May 23 2022

Macro Weekly

Week 21/2022

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Highlights

The world around us

The Norwegian economy

Market charts & comments

Last week, part I

- **The War/Sanctions**
  - **The Russians** are not able to make much progress in the Eastern provinces, and have been pushed back in the North East, seemingly after heavy losses. Ukraine seems to bet on further gains on the ground
  - **Mixed commodity prices** last week, metals finally gained some track, possibly due to hope for an easing in Covid restrictions in China. Food prices also turned up, and more than a weaker USD could explain. Any agreement on export of grains etc from Ukraine's close harbours was not reached last week. Natural gas prices fell last week
- **The virus**
  - **Lockdowns** are gradually eased in some cities, but **Beijing** is still in tightening mood with mobility still on the way down. The **Shanghai subway** is still closed but **road traffic** is increasing, and restrictions will be removed from June 1st. At least that's the plan now
- **China**
  - **Existing home prices** fell faster in April, at a 4.7% pace and prices are down 1.6% y/y. **New home prices** also fell faster than over the previous months, and are flat y/y. **New home sales** fell 25% from February to April (and are down 40% from the peak), very likely due the Covid restrictions – and price data may have been influenced as well. Still, prices have been heading down since last summer
  - The **5 y signal rate for mortgage lending** was cut by 0.15 pp to 4.45%, more than expected. Monetary policy is gradually eased
- **USA**
  - **Retail sales** were stronger than expected in April, and the history was revised substantially upwards. Almost all sectors reported stronger sales. Even so, the trend is close to flat (core goods, in volume terms), though at a level that is well above a reasonable long term trend. Demand for services is still recovering
  - **Homebuilders** reported an unusual large drop in their **Housing Market Index** in May (just 3 months have been worse), and signals a 30% decline in housing starts. Demand is falling as affordability has dropped sharply, homebuilders say. The 30 y fixed mortgage rate is up 2.1 pp so far in 2022 or by 60% in relative terms (and by 40% from before the pandemic). In addition prices are far above anything seen before, up 35% from early 2020, and affordability has fallen almost to the level before the financial crisis. So far, **housing starts/permits** have just stabilised, and April activity was close to expectations. **Existing home sales** are slowing but prices are still climbing rapidly, by 2% in April alone (mostly March transactions). The inventory may have bottomed, though at a very low level. **Demand for new mortgages** have fallen significantly recent weeks/months. Lumber prices have collapsed, and are almost back to a normal level! The surge in interest rates may soon have some material impact on the US economy, even if household debt level is way below the pre-financial crisis level
  - The first May manufacturing surveys, from **NY Fed and Philadelphia Fed were mixed**. The headline index fell sharply in both surveys (and were far weaker than expected), but the details kept well up in Phil Fed but fell sharply in NY Fed's survey. Taken together, a further decline in the ISM is signalled
  - **Leading Economic Indicators** fell to below zero in April, expected flat, and March was revised down. The LEI is signalling slower growth but is still not close to flag a recession. The same goes for **new jobless claims**, which have increased recent weeks. The lift is still too little/short

Last week, part II

- **EMU**
  - » **Final CPI** confirmed the surge in inflation – which is not entirely explained by energy and food prices
  - » **Employment** grew at a 3.2% pace in Q1, and the employment rate is far above the pre-pandemic level – the highest ever! (Which is the case in most rich countries, check charts in this report). BTW, unemployment in the EMU is the lowest since 1981, and the vacancy rate is at all time high
- **UK**
  - » **The ILO/LFS unemployment rate** fell to 3.7% in February, to the lowest level since 1974 in April. Wage inflation is accelerating; underlying rate at 5% (regular pay) to 9% (incl. bonuses)
  - » **Retail sales** recovered the March loss in April, even if **consumer confidence** has fallen to the lowest level ever (though in May) – as inflation has surged to 9% (and there is a war going on). However, total wage revenues are growing at the same pace as nominal retail sales, and savings are still higher than normal (at least until Q4 last year)
- **Sweden**
  - » War or the Riksbank? **House prices** fell slightly in both March and April, with Stockholm in the lead. The annual price inflation has fallen to 6%, from 19% last year. The Riksbank changed tack in late April but households understood what was underway, beforehand? At least the money markets did. Some war angst in addition??
- **Norway**
  - » **Wage expectations** did not surge further in Norges Bank's Q2 expectation survey (not the Network), and the bank will not have to lift its forecasts again in June. However, **inflation expectations** are not well anchored. Nobody believes in the 2% target short, medium or long term. Households and businesses are up in the 4% and 5% level, others are at 2.5% – 3%, like in other countries. We think markets expect a 2.5% inflation rate 5 y 5 y fwd. A novel model is presented in this report
  - » Another month with **extraordinary strong export data**, and unprecedented surpluses due to the high natural gas prices. However, the April surplus fell, as gas prices fell
  - » **Few housing permits** were granted in April but the underlying level is at 30' new homes (annualised). Homebuilders report 28' starts but sales are somewhat lower (24'). Other construction is flattish, with strong growth in transport, storage and trade – and a sharp decline in health, and still weakness in hotels & restaurants
  - » **Population growth** slowed marginally in Q1 due to less labour immigration. However, growth has recovered resent quarters, and working age population has accelerated to 0.75%. Most regions are reporting higher population growth but several still marginal growth – or a decline

SpareBank 1 MARKETS

The Calendar: PMIs, FOMC minutes, US inflation data, NO investment surveys, unemployment

10:00	GE	IFO Expectations	May	86.5	86.7
14:30	US	Chicago Fed Nat Activity Index	Apr		0.44
Tuesday May 24					
02:30	JN	Manufacturing PMI	May P		53.5
02:30	JN	Services PMI	May P		50.7
06:30	NO	Consumer Confidence	2Q	(-10)	5.5
09:15	FR	Manufacturing PMI	May P	55.2	55.7
09:15	FR	Services PMI	May P	58.6	58.9
09:30	GE	Manufacturing PMI	May P	54.0	54.6
09:30	GE	Services PMI	May P	57.2	57.6
10:00	**EU**	**Manufacturing PMI**	**May P**	**54.8**	**55.5**
10:00	**EU**	**Services PMI**	**May P**	**57.5**	**57.7**
10:00	EU	Composite PMI	May P	55.0	55.8
10:30	UK	Manufacturing PMI	May P	55.0	55.8
10:30	UK	Services PMI	May P	57.0	58.9
15:45	**US**	**Manufacturing PMI Markit**	**May P**	**57.8**	**59.2**
15:45	**US**	**Services PMI, Markit**	**May P**	**55.5**	**55.6**
15:45	US	Composite PMI, Markit	May P	55.5	56.0
16:00	**US**	**New Home Sales**	**Apr**	**750k**	**763k**
16:00	US	ISM Semi annual survey	H1		
20:00	**US**	**FOMC Meeting Minutes**			
Wednesday May 25					
08:00	**NO**	**Unemployment Rate LFS/AKU**	**Mar**		**3.1%**
08:00	SW	AKU Unemployment Rate	Apr	7.5%	7.6%
09:00	SW	Economic Tendency Survey	May	108	109.5
09:00	SW	Consumer Confidence	May		74.9
14:30	US	Durable Goods Orders	Apr P	0.6%	1.1%
14:30	US	Cap Goods Orders Nondef Ex Air	Apr P	0.5%	1.3%
Thursday May 26					
14:30	US	GDP Annualized QoQ, revision	1Q S	-1.3%	-1.4%
14:30	US	Initial Jobless Claims	week	210k	218k
16:00	US	Pending Home Sales MoM	Apr	-1.9%	-1.2%
Friday May 27					
	NO	CCI consumer confidence	May		-14.9
08:00	NO	Hotel Guest Nights	Apr		
08:00	**NO**	**Investment Survey Oil ind. 2023**	**Q2**	145bn	130bn
08:00	NO	Investm. Surv. Manuf, Power supl	Q2		
08:00	SW	Retail Sales MoM	Apr		0.2%
10:00	EU	Money & credit growth	Apr	6.3%	6.3%
14:30	US	Trade Balance, goods advanced	Apr	-$114.8b	-$125.3b
14:30	US	Personal Income MoM	Apr	0.5%	0.5%
14:30	**US**	**Personal Spending MoM**	**Apr**	**0.6%**	**1.1%**
14:30	**US**	**PCE Core Deflator YoY**	**Apr**	**4.9%**	**5.2%**
16:00	US	U. of Mich. Sentiment	May F	59.1	59.1

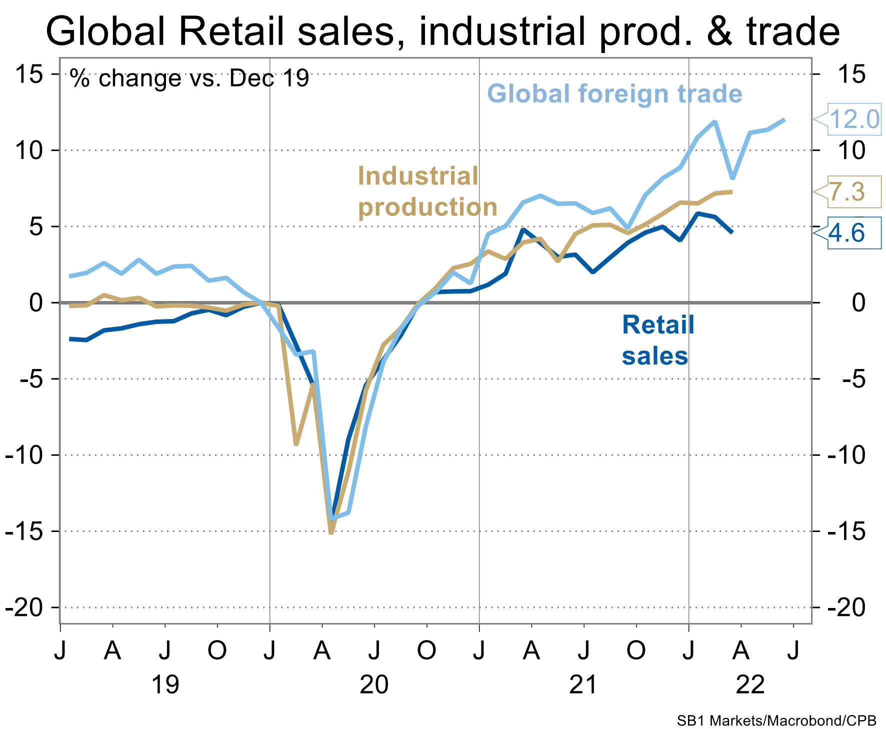
- **Preliminary May PMIs**
  - » **So far, so good** – in the rich part of the world that reports prelim. PMI data. The decline in the global PMI has been due to the lockdown setback in China – and with a small contribution from Russia, due to the war. Services in the EMU is probably the most important figure vs. ECBs appetite for starting hiking in July
- **USA**
  - » **Housing market focus**: New home sales and pending (existing) home sales. Any signs of slower demand?
  - » **Minutes from the May 4th FOMC meeting** will probably not reveal any new positions. Fed has decided to fight back on inflation, and is willing to do 'whatever it takes'. (The real problem is wage inflation, and partly corporate profits. Both are hard to bring down without weakening demand substantially)
  - » **Personal income & spending** as well as **consumption price deflators** (PCEs) are always important. Demand was very likely OK in April. Annual price inflation is expected down
- **EMU**
  - » **Money and credit** growth has accelerated but remains in check. Still current growth rates are not an argument for a signal rate at -0.5%. Neither is the lowest unemployment rate since 1981
- **Norway**
  - » **Oil companies** will report their investment activity in 2022 and their plans for 2023. We expect an upward revision of 2023, but a more major adjustment should come in the Q4-22 survey or in the Q1-23 survey, as projects are not included before an application (PUD) is submitted to the Dept. of Energy. An unprecedented number of projects will submitted before Dec-31 in order to benefit from the generous, but temporary tax relief decided in 2020. Both the manufacturing sector as well as power supply will also report their plans
  - » We expect the **LFS/AKU unemployment rate** to decline another 0.1 pp to 3.0% in April. The participation rate has more or less flattened since last summer, while the employment rate is still trending upwards but a slower pace, very likely due to lack of available labour
  - » Two **consumer confidence surveys** will confirm that households are in bad mood. They are still shopping, however

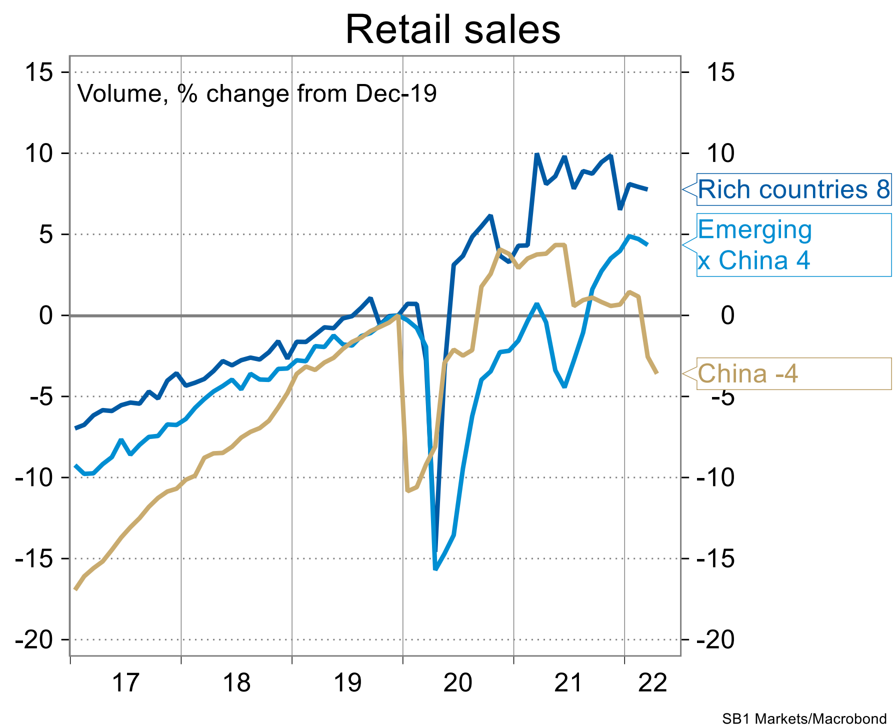
Sources: Bloomberg. SB1M est. in brackets. Key data are highlighted, **the most important in bold**

SpareBank 1 MARKETS

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

Industrial production on the right track too – probably global foreign trade too

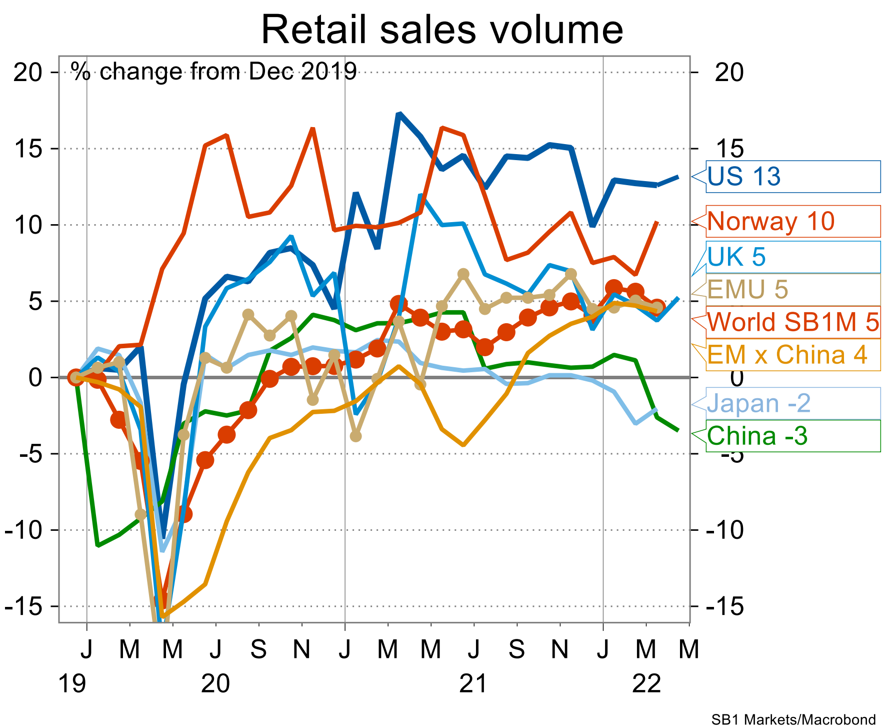


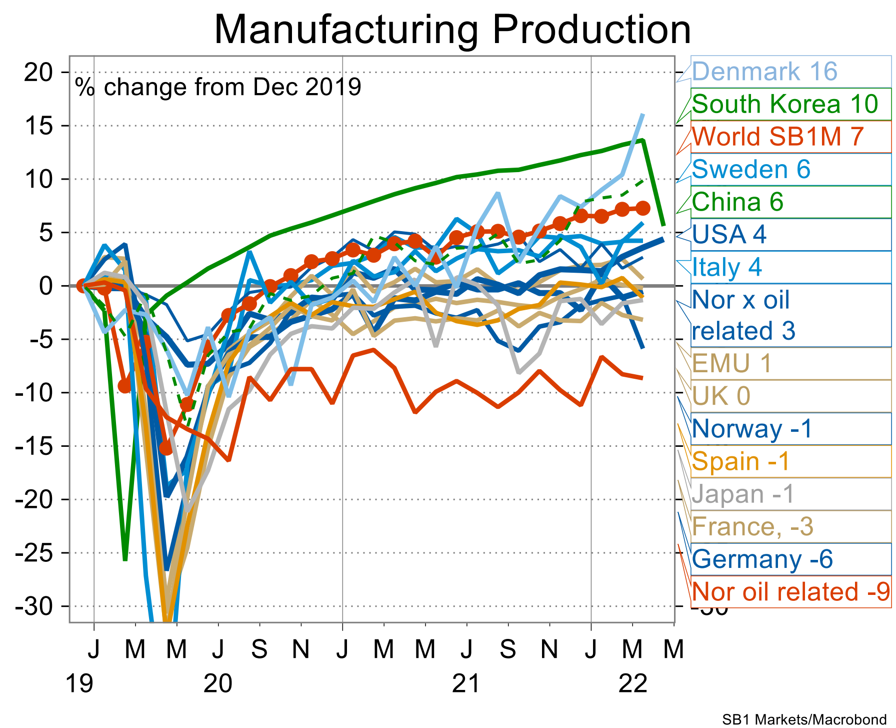


Global trade: The last months are estimates from the Kiel Institute, they are also making a prognoses for the next month based on shipping activity etc.

Retail sales down in March too, industrial production probably further up

The retail sales trend is very likely down in the rich part of the world. Manufacturing prod. still OK

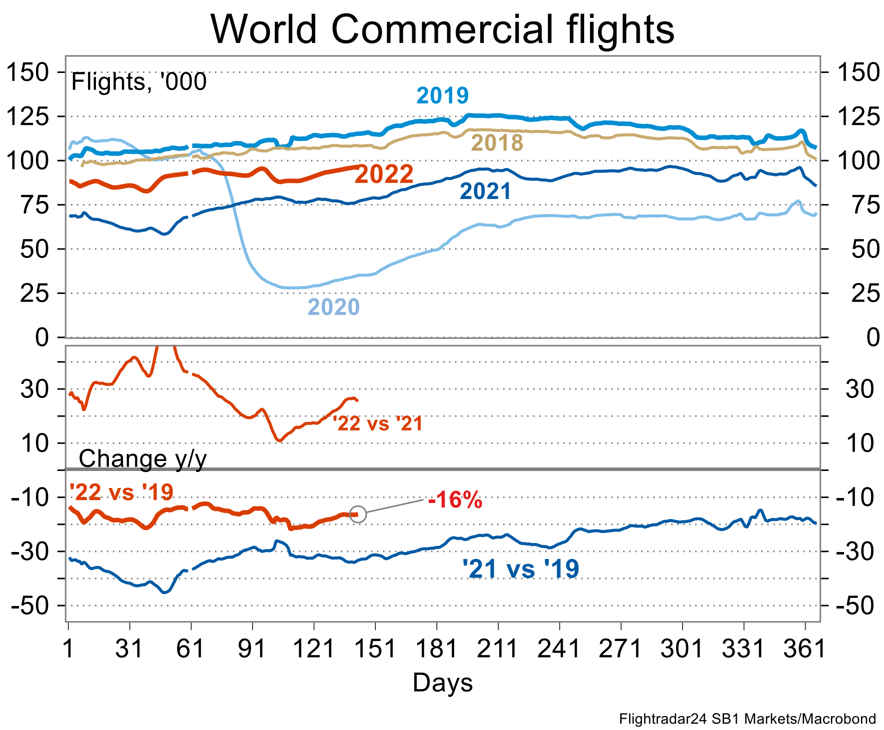


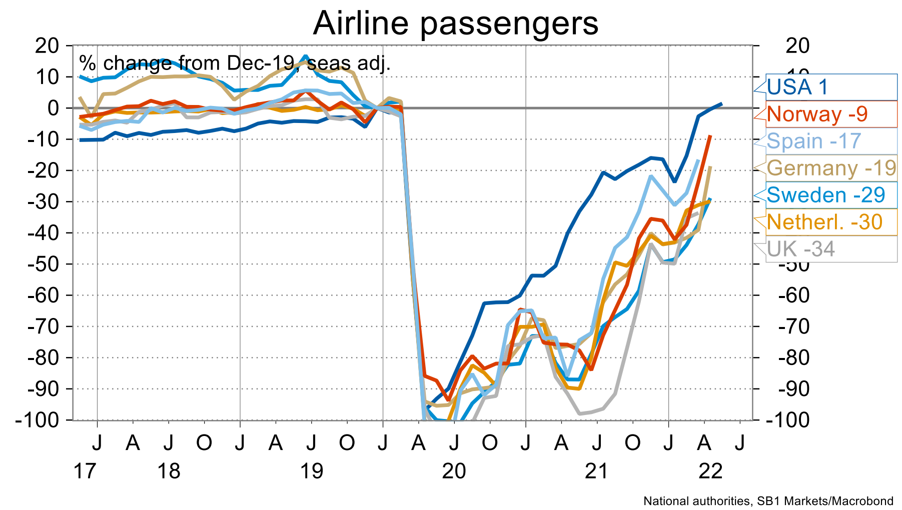


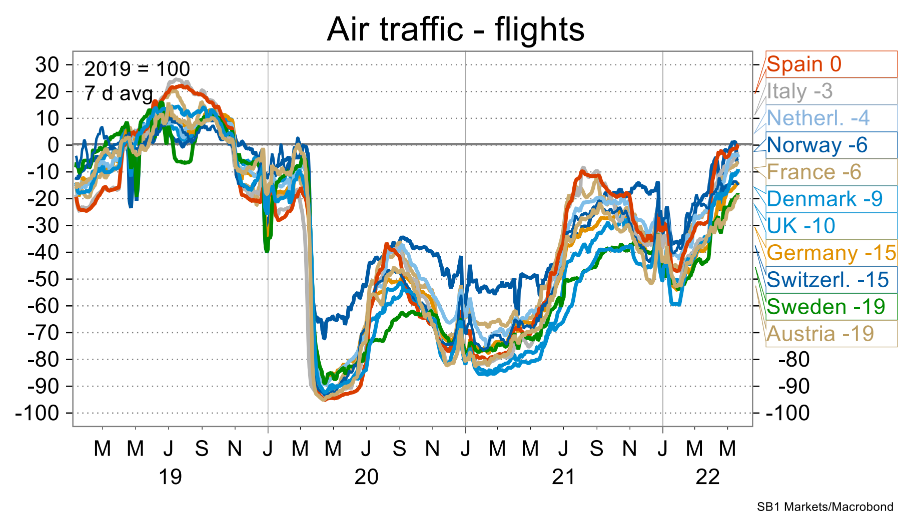
- **Retail sales** in Emerging Markets x China are recovering but is far below pre-pandemic trends
  - » US data in the chart above are preliminary due to large, but not complete revisions. We are also reviewing our model for calculating retail sales in China
- **Manufacturing production** has been hampered by a deep decline in auto production. The manufacturing PMIs are down from the peak but are still signalling growth above trend
  - » China reported a sharp drop in production in April, which will the global aggregate down (but too few others have so far reported)

Global airline traffic up last week – still 16% down from 2019

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



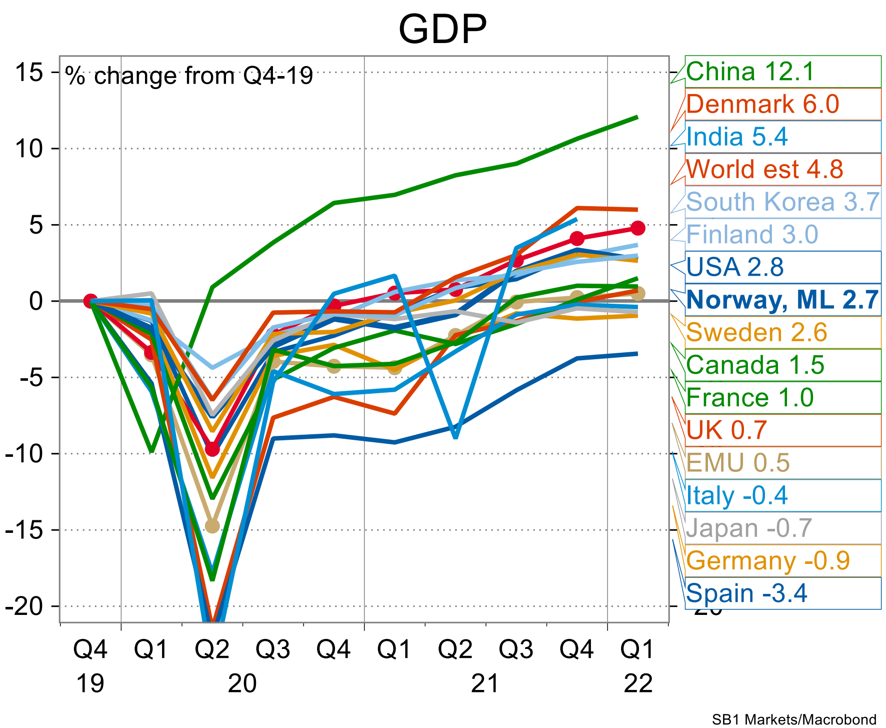


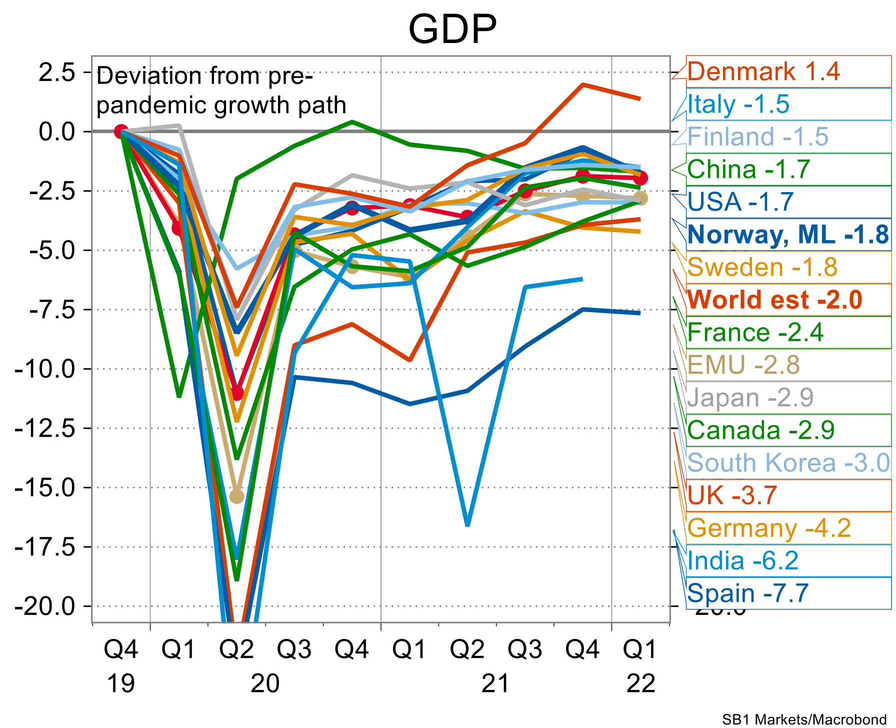


Global trade: The last months are estimates from Kiel Institute

GDP slowed in Q1, to 0.6% (2.4% annualised) from 1.4% (5.7%) in Q4

US explains most of the slowdown. GDP is still below the pre-pandemic growth path, some 2%

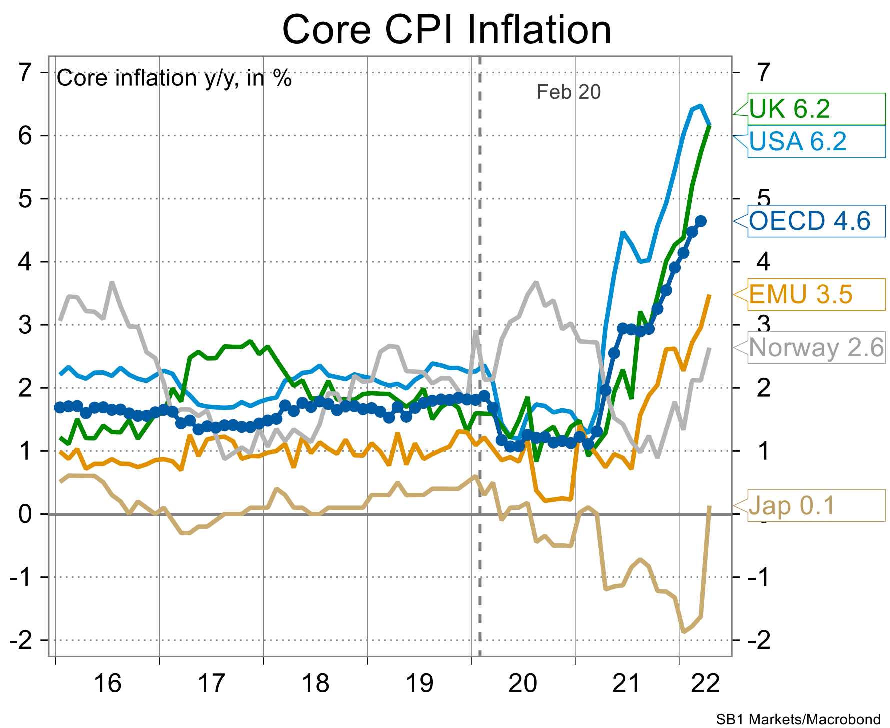


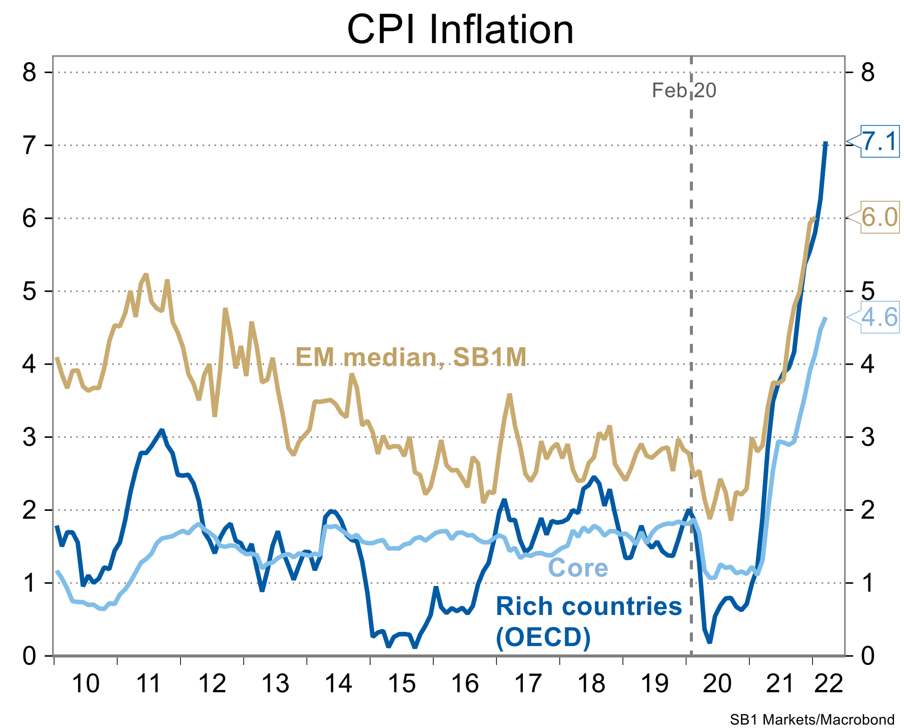


- Several countries have not yet reported, like India

Inflation still the main challenge most places

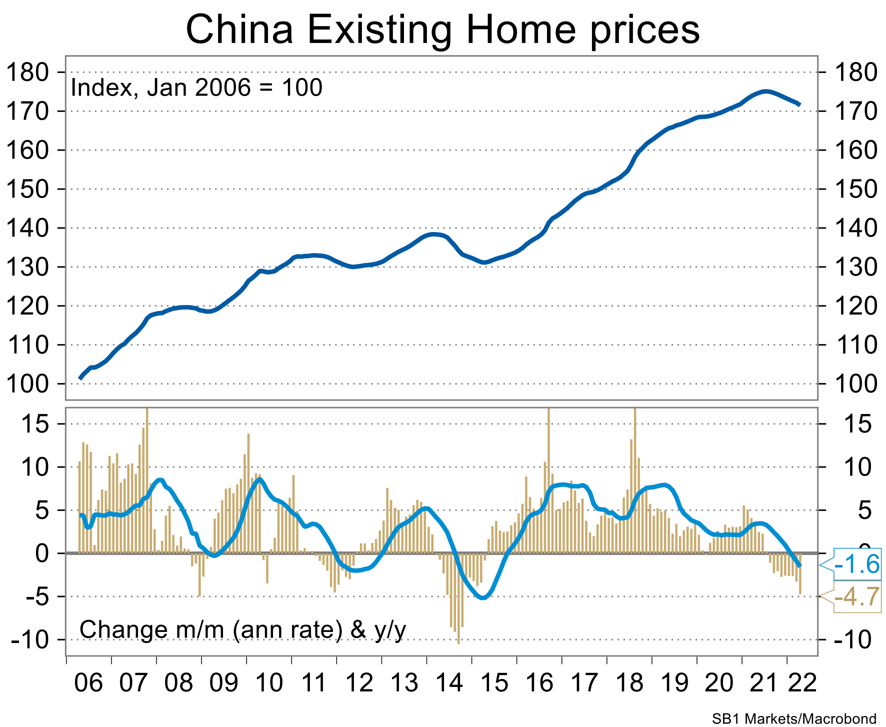
Energy prices the main culprit, but core inflation has turned up most places

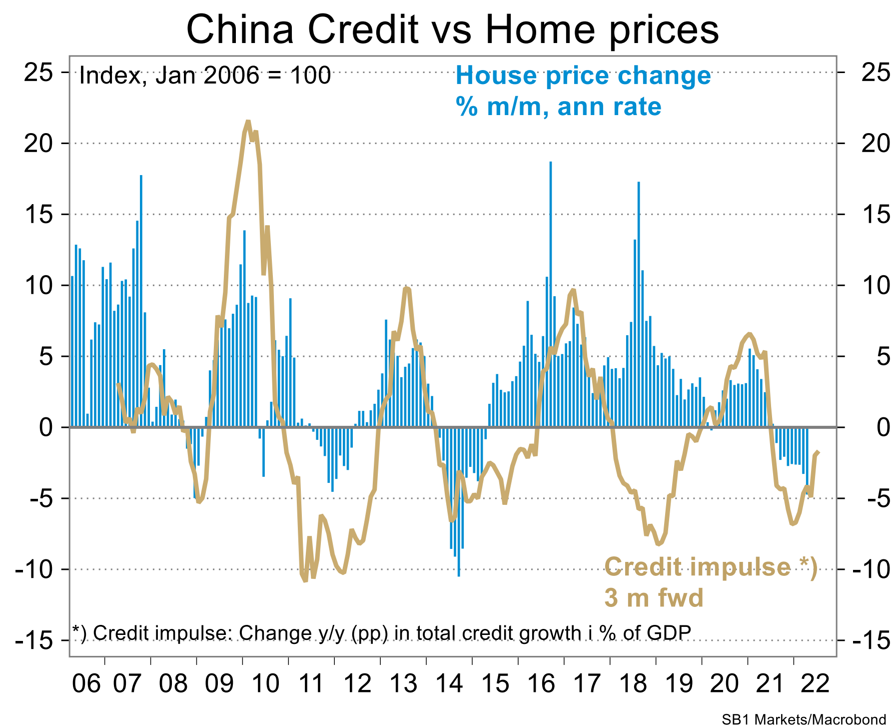




Existing home prices fell at an even faster rate in April. Lockdowns, or for 'real'?

Prices fell for the 8th month in row, and are down 1.6% y/y. New home prices fell sharply too

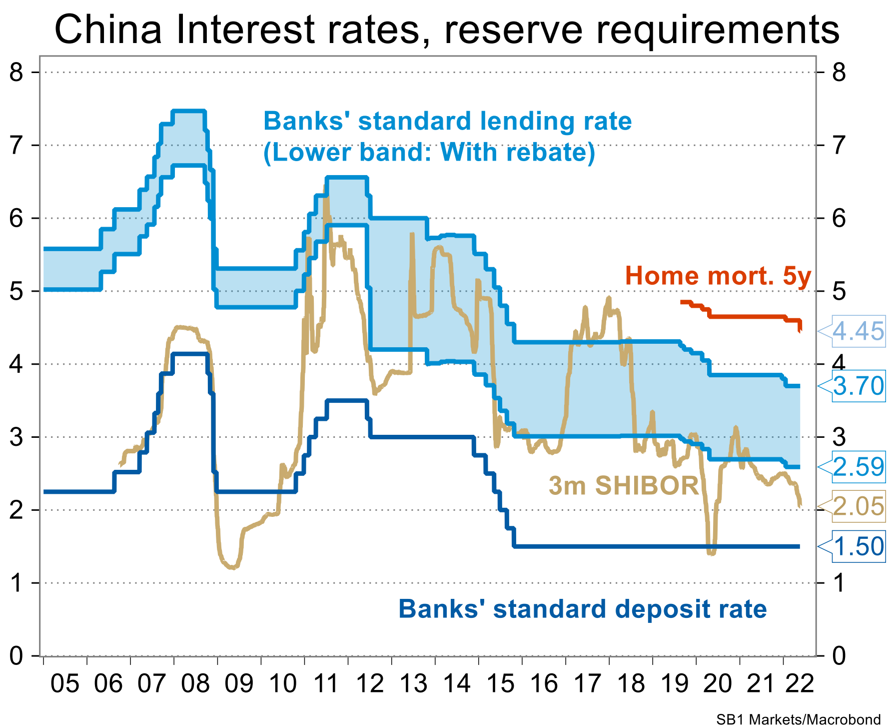


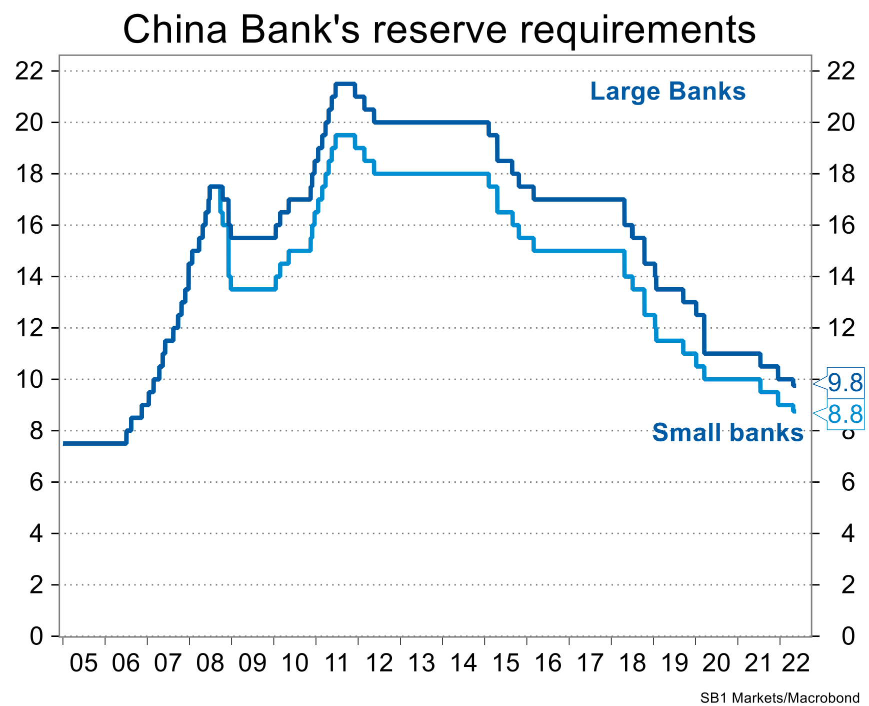


- **Existing home prices** peaked last July, and are falling at an gradually faster pace, in April by 4.7% (m/m annualised), from 3.1% in March. Measured y/y, prices are down 1.6%
- **New home prices** also fell last autumn but slower than existing home prices, and almost stabilised in Q1. However, in March prices declined at a 4.4% pace, and they are down 0.1% y/y. Some builders have reported deep price cuts to reduce the inventory and secure financing. Analysts have questioned the reliability of the official data, to which we refer here
- The gradual decline in prices since last summer is probably due both some fire sales from construction companies that run out of other sources of financing, and some hesitance from home buyers**.** In March/April **new home sales** collapsed 25% very likely due the lockdowns in many cities, and prices may also be impacted
- **Credit growth** accelerated marginally during last year and through Q1, however mostly due to increased borrowing from local governments. In April, bank lending collapsed, possibly due to lockdowns (which could impact both supply and demand for credit). The **central bank** has cut **signal rates** somewhat, and reserve requirements are cut

The gradual monetary policy easing continues

A signal rate for mortgages cut 0.15%, more than expected

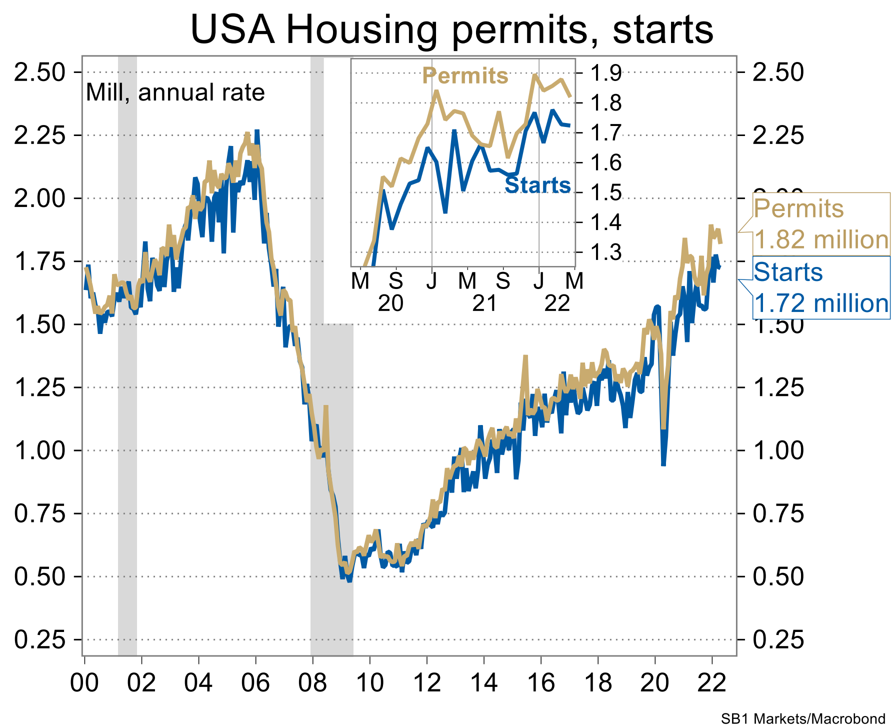


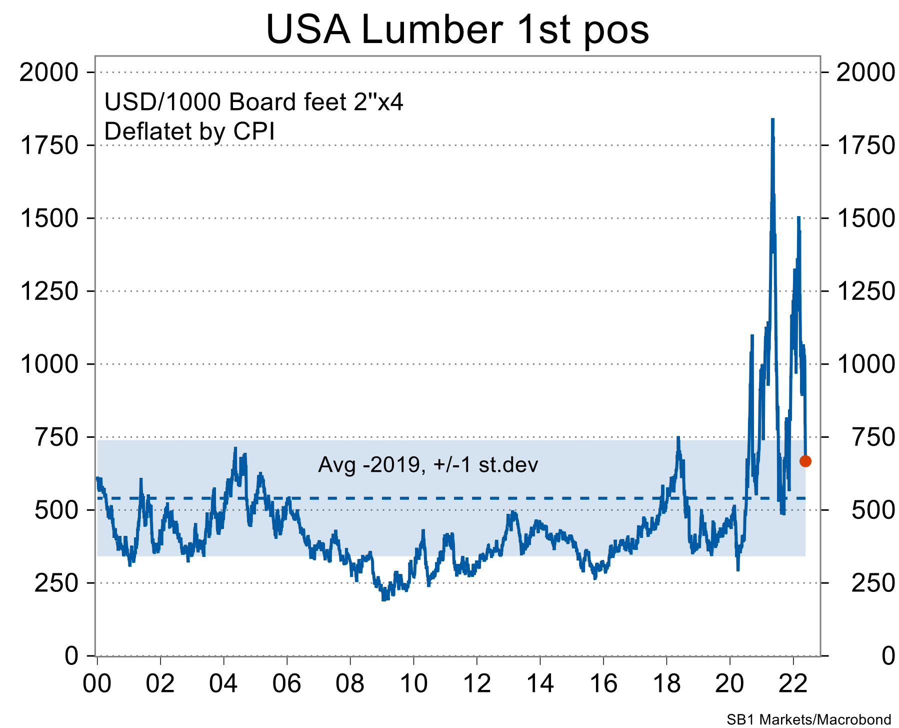


- Last week the PBoC cut the 5 y mortgage lending rate by 0.15% to 4.45%, marginally more than expected (5 – 10 bps)
- Other signal rates have been cut marginally the recent months
- The reserve requirements for banks have been cut three times since last summer, in total by 1.25%, the last 25 bps in April
- These measures are not that aggressive and does not signal any panic. The authorities want to support growth but at the same time fear that credit expansion has gone too far

Building permits, housing starts have peaked? Lumber prices collapsed

Housing starts are still at a high level – but below expectations in April

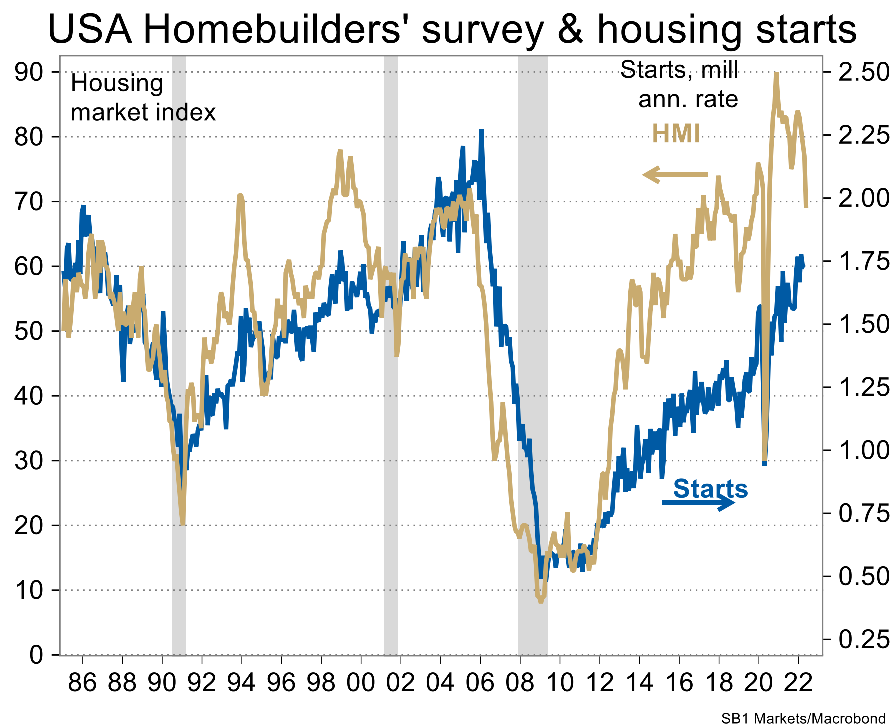


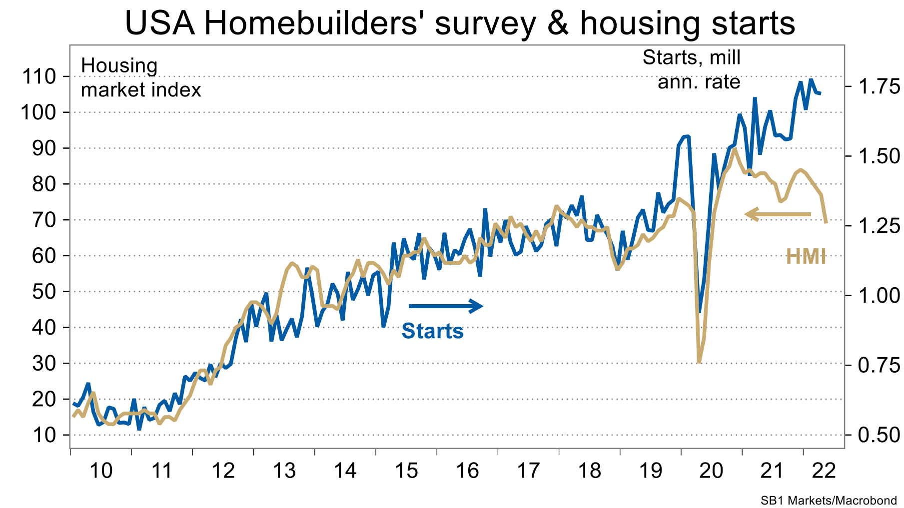


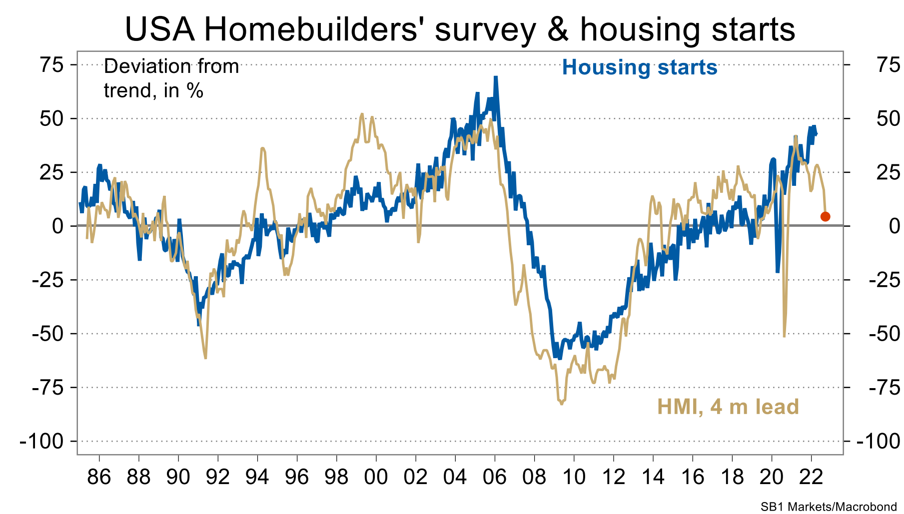
- **Housing starts** fell to 1.72 mill in April, expected 1.75 mill from 1.73 mill in March (downward revised from 1.79 mill). **Building permits** landed at 1.82 mill, as expected, from 1.88 mill in March. In sum, marginally below expectations. Both permits and stars have flattened recent months, at 15% above the pre-pandemic level – and at the highest level since 2006 – but still below the pre-financial crisis peak at 2.2 mill
- Given the incredible strong existing home market, and soaring prices, starts should normally have strengthened further, as mortgage rates have been low until recently and the economy has been strong, with a very low unemployment rate. No it's probably 'too late'. Mortgage rates have surged, and **homebuilders** are reporting waning demand, check next page
- Building **material cost inflation** has come to a sudden halt. **Lumber prices** have 'collapsed' recent weeks and are not far above a normal level anymore

Homebuilders' market index sharply down in May: Mortgage rates start to bite?

Signals a 25% decline in home prices?



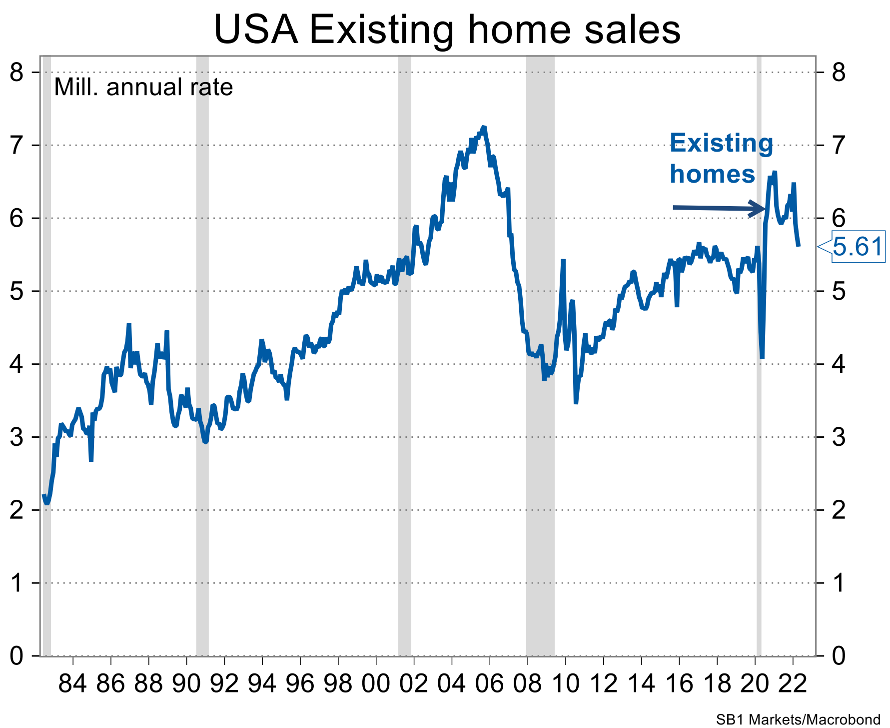


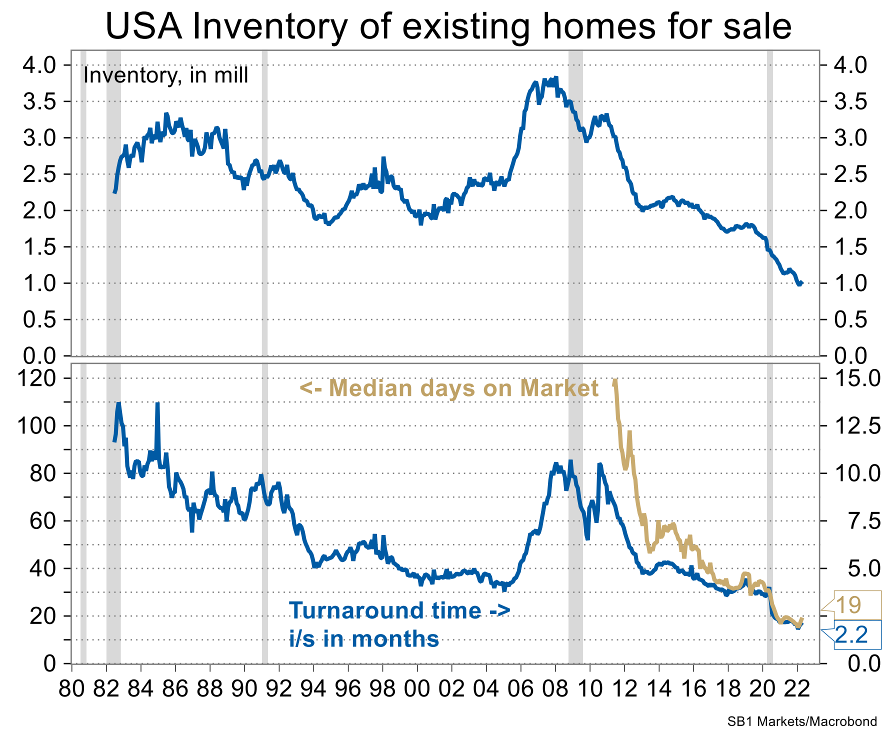


- **The Homebuilders' Housing Market Index (HM)** lost 8 p to 69 in May, expected down 2 p 75. The decline in among the largest on record, just 3 months since 1985 has been worse (of which April 2020 is one)
- *'Growing affordability challenges in the form of rapidly rising interest rates, double-digit price increases for material costs and ongoing price appreciation are taking a toll on buyer demand'*, the press release states. (No mention of material or labour shortages)
- The decline in the index signal sharp decline in housing starts, perhaps as much as 25% (the best correlation chart, to the right)

Existing home sales down in March, but prices shot further up

The inventory is still very low – but it rose marginally in April

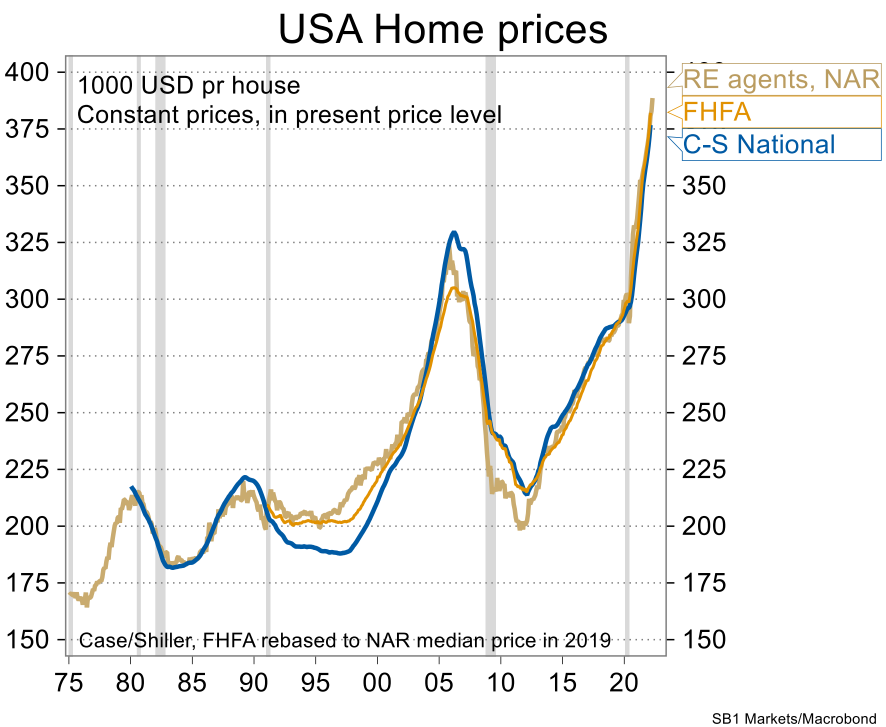


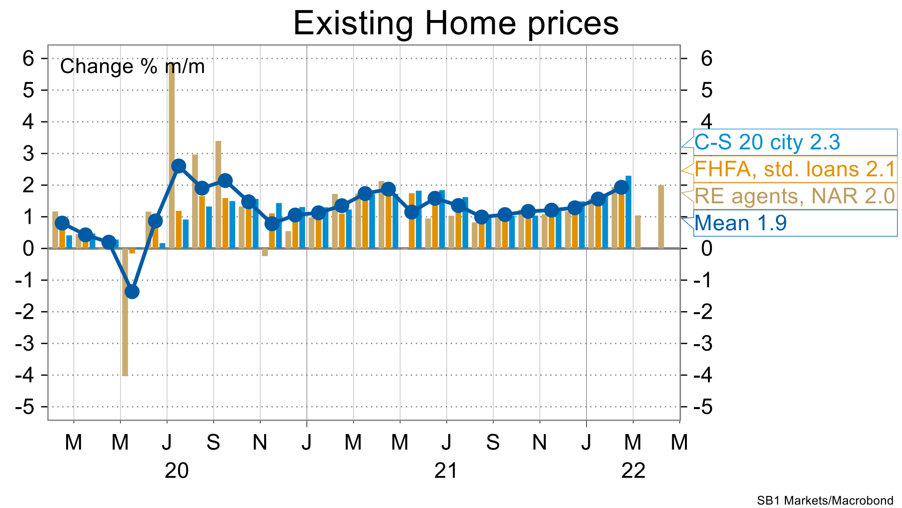


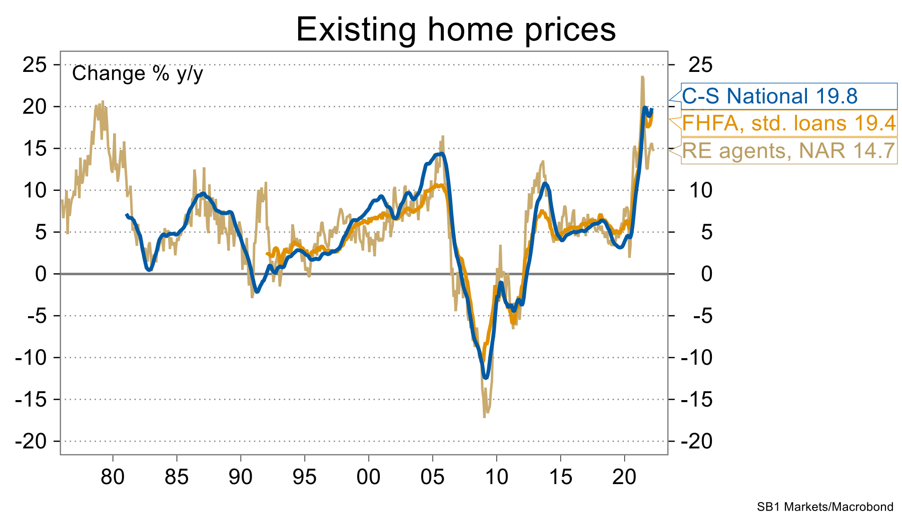
- Sales of **existing homes** fell to 5.61 mill (annualised rate), from (upward revised) 5.93 mill in March, expected down to 5.65 mill - a little better than expected. Sales have fallen 14% from local peak in January, and are probably trending down – from a high level in mid '20
- **The inventory of unsold homes** rose marginally in April, as in March – from the ATL level in February
  - » The inventory equals 2.2 months of sales (up from 2.1 last month). During the 2005 boom, the i/s ratio was 4 months, in bad times it has been as high as 10 months
  - » The median time on the market for those homes sold is just 19 days (up from 18 last month, and 16 in Feb), down from 30 days before the pandemic (and 120 days in 2011!)
- **Prices** rose 2.0% m/m (!) in April, *check more next page*
- **Mortgage rates** have shot up recent weeks and months. Some reports signal a slowdown in activity. So far, declining sales could have been explained by lack of supply, as prices have been soaring – and they still are (and much more than we expected)

Existing home prices up 2% in April (or really in March). What now?

Mortgage rates have exploded since February – will the housing market stand it?



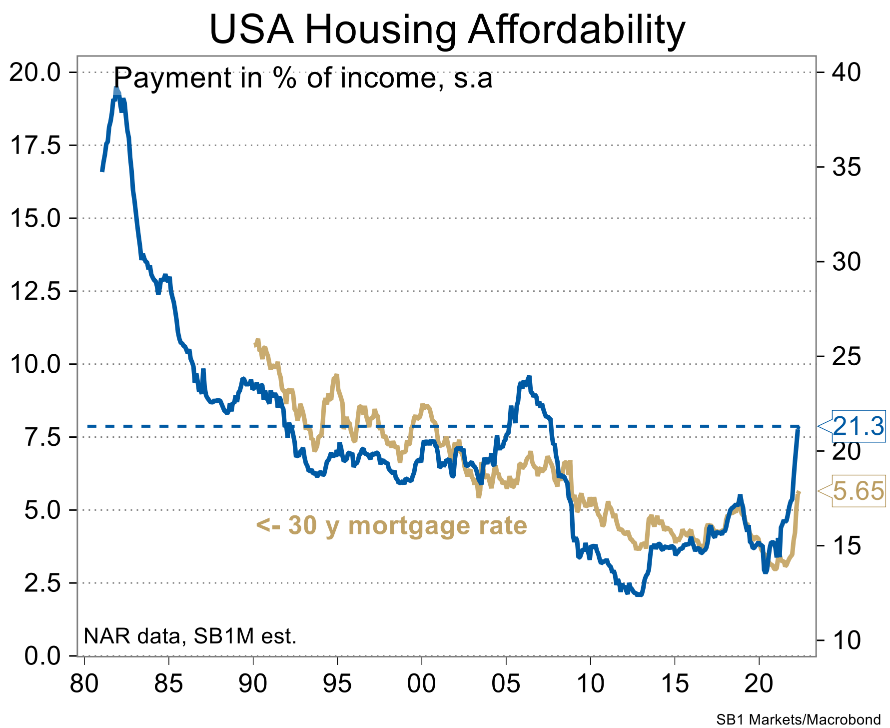


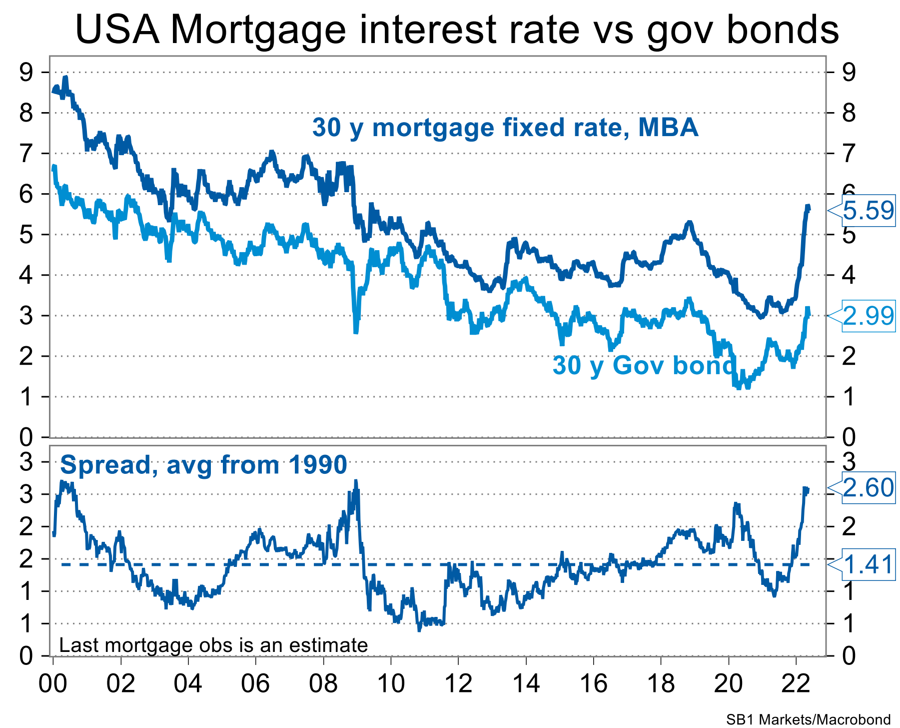


- **Prices** rose 2.0% m/m in April, up from an 1% in March. (April prices are mostly based on transactions agreed upon in March). The annual rate fell 0.2 pp to 14.7%.
- Other indices signal an even faster price appreciation, and annual rates are 19% - 21%. Prices are normally lagging sales by almost 1 year, and the recent decline in sales may signal a turnaround in prices
- Home prices are up some 35% from before the pandemic, and way above the 2006 level, even in constant prices

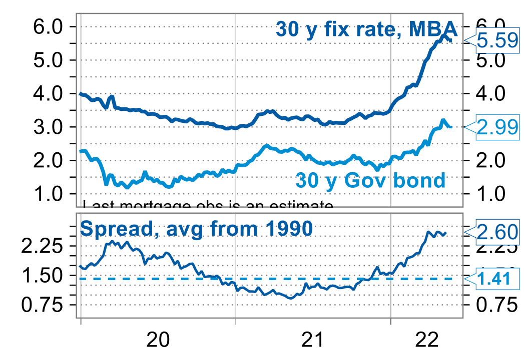
The least affordable housing market since 2008

Prices are up 35% since before the pandemic, the mortgage rate is up 40%. In sum….



