June 27 2022

Macro Weekly

Week 26/2022

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Last week, part I

- **The War/Sanctions**
  - » Russia is slowly conquering ground in the East, and will probably control Luhansk not before too long. Will the Russian continue? If not, real peace negotiations may start
  - » **Most commodity prices** fell again last week but European natural gas prices rose further due to lack of supplies from both Russia and the US
- **Preliminary June PMIs**
  - » **The PMIs** surprised sharply at the downside both in the EMU and US in June, down 2 – 3 p to the 51-level . Other US June manufacturing surveys also reported slower growth in June, with a substantial decline especially in new order indices. Delivery times are coming down (at least the delivery times index), and price indices are declining somewhat but remains at very high levels. We expect further lifts in the Chinese PMIs to compensate for the decline in the DM PMIs. Reports out this (manufacturing globally) and next week (services globally)
- **USA**
  - » **Existing home sales** fell but not more than expected, while **new home sales** surprised on the upside in May (and April was revised upwards). Still, the trend for new home sales is clearly down, as for existing home sales. The inventory of existing homes is still very low but slightly up from the bottom in February. The inventory of new homes is rather large, and is increasing rapidly, at least new homes under construction. Price inflation may be slowing. Mortgage rates have increased substantially recent months and will very likely contribute to a further slowdown of the housing market
- **EMU**
  - » **Consumer confidence fell** in June and is almost back to the ATL level in March. Normally, actual households' demand is closely correlated to their reported confidence
  - » **Ifo expectations** fell again in June and are signalling a significant decline in GDP, even if the current situation still is above par
  - » **Interest rate expectations fell sharply**, initiated by the sharp decline in the EMU at Thursday morning, and further by a decline in the US PMIs. Up to 40 bps was removed from the short end of the curve (and even more in the UK, even if news from here was not that bad)

Last week, part II

- **UK**
  - » **Headline inflation** climbed further in May, but just marginally to 9.1%, and annual core inflation slowed 0.3 pp to 5.9%. Core prices rose 0.3% m/m, the lowest gain in 8 months. Strikes have returned, as unions want compensation for the steep rise in the price level
  - » **Retail sales** – in volume terms – has been heading down since last April, fell again in May – and is well below the pre pandemic trend. Consumer confidence was at rock bottom level om June
- **Sweden**
  - » **House prices** fell by 1.2% m/m in May, following the 0.3% decline in April. In Stockholm prices fell by 2.5%, and a further 3%+ setback is reported in the first weeks of June (Valueguard). The Swedish real estate market is really 'interesting' now, both the residential and the commercial market
- **Norway**
  - » **Norges Bank** surprised both consensus, us and the market by hiking the signal rate by 50 bps to 1.25%. The interest rate path was revised up by up to 100 bps, and the peak was lifted by 60 bps and moved 3 quarters forward, to Q4-23.
    - The short end of the curve rose by up to 18 bps, implying that the market had put a 30% probability for a 50-bps hike vs 70% a 25-bps hike. Further out, the bank lifted it's path close up to FRA market's path, and the direct impact was limited. However, longer dated FRA rates fell sharply as rate expectations 'collapsed' everywhere around us Thursday and Friday.
    - Our calculus also implied a 100 bps lift in the path due to higher inflation, lower unemployment, a weaker NOK etc but we assumed the bank would spend two meetings to do the heavy lifting. Beside been 'correct', the best reason for sending a strong hawkish message to the public, is to dampen overall demand before rates are actually hiked that much.
    - NoBa expect inflation to remain well above the 2% target, growth to slow substantially and unemployment to turn marginally up from 2023
  - » **LFS (AKU) unemployment** rose 0.1 pp in April to 3.2% from an 0.2 pp upward revised level in March, we expected a decline to 2.8%. Employment was unchanged. The survey based LFS yields some monthly volatility. The **register based employees stats** reported a 0.2% increase in May. Growth in employment is now slowing, so far mostly due to lack of supply of labour
  - » **Credit growth** was unch at 4.8% y/y. Households are slowing, now to 4.7%, while Mainland corporate debt is up 6.6%
  - » **Housing starts** rose in May, and the trend is at least flat, at 31' starts (annual rate) while other construction activity has slowed slightly recent months mostly due to few new projects in the public sector. NoBa's Regional Network survey signalled lower growth in the construction sector

The Calendar: Manuf. PMI/ISM. US consumption, prices. EMU inflation. Riksbank up 50? +NAV

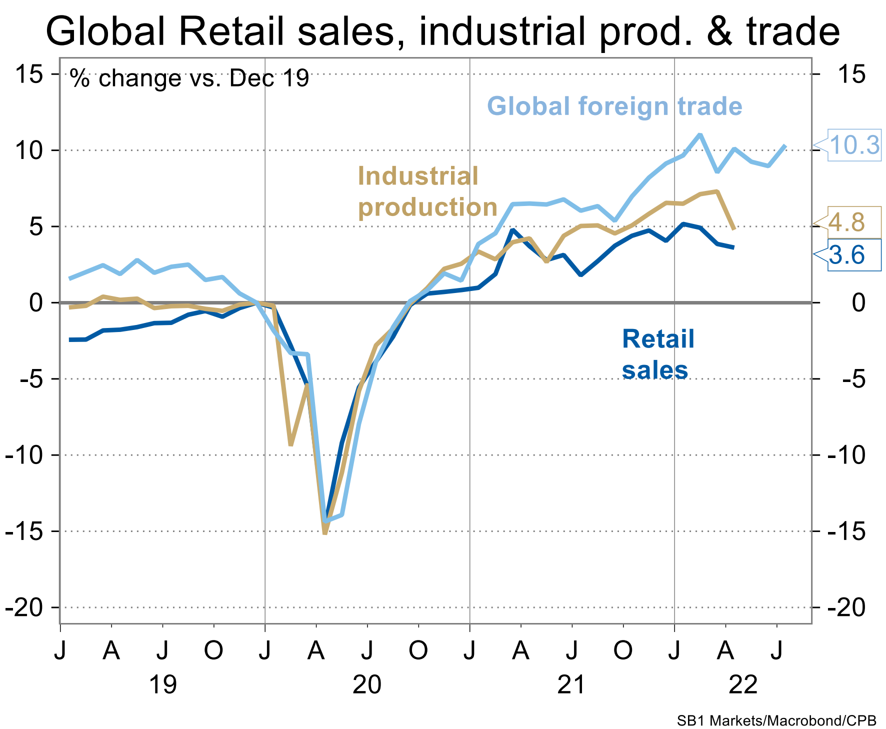
Time	Count.	Indicator	Period	Forecast	Prior
Monday June 27					
08:00	NO	Retail Sales W/Auto Fuel MoM	May	(0.0%)	-0.9%
14:30	US	Durable Goods Orders	May P	0.1%	0.5%
14:30	US	Cap Goods Orders Nondef Ex Air	May P	-0.1%	0.4%
16:00	**US**	**Pending Home Sales MoM**	**May**	**-3.5%**	**-3.9%**
Tuesday June 28					
08:00	SW	Retail Sales MoM	May		0.4%
14:30	US	Advance Goods Trade Balance	May	-$101.9b	-$105.9b
15:00	US	Case/Shiller House prices MoM	Apr	1.7%	2.4%
15:00	US	Case/Shiller House prices YoY	Apr	21.1%	21.2%
16:00	US	Consumer Confidence, Conf. B.	Jun	100.6	106.4
Wednesday June 29					
01:50	JN	Retail Sales MoM	May	1.0%	0.8%
08:00	NO	Hotel Guest Nights	May		
08:00	SW	Household Lending YoY	May		6.8%
09:00	SW	Consumer Confidence	Jun		70.4
09:00	SW	Manufacturing Confidence SA	Jun		125.5
10:00	EC	M3 YoY, credit growth	May	5.8%	6.0%
11:00	EC	Economic Confidence	Jun	103	105
14:00	GE	CPI YoY	Jun P	8.0%	7.9%
14:30	US	GDP Annualized QoQ	1Q T	-1.4%	-1.5%
Thursday June 30					
01:50	JN	Industrial Production MoM	May P	-0.3%	-1.5%
03:30	CH	Manufacturing PMI	Jun	50.3	49.6
03:30	CH	Non-manufacturing PMI	Jun	50.1	47.8
08:00	GE	Retail Sales MoM	May	0.5%	-5.4%
09:30	**SW**	**Riksbank Policy Rate**	**Jun-30**	**0.75%**	**0.25%**
11:00	**EC**	**Unemployment Rate**	**May**	**6.8%**	**6.8%**
14:30	US	Personal Income	May	0.5%	0.4%
14:30	US	Personal Spending	May	0.5%	0.9%
14:30	**US**	**Real Personal Spending**	**May**	**-0.3%**	**0.7%**
14:30	**US**	**PCE Core Deflator MoM**	**May**	**0.5%**	**0.3%**
14:30	US	PCE Core Deflator YoY	May	4.8%	4.9%
Friday June 31					
03:45	CH	Manufacturing PMI, Caixin	Jun	49.4	48.1
08:30	SW	Manufacturing PMI	Jun		55.2
10:00	EC	Manufacturing PMI	Jun F	52.0	52.0
10:00	NO	DNB/NIMA PMI Manufacturing	Jun	('54.0)	54.9
10:00	**NO**	**NAV Unemployment Rate**	**Jun**	**1.6%**	**1.6%**
11:00	EC	CPI Estimate YoY	Jun	8.5%	8.1%
11:00	**EC**	**CPI Core YoY**	**Jun P**	**3.9%**	**3.8%**
16:00	**US**	**ISM Manufacturing**	**Jun**	**55**	**56.1**
	US	Auto sales	Jun	13.50m	12.68m

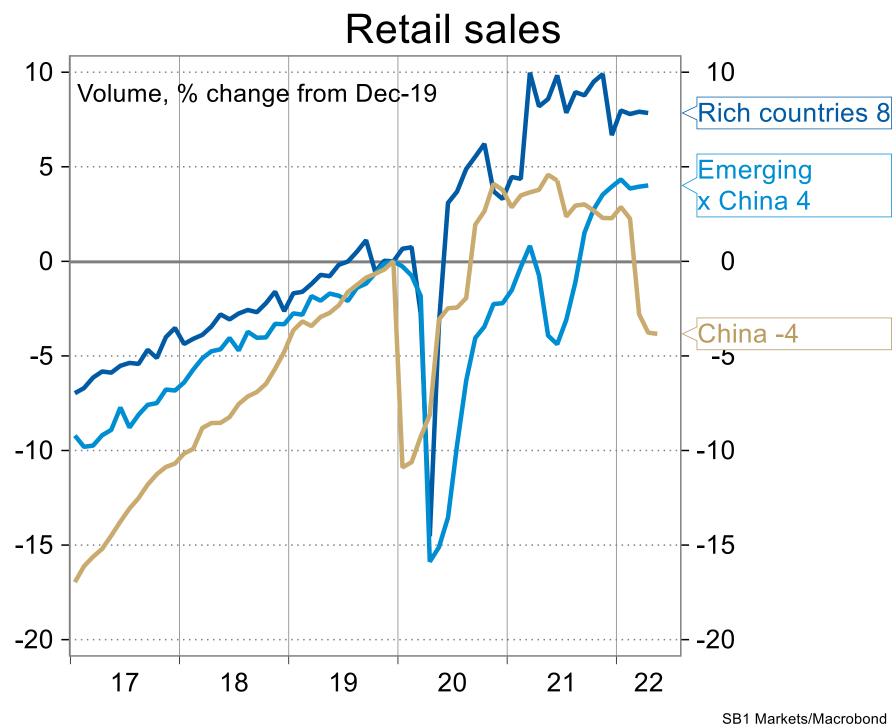
- **Manufacturing PMI/ISM**
  - » **Rich countries** have reported a slowdown in June but we assume that the manufacturing sector in China should move the other way, stabilising the global PMI. The delivery times index very likely fell further in June, and price indices retreated – but remain In the US, the ISM will very likely decline and possibly more than the expected 1.1 to 55.0, given the setback in regional surveys in June, as well as in the S&P PMI survey (aka Markit's survey). New orders are reported sharply down in the published surveys. The Norwegian PMI fell sharply in May but we do not expect a further large decline in June, as NoBa's network survey reported upheld activity
- **USA**
  - » **Pending (existing) home sales** will probably confirm tell that the housing market has turned the corner, while **home prices** have normally been lagging substantially. Now the rapid surge in mortgage rates may depress even prices quite soon. New stats out this week
  - » **Personal spending** probably fell in May, confirming low growth in consumption (and in GDP) in Q2. The core PCE deflator is expected up 0.5% m/m
- **EMU**
  - » **CPI inflation** is expected further up in June, both the headline (to 8.5%) and the core (to 3.9%). The latter is approaching 4%
  - » **The unemployment rate** flattened in April, and is expected unch. in May, at 6.8%, the lowest level since 1981! The monthly decline in no. unemployed has slowed – at the same time as vacancies have soared to the highest levels on record
- **Sweden**
  - » **The Riksbank** is expected to do as most others these days, and hike the signal rate by 0.50 pp, and then reach 0.75%. We assume the bank will signal a steeper interest rate path than it did in April, when the path was lifted by up to 150 bps. The market is way above the Riksbank's path
- **Norway**
  - » **NAV unemployment** has fallen much faster than Norges Bank has assumed, and explained some of the lift in the interest rate path last week. We expect the seas. adjusted rate to decline to 1.6% in June from the 1.7% rate in May. The actual rate may be unch. at 1.6%
  - » **Retail sales** are still well above pre-pandemic trend, which though was rather muted, and the downside is probably not that large from here. However, the surge in total inflation is squeezing real disposable income, and interest rates are on the way up. Spending abroad has not fully recovered either

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

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

Global industrial production fell some 2% in April due to the 7% setback in China. Will recover in May

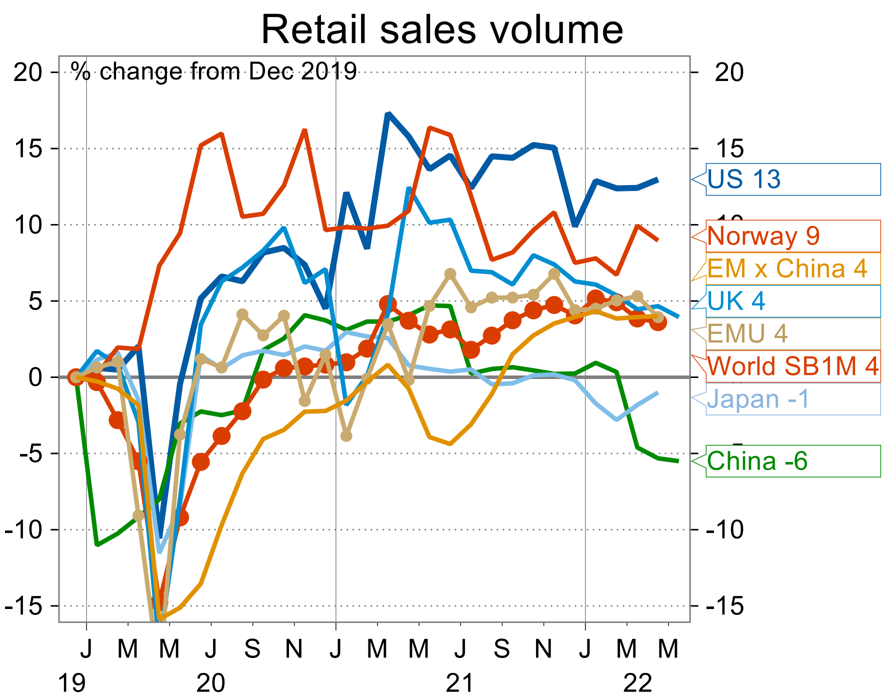


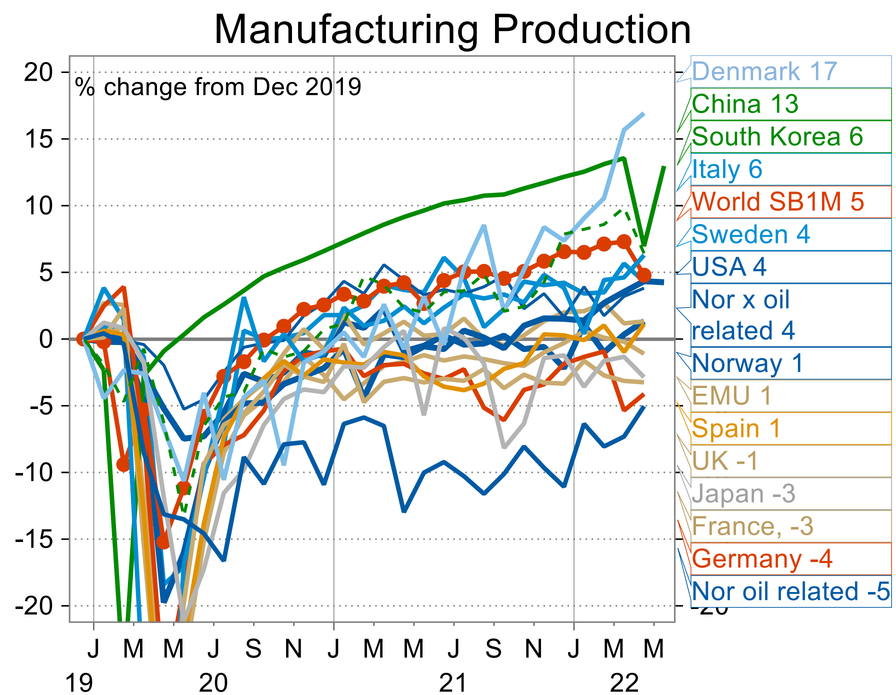


Global trade: The last months are estimates from the Kiel Institute, they are also making a prognoses for the next month based on shipping activity etc.

Retail sales have slowed since January, mostly due to China

However, both other EMs and most rich countries are reporting slower sales too





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

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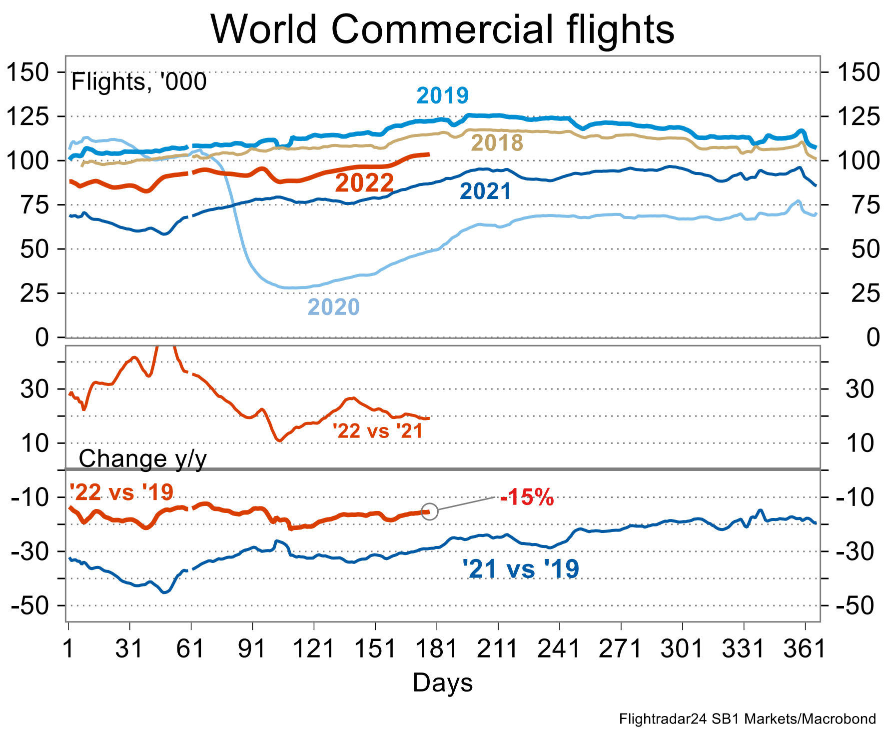
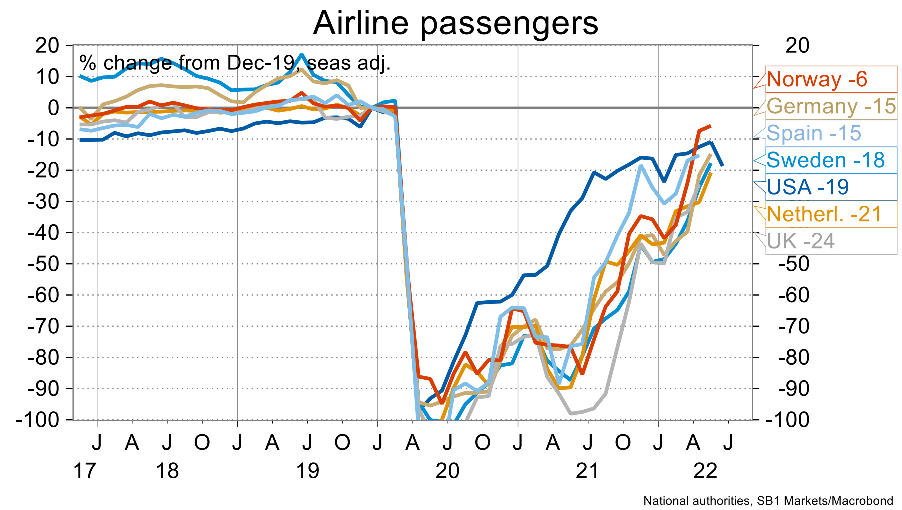
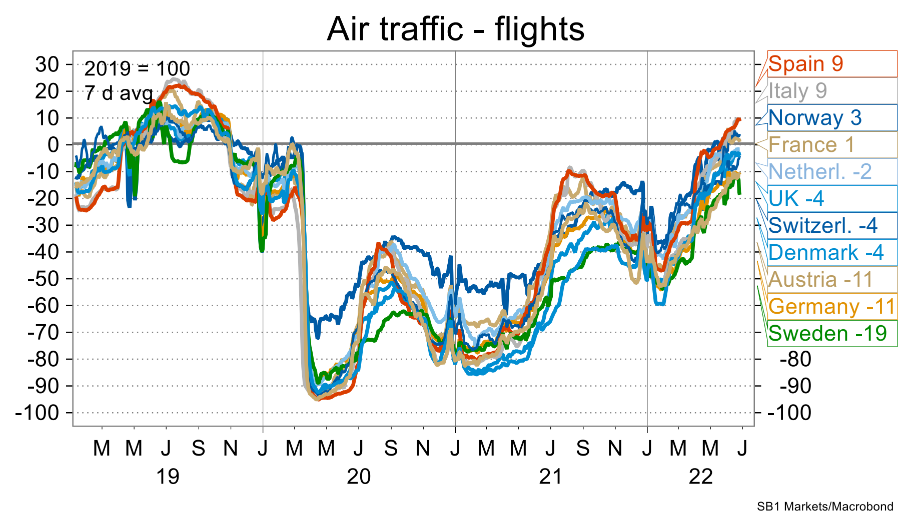
Global airline traffic on the way up, but not more than the seasonal normal



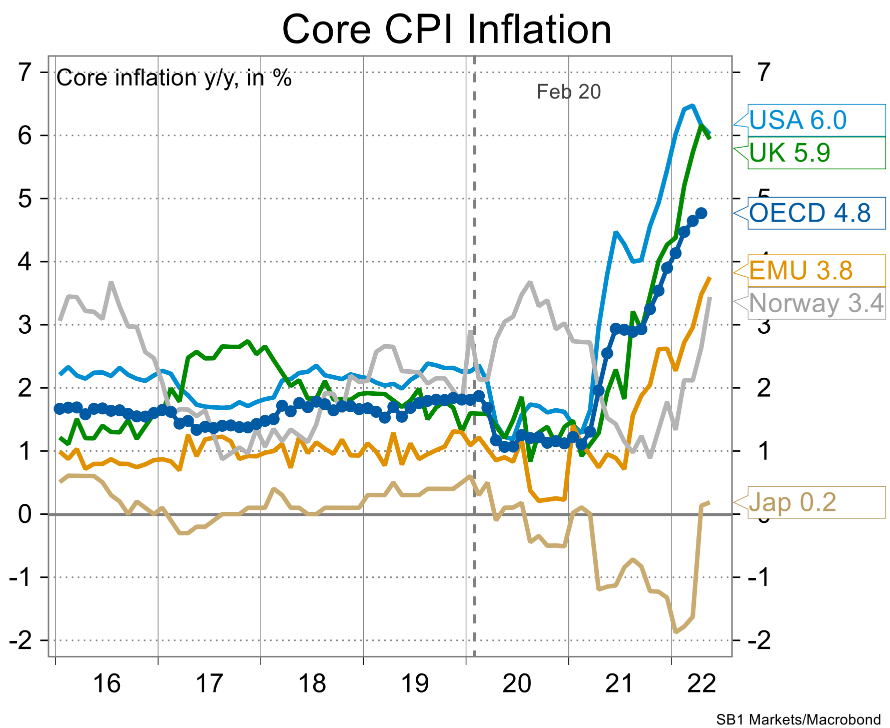


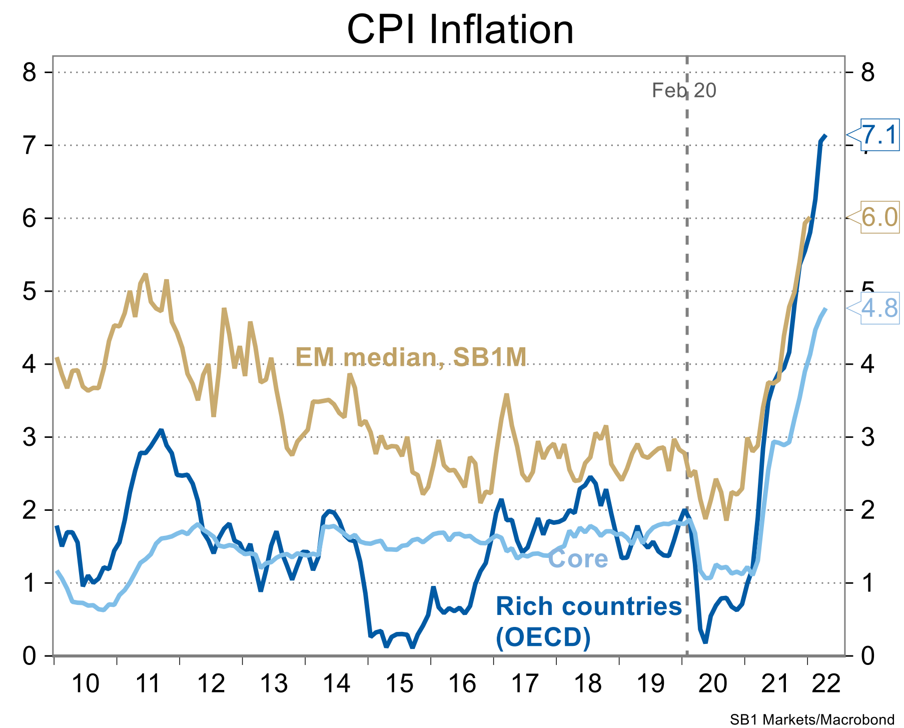


Global trade: The last months are estimates from Kiel Institute

Inflation still the main challenge most places

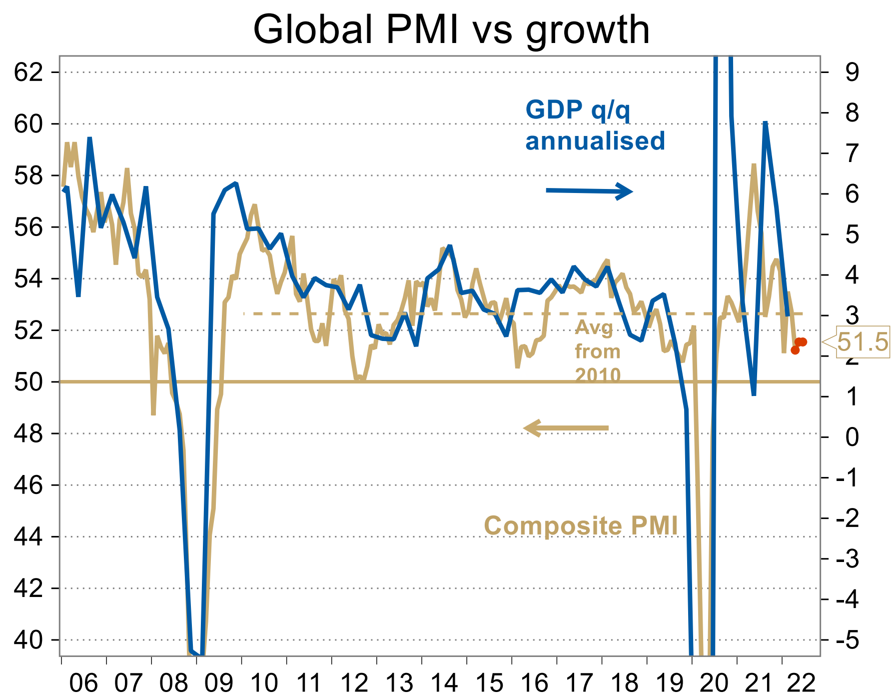
Energy prices the main culprit, but core inflation has turned up most places



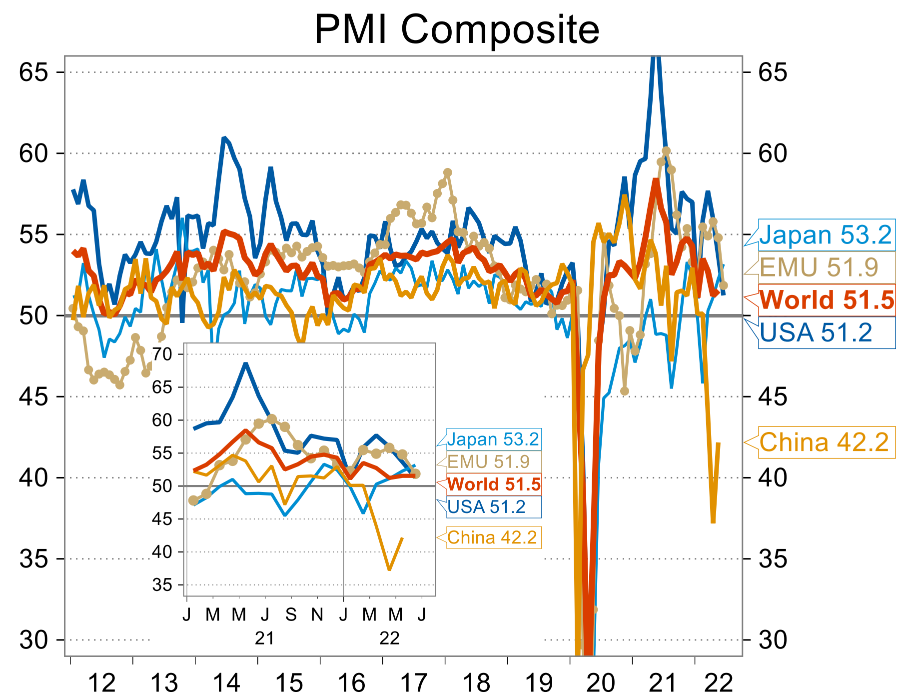


Will China save the day in June? The PMIs fell further in the rich part of the world

We assume Chinese PMIs will recover sharply in June, and help keeping the global PMIs close to unch



SB1 Markets/Macrobond



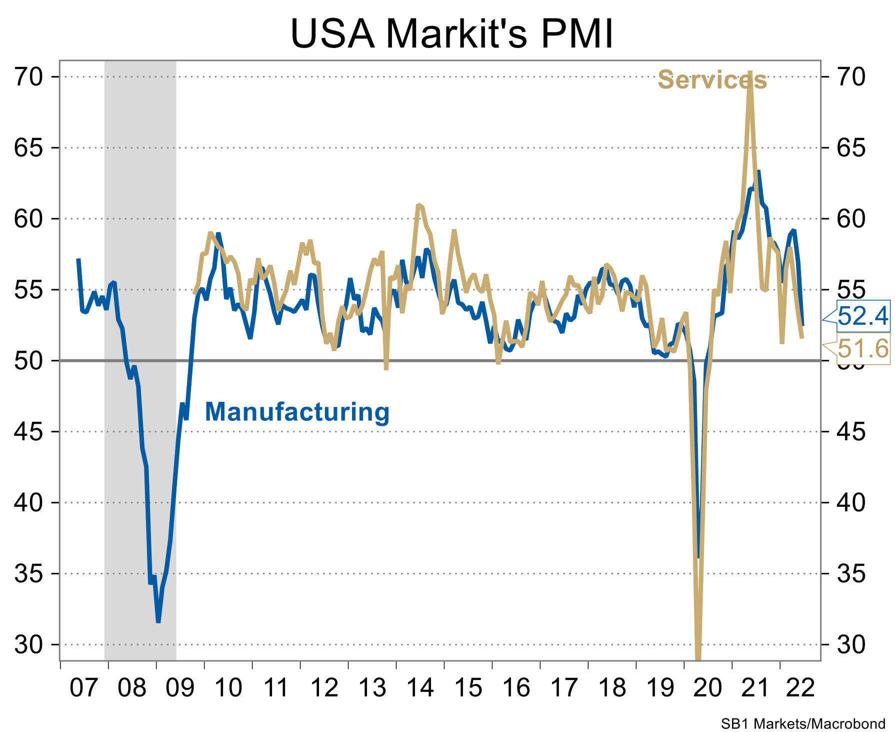
Source: IHS Markit, SB1 Markets, Macrobond

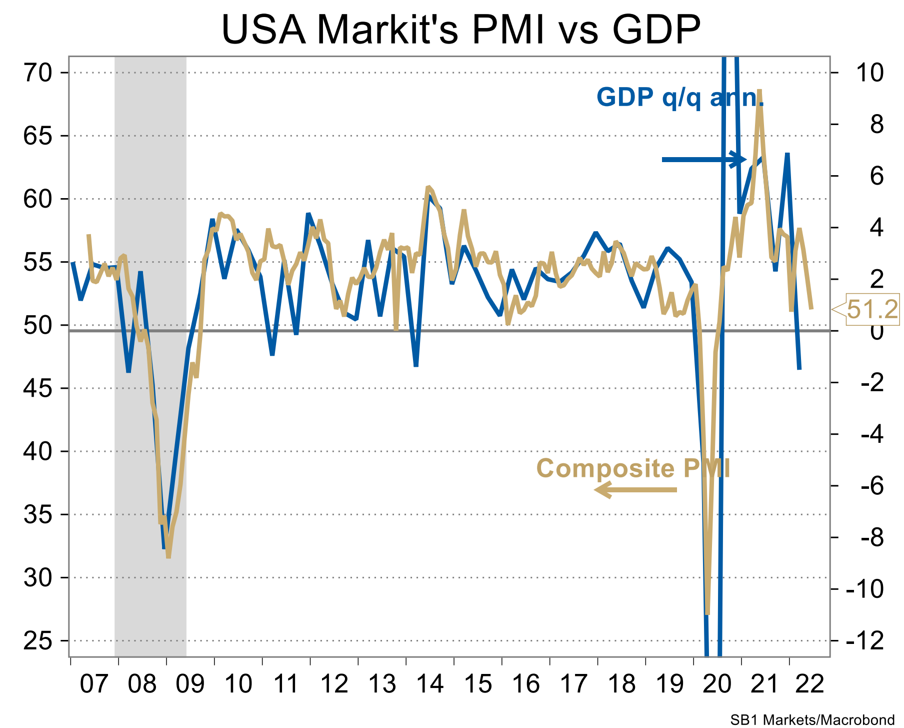
- The PMIs fell in US and EMU, and much more than expected both places. The further recovery in Japan (and close to unch prints in Australia and UK) will not prevent the DM average to decline further in June

Our estimates are based on the preliminary PMIs from US, China, EMU, Japan UK, Australia. The estimates are uncertain, but usually by less than 0.5 p

Both services and the manufacturing sector is slowing rapidly, says the PMIs

The composite fell 2.2p to 53.8, expected at 55.5 → 1% GDP signalled

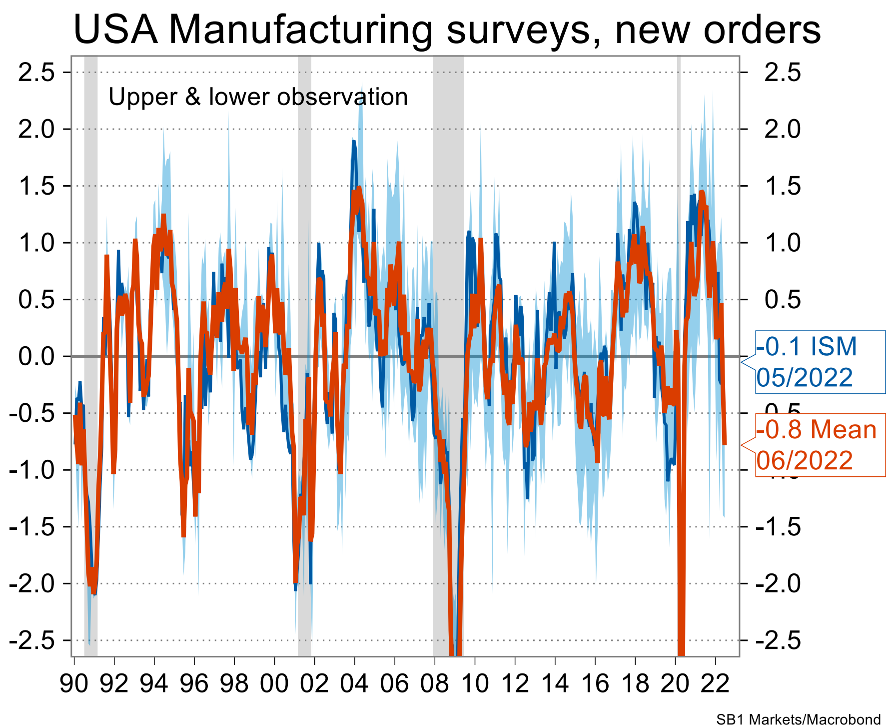




- **The composite PMI** has been trending flattish since August last year – while GDP was far better than the survey indicated in Q4, and far worse in Q1 – on average 2.8%. The May PMI signals somewhat lower growth – but far from any setback in the economy
  - » The decline was due to a 2.2 p setback in services to 53.5 (expected 55.5), and…
  - » … a decline in the output component in the manufacturing survey by 2.3 p to 55.2. The total manuf. index fell 1.7 p 55.7. Both total & output is above average but both are trending down. Together with regional Fed surveys, a substantial decline in the ISMs in May are likely
- **The price indices** were mixed: Input prices rose the fastest ever, while growth in output prices slowed – to the 2nd highest level ever
- **The delivery times index** fell sharply, signalling some easing of supply chain challenges

New orders are slowing rapidly and so far, June has been rather dismal

Something has probably hit US manufacturers in June



- Recessions have started with better new order data than these

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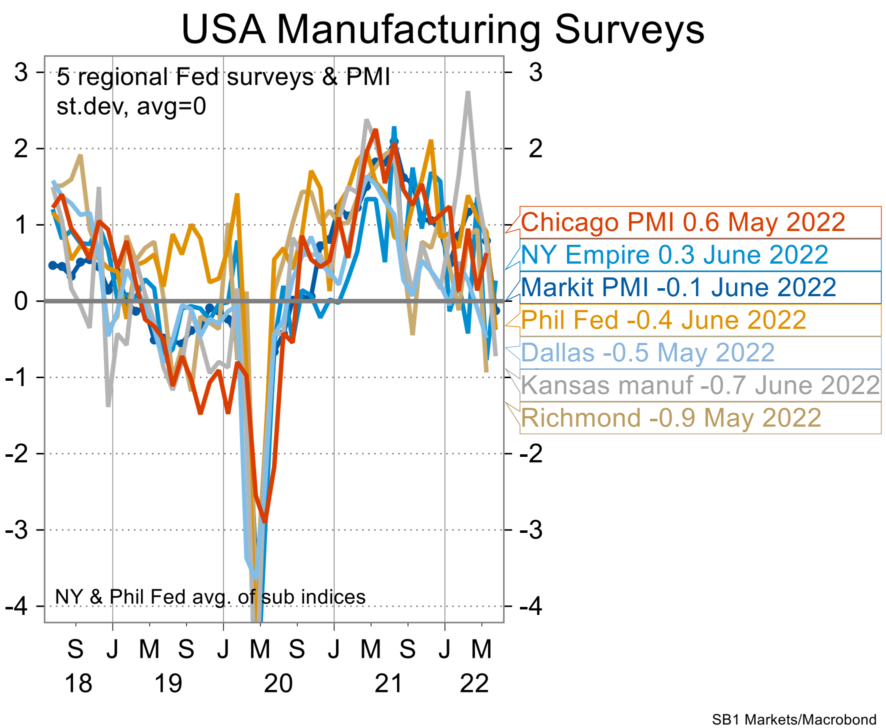
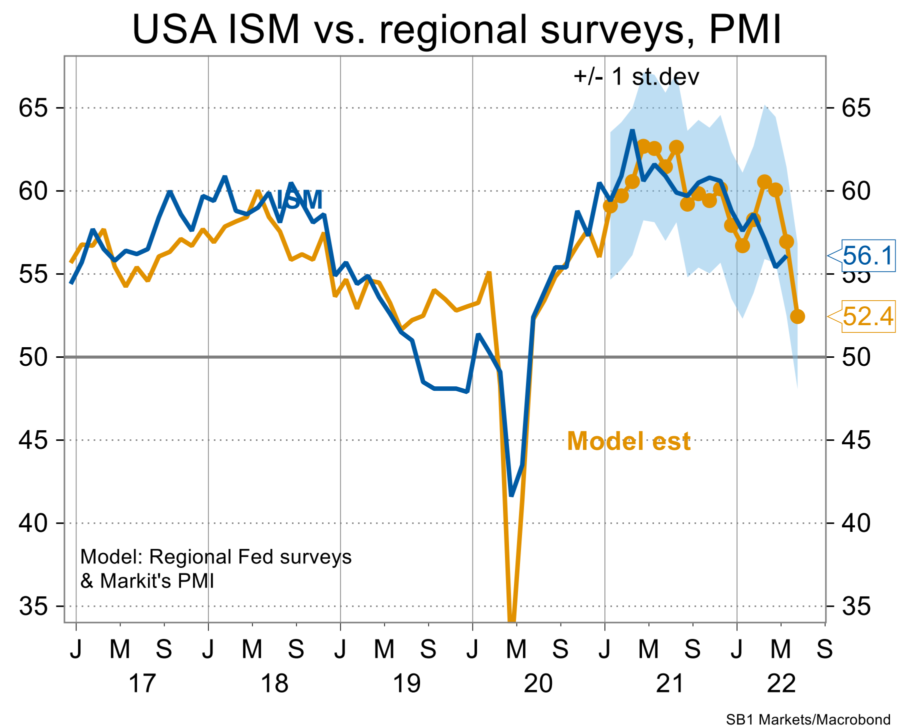
So far: May manufacturing surveys signal a substantial drop in the ISM in June

NY Empire recovered in June, the while all other surveys so far published are down. ISM to 52 - 53?

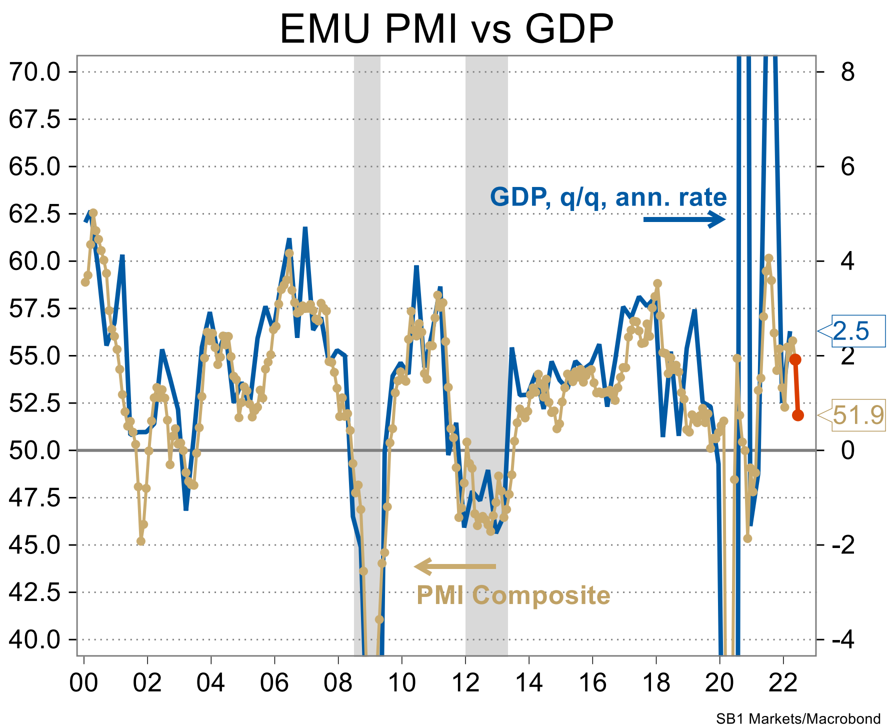


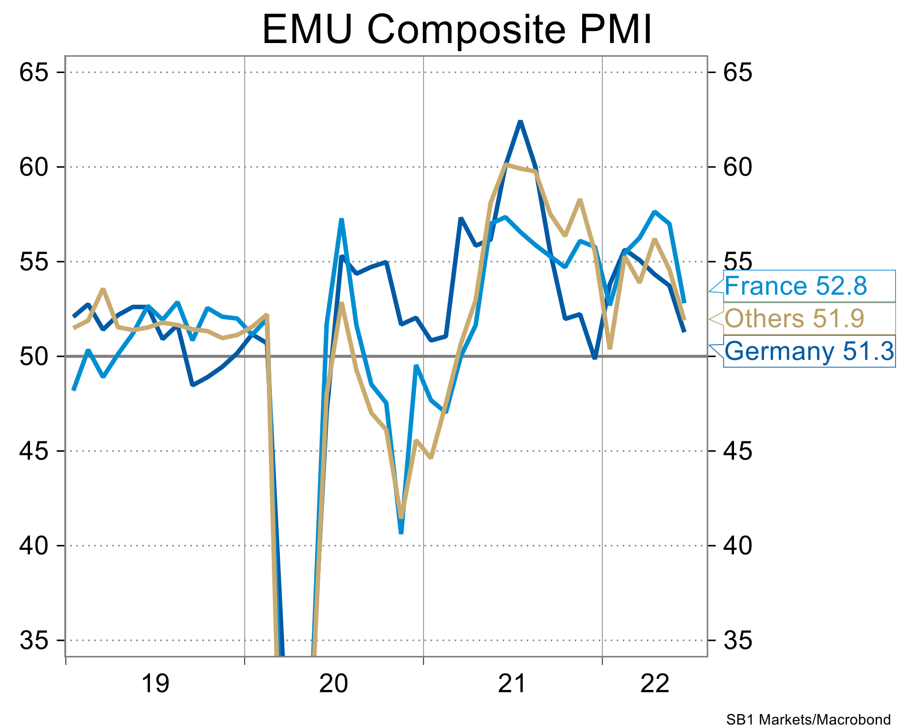


- 2 out of 3 regional Fed manufacturing surveys published so far, and Markit's PMI, fell in June. Our model signals a significant decline in the ISM index which is published next Friday
- Big picture: Growth is slowing sharply but manufacturing indices do no signal that the economy has entered a recession (even if some order indices are really worrisome

The PMIs down all over the place but the composite PMI at 51.9, GDP<1%

France lost most ground in June, but also Germany and the 'others' (avg of Italy & Spain) fell

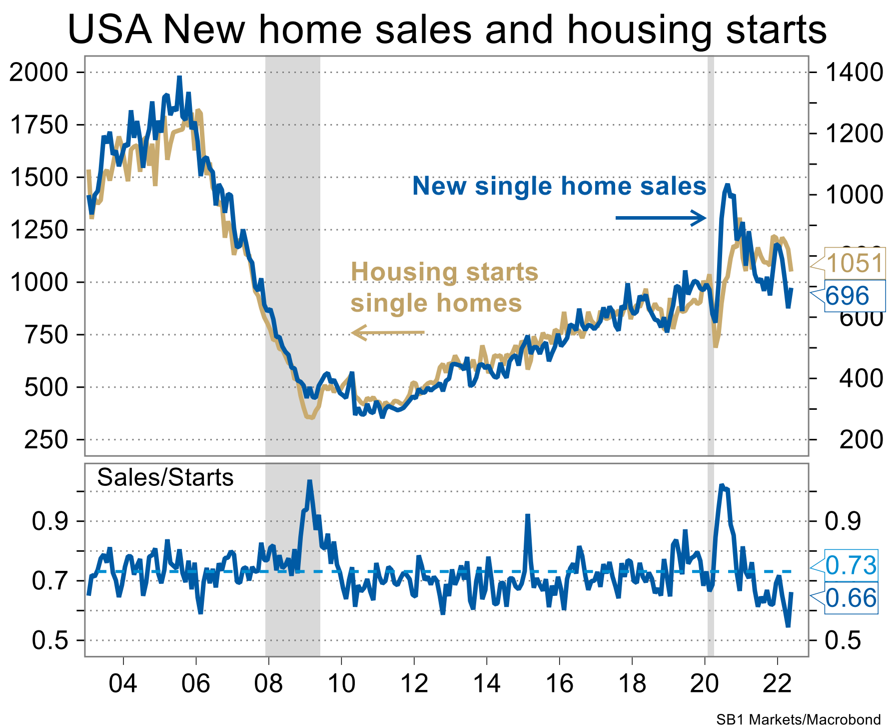


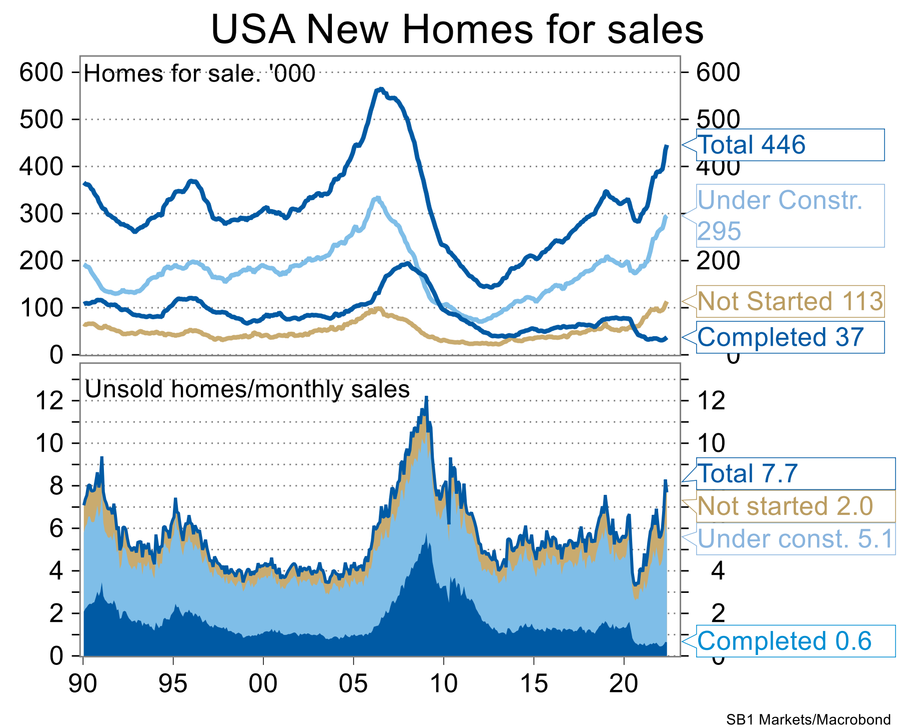


- **The composite PMI** declined 2.9 p in June, to 51.9, way below the 54.0 forecast. The level signals less than 1% GDP growth
  - **Services** reported much slower growth, the index fell by 3.3 p to 51.9, 2.7 p below the consensus forecast, and below the lowest estimate
  - Manufacturing also slowed, the PMI fell 2.6 p to 52.0, 2.7 p below consensus. However, the output index fell to below 50, and the new order index fell to 44.7 – a very weak print!
- **The delivery times** and price indices fell but all remain at very high levels, signalling a continued high price pressure
- **The ECB** will not change its plan due to these data, a July hike is very likely – if a catastrophe does not take place in the between time

New home sales surprised at the upside in May but the trend is very likely down

The inventory is rather large, and price increases are slowing

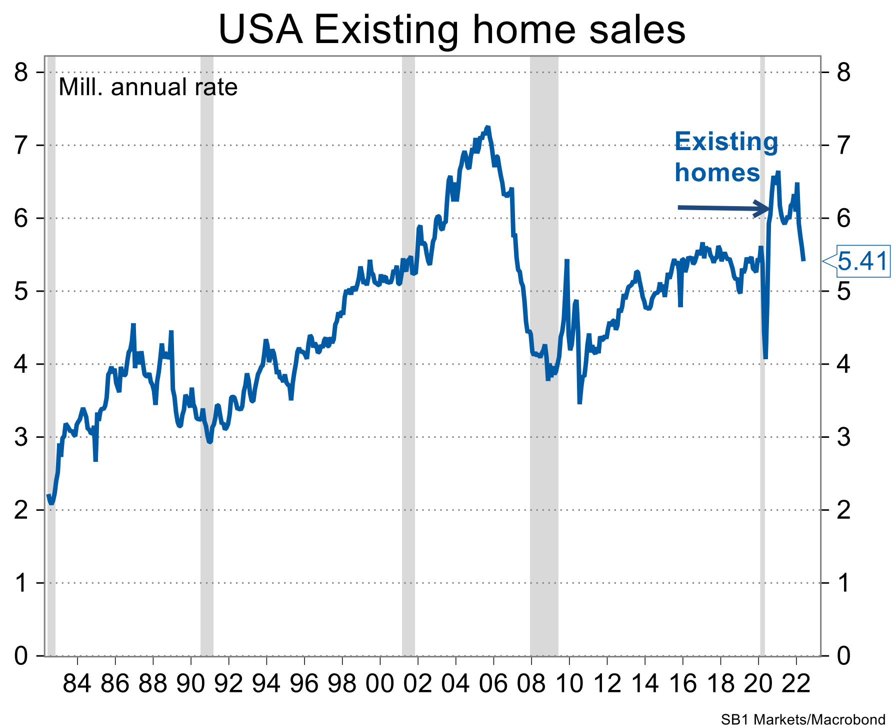


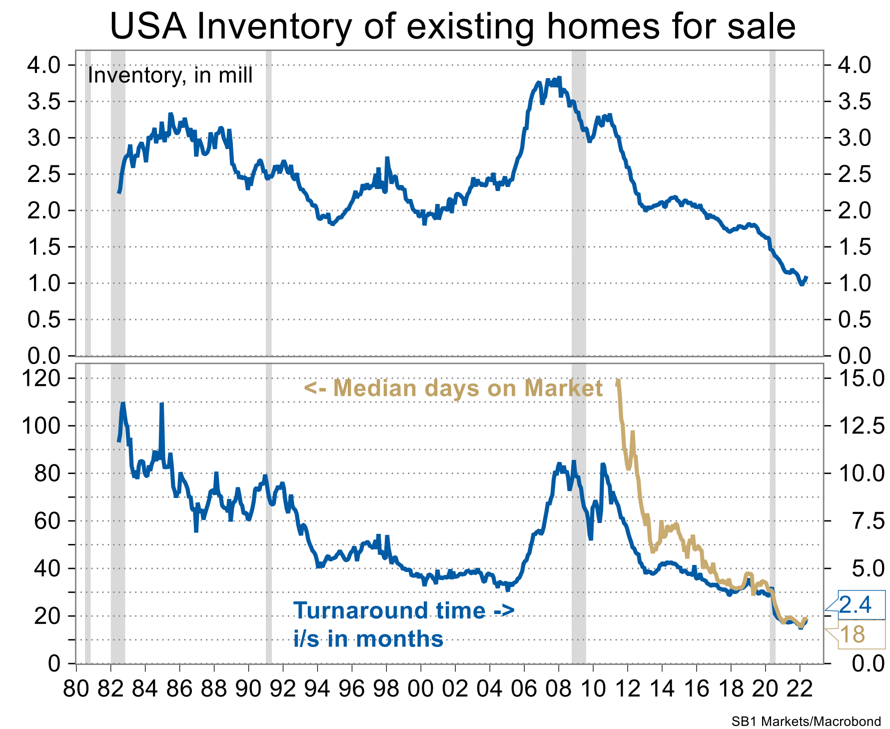


- **New single home sales** rose to 696' in May from 629' in April, revised up from 591', expected down to 587'. In sum 12% higher than expected! Still, sales are still heading down – and we expect more to come
- **The inventory of unsold homes** is climbing rapidly, now up to 446' units, up from below 300' in Aug-20. Measured in month's of sales, inventories equal 7.7 months, from the record low at 3 in Aug-20. Most of the inventory is 'for real', either completed homes (but the level in this category is very low) or under construction (and these homes will be completed) – as the supply side responded to the strong increase in demand. A steep increase in number of homes for sales that are not yet started, also confirms the strength of the supply side
- Prices fell slightly in May, and the underlying growth pace has slowed. Still, prices are up 14% y/y

Existing home sales further down in May, and price inflation slowed, to ‘just’ 0.6%

The inventory is still very low – but has increased marginally the past 3 monhts

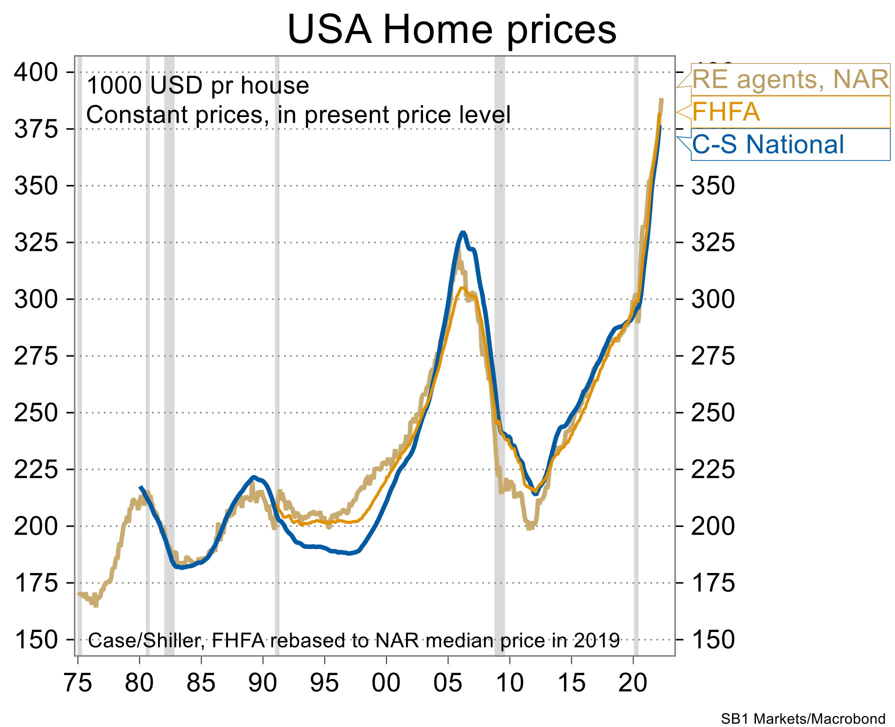


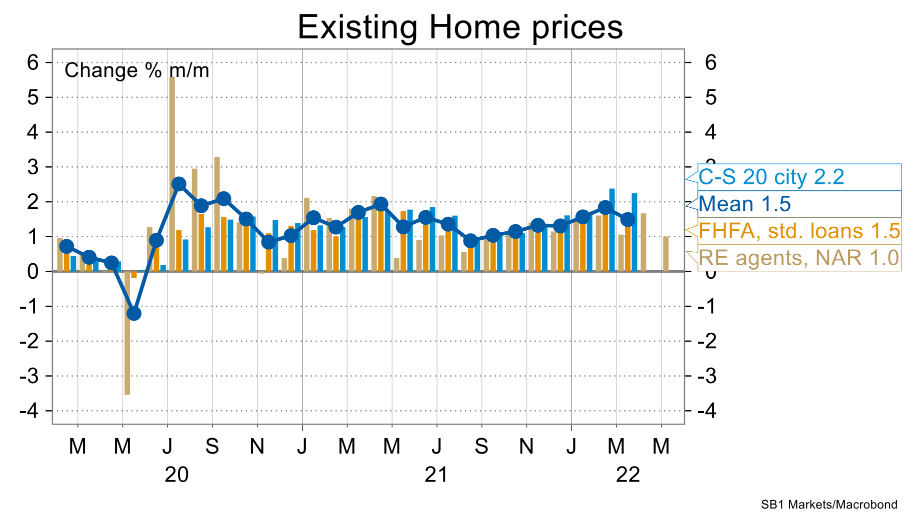


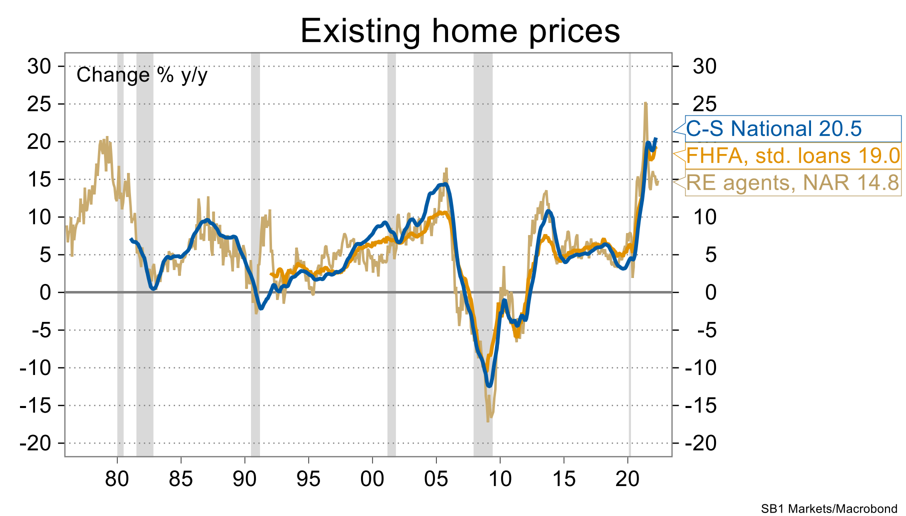
- Sales of **existing homes** fell to 5.41 mill (annualised rate), from 5.60 mill in April, as expected. Sales have fallen 17% from local peak in January, and are trending down – from a high level in mid ’20. **Pending sales** signals a further decline in actual transactions in June
- **The inventory of unsold homes** rose marginally in May, as in March and April – from the ATL level in February
  - » The inventory equals 2.4 months of sales (up from 2.2 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 18 days (down from 19 last month but up from 16 in Feb). Before the pandemic the time on market was at 30 days (and 120 days in 2011!)
- **Prices** rose 0.6% m/m in May, *check more next page*
- **Mortgage rates** have shot up recent months – and the decline in sales is probably due to a declining demand

Existing home prices up 'just' 0.6% in May (or really in April). What now?

