

SpareBank MARKETS



Macro Weekly

Week 39/2021

27 September 2021

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SpareBank
MARKETS 

Highlights, corona update

The world around us

The Norwegian economy

Market charts & comments

Last week

The virus

- Most countries reported a decline in **new Covid-19 cases** the past weeks, as over the previous weeks. New testing regimes will probably influence these data, hospitalisations will no be the important measure most places
- The no. of **hospitalisations** are falling almost everywhere – and the past 4 week seven in the USA, from an elevated level. Elsewhere in the rich part of the world, the pressure on the health system has been modest, and it is now easing. In Norway just 18/mill are hospitalised (on the way down again), vs 100+ in the UK, and 250/mill in the US
- In the West, **mobility** has not come down during the Delta outbreak, signalling that economic consequences are mild. The only remaining Covid-19 risk is another mutation that are resistant vs. vaccines. Some sectors have still reported a slowdown, like restaurants and travel
- In the East, mobility is on the way up everywhere. **India** is back at full speed, following the May disaster. **China** have probably already beaten down the last (very limited) outbreak – though at substantial cost for services in July & August
- On Saturday, all remaining corona restrictions in Norway were lifted

The economy, part I

- **Global PMI/surveys**
 - » The preliminary September PMIs from USA, EMU, Japan, UK & Australia signals a further decline in the **global composite PMI** down to below an average level, signalling growth below a 3% trend pace. The Euro area surprised sharply on the downside, even if the virus situation has not worsened, a warning sign – but growth is still reported above trend. The US PMIs fell slightly, but was close to consensus. The Japanese index rose sharply (but remained below par), and the Australian survey recovered sharply (both indicating that virus problems are easing in the Asia/Pacific region – and our estimate is more uncertain than usual due to the sharp decline in the Chinese indices in August). The global manufacturing PMI fell more than services, which make the virus explanation less convincing. Deliveries times are high, and prices are still rising at a fast pace but not faster
 - » Other **US manufacturing surveys** were in sum up in September

Last week: The economy, part II

- **Central banks**

- » **The Federal Reserve** will soon announce a gradual tapering of the QE programs, very likely at the next meeting in Nov (if nothing surprising turns up). The programs should be terminated by mid 2022, implying a reduction in bond buying by USD 20 each month during H1. The dot plot, the individual FOMC members rate forecast, was revised up by 20 – 40 bps, a substantial revision. The first hike is assumed in late 2022, and 2 – 3 more hikes in 2023. The inflation forecast was once more revised upwards, to further above 2% the coming years. Following a 3.7% lift through '21, the bank assumes that the 2%-over-time target is not reached
- » **Bank of England** kept the signal rate unch. at 0.1% but signals that bank rate may be lifted earlier than so far assumed. Market rates rose sharply, and a hike before Christmas is not likely but not totally unlikely. 2 – 3 more hikes are expected next year
- » **Sweden's Riksbank** expect the signal rate to remain at zero at least until end of 2024. However, the QE program will be terminated as planned in December
- » **Norges Bank** hiked the signal rate to 0.25% from 0, as extremely well communicated. The interest rate path was lifted by up to 19 bps, spot on our 18 (15 - 20) bps forecast. If not for a 20 bp downward 'judgement revision of the path in the short end, NoBa would have hiked by 50 bps, now! Norges Bank expects to reach 1.5% in Q2/Q3-23, 1 year earlier than assumed in June. Rates will be hiked 3 more times before next summer. The output gap and wage inflation were once more revised upwards, but the core CPI will not reach 2% before 2024. A weaker NOK also lifted the interest rate 'forecast'

- **USA**

- » **The housing market** is still going strong. Housing building permits have flattened in 2021, at a rather high level. Higher construction costs & lack of supplies have kept construction in check, even if 2nd hand home prices have soared. **Homebuilders** are still reporting/expecting high but not higher activity. **New home sales** rose marginally, while **existing home sales** fell just marginally, both better than expected. Prices are still rising but realtors reported just a 0.5% lift m/m in August

- **EMU**

- » **Consumer confidence** recovered in September, possibly due to the decline in virus infections/hospitalisations. Confidence is stronger than before the pandemic

- **Sweden**

- » **House prices** recovered the July loss in August. Still, the annual growth rate has fallen to 13% from 18% at the peak and underlying growth has slowed substantially

- **Norway**

- » **LFS employment** rose sharply in July too, and the **unemployment rate** 'collapsed' down 0.6 pp to 4.2%, 0.4 pp better than we assumed. The employment rate is on par with the pre pandemic level, the participation rate is well above. **Payroll statistics** confirm strong employment growth. The **Manpower survey** reports the most aggressive hiring plans, ever, both for Norway, and the global average
- » **Housing permits** were very low in both July and August, a response to the unprecedented lift in construction costs? Non-residential starts still OK but the overall construction starts trend is downwards

The Calendar: Manufacturing PMIs/ISM, US PCE-prices. EMU unempl.; Ret. sales, NAV here

| Time | Count. | Indicator | Period | Forecast | Prior |
|--------------------------|--------|----------------------------------|--------|------------|----------|
| Monday Sept 27 | | | | | |
| 10:00 | EC | M3/Credit growth | Aug | 7.70% | 7.60% |
| 14:30 | US | Durable Goods Orders | Aug P | 0.7% | -0.1% |
| Tuesday Sept 28 | | | | | |
| 08:00 | NO | Retail Sales MoM | Aug | (1.5) | -3.10% |
| 09:30 | SW | Retail Sales MoM | Aug | -0.2% | -1.2% |
| 14:30 | US | Advance Goods Trade Balance | Aug | -\$87.3b | -\$86.4b |
| 15:00 | US | S&P CoreLogic CS 20-City YoY NSA | Jul | 20.0% | 19.1% |
| 16:00 | US | Consumer Confidence, Conf B. | Sep | 115 | 113.8 |
| Wednesday Sept 29 | | | | | |
| 09:00 | SW | Economic Tendency Survey | Sep | | 121.1 |
| 09:00 | SW | Consumer Confidence | Sep | 108.0 | 108.6 |
| 11:00 | EC | Economic Confidence | Sep | 117 | 117.5 |
| 16:00 | US | Pending Home Sales MoM | Aug | 1.30% | -1.80% |
| Thursday Sept 30 | | | | | |
| 01:50 | JN | Retail Sales MoM | Aug | -1.8% | 1.1% |
| 01:50 | JN | Industrial Production MoM | Aug P | -0.5% | -1.5% |
| 03:00 | CH | Non-manufacturing PMI, NBS | Sep | 50.8 | 47.5 |
| 03:00 | CH | Manufacturing PMI, NBS | Sep | 50.2 | 50.1 |
| 03:45 | CH | Manufacturing PMI, Caixin/Markit | Sep | 49.5 | 49.2 |
| 08:00 | NO | Hotel guest nights | Aug | | |
| 08:00 | NO | Credit Indicator Growth YoY | Aug | (5.2%) | 5.3% |
| 08:45 | FR | Consumer Spending MoM | Aug | 0.0% | -2.2% |
| 11:00 | EC | Unemployment Rate | Aug | 7.5% | 7.6% |
| 14:00 | GE | CPI YoY | Sep P | 4.2% | 3.9% |
| 14:30 | US | Initial Jobless Claims | Sep-25 | 325k | 351k |
| Friday Oct 1 | | | | | |
| 08:00 | GE | Retail Sales MoM | Aug | 1.5% | -5.1% |
| 08:30 | SW | Manufacturing PMI | Sep | | 60.1 |
| 10:00 | NO | Manufacturing PMI | Sep | (60) | 62.2 |
| 10:00 | NO | Unemployment Rate | Sep | 2.5% (2.5) | 2.7% |
| 10:00 | EC | Manufacturing PMI | Sep F | 58.7 | 58.7 |
| 10:30 | UK | Manufacturing PMI | Sep F | 56.3 | 56.3 |
| 11:00 | EC | CPI Core YoY | Sep P | 1.8% | 1.6% |
| 14:30 | US | Personal Income | Aug | 0.2% | 1.1% |
| 14:30 | US | Personal Spending | Aug | 0.6% | 0.3% |
| 14:30 | US | PCE Core Deflator MoM | Aug | 0.2% | 0.3% |
| 15:45 | US | Manufacturing PMI, Markit | Sep F | 60.5 | 60.5 |
| 16:00 | US | U. of Mich. Sentiment | Sep F | 71.0 | 71.0 |
| 16:00 | US | Construction Spending MoM | Aug | 0.30% | 0.30% |
| 16:00 | US | ISM Manufacturing | Sep | 59.5 | 59.9 |
| 17:00 | WO | Manufacturing PMI | Sep | (53.1) | 54.1 |
| | US | Auto sales | Sep | 13.40m | 13.06m |

• Manufacturing PMIs/ISM (& China services)

- » The preliminary PMIs from US, EMU, Japan and UK were mixed but in sum weaker than expected, especially in the EMU (but the level was still OK). The global PMI index probably fell by some 1 p
- » The **Chinese PMIs** surprised at the downside in August, especially in the service sector. Both manufacturing PMIs and one of the services PMI are published this week

• USA

- » CPI inflation may have peaked, and the same could be the case for the **PCE inflation** which though high, and businesses are reporting extreme price increase plans. However, the Fed has lifted its PCE estimate (the core up 3.7% in Q4-21, vs. the 3.0% f'cast in June) and should 'tolerate' lofty prints going forward (even if the price target is met, however you measure it). Focus on **spending and income** data too
- » **Durable orders** are still going strong, and a further increase is expected in August
- » **House price** are up close to 20% y/y, according to most indices but realtors are now reporting slower m/m price increases.
- » **Consumer confidence** reports are all over the place. What is really happening? Conference Board out this week
- » The **debt ceiling** has to be lifted by Congress, if not...

• EMU

- » **Unemployment** is heading down, and is expected further down in August. The level is just 0.1 p above the pre-pandemic level
- » **Credit growth** is still moderate but households are borrowing more, and following a lift in corporate credit last spring, the credit level is rather high vs. the pre-pandemic level

• Sweden

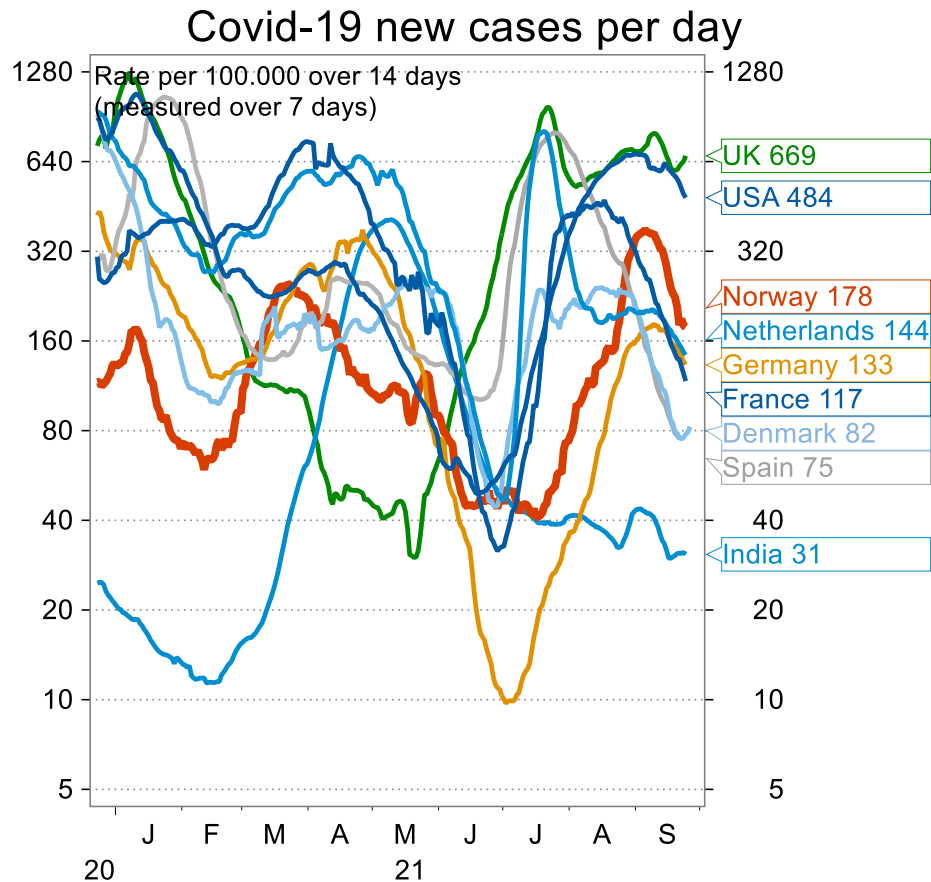
- » **Retail sales** fell in July, and expected to decline further in August. Sales are still well above the pre-pandemic trend path
- » **The economic sentiment** is still sky high in the business sector and well above an average in the household sector

• Norway

- » We expect a further decline in **open unemployment at NAV**. Demand for labour is still strong, and even if the participation rate is soaring (according to the LFS), unemployment is heading rapidly down
- » **Retail sales** nosedived by 3.1% in July, due to a 26% decline in sales of building materials amid lack of supplies and surging prices. **Households consumption of goods** still rose by 1% in July, as most of the sales of building materials are to homebuilders and professionals, not directly to households. We expect retail sales to partly recover, but total consumption to flatten as more spending are now being shifted towards services
- » We expect **credit growth (C2)** to slow marginally y/y in August, as corporate debt rose sharply m/m in Aug-20

Most countries are reporting fewer Covid cases

The only risk now: A vaccine resistant virus variant

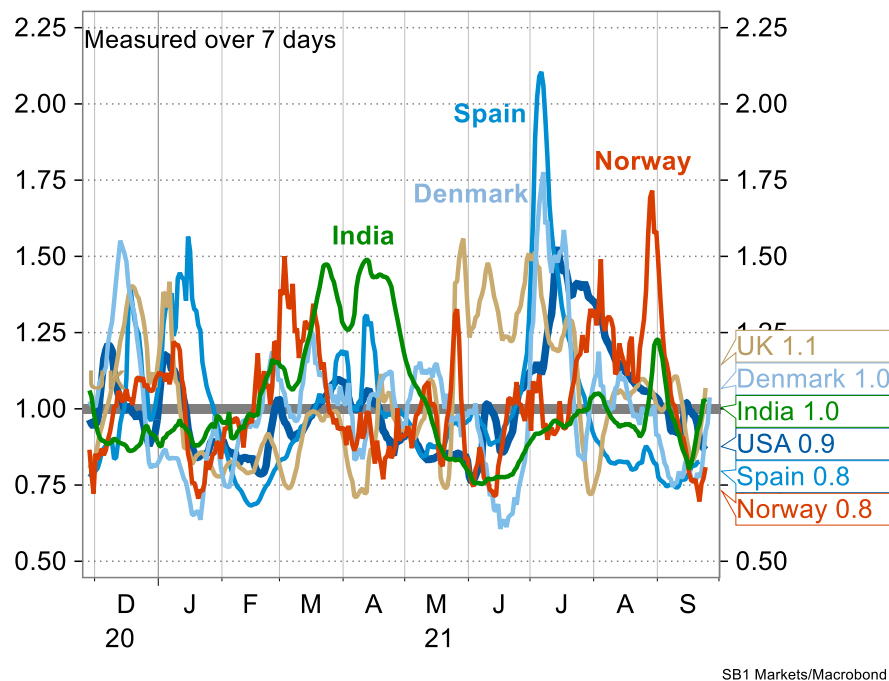


SB1 Markets/Macrobond

- In **Europe**, the Delta outbreak led to more hospitalisations and deaths, but as hospitalisation/death rates have fallen sharply there were no health crisis The no. of cases is falling in most countries, and the no. of hospitalised is now on the way down too
- Growth in new cases, hospitalisations & deaths peaked in the **US** almost 4 weeks ago – in due time as the serious illness/death rate had been far higher than in Europe, and the no. of hospitalised rose to a very high level again. Now, the number of hospitalised patients is falling rapidly
- The situation has been even more challenging in many **Emerging Markets**, but even there the no. of new cases has peaked in most countries, and growth has slowed in others. Few new cases are reported in **India** – and in **China** close to none
- In **Norway**, the no. of new cases is now falling rapidly, and the no. of hospitalised is very likely on the way down, equalling 18 per mill, vs 100+ in the UK, and almost 250 in the US)
 - » It seems very unlikely that the Norwegian health system will run into any sort of capacity problems, even after the lifting of all restrictions last Saturday

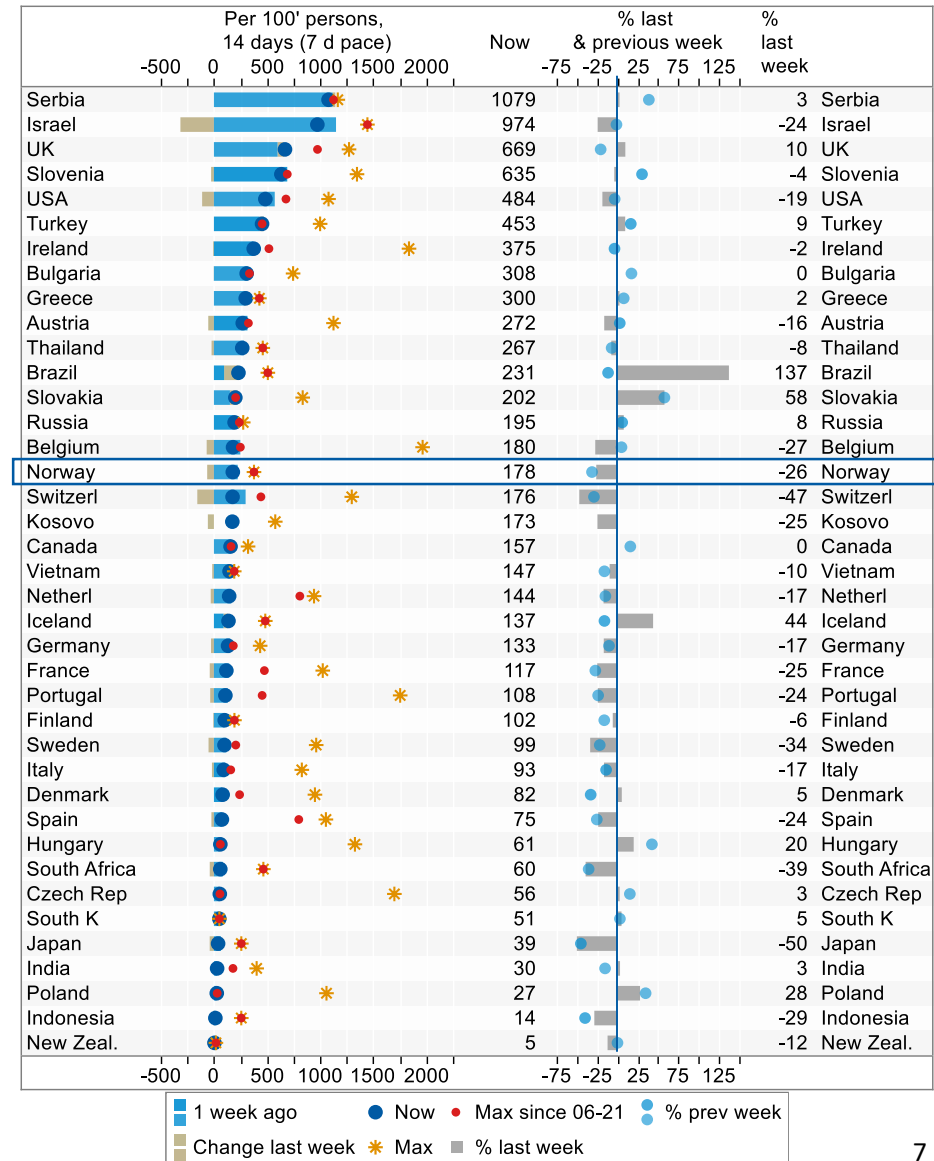
Just some few countries are reporting more cases

Covid-19 R



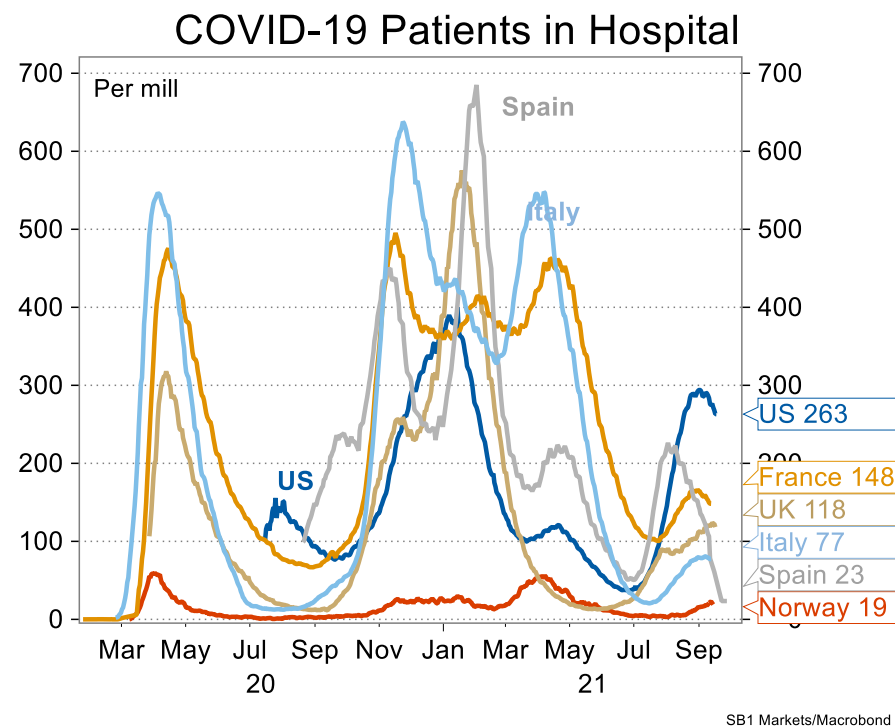
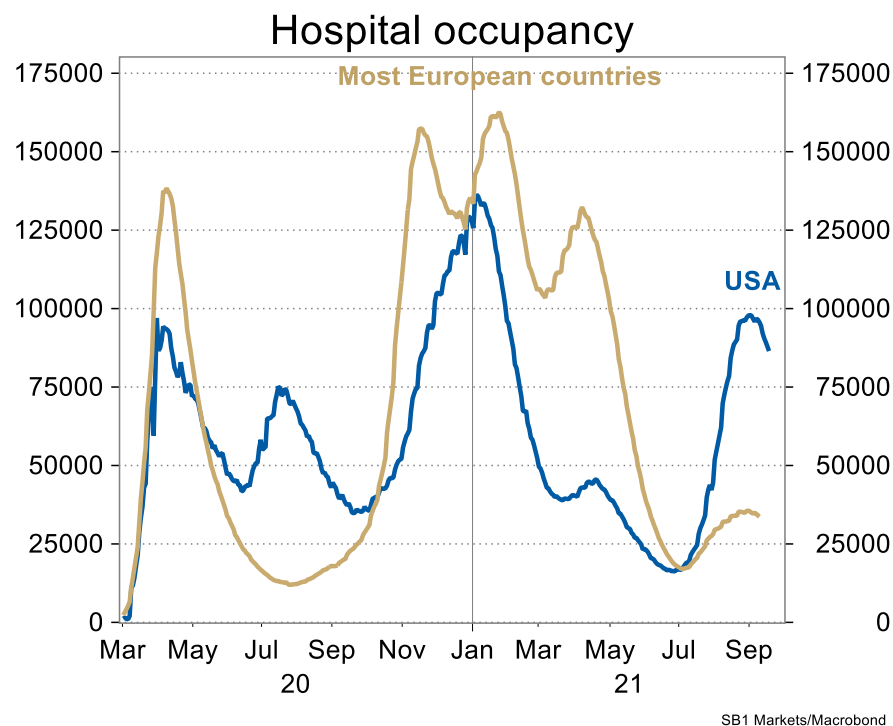
- The red dots on the chart to the right indicate the peak in new cases since June (India's peak was in May). When these dots are in 'free air', cases are down vs the recent peak - which is the case in 29 of 38 countries
- Last week the no. of new cases grew in just 12 countries (unch)
- *Disclaimer: Testing policies/capacities may have changed (and they differ vastly between countries)*

COVID-19, New Cases



The no. of patients admitted to hospitals due to Covid is flattening/falling

Just the US reached troublesome a level the past weeks the no. of patients have clearly fallen



- The number of hospitalised persons in Norway has increased substantially but remains at a very low level – and seems to have flattened

Norway: New cases on the way down everywhere

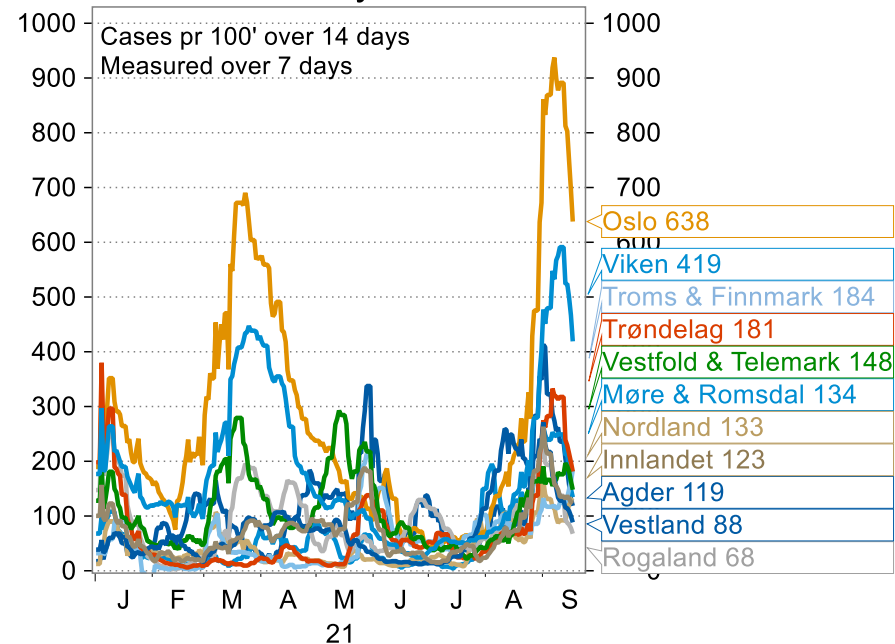
Mobility has slowed marginally so far in September but we doubt Delta is to blame

Google mobility Time spent outside home

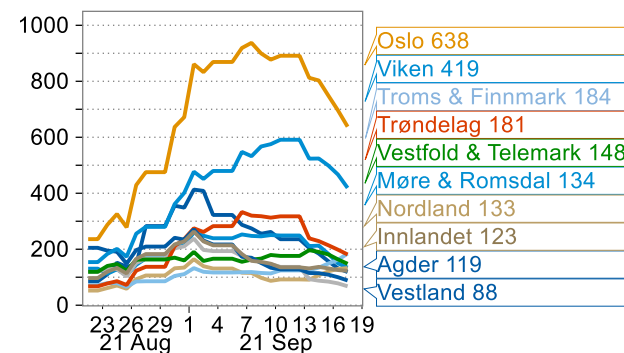


SB1 Markets/Macrobond

Norway Covid-19 cases

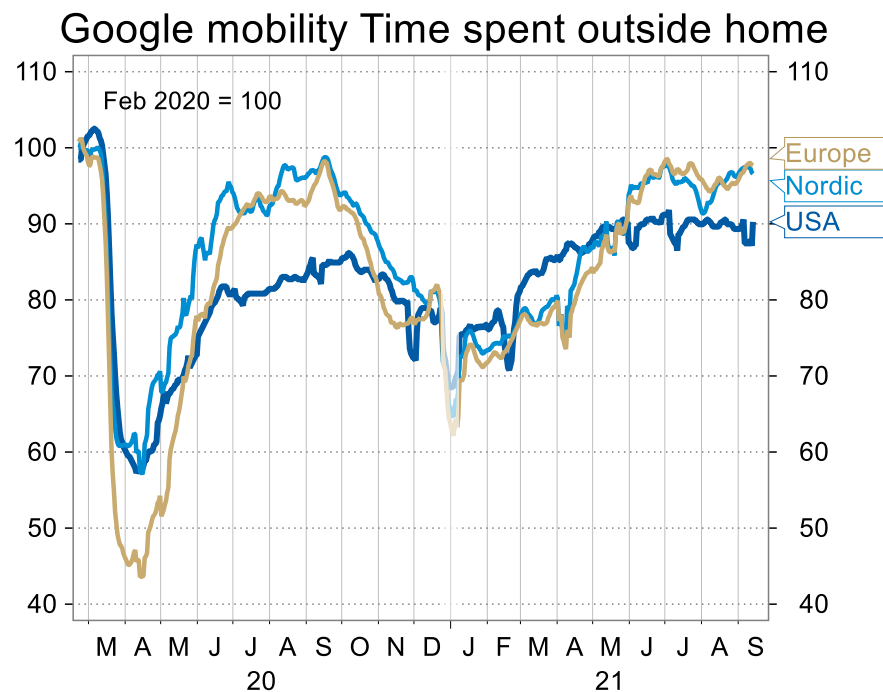


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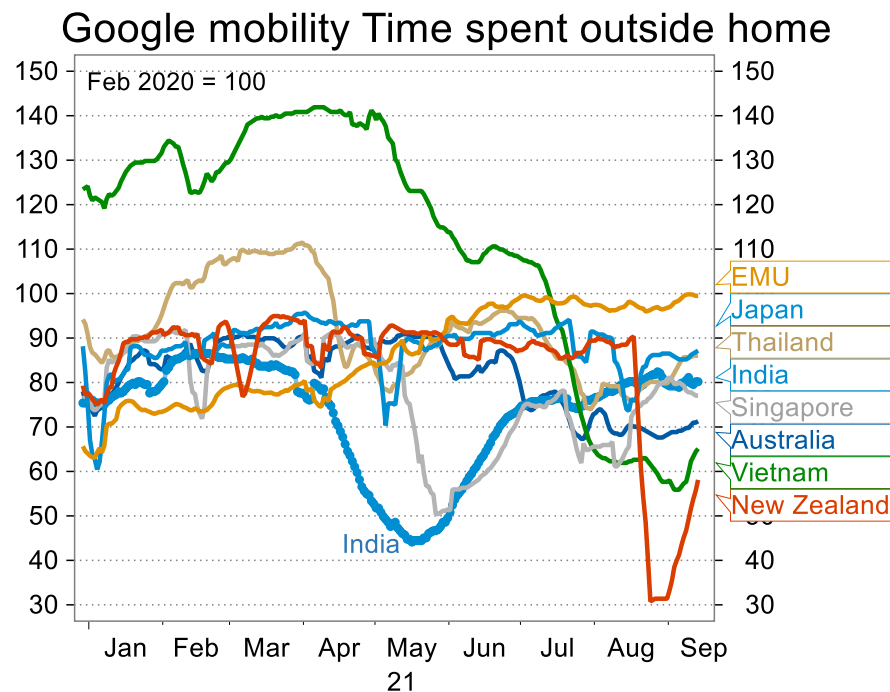


In the West, no sign of reduced mobility during the Delta attack

Still challenges in the East but mobility has bottomed everywhere



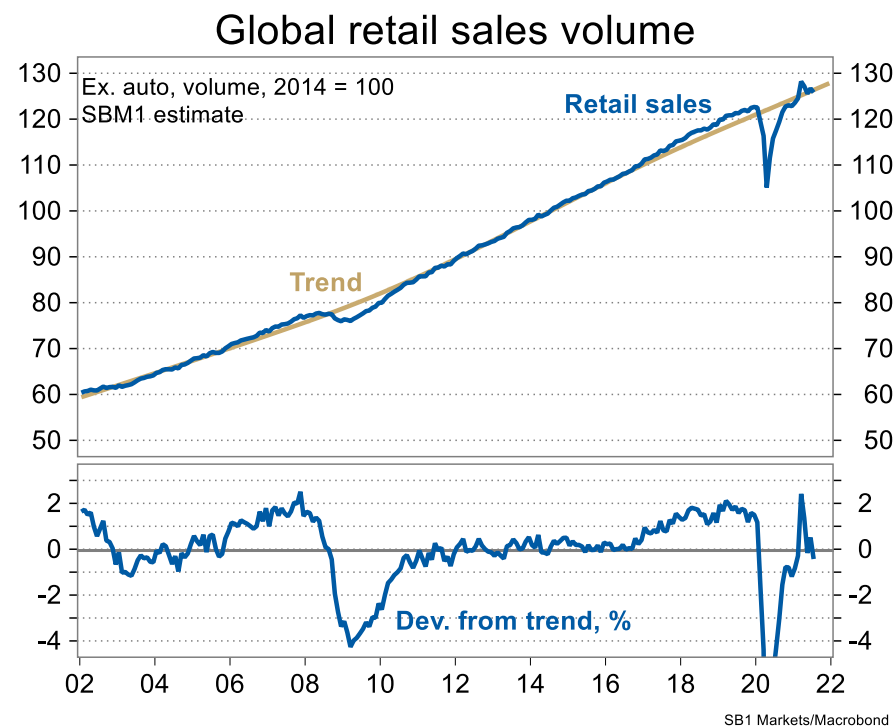
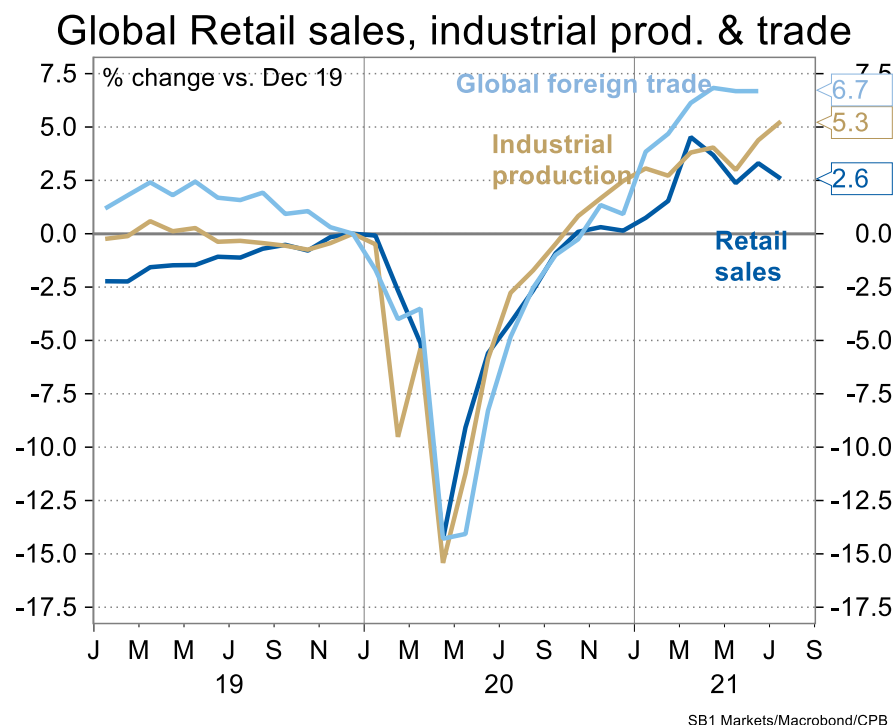
SB1 Markets/Macrobond



SB1 Markets/Macrobond

Activity in the goods sector is flattening

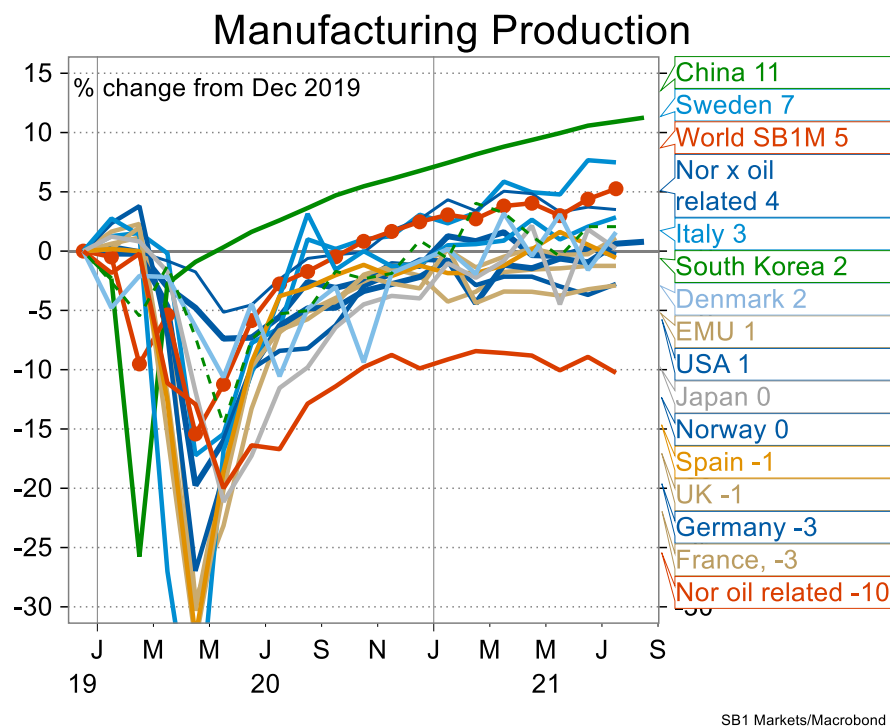
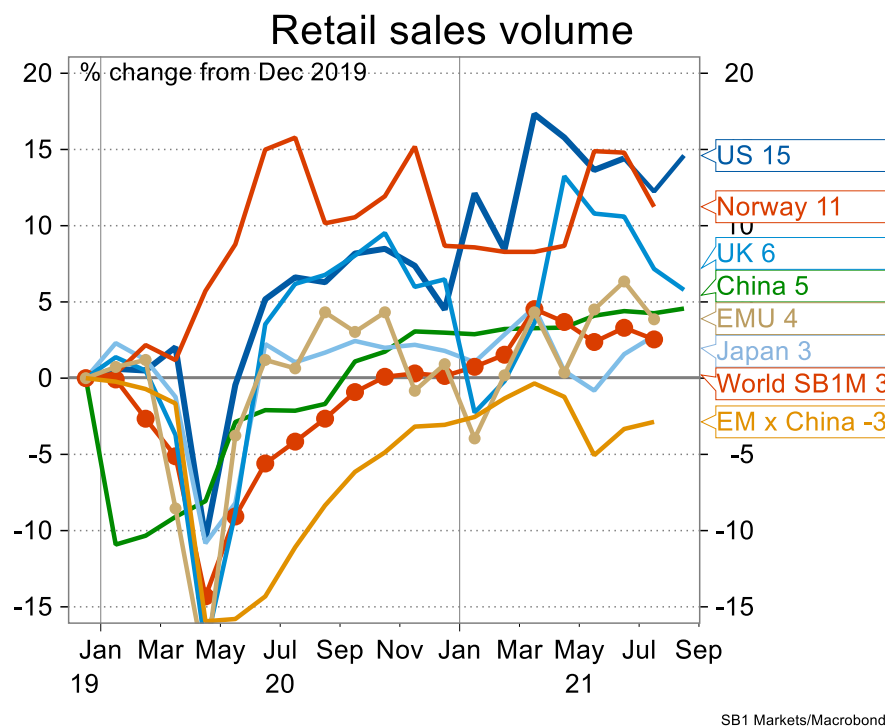
The setback in some Emerging Mkts due to Covid/Delta partially to blame. And DM demand peaks



- **Retail sales** rose in June but fell in July, and sales have flattened recent months, partly due to the India but also a downward trend in rich part of the world. The level is approx. 2½ % up vs the pre-pandemic level
- **Manufacturing production** rose in June, and continued upwards in July. The level is some 5% above the pre-pandemic level. Trouble in India and in the auto industry globally have contributed on the downside recent months
- **Global foreign trade** flattened in May (was originally reported up), and was stable in June as well. The level is close to 7% above the pre-Covid level, according to CBP in Netherlands

DM demand for consumer goods have peaked, and EM has been weak lately

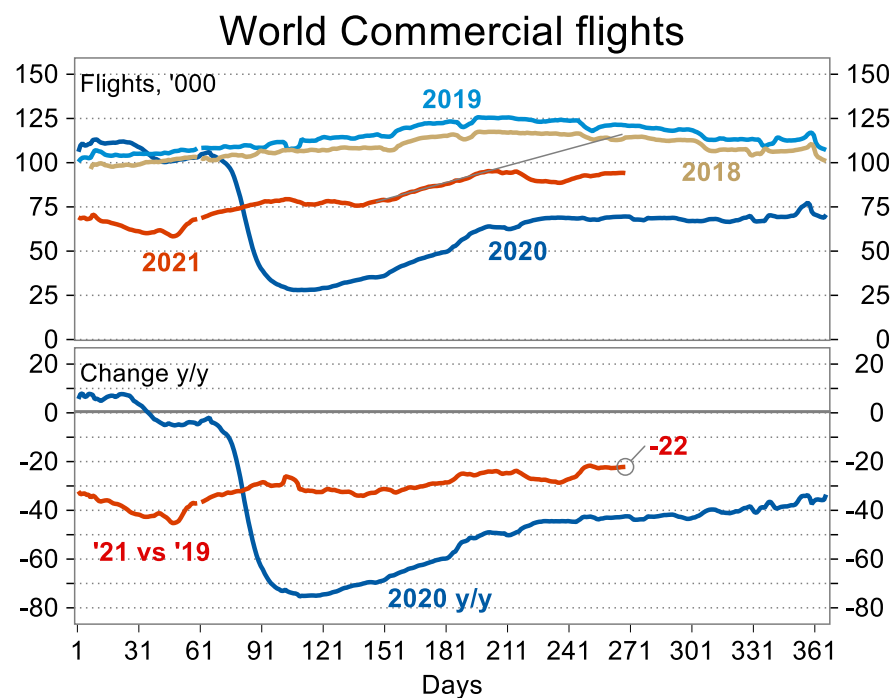
The upside potential is large for Emerging Markets, but the Delta variant is hampering activity



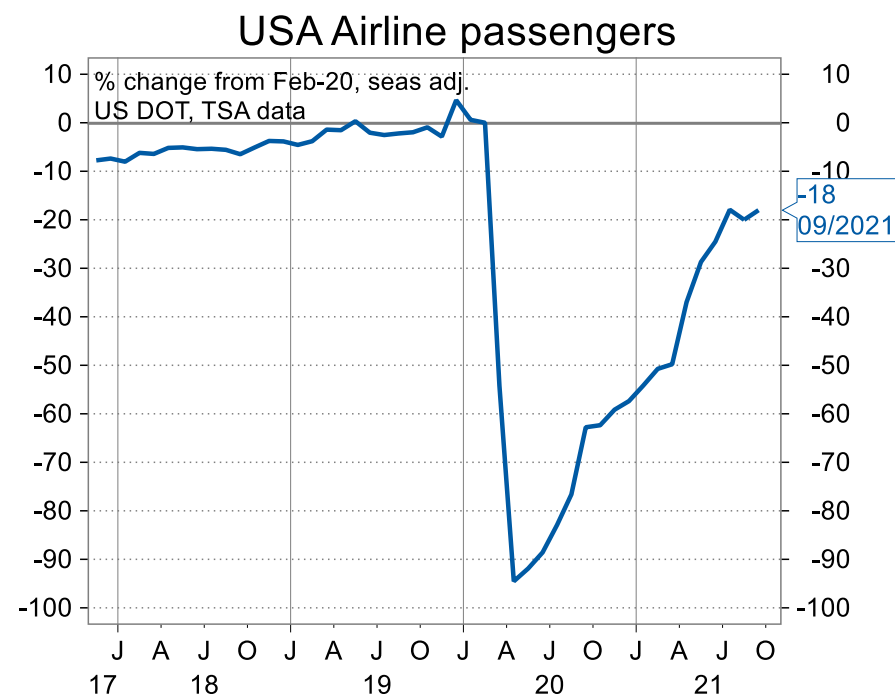
- **Retail sales** in Emerging Markets x China were weak before the summer due to the setback in demand in India. Now a substantial recovery is underway in India, but now other Asian countries have run into problems
- **Manufacturing production** is still drifting upwards, everywhere. The manufacturing PMIs are still strong
- Norwegian oil-related manufacturing production is down 10% vs the pre-pandemic level – non-oil sectors are up 4%, one of the better results in the rich part of the world (but behind Sweden, +7%). The Norwegian PMI and other surveys are signalling very strong growth (among the best in the world)

Global airline traffic further up last week, the gap to 2019 at 22%

In the US, traffic flattened in August but the first half of September marginally better



Flightradar24 SB1 Markets/Macrobond

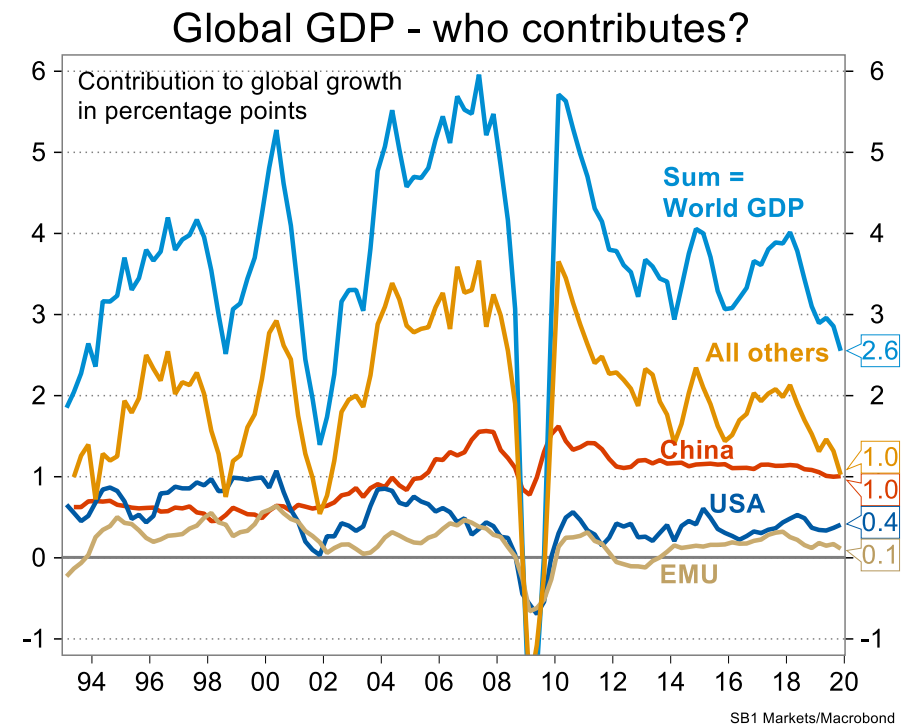


SB1 Markets/Macrobond

- Airline traffic drops some 10% from the peak summer season until the end of the year. Thus, a flattish development during this autumn implies a 1.7% 'recovery' per month

Growth correlations are normally strong but the mechanics are idiosyncratic

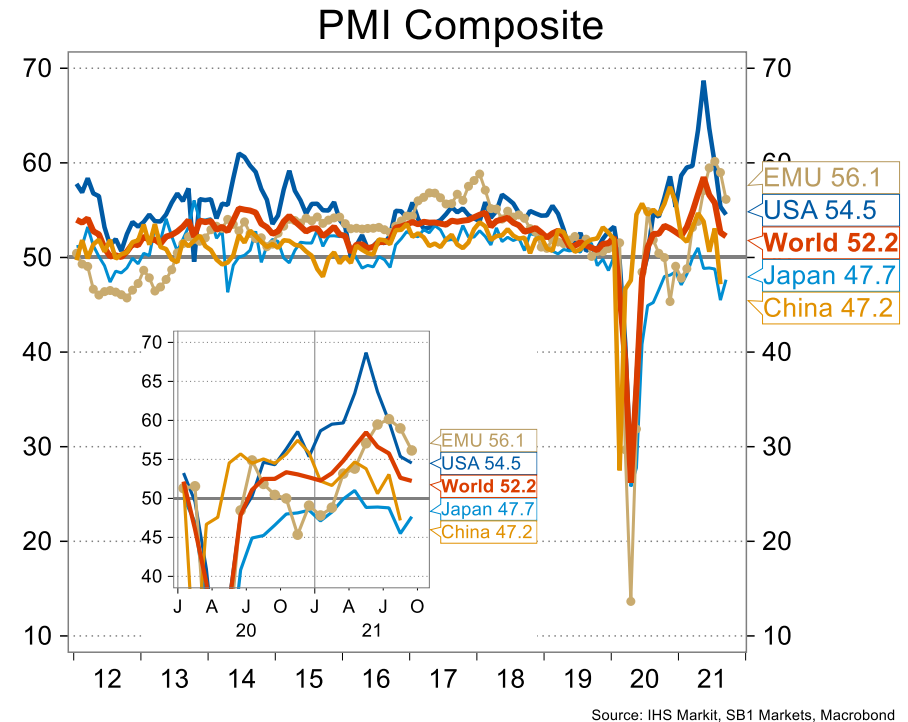
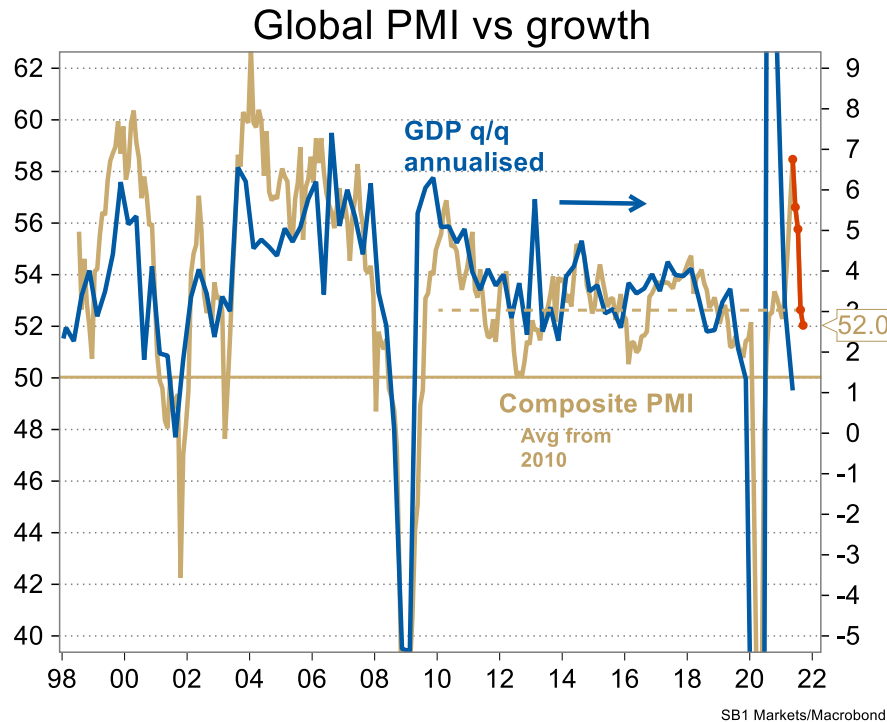
So far, the Chinese direct contributions to global GDP volatility has been rather limited



- China has all in all been a 'stable factor' in the global economy, if Chinese GDP data are to be believed – but the contribution to changes in world GDP was significant during the Financial Crisis, both down and up
- China now (2019, before the pandemic) contributes by 1% to an overall growth in GDP of almost 3% - thus 1/3rd!
 - » The US typically contributes with less than 15%, and EMU by half of that!
 - » 'All others' are usually much more important
- With 17% share of global GDP (PPP adjusted) a substantial GDP growth slowdown in China, will mechanically have a strong impact on global growth figures, and even more on specific markets where China is a large importer
- (Several slides on investments/credit in China here)