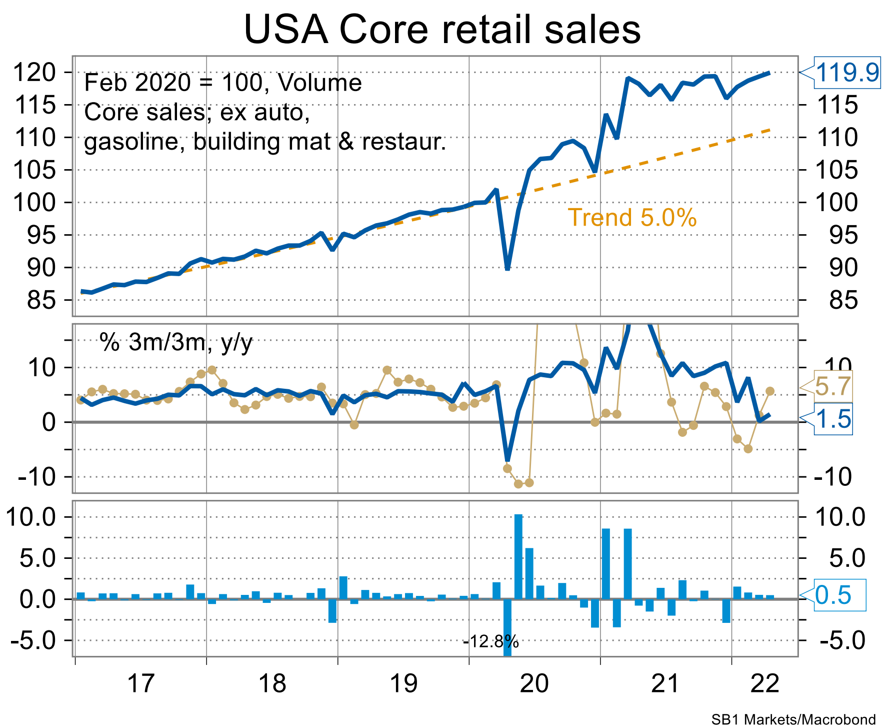


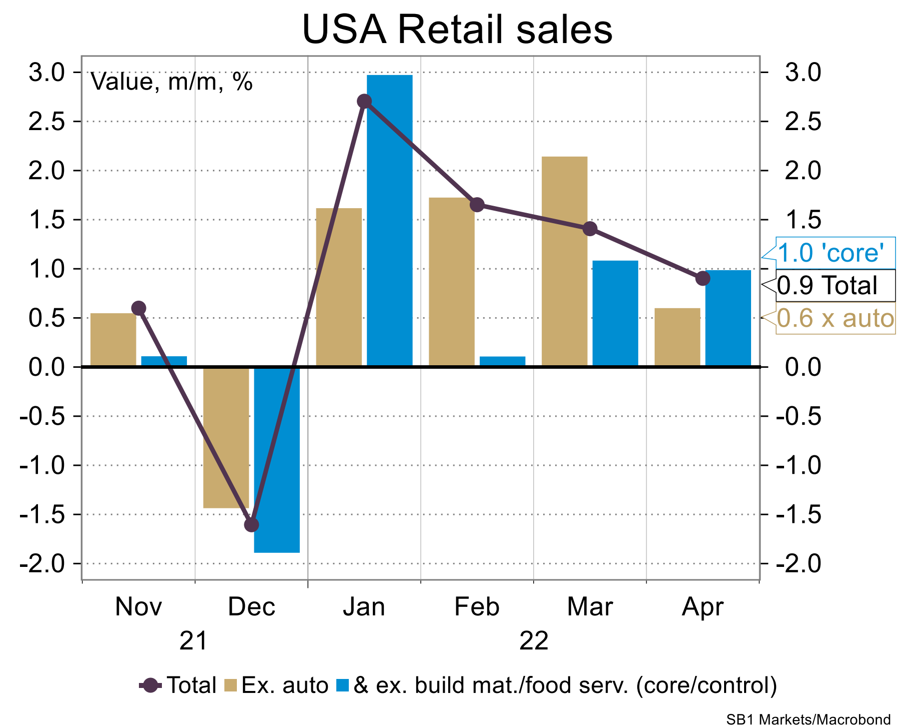
- **The 30 y fixed mortgage rate** has climbed to 5.59% (effective rate) from 3.0% last summer, from 3.5% at the start of 2022. Before the pandemic, the rate was 4.0%
  - » The mortgage rate has climbed MUCH faster than the 30 y Gov bond rate. The spread has widened to 260 bps from 91 at the bottom last spring and it is far above the 141 bps average – <u>and among the highest in modern times. The upside risk must be limited from here – the spread will at one stage retreat</u>
- The **Federal Reserve** concluded its mortgage backed bonds buying campaign in March - <u>and will start reducing its holdings from June. No doubt, this shift explains the surge 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 – and is 'responsible' for the substantial part of the unprecedented 35% surge in prices past 2 years



Retail sales still strong, March have been revised up, decent growth in April

Real core goods sales are still going strong, and the trend is slightly upwards

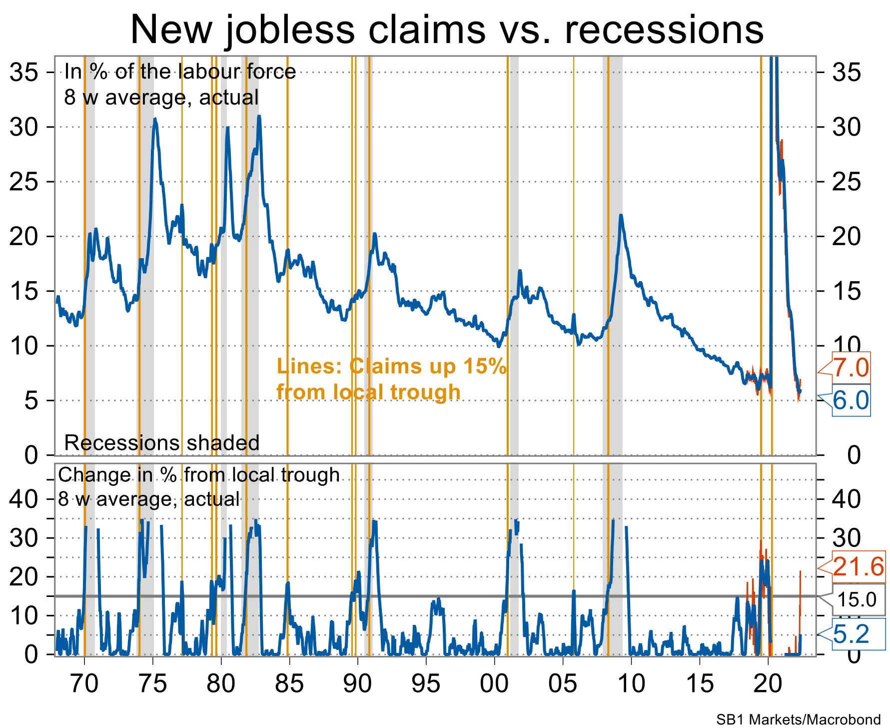




- **Total nominal sales** rose 0.6% in April (expected 0.9%), but March sales, which were first reported to 0.5%, were revised up to 0.7% ahead of the report, but now further up to 1.4%! Thus, March/April was above expectations. Dec/Jan/Feb have also been heavily revised as well. Total nominal sales are up 29% – vs. the Feb 2020 level (from 25% in the March report, one month ago)
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) rose 1% in April, expected up 0.8%. March was revised up from the first estimate at -0.1% via 0.7% and now up to 1.1%, and Feb was revised to +0.1% from -0.9%. In **volume terms** we estimate an increase core sales in both March and April at some 0.5%, but we are not able to recalculate the Dec-Feb trajectory with any sort of confidence, and the volume estimates on the chart above to the left is highly uncertain
- **Consumption of goods** is very likely above a sustainable level, and we still expect sales to decline the coming months/quarters, both due to a further shift into services, high inflation, and higher interest rates

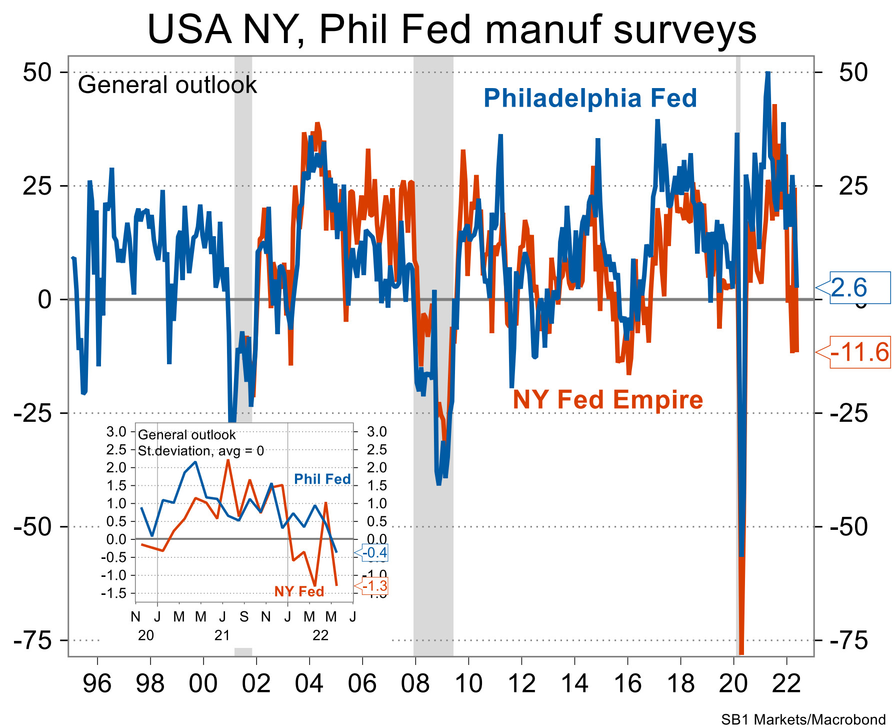
When a recession hits, jobless claims have been on the way up for a while

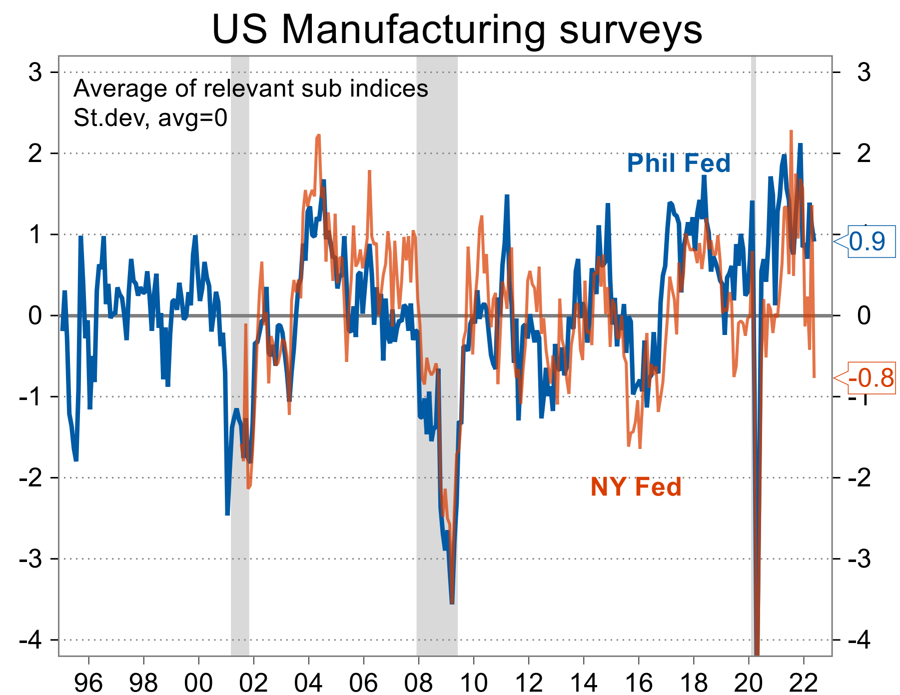
The change in the 8 week average is still far too low to suggest a recession, now



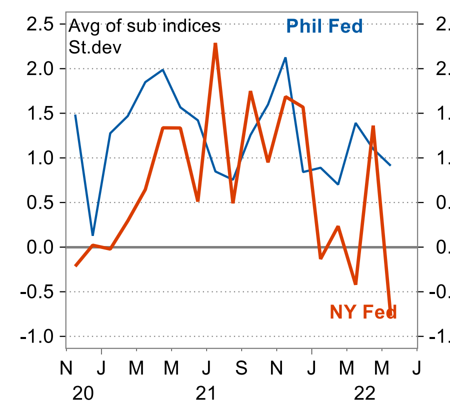
Mixed regional surveys: NY Fed down, Phil Fed's not as bad as the headline

The headline index in both surveys fell sharply – but just the NY fed survey as weak 'on the inside'





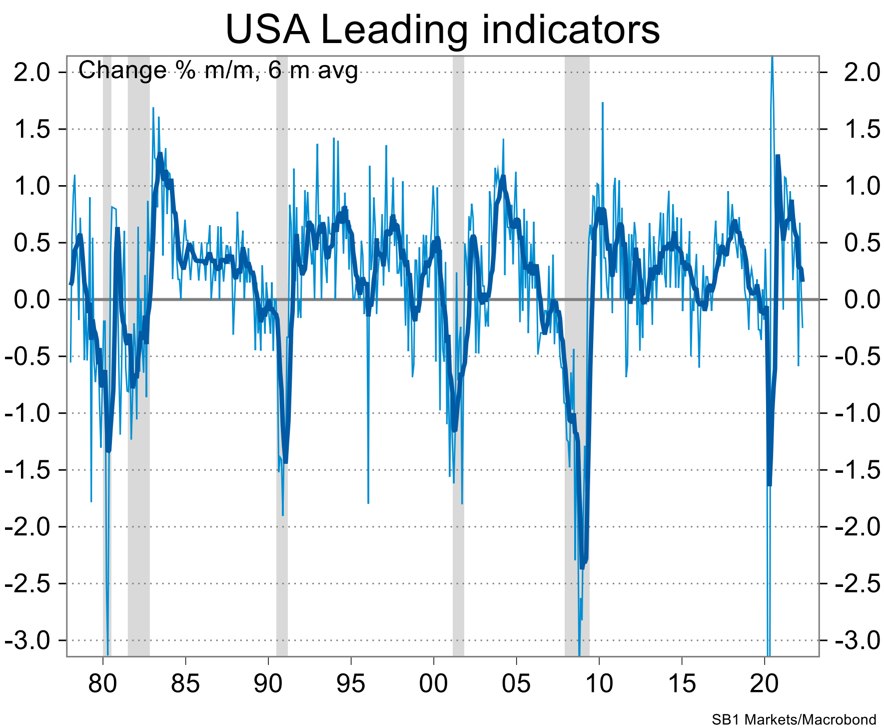
- **Philadelphia Fed's manufacturing index** fell to 2.6 in May from 17.6 in April, expected down to 15. The index is well below average at -0.4 st.dev, from +0.4
- **NY Fed Empire State manufacturing index** fell to -11.6 from 26.6, expected down to 15. The index is well below par at -1.3 st.dev, from +1 in April. This index has been rather volatile lately, and it was even weaker in March
- The **sub-indices** told a different picture:
  - » The Phil Fed was still 'strong inside', like a rapid growth in orders – the average of subs at +0.9 st.dev.
  - » The NY Fed subindices 'crashed' to -0.7 st.dev from +1.4

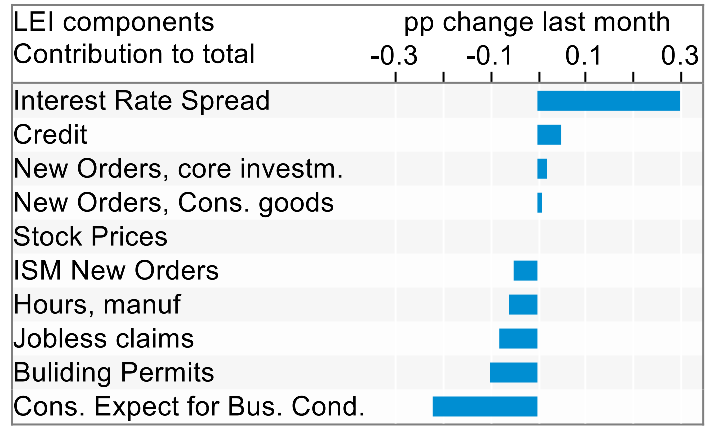


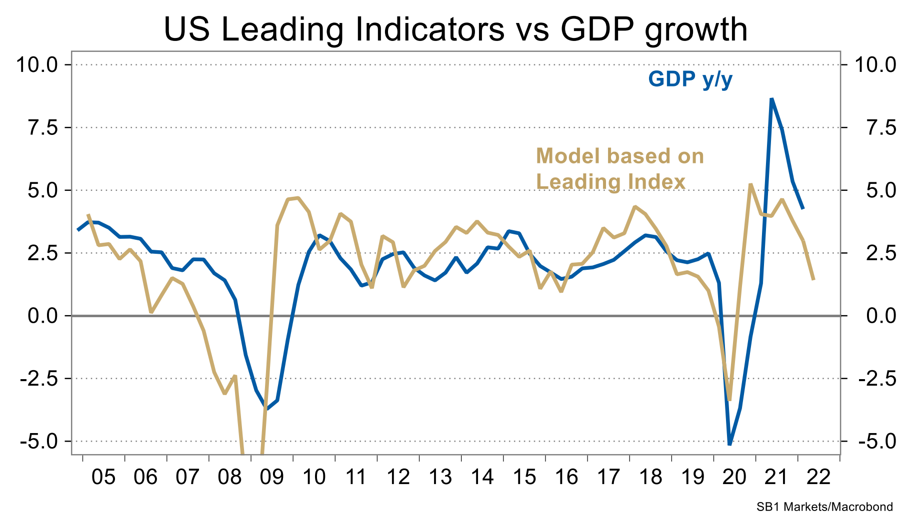
SpareBank 1 MARKETS

The Leading Economic Indicators down in April, growth is slowing

Still, the LEI is not yet signaling any recession



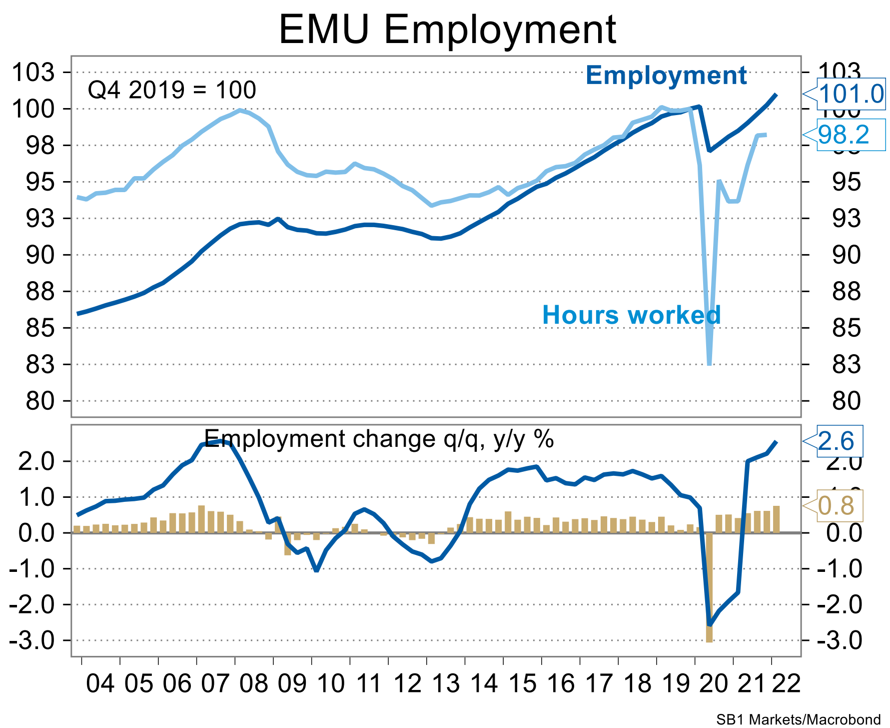


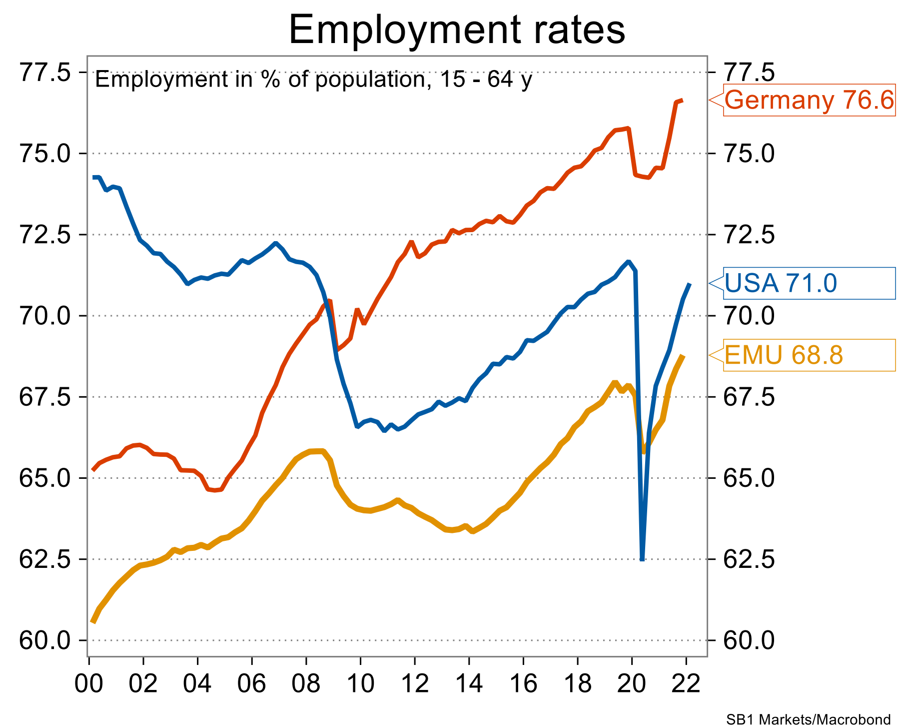


- The LEI fell 0.3% in April, expected flat and March was revised down 0.1%, from 0.3%
- The 6 m average is at 0.2%, not a recession signal. Even a LEI below zero over 6 months is a safe signal: LEI has been down over 6 months 13 times since 1978 – and 5 recessions have been recorded (12 times below and 4 recessions if the the pandemic is excluded)

Employment growth accelerated in Q1, up at 3.2% clip, best in 15 years

The employment rate is at ATH

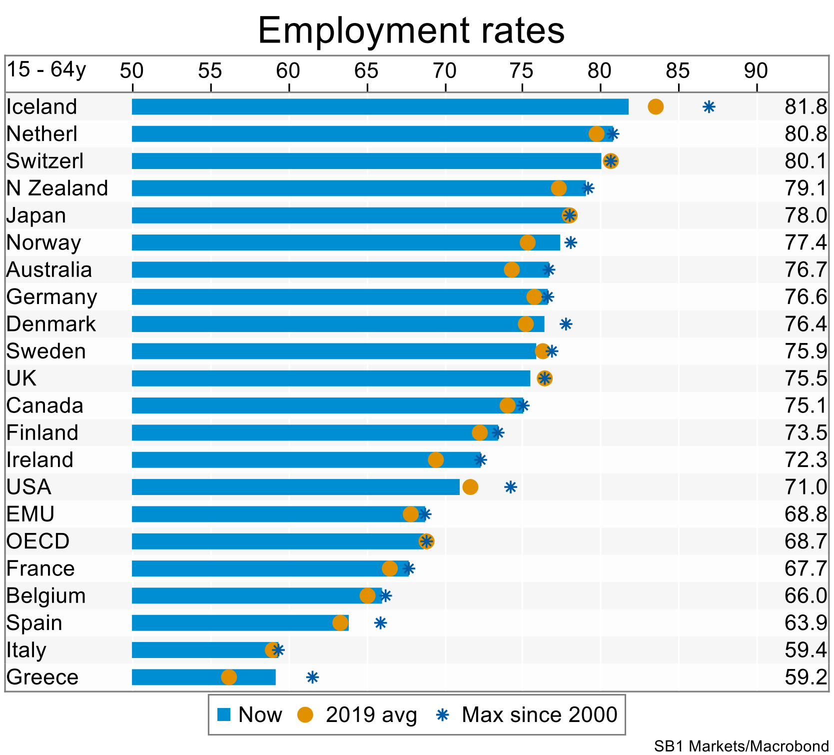


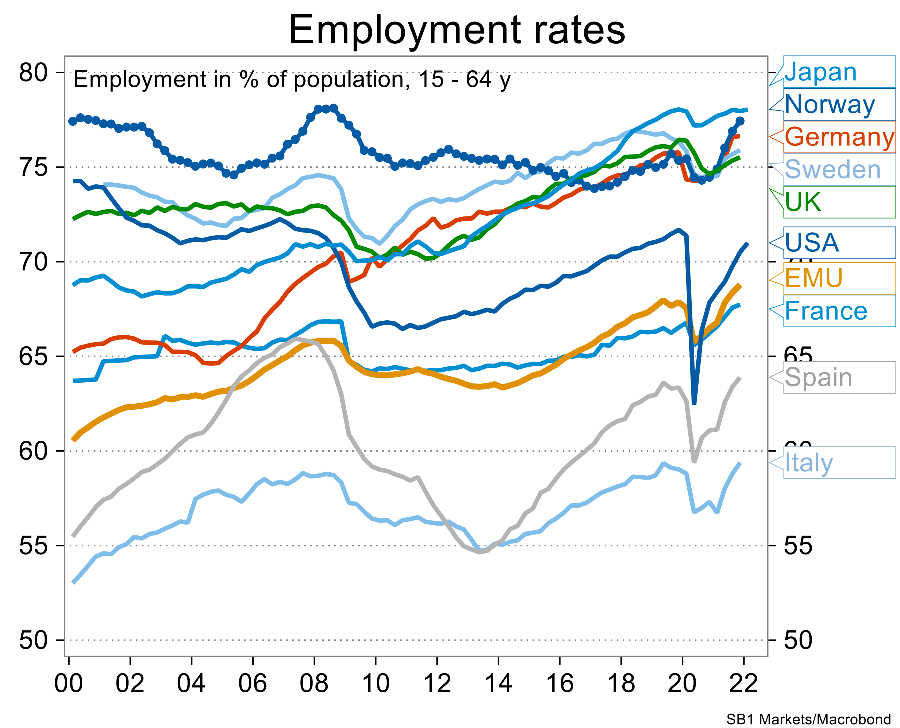


- **Employment** rose by 0.8% in Q1, up from 0.5% the two previous quarters. The employment level is 1% up from before the pandemic
  - » We do not yet have data for Q1 hours worked , they are stilling lagging employment
- **The employment rate in the EMU is at a record high level at 68.8%**
- **Unemployment** has been falling rapidly since last spring. In March, the unemployment level fell to 6.8%, the lowest level since 1981
- The number of **unfilled vacancies** has soared to the highest level ever, by far

Employment rates: Just 1/5 of rich countries below the '19 level, 2/3 are at ATH!

Rates in US, UK, Sweden and Iceland is still below the 2019 level

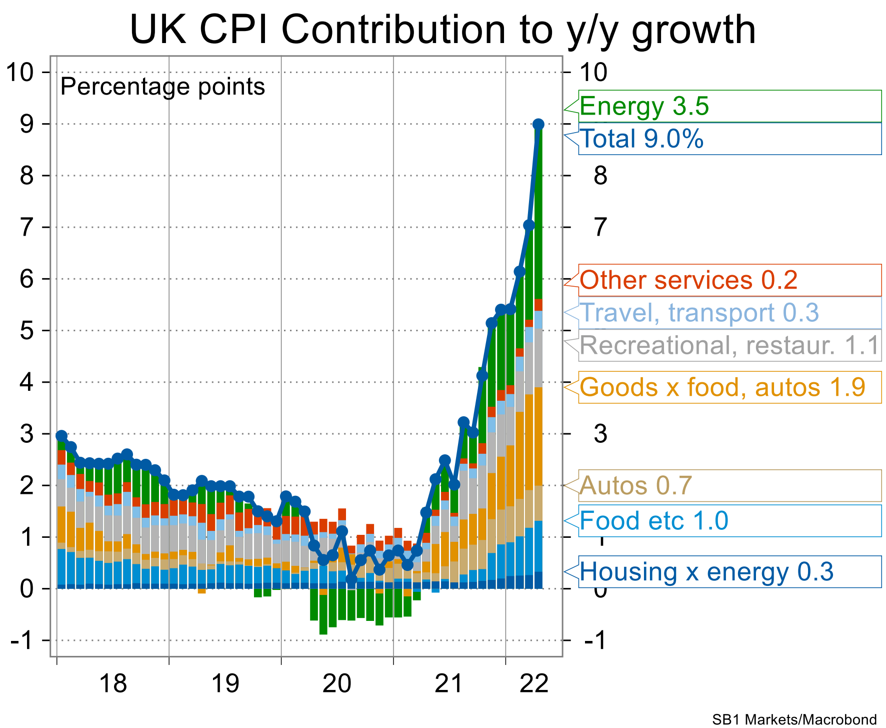


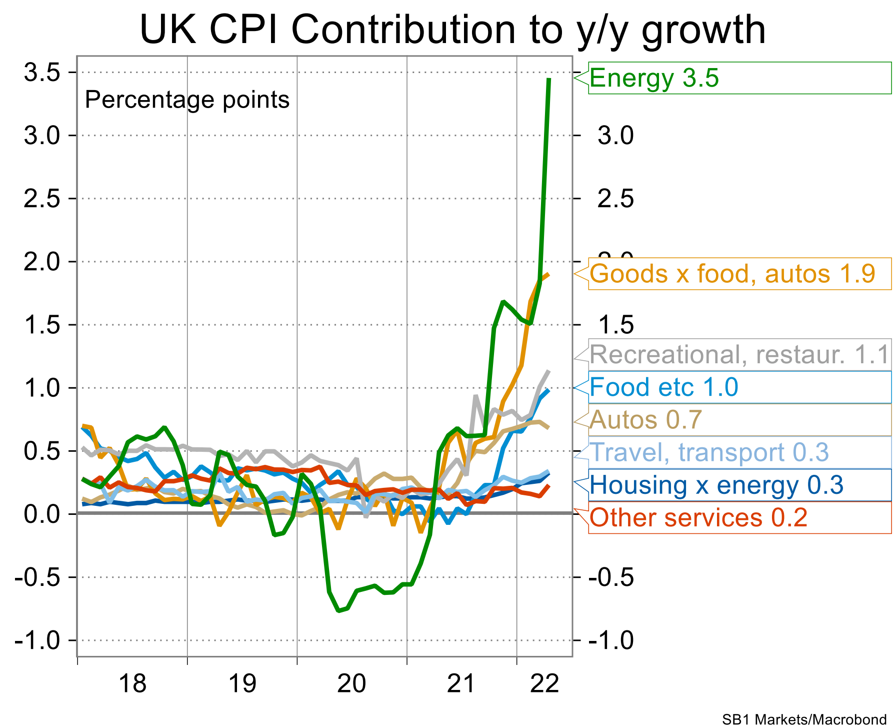


- US and Iceland has the lowest level vs their earlier peaks. Iceland is still at the top

Energy is important, but several components contribute as well

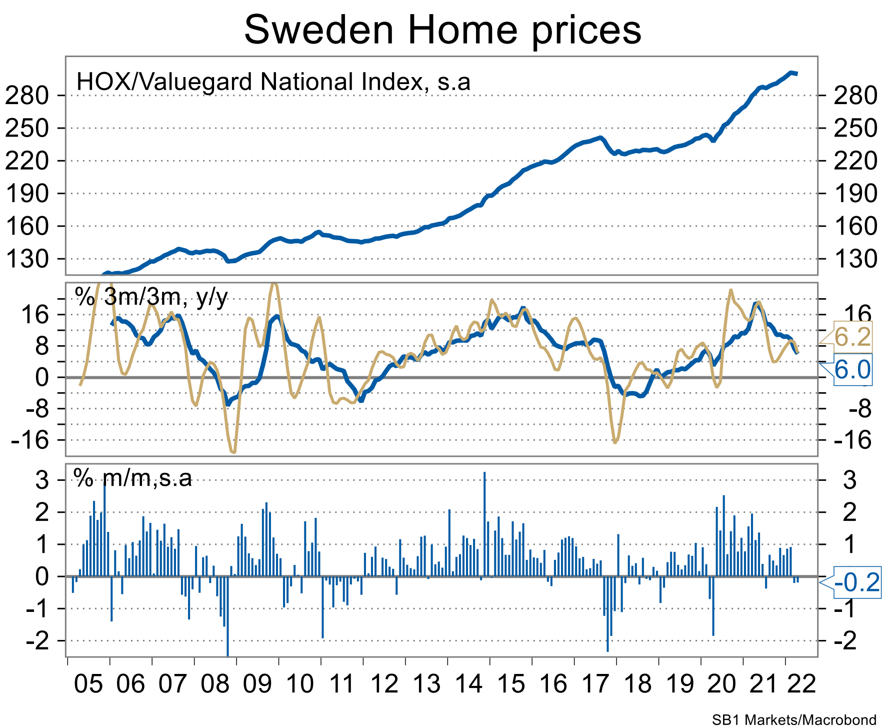
Goods x food & autos prices have shot up, as have recreational services/restaurants, foods, autos

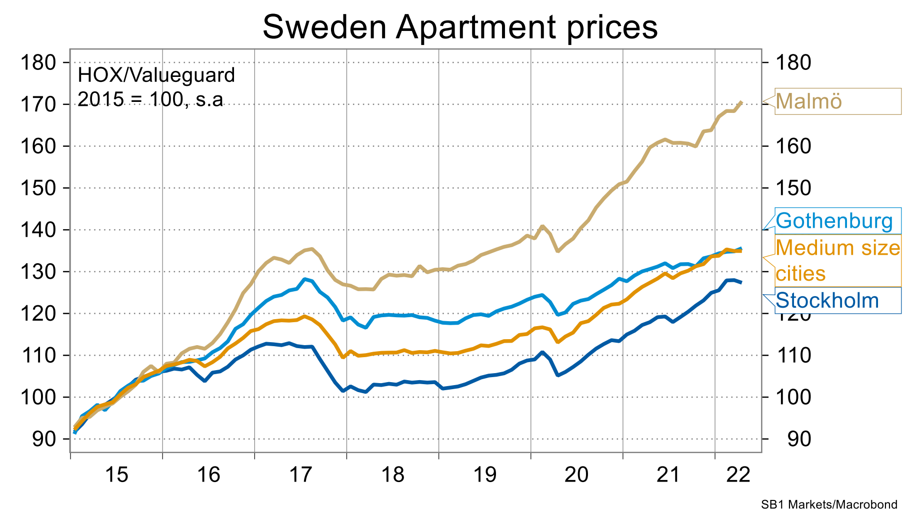


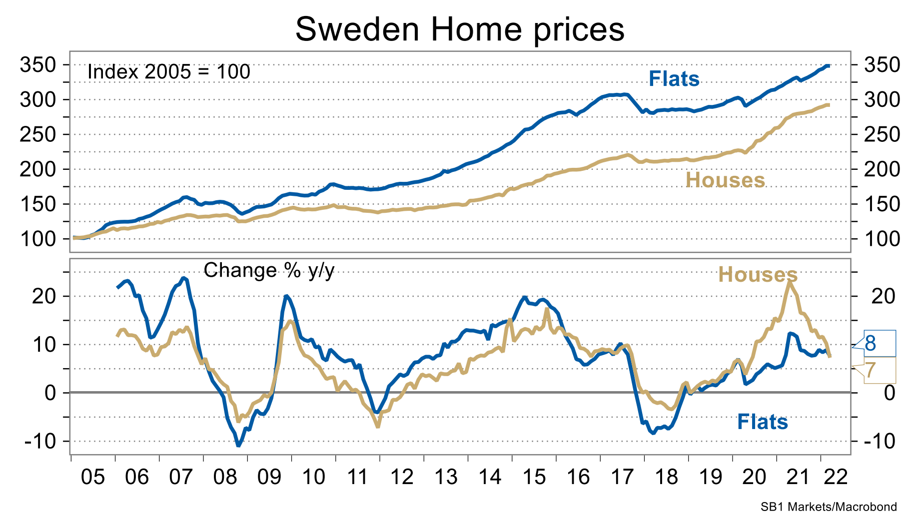


Swedish house prices FELL in April too, the annual rate 6.2%, from 19% a year ago

Mortgage rate expectations most likely to blame

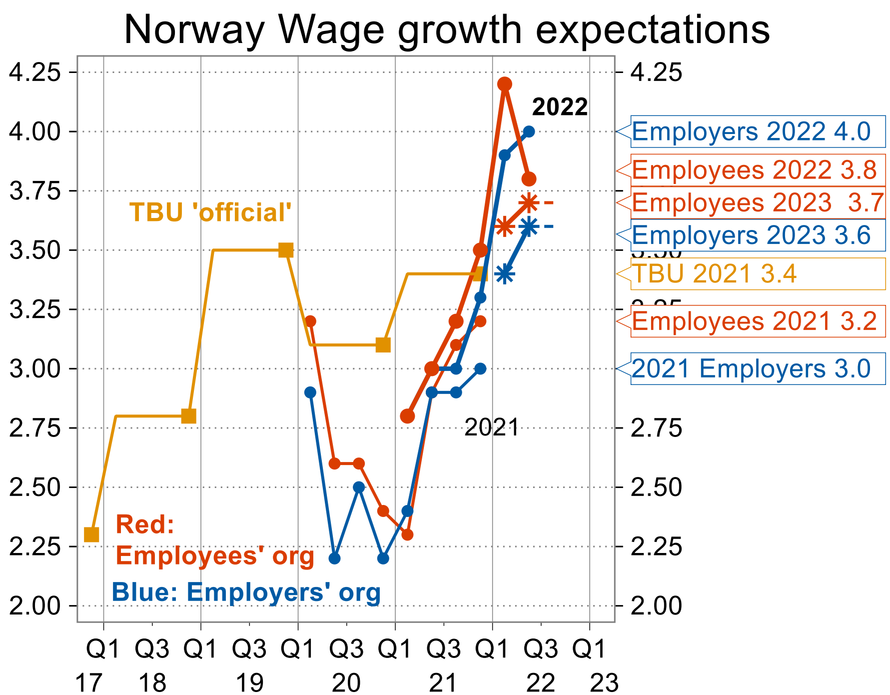






- Prices fell 0.2% m/m as in March (revise from -0.1%), and the annal rate declined to 6.2% from 7.4% in March
  - » The underlying price growth (3m/3m) is still 6%, and higher than in October last year (but the m/m decline continues into May…)
- Prices fell in Stockholm but rose in both Malmö and Gothenburg
- The **Riksbank's** abrupt change of tack in late April will very likely calm the housing market down – and a further decline in prices are quite likely. The non-residential market has already taken a hit

NoBa Expectation survey: Employers expect 4% wage growth, trade unions 3.8%!



SB1 Markets/Macrobond

2022

- Leaders in employers' organisations lifted their forecast by <u>0.1 pp to 4.0%</u> in Q2
- In the trade unions, leaders expect revised their forecast to 3.8%, from 4.2%
- Norges Bank assumed a 3.8 % growth rate in the March MPR
- <u>We think wage inflation will rise to above 4% in 2020 even if the agreed guidline in the central wage negotiation is 3.7%</u>

2023

- Employers aim for 3.6%, the employees 3.7%, up by 0.2 and 0.1 resp.
- Given the current tight labour market, these forecasts seem to be on the low side

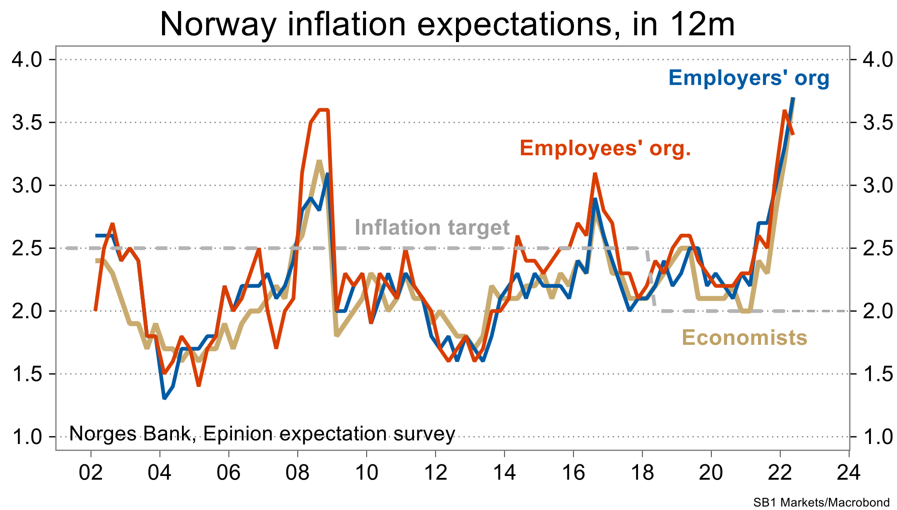
In sum

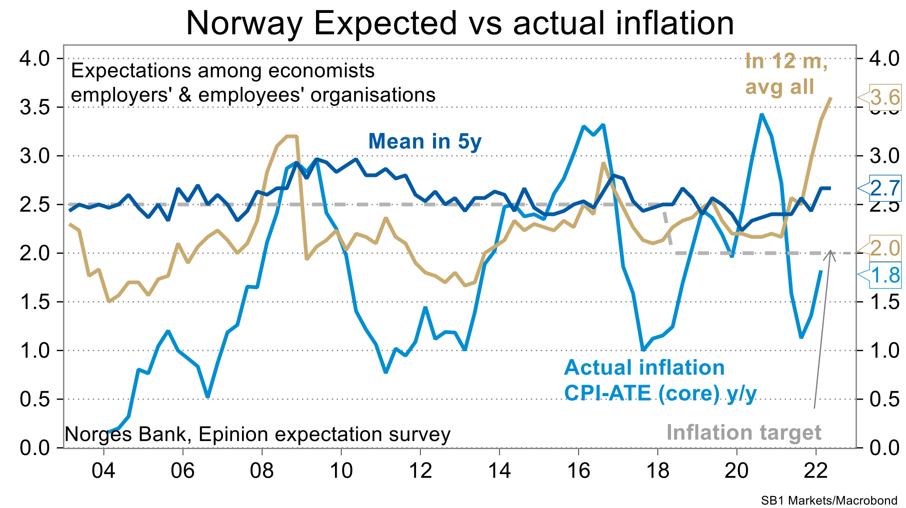
- Wage inflation is accelerating but these forecasts are not frightening vs Norges Banks 4% 2023 forecast and we do not expect the Bank to revise its forecast upwards as has been the norm the recent quarters

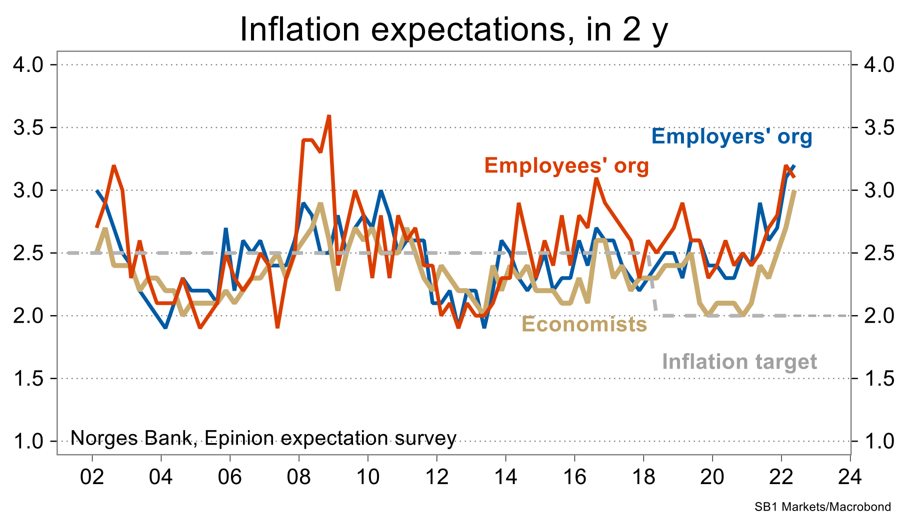
SpareBank 1 MARKETS

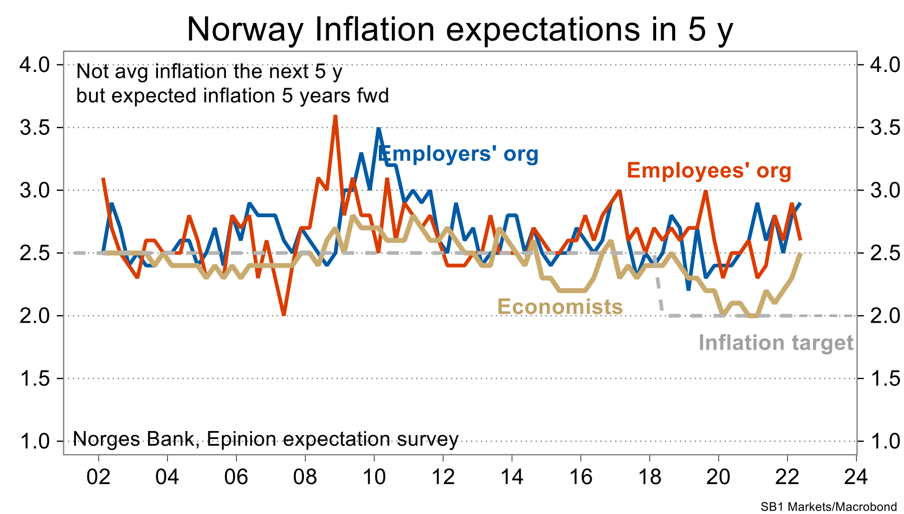
Short term inflation exp. further up, and nobody believes in 2% long term!!

3% – 3.5% infl. is expected the coming 2 years. Long term (in 5 years), a 2.7% rate of inflation is expected





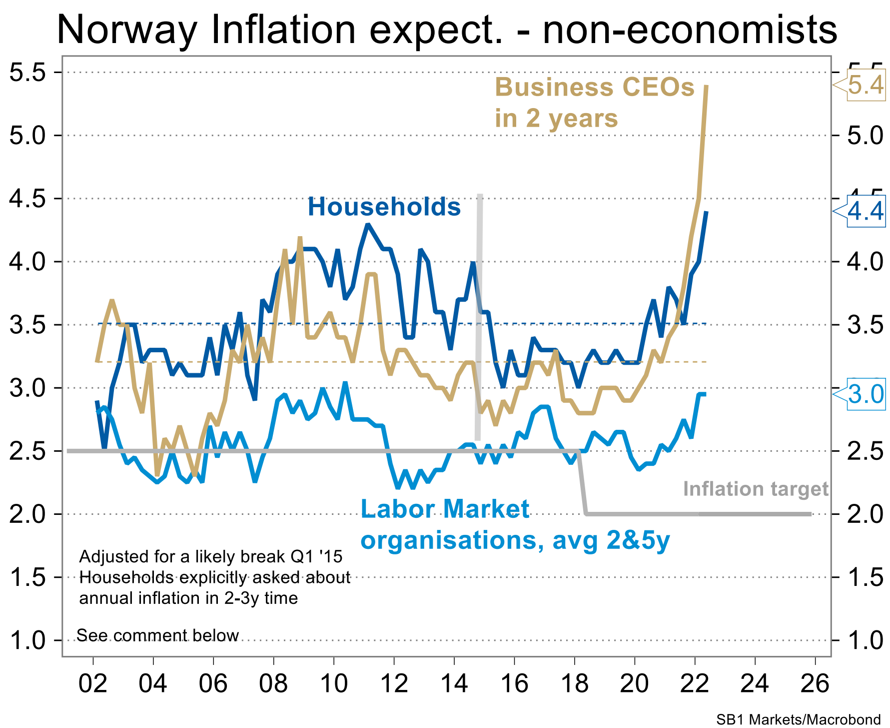




In these charts, results from economists (academia, market), leaders in trade unions and in employers' associations are presented, not businesses or households

Household, business inflation expectation are not particularly well anchored

Businesses expect a 5.4% inflation rate in 2 years' time, households 4.5% 2 – 3 years ahead



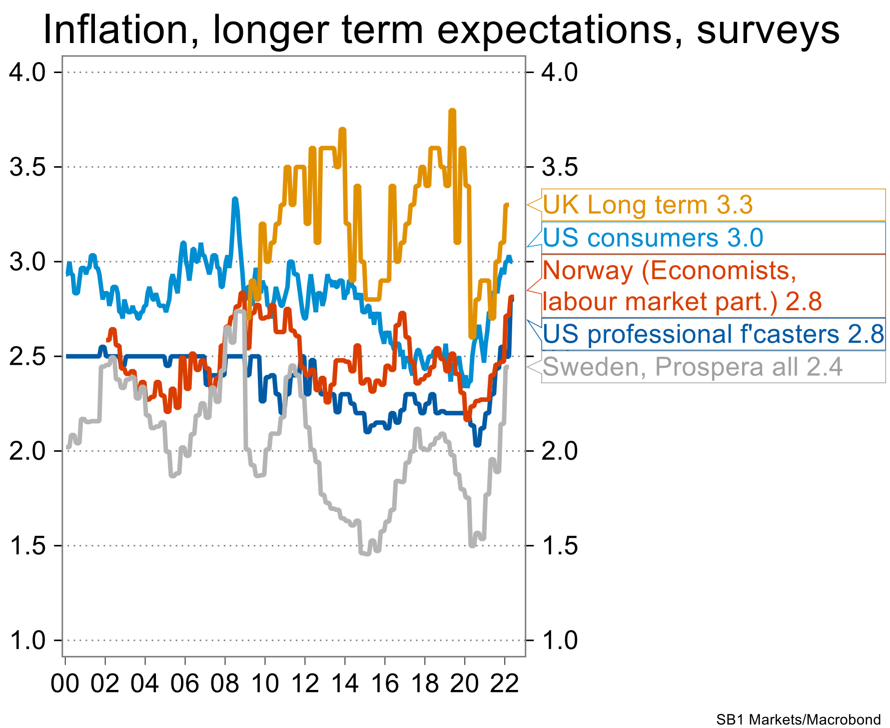
Business leaders' & households' expectations are rising sharply to above normal (very high) levels

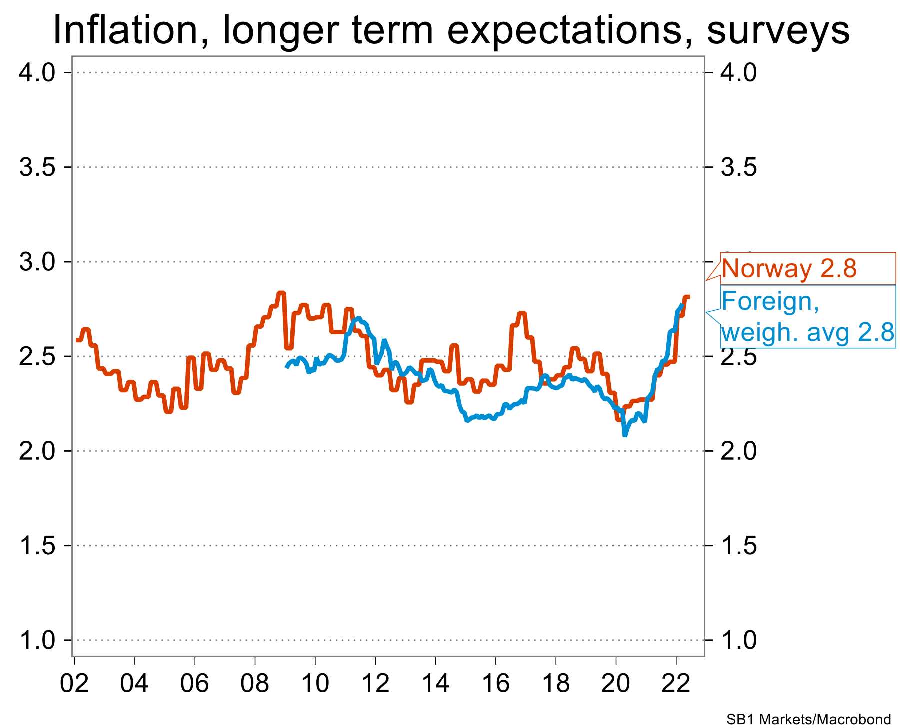
- **Labour market participants** (leaders in trade unions & employees' assoc.) are probably listening to their economists, but they still expect 3% long term inflation rate (2 y & 5 y avg). The cut in the inflation target to 2% in 2018 has not influenced inflation expectations at all
- **Business leaders** are expecting a 5.4% inflation rate in 2 years time – up 2.5 pp since before corona, and much higher than their average expectation (3.1%) (and no impact of the lower inflation target)
- **Households** have always expected incredibly high inflation going forward (even after an adjustment of data prior to Q1 '15, due to a clarification of 'inflation', see below) – on average 3.5%. Now, **they expect 4.4% in** 2 to 3 years time, up 0.4 pp from Q1, and 1.2 pp up from before corona
- Should we just ignore these 'silly' expectations, or should we reflect on them?
  - » We should at least put some emphasis on the significant rise in inflation expectations – to above average levels
  - » **Perhaps we could even explain demand for credit from households by the 2 – 2.5 pp negative gap between mortgage lending rates and their long-term inflation expectations?**

The questions regarding expected inflation in 2 or 2 – 3 years time for business leaders and households were slightly altered in Q1 2015 survey. Since then, they have been asked about the expected rate of annual inflation in 2/2-3 year time, not just 'inflation' which could have an unambiguous interpretation. Household revised their expectations down by 0.6 pp in the Q1 '15 vs the Q4 '14 survey due to this clarification. Business CEO's revised their expectations a tad upwards. Since there were no other major change in actual inflation or inflation expectations among other groups during these months, we have just revised households' expectations down by 0.6 pp pre Q4 '14 at the chart above

Survey based inflation expectations in Norway vs. other countries: Quite similar

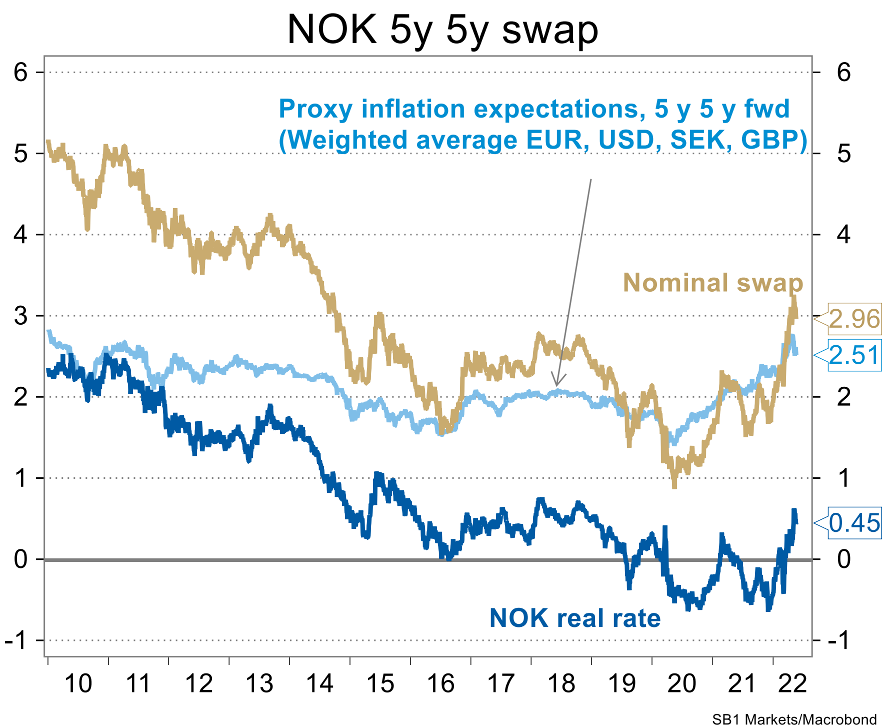
And they are on the way up now, everywhere. The discrepancy is neglectable

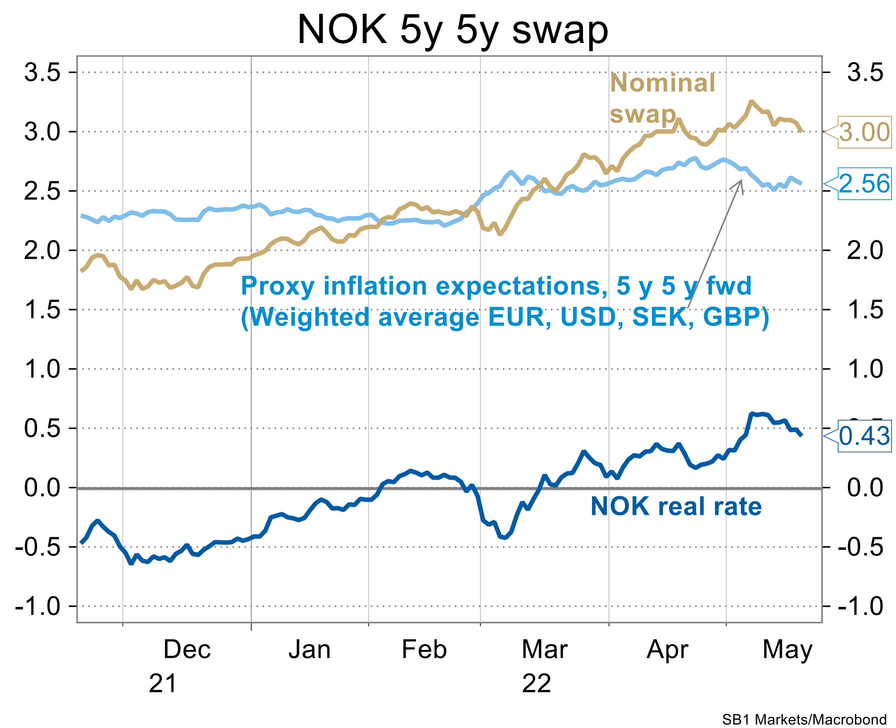




Where are the Norwegian market based inflation expectations?

Problem: There are no NOK break-evens (or real rate) bonds or swaps. So just construct a proxy?

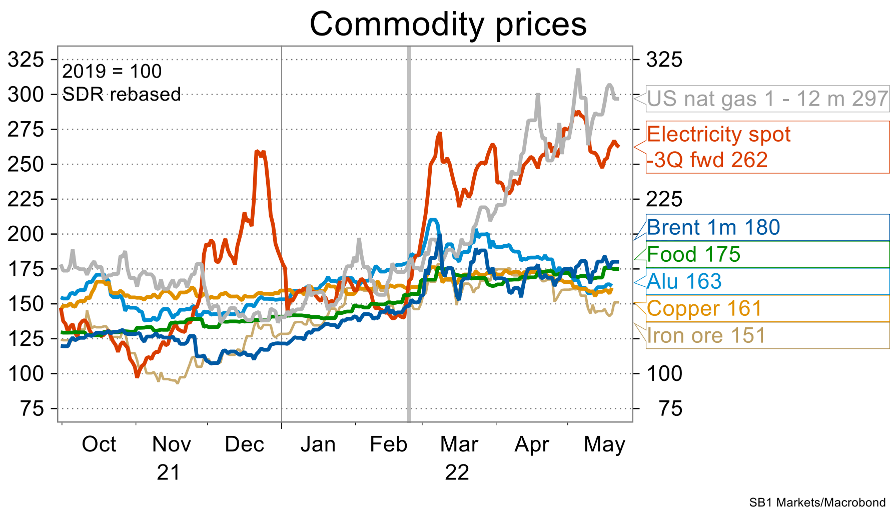


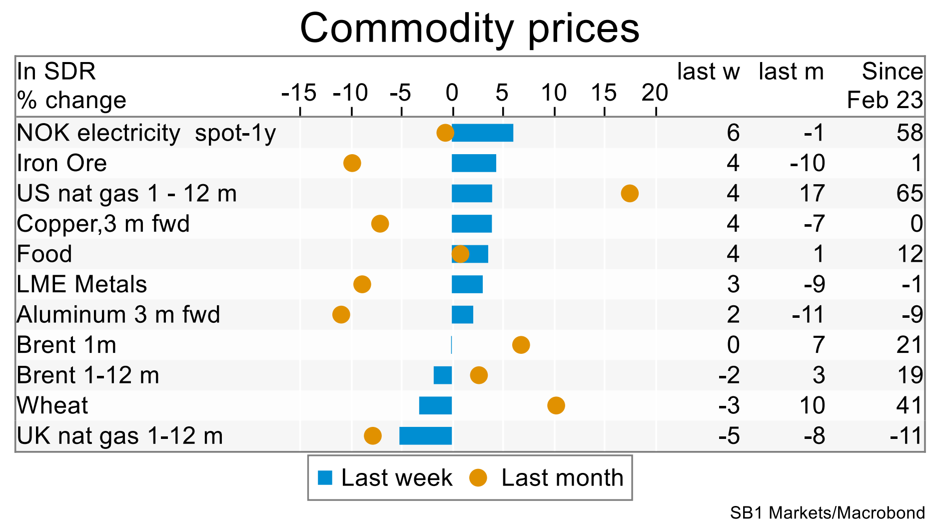


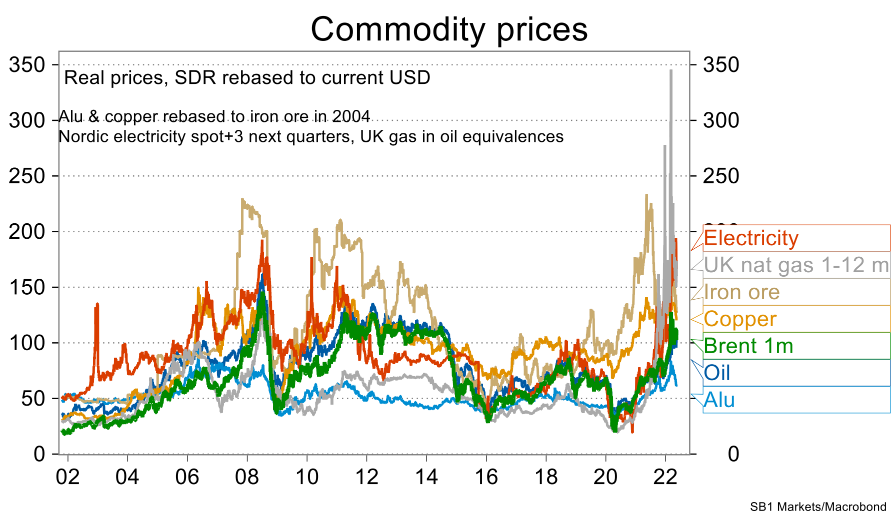
- We have constructed a proxy for Norwegian inflation expectations derived from break-even swaps in EUR, USD, SEK and GBP. Our peers vary somewhat level-wise, but the short term changes are very similar. We have just weighted them together (and adjusted GBP swaps for the CPI/RPI differential)
- The current estimated 5 y 5 y NOK inflation 'break-even' is 2.51%, 50 bps higher than a 'normal' level at 2%. The 10 y break-even is at 2.86%
- A NOK real rate is just a residual when expected inflation is calculated: It has surged here too – which has profound impact on all NPV-models (in real estate and everywhere else). There is no reason to believe that expected real growth in rents/earnings have appreciated alongside the rise in long term real rate

SpareBank 1 MARKETS

Commodity prices mixed last week, food prices and metal prices rose





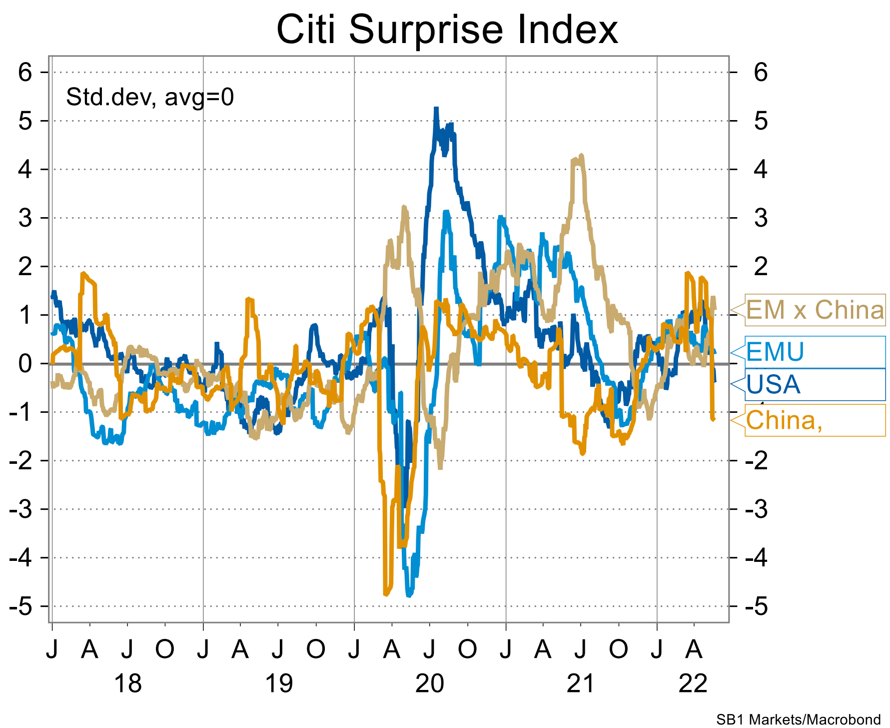


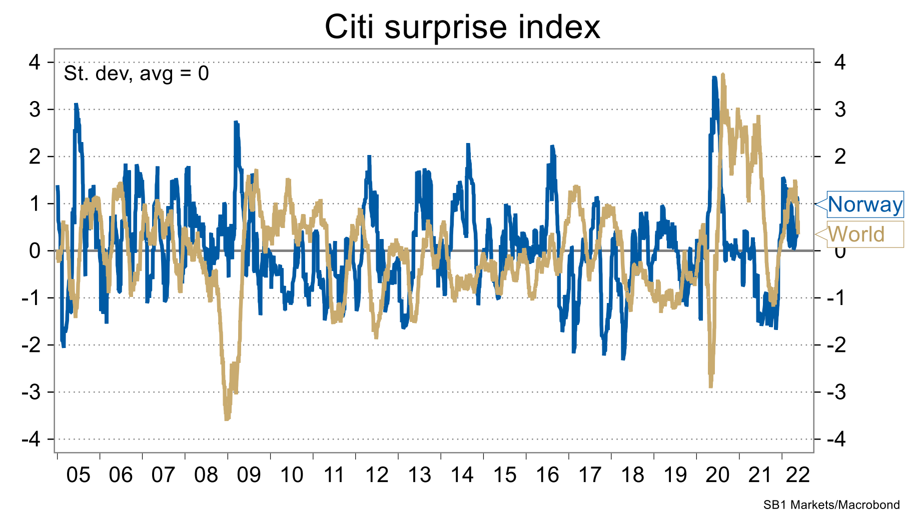
- The Economists food commodity index rose 4% last week, and has been close to flat last month – and prices are up 12% from before the war
- UK natural gas prices are 11% down since before the invasion
- US natural gas prices are up 58% - some LNG ‘leakage’ to Europe?
- Norwegian electricity prices are up 58%
- The oil price was close to unch last week – and up 20% from before the war

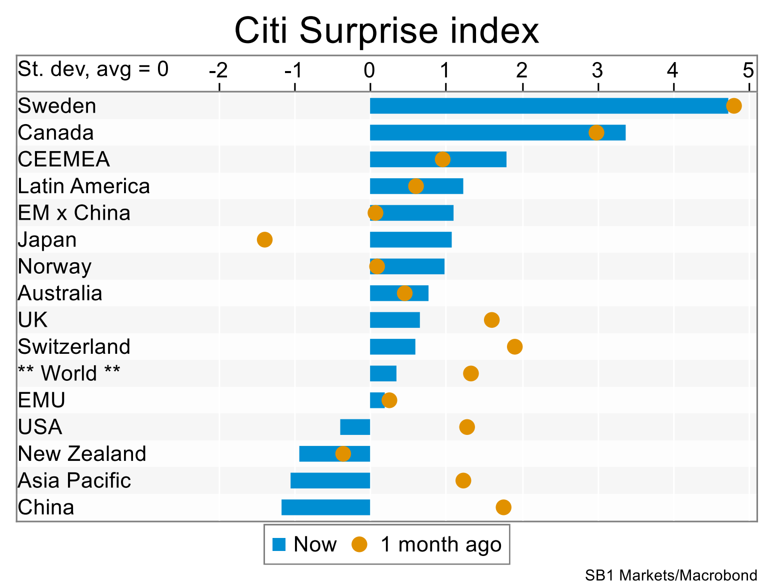
SDR: Special drawing rights – a ‘global currency’

Chinese lockdowns even take the global surprise index down

US has fallen below par too







- **Norway** is surprising significantly on the upside, according to Citi
- **Sweden** is still at the top

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

Highlights

The world around us

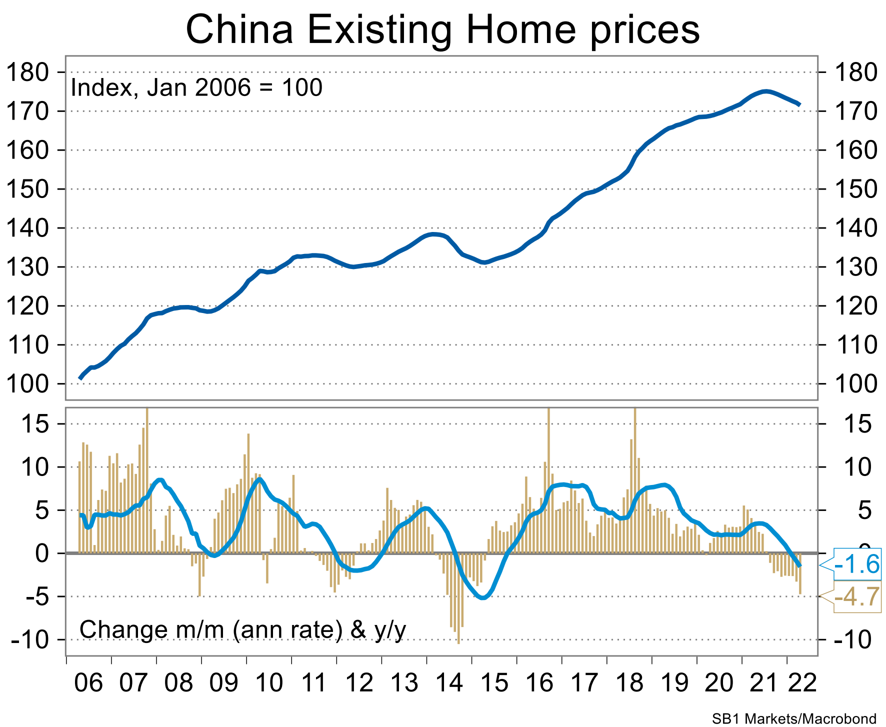
The Norwegian economy

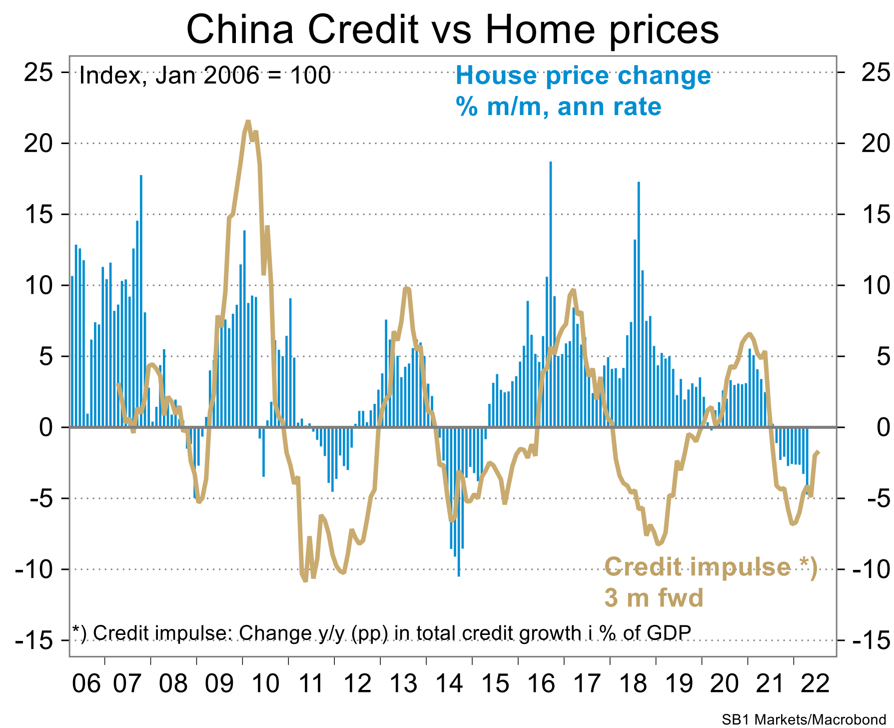
Market charts & comments

SpareBank 1 MARKETS

Existing home prices fell at an even faster rate in April. Lockdowns, or for ‘real’?