A 0.6% price inflation is not low (7.4% annualised) but far below house price inflation past 2 years







- **Prices** rose 0.6% m/m in May, down from 1.9% in April (our seas. adj.) May prices are mostly based on transactions agreed upon in April. The annual rate climbed 0.6 pp to 14.8% (prices were flat in May last year). The trend is still down
- Other indices are up 19% - 21% y/y. Prices are normally lagging sales by almost 1 year, and the recent decline in sales very likely signals a turnaround in prices too
- Home prices are up some 38% from before the pandemic, and way above the 2006 level, even in constant prices (up some 15%)

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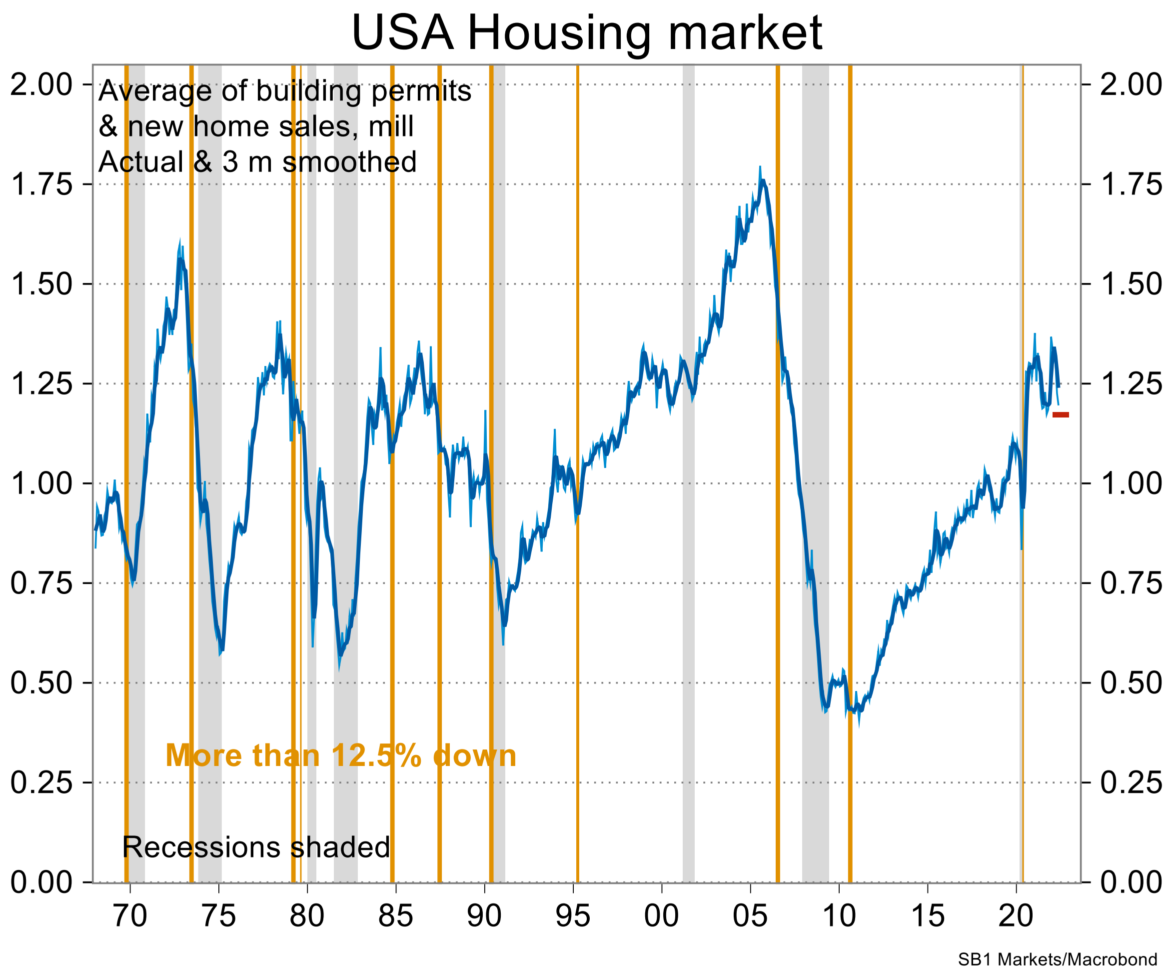
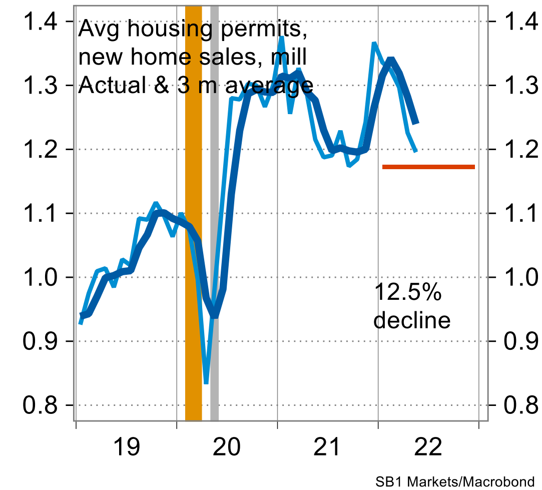
Housing vs. recessions: The red line is not crossed but the direction is set?

Both building permits and new home are trending down but not yet sufficient to ‘declare’ a recession

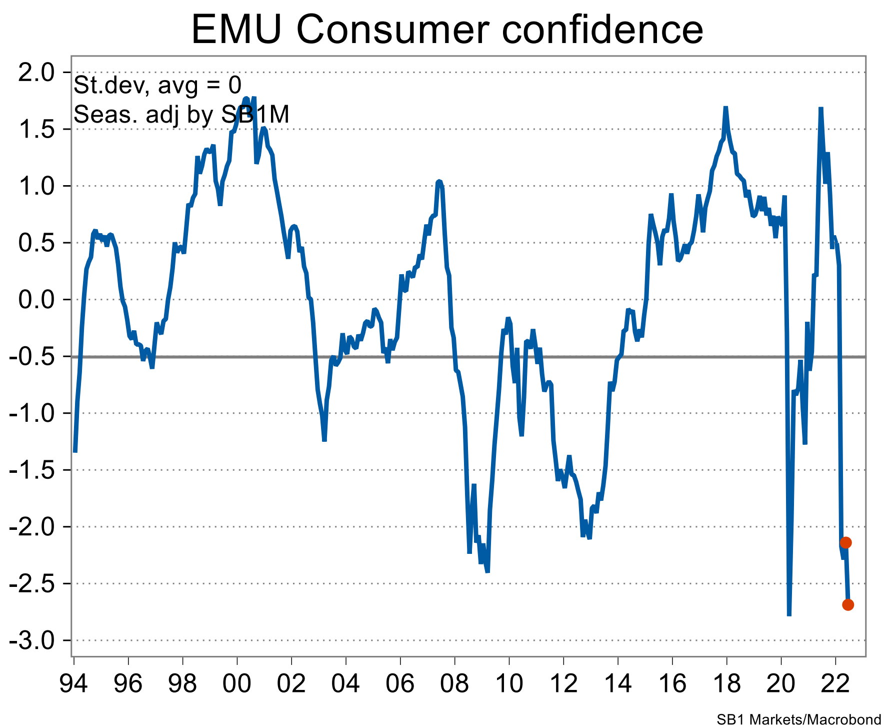


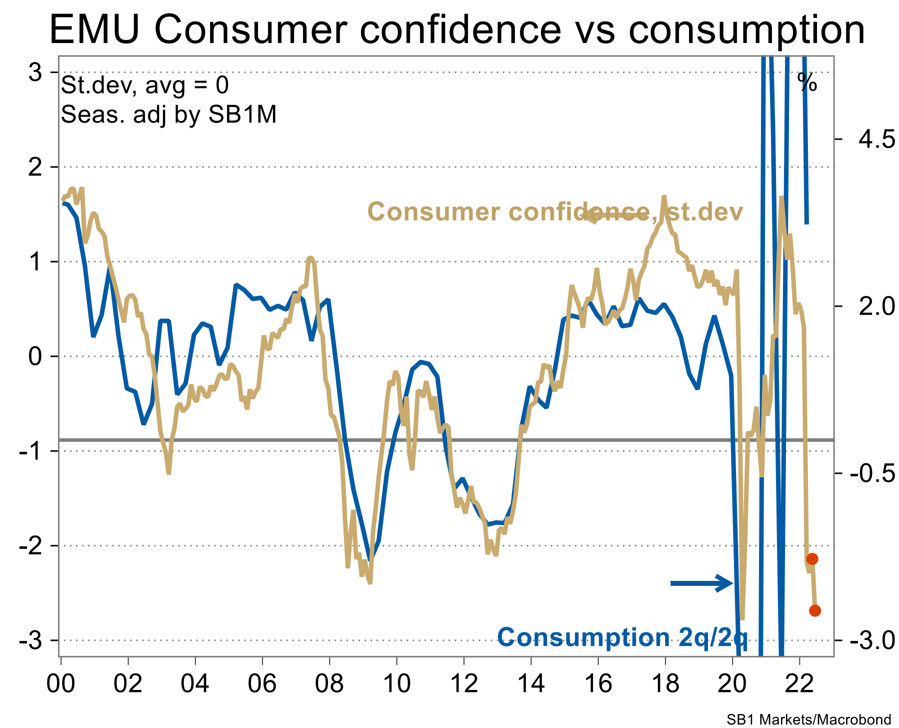


- Most recessions are ‘housing recessions’ as demand for housing and residential investments declines substantially ahead of and during recessions
  - » The only exception in recent decades was the ‘Nasdaq’ recession in 2001
  - » In addition, the pandemic recession was not caused by a setback on the housing market
- At the chart above, we have marked declines of more than 12.5% in the 3 m average of the average of building permits and new homes sales with a yellow line
  - » 1984 and 1987, where interest rates were hiked, soft landings, and no recession. (the 2010 decline was just after the GFC)
  - » The other 7 lines: A recession followed

Consumer confidence further and sharply down in June, just Apr-20 even worse

Inflation and a war is more important than the lowest unemployment rate since 1980

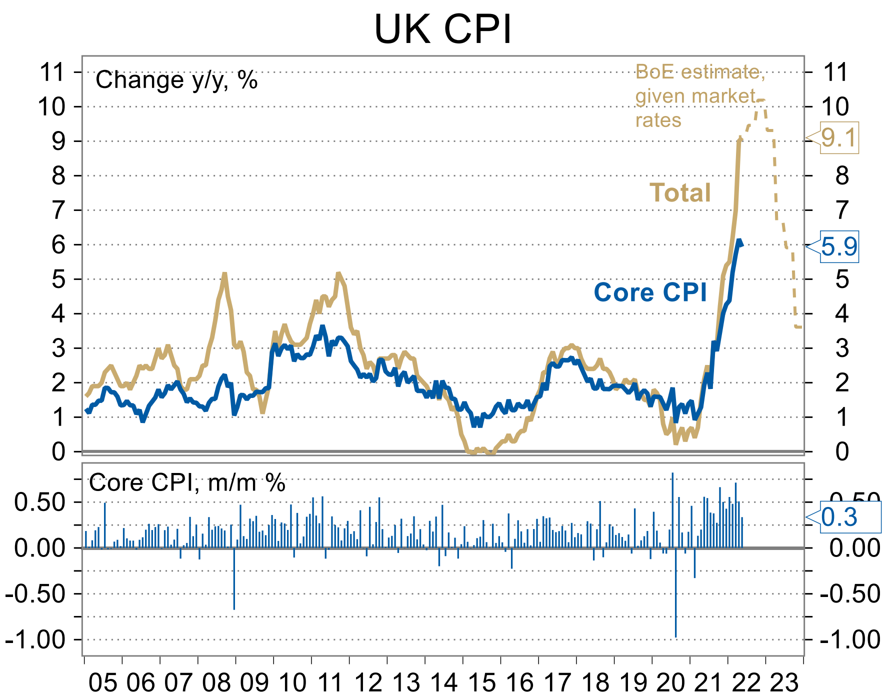


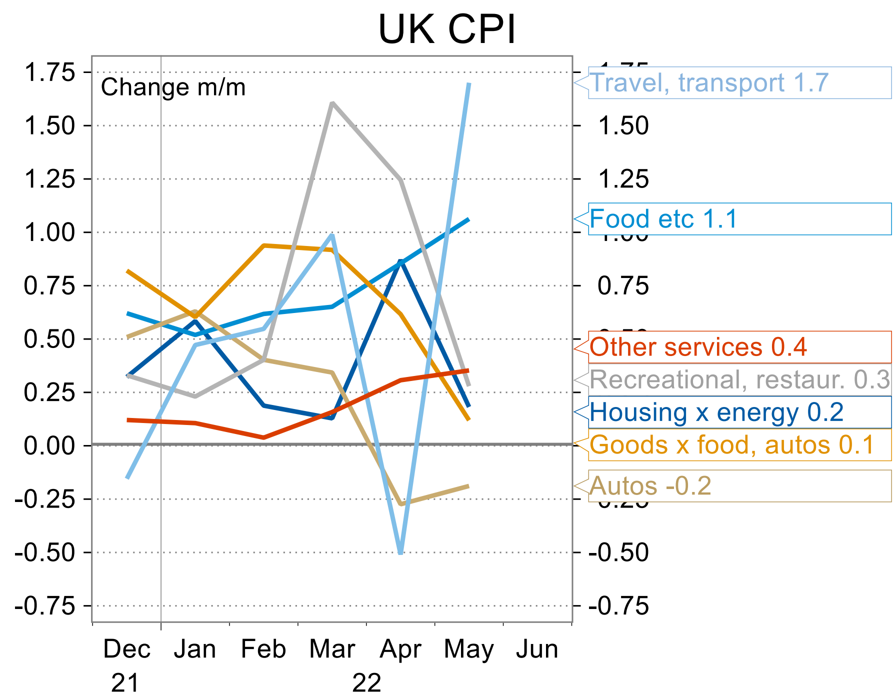


- **The confidence index** fell 3.1 p to -23.6, expected up 0.6 p to 20.5. The decline equals 0.6 st.dev, and the level in June is -2.7 st.dev below avg
- **The war** has been around for 4 months, at most likely it does not constitute an even larger negative drag on the sentiment. Thus, **inflation** is probably to blame. **Interest rates** will be hiked – and the rest of the yield curve has taken big leaps upwards, but we doubt that can explain the decline in sentiment in June
- Usually, consumer confidence is tightly correlated to growth in household demand. If so…

Headline inflation marginally up, the core marginally down –to 9.1% & 5.9%...

Bank of England is looking for 11%+ in October

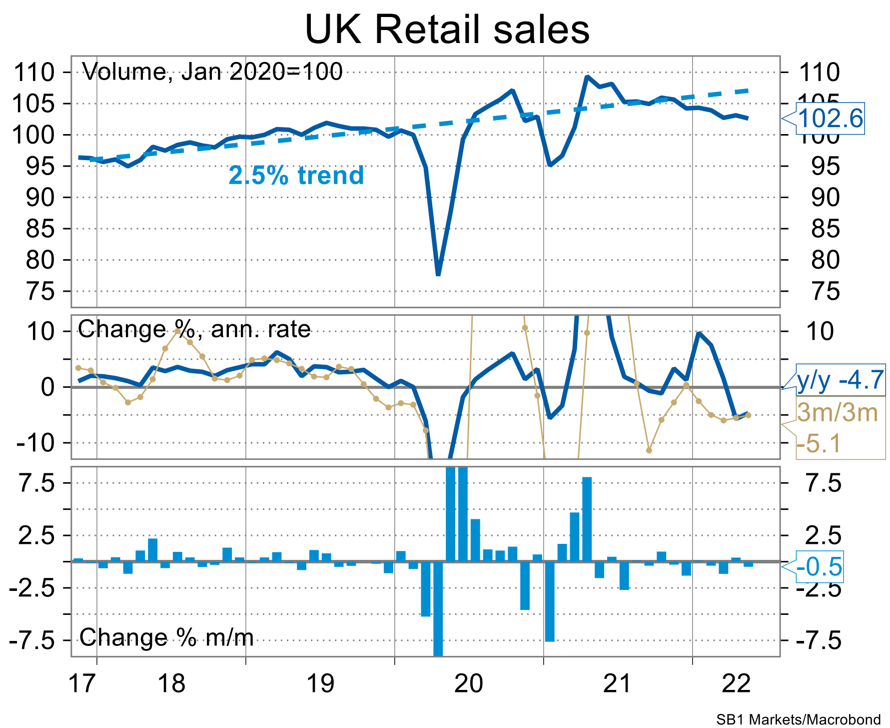


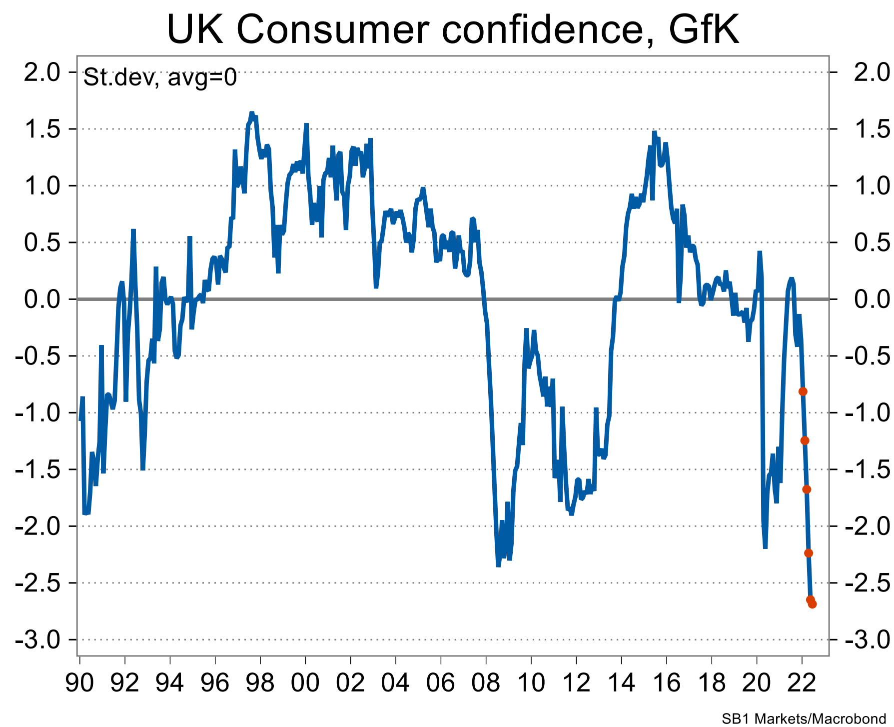


- **The total CPI** rose 0.5% m/m in May, following the unprecedented 2.2% lift in April, when the semi-annual price adjustment of energy prices were implemented. The annual rate at 9.1% (as expected) is highest since 1982
- **Energy** has lifted the headline y/y rate by 3.5 pp. The regulated price cap for energy was lifted substantially in April (a semi-annual adjustment, the next in October)
- Food prices rose 1.1% in May, and they are up 7.6% y/y, lifting the headline by 1.0 pp
- The **core CPI** (ex food and energy) rose 0.3% m/m, the lowest pace in 8 months The core is up 5.9% y/y, down from 6.2%, expected down to 6.0%
- Auto prices have fallen the past 2 months, and price increases for goods x autos & food have slowed too. However, service prices are on the way up
- All major sectors are reporting growth above 2%

Retail sales are trending downwards. In volume terms, that is

Sales fell 0.5% in May, less than expected but April was revised down by 1pp to 0.4%





- **Retail sales** peaked last April, and the gradual decline brought sales down to well below the pre-pandemic 2.5% growth path. Sales are down at a 5.1% pace measured 3m/3m, a substantial drag on GDP growth
- **Consumer confidence** fell just marginally in June but the level is very low, -2.7 st.dev below average, a new ATL. In last November, the index was 0.3 st.dev below average
  - » High inflation, declining real wages and higher interest rates may be the most important reasons. Beside that, the labour market is strong, the unemployment rate is low

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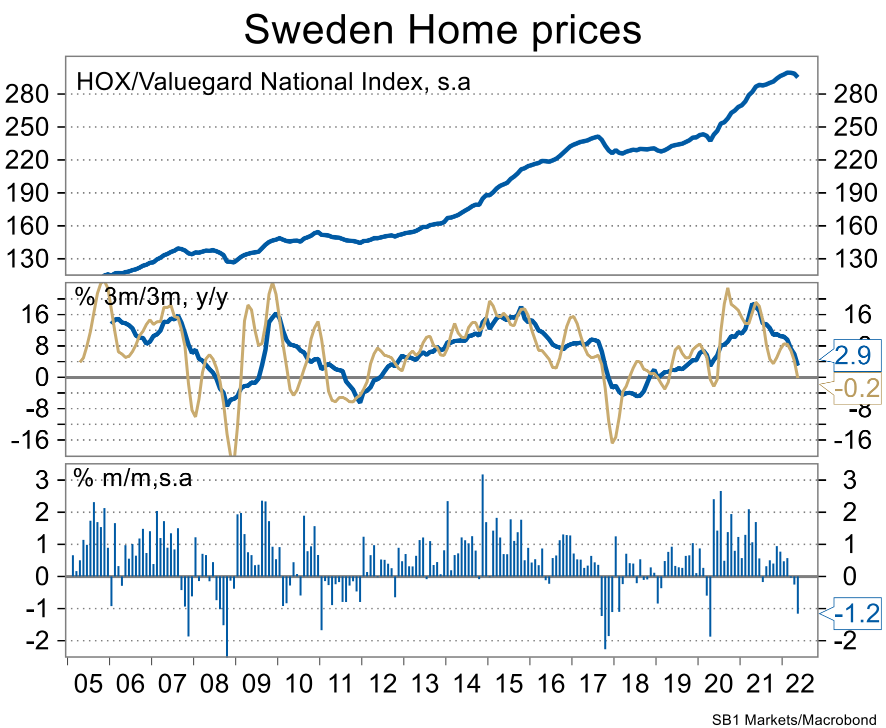
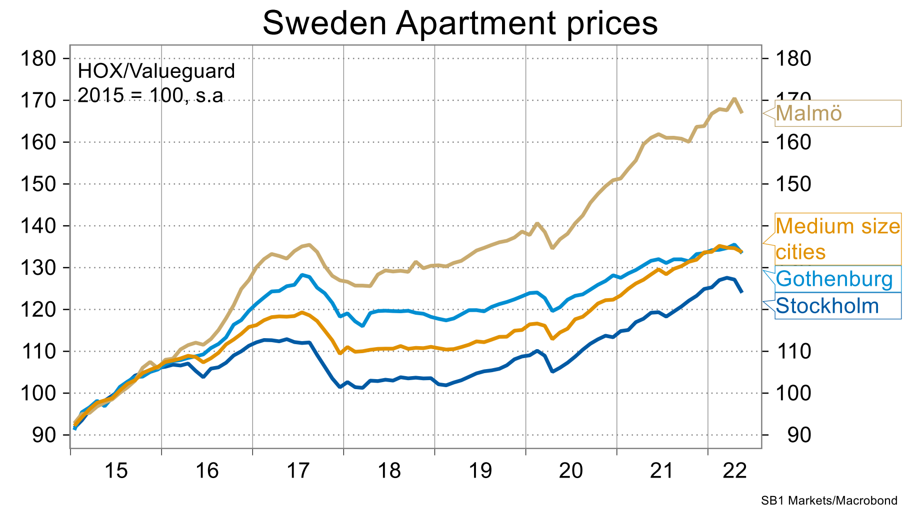
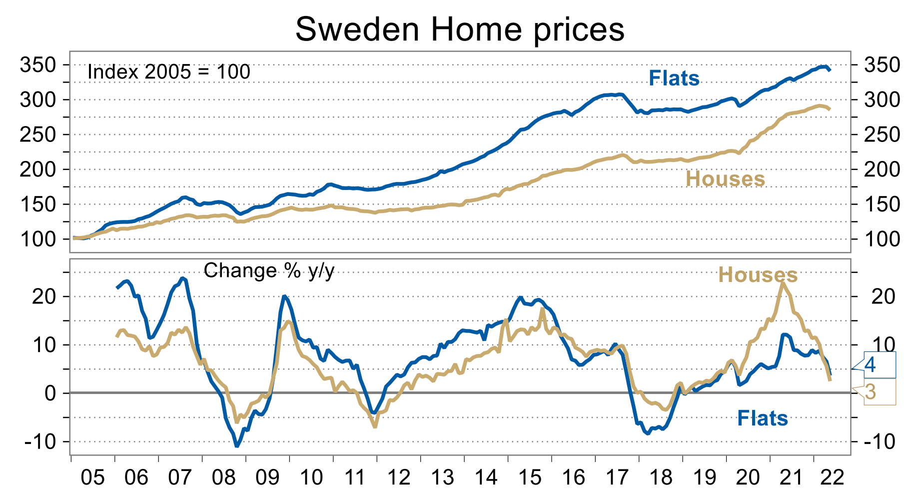
Swedish house fell sharply in May. Mortgage rates (w/expectation) to blame

Prices fell 1.2%, following the 0.3% drop in April. Stockholm down 2.5%, and further in June?



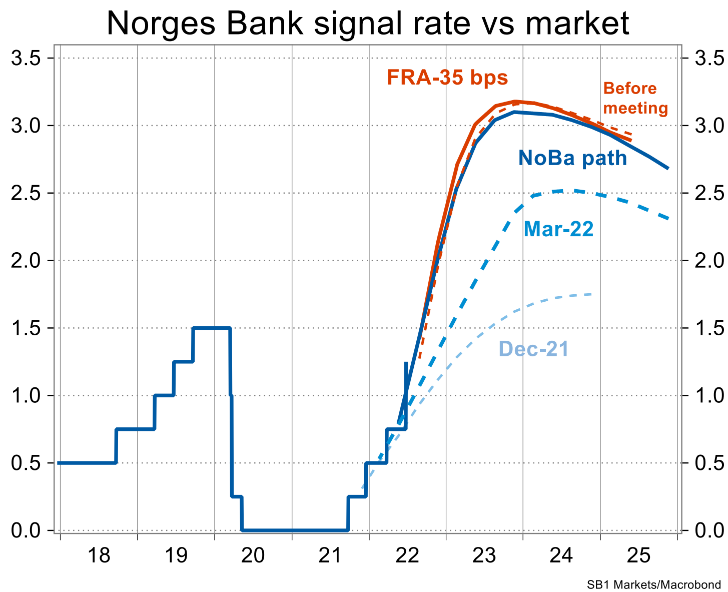




- The annual rate declined to 2.9% from 6.2% in April
  - » The underlying price growth (3m/3m) suddenly turned negative
- Prices fell the most in Stockholm by 2.5%, and Valuegard reports a further 3% decline in the two first weeks in June. In May, prices fell 1.5% in Malmö, by 2.5 in Göteborg. The decline in smaller cites averaged 0.7%
- The **Riksbank's** abrupt change of tack in late April has no doubt hit the housing market hard

NoBa added 50 bps, lifted the path by up to 1 p, and the peak by 60 bps

Will households take notice before the mortgage rate is doubled? Probably



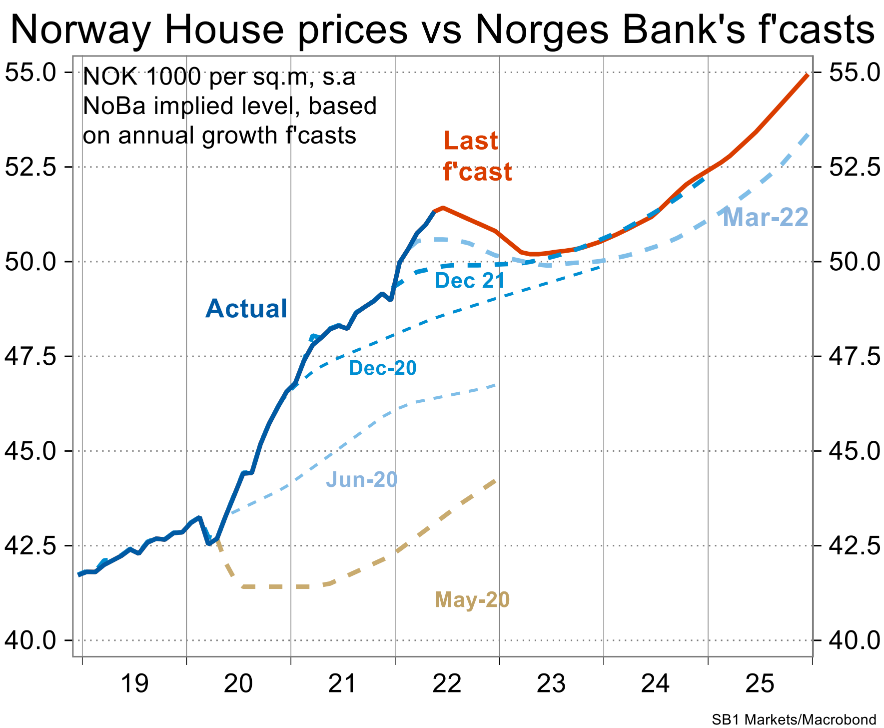
Interest rate paths

	NoBa Path 1-22	**NoBA Path 2-22**	**Change**	Fair FRA *) @IMM, NB	FRA** pre-meet	FRA** now	FRA-** NoBa
Q2 22	0.78	**0.79**	0.01	1.65			
Q3 22	1.05	**1.39**	0.34	2.25	2.22	**2.40**	0.15
Q4 22	1.32	**1.99**	0.67	2.80	2.88	**3.00**	0.20
Q1 23	1.59	**2.53**	0.94	3.17	3.22	**3.34**	0.17
Q2 23	1.85	**2.87**	1.02	3.36	3.43	**3.49**	0.13
Q3 23	2.10	**3.04**	0.94	3.44	3.50	**3.53**	0.08
Q4 23	2.35	**3.10**	0.75	3.44	3.55	**3.51**	0.07
Q1 24	2.48	**3.09**	0.61	3.43	3.50	**3.49**	0.05
Q2 24	2.51	**3.08**	0.57	3.40	3.45	**3.44**	0.04
Q3 24	2.52	**3.04**	0.52	3.35	3.41	**3.37**	0.02
Q4 24	2.50	**2.99**	0.49	3.29	3.39	**3.30**	0.01
Q1 25	2.47	**2.93**	0.46	3.21	3.31	**3.25**	0.04
Q2 25	2.43	**2.85**	0.42	3.13	3.26	**3.20**	0.06
Q3 25	2.37	**2.77**	0.40	2.69			
Q4 25	2.31	**2.68**	0.37				

*) *Assuming the NIBOR spread at 35 bps*
**) Q4 FRAs adjusted for liquidity prem

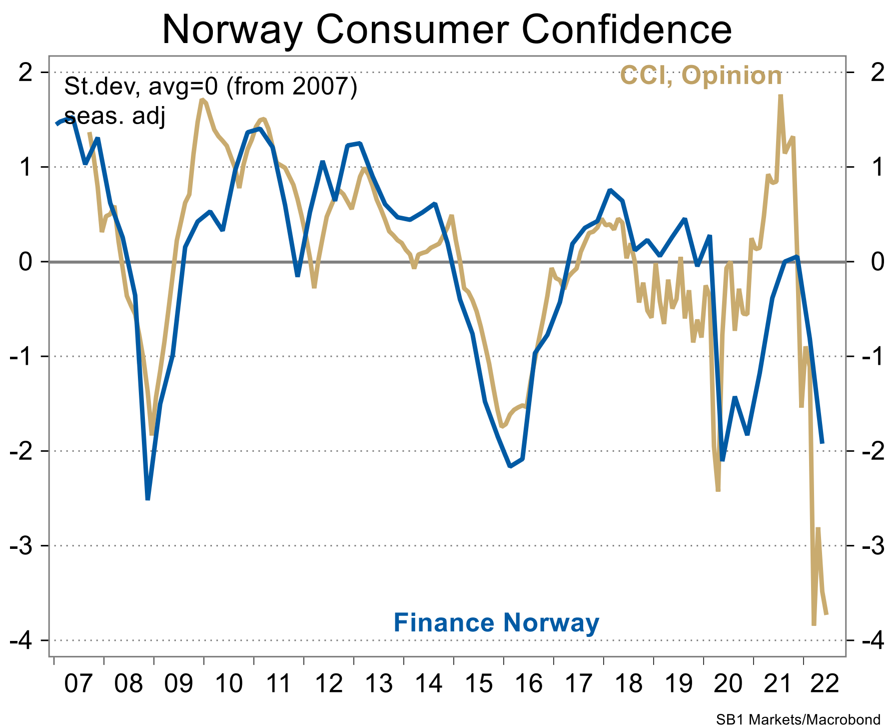
- **Norges Bank** surprised both consensus, us and the market by hiking the signal rate by 50 bps to 1.25%. The interest rate path was revised up by up to 100 bps, and the peak was lifted by 60 bps and moved 3 quarters forward, to Q4-23.
  - » The short end of the curve rose by up to 18 bps, implying that the market had put a 30% probability for a 50-bps hike vs 70% a 25-bps hike. Further out, the bank lifted it's path close up to FRA market's path, and the direct impact was limited. (However, longer dated FRA rates fell sharply as rate expectations 'collapsed' everywhere around us Thursday and Friday).
  - » Our calculus also implied a 100 bps lift in the path due to higher inflation, lower unemployment, a weaker NOK etc but we assumed the bank would spend tow meetings to do the heavy lifting. Beside been 'correct', the best reason for sending a strong hawkish message to the public, is to dampen overall demand before rates are actually hiked that much
  - » The bank signals 25 bps hikes in August, September, November and December, up to 2.25%. The market is more aggressive, some 20 bps above NoBa's path in December
- **The economic outlook**
  - » NoBa expect inflation to remain well above the 2% target, wage inflation to climb to well above 4% the coming years
  - » GDP growth to slow substantially and unemployment to turn marginally up from 2023
  - » Still, the unemployment is assumed to climb just to 2.1% in 2025, from the current 1.7%, far below an average level – and the output gap is assumed to be positive until sometime after 2025. <u>That is, a continuous high activity scenario with too high wage and price inflation is forecasted for the coming 3 years</u>
    - In the years after 2025, the NoBa expects inflation to slow to 2.0%, and the output gap to reach zero (the first published really long-term prognosis)
  - » NoBa expect house prices to decline by 2% from July to Q2-23, then to head upwards again, especially when the rates are assumed to be cut from 2024
- **So what?**
  - » The market is probably too aggressive for H2. The Bank will be focusing at the labour market, wage inflation and the housing market, more than the actual CPI data the coming months. The risk is at the downside vs the housing market, but the labour market will probably remain very tight

Norges Bank revised house prices up – but expects a 2% decline until next spring



- NoBa expects house prices to appreciate less than income growth the coming years, at least until 2025, where interest rates are expected to be cut
- The bank expects house prices to turn down from July, and to bottom in late Q1 next year, when interest rate increases slows to a trickle. Prices will be back to the assume June peak in mid 2024
- Prices will pick up steam when the signal rate turns south during 2024
- NoBa has published forecast all over the place since the beginning of the pandemic. And we do not blame the Bank!

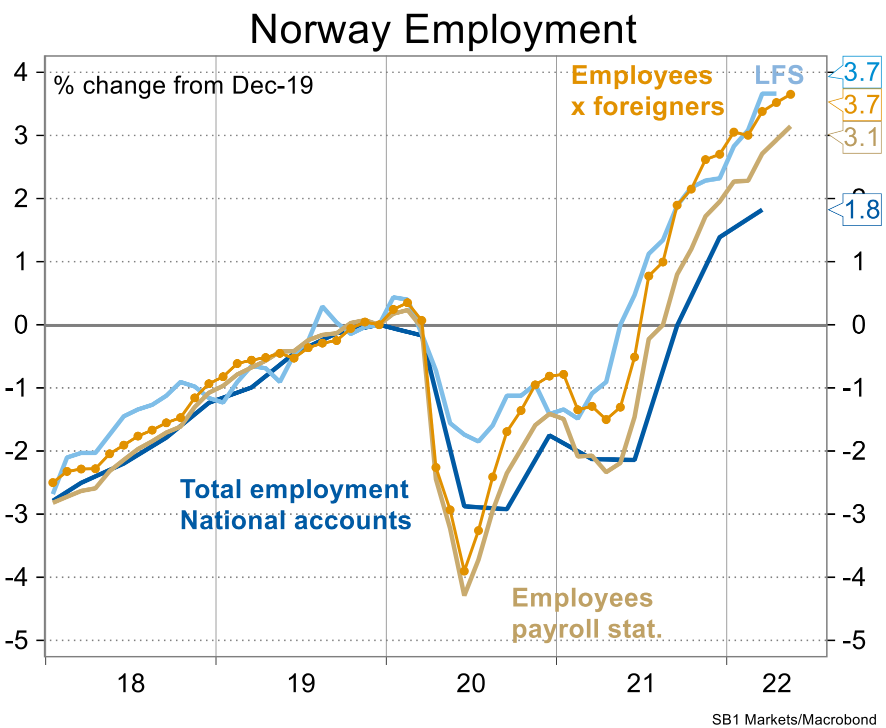
Consumer confidence down in June, close to ATL (from March)



- **The decline in CCI** from Opinion in March was the largest one month drop ever, to the lowest lever ever – rather dramatic – probably due to a combination of inflation & interest rate fears and the war
- The index recovered somewhat in April, but fell again in May and in June, down to -3.7 st.dev below average, just slightly above the March ATL
- **Will households stop spending or retreating from the housing market?** So far, we have not seen any signs of that. However, the 50-bps lift in interest rates these days may have some impact, both on spending and housing demand?

Employment growth is calming down,

LFS employment was flat in April, while the number of employees rose by 0.2% in May



- **The LFS** ('AKU' survey) employment data (both employees and self-employed, with permanent residency in Norway) reported zero growth in April (avg. Mar – May) from March (avg Feb– Apr), but by a 3.3% pace over the past 3 months
  - » LFS employment is up 3.7% from before the pandemic
- The register based employee stats, report 0.2% growth in the no. of employees in May, and a 3.1% growth since Q4-19. Excluding foreigners on short term stay, the no. of employees is up 3.7% (our estimate for the past 2 months)
- National accounts report a 1.8% lift in employment to Q1-22 from Q4-19

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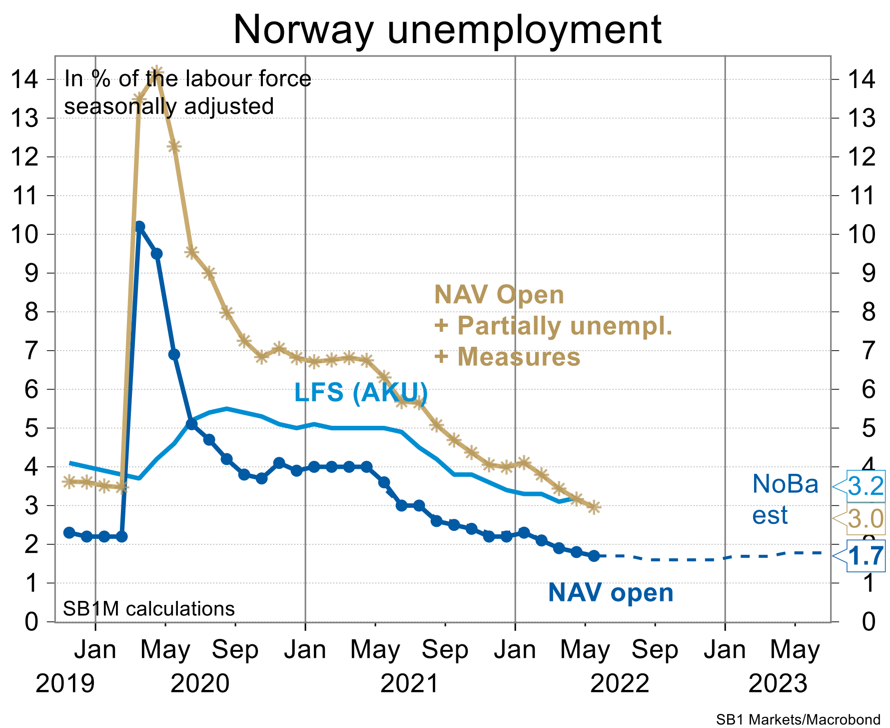
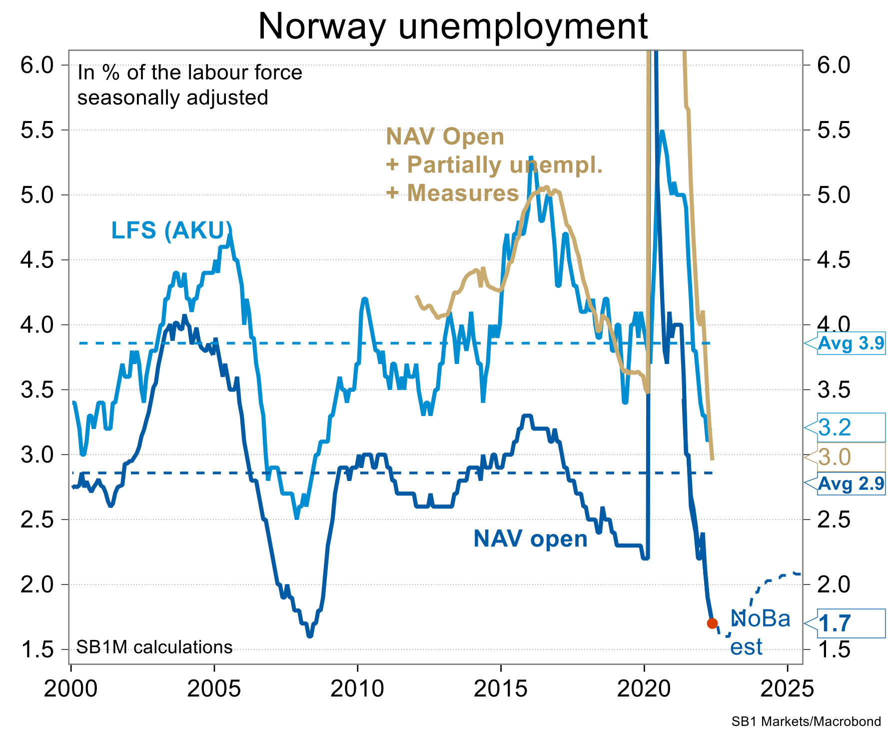
AKU employment slightly revised up, and rose in April. Still, the trend is down

Norges Bank revised its NAV unemployment forecast down by 0.2 pp – but expect it to bottom in H2





- **The LFS (AKU) unemployment rate** rose 0.1 pp to 3.2% in April, we expected an 0.1 pp decline from the previously reported 2.9% in March. March was revised up by 0.2 pp, as was the history more or less too.
- **The 'full time' open NAV unemployment**, which includes furloughed workers, fell to 1.7% of the labour force in May

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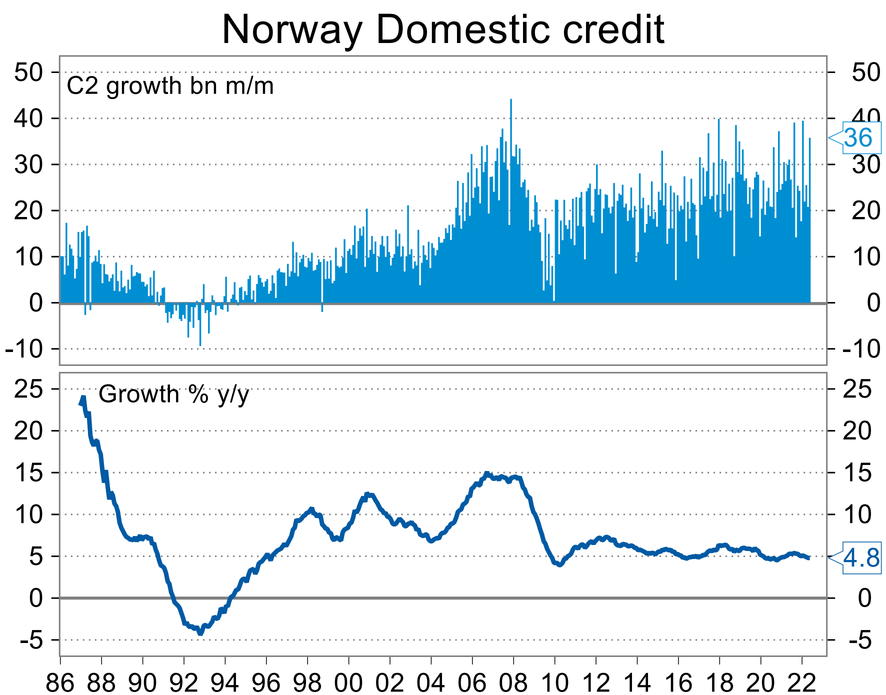
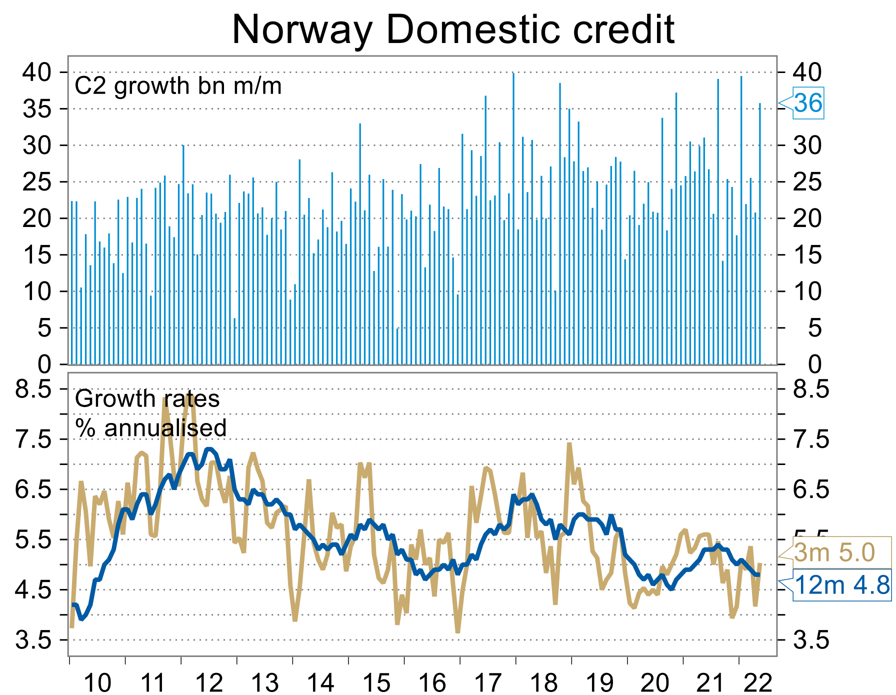
Domestic credit growth (C2) growth unch in April, at 4.8%

Growth in household debt is gradually slowing, while businesses are still keeping their demand up

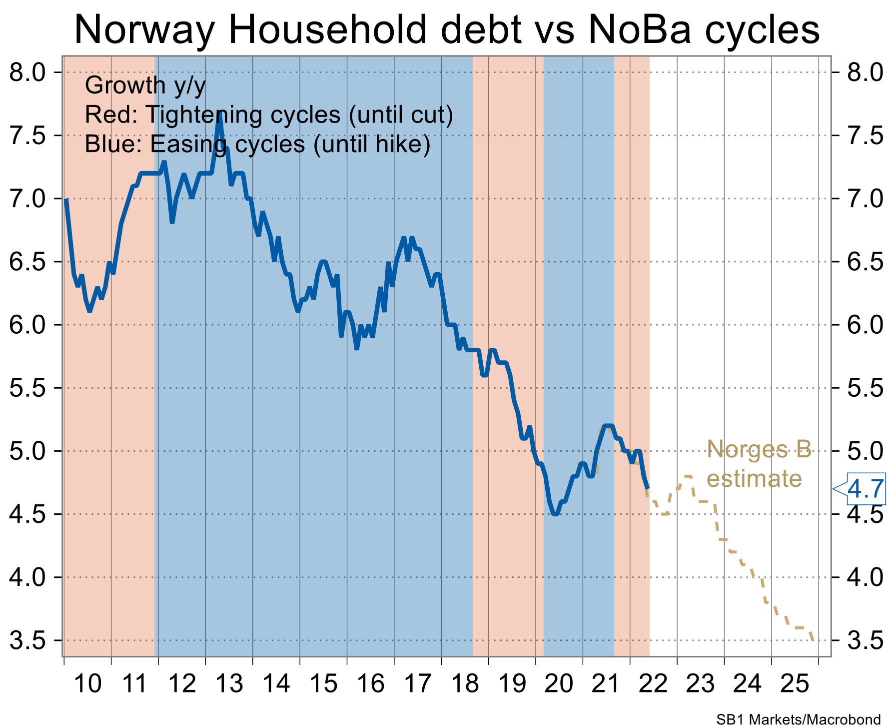




- **Total domestic debt** (C2) rose by NOK 35 bn in May, up from 21 bn in April, we expected 26 bn. The annual growth was unchanged at 4.8%, we expected 4.7%. The 3m/3m growth rate is at 5%. <u>We are not witnessing any credit boom. However, debt levels are high, especially in the household sector</u>
- **Household credit** <u>rose by NOK 14 bn</u> in May, as we expected (and as in April). The annual rate retreated 0.1 pp to 4.7%, as we expected
- **Corporate C2 credit**, <u>rose by NOK 17 bn</u>, up from 6 bn in April, 9 bn more than we assumed. Annual growth still fell to 4.7% from 4.9%
- **Mainland corporations** increased their debt by 6.6% y/y, up 0.2 pp vs. April
- **Local governments** added NOK 4 bn, as we assumed. The annual growth rate fell 0.1 pp to 4.2%. Last summer the rate was 8%! Finally, local gov's at not increasing their debt/income ratio

Will higher rates slow down borrowing?

Quite likely, even if there are several stories – and mortgage regulations have impacted borrowing too



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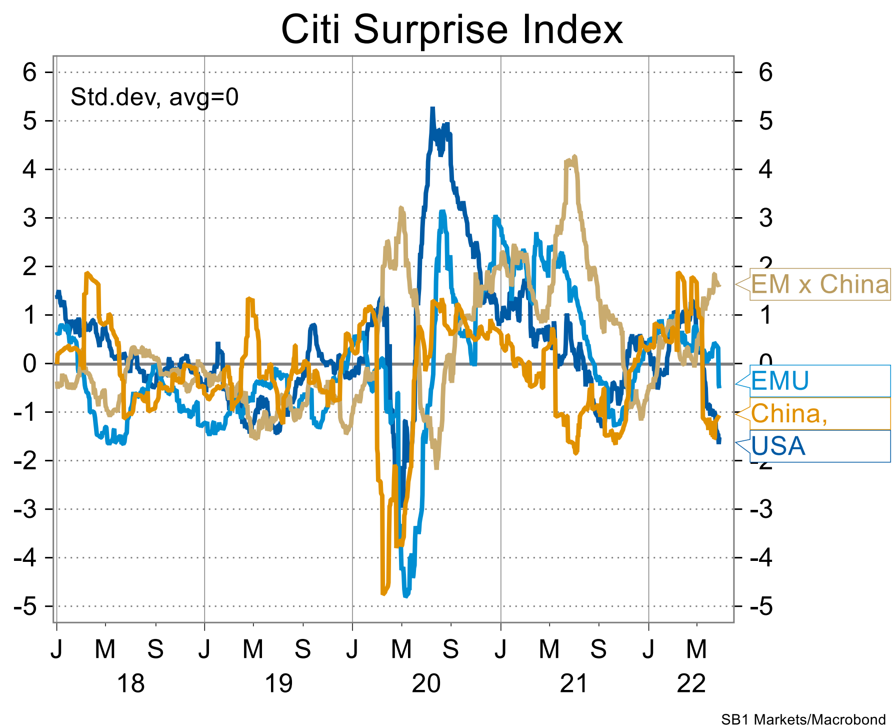
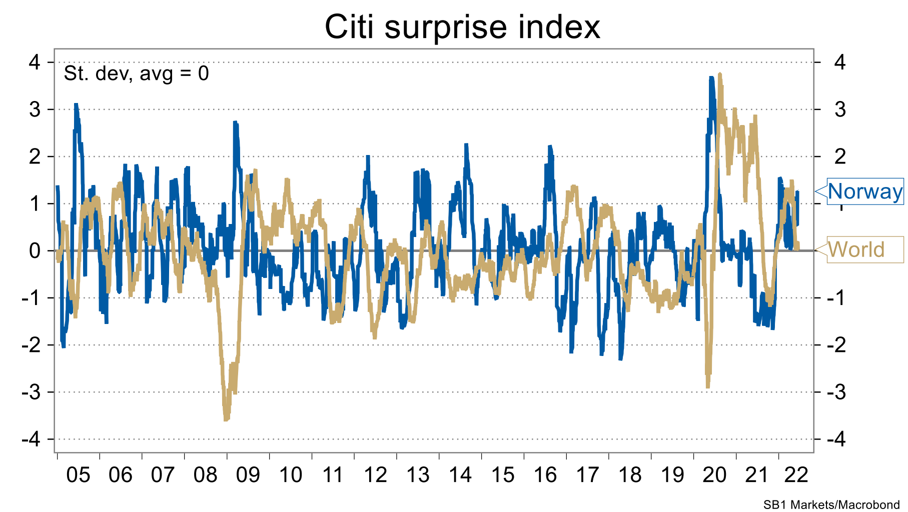
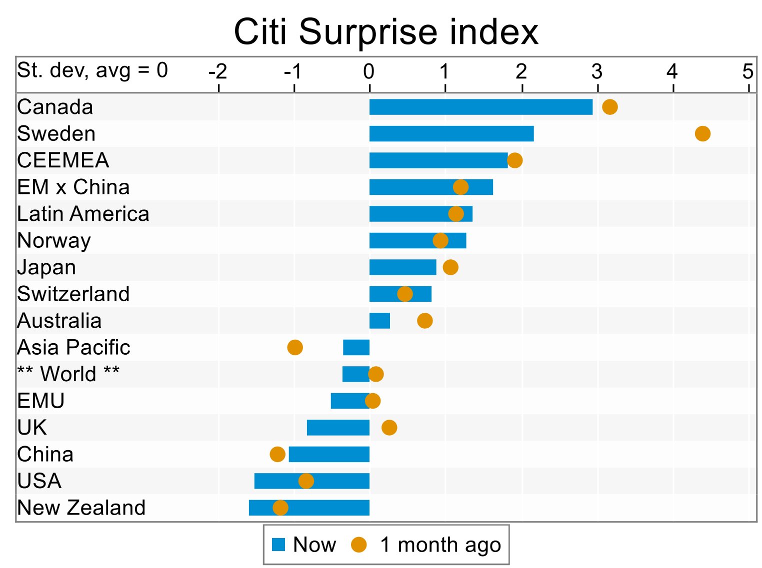
US further down and towards the bottom of the list, at least vs. expectations

And the Eurozone suddenly fell below par too, due to weak PMIs (like in the US)







- **Emerging markets** x China are delivering far better results than excepted
- **Norway** is surprising significantly on the upside, according to Citi
- **Canada and Sweden** are still at the top

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

Highlights

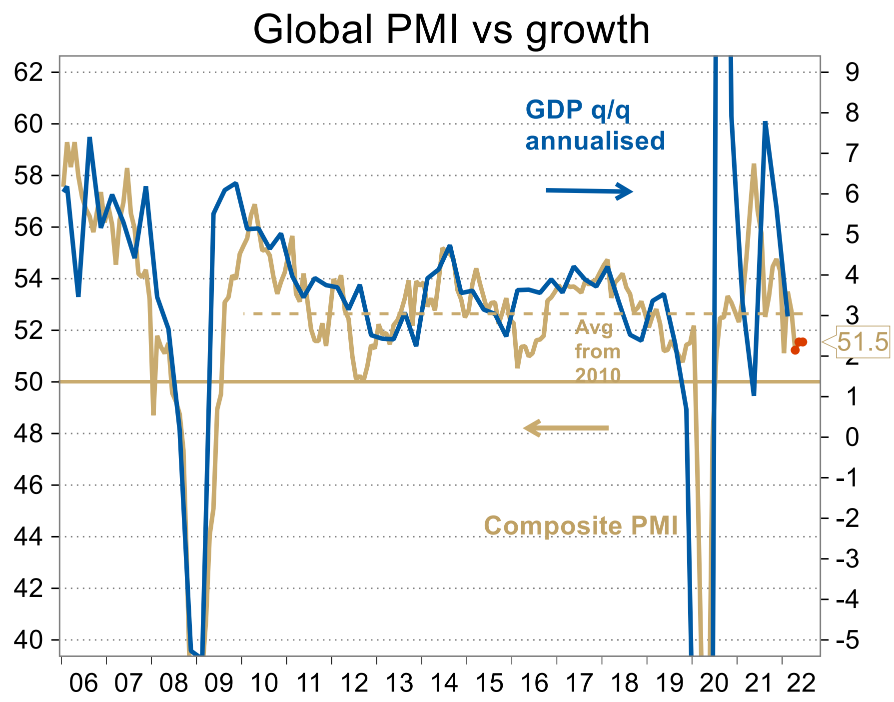
The world around us

The Norwegian economy

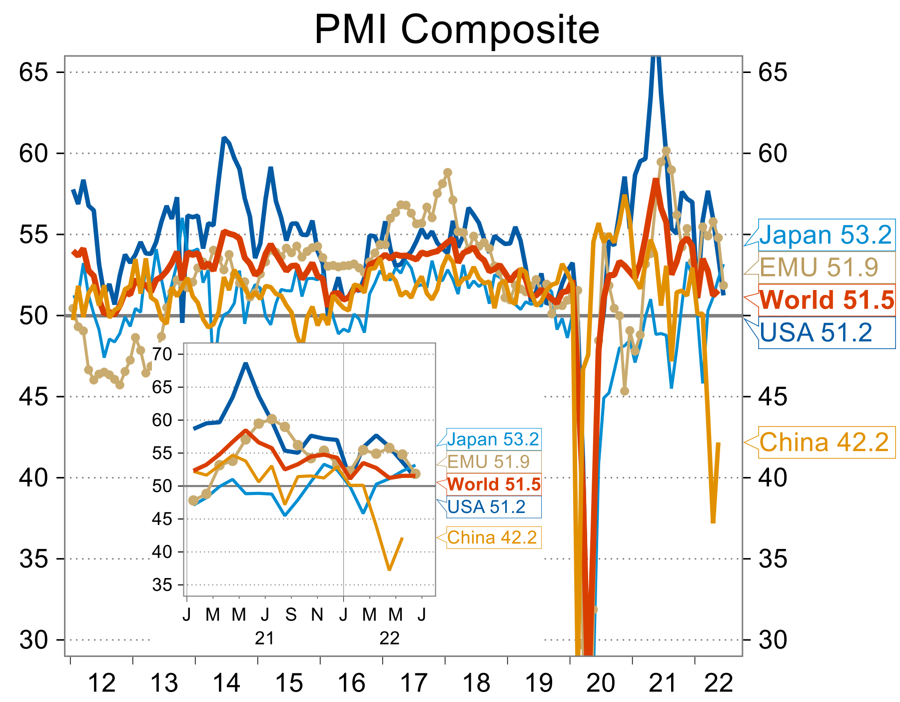
Market charts & comments

Will China save the day in June? The PMIs fell further in the rich part of the world

We assume Chinese PMIs will recover sharply in June, and help keeping the global PMIs close to unch



SB1 Markets/Macrobond



Source: IHS Markit, SB1 Markets, Macrobond

- The PMIs fell in US and EMU, and much more than expected both places. The further recovery in Japan (and close to unch prints in Australia and UK) will not prevent the DM average to decline further in June

Our estimates are based on the preliminary PMIs from US, China, EMU, Japan UK, Australia. The estimates are uncertain, but usually by less than 0.5 p

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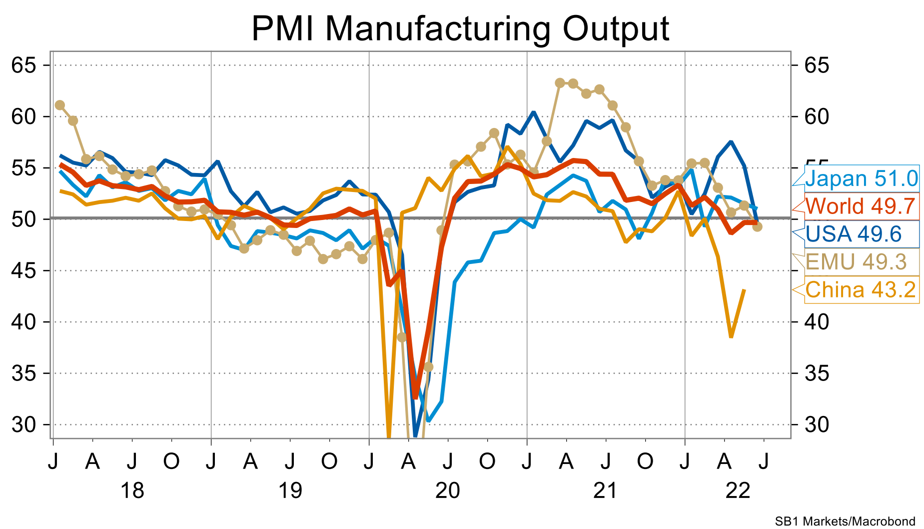
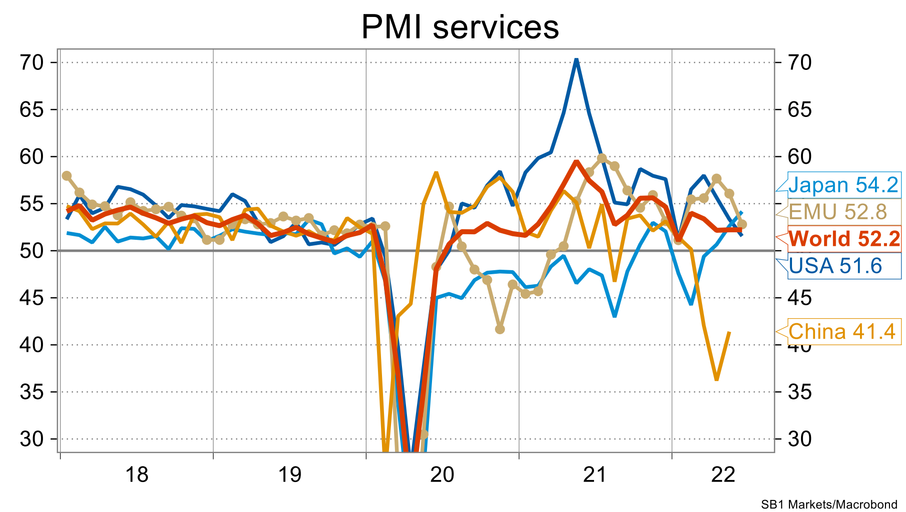
Both manufacturing & services down in DM in June

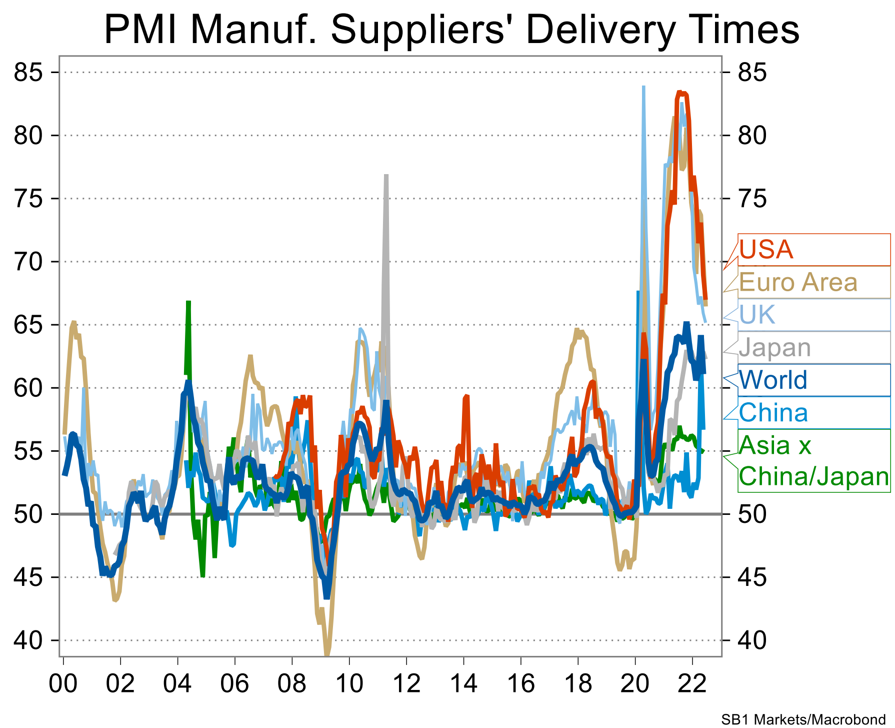


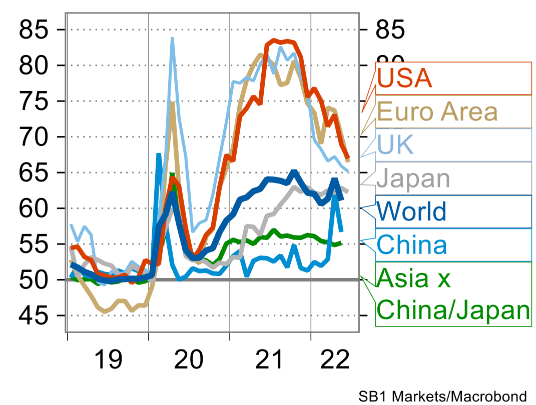


- Services in the US are slowing, while activity in the manufacturing sector is holding up better in the US than in Europe (both EMU and UK)
- The trend for the composite PMI in the rich part of the world is downwards
- A recovery in the Chinese PMIs are assumed in the global forecasts

Delivery times index further down in June

US and Europe reported declining indices. China has not reported June data yet.