PMI probably further down in September, to below par

We estimate a 0.5 – 1 p decline to approx. 52, to slightly below an average level, the EMU to blame

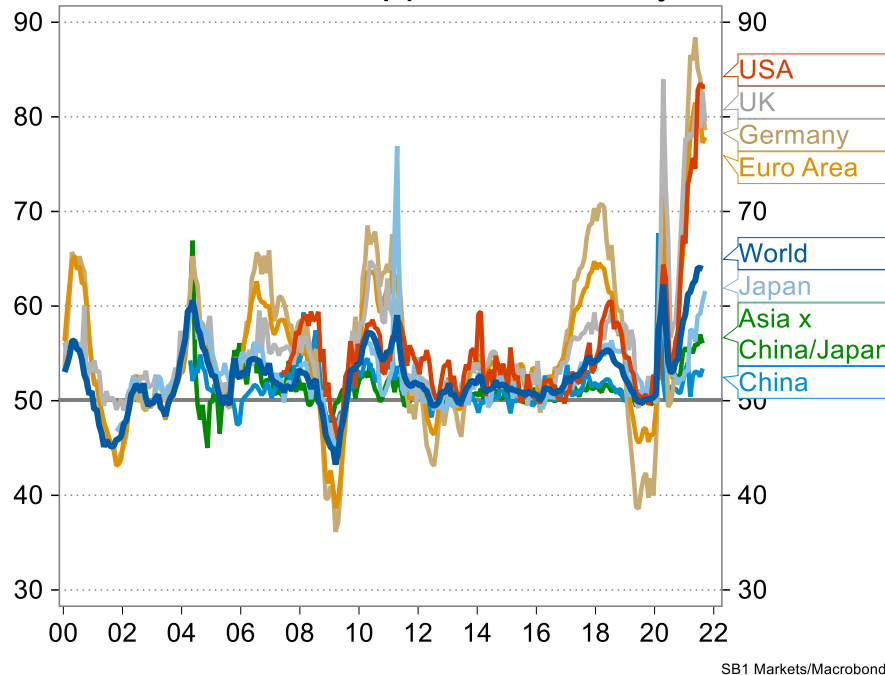


- **The global PMI** has peaked, so has very likely global growth. The September PMI signals less than 3% GDP growth
 - » The uncertainty in the estimate is larger than normal due to divergences between countries that have reported preliminary PMIs so far, and the steep decline in China last month – with a wide possible outcome in September
- The **US PMI** fell slightly but not much more than expected, while the **EMU survey** surprised sharply on the downside, with an almost 3 p decline. The **UK index** fell as well. Japan is still weak, but recovered, and the **Australian PMI** rose sharply, following the Delta drop in August
- **Delivery times** rose even faster in the US, but slowed in Europe. Input & output prices are still increasing at a rapid pace but in sum down from the peak in July

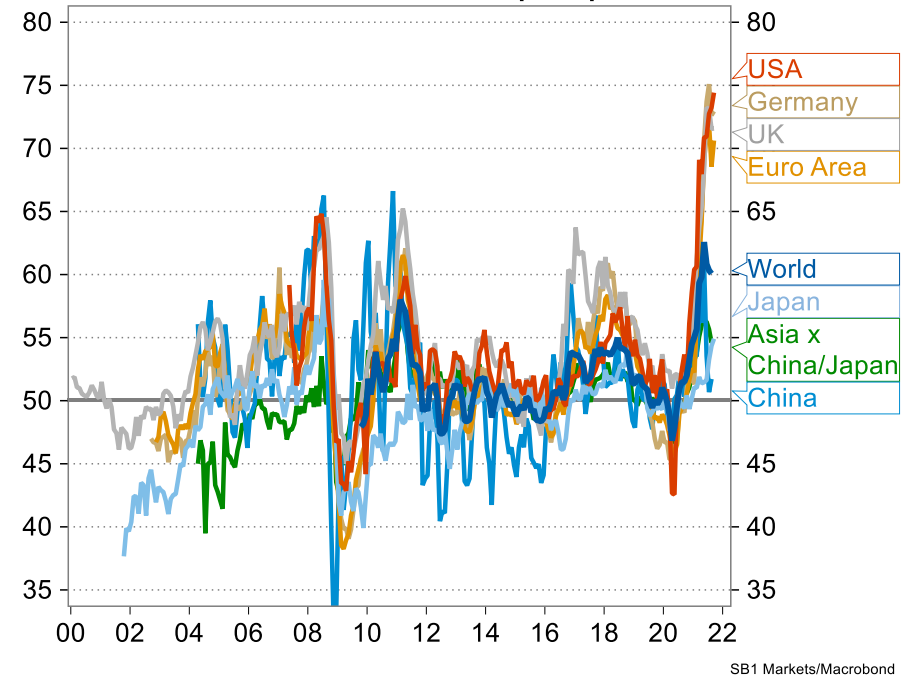
Delivery times still very high

Prices are rising at a rapid pace but a tad slower in August than in July

PMI Manuf. Suppliers' Delivery Times



PMI Manuf. Output prices

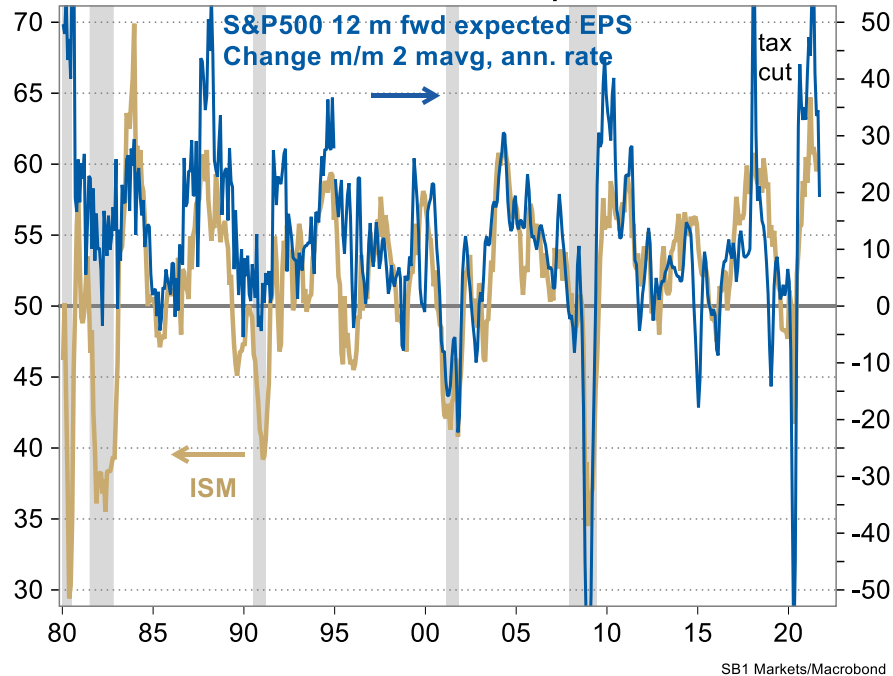


- **The global delivery times** PMI sub-index (changes in delivery times vs the previous month) has probably peaked – at a record high level (it was probably close to stable in September). It does not imply delivery times are declining, at least not if companies give an honest answer when asked if delivery times are increasing or decreasing (but the delivery index is below 50 too infrequently, we suspect companies rather do answer whether delivery times are short or long)
- **The global manufacturing output price index** probably declined in September, and the peak may have been in June. The level is still very high (just marginally down from ATH in June) – and companies are still reporting very rapid price increases

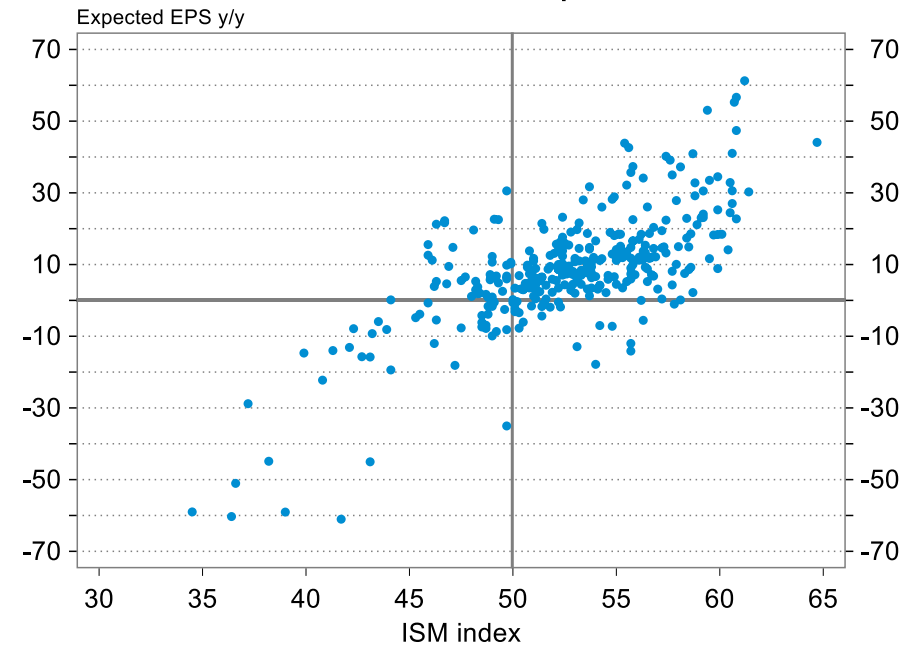
Do not forget what drives the momentum in expected earnings

It's the momentum in the economy today!

USA ISM vs. EPS expectations



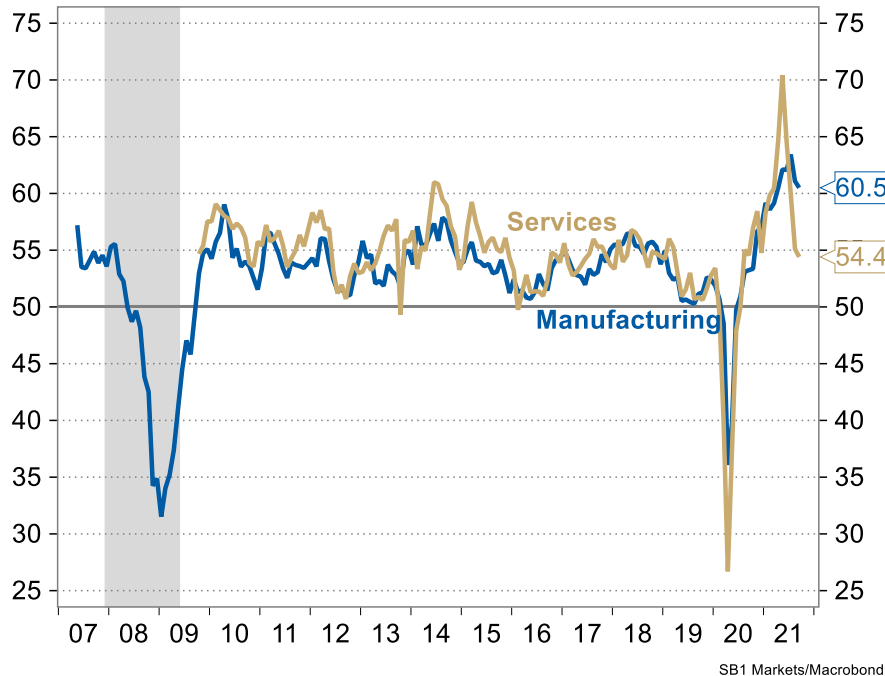
USA ISM vs. EPS expectations



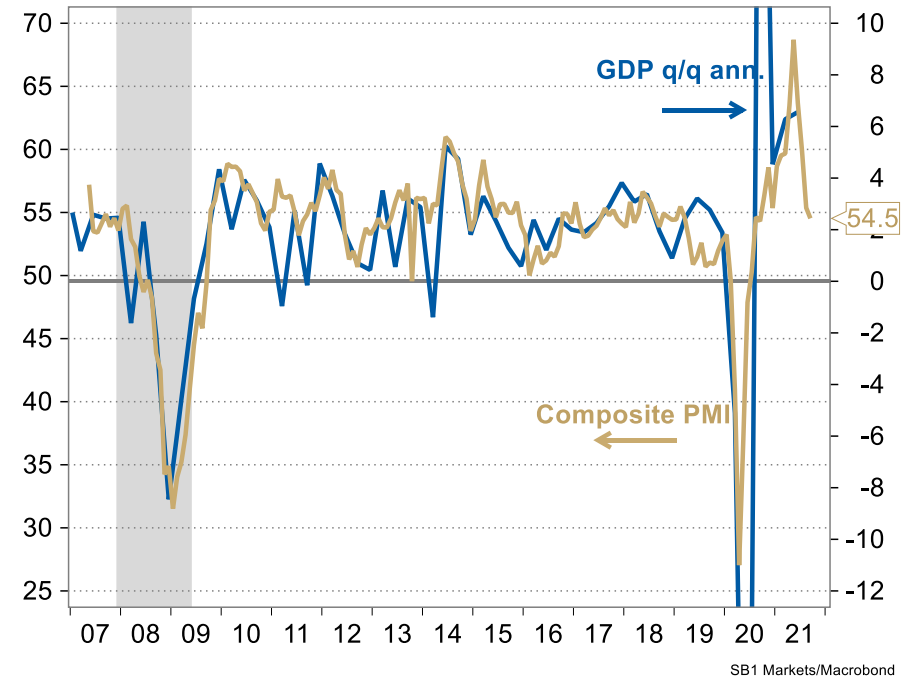
Both services and manufacturing slowed in September

Delta outbreak likely explains part of the fall in the services PMI

USA Markit's PMI



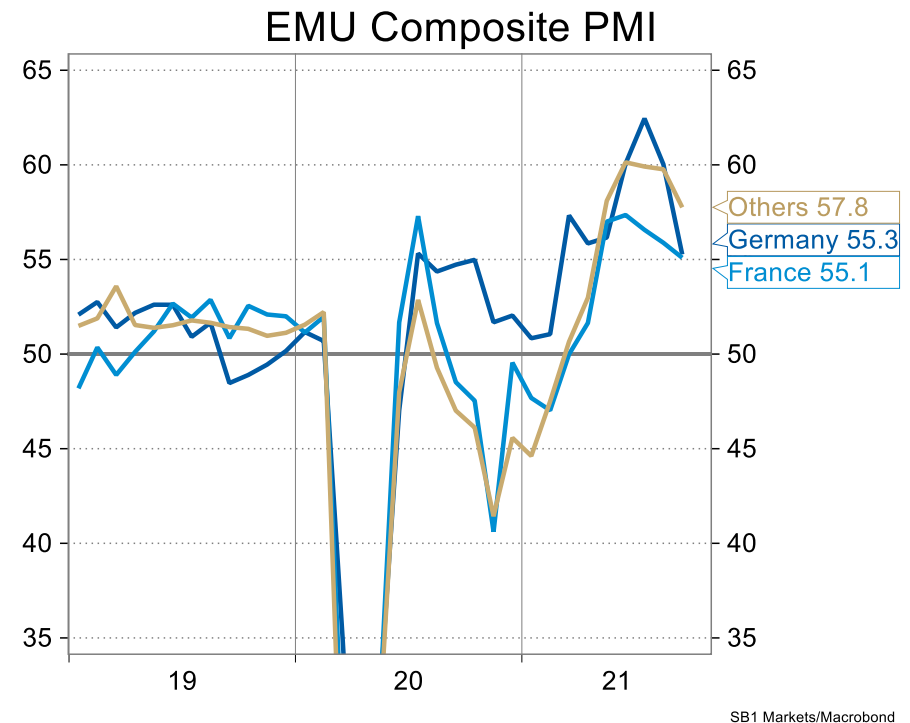
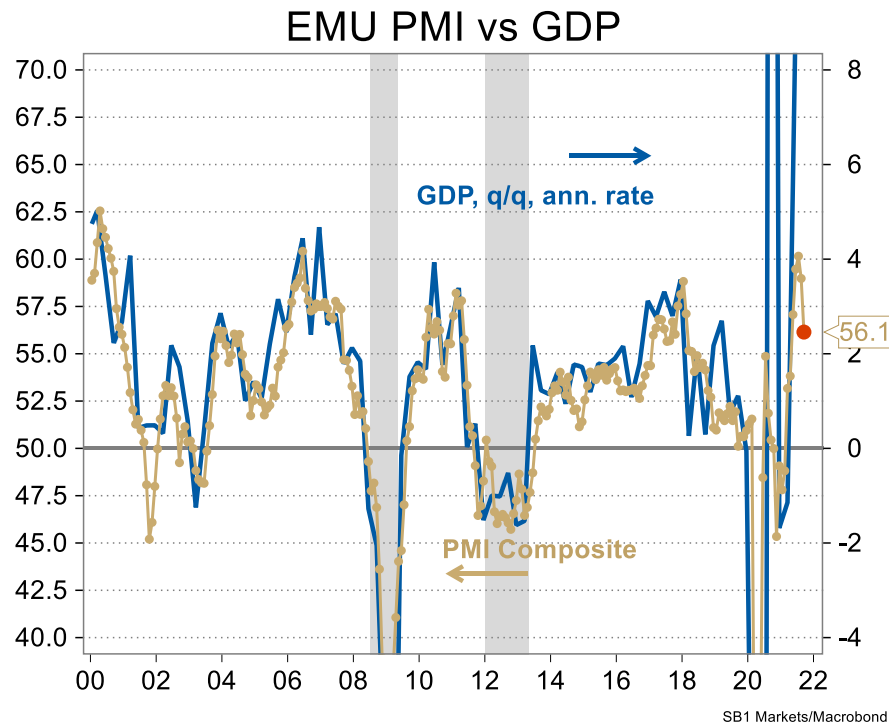
USA Markit's PMI vs GDP



- **The composite PMI** fell 1 p to 54.5; 0.5 p below expectations – and now signals just 2.5% GDP growth,
 - » The **manufacturing** index fell by 0.6 p to 60.5, expected down 0.1 p 61.0. The level is of course still a very high level
 - » The **services PMI** fell by 0.7 p to 54.4, expected down 0.1 to 54.9. 4 months ago the index was above 70, the highest ever, by far. The level is slightly below average
- The Delta outbreak may explain the continued slowdown in services – but slower growth is reasonable when activity has recovered substantially. Lack of labour is also hampering growth
- **Prices** are still soaring – and cost inflation was the 2nd highest since the composite index was introduced in 2009

EMU PMI weaker on supply chain constraints, *weaker demand* & virus concerns

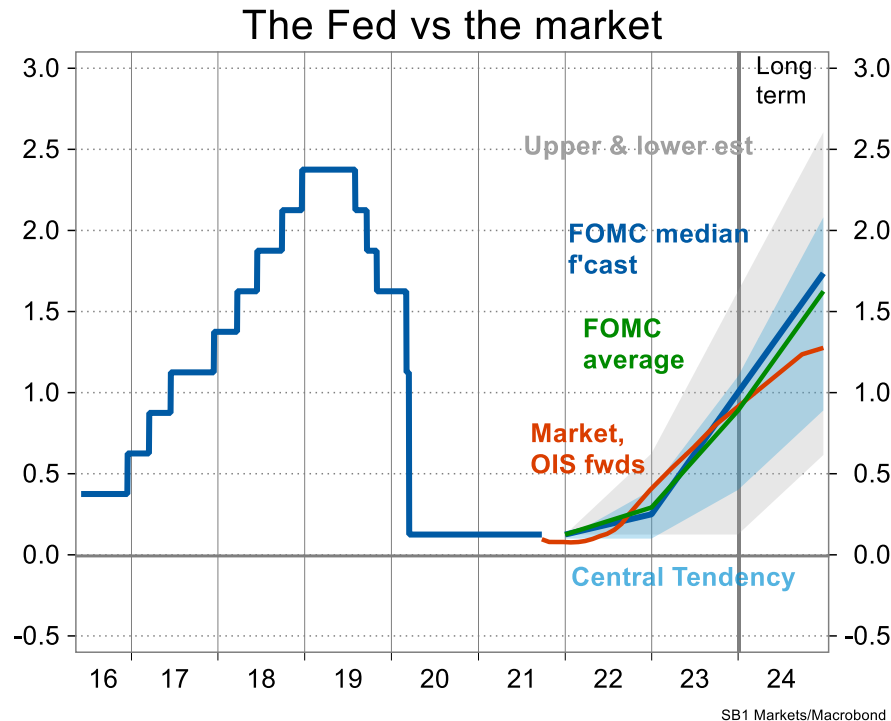
PMI still signalling growth above trend



- **The composite PMI** fell 2.9 p to 56.1 (expected 58.5), which signals a 2.5% pace of growth in GDP (or 0.6 % per quarter)
 - » The composite index fell in Germany and France. The average of Spain & Italy (and very likely both countries) was also down – but the PMI for these latter countries are still at impressive levels
 - » The **manufacturing PMI** fell 2.9 p to 56.3, expected down 0.9 p to 59.0
 - » The **service sector PMI** fell 2.7 p to 56.3, expected down 0.5 p to 58.5

Fed very likely to announce tapering in Nov - 50/50 split on rate hike in '22

... the Bank argues a rate lift-off is decoupled from tapering, but is it though...?

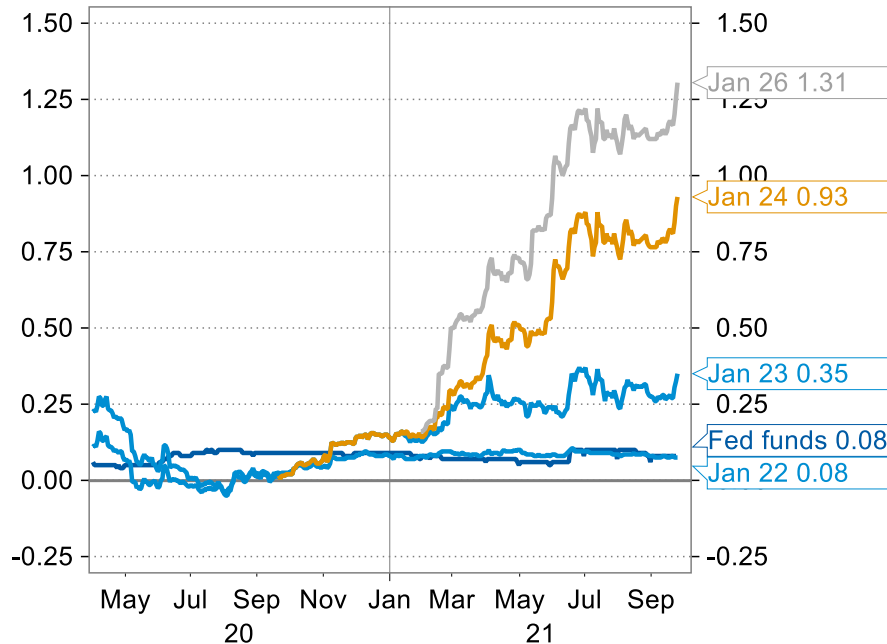


- The FOMC left the **target rate** unchanged at 0-0.25%. No change on the **QE volume** either for the time being, USD 120 bn per month in Treasury bonds (80 bn) and mortgage bonds (40 bn) – and decision was unanimous
- However, 'the committee judges that a moderation in the pace of asset purchases may soon be warranted', and that tapering would conclude at the middle of 2022
- The FOMC once more gradually changed its descriptions of the economy: 'The sectors most adversely affected by the pandemic have improved in recent months, but the rise in COVID-19 cases has slowed their recovery'... **'The path of the economy continues to depend on the course of the virus.** Progress on vaccinations will likely continue to reduce the effects of the public health crisis on the economy, but risks to the economic outlook remain', is the current wording. Six weeks ago, the FOMC said *the sectors most adversely affected by the pandemic have shown improvement but have not fully recovered*
- The FOMC members lifted their **inflation f'cast** substantially, and the expected trajectory is now well above Fed's 2%-over-time-target. **GDP growth** was revised marginally down. The **unemployment** estimate was lifted by 0.3 pp for Q4-22, but left unch for 22 and 23 (down to 3.5%)
- The average/median **dot-plot** interest rate path was lifted by 0.2 – 0.4, more than Norges Bank revised its path. Two members shifted the timing for the first hike to 2022 from '23, and 9 of 18 members favours next year
- Chairman Powell tried his best to convince the market that tapering and hiking rates are completely decoupled, but they can't be... According to the dot-plot, half of the members sees a hike in '22, and though Powell still claims inflation is transitory, the tone and projections suggest that the FOMC is in fact more worried about inflation
- **Market reactions: Interest rates rose 7 -13 bps, all over the curve. Real rates did the 'heavy' lifting**

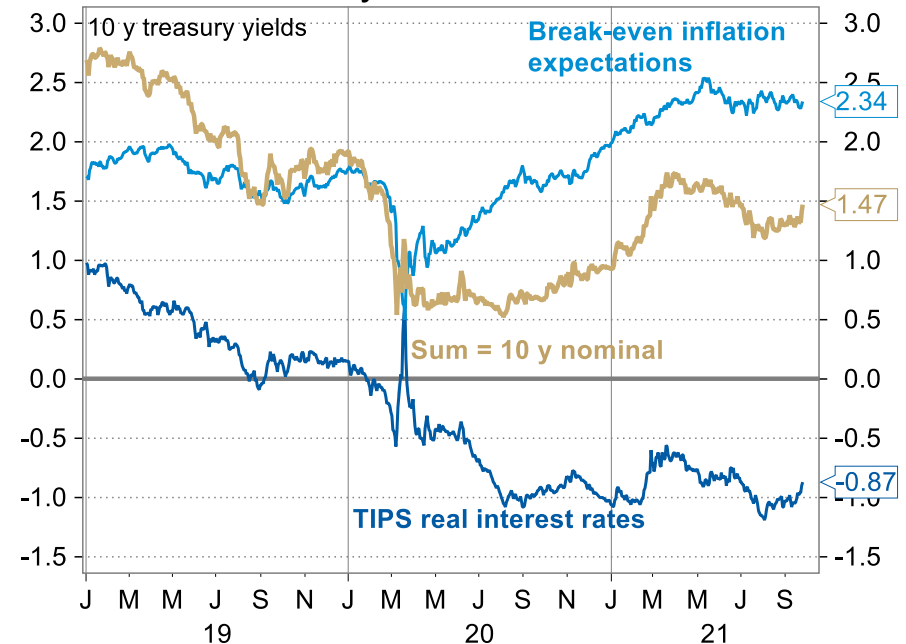
The market is fully pricing in the first hike in Q4-22

The whole curve shifted upwards after the FOMC meeting

Fed funds future



USA TIPS Real yields, break-even inflation



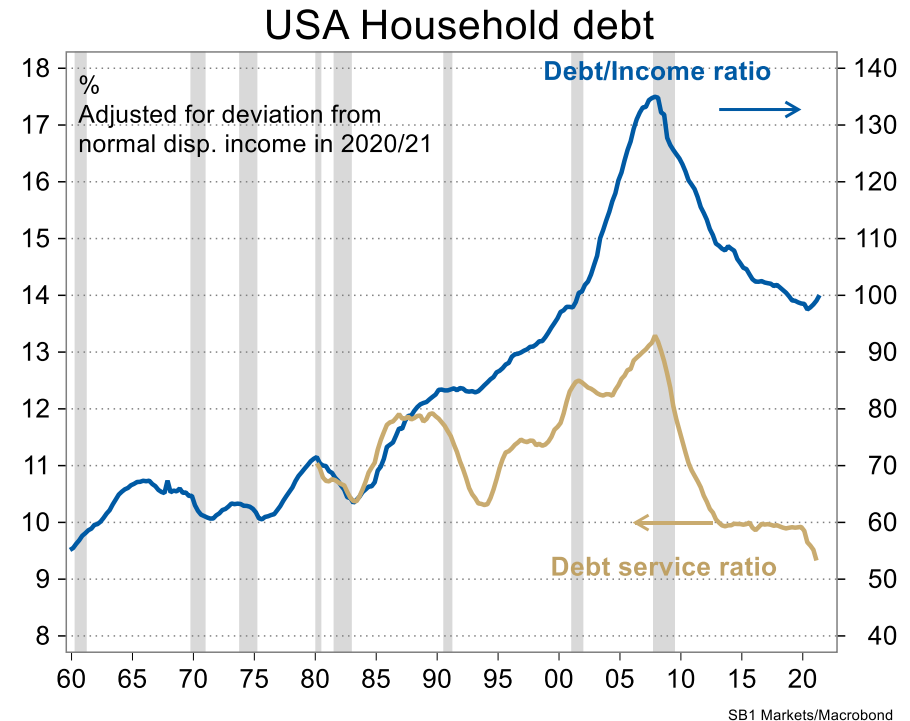
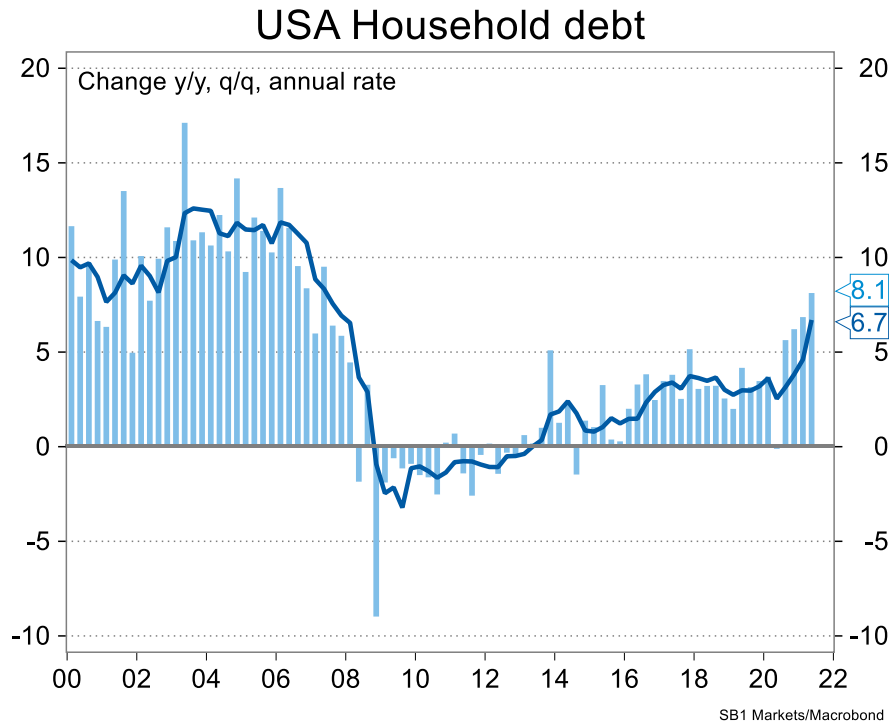
- At the **short end of the curve**, Fed Funds future rate climbed 7 – 13 bps. A first hike is once more priced in by the end of next year
- The 10 y gov bond** rose by 10 bps to 1.47, the highest level since late June, well up from the July bottom at 1.19% - but still well below the March local peak at 1.73%
 - » Real rates rose further, by 9 bps to -0.87%

US & Germany 10 y Gov bond yield

| | Yield | Change 1w | Change 1m | Min since April-20 |
|-----------------------------|-------|-----------|-----------|--------------------|
| USA nominal treasury | 1.47 | 0.10 | 0.18 | 0.52 |
| .. break-even inflation | 2.34 | 0.01 | 0.04 | 1.06 |
| .. TIPS real rate | -0.87 | 0.09 | 0.14 | -1.19 |
| Germany nominal bund | -0.23 | 0.06 | 0.25 | -0.65 |
| .. break-even inflation | 1.76 | 0.02 | 0.21 | 0.40 |
| .. real rate | -1.99 | 0.04 | 0.04 | -2.13 |

So low rates do have an impact? Household credit growth is accelerating rapidly

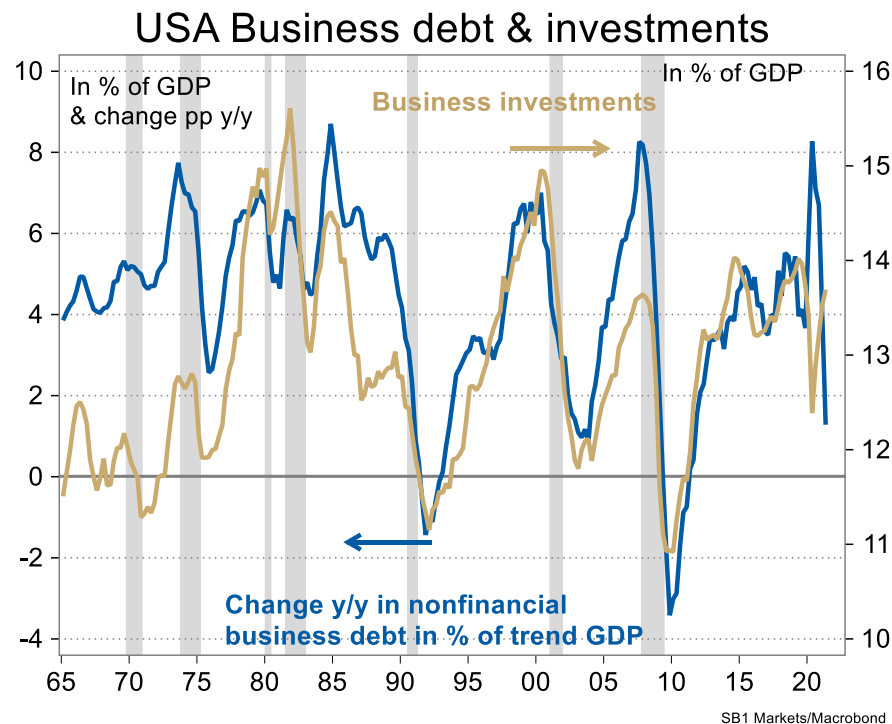
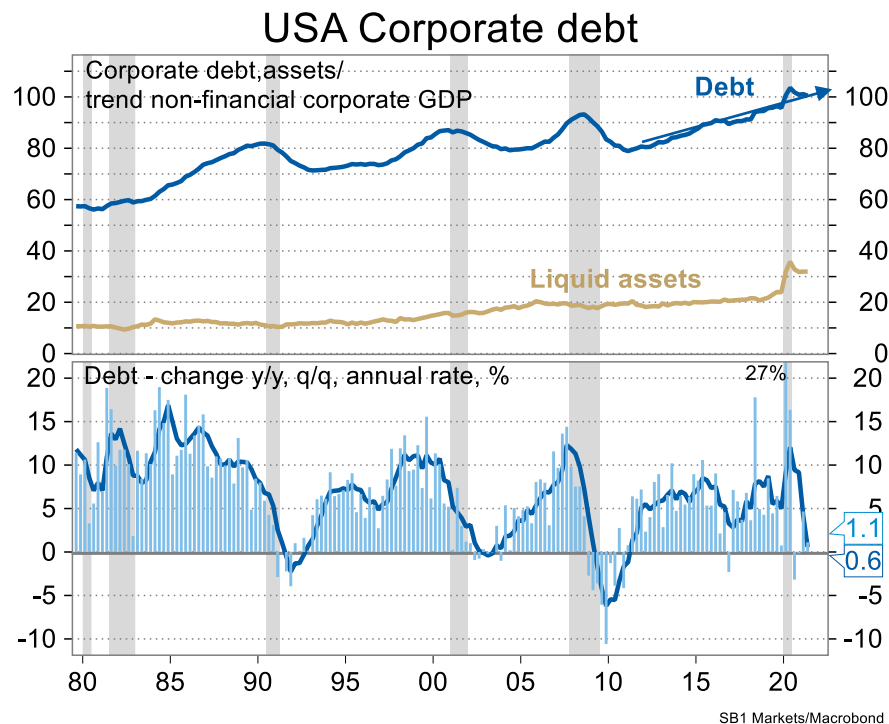
The debt/income ratio is growing again, though from far below the pre-financial crisis level



- Households have reduced their debt burden in an unprecedented way past 12 years – until Q1 last year
- From Q2-20, growth in household debt has outpaced income growth (adjusted for the income impact of the pandemic)
- In Q2-21, debt grew at a 8.1% pace, the highest since 2007. In the years before the financial crisis, debt grew by some 12% per year over several years (2003 – 2006). Debt/income ratio rose from a level equal to the current level, 100%, to 135% of disposable income.
 - The more than a decade long consolidation period from 2007 was the toughest ever, in US history. And it almost killed the economy, when credit demand (and supply) collapsed in 2008
 - Now, the deb/income ratio is at decent level – no reason to worry. (Norwegian households entertain more debt to income ratio that is twice as high)
- The debt/income debt service ratio is record low, due to the low mortgage rate

Corporate debt growth has slowed, following the Q1-20 hike

However, the debt level is high – but so is the level of liquid assets too 😊

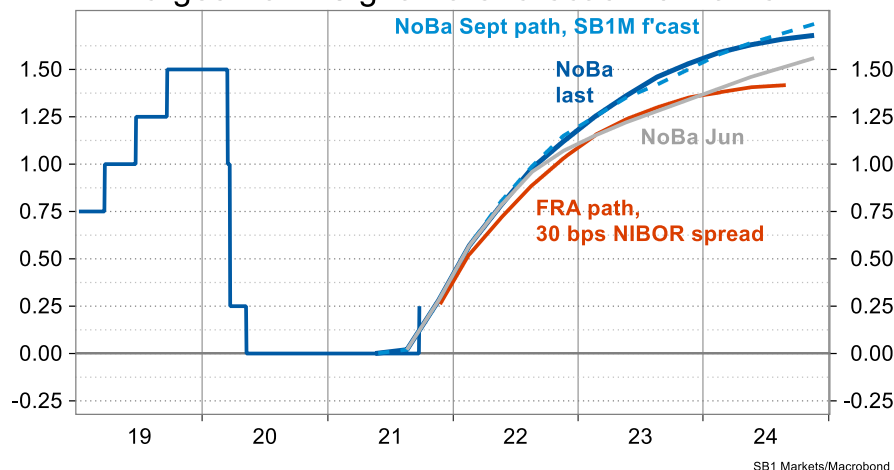


- Corporate debt rose by just 1.1% (annualised) in Q2, down from 4% in Q1. Measured y/y, debt is up by 0.6%, the lowest rate since the financial crisis. However, debt rose sharply in Q2 last year, as companies secured funding, and slashed investments costs. The average growth rate over the past 2 years is 6.3%, slightly above trend growth in per cent of GDP. Thus, the corp GDP/debt ratio is just marginally above the long term increase in this debt ratio. Barring the super-high borrowing last spring, this ratio is at a record high level
- On the other hand, companies have also increased their liquid assets sharply since before the pandemic, to the highest level ever
- In sum: Companies still have some capacity to further lift their investments – even if the profit cycle has turned south

On the road again: NoBa lifted the signal rate – and the interest rate path (again)

The hike was given. The rate path implies 1.5% is reached in Q2/Q3 2023, 1y earlier than in June MPR

Norges Bank Signal rate forecast vs market



Interest rate paths

| | Path 2-21 | Path 3-21 | Change bps | SB1M f'cast | Fair FRA * @IMM, NB | FRA pre meet | NoBa -FRA |
|-------|-----------|-------------|---------------|----------------|------------------------|--------------------|--------------|
| Q3 21 | 0.02 | 0.02 | 0 | 0.02 | | | |
| Q4 21 | 0.28 | 0.28 | 0 | 0.28 | 0.83 | 0.76 | 6 |
| Q1 22 | 0.57 | 0.57 | 0 | 0.57 | 1.05 | 0.99 | 6 |
| Q2 22 | 0.78 | 0.78 | 0 | 0.80 | 1.25 | 1.17 | 8 |
| Q3 22 | 0.96 | 0.98 | 2 | 0.99 | 1.40 | 1.32 | 8 |
| Q4 22 | 1.07 | 1.12 | 5 | 1.15 | 1.53 | 1.43 | 10 |
| Q1 23 | 1.15 | 1.25 | 10 | 1.25 | 1.64 | 1.53 | 12 |
| Q2 23 | 1.22 | 1.36 | 14 | 1.35 | 1.74 | 1.60 | 15 |
| Q3 23 | 1.28 | 1.46 | 18 | 1.42 | 1.82 | 1.65 | 17 |
| Q4 23 | 1.34 | 1.53 | 19 | 1.50 | 1.88 | 1.67 | 22 |
| Q1 24 | 1.40 | 1.59 | 19 | 1.58 | 1.92 | 1.71 | 22 |
| Q2 24 | 1.46 | 1.63 | 17 | 1.64 | 1.96 | 1.72 | 24 |
| Q3 24 | 1.51 | 1.66 | 15 | 1.69 | 1.98 | | |
| Q4 24 | 1.56 | 1.68 | 12 | 1.74 | 2.00 | | |

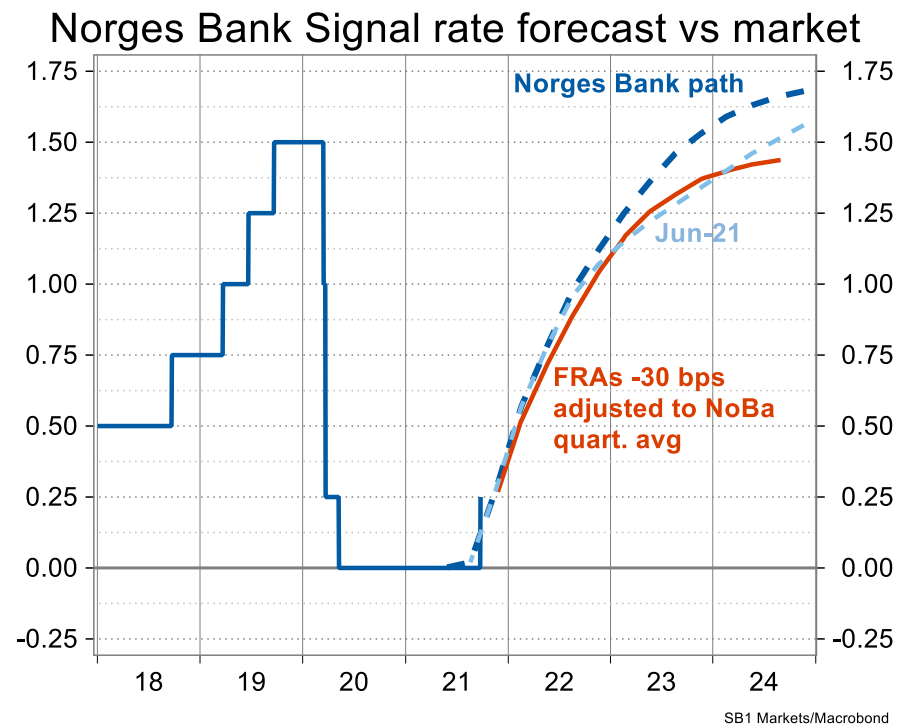
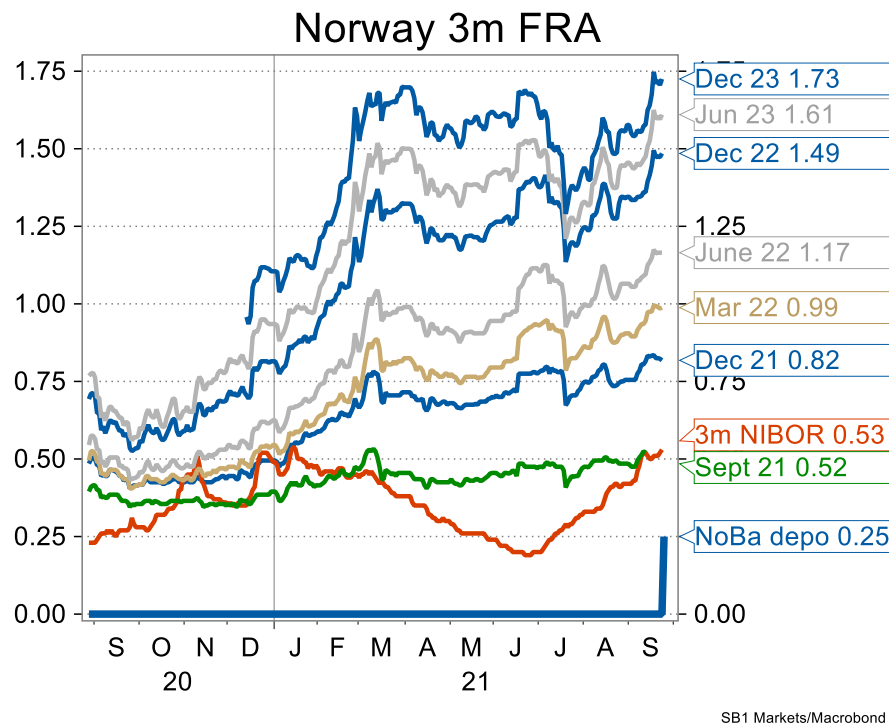
*) Assuming a 30 bps NIBOR spread from Q3-21

| Q4 FRAs adjusted for liquidity prem

- **Key policy rate** was hiked by 25 bps, which was extremely well communicated in advance
- **Policy rate path** revised upwards by up to 19 bps by the end of 2023/early 2023
 - » By luck and coincidence we forecasted an 18 bp lift for that period – and our suggested path was close to identical to NoBa's, barring a 6 p divergence in late 2024 (NoBa's curve flattened faster than we assumed)
 - » According to comments from Governor Olsen, and the bank's rate path, the next step will be taken in December, then in March and in June – and one more in Q4-22, plus 1 – 2 hikes during 2023
 - » The key policy rate will be back at 1.5% in Q2 (most likely) or Q3 2023, one year earlier than assumed in the June path
 - » The end point was revised up by 12 bps to 1.68%
- Norges Bank's rate path was up to **24 bps above the FRA market rates** ahead of the meeting but markets did not respond the NoBa's message – as most had expected an upward revision and market rate have climbed rapidly recent weeks
 - » We deem the risk to be on the upside vs. FRA rates the coming weeks
- The **NOK** immediately gained 0.3%, but half of the gain was quickly reversed and NoBa's actions turned out to be a non-event. Anyway, NOK rates are not important at all vs. the NOK exchange rate

The new rate path well above market FRA rates

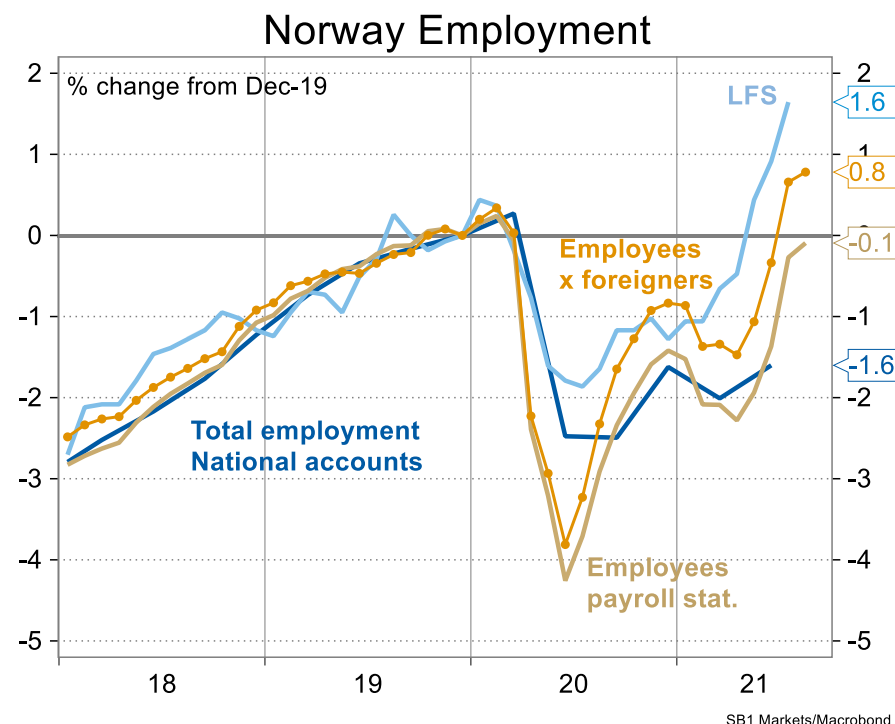
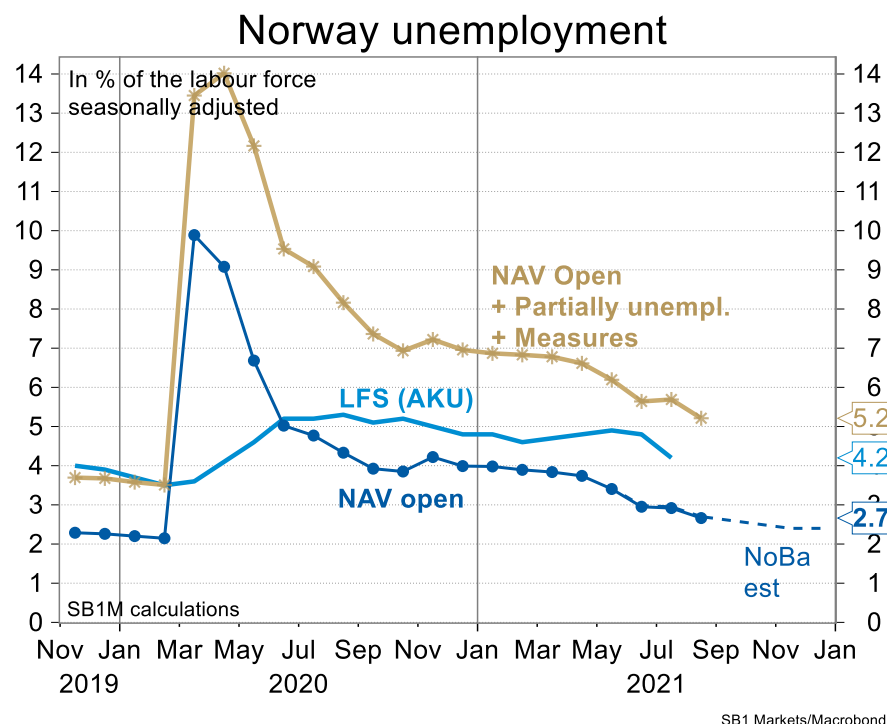
No panic in the FRA market following NoBa's hawkish message, rates were unchanged



- FRA rates have climbed rapidly since mid July, and are at the highest level in this cycle
- The market is now fully discounting NoBa a hike in December, a March by 80%, and a June hike by 50%, if rates are hiked in both December and March
- The FRA-curve is some 7 bps below the NoBa path on average in 2022, and 13 bps in 2023, and 21 bps in 2024
 - » The longer NOK FRAs are of course gradually more influenced by the low rates abroad

And then the LFS unemployment rate also fell – as empl. soars, +1.6% vs pre-p

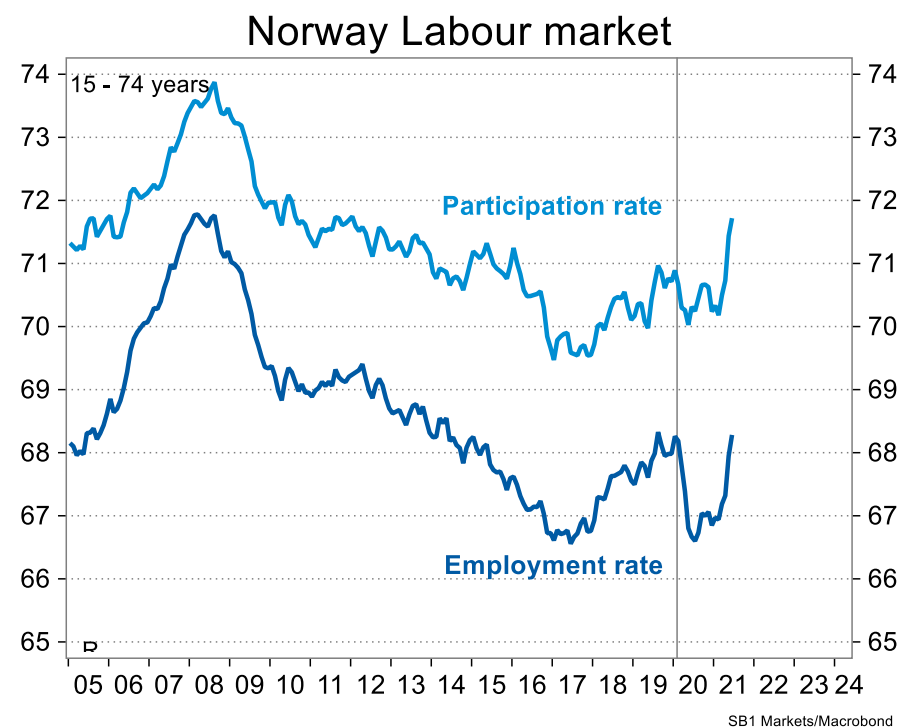
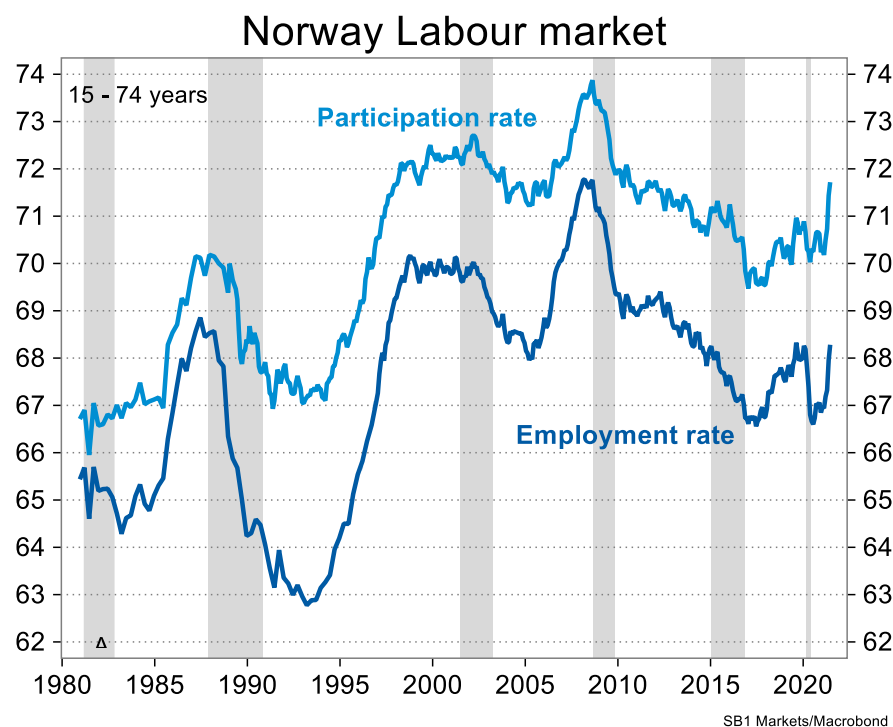
Unemployment down to 4.2% from 4.8%. And even more impressive, the participation rate is surging!