Prices fell for the 8th month in row, and are down 1.6% y/y. New home prices fell sharply too



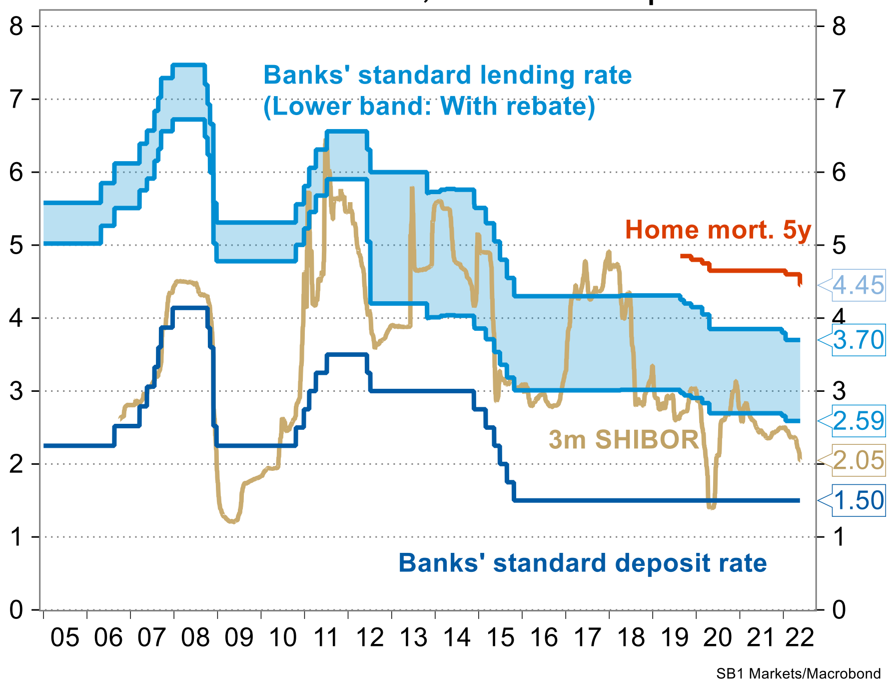


- **Existing home prices** peaked last July, and are falling at an gradually faster pace, in April by 4.7% (m/m annualised), from 3.1% in March. Measured y/y, prices are down 1.6%
- **New home prices** also fell last autumn but slower than existing home prices, and almost stabilised in Q1. However, in March prices declined at a 4.4% pace, and they are down 0.1% y/y. Some builders have reported deep price cuts to reduce the inventory and secure financing. Analysts have questioned the reliability of the official data, to which we refer here
- The gradual decline in prices since last summer is probably due both some fire sales from construction companies that run out of other sources of financing, and some hesitance from home buyers**.** In March/April **new home sales** collapsed 25% very likely due the lockdowns in many cities, and prices may also be impacted
- **Credit growth** accelerated marginally during last year and through Q1, however mostly due to increased borrowing from local governments. In April, bank lending collapsed, possibly due to lockdowns (which could impact both supply and demand for credit). The **central bank** has cut **signal rates** somewhat, and reserve requirements are cut

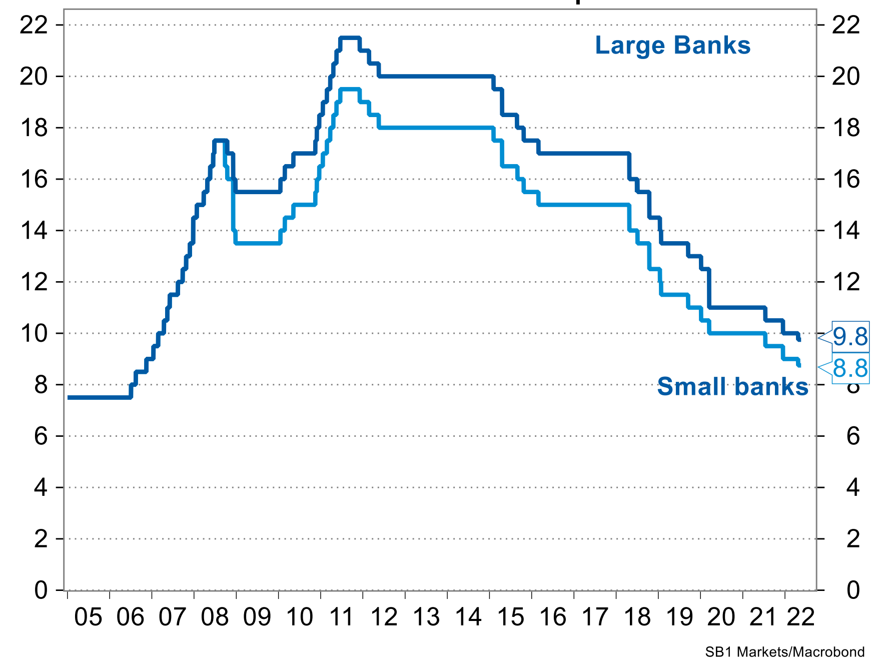
The gradual monetary policy easing continues

A signal rate for mortgages cut 0.15%, more than expected

China Interest rates, reserve requirements



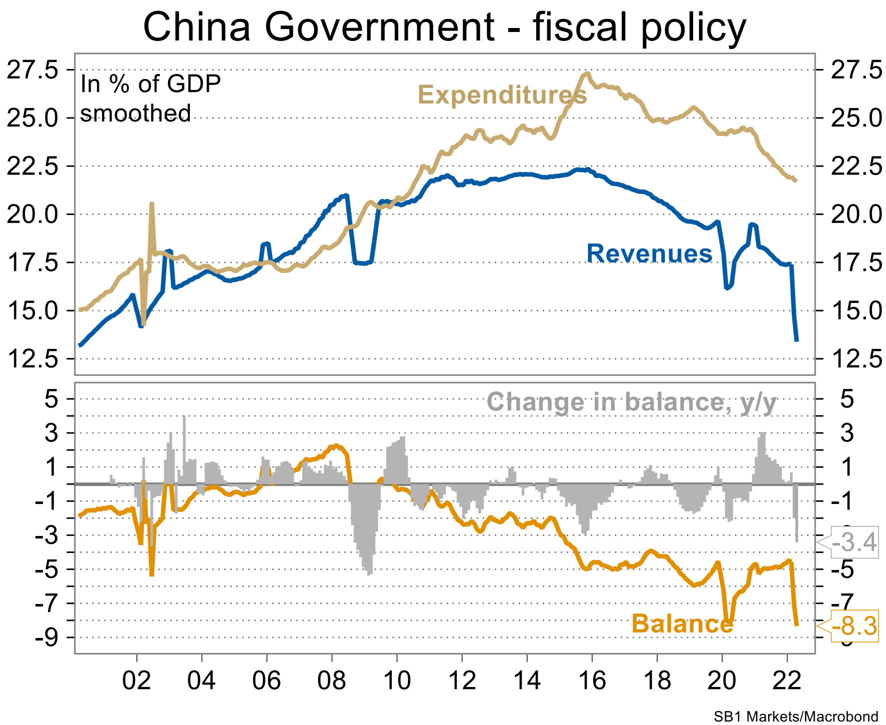
China Bank's reserve requirements



- Last week the PBoC cut the 5 y mortgage lending rate by 0.15% to 4.45%, marginally more than expected (5 – 10 bps)
- Other signal rates have been cut marginally the recent months
- The reserve requirements for banks have been cut three times since last summer, in total by 1.25%, the last 25 bps in April
- These measures are not that aggressive and does not signal any panic. The authorities want to support growth but at the same time fear that credit expansion has gone too far

Government revenues have been 'locked in'

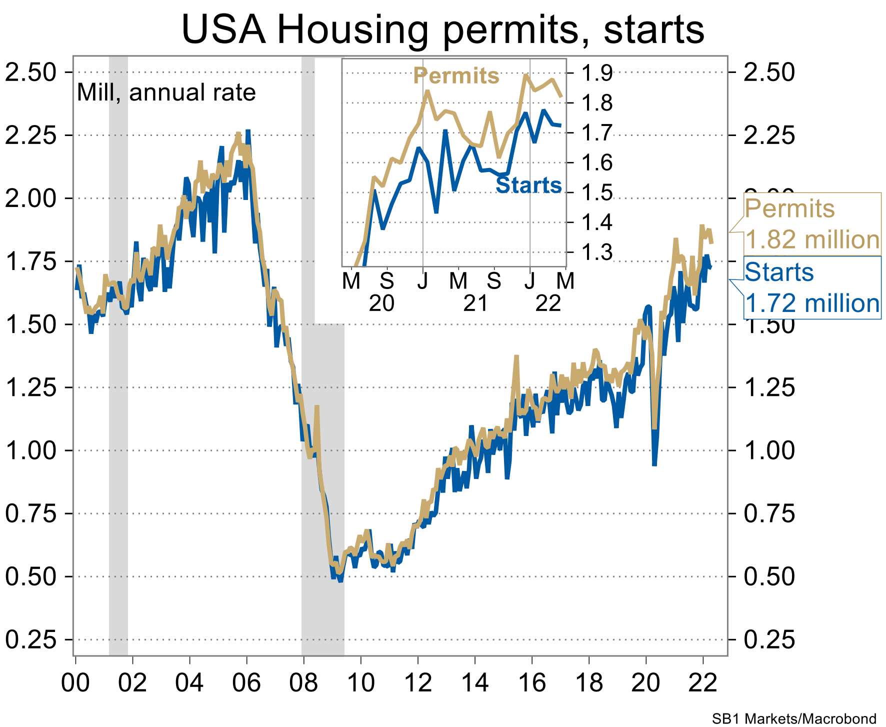
Reveunes fell more than 40% m/m in April, totally unpredecented

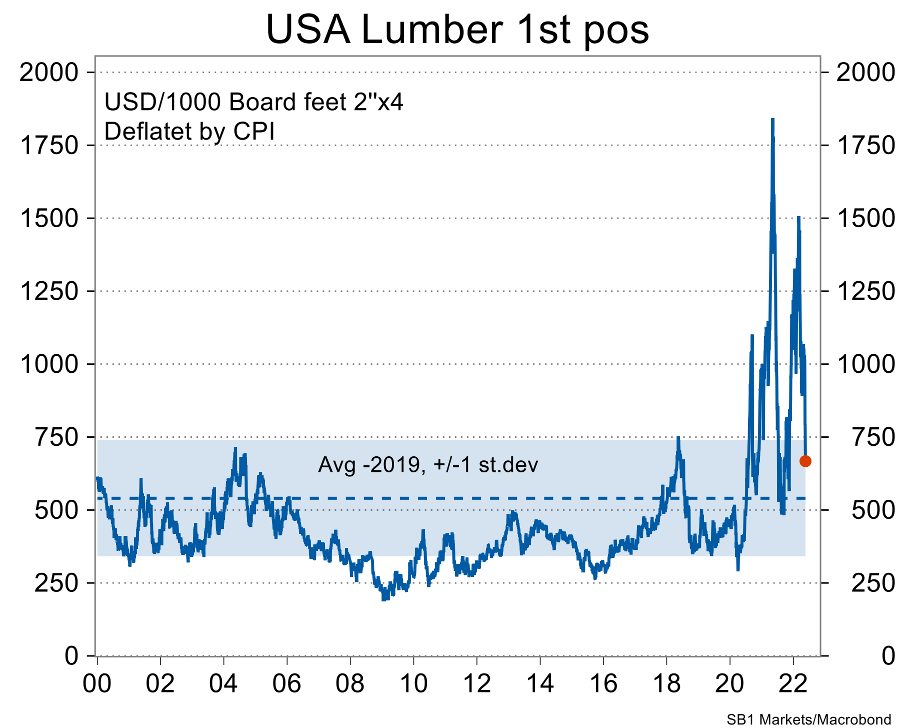


- The virus very likely to blame

Building permits, housing starts have peaked? Lumber prices collapsed

Housing starts are still at a high level – but below expectations in April

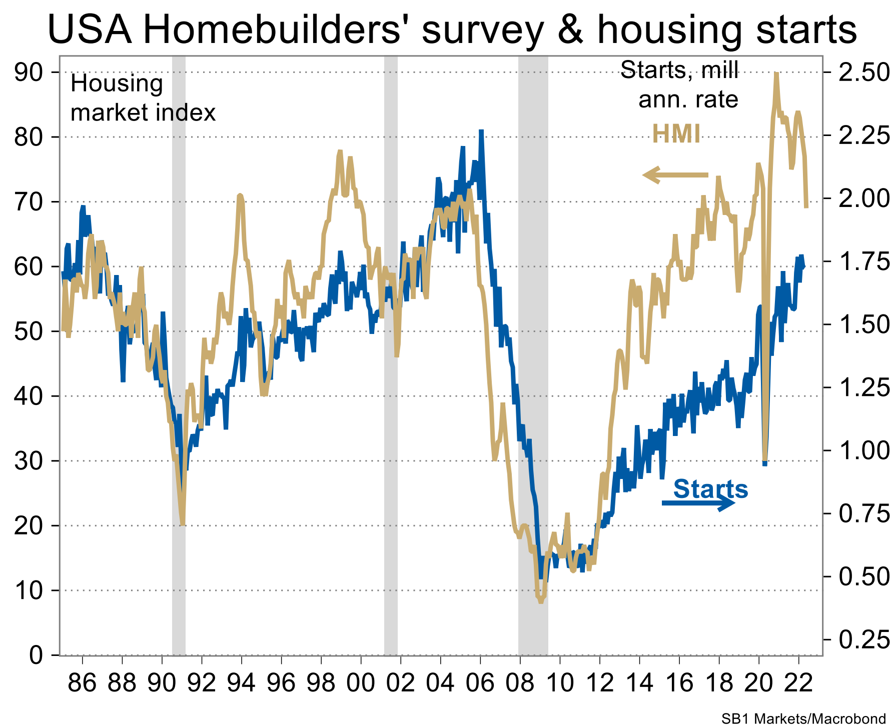


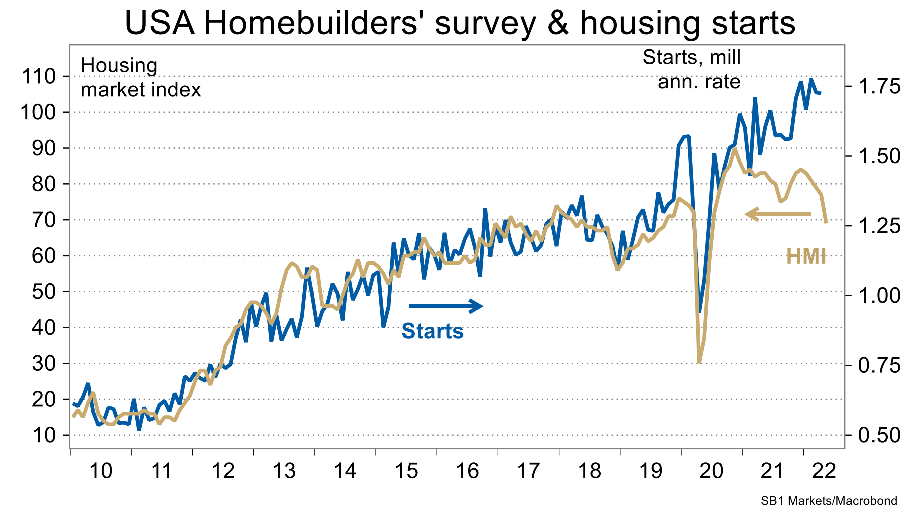


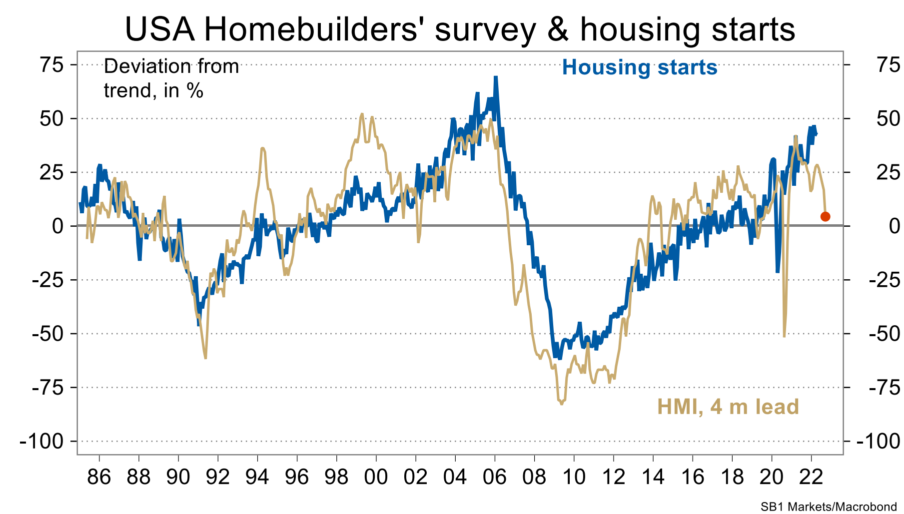
- **Housing starts** fell to 1.72 mill in April, expected 1.75 mill from 1.73 mill in March (downward revised from 1.79 mill). **Building permits** landed at 1.82 mill, as expected, from 1.88 mill in March. In sum, marginally below expectations. Both permits and stars have flattened recent months, at 15% above the pre-pandemic level – and at the highest level since 2006 – but still below the pre-financial crisis peak at 2.2 mill
- Given the incredible strong existing home market, and soaring prices, starts should normally have strengthened further, as mortgage rates have been low until recently and the economy has been strong, with a very low unemployment rate. <u>No it's probably 'too late'</u>. Mortgage rates have surged, and **homebuilders** are reporting waning demand, check next page
- Building **material cost inflation** has come to a sudden halt. **Lumber prices** have 'collapsed' recent weeks and are <u>not far above a normal level anymore</u>

Homebuilders' market index sharply down in May: Mortgage rates start to bite?

Signals a 25% decline in home prices?



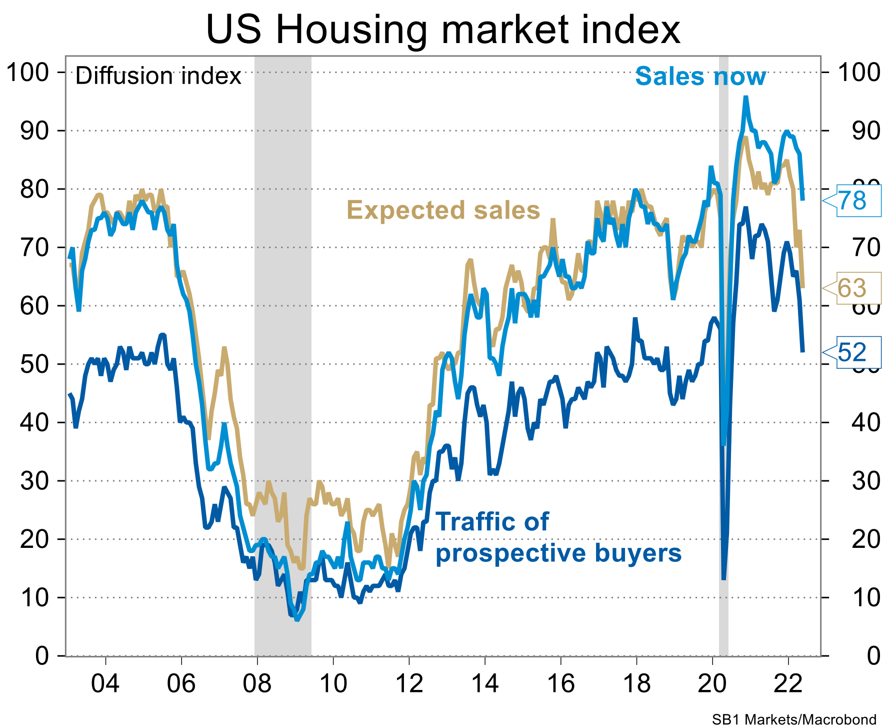


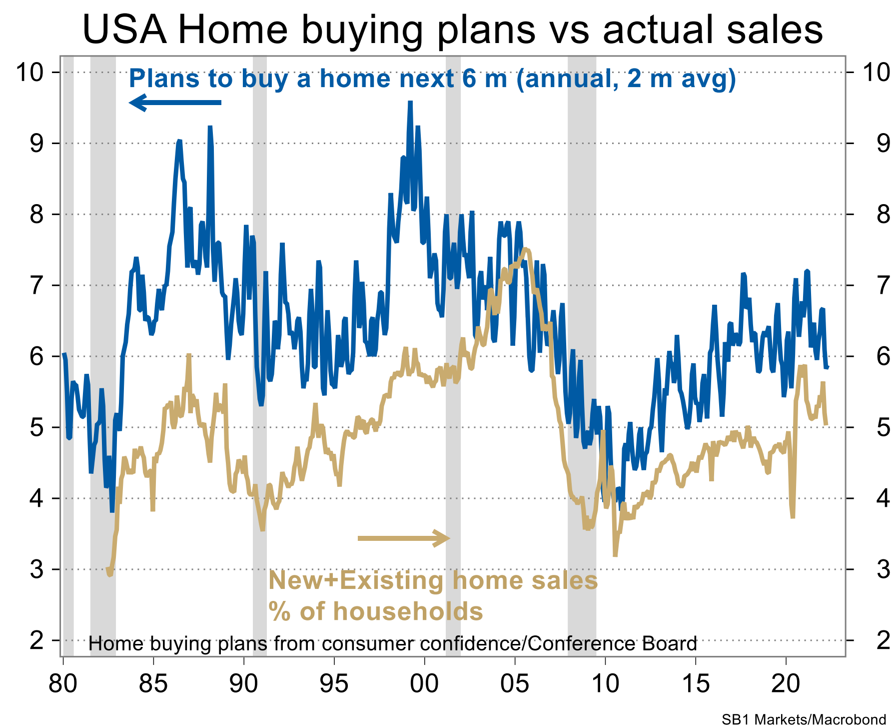


- **The Homebuilders' Housing Market Index (HM)** lost 8 p to 69 in May, expected down 2 p 75. The decline in among the largest on record, just 3 months since 1985 has been worse (of which April 2020 is one)
- *'Growing affordability challenges in the form of rapidly rising interest rates, double-digit price increases for material costs and ongoing price appreciation are taking a toll on buyer demand'*, the press release states. (No mention of material or labour shortages)
- The decline in the index signal sharp decline in housing starts, perhaps as much as 25% (the best correlation chart, to the right)

All components of the HMI sharply down, almost by the same amount

Homebuying plans have not fallen by much, according to Conference Board's cons. confidence

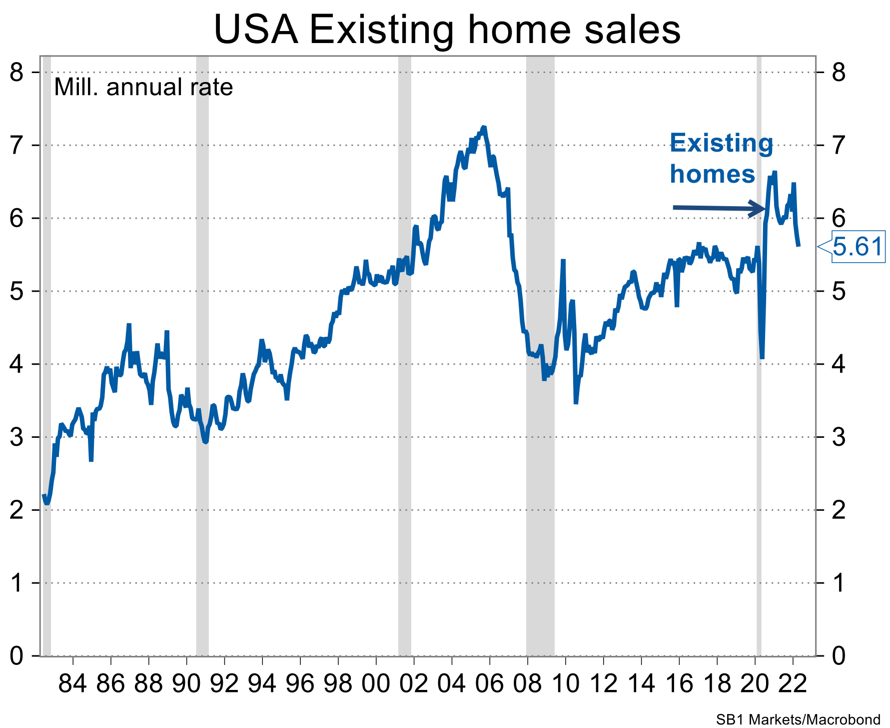


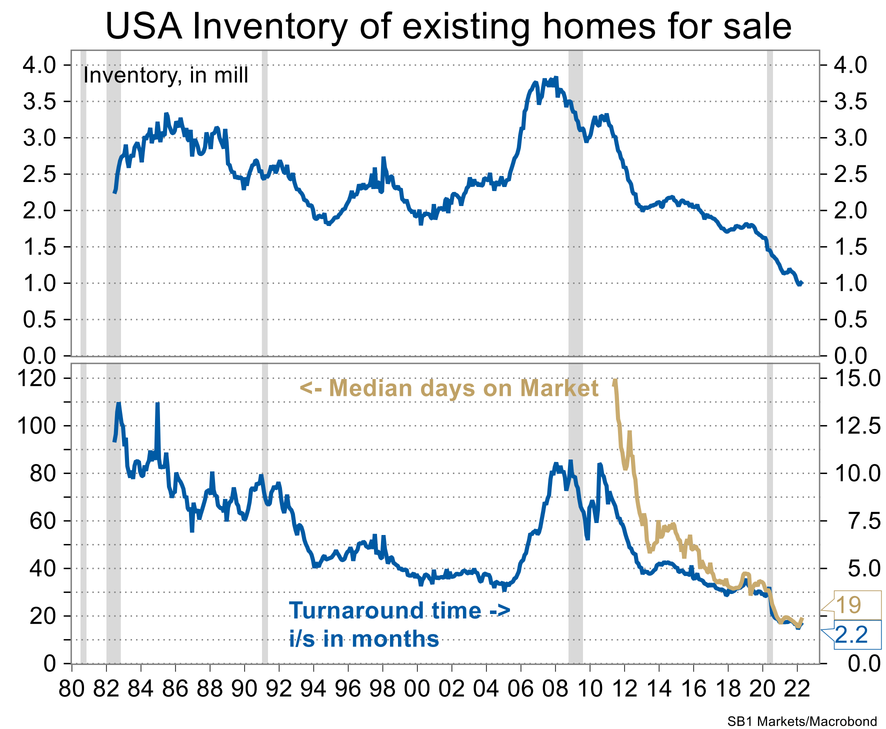


- Conference Board has not reported their May data yet

Existing home sales down in March, but prices shot further up

The inventory is still very low – but it rose marginally in April

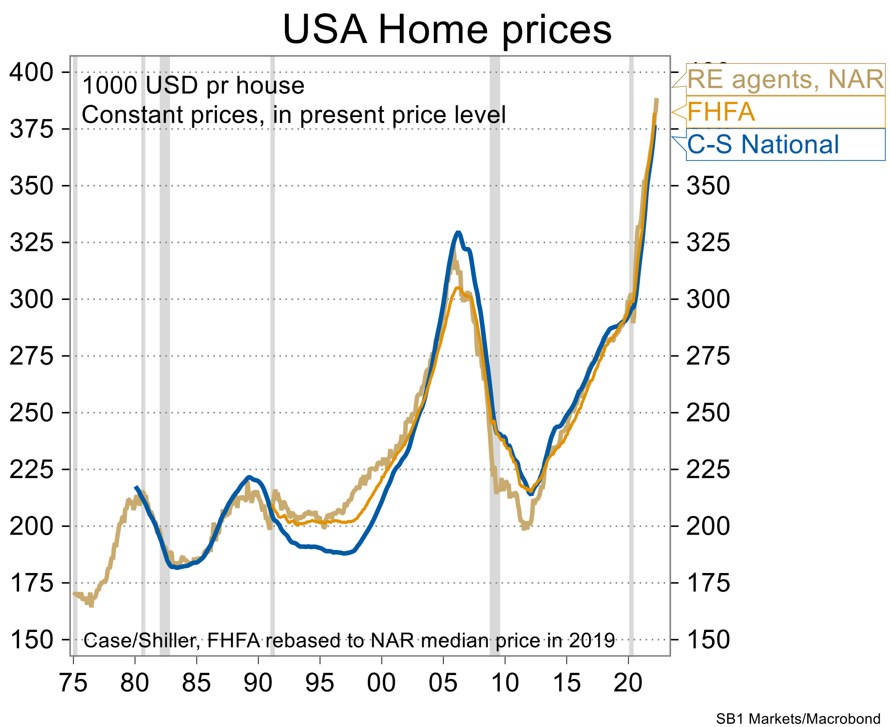


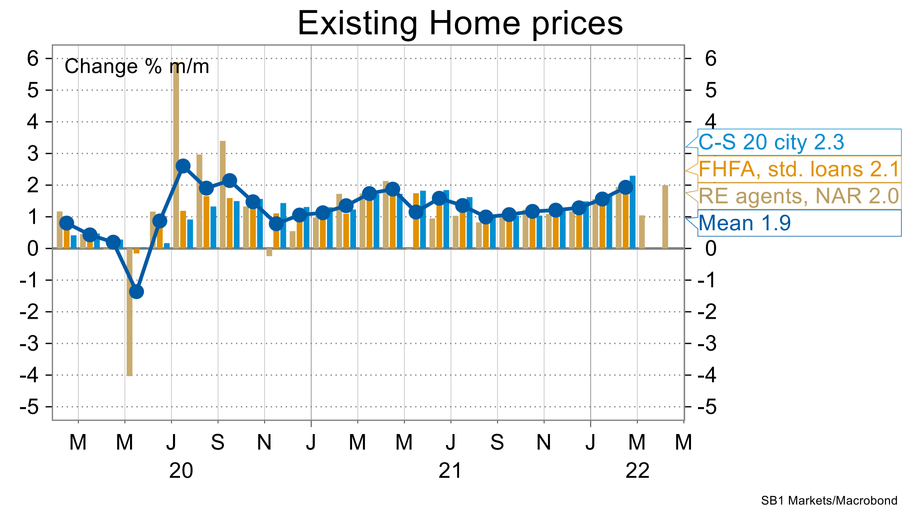


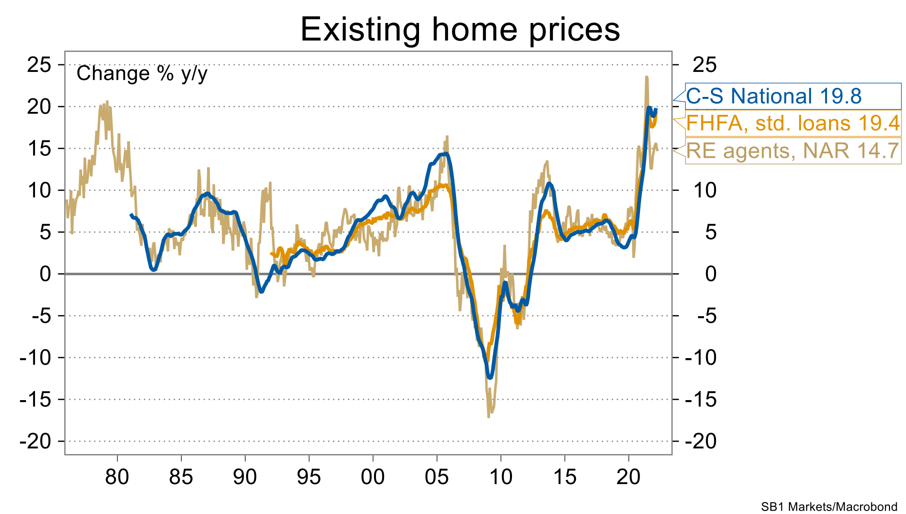
- Sales of **existing homes** fell to 5.61 mill (annualised rate), from (upward revised) 5.93 mill in March, expected down to 5.65 mill - a little better than expected. Sales have fallen 14% from local peak in January, and are probably trending down – from a high level in mid '20
- **The inventory of unsold homes** rose marginally in April, as in March – from the ATL level in February
  - The inventory equals 2.2 months of sales (up from 2.1 last month). During the 2005 boom, the i/s ratio was 4 months, in bad times it has been as high as 10 months
  - The median time on the market for those homes sold is just 19 days (up from 18 last month, and 16 in Feb), down from 30 days before the pandemic (and 120 days in 2011!)
- **Prices** rose 2.0% m/m (!) in April, *check more next page*
- **Mortgage rates** have shot up recent weeks and months. Some reports signal a slowdown in activity. So far, declining sales could have been explained by lack of supply, as prices have been soaring – and they still are (and much more than we expected)

Existing home prices up 2% in April (or really in March). What now?

Mortgage rates have exploded since February – will the housing market stand it?



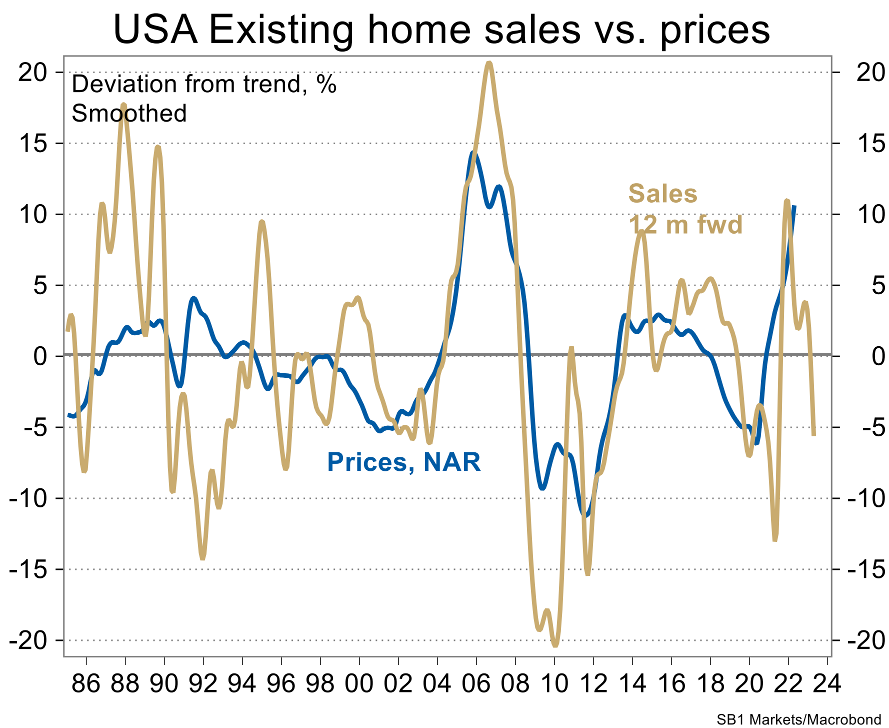


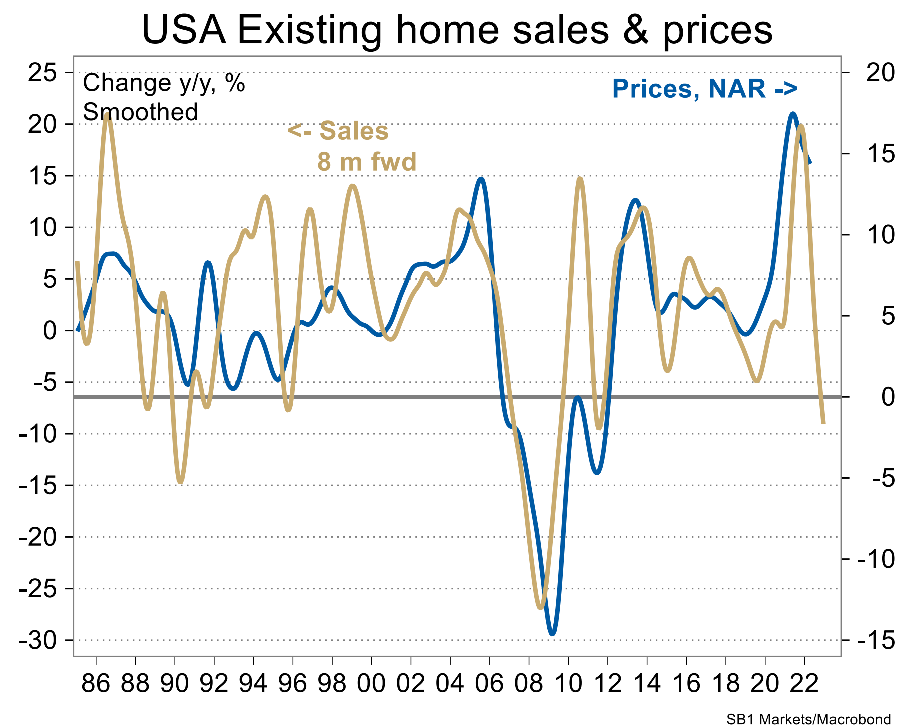


- **Prices** rose 2.0% m/m in April, up from an 1% in March. (April prices are mostly based on transactions agreed upon in March). The annual rate fell 0.2 pp to 14.7%.
- Other indices signal an <u>even faster</u> price appreciation, and annual rates are 19% - 21%. <u>Prices are normally lagging sales by almost 1 year, and the recent decline in sales may signal a turnaround in prices</u>
- Home prices are up some 35% from before the pandemic, and way above the 2006 level, even in constant prices

When home sales decline, prices follow. Normally after a while

Thus, a focus on transactions is justified – even if prices are the ‘real thing’

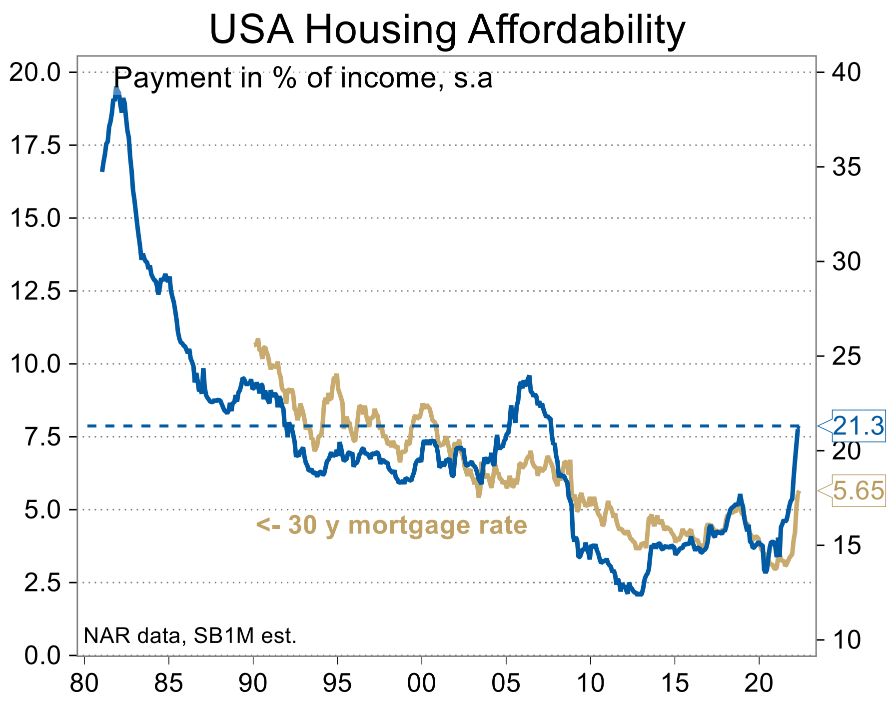


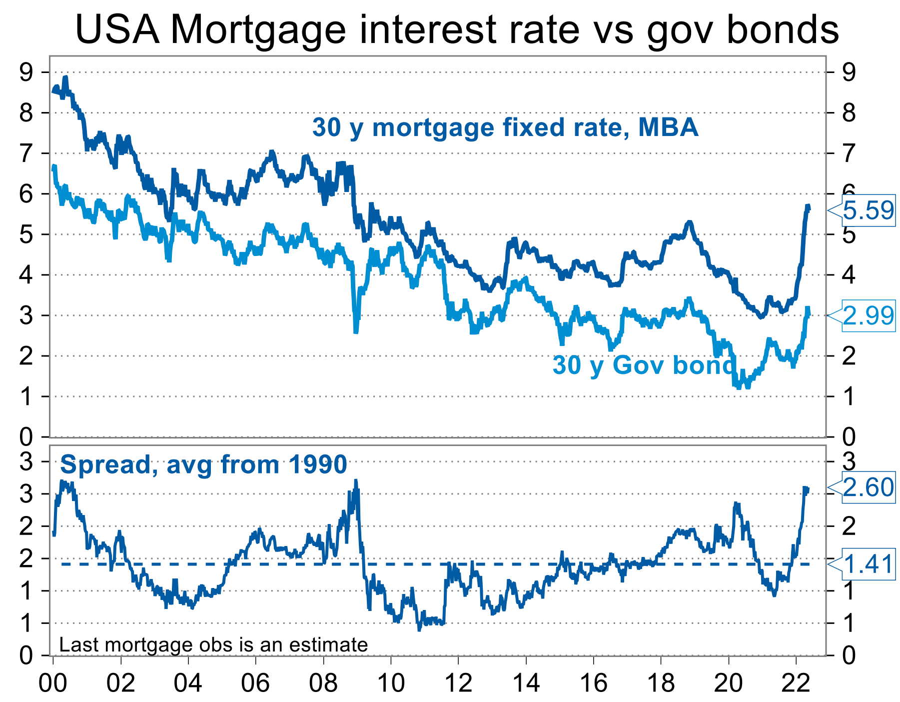


SpareBank 1 MARKETS

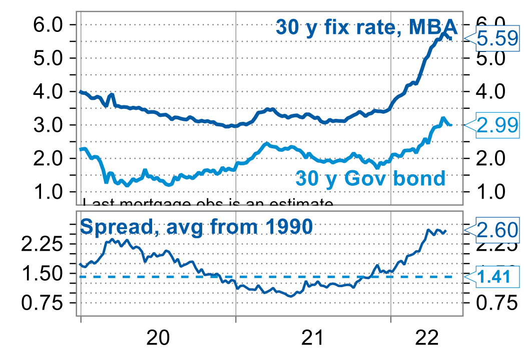
The least affordable housing market since 2008

Prices are up 35% since before the pandemic, the mortgage rate is up 40%. In sum....



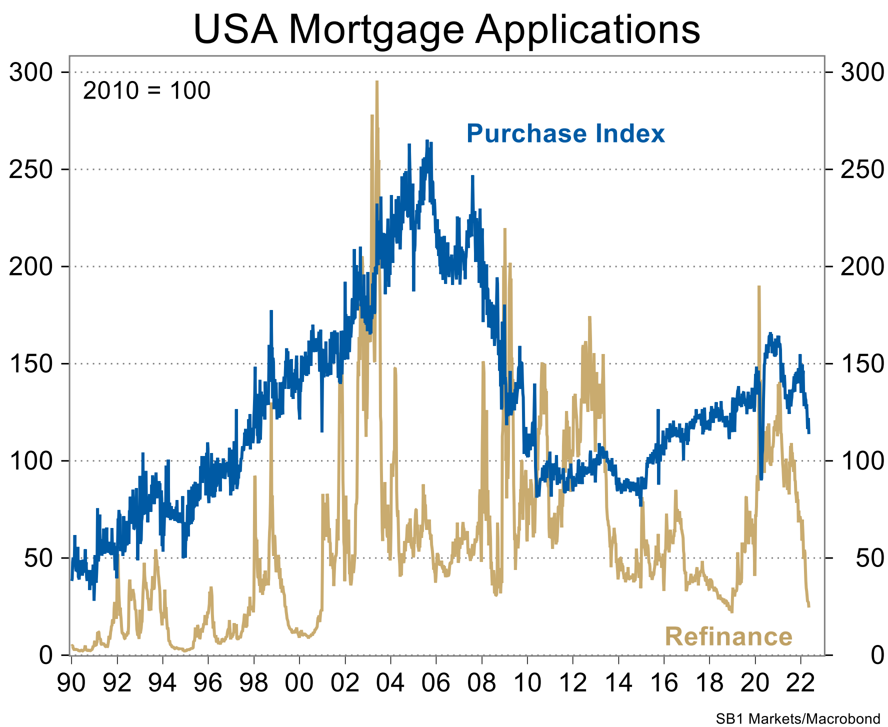


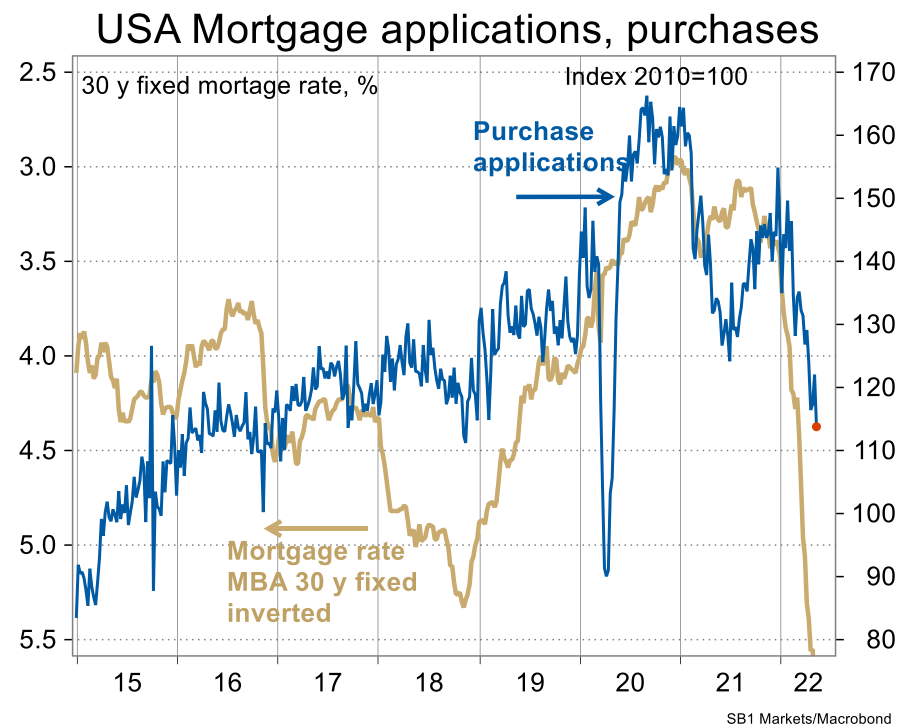
- **The 30 y fixed mortgage rate** has climbed to 5.59% (effective rate) from 3.0% last summer, from 3.5% at the start of 2022. Before the pandemic, the rate was 4.0%
  - » The mortgage rate has climbed MUCH faster than the 30 y Gov bond rate. The spread has widened to 260 bps from 91 at the bottom last spring and it is far above the 141 bps average – and among the highest in modern times. The upside risk must be limited from here – the spread will at one stage retreat
- The **Federal Reserve** concluded its mortgage backed bonds buying campaign in March - and will start reducing its holdings from June. No doubt, this shift explains the surge 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 – and is 'responsible' for the substantial part of the unprecedented 35% surge in prices past 2 years



Mortgage rates are up – and demand for new mortgages ~~may be~~ is waning

Applications fell again last week – and finally we can see a downturn worth talking about

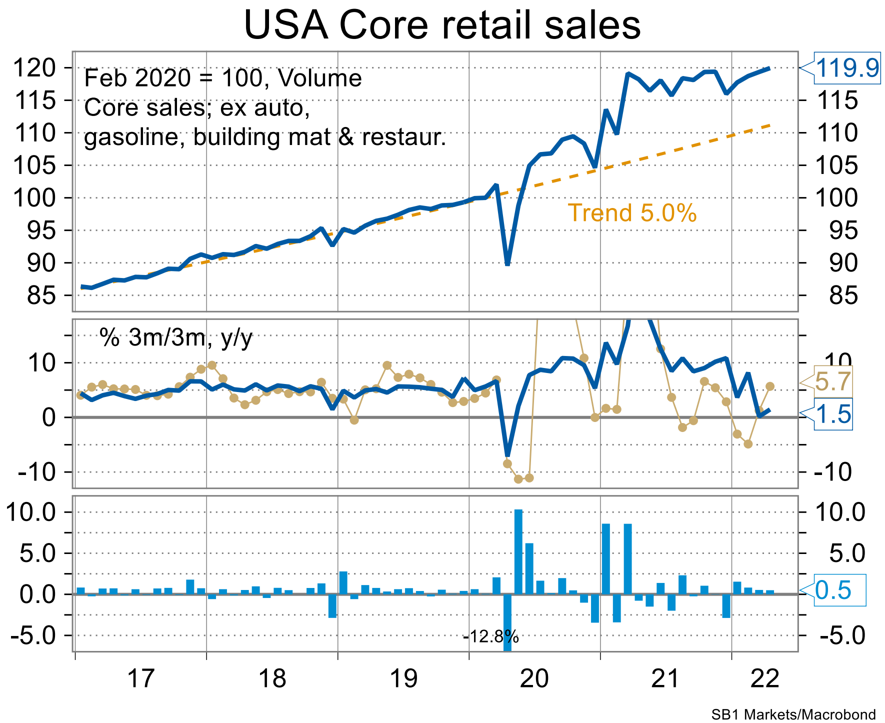


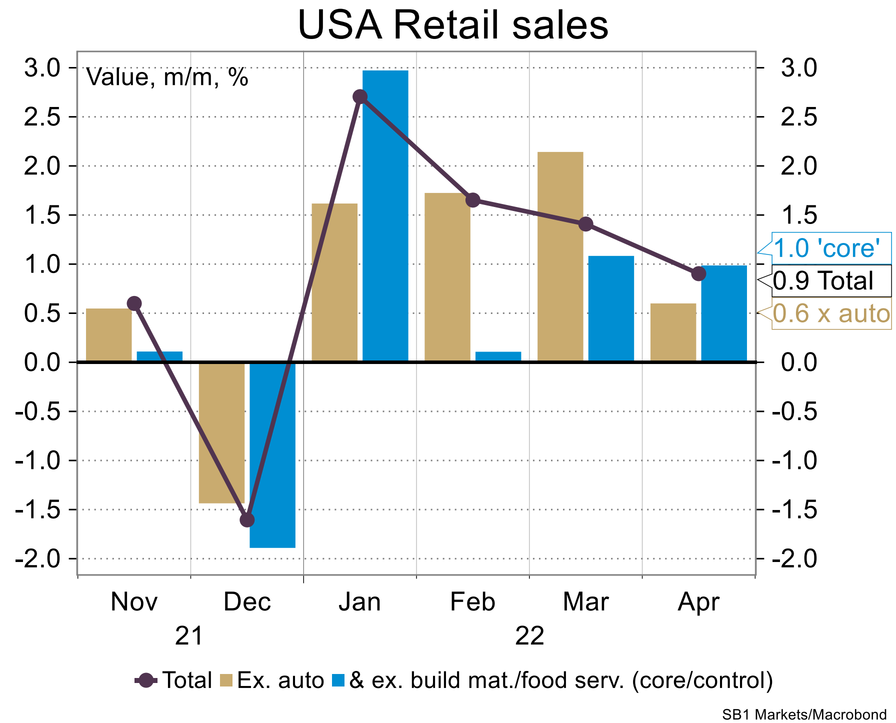


- Applications for new mortgages are down some 20% since the start of the year, and the level is now almost 10% below the pre-pandemic level. Still, the downturn is not dramatic

Retail sales still strong, March have been revised up, decent growth in April

Real core goods sales are still going strong, and the trend is slightly upwards



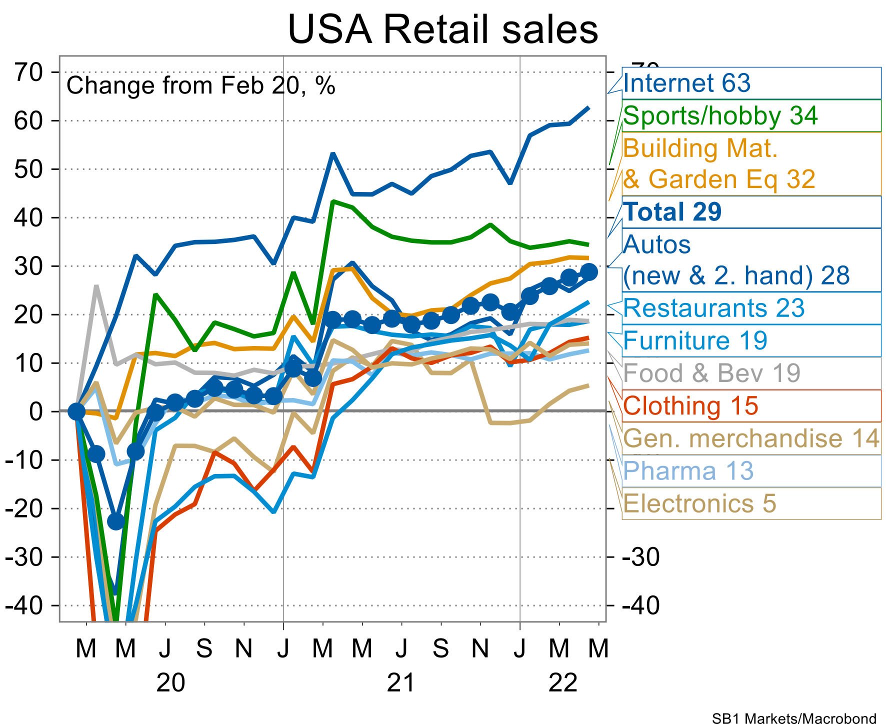


- **Total nominal sales** rose 0.6% in April (expected 0.9%), but March sales, which were first reported to 0.5%, were revised up to 0.7% ahead of the report, but now further up to 1.4%! Thus, March/April was above expectations. Dec/Jan/Feb have also been heavily revised as well. Total nominal sales are up 29% – vs. the Feb 2020 level (from 25% in the March report, one month ago)
- **Core sales of goods** (=control group, excludes autos, gasoline, building materials & restaurants) rose 1% in April, expected up 0.8%. March was revised up from the first estimate at -0.1% via 0.7% and now up to 1.1%, and Feb was revised to +0.1% from -0.9%. In **volume terms** we estimate an increase core sales in both March and April at some 0.5%, <u>but we are not able to recalculate the Dec-Feb trajectory with any sort of confidence, and the volume estimates on the chart above to the left is highly uncertain</u>
- **Consumption of goods** is very likely above a sustainable level, and we still expect sales to decline the coming months/quarters, both due to a further shift into services, high inflation, and higher interest rates

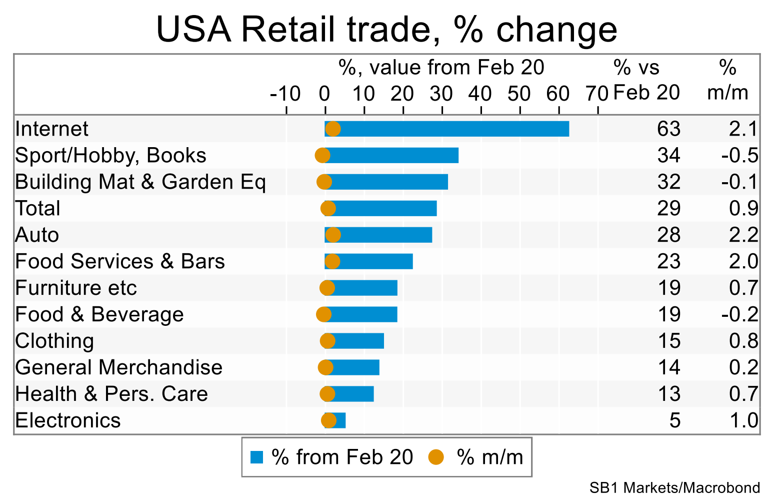
USA

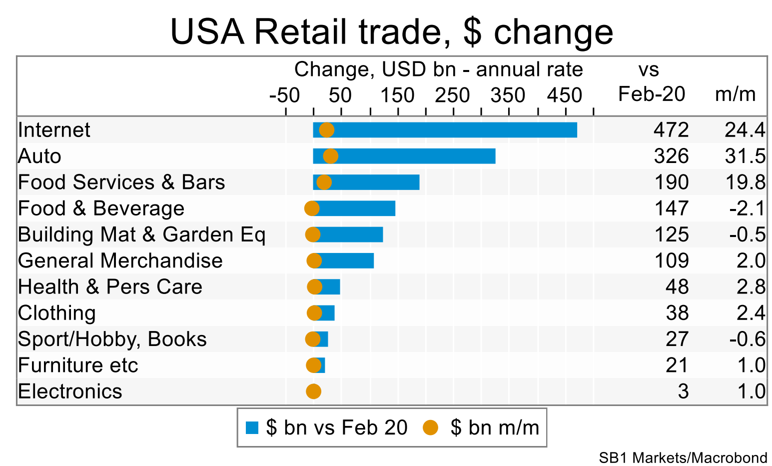
Most sectors report growth in April

All main sectors report higher growth than before the pandemic but huge sectoral differences remain



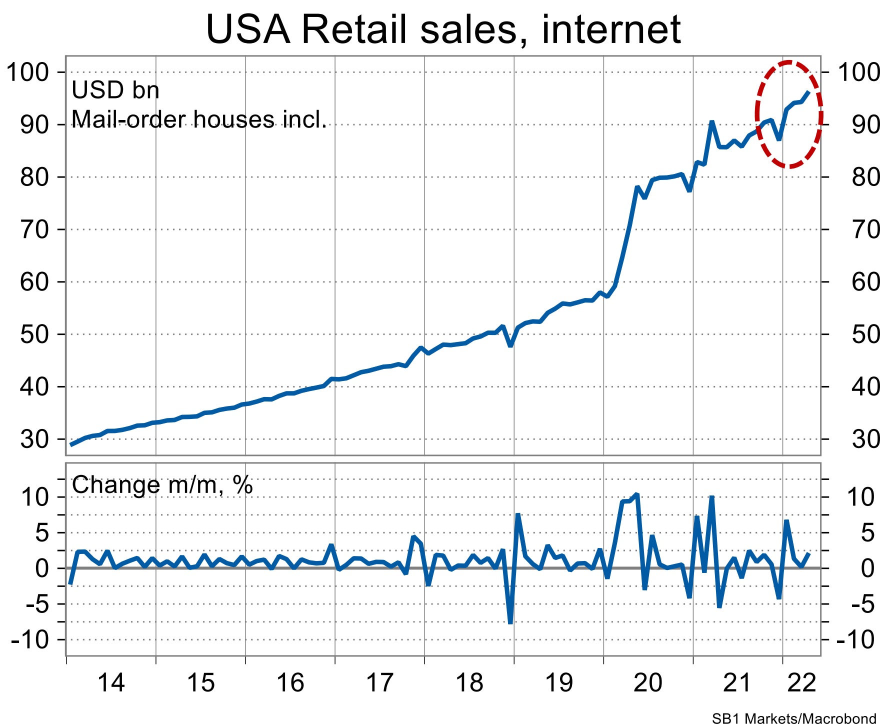
- 3 out of 11 main sectors reported lower sales in April, 8 higher sales
- Restaurants are up 23% vs Feb-20!
- Total sales are up 29% in value terms
- Net sales are up 63%

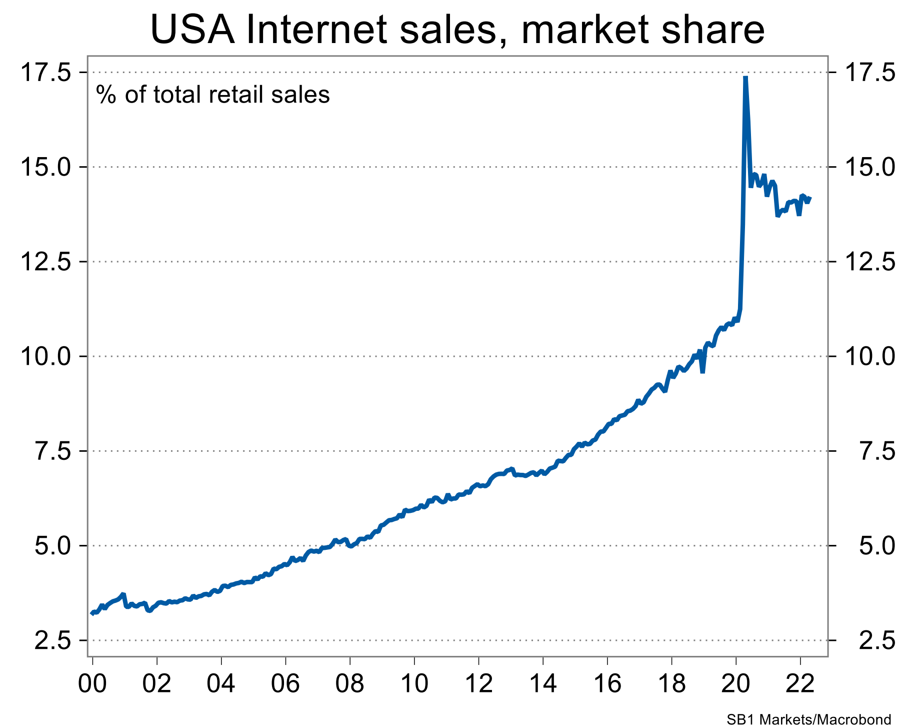




Internet sales keep climbing – after at substantial revision, *check the next page*

We assumed that the seasonal pattern was incorrectly estimated, but there's been further revisions

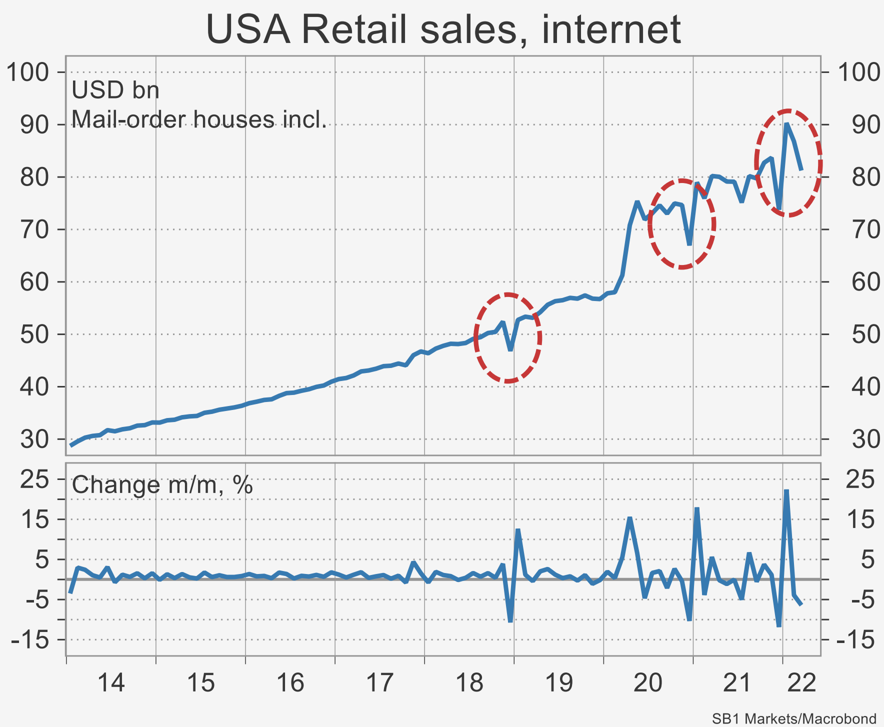


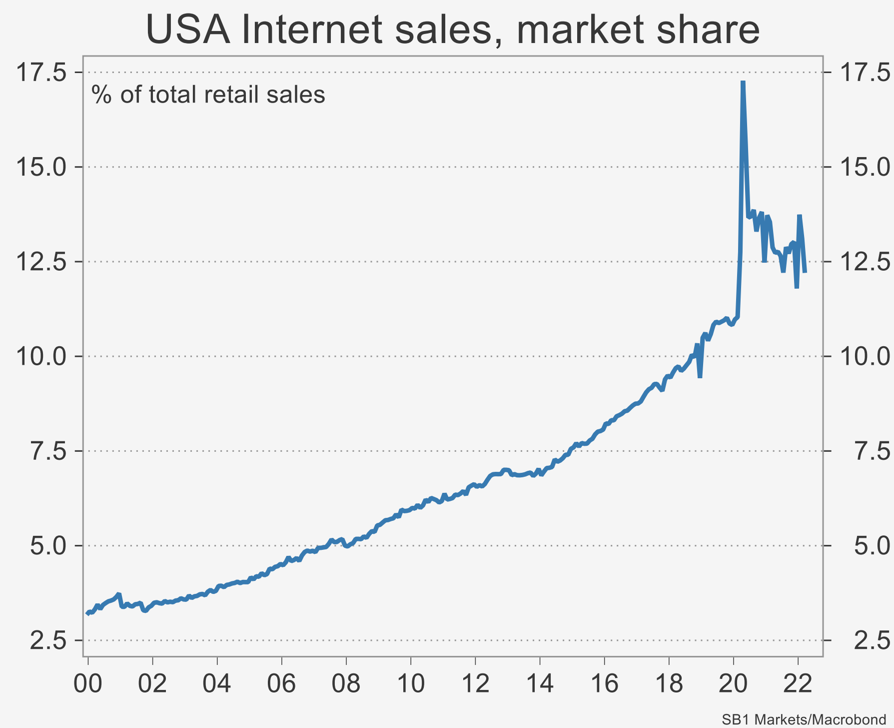


- Anyway, the internet sales market share (vs. total retail sales) has returned to the pre-pandemic trend growth

This is how internet sales looked like one month ago

Flick back and forth; check the new path! Sales were revised up by 17% in the annual revision

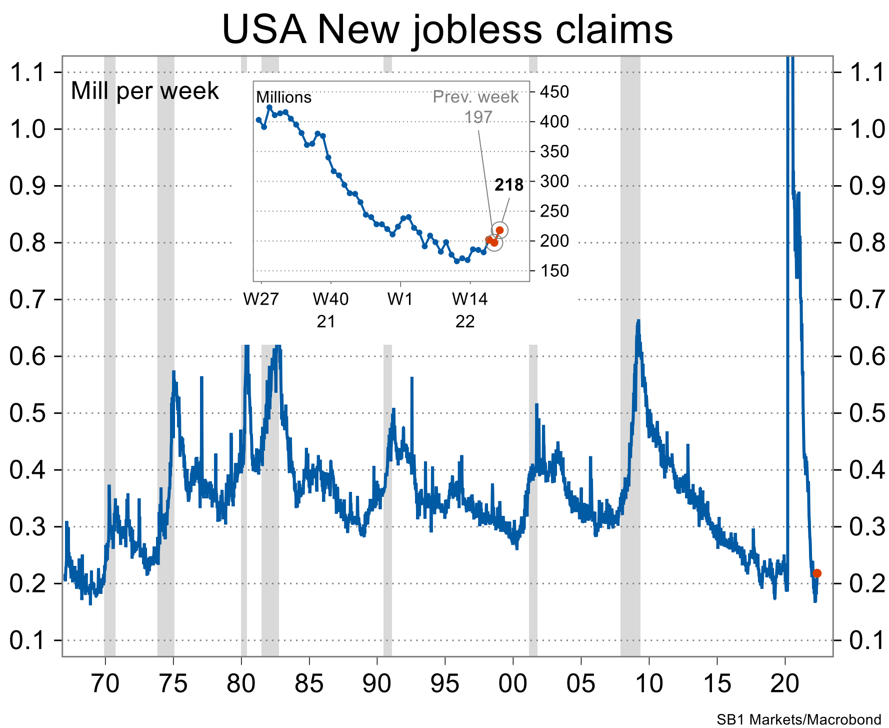


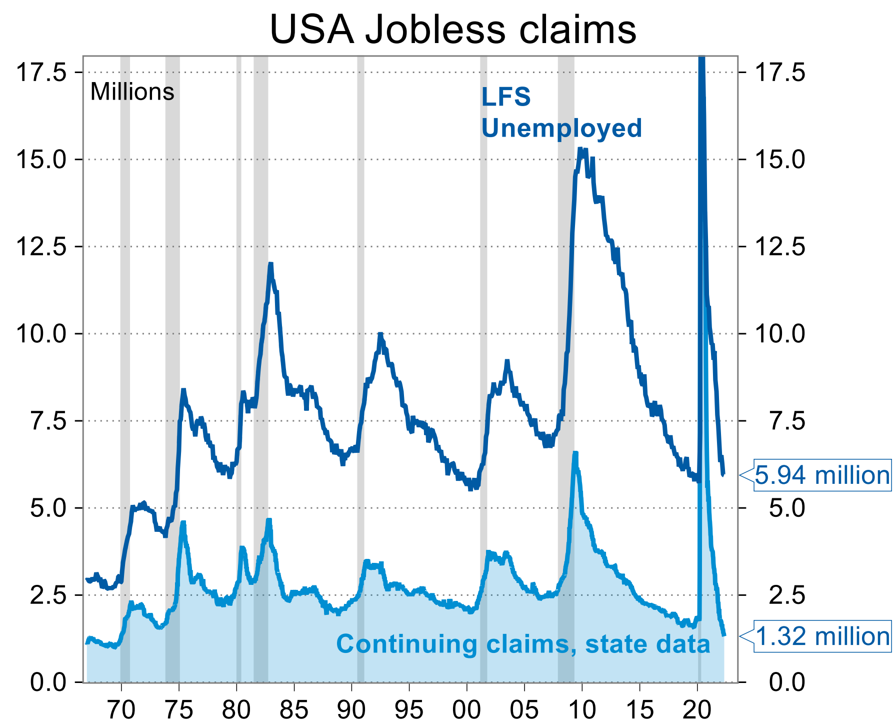


- The seasonal pattern has also been revised, as we assumed

New jobless claims further up – but far from any recession signal

However, new claims is often an early warning sign!