- **The global delivery times** PMI sub-index (changes in delivery times vs the previous month) has been inching down since the peak last October. The decline is broad among the Western rich countries
- **The interpretation of this index is uncertain** – are companies really reporting changes in delivery times – which they are asked to do?
  - » This index as been above 50 most of the time (the past 20+ years), formally implying a continuous increase in delivery times. However, delivery times have surely not increased almost all the time – they have rather fallen! Companies may be reporting the level of delivery times. If so, delivery times are now contracting – while the index formally reports than delivery times are increasing at a marginally slower pace

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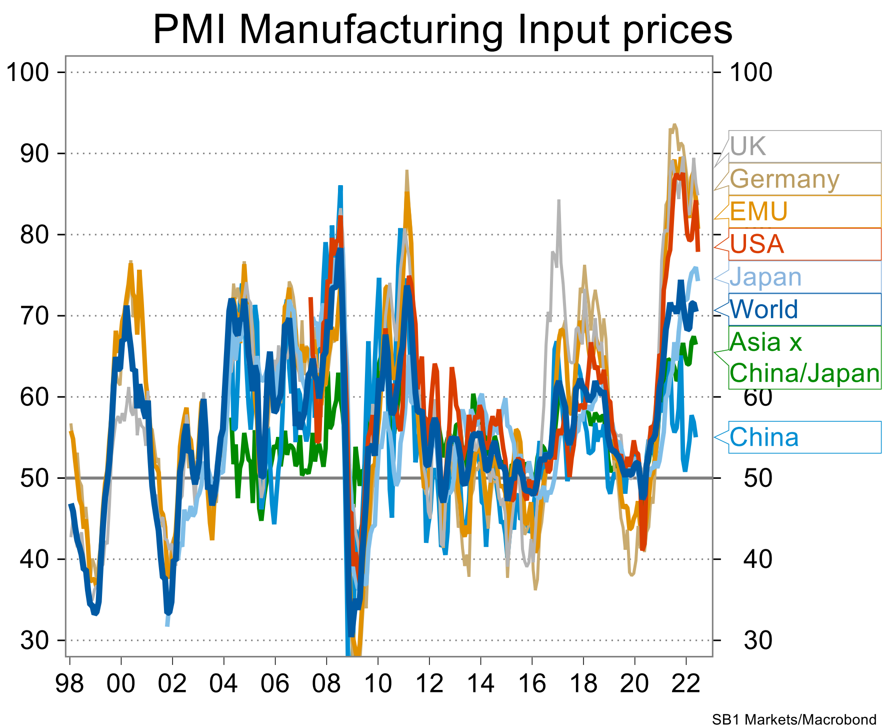
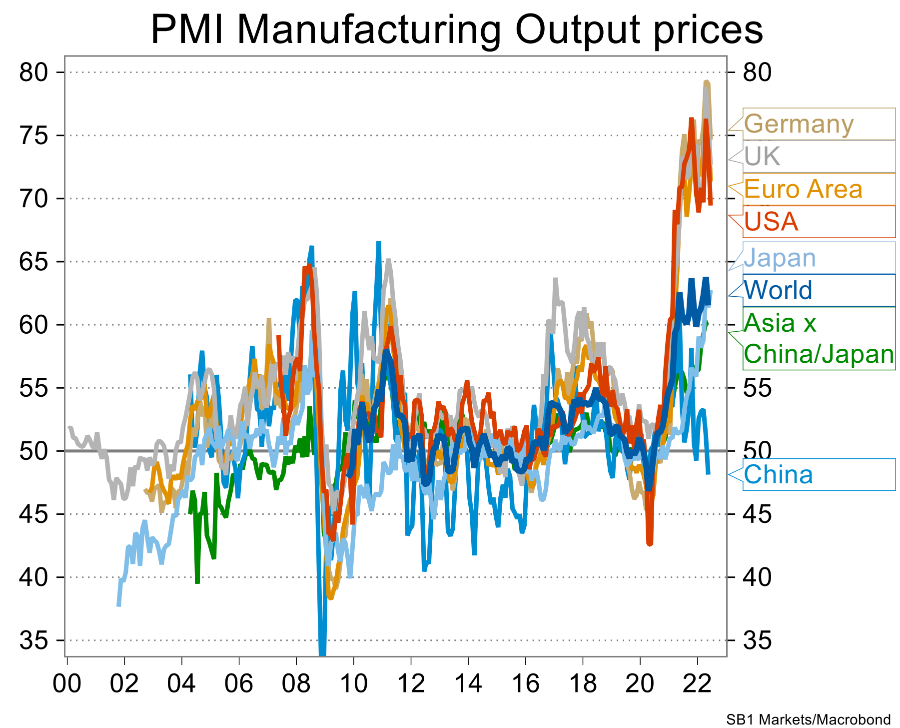
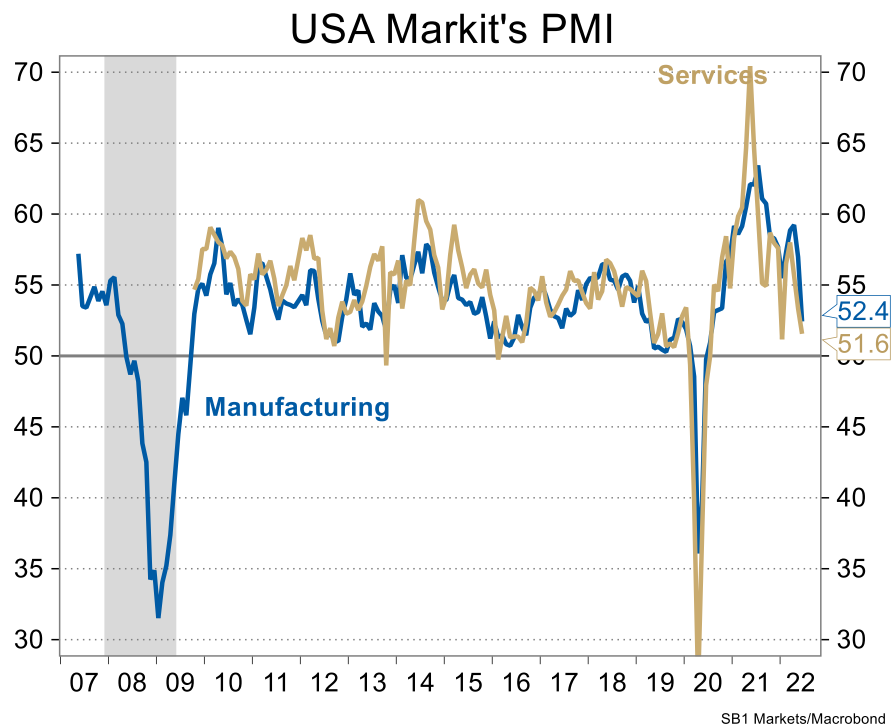
Manufacturing price inflation is heading downwards but remains very elevated

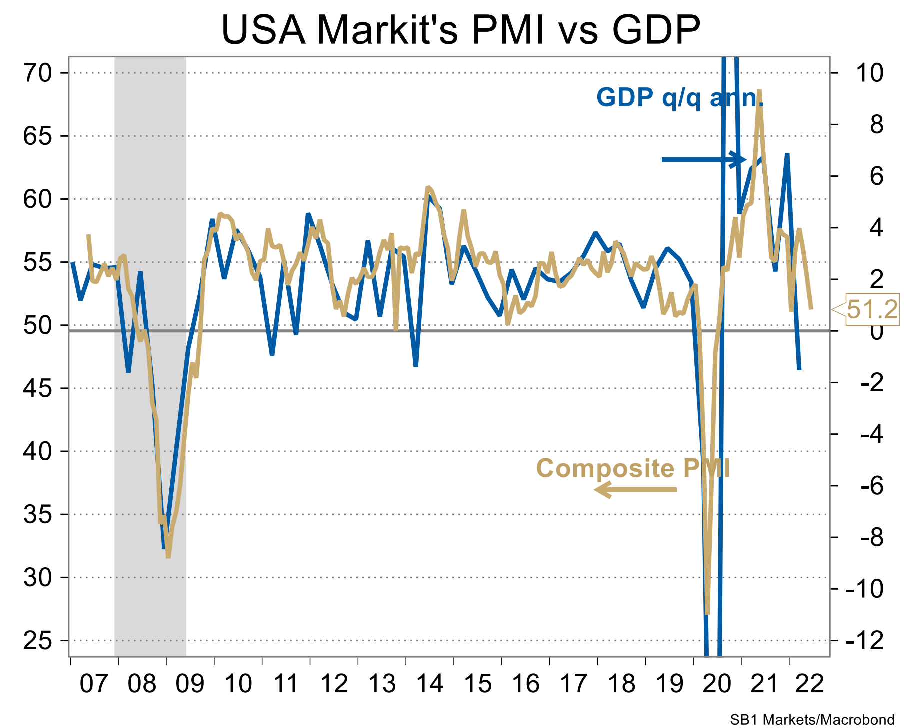




Both services and the manufacturing sector is slowing rapidly, says the PMIs

The composite fell 2.2p to 53.8, expected at 55.5 → 1% GDP signalled

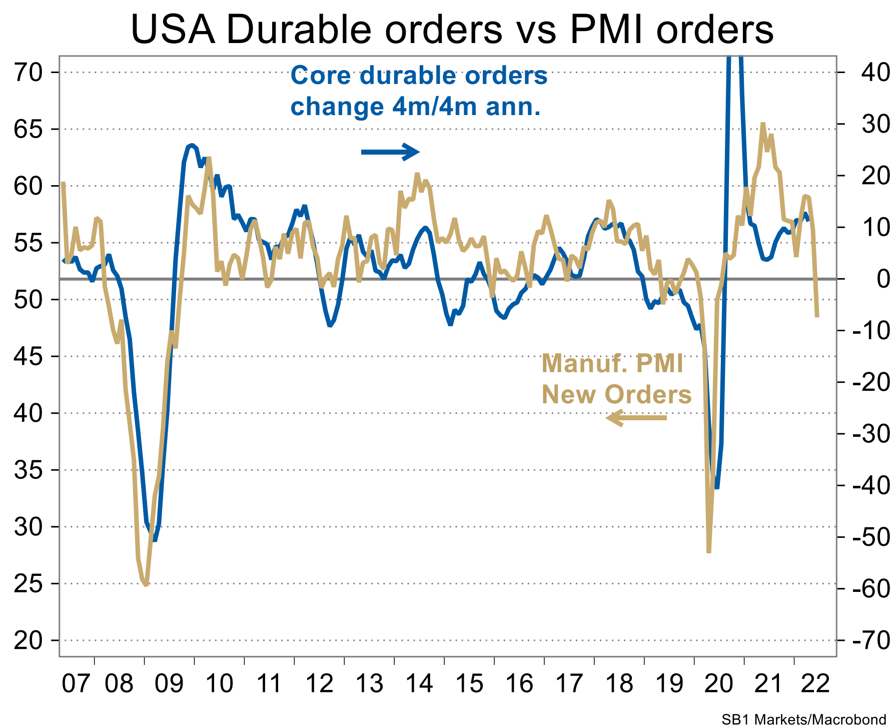


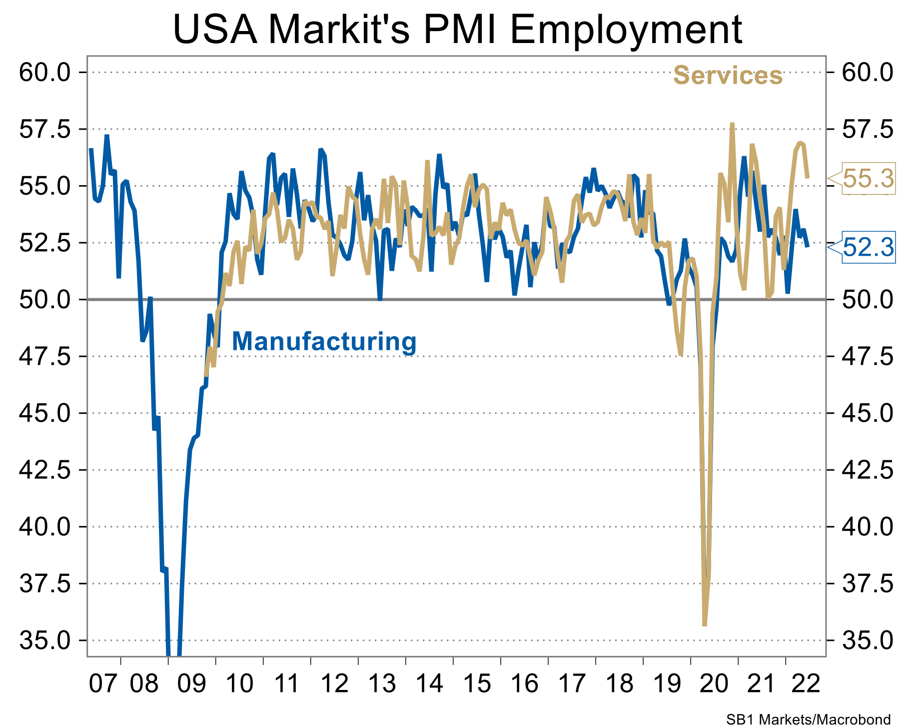


- **The composite PMI** has been trending flattish since August last year – while GDP was far better than the survey indicated in Q4, and far worse in Q1 – on average 2.8%. The May PMI signals somewhat lower growth – but far from any setback in the economy
  - » The decline was due to a 2.2 p setback in services to 53.5 (expected 55.5), and…
  - » … a decline in the output component in the manufacturing survey by 2.3 p to 55.2. The total manuf. index fell 1.7 p 55.7. Both total & output is above average but both are trending down. Together with regional Fed surveys, a substantial decline in the ISMs in May are likely
- **The price indices** were mixed: Input prices rose the fastest ever, while growth in output prices slowed – to the 2nd highest level ever
- **The delivery times index** fell sharply, signalling some easing of supply chain challenges

Manufacturing orders fell in June, the PMI says

The new order index fell by 7.7 p to 48.4, a rather unusual drop: <u>just Nov-08 & Apr-09 even worse</u>

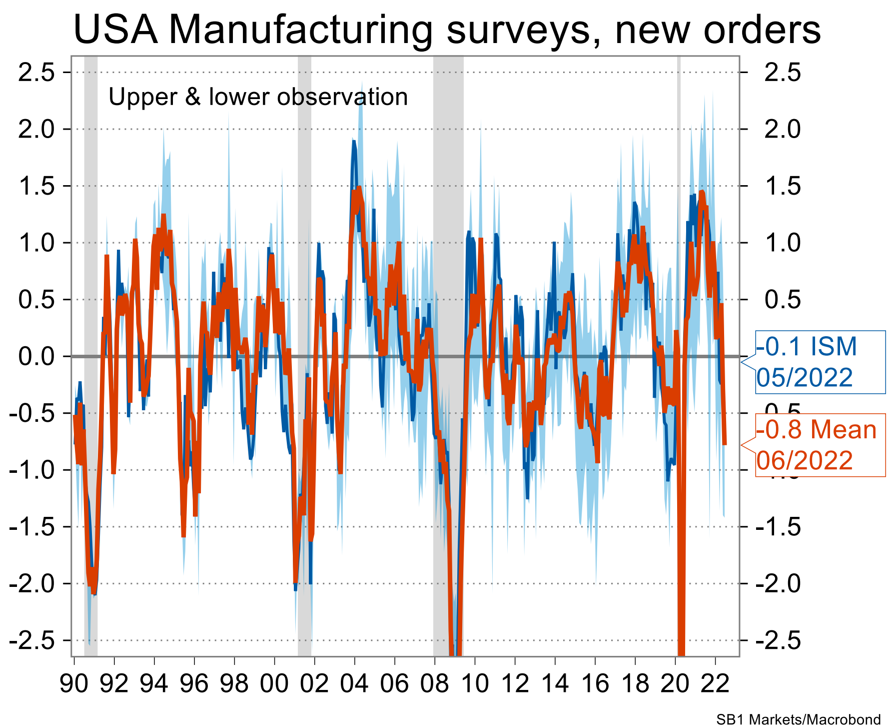




- What happened in June? The Phil Fed index also reported a sudden halt in order inflow in June
- Employment, which is lagging, is still on the way up at a faster pace than normal

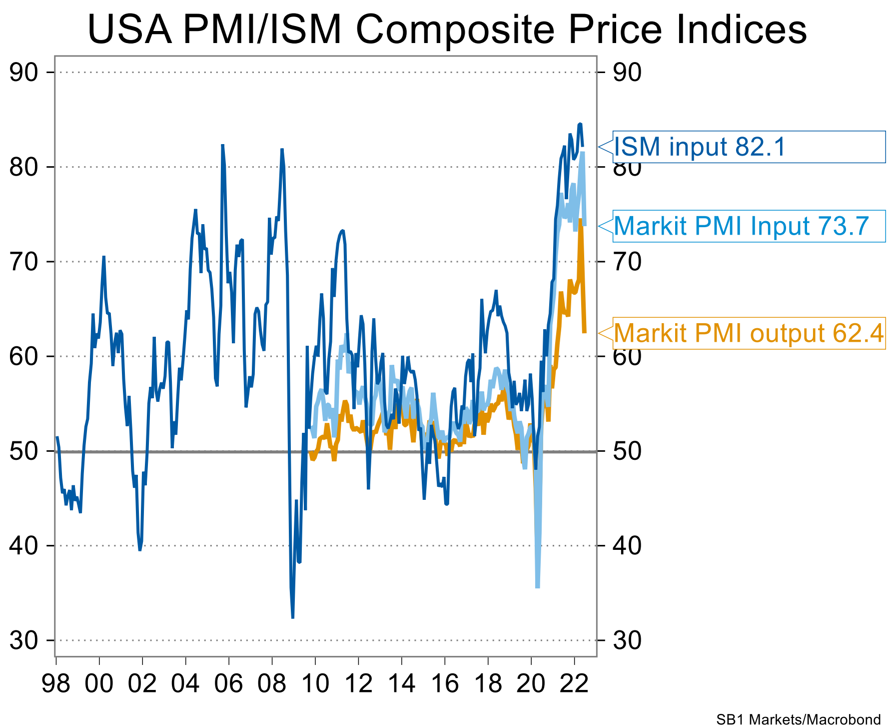
New orders are slowing rapidly and so far, June has been rather dismal

Something has probably hit US manufacturers in June



- Recessions have started with better new order data than these

Peak price inflation? Companies are reporting slower price increases in June

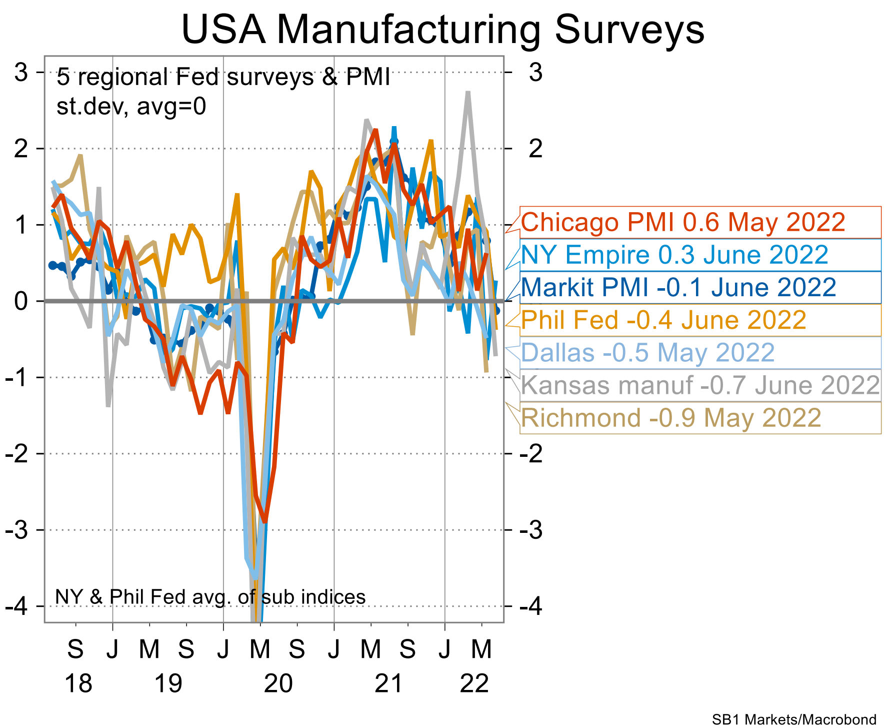


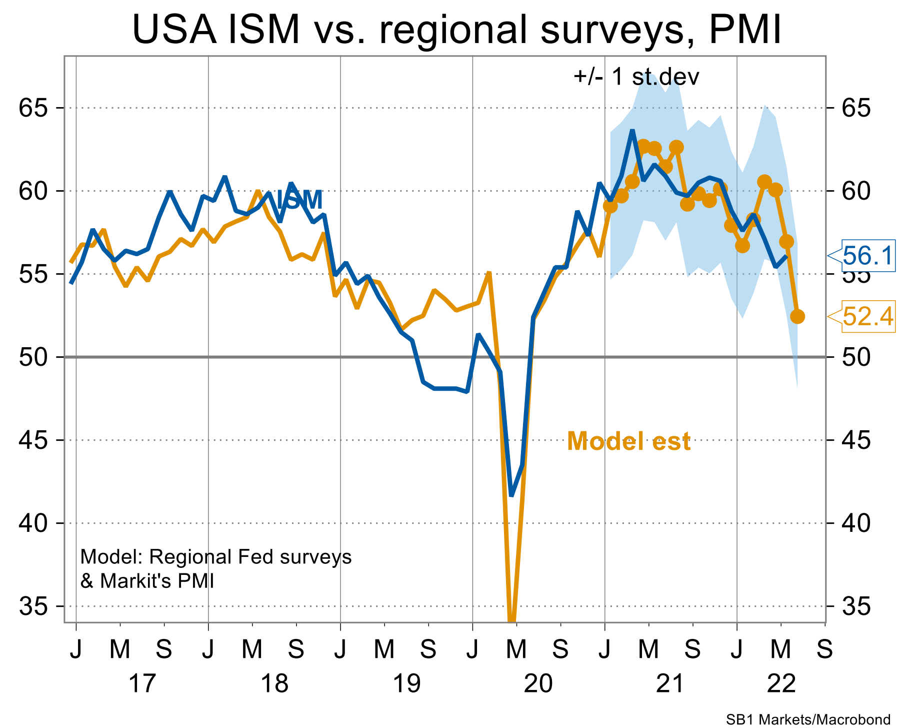
- ISM has not yet reported data

- ISM has not yet reported January data

So far: May manufacturing surveys signal a substantial drop in the ISM in June

NY Empire recovered in June, the while all other surveys so far published are down. ISM to 52 - 53?

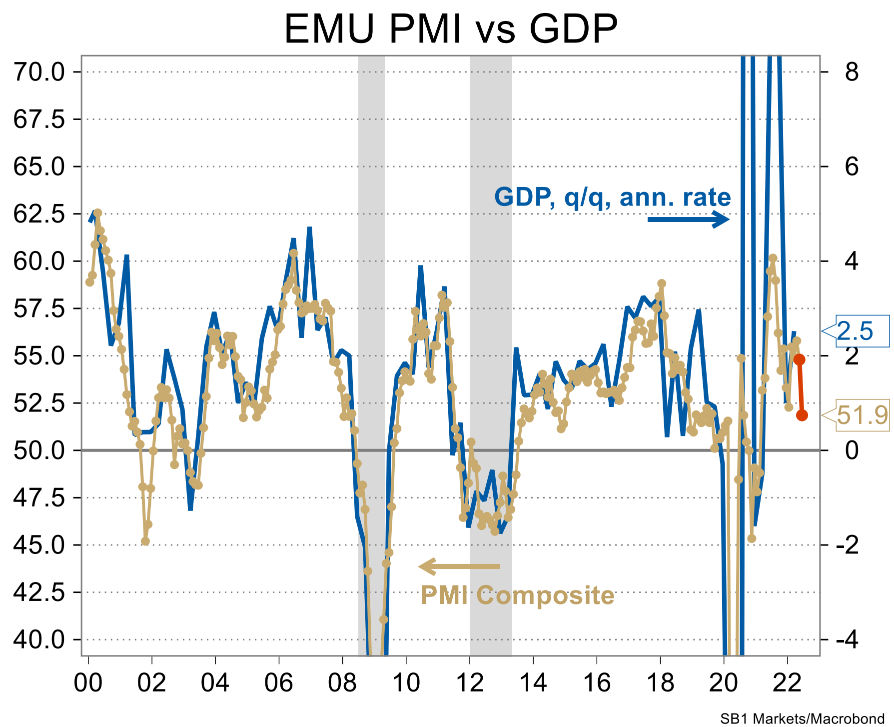


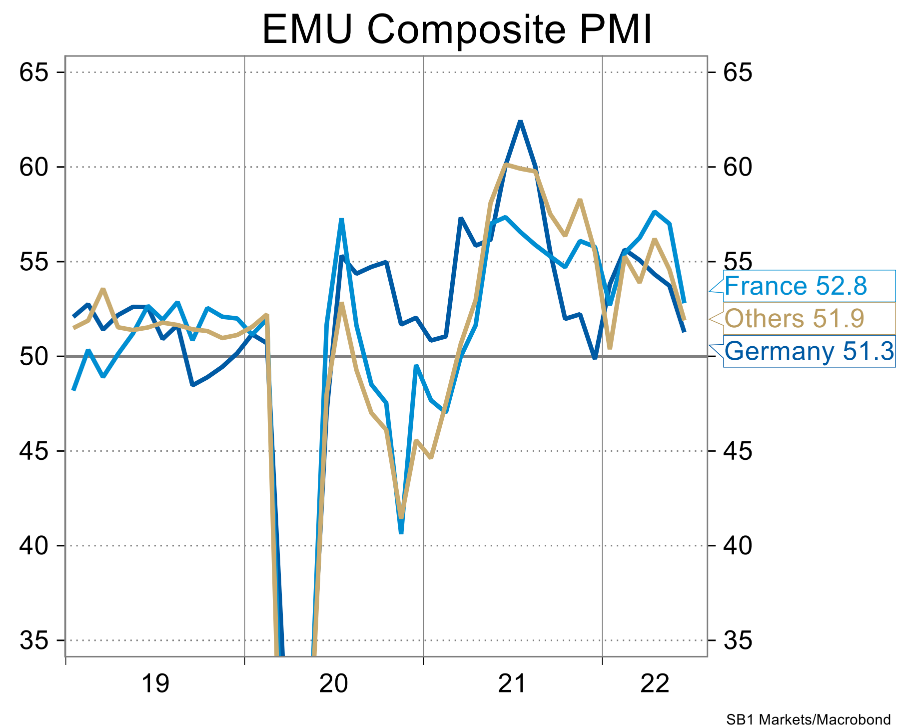


- 2 out of 3 regional Fed manufacturing surveys published so far, and Markit's PMI, fell in June. Our model signals a significant decline in the ISM index which is published next Friday
- Big picture: Growth is slowing sharply but manufacturing indices do no signal that the economy has entered a recession (even if some order indices are really worrisome

The PMIs down all over the place but the composite PMI at 51.9, GDP<1%

France lost most ground in June, but also Germany and the 'others' (avg of Italy & Spain) fell

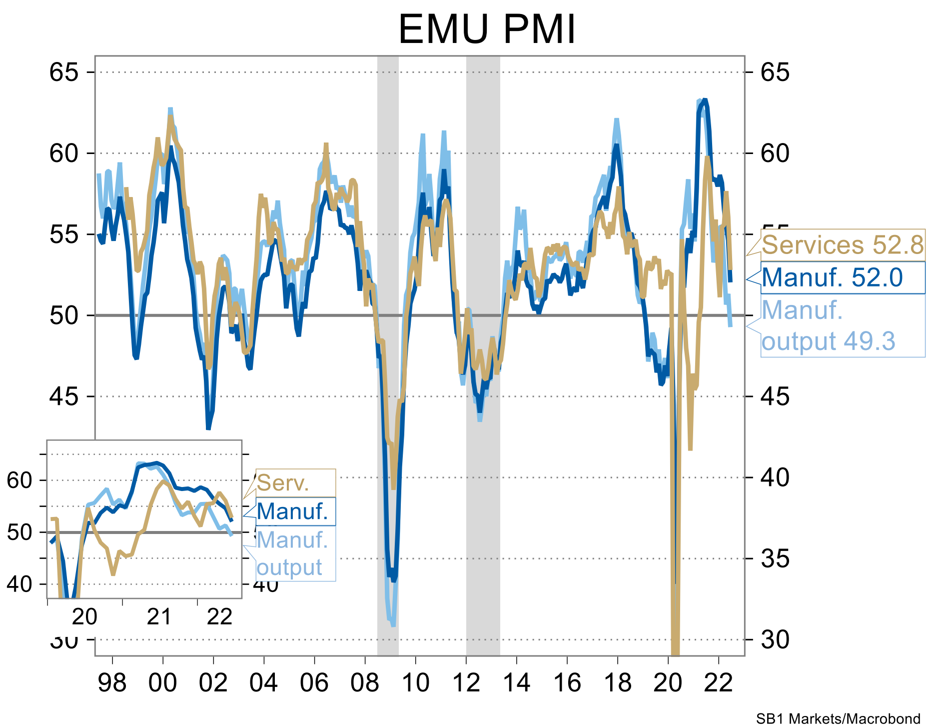


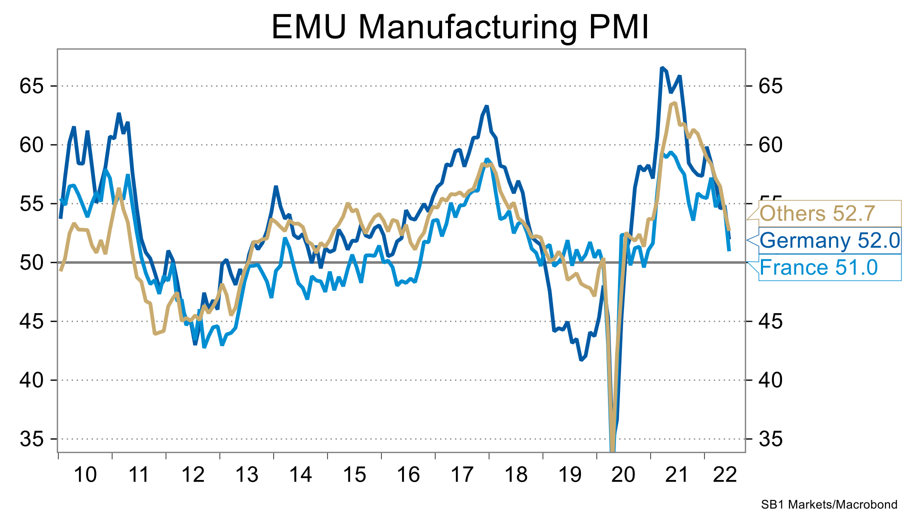


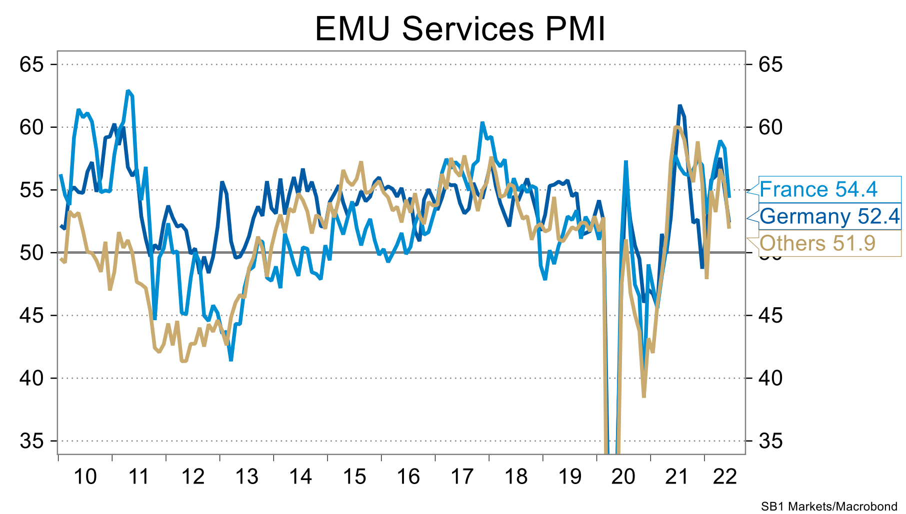
- **The composite PMI** declined 2.9 p in June, to 51.9, way below the 54.0 forecast. The level signals less than 1% GDP growth
  - **Services** reported much slower growth, the index fell by 3.3 p to 51.9, 2.7 p below the consensus forecast, and below the lowest estimate
  - Manufacturing also slowed, the PMI fell 2.6 p to 52.0, 2.7 p below consensus. However, the output index fell to below 50, and the new order index fell to 44.7 – a very weak print!
- **The delivery times** and price indices fell but all remain at very high levels, signalling a continued high price pressure
- **The ECB** will not change its plan due to these data, a July hike is very likely – if a catastrophe does not take place in the between time

Manufacturing is entering the contraction zone? The slowdown is broad

The output index fell below the 50-line. Services are also reporting slower growth

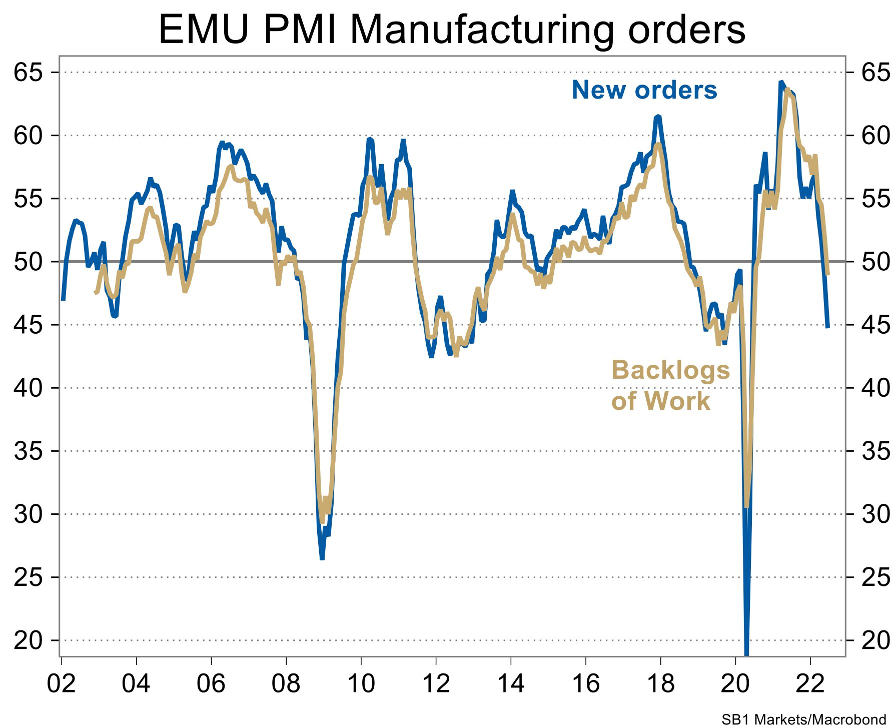


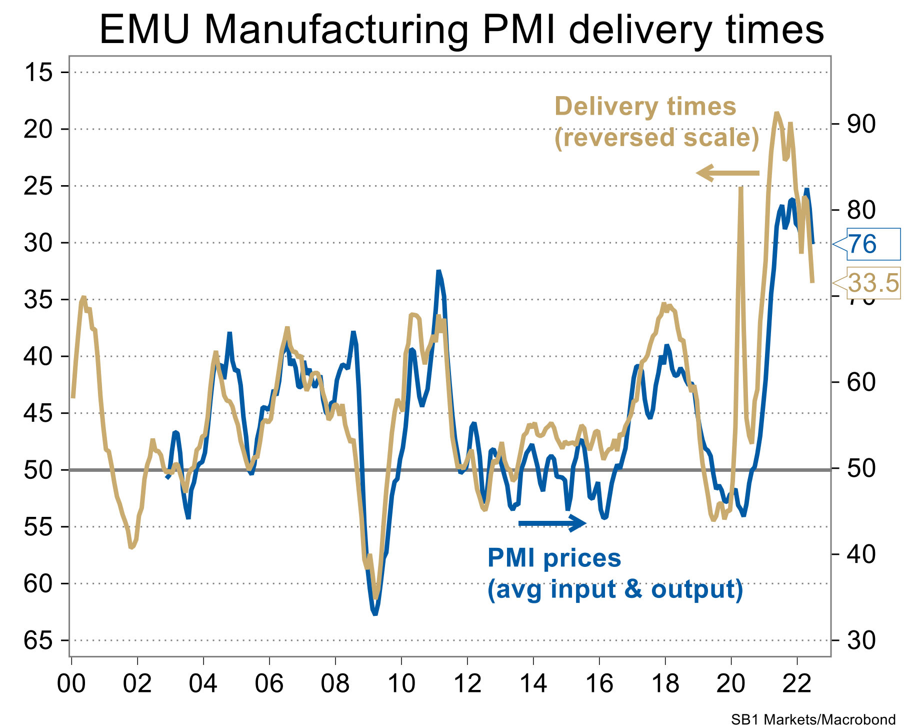




New orders sharply down, and even the backlog contracted

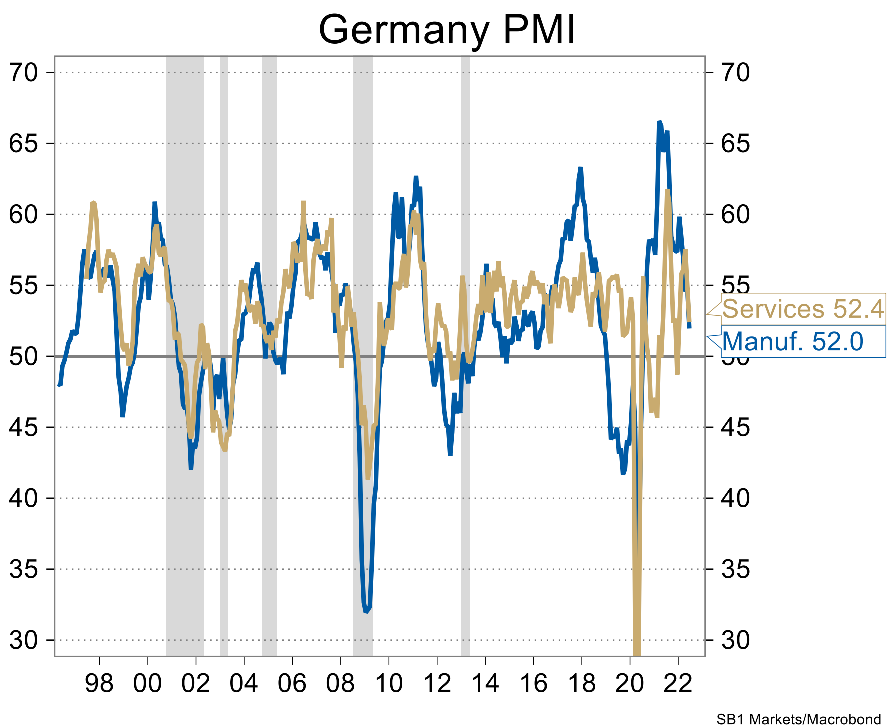
Delivery times are easing but price increases are still unusually wide spread

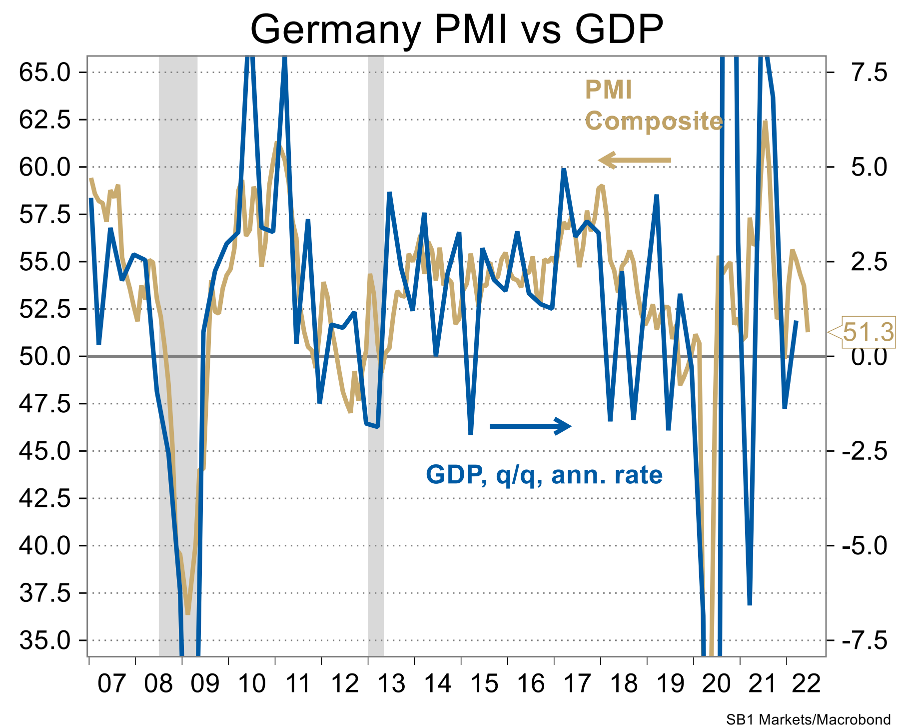




Germany: The composite PMI down 2.4 p to 51.3 (exp. -0.7 p) → 1 % GDP growth

Both manufacturers and the service sector reported slower growth in June, both down 2.6 – 2.8 p

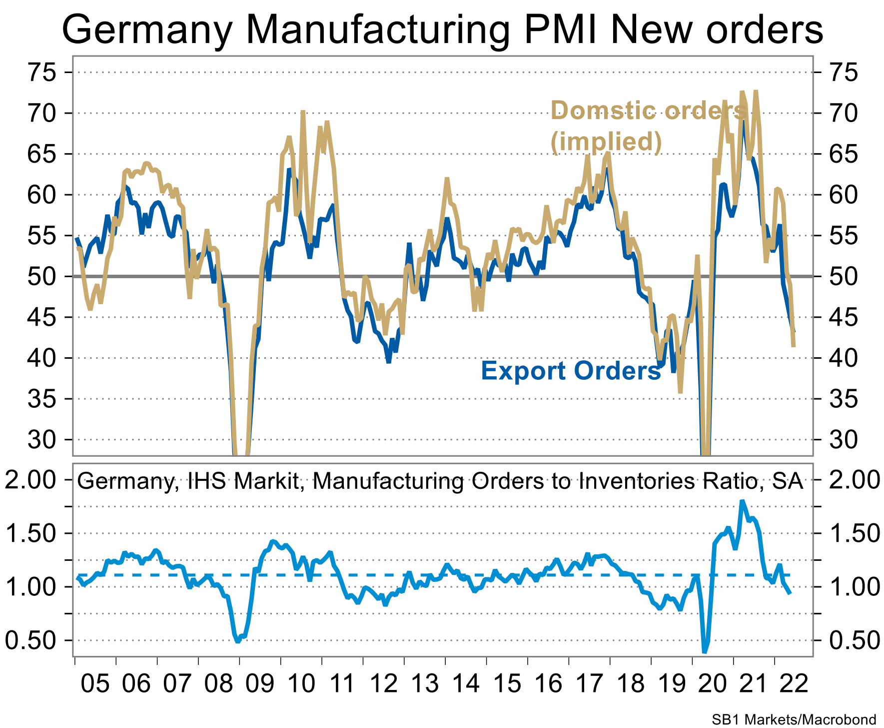




- All 3 indices were far lower than expected

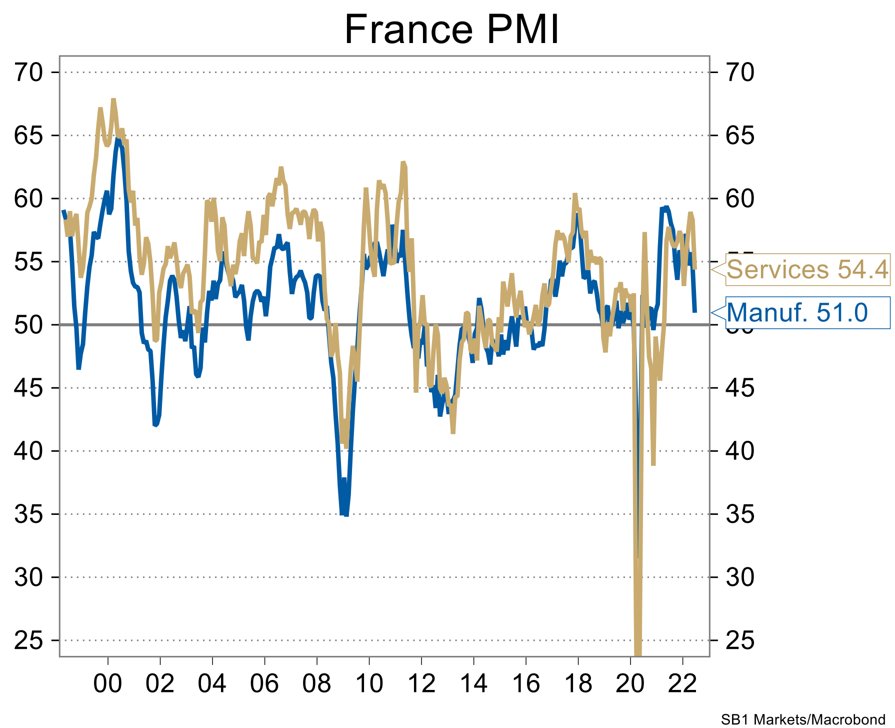
Order growth further into negative territory – both from abroad and at home

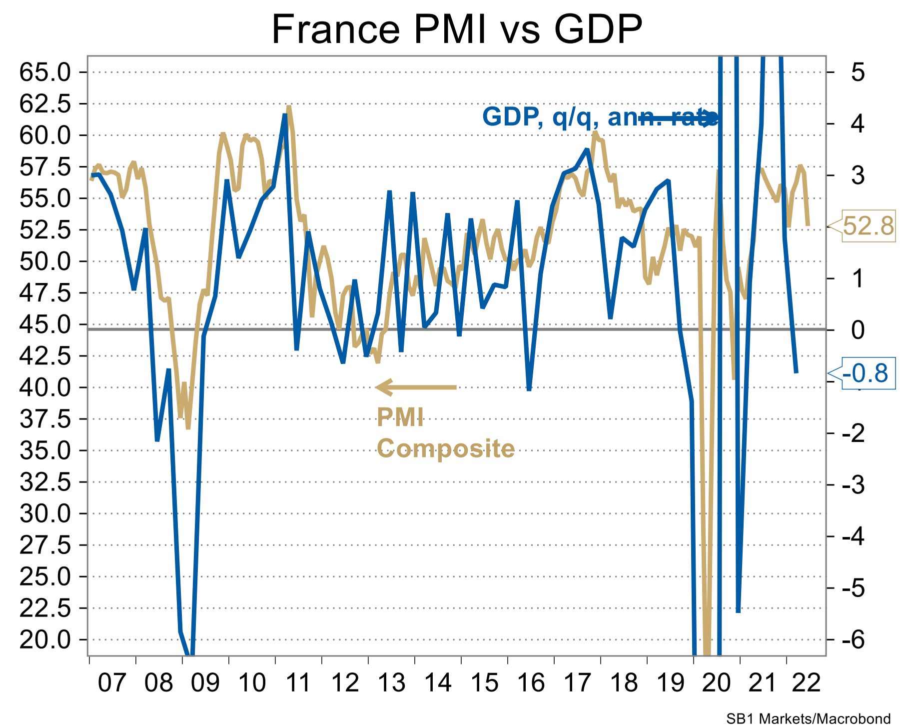
A warning sign that the activity in the manufacturing sector is now slowing sharply



France: Both services and manufacturers report lower growth in June

The composite down 4.2 p to 52.8. (expected 56.4!) → 2%+ GDP growth is still signalled

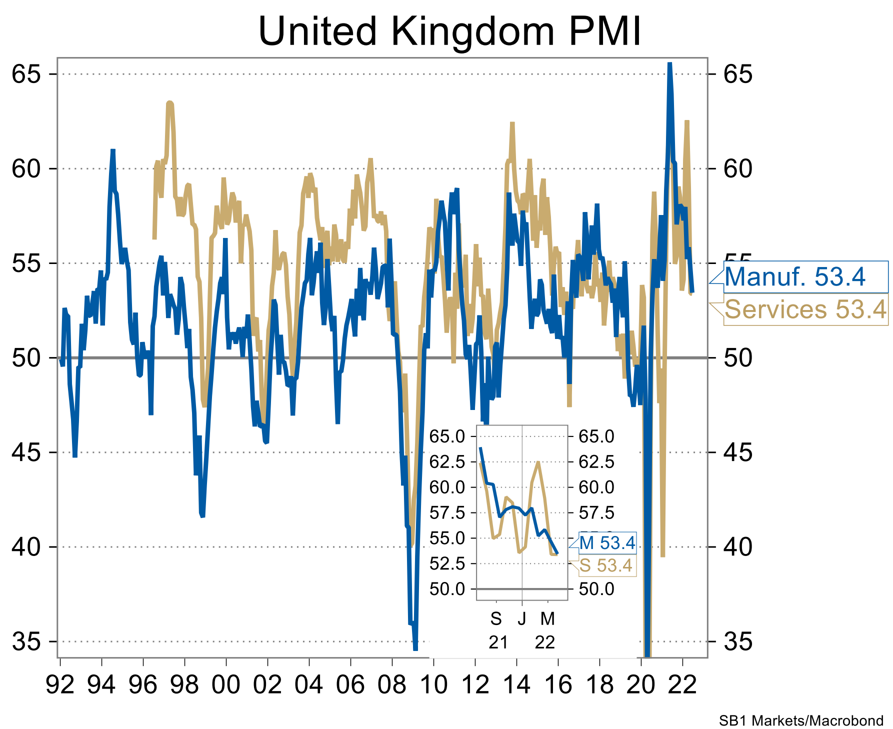


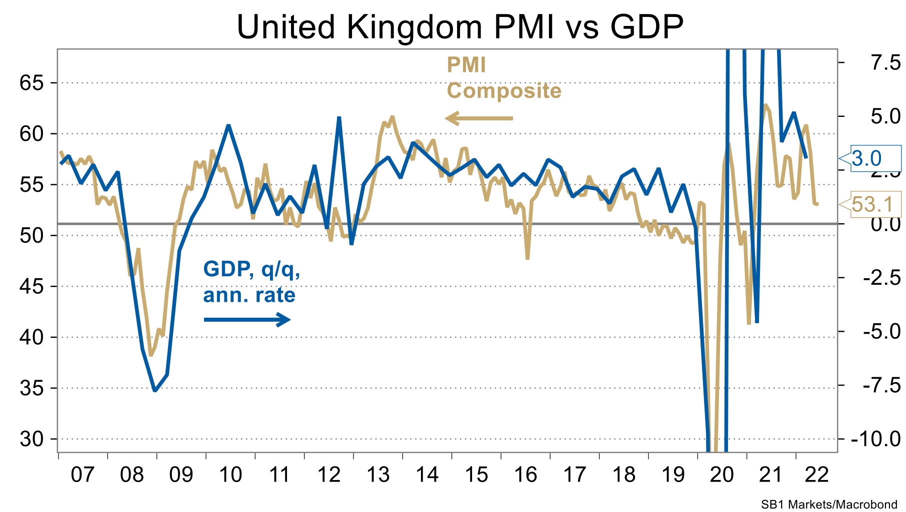


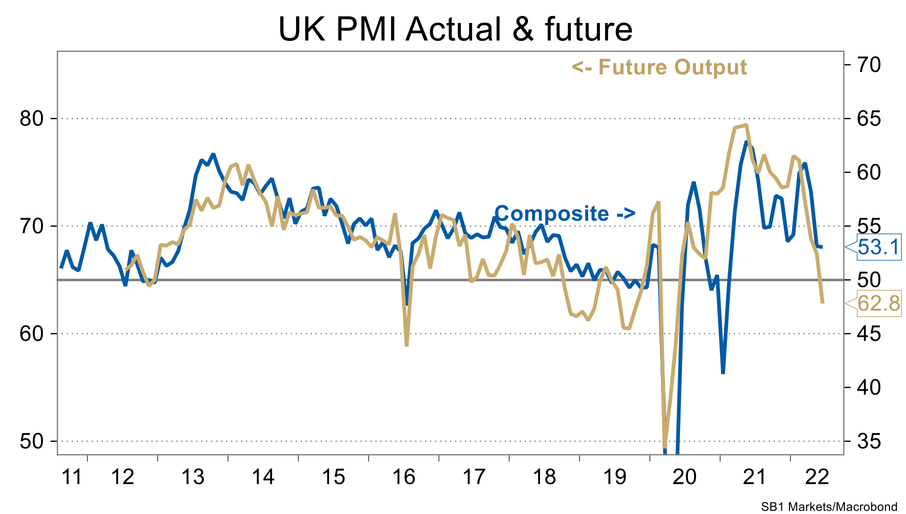
- Both the manufacturing & the service sector PMI fell sharply in June

The composite index stabilised in June but signals less than 1% GDP growth

In May, the index collapsed (-5.1 p), and the manuf. sector slowed further in June. Services not



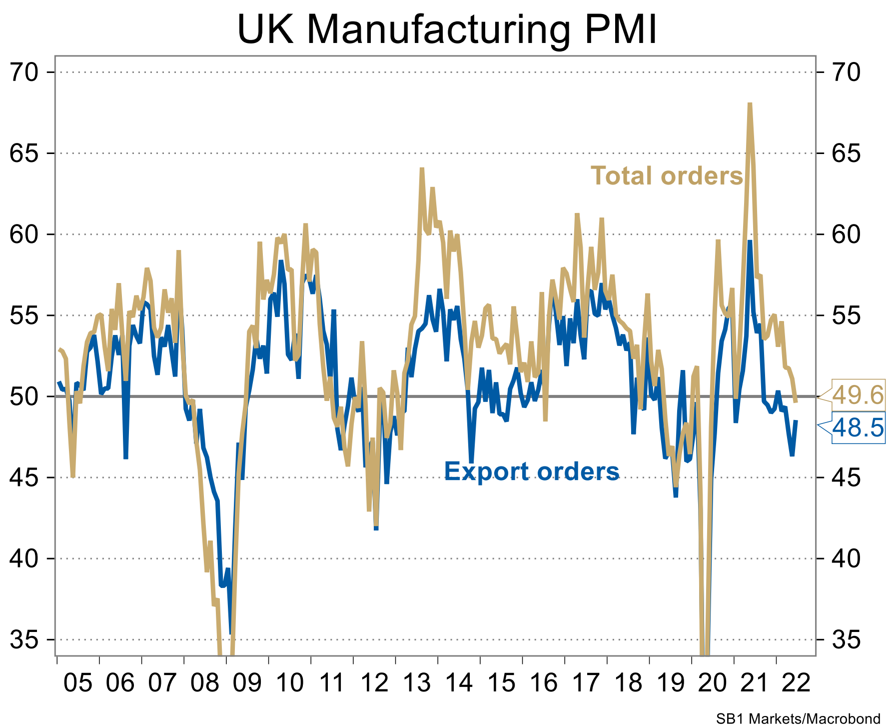


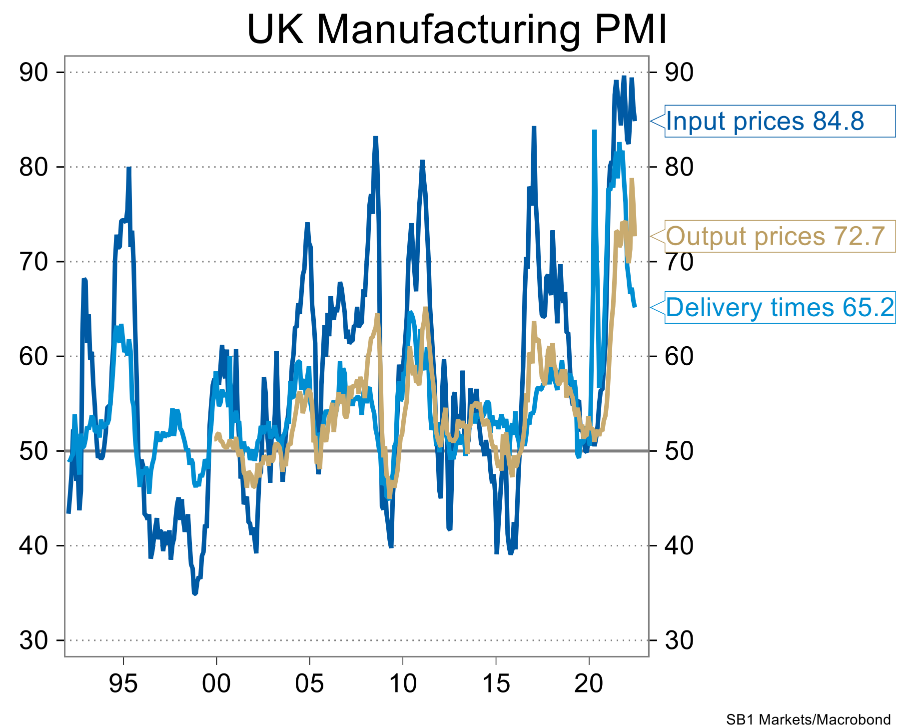


- The **composite PMI** was unch at 53.1, and 0.7 p higher than expected. The index level suggests rather modest growth
- **The manufacturing total** index fell 1.2 p to 53.4, and 0.2 p more than expected. The output sub index fared better, it fell just marginally but is at low level, 51.2. In addition, the order index fell below 50. Prices are still increasing at a fast pace, even if delivery times slows
- **The service sector** stabilised following the large decline in April and May. The level is close to average, at 53.4
- **The future index** also fell further in June, especially the output component. Not a positive sign

Order growth crossed the 50 line in June but price pressures remain high

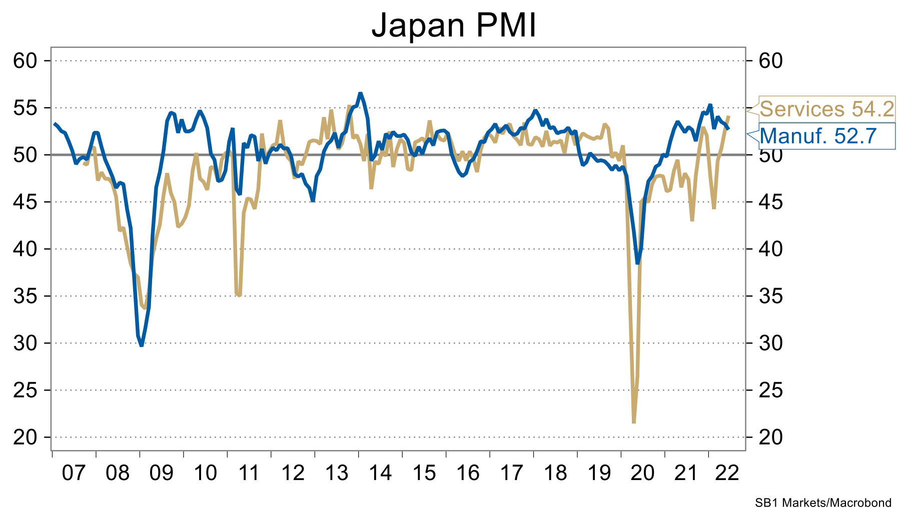
… even if the delivery times index eases

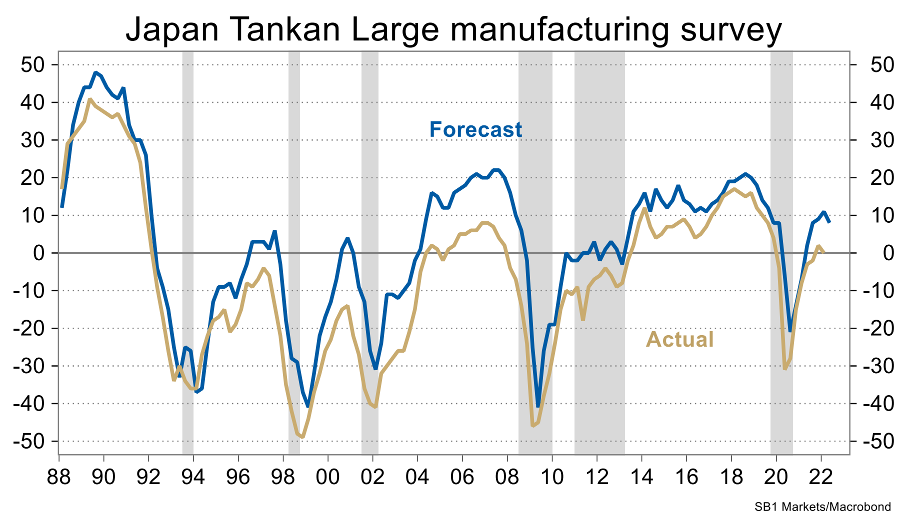


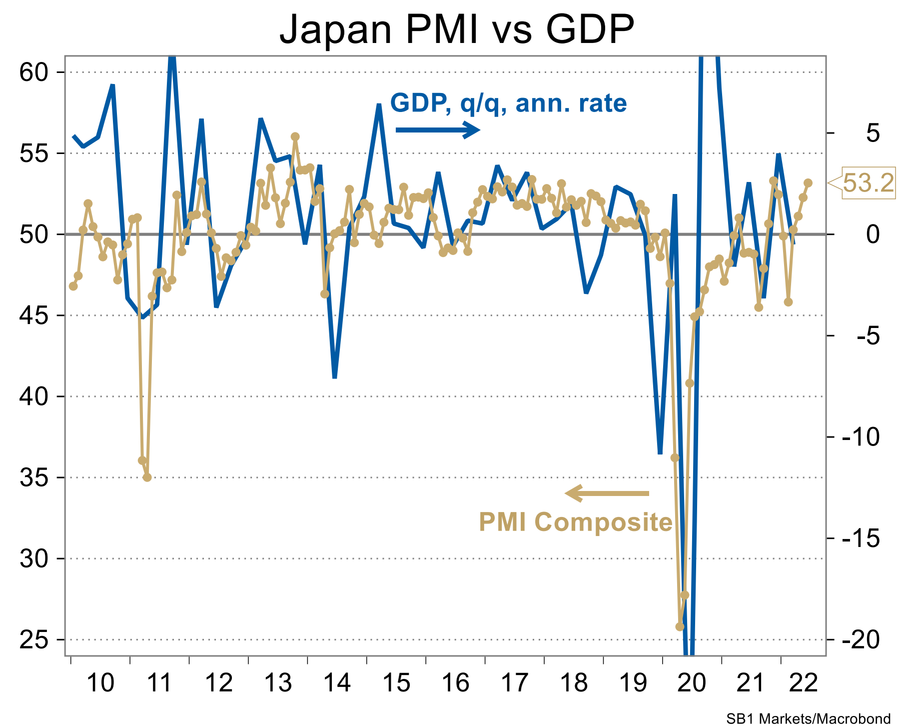


The sun is rising in the East, the comp PMI further up, 2.5% GDP growth?