- **According the LFS, employment rose by 20' persons m/m in July (June-Aug avg), or by 0.7%, following the 0.5% lift the previous month! The employment level in July is 1.6% above the pre-pandemic level.** The monthly payroll stats is confirmed, 'national' employees are up 0.8%, following a 0.1% lift in Aug. The total no. of employees is still 0.1% below the pre-pandemic level, due to a decline in foreigners on short term stay
- The **employment rate** has shot up recent months, and it is now above the pre-pandemic level!
- The **labour force participation rate** has climbed even faster, and it is now 0.7 pp higher than before the pandemic – and the highest since 2011! This is incredible (even if population growth has slowed substantially)
- **LFS unemployment** 'collapsed' by 18', down to 4.2% from 4.8%, we expected 4.6% (after being disappointed a couple of months). The rate is still 0.7 pp above the pre-pandemic level – but just because the participation rate surged! The decline in the NAV unemployment rate is confirmed!

The participation rate is surging to far above the pre-pandemic level

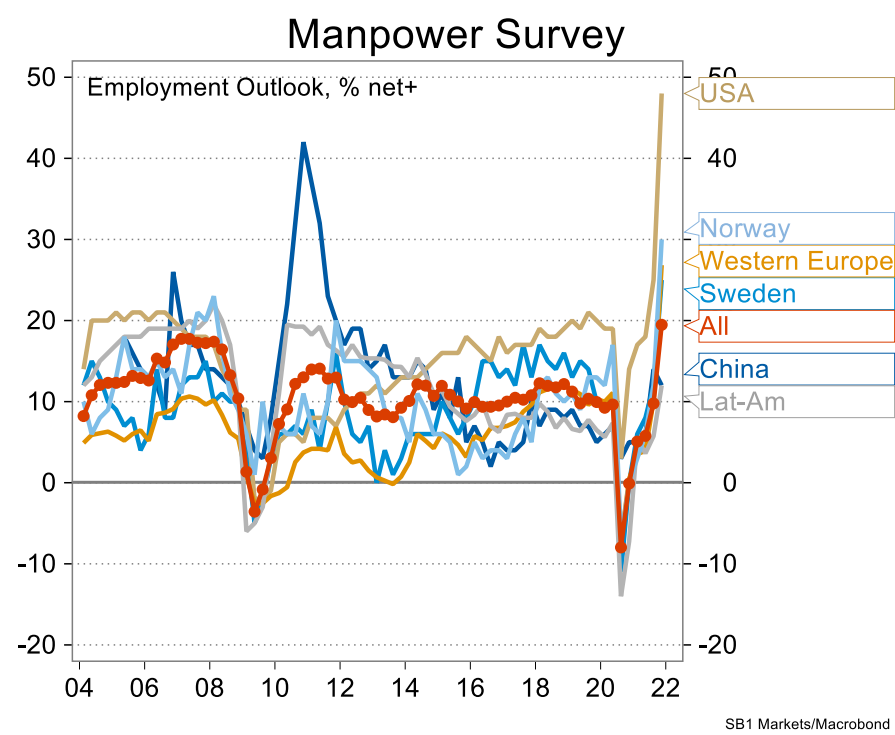
Is lack of foreign labour enhancing the opportunities for marginal national groups??



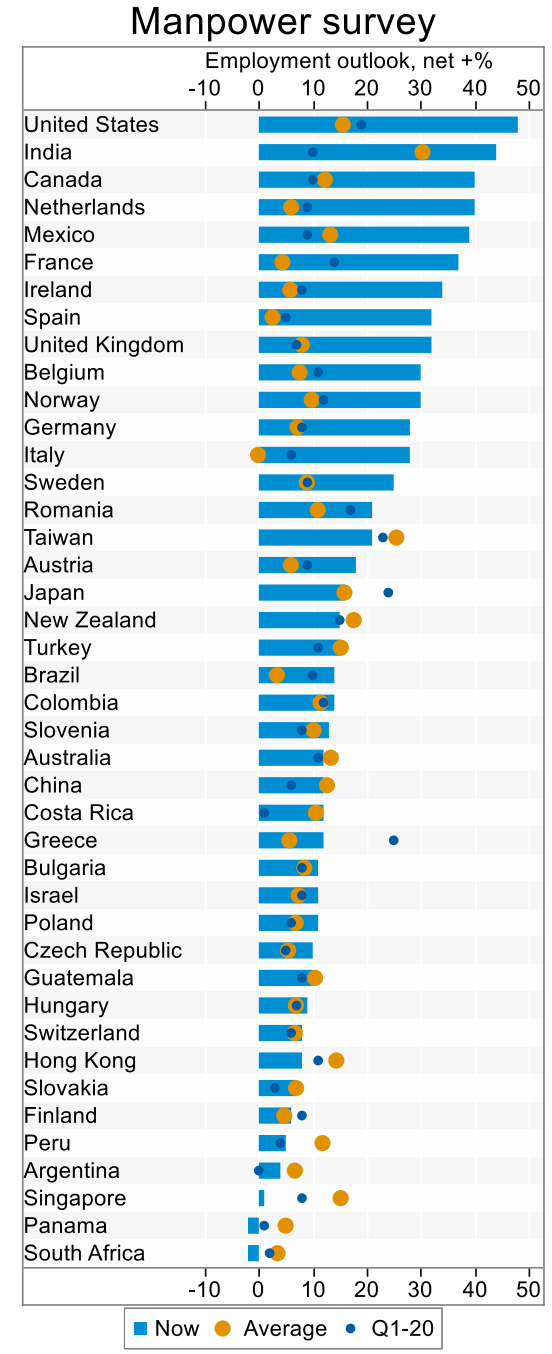
- The surge in participation & employment rates is rather incredible, especially the lift in the participation rate to far above the pre-pandemic level
- The no. of foreigners on short term stay in Norway has fallen by almost 1/3 or 25' persons vs the pre-pandemic level, equalling 0.6% of the working age population. If nationals (Norwegians or foreigners on permanent stay) have filled all of these positions, both the LFS participation & the employment rate would have increased by an equal amount. At least some of the increase in nationals' employment must be due to this effect
- If so, will these new national entrants remain in the labour market and keep their job when borders are fully opened up? We think they have a decent chance
 - » We are not sure if foreign workers will return as labour markets are tight everywhere now
 - » The Norwegian labour market is now very tight (see more next page)
 - » Those who have acquired a job now, will have qualified themselves

Manpower survey: The fastest employment growth, ever

... expected the coming 3 months

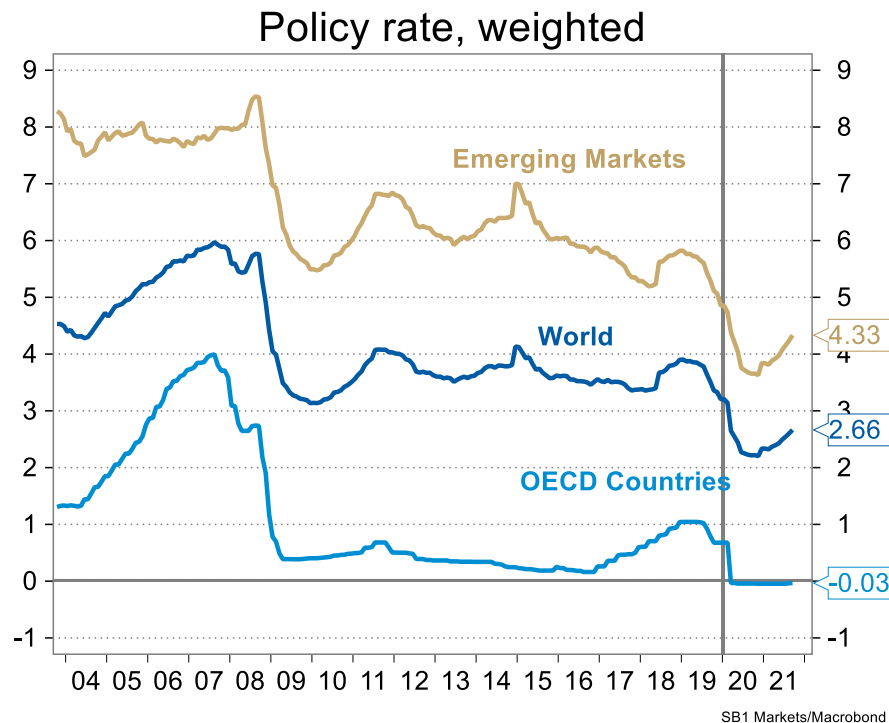


- At least, the companies have very aggressive hiring plans
 - » US in the lead, followed by India and Canada. Norway high up in the list
- Just 10 of 42 countries are reporting slower growth in employment than normal, 8 countries have less upbeat plans than before the pandemic – and 14 are reporting record high hiring plans (most among those at the top of the list)
- This survey confirms other labour market data points: Unemployment is lower than normal almost everywhere, the no. of unfilled vacancies are record high in most countries



Some 25 countries have lifted their signal rates, of which 23 in EMs

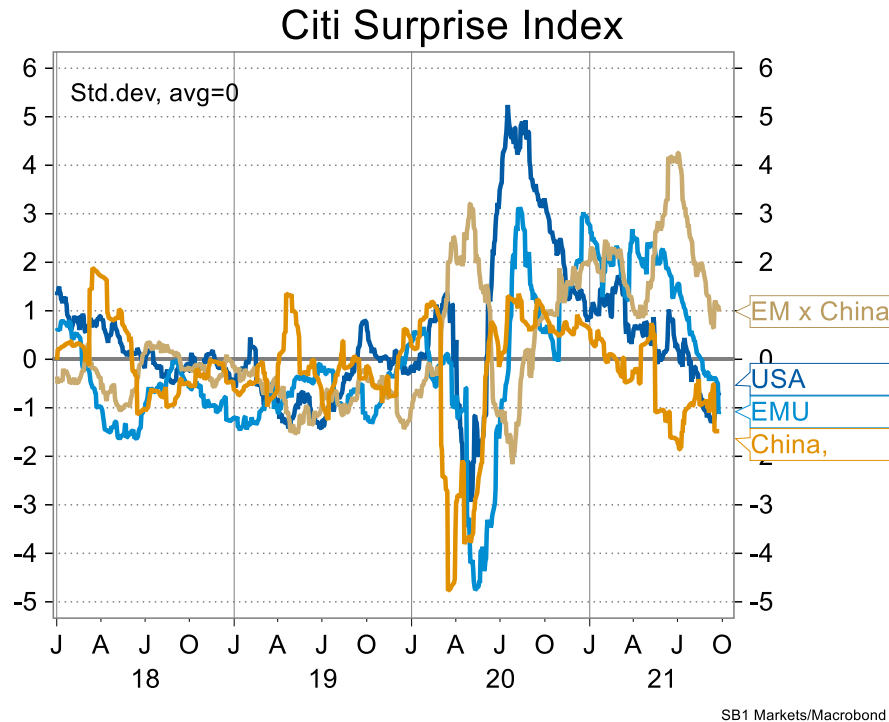
Just South Korea and Norway have joined the party from the DM side



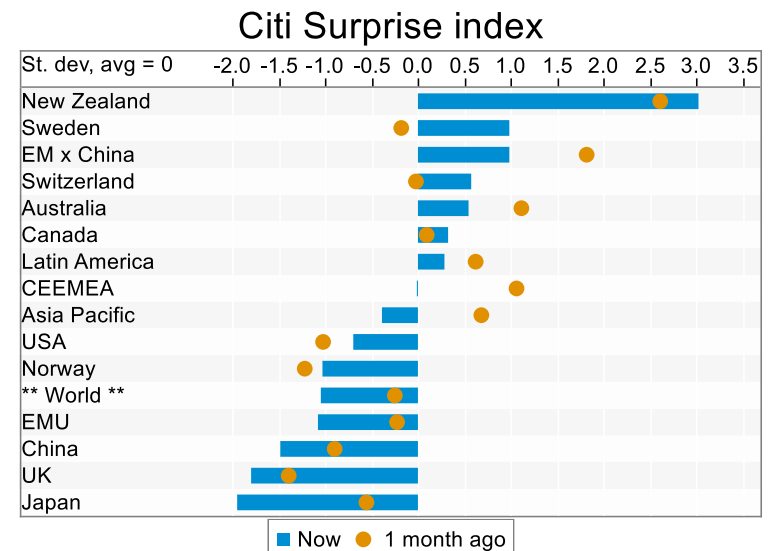
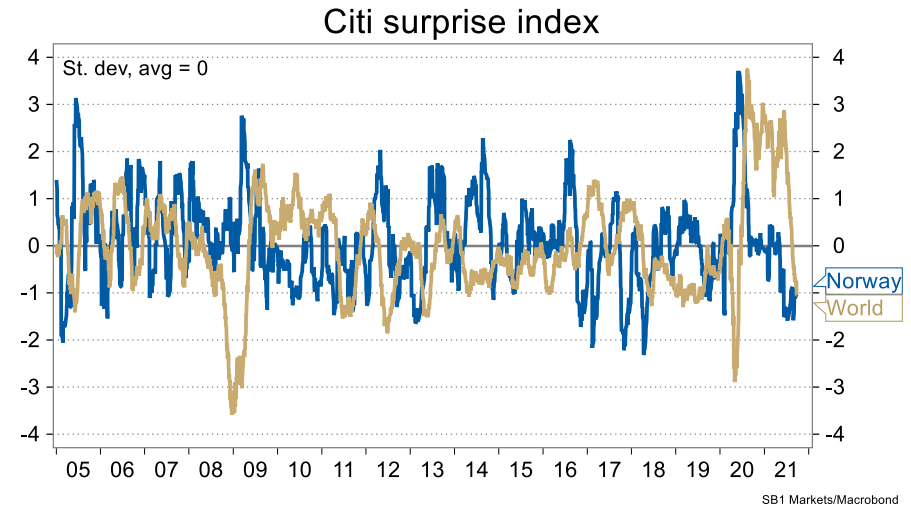
- Russia, Brazil, Mexico, Turkey, Argentina, Singapore and Chile, Peru and Hungary, to name the most prominent of the early lifters

More negative surprises – EMU (PMIs) contributed the most last week

And US surprised less on the negative side



- The **US** surprise has fallen further below average, but have recovered past 2 weeks
- The **EMU** has been below the zero line the two past weeks – but stabilised last week
- **China** dropped on the weak August data published last week
- **Emerging Markets x China** are still reporting better data than expected
- **Norway** has surprised sharply on the downside recent weeks, so has the UK



Highlights

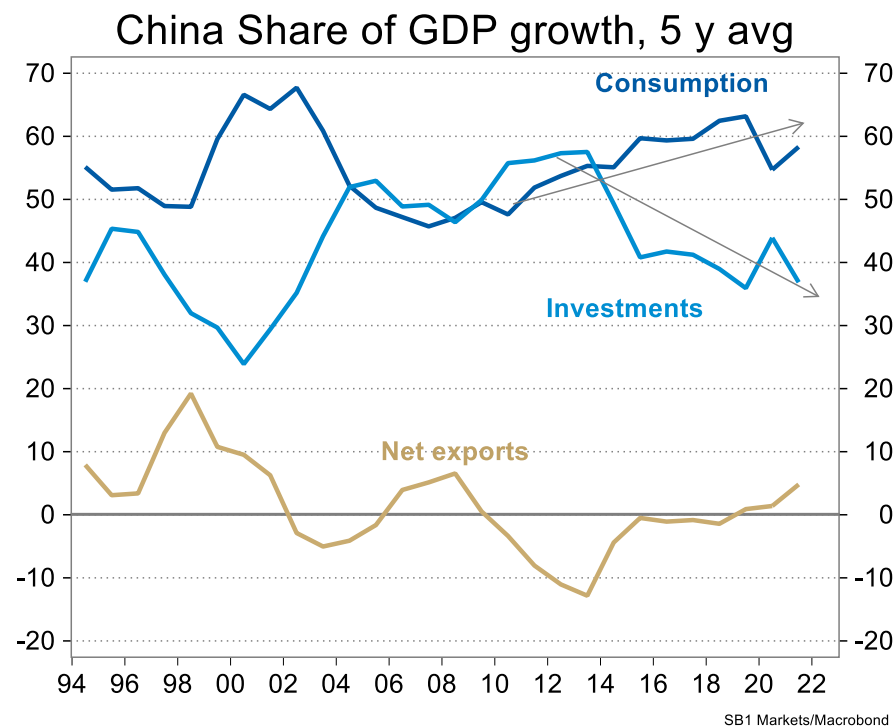
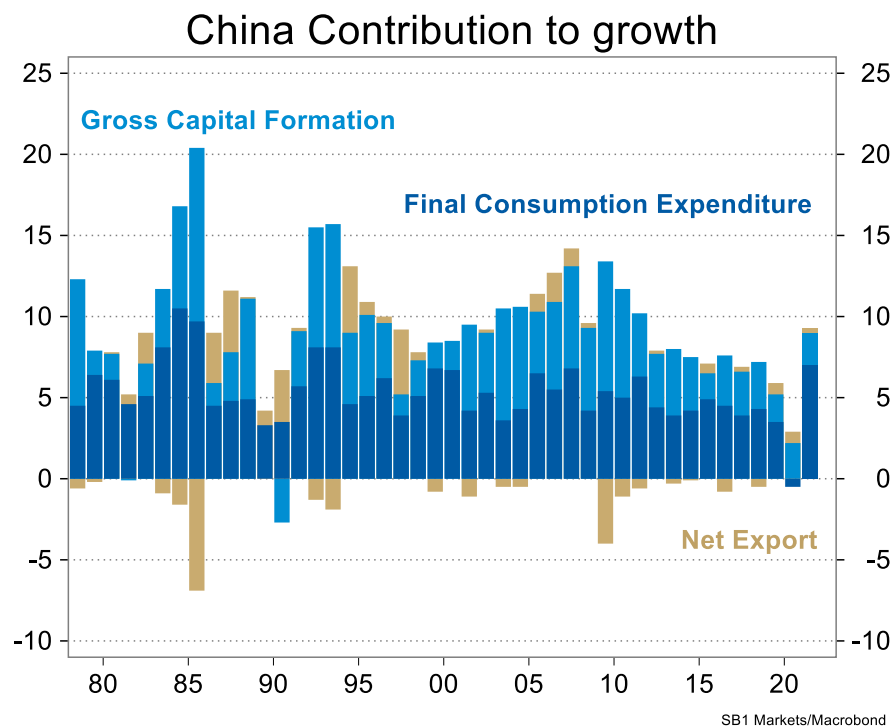
The world around us

The Norwegian economy

Market charts & comments

China: The growth model & construction collapse risk. And the rest of the world

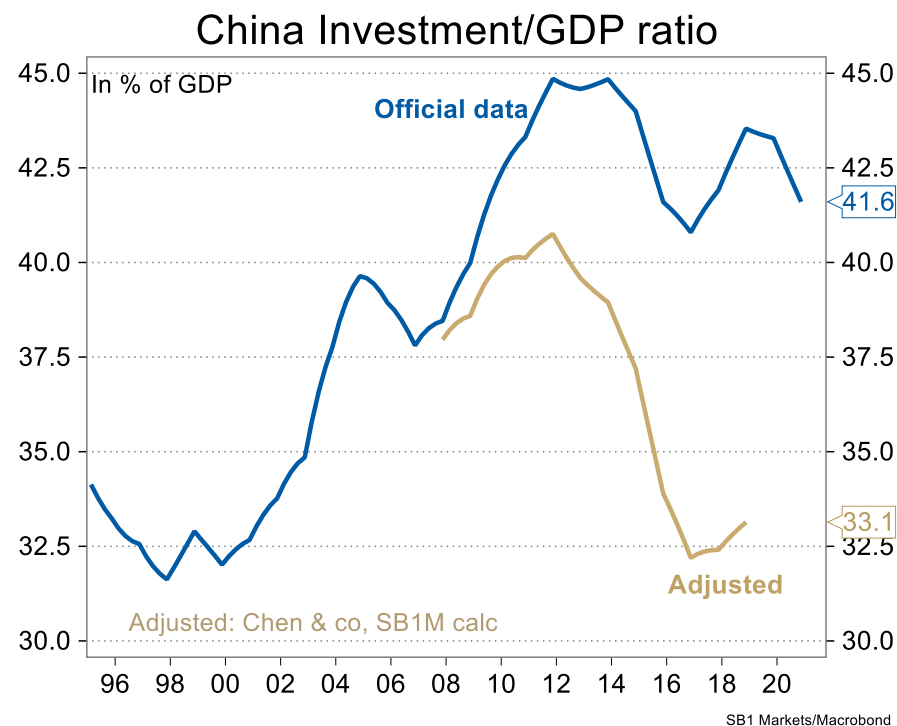
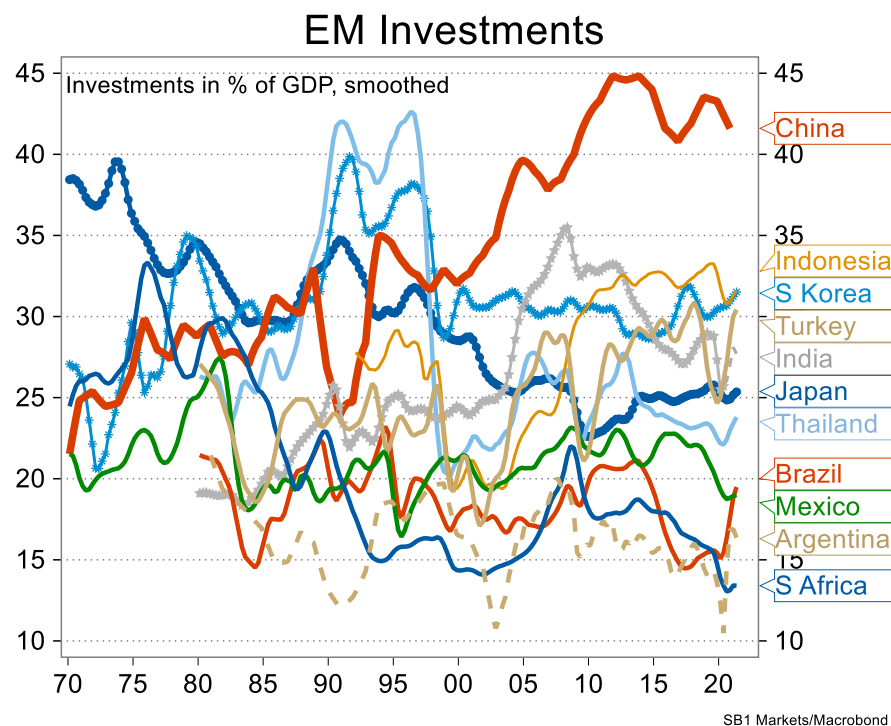
China has become less dependent on investments but still more than most other countries



- Growth wise, China has not been driven by rapid growth in investments since 2013, like it had been during the previous years
 - » Still, over the past 5 years (in average), almost 40% of growth in GDP is due to growth in investments, though down from almost 60% in 2013, after the take off in investments in 2008/2009, when China saved itself (and the world economy) by a huge lift in domestic investments

The investment/GDP ratio is trending down but is still very high, above 40%

Just few countries have invested more than 35% of GDP for more than a short period



- Such a high investment level is no doubt a warning sign, the risk of overbuilding must be substantial. In several countries, periods with high investments, have been followed substantial setbacks (if investments contracts rapidly, like Thailand and South Korea) or a prolonged period of slow growth if the investment level declines over time (Japan)
- However, some researchers question Chinese investment data. They are aggregated from local governments, and these regional data do not seem reasonable. A calculation *) indicates that the investment level is far lower than stated in the national accounts (and that GDP growth has been slower than official figures tell).

*) Wen Chen et al: A Forensic Examination: of China's National Accounts, Brookings, 2019

The correlation between construction cycles and GDP has not been that close

At least if official data are to be believed

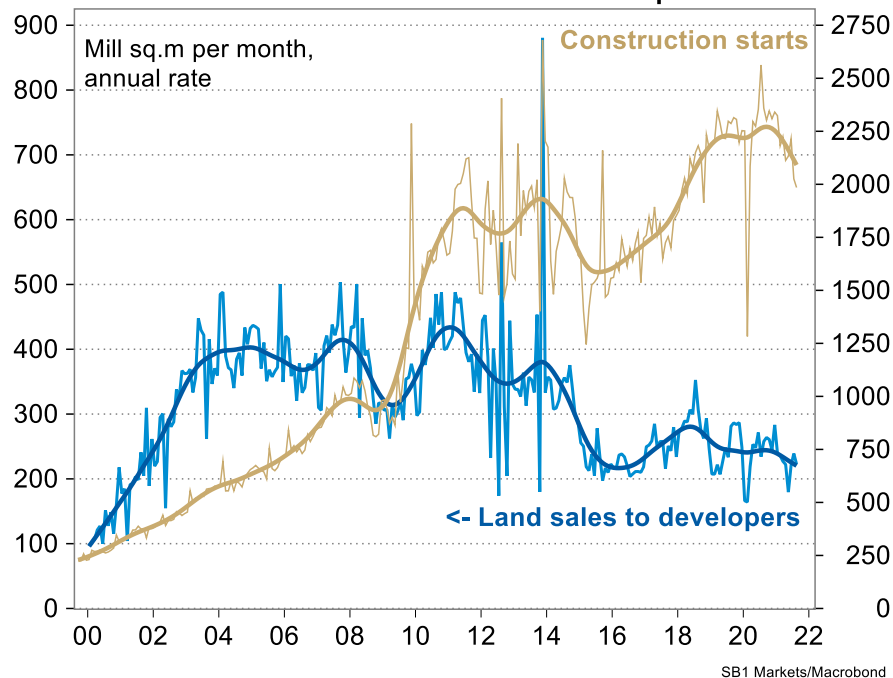


- The Financial crisis downturn did not start in the construction sector – but the recovery happened in tandem
- The slowdown from 2011 was also pretty closely correlated
- Other cycles have not been that close
- A large drop in construction will very likely have a substantial impact on total GDP growth in China

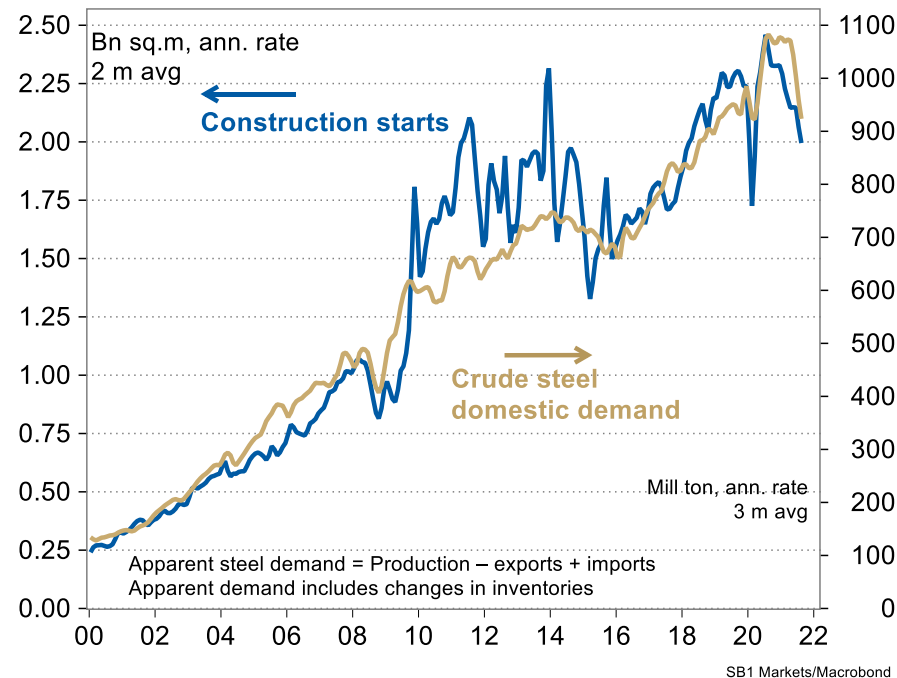
Construction starts has (luckily) fallen 15% since early 2021 but level still not low

Should Evergrande's problems slow/stop financing for other builders, a substantial downside risk

China Land sale to developers



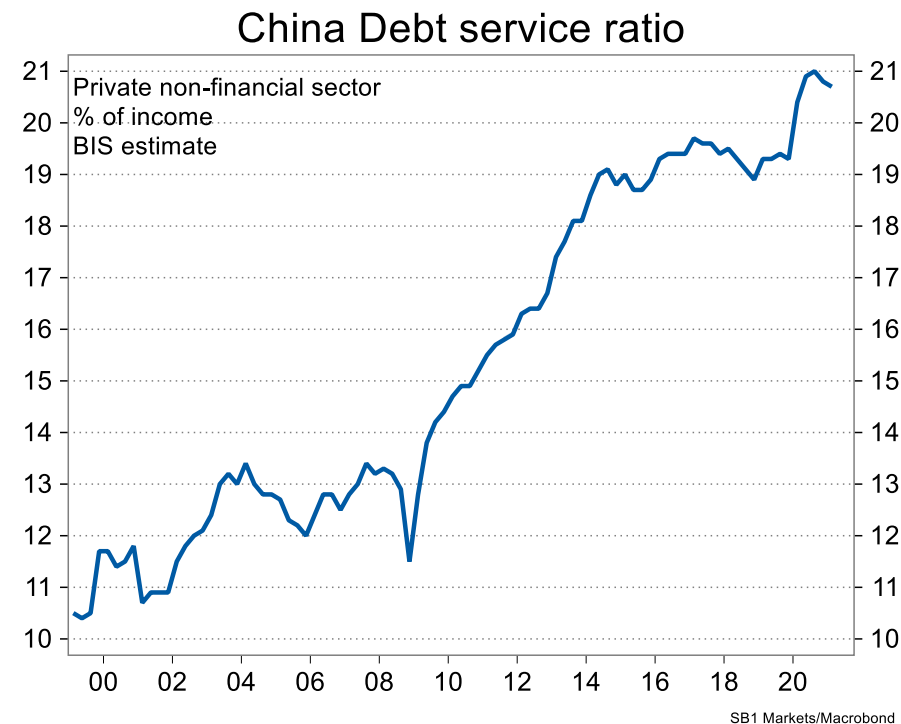
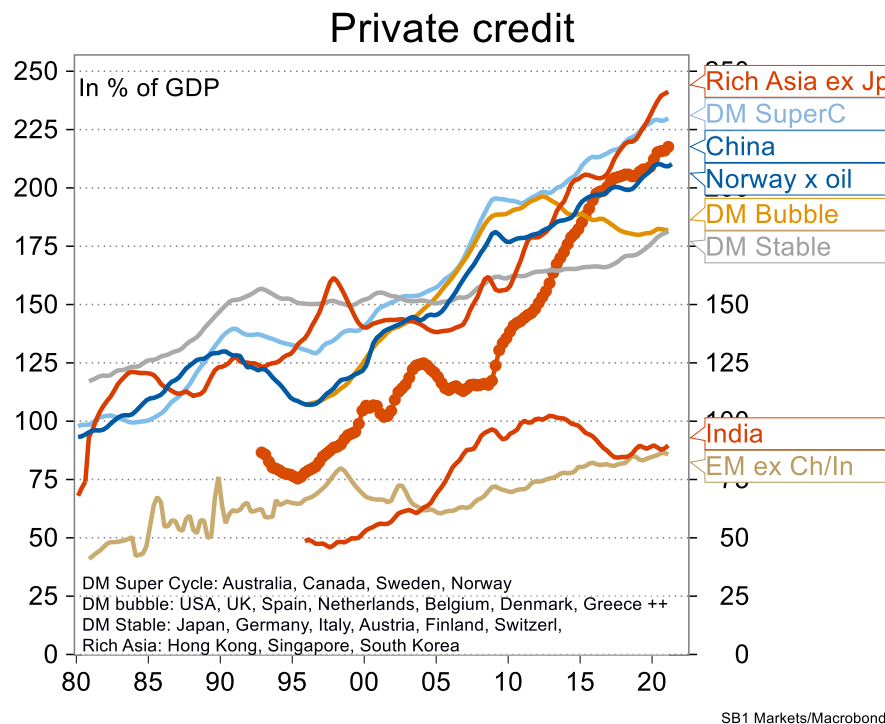
China Construction vs steel



- .. And should demand and prices decline substantially, one more worry
- However, the world (ex iron ore producers) have lived well during the 15% decline in construction starts. Another 15% would probably not be any big deal eier

A final nail in the coffin: A very high – and still rising – Chinese debt/income ratio

Or a possible nail: The debt level is high – and extremely high to be a middle income country

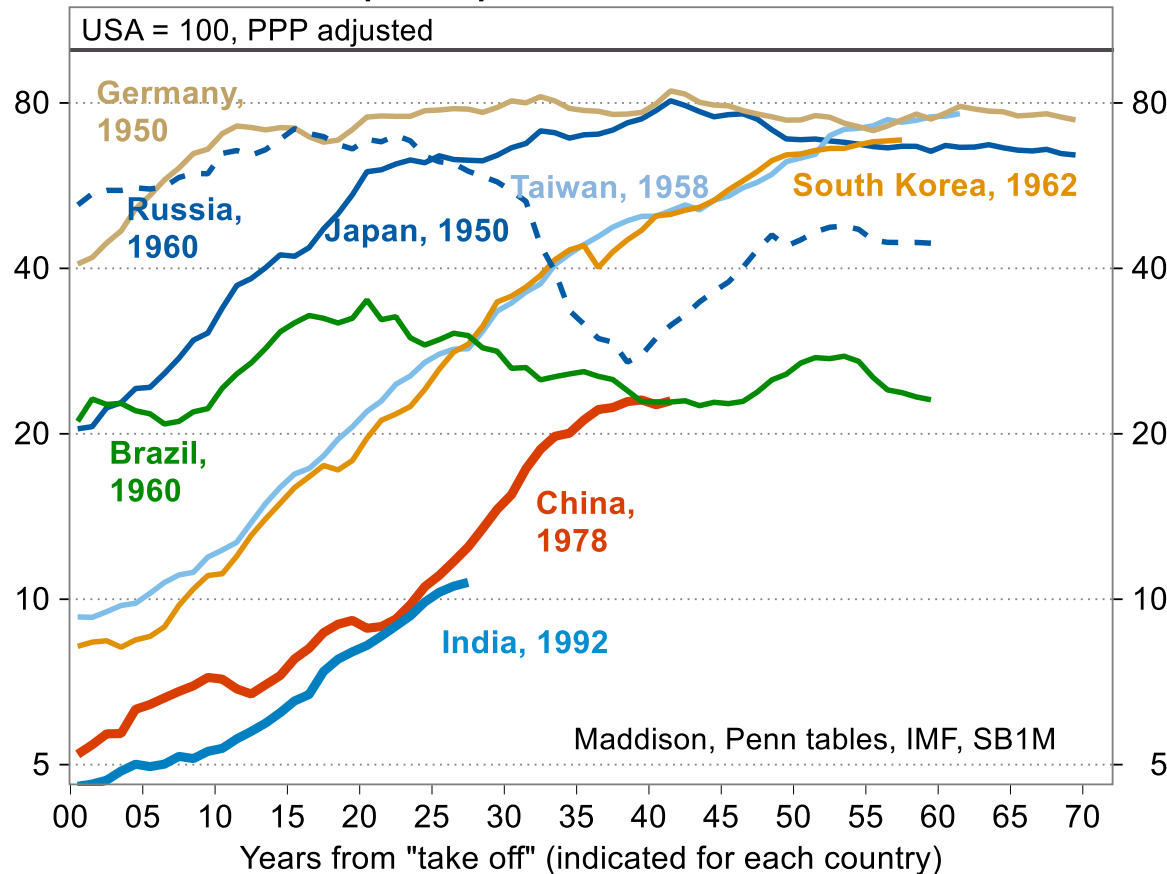


- China still has interest rates than can be cut meaningfully – and given the high debt level, that would reduce the debt service ratio substantially

Limits to growth? Well not yet, mechanically

Institutions will decide, as always. Is the new (Xi) model suited for long term growth? We doubt it

GDP pr capita - relative to USA

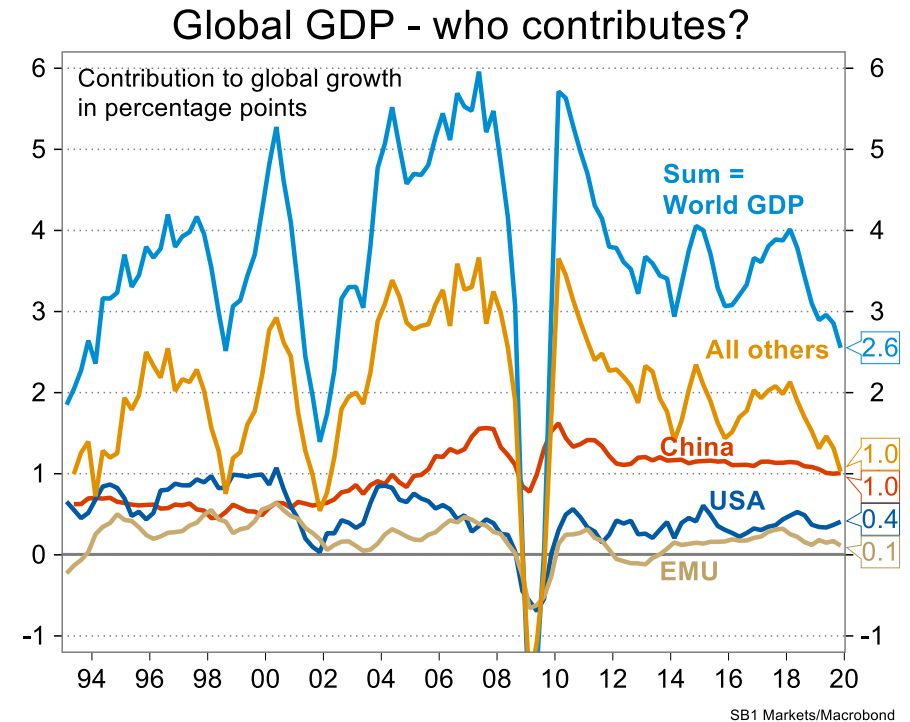


SB1 Markets/Macrobond

- China has slowed but is still on the rise, from a low level (25% of the US GDP per capita level)
- The investment-driven economies in Asia (+ Germany) reached 75% – 80% of the US GDP level per person before flattening out (growth became more complicated?)
- If institutions are bad? It may go wrong, 'far too early' (The middle income trap)
 - » Russia has crashed
 - » Brazil has crashed
- Are the Chinese institutions now, as shaped by president Xi's autocratic (or worse) leadership, well suited in a competitive world? Time will show, we doubt as a monolithic decision making system seldom works well over time
 - » Deng Xiaoping's more decentralized 'capitalism' (from 1978) worked very well, lifting China out of poverty

Growth correlations are normally strong but the mechanics are idiosyncratic

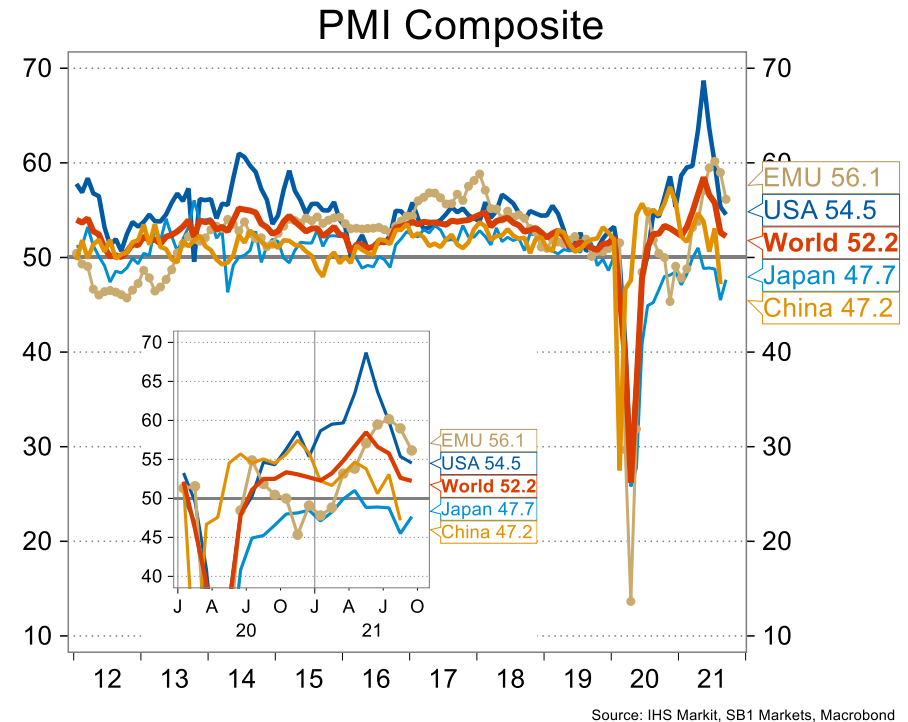
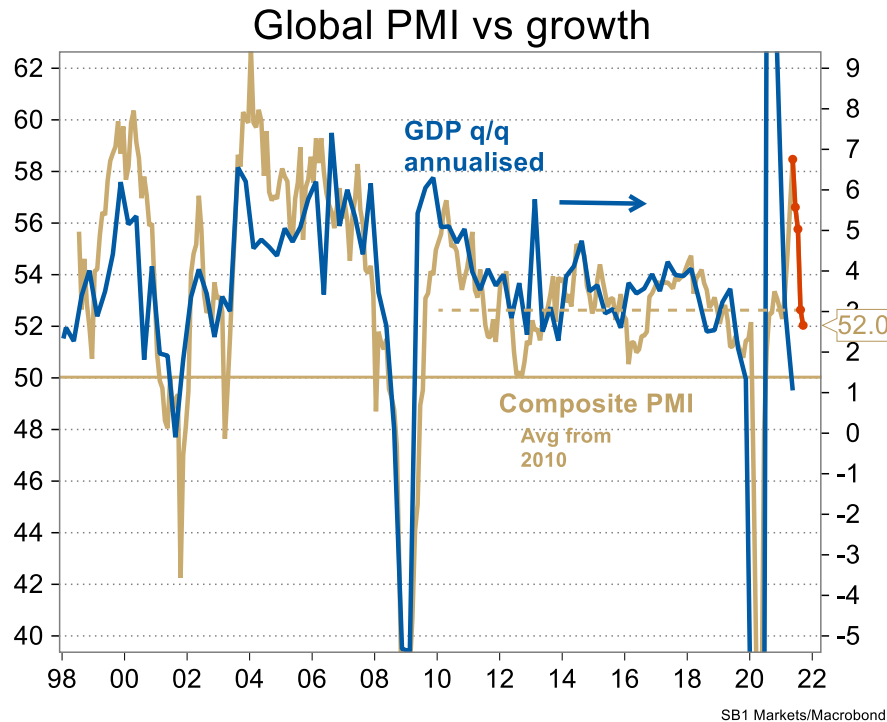
So far, the Chinese direct contributions to global GDP volatility has been rather limited



- China has all in all been a 'stable factor' in the global economy, if Chinese GDP data are to be believed – but the contribution to changes in world GDP was significant during the Financial Crisis, both down and up
- China now (2019, before the pandemic) contributes by 1% to an overall growth in GDP of almost 3% - thus 1/3rd!
 - » The US typically contributes with less than 15%, and EMU by half of that!
 - » 'All others' are usually much more important
- With 17% share of global GDP (PPP adjusted) a substantial GDP growth slowdown in China, will mechanically have a strong impact on global growth figures, and even more on specific markets where China is a large importer

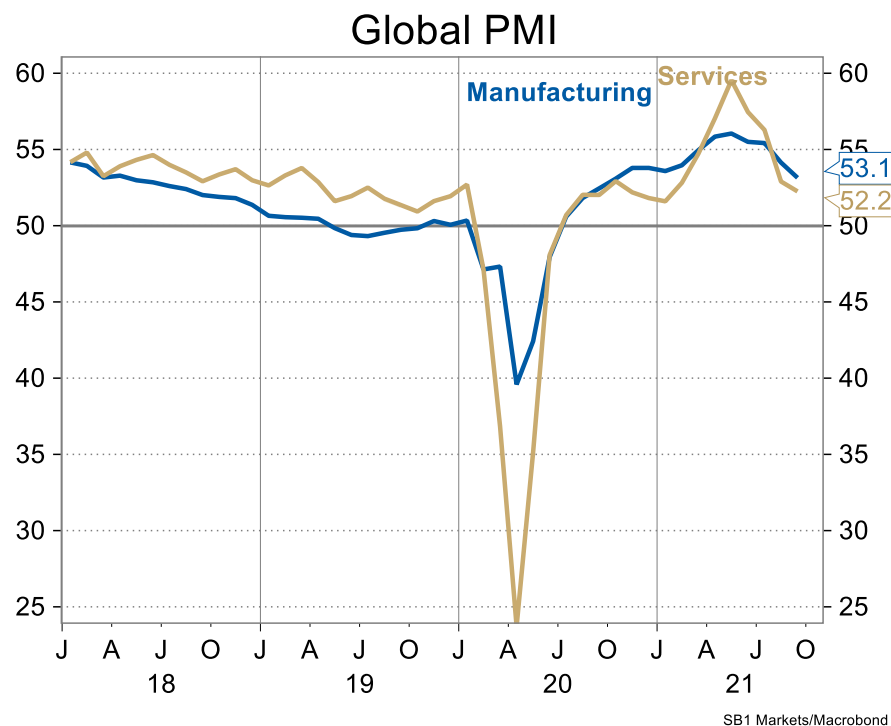
PMI probably further down in September, to below par

We estimate a 0.5 – 1 p decline to approx. 52, to slightly below an average level, the EMU to blame

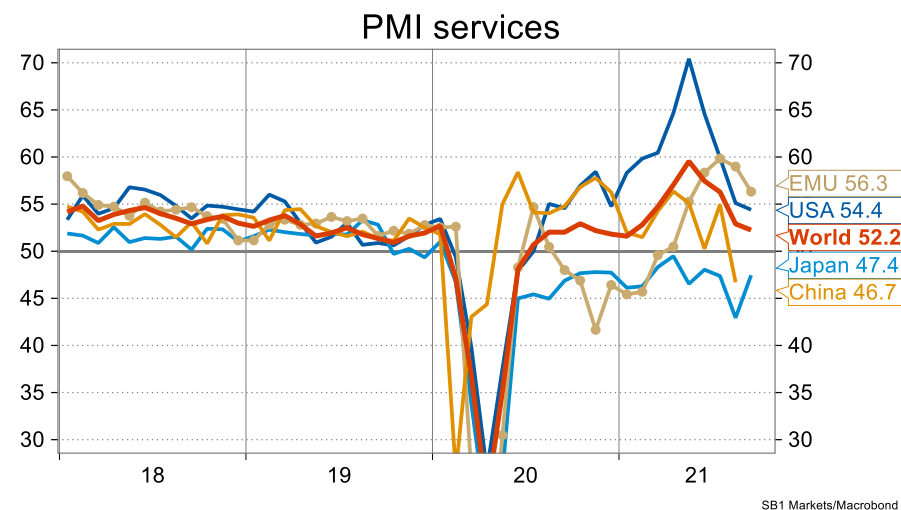
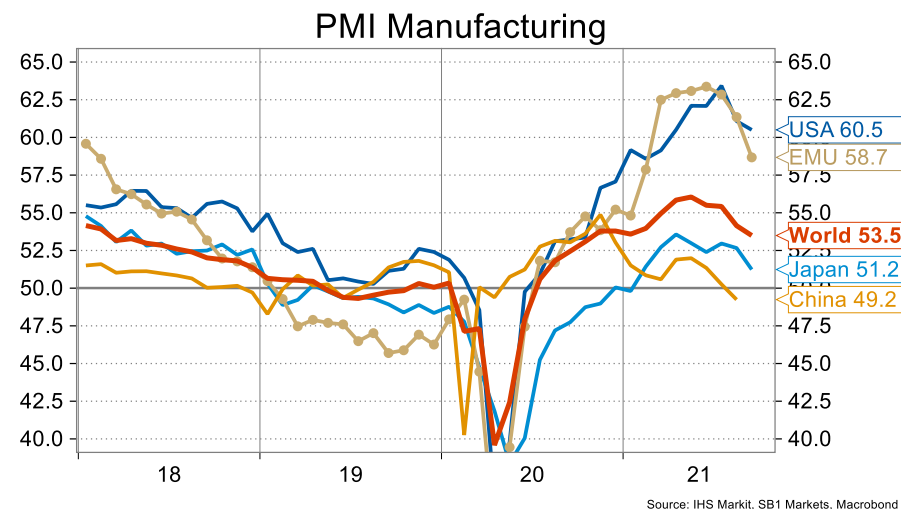