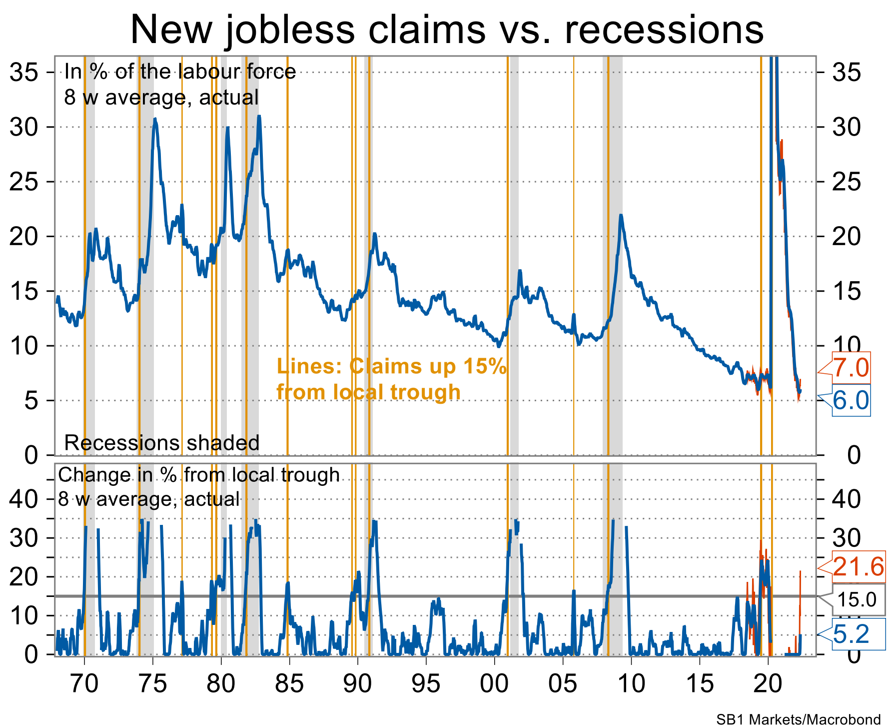




- **New jobless claims** grew by 21' in week 19 to 218'. Recent weeks, the inflow has increased marginally. Still, the inflow is close to the lowest level since 1968, when the labour force was 2 times larger than today
- **Ordinary continuing claims** declined by 25' to 1.32 mill in week 18, not seen since December 1969!
- Another confirmation that the **labour market** is still extremely tight

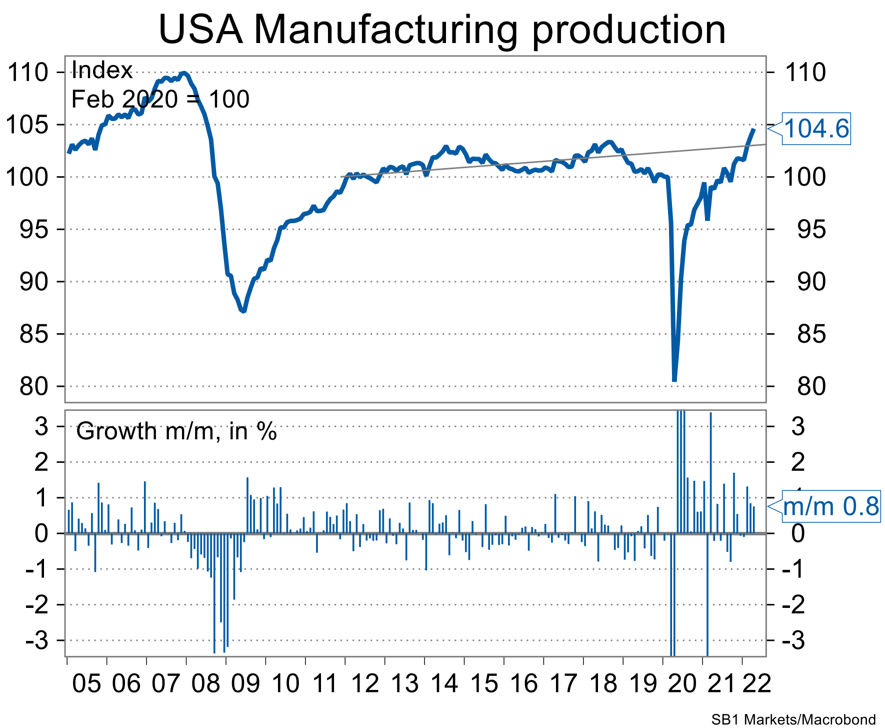
When a recession hits, jobless claims have been on the way up for a while

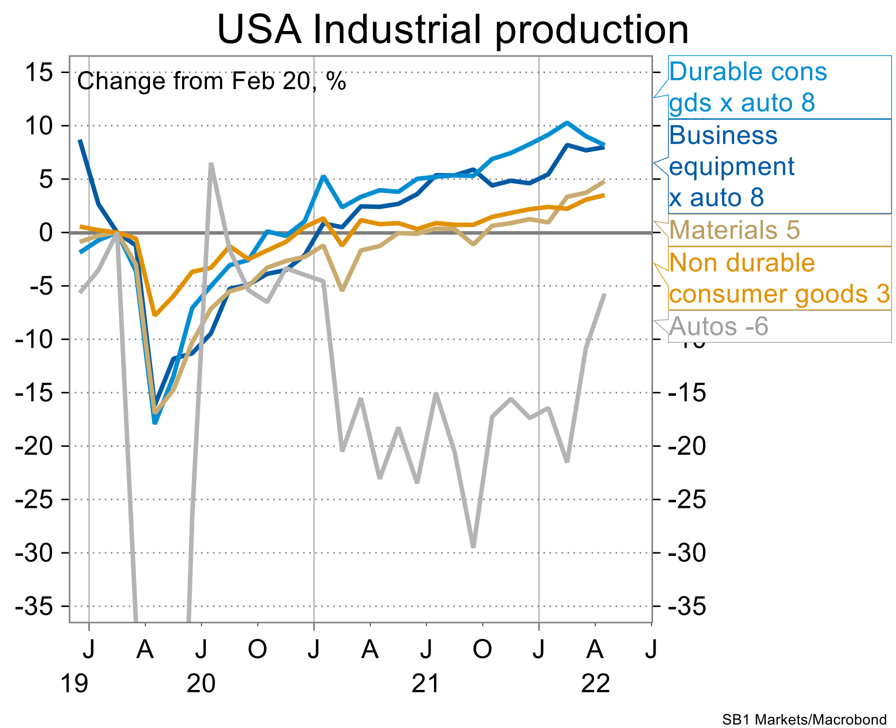
The change in the 8 week average is still far too low to suggest a recession, now



Manufacturing production up 0.8% in April, as auto production climbed 6%

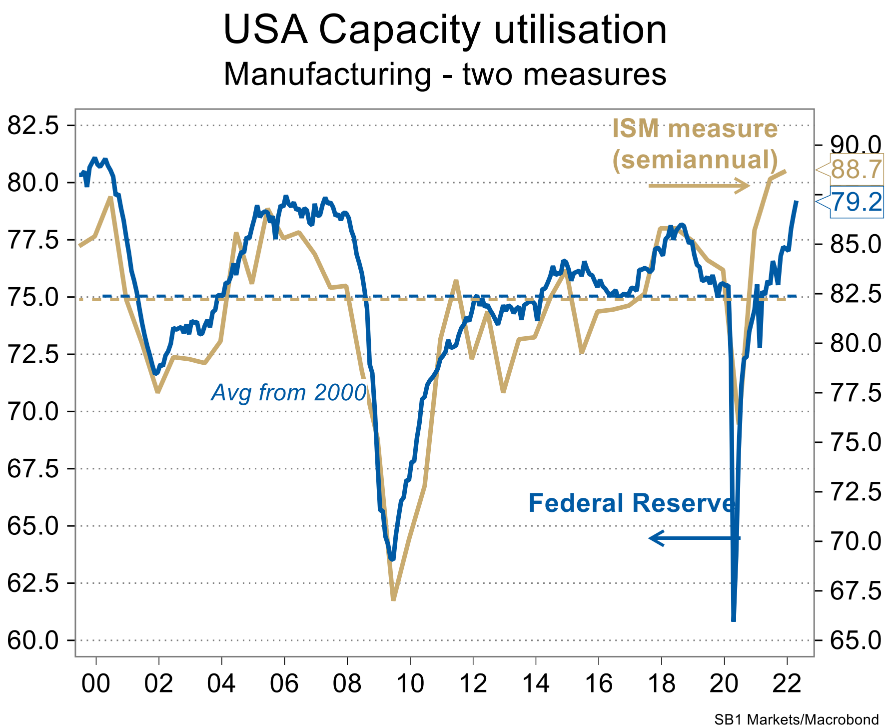
Production is growing at 8.5% clip (3m/3m), and is now above the pre-pandemic trend path





- **Manufacturing production** was expected up 0.3%
  - » The steep decline in auto production has been a drag on overall production in 2021 and into 2022 – but auto production is now recovering, down just 6% vs the Feb-20 level
- **Total industrial production**, including utilities, mines/oil production grew 1.1% in April
- **PMI/ISM and all other surveys** signal a continued recovery but at somewhat slower pace than until now
- **Capacity utilization** increased leaped to 79.3%, close to the pre-financial crises peak. The ISM survey reports a record high utilization, check next page

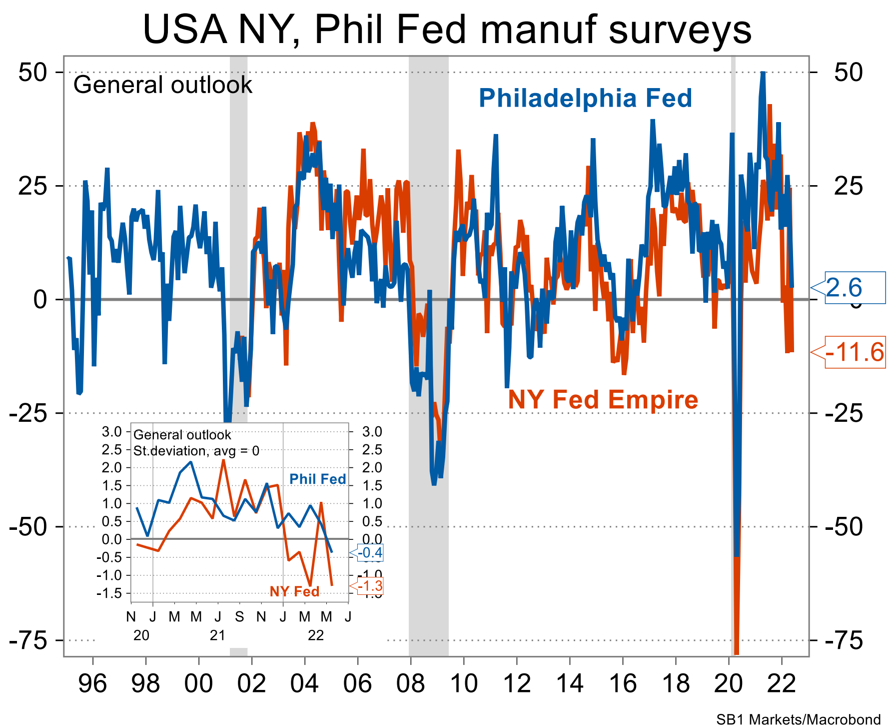
Capacity utilisation very high or record high

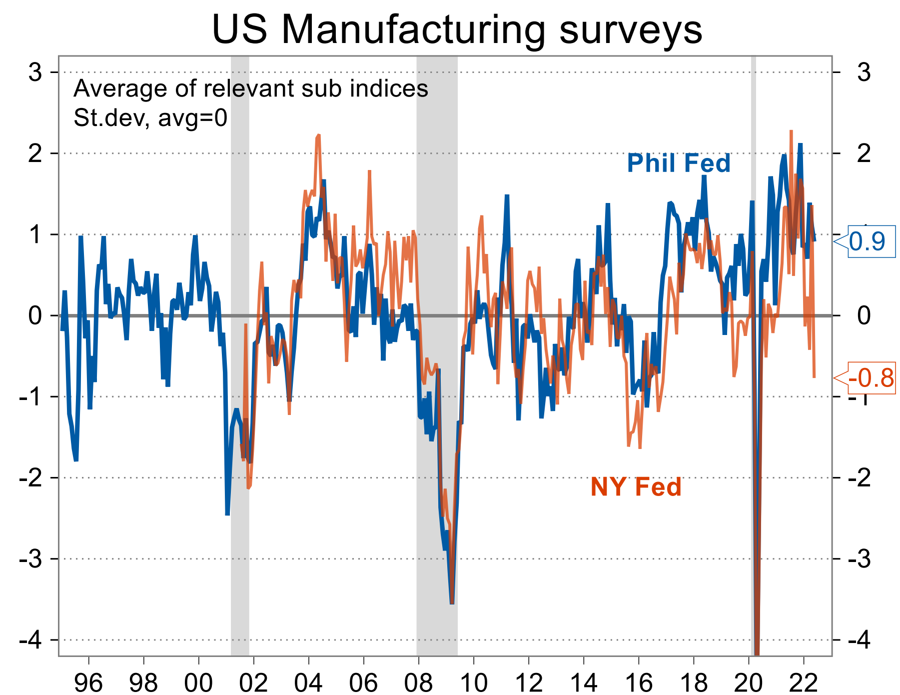


- **The Federal Reserve** report a 0.5 pp increase in manufacturing to 79.2%, just 0.2 pp below the peak before the financial crisis
- **ISM's semi-annual** survey reported a further increase H2-21/Dec, to another ATH at 88.7% vs the average at 82.5% (H1 date out this week)
  - These two measures have not been 100% correlated but the current discrepancy is large – and quite important when assessing the growth outlook
- The Fed's estimate is model based, while the ISM survey is based on companies assessment of their own capacity utilisation
- We have so far assumed that the ISM measure has given the best picture of the capacity utilisation in the manufacturing sector. Now, the discrepancy has narrowed (at least until ISM reports in H1 data tomorrow)

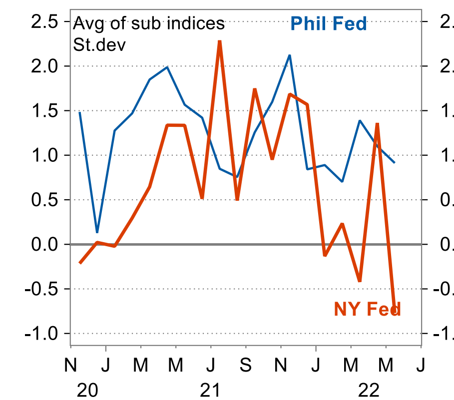
Mixed regional surveys: NY Fed down, Phil Fed's not as bad as the headline

The headline index in both surveys fell sharply – but just the NY fed survey as weak 'on the inside'



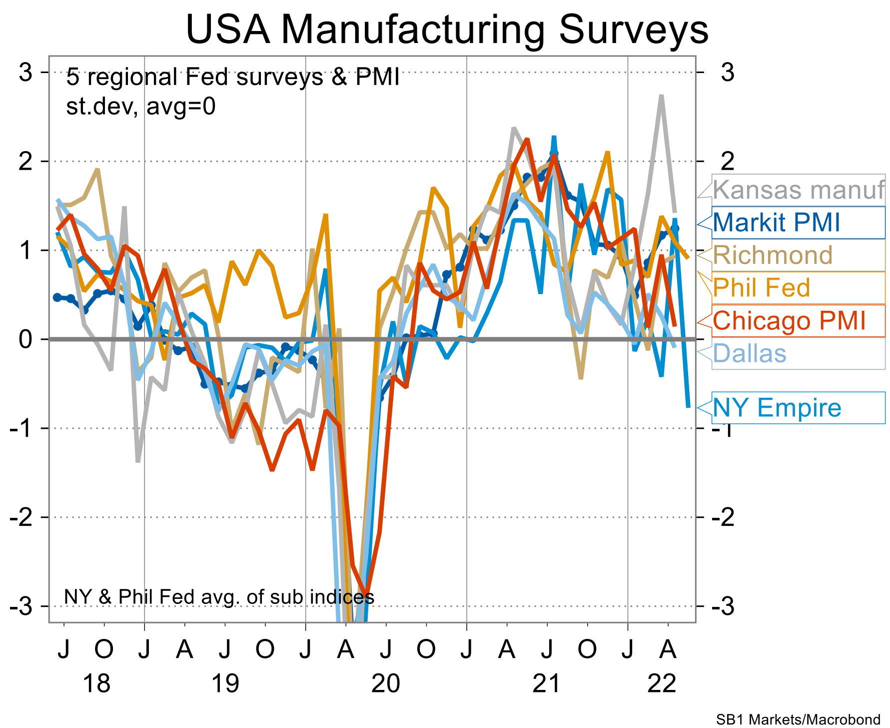


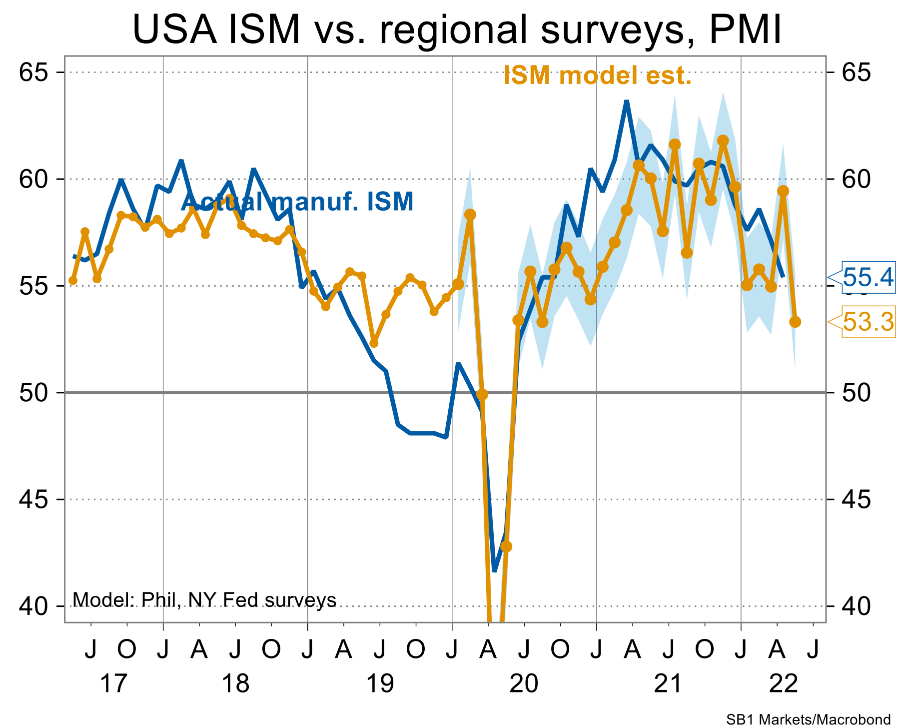
- **Philadelphia Fed's manufacturing index** fell to 2.6 in May from 17.6 in April, expected down to 15. The index is well below average at -0.4 st.dev, from +0.4
- **NY Fed Empire State manufacturing index** fell to -11.6 from 26.6, expected down to 15. The index is well below par at -1.3 st.dev, from +1 in April. This index has been rather volatile lately, and it was even weaker in March
- The **sub-indices** told a different picture:
  - » The Phil Fed was still 'strong inside', like a rapid growth in orders – the average of subs at +0.9 st.dev.
  - » The NY Fed subindices 'crashed' to -0.7 st.dev from +1.4



So far: A further decline in the ISM in May most likely

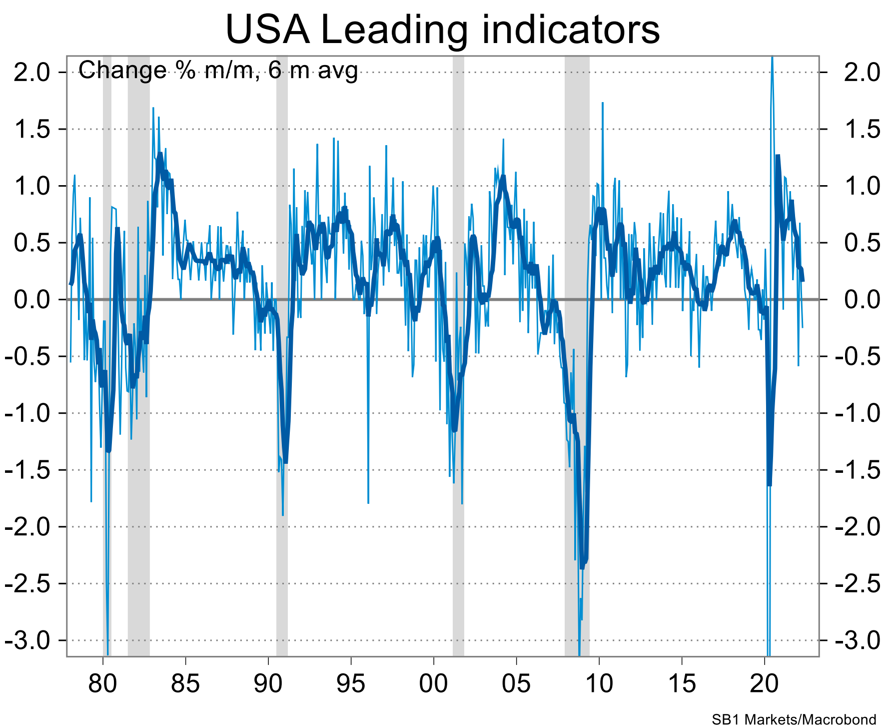
The big picture: Surveys are heading down, manufacturing growth is slowing

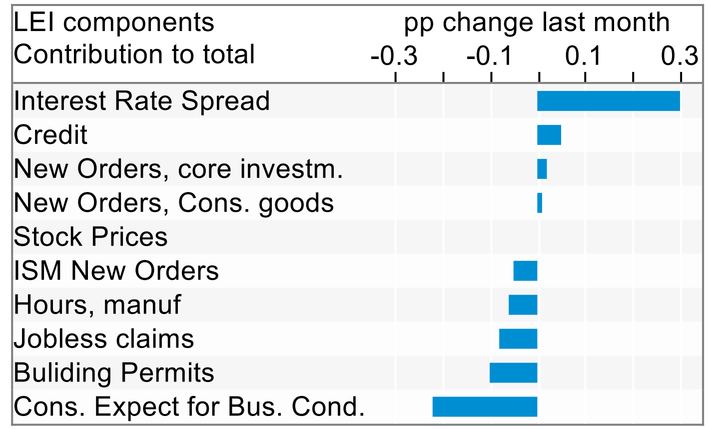




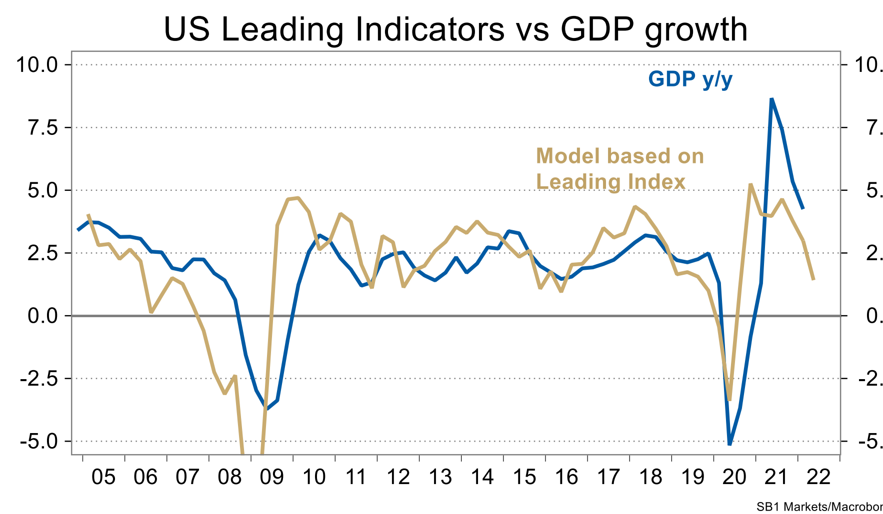
The Leading Economic Indicators down in April, growth is slowing

Still, the LEI is not yet signaling any recession



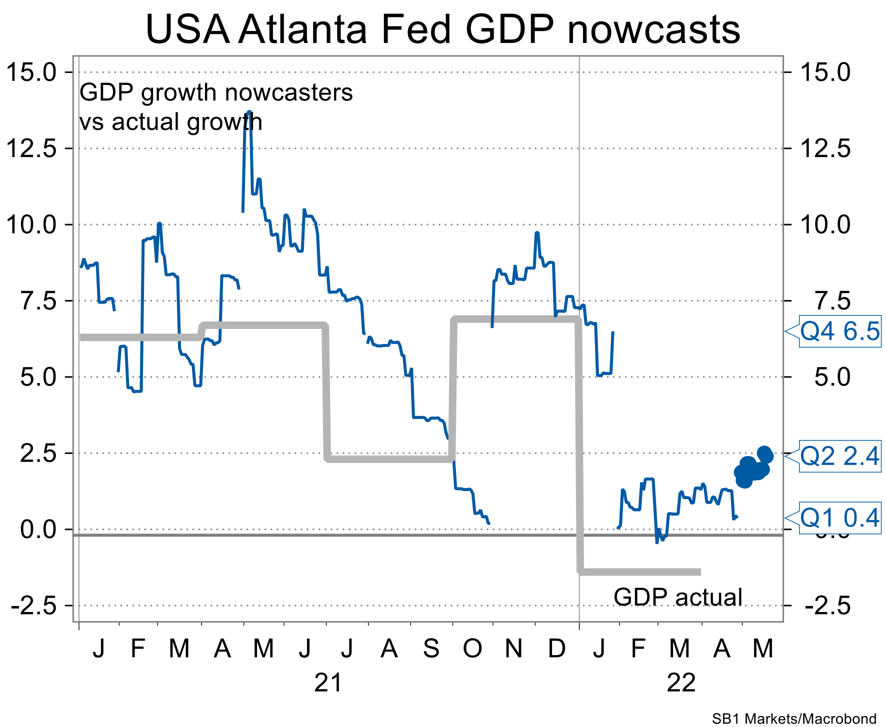


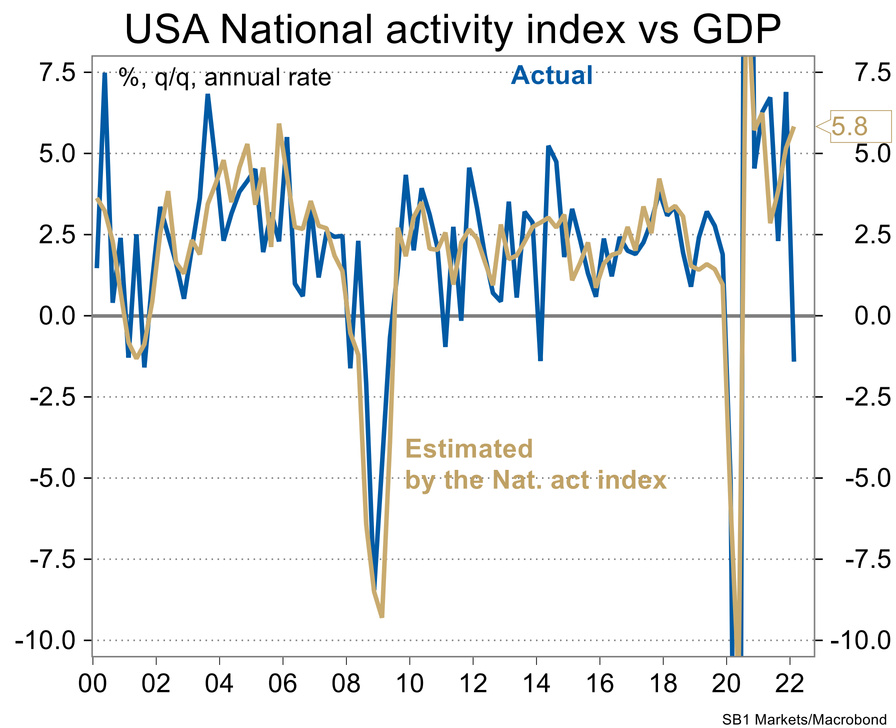
- The LEI fell 0.3% in April, expected flat and March was revised down 0.1%, from 0.3%
- The 6 m average is at 0.2%, not a recession signal. Even a LEI below zero over 6 months is a safe signal: LEI has been down over 6 months 13 times since 1978 – and 5 recessions have been recorded (12 times below and 4 recessions if the the pandemic is excluded)



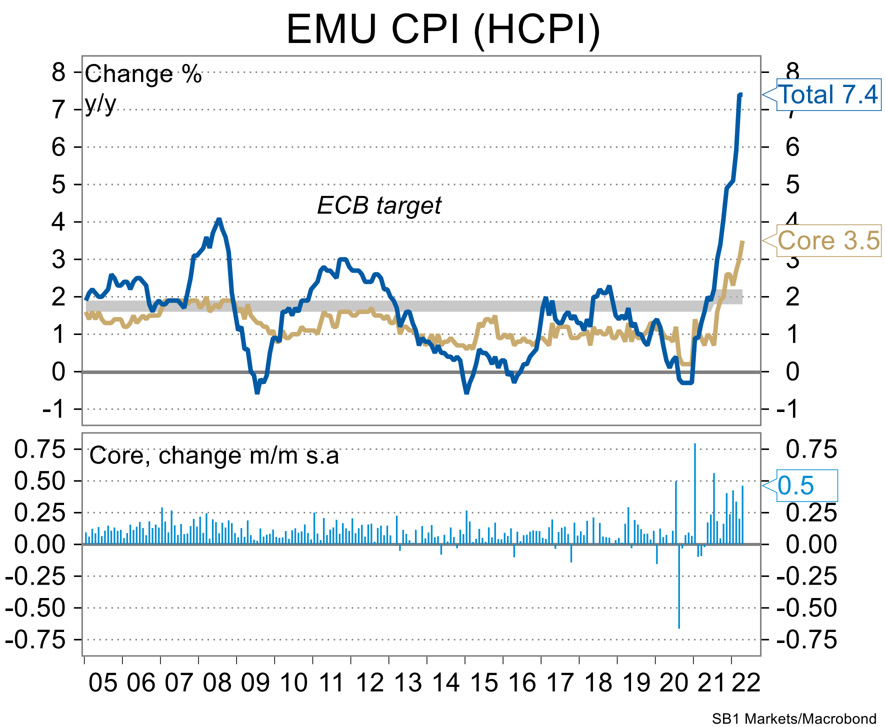
Atlanta Fed's nowcaster suggests 2,4% growth in Q2, the Nat. Activity index 6%

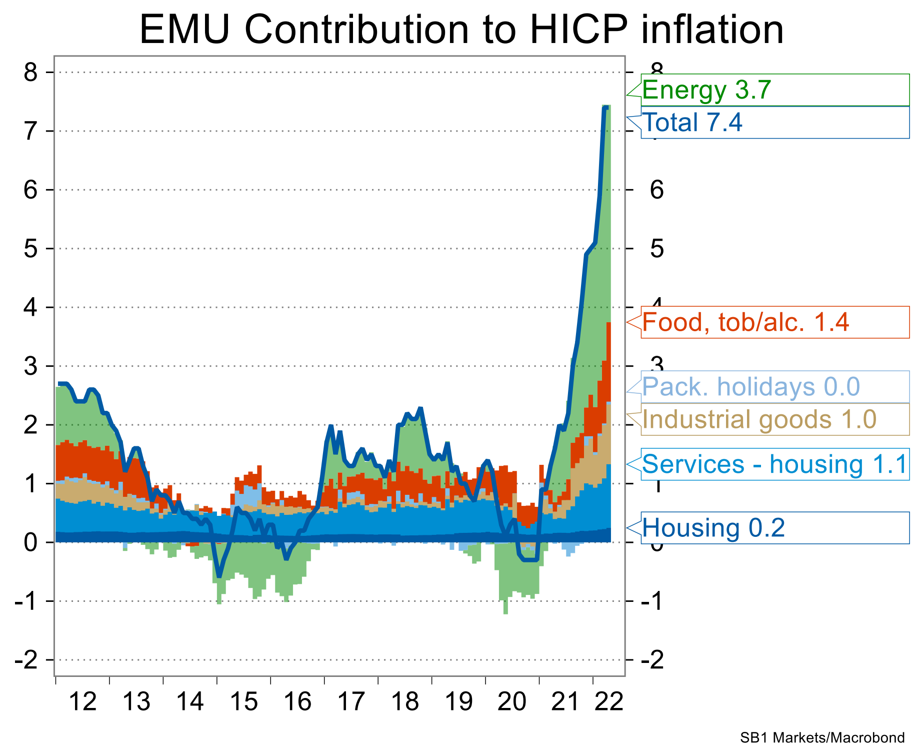
Q1 was far weaker than expected and signalled by other data





The April inflation 'shock' confirmed



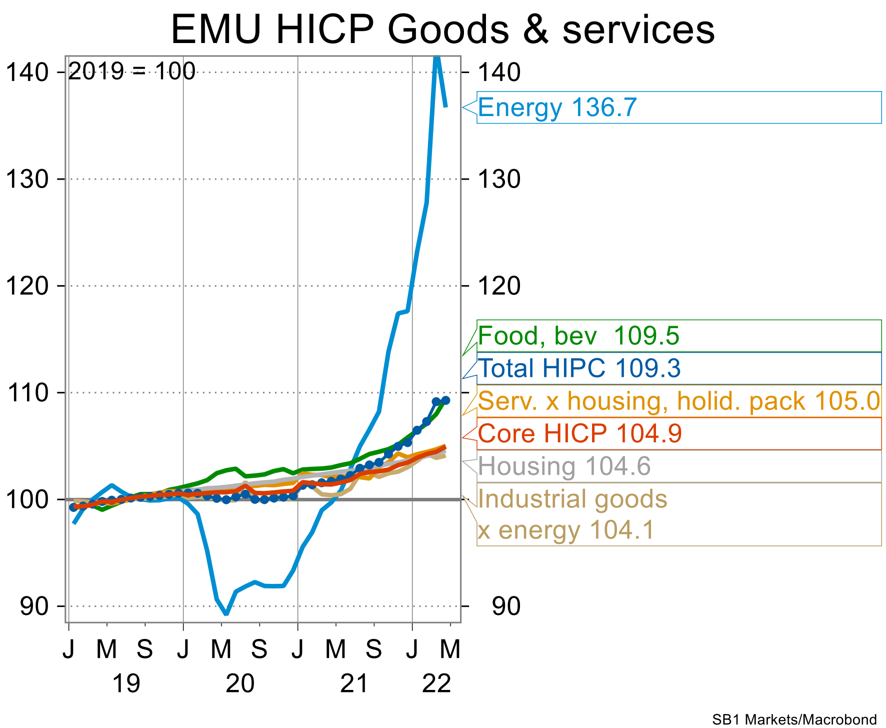


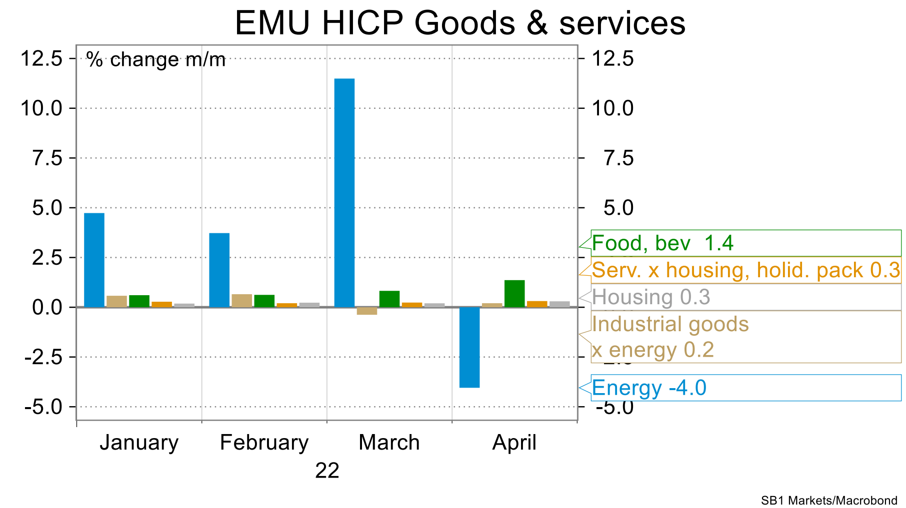
- **The headline** was just 0.1 pp higher than expected, so the HUGE surprise was the core index. Few details yet but both goods x energy & services accelerated
- **Energy prices** fell m/m, and the annual rate declined. **Still,** energy is the main culprit for the extremely high inflation numbers (check also 3 – 4 pages further out in the report)

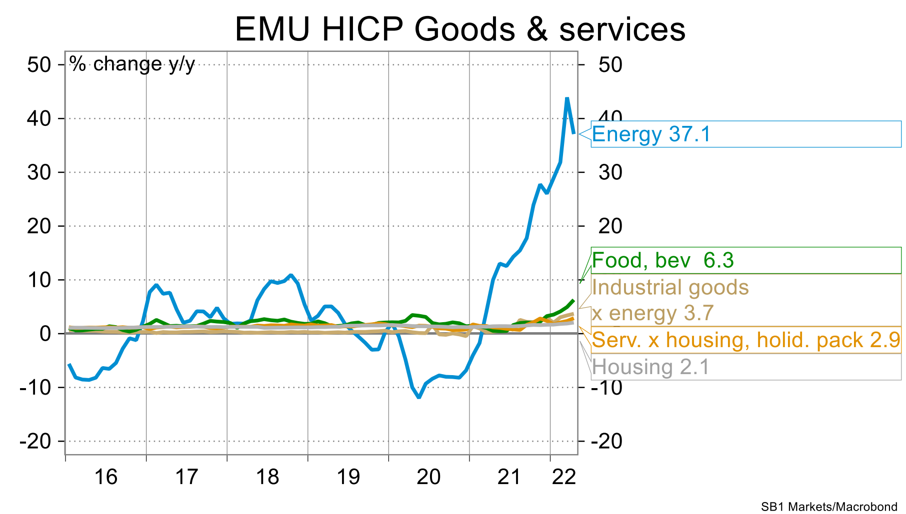
SpareBank 1 MARKETS

Energy prices may have peaked, but food inflation surges

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



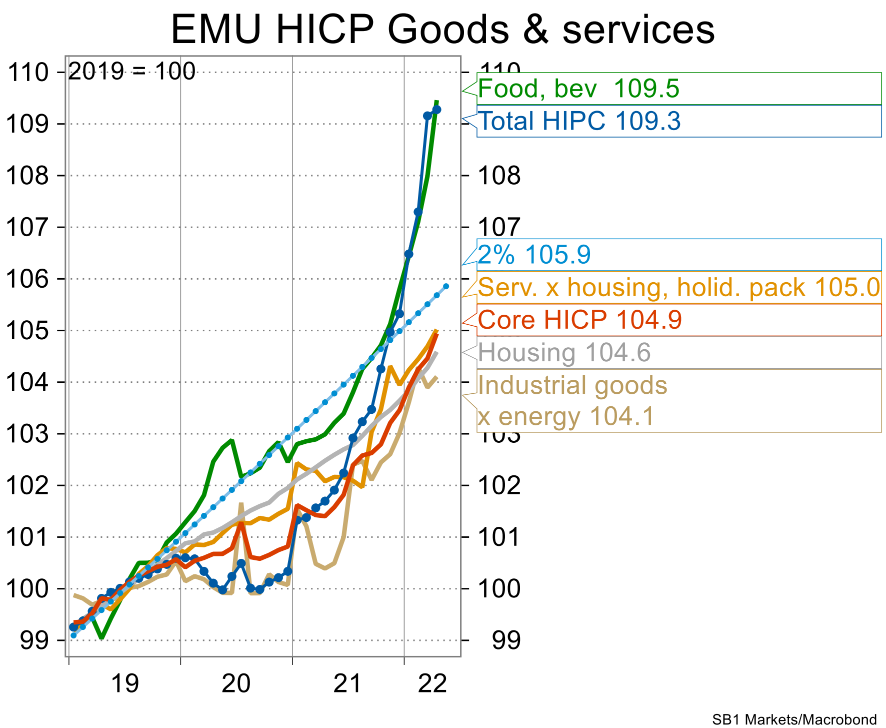




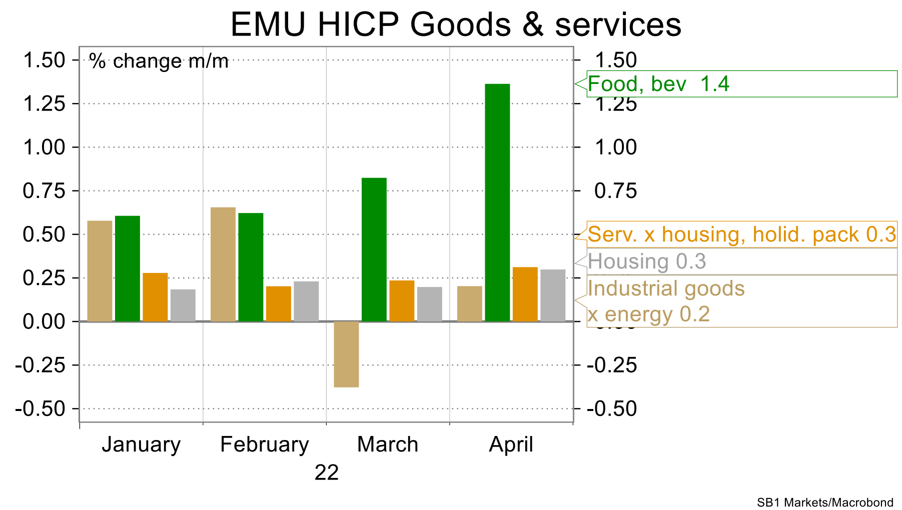
- At one stage, energy prices will turn south again

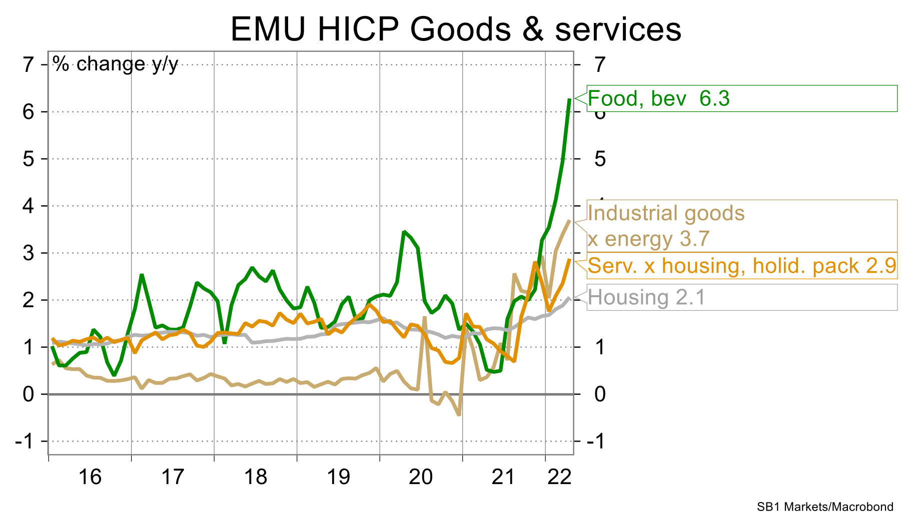
And prices ex energy and food are accelerating too

Food inflation at 6.3%, industrial goods x energy at 3.7%, and services ex housing 2.9%. Housing 2.1%



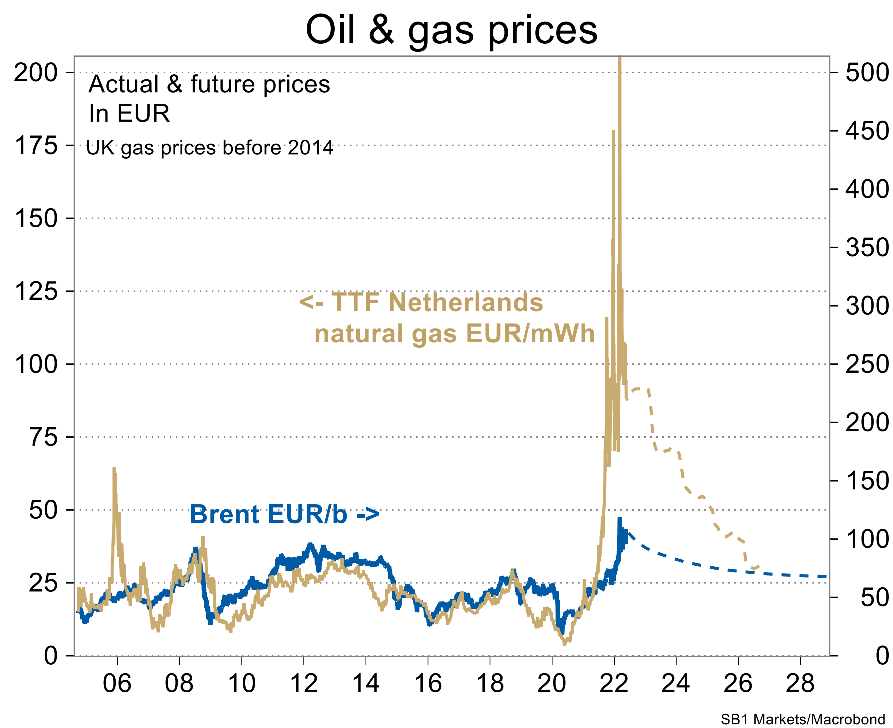
- Industrial goods prices increased 0.2% in April, and are up 3.7% y/. Still, these prices are well below a 2% path since 2019 – and the annual growth rate should decline substantially during the next months
- Services prices (ex housing, holiday travel) rose 0.3% in April, and these prices are also below a 2% path vs the 2019 level. Transport and hotels/restaurants have contributed on the upside last year

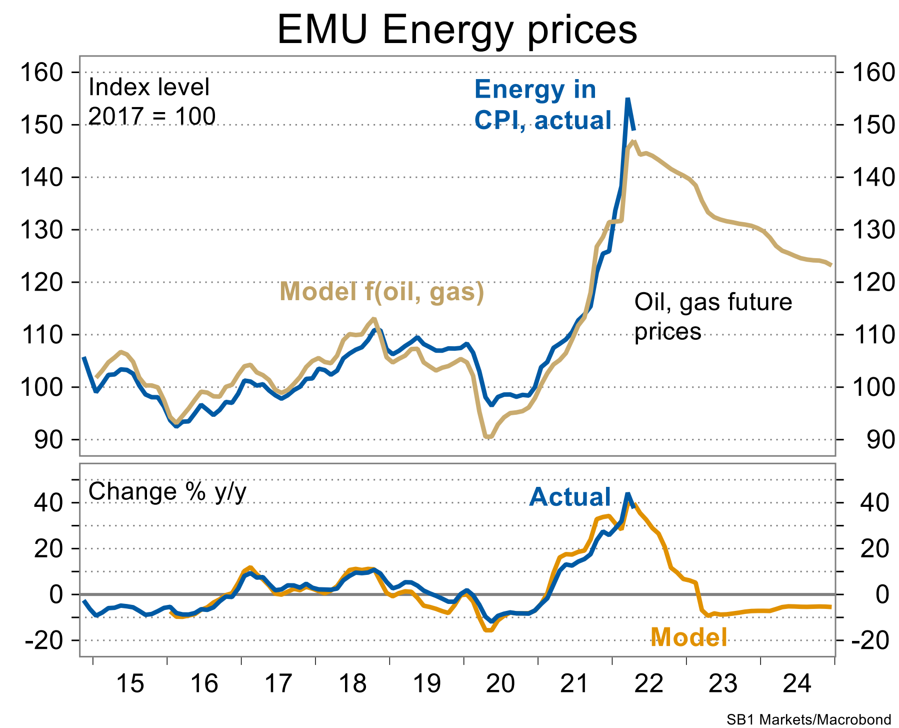




Gas, oil prices have lifted 'energy CPI inflation' up to 40% but….

…if futures markets are correct (this time…) , annual energy inflation is at the peak now





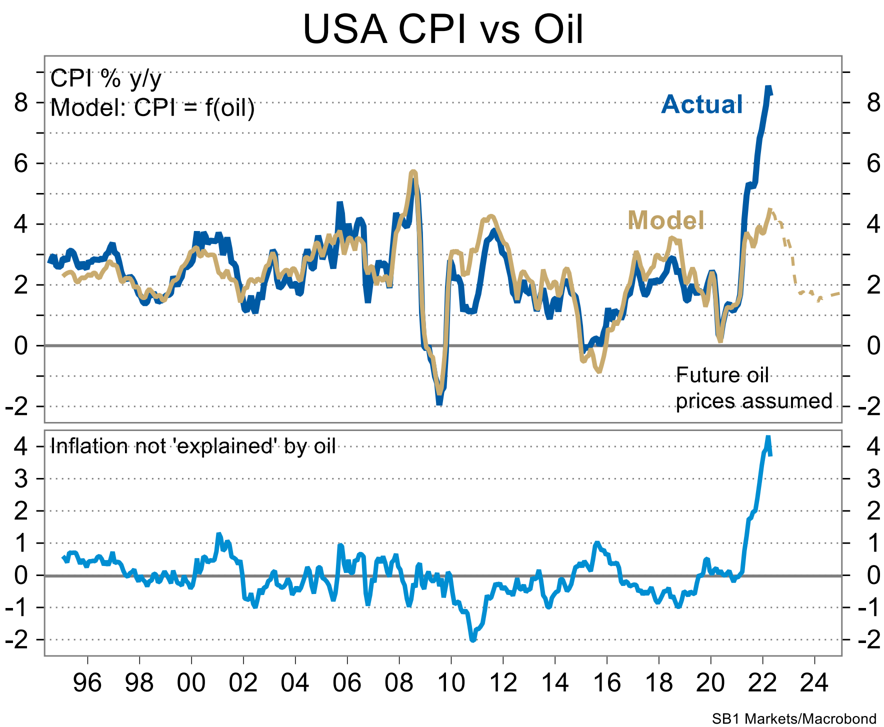
- Future prices are heading downwards, both for natural gas (TTF) and oil (Brent)
- Early next year, energy prices will be down, measured y/y
- Gas and oil have contributed equally to the lift in energy prices measured at the consumer level, according to our models

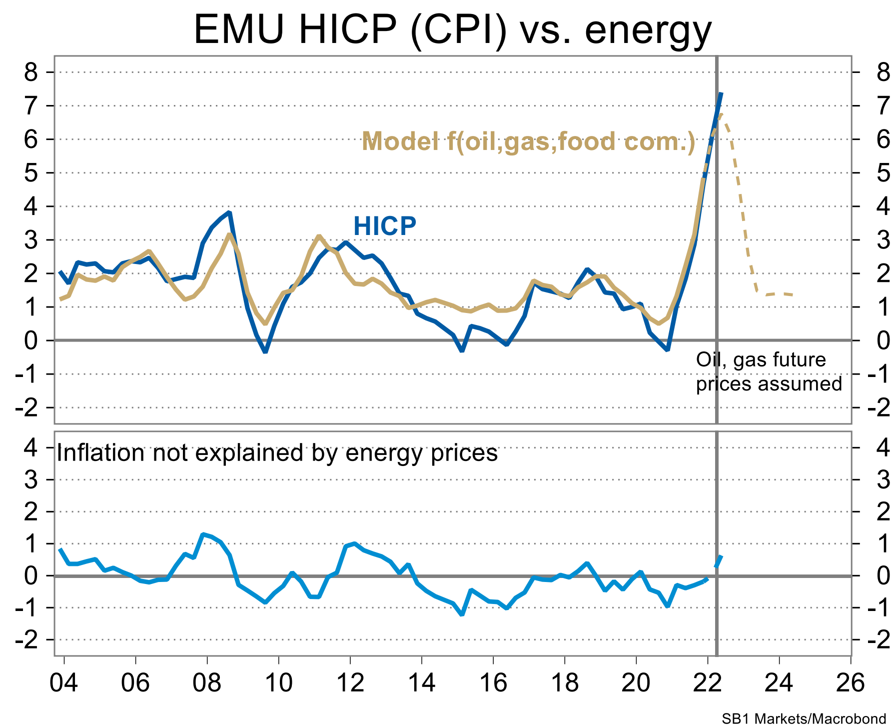
In these models we incorporate all direct impacts from changes in the oil price – as well as the impact from other factors that influence inflation which correlates to the oil price

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



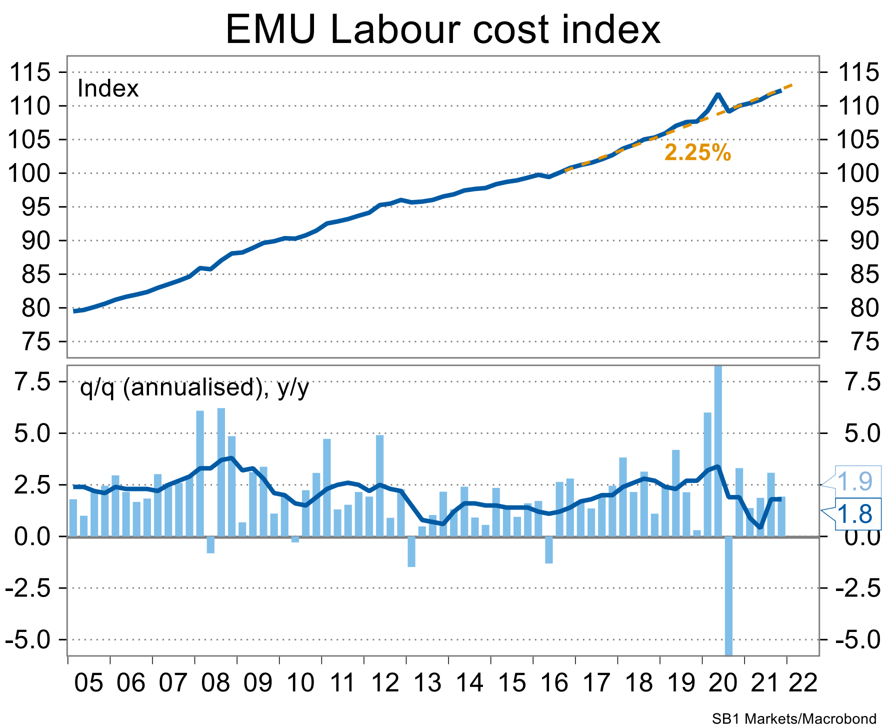


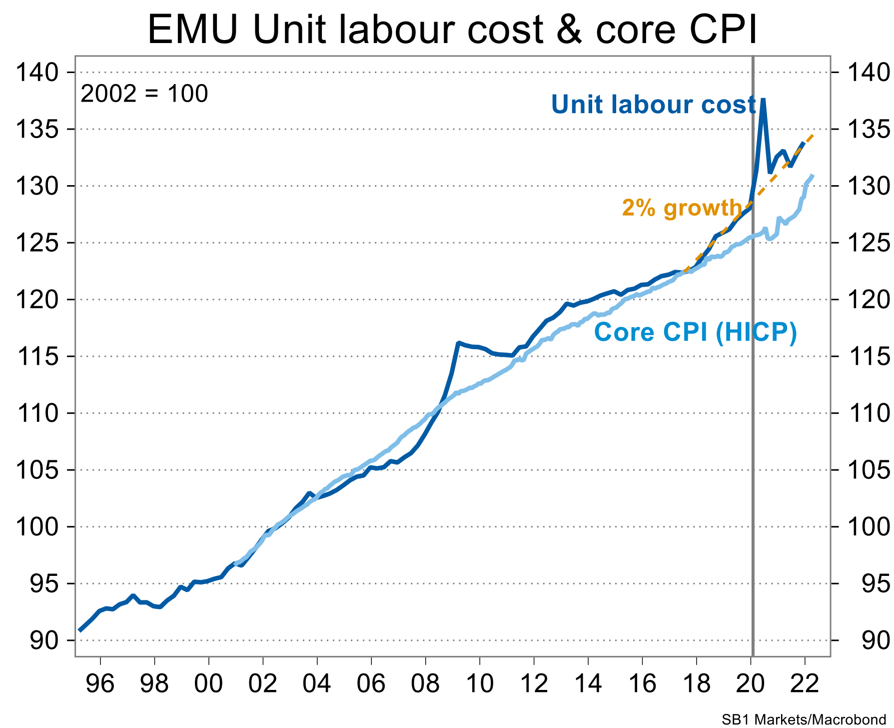
- **In the US, oil price cycles** have – for all practical purposes – explained all of the CPI cycles the past 30 years. Until 2021. The precent 4 pp discrepancy is unprecedented! The current/future oil price signals a decline in the annual CPI rate later this spring. The trouble is the 'gap' or the 8% starting point
- **In EMU**, the CPI acceleration until late last year could be fully explained by the increase in energy prices (with a small contribution also from food commodity price). Now, other goods and services are also contributing somewhat
- 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 influence inflation which correlates to the oil price

Just a reminder: So far, no wage cost pressure in the EMU

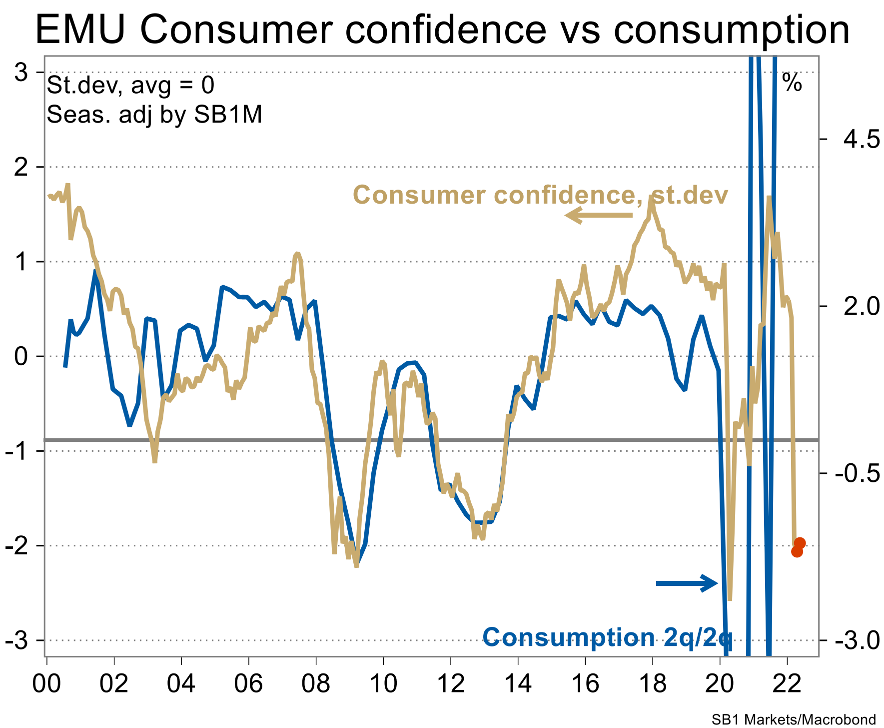
Even if the unemployment rate is the lowest since 1981, and the vacancy rate is the highest ever

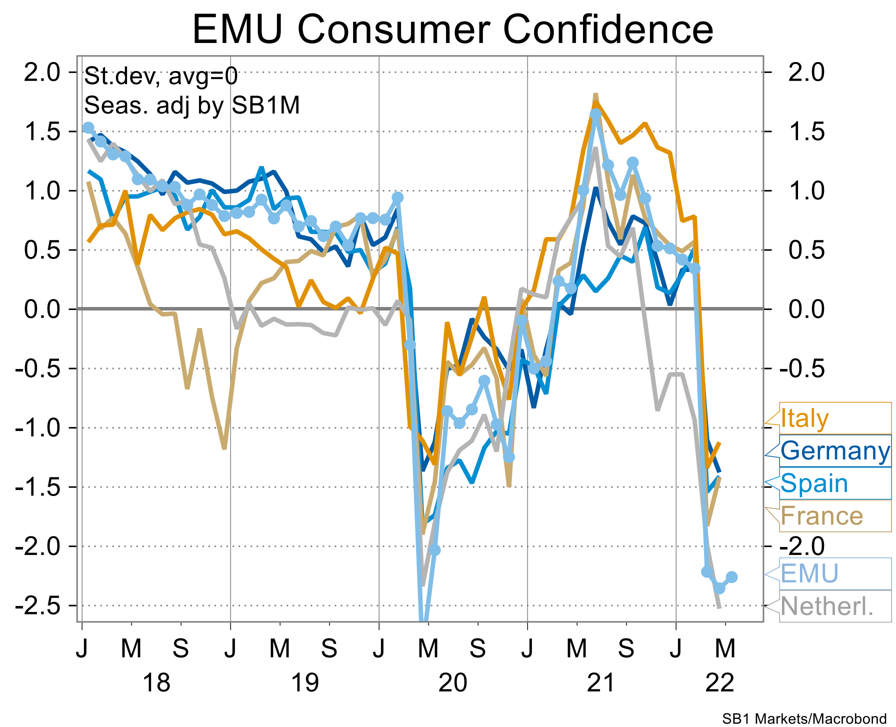




Consumer confidence just marginally up in May – the level remains low

The level recent months has been revised down significantly – the index is 2 st.dev below average



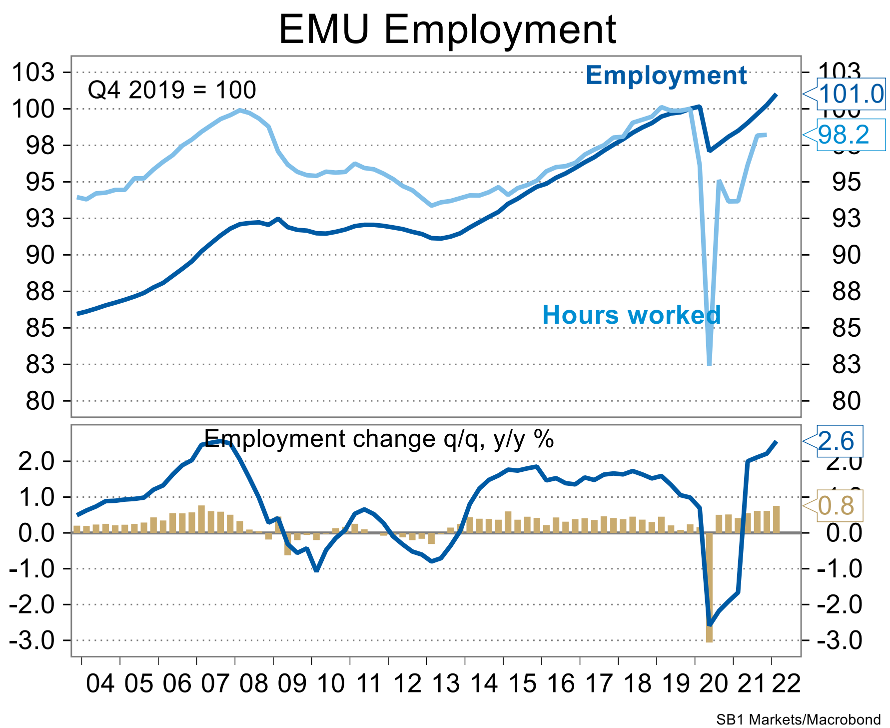


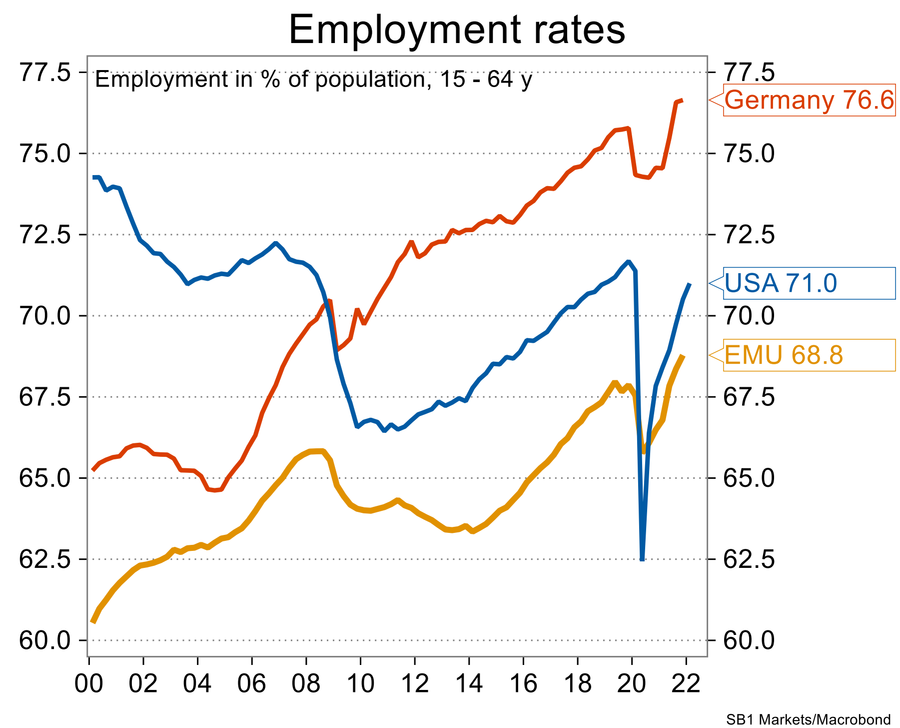
- The index rose 0.9 p to -21.1, expected down to -21.5. The level in April was originally reported at -16.9. The May level is 2.0 st.dev below average, close to record low. The war and high energy prices is not the best mix for keeping the sentiment up, it seems. In February though, the index was at +0.6 st.dev, when energy prices also were high. So the war is probably the most to blame
- No reports from individual countries yet

SpareBank 1 MARKETS

Employment growth accelerated in Q1, up at 3.2% clip, best in 15 years

The employment rate is at ATH



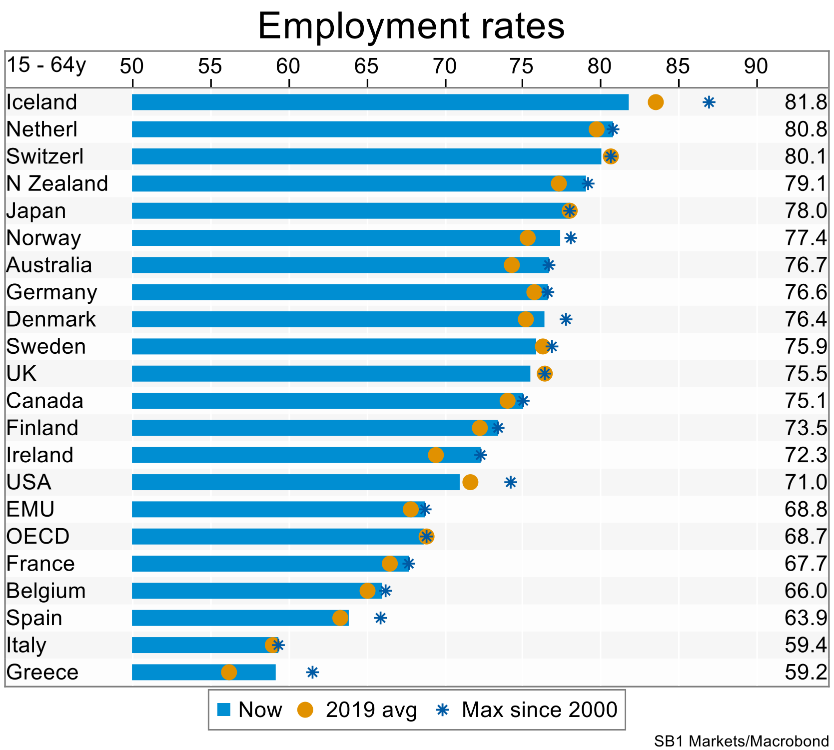


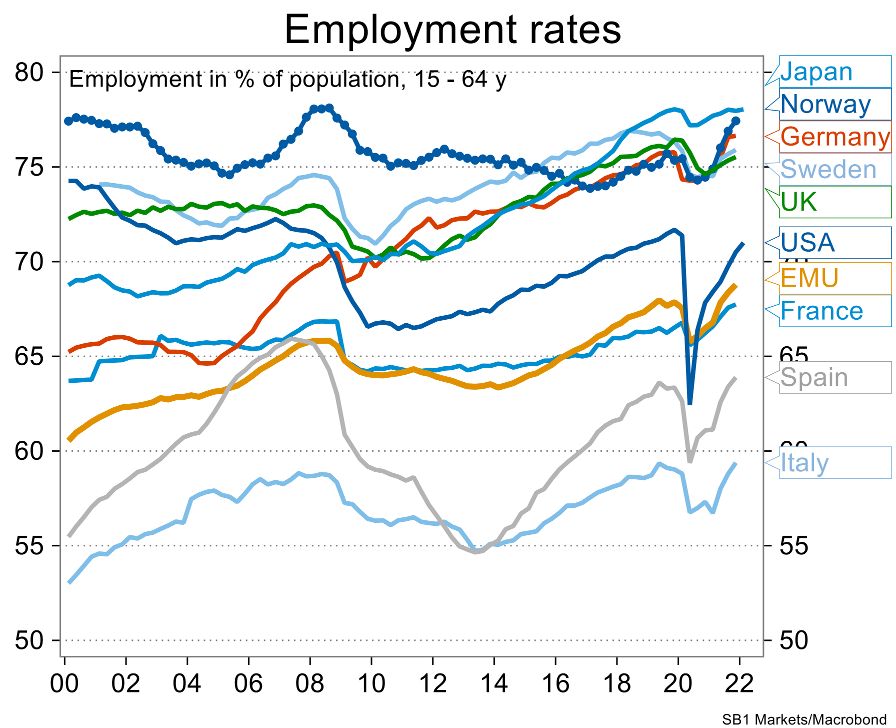
- **Employment** rose by 0.8% in Q1, up from 0.5% the two previous quarters. The employment level is 1% up from before the pandemic
  - » We do not yet have data for Q1 hours worked , they are stilling lagging employment
- **The employment rate in the EMU is at a record high level at 68.8%**
- **Unemployment** has been falling rapidly since last spring. In March, the unemployment level fell to 6.8%, the lowest level since 1981
- The number of **unfilled vacancies** has soared to the highest level ever, by far

SpareBank 1 MARKETS

Employment rates: Just 1/5 of rich countries below the '19 level, 2/3 are at ATH!

Rates in US, UK, Sweden and Iceland is still below the 2019 level

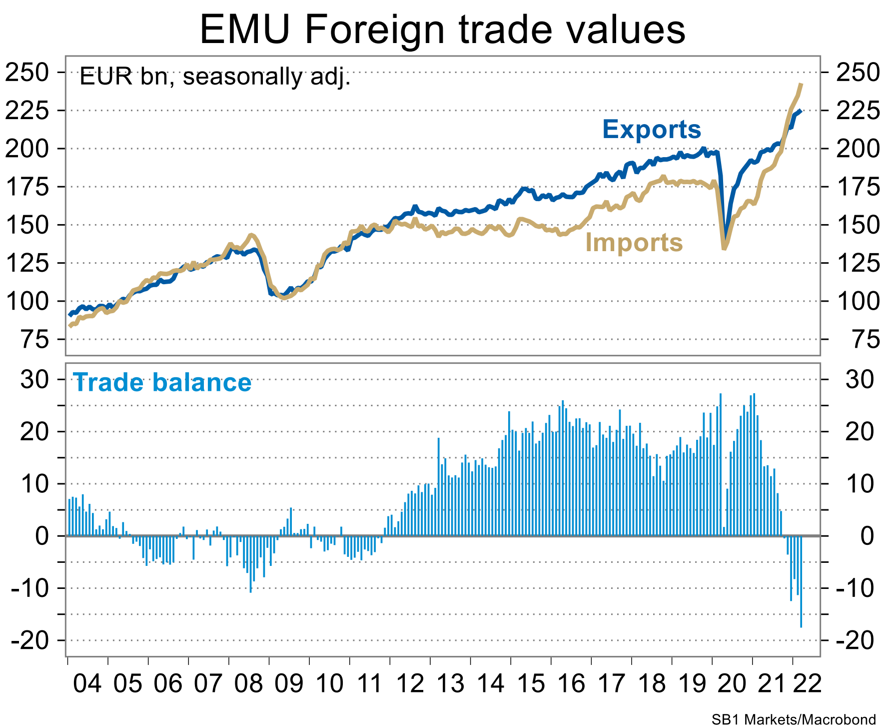


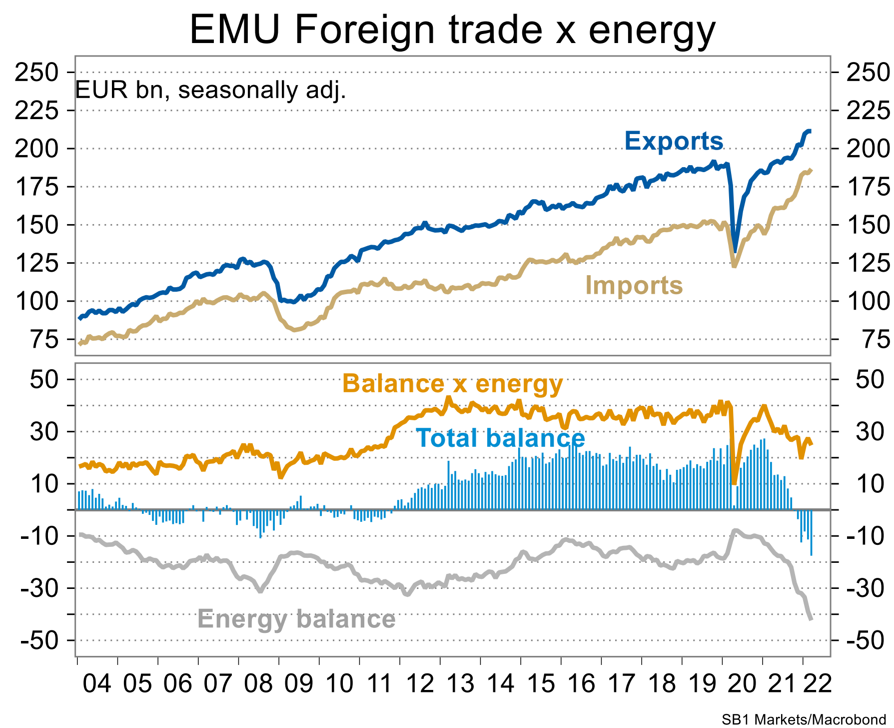


- US and Iceland has the lowest level vs their earlier peaks. Iceland is still at the top

Import are exploding, and just not due to higher energy imports

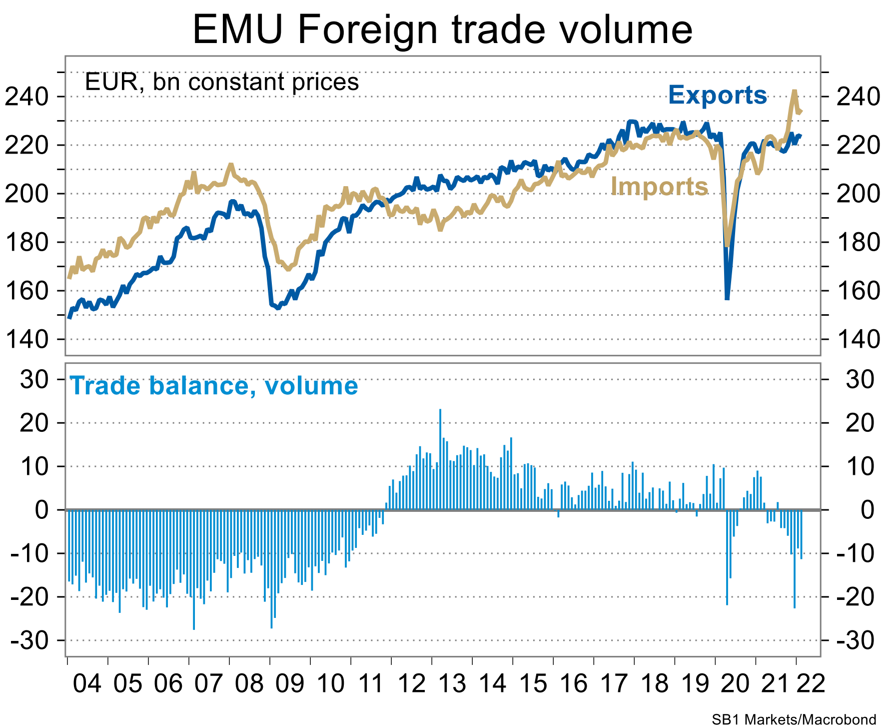
The Euro Area is now running a trade deficit at 1.6% of GDP, the energy import costs 3.8%!