The manuf. PMI slightly down but above an average level. Services up and the level is well above par

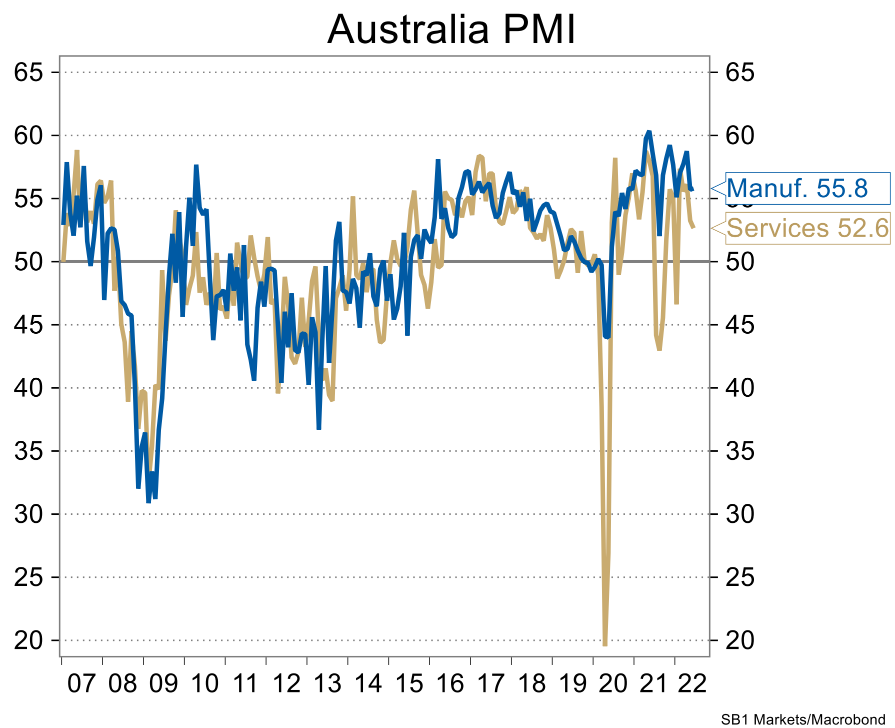


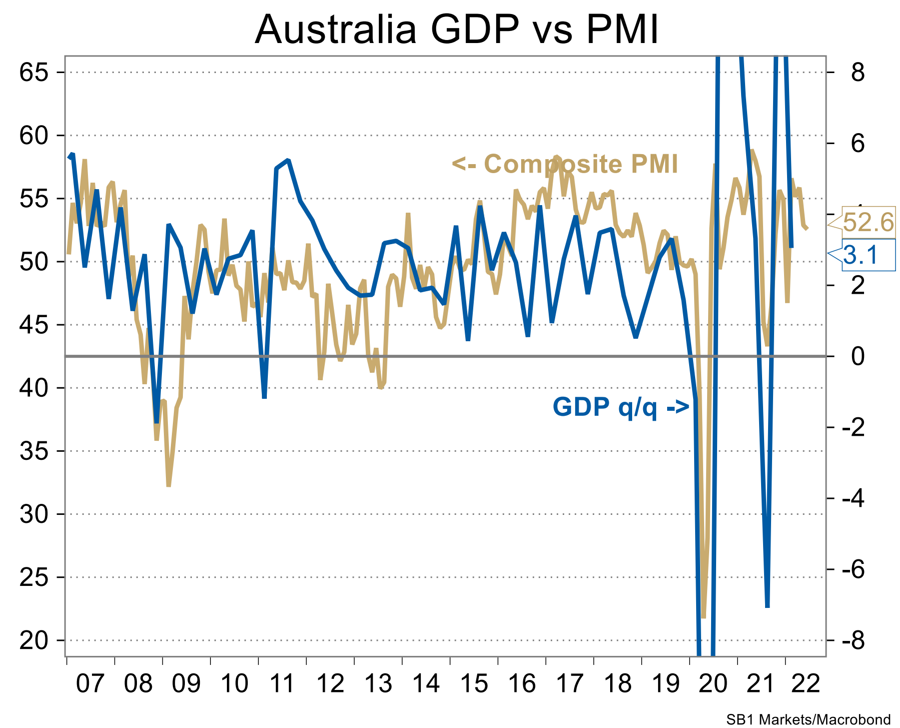




Both PMIs down in almost stabilised in June, signalling 3% growth

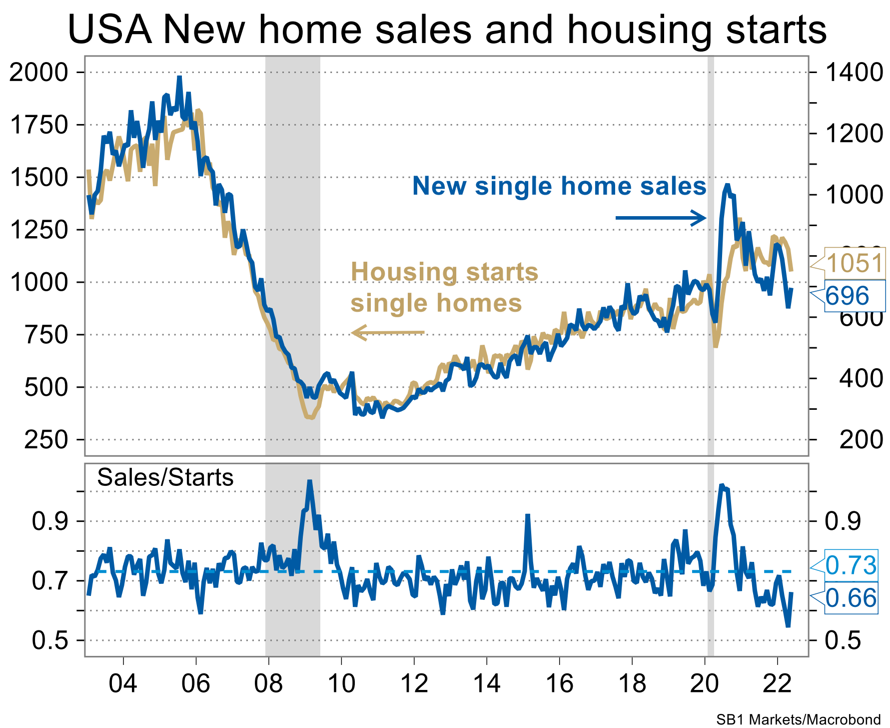
So far, a modest monetary tightening has not hurt the overall economy (at least not yet)

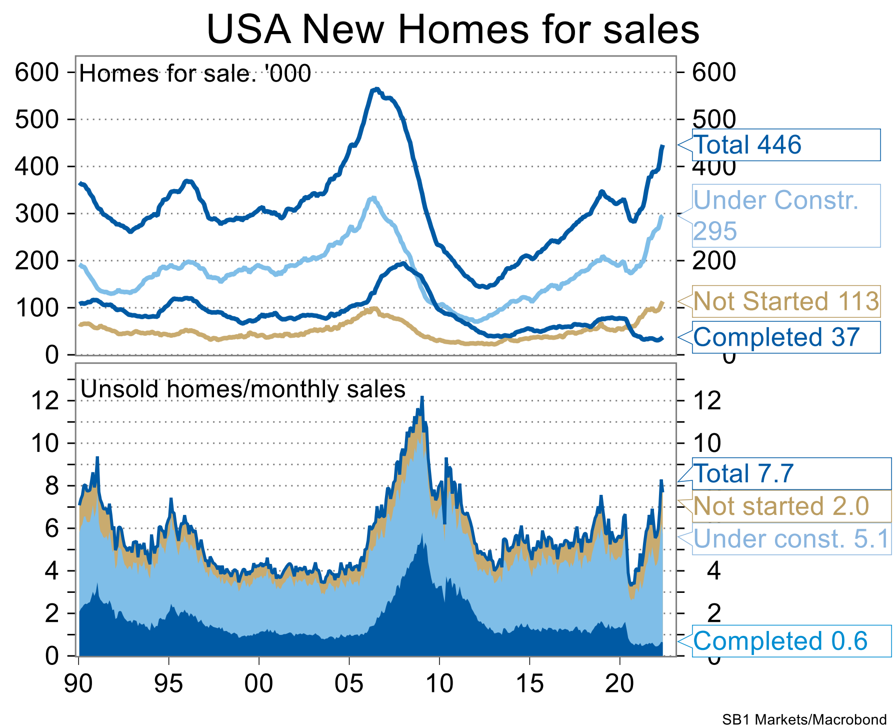




New home sales surprised at the upside in May but the trend is very likely down

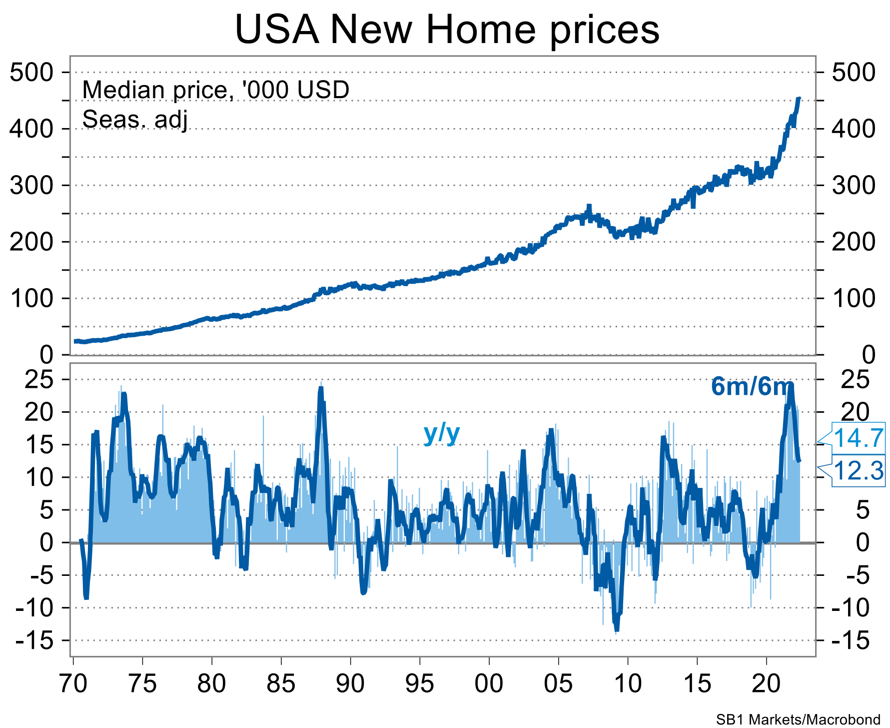
The inventory is rather large, and price increases are slowing

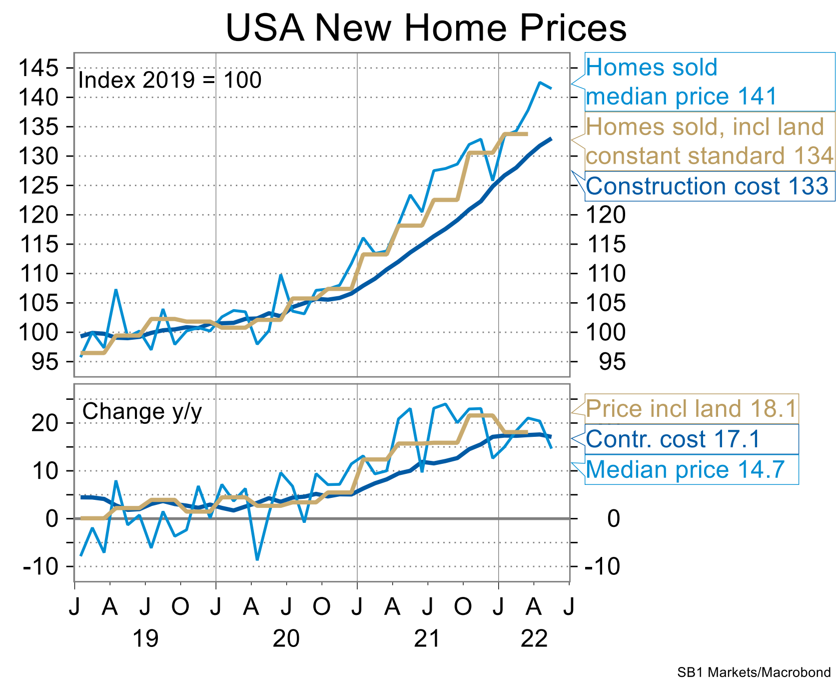




- **New single home sales** rose to 696' in May from 629' in April, revised up from 591', expected down to 587'. In sum 12% higher than expected! Still, sales are still heading down – and we expect more to come
- **The inventory of unsold homes** is climbing rapidly, now up to 446' units, up from below 300' in Aug-20. Measured in month's of sales, inventories equal 7.7 months, from the record low at 3 in Aug-20. Most of the inventory is 'for real', either completed homes (but the level in this category is very low) or under construction (and these homes will be completed) – as the supply side responded to the strong increase in demand. A steep increase in number of homes for sales that are not yet started, also confirms the strength of the supply side
- Prices fell slightly in May, and the underlying growth pace has slowed. Still, prices are up 14% y/y

New home prices marginally down in May, and growth is slowing

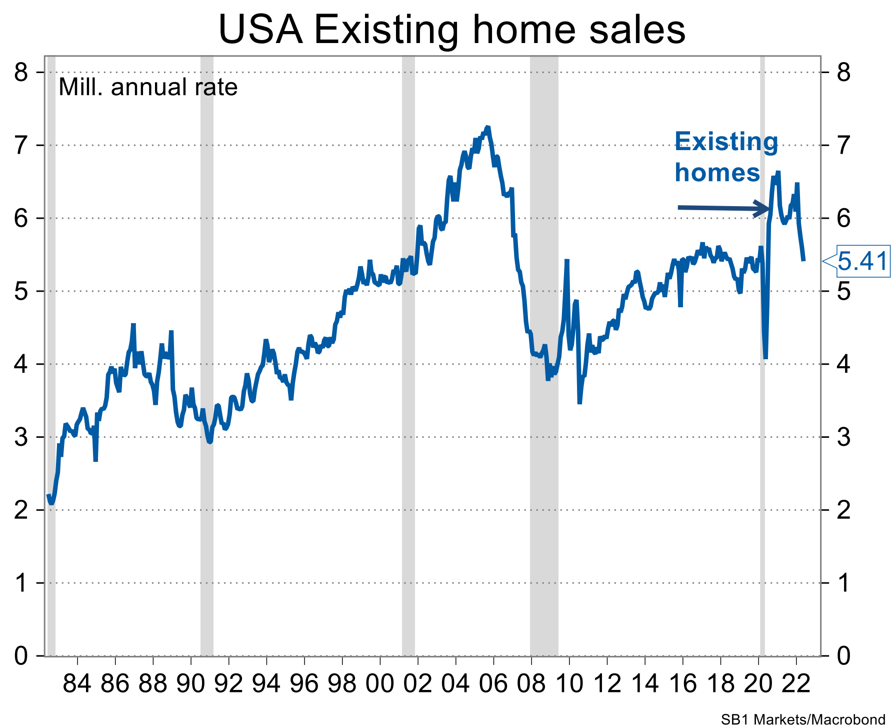


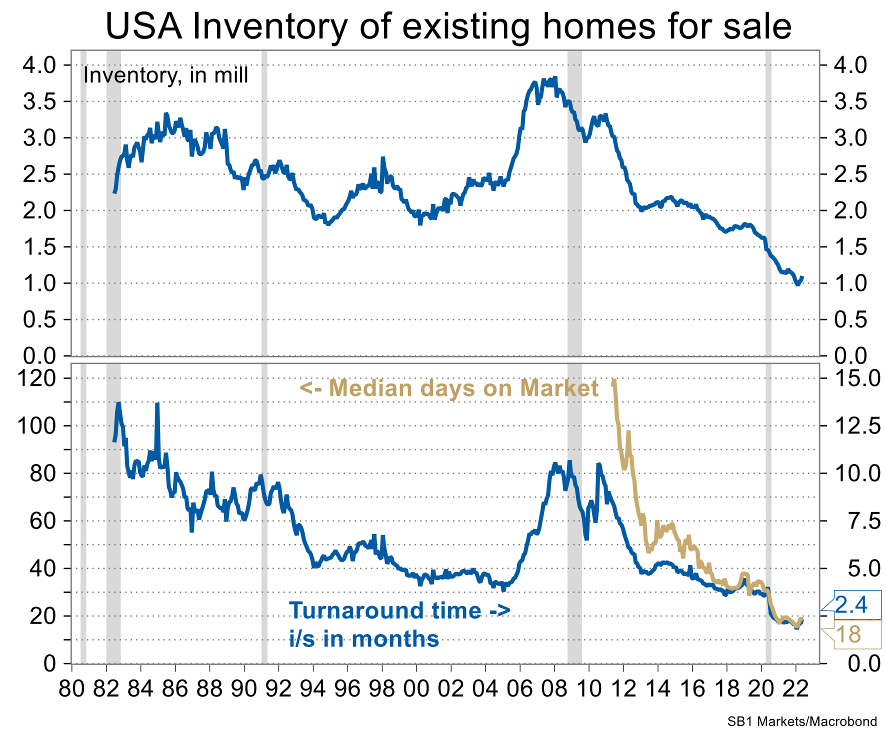


- The monthly **median new home sales price** is very volatile, as these prices are not adjusted for changes in the mix of homes sold. In May, prices were up 14.7% y/y, and the 6m/6m pace is 'just' 12%
- The **construction price index** is adjusted for changes in standard & size, as is the **new homes sold price index**, which also includes cost of land: they are up by 17% and 18%, measured in May and Q1, resp. Construction cost inflation is very likely peaking now, as material prices are nosediving
  - » The parity between total cost (incl land) and construction costs signals that land price growth – and thus demand for new homes - has slowed marginally vs 2021. Then, prices incl. land grew even faster than construction costs, signalling strong demand for new homes

Existing home sales further down in May, and price inflation slowed, to 'just' 0.6%

The inventory is still very low – but has increased marginally the past 3 monhts



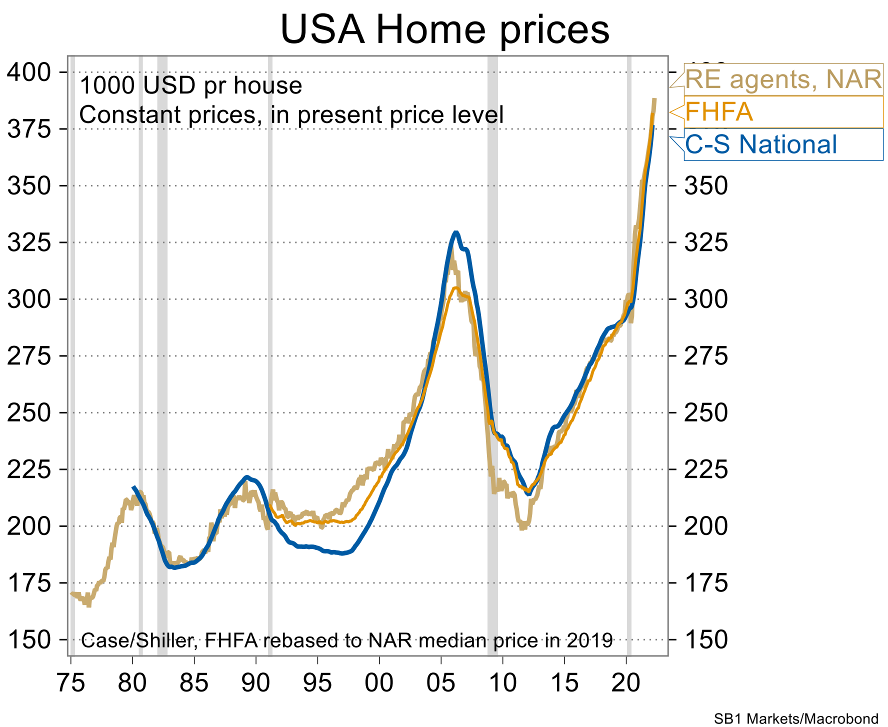


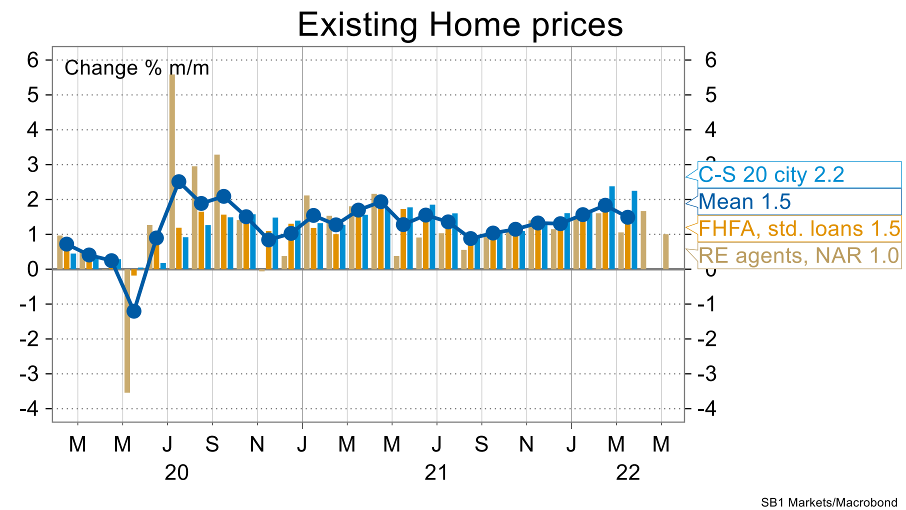
- Sales of **existing homes** fell to 5.41 mill (annualised rate), from 5.60 mill in April, as expected. Sales have fallen 17% from local peak in January, and are trending down – from a high level in mid '20. **Pending sales** signals a further decline in actual transactions in June
- **The inventory of unsold homes** rose marginally in May, as in March and April – from the ATL level in February
  - » The inventory equals 2.4 months of sales (up from 2.2 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 18 days (down from 19 last month but up from 16 in Feb). Before the pandemic the time on market was at 30 days (and 120 days in 2011!)
- **Prices** rose 0.6% m/m in May, *check more next page*
- **Mortgage rates** have shot up recent months – and the <u>decline in sales is probably due to a declining demand</u>

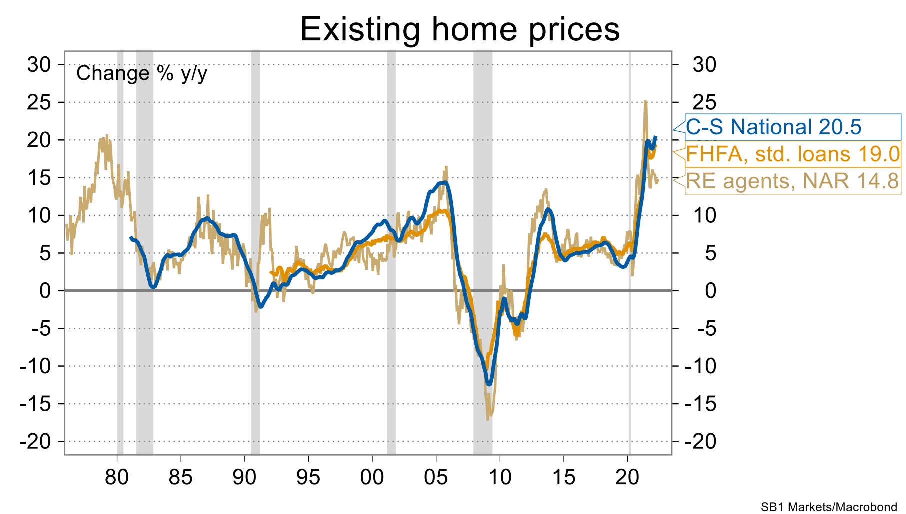
SpareBank 1 MARKETS

Existing home prices up 'just' 0.6% in May (or really in April). What now?

A 0.6% price inflation is not low (7.4% annualised) but far below house price inflation past 2 years



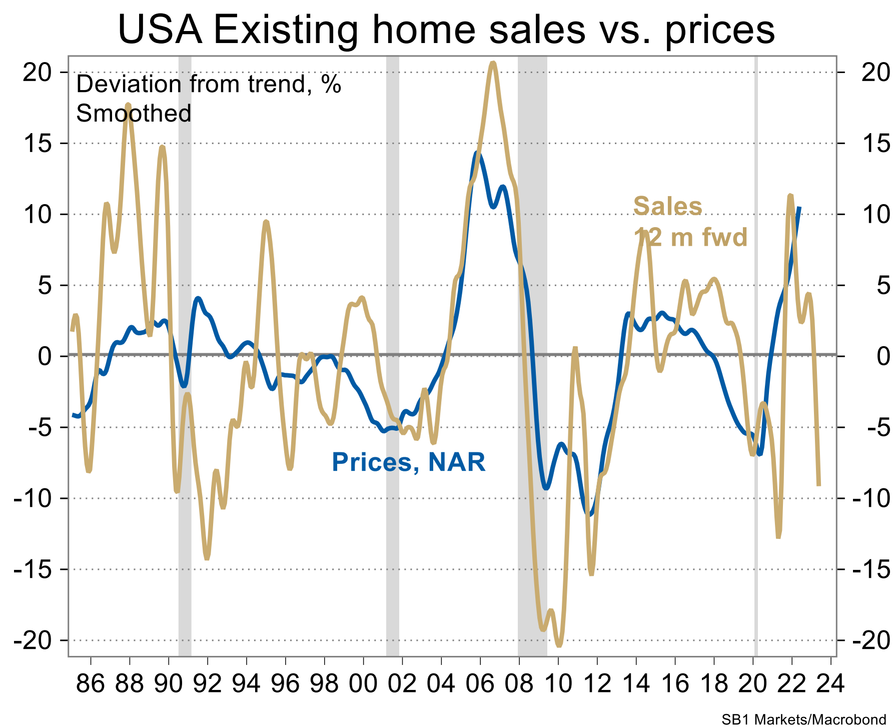


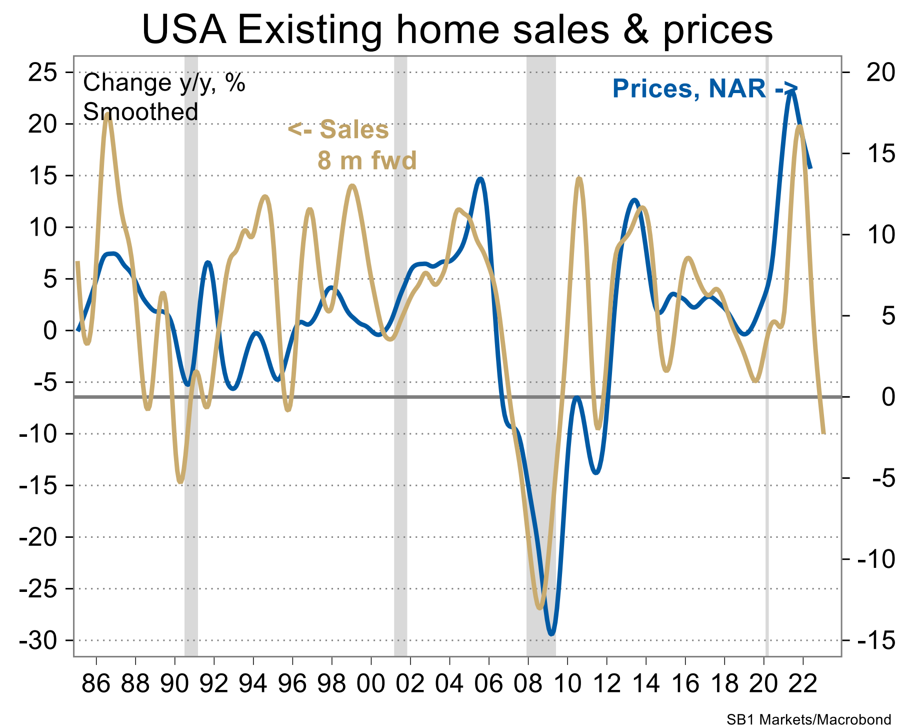


- **Prices** rose 0.6% m/m in May, down from 1.9% in April (our seas. adj.) May prices are mostly based on transactions agreed upon in April. The annual rate climbed 0.6 pp to 14.8% (prices were flat in May last year). The trend is still down
- Other indices are up 19% - 21% y/y. <u>Prices are normally lagging sales by almost 1 year, and the recent decline in sales very likely signals a turnaround in prices too</u>
- Home prices are up some 38% from before the pandemic, and way above the 2006 level, even in constant prices (up some 15%)

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

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

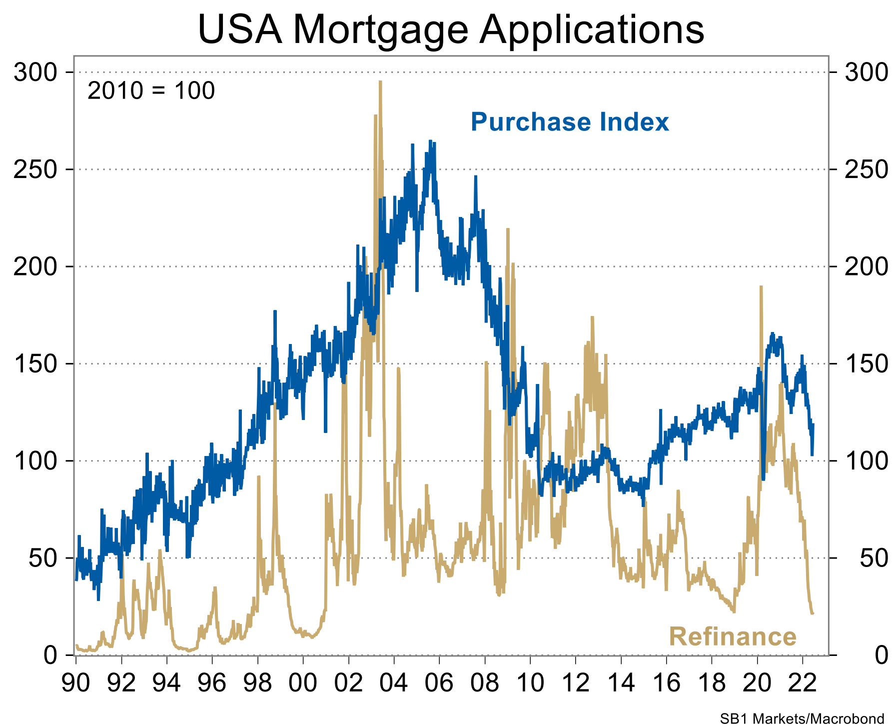


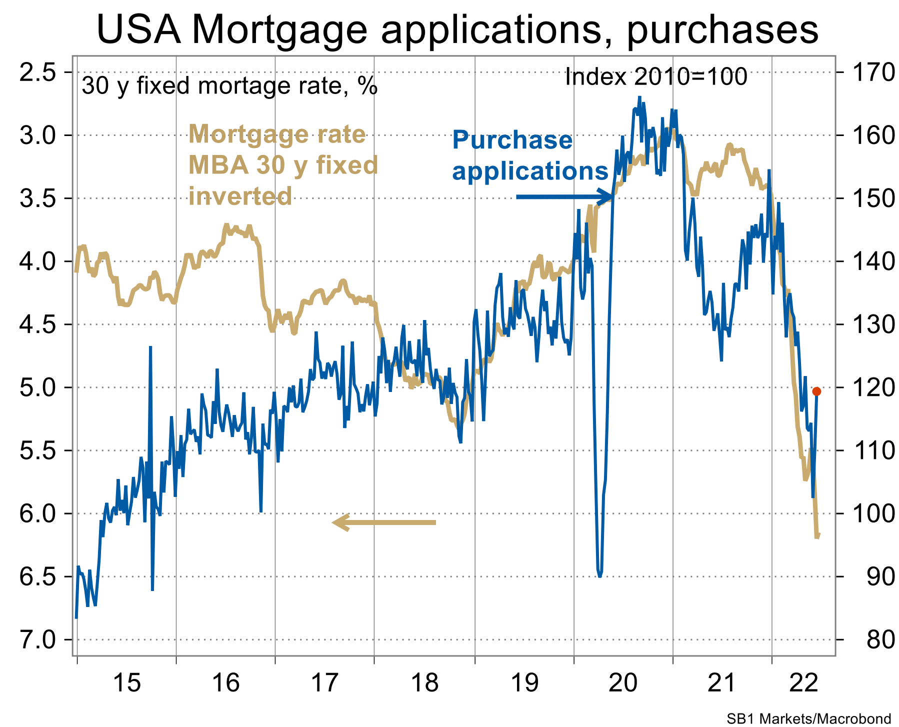


- Sales peaked in Jan-21 but probably mostly due to lack of supply – and prices have not yet yielded. The recent decline in sales, which started in Feb-22, may be due to a softening demand, signalling dowside risk for prices

Mortgage applications up for the 2nd week in row. Mortgage rates no problem?

We doubt, the trend is downwards

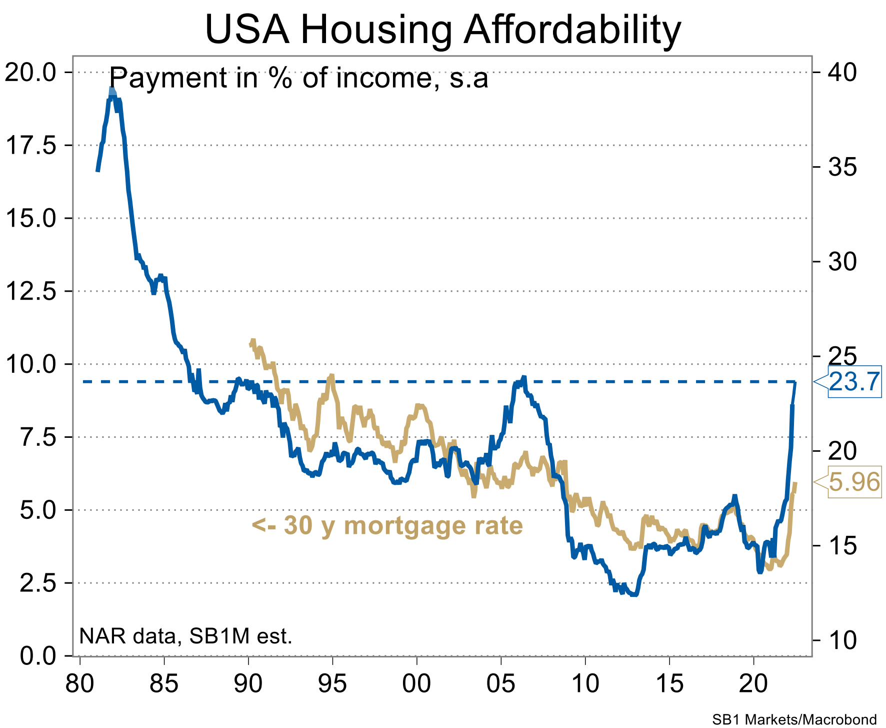


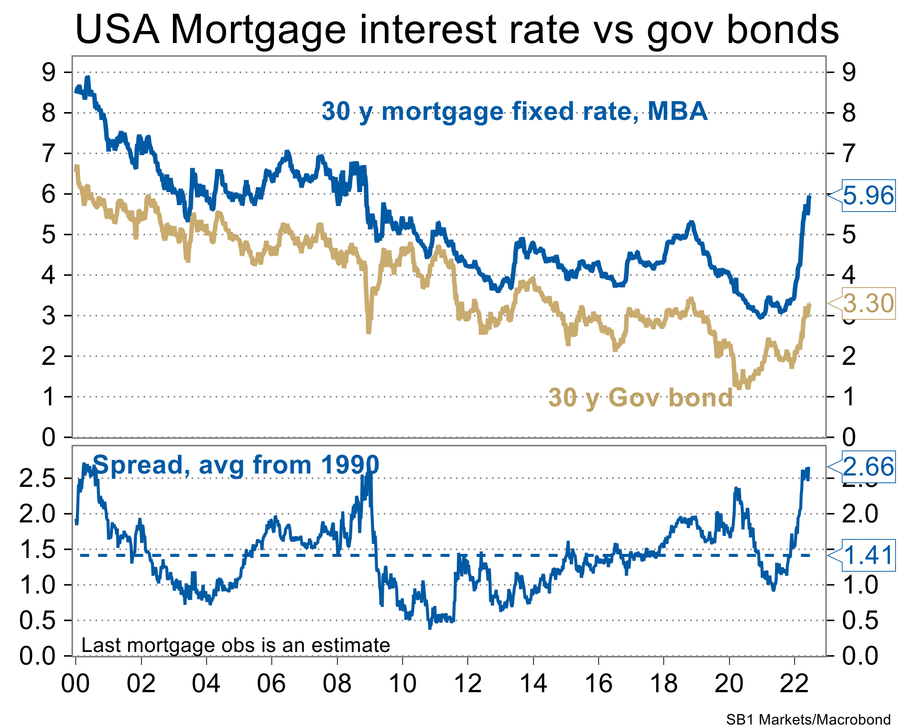


- Applications for new mortgages are down some 20% since the start of the year, and the level is almost 10% below the pre-pandemic level. We expect a further decline the coming weeks

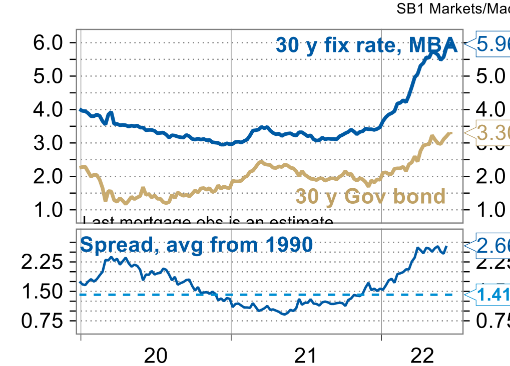
The least affordable housing market since 2008 (almost since 1987)

Prices are up 37% since before the pandemic, the mortgage rate is up 50%. In sum….



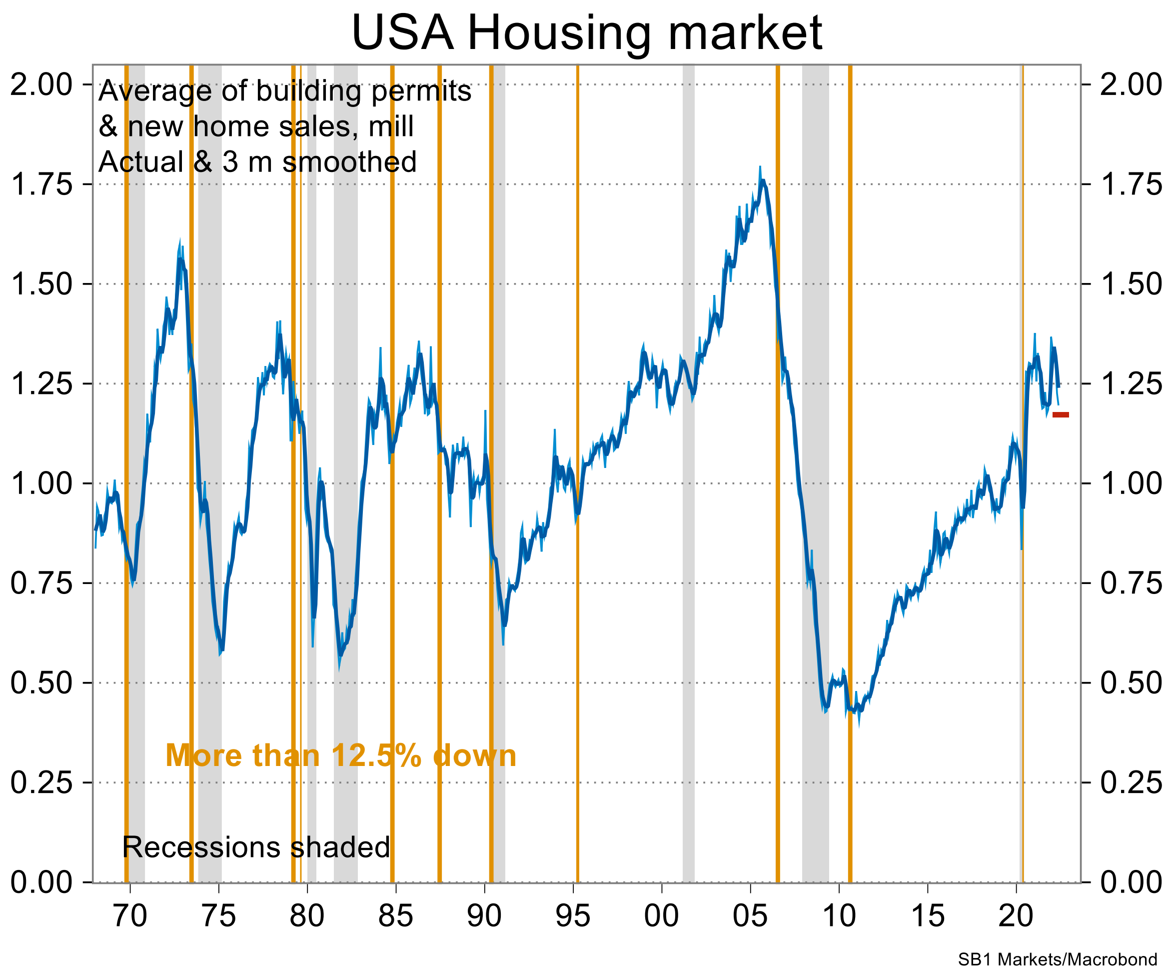


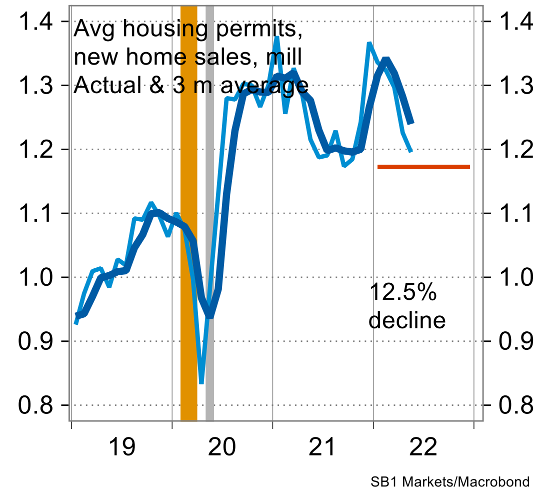
- **The 30 y fixed mortgage rate** has climbed to 5.96% (effective rate) from 3.0% last summer, from 3.5% at the start of 2022. Before the pandemic, the rate was 4.0%
- The **Federal Reserve** concluded its mortgage backed bonds buying campaign in March - <u>and has now start reducing its holdings. No doubt, this shift explains the surge in the spread, to 2.66 pp, way above the average at 1.41 pp</u>



Housing vs. recessions: The red line is not crossed but the direction is set?

Both building permits and new home are trending down but not yet sufficient to 'declare' a recession

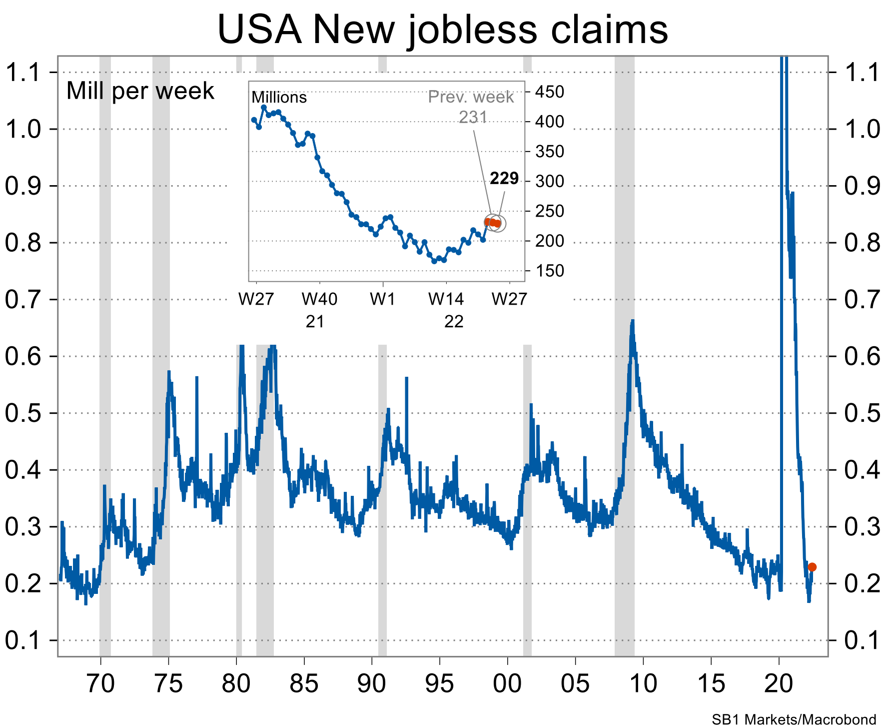


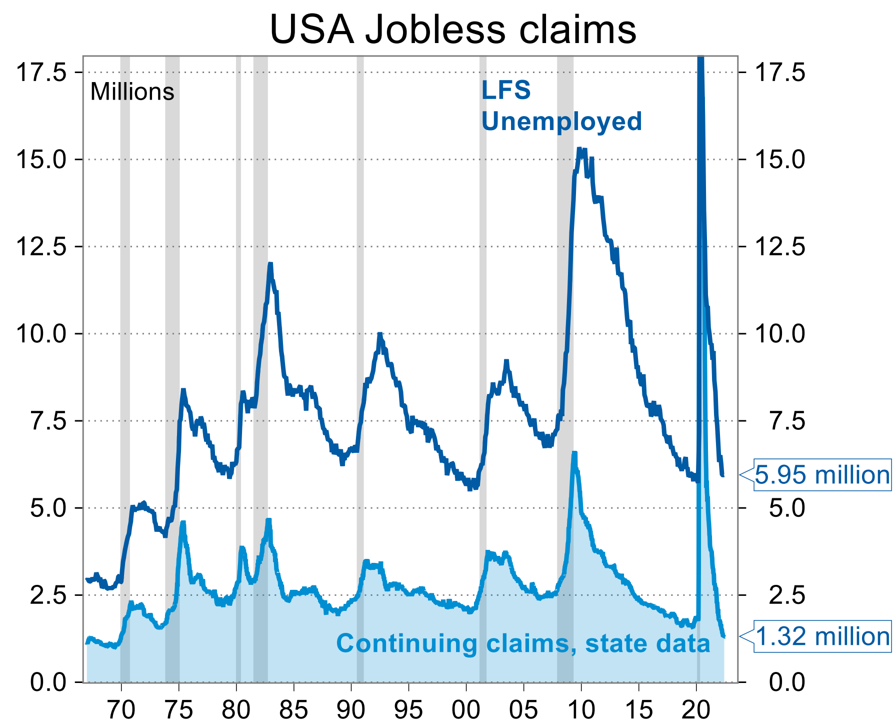


- Most recessions are 'housing recessions' as demand for housing and residential investments declines substantially ahead of and during recessions
  - » The only exception in recent decades was the 'Nasdaq' recession in 2001
  - » In addition, the pandemic recession was not caused by a setback on the housing market
- At the chart above, we have marked declines of more than 12.5% in the 3 m average of the average of building permits and new homes sales with a yellow line
  - » 1984 and 1987, where interest rates were hiked, soft landings, and no recession. (the 2010 decline was just after the GFC)
  - » The other 7 lines: A recession followed

New jobless claims are trending upwards but have stabilised past two weeks

The increase in not yet ‘recession-like’, but the distance is not that far anymore (check next page)

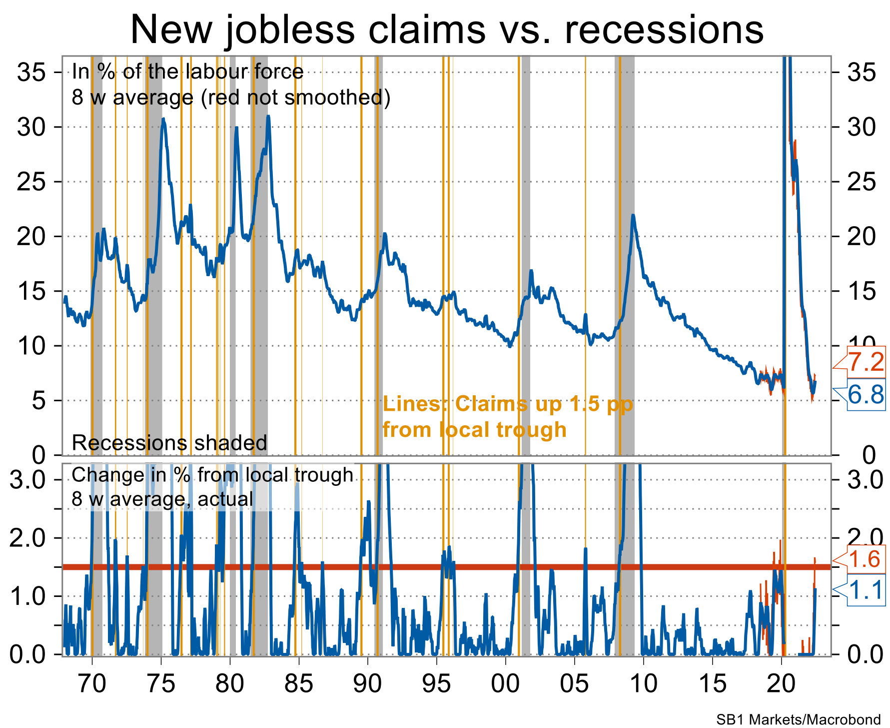




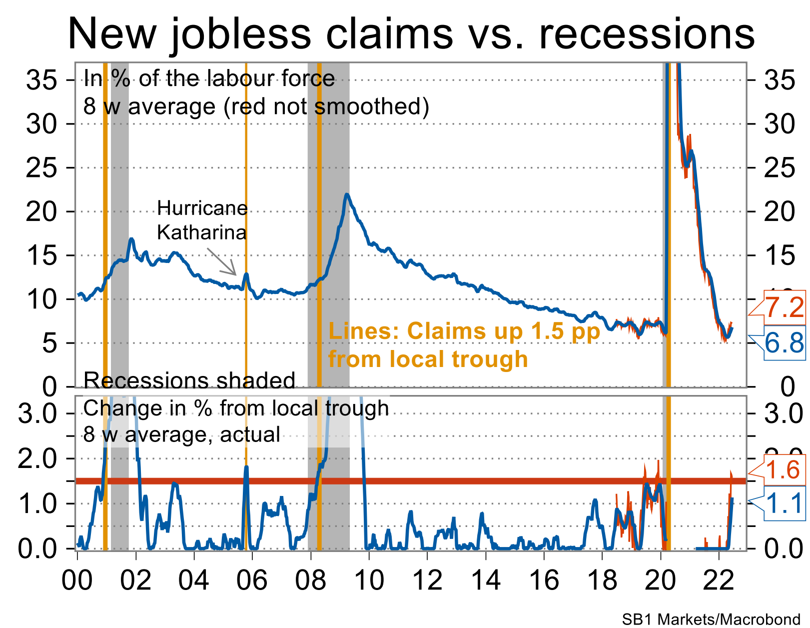
- **New jobless claims** fell by 2’ to 229’ in week 24. Since the bottom in week 11 in mid-March, the inflow has increased by 63’, from 166’ – which was the lowest since 1969
- **Ordinary continuing claims** rose marginally to 1.32 mill in week 23, an extremely low level

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

The change in the 8-week average is still not large enough to suggest a recession



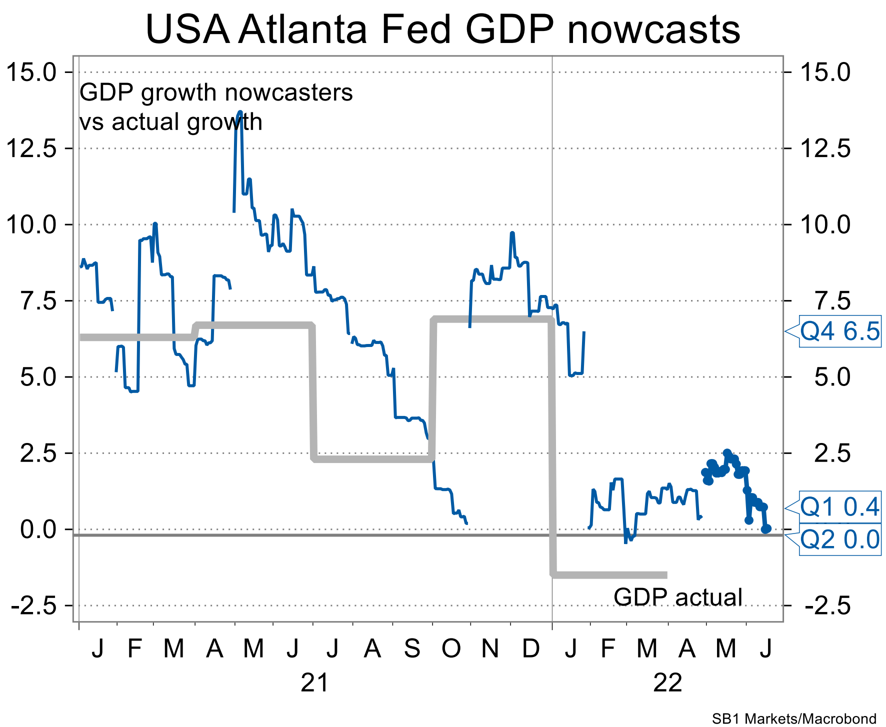
- …. But the margin is shrinking week by week

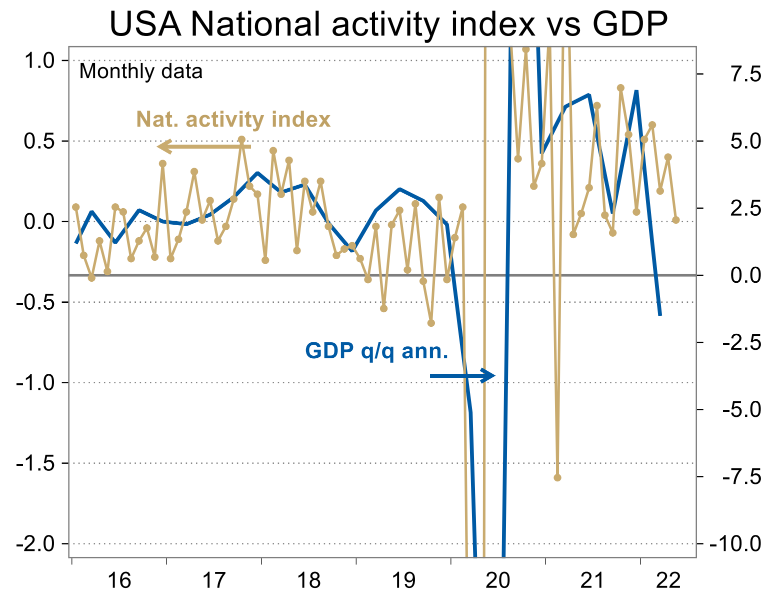


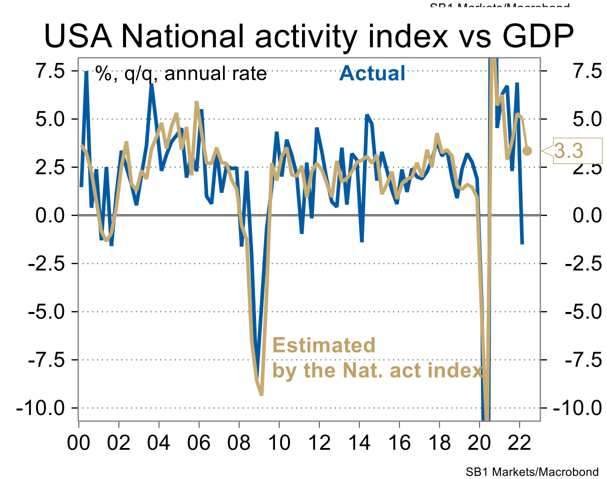
- The yellow lines: New jobless claims (8-week average) up 1.5 pp vs. the labour force
- Now, the average is up 1.1 pp, from 0.6 pp last week
- Our recession signal model based on new jobless claims has sent several false signals, and the signals often comes too late. Even so, the

Atlanta Fed's nowcaster suggests zero GDP growth in Q2

... while the National Activity index just signals slowdown to some 2% GDP growth in May



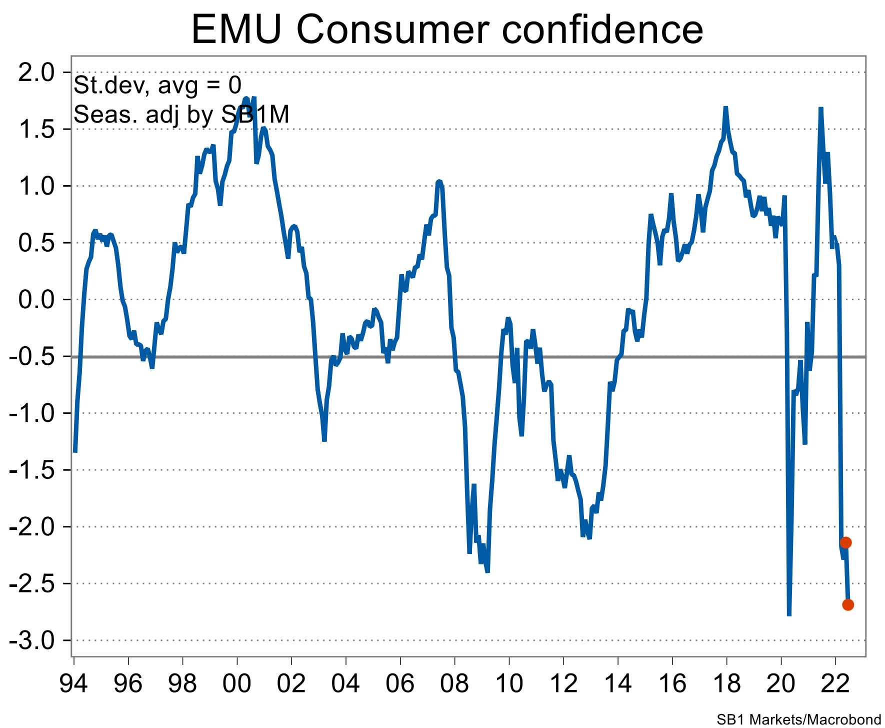


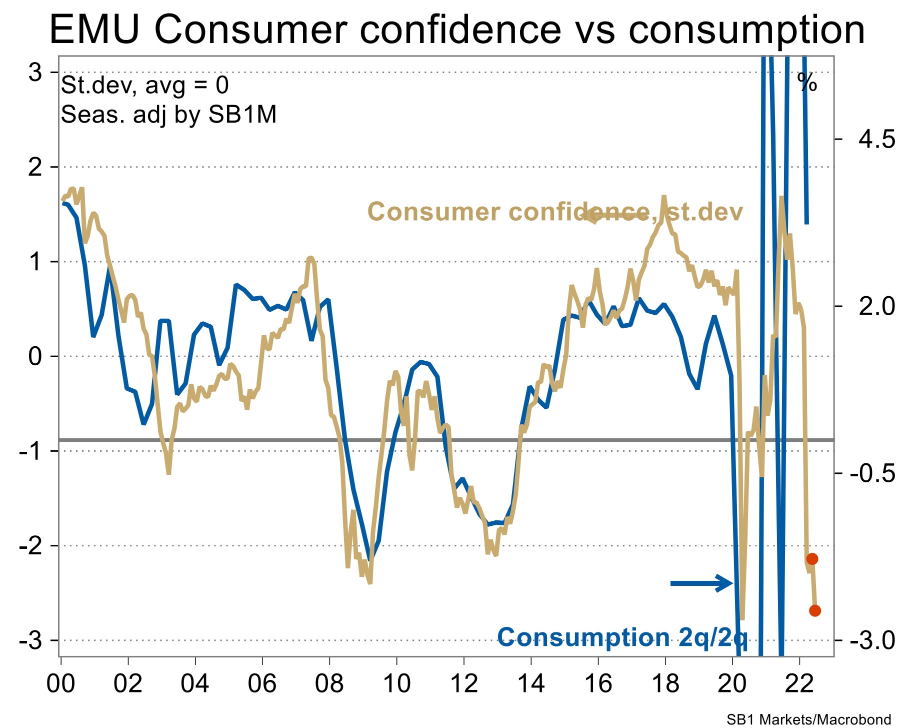


- In a quarterly model, the Activity index suggests a 3.3% growth pace, way above Atlanta Fed's nowcaster

Consumer confidence further and sharply down in June, just Apr-20 even worse

Inflation and a war is more important than the lowest unemployment rate since 1980

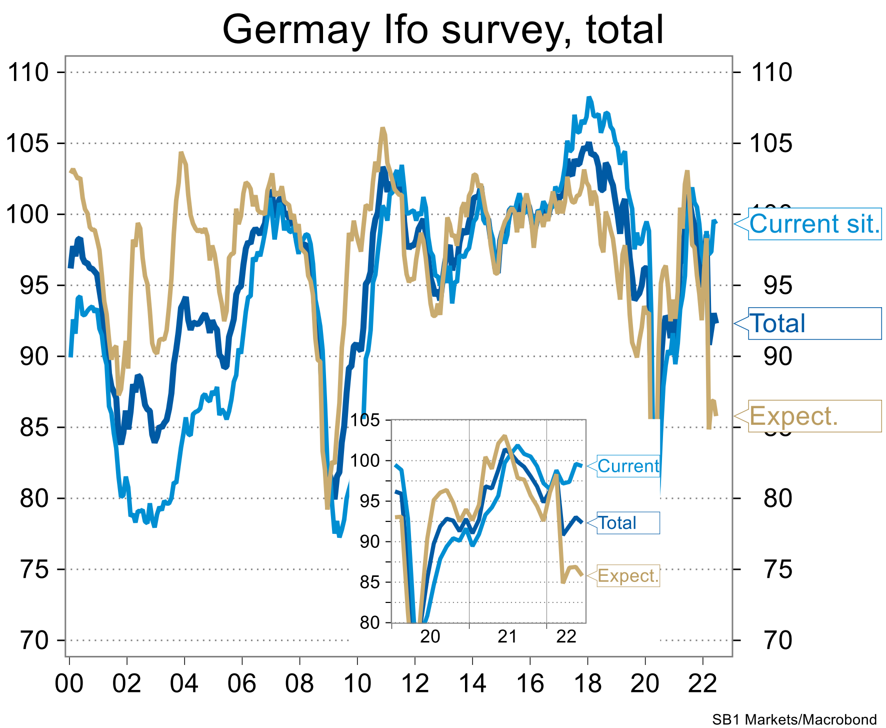


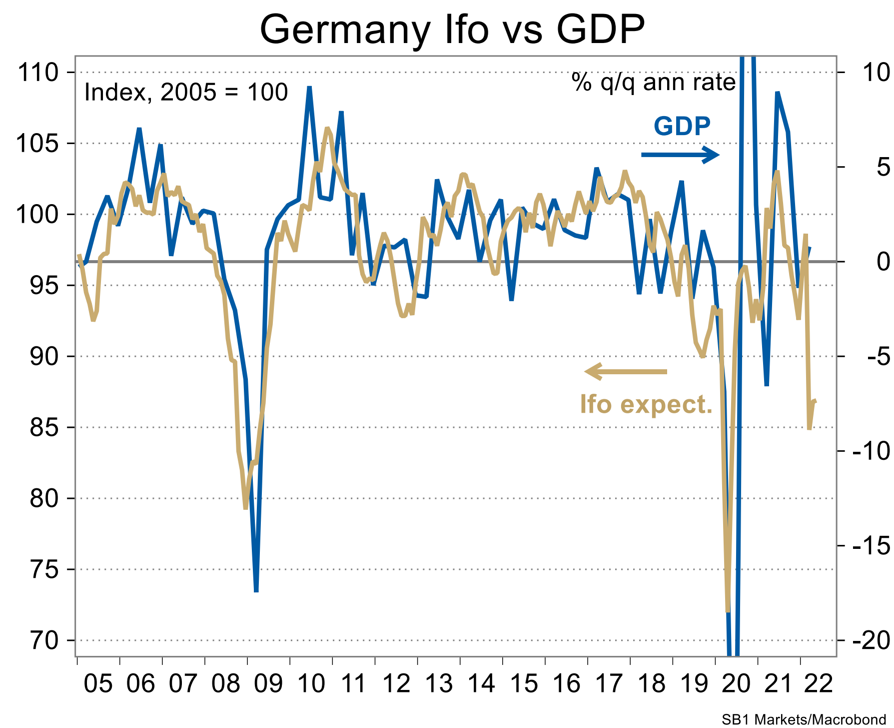


- **The confidence index** fell 3.1 p to -23.6, expected up 0.6 p to 20.5. The decline equals 0.6 st.dev, and the level in June is -2.7 st.dev below avg
- **The war** has been around for 4 months, at most likely it does not constitute an even larger negative drag on the sentiment. Thus, **inflation** is probably to blame. **Interest rates** will be hiked – and the rest of the yield curve has taken big leaps upwards, but we doubt that can explain the decline in sentiment in June
- Usually, consumer confidence is tightly correlated to growth in household demand. If so…

Ifo expectations slightly down in June, signals a sharp contraction in GDP

The index fell 0.2 st.dev to -2.2 sd below avg. The current situation just marg. down, at +0.6 st.dev

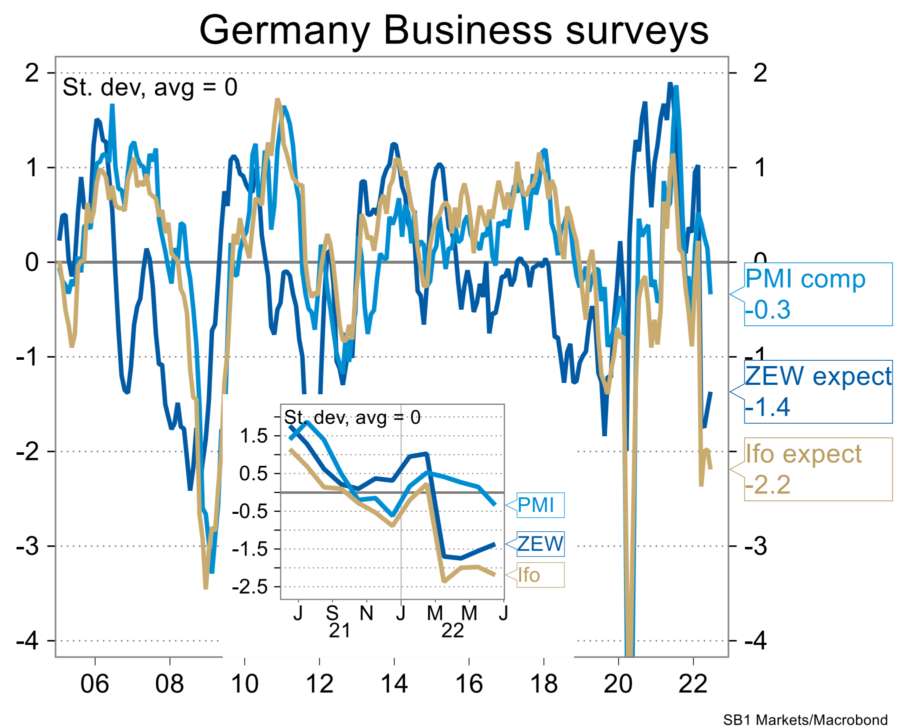




- **The expectation index** fell 1.1 p to 85.8, 0.5 p lower than expected. The level is very low, at -2.2 st.dev below average signalling a huge decline in GDP, at a 7% – 8% pace!
- The **assessment of the current situation** fell 0.2 p to 92.3, and was 0.3 p higher than expected. The level is still well below average, at 0.6 st.dev

The Ifo business climate mixed: better in construction and services

... but weaker in manufacturing and construction. The composite PMI down but the ZEW survey rose

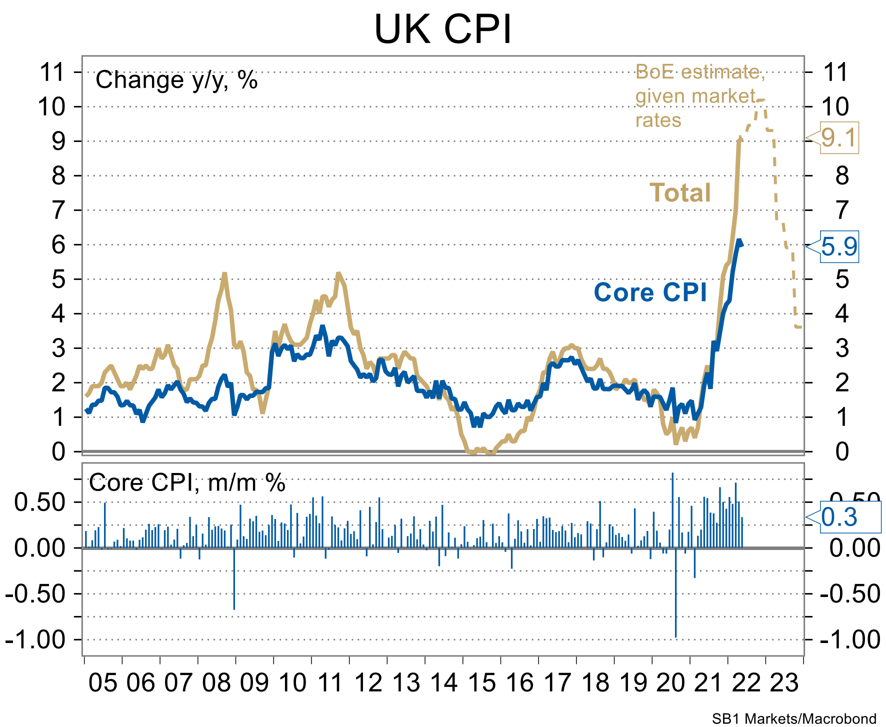


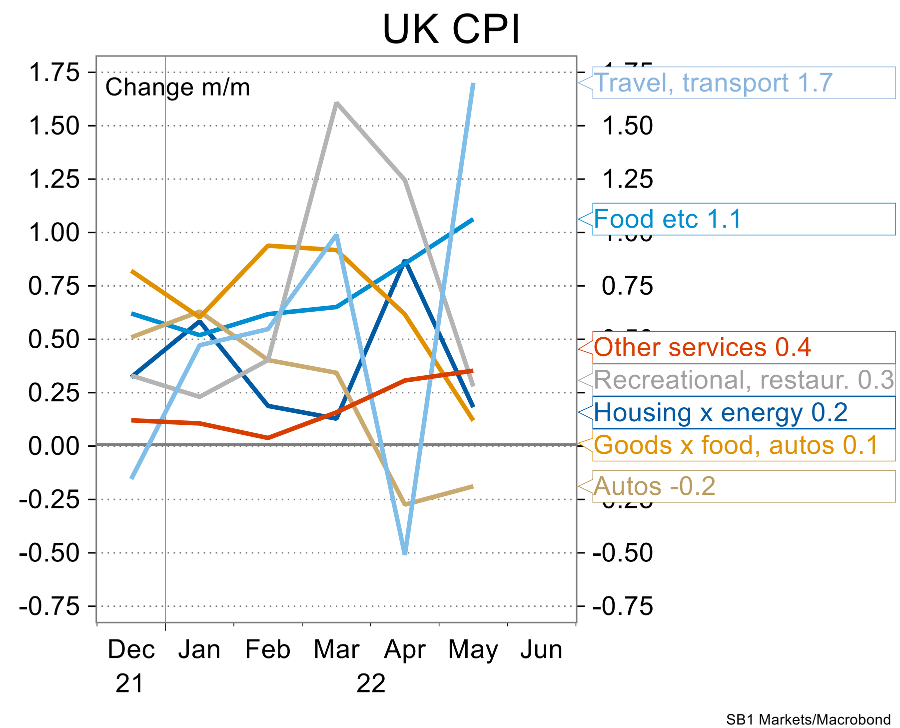
- Business climate: the average of the current situation and expectations

SpareBank 1 MARKETS

Headline inflation marginally up, the core marginally down –to 9.1% & 5.9%...