- **The global PMI** has peaked, so has very likely global growth. The September PMI signals less than 3% GDP growth
 - » The uncertainty in the estimate is larger than normal due to divergences between countries that have reported preliminary PMIs so far, and the steep decline in China last month – with a wide possible outcome in September
- The **US PMI** fell slightly but not much more than expected, while the **EMU survey** surprised sharply on the downside, with an almost 3 p decline. The **UK index** fell as well. Japan is still weak, but recovered, and the **Australian PMI** rose sharply, following the Delta drop in August
- **Delivery times** rose even faster in the US, but slowed in Europe. Input & output prices are still increasing at a rapid pace but in sum down from the peak in July

Both manufacturing and services probably down in September



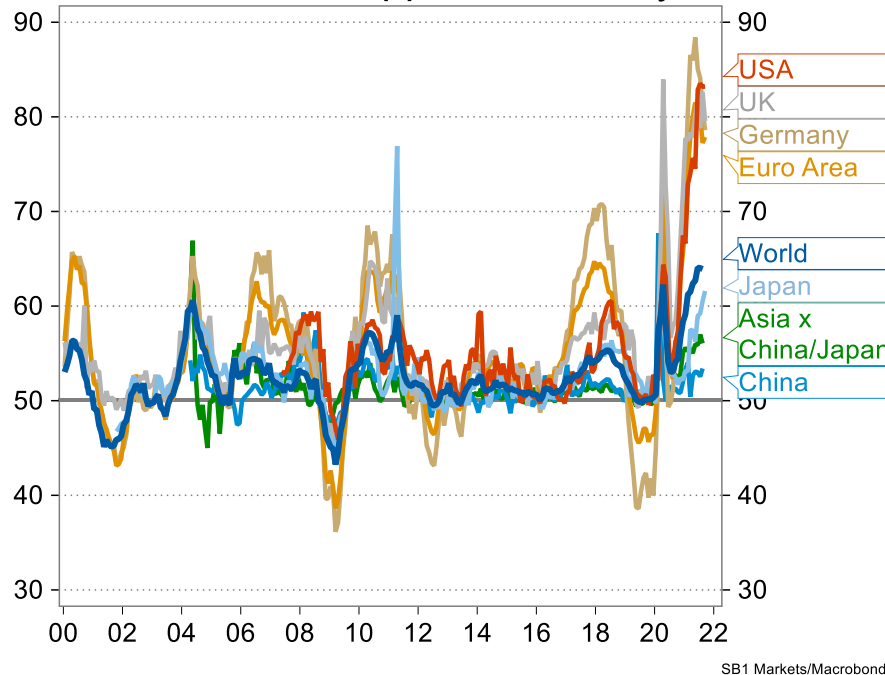
- We estimate a 1 p decline in the **manufacturing PMI** and a 0.6 p drop in **services PMI**
- The slowdown in the manufacturing PMI was broad
- Services in the EMU fell sharply



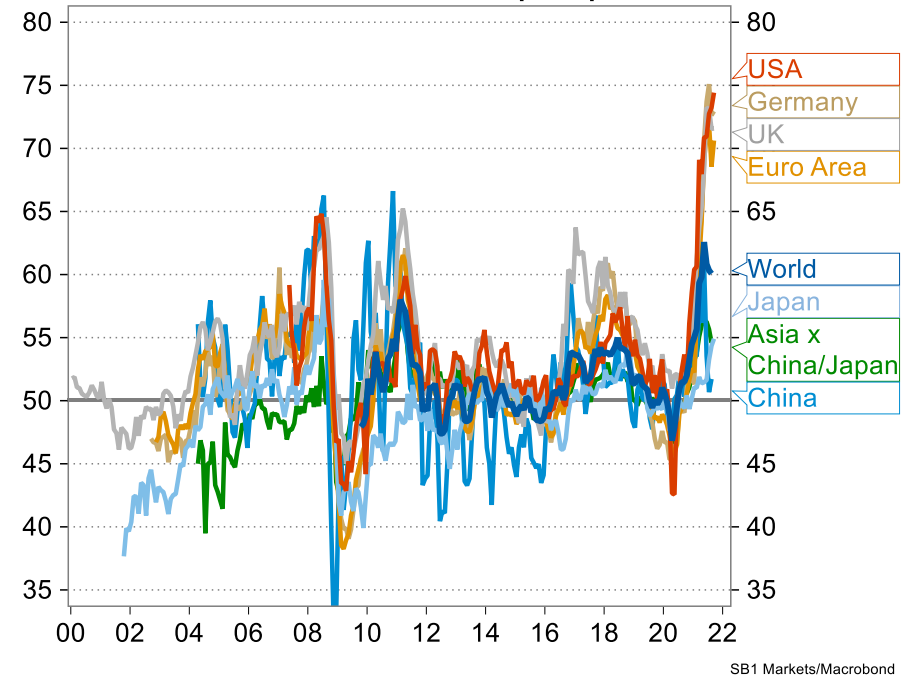
Delivery times still very high

Prices are rising at a rapid pace but a tad slower in August than in July

PMI Manuf. Suppliers' Delivery Times



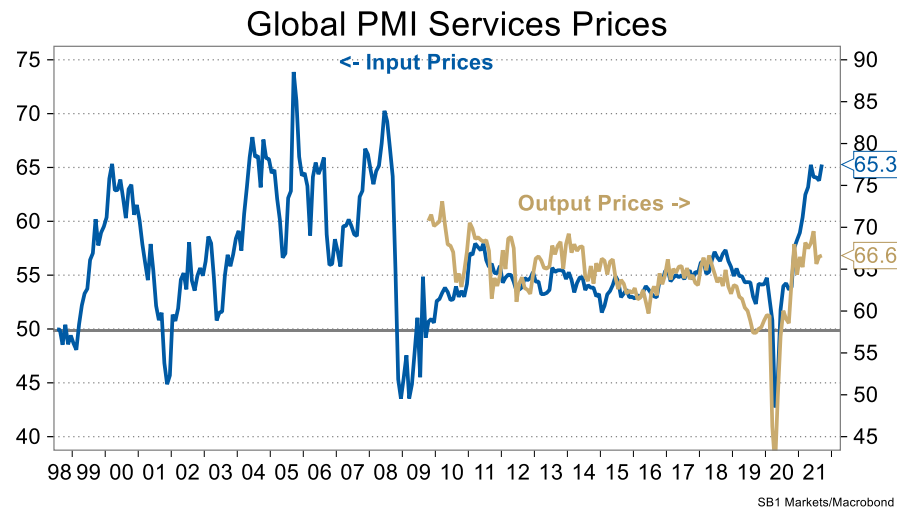
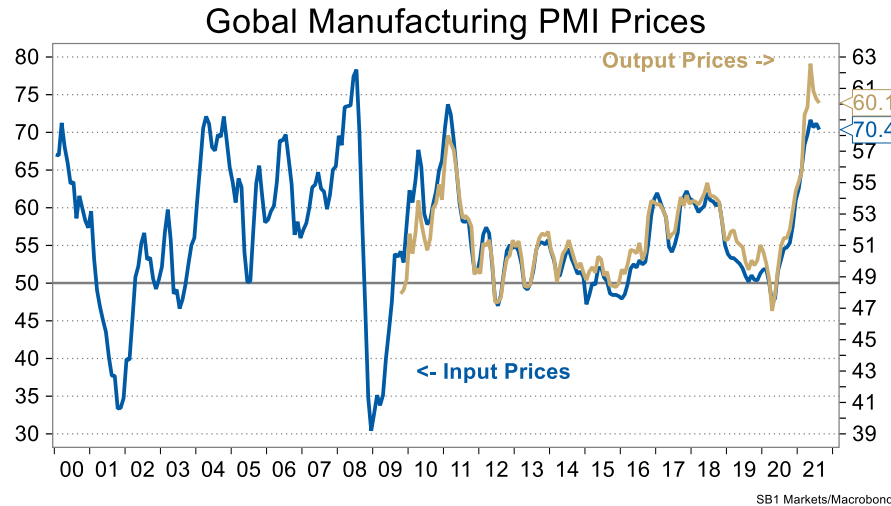
PMI Manuf. Output prices



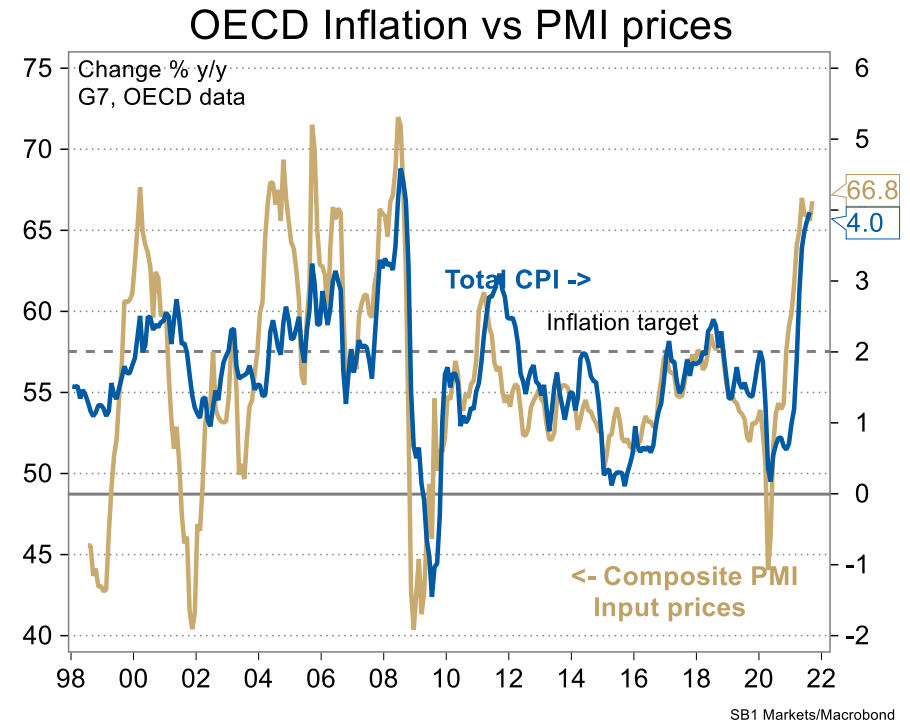
- **The global delivery times** PMI sub-index (changes in delivery times vs the previous month) has probably peaked – at a record high level (it was probably close to stable in September). It does not imply delivery times are declining, at least not if companies give an honest answer when asked if delivery times are increasing or decreasing (but the delivery index is below 50 too infrequently, we suspect companies rather do answer whether delivery times are short or long)
- **The global manufacturing output price index** probably declined in September, and the peak may have been in June. The level is still very high (just marginally down from ATH in June) – and companies are still reporting very rapid price increases

The global PMI price index has probably peaked – but remains at high level

Output prices are slowing the manufacturing sector but input prices in services still growing faster



The last services PMI priced based on preliminary PMIs from EMU, Japan, UK, and the US

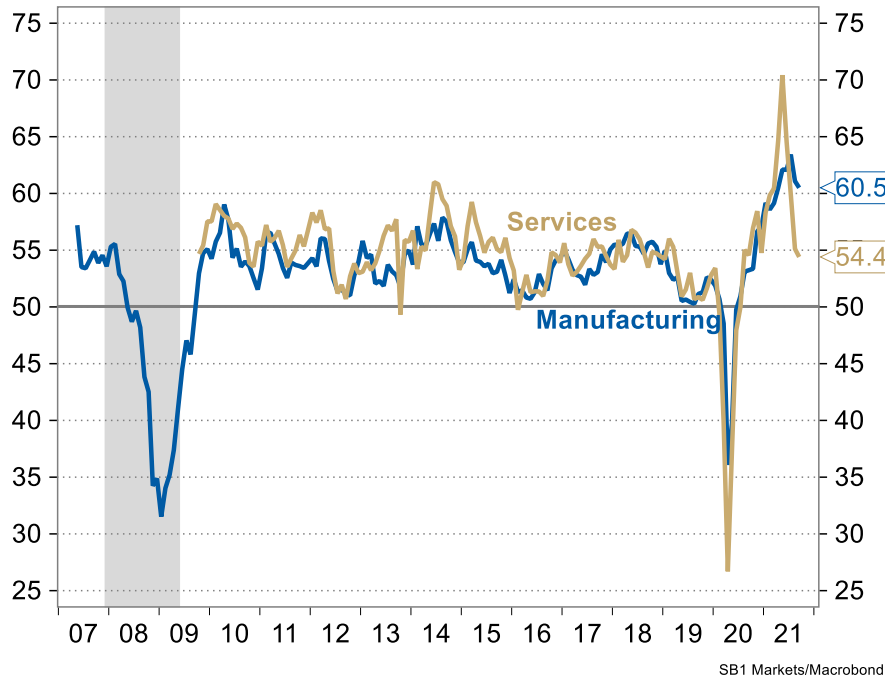


- Sure, companies world wide are reporting price increases far above normal level, and actual inflation prints will remain elevated for months (at least annual growth rates)

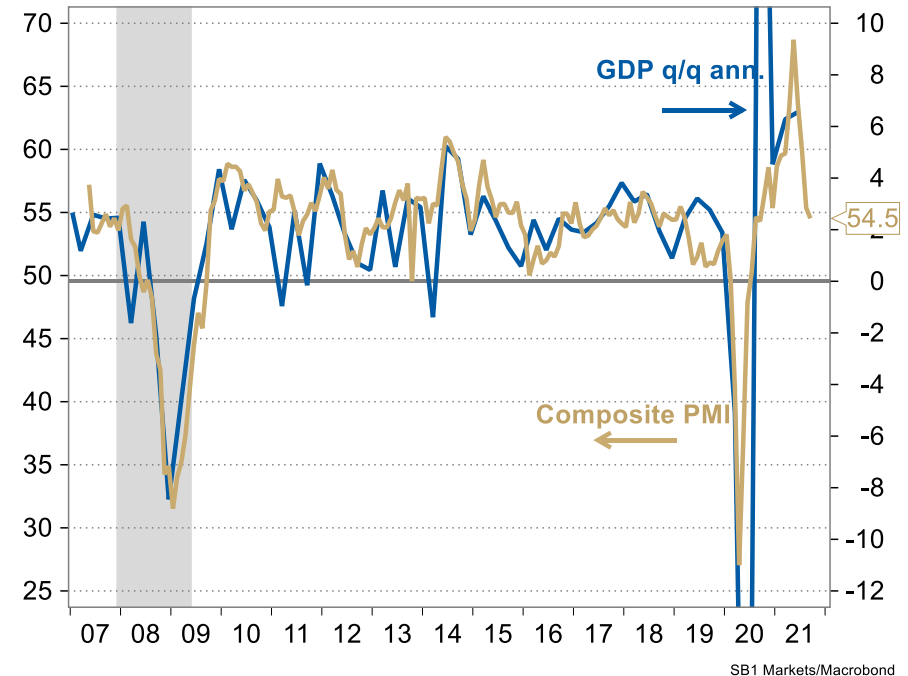
Both services and manufacturing slowed in September

Delta outbreak likely explains part of the fall in the services PMI

USA Markit's PMI



USA Markit's PMI vs GDP

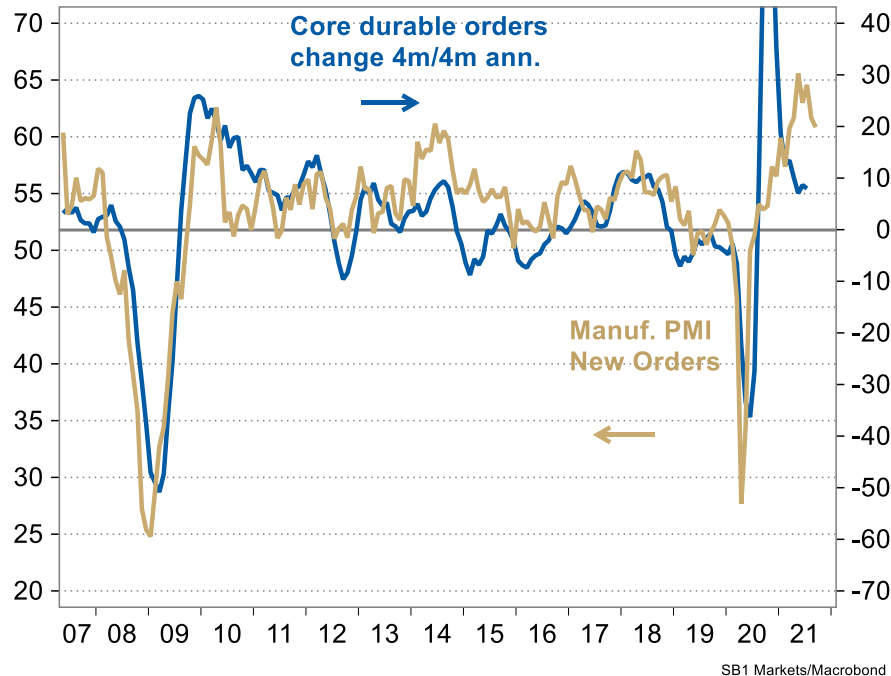


- **The composite PMI** fell 1 p to 54.5; 0.5 p below expectations – and now signals just 2.5% GDP growth,
 - » The **manufacturing** index fell by 0.6 p to 60.5, expected down 0.1 p 61.0. The level is of course still a very high level
 - » The **services PMI** fell by 0.7 p to 54.4, expected down 0.1 to 54.9. 4 months ago the index was above 70, the highest ever, by far. The level is slightly below average
- The Delta outbreak may explain the continued slowdown in services – but slower growth is reasonable when activity has recovered substantially. Lack of labour is also hampering growth
- **Prices** are still soaring – and cost inflation was the 2nd highest since the composite index was introduced in 2009

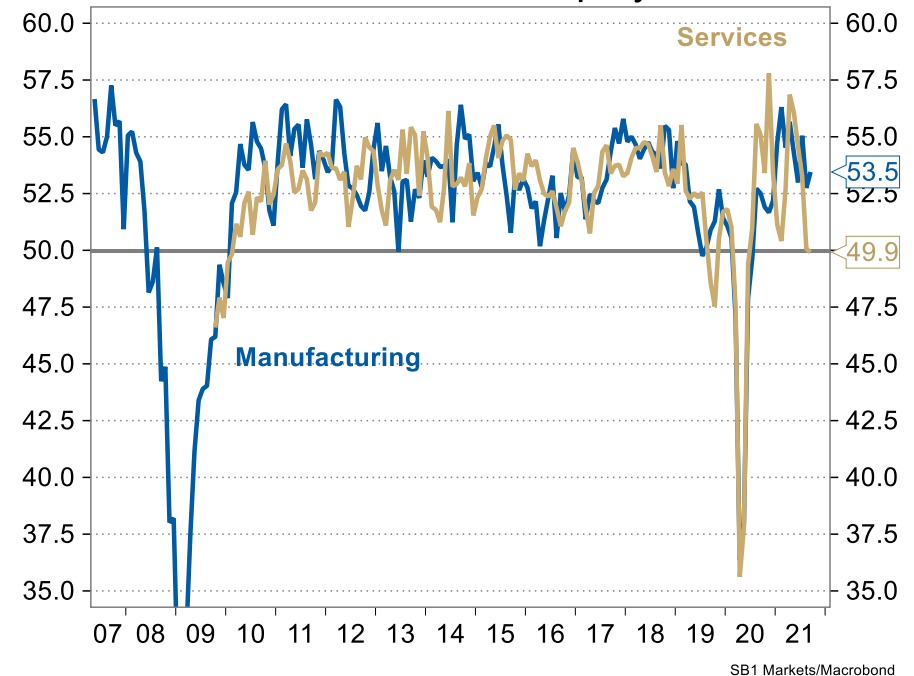
Manufacturing orders still strong – and employment growth slightly up in Sept.

No employment growth in Services in Sept, in line with what other reports are telling us

USA Durable orders vs PMI orders



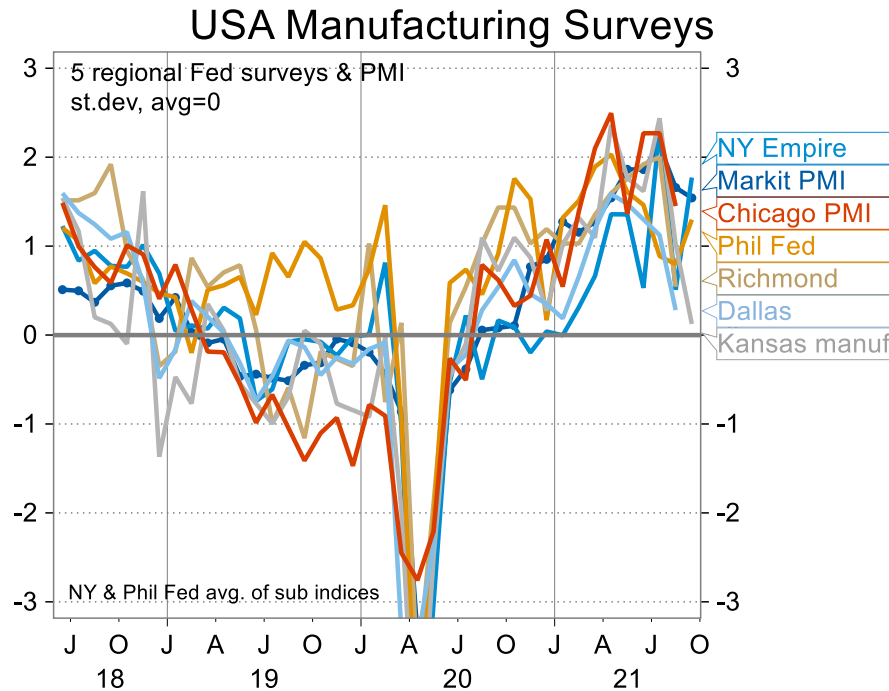
USA Markit's PMI Employment



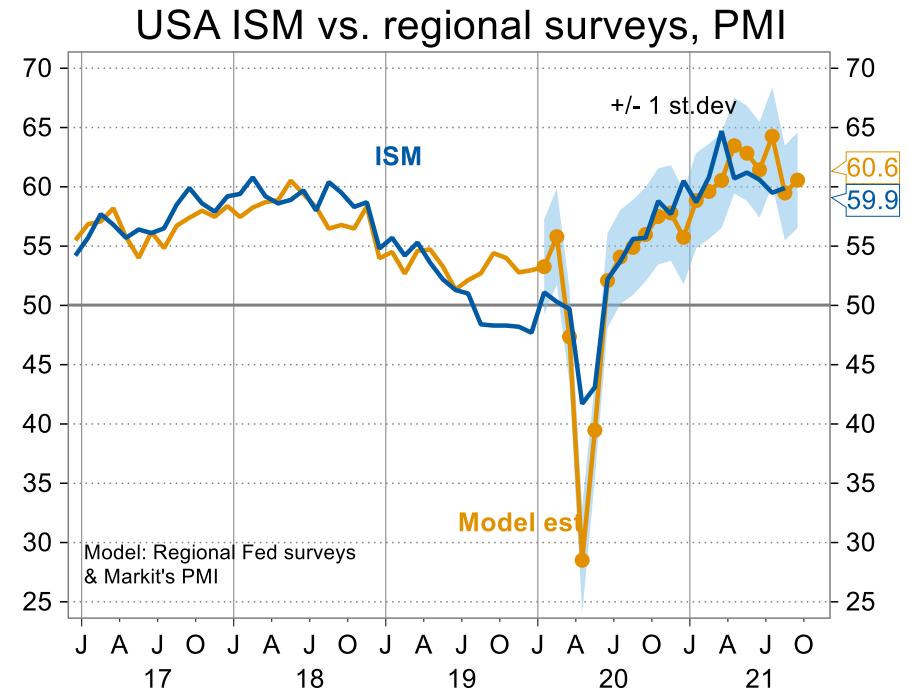
- We believe that the rise in the spread of the Delta variant as well as a lack of supply of labour are the reasons for the downturn in the services employment index. Employment growth in the manufacturing sector was stronger in September

Mixed among manufacturing surveys: In sum up in September

Kansas Fed, Markit PMI down but both Phil & NY Fed sharply up



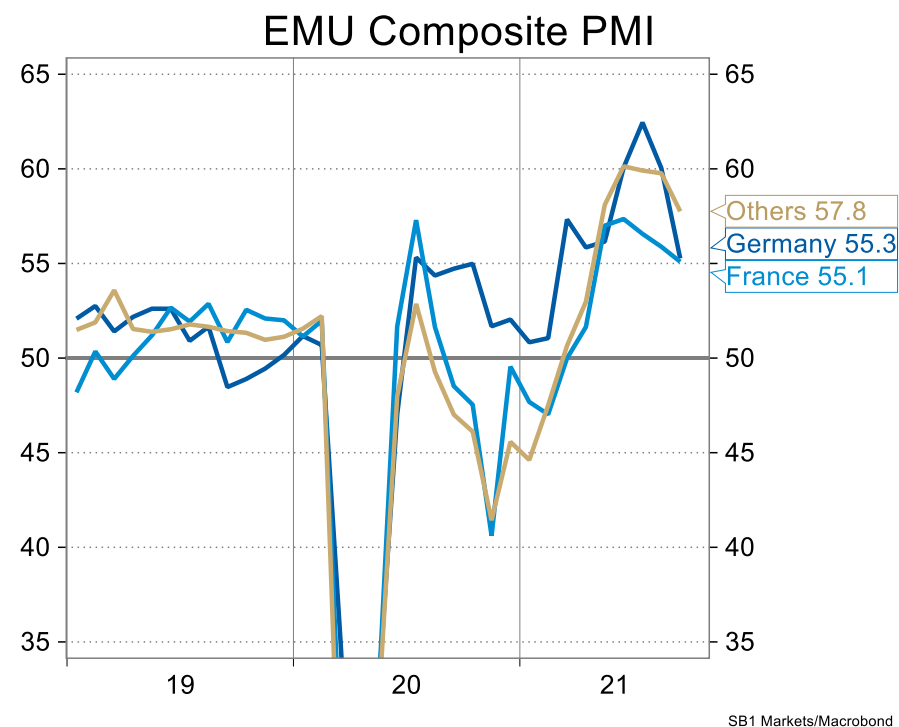
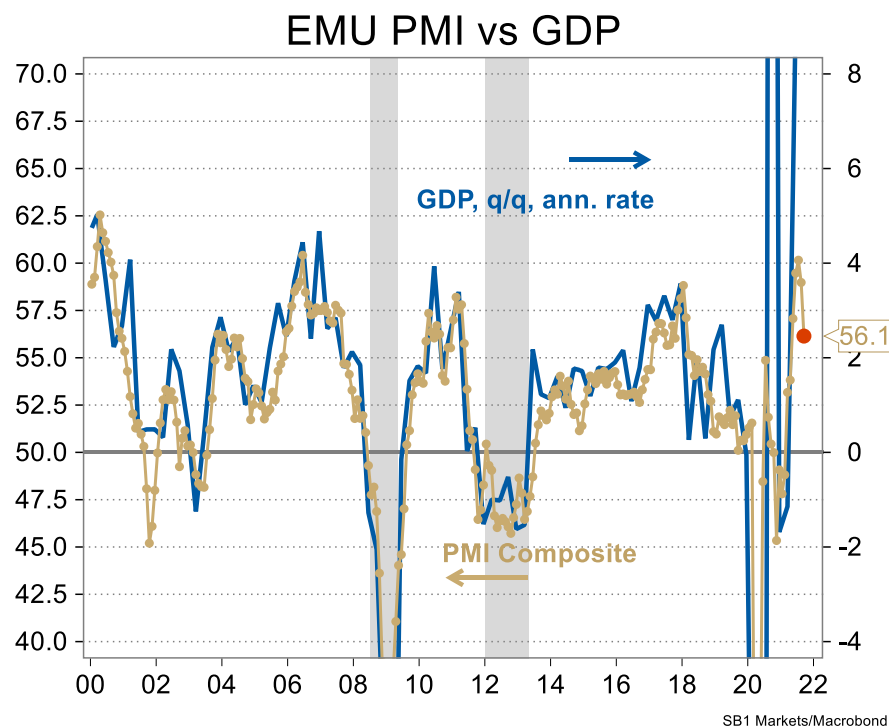
SB1 Markets/Macrobond



SB1 Markets/Macrobond

EMU PMI weaker on supply chain constraints, *weaker demand* & virus concerns

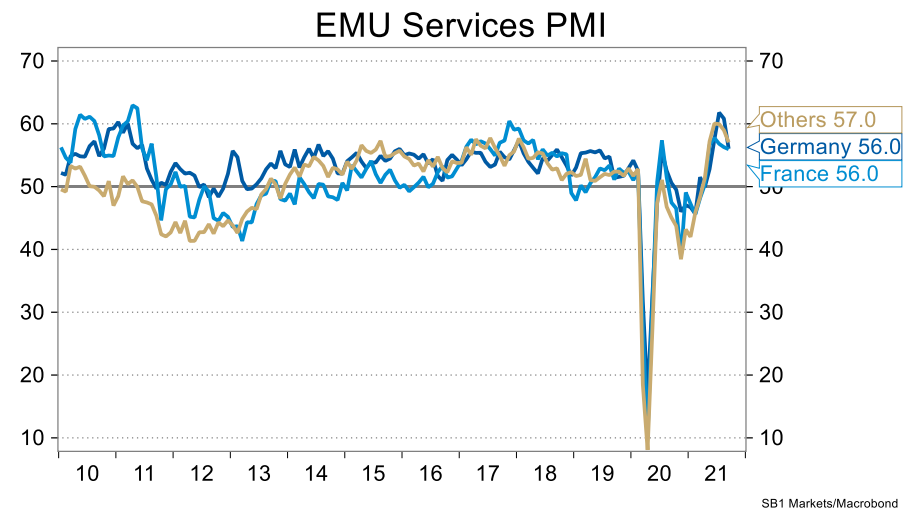
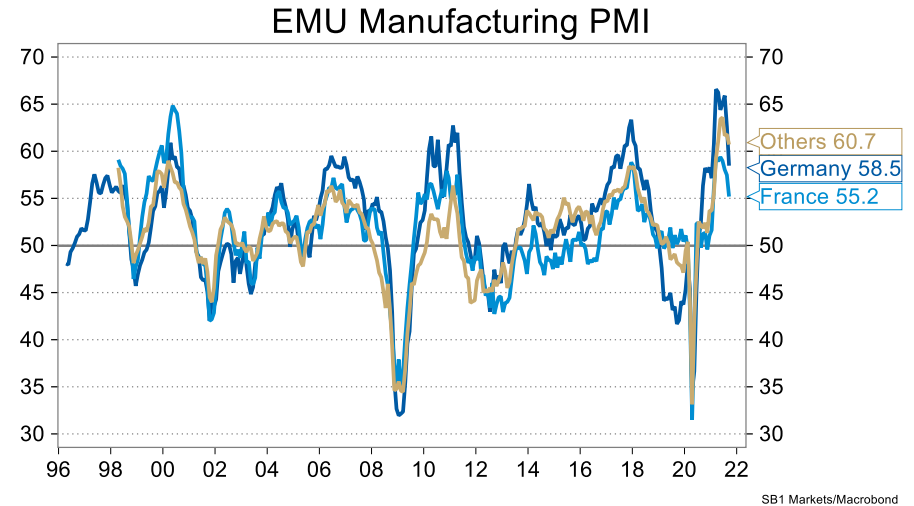
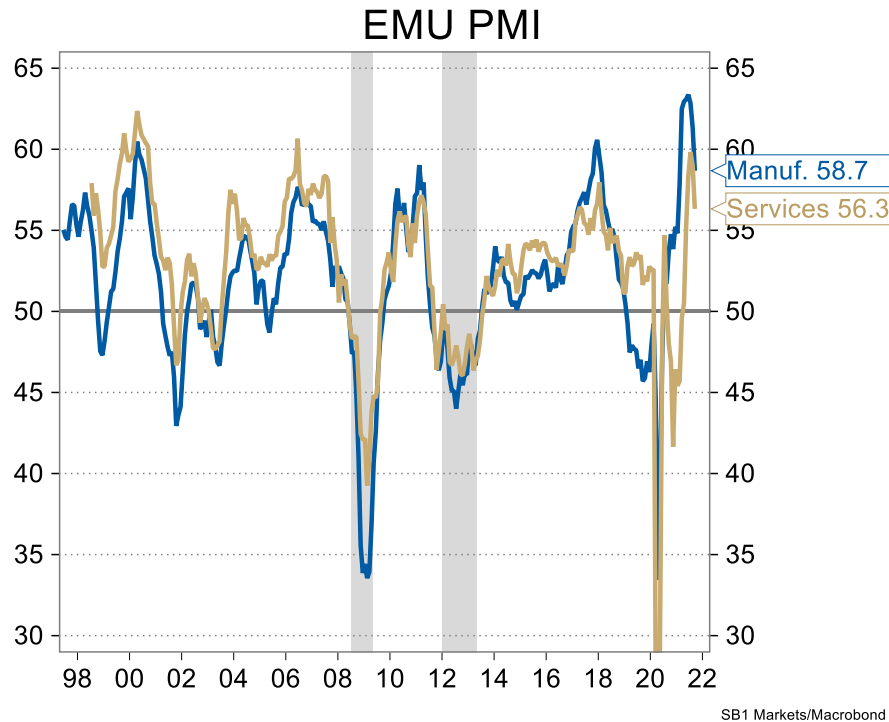
PMI still signalling growth above trend



- **The composite PMI** fell 2.9 p to 56.1 (expected 58.5), which signals a 2.5% pace of growth in GDP (or 0.6 % per quarter)
 - » The composite index fell in Germany and France. The average of Spain & Italy (and very likely both countries) was also down – but the PMI for these latter countries are still at impressive levels
 - » The **manufacturing PMI** fell 2.9 p to 56.3, expected down 0.9 p to 59.0
 - » The **service sector PMI** fell 2.7 p to 56.3, expected down 0.5 p to 58.5

PMIs down everywhere, both in manufacturing & services

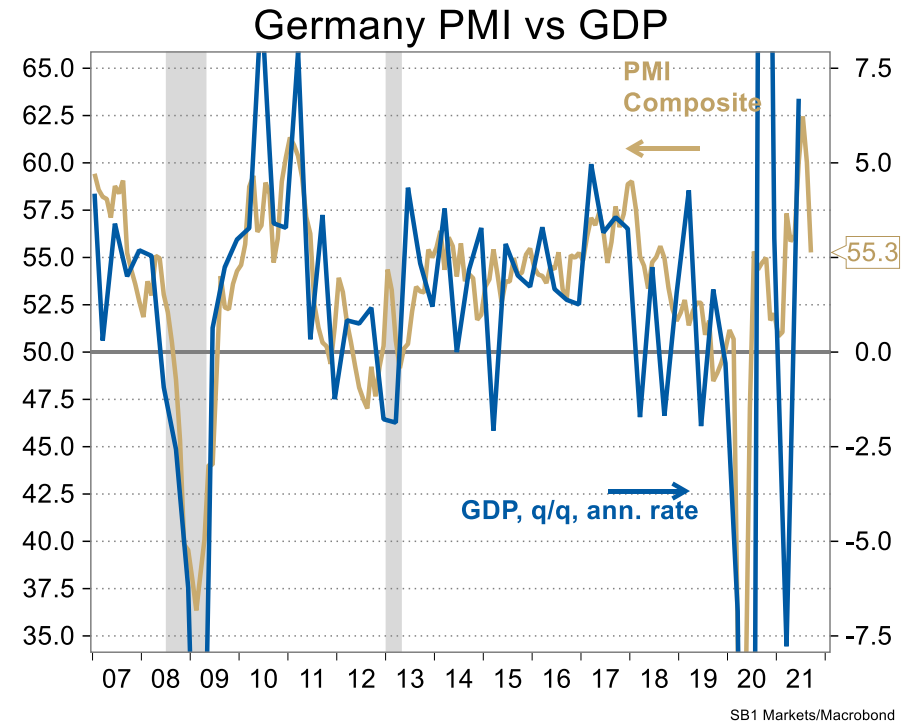
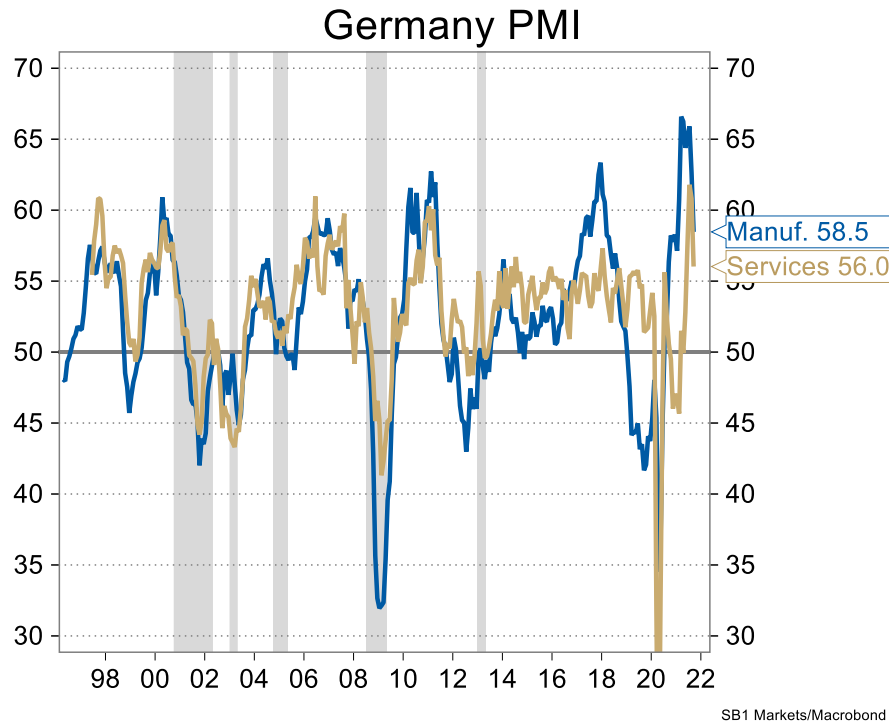
Still, growth above trend is reported everywhere



- The **service sector PMI** fell 2.7 p to 56.3
- The **manufacturing PMI** fell 2.9 p to 56.3, expected 59.0
- All indices are above average, signalling growth above trend

Germany: PMI dropped sharply in September – level is still decent

The composite PMI was down 4.7 p to 55.3, expected at 59.2

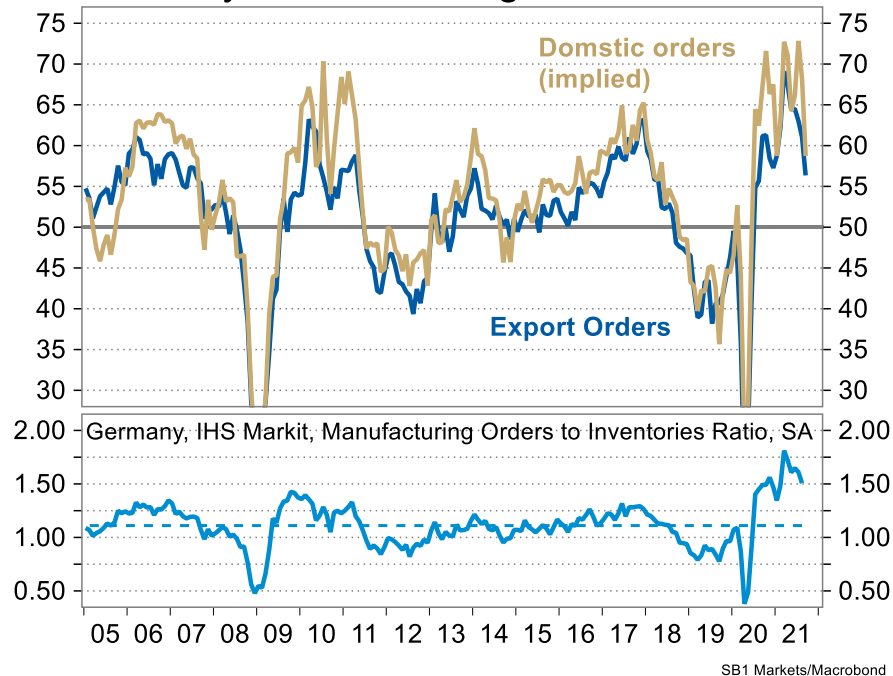


- **The prelim. manufacturing PMI** decreased by 4.1 p to 55.3, expected down 1.1 p to 61.5. The auto sector is very likely to blame, while supply constraints are still restricting growth, and price pressures are weighing on sentiment
- **The service sector PMI** was down 4.8 p to 56, expected at 60.2
- **The composite PMI** no signals around 2.5% GDP growth, which is more or less at the German trend

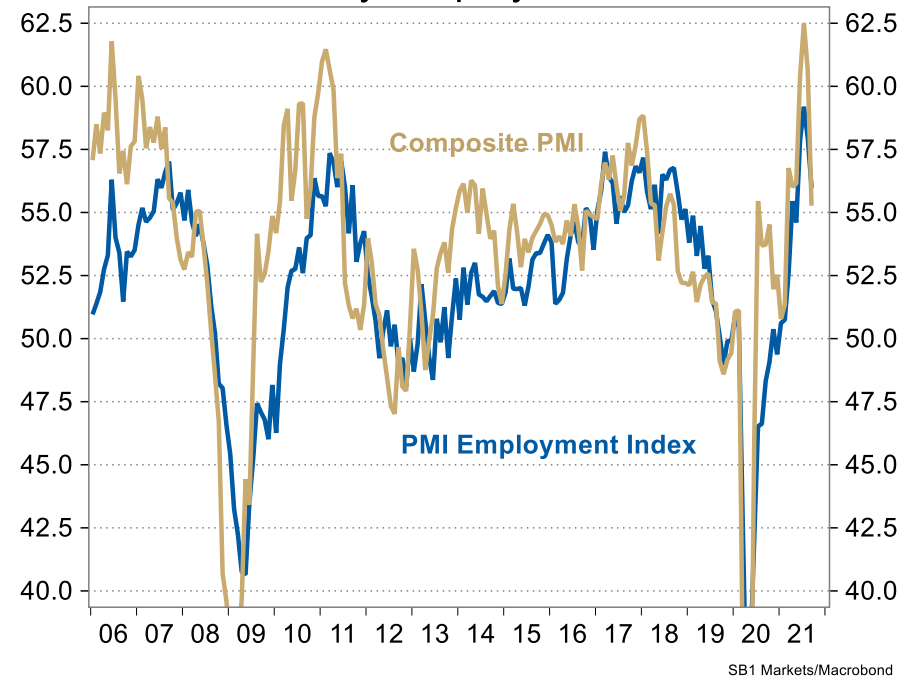
Germany: Orders and Employment indices further down

... but levels are still acceptable

Germany Manufacturing PMI New orders



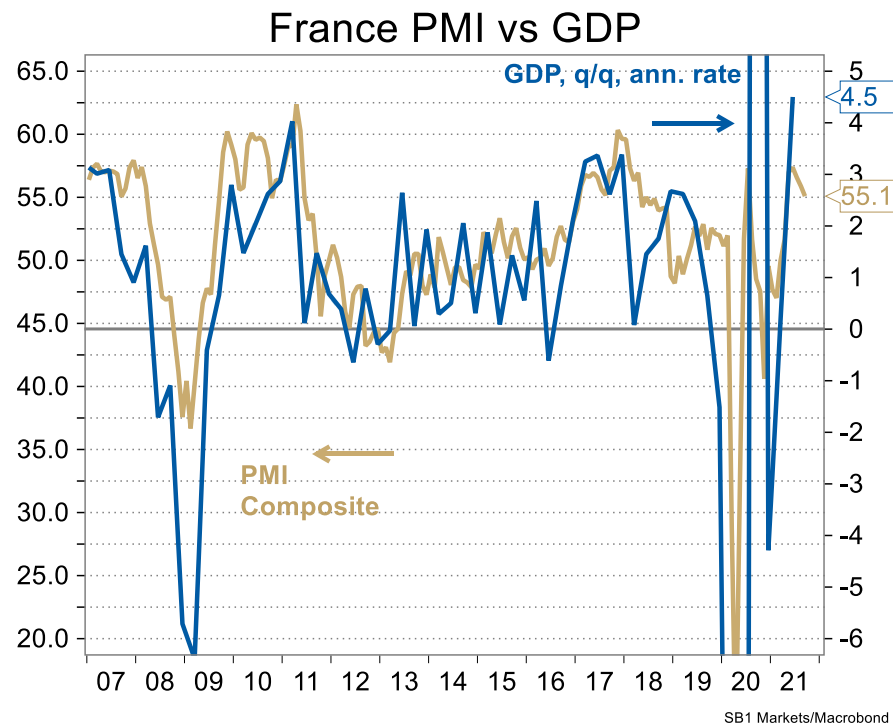
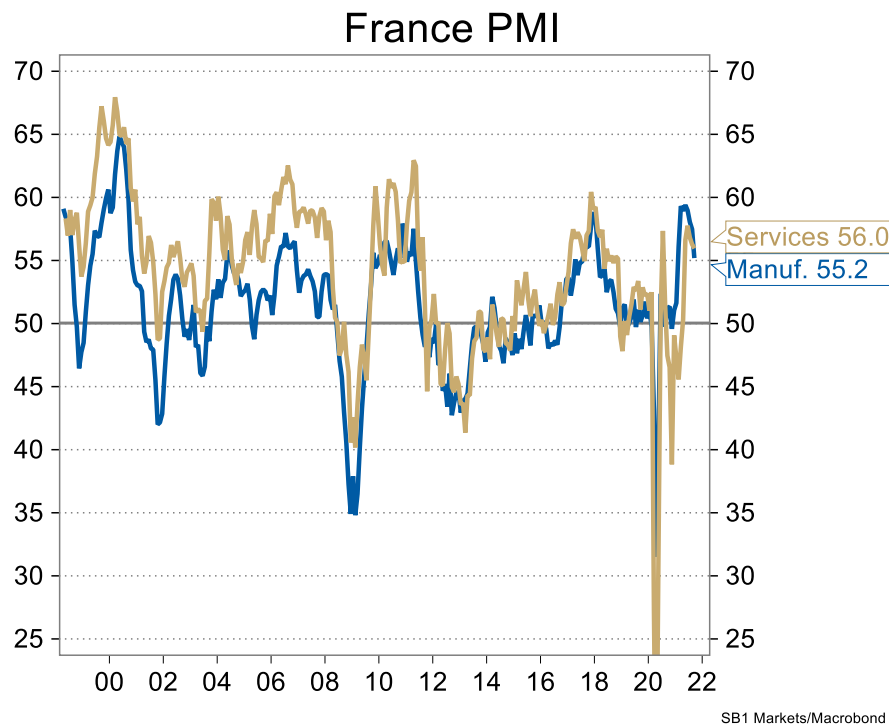
Germany Employment PMI



- Weaker demand for new autos in particular is drawing on new orders

France: The PMIs further down in September

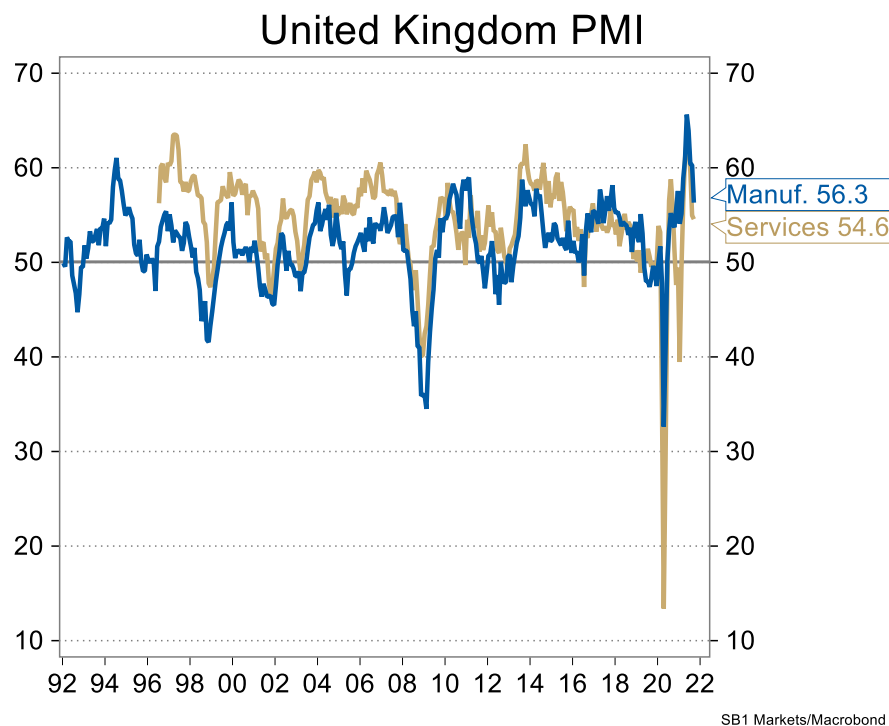
PMI still signals 2.5% growth, which is not impressive following the reopening of society



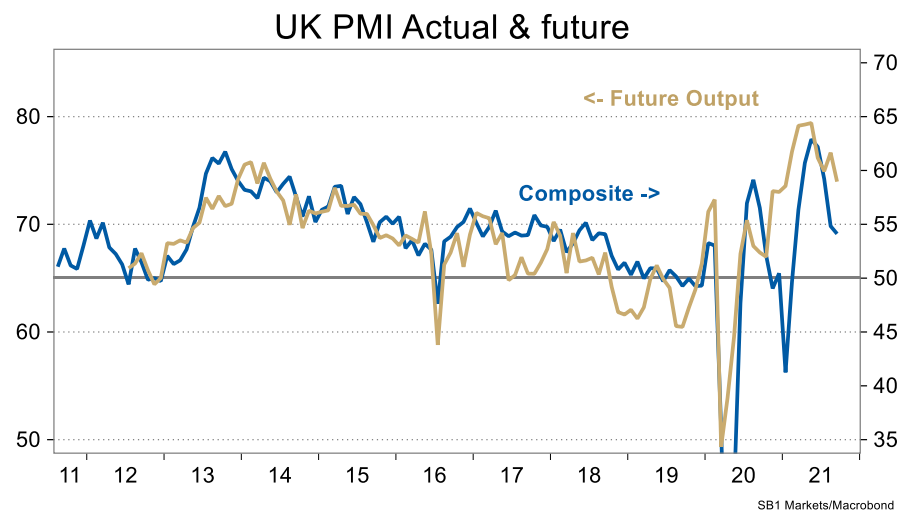
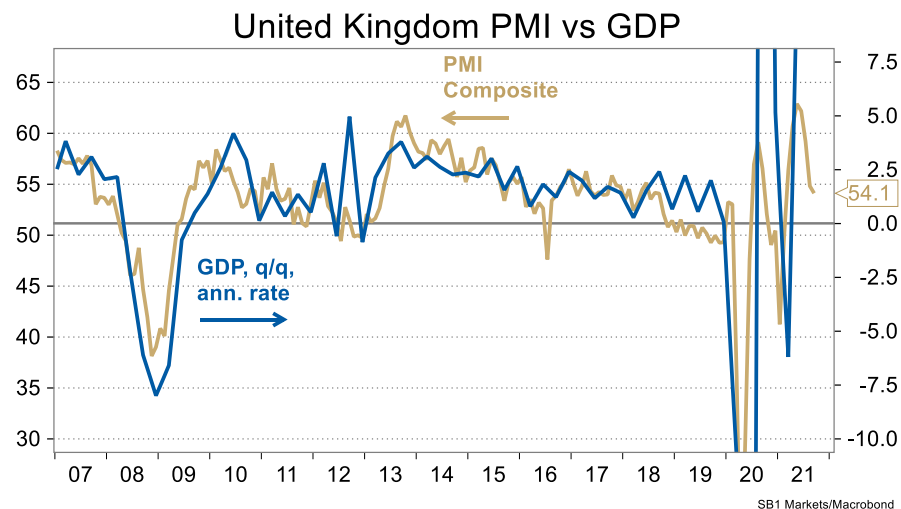
- The **services** PMI fell 0.3 p to 56.0 (in line with expectations), while the **manufacturing** PMI fell 2.3 p to 55.2
- The composite index fell 0.8 p to 56, which is 0.7 p below market expectations