- The trade deficit widened further in March has energy prices soared, to EUR 17 bn, the highest ever, by far
- Imports are up 56% y/y, while exports are up ‘just’ 14% - which in it self is rather strong

Import volumes up 5% from Feb-20, exports are at the same level

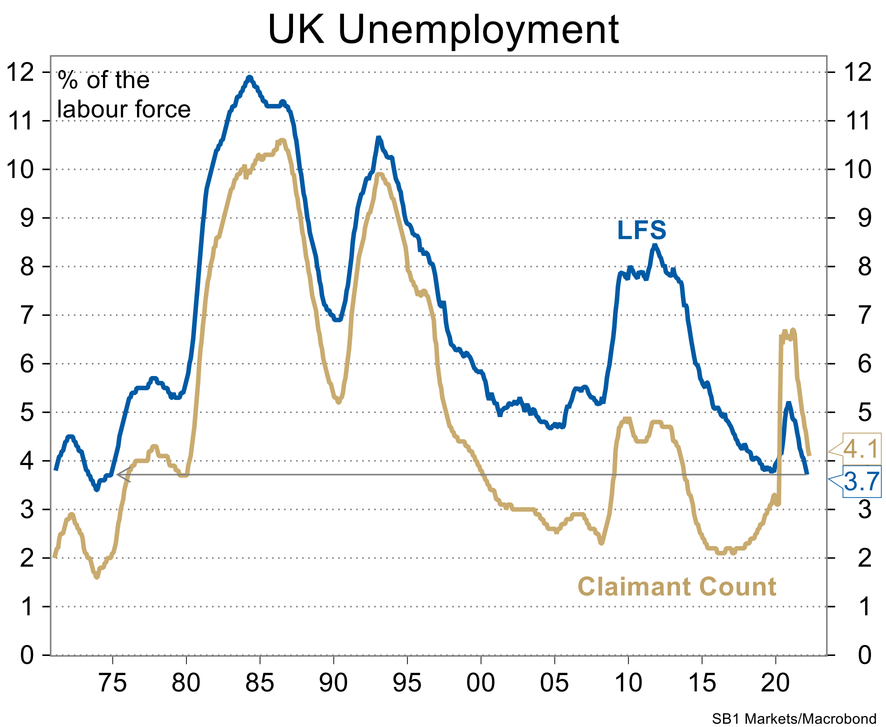


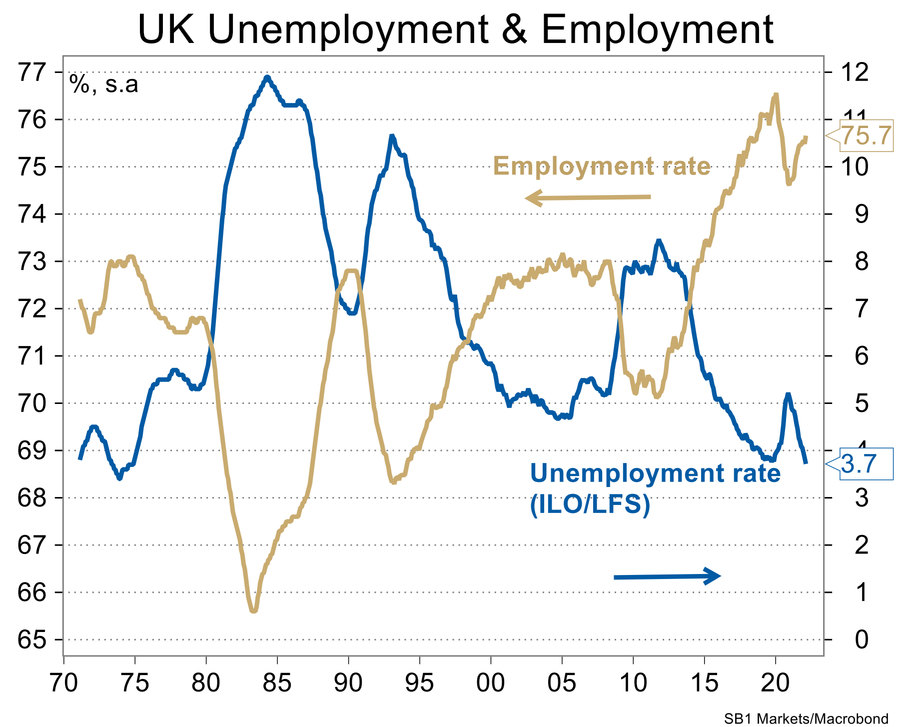
- All of the increase in import volumes is due to a lift late last year

Volume data are lagging value data by one month

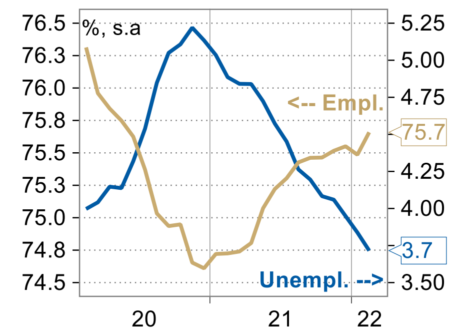
Unemployment down to the lowest level since 1974, at 3.7%

The employment rate still below the pre-covid ATH peak but is inching upwards – and the level is high



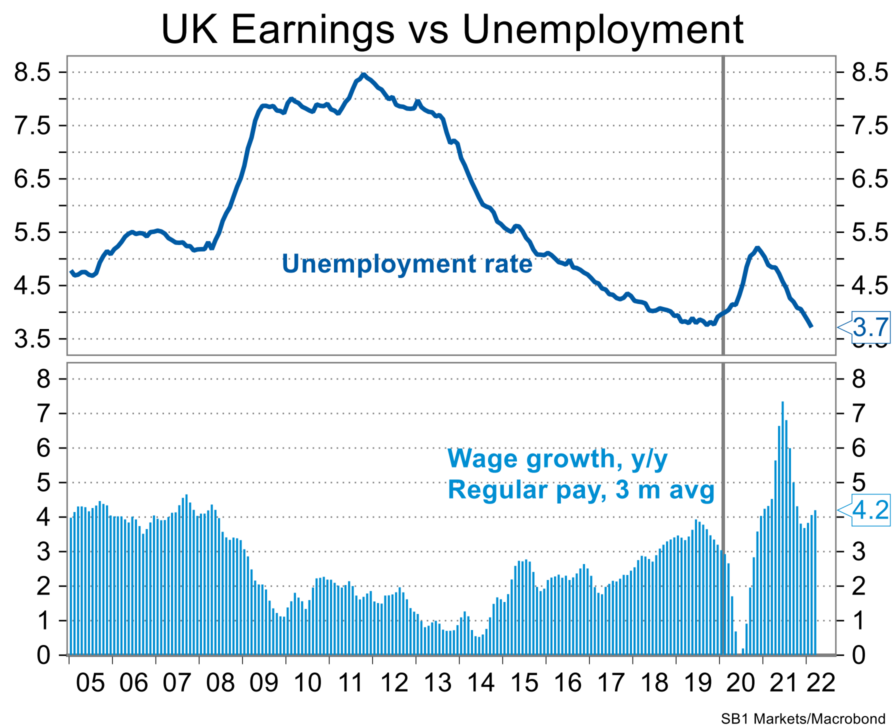


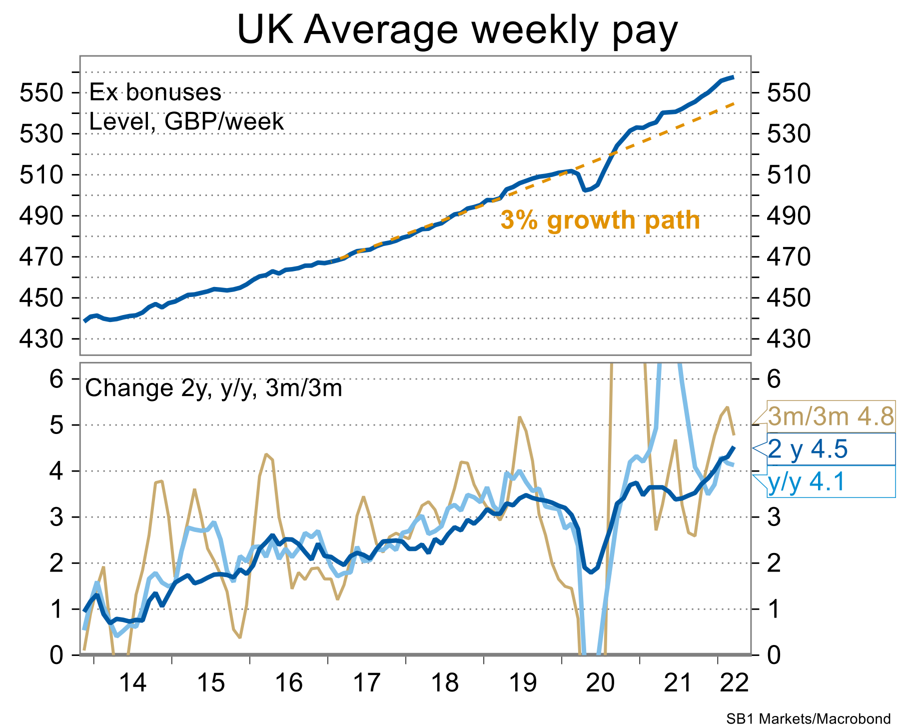
- ILO/LFS ('AKU') unemployment fell by 0.1 pp to 3.7%, expected unchanged – to the lowest level in almost 5 decades!
- The claimant count at labour market offices fell by 57', and more than expected. The level fell 0.1 pp to 4.1%, still above the pre-pandemic level (3.1%) and well above bottom levels (just above 2%). Given the record high level of vacancies, the claimant count 'should' have fallen further. More mismatch in the labour market
- The employment rate is still 0.9 pp below the record high pre-pandemic level
- The no. of unfilled vacancies is record high and still increasing rapidly



Wage inflation is accelerating, the pace is at 5% (regular pay) to 9% (incl bonuses)

… creating pressure on total inflation

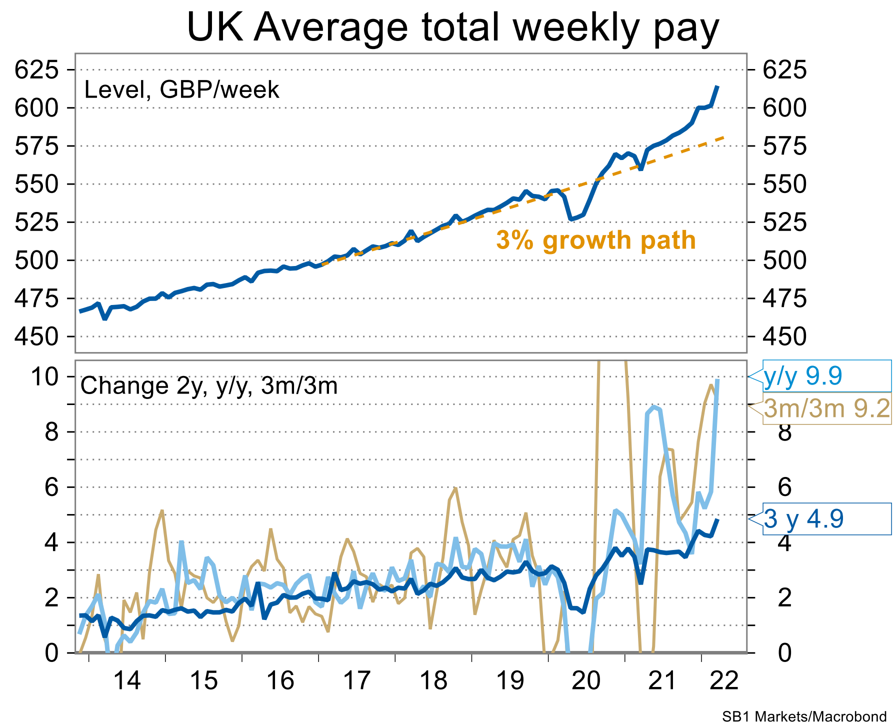




- **Annual wage growth** (regular pay, 3 m avg) accelerated 0.2 pp to 4.2% in March, 0.1 pp more than expecrted. Not smoothed, wages were up 4.1% (unch). The underlying 3m/3m rate retreated marginally to 4.8%
- **Including bonuses**, total wages are up 9.9%, and underlying 3m/3m growth equals 8%!
  - » Over the 2 past years, total weekly pay is up 4.7% in average
- Just before the pandemic, wage inflation was approx. 3% (total pay) to 4% (regular pay) – but just between 2% and 3% the preceding years. Thus, the current wage inflation rates are well above the British 'norm'
- The **'LFS/ILO' unemployment rate** fell to 3.8% in January, from 3.9% in December – just marginally above (the 2nd decimal) above the pre-pandemic level

Total pay, including bonuses, is accelerating rapidly

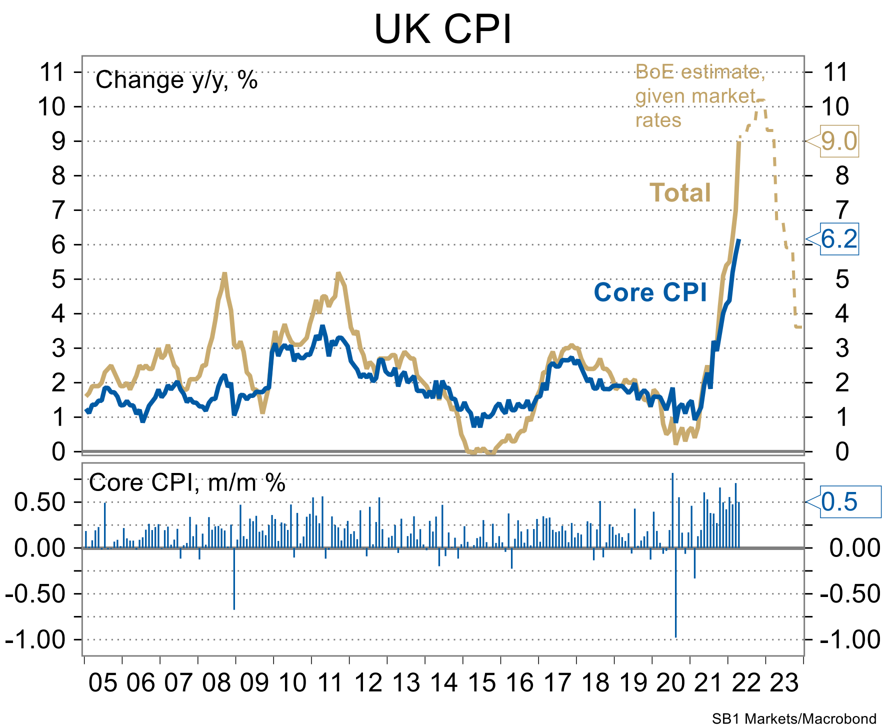
- It is completely impossible to bring inflation back to 2% over time if wage inflation remains above 5%, probably even above 4%. With a 3% inflation rate, inflation was just marginally below the 2% target

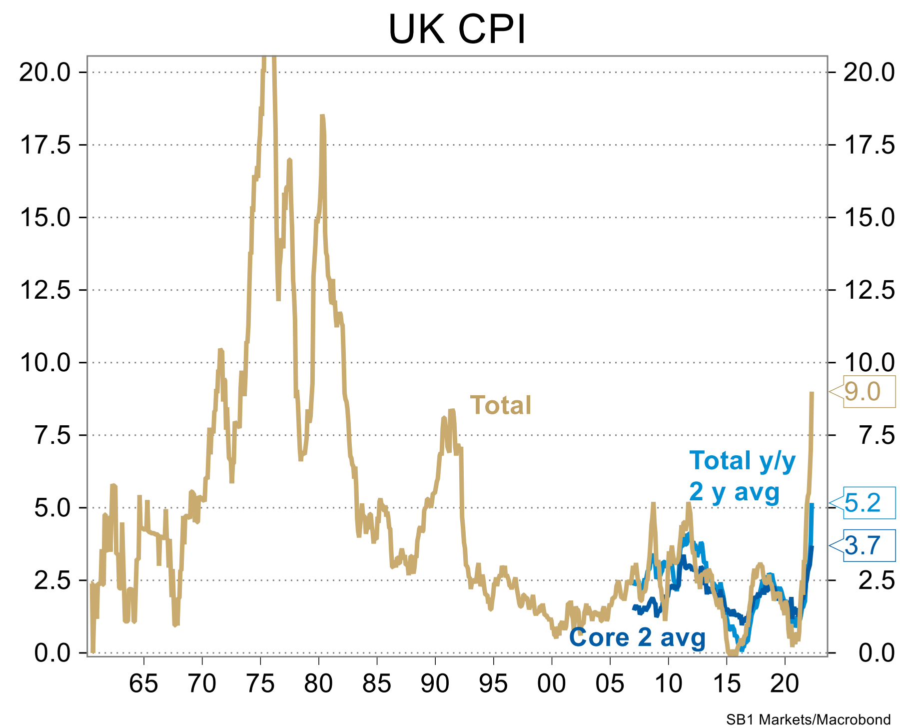


SpareBank 1 MARKETS

Inflation up 2.1 pp to 9.0% in April, as energy prices surged 26% m/m (52% y/y)

The semi-annual adjustment of energy prices lifted the CPI sharply. The core CPI up 0.5 pp to 6.2% y/y

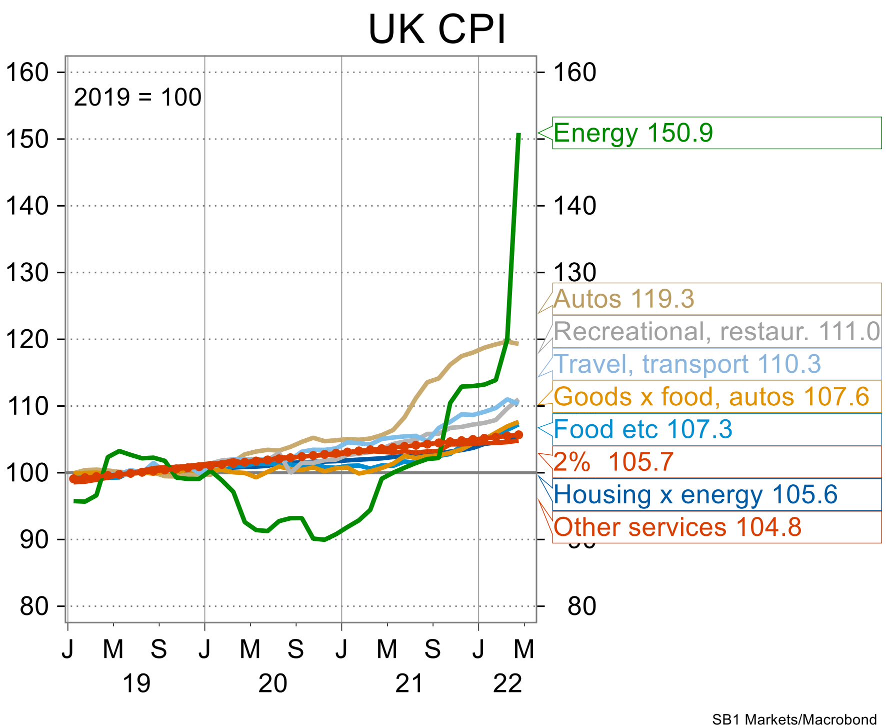


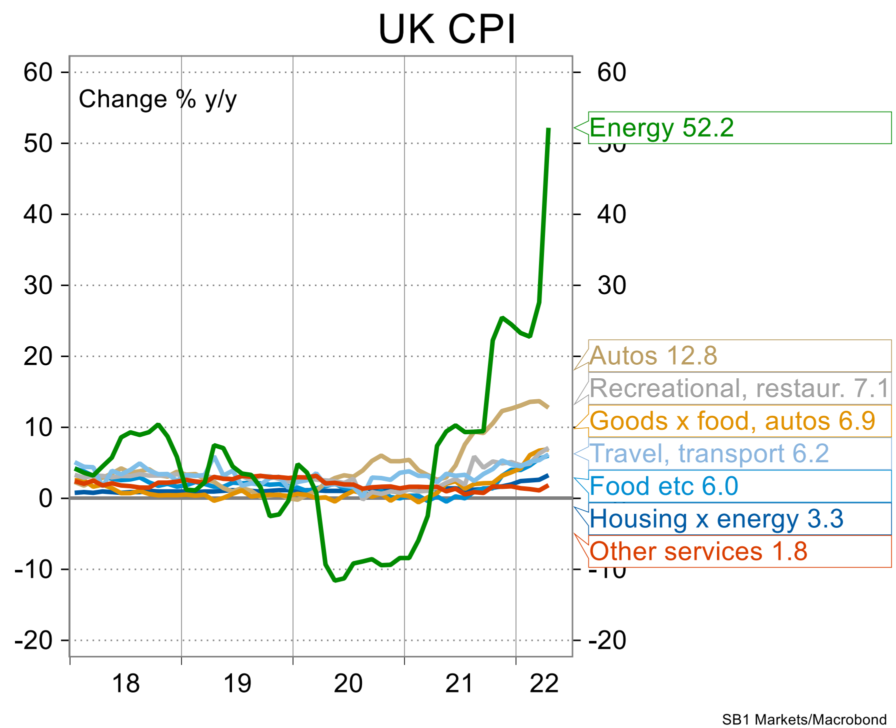


- **The total CPI** rose 2.2% m/m in April, way above anything seen before – but still 0.1 pp less than expected. The annual rate at 9% is highest since 1982 – and the 2 y average growth at 5.2% is the highest since 1990
- **Energy** has lifted the headline y/y rate by 3.5 pp, from 1.8%. The regulated price cap for energy was lifted substantially in April. Other goods, also excluding food & autos are sharply up, contributing even more than energy! And food prices are up 6%, lifting the CPI by 1 pp
- The **core CPI** (ex food and energy) rose 0.5% m/m, and is up 6.2% y/y
- **Transport** has lifted CPI by 1.6 pp. Second-hand cars are sharply up, as are fuel prices
- **Housing, included energy**, has lifted the CPI by 1 pp. Still, there are many other contributors left…

Energy is a main culprit

… but most main components are above the 2% growth path

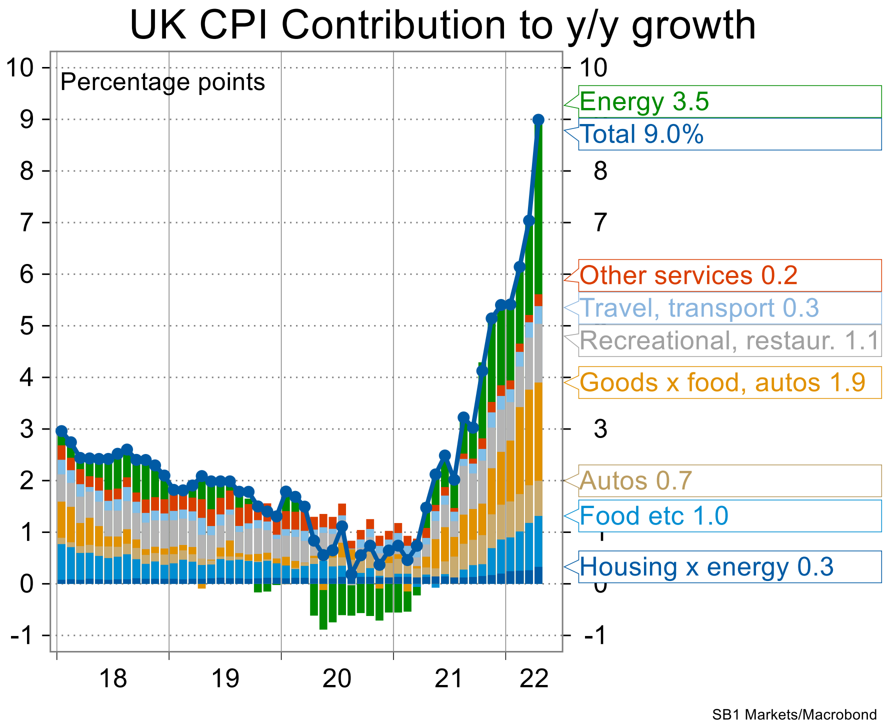


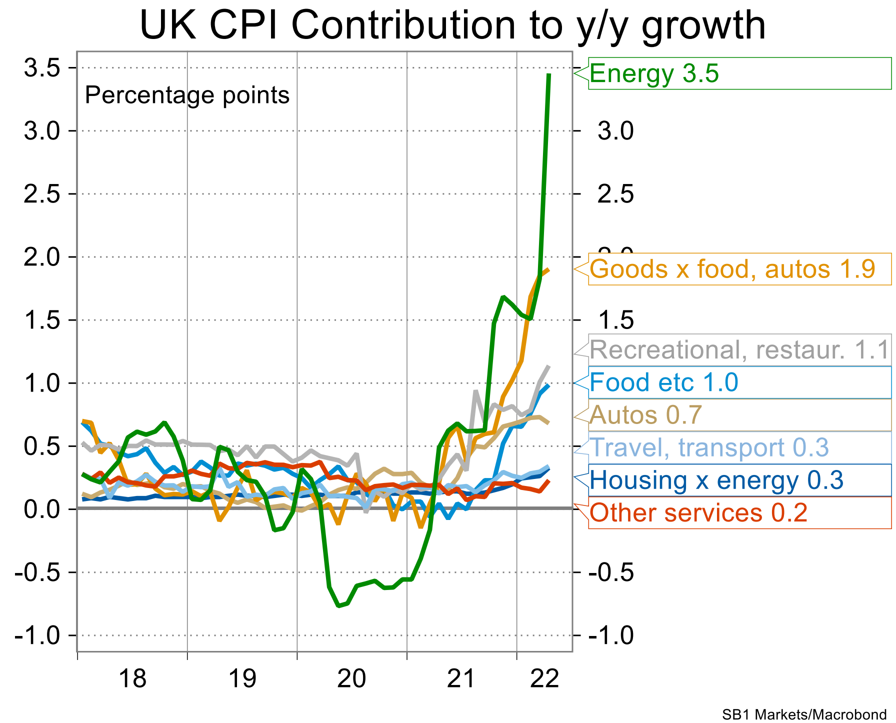


- **Energy prices** are up 52% y/y, due to the 26% m/m surge in April, when semi-annual price cap adjustments were undertaken

Energy is important, but several components contribute as well

Goods x food & autos prices have shot up, as have recreational services/restaurants, foods, autos

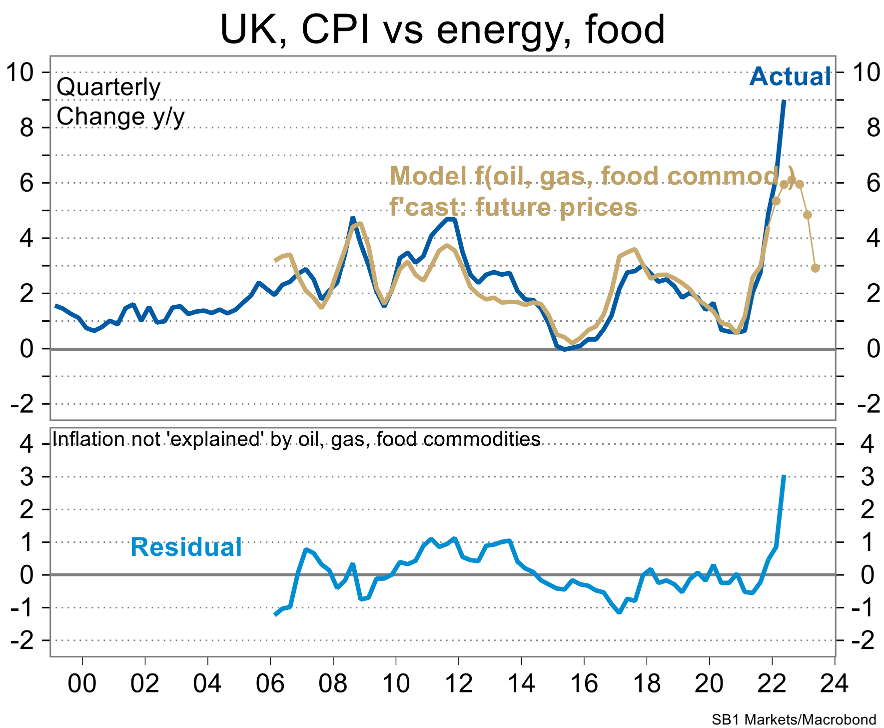


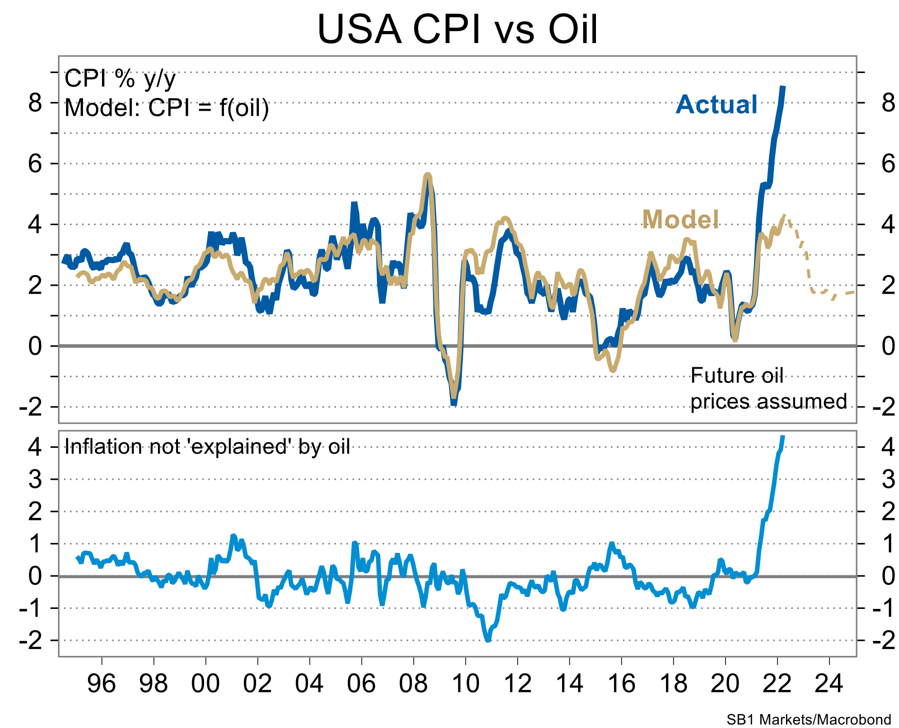


SpareBank 1 MARKETS

Oil, gas food prices explain quite a lot but now other factors are contributing too

6 pp of the 9% lift in CPI may be explained by energy & food commodity prices

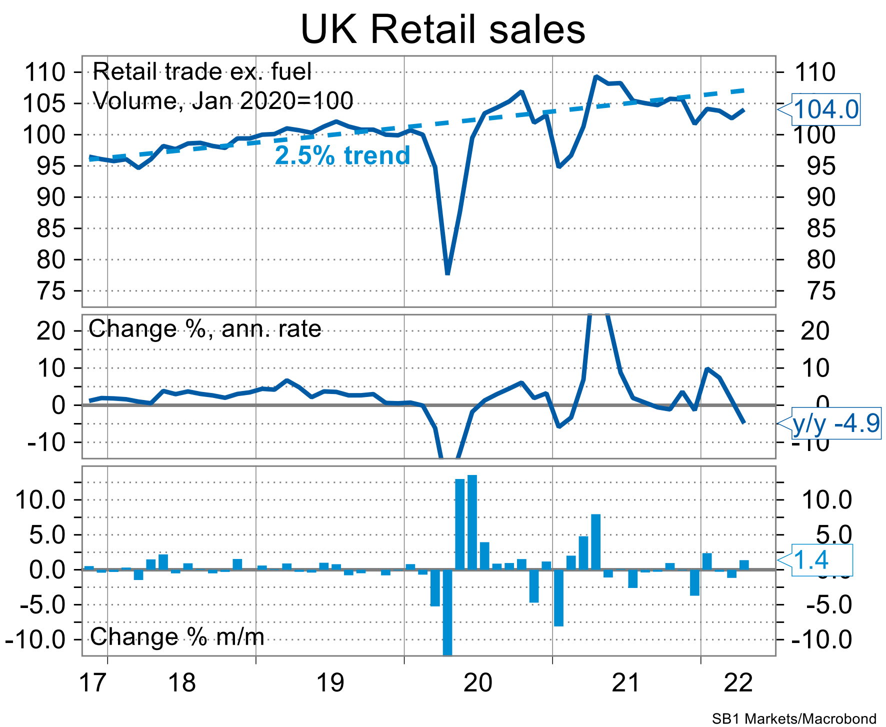


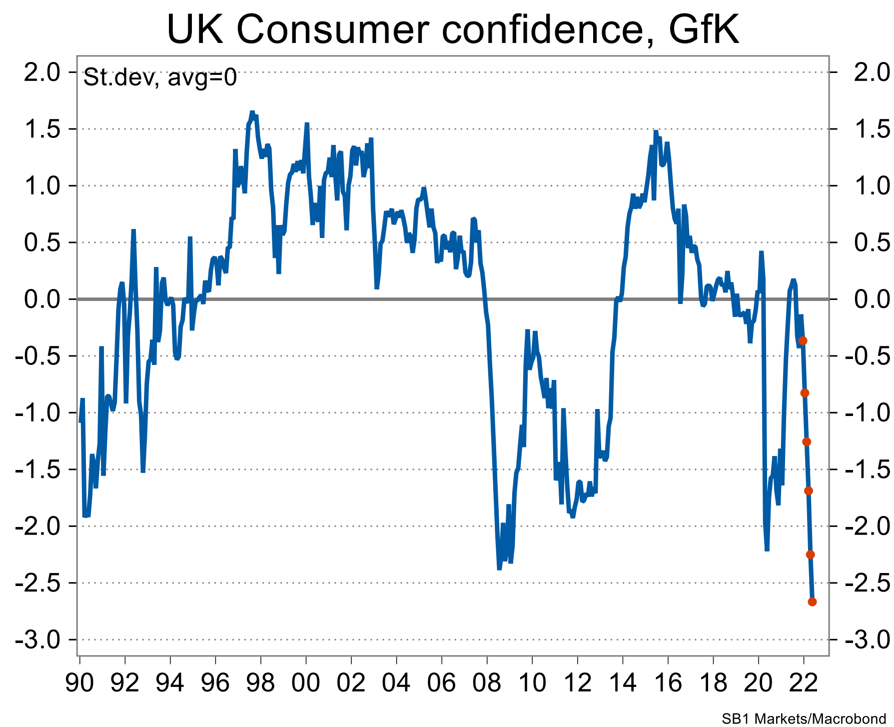


SpareBank 1 MARKETS

Retail sales recovered the March loss in April but the trend is probably still down

Sales rose 1.4% in April, exp. <u>down</u> 0.3%. Still, sales are below the pre-p trend path. And confidence...

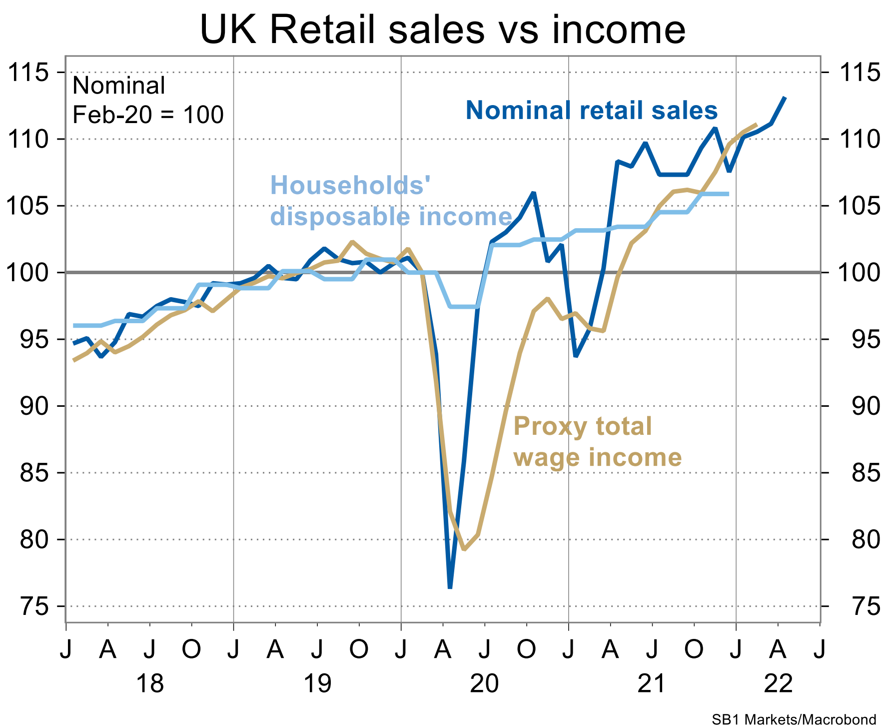


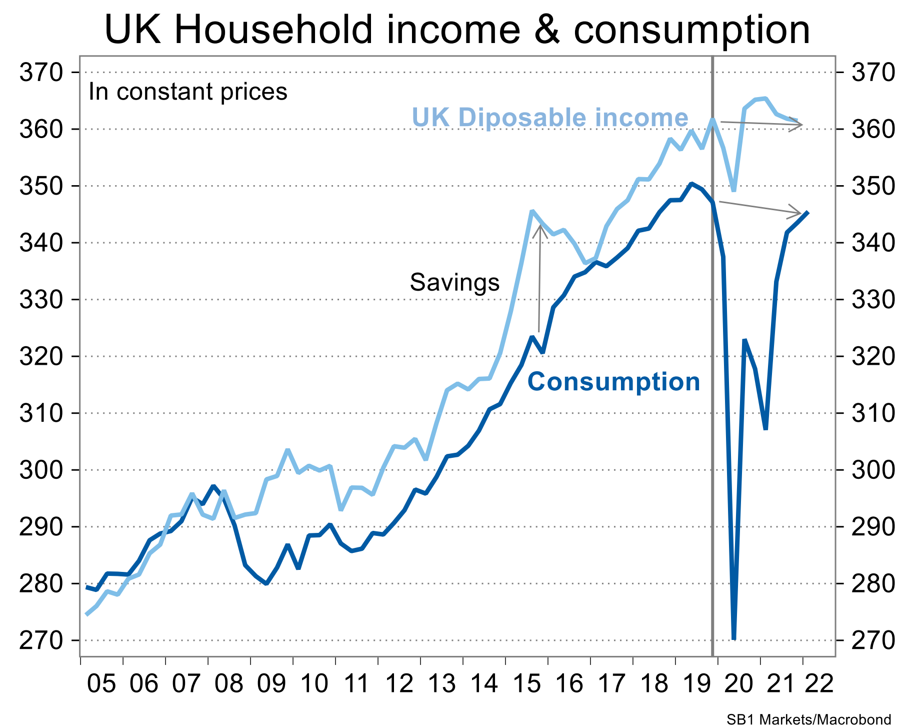


- **Retail sales** peaked last April, and the gradual decline brought sales down to well below the pre-pandemic 2.5% growth path. Since December, sales have flattened though
- **Consumer confidence** fell further in May, to the lowest level ever. In November, the index was 0.3 st.dev below average, and since then is has been falling like a stone, to -2.7 st.dev in May!
  - » High inflation and declining real wages may be one reason. Perhaps the war too (but most of the decline took place through February) Beside that, the labour market is strong, the unemployment rate is low, and wages are climbing rapidly too

Total wage income is keeping up with nominal retail sales

... and total consumption is weaker than normal vs. total disp. income (=savings higher than normal)

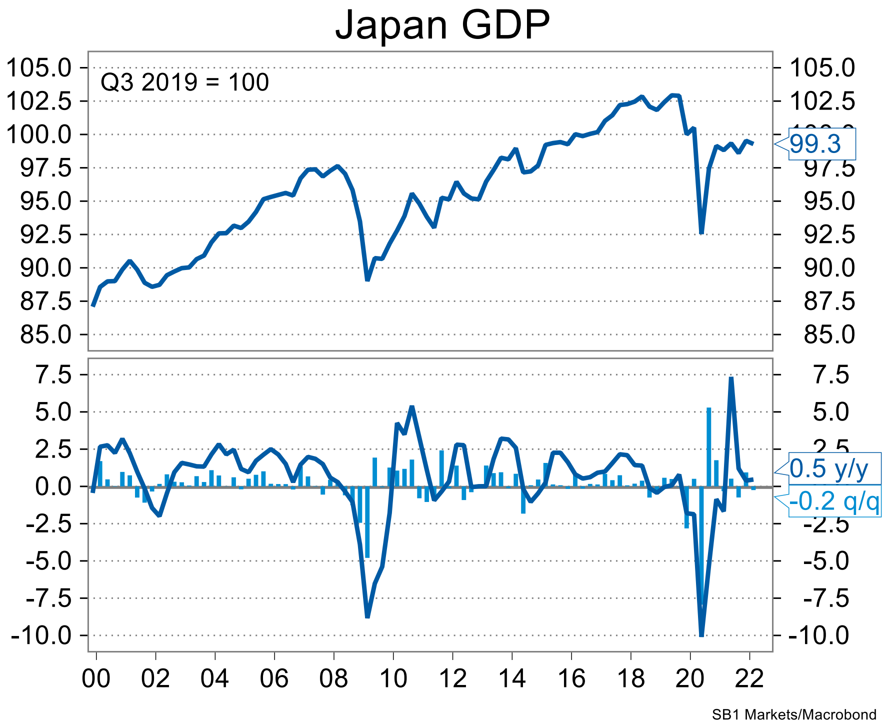


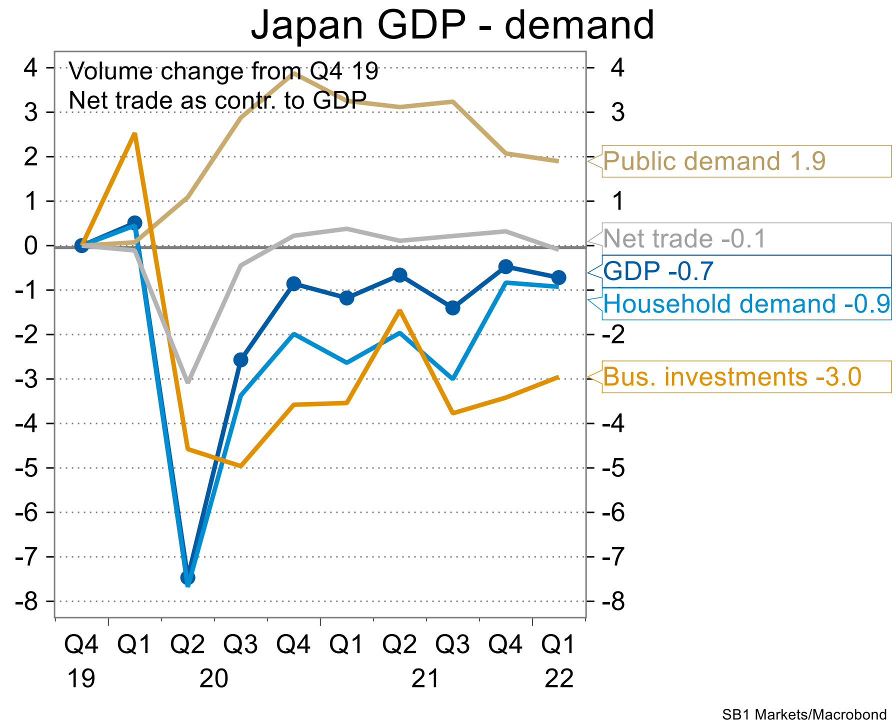


- The latter at least until Q4 last year

GDP down just 0.8% in Q1 (0.2% not annualised), expected -1.8%

Business investments up, from a low level. Household demand down. GDP still down 0.7% vs. Q4-19

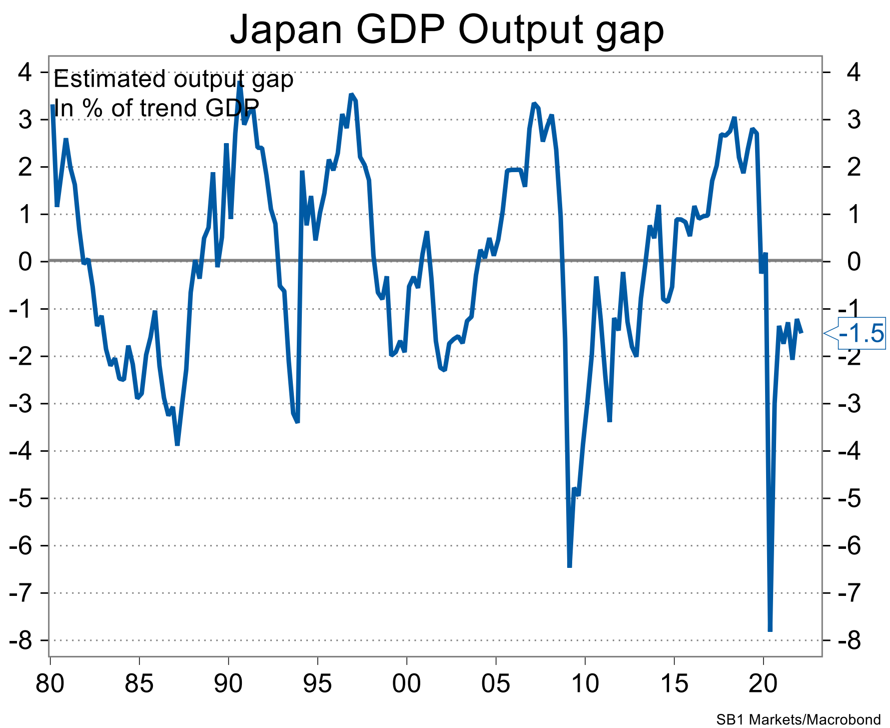


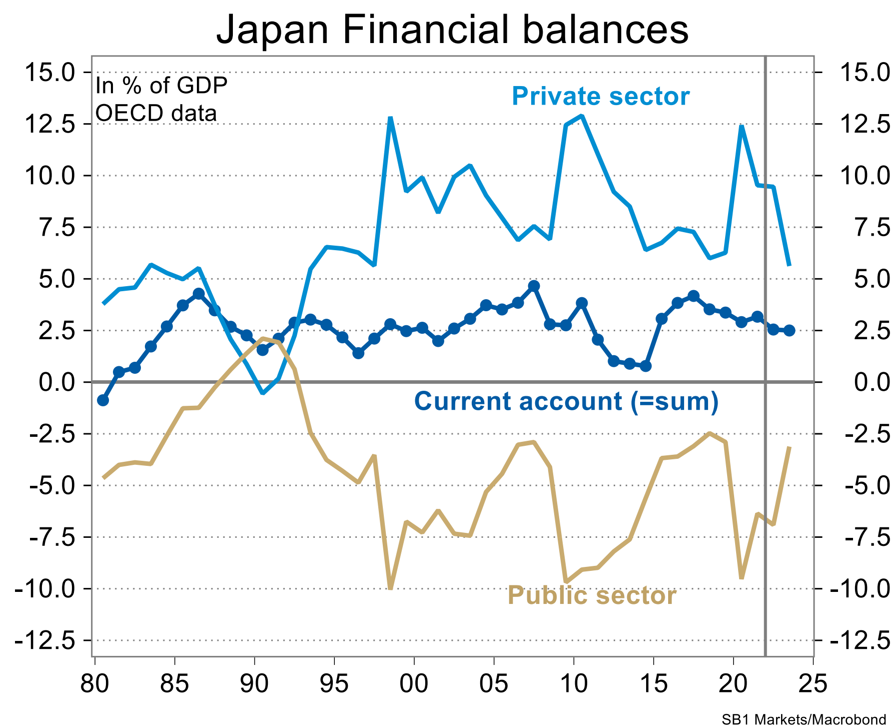


- Better than expected, but still far from good. Covid restrictions hit part of the economy early in the quarter
- GDP is still 0.7% below the Q4-19 level, and Q4-19 was not an impressive starting point (partly due to the VAT hike in Oct-19). <u>GDP is more than 3% below the late 2018 level</u>

A deep downturn – but not that far up the (weak) pre-pandemic trend level

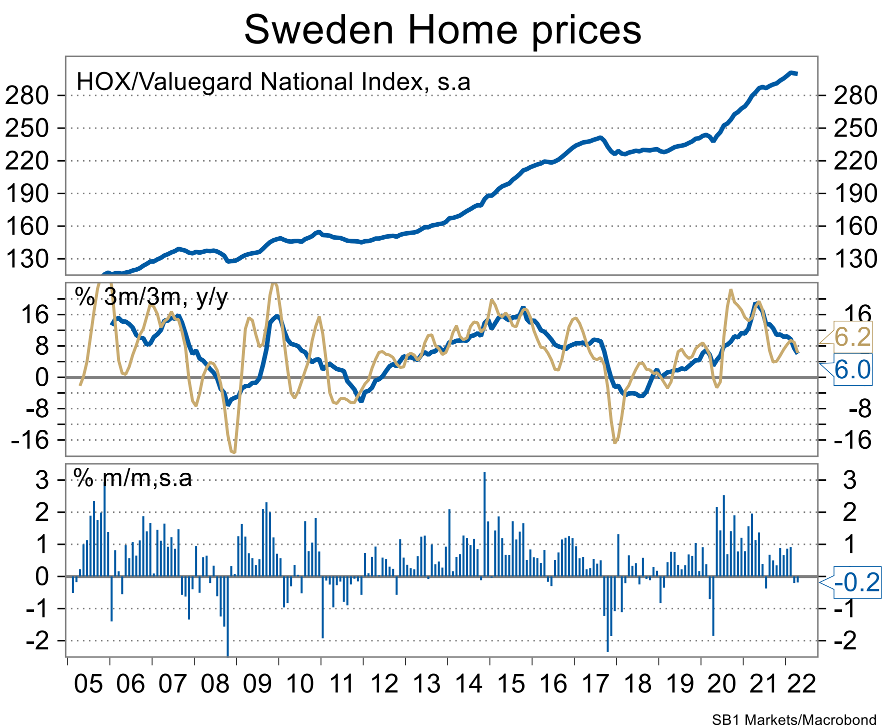
Private sector savings are now on the way down – and the public sector deficit is shrinking

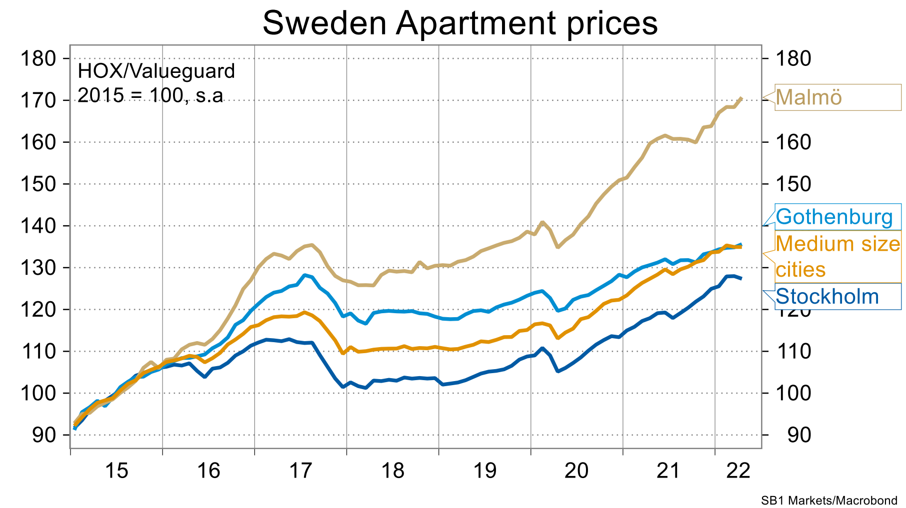


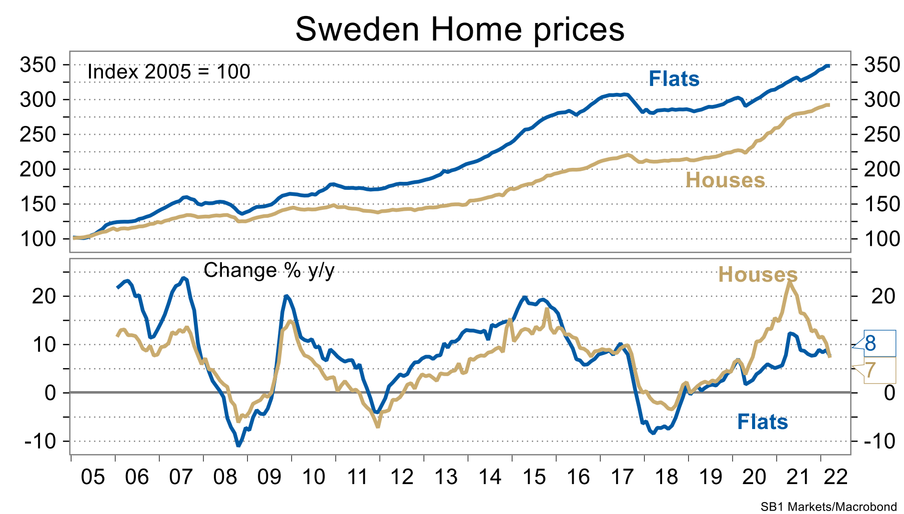


Swedish house prices FELL in April too, the annual rate 6.2%, from 19% a year ago

Mortgage rate expectations most likely to blame



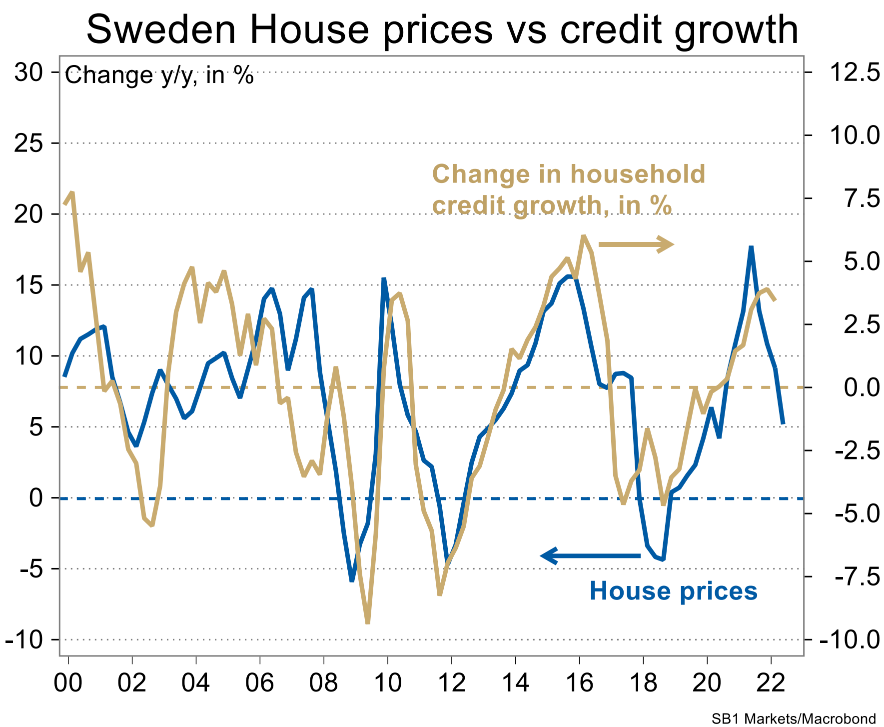


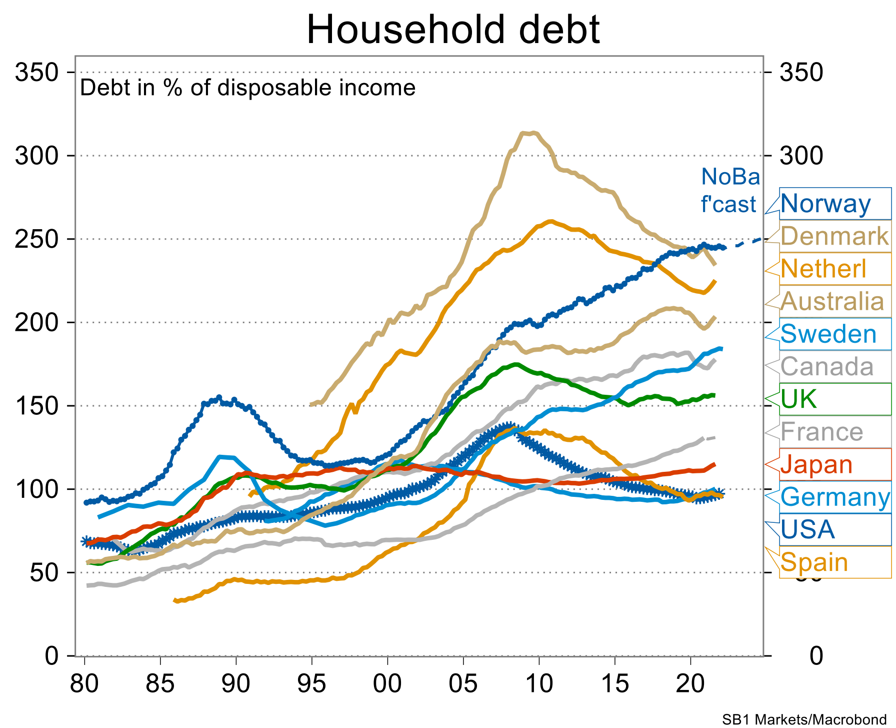


- Prices fell 0.2% m/m as in March (revise from -0.1%), and the annal rate declined to 6.2% from 7.4% in March
  - » The underlying price growth (3m/3m) is still 6%, and higher than in October last year (but the m/m decline continues into May…)
- Prices fell in Stockholm but rose in both Malmö and Gothenburg
- The **Riksbank's** abrupt change of tack in late April will very likely calm the housing market down – and a further decline in prices are quite likely. The non-residential market has already taken a hit

Credit growth is still higher than one year ago – but growth is now slowing

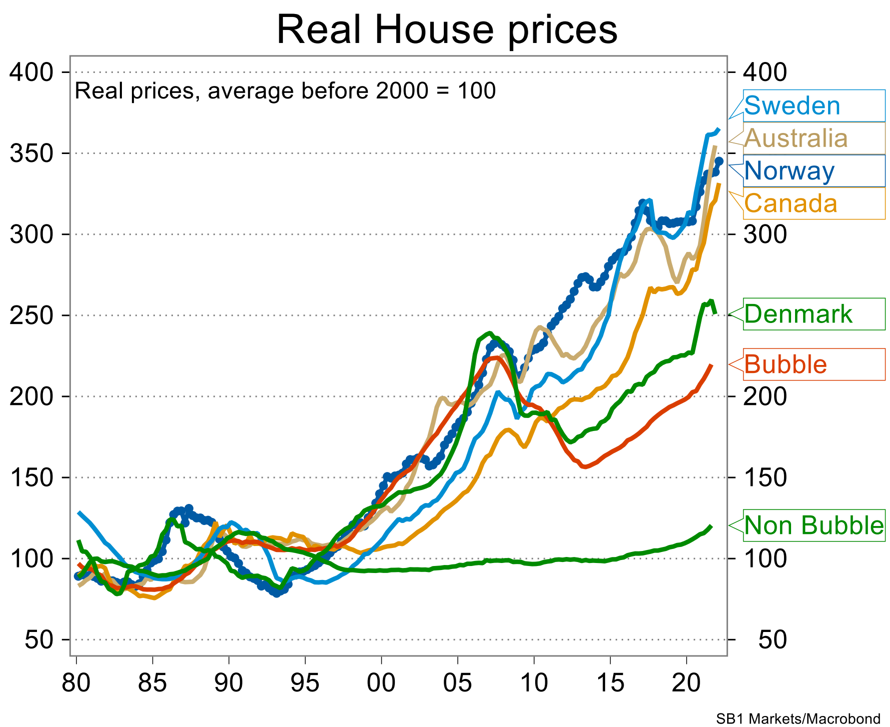
And more slowing is in the cards as the housing market calms down

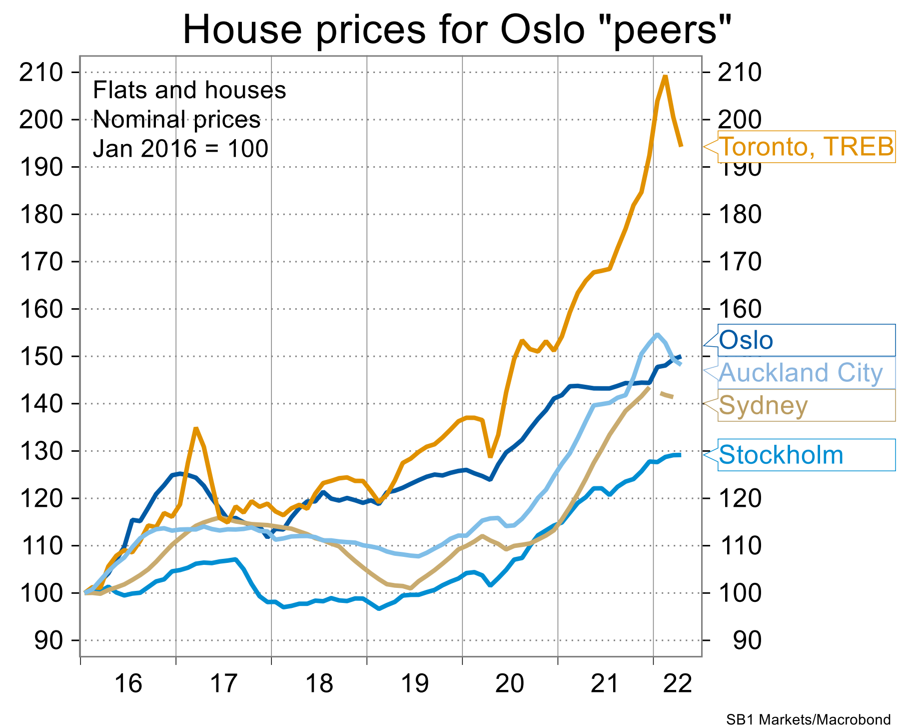




Zero-interest rates have been just wonderful!

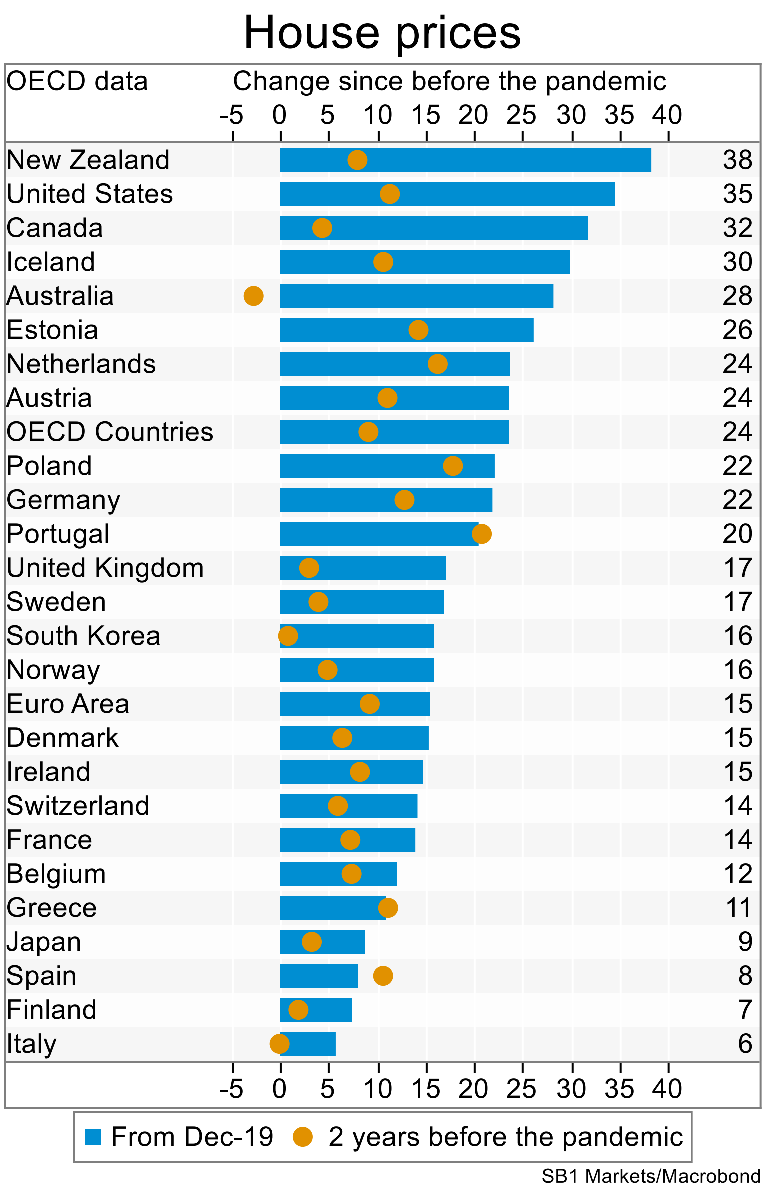
But what will happen when interest rates are on the move upwards? Some challenges ahead





- Real house prices are at high levels in both Australia, Canada, Norway, and Sweden
- Prices are reported down in Toronto, and in Auckland – and prices may have fallen in Sydney as well

House prices up everywhere, and have accelerated in 23 of 26 countries



... since before the pandemic

- Sweden is not at the top of the list, neither is Norway

OECD quarterly data, the last quarter Q2 or Q3-21

Highlights

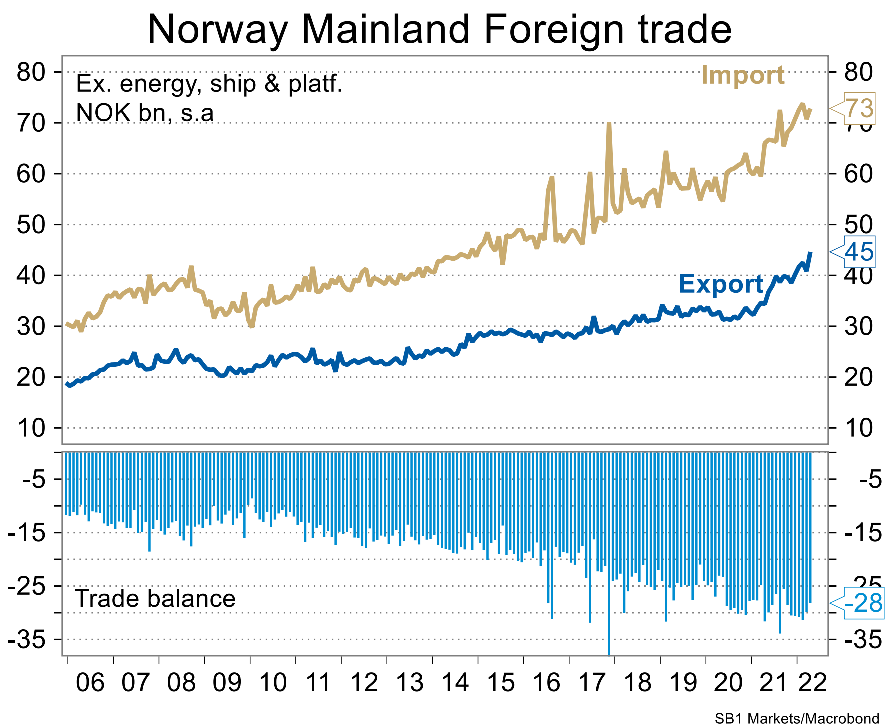
The world around us

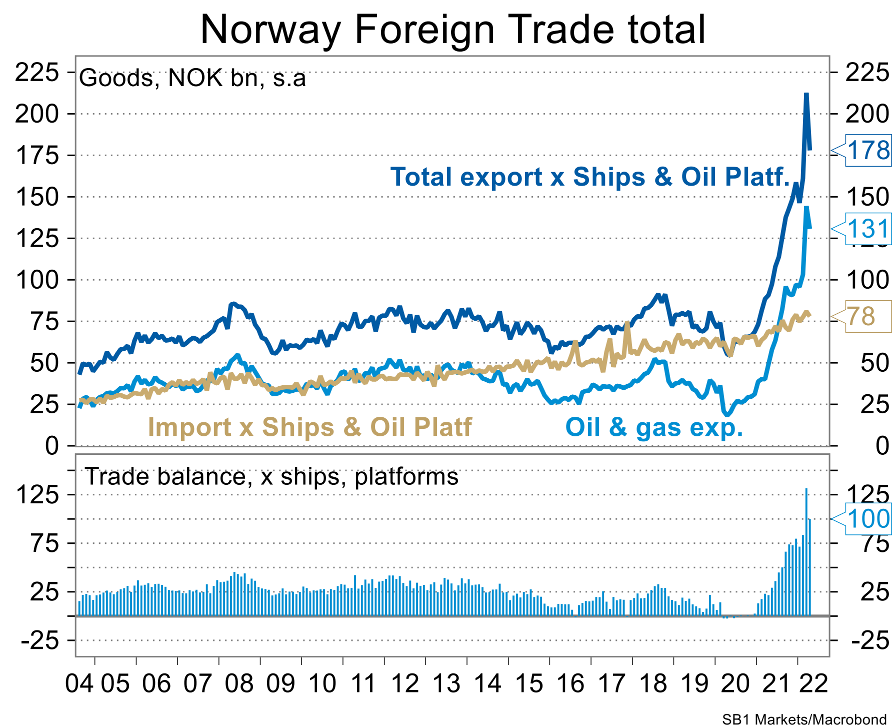
The Norwegian economy

Market charts & comments

Trade surplus down NOK 32 bn to NOK 100 bn in April as gas prices fell

Petro exports at NOK 131 bn, the Mainland ex. energy deficit down as exports climbed to ATH

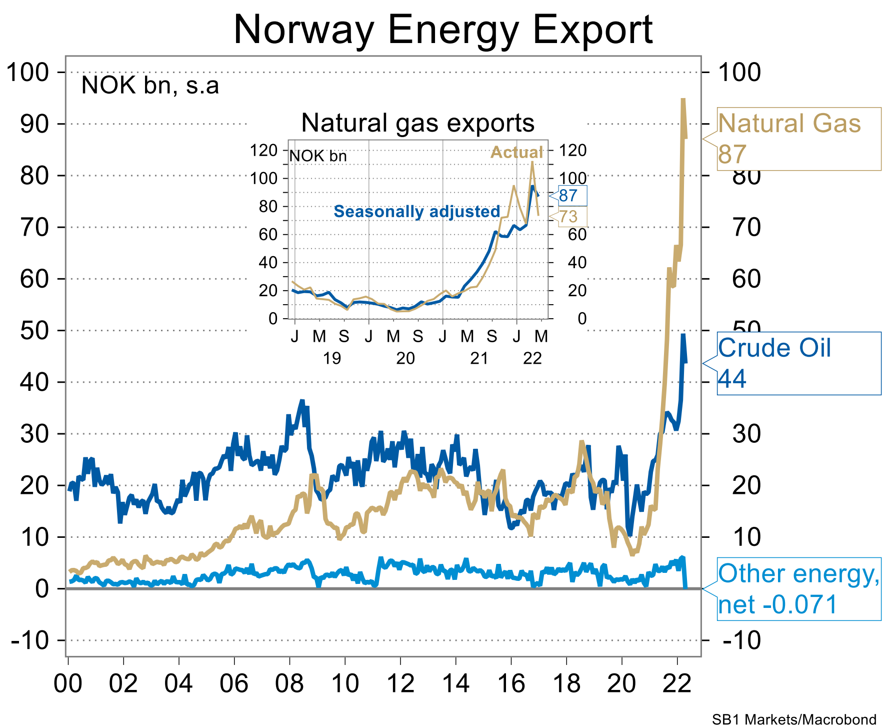


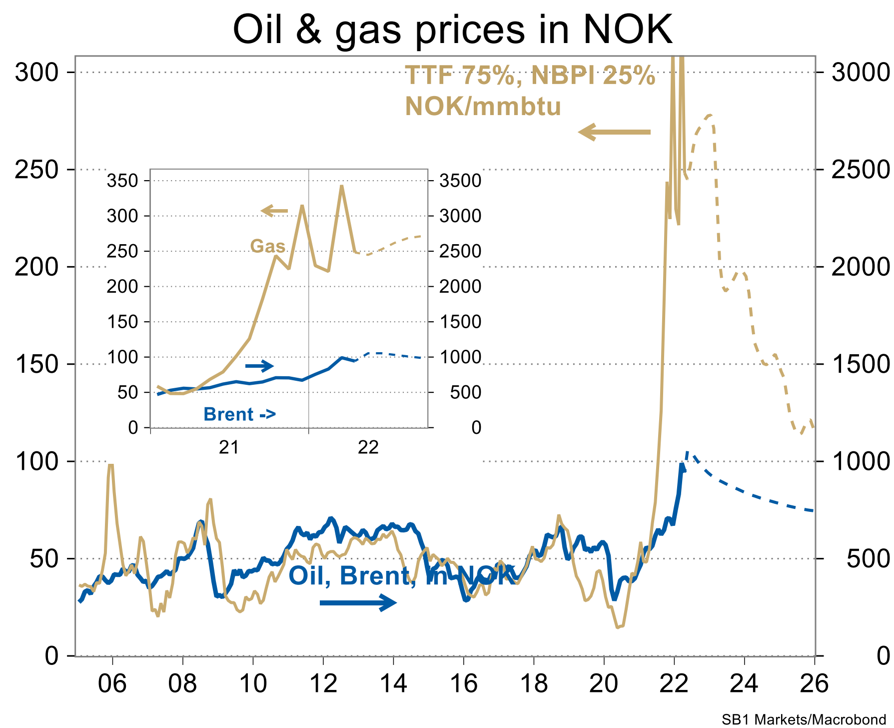


- The seasonally adjusted **overall trade surplus** in goods at NOK 100 bn is the 2nd highest ever, equalling some 30% of GDP!
- **Natural gas exports** fell in April, as the gas price declined from the ATH level in March. In actual terms, gas exports fell to NOK 73 bn from 112 bn. Seasonally adjusted, exports fell by just 8 bn to 87 bn. Usually we just refer to seasonally adjusted data but now actual figures may be just as relevant due to the special circumstances in the European gas market. Oil exports fell marginally in April too
- **The Mainland (non energy) trade deficit in goods** fell by 3 bn to NOK 28 bn, equalling 9% of Mainland GDP (however, most imports for oil investments are categorised as Mainland imports and sales from the Mainland to the oil sector (both op.ex and cap.ex) are not counted as exports – and the 'real' Mainland trade balance is far, far stronger)
- **Non-energy exports** rose sharply in April, NOK 45 bn, the highest level ever. The underlying growth rate over the past year is at almost 25%. Exports are up more than more than 40% since 2020, mostly due to higher prices but volumes are up as well. Fish, metals & chemicals are reporting strong growth.
- **Imports** fell 2 bn in March but remain at a 15% growth path

Gas exports down from the peak as prices fell in April

Crude oil exports also fell slightly – but both remain at extreme levels



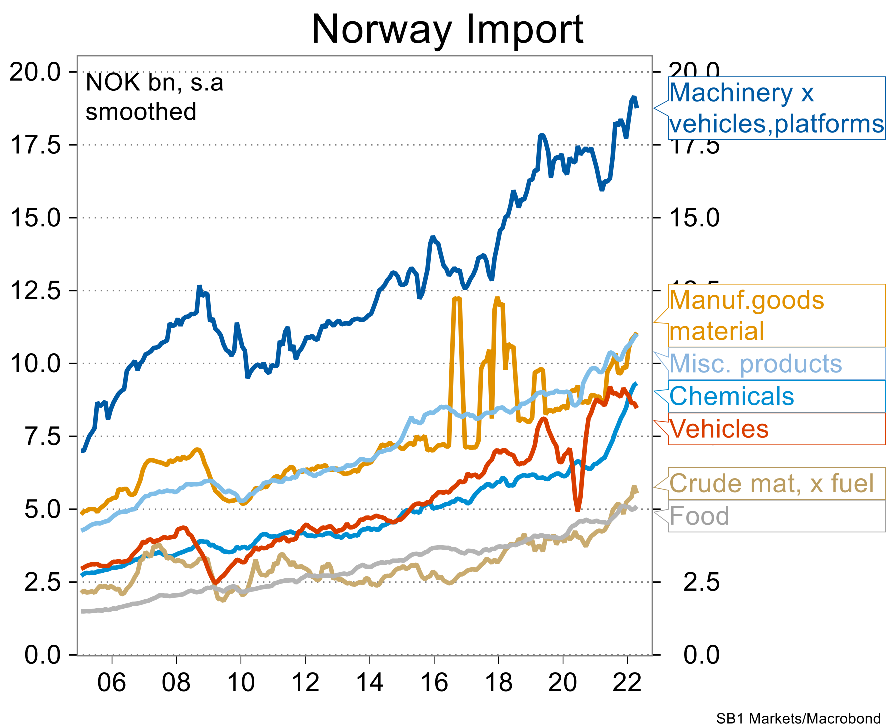


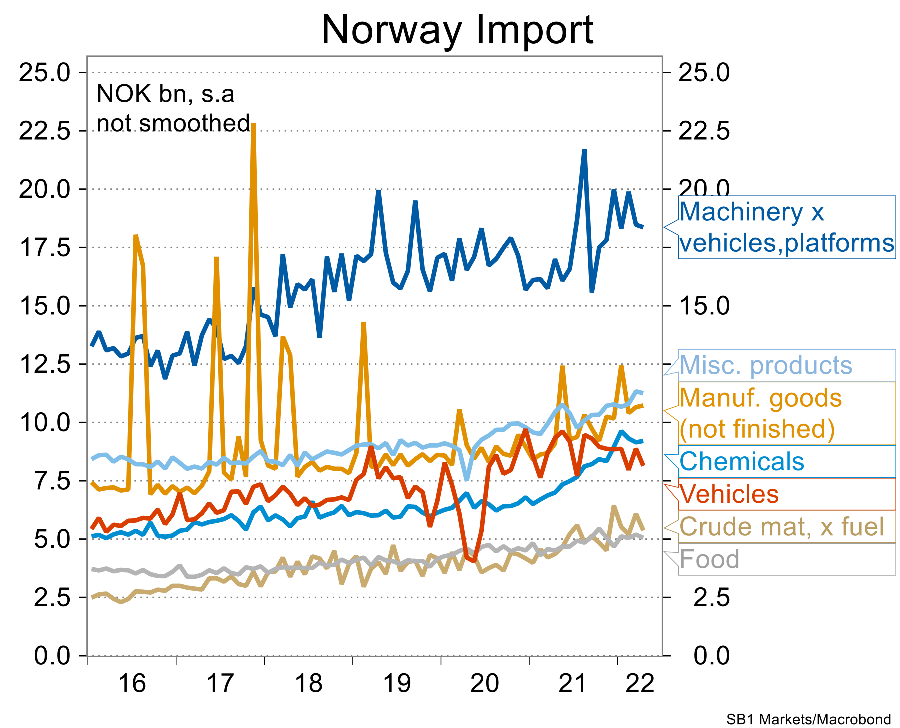
- **Gas prices** (75% TTF Netherland gas prices, 25% NBI UK prices) fell by more than 25% in April from March. So far in May, prices have not fallen further
- The value of **gas exports** rose by 33% (seasonally adjusted) to NOK 88 bn (the actual number was NOK 112 bn, and given market conditions, the normal decline in gas exports in Q2 and Q3 will probably not materialise in 2022, and the seas. adjusted March figure may be 'too low'). However we adjust it, gas exports are at an unprecedented level
- **Crude oil exports** fell by NOK 5 bn to 44 bn
- Of the **petroleum exports** at NOK 131 (seas. adj) will end up in the Government's coffers, and then transferred to the Oil fund. Some few dollars will trickle down to the oil companies' bottom line too
- Other energy exports fell to zero, as Norwegian electricity production is kept in check due to a low level of reservoirs in the hydroelectrical system

SpareBank 1 MARKETS

Most imports are trending rapidly upwards – as domestic demand is strong

Vehicle imports are finally yielding, from a high level

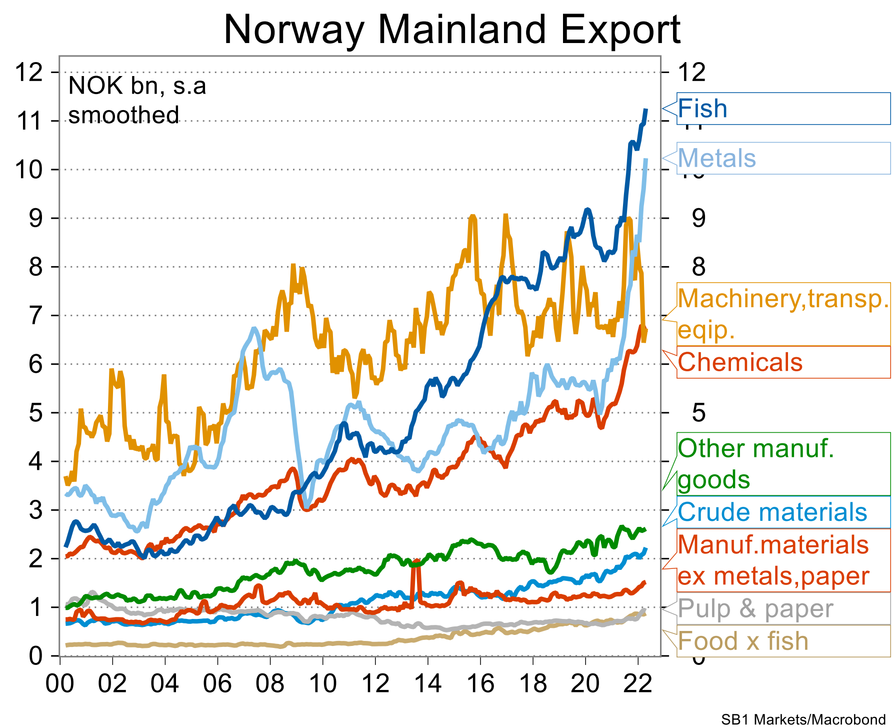


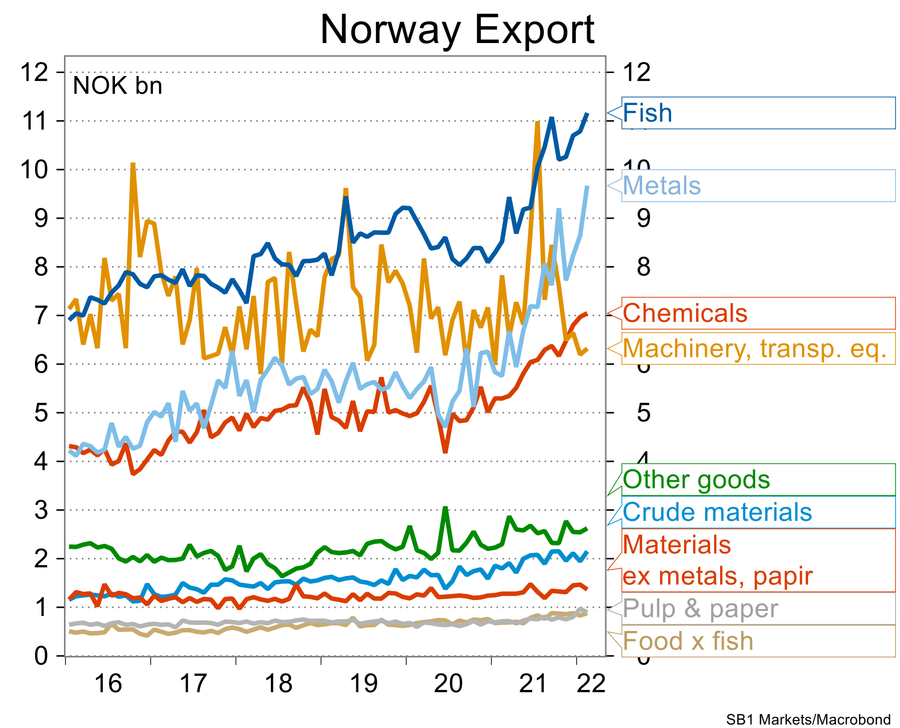


- The spikes in imports of manufactured goods are due to unfinished platforms or ships

Fish exports are surging, metals & chemicals are sprinting upwards too

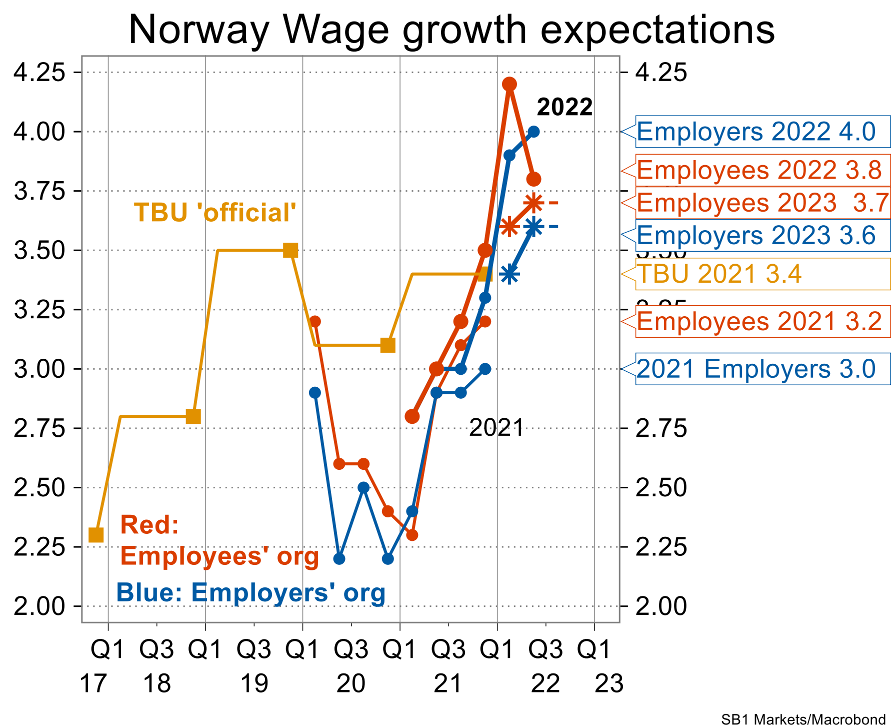
Exports of machinery & transport eq. sharply down recent months, level unch. from 2014 (and 2007)





- Raw material prices will very likely come down from the precent high levels (many are on the way down already). Then the value of commodity exports will come down as well

NoBa Expectation survey: Employers expect 4% wage growth, trade unions 3.8%!