Bank of England is looking for 11%+ in October





- **The total CPI** rose 0.5% m/m in May, following the unprecedented 2.2% lift in April, when the semi-annual price adjustment of energy prices were implemented. The annual rate at 9.1% (as expected) is highest since 1982
- **Energy** has lifted the headline y/y rate by 3.5 pp. The regulated price cap for energy was lifted substantially in April (a semi-annual adjustment, the next in October)
- Food prices rose 1.1% in May, and they are up 7.6% y/y, lifting the headline by 1.0 pp
- The **core CPI** (ex food and energy) rose 0.3% m/m, the lowest pace in 8 months The core is up 5.9% y/y, down from 6.2%, expected down to 6.0%
- Auto prices have fallen the past 2 months, and price increases for goods x autos & food have slowed too. However, service prices are on the way up
- All major sectors are reporting growth above 2%

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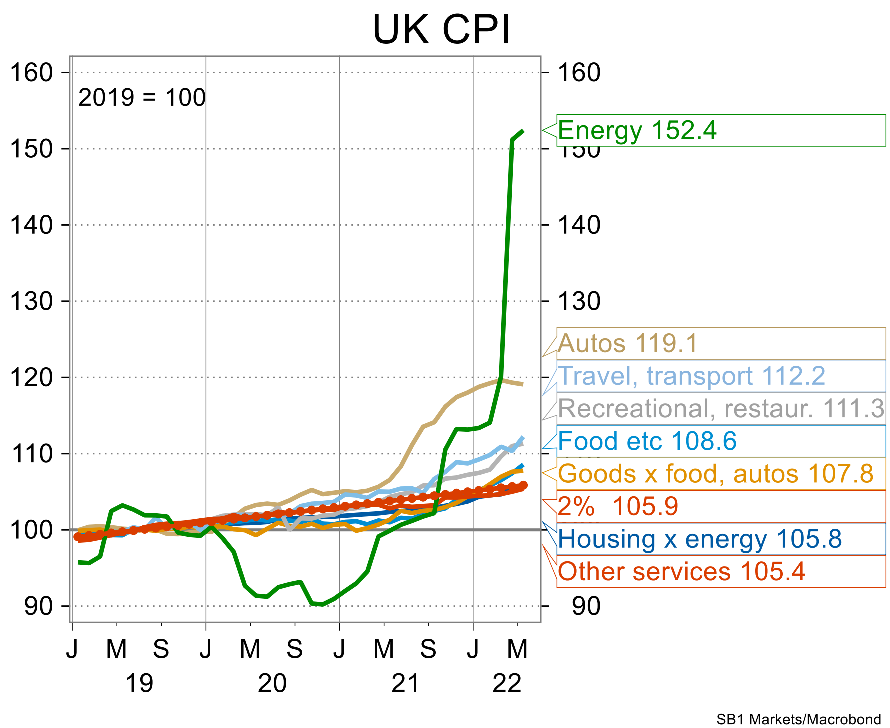
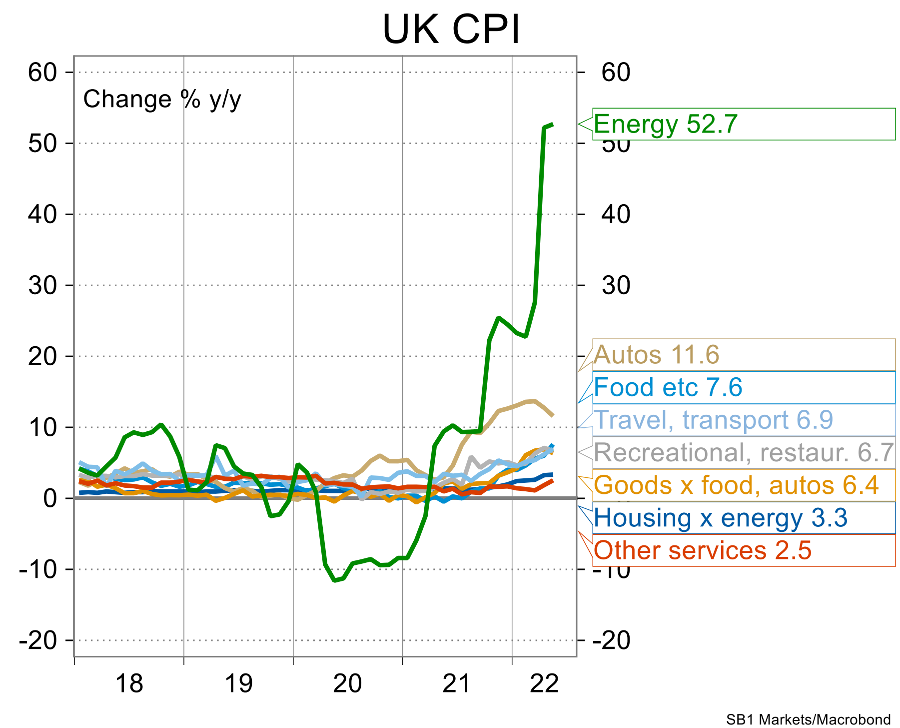
Energy is a main culprit

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

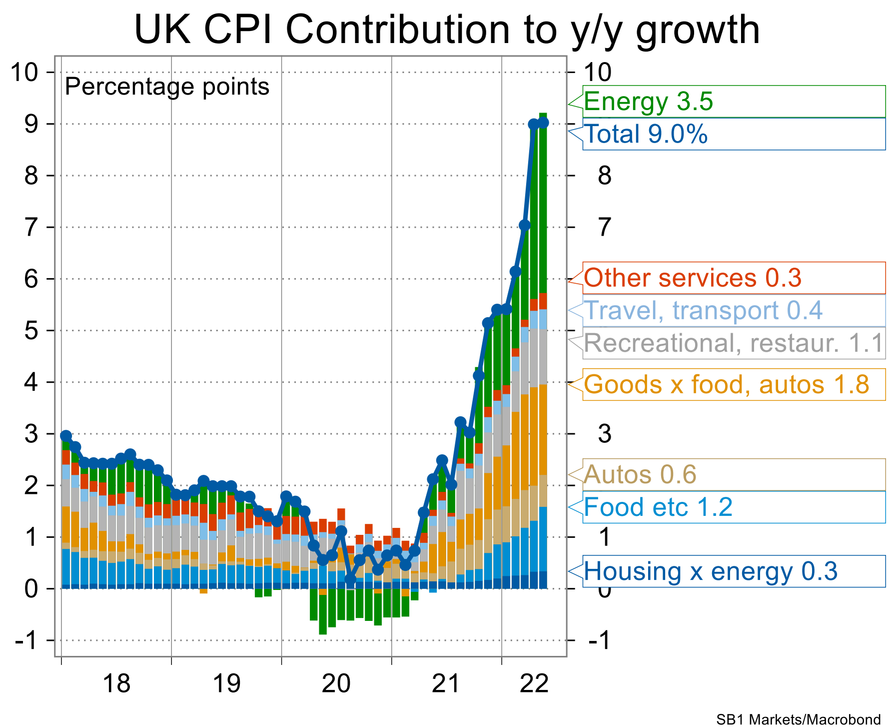


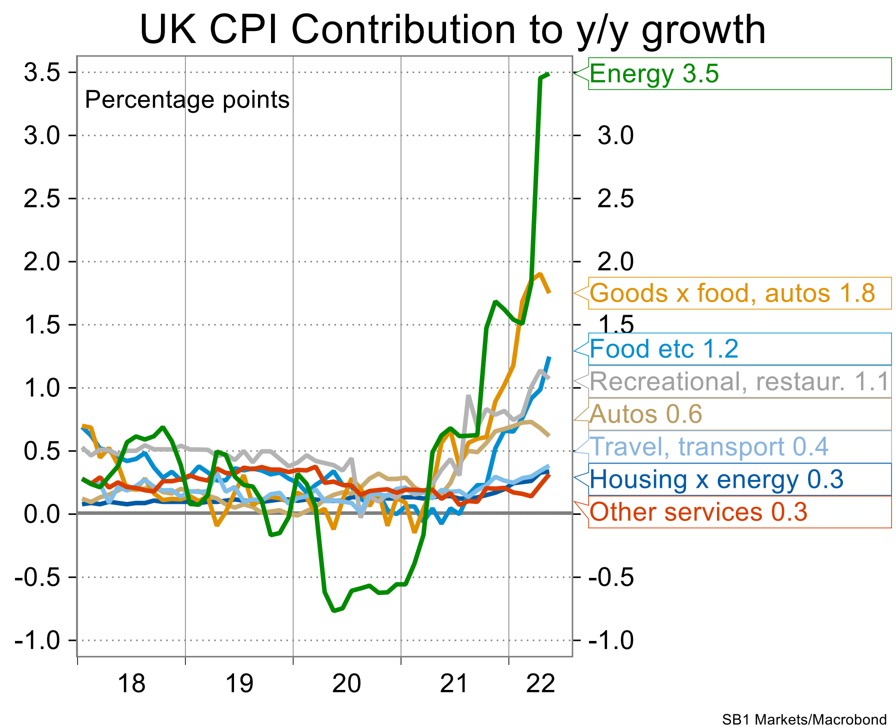


- **Energy prices** are up 52% y/y, due to the 26% m/m surge in April, when semi-annual price cap adjustments were undertaken

Energy is important, but several components contribute as well

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

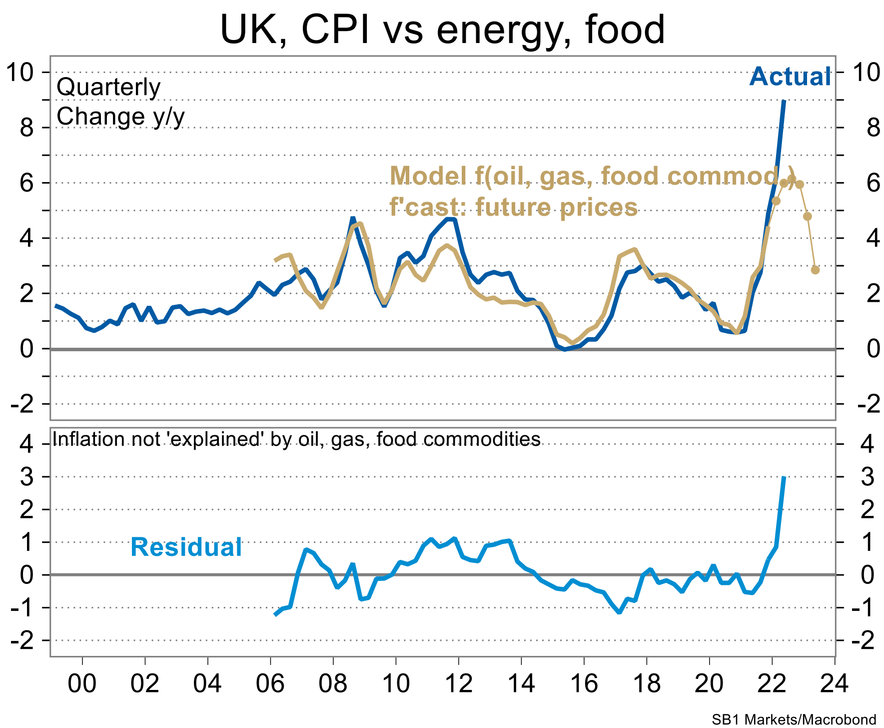


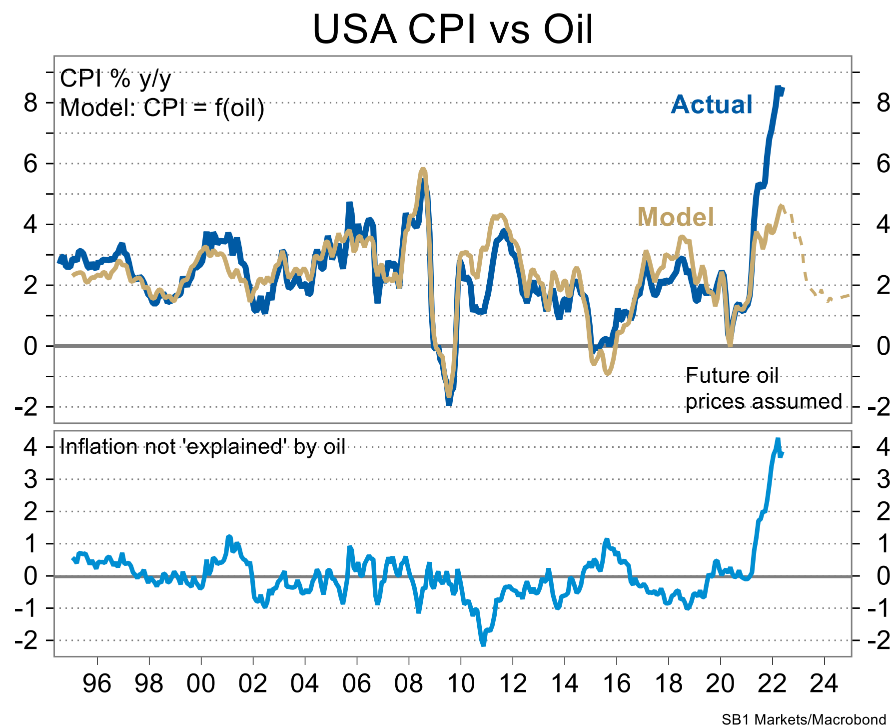


SpareBank 1 MARKETS

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

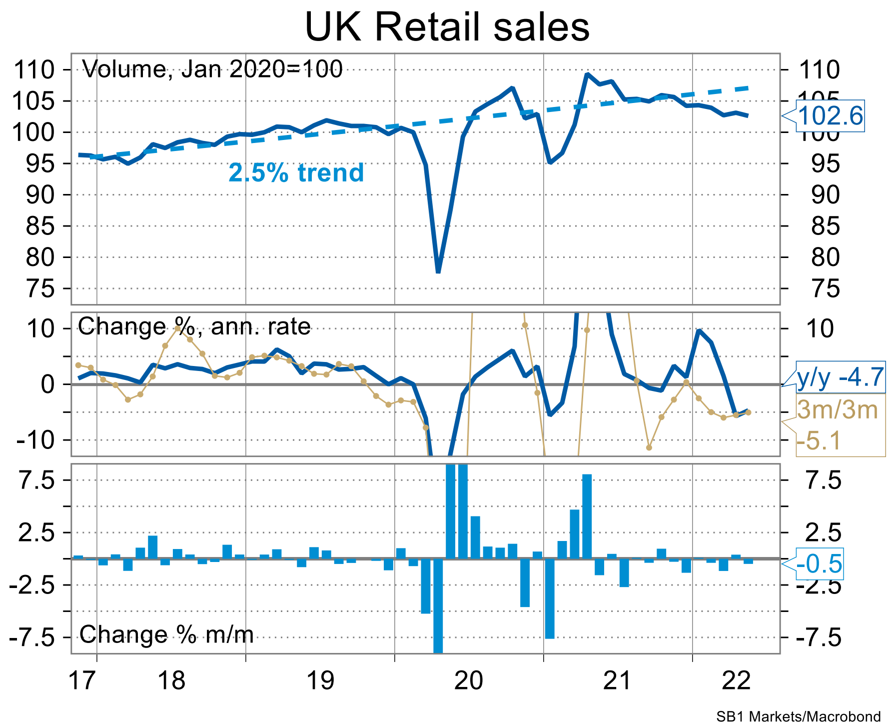
6 pp of the 9% lift in CPI may be explained by energy & food commodity prices. Still 3 pp left

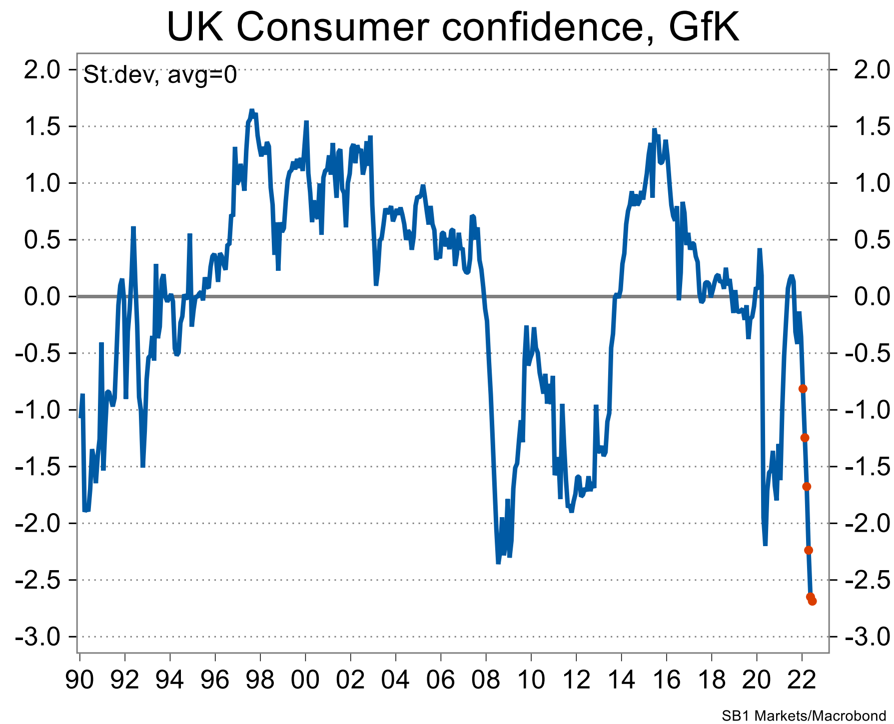




Retail sales are trending downwards. In volume terms, that is

Sales fell 0.5% in May, less than expected but April was revised down by 1pp to 0.4%

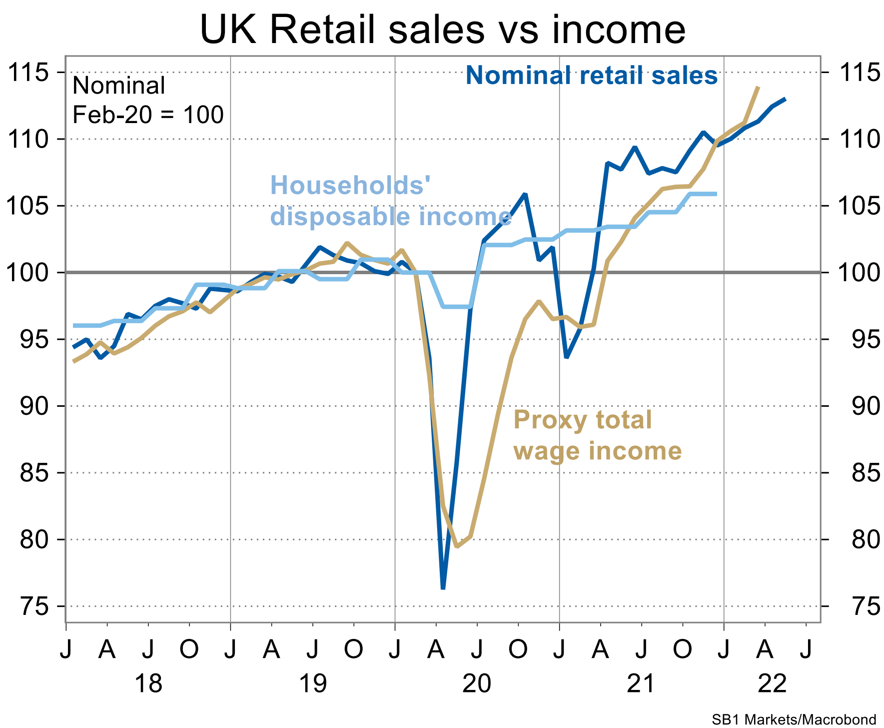


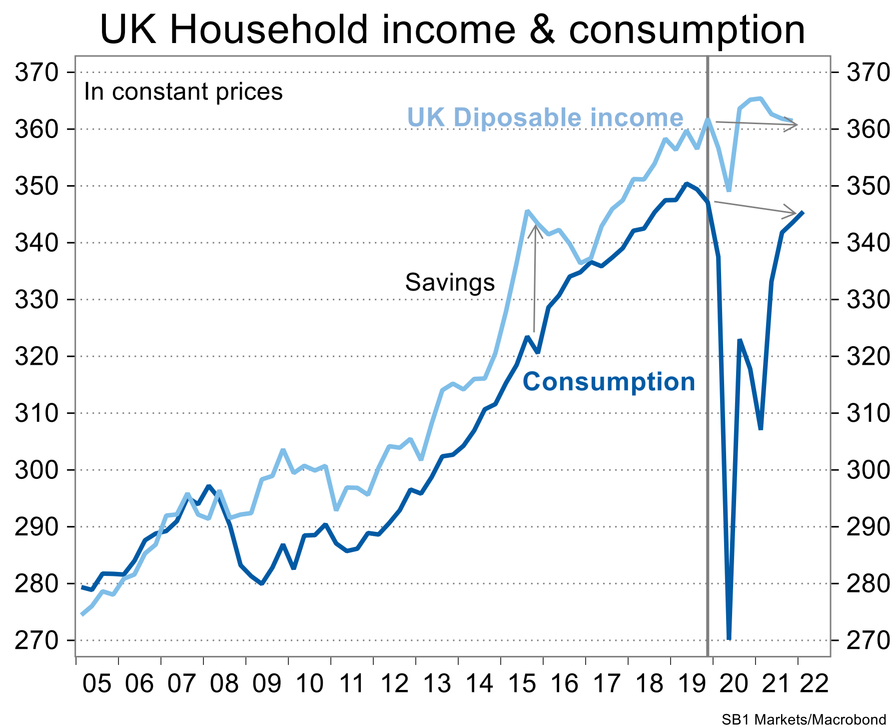


- **Retail sales** peaked last April, and the gradual decline brought sales down to well below the pre-pandemic 2.5% growth path. Sales are down at a 5.1% pace measured 3m/3m, a substantial drag on GDP growth
- **Consumer confidence** fell just marginally in June but the level is very low, -2.7 st.dev below average, a new ATL. In last November, the index was 0.3 st.dev below average
  - High inflation, declining real wages and higher interest rates may be the most important reasons. Beside that, the labour market is strong, the unemployment rate is low

Total wage income has kept up with nominal retail sales

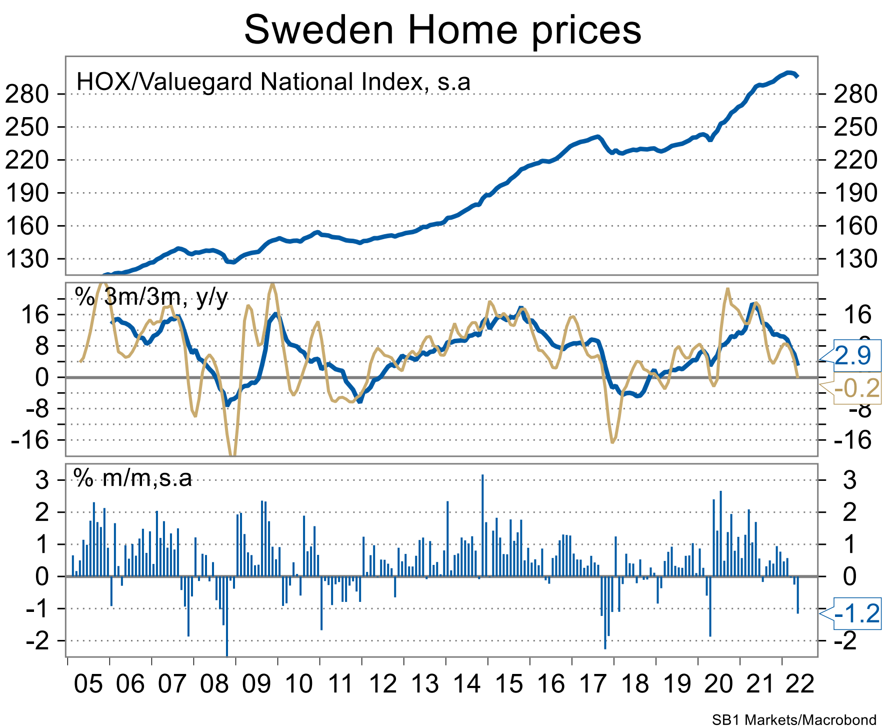
... and total consumption is weaker than normal vs. total disp. income (=savings higher than normal)

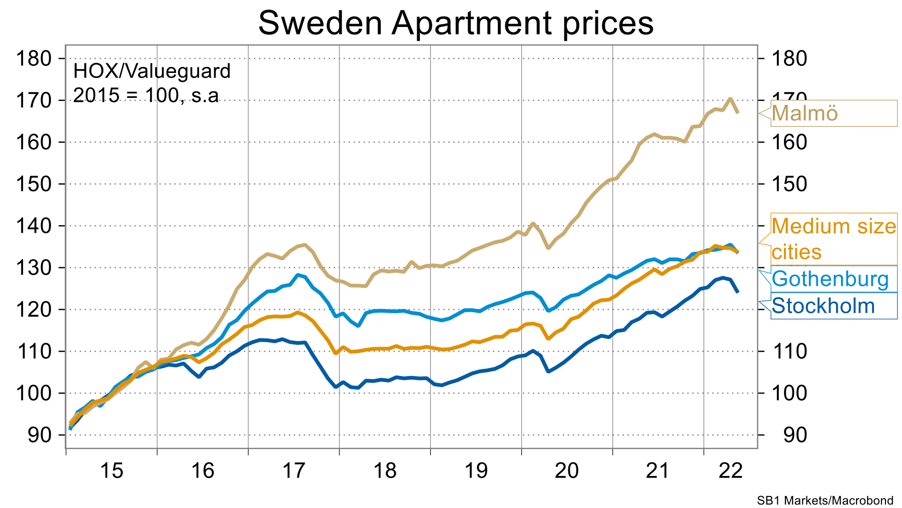


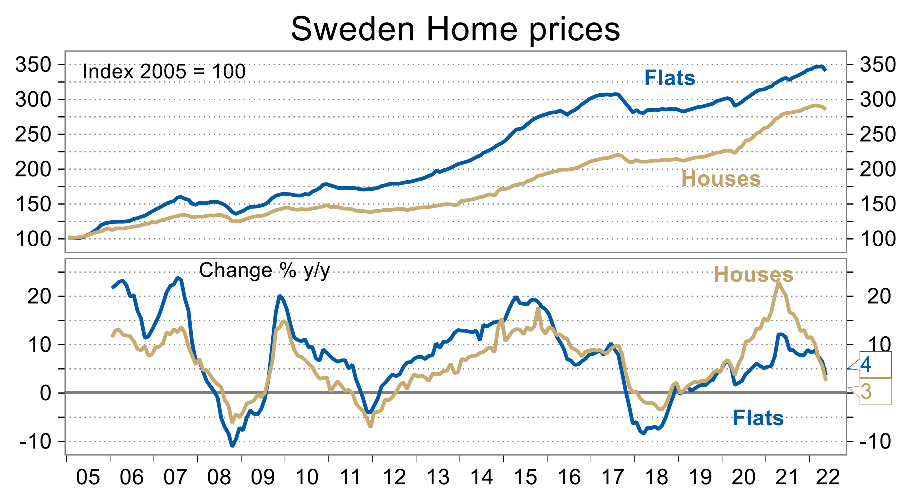


Swedish house fell sharply in May. Mortgage rates (w/expectation) to blame

Prices fell 1.2%, following the 0.3% drop in April. Stockholm down 2.5%, and further in June?



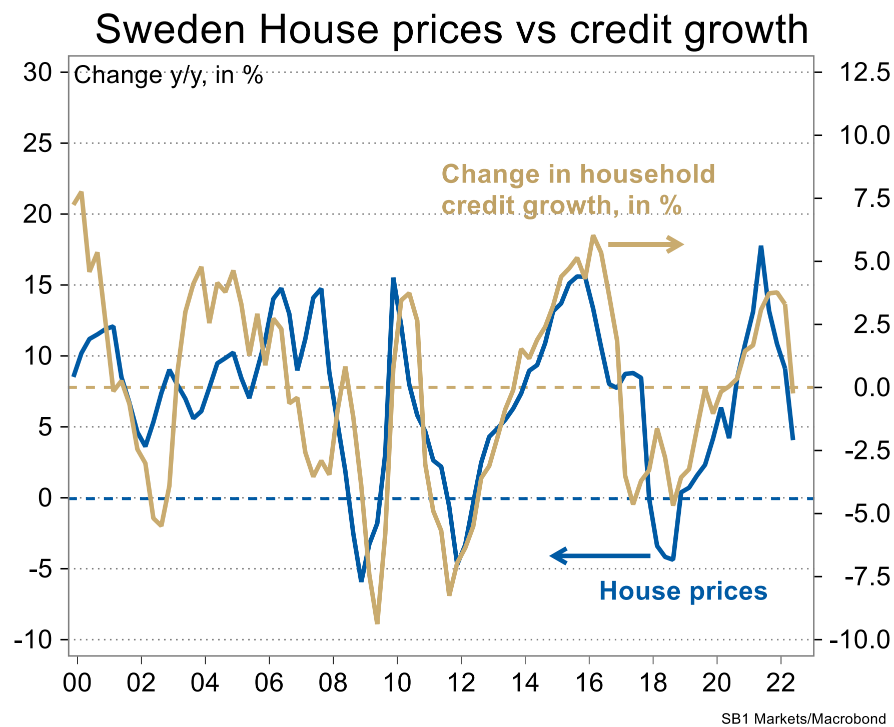


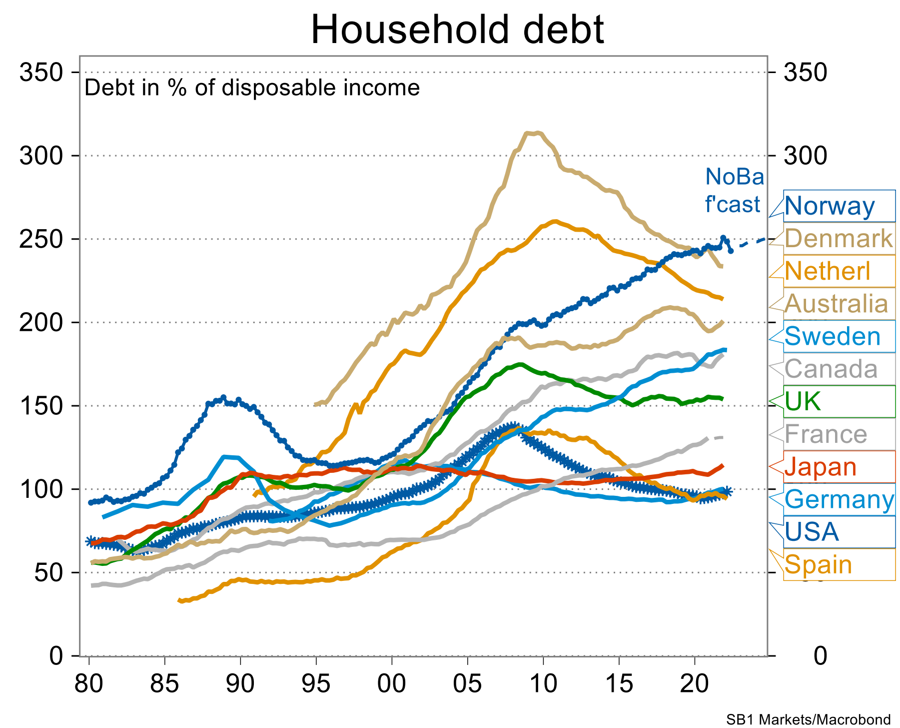


- The annual rate declined to 2.9% from 6.2% in April
  - » The underlying price growth (3m/3m) suddenly turned negative
- Prices fell the most in Stockholm by 2.5%, and Valuegard reports a further 3% decline in the two first weeks in June. In May, prices fell 1.5% in Malmö, by 2.5 in Göteborg. The decline in smaller cites averaged 0.7%
- The **Riksbank's** abrupt change of tack in late April has no doubt hit the housing market hard

Credit growth is slowing too, as always when the housing market calms down

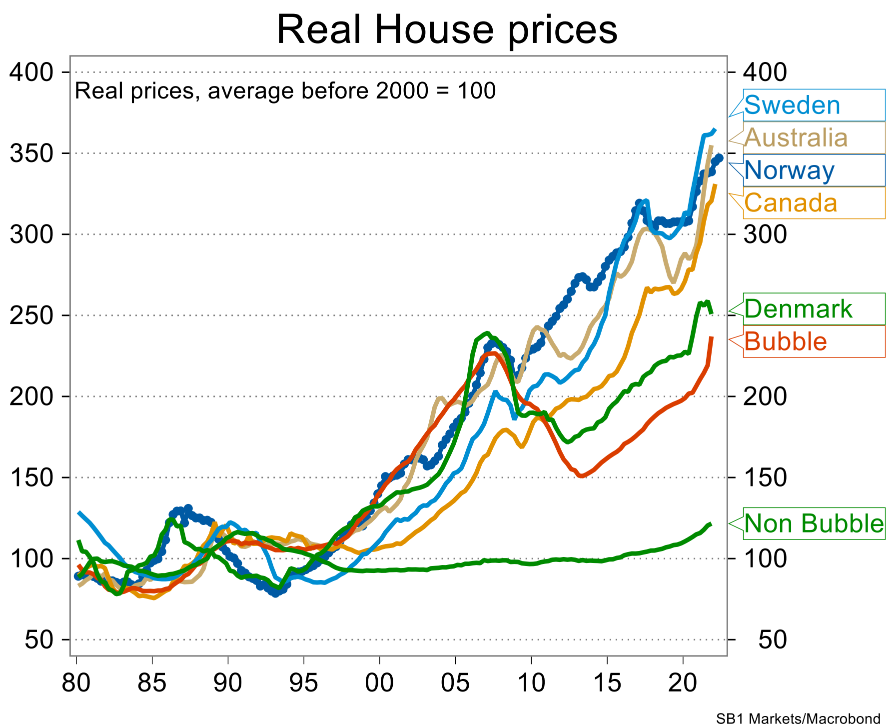
And more slowing is in the cards as house prices very likely will decline further

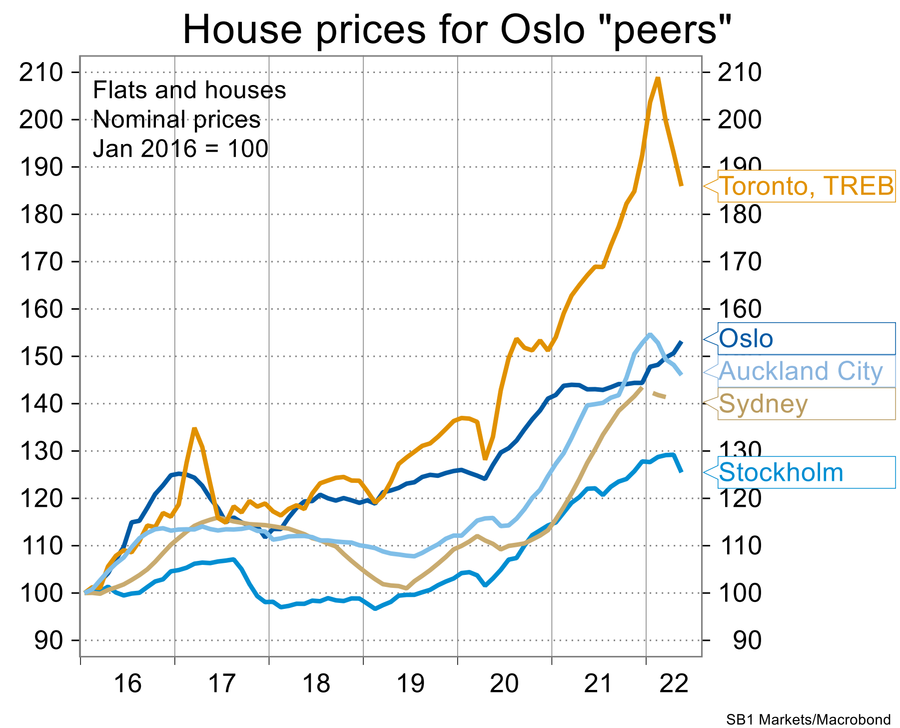




Just Oslo on the way up, Toronto, Sydney, Auckland & Stockholm have peaked?

The Times They Are A-Changin'. And probably not to the better for indebted homeowners





- Real house prices are at high levels in both Australia, Canada, Norway, and Sweden
- Now, the capital cities may signal a change is underway. Except for Oslo, of course, where prices never can decline.

Highlights

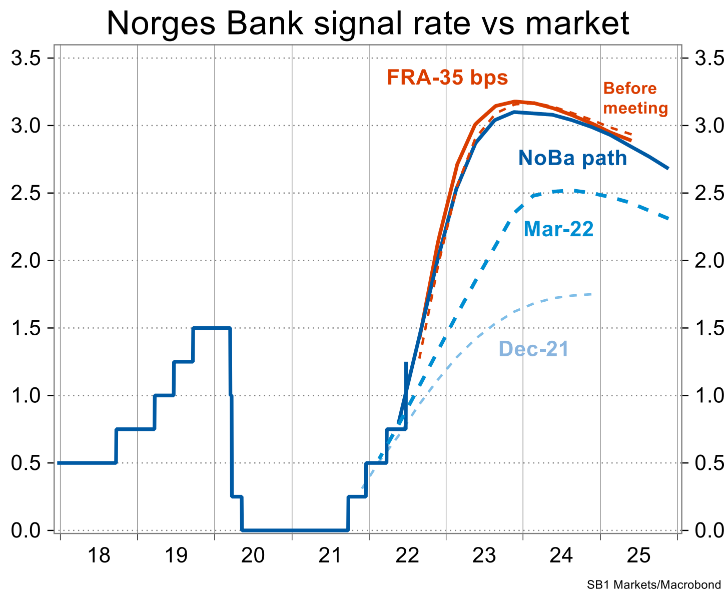
The world around us

The Norwegian economy

Market charts & comments

NoBa added 50 bps, lifted the path by up to 1 p, and the peak by 60 bps

Will households take notice before the mortgage rate is doubled? Probably



Interest rate paths

	NoBa Path 1-22	**NoBA Path 2-22**	**Change**	Fair FRA *) @IMM, NB	FRA** pre-meet	FRA** now	FRA-** NoBa
Q2 22	0.78	**0.79**	0.01	1.65			
Q3 22	1.05	**1.39**	0.34	2.25	2.22	**2.40**	0.15
Q4 22	1.32	**1.99**	0.67	2.80	2.88	**3.00**	0.20
Q1 23	1.59	**2.53**	0.94	3.17	3.22	**3.34**	0.17
Q2 23	1.85	**2.87**	1.02	3.36	3.43	**3.49**	0.13
Q3 23	2.10	**3.04**	0.94	3.44	3.50	**3.53**	0.08
Q4 23	2.35	**3.10**	0.75	3.44	3.55	**3.51**	0.07
Q1 24	2.48	**3.09**	0.61	3.43	3.50	**3.49**	0.05
Q2 24	2.51	**3.08**	0.57	3.40	3.45	**3.44**	0.04
Q3 24	2.52	**3.04**	0.52	3.35	3.41	**3.37**	0.02
Q4 24	2.50	**2.99**	0.49	3.29	3.39	**3.30**	0.01
Q1 25	2.47	**2.93**	0.46	3.21	3.31	**3.25**	0.04
Q2 25	2.43	**2.85**	0.42	3.13	3.26	**3.20**	0.06
Q3 25	2.37	**2.77**	0.40	2.69			
Q4 25	2.31	**2.68**	0.37				

*) *Assuming the NIBOR spread at 35 bps*
**) Q4 FRAs adjusted for liquidity prem

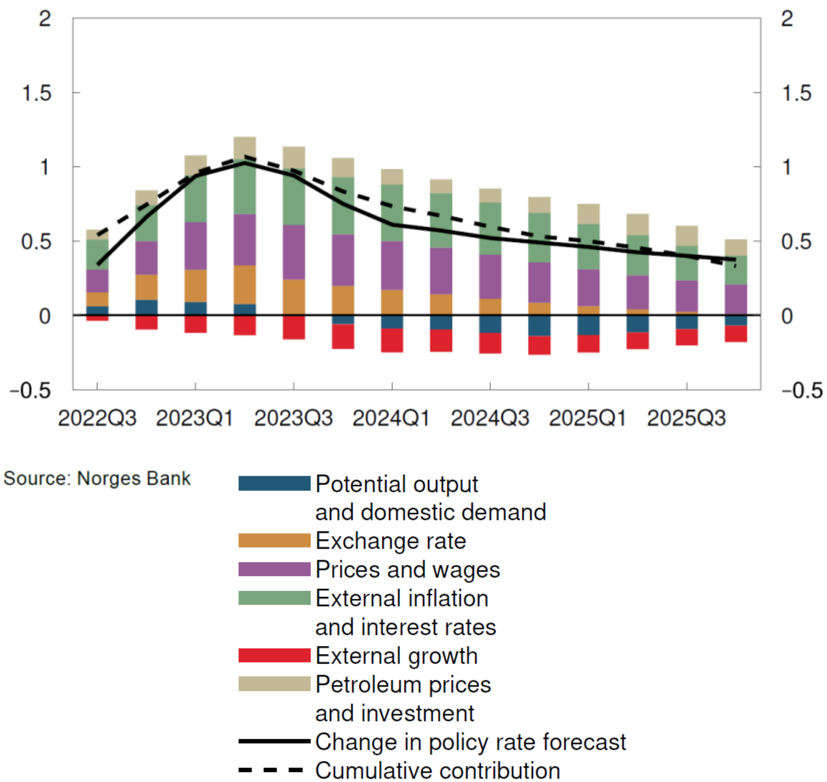
- **Norges Bank** surprised both consensus, us and the market by hiking the signal rate by 50 bps to 1.25%. The interest rate path was revised up by up to 100 bps, and the peak was lifted by 60 bps and moved 3 quarters forward, to Q4-23.
  - » The short end of the curve rose by up to 18 bps, implying that the market had put a 30% probability for a 50-bps hike vs 70% a 25-bps hike. Further out, the bank lifted it's path close up to FRA market's path, and the direct impact was limited. (However, longer dated FRA rates fell sharply as rate expectations 'collapsed' everywhere around us Thursday and Friday).
  - » Our calculus also implied a 100 bps lift in the path due to higher inflation, lower unemployment, a weaker NOK etc but we assumed the bank would spend tow meetings to do the heavy lifting. Beside been 'correct', the best reason for sending a strong hawkish message to the public, is to dampen overall demand before rates are actually hiked that much
  - » The bank signals 25 bps hikes in August, September, November and December, up to 2.25%. The market is more aggressive, some 20 bps above NoBa's path in December
- **The economic outlook**
  - » NoBa expect inflation to remain well above the 2% target, wage inflation to climb to well above 4% the coming years
  - » GDP growth to slow substantially and unemployment to turn marginally up from 2023
  - » Still, the unemployment is assumed to climb just to 2.1% in 2025, from the current 1.7%, far below an average level – and the output gap is assumed to be positive until sometime after 2025. <u>That is, a continuous high activity scenario with too high wage and price inflation is forecasted for the coming 3 years</u>
    - ▪ In the years after 2025, the NoBa expects inflation to slow to 2.0%, and the output gap to reach zero (the first published really long-term prognosis)
  - » NoBa expect house prices to decline by 2% from July to Q2-23, then to head upwards again, especially when the rates are assumed to be cut from 2024
- **So what?**
  - » The market is probably too aggressive for H2. The Bank will be focusing at the labour market, wage inflation and the housing market, more than the actual CPI data the coming months. The risk is at the downside vs the housing market, but the labour market will probably remain very tight

SpareBank 1 MARKETS

Reasons for the rate path lift: Everything, except growth abroad

The path revised up by up to 1 pp, the largest lift ever. The peak up 60 bps, moved 3 quarters forward

Chart 4.8 A number of factors pull up the rate path
Cumulative contribution. Percentage points



Source: Norges Bank

Our pre-meeting forecast was pretty close to the outcome until mid 2023 but thereafter NoBa was slightly more aggressive!

Upside contributions:

- Higher inflation and interest rates abroad
- A weak NOK
- Higher price and wage inflation
- A lower potential output, domestic demand stronger (unemployment lower than expected)
- Petroleum prices, investments

Downside contributions:

- Just weaker growth abroad

Our assessment

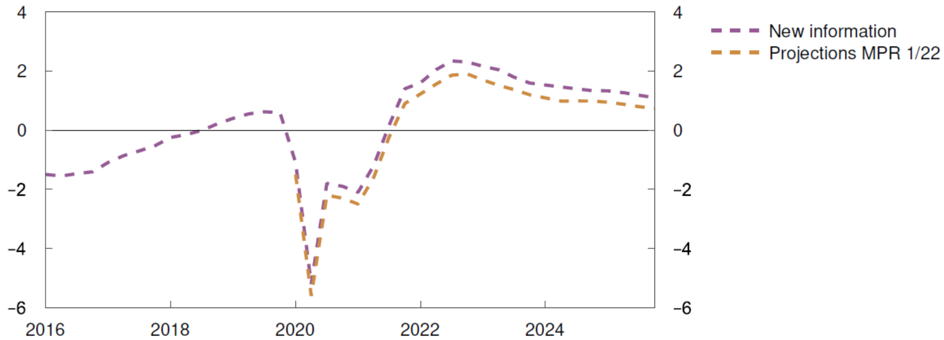
- Our mechanical calculation also resulted in a 100-bps upward revision, but we thought NoBa would take a more gradual approach by lifting the path by 50 – 75 bps
- Beside being ‘correct’ (the standard factors justified the lift in the path, and the 50-bps lift in the signal rate), we assume the committee wanted to send a strong signal: <u>Take care, rates may increase substantially</u>!
- Such a signal may of course limit the need for further rate hikes, as actual behaviour may be influenced buy signalling a 4 – 5% mortgage rate not before too long
- A downshift in global growth, reduced real disposable income

Too high capacity utilisation & too high CPI inflation 'forever'

… and inflation is assumed to stay above the target the whole forecast period (through '25)

Chart 4.3 Higher capacity utilisation

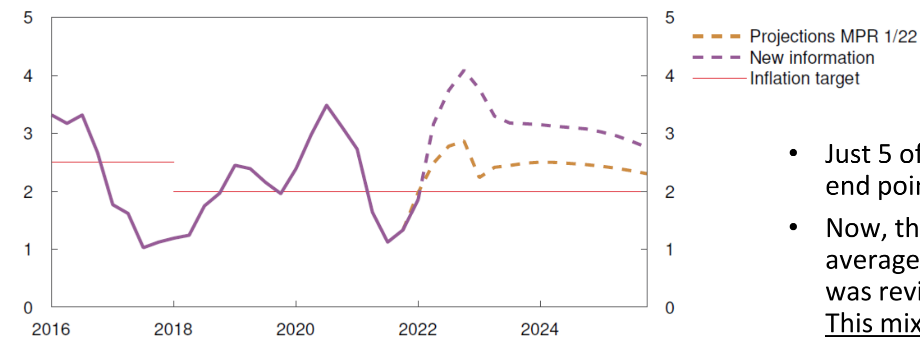
Estimated output gap. Conditioned on new information concerning economic developments and the policy rate forecast in MPR 1/22. Percent



Source: Norges Bank

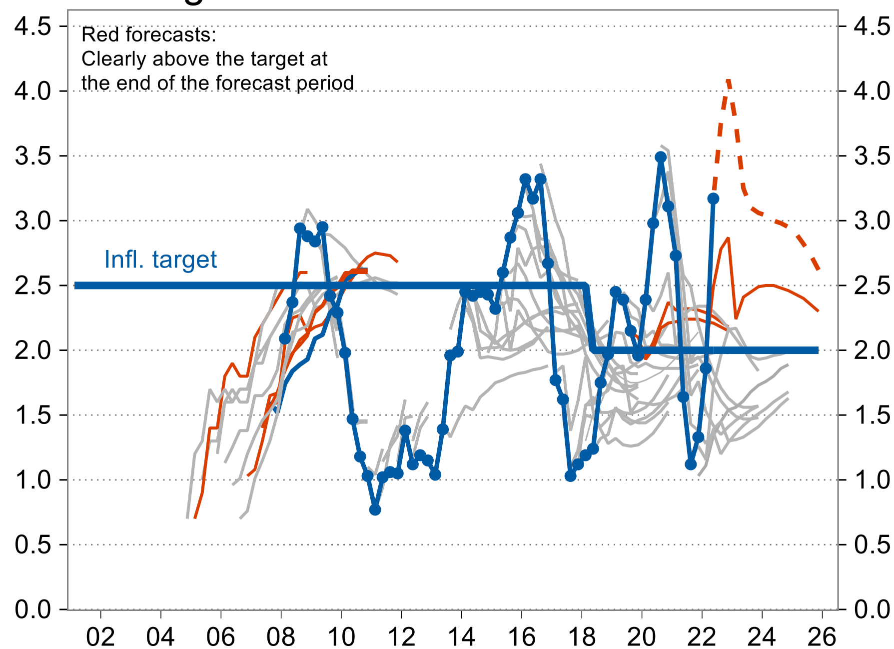
Chart 4.4 Prospects for higher inflation

CPI-ATE. Projections conditioned on new information concerning economic developments and the policy rate forecast in MPR 1/22. Four-quarter change. Percent



Sources: Statistics Norway and Norges Bank

Norges Bank core inflation forecasts

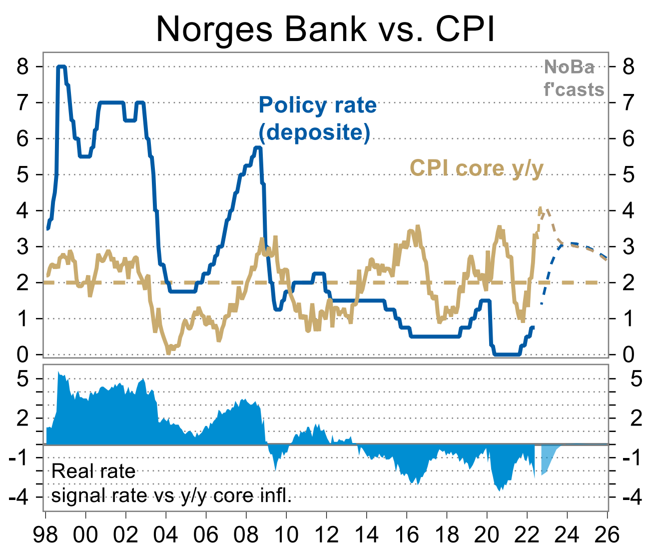


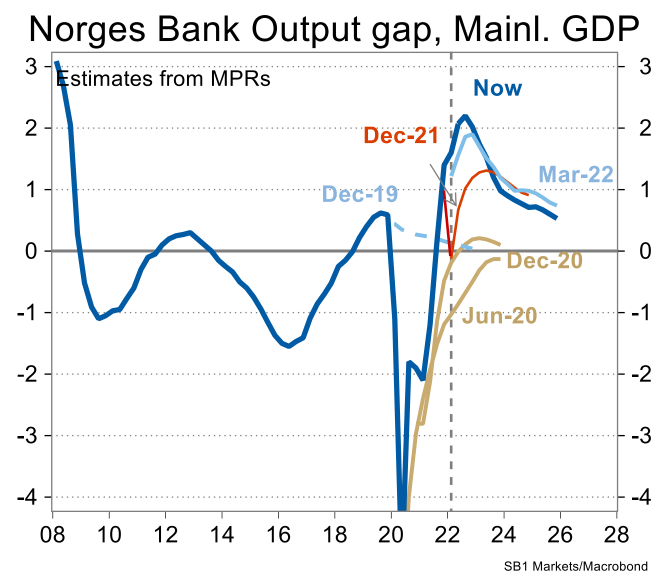
SB1 Markets/Macrobond

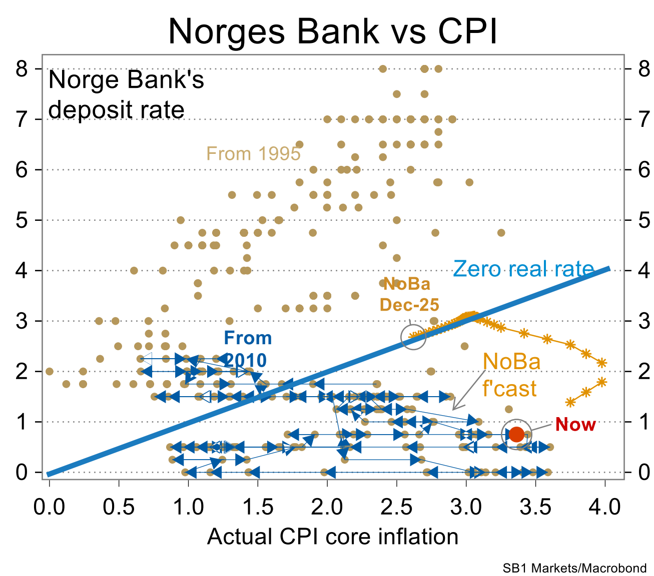
- Just 5 of the more than 60 inflation forecasts NoBa has published since 2005 has had an end point above the inflation target at the time, and then by just 0.1 pp or 0.2 pp
- Now, the inflation forecast at the end of the forecast period is 0.7 pp above the target. The average miss is 1 pp (in sum 4.4 pp) – <u>a substantial deviation</u> In addition, the output gap was revised sharply up, and it is assumed to be significant above zero the coming 4 years. <u>This mix is also unprecedented</u> . (However, in 2027, everything will be in order, of course)
- **<u>NoBa wants to let the economy run rather hot, even if it implies inflation marginally above target</u>. However, should the labour market tighten further or wage inflation accelerate more than expected, more hikes are likely. And vice versa, of course**

Inflation well above target, the output gap to remain >0 until after 2025

Higher rates will slow the economy, and the output gap is revised down from mid 2023 (but up first)

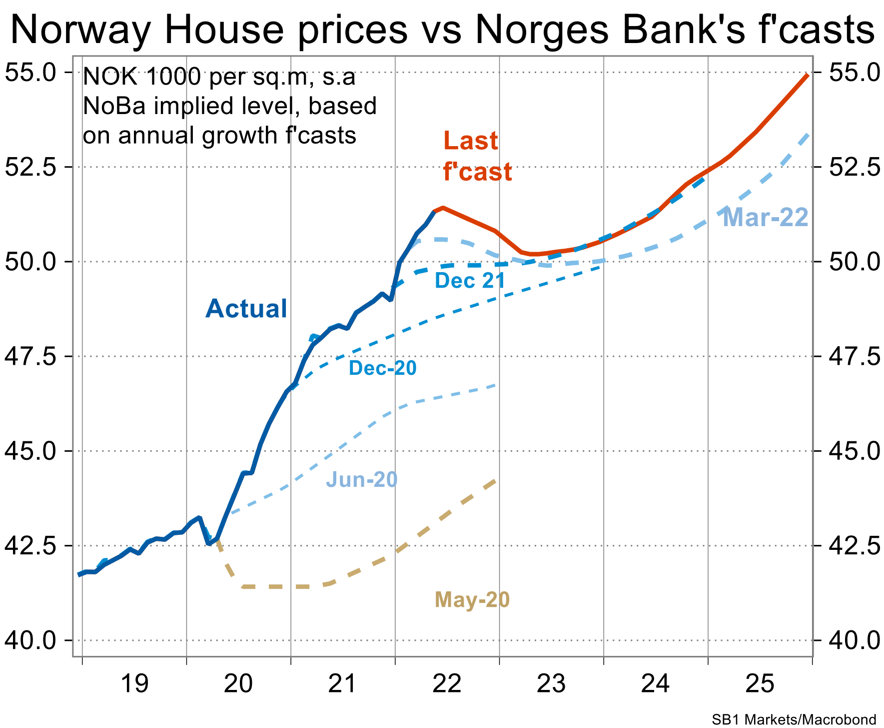






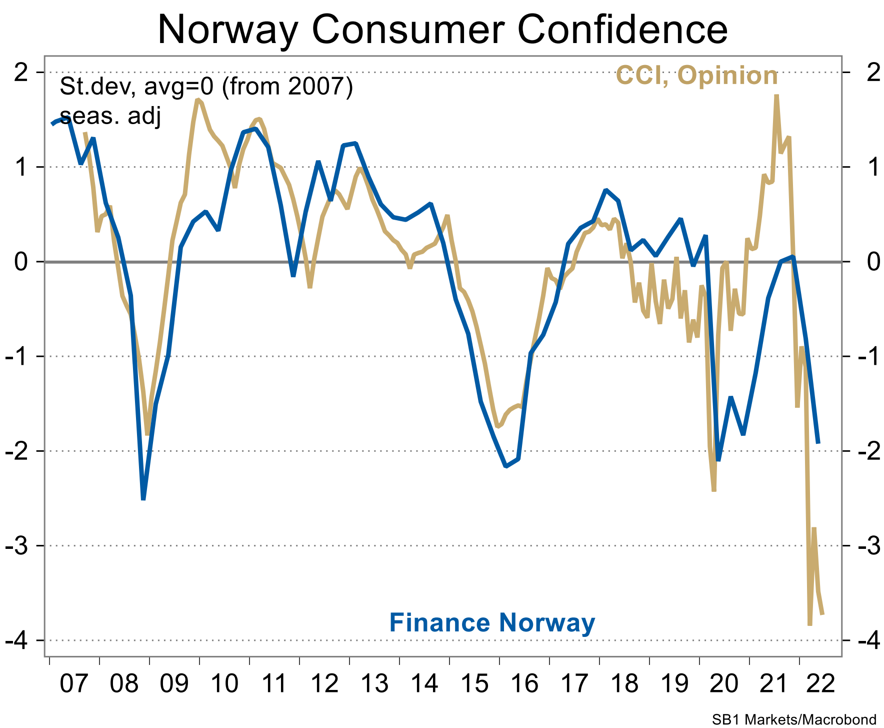
SpareBank 1 MARKETS

Norges Bank revised house prices up – but expects a 2% decline until next spring



- NoBa expects house prices to appreciate less than income growth the coming years, at least until 2025, where interest rates are expected to be cut
- The bank expects house prices to turn down from July, and to bottom in late Q1 next year, when interest rate increases slows to a trickle. Prices will be back to the assume June peak in mid 2024
- Prices will pick up steam when the signal rate turns south during 2024
- NoBa has published forecast all over the place since the beginning of the pandemic. And we do not blame the Bank!

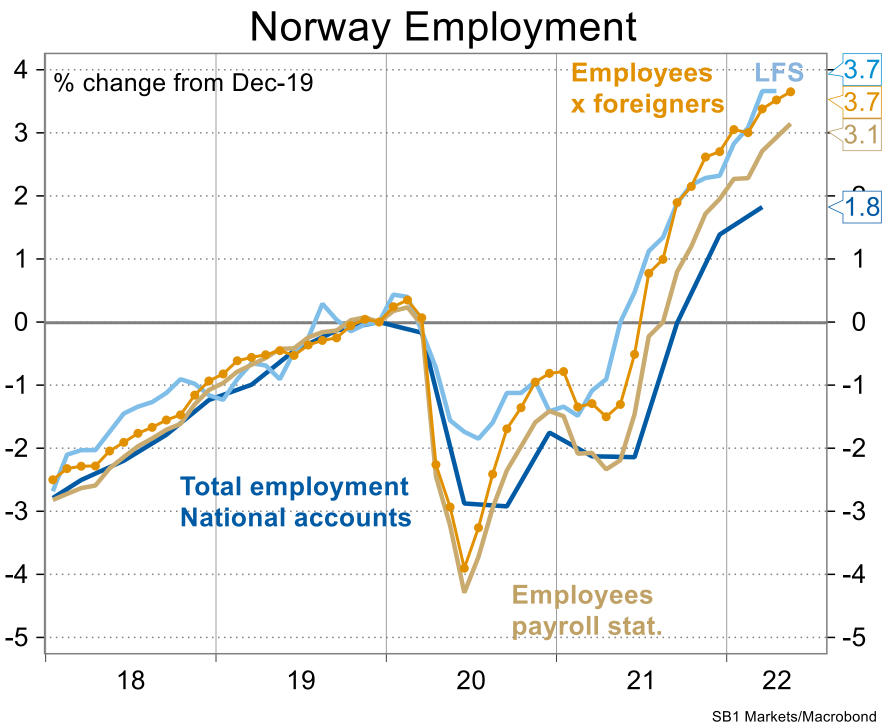
Consumer confidence down in June, close to ATL (from March)



- **The decline in CCI** from Opinion in March was the largest one month drop ever, to the lowest lever ever – rather dramatic – probably due to a combination of inflation & interest rate fears and the war
- The index recovered somewhat in April, but fell again in May and in June, down to -3.7 st.dev below average, just slightly above the March ATL
- **Will households stop spending or retreating from the housing market?** So far, we have not seen any signs of that. However, the 50-bps lift in interest rates these days may have some impact, both on spending and housing demand?