UK PMIs: Supply constraints contains growth - levels still signal expansion

Input cost pressure remains and charges are at ATH



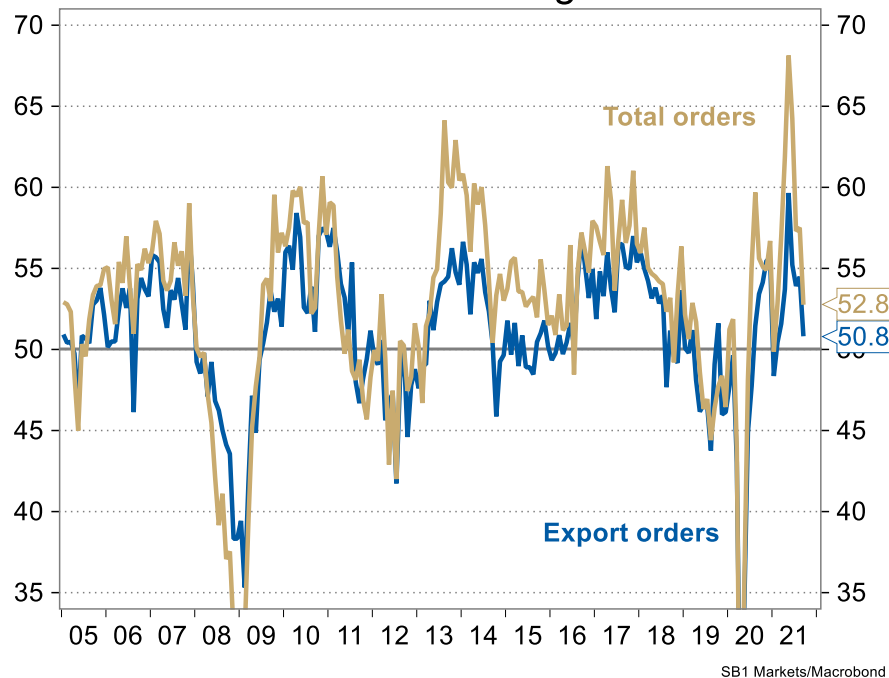
- **The composite PMI** fell 0.7 p to a 7-month low at 54.1, signalling 2%+ growth (but the precision is not that impressive).
 - » Firms cited supply issues (materials and labour) as reasons for dip – but growth is still well above trend
- **The total manuf. PMI** was down 4 p to 56.3
- **Services PMI** decreased by 0.4 p to 54.6
- **Employment growth** was still the 2nd strongest in 25 years (ATH was in Aug), according to Markit



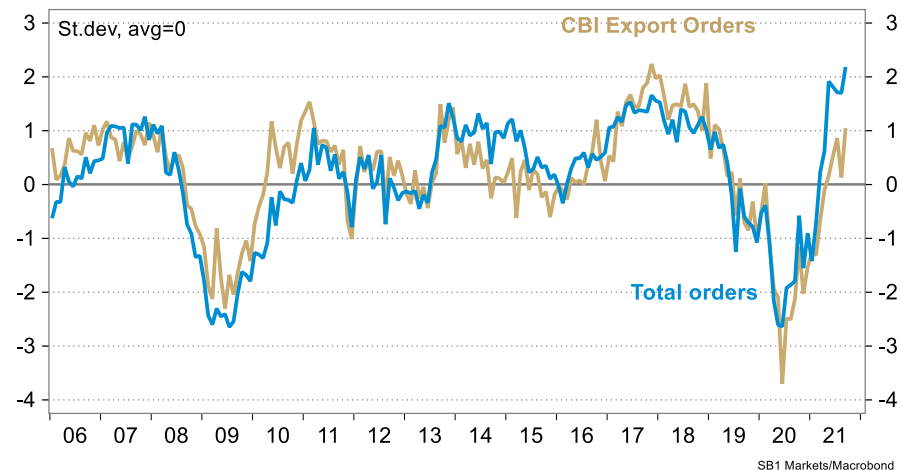
New orders down to a 7-month low, but still growing

PMI export orders down to an average level, the CBI index report growth above trend

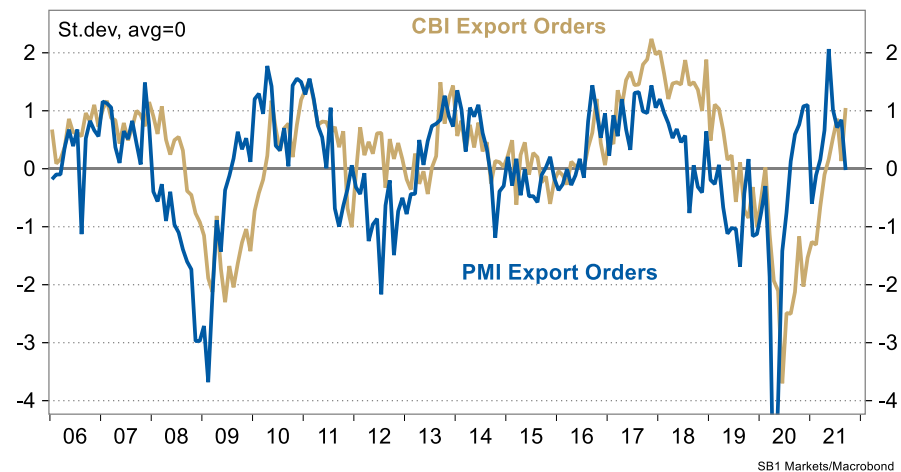
UK Manufacturing PMI



UK CBI Manuf. orders vs PMI

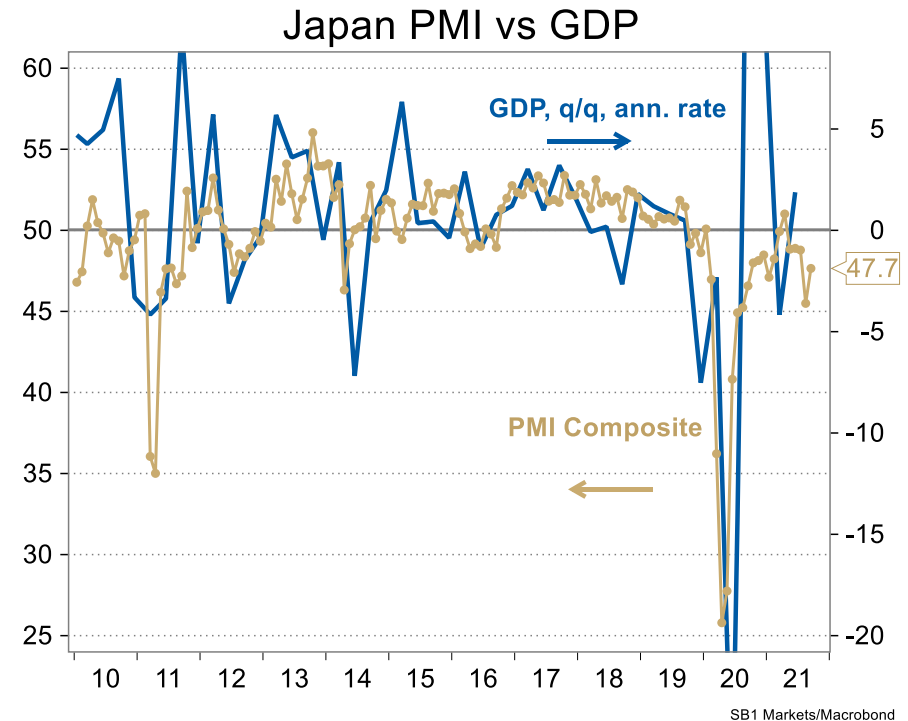
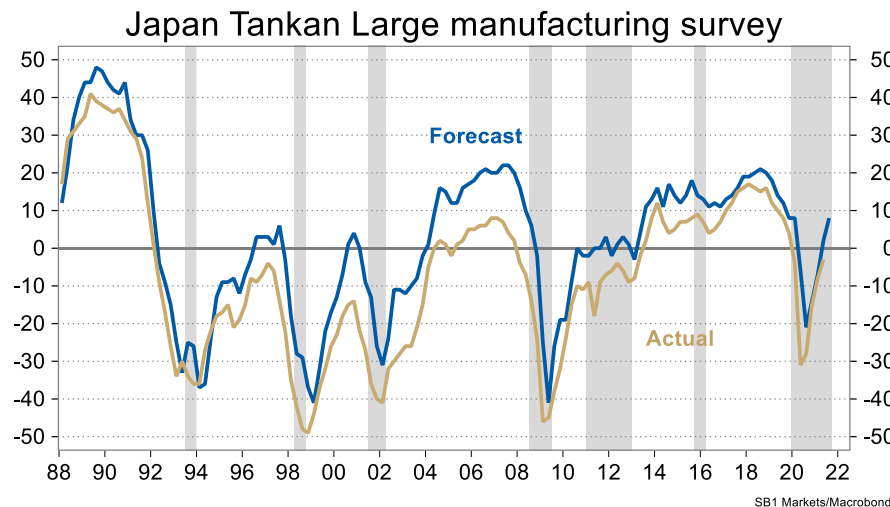
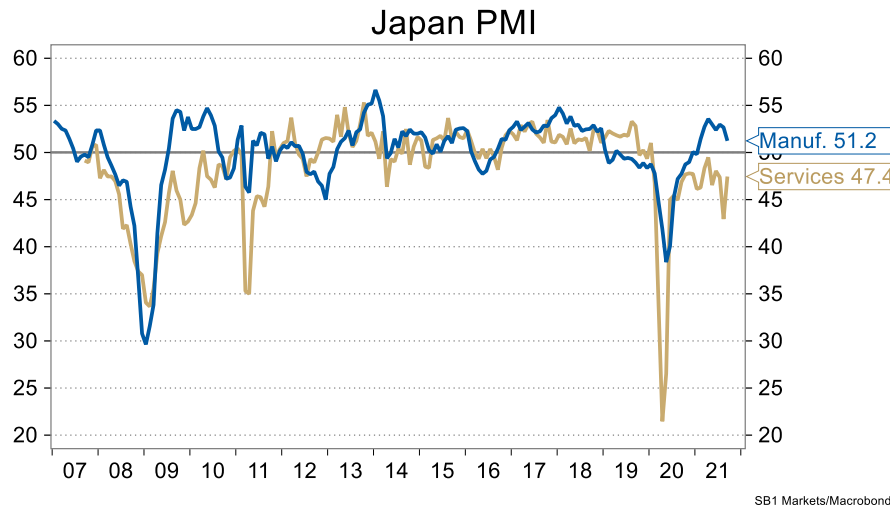


UK CBI Manuf. orders vs PMI



Japan PMI stronger, but still in contraction territory

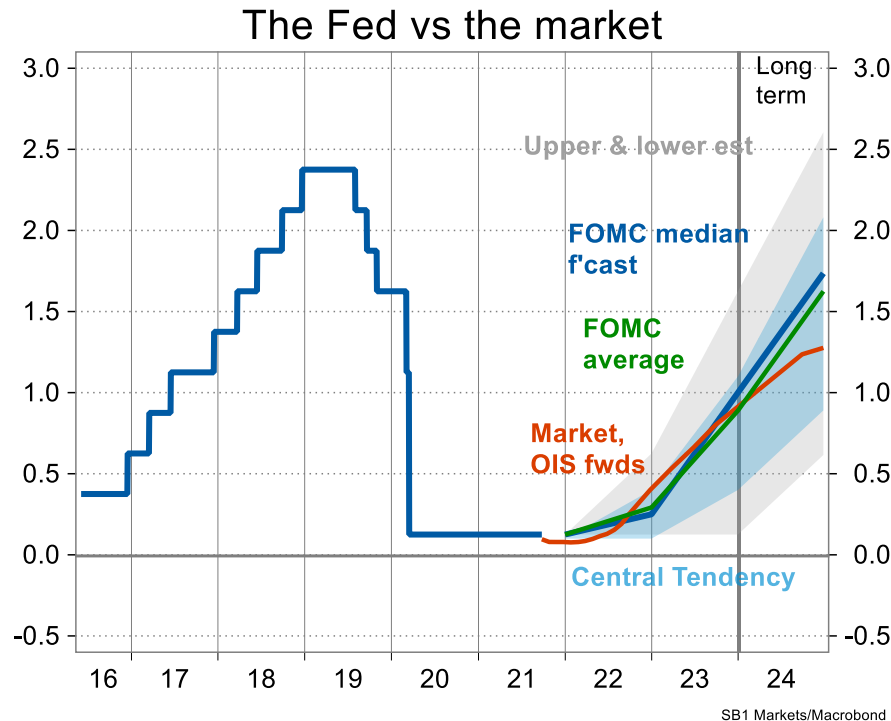
The composite PMI at 47.7 signals a 2% ann. contraction in GDP



- The **composite PMI** was unch. at 47.7 and signals a moderate contraction in GDP, but the correlation is not impressive
- **Manufacturing PMI** fell 1.5 p to 51.2, and here too price pressures and supply issues are containing growth. However, output prices were softer in September...
- The **services PMI** bounced back 4.5 p in Sept., but services are still contracting, likely due to Covid restrictions which will convene at the end of the month

Fed very likely to announce tapering in Nov - 50/50 split on rate hike in '22

... the Bank argues a rate lift-off is decoupled from tapering, but is it though...?



- The FOMC left the **target rate** unchanged at 0-0.25%. No change on the **QE volume** either for the time being, USD 120 bn per month in Treasury bonds (80 bn) and mortgage bonds (40 bn) – and decision was unanimous
- However, 'the committee judges that a moderation in the pace of asset purchases may soon be warranted', and that tapering would conclude at the middle of 2022
- The FOMC once more gradually changed its descriptions of the economy: 'The sectors most adversely affected by the pandemic have improved in recent months, but the rise in COVID-19 cases has slowed their recovery' ... **'The path of the economy continues to depend on the course of the virus.** Progress on vaccinations will likely continue to reduce the effects of the public health crisis on the economy, but risks to the economic outlook remain', is the current wording. Six weeks ago, the FOMC said *the sectors most adversely affected by the pandemic have shown improvement but have not fully recovered*
- The FOMC members lifted their **inflation f'cast** substantially, and the expected trajectory is now well above Fed's 2%-over-time-target. **GDP growth** was revised marginally down. The **unemployment** estimate was lifted by 0.3 pp for Q4-22, but left unch for 22 and 23 (down to 3.5%)
- The average/median **dot-plot** interest rate path was lifted by 0.2 – 0.4, more than Norges Bank revised its path. Two members shifted the timing for the first hike to 2022 from '23, and 9 of 18 members favours next year
- Chairman Powell tried his best to convince the market that tapering and hiking rates are completely decoupled, but they can't be (even if they formally are) ... According to the dot-plot, half of the members sees a hike in '22, and though Powell still claims inflation is transitory, the tone and projections suggest that the FOMC is in fact more worried about inflation
- **Market reactions: Interest rates rose 7 -13 bps, all over the curve. Real rates did the 'heavy' lifting**

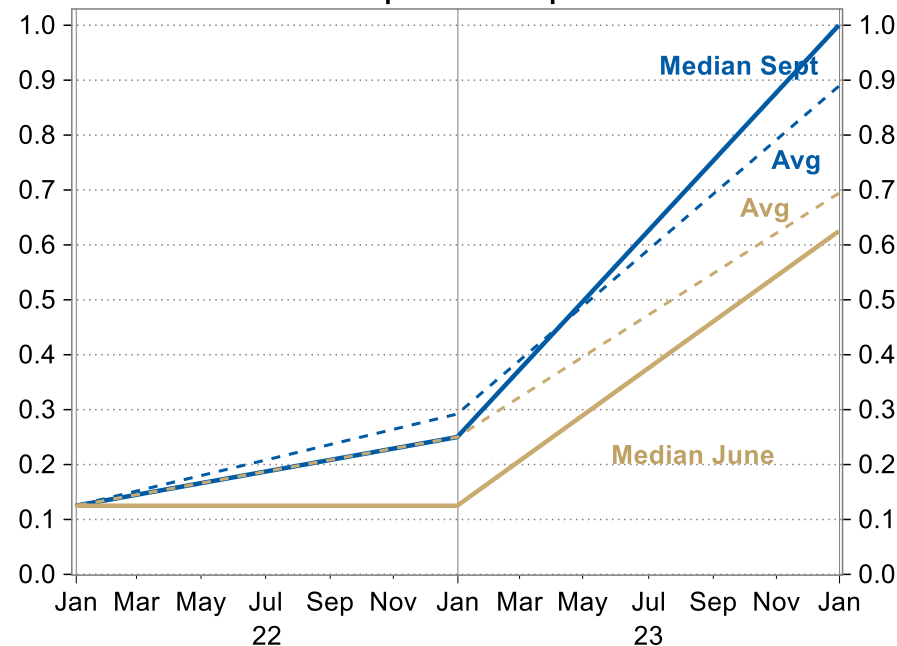
Inflation revised up for all years. GDP for '21 revised down, '22 & '23 revised up

And the dot plot, rate estimates were lifted by up to 40 bps, at least 3 hikes in 22/23

Percent

| Variable | Median ¹ | | | | |
|---|---------------------|------|------|------|------------|
| | 2021 | 2022 | 2023 | 2024 | Longer run |
| Change in real GDP | 5.9 | 3.8 | 2.5 | 2.0 | 1.8 |
| June projection | 7.0 | 3.3 | 2.4 | | 1.8 |
| Unemployment rate | 4.8 | 3.8 | 3.5 | 3.5 | 4.0 |
| June projection | 4.5 | 3.8 | 3.5 | | 4.0 |
| PCE inflation | 4.2 | 2.2 | 2.2 | 2.1 | 2.0 |
| June projection | 3.4 | 2.1 | 2.2 | | 2.0 |
| Core PCE inflation ⁴ | 3.7 | 2.3 | 2.2 | 2.1 | |
| June projection | 3.0 | 2.1 | 2.1 | | |
| Memo: Projected appropriate policy path | | | | | |
| Federal funds rate | 0.1 | 0.3 | 1.0 | 1.8 | 2.5 |
| June projection | 0.1 | 0.1 | 0.6 | | 2.5 |

FOMC 'Dot plot' - Sept vs. June

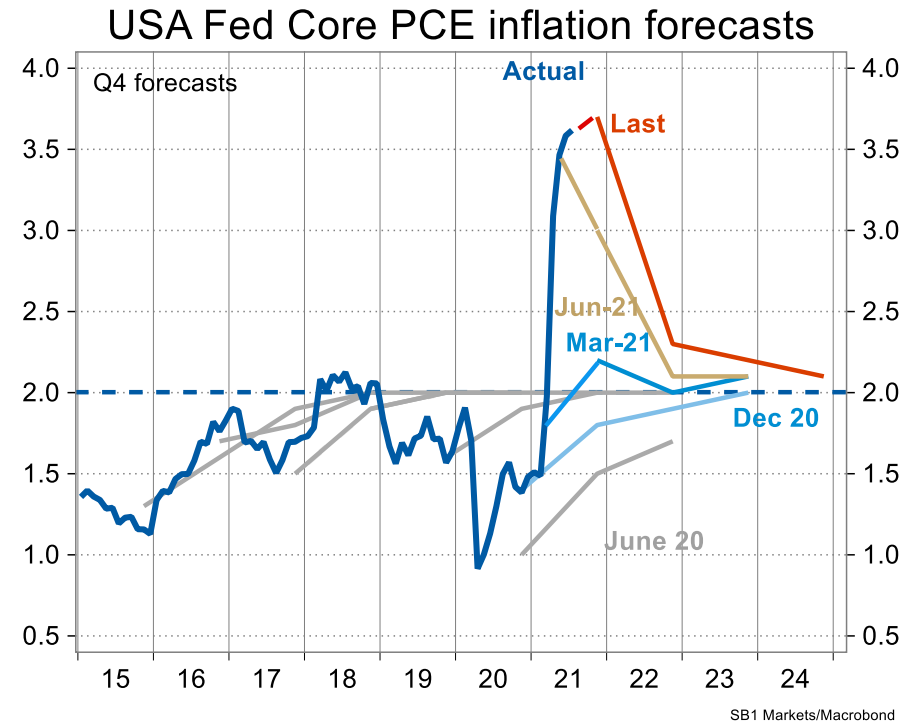
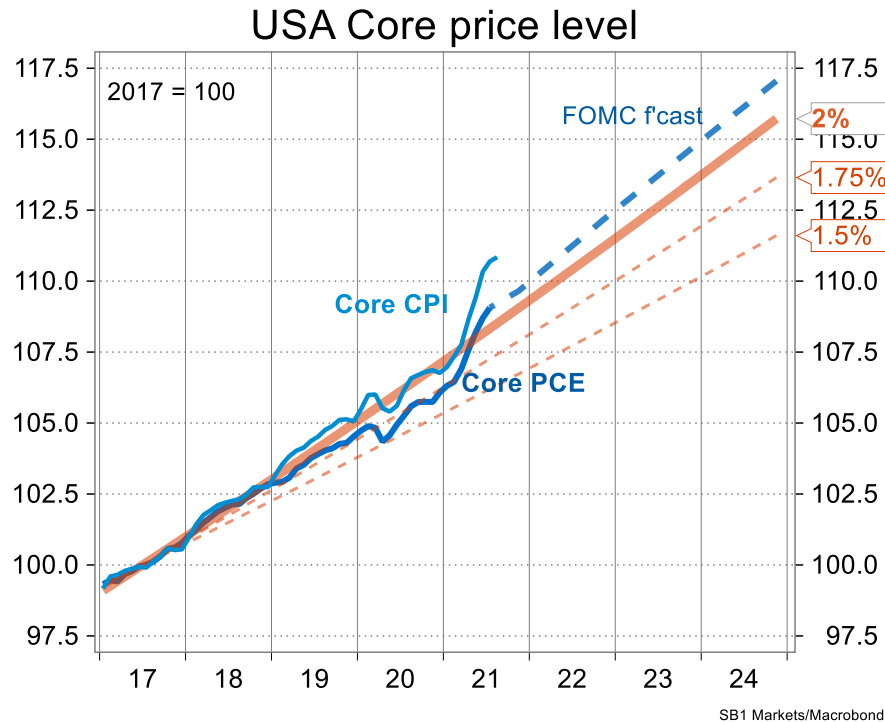


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- The **'21 GDP f'cast** was revised down by 1.1 pp, after having been revised up 0.5 pp in June. **Unemployment** in '21 was revised up by 0.3 pp to 4.8%, but is expected to be lower than the assumed NAIRU at 4.0% in 2022. The inflation forecast was substantially revised up, once more
- The dot plot**, the individual FOMC members interest rate forecasts, were revised up by 0.2 – 0.4 pp, more than Norges Bank upward revision. The committee is split 9-9 vs. a 2022 hike. By the end of 2023, 3 to 4 hikes are signalled, almost 2 more than indicated in June
- The long term neutral Fed funds rate** is assumed to be 2.5% (unch), implying a (long term) 0.5% positive real rate. As the rate is assumed to stay well below 2% for the coming years, and inflation is expected to stay above 2%, the bank plans for a continued, and substantial monetary stimulus the coming years, on average a negative real rate at 1.8% ('21 – '24 avg)

Fed lifts the 2021 inflation forecast sharply – and core PCE ‘leave targeted path’!

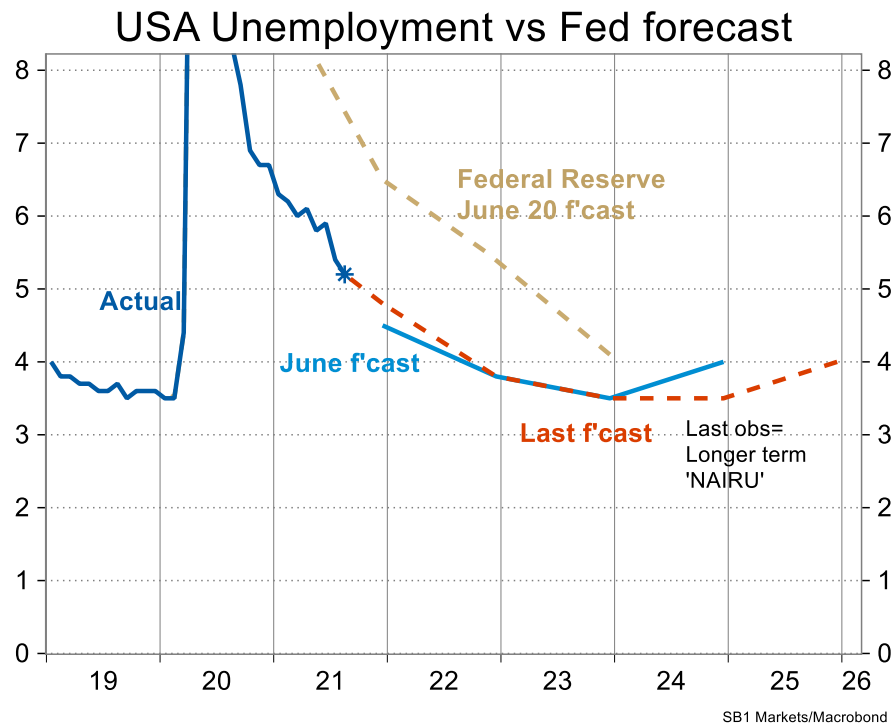
Q4-21 core PCE inflation expected +0.7 pp to 3.7%, and will stay above 2%. The target path is left behind



- Last year the FOMC introduced its new price level target. The bank aims to reach an average rate of inflation of 2% over time. If inflation has been below 2%, annual inflation should be allowed to stay above 2% in order to lift the price level up to the long term 2%-path
- **The Q4-21 core PCE core inflation** estimate was lifted 0.7 pp from the June f'cast to 3.7% (and from the assumed 2.2% in March...). The estimates for '22 and '23 were lifted by 0.1 – 0.2 pp, and are expected at 2.3% and 2.2%. The first '24 f'cast is pencilled to 2.1%. The price trajectory is now well above the 2%-over-time inflation target, suggesting that the Fed will allow inflation to run above target to reach the maximum employment target. However, Powell assured that should inflation come in stronger than expected, the Fed 'would certainly respond'

Unemployment revised up for Q4-21, the down to the previous path

'NAIRU' is still assumed to be 4% - and unemployment is expected to be below that level in '22 – '24

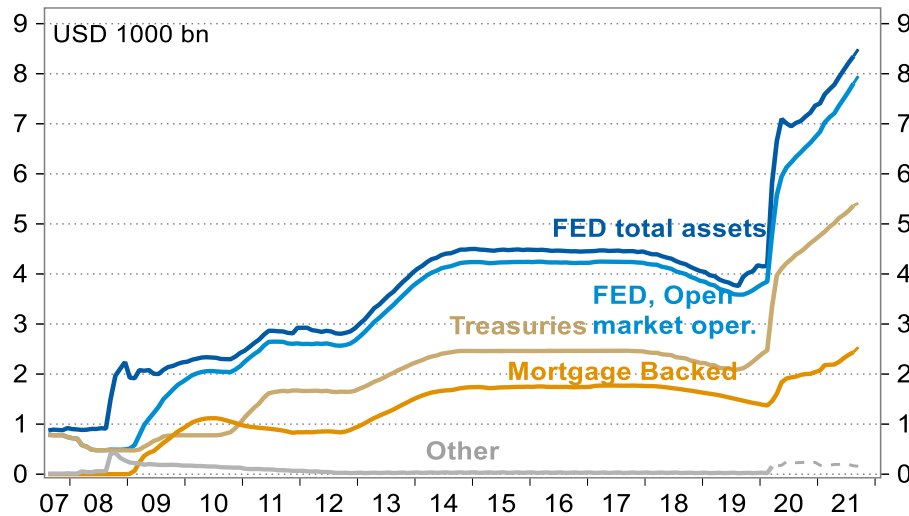


- The (median) FOMC member expects an unemployment rate at the end of 2021 at 4.8%, up 0.3 pp vs the June f'cast, and then down to 3.5% in 2023, close to the level in 2019
 - » The longer term 'neutral' unemployment rate is assumed to be 4% - a well known number for the FOMC members
- The Q4-23 unemployment forecasts have been quite similar since June last year, even if the GDP forecast has been revised up by 5%. The longer run trend growth is still assumed to be the same, at 1.8% per year

FOMC statement: Tapering on the 2021 horizon

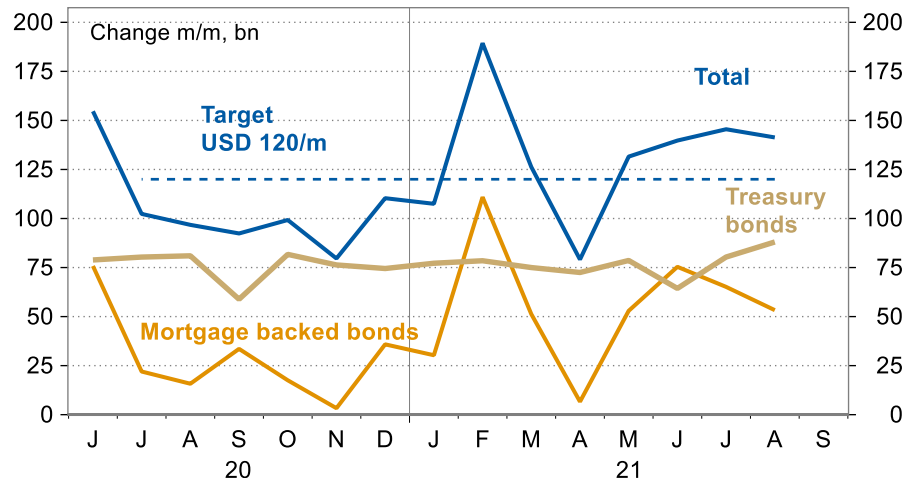
If 'nothing surprising' happens, Fed will announce tapering late '21, and finish by mid '22

USA Federal Reserve balance

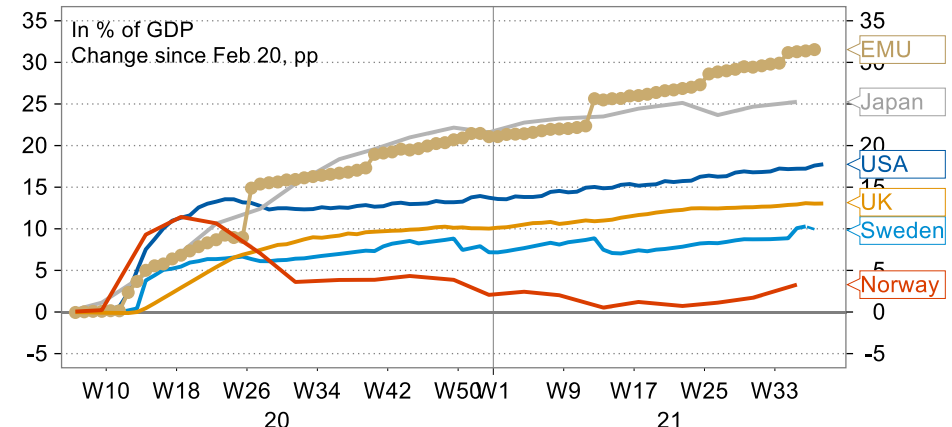


- A November tapering announcement was not announced, but given the wording in the statement and Powell's comment, just a market economic slowdown or a stock market crash would prevent the bank from cutting back its QE program
- Fed will probably reduce the monthly buying by some USD 20 bn each month/month, from the current USD 120 bn level, down to zero next summer

USA Fed Treasuries & MBS



Central banks' balances



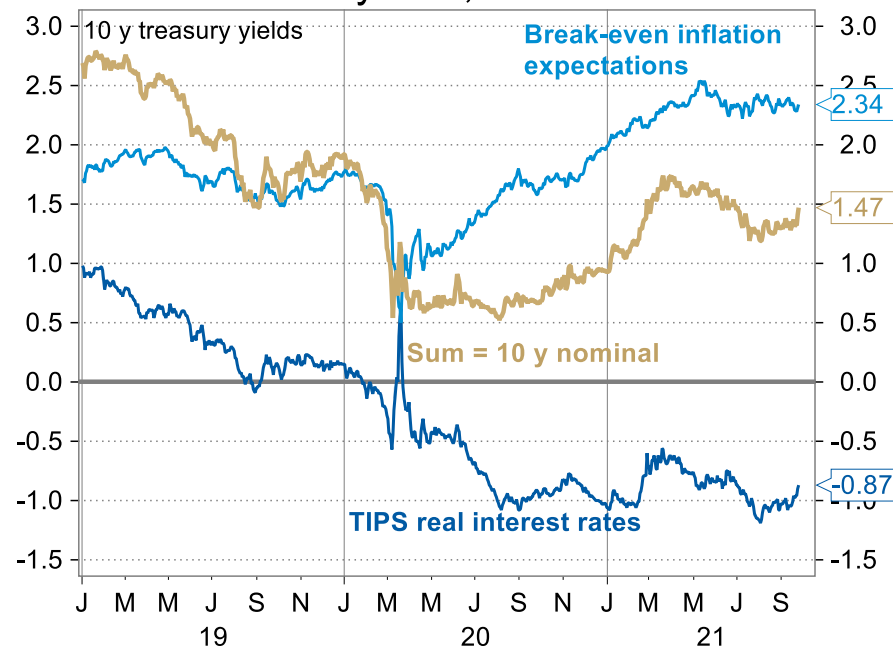
The market is fully pricing in the first hike in Q4-22

The whole curve shifted upwards after the FOMC meeting

Fed funds future



USA TIPS Real yields, break-even inflation



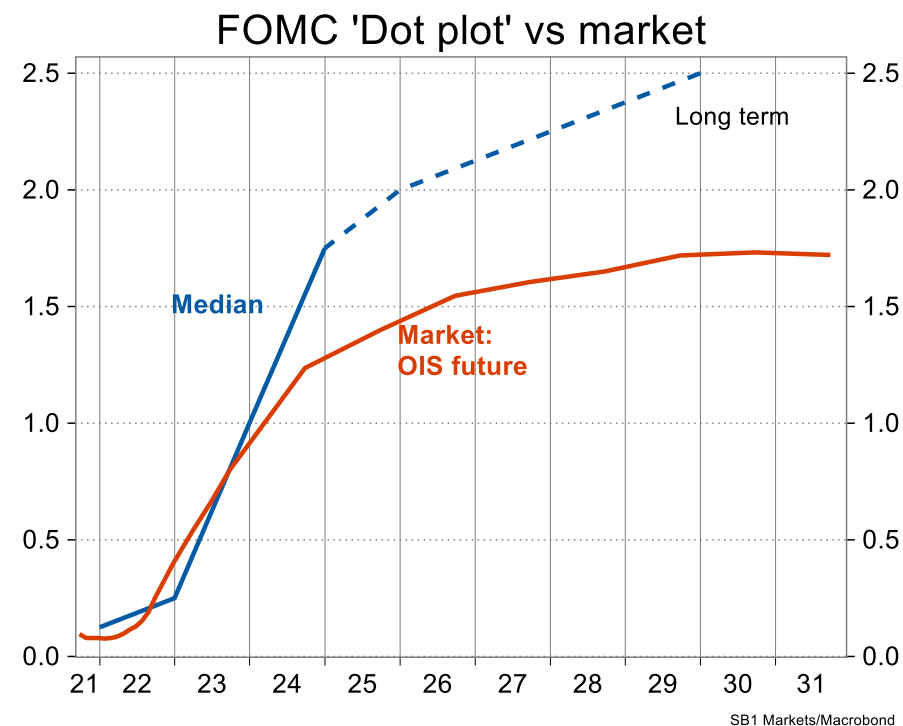
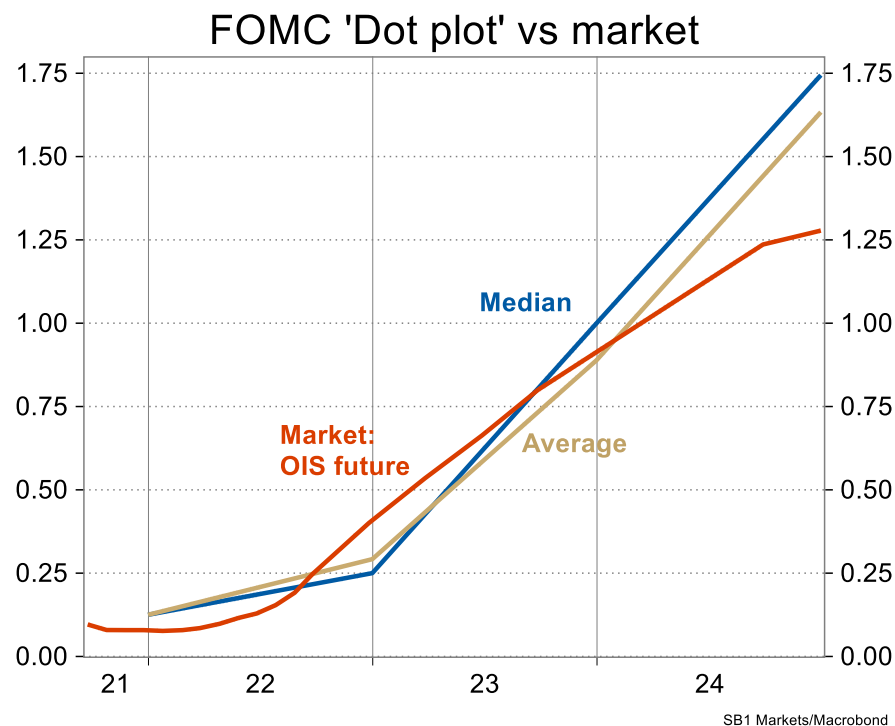
- At the **short end of the curve**, Fed Funds future rate climbed 7 – 13 bps. A first hike is once more priced in by the end of next year
- The 10 y gov bond** rose by 10 bps to 1.47, the highest level since late June, well up from the July bottom at 1.19% - but still well below the March local peak at 1.73%
 - » Real rates rose further, by 9 bps to -0.87%

US & Germany 10 y Gov bond yield

| | Yield | Change 1w | Change 1m | Min since April-20 |
|-----------------------------|-------|-----------|-----------|--------------------|
| USA nominal treasury | 1.47 | 0.10 | 0.18 | 0.52 |
| .. break-even inflation | 2.34 | 0.01 | 0.04 | 1.06 |
| .. TIPS real rate | -0.87 | 0.09 | 0.14 | -1.19 |
| Germany nominal bund | -0.23 | 0.06 | 0.25 | -0.65 |
| .. break-even inflation | 1.76 | 0.02 | 0.21 | 0.40 |
| .. real rate | -1.99 | 0.04 | 0.04 | -2.13 |

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

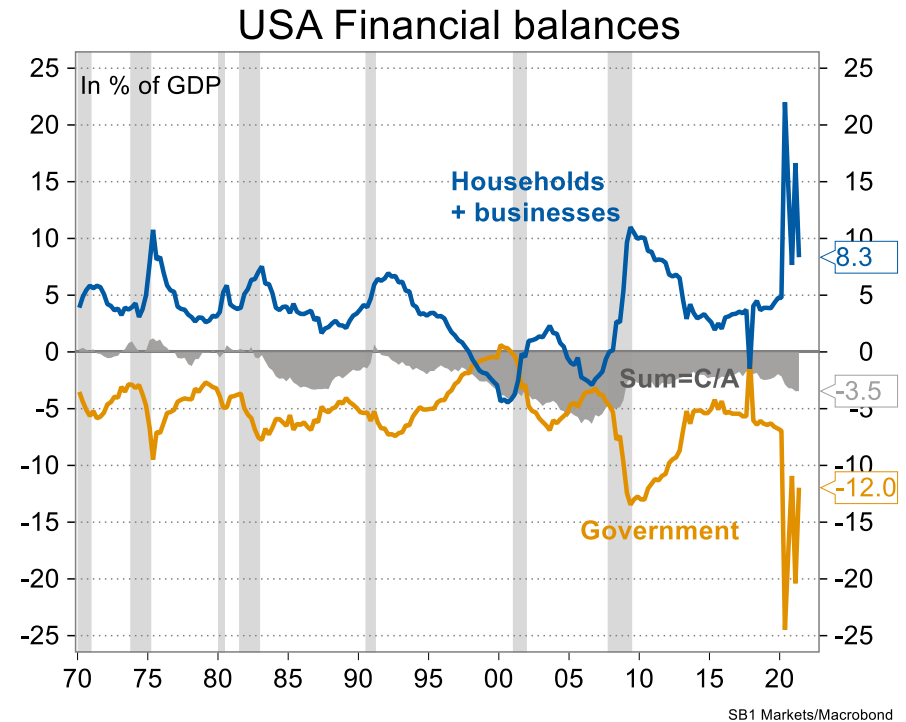
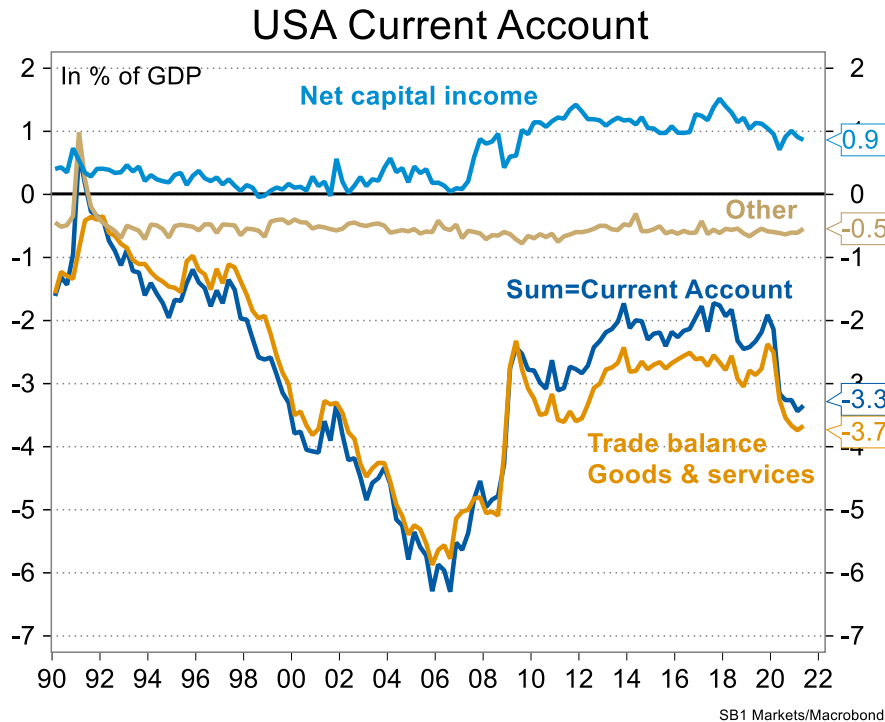
The market is satisfied with a 1.75% long term Fed funds rate, the FOMC says 2.5%



- Still, The market is somewhat ahead of the FOMC from late 2022 to mid 2023

The current account deficit marginally narrowed to 3.3% in Q2, a tad too high?

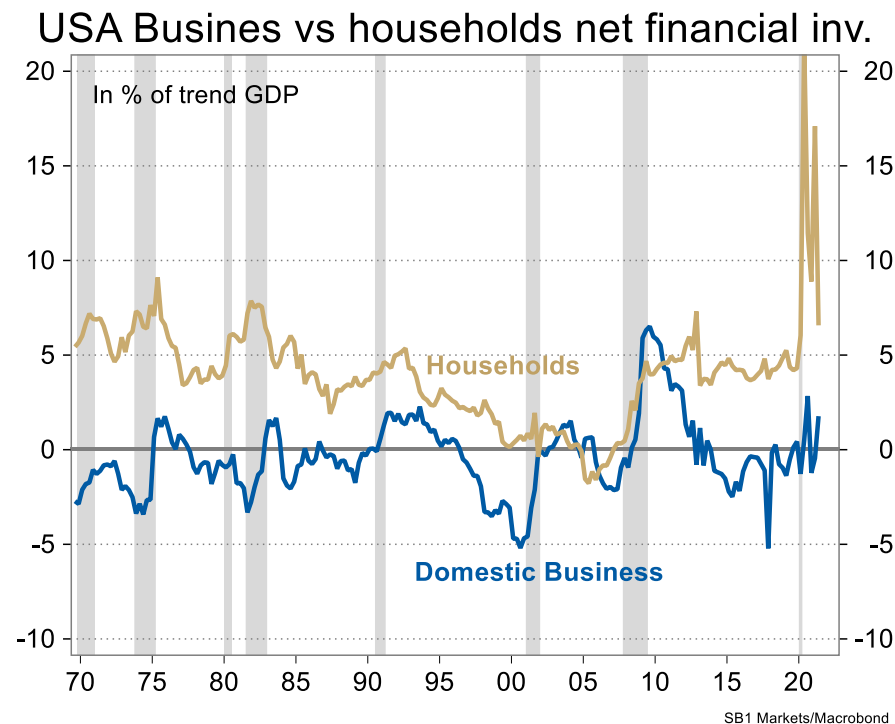
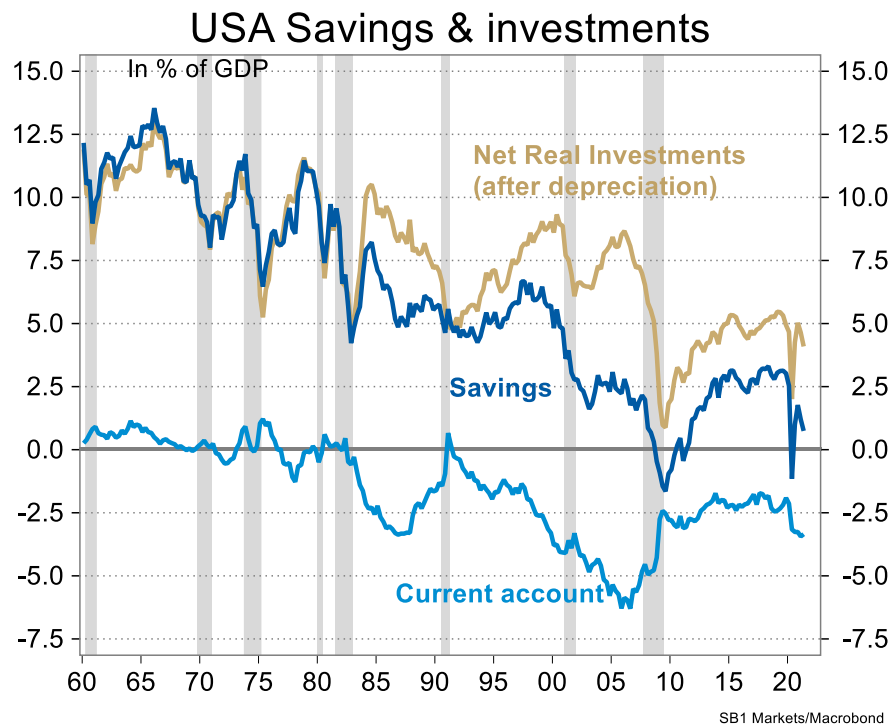
It is nothing vs before the Fin Crisis (-6%). The Government deep in red, but the private sector saves



- The CA deficit fell to 3.3% of GDP from 3.5% in the previous quarter. The move was driven by a slight reduction in the trade deficit of goods and services
- Last year, the private sector cash surplus reached 12.2% of GDP, all time high, by far, up from 4.2% in 2019. The flip side was not a surplus vs. rest of the world but an even larger deficit in the public sector, equalling 14.9% of GDP, from 6.8% in 2019. Corona measures emptied the government's coffers, while filling up the private sector's pockets as households & corporates were over-compensated by the government for losses in their market based revenues – and cut spending at the same time
- In Q2, the public sector deficit was still at 12% of GDP, while the private sector ran a 8.3% surplus

The current account deficit = Savings - investments

The US is saving less than it invests, and invest. are not that high. And who's saving in the priv. sector?

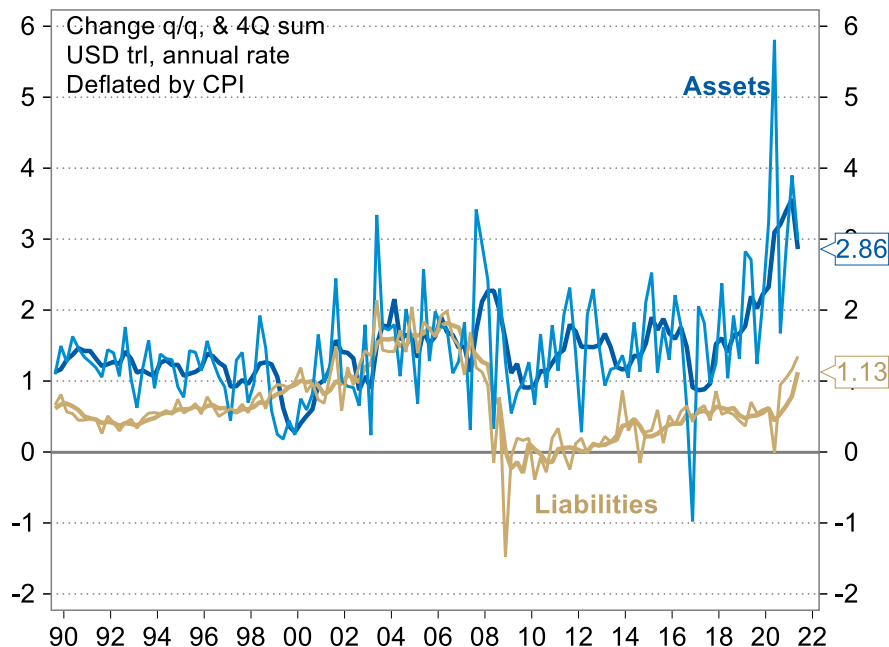


- However, net investments (after depreciation) are above the long-term declining trend in the investment/GDP ratio
- Who are saving in the private sector?
 - » Households, who have received tons of money they could not spend during the pandemic, have raked up the lion's share cash surplus in the private sector
 - » Business have been running a moderate cash surplus – and is not at an exposed position now – a limited risk for a sharp increase in cash surpluses, due to sharp cuts in investments (which is one of the two drivers for recessions, the other is reduced household demand, due to higher household cash surpluses. No reason to worry, short term, here either?)