2022

- Leaders in employers' organisations lifted their forecast by 0.1 pp to 4.0% in Q2
- In the trade unions, leaders expect revised their forecast to 3.8%, from 4.2%
- Norges Bank assumed a 3.8 % growth rate in the March MPR
- We think wage inflation will rise to above 4% in 2020 even if the agreed guidline in the central wage negotiation is 3.7%

2023

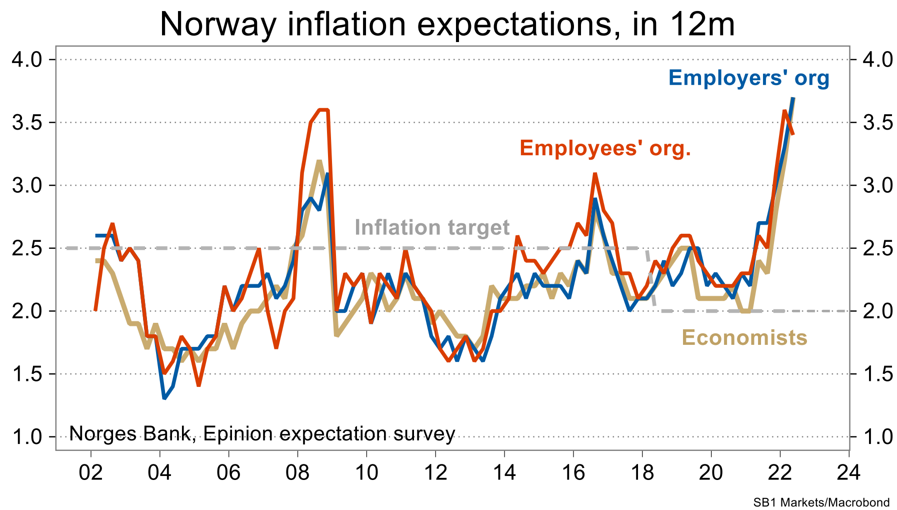
- Employers aim for 3.6%, the employees 3.7%, up by 0.2 and 0.1 resp.
- Given the current tight labour market, these forecasts seem to be on the low side

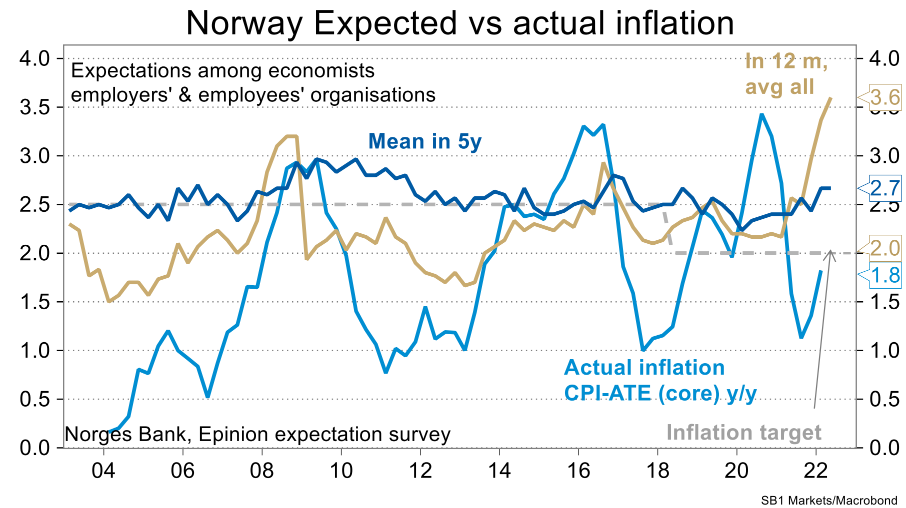
In sum

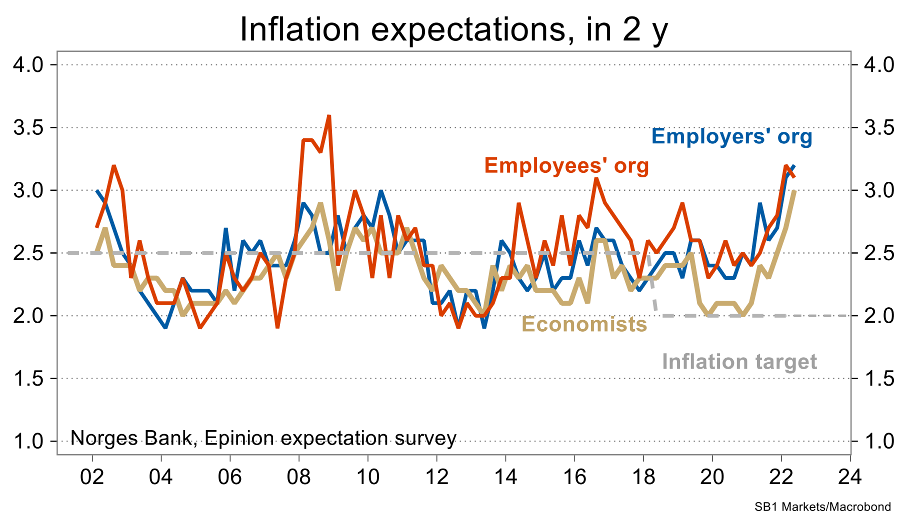
- Wage inflation is accelerating but these forecasts are not frightening vs Norges Banks 4% 2023 forecast and we do not expect the Bank to revise its forecast upwards as has been the norm the recent quarters

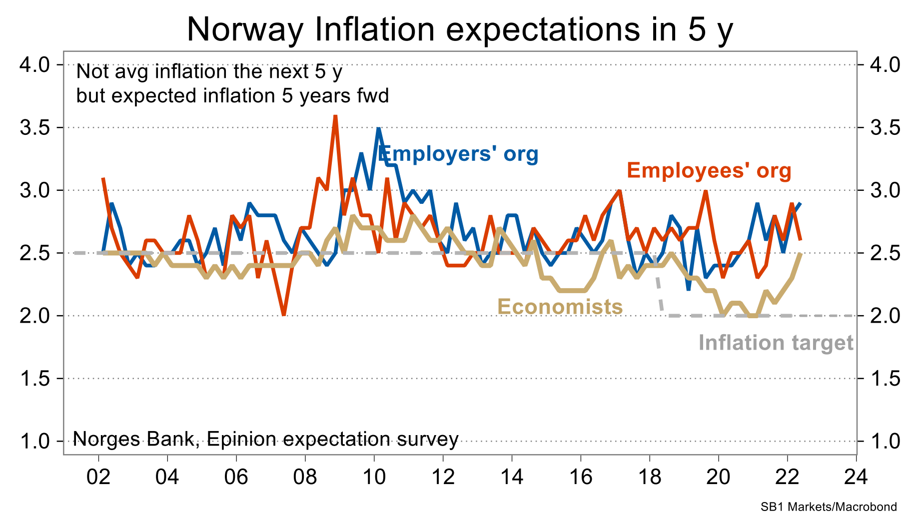
Short term inflation exp. further up, and nobody believes in 2% long term!!

3% – 3.5% infl. is expected the coming 2 years. Long term (in 5 years), a 2.7% rate of inflation is expected





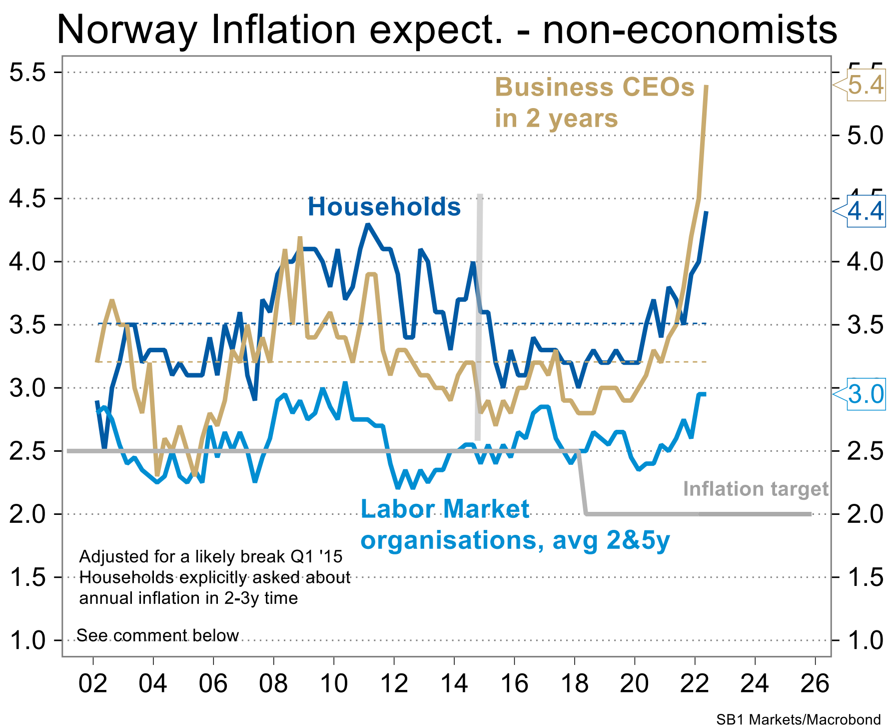




In these charts, results from economists (academia, market), leaders in trade unions and in employers' associations are presented, not businesses or households

Household, business inflation expectation are not particularly well anchored

Businesses expect a 5.4% inflation rate in 2 years' time, households 4.5% 2 – 3 years ahead



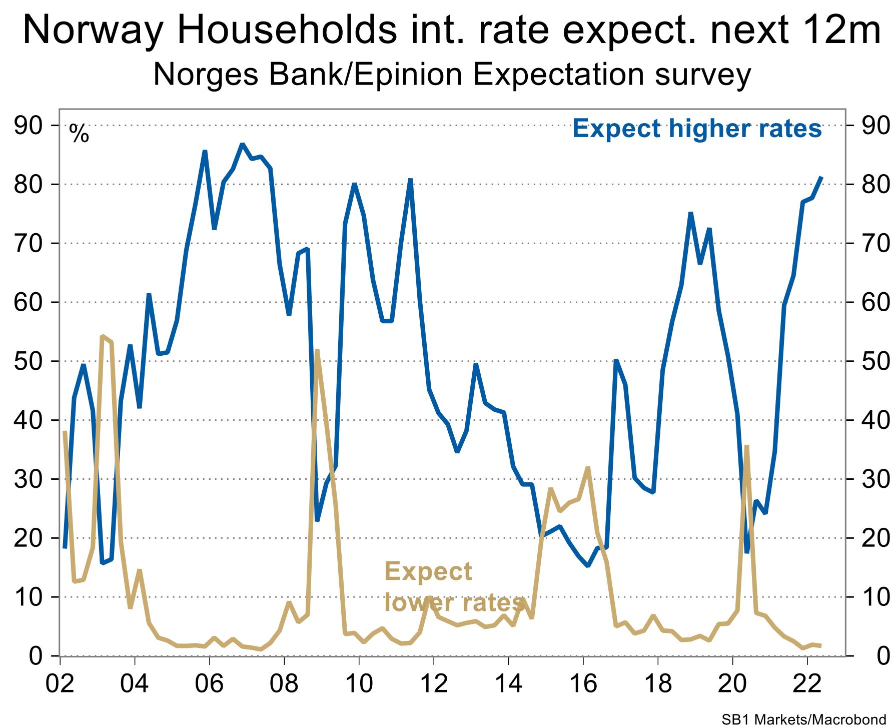
Business leaders' & households' expectations are rising sharply to above normal (very high) levels

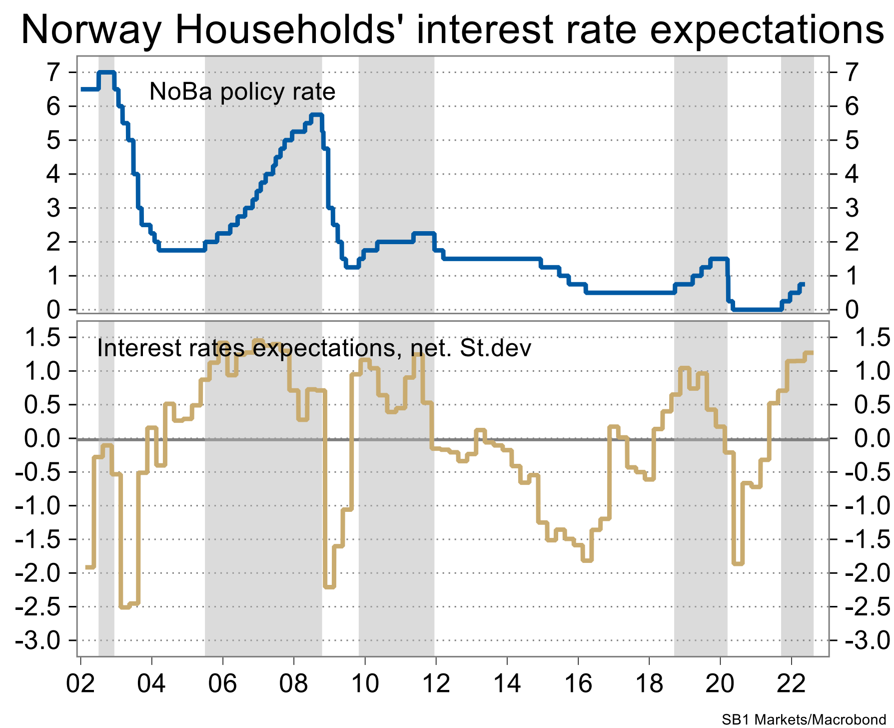
- **Labour market participants** (leaders in trade unions & employees' assoc.) are probably listening to their economists, but they still expect 3% long term inflation rate (2 y & 5 y avg). The cut in the inflation target to 2% in 2018 has not influenced inflation expectations at all
- **Business leaders** are expecting a 5.4% inflation rate in 2 years time – up 2.5 pp since before corona, and much higher than their average expectation (3.1%) (and no impact of the lower inflation target)
- **Households** have always expected incredibly high inflation going forward (even after an adjustment of data prior to Q1 '15, due to a clarification of 'inflation', see below) – on average 3.5%. Now, **they expect 4.4% in** 2 to 3 years time, up 0.4 pp from Q1, and 1.2 pp up from before corona
- Should we just ignore these 'silly' expectations, or should we reflect on them?
  - » We should at least put some emphasis on the significant rise in inflation expectations – to above average levels
  - » **Perhaps we could even explain demand for credit from households by the 2 – 2.5 pp negative gap between mortgage lending rates and their long-term inflation expectations?**

The questions regarding expected inflation in 2 or 2 – 3 years time for business leaders and households were slightly altered in Q1 2015 survey. Since then, they have been asked about the expected rate of annual inflation in 2/2-3 year time, not just 'inflation' which could have an unambiguous interpretation. Household revised their expectations down by 0.6 pp in the Q1 '15 vs the Q4 '14 survey due to this clarification. Business CEO's revised their expectations a tad upwards. Since there were no other major change in actual inflation or inflation expectations among other groups during these months, we have just revised households' expectations down by 0.6 pp pre Q4 '14 at the chart above

Households recognises that interest rates are on the way up

Households are often ahead of the curve when NoBa (well communicated) starts hiking

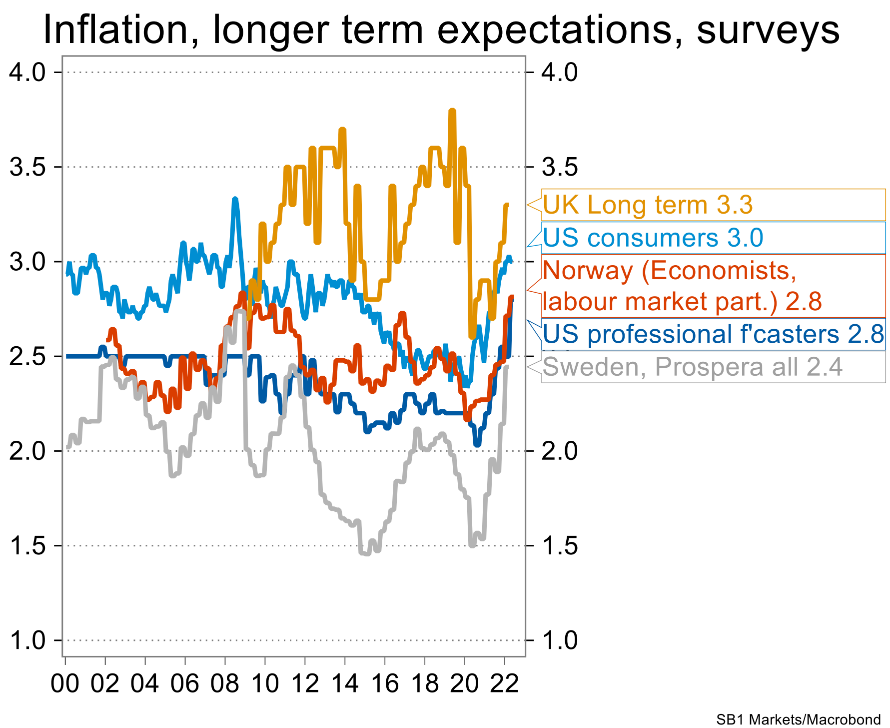


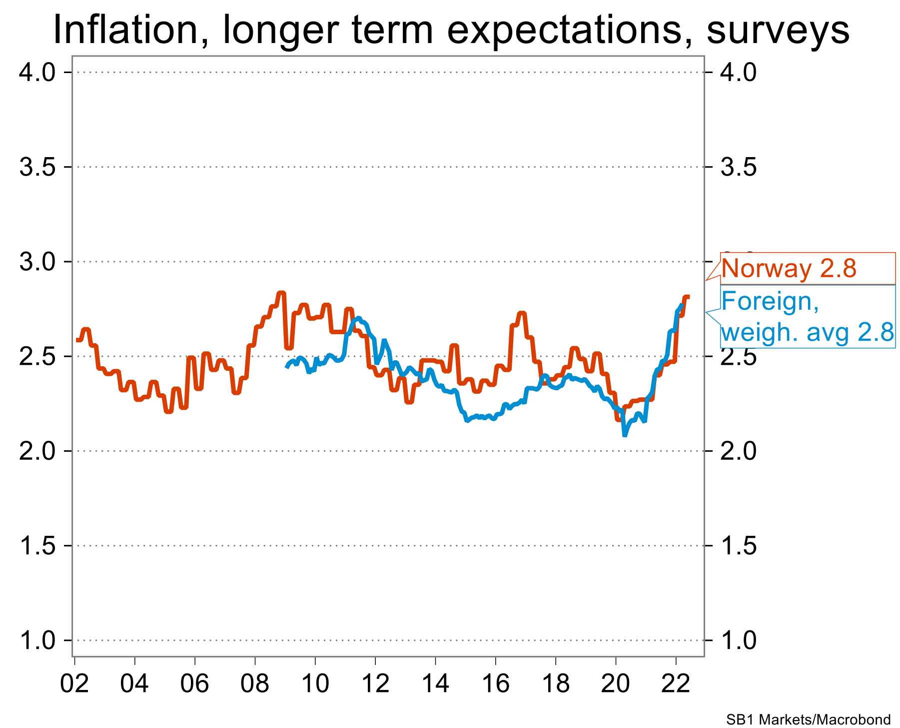


- 81% of households expect Norges Bank to hike the policy rate the coming 12 months, up from 65% 9 months ago, before NoBa started hiking. Nobody (or just 2%) expect NoBa to lower rates, while almost 20% are not sure

Survey based inflation expectations in Norway vs. other countries: Quite similar

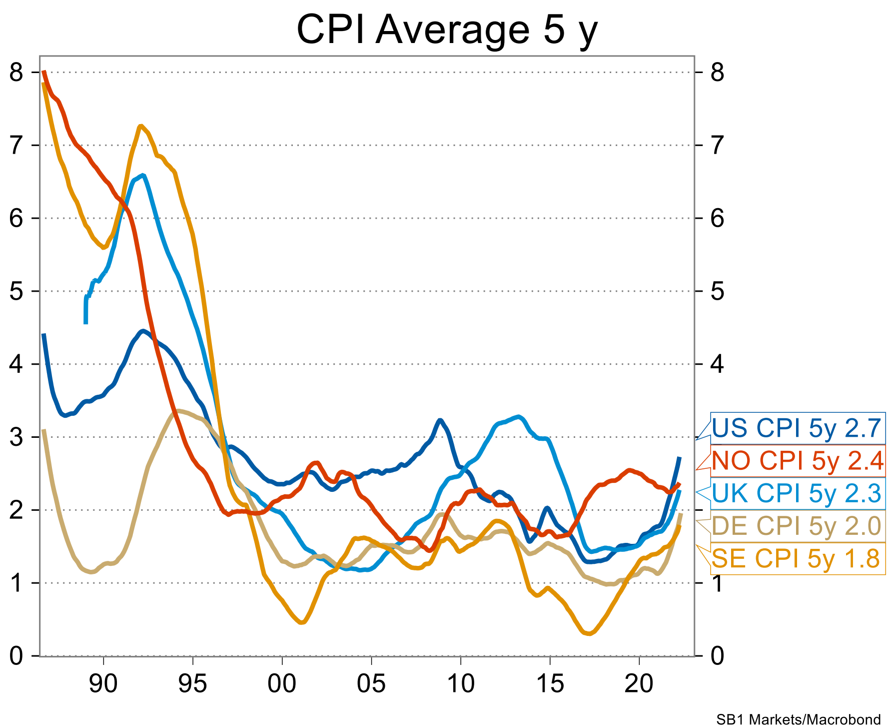
And they are on the way up now, everywhere. The discrepancy is neglectable

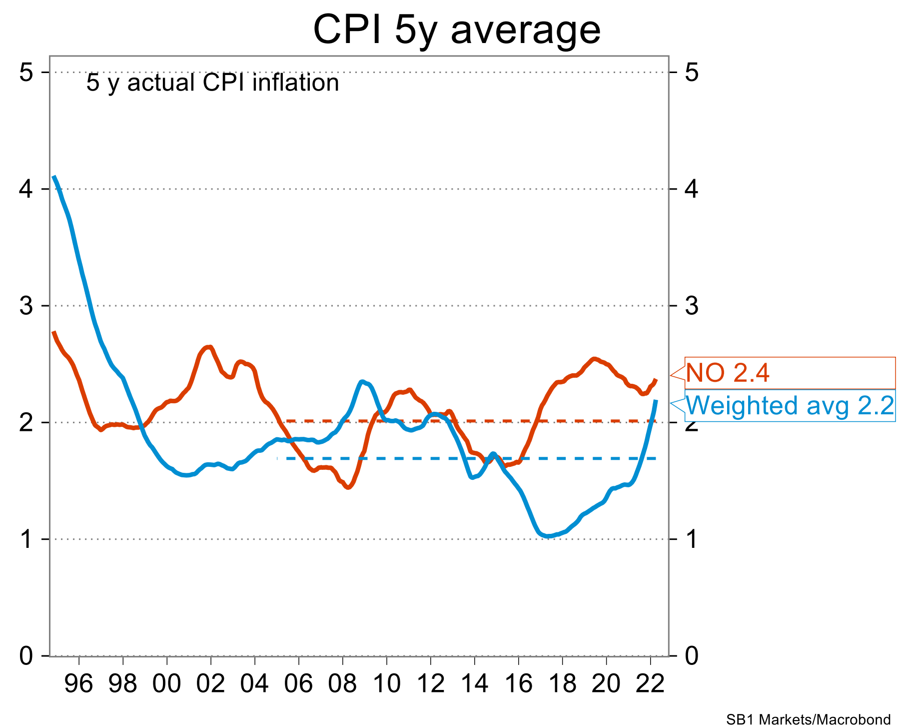




Long term: Actual inflation has been higher in Norway than abroad

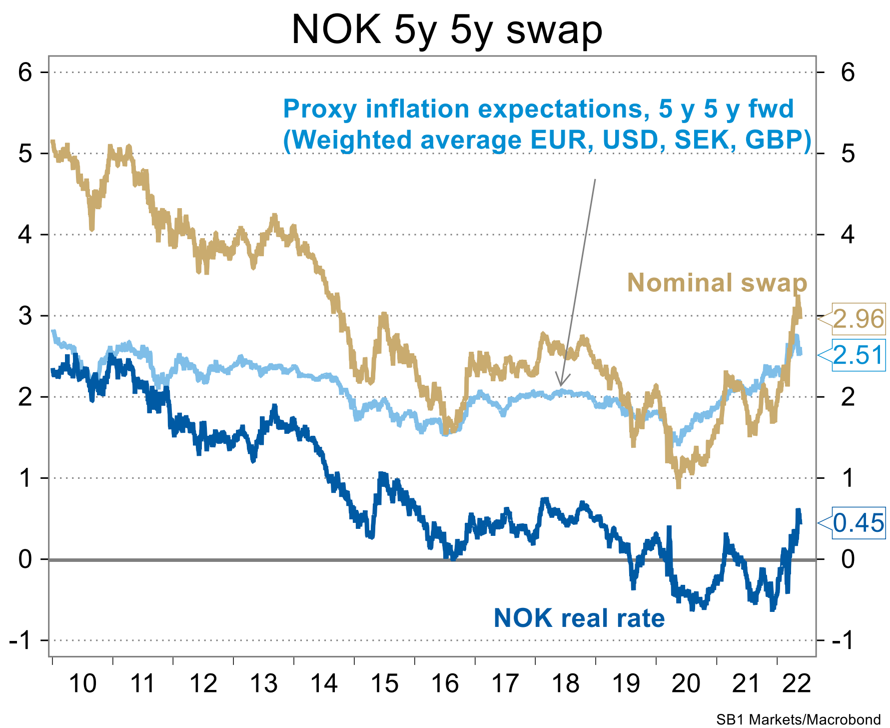
… But not consistently. The past 5 years, no big difference

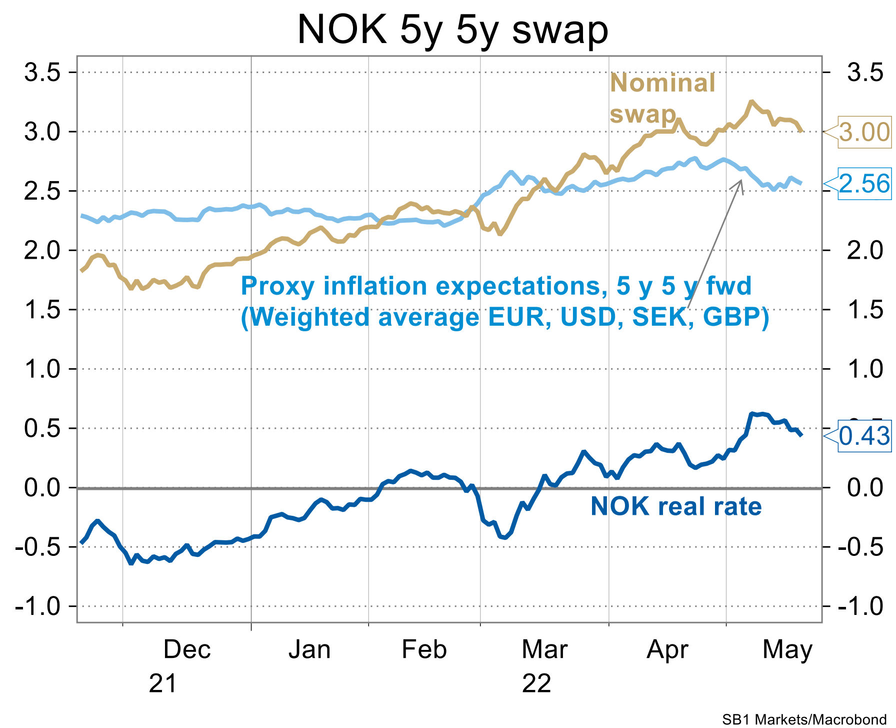




Where are the Norwegian market based inflation expectations?

Problem: There are no NOK break-evens (or real rate) bonds or swaps. So just construct a proxy?

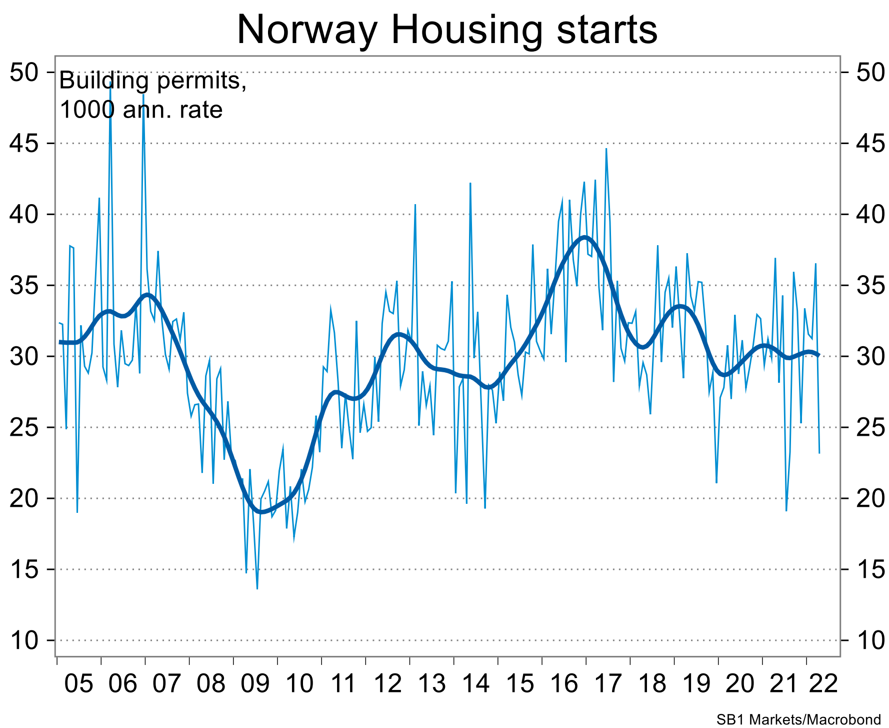


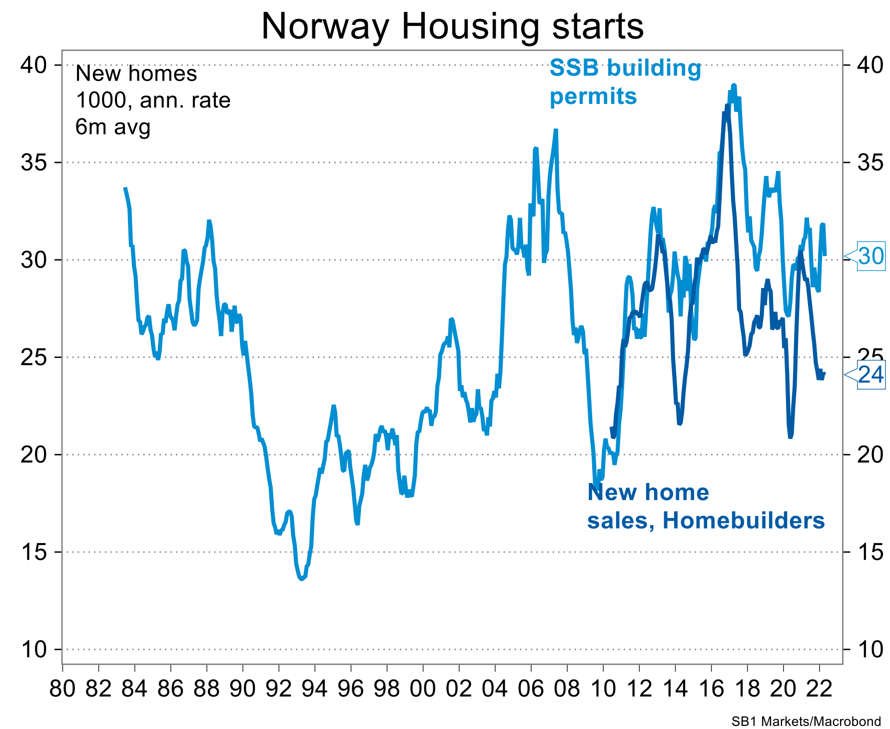


- We have constructed a proxy for Norwegian inflation expectations derived from break-even swaps in EUR, USD, SEK and GBP. Our peers vary somewhat level-wise, but the short term changes are very similar. We have just weighted them together (and adjusted GBP swaps for the CPI/RPI differential)
- The current estimated 5 y 5 y NOK inflation 'break-even' is 2.51%, 50 bps higher than a 'normal' level at 2%. The 10 y break-even is at 2.86%
- A NOK real rate is just a residual when expected inflation is calculated: It has surged here too – which has profound impact on all NPV-models (in real estate and everywhere else). There is no reason to believe that expected real growth in rents/earnings have appreciated alongside the rise in long term real rate

SSB: Housing permits sharply down in April (as many times before)

Permits down to 23 from 36', but the trend seems to be flat

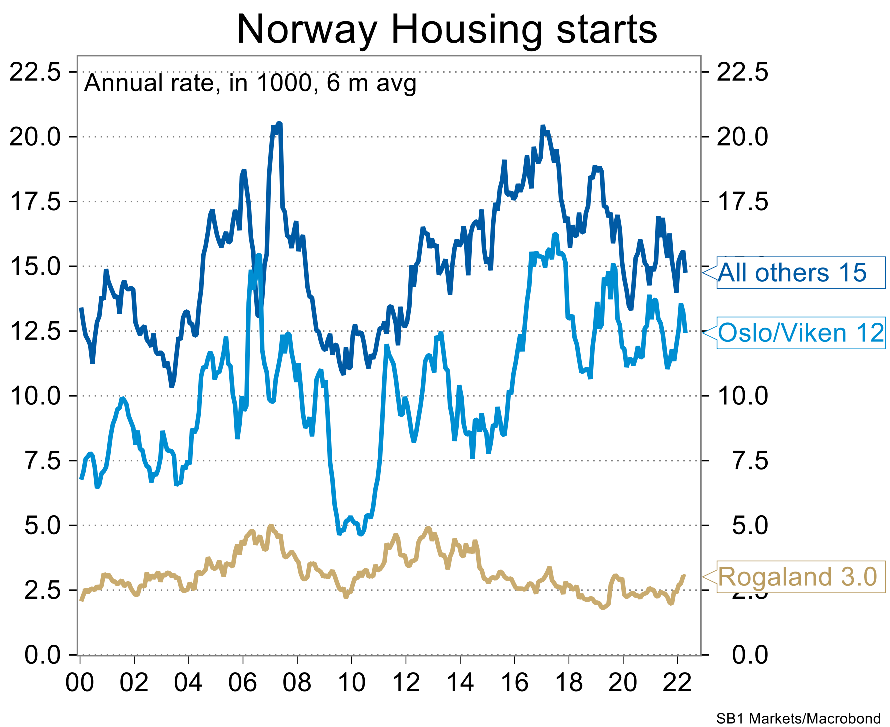


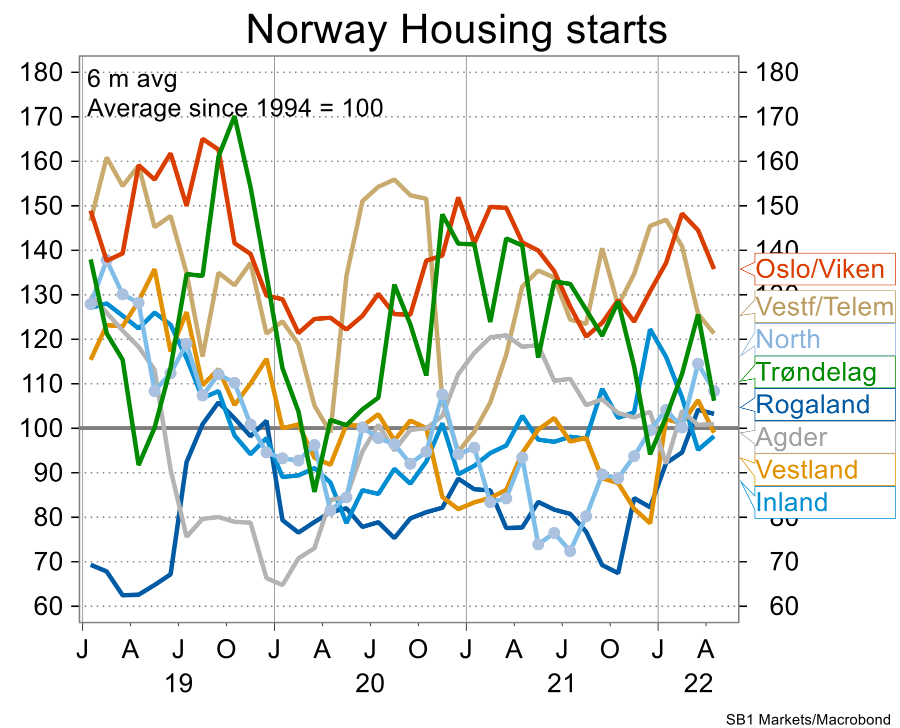


- The average no. of permits the past 6 months is at 30' (annualised), not far below the estimate at 28' from the Homebuilders (Boligprodusentene). Sales have been somewhat weaker, at 24'
- Student homes, and assisted-living/nursing homes are not included in data from the Homebuilders. Some single homes are not included either

A broad increase in housing starts

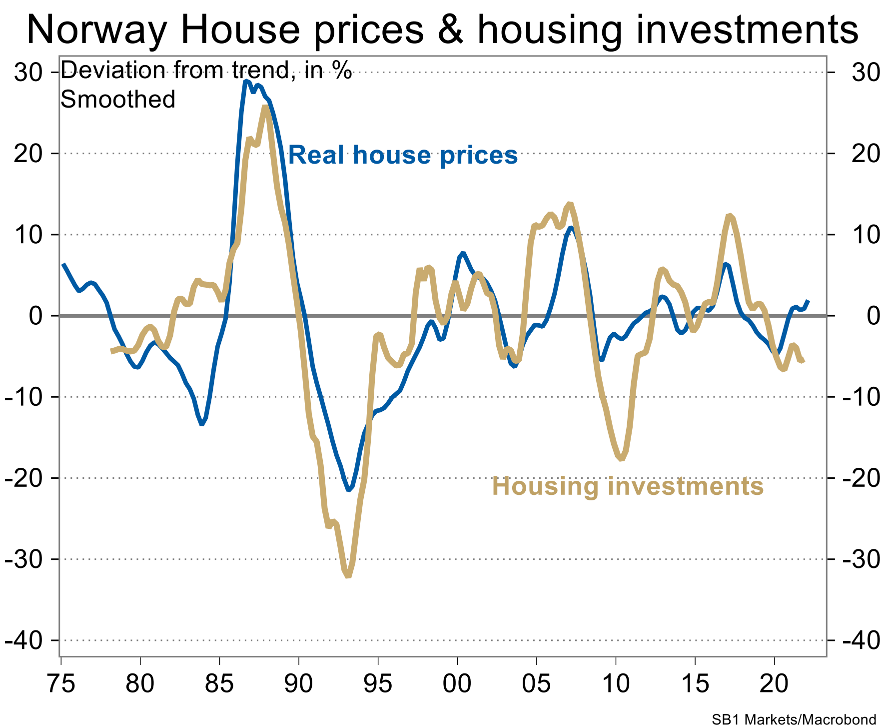
Most regions are up recent months, and only Innlandet are reporting fewer starts than past 25 y avg

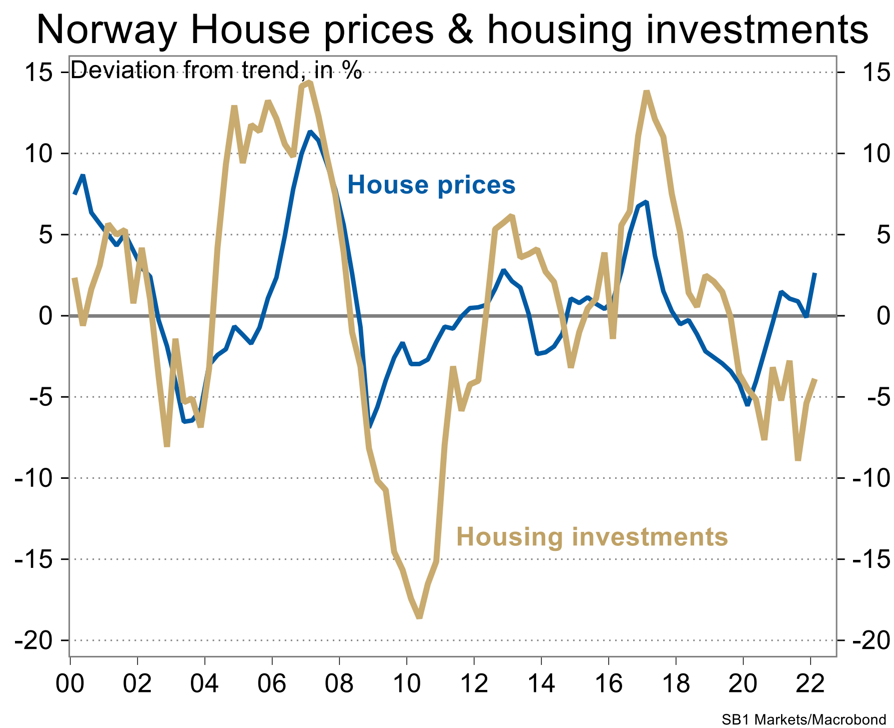




Housing starts/investments normally in tandem with house prices, no surprise

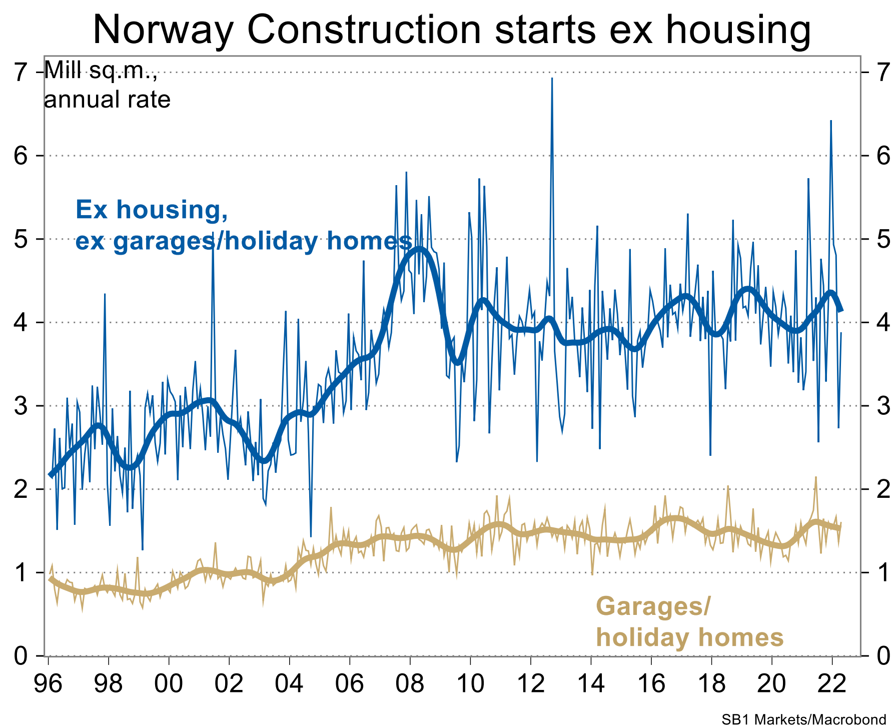
Prices have strengthened recent months – but higher building costs are weighting on starts

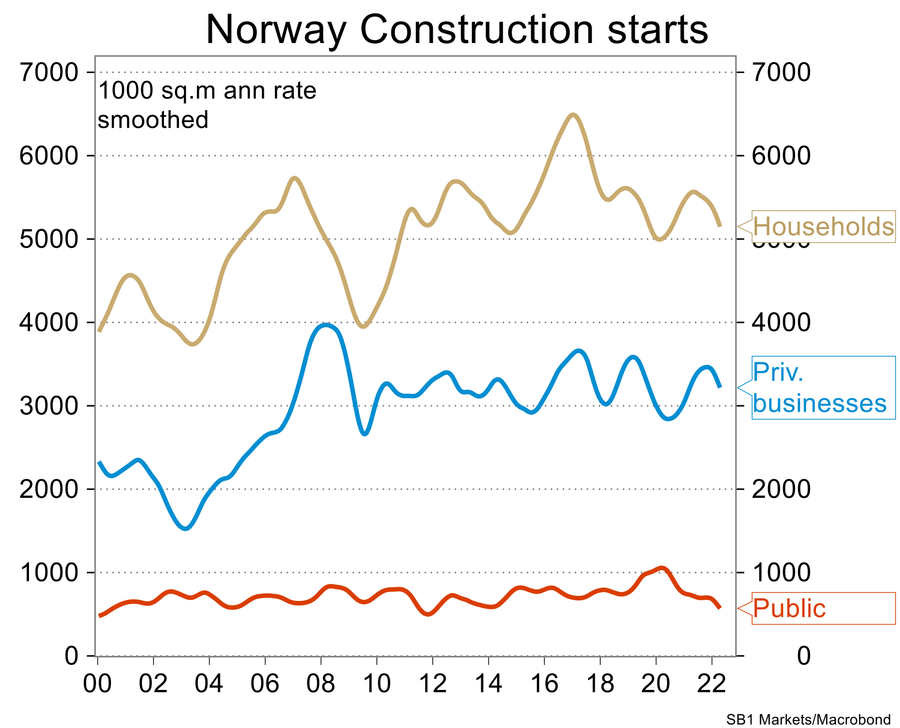




Non-residential construction keeps up well

Private services in the lead. Public sector is slowing down

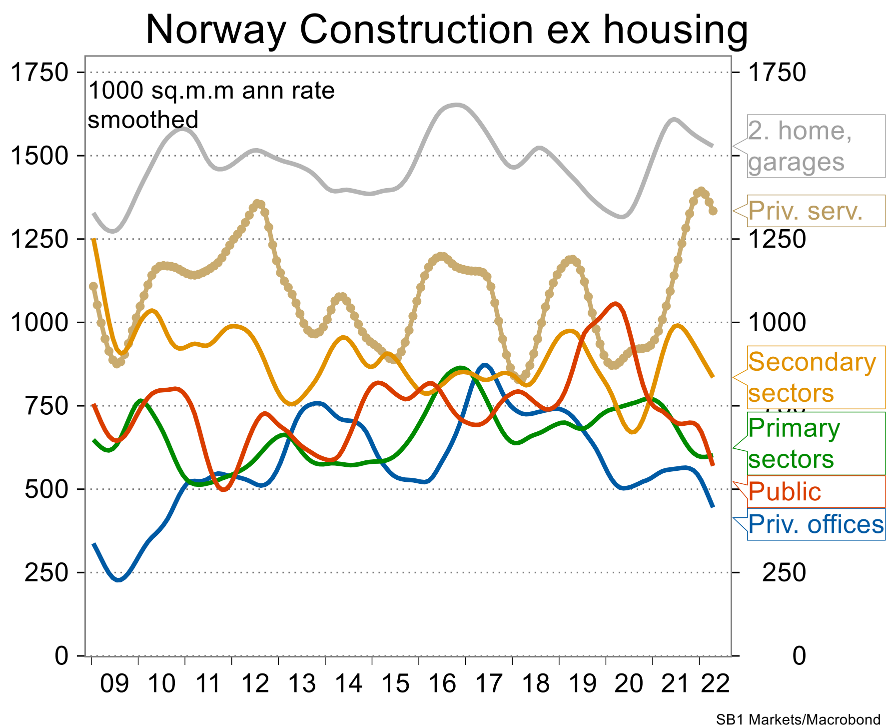


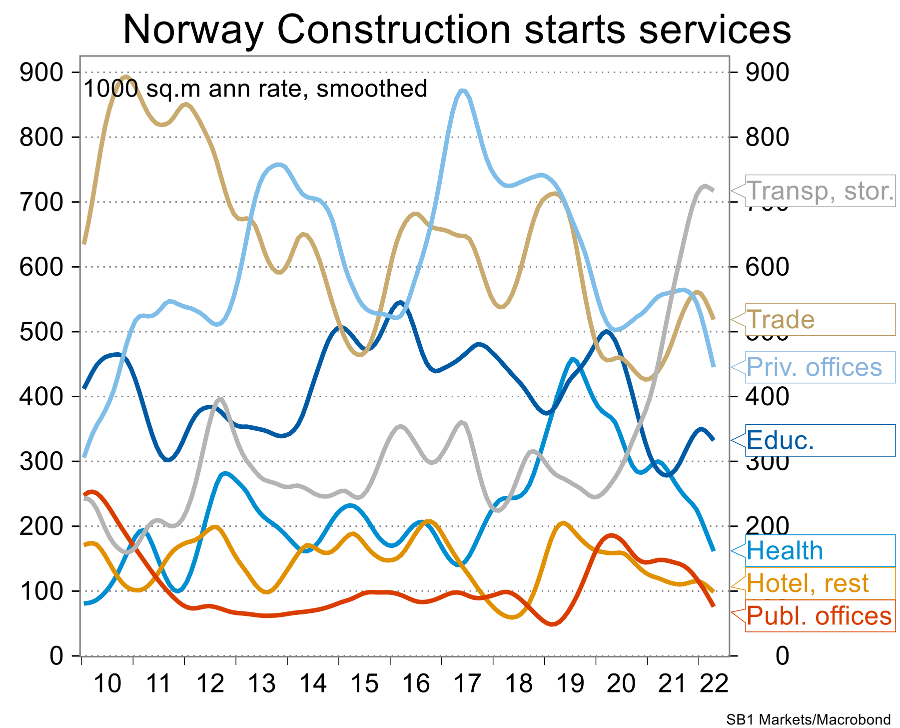


- **Construction starts ex housing & garages/cabins** are very volatile, short term, influenced by single projects
  - » **Private non-residential starts** climbed in H2-20 and continued at a high level in Q1
  - » **Public sector construction starts** have fallen almost 50% since early 2020 and are still sliding down, due to few new starts within the health sector
  - » **Construction starts of cabins/garages** are have climbed 30% – 40% from early 2020 – but have slowed somewhat the last year. Is the stay-in-Norway boom behind us?

Private services in the lead, transport/storage & trade on the way up

Private offices, public sector (health) have slowed substantially. Hotels & restaurants weak too

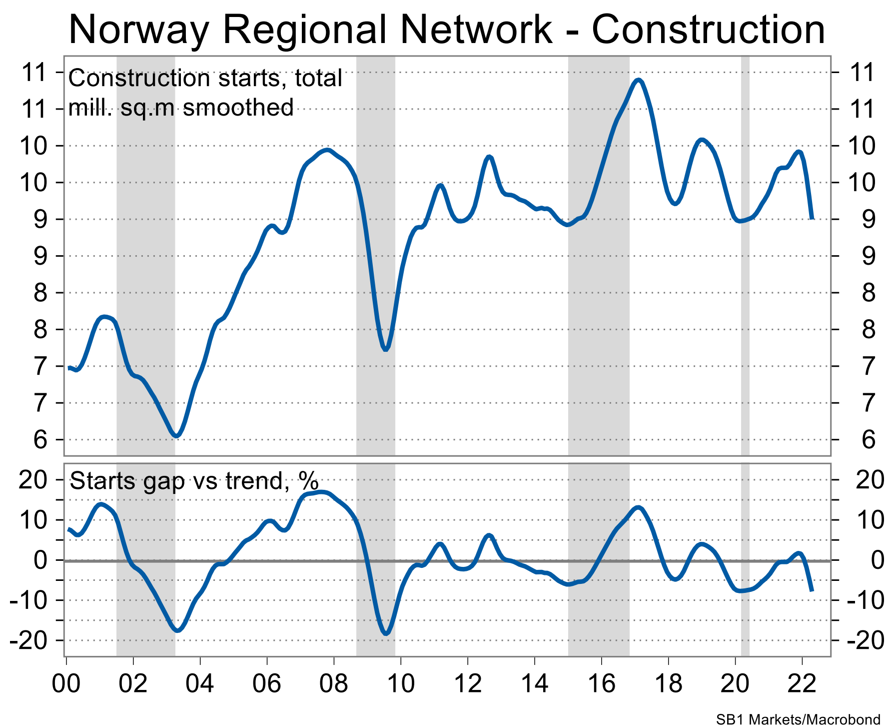


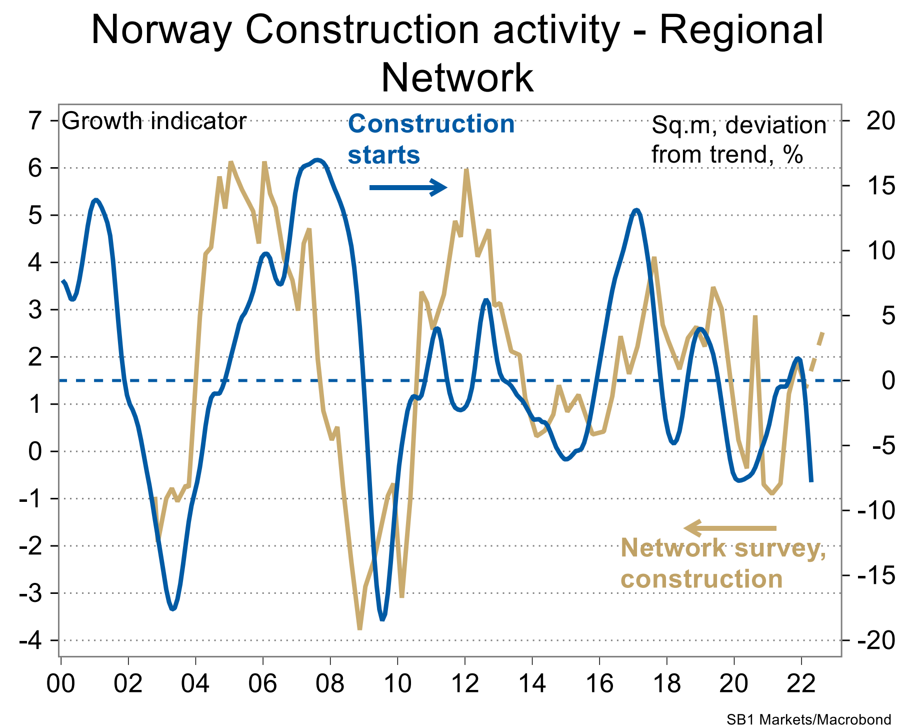


Public on the chart to the left, and at the previous page: Construction starts in public administration, education and health

The Q1 NoBa Regional Network signalled moderate – but higher – growth

... while total construction starts have slowed recently

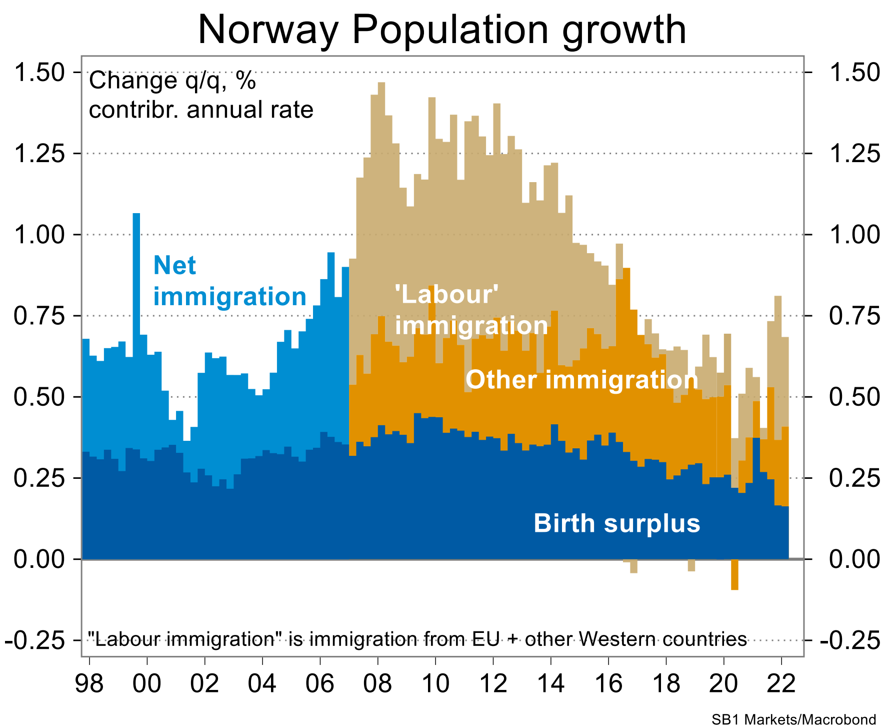


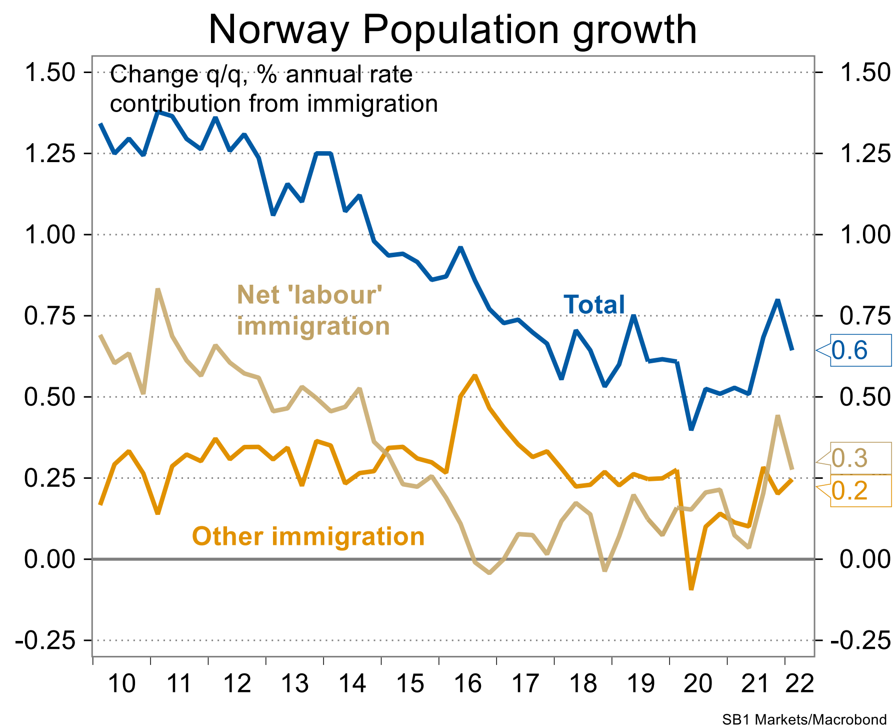


- The 'long term' trend in total starts is down since early 2017

Labour immigration picks up steam but not further in (Covid-) Q1

The birth surplus has fallen to the lowest level ever, at least in modern times

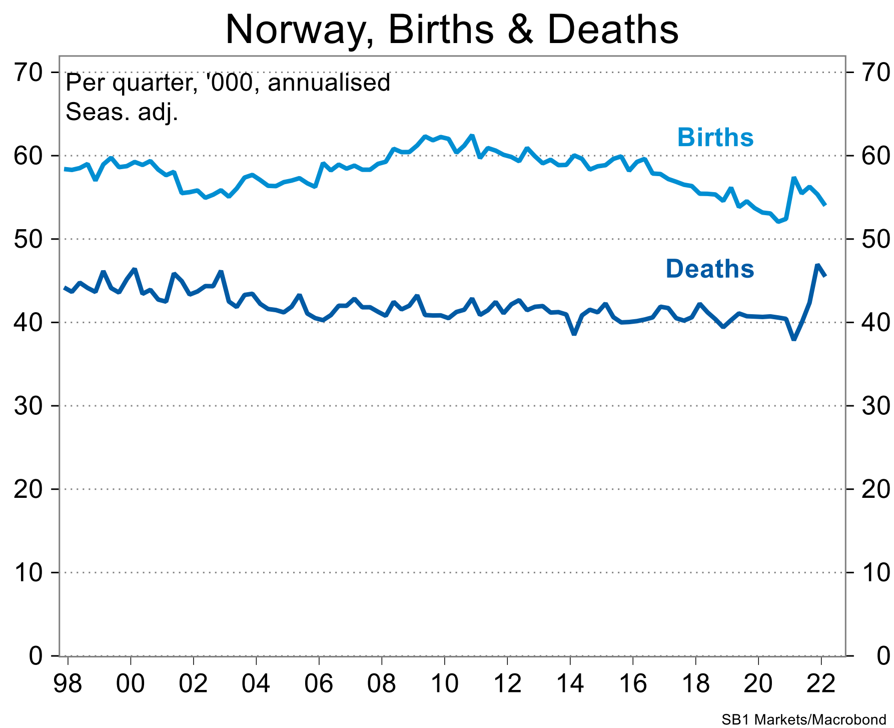




- Total population grew by 9.000 in Q1 (seasonally adj), equalling a 0.6% annualised rate. Last year the population added 34' persons, a 0.6% increase
  - » Labour ('Western') immigration slowed somewhat in Q1, likely due to the Covid restrictions that lasted until mid February. The 4000 new citizens represent 0.3% of the population
  - » Other immigration remained at modest level, contributing by 0.2 pp
  - » The net birth surplus fell to the lowest level ever in Q1. Births are slowing from the Covid spike in Q1-21 (but remain above 'normal' and the number of deaths is some 5' (12%) above a normal level, both due to Covid deaths, and '3 years of accumulated flu'-deaths

Births on the way down, deaths are still 12% higher than normal

… as many old citizens are still dying due to (or with) covid sickness



- … and others that survived in 2020 and 2021 due to the very mild flu season (all viruses were surpressed), now get the flu – and die from it

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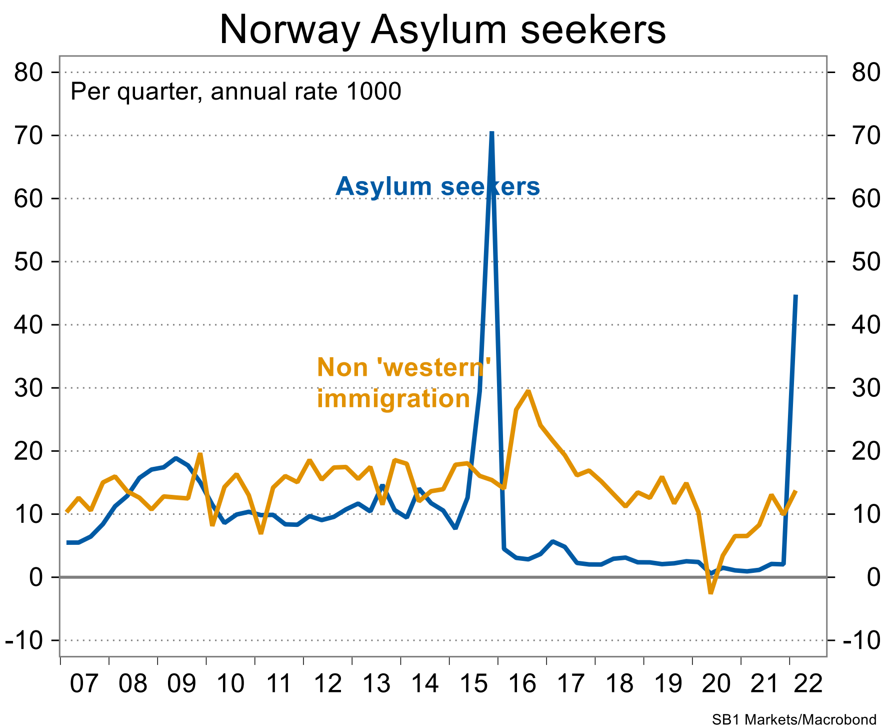
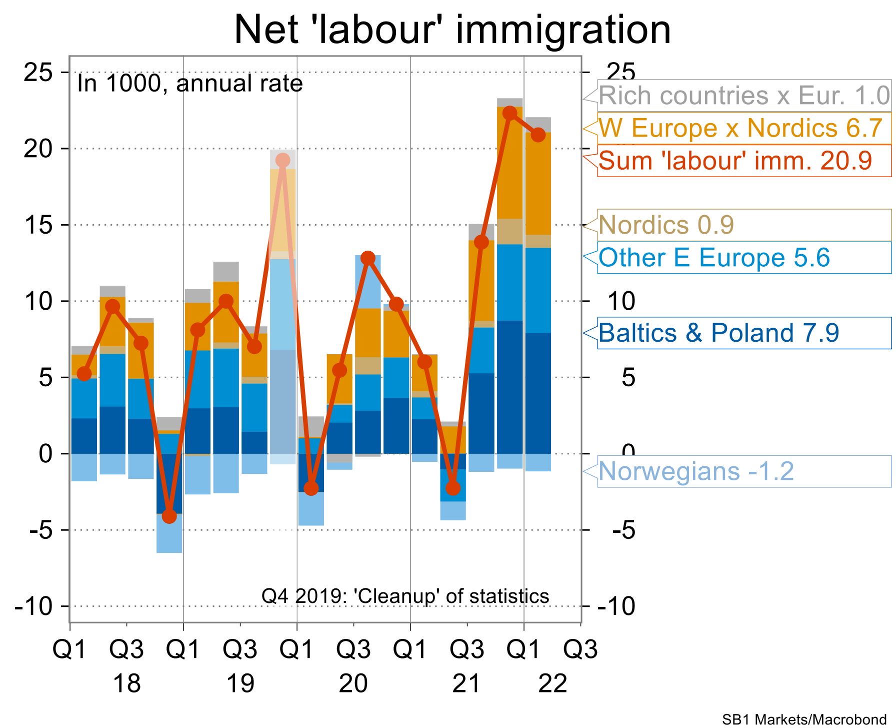
Some asylum seekers arrived in Q1 (March). Guess from where…