Employment growth is calming down,

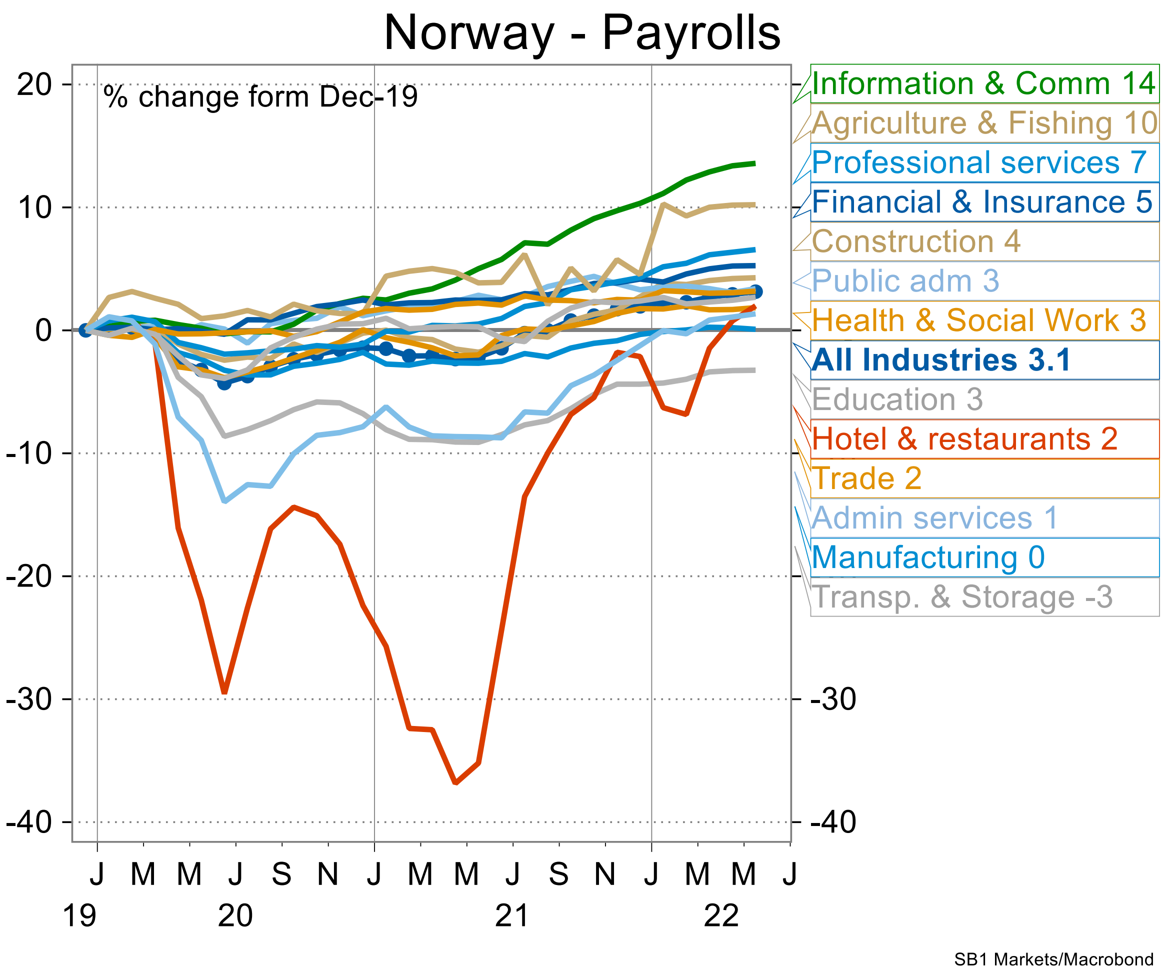
LFS employment was flat in April, while the number of employees rose by 0.2% in May

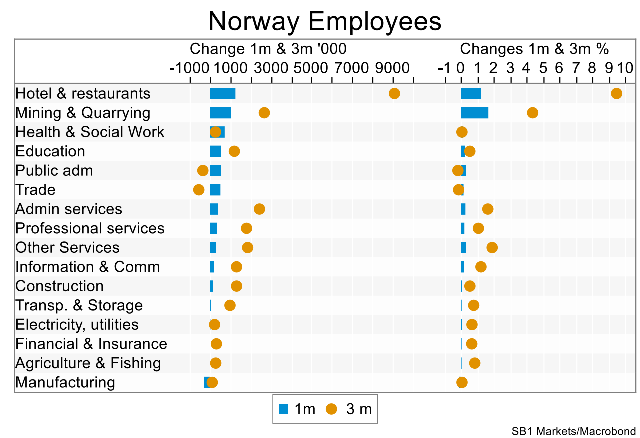


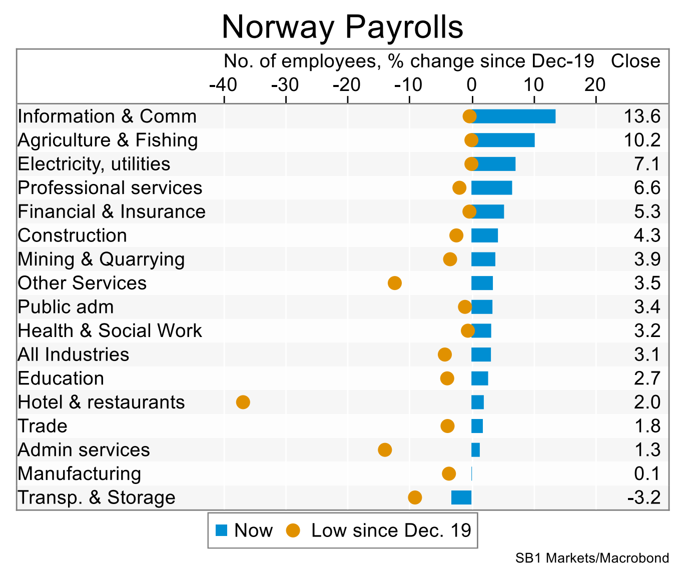
- **The LFS** ('AKU' survey) employment data (both employees and self-employed, with permanent residency in Norway) reported zero growth in April (avg. Mar – May) from March (avg Feb– Apr), but by a 3.3% pace over the past 3 months
  - » LFS employment is up 3.7% from before the pandemic
- The register based employee stats, report 0.2% growth in the no. of employees in May, and a 3.1% growth since Q4-19. Excluding foreigners on short term stay, the no. of employees is up 3.7% (our estimate for the past 2 months)
- National accounts report a 1.8% lift in employment to Q1-22 from Q4-19

Employees: Just transport & storage below the Dec-19 level

Hotels & restaurants are now above. Over the past months: A decline in trade and pubic admin.

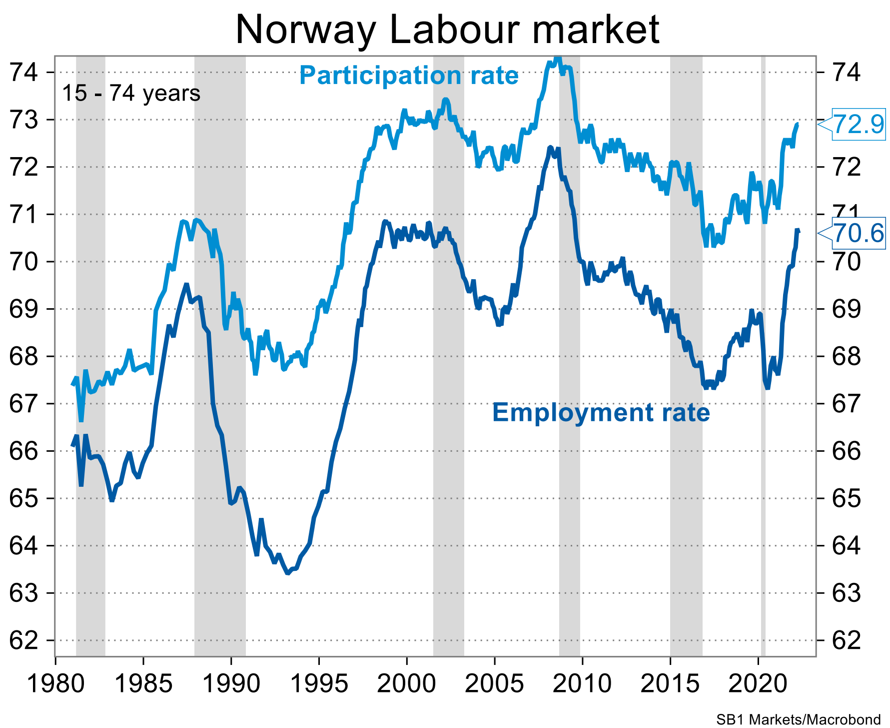




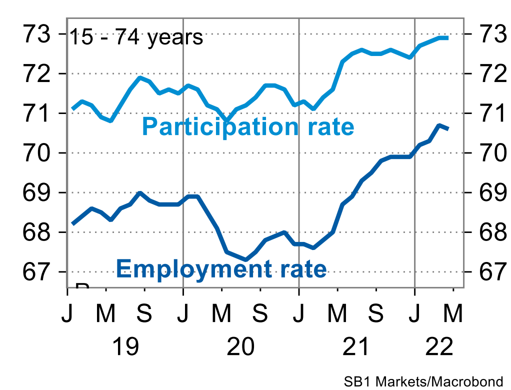


The employment rate slightly down in May

… while the participation rate was unchanged. Both are at rather impressive high levels



- **The employment rate fell 0.2 p to 70.6%**
  - Ahead of the pandemic the rate was almost 69%, and it is up from the 67.4% through in early 2021 (and from the same level in 2017, after the 'oil crisis'). The employment rate is measured in % of the working age 15 - 74 y population
  - The employment rate is the highest since ~~2012~~ 2009
- **The participation rate** was flat at 72.9% in April. Until the substantial lift in January, participation had been flat since last summer. Are there still reserves out there? If so, very good news – and an argument for Norges Bank to let the boom continue
- **Working age population** growth is up 0.8% over the last year (Q1 est), in fact higher than just before the pandemic. Labour immigration has accelerated somewhat, possible as a ketchup effect after low immigration during the pandemic. Given the tight labour markets in the rest of Europe, we doubt labour immigration will solve the labour deficit in Norway

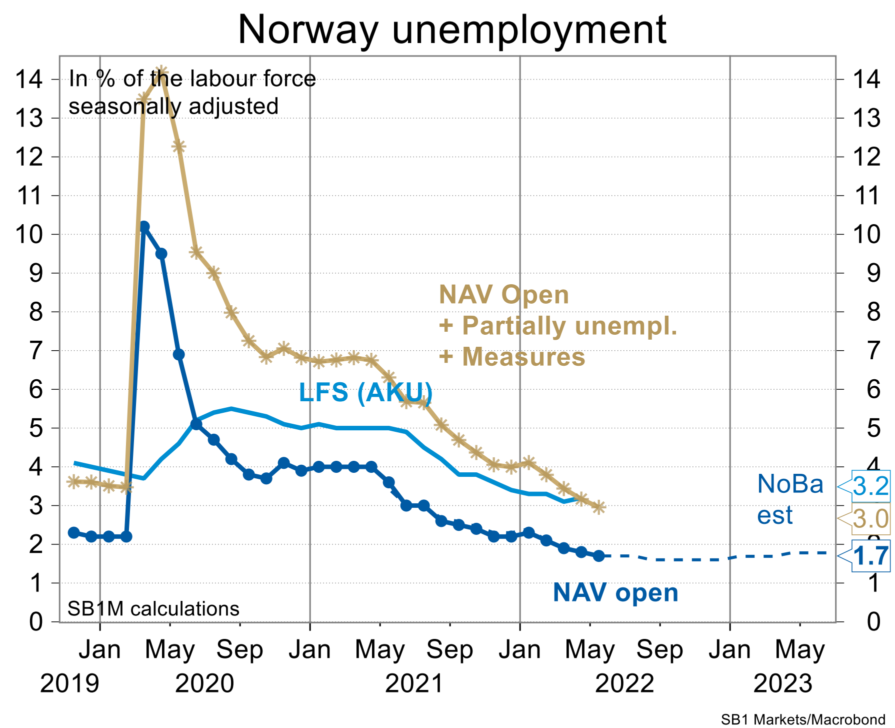


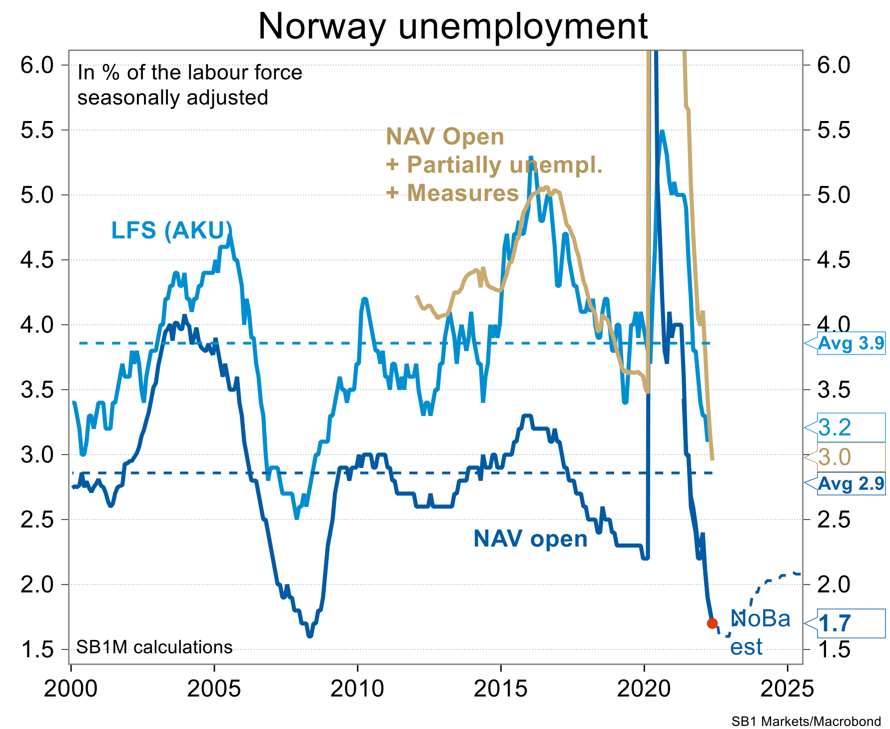
Both the employment and the participation rate has been significantly revised up since 2006, by almost 1 pp. Unemployment is slightly revised upwards

SpareBank 1 MARKETS

AKU employment slightly revised up, and rose in April. Still, the trend is down

Norges Bank revised its NAV unemployment forecast down by 0.2 pp – but expect it to bottom in H2

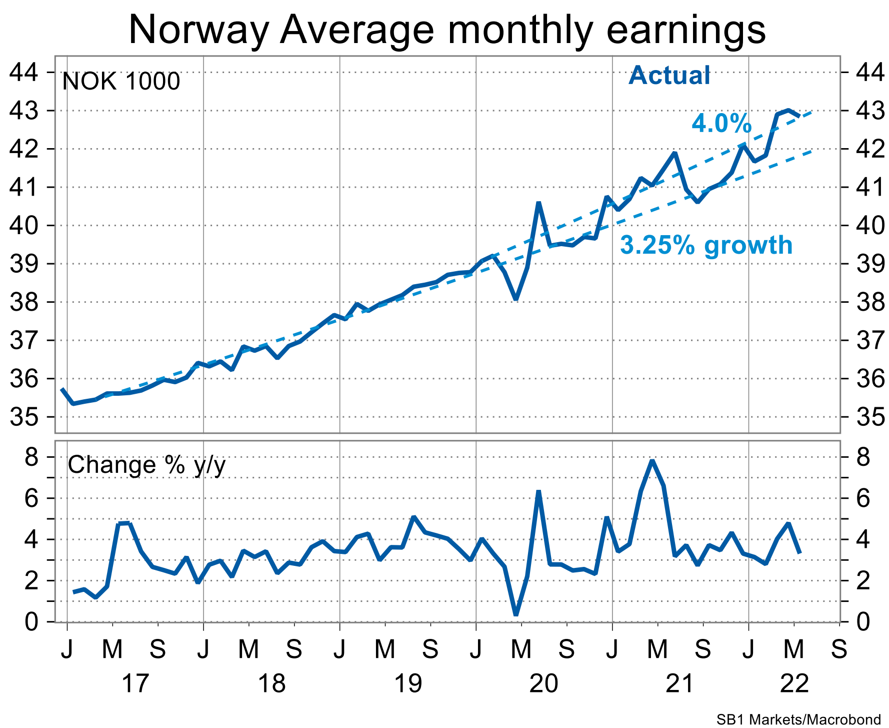


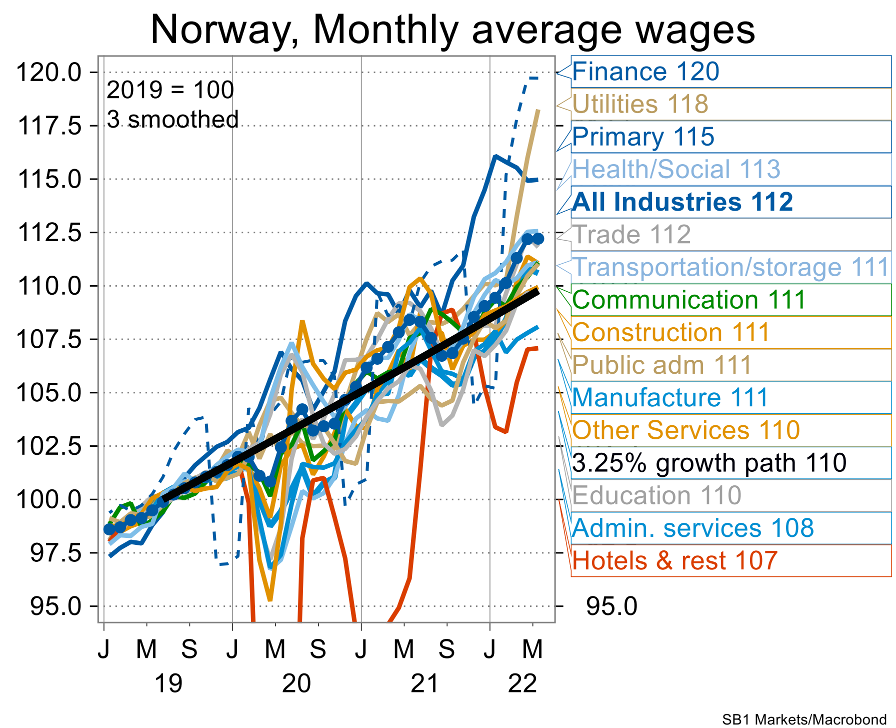


- **The LFS (AKU) unemployment rate** rose 0.1 pp to 3.2% in April, we expected an 0.1 pp decline from the previously reported 2.9% in March. March was revised up by 0.2 pp, as was the history more or less too.
- **The 'full time' open NAV unemployment**, which includes furloughed workers, fell to 1.7% of the labour force in May

Wage inflation may be accelerating somewhat

Average wages have been volatile through the pandemic – and monthly data rather useless

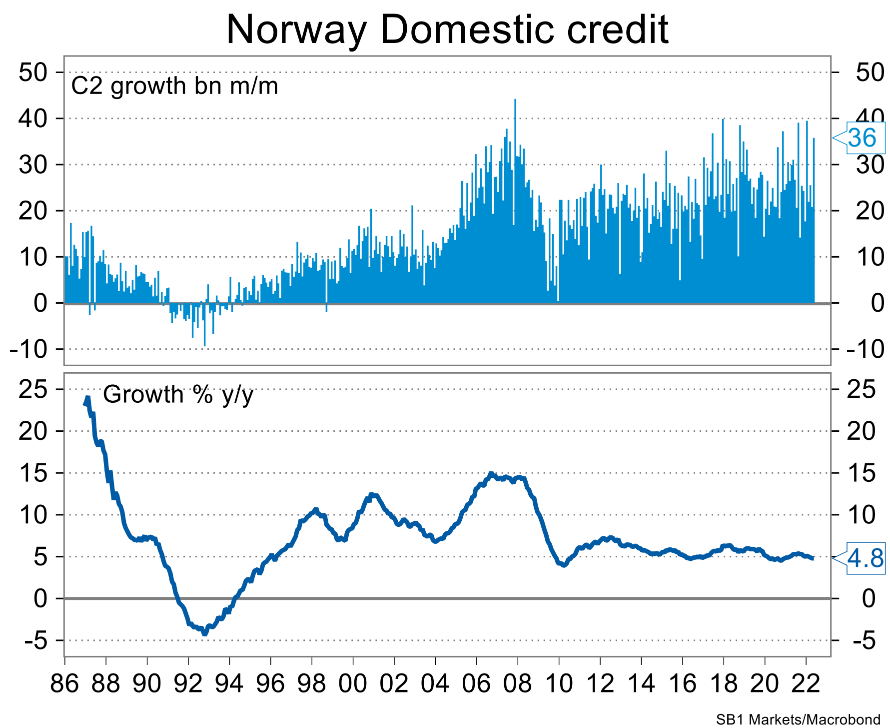


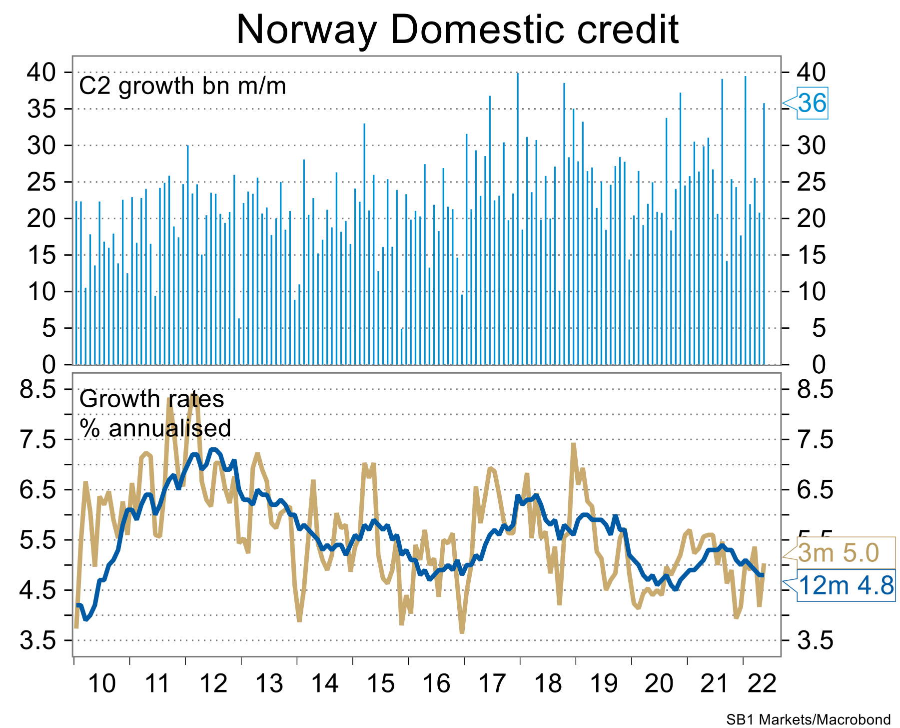


- Monthly average cash earnings are rather volatile, also depending on hours worked, bonuses
  - » Last year the monthly stats reported a 4.4% growth rate – while the average wage inflation was 3.5%, according to SSB
  - » Wages rose sharply in March, and remained at a 'high' level in both April and May
- However, earnings have been quite consistently above the 3.25% growth path from the start of the pandemic. The return of low-paid service sector workers took the average down last summer – before the average wage rate shot up again. That could signal some acceleration in wage inflation, up to a 4% path, according to these data

Domestic credit growth (C2) growth unch in April, at 4.8%

Growth in household debt is gradually slowing, while businesses are still keeping their demand up

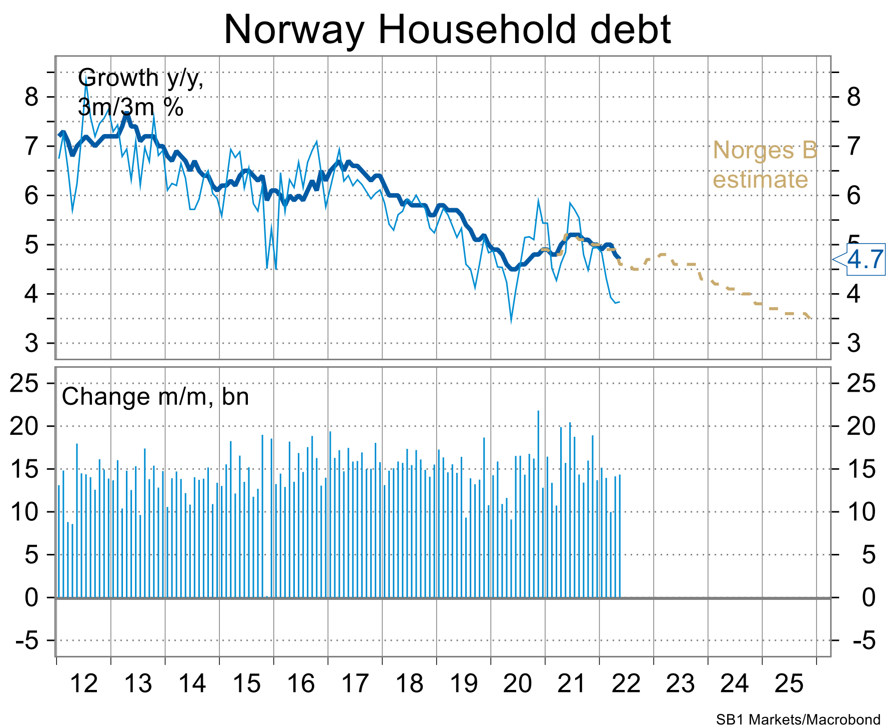


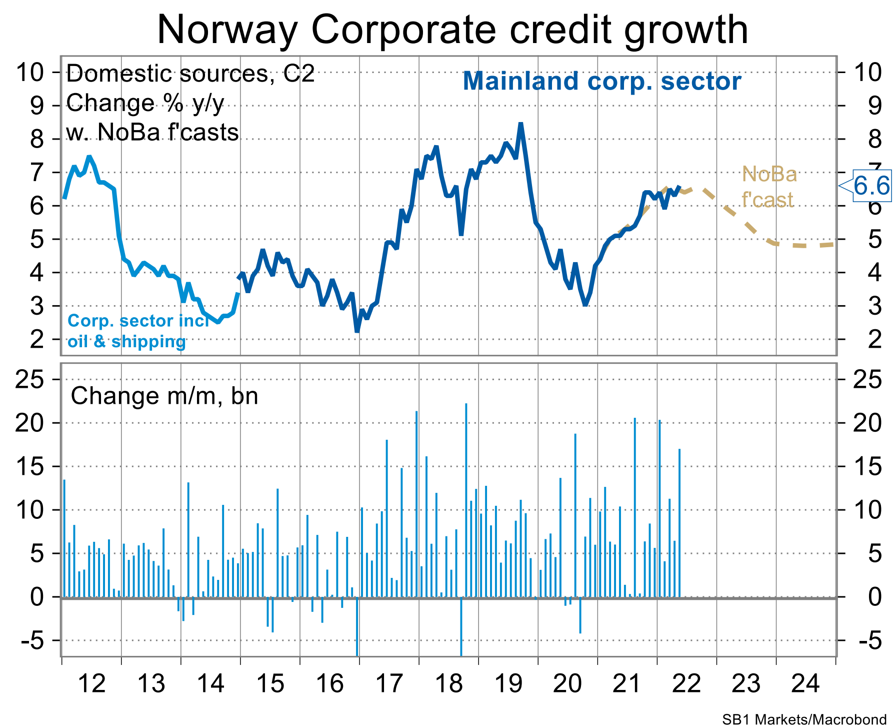


- **Total domestic debt** (C2) rose by NOK 35 bn in May, up from 21 bn in April, we expected 26 bn. The annual growth was unchanged at 4.8%, we expected 4.7%. The 3m/3m growth rate is at 5%. We are not witnessing any credit boom. However, debt levels are high, especially in the household sector
- **Household credit** rose by NOK 14 bn in May, as we expected (and as in April). The annual rate retreated 0.1 pp to 4.7%, as we expected
- **Corporate C2 credit**, rose by NOK 17 bn, up from 6 bn in April, 9 bn more than we assumed. Annual growth still fell to 4.7% from 4.9%
- **Mainland corporations** increased their debt by 6.6% y/y, up 0.2 pp vs. April
- **Local governments** added NOK 4 bn, as we assumed. The annual growth rate fell 0.1 pp to 4.2%. Last summer the rate was 8%! Finally, local gov's at not increasing their debt/income ratio

Corporate credit growth is accelerating, households are slowing

… as interest rates are creeping upwards

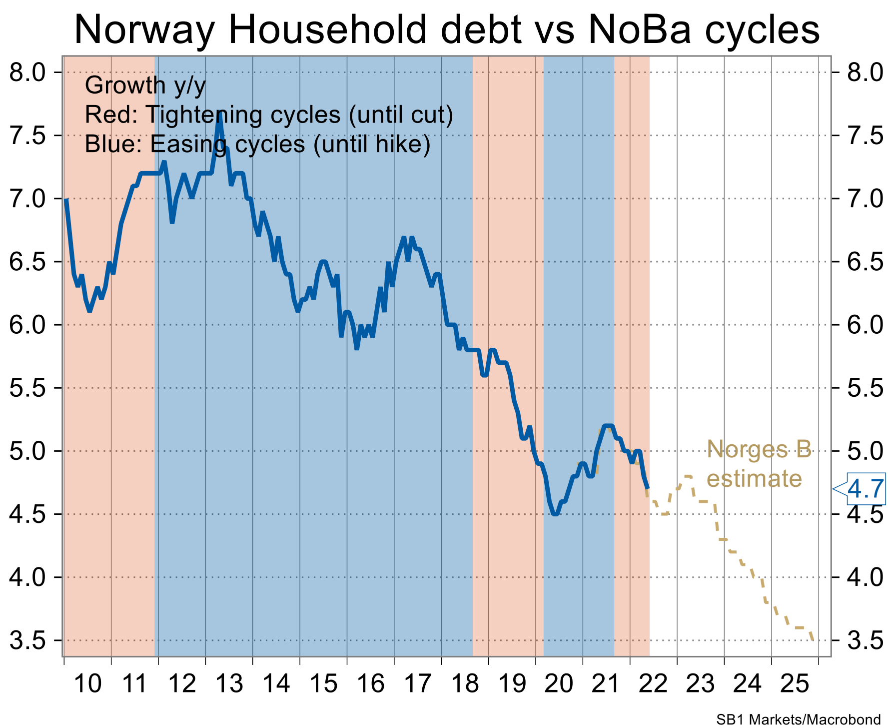




- **Household credit** growth has been slowing marginally recent months, the 3m/3m rate has fallen to below 4%
- Monthly growth in **corporate domestic credit** is volatile, and from time to time, substantially revised. Norges Bank expects growth to slow (and the bank has done so as long as we can remember, but the current forecast is less dovish than usual)

Will higher rates slow down borrowing?

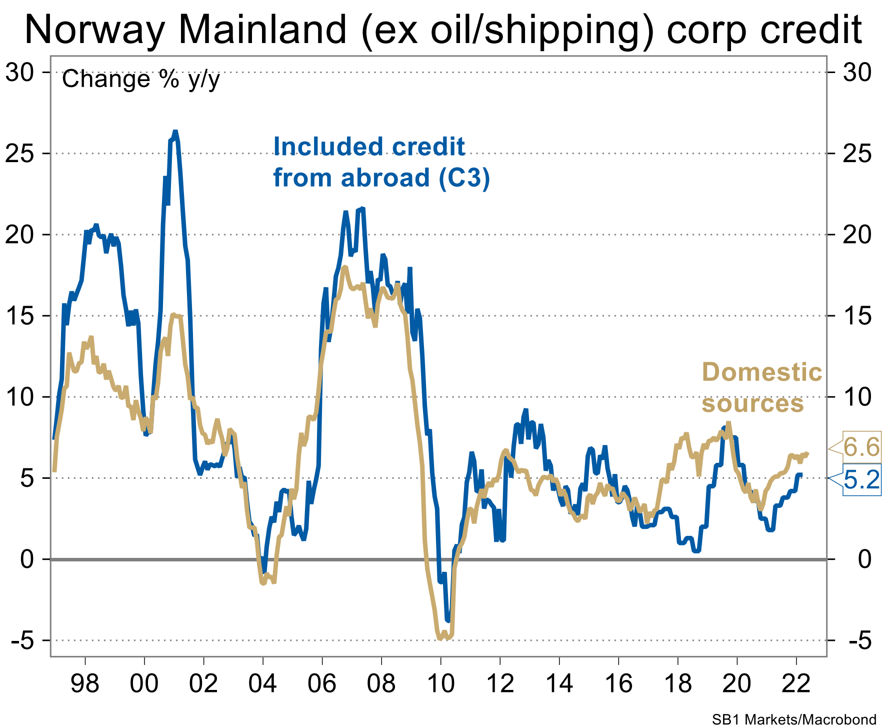
Quite likely, even if there are several stories – and mortgage regulations have impacted borrowing too

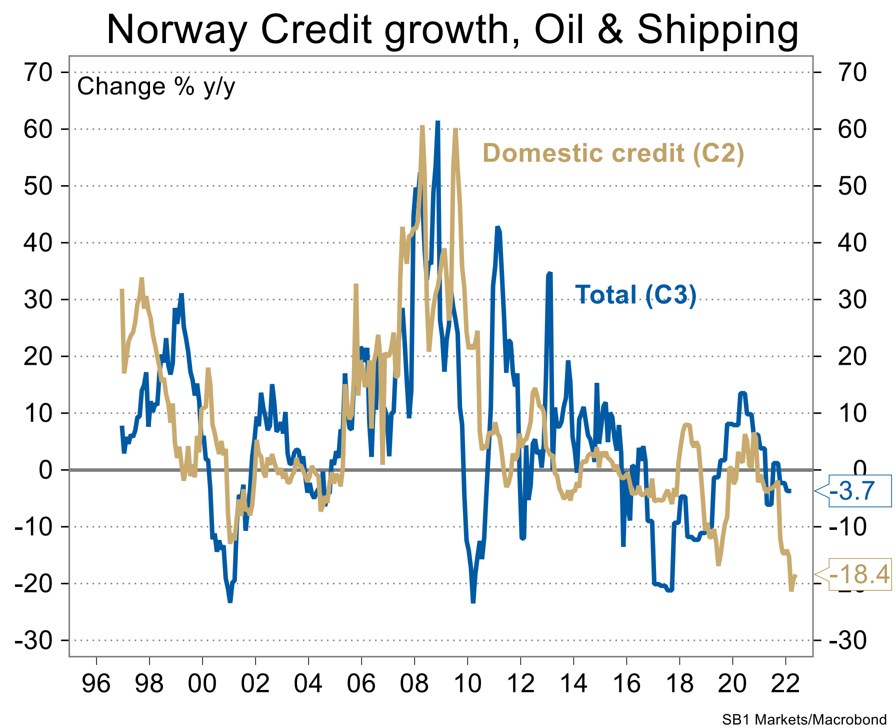


SpareBank 1 MARKETS

Mainland corporates increased their <u>total</u> debt (including foreign credit) by 5.2%

… in Q1. Debt from domestic sources (in C2) was up 6.6% in June

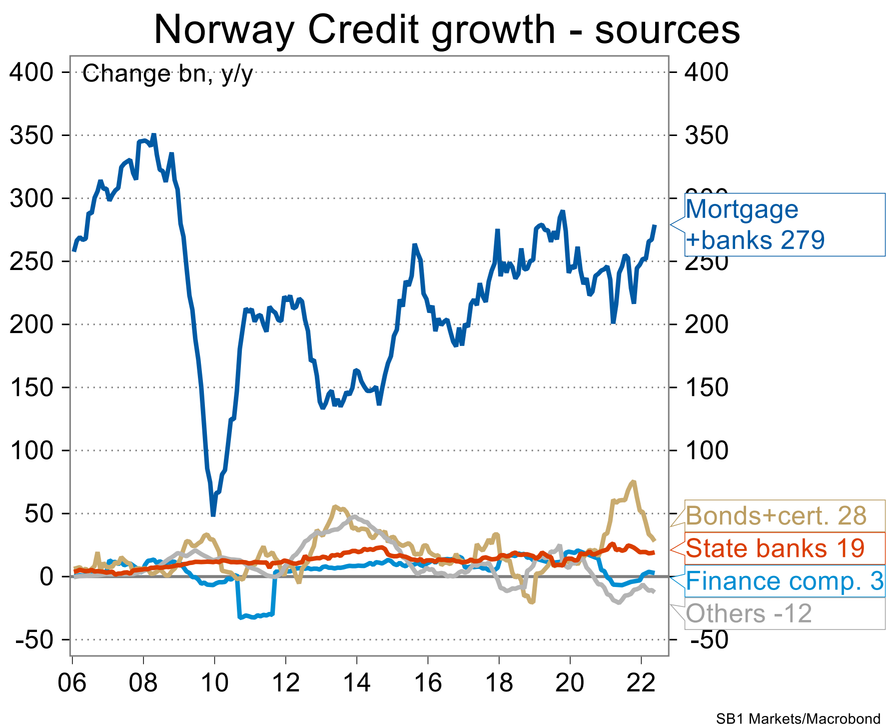


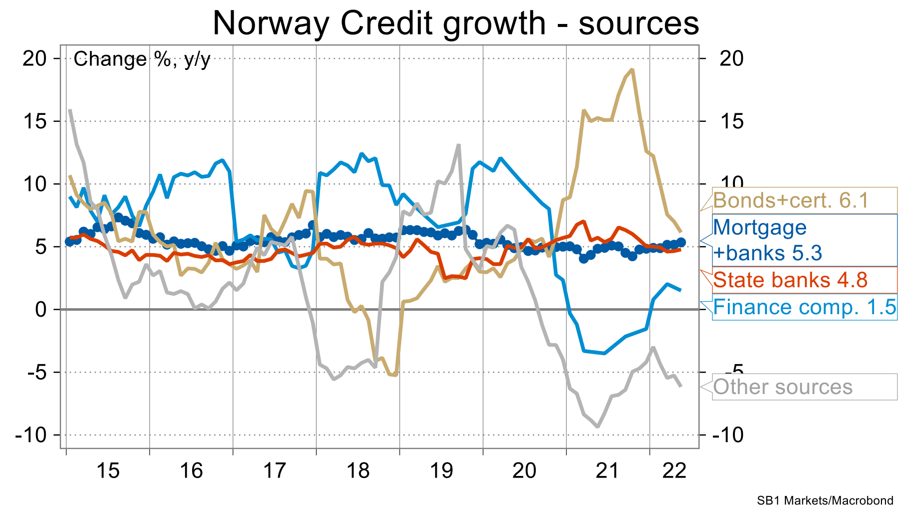


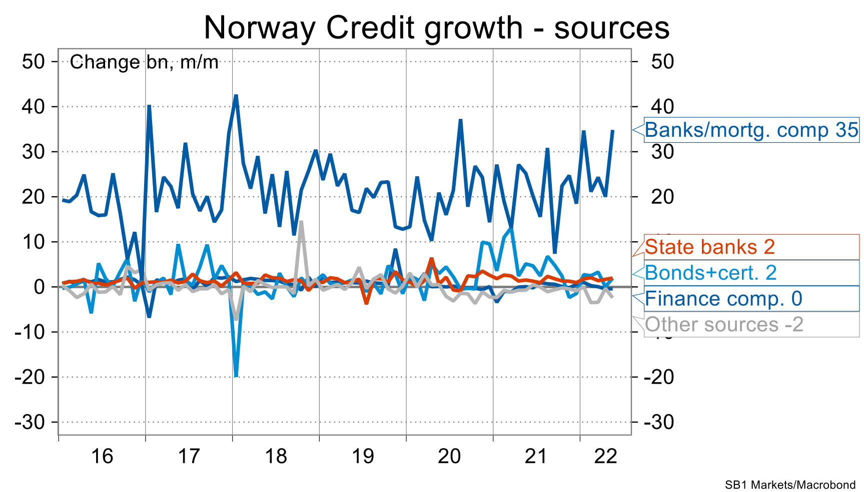
- **Oil and shipping** companies have been moving the opposite way, borrowing more abroad, paying down debt in Norway. The sum is down 3.7% (Q1), even if domestic debt is down 18% (via transactions)

Banks are increasing their large market share further

Bond market borrowing has slowed substantially recent months



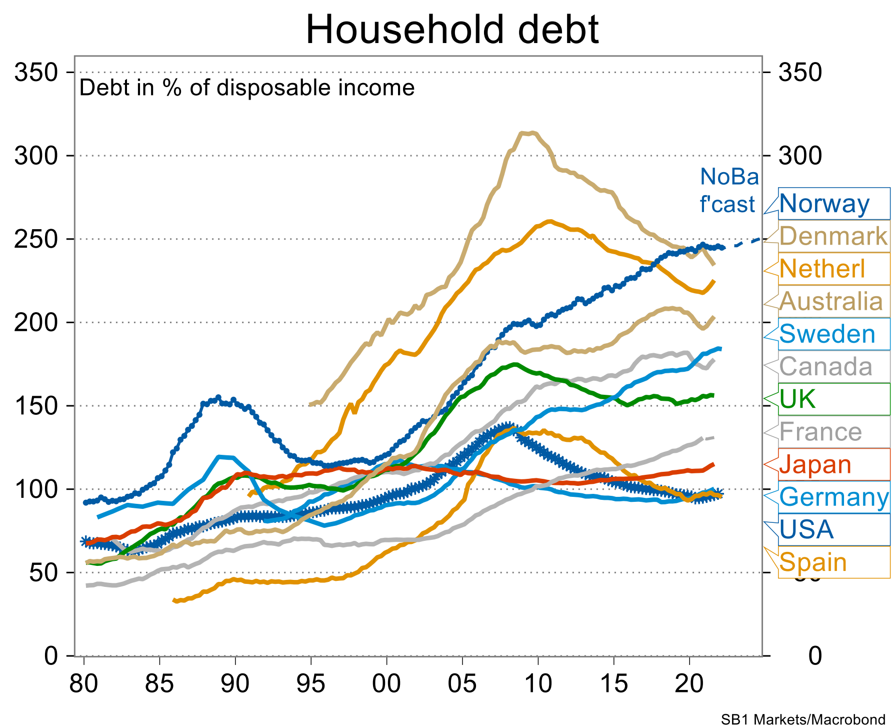


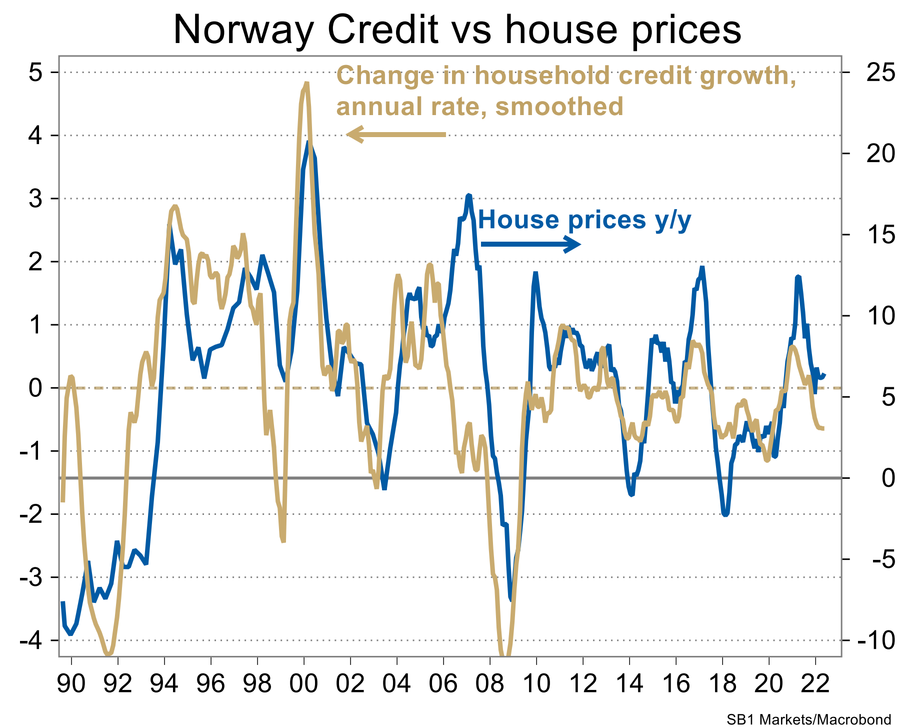


- Net issuance of bonds (to non-financial sector) is up NOK 28 bn (6%) y/y, unusual high growth rates but well down from the peak (75 bn, 19%)
- Banks/mortgage companies are up NOK 279 bn (5.3%) y/y
- Finance companies and 'others' have reduced their lending
  - » Both insurance/pension funds as well as Statens Lånekasse, Eksportkreditt are included in our residual 'others', but just the sum of SL & Eksportkreditt is down

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

Household debt/income: We are no. 1! But the debt ratio has flattened

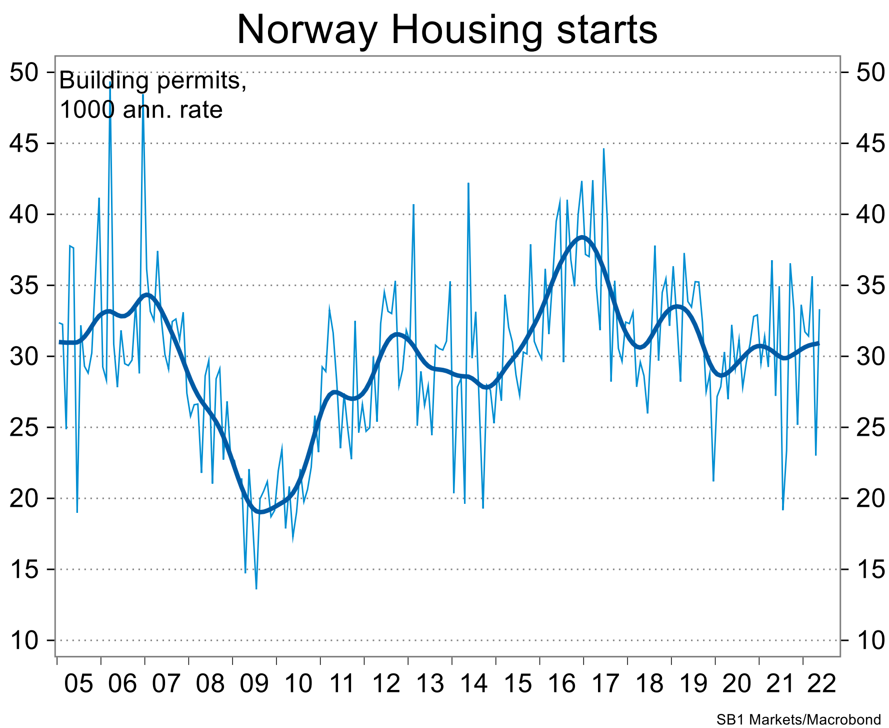


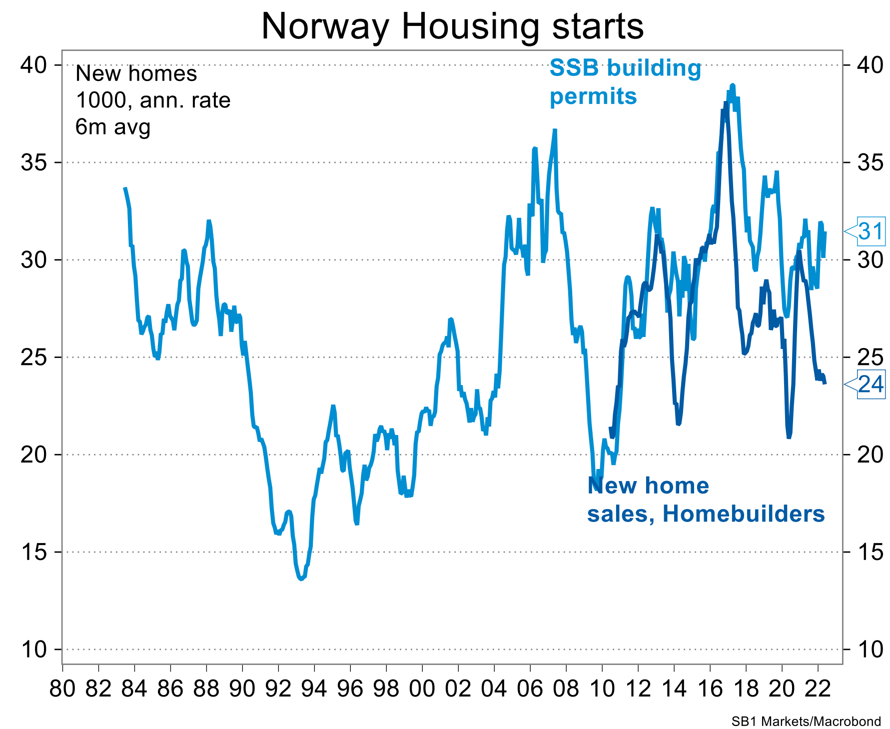


- **Norwegians households' debt** steady been growing faster than income but just marginally since early 2018
  - » Debt/income ratios in many countries have been influenced policy measures vs. households during the pandemic
- **Changes** in credit **growth** (the 2nd derivative) is usually correlated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

SSB: Housing permits back up to a normal level+ in May

Permits up to 33’ from 23’ – and to above the average level over the previous months

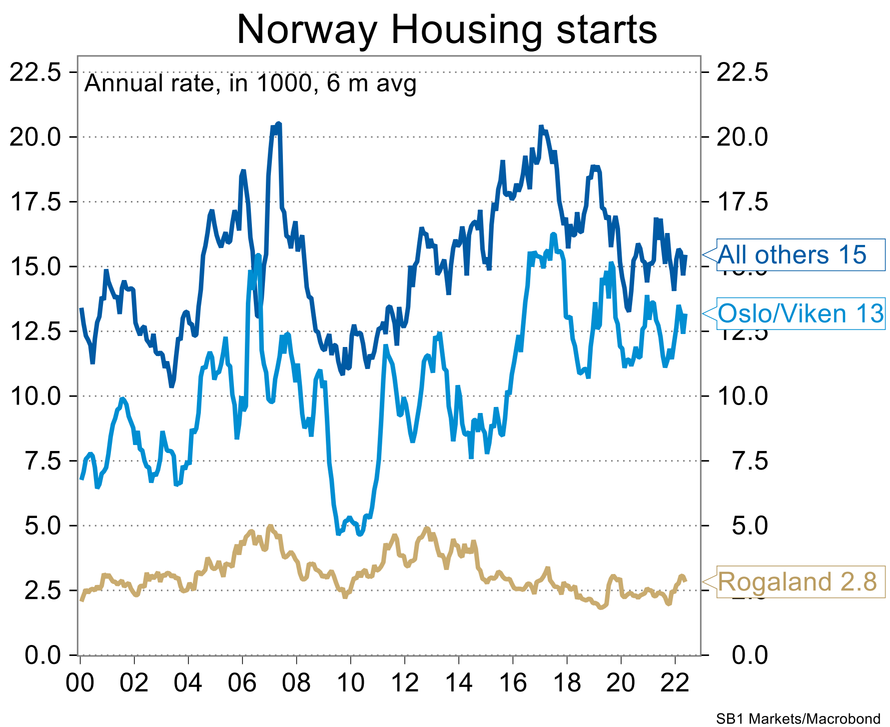


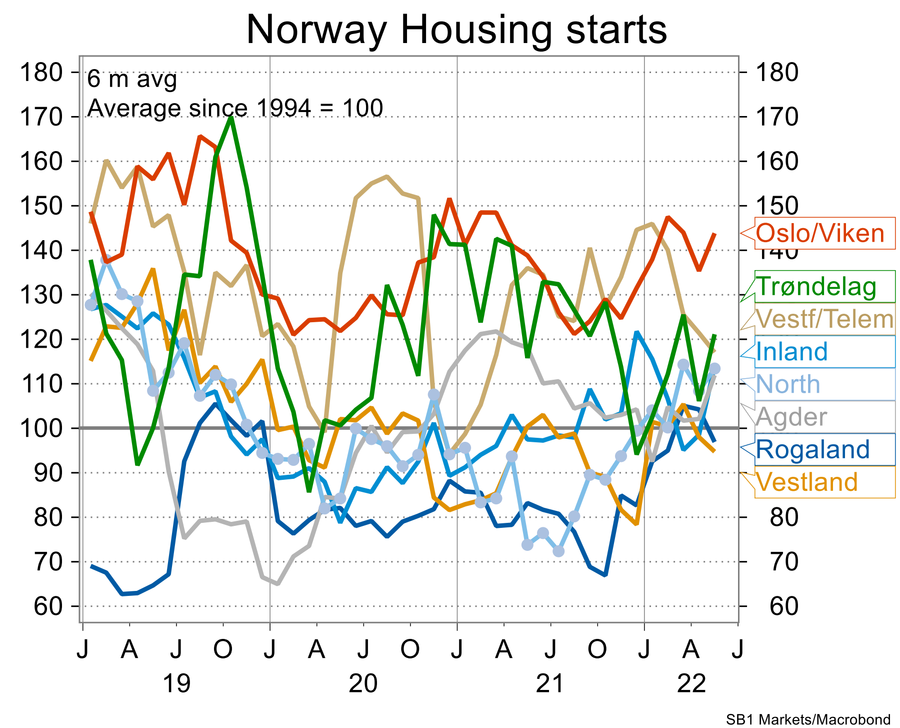


- The average no. of permits the past 6 months is at 31’ (annualised), not far below the estimate at 28’ from the Homebuilders (Boligprodusentene). Sales have been somewhat weaker, at 24’ (shown at the chart)
- Student homes, and assisted-living/nursing homes are not included in data from the Homebuilders. Some single homes are not included either

Oslo/Viken and Rogaland up recent months

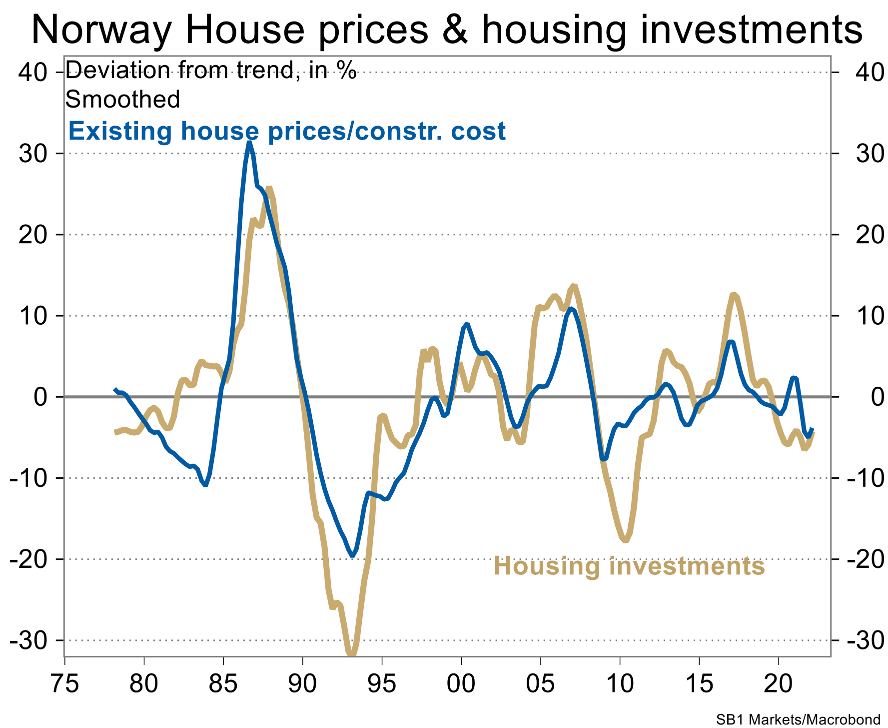
Most regions are up recent months, most are reporting more starts than past 25 y avg

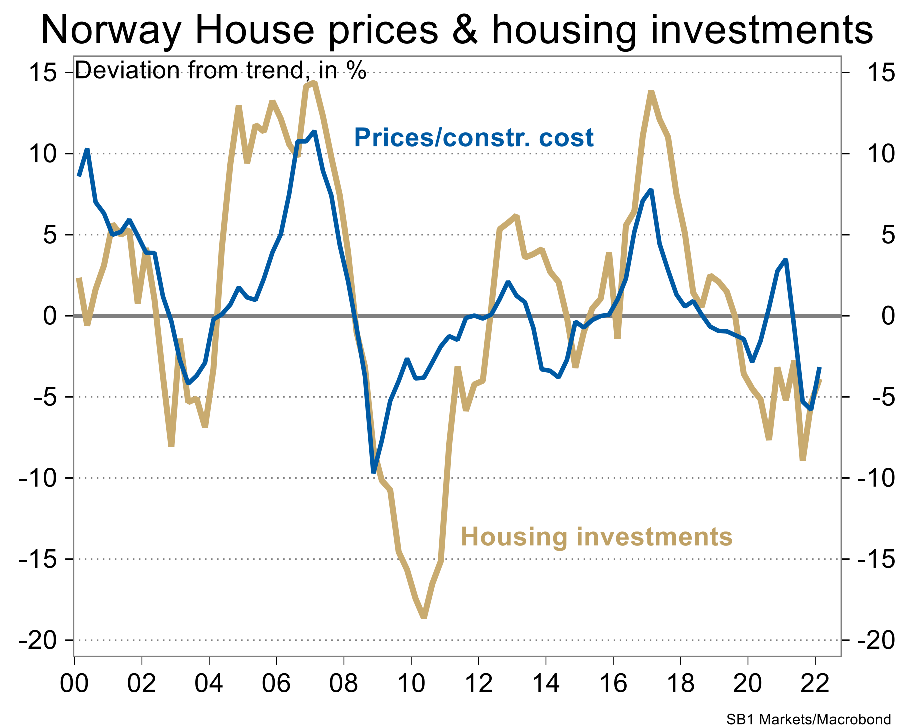




Housing starts/investments normally in tandem with house prices, no surprise

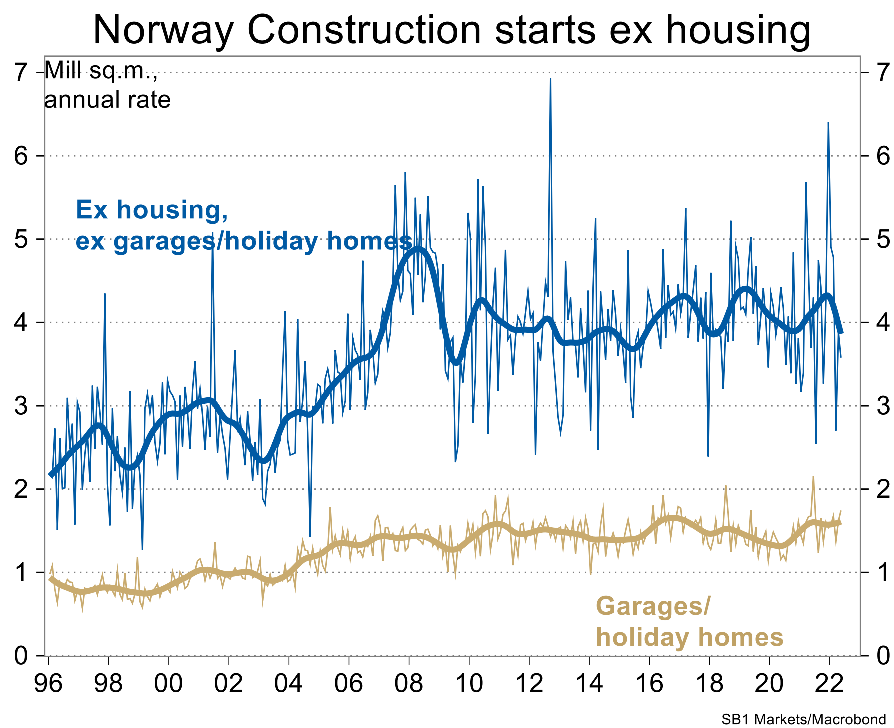
Prices have strengthened recent months – but higher building costs are weighting on starts

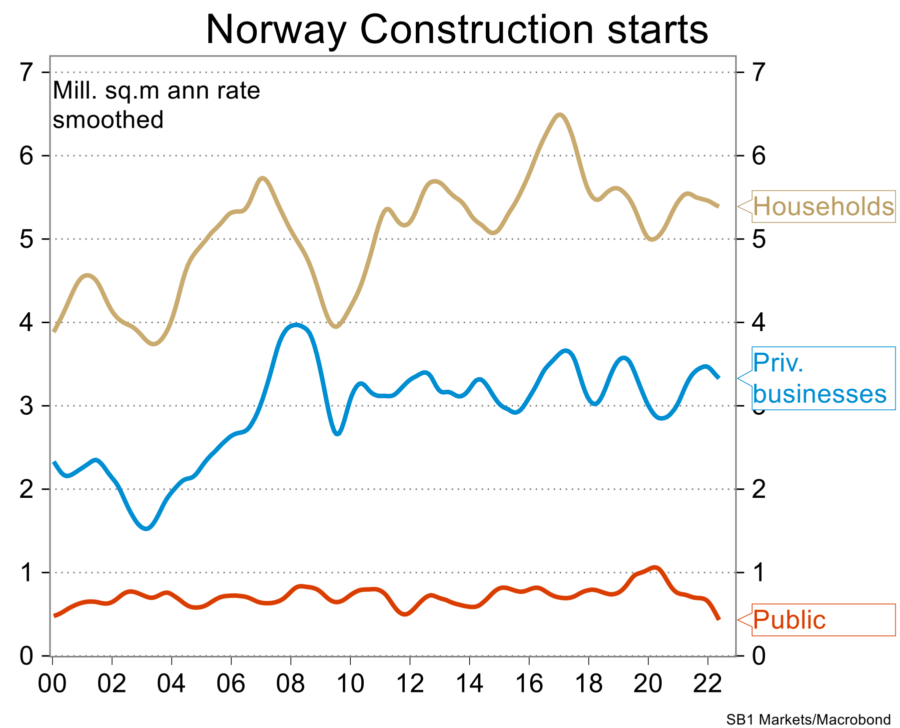




Non-residential construction slightly down recent months

Public sector is slowing down, while activity in the private sector keeps up well

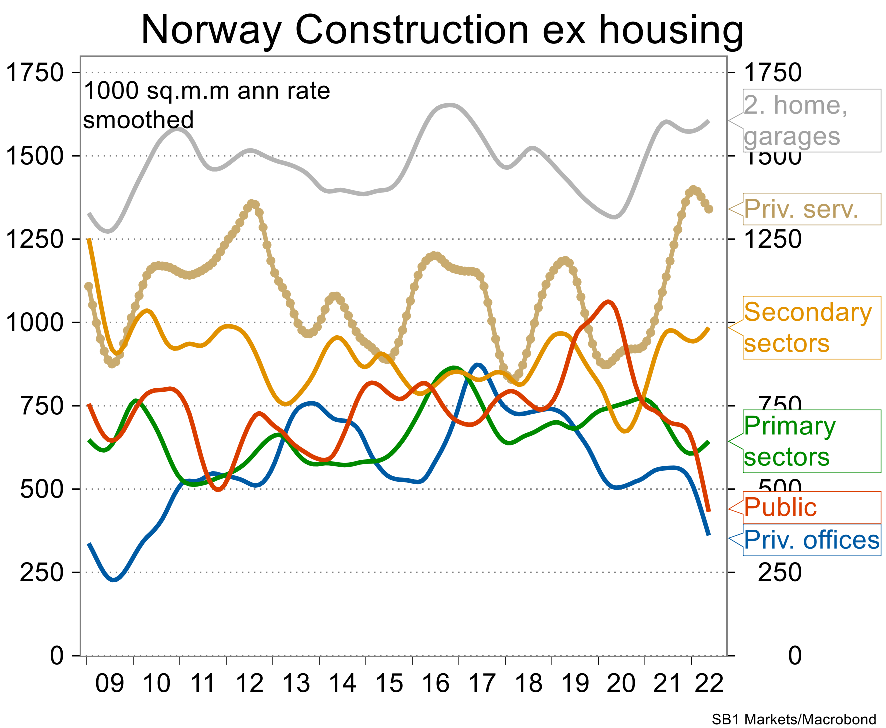


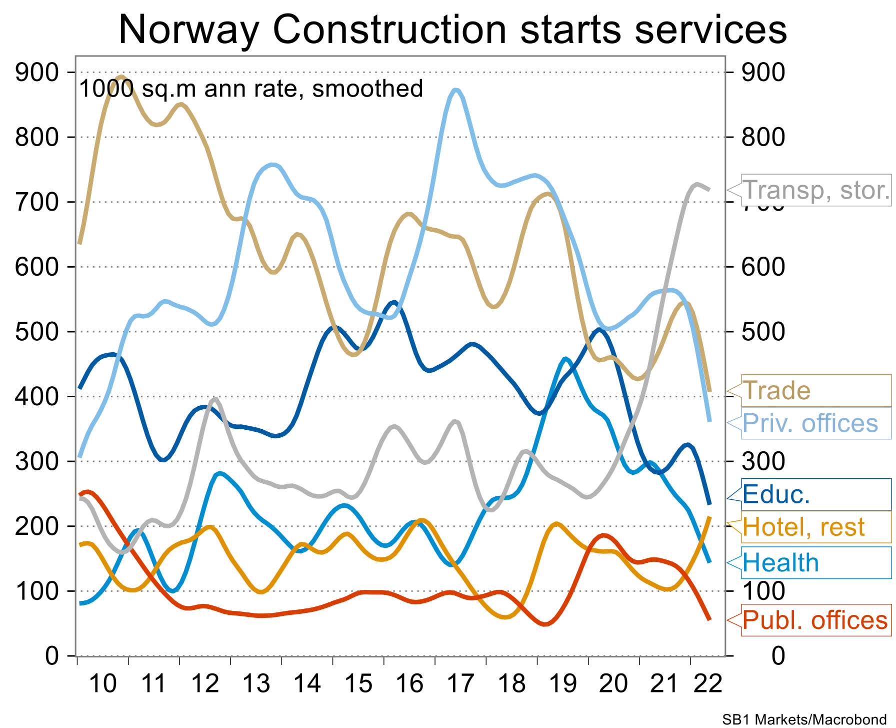


- **Construction starts ex housing & garages/cabins** are very volatile, short term, influenced by single projects
  - » **Private non-residential starts** climbed in H2-20 but has fallen slightly recent months
  - » **Public sector construction starts** have fallen 50% since early 2020 and are still sliding down, due to few new starts within the health sector
  - » **Construction starts of cabins/garages** have climbed 30% – 40% from early 2020 – but have flattened over the past year