Flow of funds: Debt growth in acceleration, financial asset growth is slowing

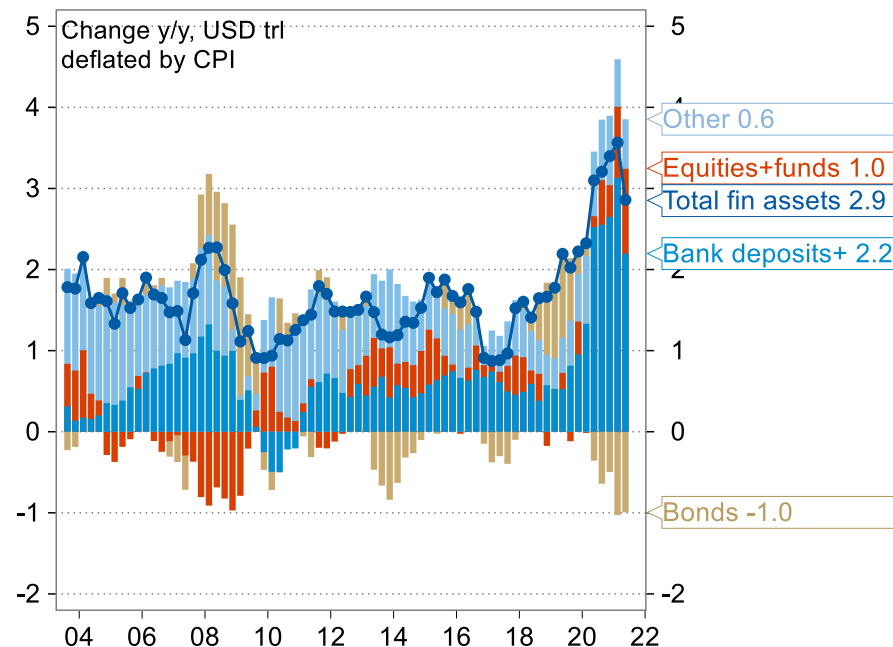
Over the past year, US households have bought (net) equities for USD 1 trl, a record high amount

USA Households' assets & liabilities



SB1 Markets/Macrobond

USA Households' assets



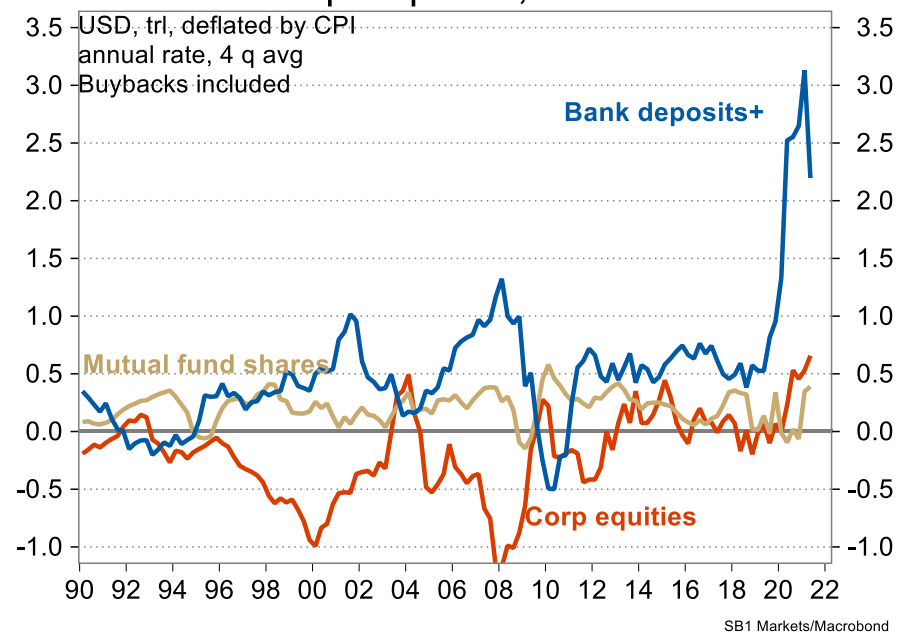
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- **Households have increased their financial assets** by USD 2.9 trl over the past year, 2.5 x more than 'normal' but down from 3.6 bn in Q1. The growth in is almost 2 times the normal growth in financial assets. During the pandemic, the savings exploded. Now the savings rate is on the way back to a normal level
 - » **Bank accounts** have swelled by USD 2.2 trl, or by 75% of the total (net) increase in assets. Normally, bank deposits grow by some ¾ trl per year. So, households are still filling up their bank accounts more than normal
 - » Over the past 4 quarters, households have bought **equities and fund shares** for USD 1 trl (net), a new record high! Which may explain some of the retail 'activity' in the stock market recently...
 - » Households have (net) sold **bonds** at a close to unprecedented pace over the past year, by USD 1 trl
- Growth in assets is partly supported by a much faster growth in debt (the balance sheet is boosted, see more next page)

Record high net investments in corporate shares

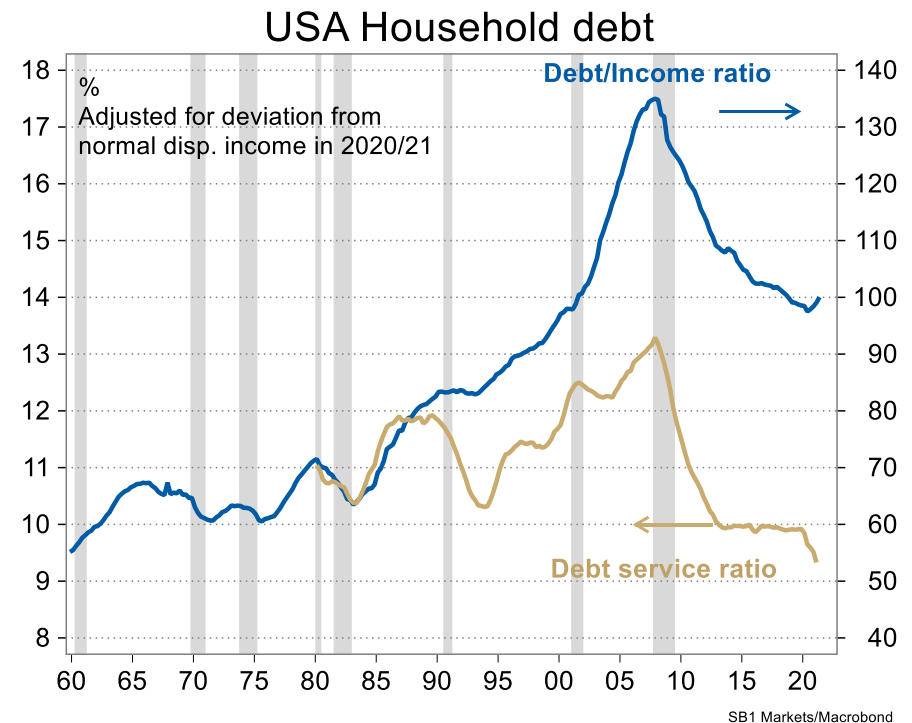
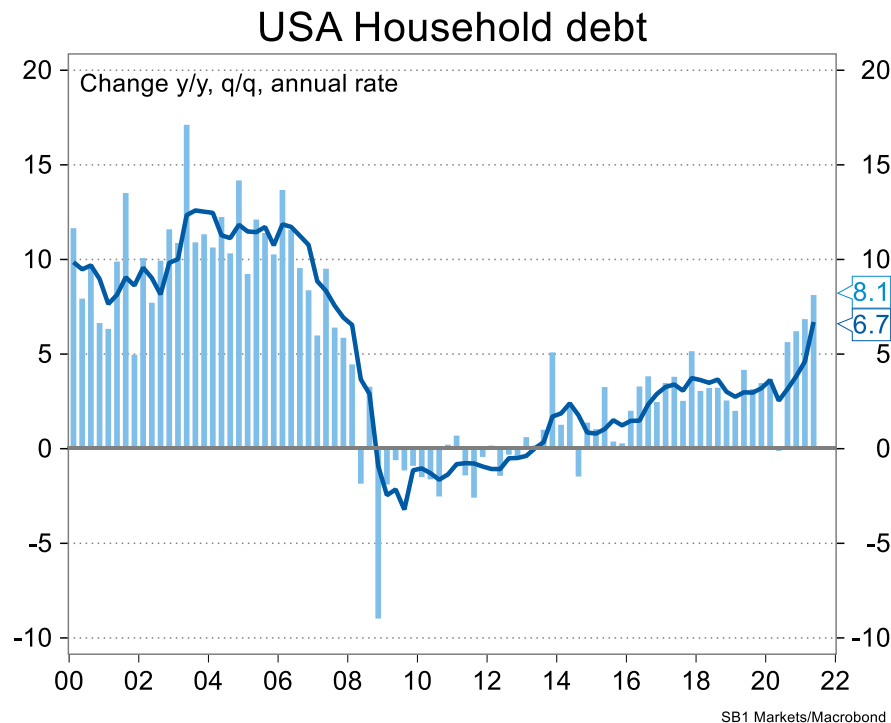
And more inflow to mutual funds than normal

USA Households net buying of corp. equities, funds



So low rates do have an impact? Household credit growth is accelerating rapidly

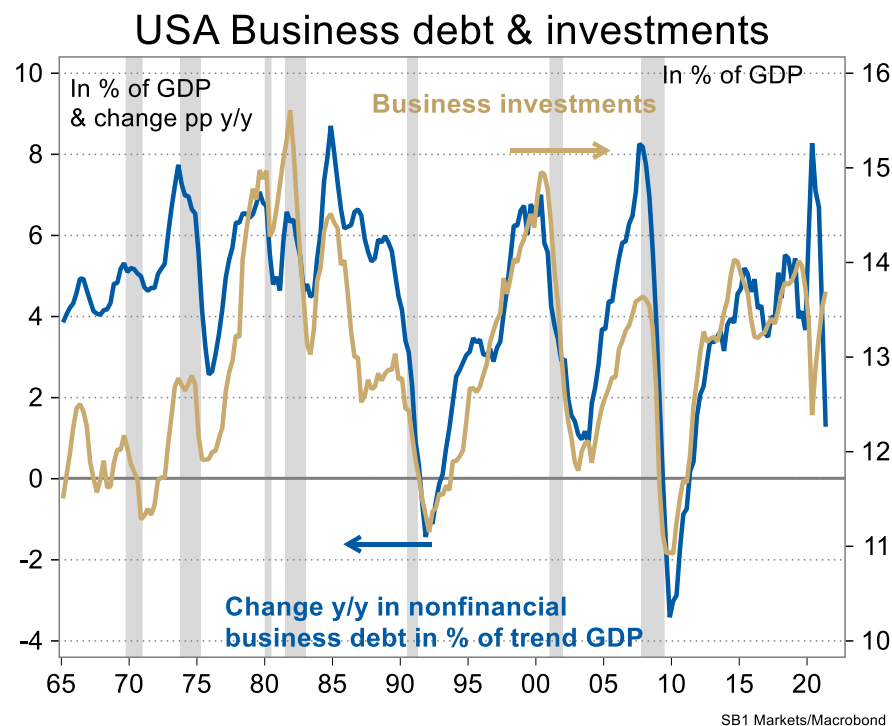
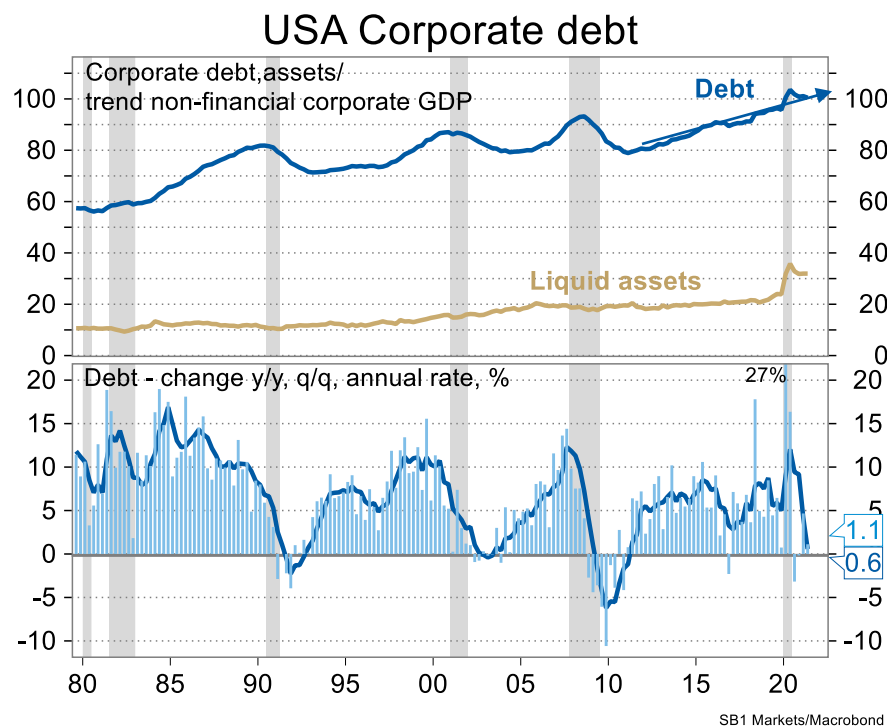
The debt/income ratio is growing again, though from far below the pre-financial crisis level



- Households have reduced their debt burden in an unprecedented way past 12 years – until Q1 last year
- From Q2-20, growth in household debt has outpaced income growth (adjusted for the income impact of the pandemic)
- In Q2-21, debt grew at a 8.1% pace, the highest since 2007. In the years before the financial crisis, debt grew by some 12% per year over several years (2003 – 2006). Debt/income ratio rose from a level equal to the current level, 100%, to 135% of disposable income.
 - The more than a decade long consolidation period from 2007 was the toughest ever, in US history. And it almost killed the economy, when credit demand (and supply) collapsed in 2008
 - Now, the deb/income ratio is at decent level – no reason to worry. (Norwegian households entertain more debt to income ratio that is twice as high)
- The debt/income debt service ratio is record low, due to the low mortgage rate

Corporate debt growth has slowed, following the Q1-20 hike

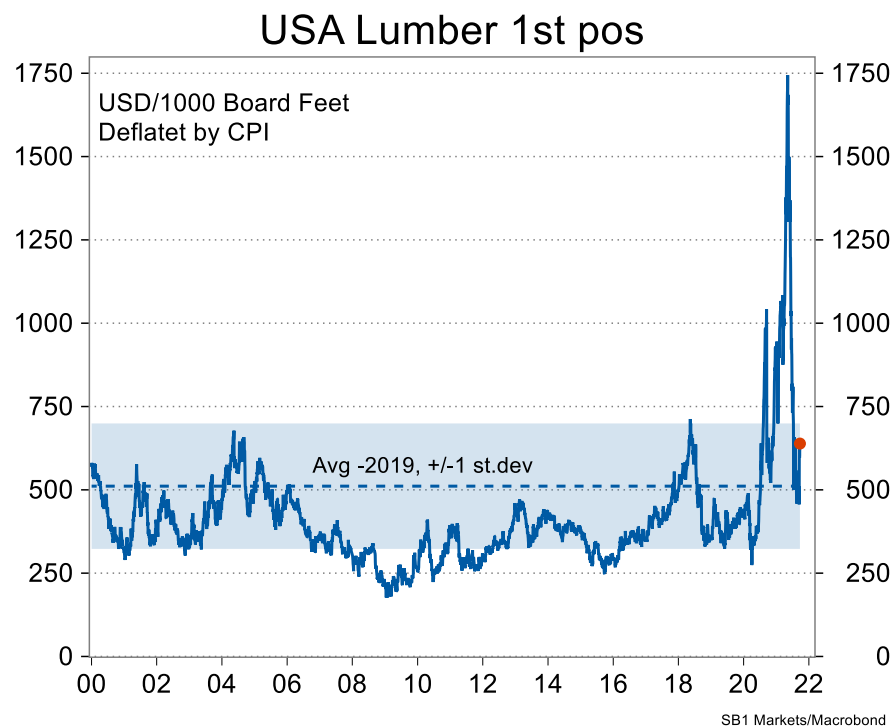
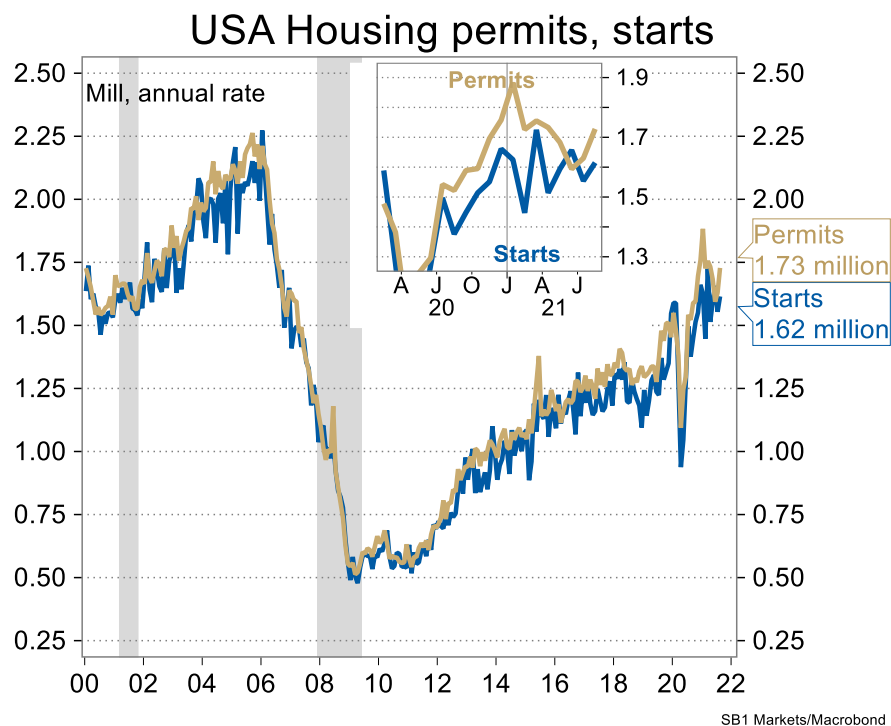
However, the debt level is high – but so is the level of liquid assets too 😊



- Corporate debt rose by just 1.1% (annualised) in Q2, down from 4% in Q1. Measured y/y, debt is up by 0.6%, the lowest rate since the financial crisis. However, debt rose sharply in Q2 last year, as companies secured funding, and slashed investments costs. The average growth rate over the past 2 years is 6.3%, slightly above trend growth in per cent of GDP. Thus, the corp GDP/debt ratio is just marginally above the long term increase in this debt ratio. Barring the super-high borrowing last spring, this ratio is at a record high level
- On the other hand, companies have also increased their liquid assets sharply since before the pandemic, to the highest level ever
- In sum: Companies still have some capacity to further lift their investments – even if the profit cycle has turned south

Housing starts stabilise, at a rather high level

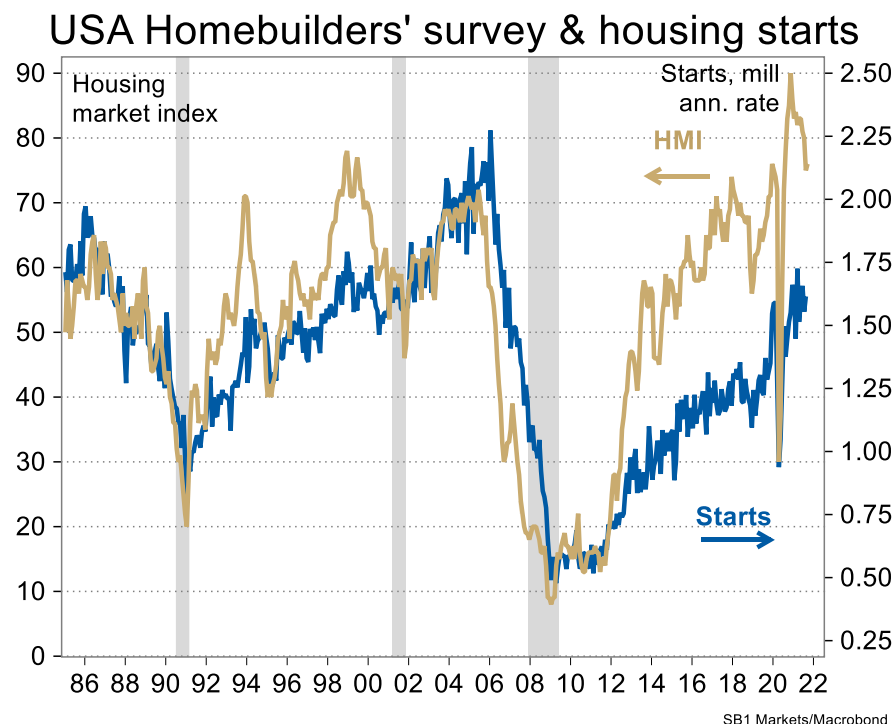
Both starts and permits up in August



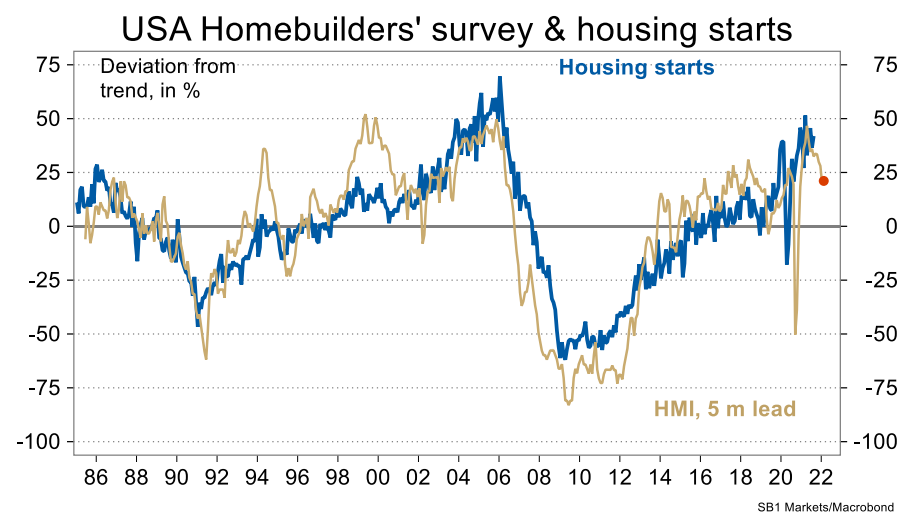
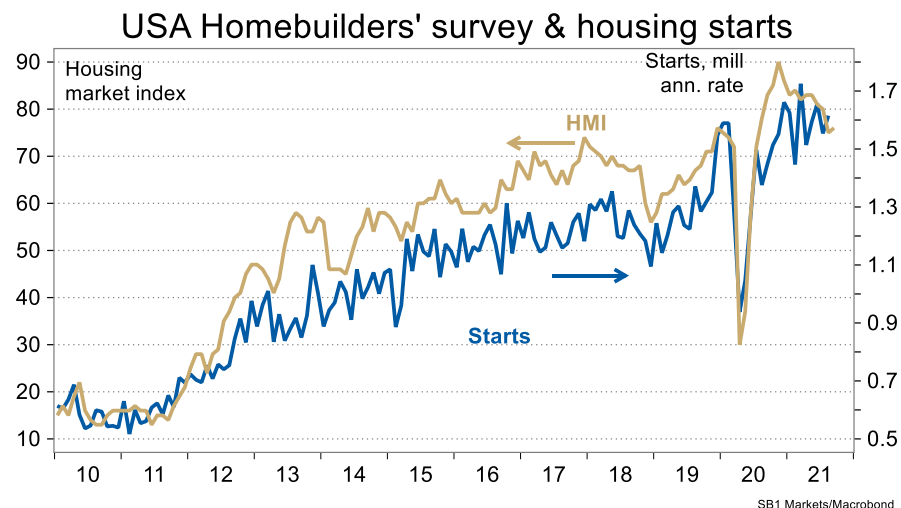
- **Housing starts** rose to 1.61 mill in August, from 1.55 mill in July (expected unchanged)
- **Building permits** rose to 1.73 mill, up from 1.63 in July, expected slightly down
- **Starts have flattened in 2021**, and barring some strong months late '20/early 21' the same goes for permits. The level is somewhat up vs. the pre-pandemic level. However, given the incredible strong existing home market, and soaring prices, starts should normally have strengthened further, amid still very low mortgage rates and a recovering economy
- **Supply & capacity problems and higher cost** in the building sector may explain the lack of response. However, those constraints may be easing, at least lumber is available at almost normal prices, and far down from the all time high in early May

Home builders market index a small tick up in September

The HMI has been at record high levels since last autumn but has been on the way down since Nov

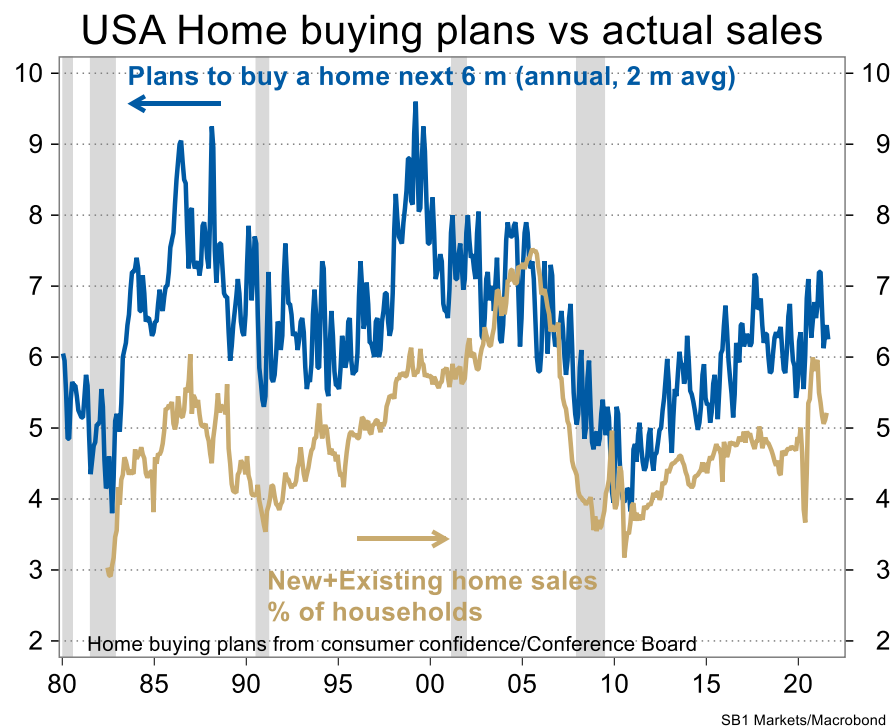
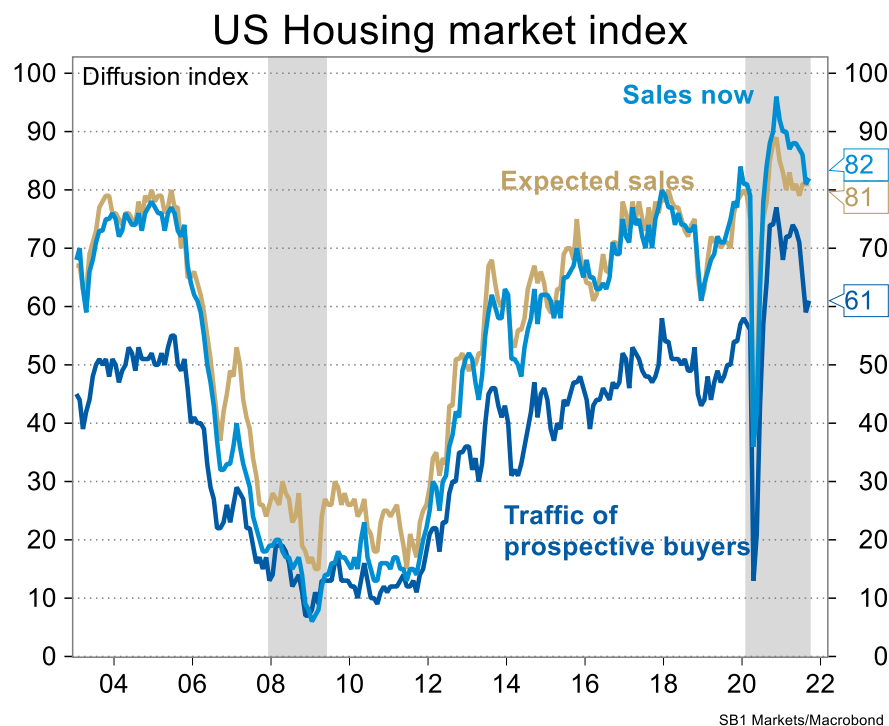


- **The Home Builders Housing Market Index** gained 1 p to 76 in Sept, expected 1 p down, following the unexpected 5 p drop in Aug. The level is high but still down from 90 last Nov
- **Rising material prices and supply chain shortages** are creating challenges for the home builders, according to the NAHB – but those shortages are probably close to peaking down
- Even if the level is very high, the HMI signals a moderate decline in housing starts, ref. the chart to the bottom right



Home builders report lower sales and less interest from buyers in August

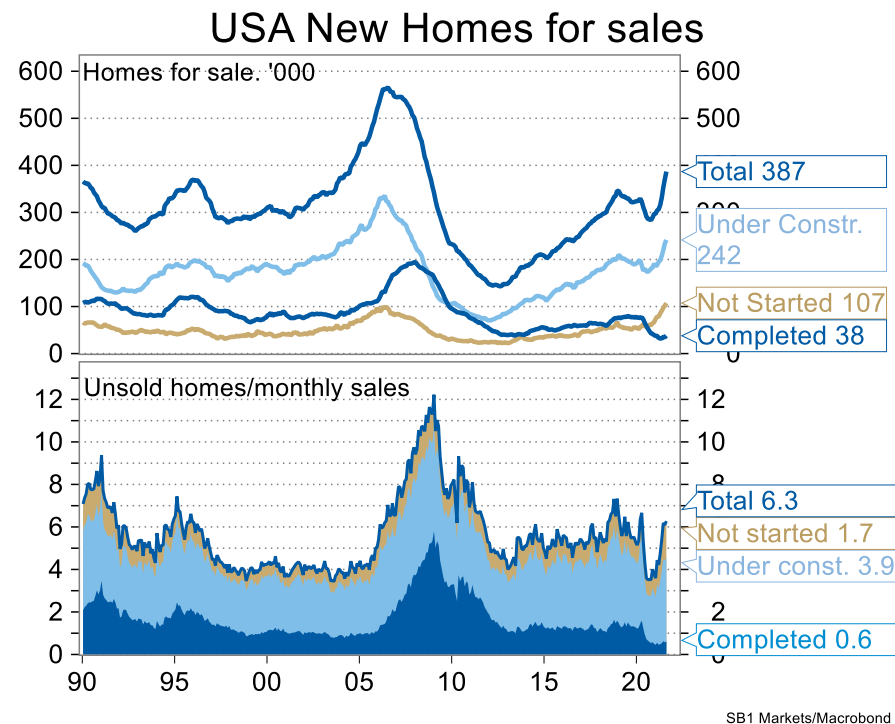
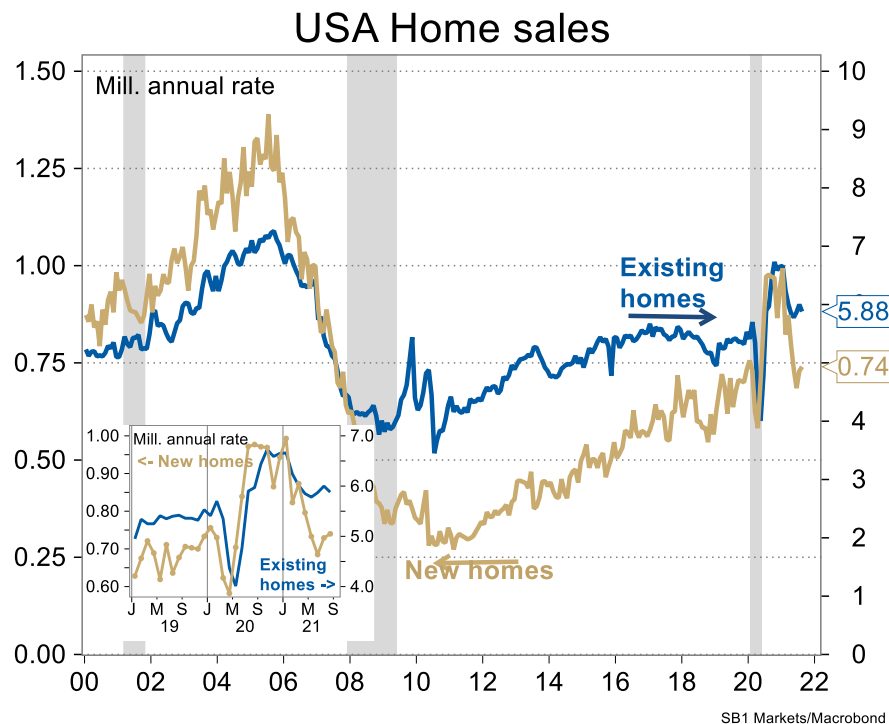
... while homebuying plans have moderated somewhat during the summer



- Conference Board's survey reports that households deem buying conditions to have improved in June and July, and the level is close to the best since 2006

New home sales slightly up in August too, still rather low

Too few completed homes to chose between? However, more new homes are underway

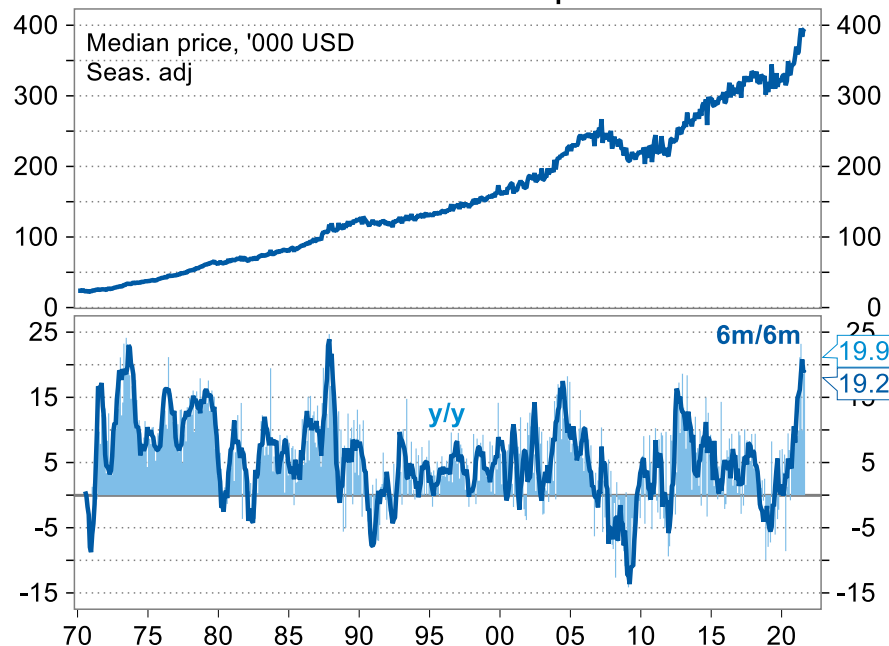


- **New home sales** rose to 740' (annualized rate) in August, up from 729' in July (revised up from 708'), expected at 715'. Sales are down 29% from January – and marginally below the pre-pandemic level. *On existing home sales: 2 pages fwd*
 - » The inventory of unsold homes has increased somewhat the past 8 months primarily because many projects that haven't started yet have been added, in fact more new projects than ever, a sign that the supply side is responding to the strong demand. The no. of completed homes for sale is record low, equalling 18 days' sale (if homes are sold 7 days a week)

Construction costs up, but new home prices even more

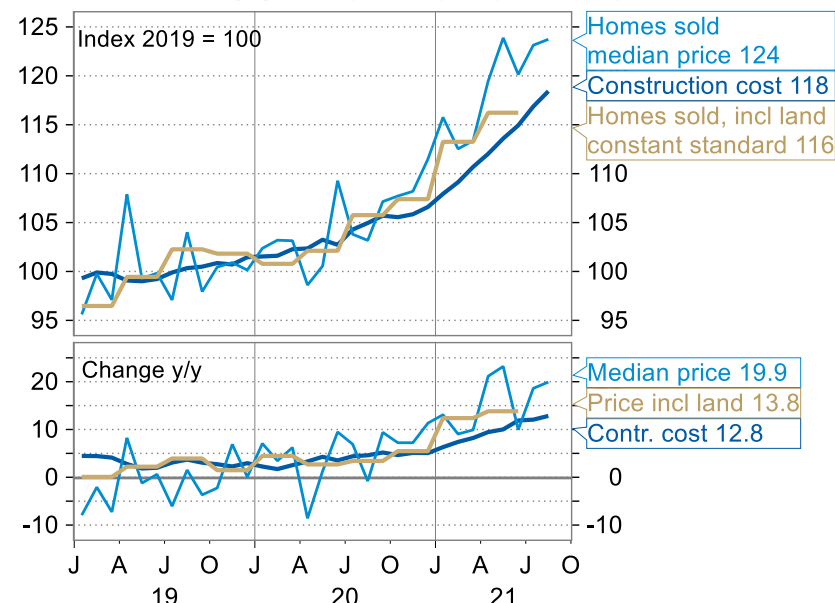
Construction costs are up 12% y/y, selling prices are up 20%. Land prices are surging, demand is strong

USA New Home prices



SB1 Markets/Macrobond

USA New Home Prices

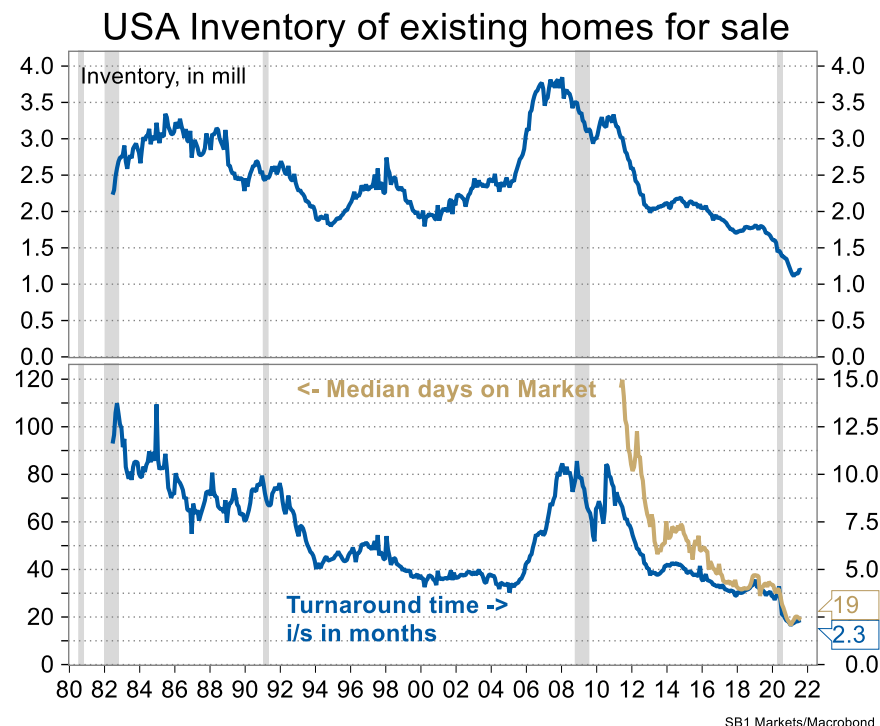
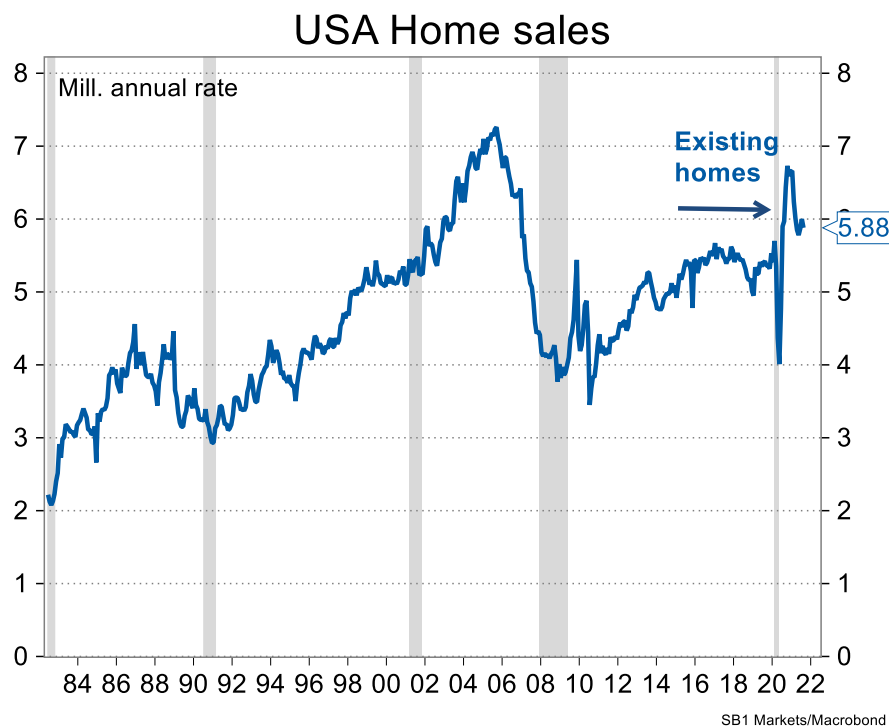


SB1 Markets/Macrobond

- Monthly **median new home sales prices** are volatile, in August the annual rate was 19.9%. A 6m/6m less short term volatile rate at 19.2% still makes impossible to deny the fact: New home prices are sharply up
 - » This price index is influenced by changes in the mix of homes sold – and over time by changes in standards & size
- The **construction price index** is adjusted for changes in standard & size, as is the **new homes sold price index**, which includes cost of land, and they are up by 12.8% and 13.8% resp. y/y (the latter just Q2 data, and Q3 may be higher)
- As prices are still up more including land than the construction cost index (which of course is influenced by higher material costs), signalling an even faster increase in land prices. Thus, demand must be the main driver for the hike in prices, not the construction cost (if demand was weak due to high prices, prices including land would have climbed less than construction costs)

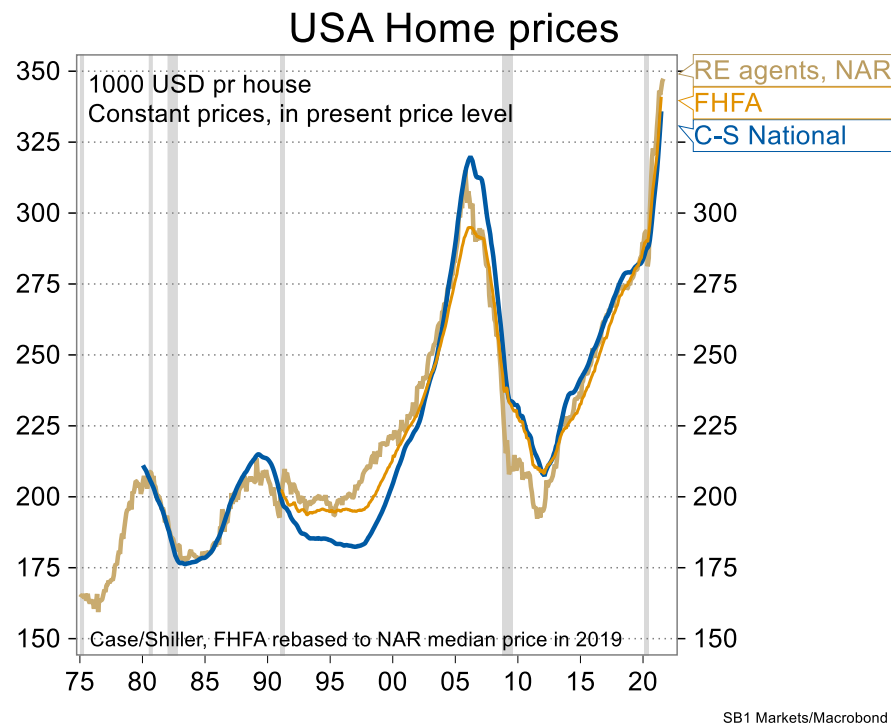
Existing home sales slightly down in Aug, level high. The inventory is still low

... but marginally up. Price inflation has been strong, is slowing

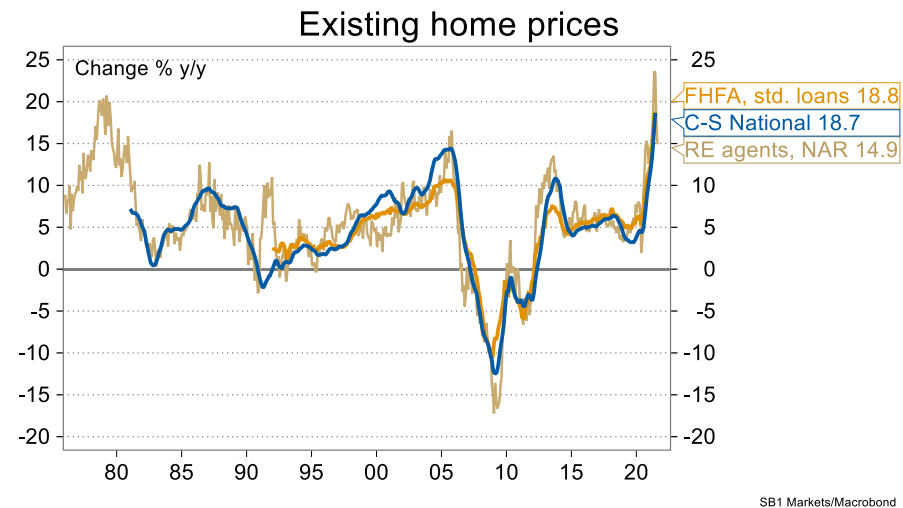
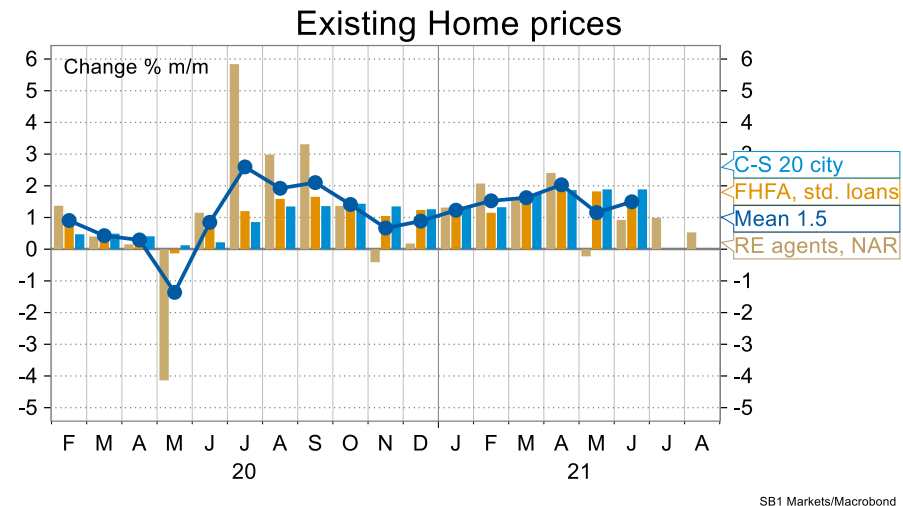


- Sales of **existing homes** fell slightly to 5.88 mill (ann. rate) in Aug from 6.00 mill in June, exactly as expected. Sales are 13% down from the local peak but still almost 10% higher than the pre-pandemic level. Sales are no doubt kept down due to a very low inventory of unsold homes. However, there are reports on buyers becoming more cautious following the steep rise in prices, and households judge the timing is very bad for home buying
- The inventory of unsold homes** rose marginally in August too, but is still extremely low, and equals just 2.3 months of sales. During the 2005 boom, the i/s ratio was 4 months, in bad times is at 10 months. The median time at the market is just 19 days, down from 30 days before the pandemic
- Prices** rose 0.5% m/m in Aug, half the speed in June/July. The annual rate fell further, to 14.9% from 17.0% in July (and 23.4% in June)

Existing home prices still on the way up, but at a slower pace

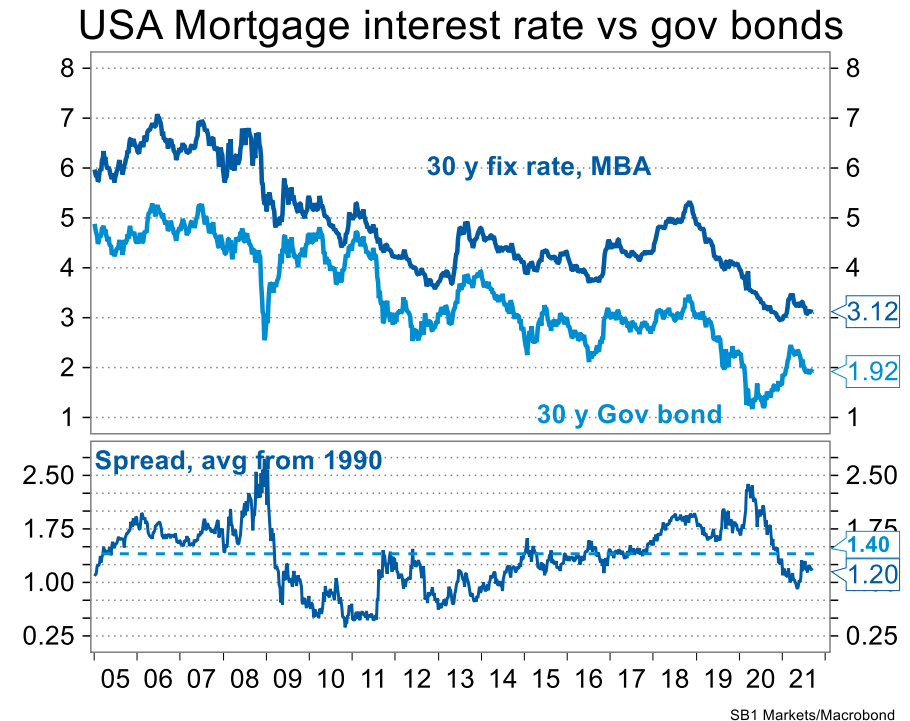
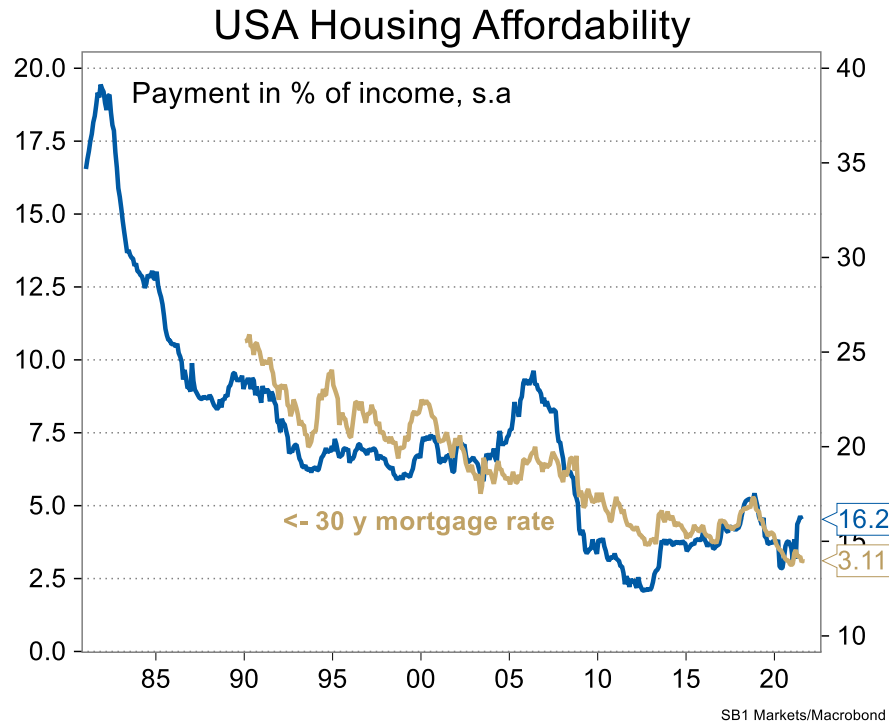


- **Prices** rose 0.5% m/m in August, according to the realtors - marginally down from 1.0% in July. Growth has slowed somewhat, since May prices are up at a 7% pace, from a 20%++ pace during the spring
 - » The annual rate fell to 14.9% from 17.0% in July (and 23.4% in June)
- **Other price indices** confirm a red hot housing market; prices are rising extremely fast, even after adjusting for the decline/slow growth last spring



Homes are still very affordable, because the mortgage rate is so low!