More than 10’ arrived, most of them from Ukraine in Q1

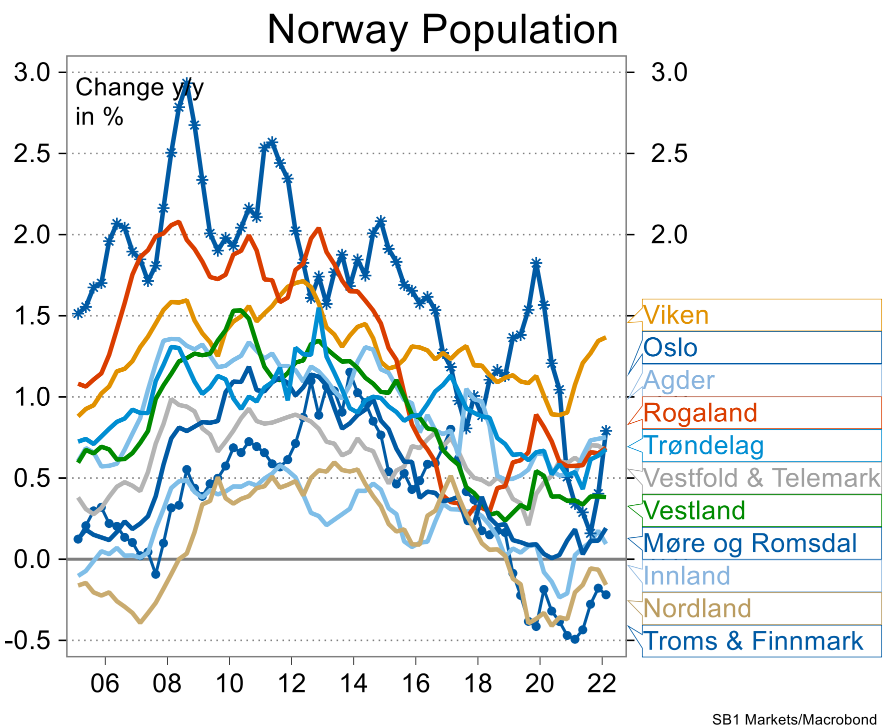


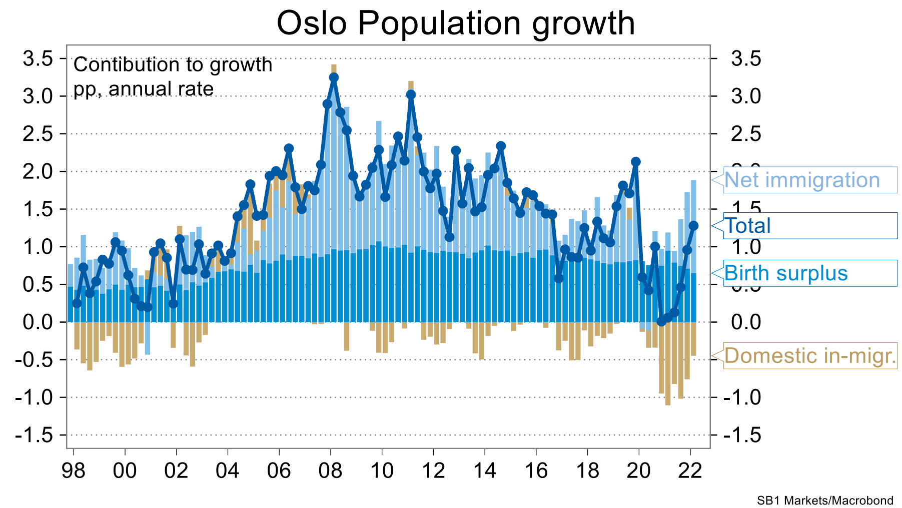


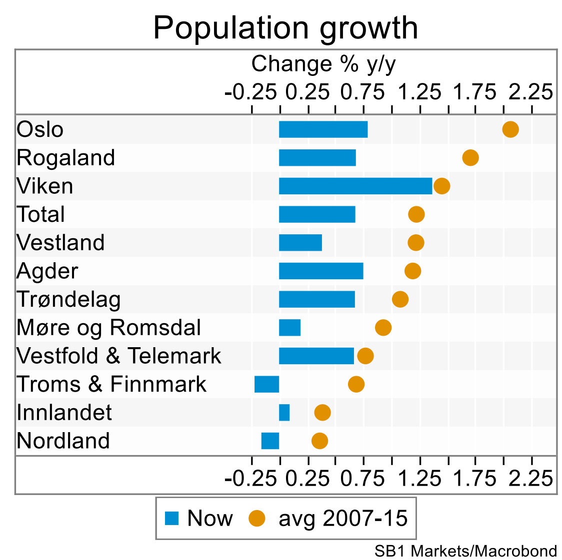
- Growth in non-western immigration fell back to ‘normal’ before corona, following the ‘Syrian’ surge in 2016. During the corona quarters, non-western immigration fell to the lowest level ‘ever’ in 2020. Growth has since picked up but to less than a ‘normal’ level
- The inflow of asylum seekers has been virtually flat, at a very low level – approx. 1000 in an annual rate – until the Ukrainians turned up in March
- Net immigration from European countries (which we label ‘labour’ immigration) remained at a pretty high level in Q1

More immigration is lifting population growth most places

…but just Viken and Vestfold & Telemark (almost) back to good ol’ days





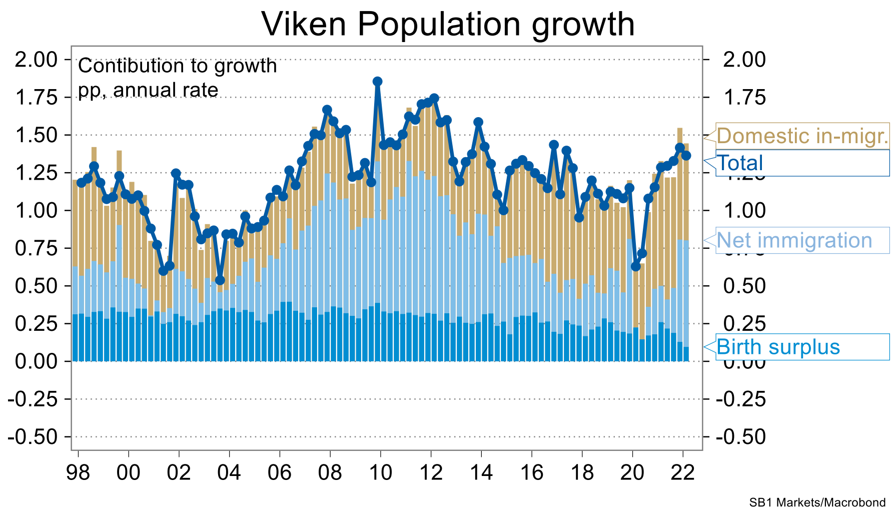


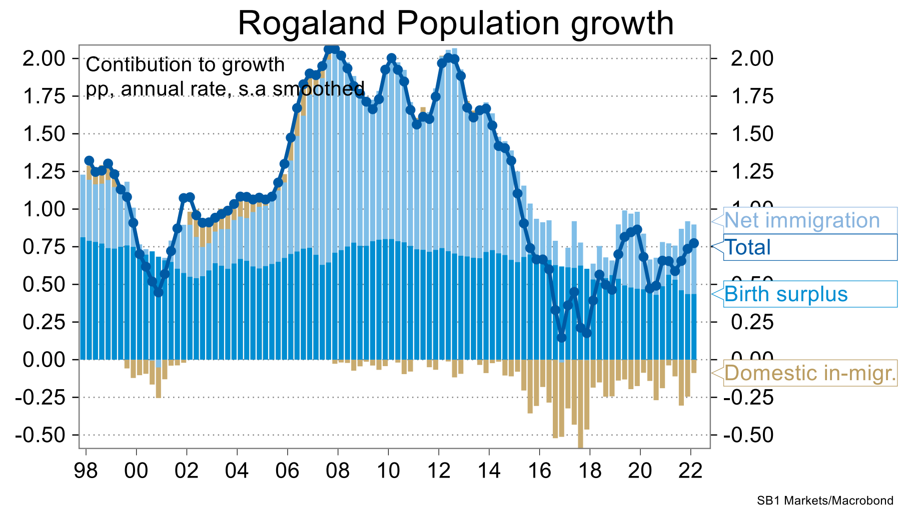
- From 2012/13 until 2018, population growth slowed in most regions – but the least in Viken (Akershus kept up best) and Vestfold & Telemark. Following a mini immigration wave in 2019, growth slowed sharply in Oslo. Now, growth here is on the way up again
- Population growth has cooled substantially in all other regions recent years, to well below 2010-2015 levels, but growth is once more accelerating
- Due to higher domestic out migration, population growth is close to zero or below in Møre & Romsdal, Innlandet, Nordland, and Troms & Finnmark

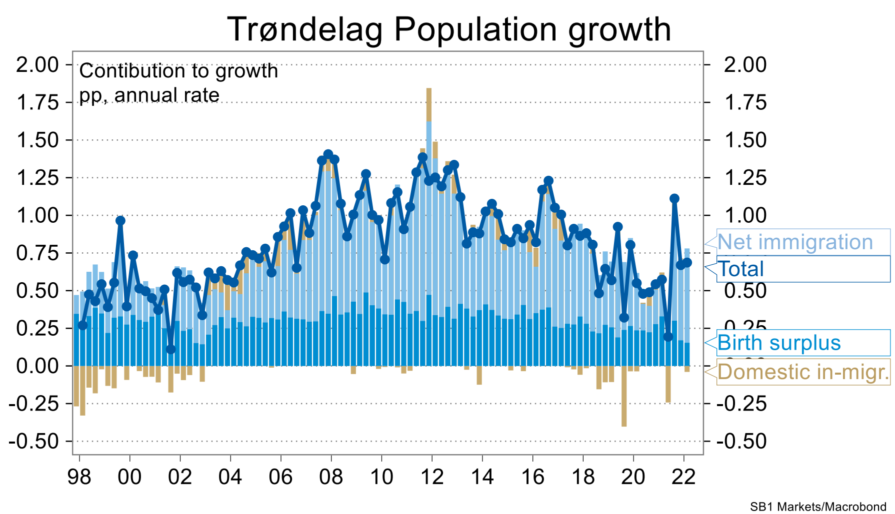
Norway

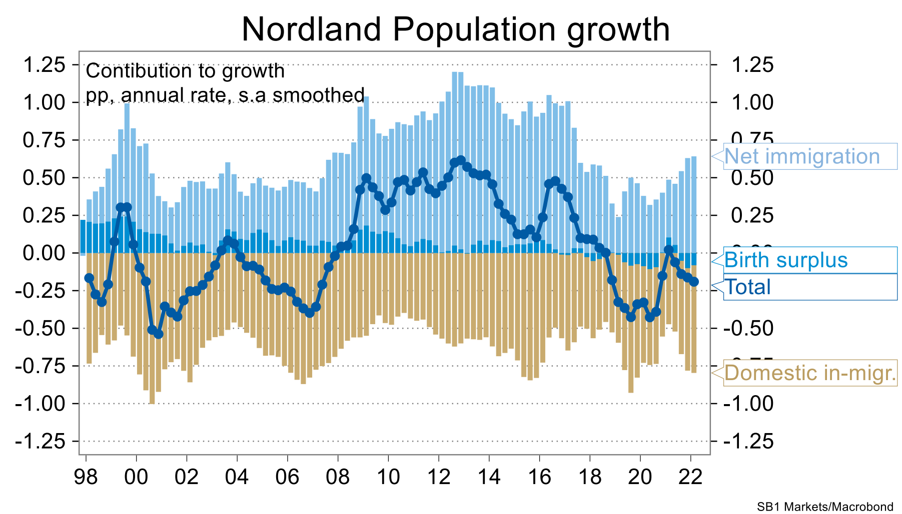
Some serious regional differences

(Sum Oslo & Viken records a substantial net domestic in-migration)



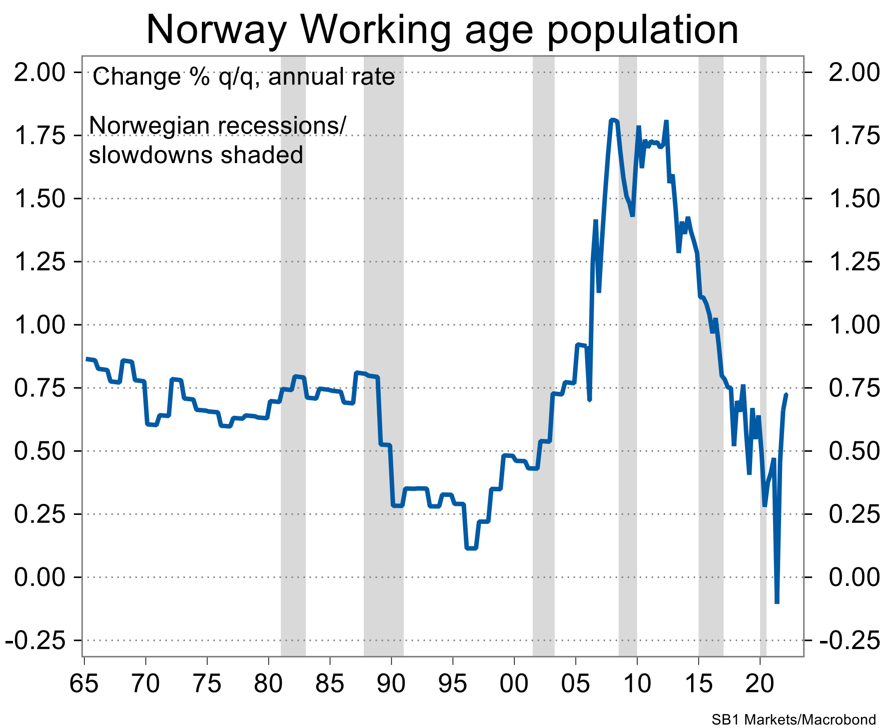


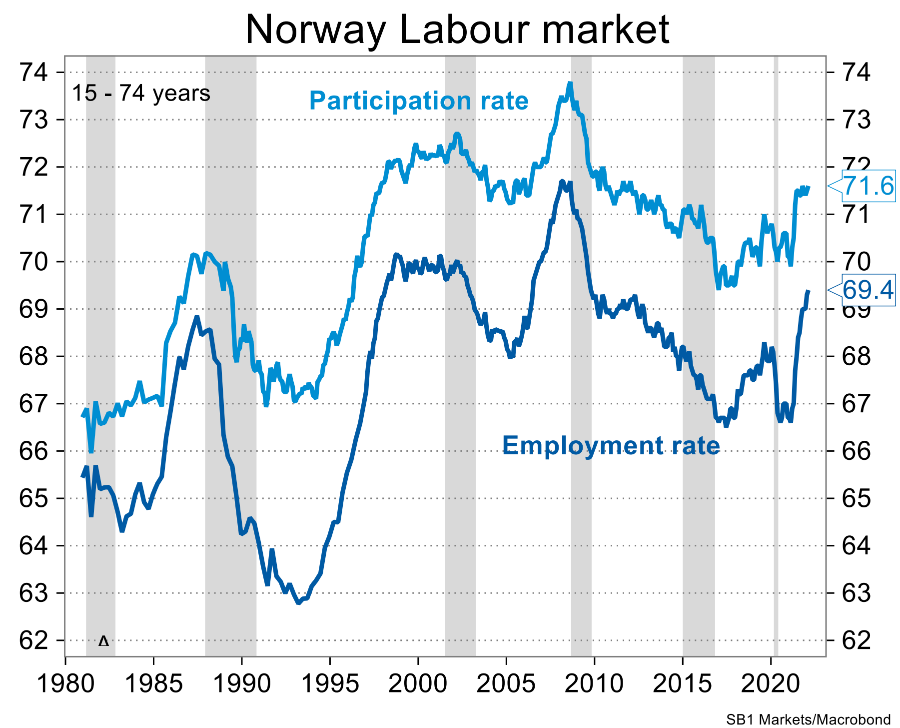




Working age population growth has recovered back up to a ‘normal’ level

Growth at 0.75%, still 1 pp lower than during the booming years





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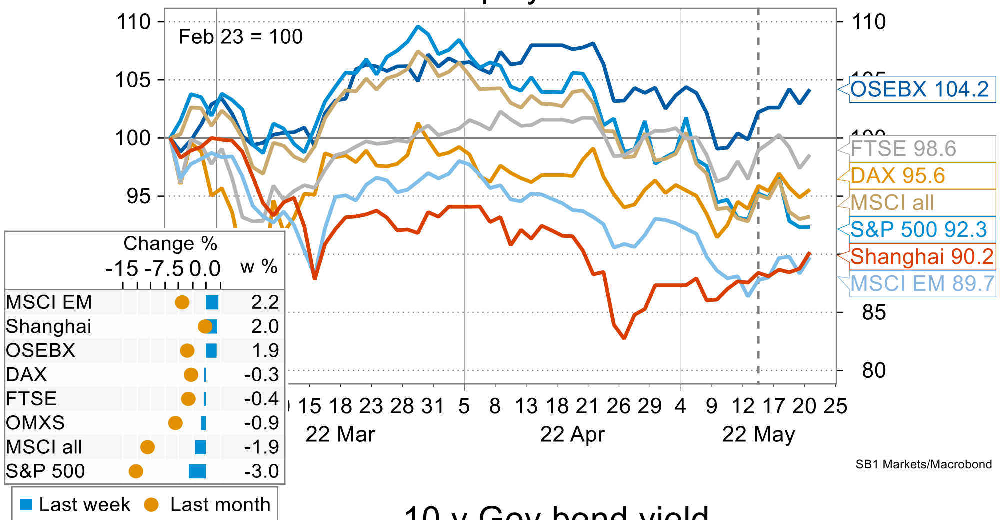
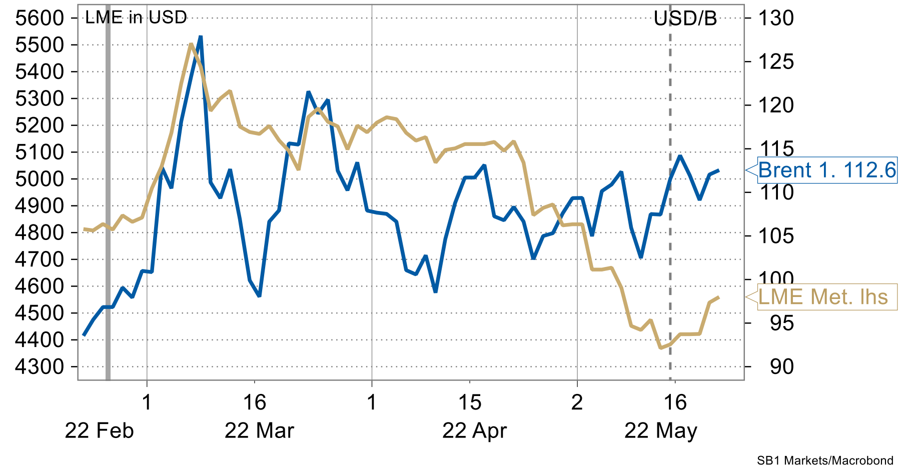
Mixed stock markets, the S&P 500 further down. Oil flattened, metals up

Metals and Shanghai up together: Lockdown will be eased?

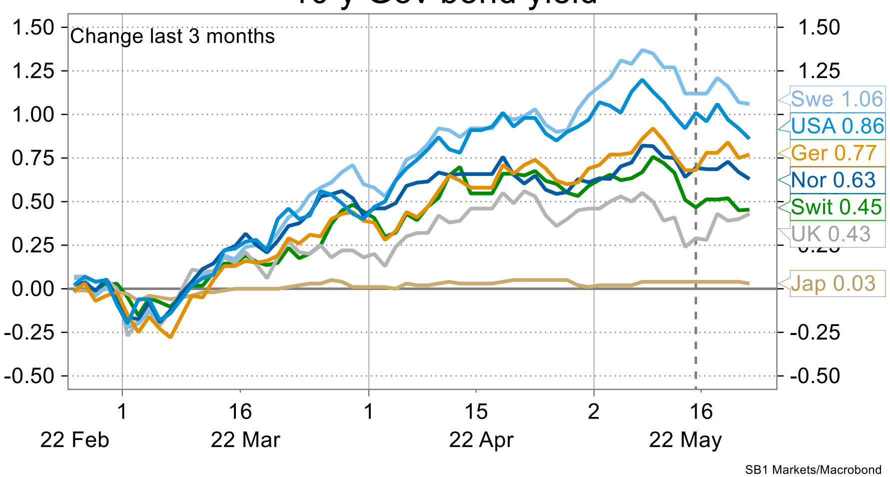
Equity Indices



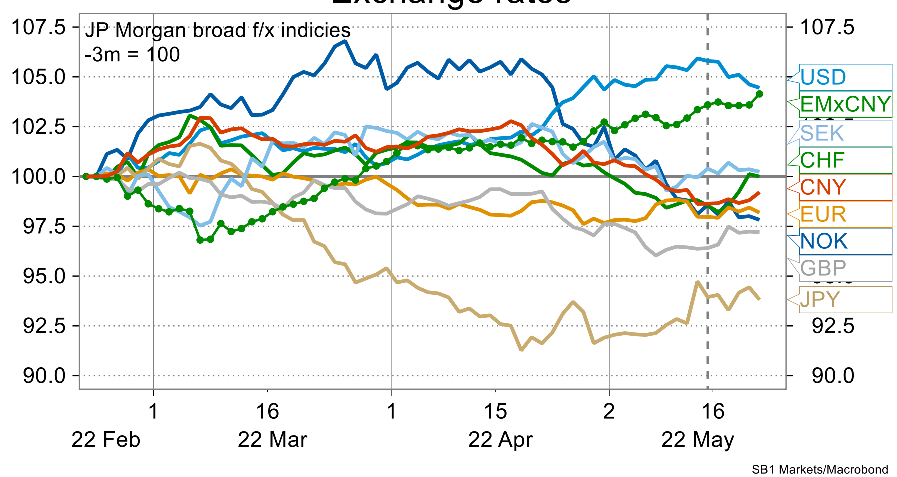
Oil vs. metals



10 y Gov bond yield

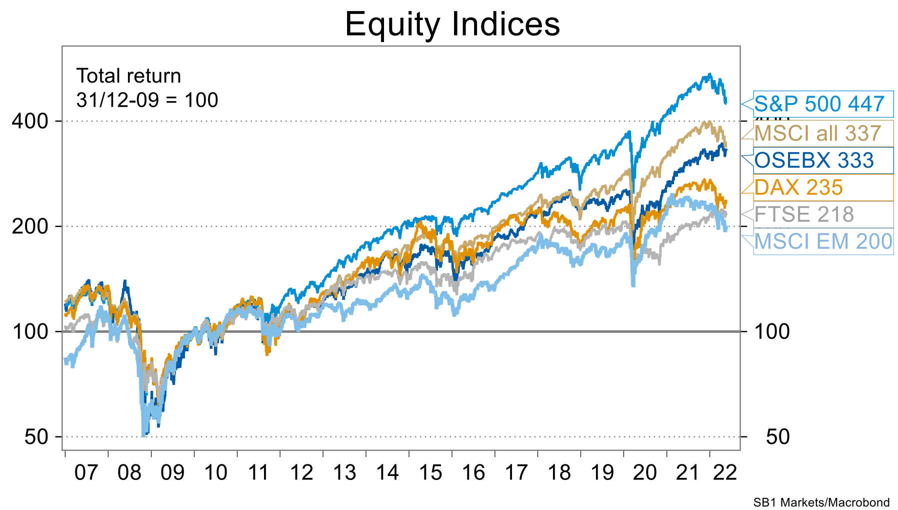


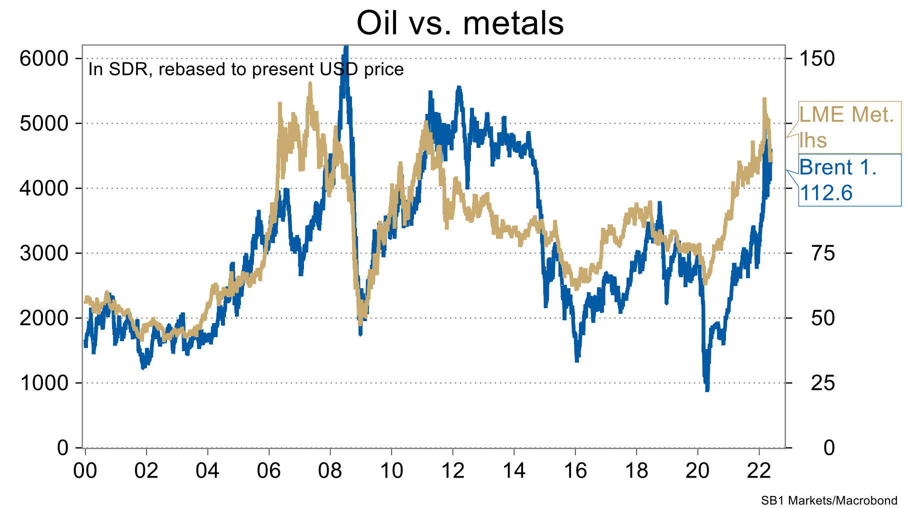
Exchange rates

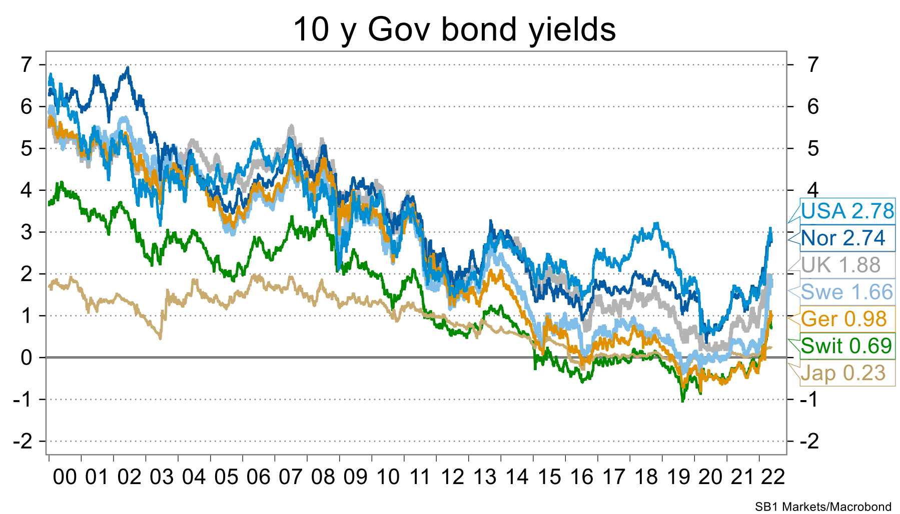


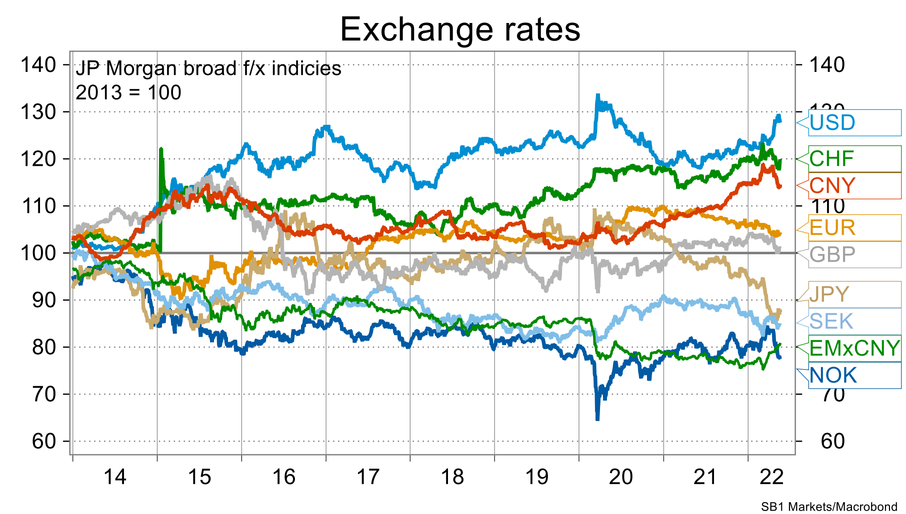
The big picture: Stock markets down (-oil rich OSEBX, FTSE), bond yields up

Commodities have taken a big step upwards, until early March. USD the f/x winner

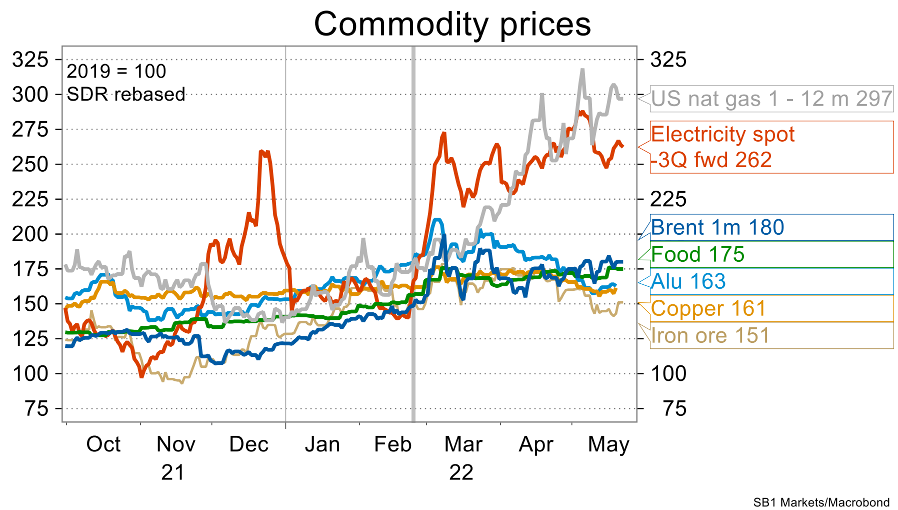


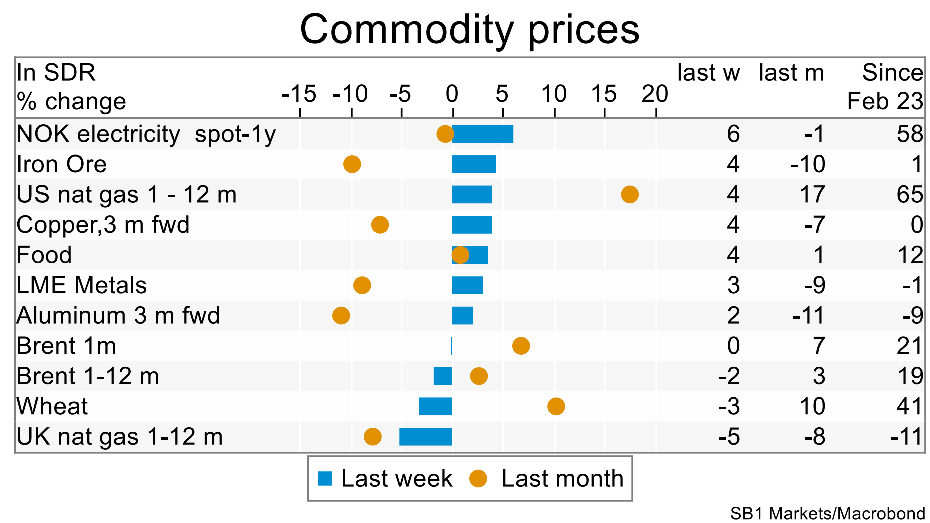


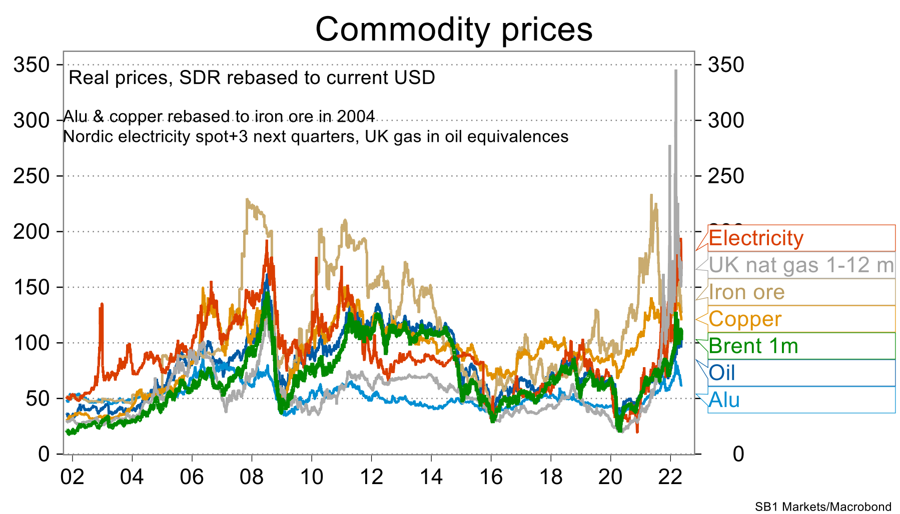




Commodity prices mixed last week, food prices and metal prices rose



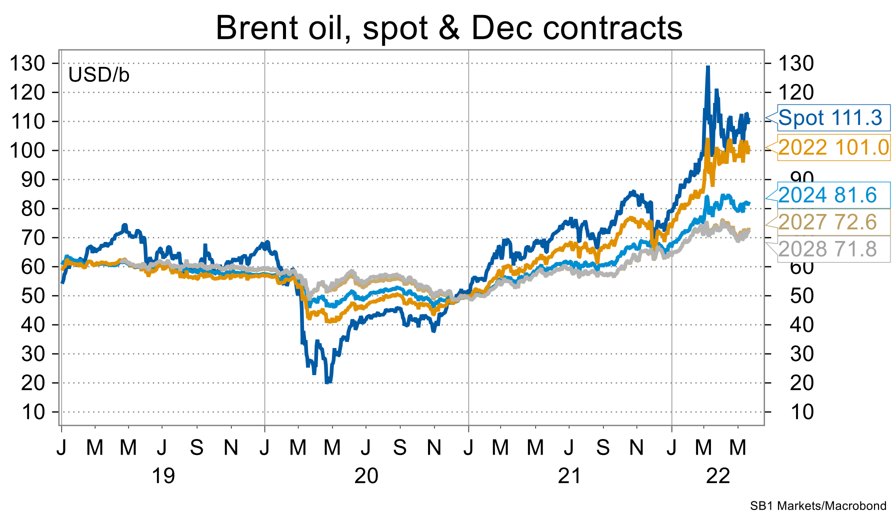


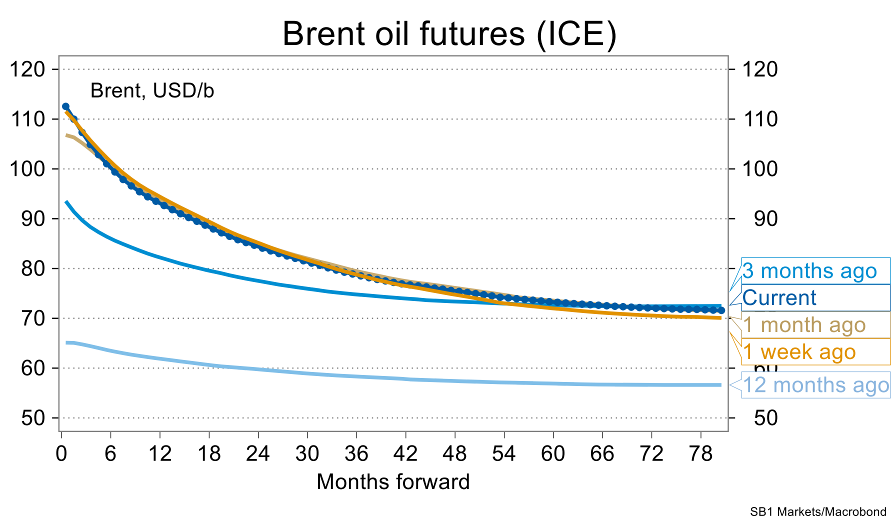


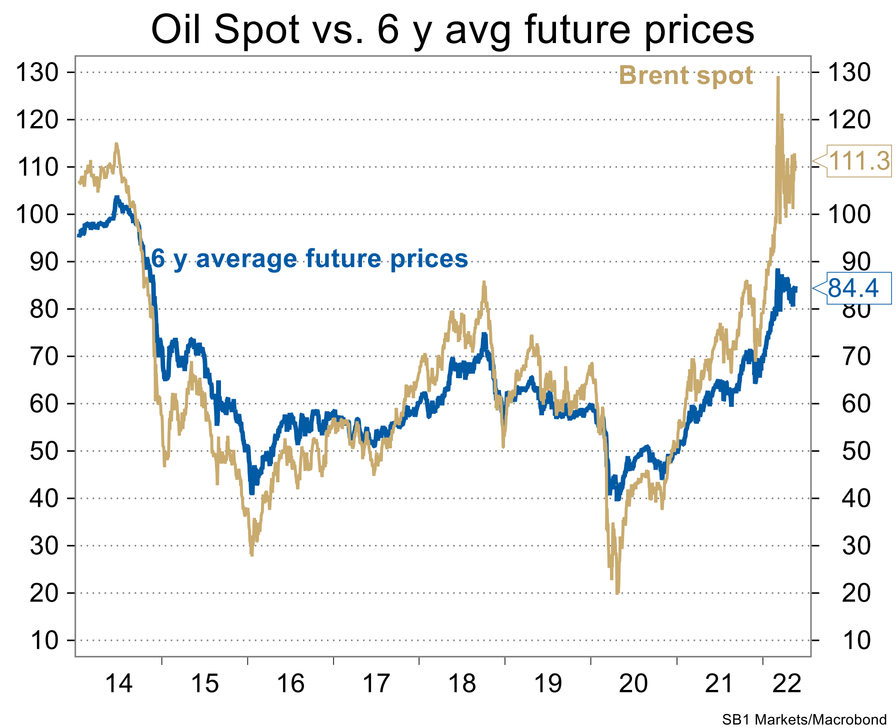
- The Economists food commodity index rose 4% last week, and has been close to flat last month – and prices are up 12% from before the war
- UK natural gas prices are 11% down since before the invasion
- US natural gas prices are up 58% - some LNG 'leakage' to Europe?
- Norwegian electricity prices are up 58%
- The oil price was close to unch last week – and up 20% from before the war

SDR: Special drawing rights – a 'global currency'

The oil price curve close to unchanged last week

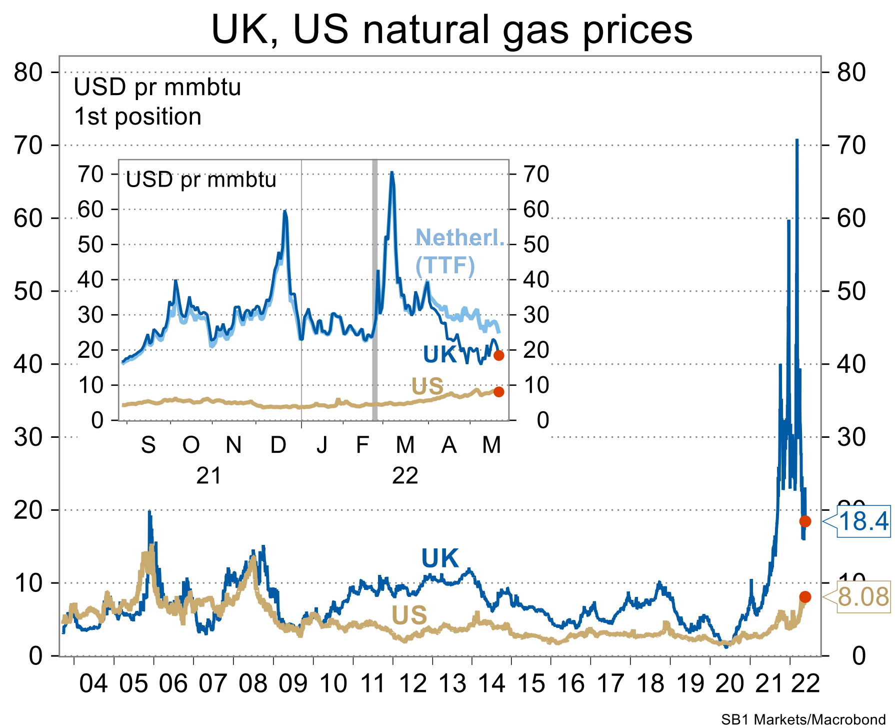


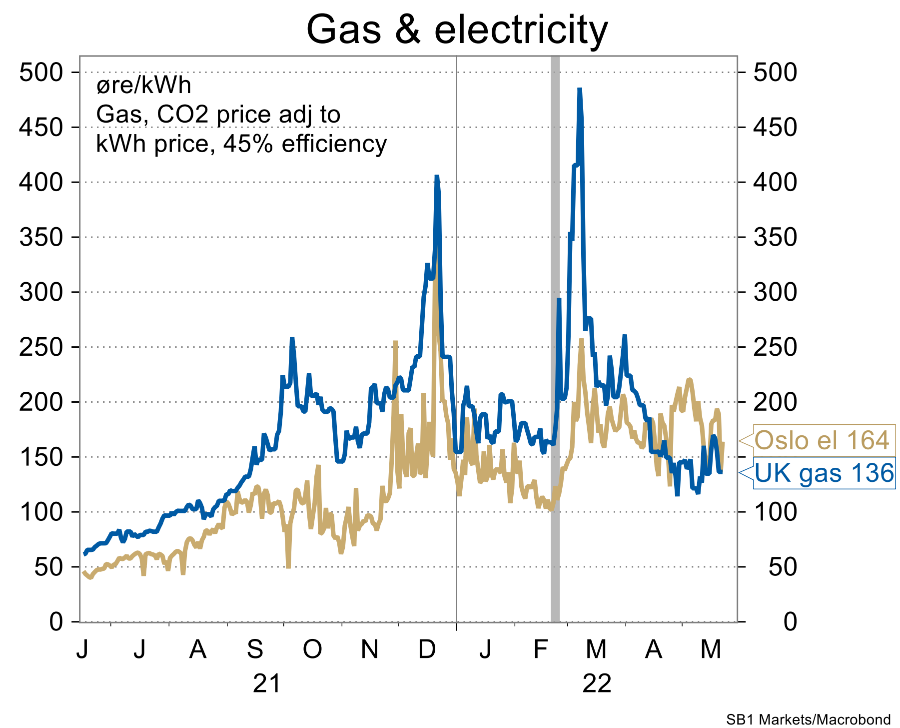




European natural gas prices are sliding down, and electricty prices are falling here

Even as the uncertainty vs. imports form Russia remains high



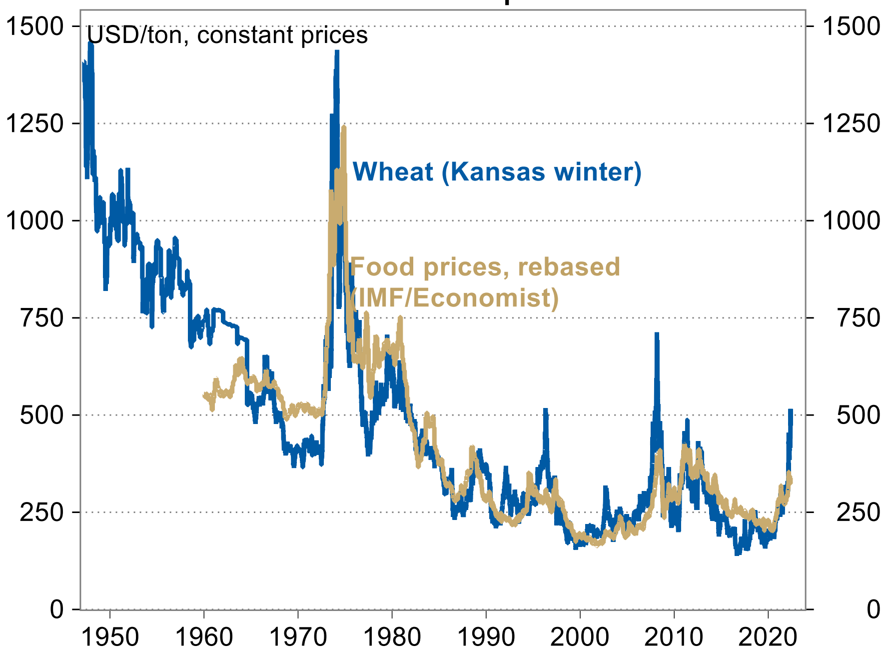


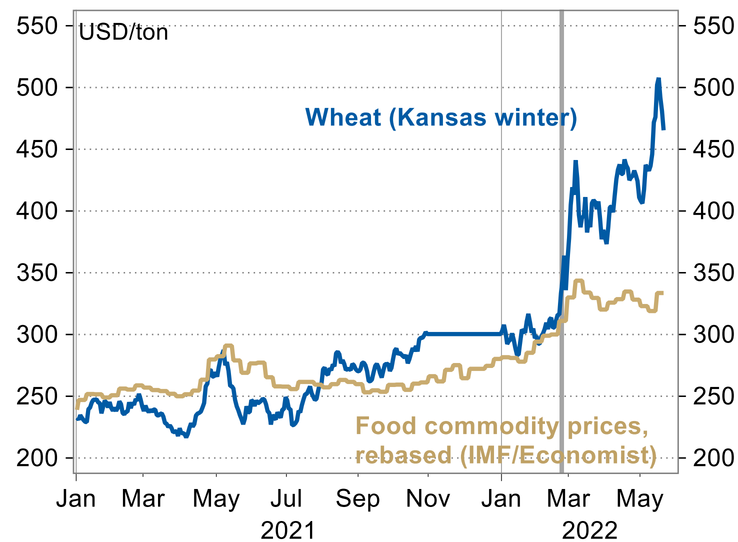
- Will LNG exports from the USA increase gas prices here? Seems like the market is discounting it – and it is not unreasonable. The cost exporting US gas to Europe may be some USD 5 – 6/mmbtu, almost twice the current price differential (in the short end for the gas price curve)

Wheat prices down following the hike but overall food prices rose last week

Discussions on exports of Ukrainian grain products have not concluded, Russia wants sanctions easing

Food/wheat prices

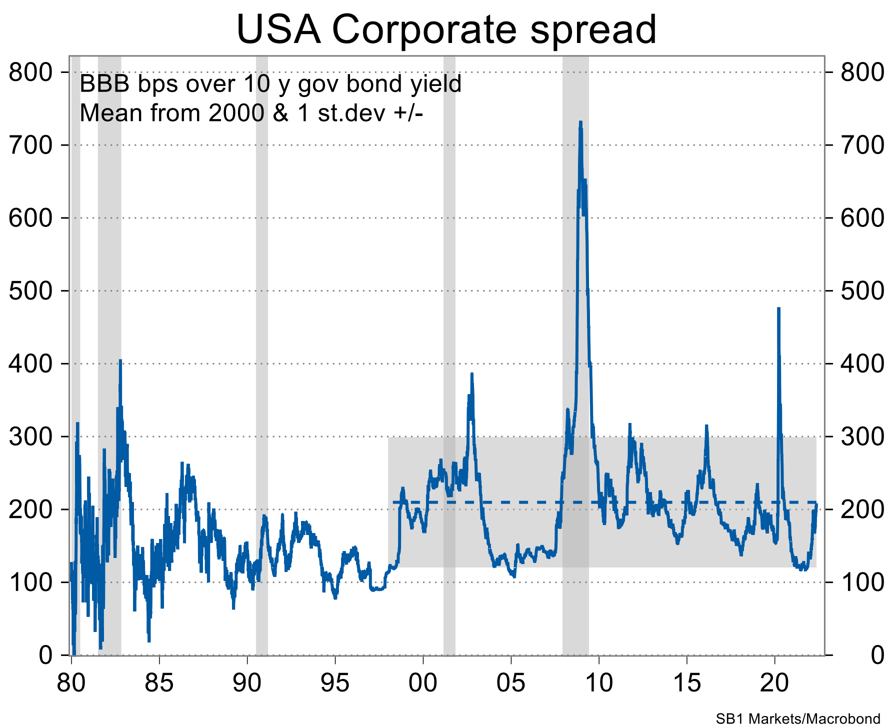


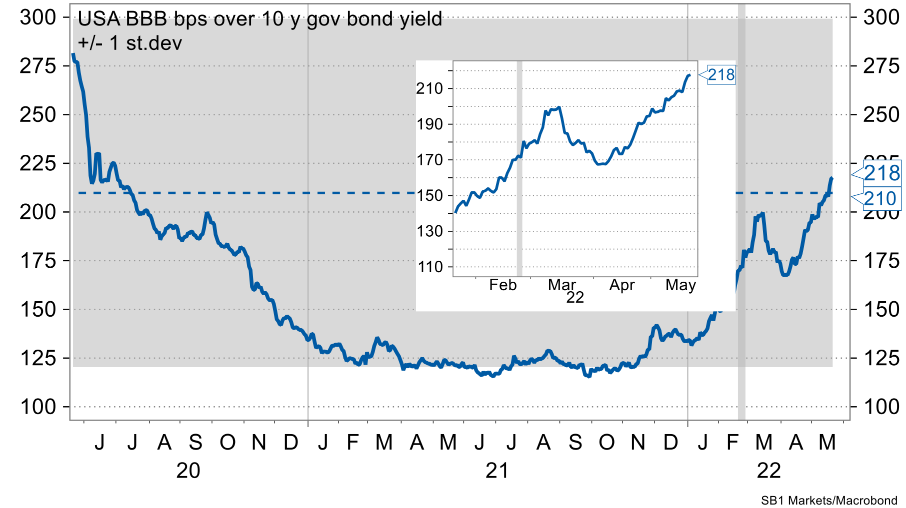


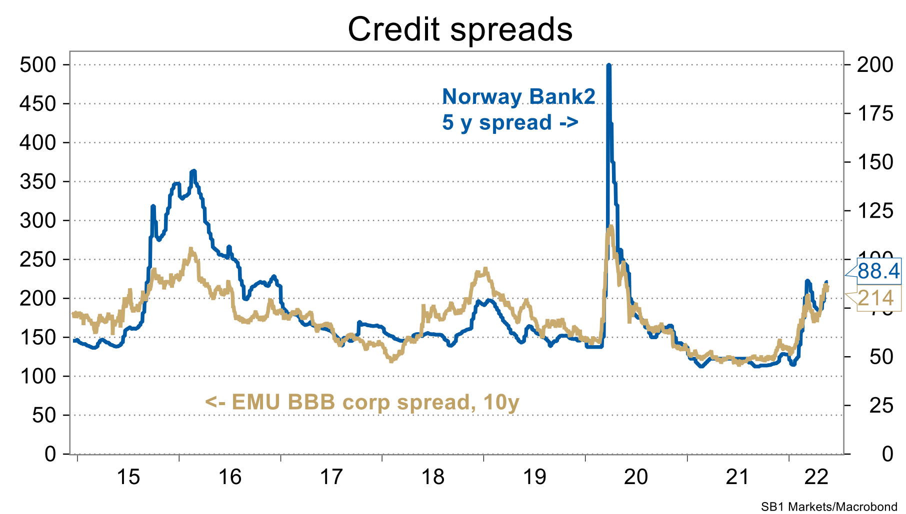
SB1 Markets/Macrobond

Credit spreads up to above the 25 y avg, from 1 st.dev below avg in Nov!

The US corporate BBB spread has widened to 218 bps from 120 last autumn



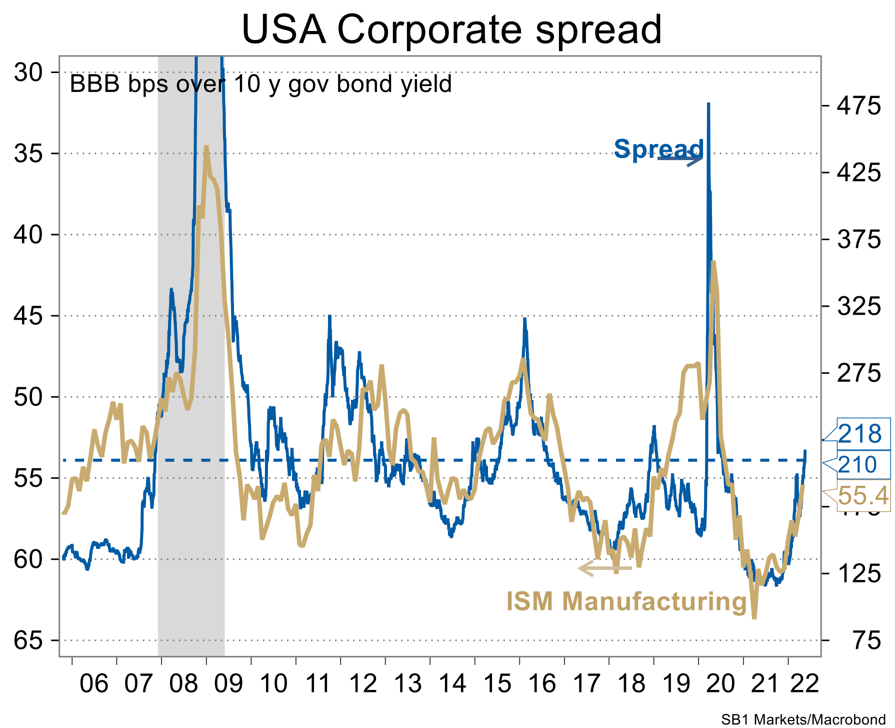


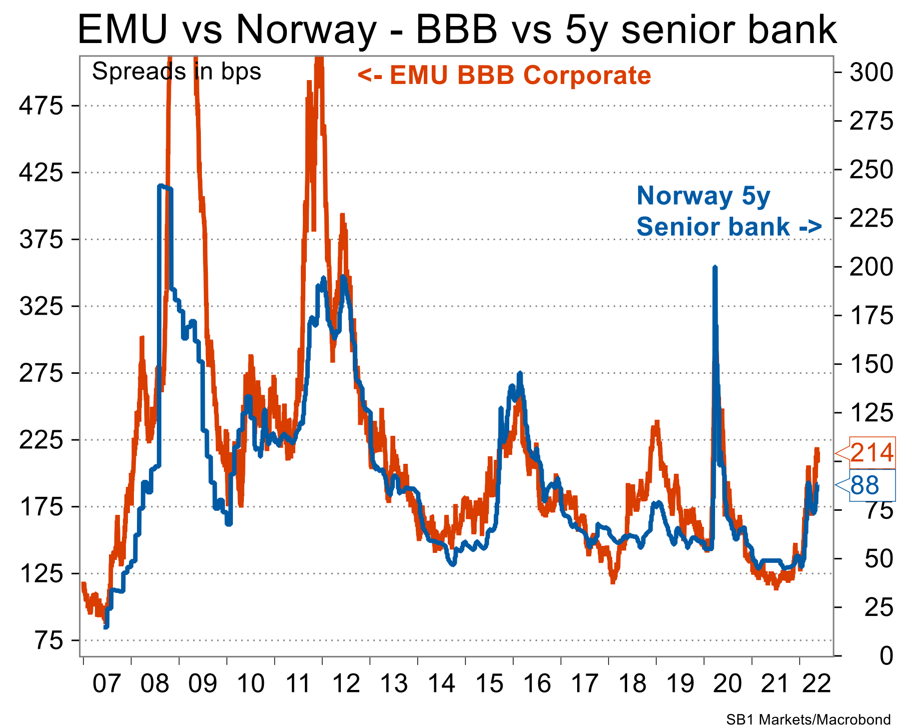


- The total capital cost has increased significantly, as the long term real government bond rate is up almost 150 bps (and the nominal rate even more)
- European and Norwegian spreads are following suit, as they usually do

Why are credit spreads widening? Could it be the slowing economy?

What do you think is more likely: An ISM at 50 or 60 in 6 months time?



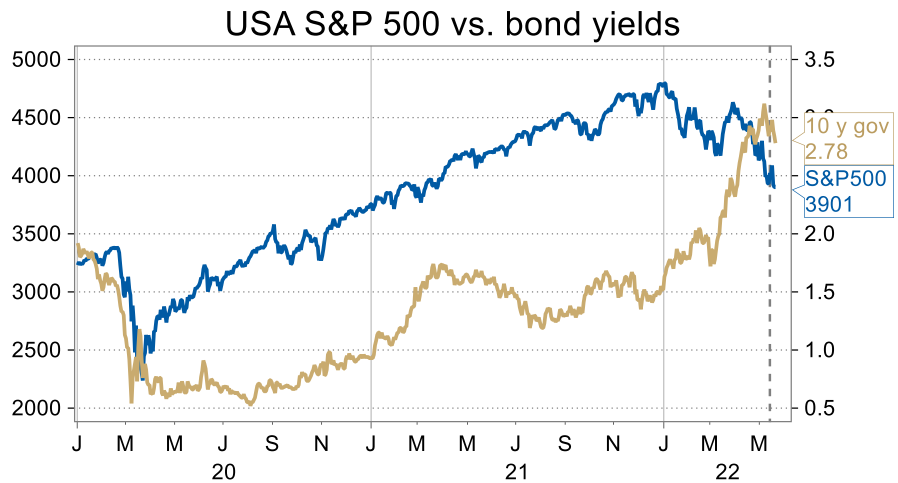


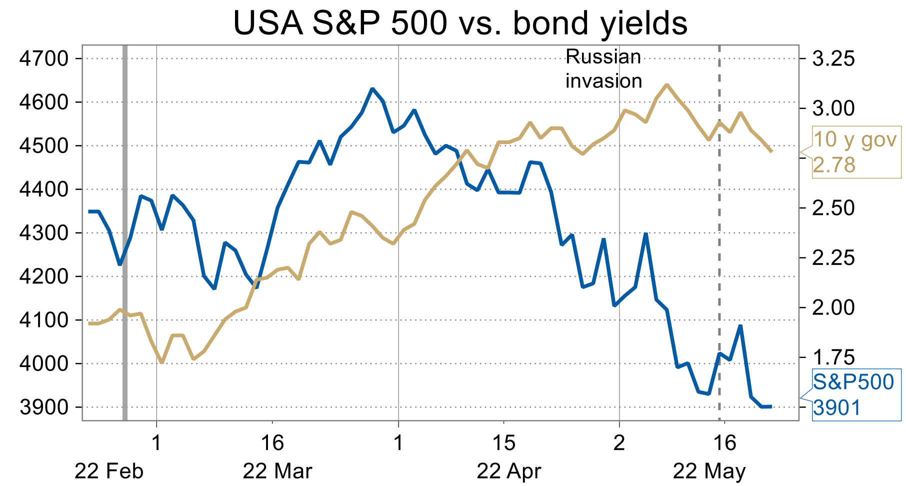
- The answer is not irrelevant for your view on the outlook for spreads, we think

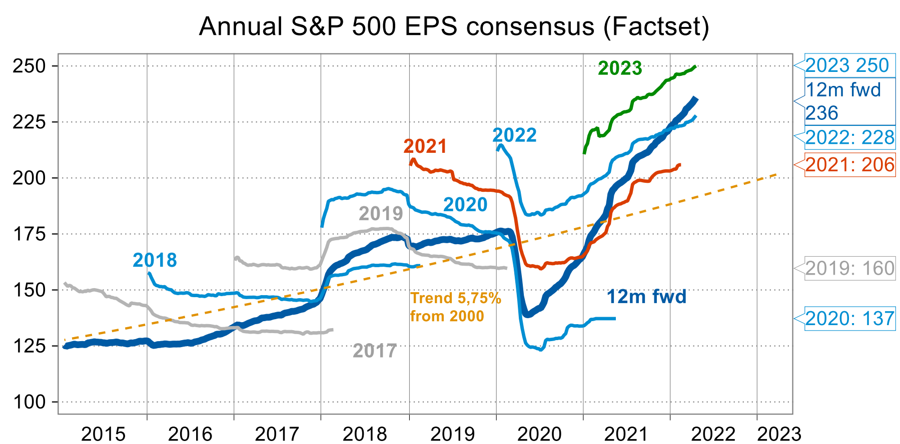
SpareBank 1 MARKETS

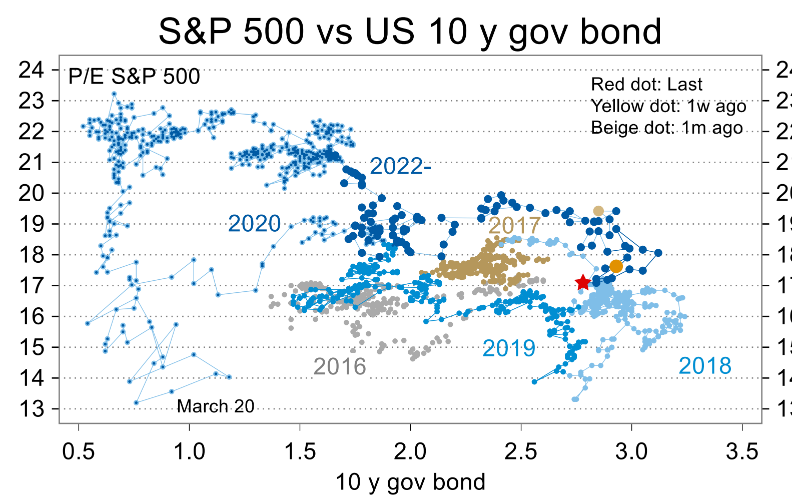
The S&P 500 down 3.0%, close to bear market (-20%). The 10 y bond yield -15 bps

The next shoe to drop: Growth in expected earnings will soon fall sharply



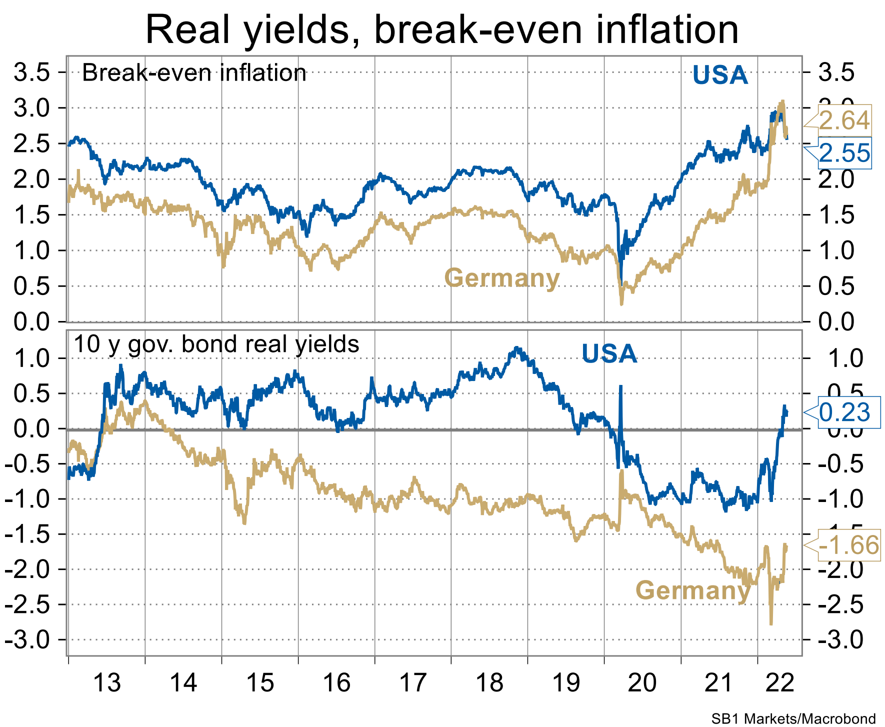


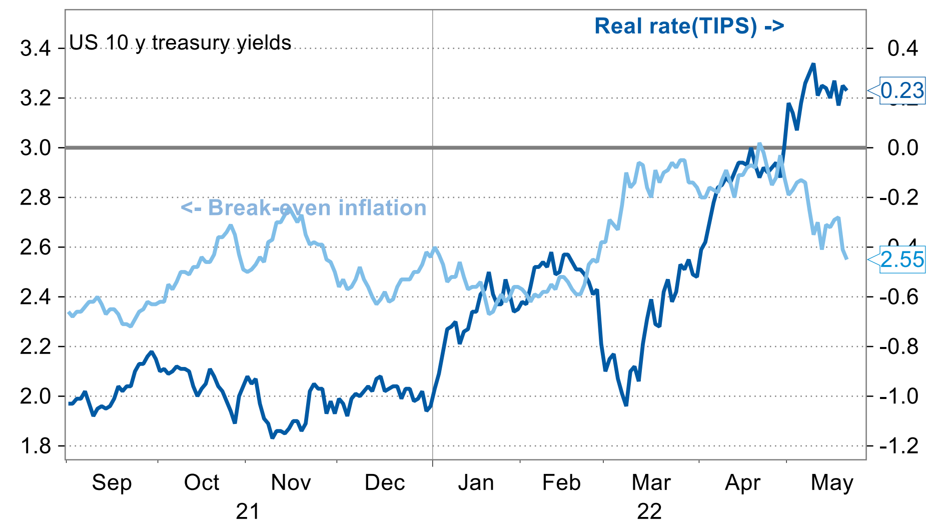




Inflation expectations further down in the US, real rates stabilise

German inflation expectations rose following the huge decline last week





US & Germany 10 y Gov bond yield

	Yield	Change 1w	Change 1m	Since Feb 18	Min since April-20
USA nominal treasury	2.78	-0.15	-0.07	0.86	0.52
.. break-even inflation	2.55	-0.14	-0.37	0.14	1.06
.. TIPS real rate	0.23	-0.01	0.30	0.72	-1.19
Germany nominal bund	0.98	0.09	0.11	0.76	-0.65
.. break-even inflation	2.64	0.07	-0.43	0.66	0.40
.. real rate	-1.66	0.02	0.54	0.10	-2.80

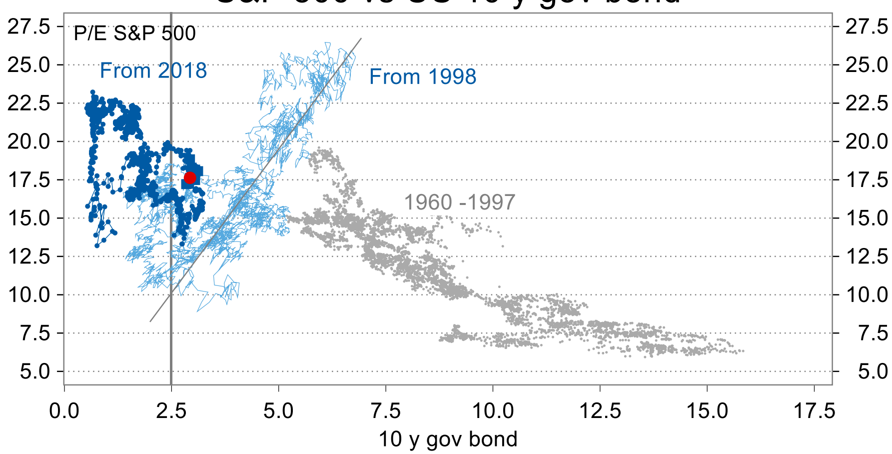
SB1 Markets/Macrobond

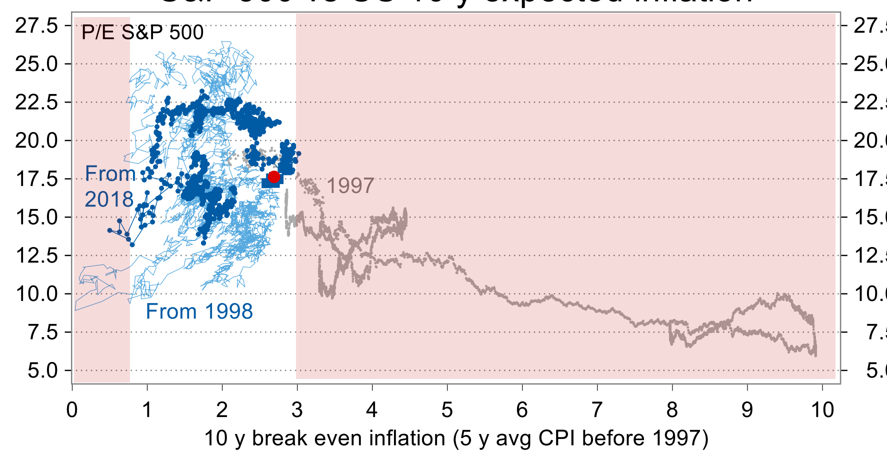
- **The US nominal 10 y bond** yield fell 15 bps last week to 2.78%
  - » **Real rates** were close to unchanged at 0.24% we still think the level is too low
- **The 10 y German bund** rose 9 bps to 0.98%

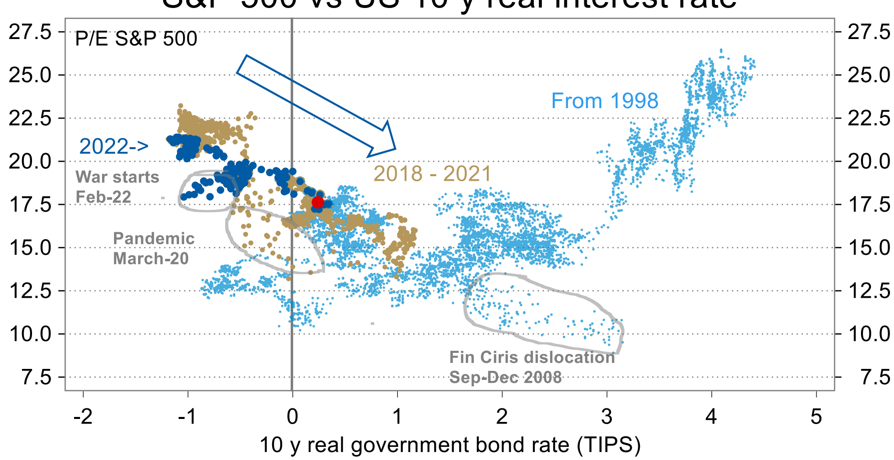
SpareBank 1 MARKETS

Bonds vs. equities: What's next? Central banks are now fighting inflation!