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

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



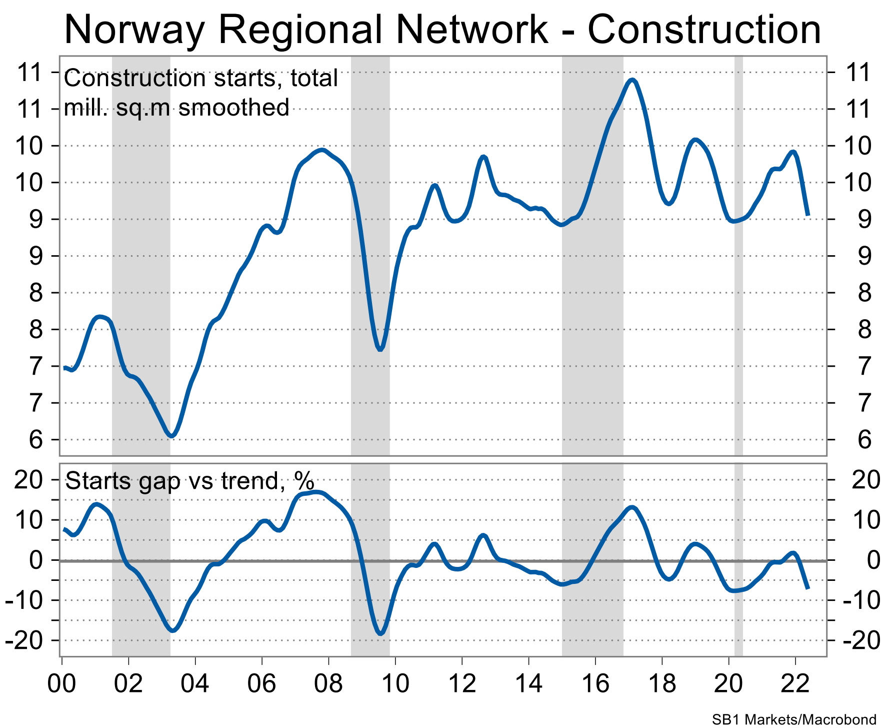


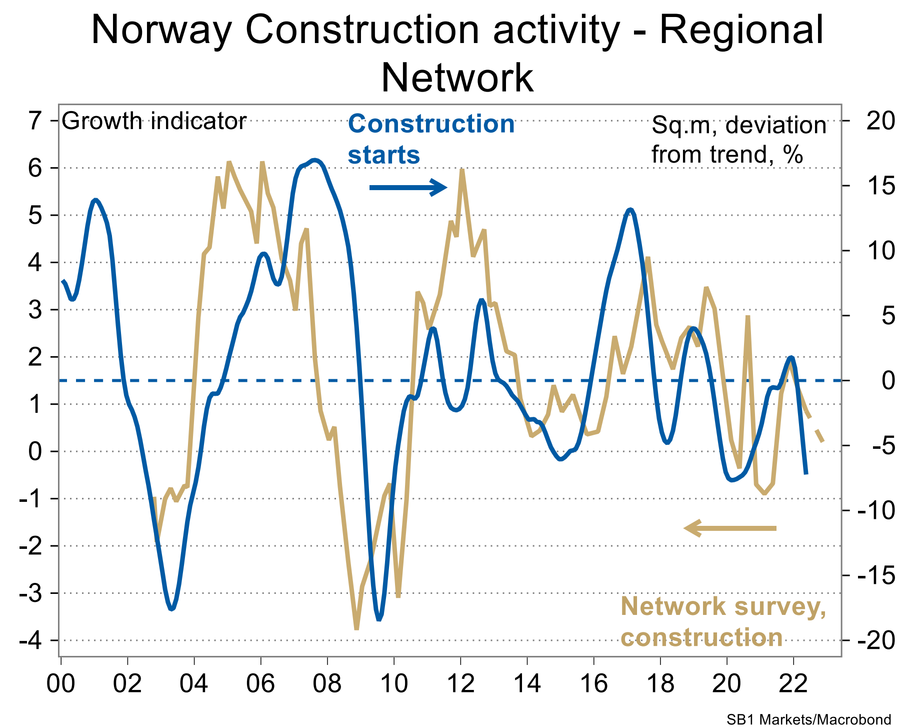
Public on the chart to the left, and at the previous page: Construction starts in public administration, education and health

SpareBank 1 MARKETS

The Q1 NoBa Regional Network signals a slowdown in the construction sector

… while total construction starts have slowed recently



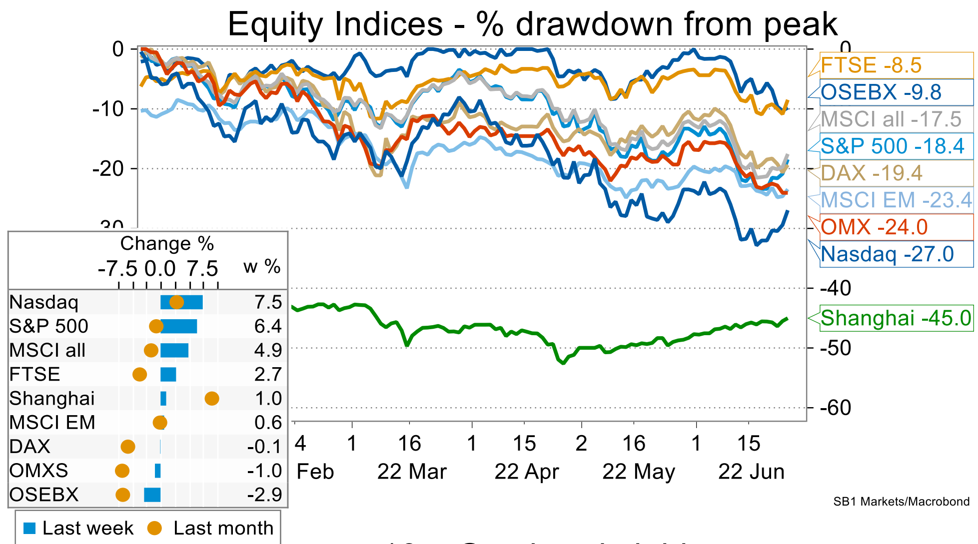


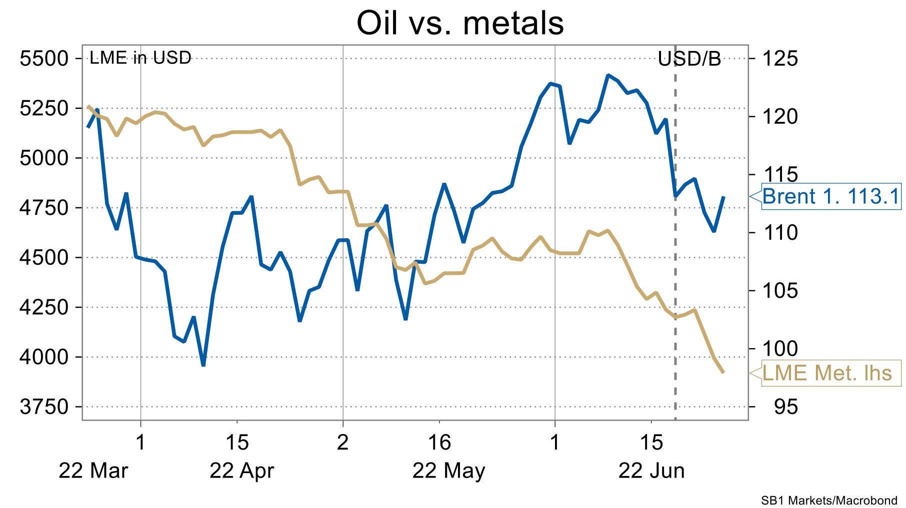
- The ‘long term’ trend in total starts is down since early 2017

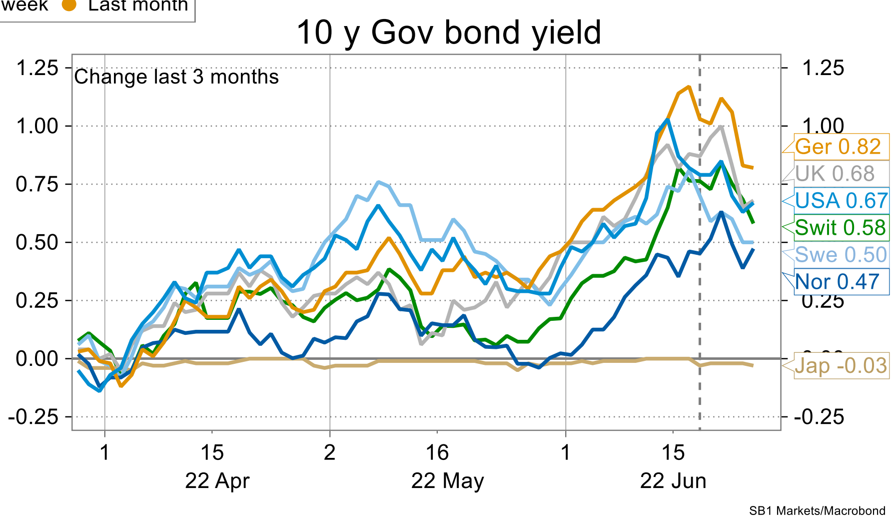
SpareBank 1 MARKETS

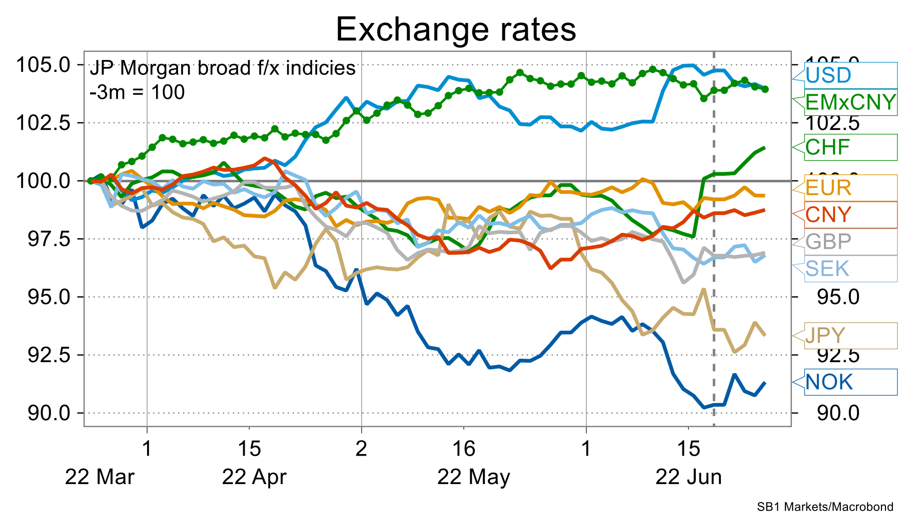
Equities up as bonds, commodities fell

Risk off amid aggressive rate hikes from central banks – and a steep surge in expected real interest rates





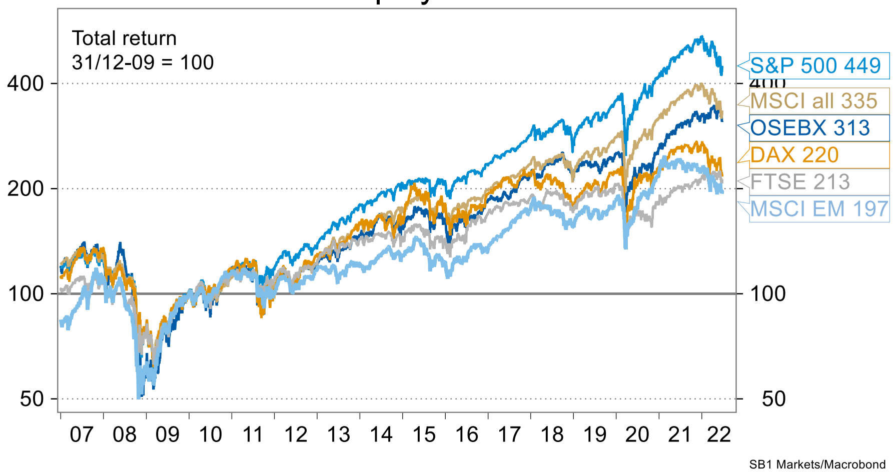




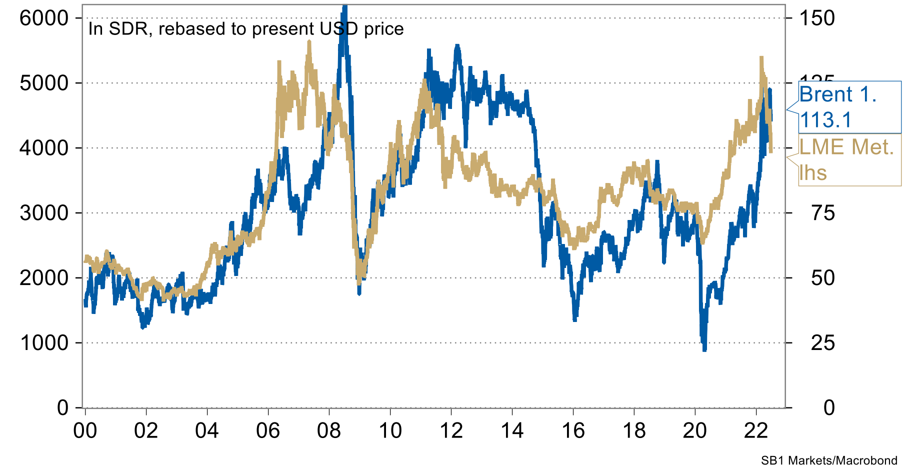
The big picture: Stock markets down (-oil rich OSEBX, FTSE), bond yields up

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

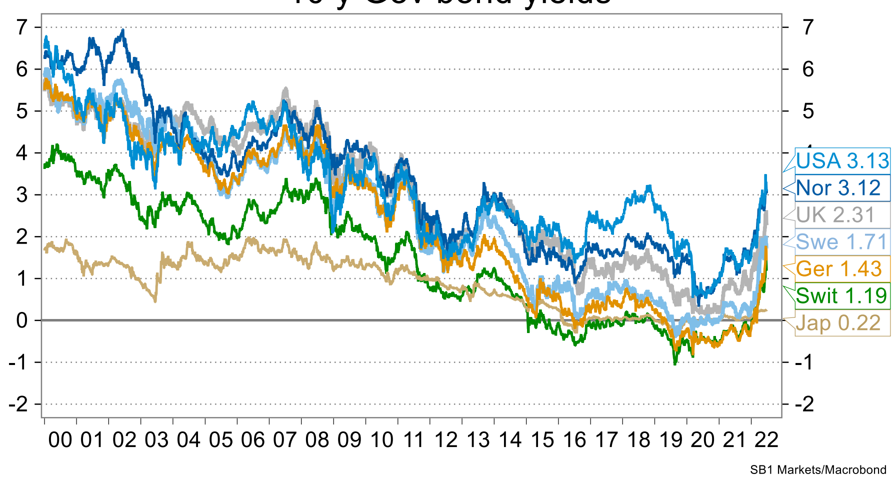
Equity Indices



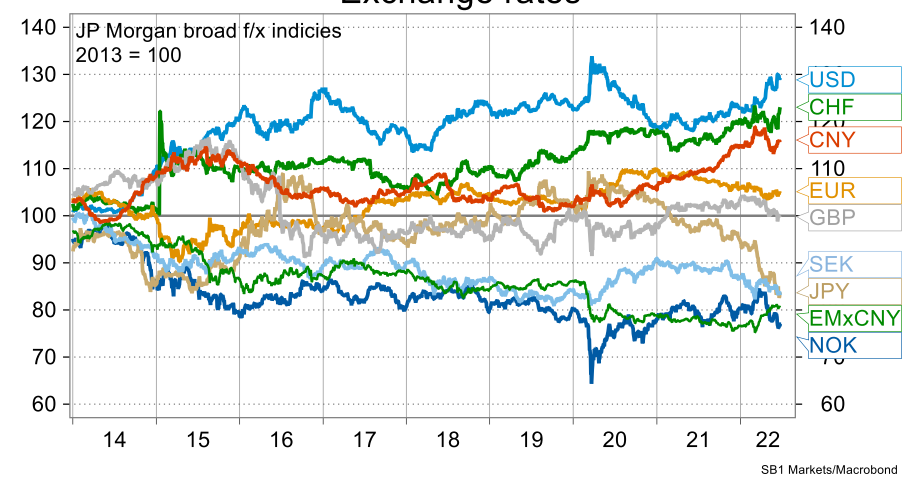
Oil vs. metals



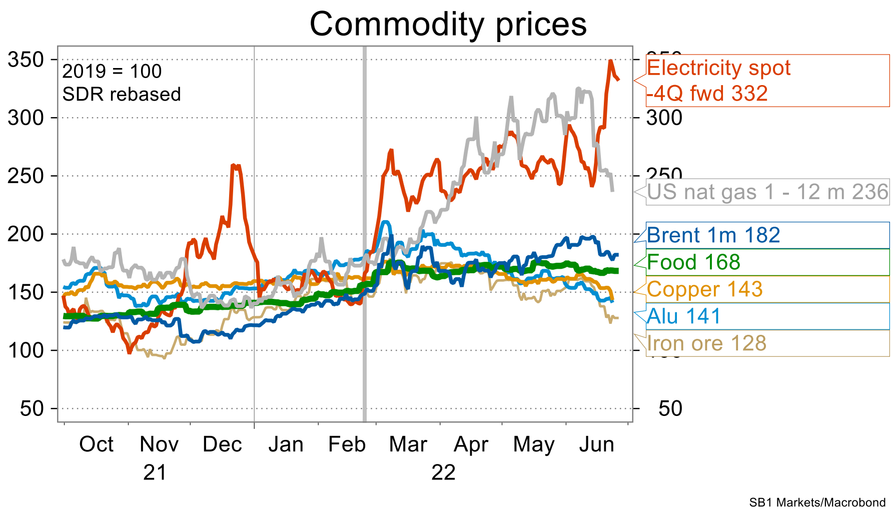
10 y Gov bond yields

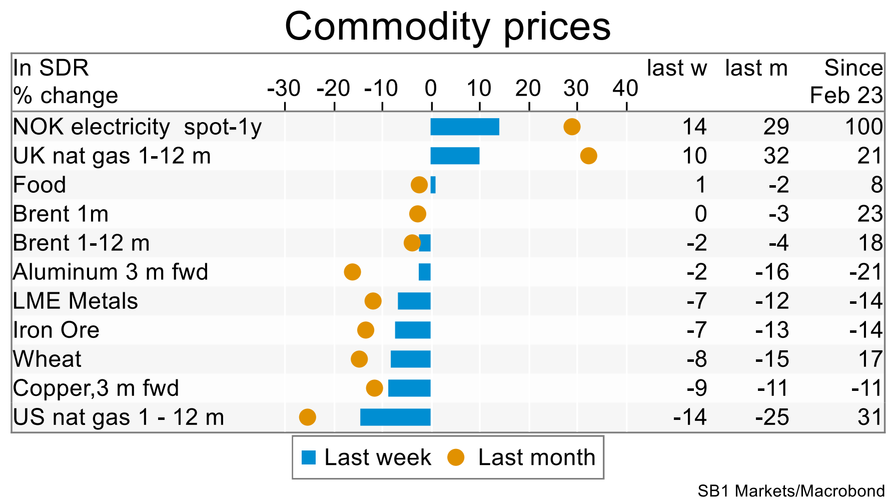


Exchange rates

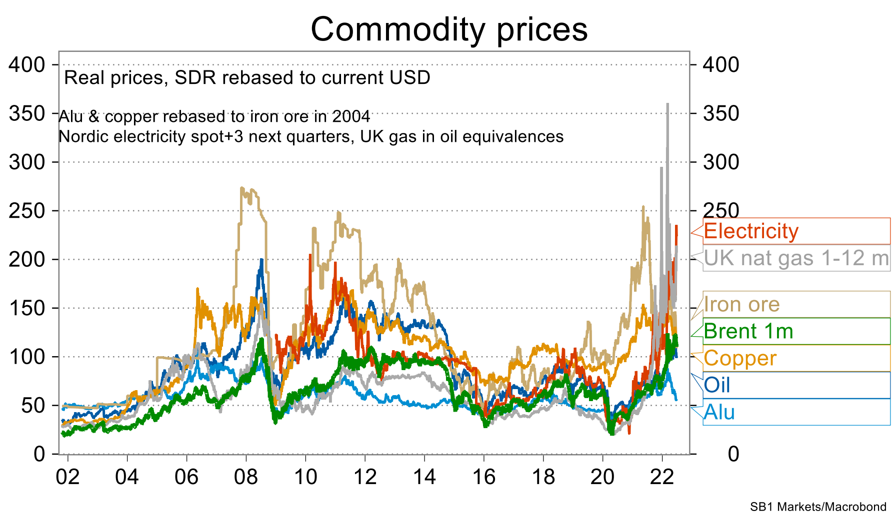


Most commodity prices are on the way down, except European gas prices





In SDR % change	last w	last m	Since Feb 23
NOK electricity spot-1y	14	29	100
UK nat gas 1-12 m	10	32	21
Food	1	-2	8
Brent 1m	0	-3	23
Brent 1-12 m	-2	-4	18
Aluminum 3 m fwd	-2	-16	-21
LME Metals	-7	-12	-14
Iron Ore	-7	-13	-14
Wheat	-8	-15	17
Copper,3 m fwd	-9	-11	-11
US nat gas 1 - 12 m	-14	-25	31

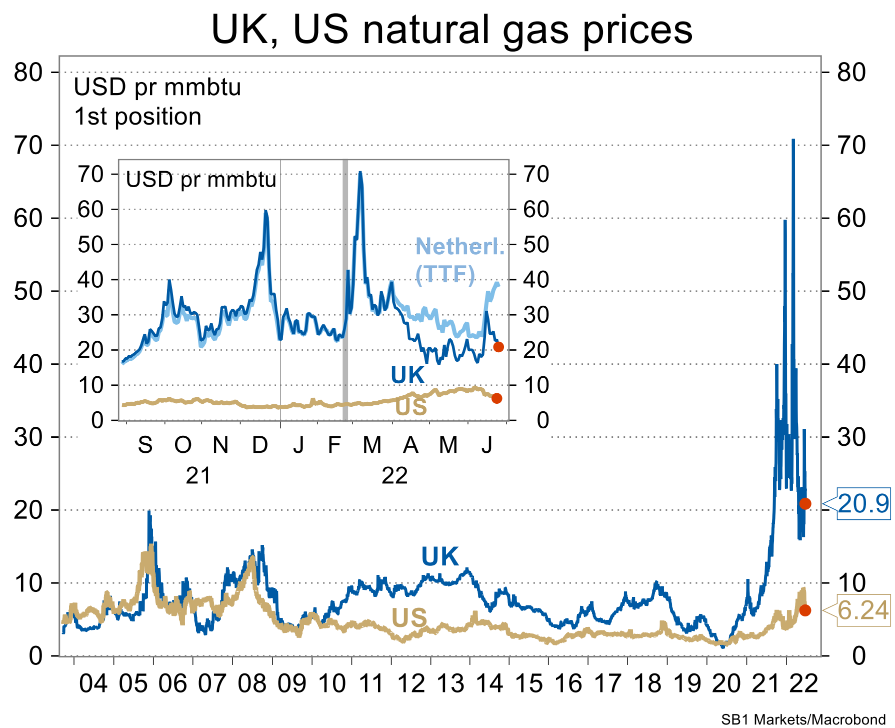


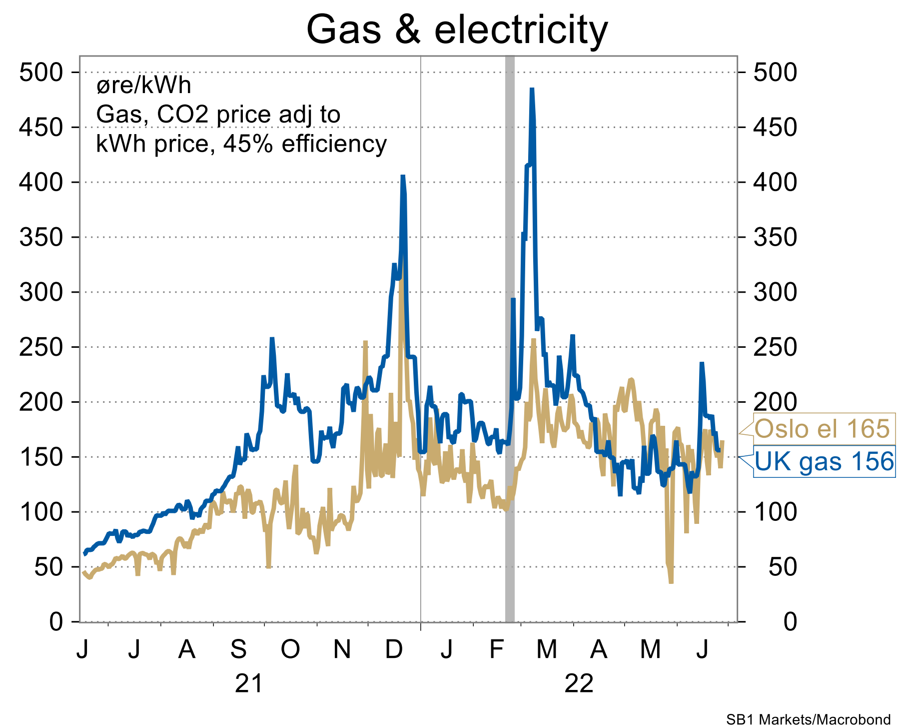
- Oil prices stabilised in the short end, prices fell further out of the curve
- European natural gas prices rose further last week – lack of Russian gas – and less US LNG the coming months due to the fire in an LNG plant
- US natural gas fell further, due to less export capacity due to the fire
- Norwegian electricity prices rose further last week
- The Economists food commodity index rose 1% in SDR terms last week but is trending gradually down

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

Continental natural gas prices rose further, while prices are falling in the UK & US

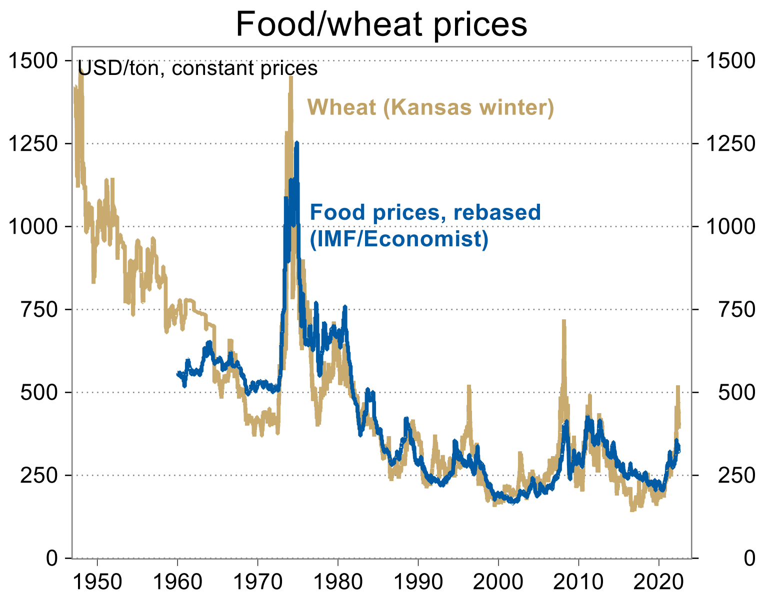
Lack of piped gas from Russia and less LNG from US the coming months

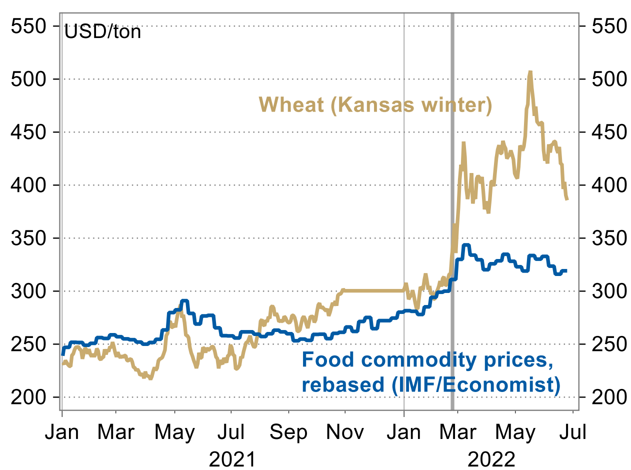


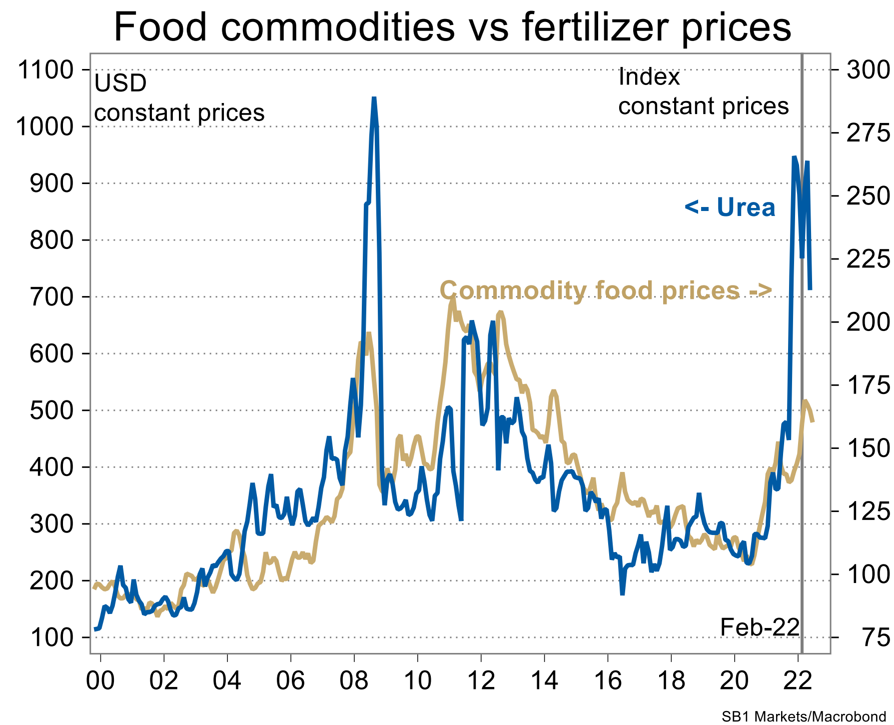


Food prices are trending (very) slowly downwards

Wheat prices are falling rather rapidly but are still up 25% from before the war

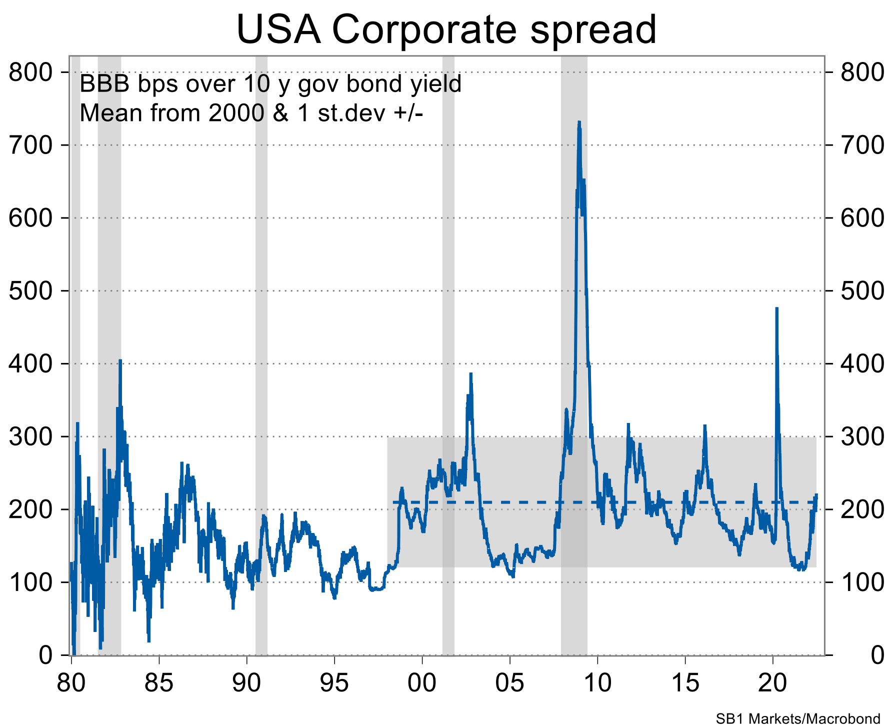


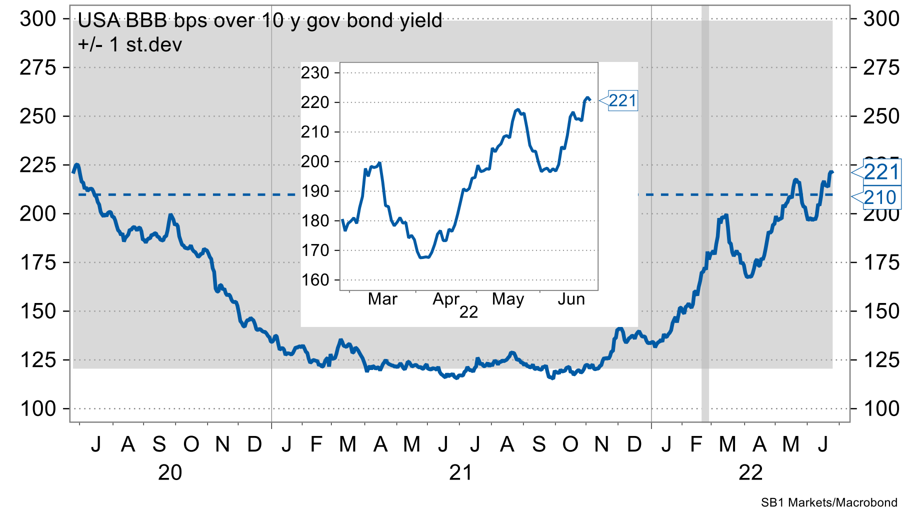




Credit spreads further up last week

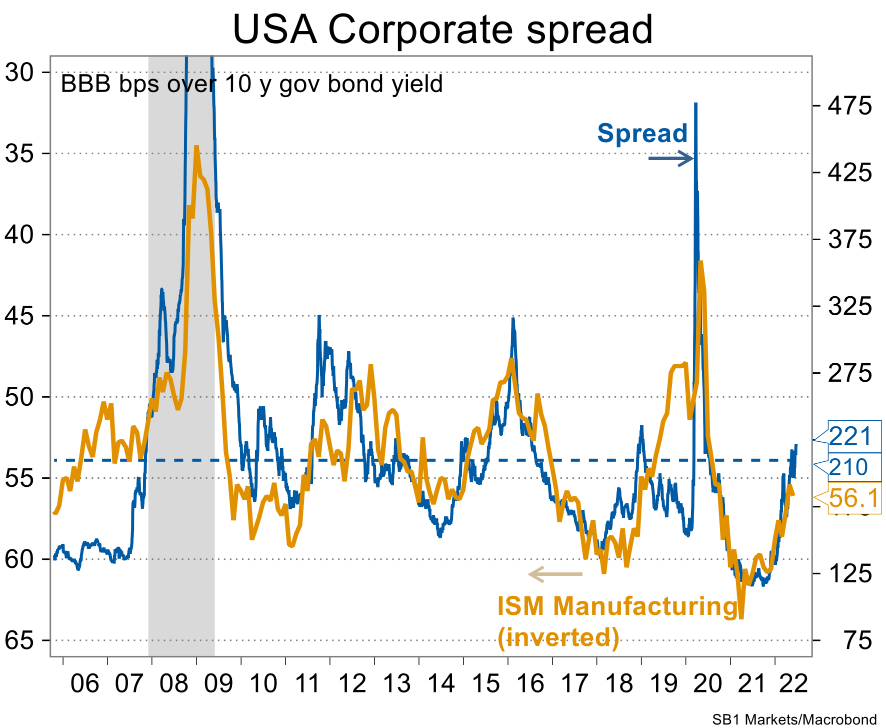
Credit spreads are somewhat above the average level past 25 years, from a very low level last autumn

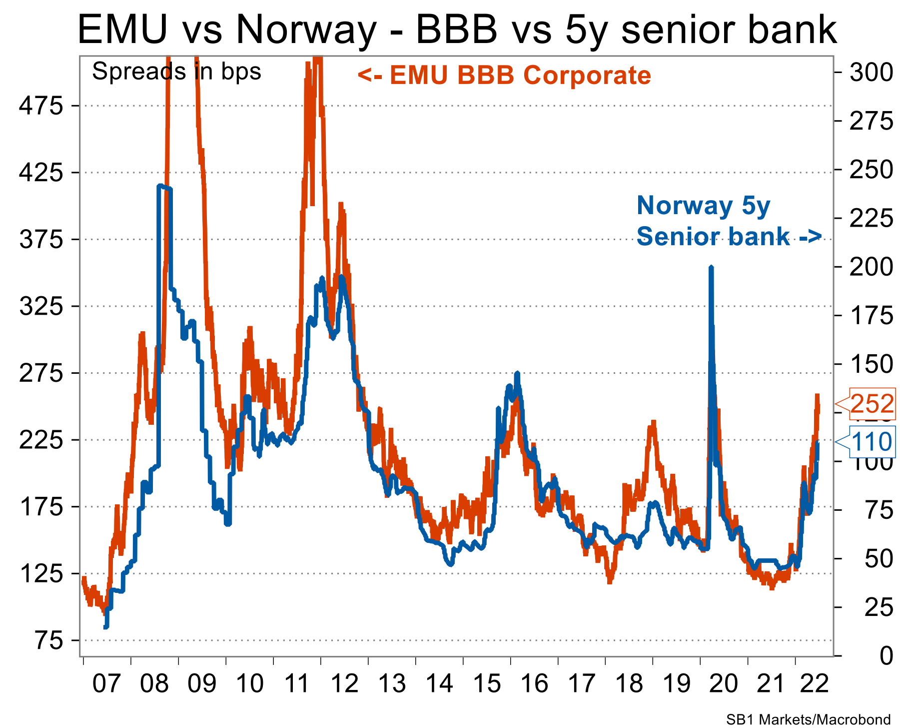




Why are credit spreads widening? Could it be the slowing economy?

What do you think is more likely: An ISM at 50 or 60 in some few months time? Or 45?



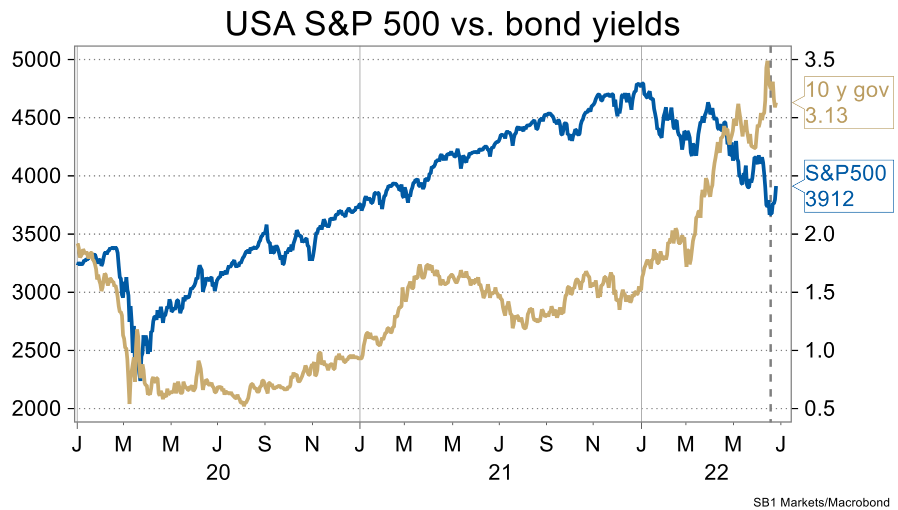


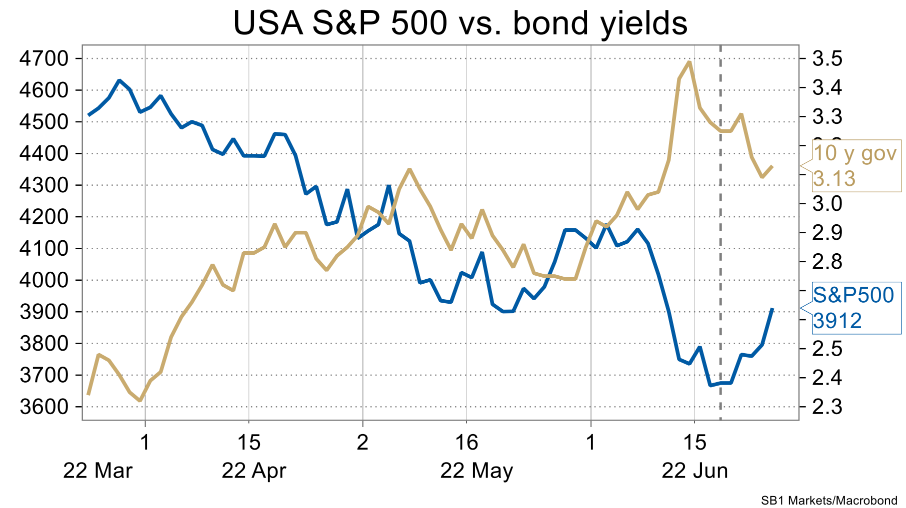
- The answer is not irrelevant for your view on the outlook for spreads, we think
- And do you think Norwegian spreads will be influenced by changes in the global credit market?

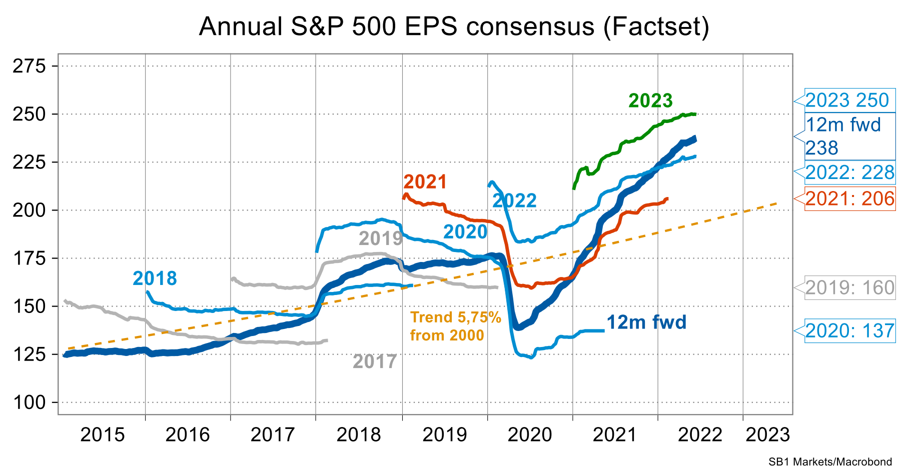
SpareBank 1 MARKETS

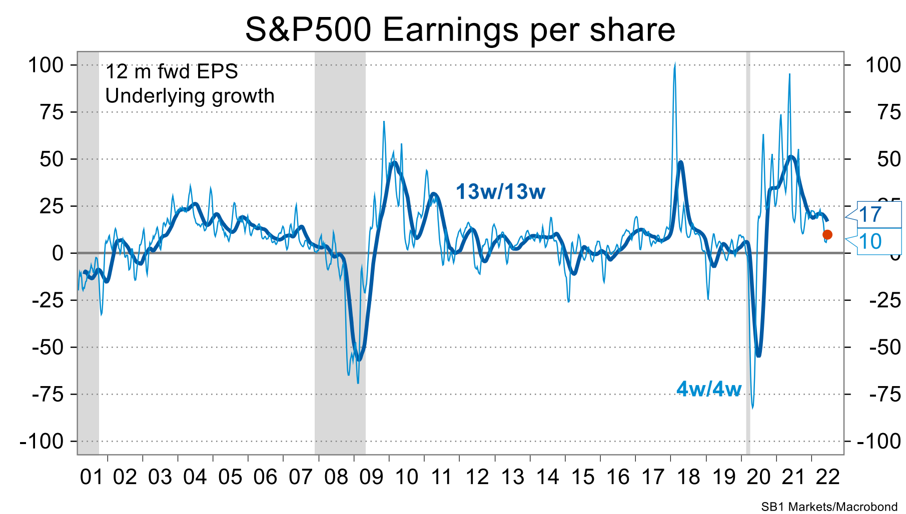
The S&P 500 up 6.4%, bond yields down – as earnings expectations slow

Bond yields rose too much, and equities fell to much before the reversal last week?





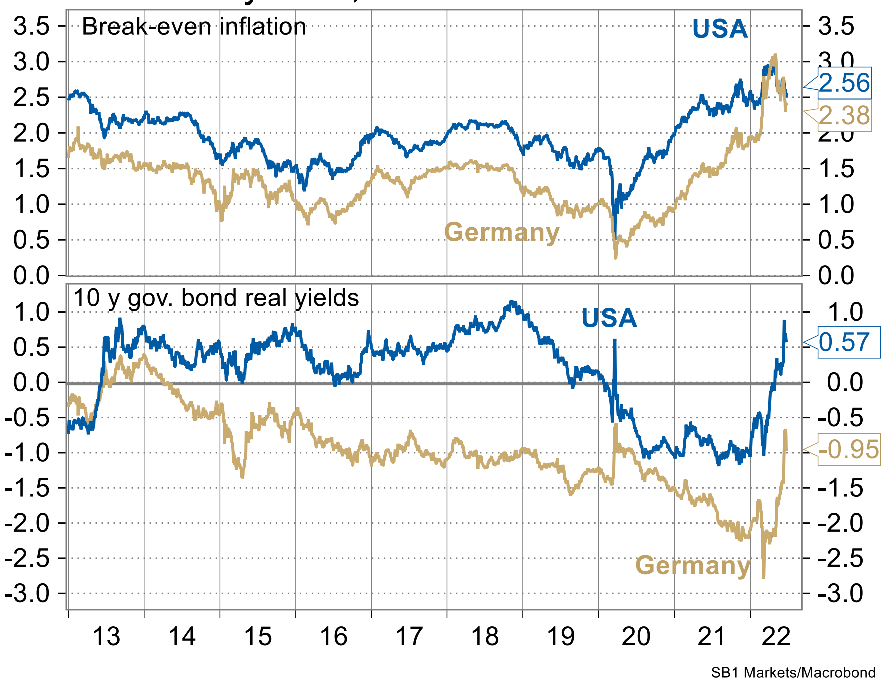


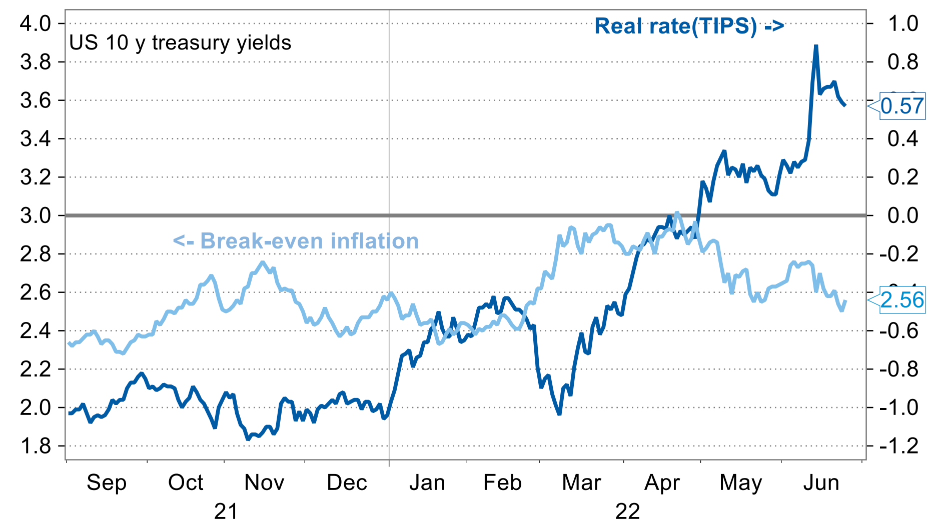


USA real rates retreated following the incredible surge

Inflation expectations are trending down – as markets recognise central banks will fight inflation

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





US & Germany 10 y Gov bond yield

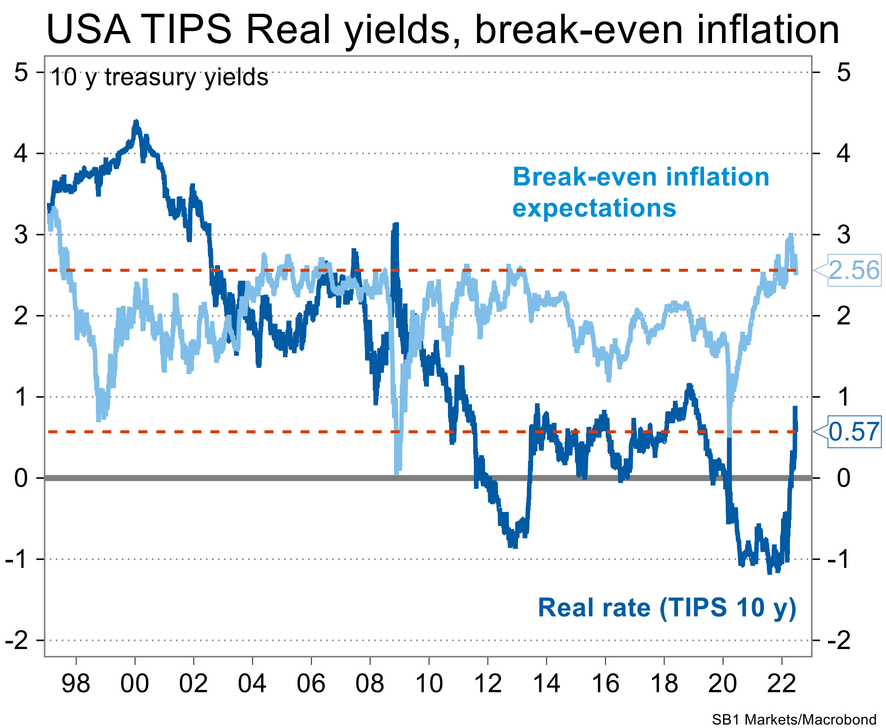
	Yield	Change 1w	Change 1m	Since Feb 18	Min since April-20
USA nominal treasury	3.13	-0.12	0.37	1.21	0.52
.. break-even inflation	2.56	-0.02	0.01	0.15	1.06
.. TIPS real rate	0.57	-0.10	0.36	1.06	-1.19
Germany nominal bund	1.43	-0.21	0.45	1.21	-0.65
.. break-even inflation	2.38	-0.04	-0.19	0.40	0.40
.. real rate	-0.95	-0.17	0.64	0.81	-2.80

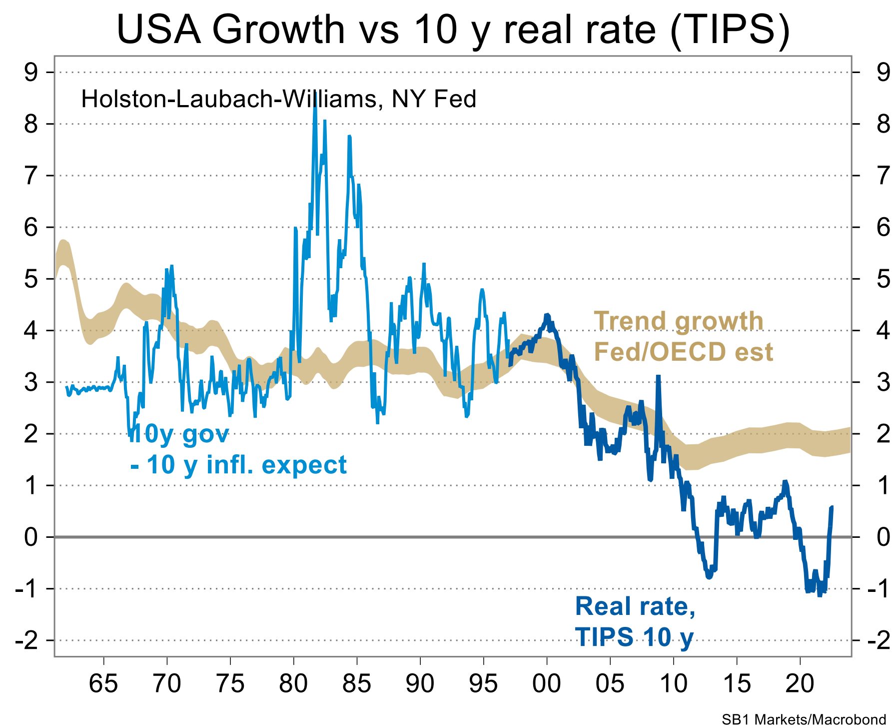
SB1 Markets/Macrobond

- **The US nominal 10 y bond** yield fell 12 bps to 3.13%
  - » **Real rates** fell 10 bps, to 0.57%. Inflation expectations fell by 2 bps, to a level first reached in Oct last year
- **The 10 y German bund** added 25 bps to 1.64%
  - » **Real rates** fell 17 bps following the 55 bps surge the previous week, to -0.95%
  - » Inflation expectations fell 4 bps to 2.28% - not that far above the target anymore – and down from above 3% at the peak

Mind the gap: It's rapidly closing!

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



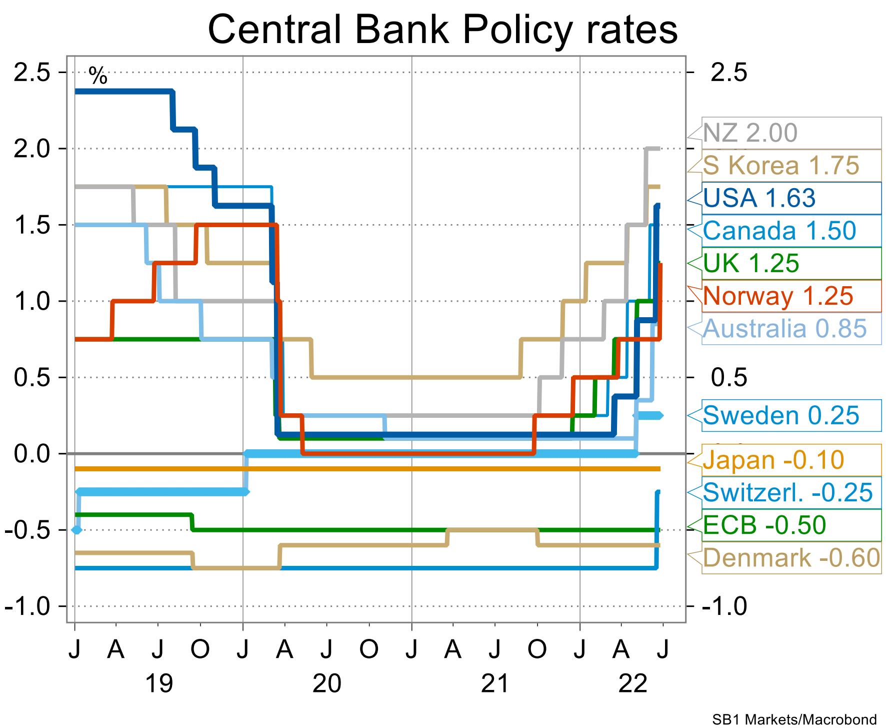


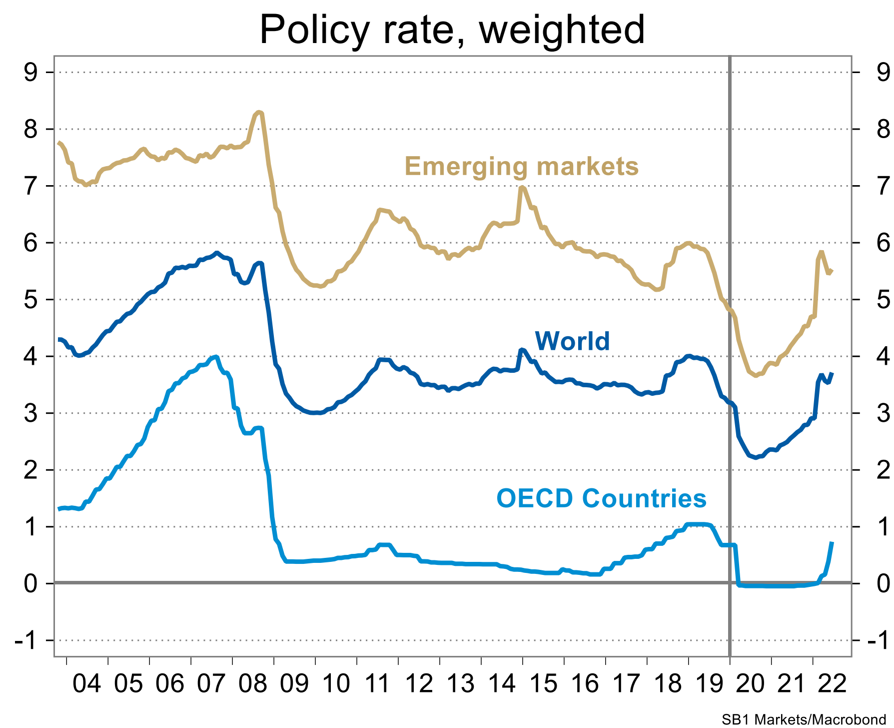
- There is no reason to believe that the current surge in real rates is due to an equivalent increase in growth expectations. It is of course the opposite: At least the short to medium-term outlook is now weakening as central banks finally enter the fight against inflation by at least bringing growth 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

Central banks on the move

Norway is now at split 5th position among rich countries

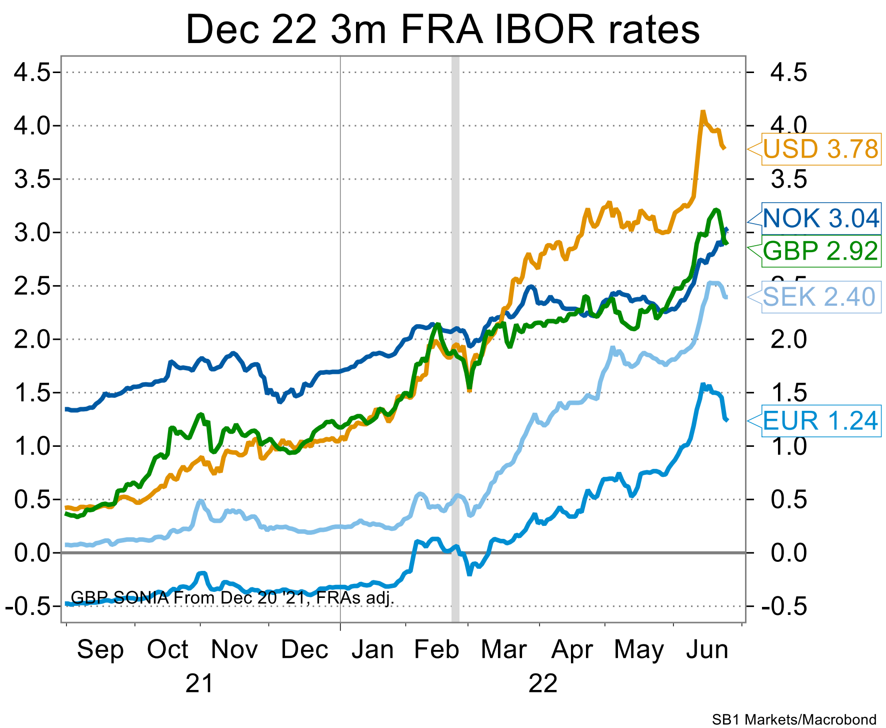


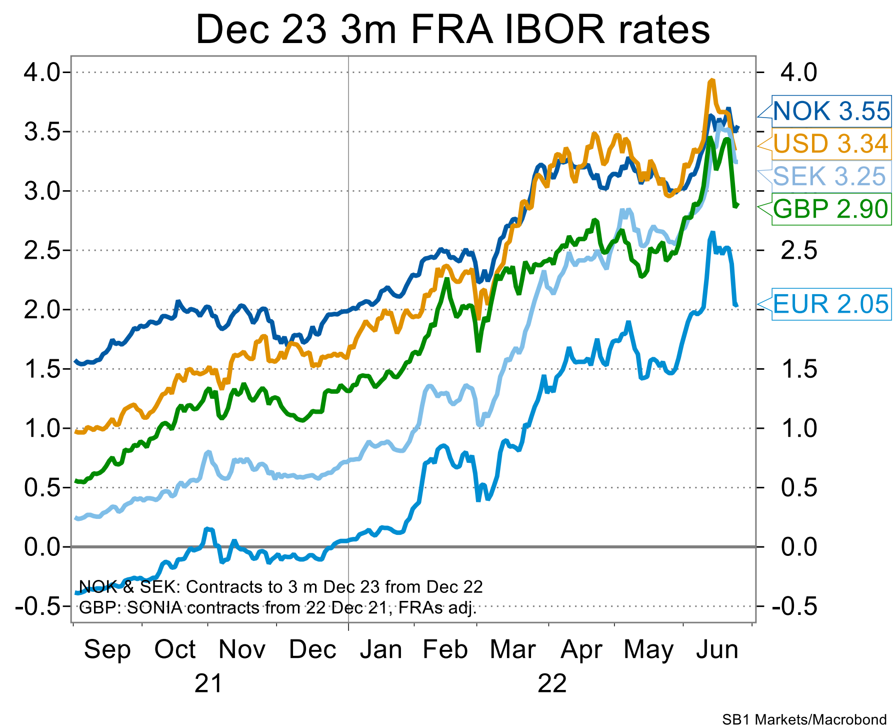


- In addition to rate hikes, central banks (x Japan and the Riksbank) have abolished their QE buying programs
- The EM average policy rate has come down due to the Russian cuts – but the trend is straight up

One hike removed from the EUR curve in H2, a second in 2023!

GBP rate fell sharply too, Dec-23 by 50 bps!

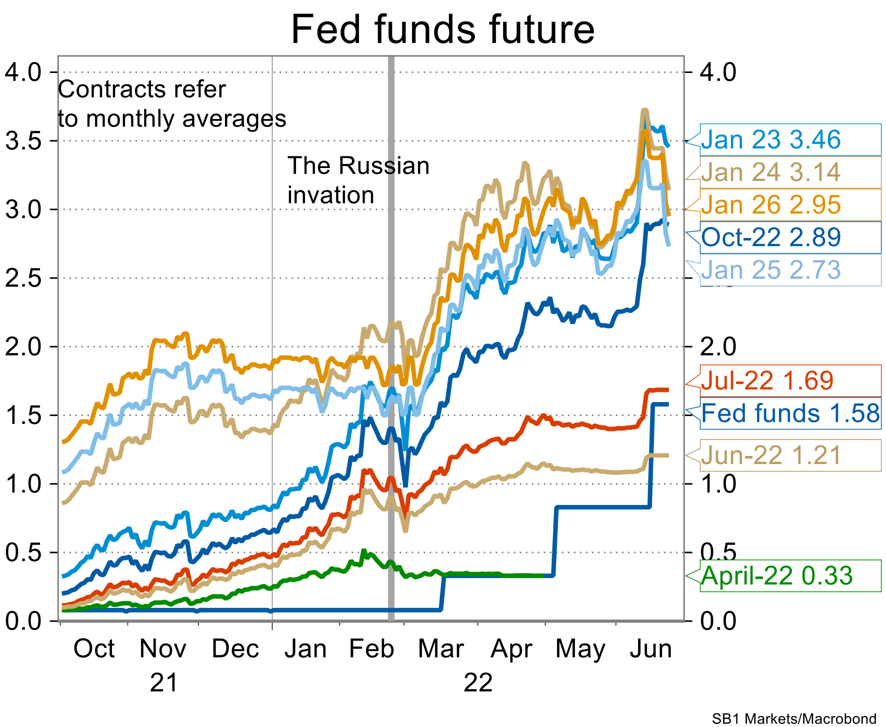


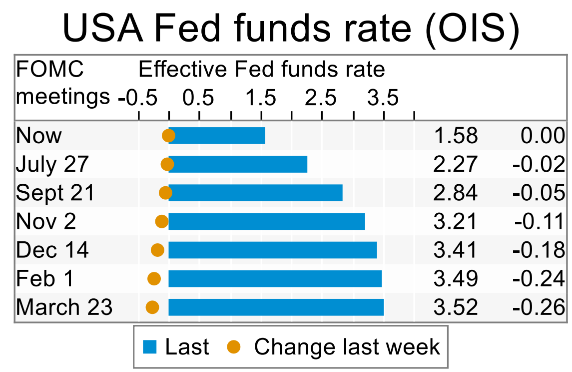


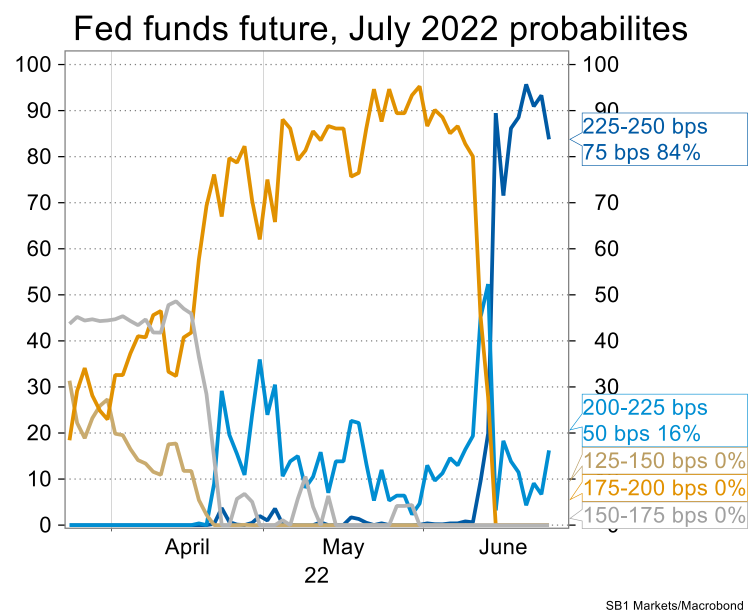
- *Is the peak near, for this cycle? Financial conditions are tightening and signs of a slowdown are visible some places.* We asked so last week, and a retreat occurred. Will the market (and central banks) gather more information whether tighter financial conditions has a sufficient impact on household and business demand (which is needed to get demand driven price increased down)

The Fed funds future curve down, the most in the long end

However, still an 84% probability for another 75-bps hike in late July, and not unlikely also in September

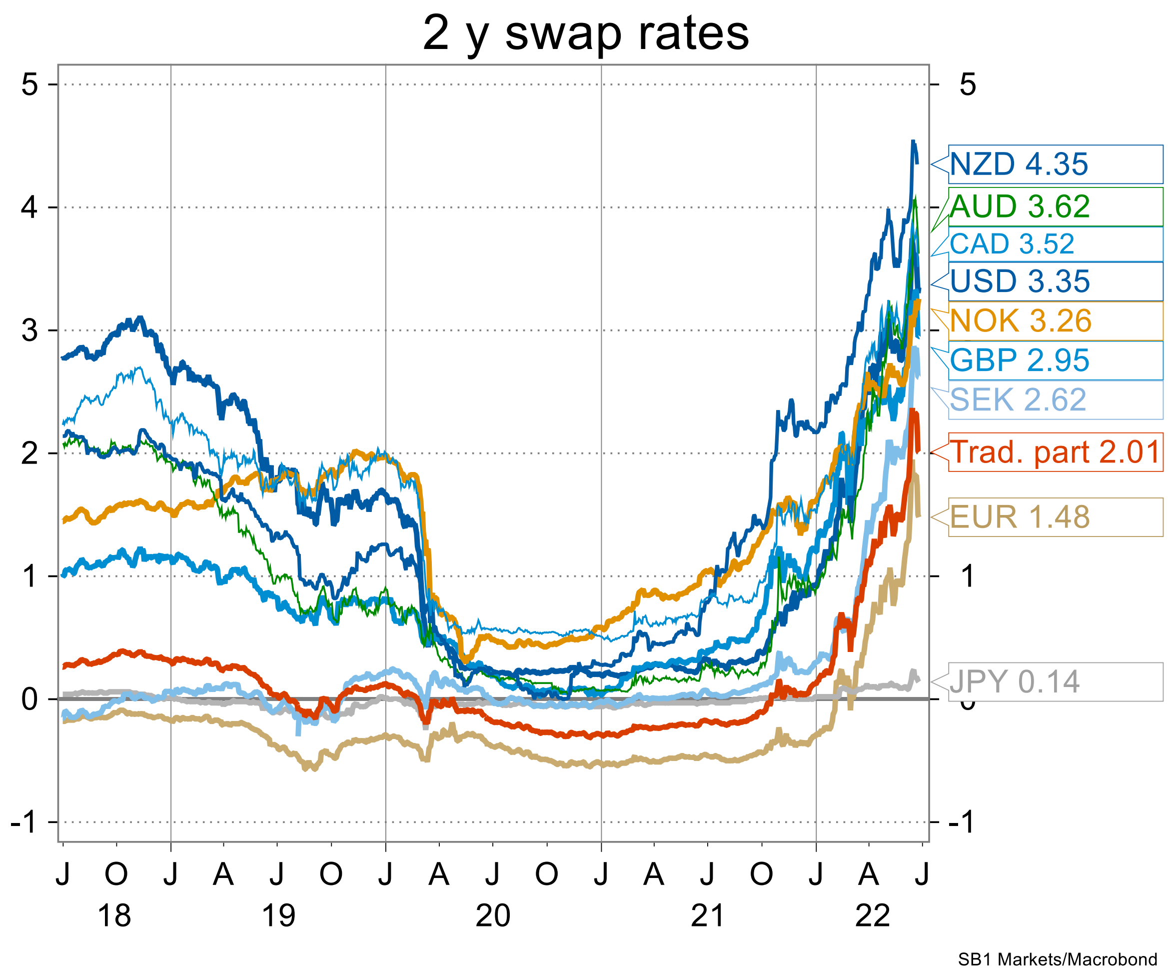


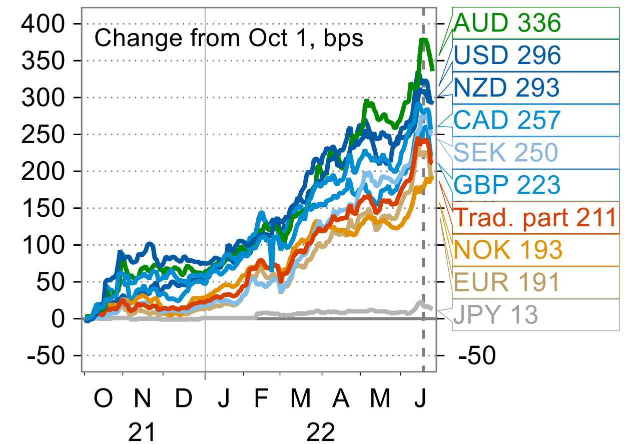


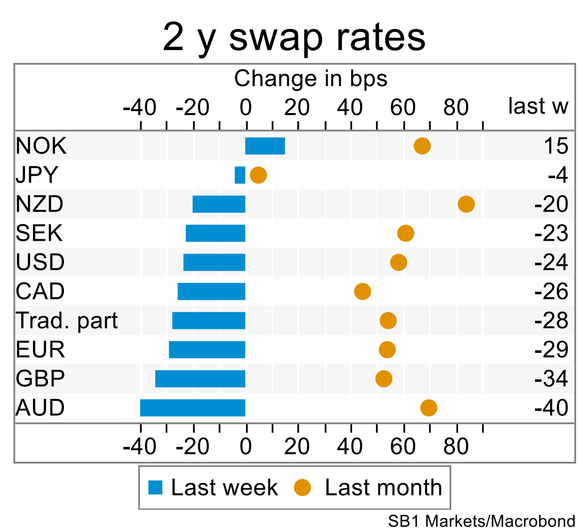


- How much weakness in the housing or labour market will the FOMC need in order to slow down the pace of tightening?