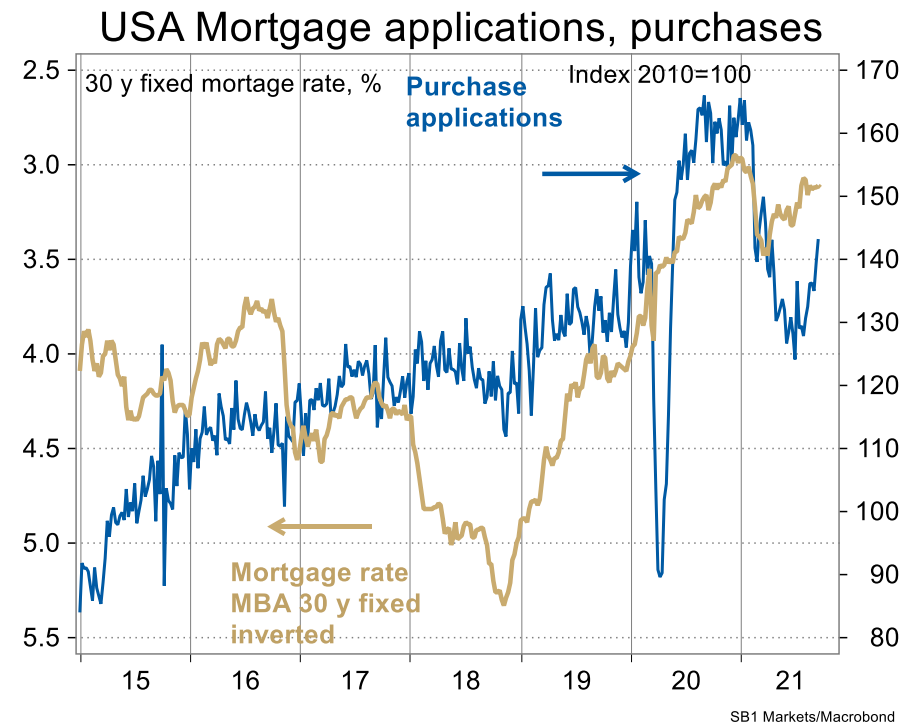
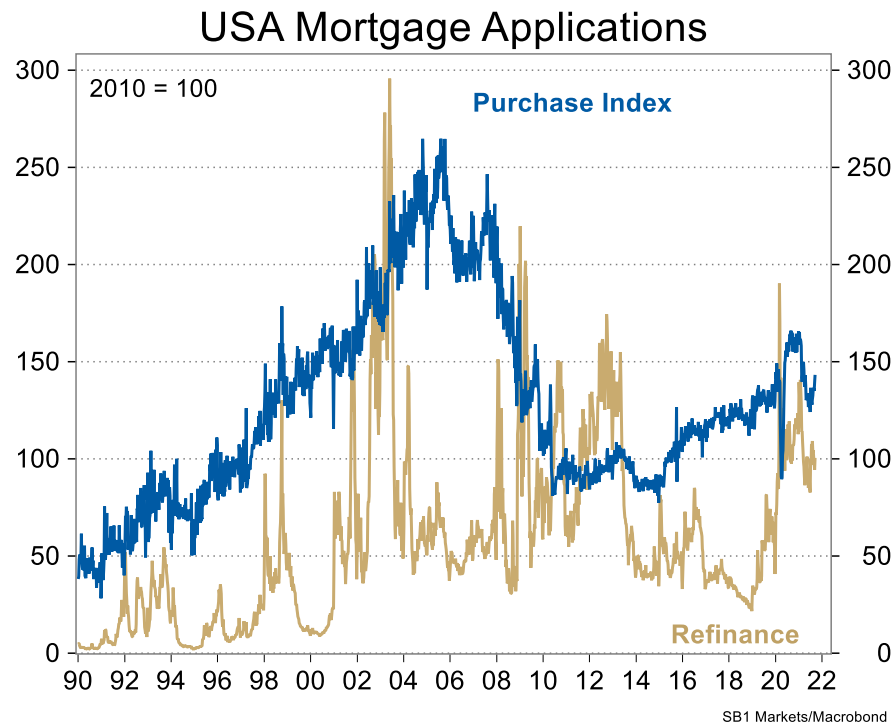
However, mortgage rates have more or less flattened – and home prices are sharply up



- The lift in prices is felt, no doubt

- **The 30 y fixed mortgage rate** has fallen some 40 bps since March, even if the spread to the 30 y gov bond has increased somewhat
- **Household mortgage debt** is up USD 500 bn y/y. Fed is buying USD 40 bn per month, 480 bn per year. The Fed is funding the housing party, all of it! Cheers ☺

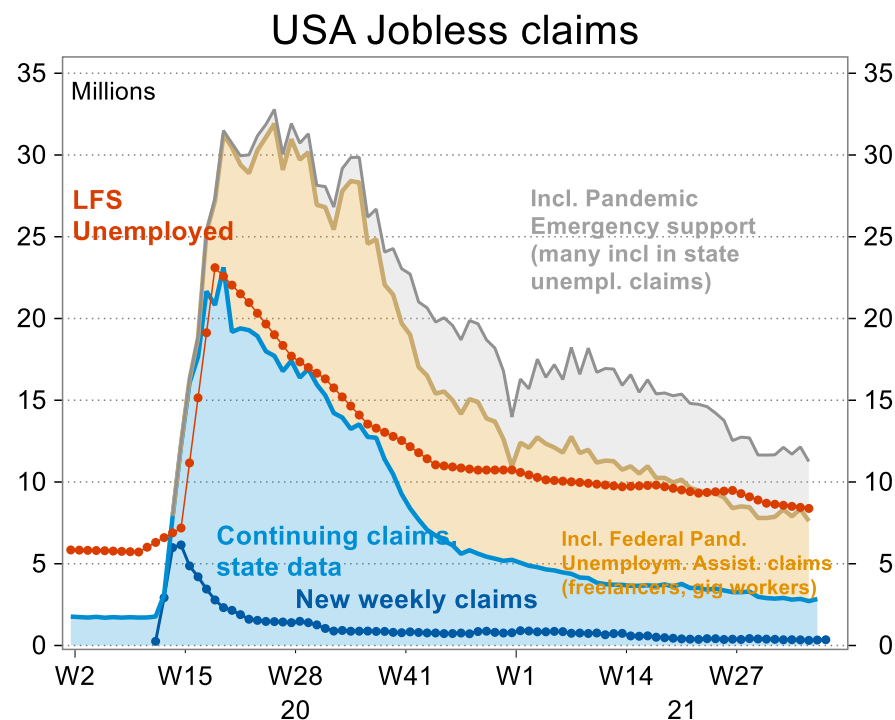
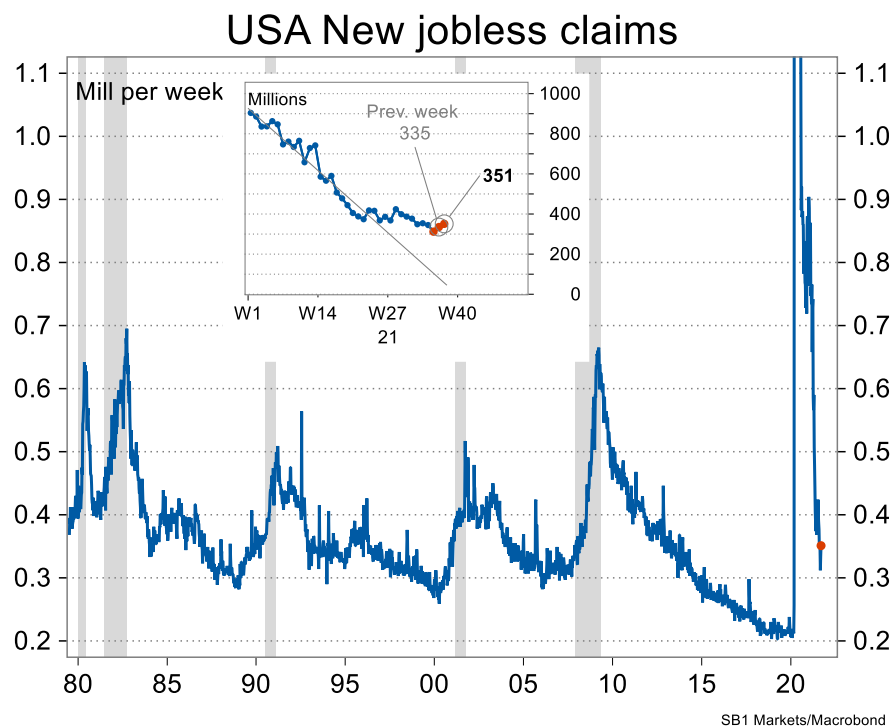
Mortgage rates are down – and now demand for mortgages is responding?



- Demand for new mortgages (for buying, not refinancing) is not closely correlated to mortgage rates but the increase in demand last year was influenced by the steep decline in mortgage rates
- Demand for new mortgages rose marginally last week but has not responded to the 40 bps decline in the 30 y mortgage rate since March – the no. of applications has fallen

Jobless claims slightly up again – and the level is not that low

The jury is still out vs the impact of the termination of federal UI benefit programs

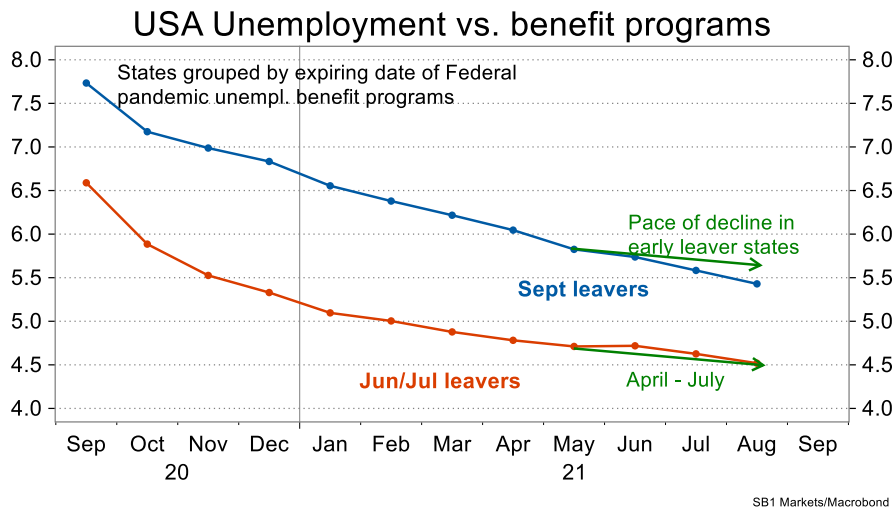
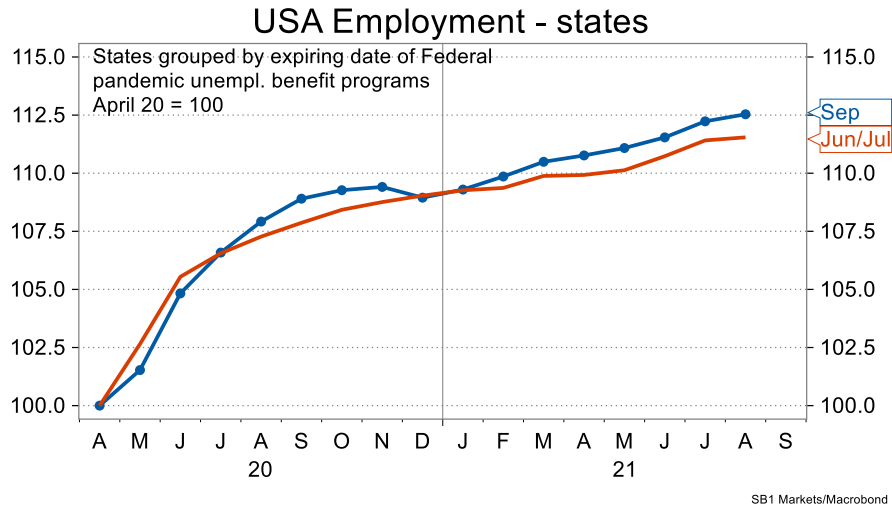


- **New jobless claims rose** by 16' to 351' in week 37 – expected down to 320'. The inflow is high given all other indicators of demand for labour – and far above the rapidly declining trend which ruled until the late spring. The trend is still down.
- The no. of recipients from the **two temporary federal pandemic programs** decreased in week 35, by 752' mill to 8.5 mill – in the week before the termination of these programs at Sept 6. What are these workers doing now? The largest social experiment ever!
- In the states that left these federal programs early, in mid June or early July, employment has not accelerated vs the stayer states (check next page)

From last week's report

Slower growth in employment in early Federal UI leaver states in August

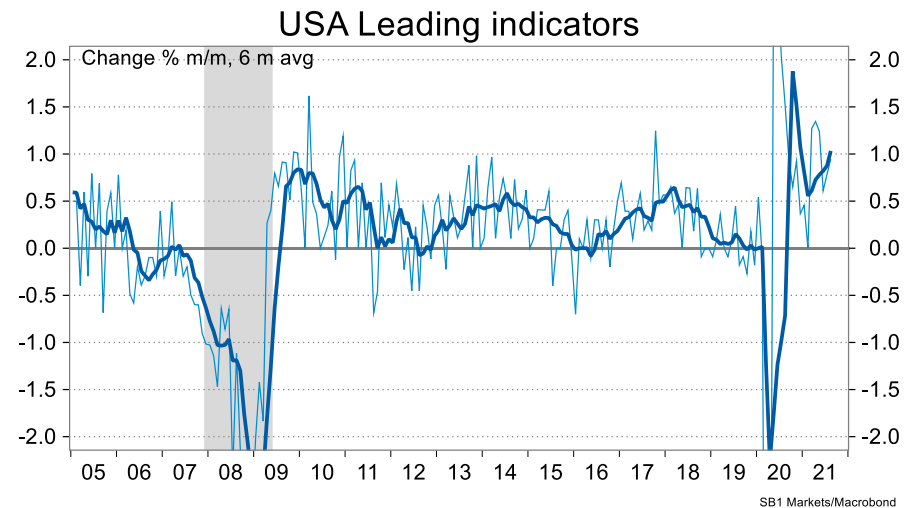
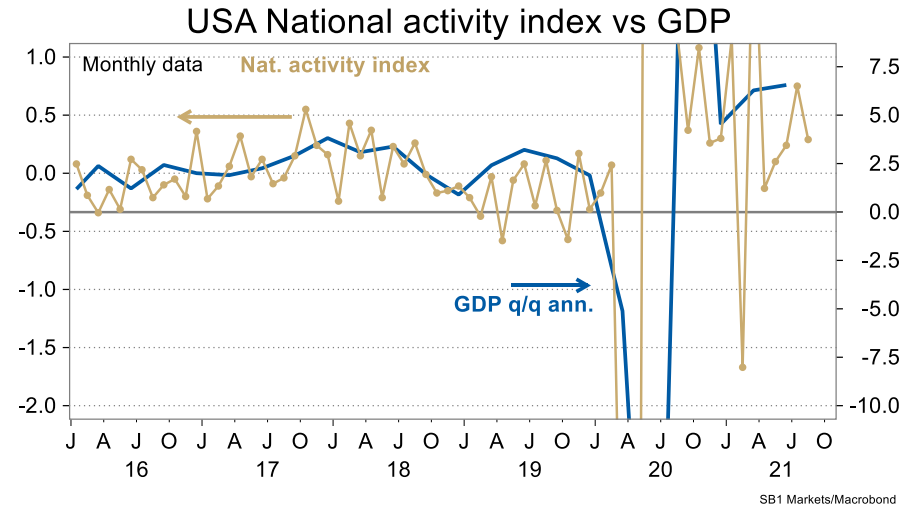
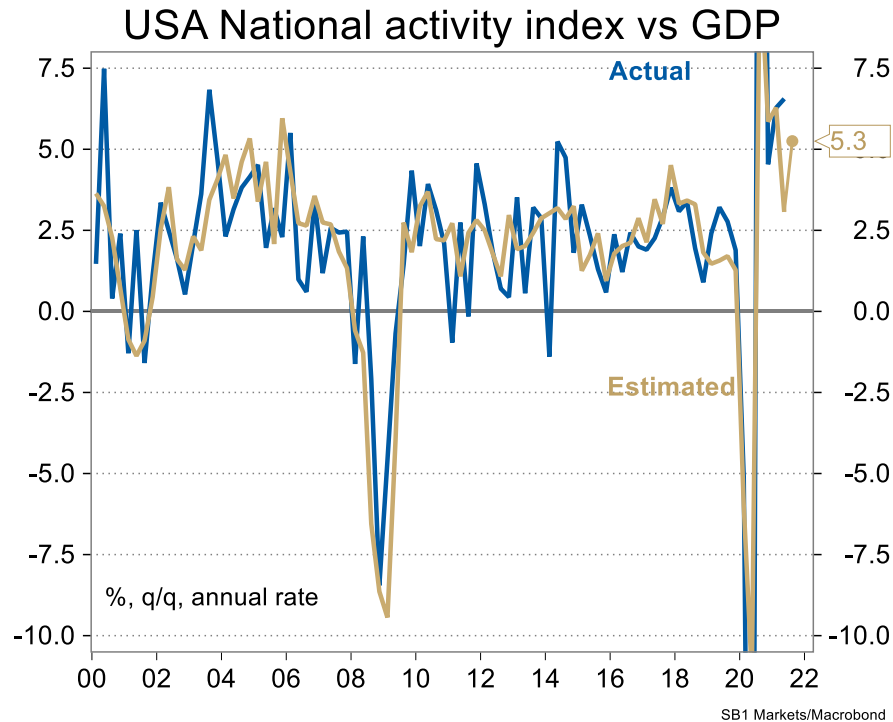
However, unemployment has fallen slower in those states, as more workers are searching for jobs



- Half of the states left the two temporary federal unemployment benefit programs in June and early July, so far without any significant differences in employment growth the past 2-3 months
 - » In August, employment rose by 0.1% in the early-leaver states, and by 0.3% in the rest of the country, a 'wrong' sign
 - » In July, growth was equal in the two groups of states.
 - » In June early leavers states reported a somewhat higher employment growth than the others
- State participation rates are not published but we have an indication that participation has increased marginally in the early-leaver states
 - » The unemployment rate has fallen by 0.2% in the early-leaver states vs by 0.4 pp in the rest of the country
 - » The employment rate has increased more or less by the same amount (state employment rates are not published, and we have not bothered calculating them).
 - » If so, the participation rates in the early-leaver states must have increased by 0.2 pp more than in the other states since April
- Given that some 3% of the working age population were enrolled on the temporary pandemic unemployment benefit programs that now have been abolished, a 0.2 pp lift in the participation (in the early-leaver states after two months) is not that impressive
- In addition, since employment has not increased, which is the real test, these August data are far from encouraging for those who are expecting a tsunami of willing and able workers into the labour market the coming weeks and months

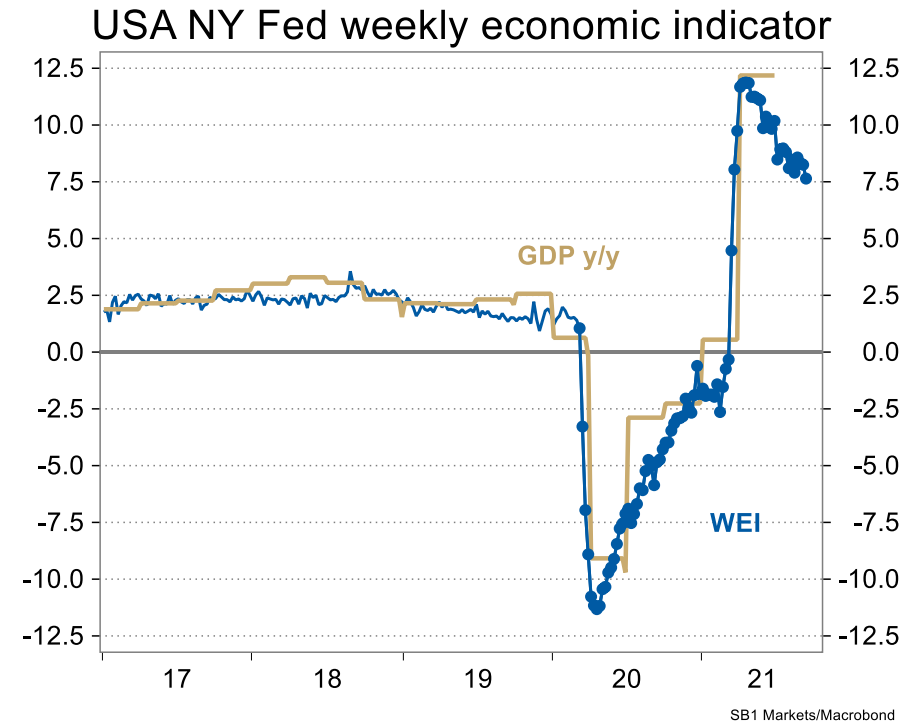
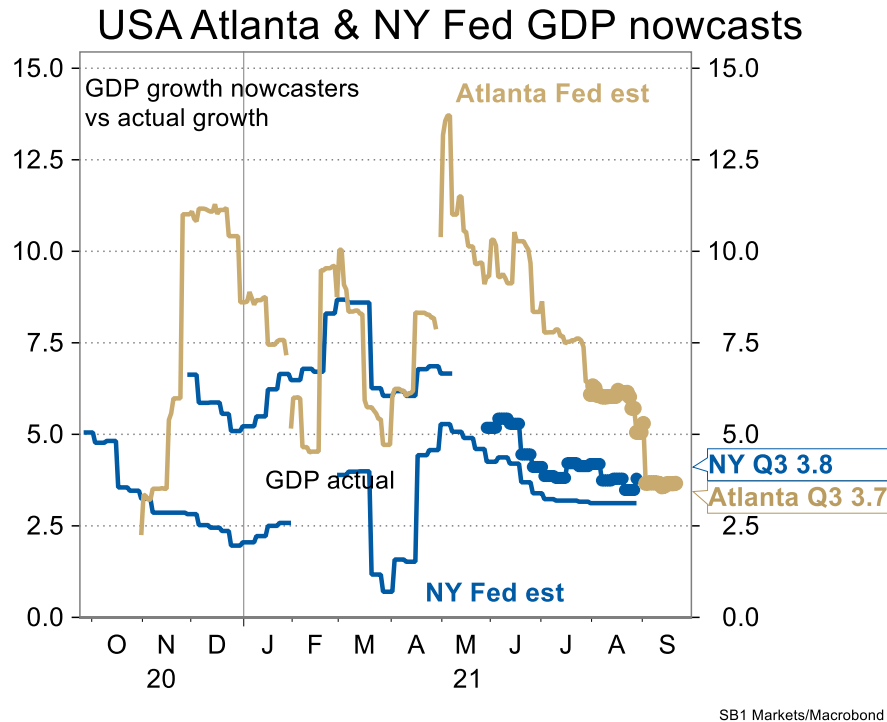
The national activity index, the LEI signals decent growth

Does not signal any substantial slowdown in Q3 (like some nowcasters do)



- The **National Activity index**, one of the best (or the best) GDP tracker (possibly better than the GDP itself 😊) fell to 0.3 in August from 0.8 in July, expected unch. at prev. reported 0.5. A 0.3 print is above the average level (0, growth at trend). The index now signals a 5.3% GDP growth rate in Q3 (supported though mostly by the strong July index)
- **Conference Board's Leading Indicators** rose significantly in August, signalling growth well above trend

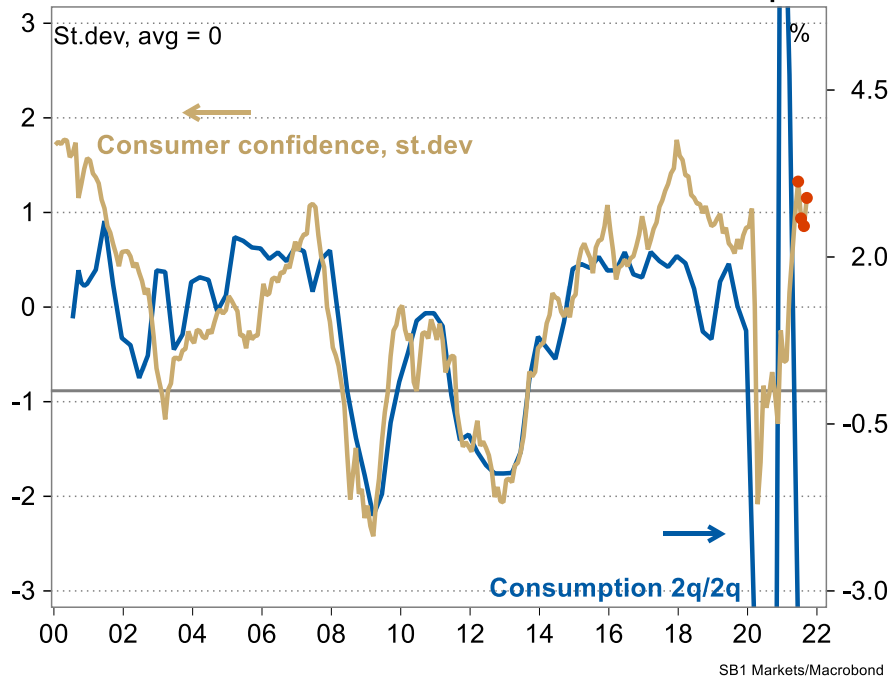
The nowcasters still signal 3% to 4% GDP growth in Q3 as estimates slow



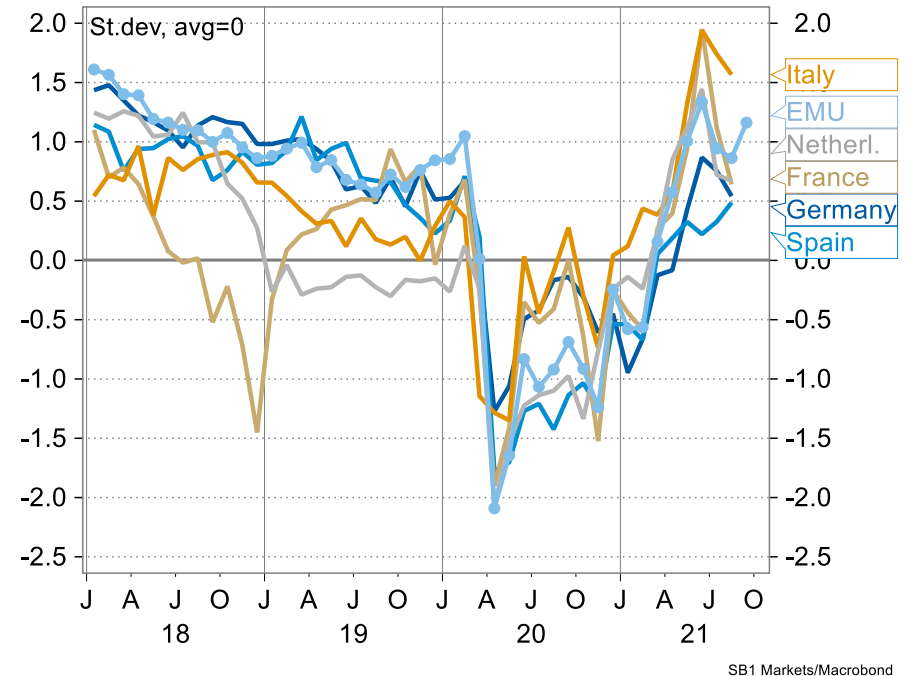
Eurozone consumer confidence rebounded in September, well above the p-p levl.

Consumer confidence rose by 0.3 st.dev in August; level is 1.2 st.dev above average!!

EMU Consumer confidence vs consumption



EMU Consumer Confidence

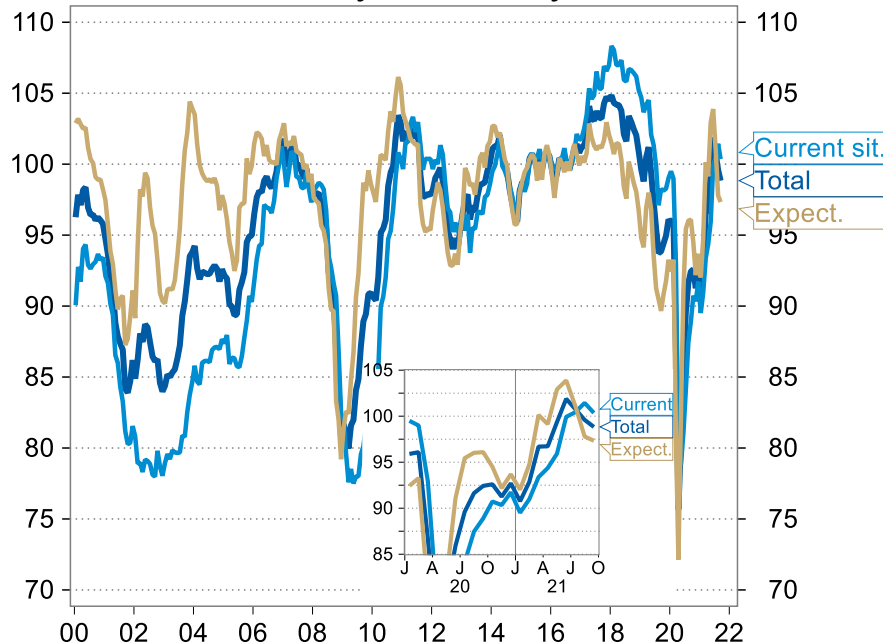


- **The consumer confidence index** increased to -4.0 in September from -5.3 in August, expected down to -5.8. The level is among the best past 2 decades! Most likely, households have recognised that the fight against the corona virus has been successful
- A positive sign for household demand in the coming months
- No September country data or details yet
 - » All of the large EMU economies reported confidence above par in August. Italy has been above average since December, and is in the lead

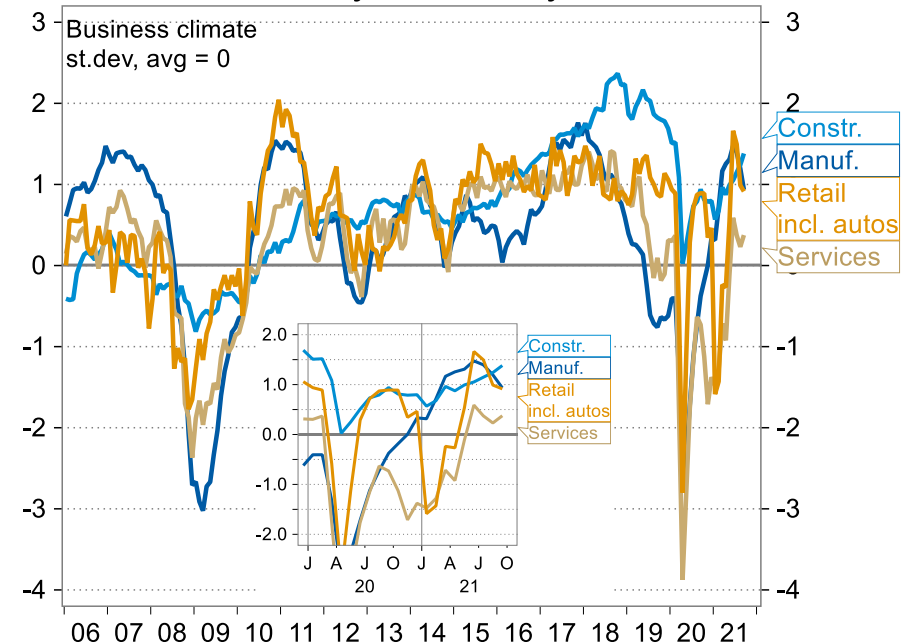
Ifo expectations down in Sept, close to average. Current situation still strong

Manufacturing and retail are slowing from a high level. Services have stabilised. Constr. straight up

Germany Ifo survey, total

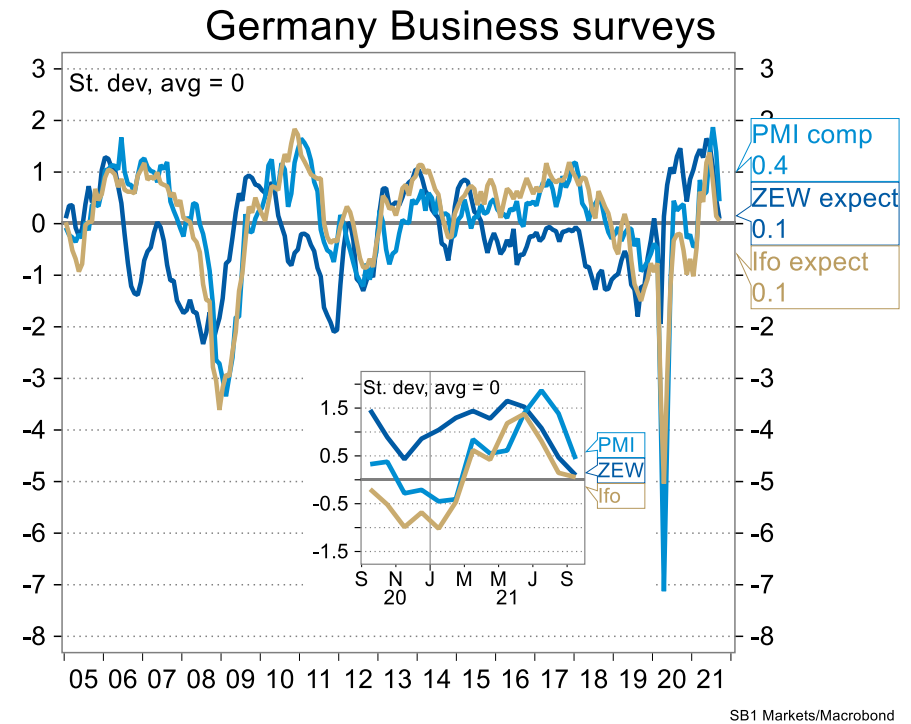
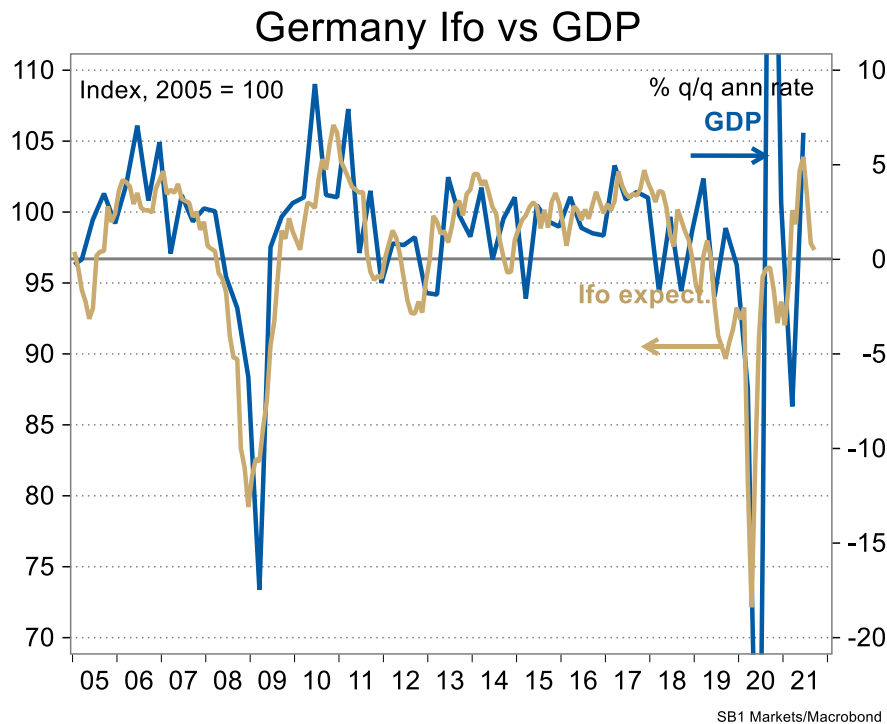


Germany Ifo survey, sectors



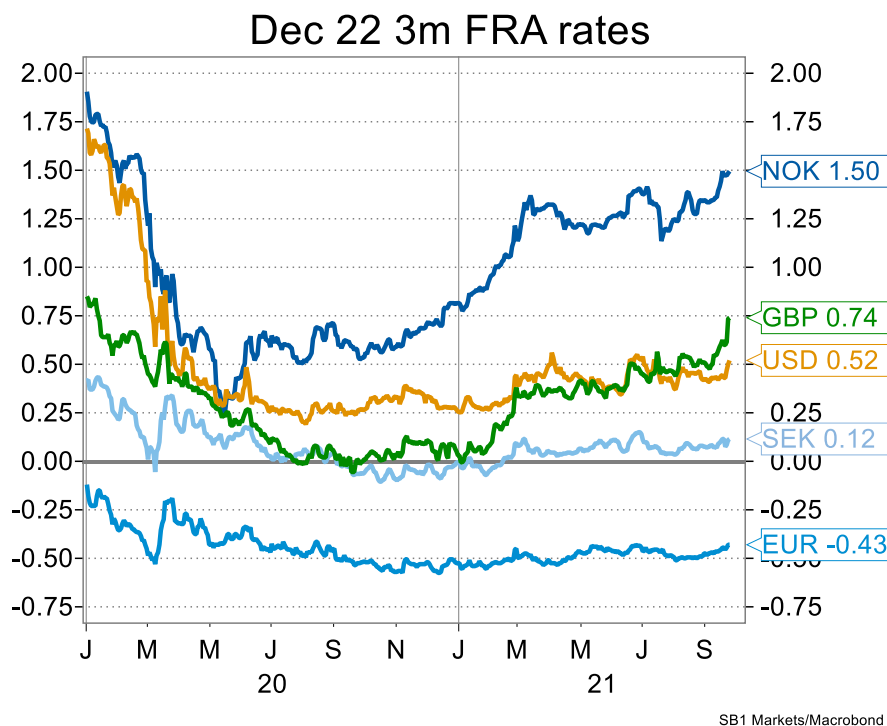
- In September, the **expectations index** fell by 0.5 p to 97.3, and the level is just 0.1 st.dev above average
- The assessment of the **current situation** fell 1 p to 100.4 – and the level is 0.8 st.dev above average
- **Manufacturing** business climate (average of current situation & expectation) declined further in August, but is still at a high level. The **retail** sector is still reporting strong growth, albeit somewhat slower. Other parts of the **service sector** has stabilised but at a rather low level, very likely due to Delta trouble. **Construction** is reporting even stronger growth
- **All other German surveys** have come down somewhat recent months – but all are at/above average, signalling growth at or marginally above trend. The activity level is still below par, and growth will hopefully turn out be above trend the coming quarters

By and large, surveys signal growth close to trend, or slightly above



Bank of England: Some modest tightening is likely & a hike draws closer

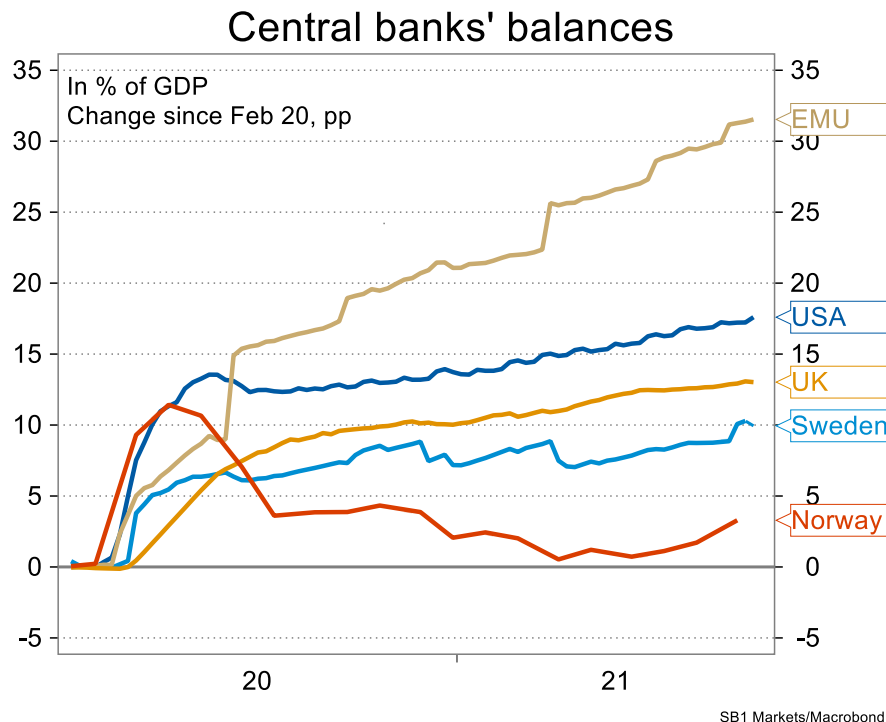
But policy kept unchanged at 0.1% for now...



- No changes in the policy now: The bank rate unch. at record low 0.1%, but this time, two MPC members (Ramsden and Saunders) wanted to end the QE govt bond purchases. However, with a 7-2 vote, the target remains unch. at GBP 875 bn
- The Bank lifted its inflation forecast yet again, and it is still uncertain on how much spare capacity there is at the labour market after the pandemic – the answer may come as the furlough scheme concludes the end of Sept.
- **On hiking rates**, the Bank states that “*some developments during the intervening period appear to have strengthened that case*”
- Also important to note, according to the Bank: **“any future initial tightening of monetary policy should be implemented by an increase in Bank Rate, even if that tightening became appropriate before the end of the existing UK government bond asset purchase programme”**
- A more hawkish signal than expected, even late 2021 OIS rate rose significantly, implying some probability for a hike before Christmas. Somewhat more than 3 hikes is discounted the coming 12 months, from less than 3 before the meeting (the implied OIS up by 13 bps, half a hike
- Rate rose along the curve, and the GBP recovered most of the loss from the first part of the week

Riksbank sees zero interest rate 'forever', despite inflation f'cast above target

2021 GDP growth forecast raised by another 0.5 pp to 4.7%; CPIF above target in '21 & '22



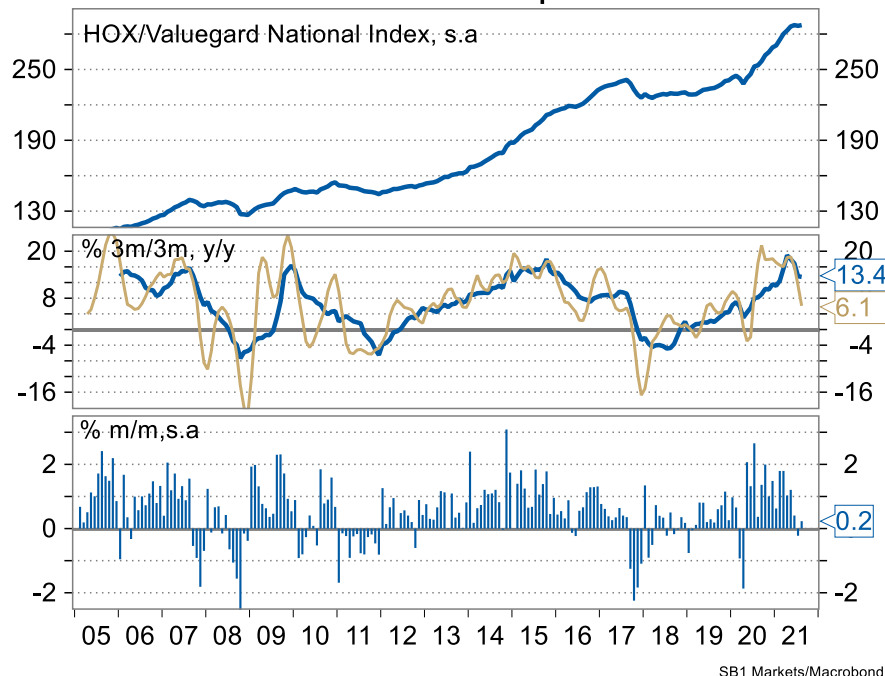
- The US Fed, ECB & BoE has been more aggressive vs QE than the Riksbank
- Other central banks are all now discussing when to taper their asset purchases
- The Riksbank will end its program in December, if it does not decide to extend it – which it has not signalled – which will yield an abrupt 'tapering'

- The Riksbank kept the **signal rate unchanged at zero**, as expected – and the bank assume it will stay there for a long as the Bank can see (till Q3 2024)
- The Bank keeps the **target QE level at SEK 700 bn**, as announced at the Nov '20 meeting, until the end of 2021, – because according to the Bank, *'The risks with reducing stimulation measures too early are therefore still judged to be greater than the risks of retaining them too long'*
- The Bank revised its growth projections :
 - » The 2021 forecast is raised 0.5 pp to 4.7% - citing that the economy is now is more resilient to the effects of the virus, while the growth f'cast for 2022 was revised by down by 1 pp to 3.6% and the f'cast for 2023 was revised up by 1 pp to 2.0%
 - » The unemployment rate will still increase from 8.3% in 2020 to 8.8% in this year (+0.1 pp)
 - » Inflation f'cast was revised up for all years, and will be above the 2% in 2021, 2022 and in 2024, according to the Riksbank. However, adjusted for energy prices, the CPIF will remain well below 2% until the target is assumed to be reached in 2024
- **The Riksbank remains dovish, stating that 'the expansionary monetary policy is a prerequisite for inflation... to be close to the target'**
- ...but Sweden, like many other countries, does not seem to have a demand-side problem...