... And they will probably succeed. But at a price: Higher real rates + 'some' earnings surprises



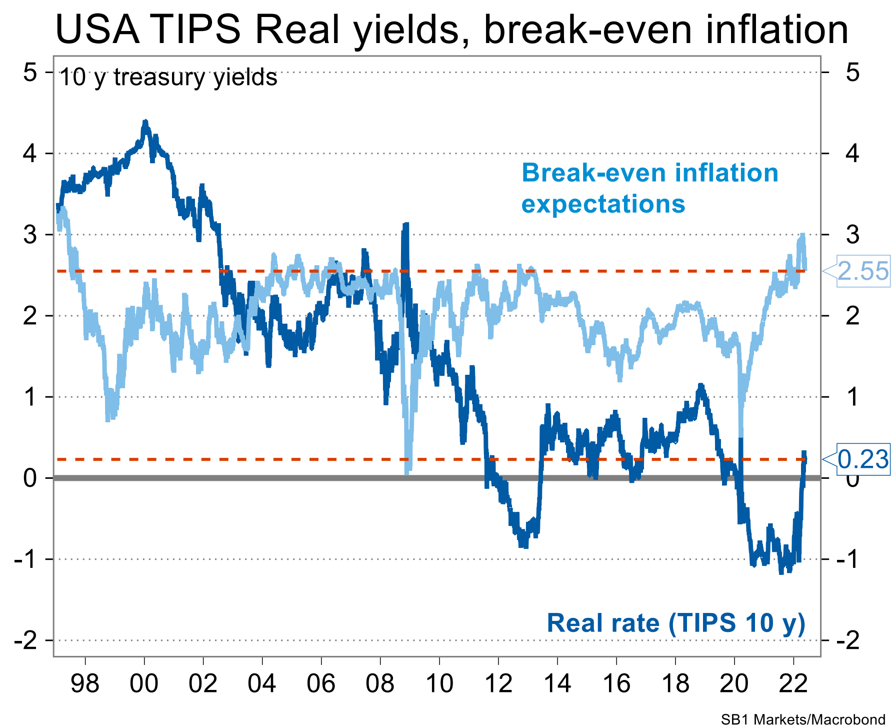


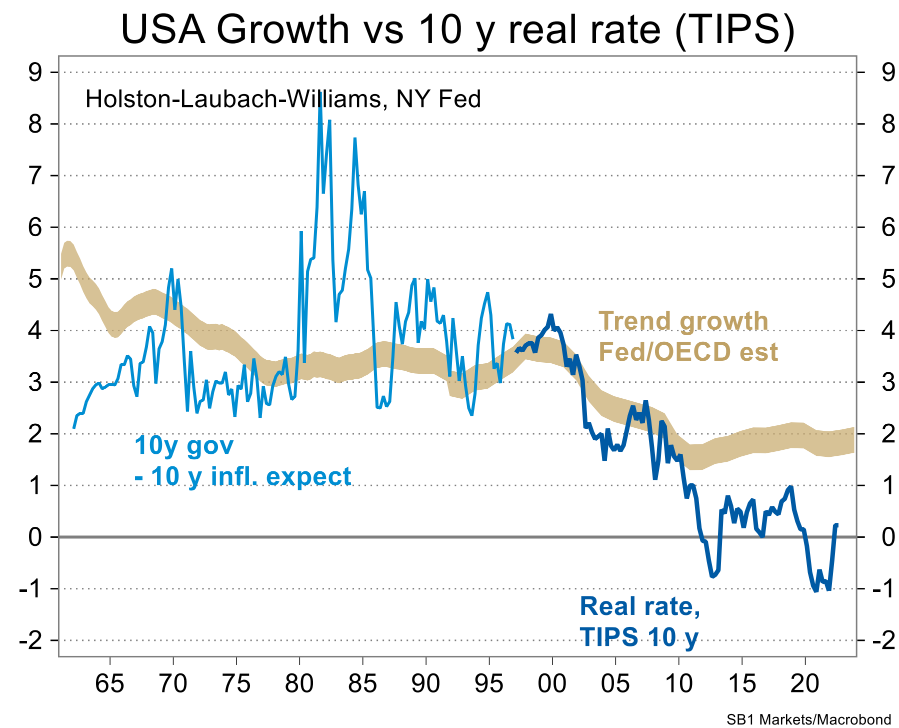


- **Expected inflation**
  - » ***If its not too low or too high: No problem***
    - 'Real' expected earnings are unaffected, higher inflation implies stronger growth in earnings, and vice versa
  - » ***If its too low or too high: A problem***
    - Something is rotten: Deflation or far too high inflation. The economy is not stable. Risk is increasing, earnings are exposed.
  - » Now: Infl. expectations at close to 3% - on the border to become a problem?
- **Expected long term real interest rates**
  - » ***Low real rates normally not good news, high rates were OK***
    - Real rates were low when the economy was weak, the outlook uncertain
    - High real rates when the economy was booming, with high P/Es
  - » **2018-21:** real rates have been low even if the economic outlook has been OK
    - Central banks wanted to lift growth, inflation was anyway not a problem – we entered the 'Goldilocks' corner'
  - » **Now:** Central banks engaged in a HUGE policy shift, to contain inflation. The risk: A further increase in REAL rates, at the same time as growth expectations slow!

Mind the gap: It's rapidly closing!

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



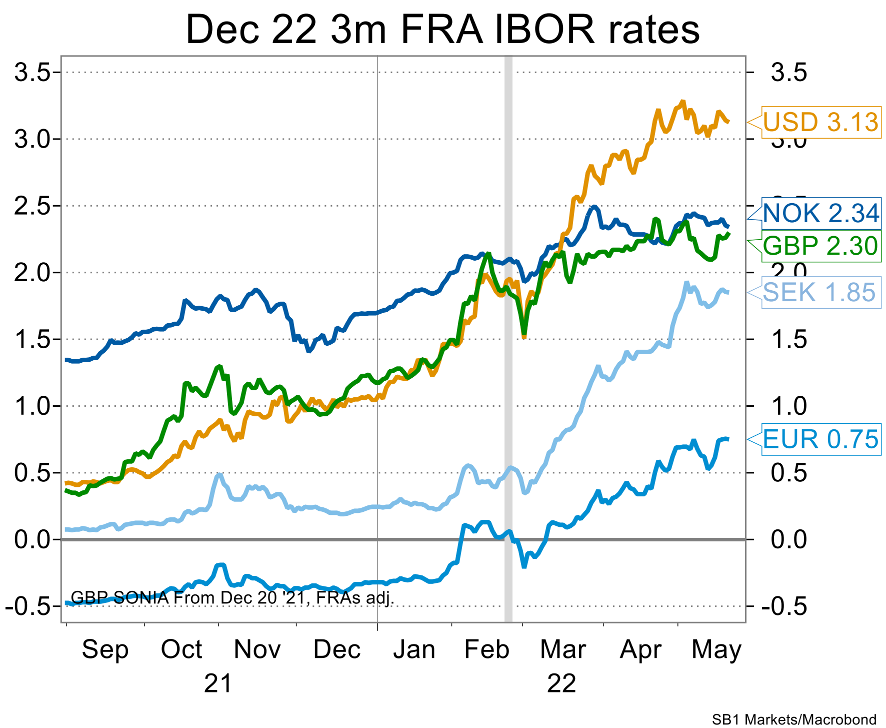


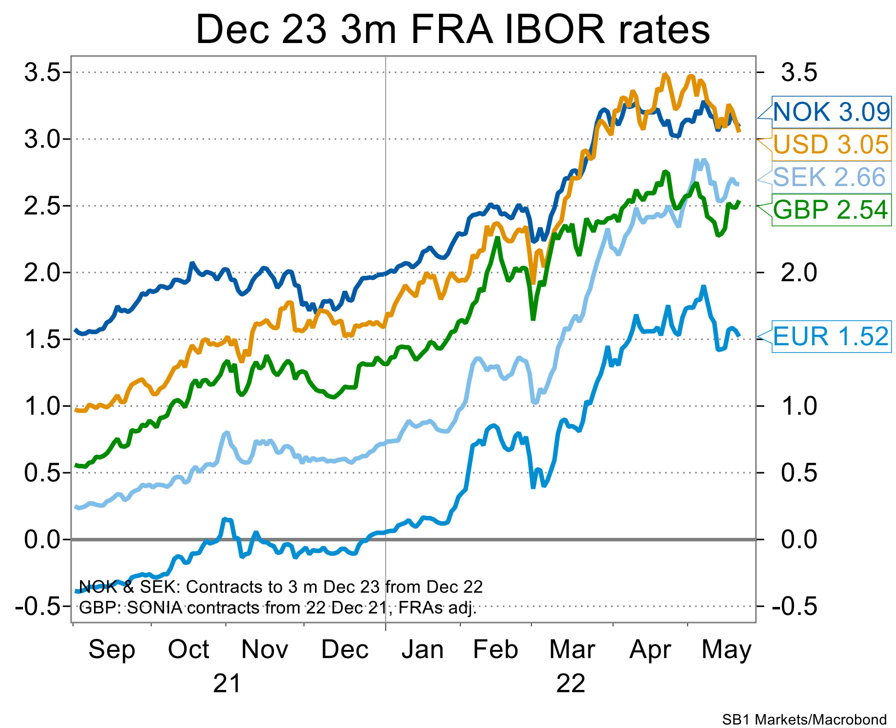
- There is no reason to believe that the current surge in real rates is due to an equivalent increase in growth expectations. It is of course the opposite: At least the short to medium-term outlook is now weakening as central banks finally enter the fight against inflation by at least bringing growth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

SpareBank 1 MARKETS

The FRA surge has flattened – but most were up last week (except NOK FRAs)

(The previous week NOK FRAs did not follow the others down)

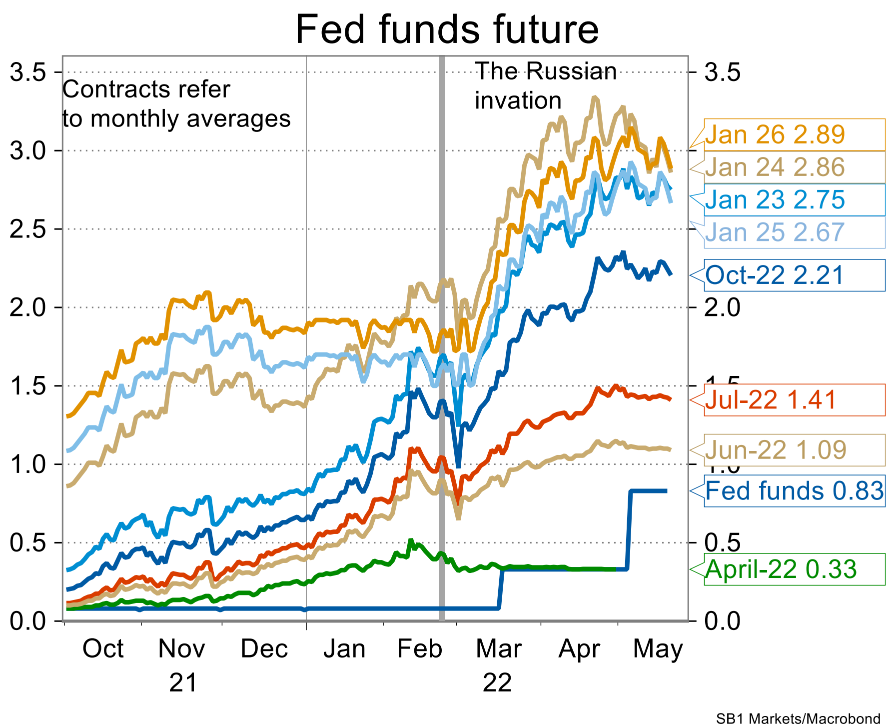


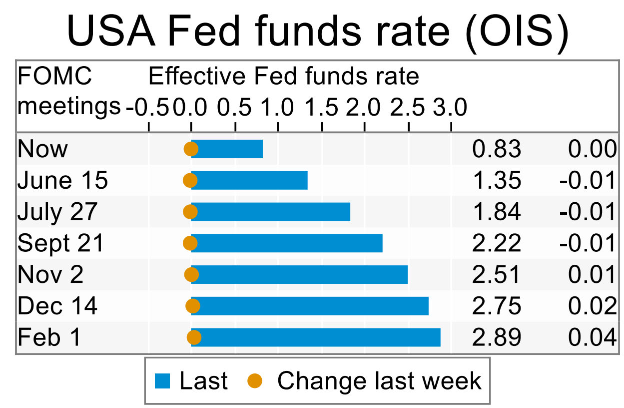


- The ECB is steadily drumming up a July hike – the minutes from the last board meeting showed that the bank is moving towards a tightening before not too long

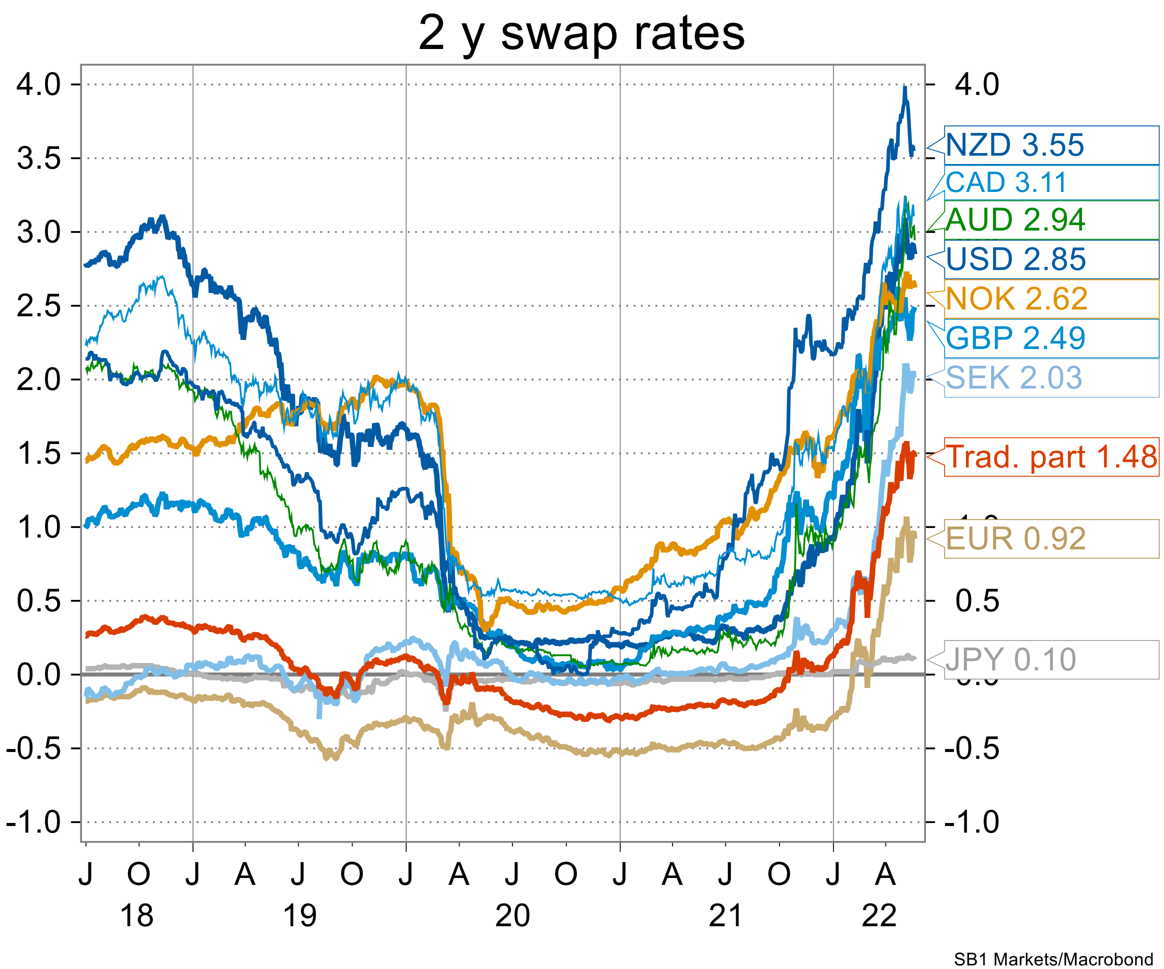
Small changes in the very short end of the Fed funds curve

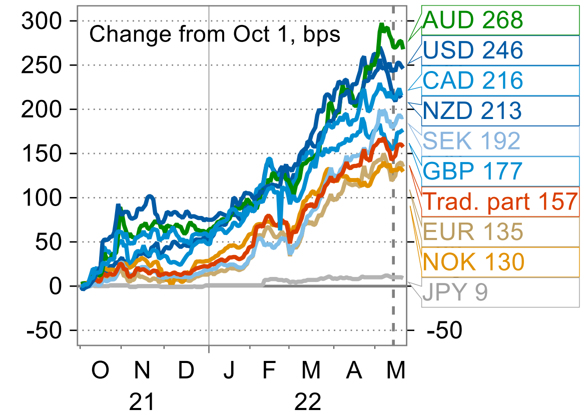
But expectations are yielding from late 2022 – just like the previous week. Some recession fears!

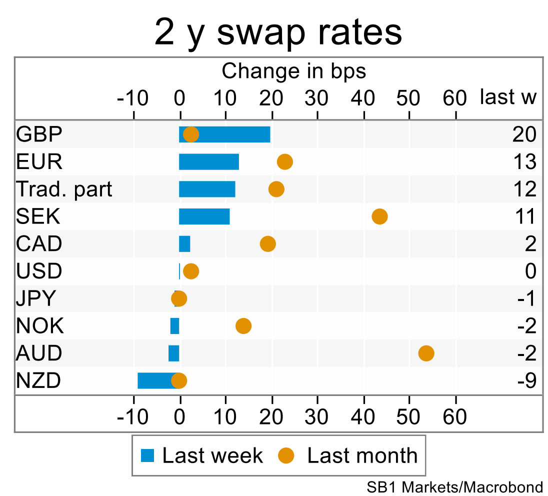




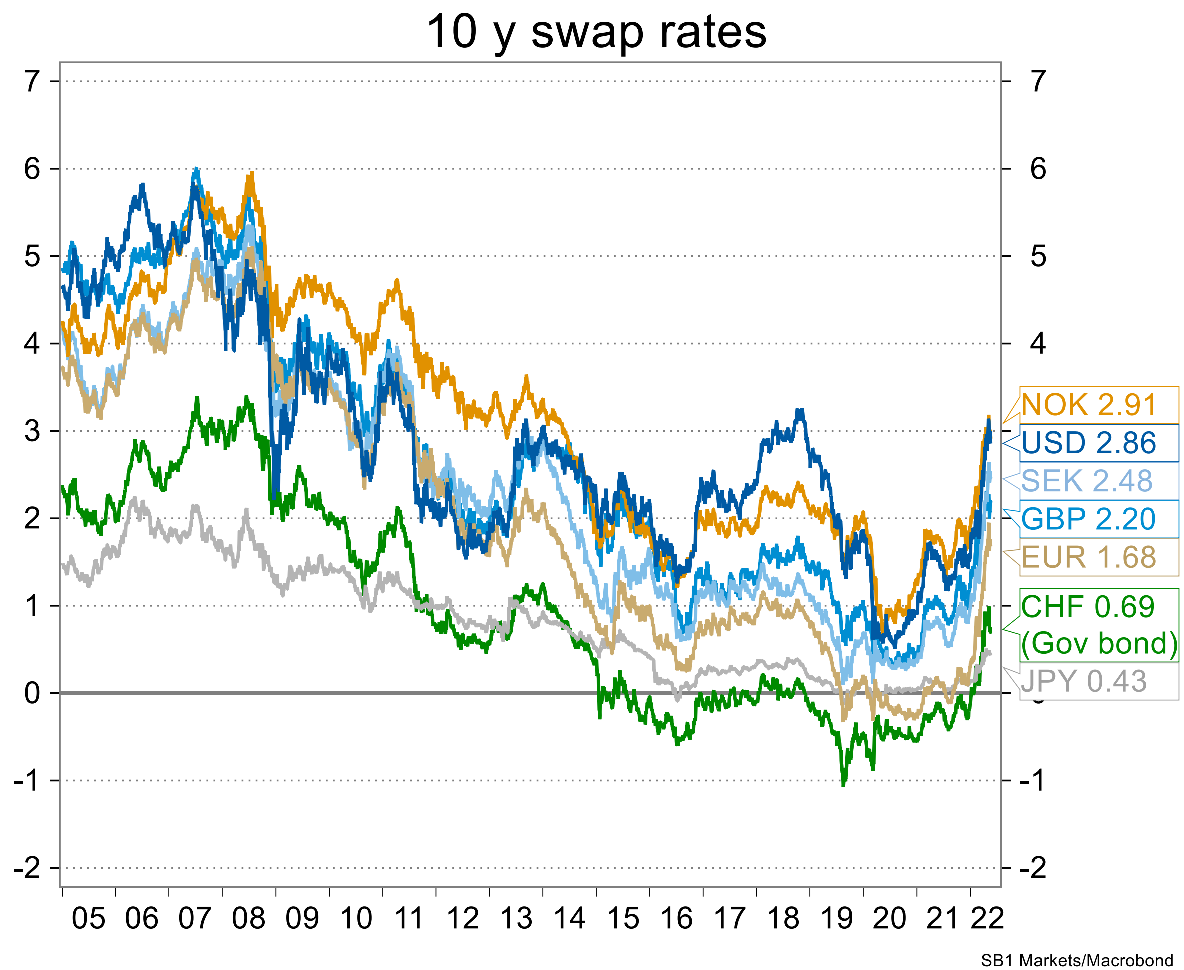
Mixed in the short end, but the average up last week

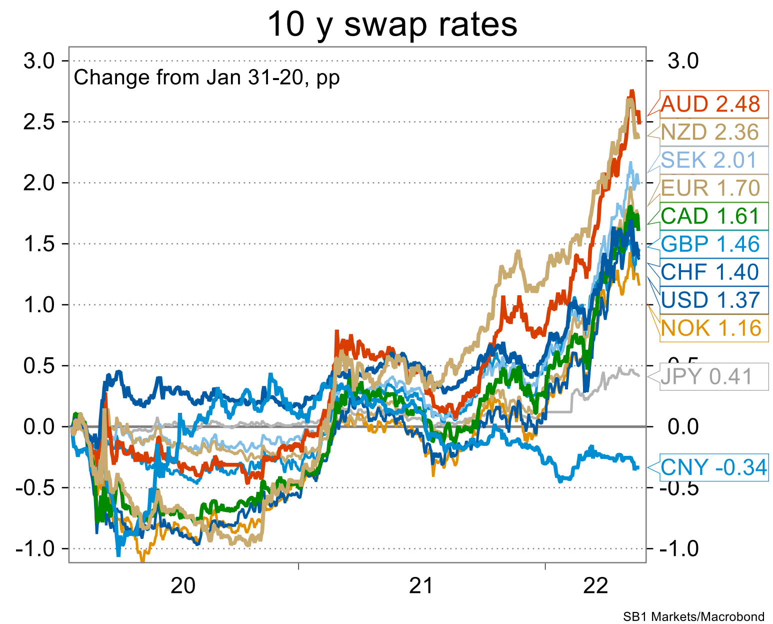


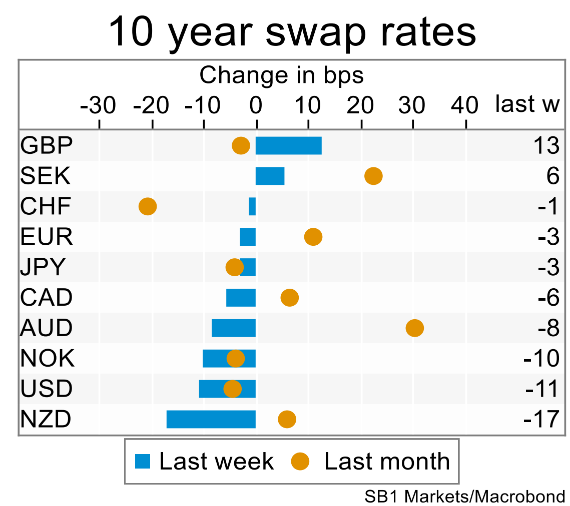




The long end down most places last week too, burdened by stock markets?

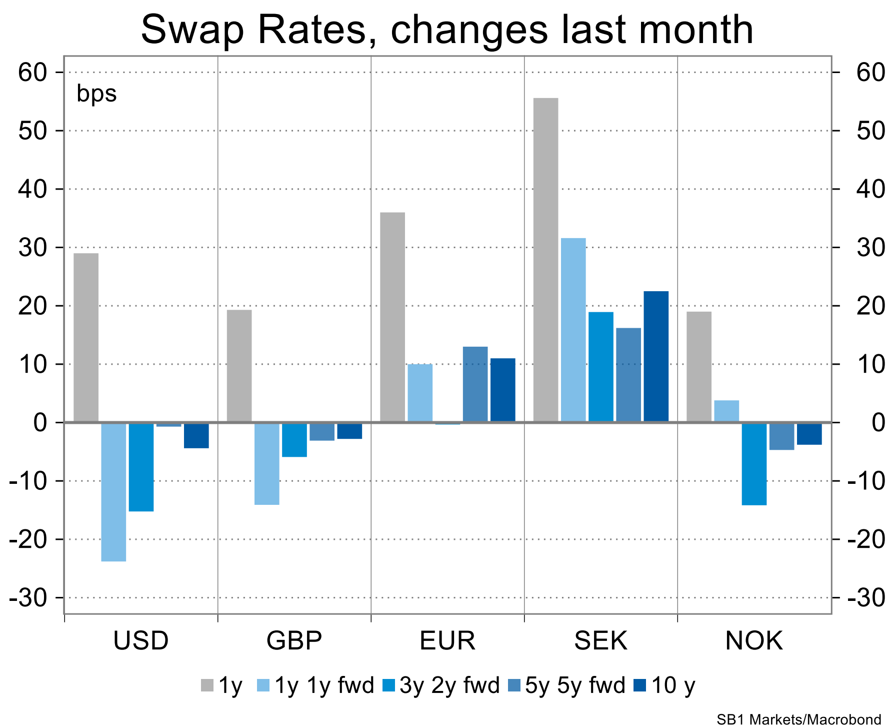


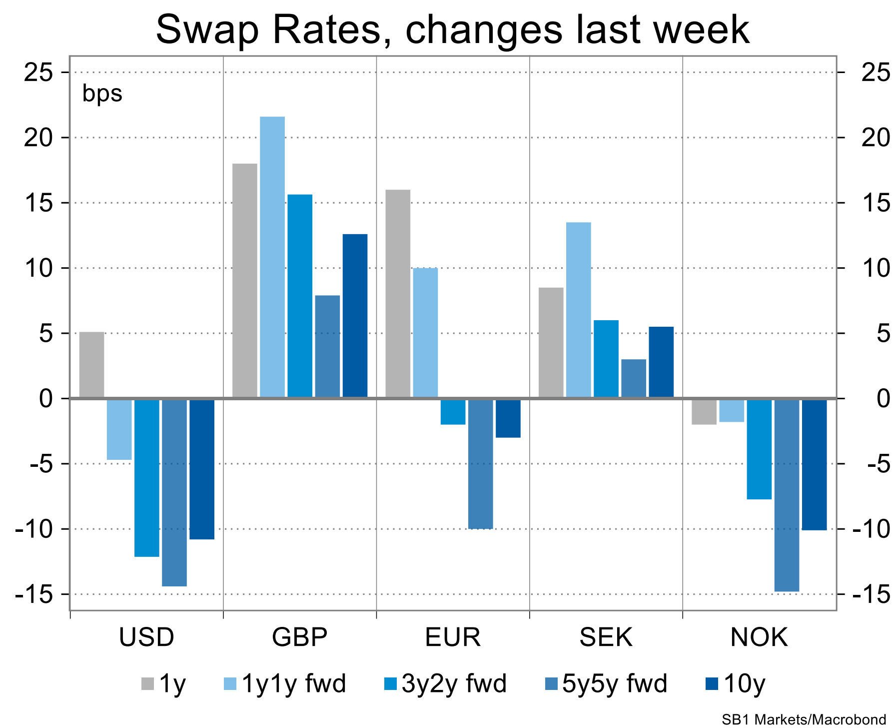




CHF: 10 y government bond yield

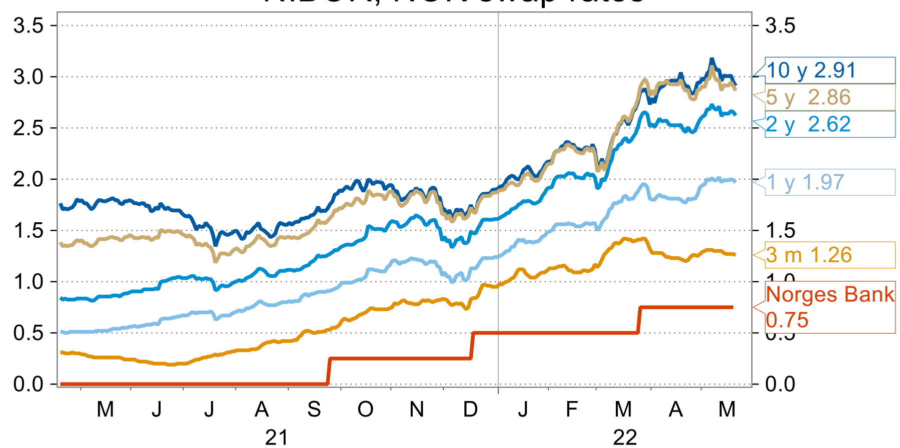
No clear pattern last week – GBP rates rose the most, while USD & NOK rates fell





Rates down in the long end of the curve – but still close to 3%

NIBOR, NOK swap rates

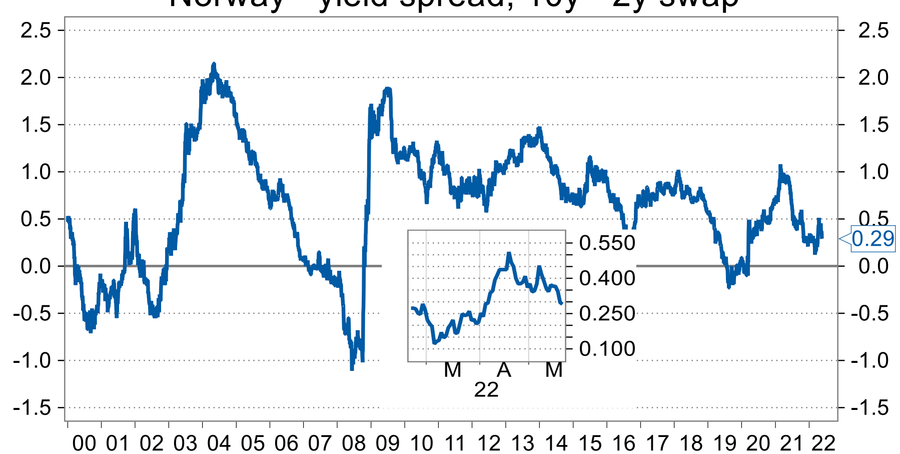


SB1 Markets/Macrobond

NOK Swap rates

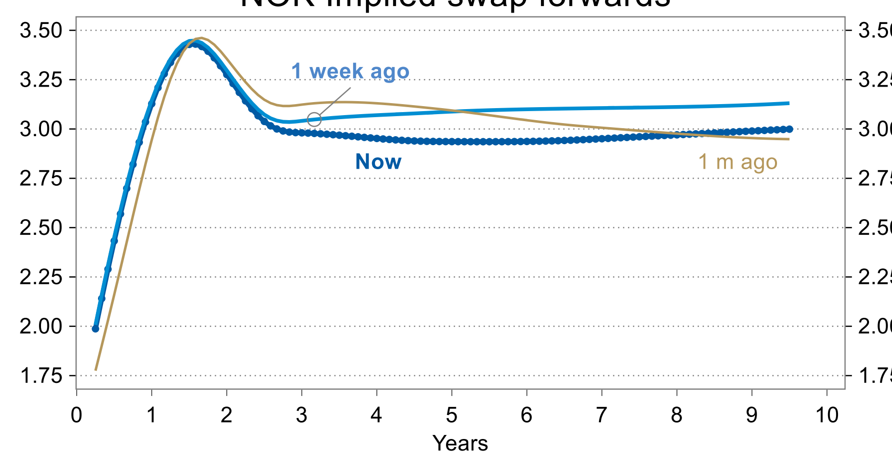
SB1 Markets/Macrobond

Norway - yield spread, 10y - 2y swap



SB1 Markets/Macrobond

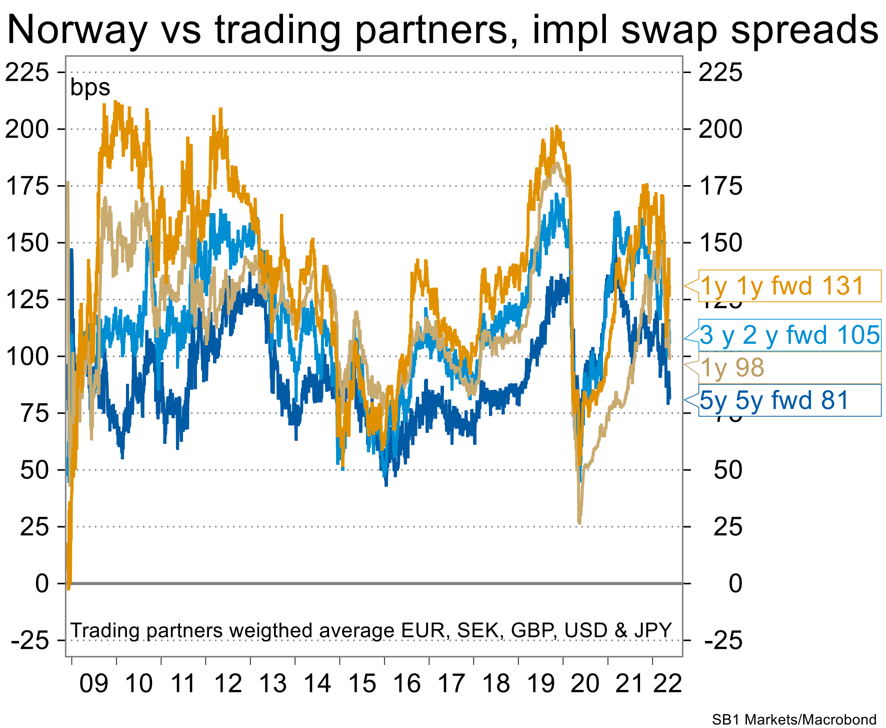
NOK Implied swap forwards

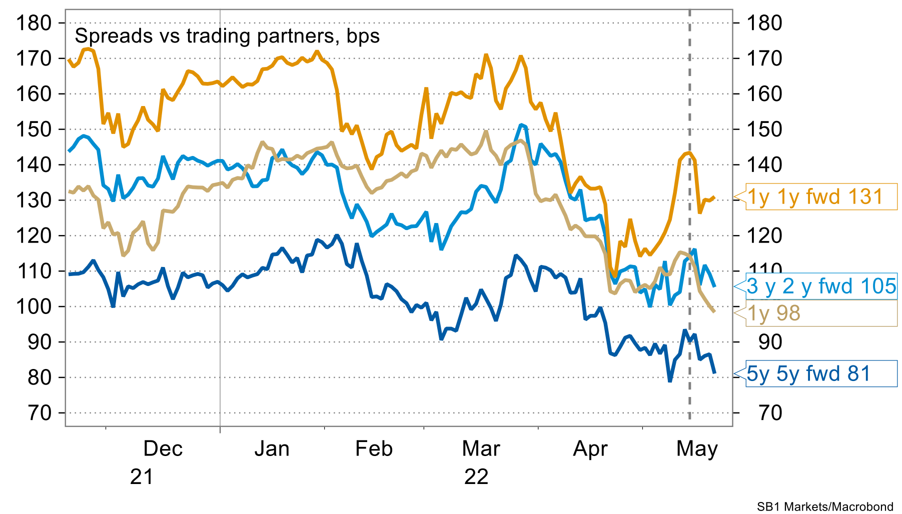


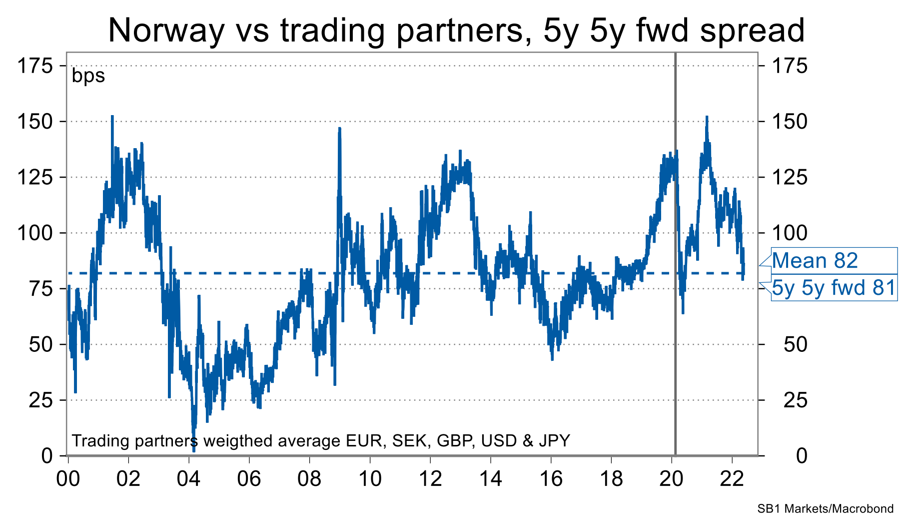
SB1 Markets/Macrobond

Spreads down last week, especially in the short end of the curve

Spreads vs. trading partners at very close to average levels after the lift last week, all over the curve

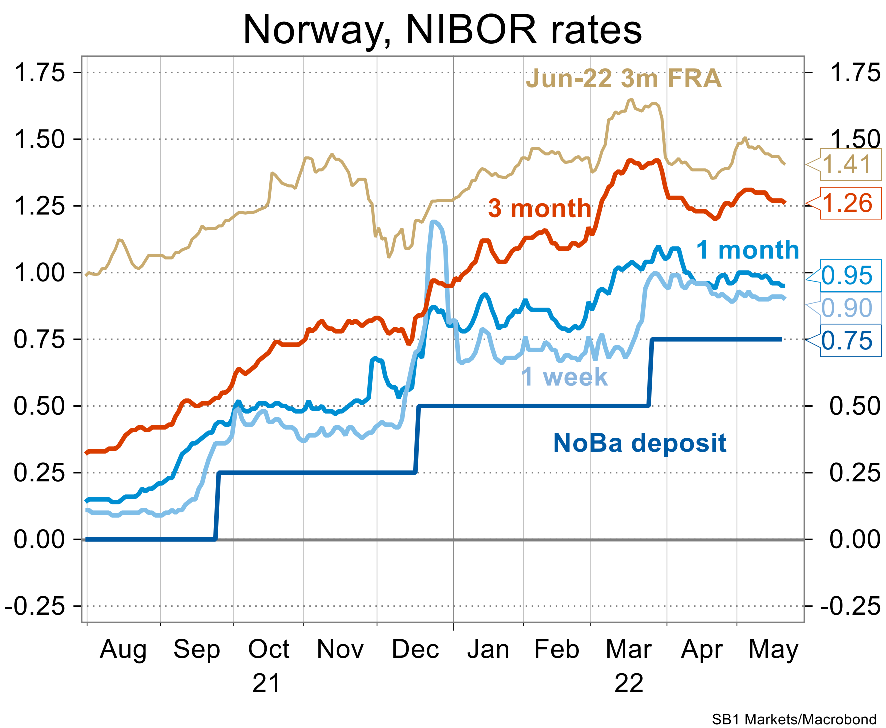


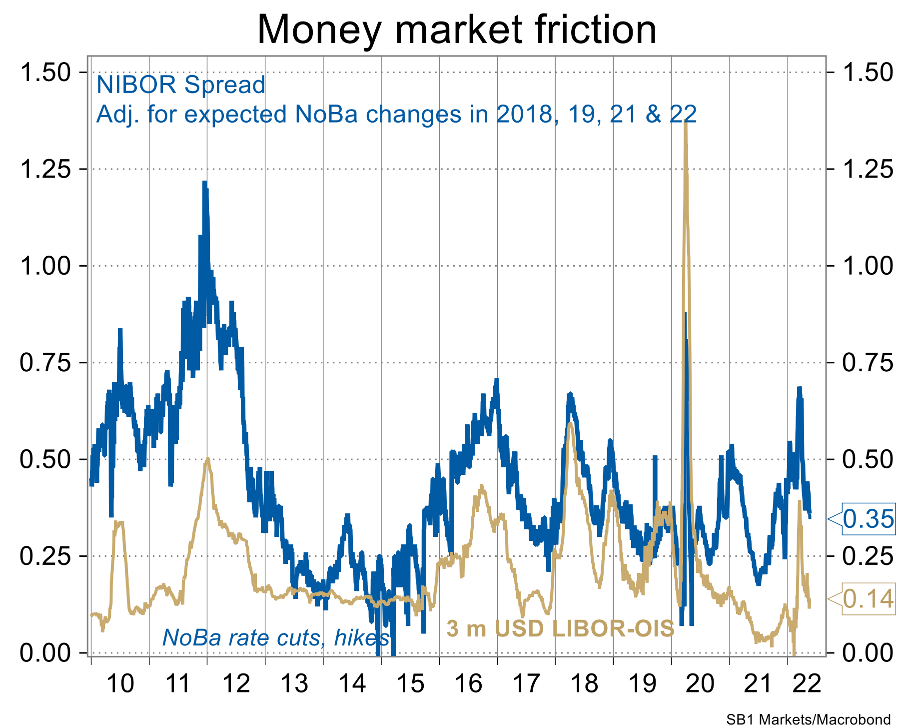




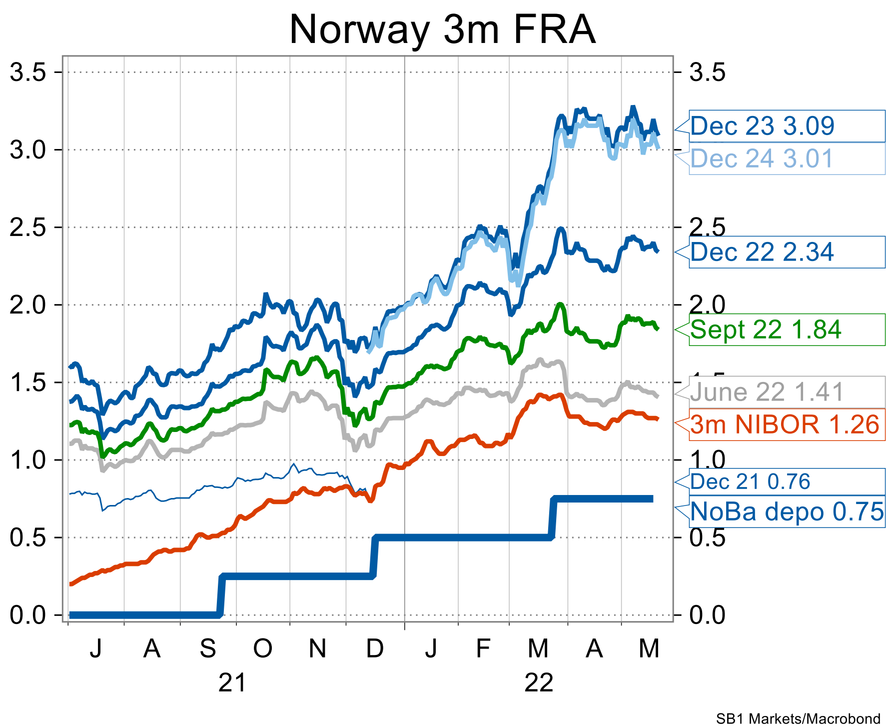
The 3m NIBOR down 2 bps to 1.26%, the NIBOR spread down 4 bps to 35 bps

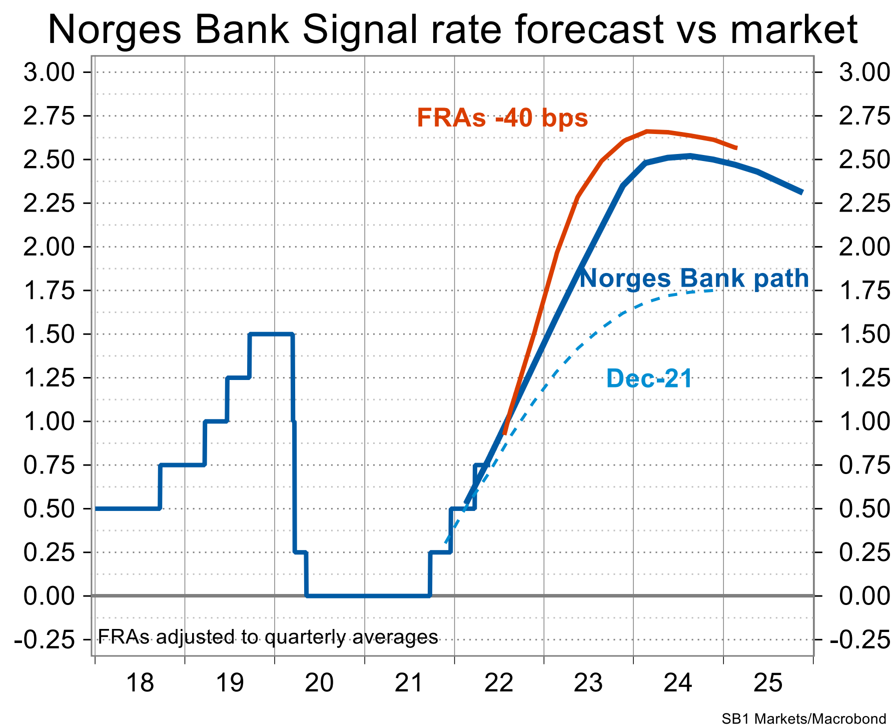
The USD LIBOR-OIS spread unch. at 14 bps





FRA rates slide down slowly



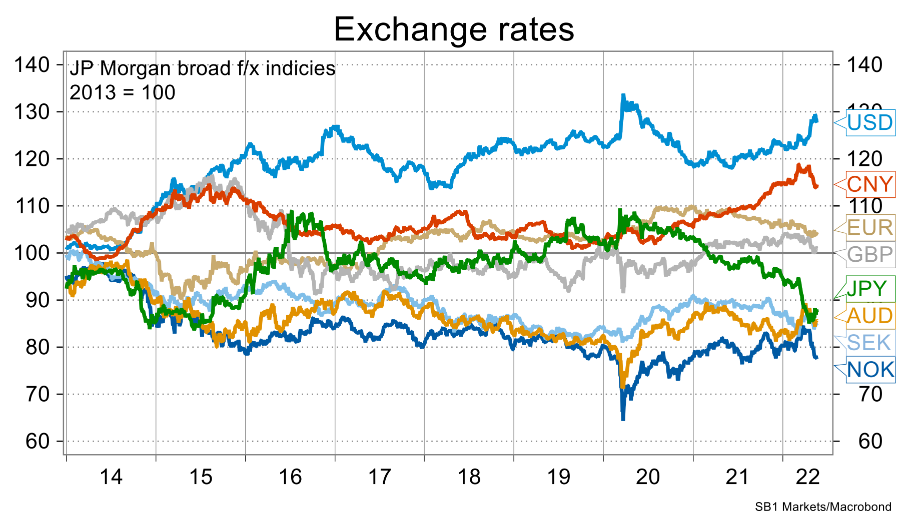


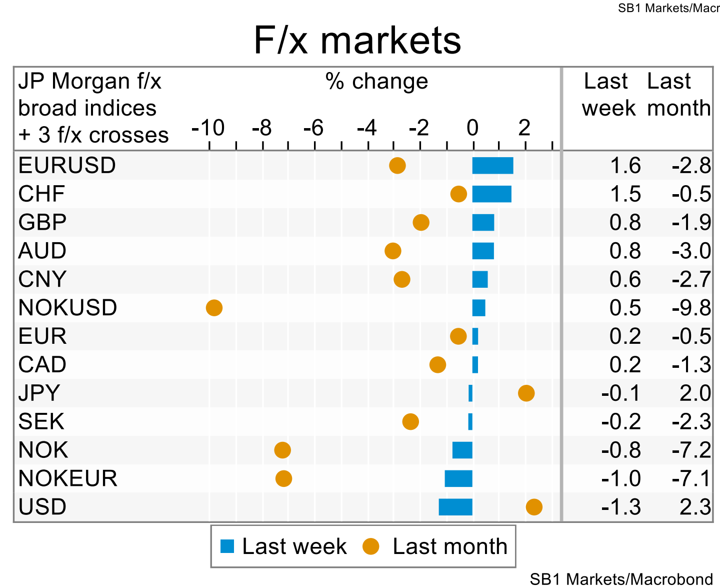
- The **June 3 m FRA** declined 4 bps to 1.41% last week, and the Sep contract lost 4 bps to 1.84% (and Dec -3 bps to 2.34%)
  - » If NoBa hikes by 25 bps to 1% at June the 23 meeting (and no hike in August), the average deposit rate in the duration of the June 3 m FRA contract will be 0.98%
    - A 100% probability for a 25 bp hike if the assumed Q3 NIBOR spread is 43 bps. We doubt the spread is assumed to be that high. A 50 bps hike cannot be ruled out
    - However, as the Sept 3 m FRA at 1.84% is 43 bps above the June contract, a 25 bps hike in both August and September is also an alternative (and more likely)
- The FRA market discounts close to a 50/50 between 1.75% or 2.00% rate in December (assuming a general 40 bps NIBOR spread + a 5 bps Q4 liquidity premium). Norges Bank signalled 1.50 (85%) or possibly 1.75% (15%) in March

SpareBank 1 MARKETS

NOK lost another 0.8% last week – just the USD was weaker

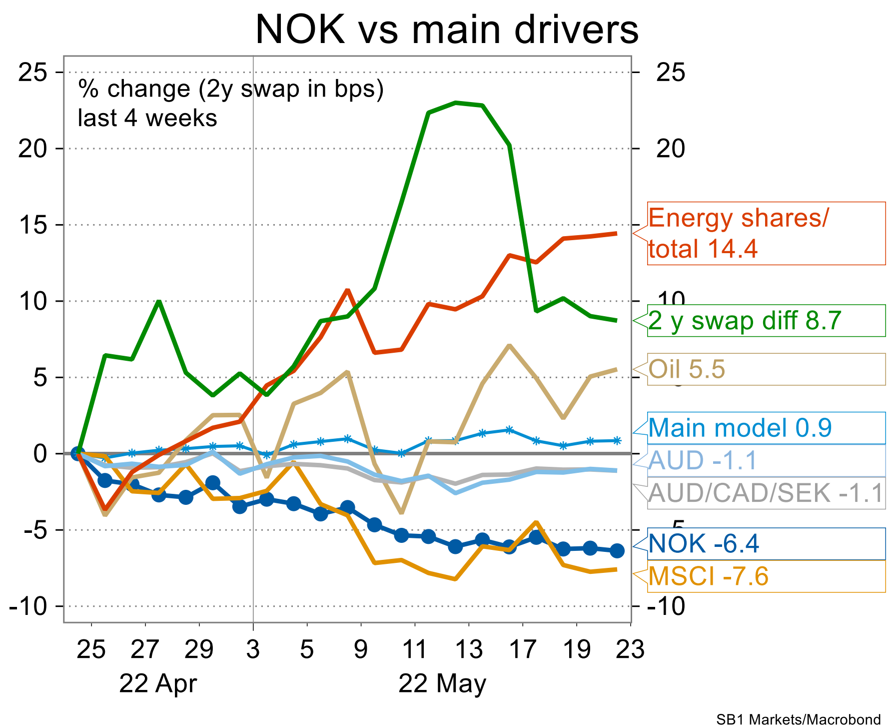
The EUR and CNY stabilised

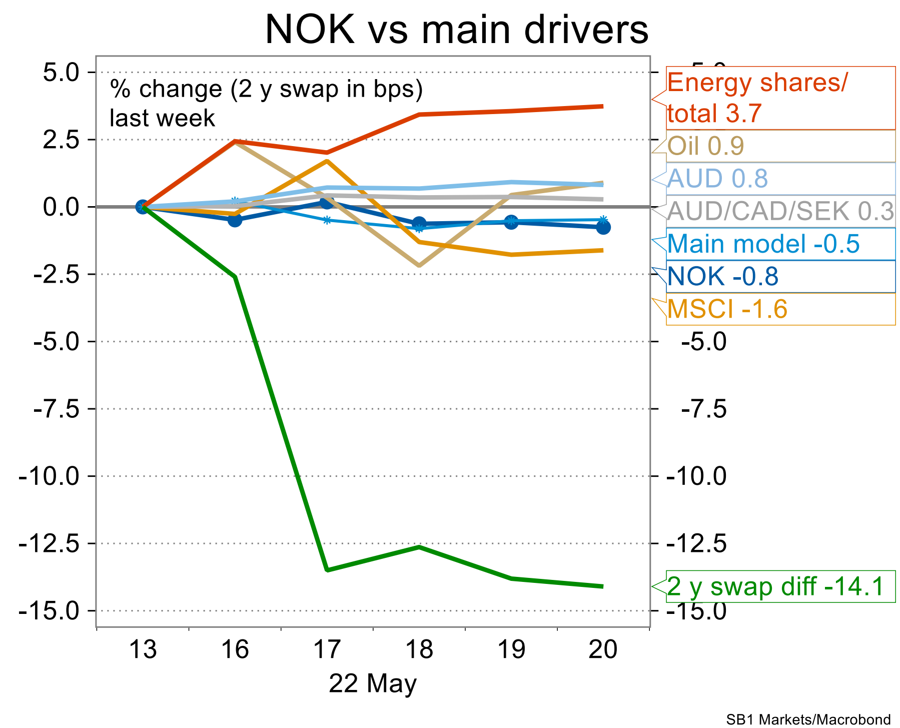




What's up (or rather down) with the NOK?

NOK further 0.8% down last week. The interest rate spread fell, the oil price not. The model said -0.5%





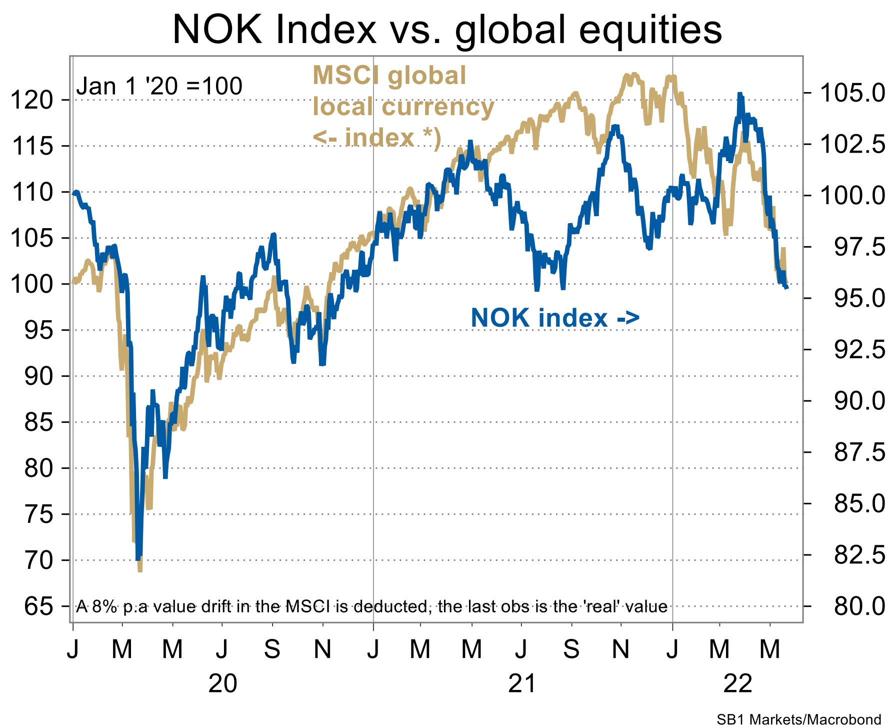
The status vs. the normal drivers – NOK the only loser

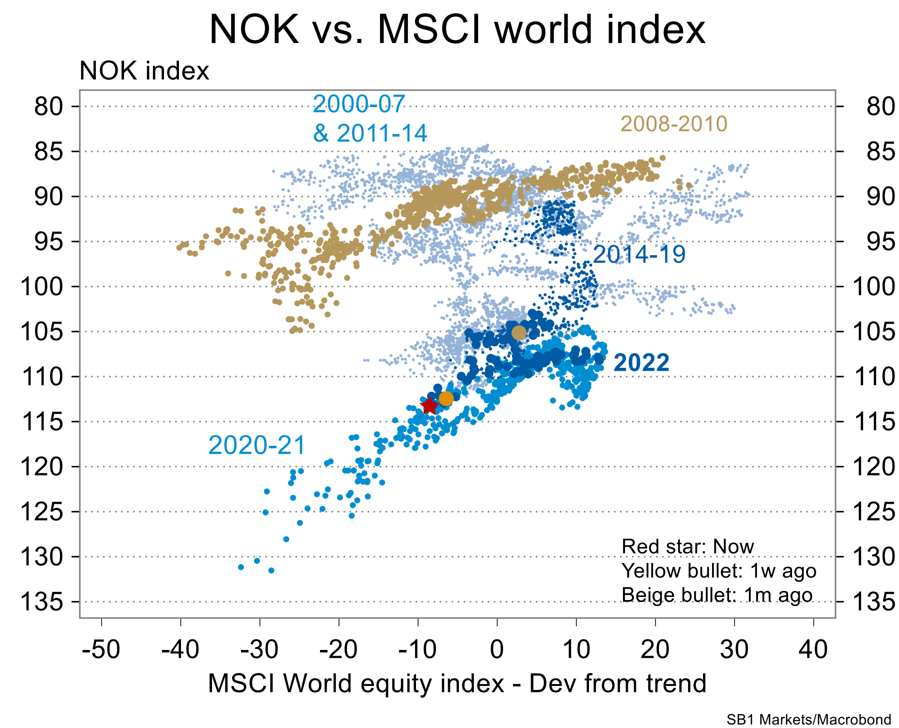
- ***The NOK -0.8% - and it is 6.8% below our main model estimate (from -6.5%)***
- The NOK is 9.5% weaker than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts (from 8.6%)
- NOK is 5 % weaker than a model which includes global energy companies equity prices (vs the global stock market) (from 4.5)

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

The NOK has fallen alongside the global stock market recently

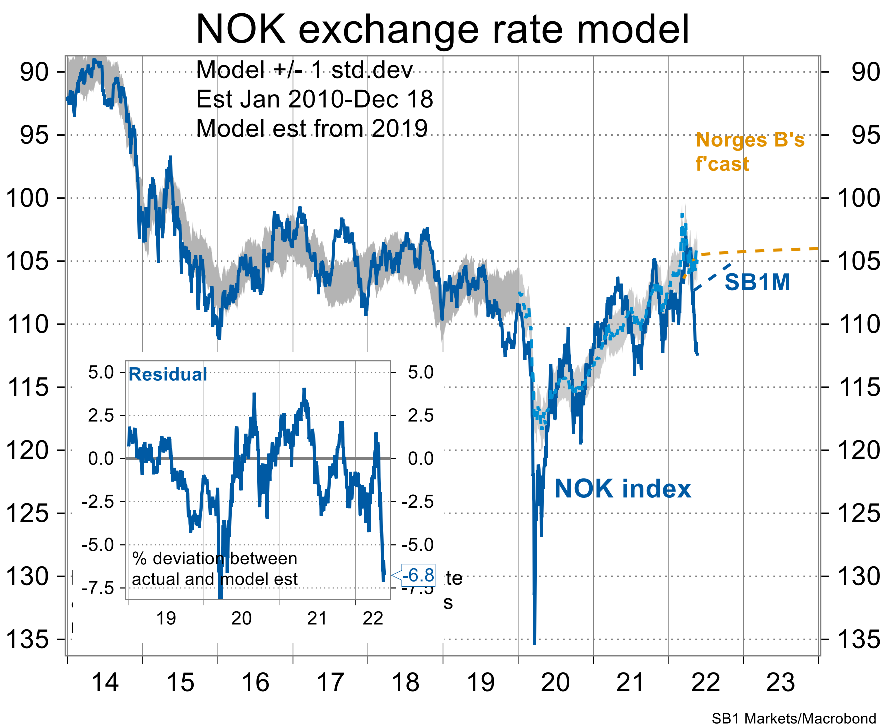
… but there is no stable correlation over time, and when it is, the oil price is normally the real driver

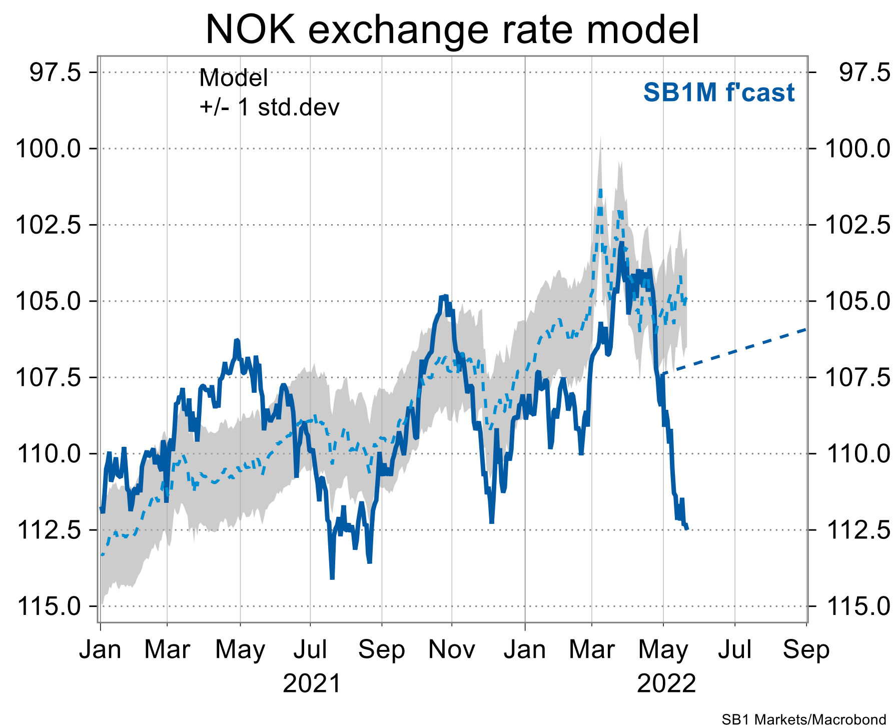




The NOK suddenly down 6.8% vs our standard model estimate!

Rather unusual…



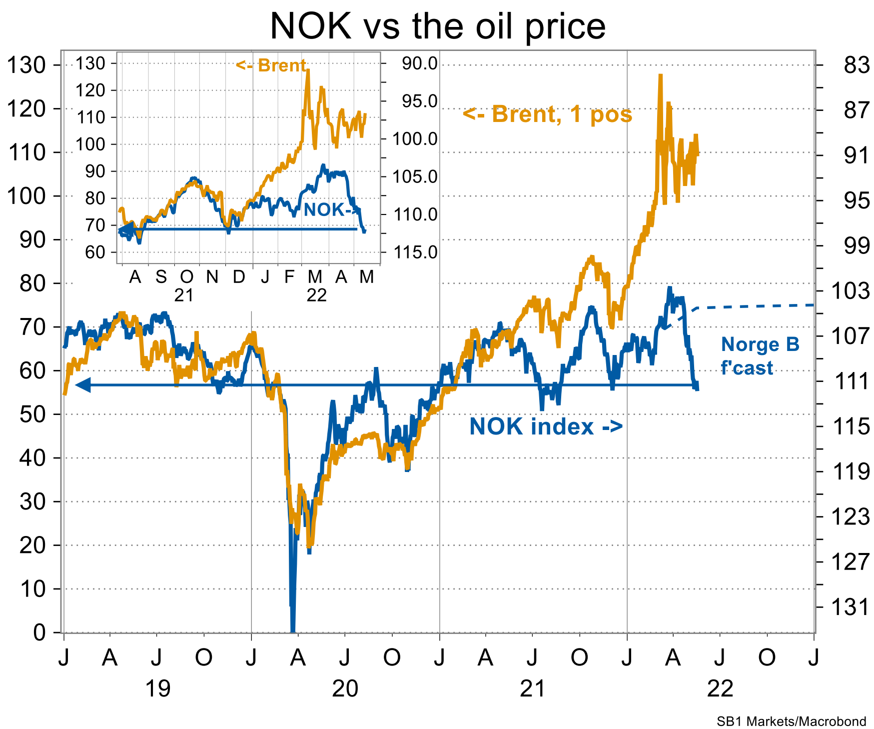


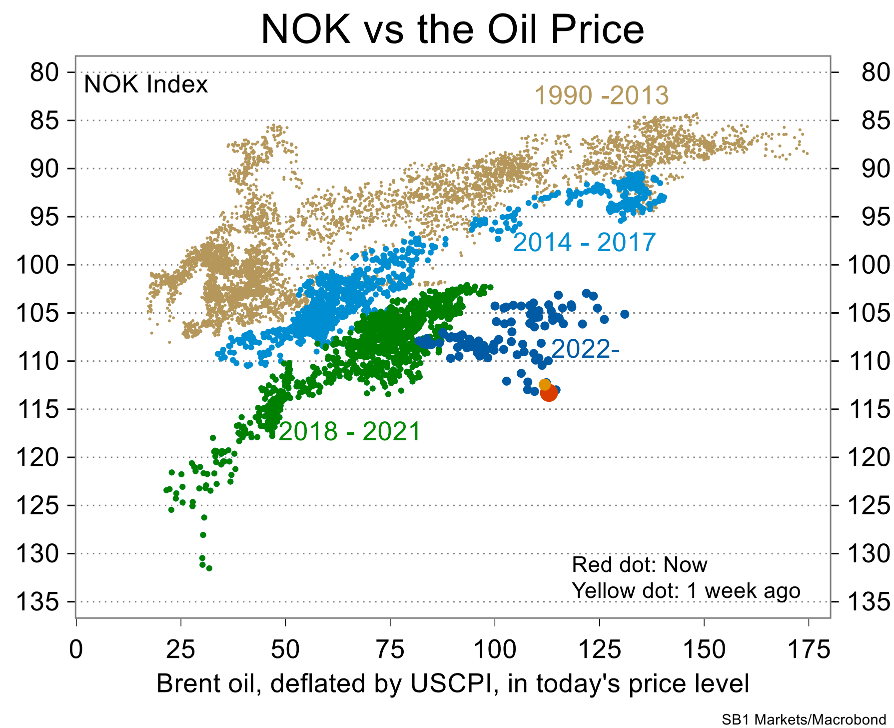
- The decline started April 25th

SpareBank 1 MARKETS

Oil up, NOK further down

NOK is weak, as if the oil prices were USD 70/b (rebased to early Jan) or 55 (rebased to May-21)

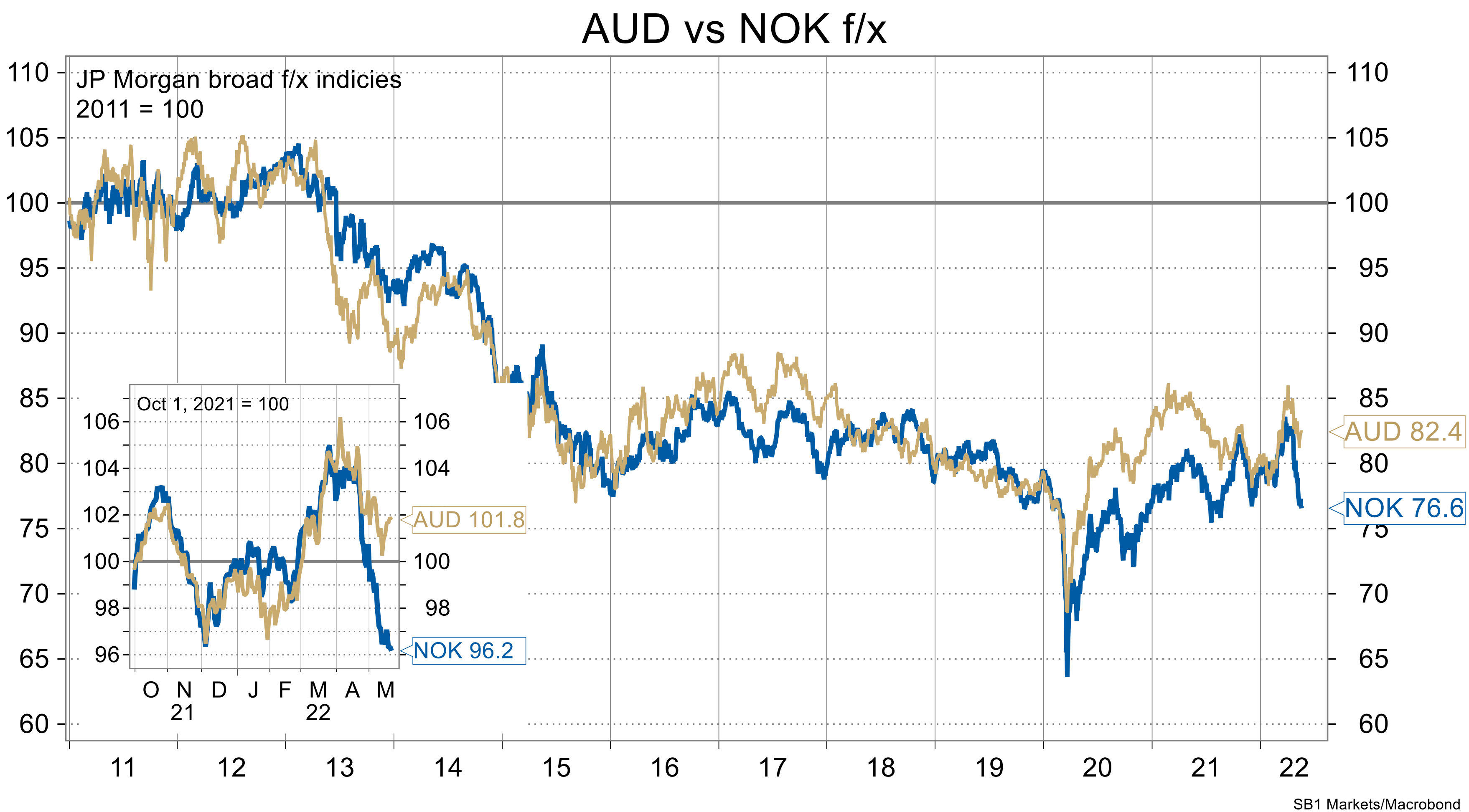




- The NOK has never before been as weak as now, given the oil price

The NOK suddenly lost ~~3.5~~ ~~4.5~~ 5.5% vs. the AUD

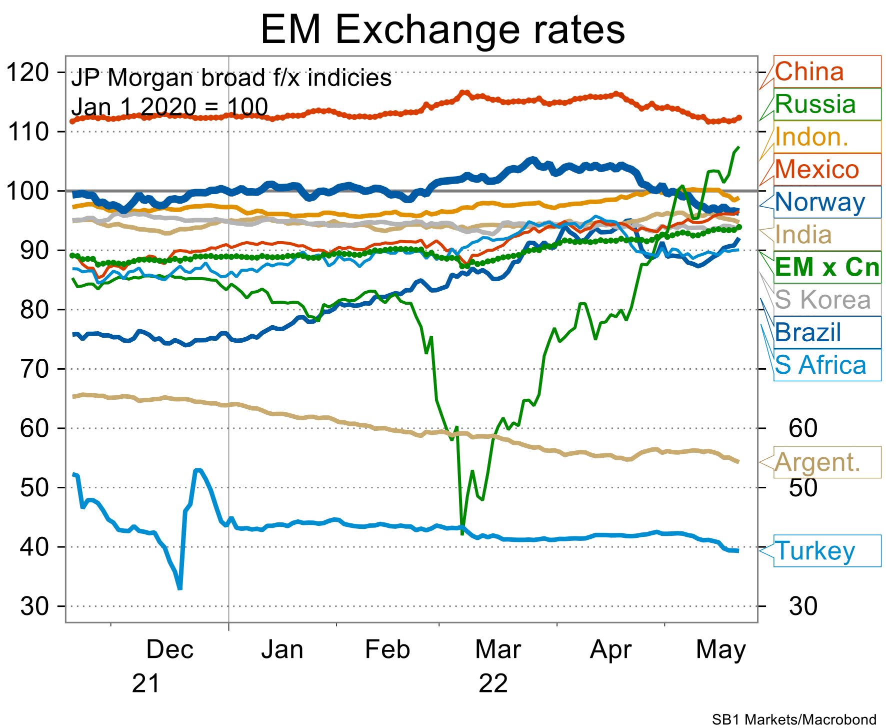
None of the two usual suspects explain it: Oil price or the LME. Other factors have not been relevant

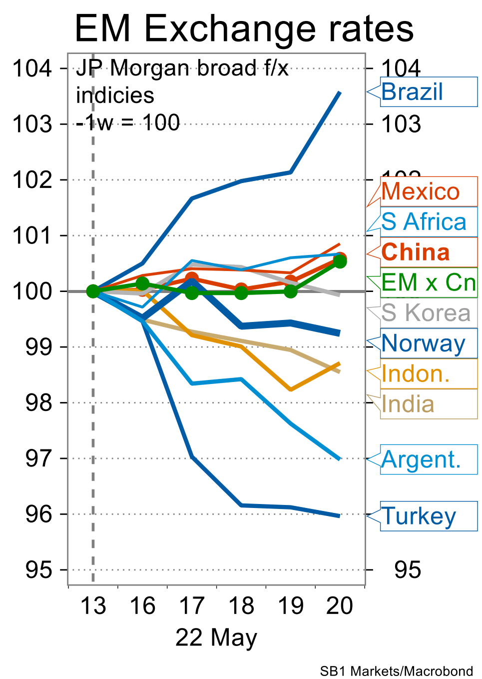


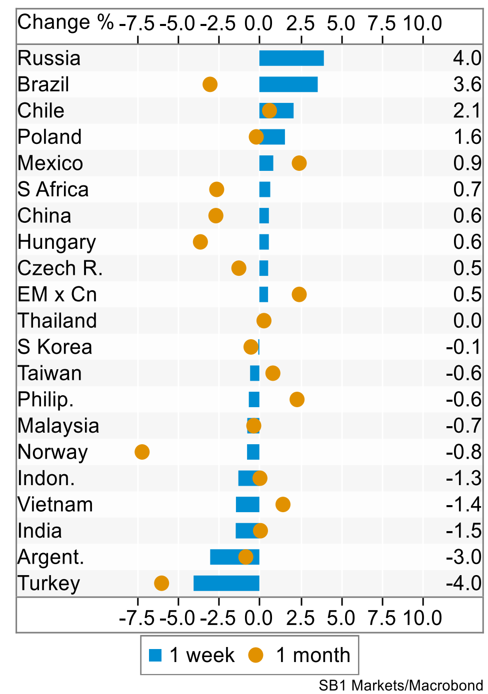
Usually, interest rate differentials have not been important at for the NOK/AUD relative strength/weakness. NOK has usually strengthened vs. the AUD in times of turbulence in the stock market (VIX, S&P vs. long term trend)

EM f/x more up than down last week – but Turkey is not that popular

(and not in NATO either). The Russian RUB is steadily climbing: A huge trade surplus + capital controls







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