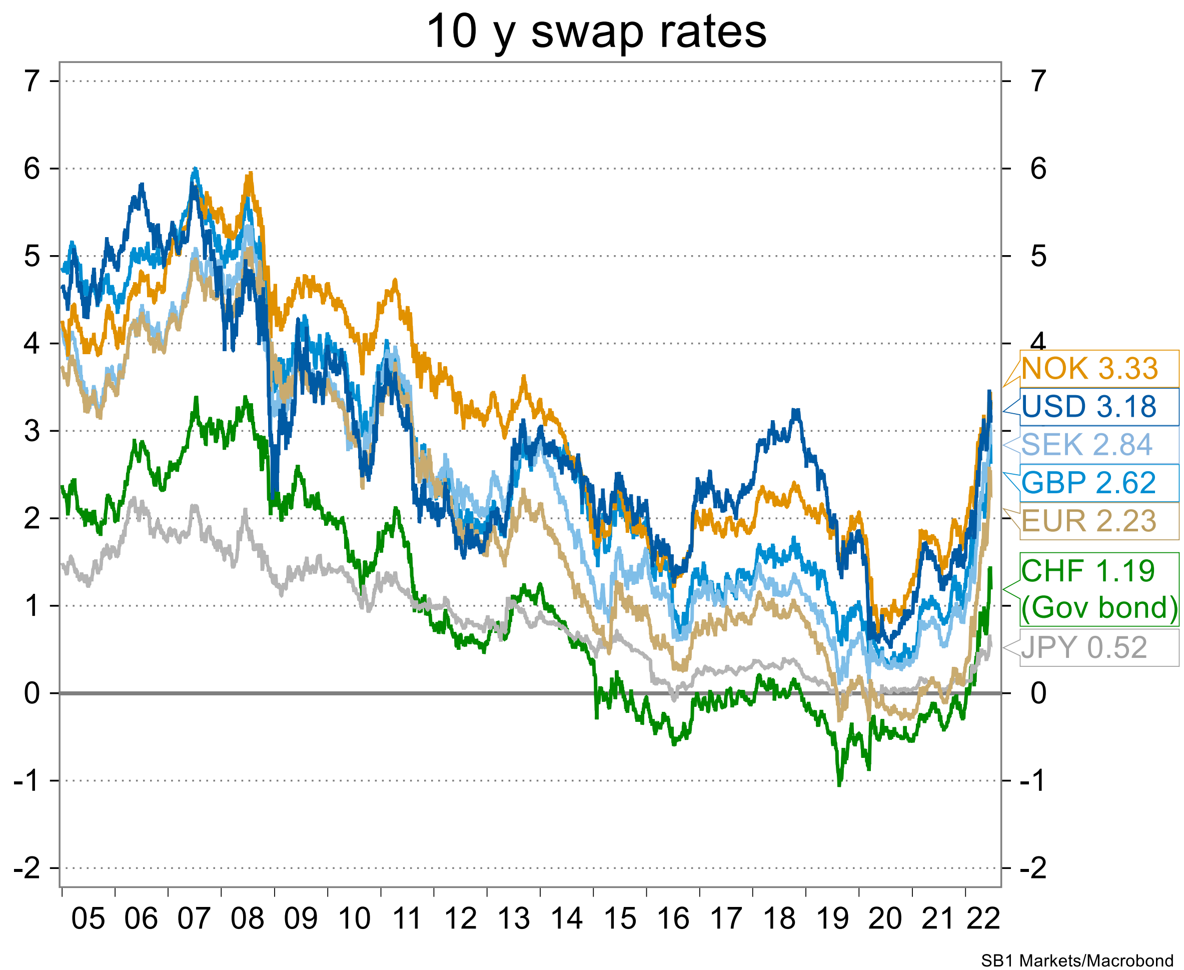
The NOK 2 y swap up 15 bps, all other down, by up to 30 – 40 bps

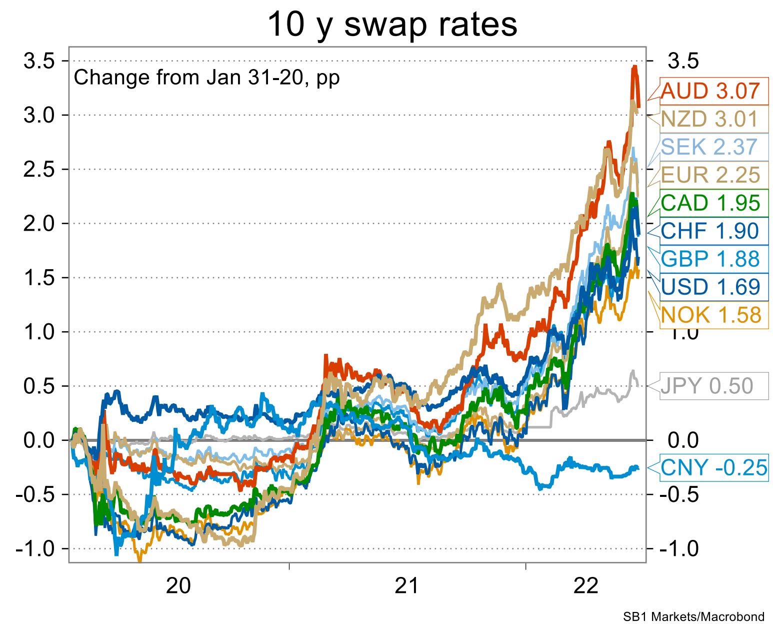


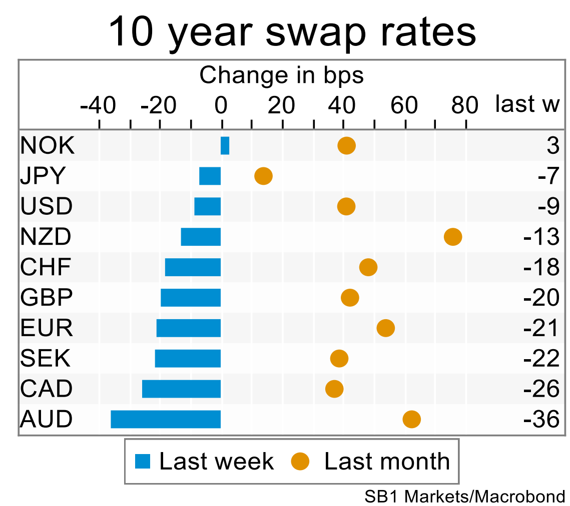




Just 10 y NOK swaps up, all other down



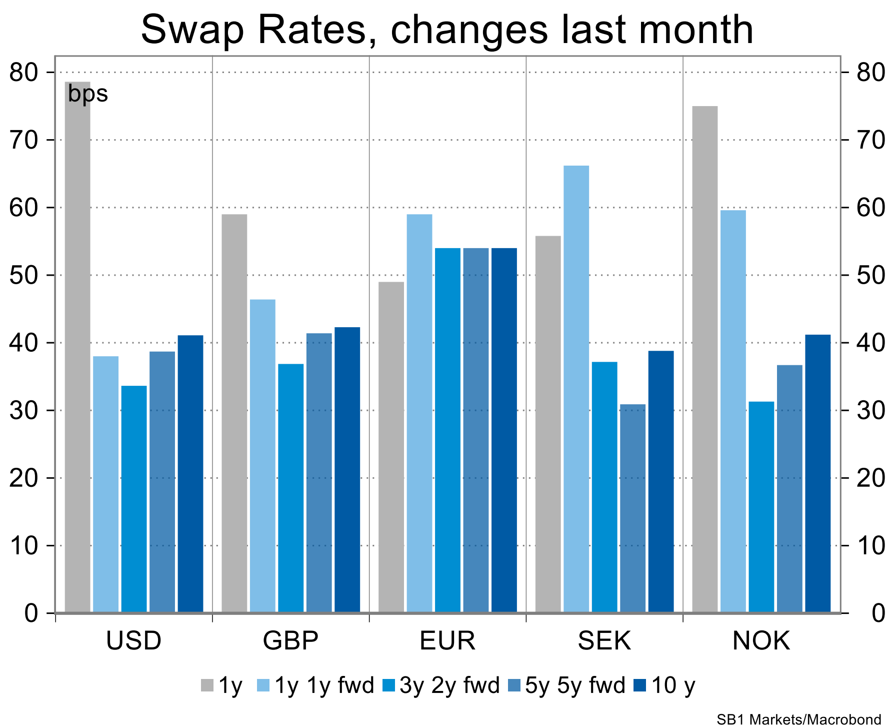


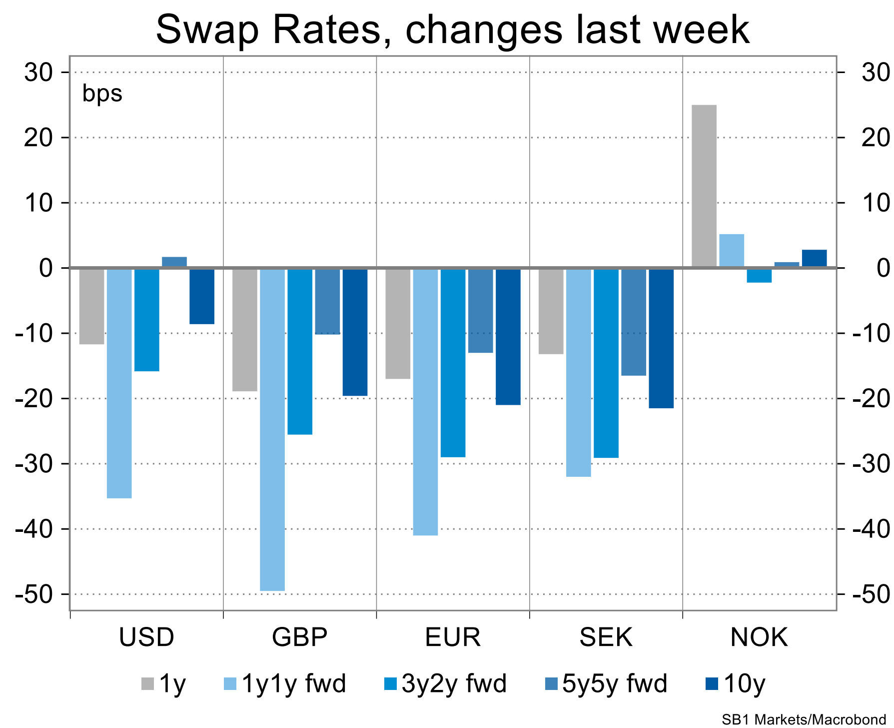


CHF: 10 y government bond yield

A very special week indeed: NOK rates up, while rates collapsed abroad

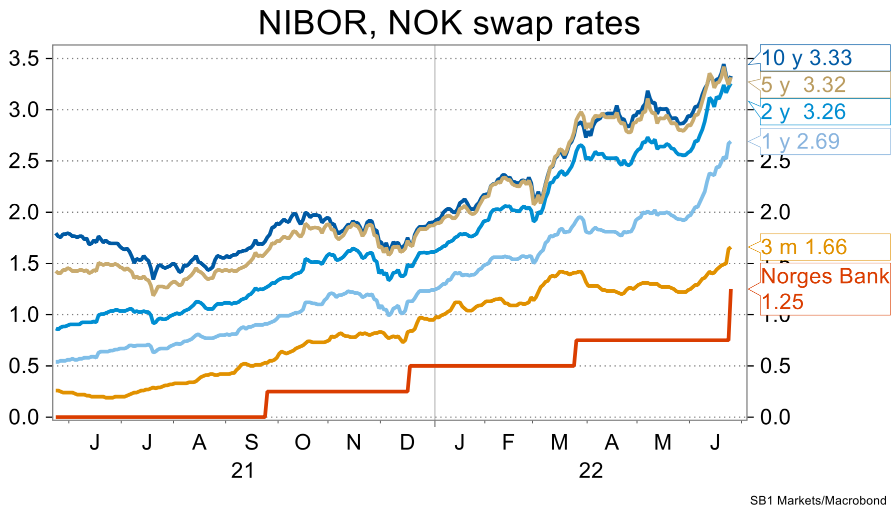
NoBa pushed the short end of the curve up, the long end was unaffected (but rates fell abroad)

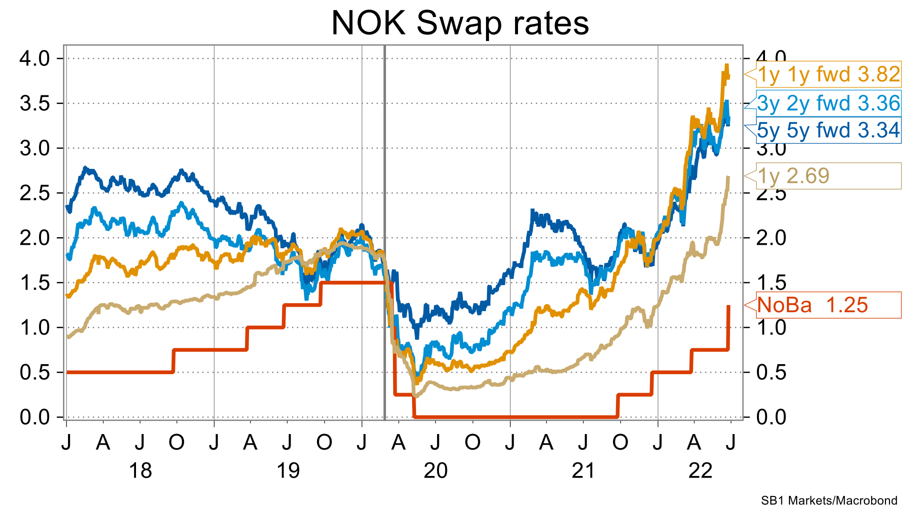


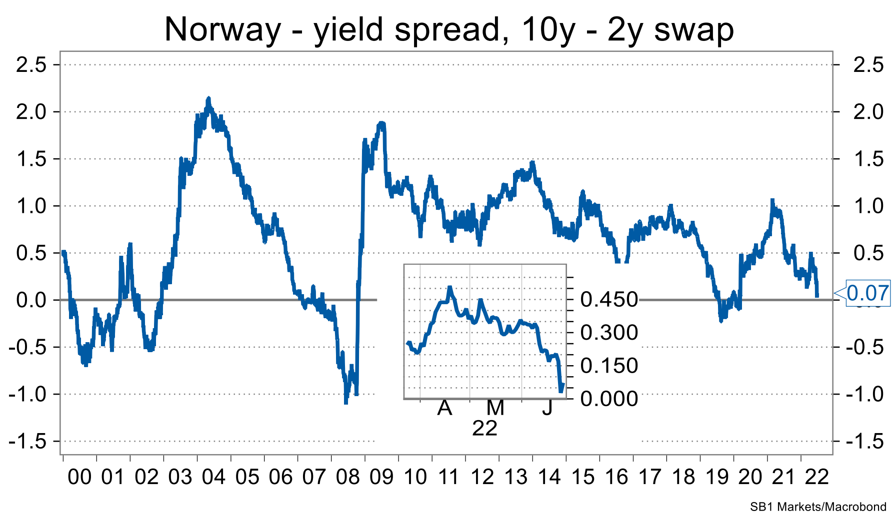


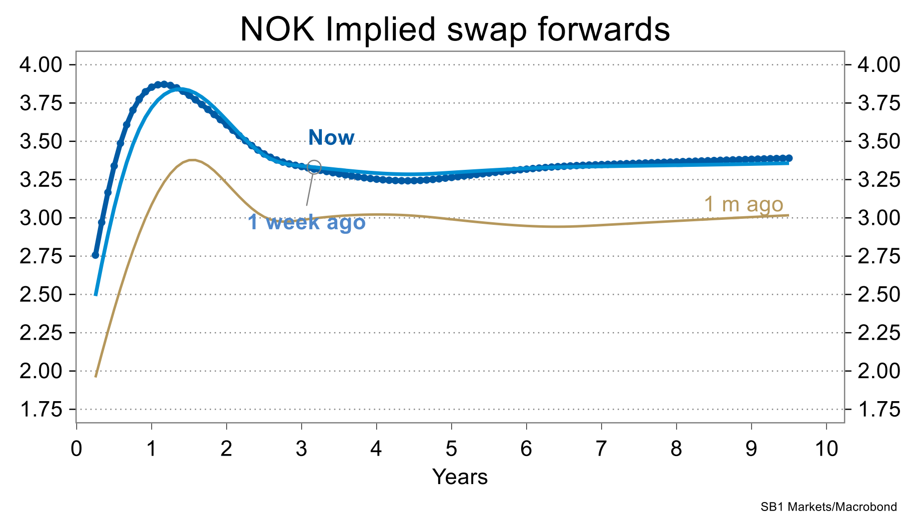
The short end up. From 1.5 year ahead, implied rates close to unchanged

The curve flattened, just 7 bps between 2 and 10

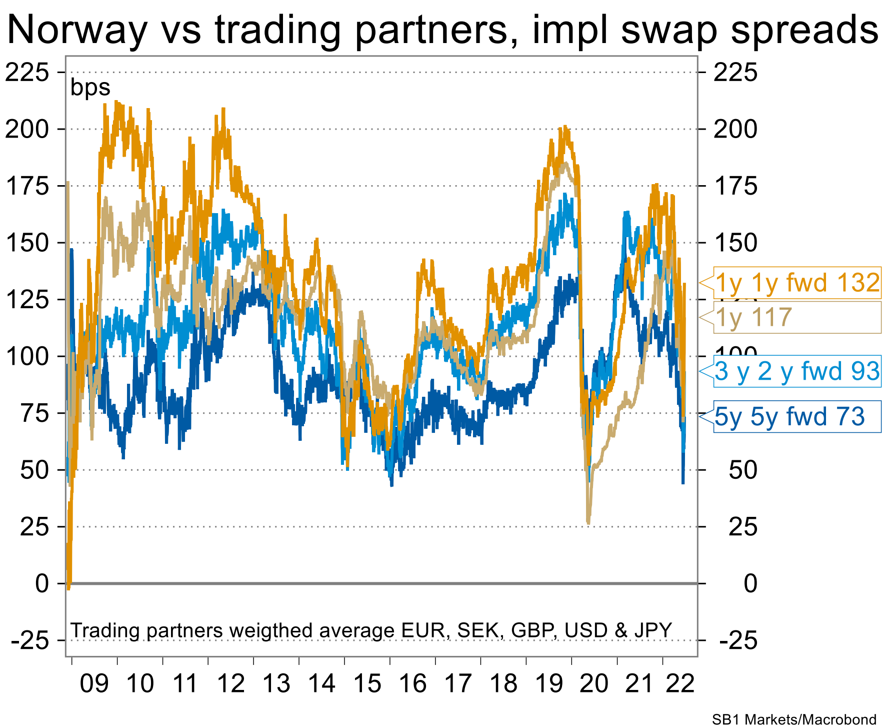


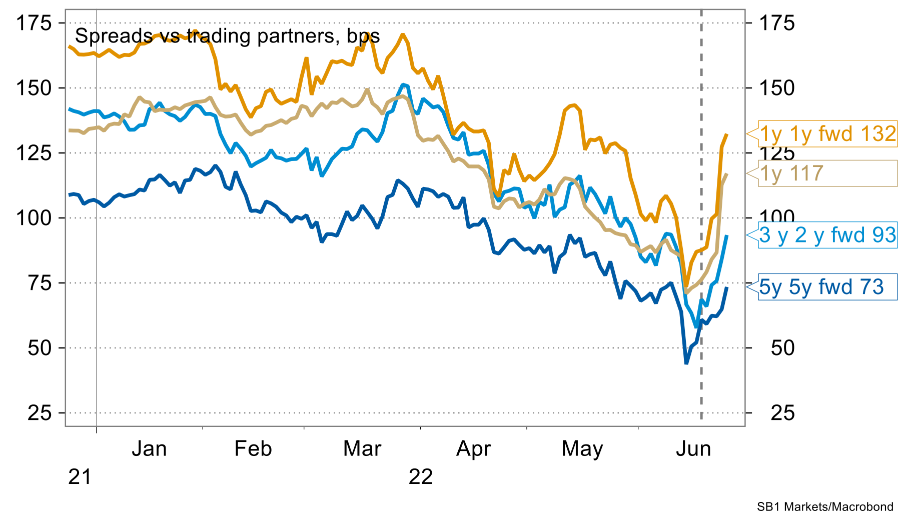


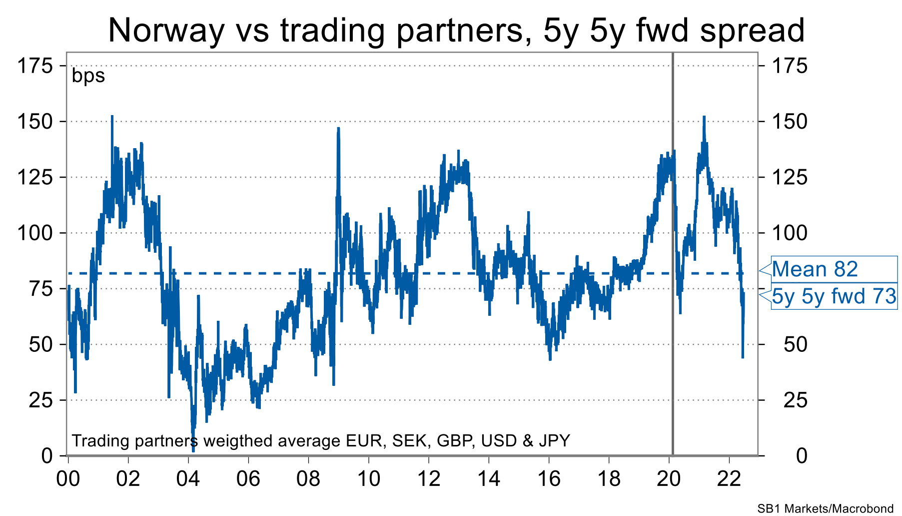




An extreme spread widening, EMU rates collapsed, NOK rates up







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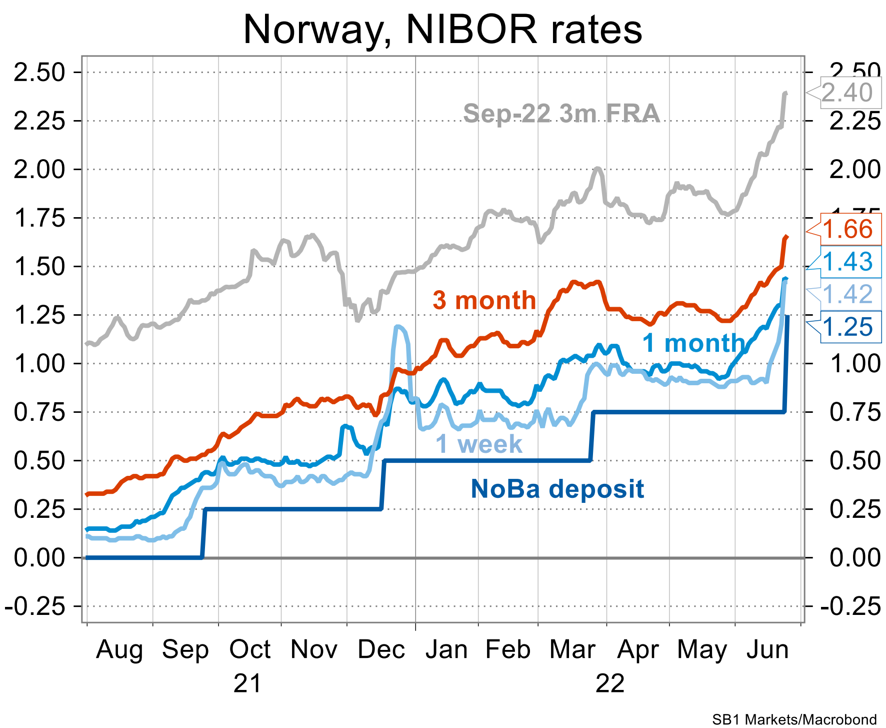
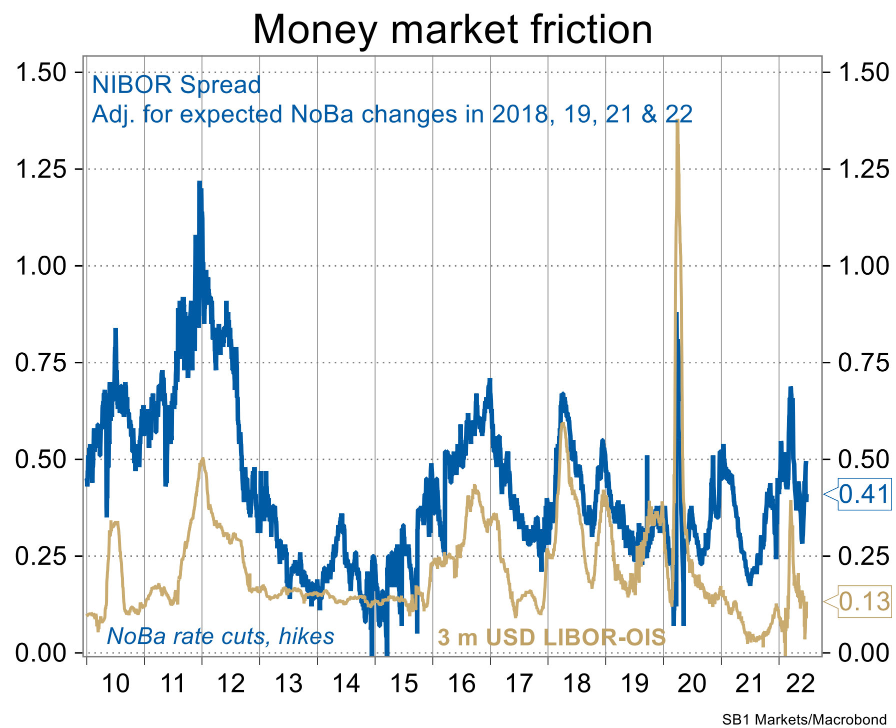
The 3m NIBOR up 17 bps to 1.66%, as NoBa rocked the boat

Without a hike in August, the NIBOR spread is 41 bp, if an Aug. hike, the spread in 30 bps

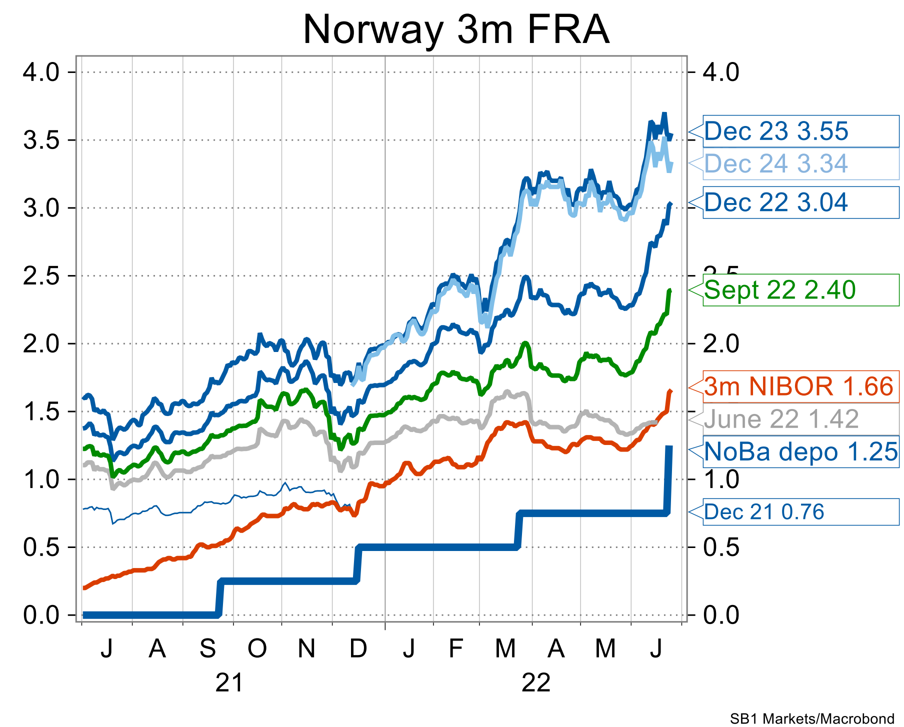


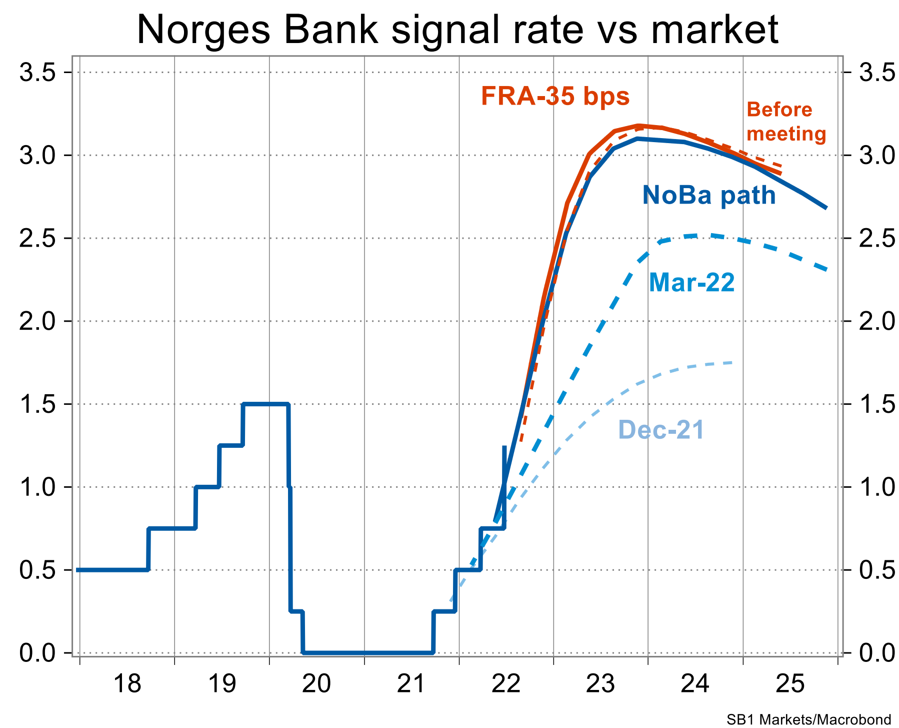


- Given the 2.40% Sept FRA, a 25 bps hike in August must be a done deal
- The USD LIBOR-OIS spread climbed 7 bps to 13 bps last week – which is still a low level!

NoBa adopted the FRA market's expectations from end of 2022

But is the very short end of the FRA curve implies more than 25 at each meeting in Aug, Sept & Nov





- **If NoBa hikes** in August, which was signalled at last week's meeting, the average signal rate will be 1.36 the coming 3 months. The current 3m NIBOR is at 1.66%, implying 30 bps spread. There is a possibility for NoBa not to hike further, that is, the spread is somewhat above 30 bps
- **However, the Sept 3m FRA** at 2.40% and a 35 bps spread implies a 2.05% average NoBa signal rate in the 3 months from Sept 21, which implies more than 25-bps hikes in Aug, Sept & November (25 at each meeting yields a NoBa avg at 1.90%. If 50 bps is delivered in Sept + 25 bps in Nov., the next 3 months will yield 2.13%. Given a 35 bps spread, the probability for a 50 bps hike in September is at approx. 60% for a 50 bps lift in Sept. too. We think the probability is somewhat lower
- The **Dec 3 m FRA** at 3.04% is some 20 bps above the path signalled by Norges Bank (assuming a 5 bps liquidity premium in the Dec FRA)

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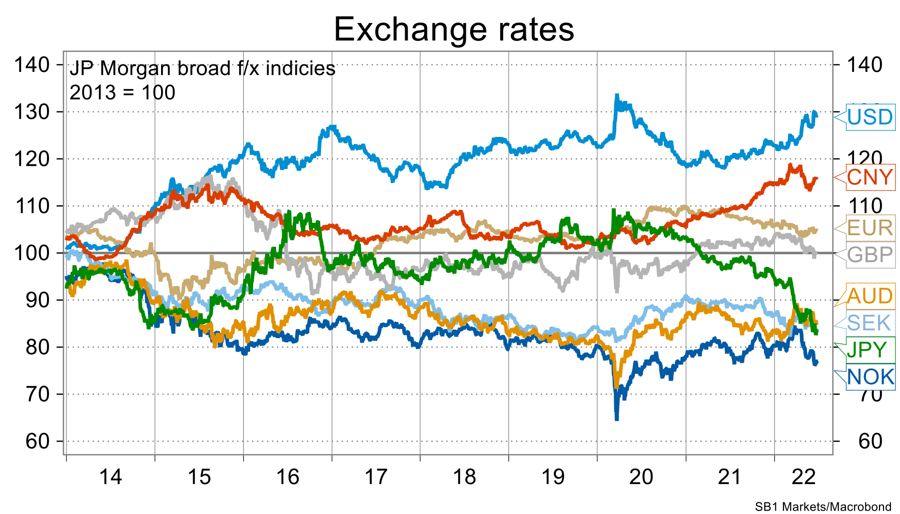
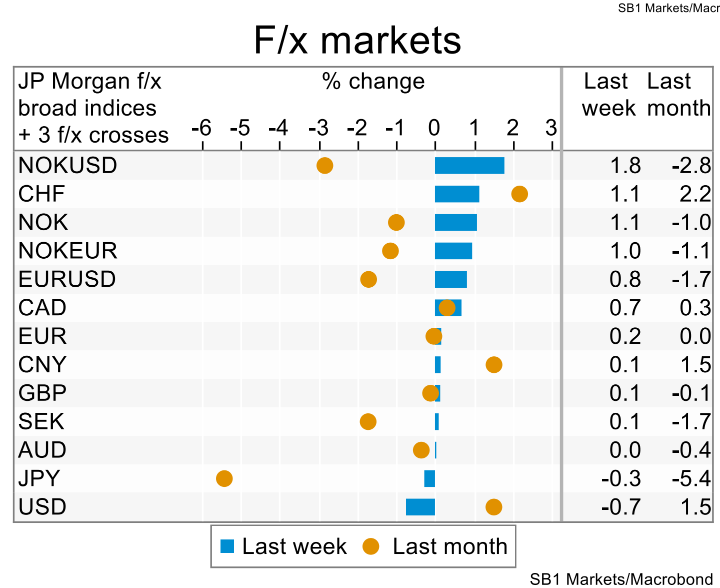
NOK to the top from the bottom, but is still remarkably weak

The JPY fell just marginally but is even weaker than the NOK. The USD marginally down

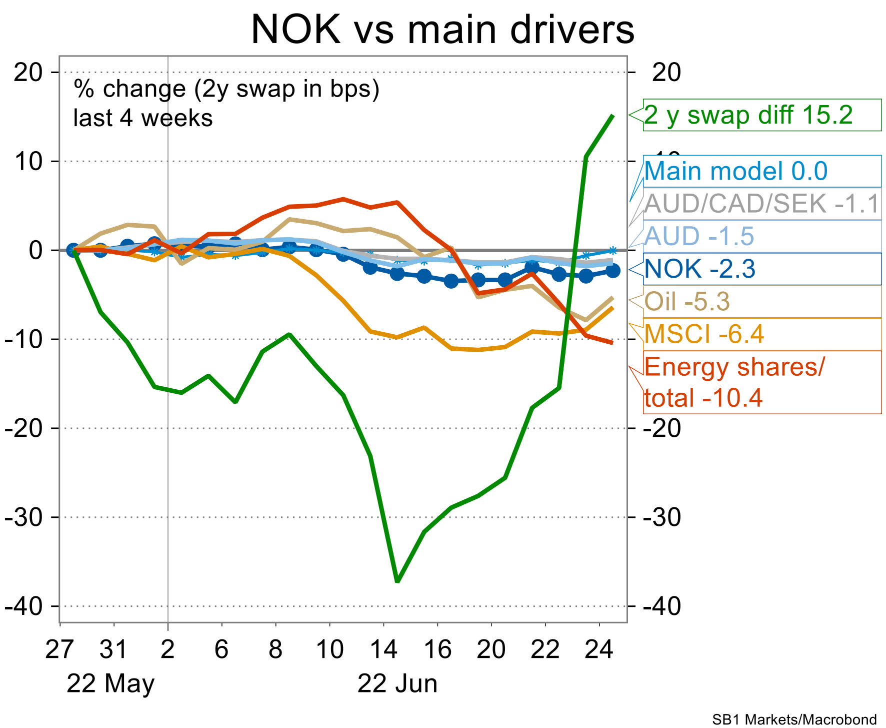


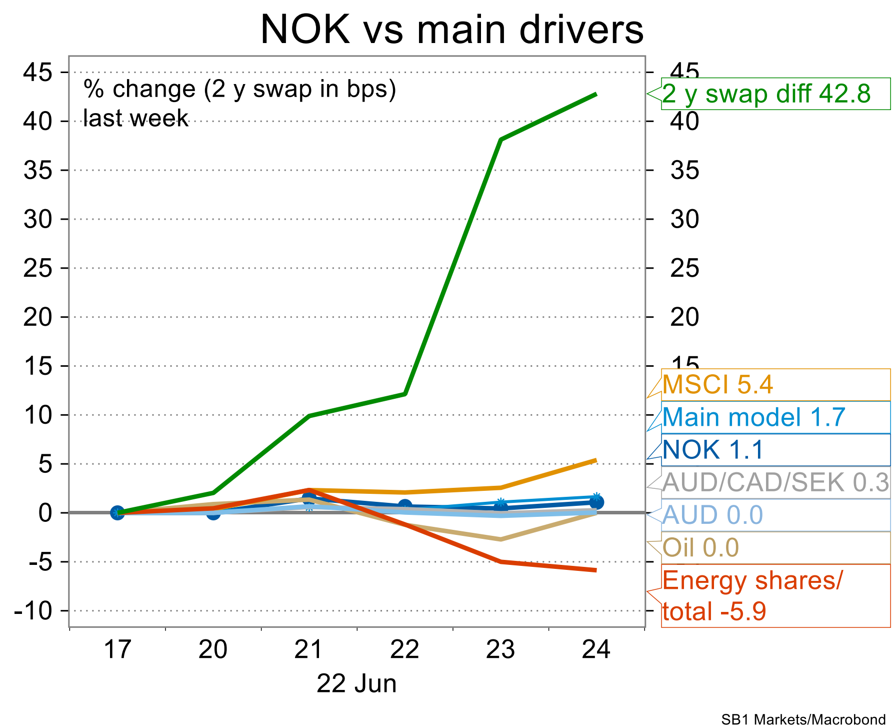


JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
NOKUSD	1.8	-2.8
CHF	1.1	2.2
NOK	1.1	-1.0
NOKEUR	1.0	-1.1
EURUSD	0.8	-1.7
CAD	0.7	0.3
EUR	0.2	0.0
CNY	0.1	1.5
GBP	0.1	-0.1
SEK	0.1	-1.7
AUD	0.0	-0.4
JPY	-0.3	-5.4
USD	-0.7	1.5

NOK up 1.1%, our model suggested +1.7%. The NoBa hike contributed marginally?

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





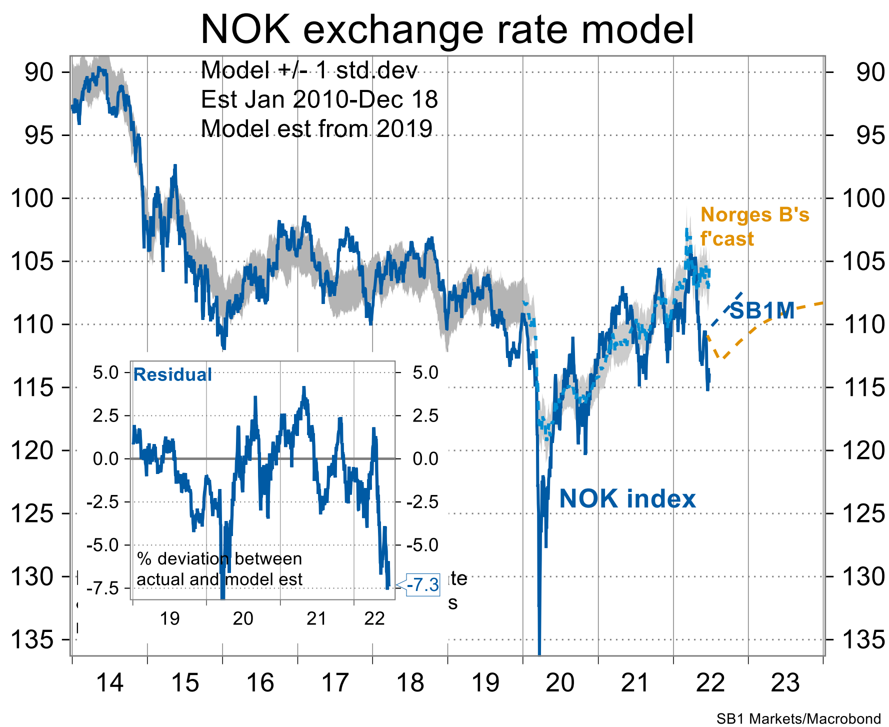
Gaps vs. out model estimates are wide

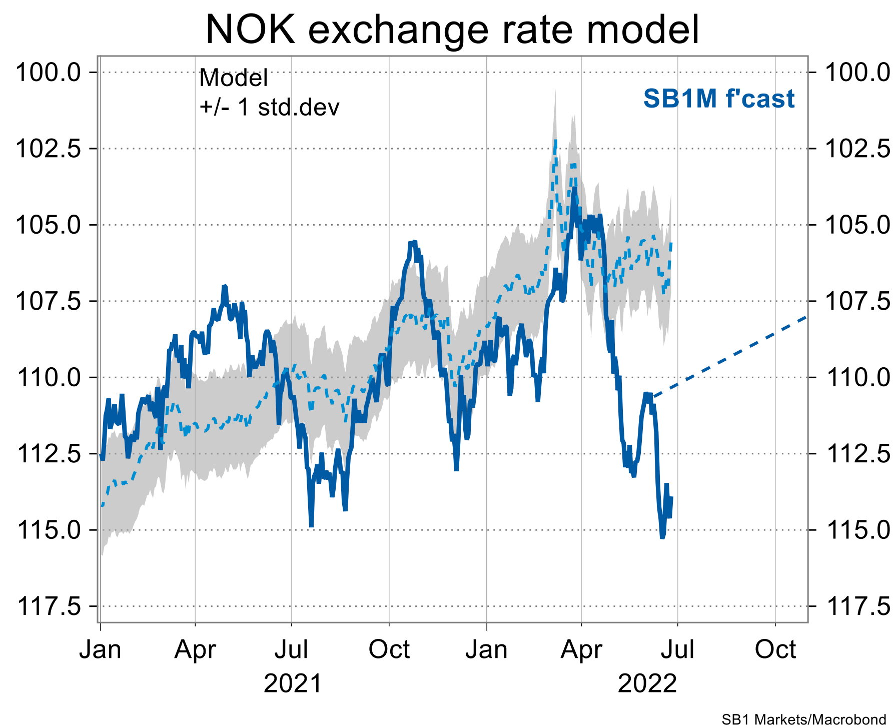
- ***The NOK +1.1% - and it is 7.3% <u>below</u> our main model estimate (from –6.8%)***
- The NOK is 10% <u>weaker</u> than our AUD/CAD/SEK-model, our ‘super-cycle peers’, predicts (unch)
- NOK is 4% <u>weaker</u> than a model which includes global energy companies equity prices (vs the global stock market) (unch)

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

The NOK down and 7.3% below our model estimate

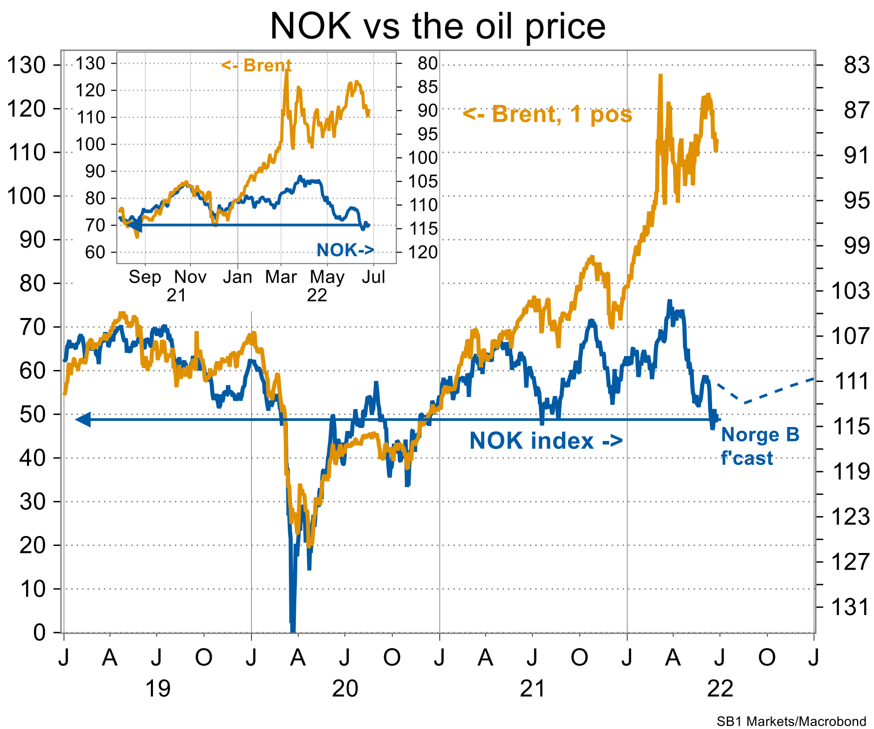
Rather unusual…

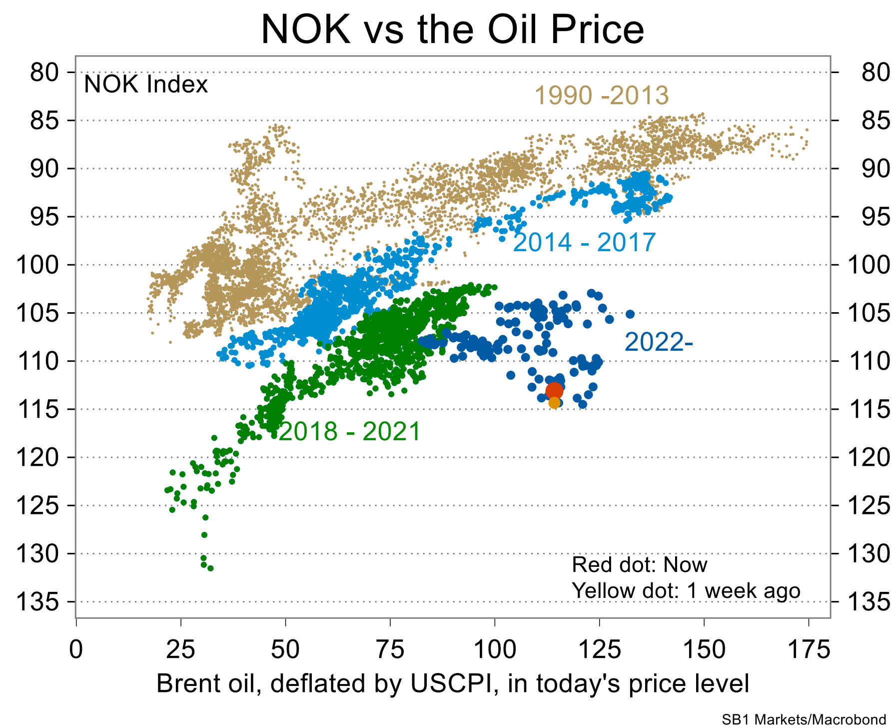




Both the oil price and NOK down last week

NOK is weak, as if the oil price were USD 70/b (rebased to early Jan) or USD 50/b (rebased to May-21)

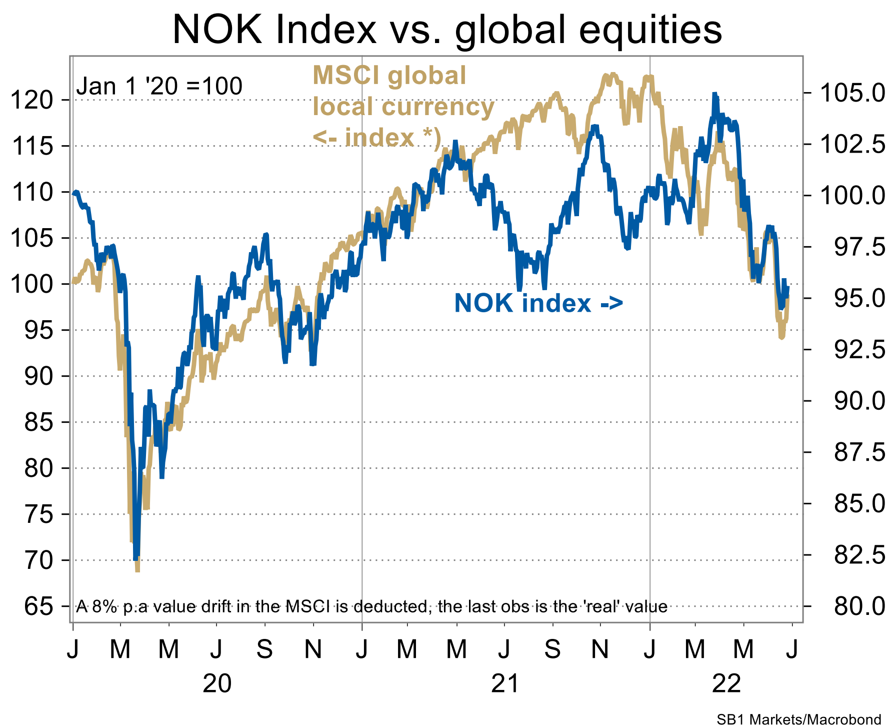


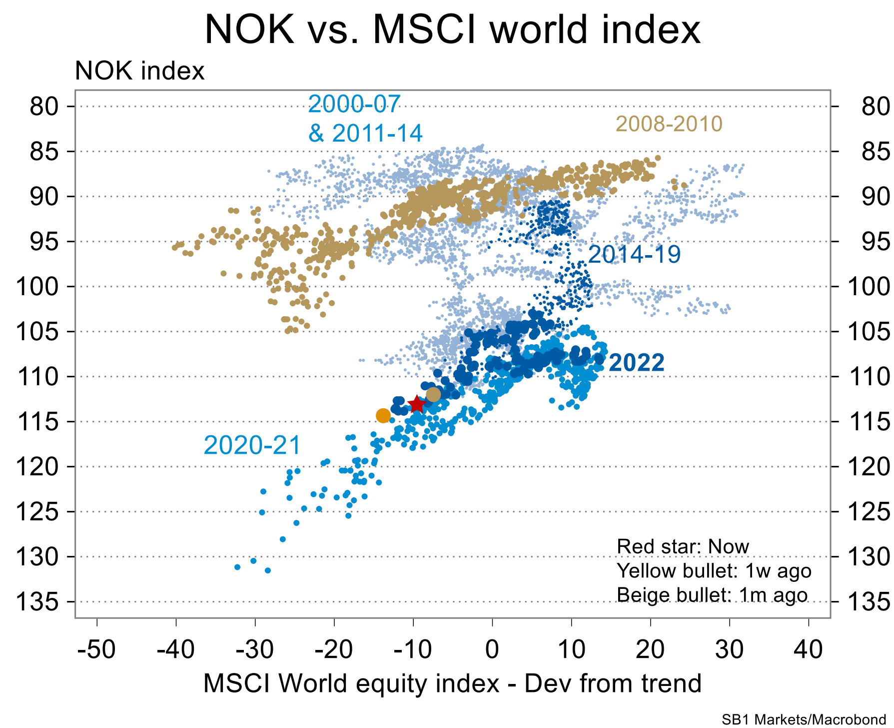


- The NOK has never before been as weak as the recent weeks, given the oil price

The NOK has been closely correlated to the stock market. Since April

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

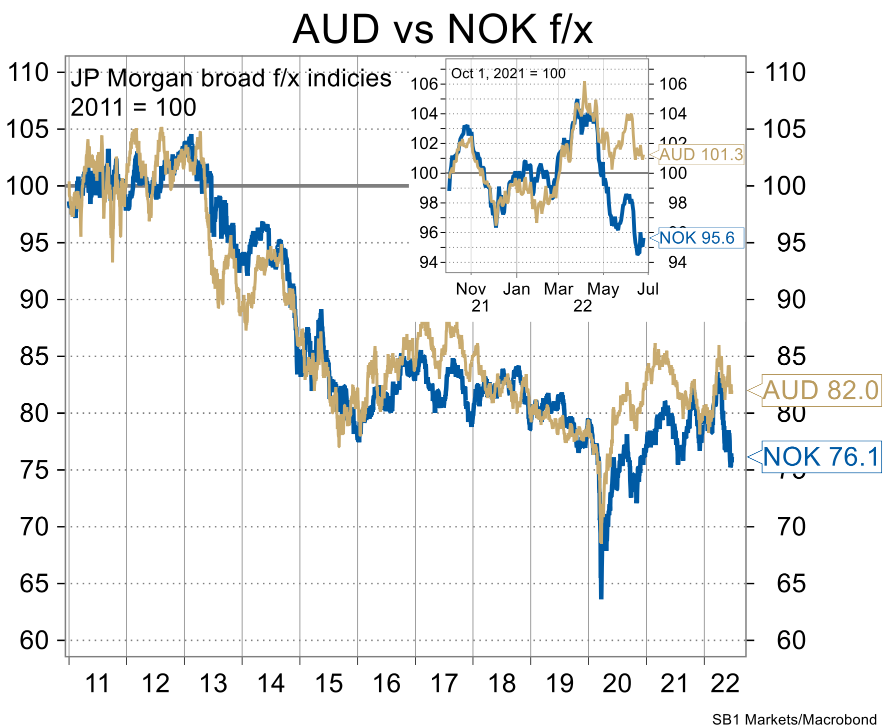


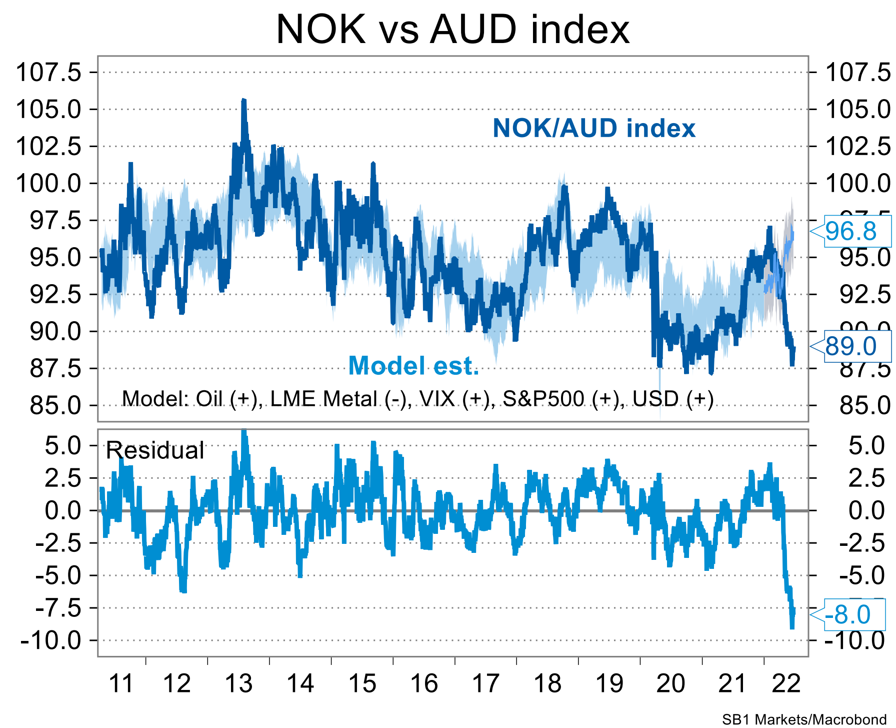


- However, since April oil has not contributed at all vs. the decline in the NOK. So it is RISK OFF again, also vs the NOK?

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

The gap is now among the largest, even in metal prices have been falling for a while, oil & gas not





- The discrepancy between the NOK and AUD is highly unusual, given the normal factors that decide the gap
- Normally, NOK strengthens vs the AUD when the oil prices rises vs. the LME metal index, when VIX, and the S&P500 index increases, and the USD index appreciates. Seem like we need a new model. Until we find it, buy the NOK index (and short the AUD index)

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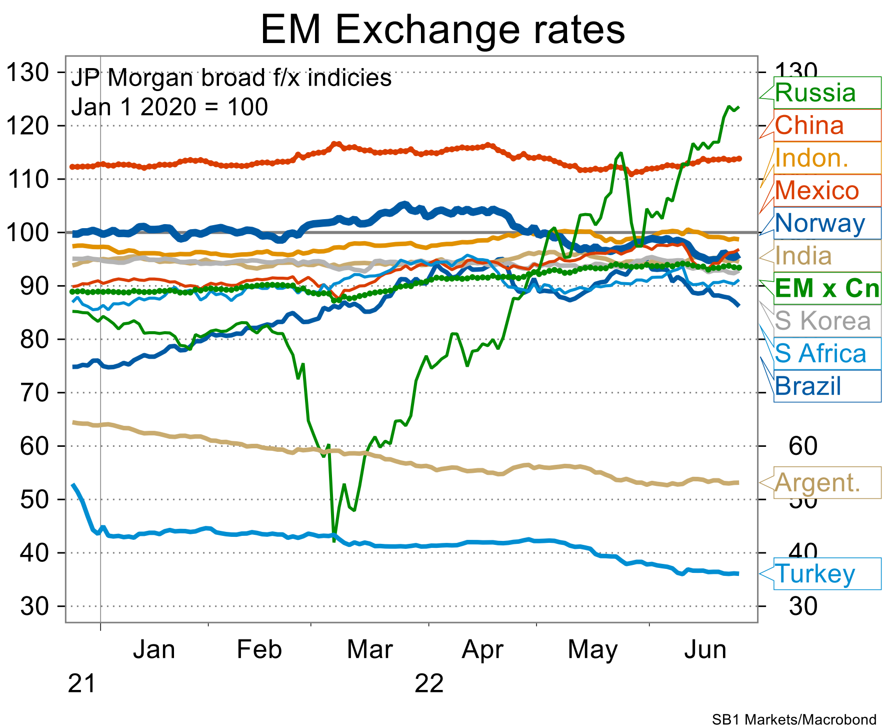
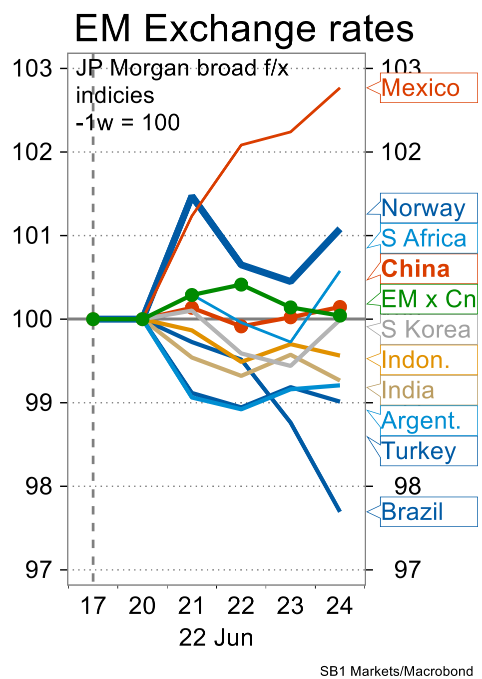
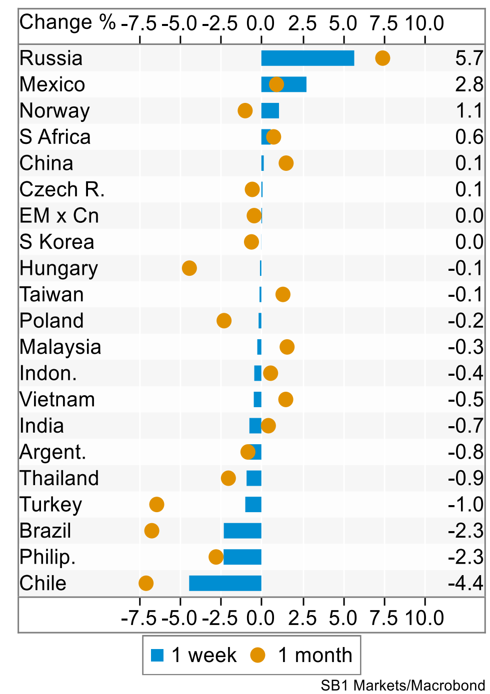
EM f/x mostly down: The RUB further up







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