House price peak? Swedish house prices up 0.2% in August, after falling in July

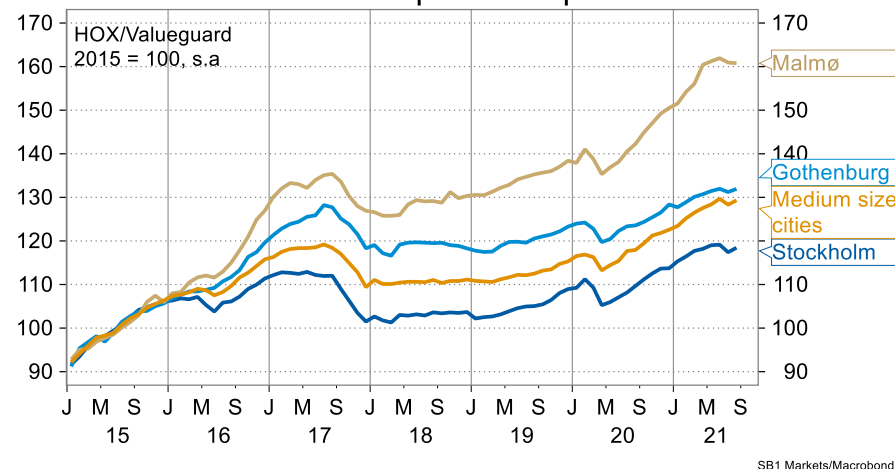
The annual price growth has fallen to 13%, from the peak at 19%

Sweden Home prices

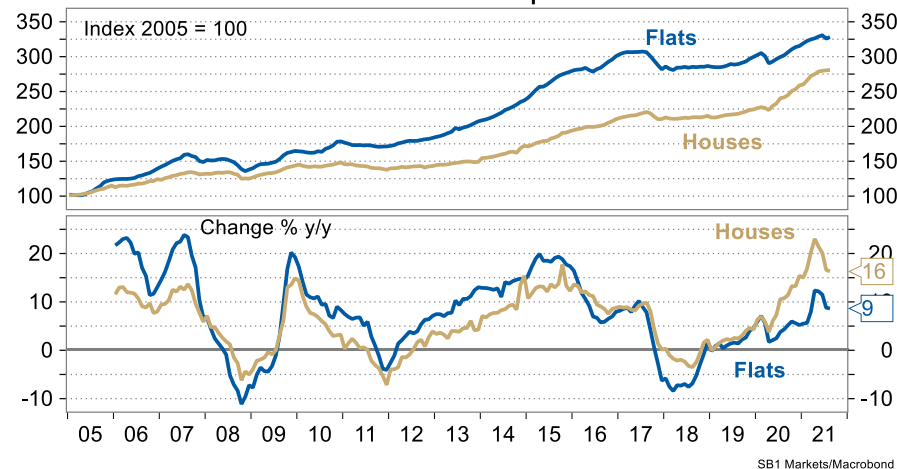


- The annual price inflation fell to 13.4% in August from 13.6% in July. In April the rate was 19% (as prices fall last spring)
 - » The underlying price growth (3m/3m) has slowed to 6%
- Apartment prices rose in all major cities, except in Malmö. However, both Malmö and Stockholm prices are down vs. the May/June level
- The Riksbank has 'promised' to keep interest rates unchanged until 2024

Sweden Apartment prices



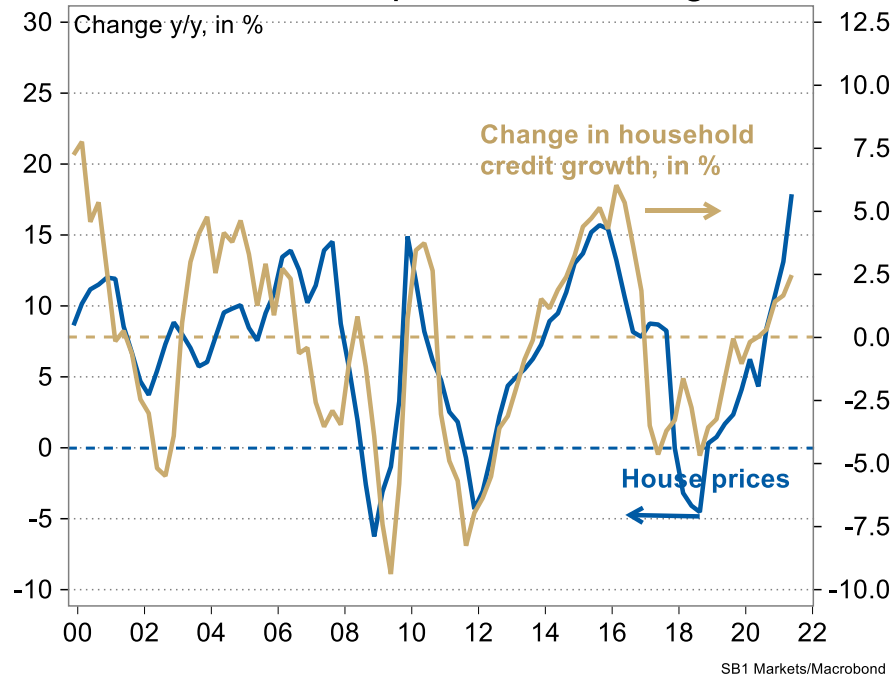
Sweden Home prices



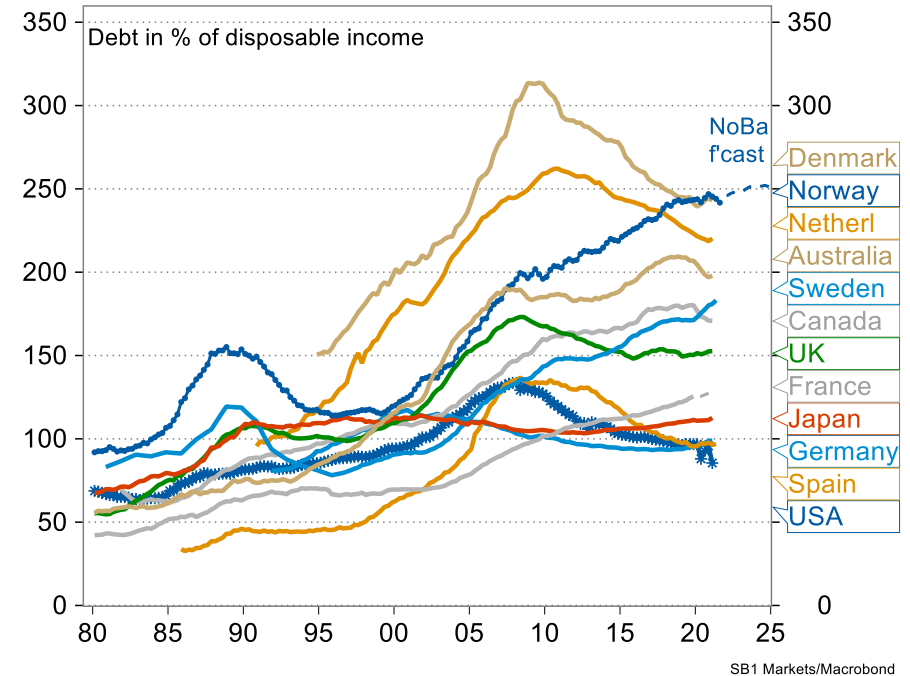
Credit growth is accelerating rapidly

... and more than in any other rich country, without cuts in (record low) mortgage rates

Sweden House prices vs credit growth

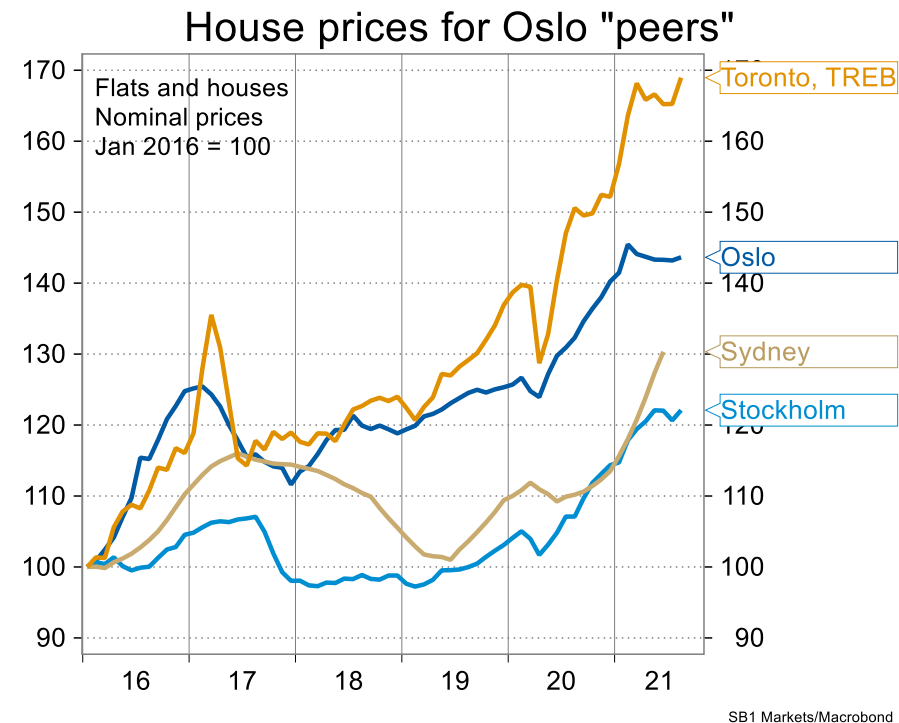
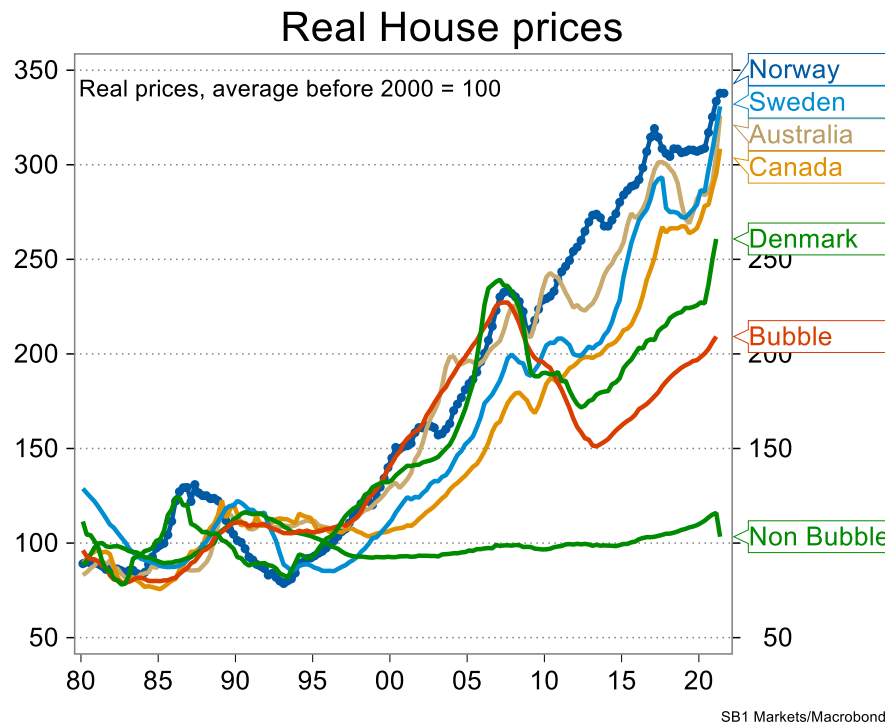


Household debt



Zero-interest rates are just wonderful! At least for a while

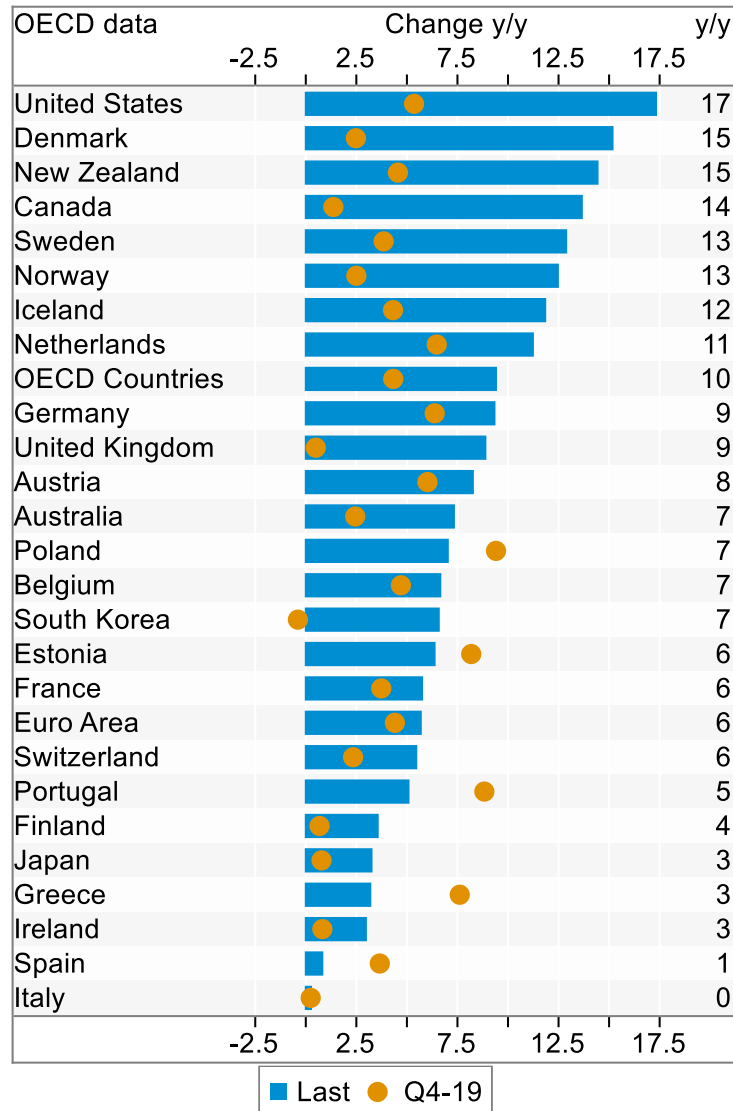
However, now prices are sagging in Norway



- Real house prices are at high levels in both Australia, Canada, Norway, and Sweden
- Home prices in the capitals in these countries are mixed recent months, as Oslo and Toronto and now Stockholm have taken a break – but Sydney is probably still on the way up

House prices up everywhere, and have accelerated in 21 of 26 countries

House prices



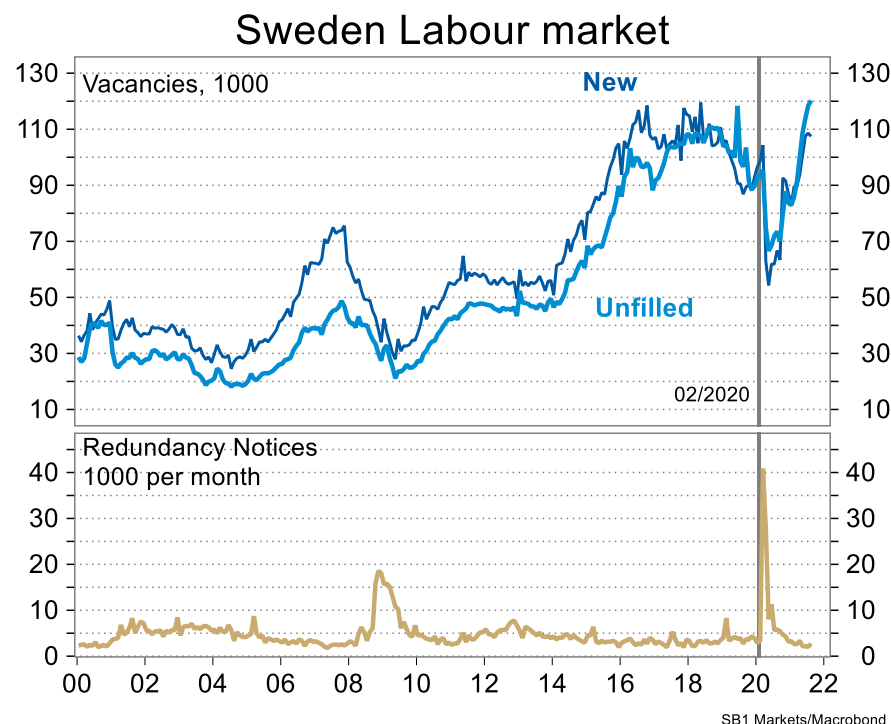
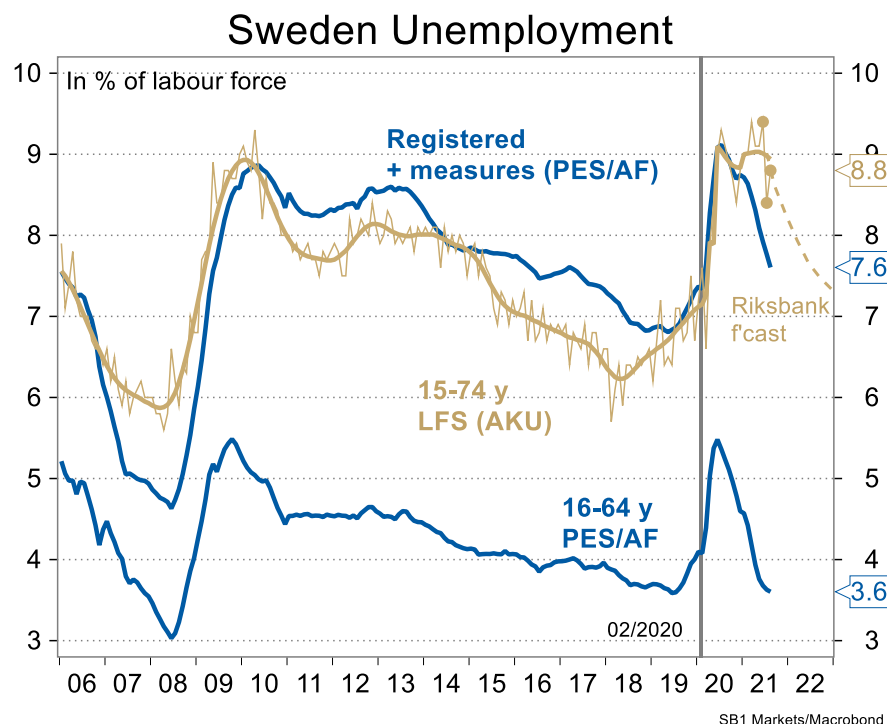
SB1 Markets/Macrobond

- The average price appreciation in the OECD area was 10% in Q2, up from a 4% before the pandemic
- Denmark, New Zealand, Sweden and Norway have reported the steepest acceleration vs. pre-corona growth rates
- Price inflation has slowed the most in Greece, for good reasons – the tourist country has been through a harsh downturn. The house markets in Spain and Portugal have been hurting, for the same reason

OECD quarterly data, the last quarter Q1 or Q2-21

LFS unemployment up to 8.8% in Aug but employment is trending rapidly upwards

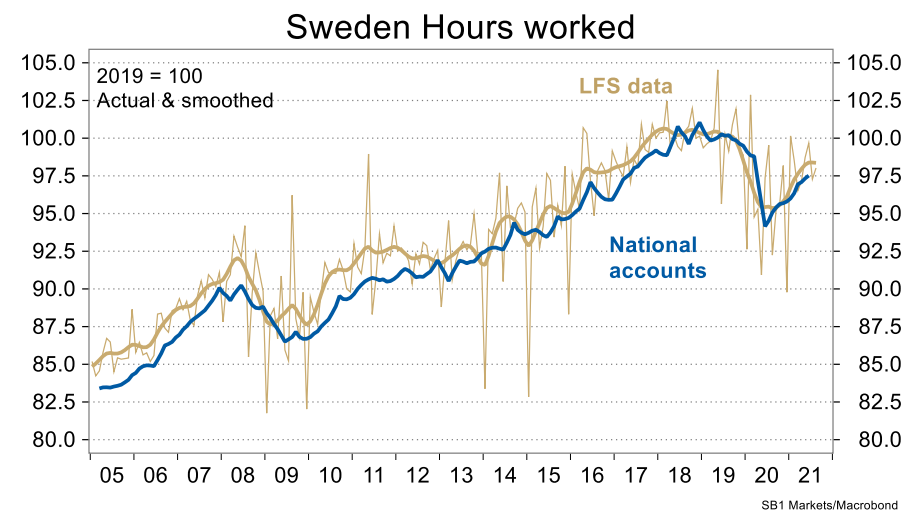
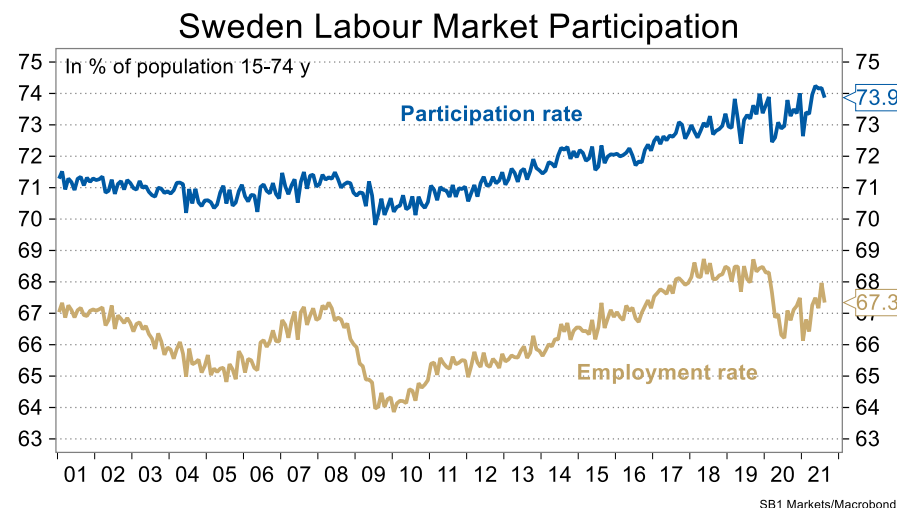
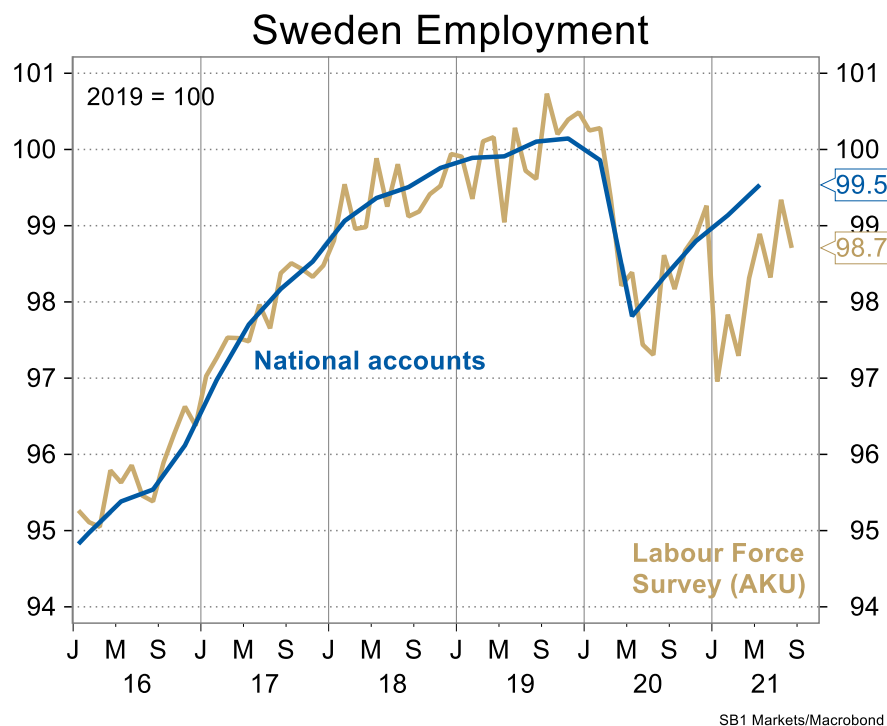
The participation rate is record high, 'explaining' the high unempl. rate. Registered unempl. at 3.6%



- The **LFS (AKU) unemployment** rose by 0.4 pp in August to 8.8% -and the level is up 1.6 pp higher than in early 2020. (However, this survey is heavily revised, and we are not sure the Swedes have made data comparable)
- Employment is climbing rapidly but remains 1% below the pre-pandemic level-
- **Registered 'open' unemployment** (PES/AF 'NAV') has fallen rapidly since last June, and currently stands at 3.6%, unchanged from July (at the first decimal), and below the pre-pandemic level at 4.1%
 - » Incl. labour market measures, PES/AF unemployment is falling rapidly too - but less than open unemployment. The rate fell by 0.2 pp to 7.6%, but the level is still 0.3 pp above the early 2020 level
- The number of **new vacancies** stabilised in August, at a higher level than before the pandemic. The no. of **unfilled vacancies** rose further, to ATH – like in so many other countries. The no. of **layoffs** remain at a low level

The employment rate up, and labour force participation at record high levels!

Still, the employment rate is down 1.6% (1.1 pp) vs. late 2019. The participation rate is up!



- Employment is down approx. 1% from before the pandemic in Q2
- The participation rate fell marginally in August, but is at a record high level – which explains half of the increase in the unemployment rate since before the pandemic
- Hours worked has recovered substantially vs last spring, and are still on the way up - and are now 2% below the pre-pandemic level

Highlights

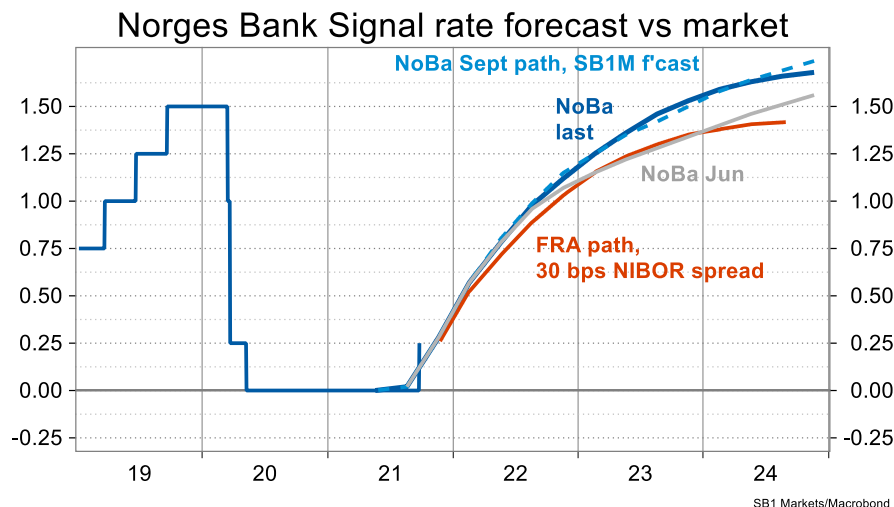
The world around us

The Norwegian economy

Market charts & comments

On the road again: NoBa lifted the signal rate – and the interest rate path (again)

The hike was given. The rate path implies 1.5% is reached in Q2/Q3 2023, 1y earlier than in June MPR



| Interest rate paths | | Change | SB1M | Fair FRA * | FRA | NoBa |
|---------------------|-----------|--------|-------|------------|----------|------|
| Path 2-21 | Path 3-21 | bps | fcast | @IMM, NB | pre meet | -FRA |
| Q3 21 | 0.02 | 0.02 | 0 | 0.02 | | |
| Q4 21 | 0.28 | 0.28 | 0 | 0.28 | 0.83 | 0.76 |
| Q1 22 | 0.57 | 0.57 | 0 | 0.57 | 1.05 | 0.99 |
| Q2 22 | 0.78 | 0.78 | 0 | 0.80 | 1.25 | 1.17 |
| Q3 22 | 0.96 | 0.98 | 2 | 0.99 | 1.40 | 1.32 |
| Q4 22 | 1.07 | 1.12 | 5 | 1.15 | 1.53 | 1.43 |
| Q1 23 | 1.15 | 1.25 | 10 | 1.25 | 1.64 | 1.53 |
| Q2 23 | 1.22 | 1.36 | 14 | 1.35 | 1.74 | 1.60 |
| Q3 23 | 1.28 | 1.46 | 18 | 1.42 | 1.82 | 1.65 |
| Q4 23 | 1.34 | 1.53 | 19 | 1.50 | 1.88 | 1.67 |
| Q1 24 | 1.40 | 1.59 | 19 | 1.58 | 1.92 | 1.71 |
| Q2 24 | 1.46 | 1.63 | 17 | 1.64 | 1.96 | 1.72 |
| Q3 24 | 1.51 | 1.66 | 15 | 1.69 | 1.98 | |
| Q4 24 | 1.56 | 1.68 | 12 | 1.74 | 2.00 | |

*) Assuming a 30 bps NIBOR spread from Q3-21

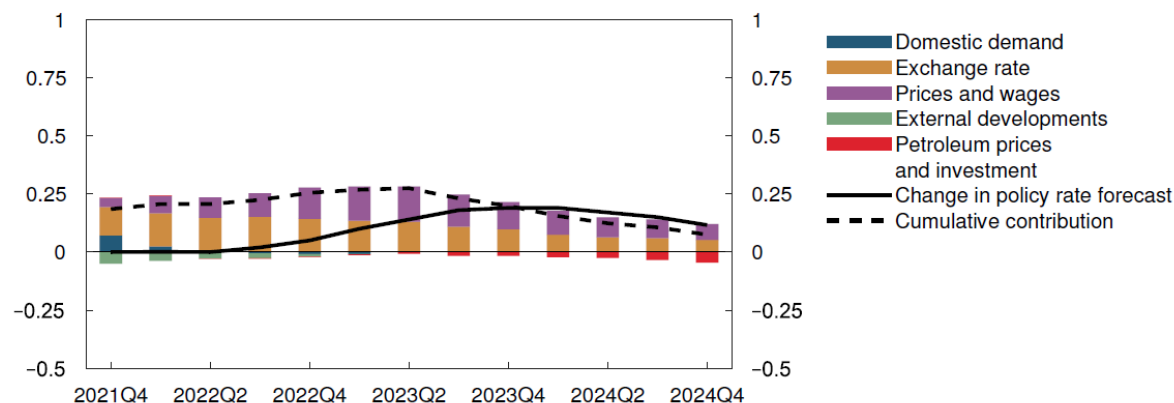
| Q4 FRAs adjusted for liquidity prem

- **Key policy rate** was hiked by 25 bps, which was extremely well communicated in advance
- **Policy rate path** revised upwards by up to 19 bps by the end of 2023/early 2023
 - » By luck and coincidence we forecasted an 18 bp lift for that period – and our suggested path was close to identical to NoBa's, barring a 6 p divergence in late 2024 (NoBa's curve flattened faster than we assumed)
 - » According to comments from Governor Olsen, and the bank's rate path, the next step will be taken in December, then in March and in June – and one more in Q4-22, plus 1 – 2 hikes during 2023
 - » The key policy rate will be back at 1.5% in Q2 (most likely) or Q3 2023, one year earlier than assumed in the June path
 - » The end point was revised up by 12 bps to 1.68%
- Norges Bank's rate path was up to **24 bps above the FRA market rates** ahead of the meeting but markets did not respond the NoBa's message – as most had expected an upward revision and market rate have climbed rapidly recent weeks
 - » We deem the risk to be on the upside vs. FRA rates the coming weeks
- The **NOK** immediately gained 0.3%, but half of the gain was quickly reversed and NoBa's actions turned out to be a non-event. Anyway, NOK rates are not important at all vs. the NOK exchange rate

Reasons for the rate path revision: The economy is improving, at home & abroad

NoBa's models suggested a 50 bps hike but the Bank decided to take it step by step

Cumulative contribution. Percentage points



Source: Norges Bank

Our pre-meeting forecast, we too assumed a substantial neg. contribution from 'judgement'

| Changes in the interest rate path from the June NoBa meeting | Impact bps |
|--|------------|
| Domestic demand (incl oil price), capacity util. | 8 |
| Money Market (money market, lending spreads) | 0 |
| Prices, wages | 10 |
| Foreign factors | 2 |
| NOK | 13 |
| Judgement (surveys, fin. stab, global risk etc) | -15 |
| Sum | 18 |
| Changes in NOK Dec-22 FRA since after June m. | 12 |
| Change in the interest path 1 1/2 - 2 years from now | |

Upside contributions:

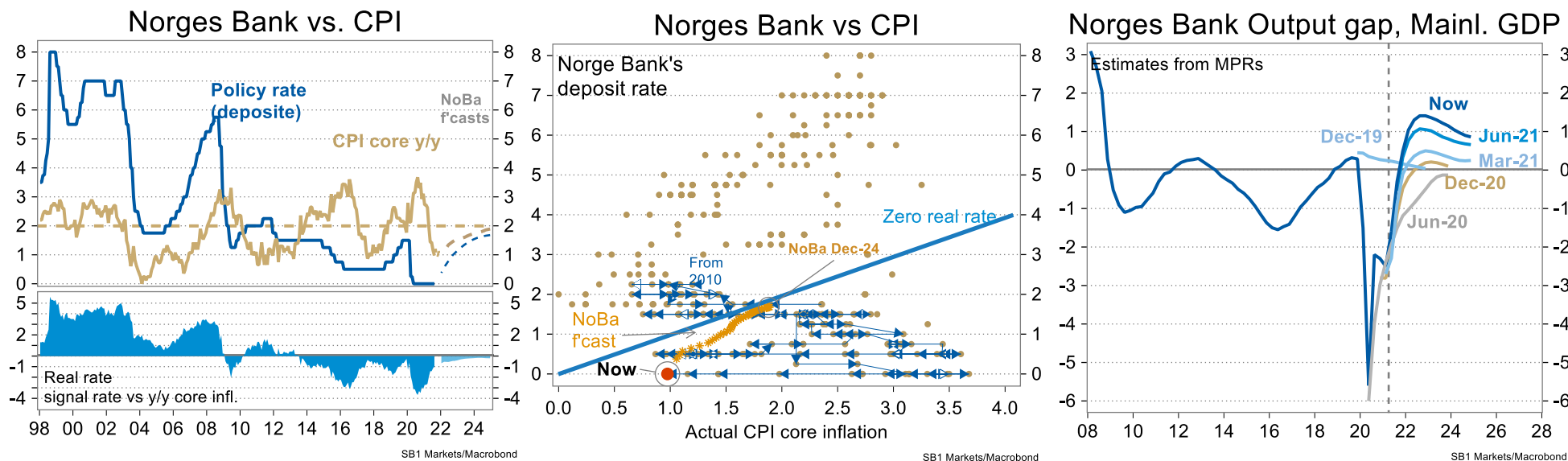
- The NOK has been weaker than expected
- Domestic demand is a tad stronger
- Wage and cost inflation is revised upwards

Downside contributions:

- Nothing from the **data/model side**, barring a small Delta impact abroad in Q4-2022, and a small contribution in '23 - '24 from lower oil investments (but they are assumed to rise sharply (20% in 23/24) due to the 'tax rebate')
- The model approach suggested a 25 bps upward revision of the interest path, implying a 50 bps hike now. However, the **board used its judgement**, and decided to take a more gradual approach as there are uncertainties regarding the virus situation abroad, and even more on how households will respond to the hike in rates
 - » This judgement adjustment was the largest ever

NoBa takes the lead: The most flexible inflation targeter

Hikes rates even if inflation is below target. Because the alternative is more risky. Will others follow?



Inflation is expected to stay below the 2% inflation target over the whole forecasting period, the next 3½ years. Even so, Norges Bank starts hiking rates. Why? Here is our take:

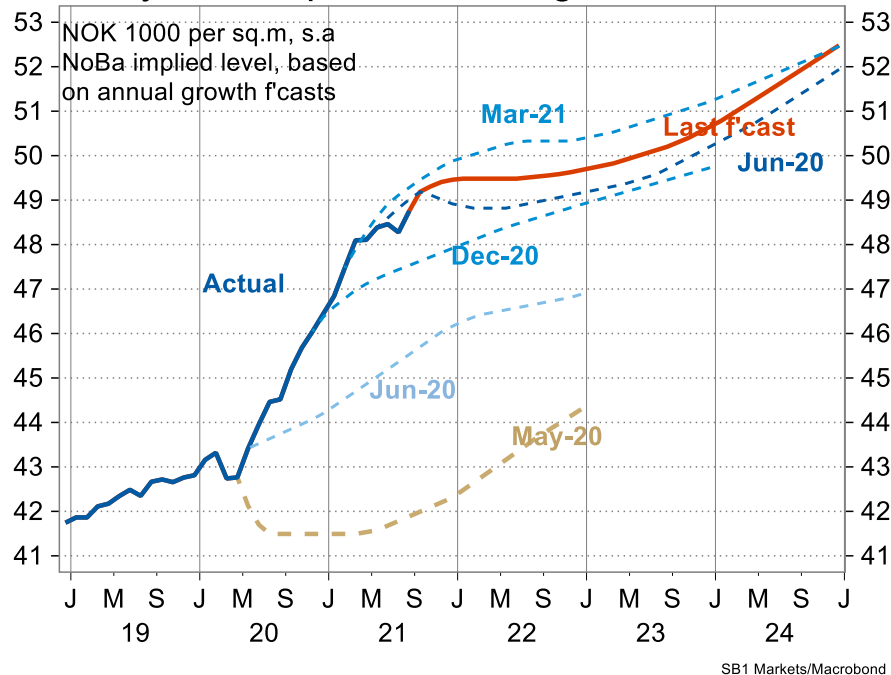
- **Norges Bank has not been an inflation nutter the past 10 years.** If anything, there is a negative correlation between actual core inflation and the signal rate since 2010. From 2021, both inflation and the signal rate is expected to move together 'in the right direction', both upwards.
- **The real policy rate is expected to stay negative for 1½ more years (it has not been positive since late 2013!).** Norges Bank assumes neutral policy rate slightly below zero (the real 3 m NIBOR at zero). Policy remains expansionary, albeit less so over time, as the interest rates climbs faster than inflation (BTW, we are not so sure than the neutral NIBOR rate is at zero)
- **Norges Bank assumes capacity utilisation** is now turning positive, and is expected to climb further, following another upwards revision
- No doubt, **risks for (further) build-up of financial imbalances** would increase significantly if the bank kept the signal rate at zero in order to push up inflation, in an even stronger economy than the one projected

Norges Bank is no doubt the most flexible inflation targeter among central banks today. We think this policy is wise, and we expect other central banks to follow suit the coming two years as the present policy mix most likely will not foster stability, long term

Norges Bank revised its house price path upwards

Even if the interest rate path was lifted. However, prices are expected up at a 2.2% pace till ult. 2024

Norway House prices vs Norges Bank's f'casts



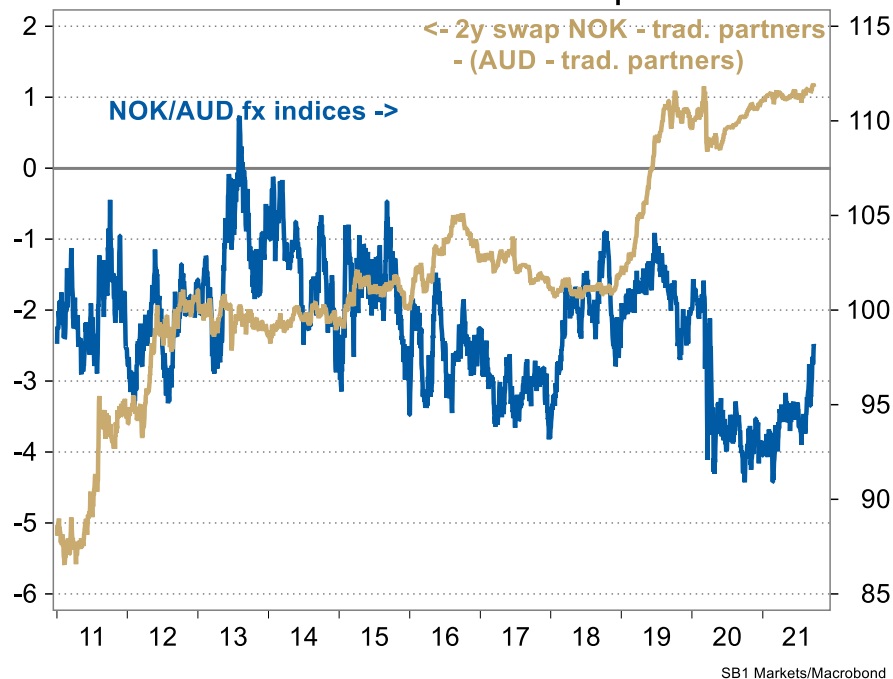
- NoBa expects house prices to appreciate less than income growth the coming years but not by much

- The price path is still lower than the March estimate

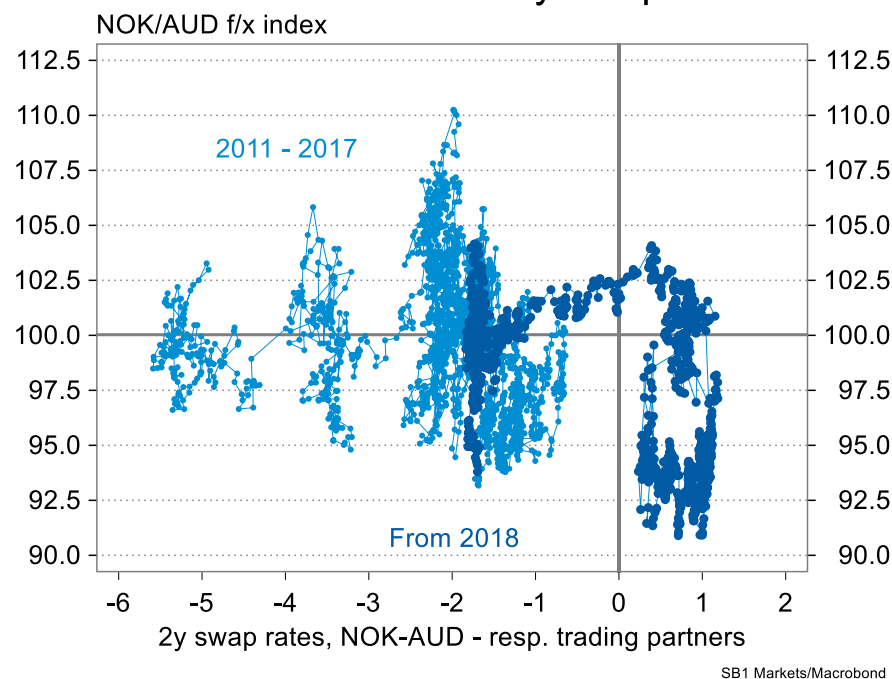
Can Norges Bank walk the walk alone?

Or will the NOK become too strong? A simple test: How important are interest rates, by themselves?

NOK vs AUD: F/x & swap rates



NOK vs AUD: F/x & 2y swap rates

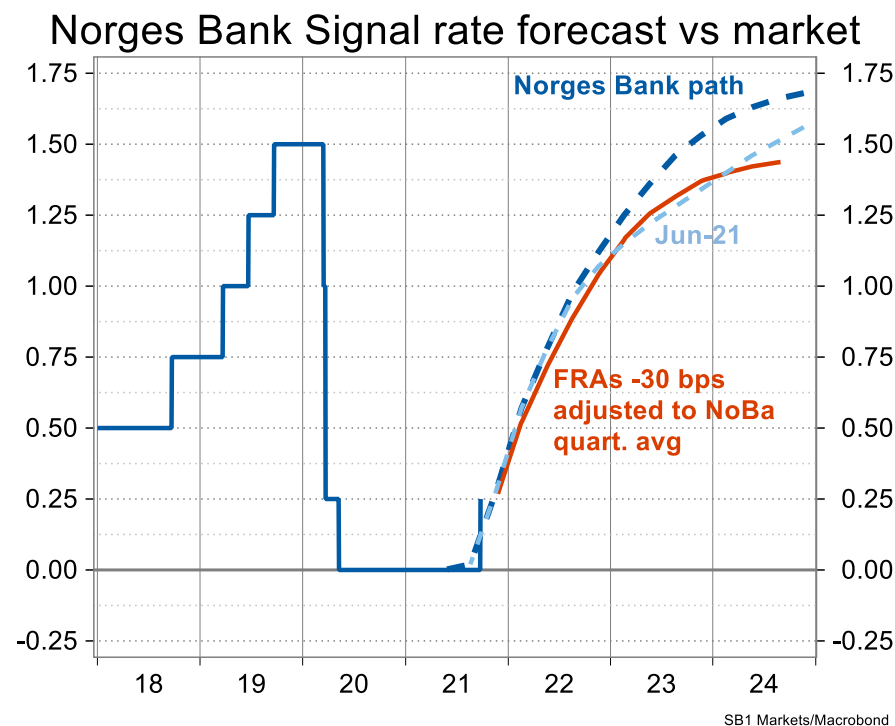
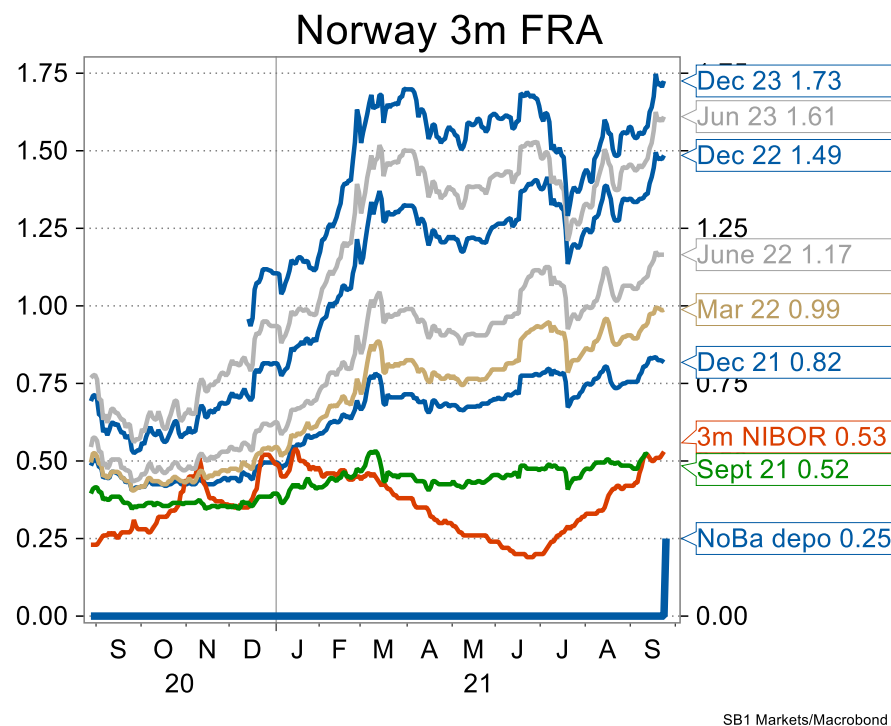


A simple test

- The AUD and NOK f/x indices are very closely correlated ([check the chart here](#))
- Can differences in interest rates between the two currencies vs their respective trading partners explain the rather small discrepancies between the two? **No!!**
- If you build a model explaining the NOK exchange rate by the interest differential, it is completely useless
- Can Norges Bank go solo, without pushing NOK strongly up (vs other currencies we correlate closely to)? **Probably YES**

The new rate path well above market FRA rates

No panic in the FRA market following NoBa's hawkish message, rates were unchanged

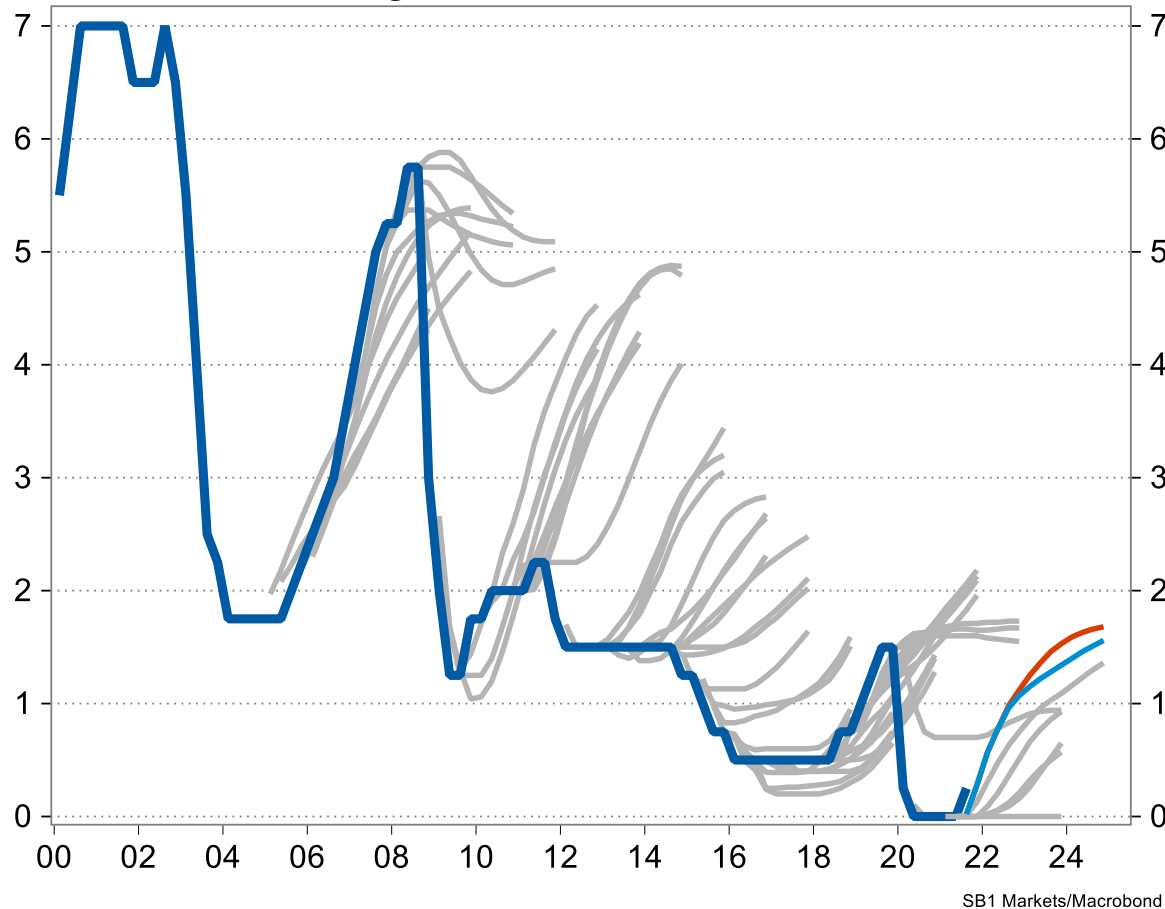


- FRA rates have climbed rapidly since mid July, and are at the highest level in this cycle
- The market is now fully discounting NoBa a hike in December, a March by 80%, and a June hike by 50%, if rates are hiked in both December and March
- The FRA-curve is some 7 bps below the NoBa path on average in 2022, and 13 bps in 2023, and 21 bps in 2024
 - » The longer NOK FRAs are of course gradually more influenced by the low rates abroad

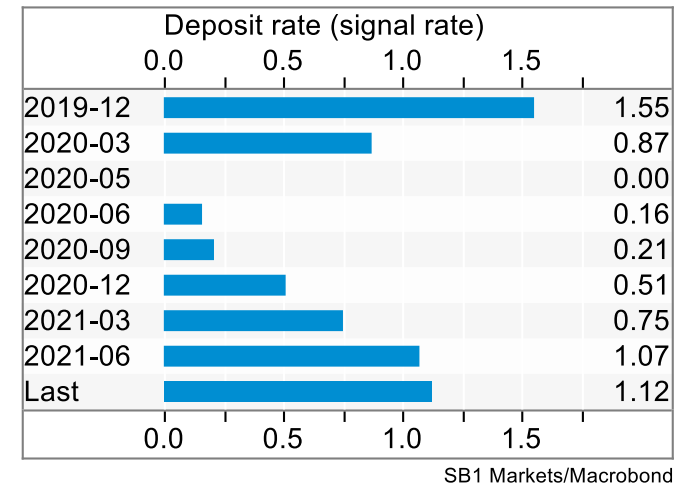
Never forget this one!

The bank has never done as it said it would. Because something unexpected turned up, of course!

Norges Banks rentebaner



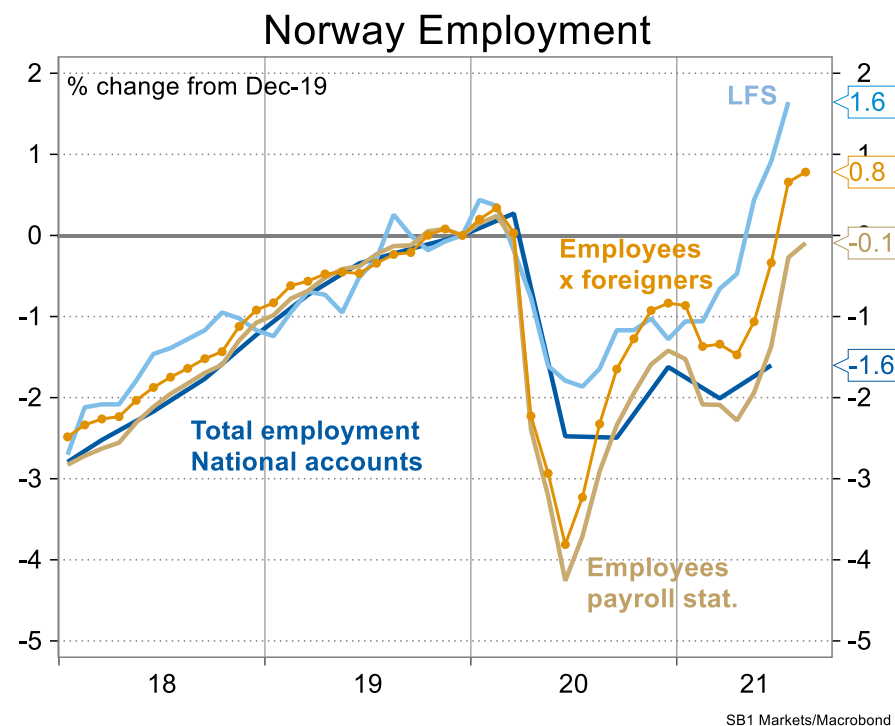
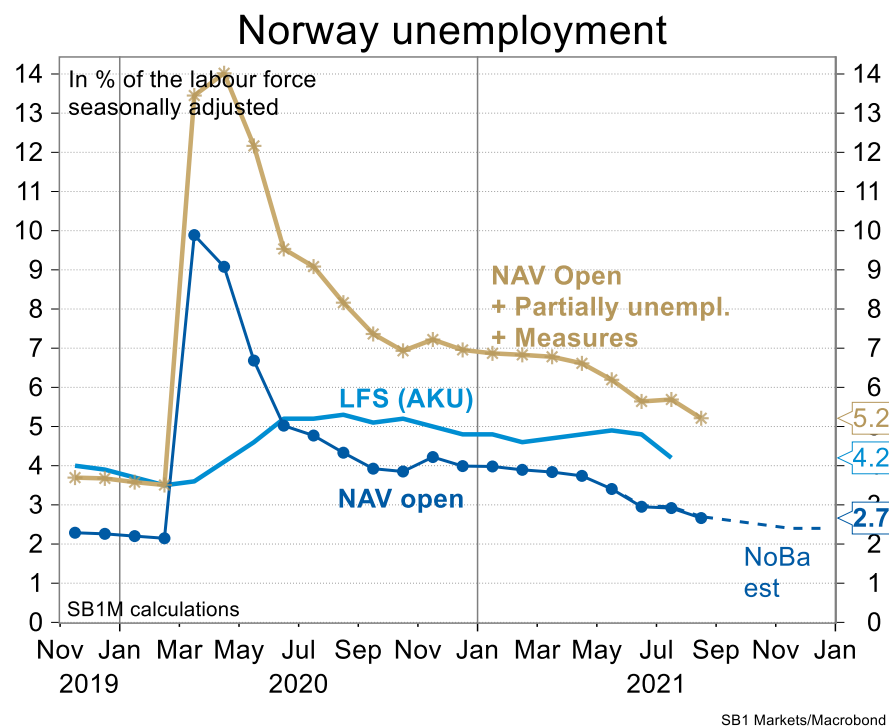
NoBa Q4 2022 f'cast



The last path in red, the previous in light blue

And then the LFS unemployment rate also fell – as empl. soars, +1.6% vs pre-p

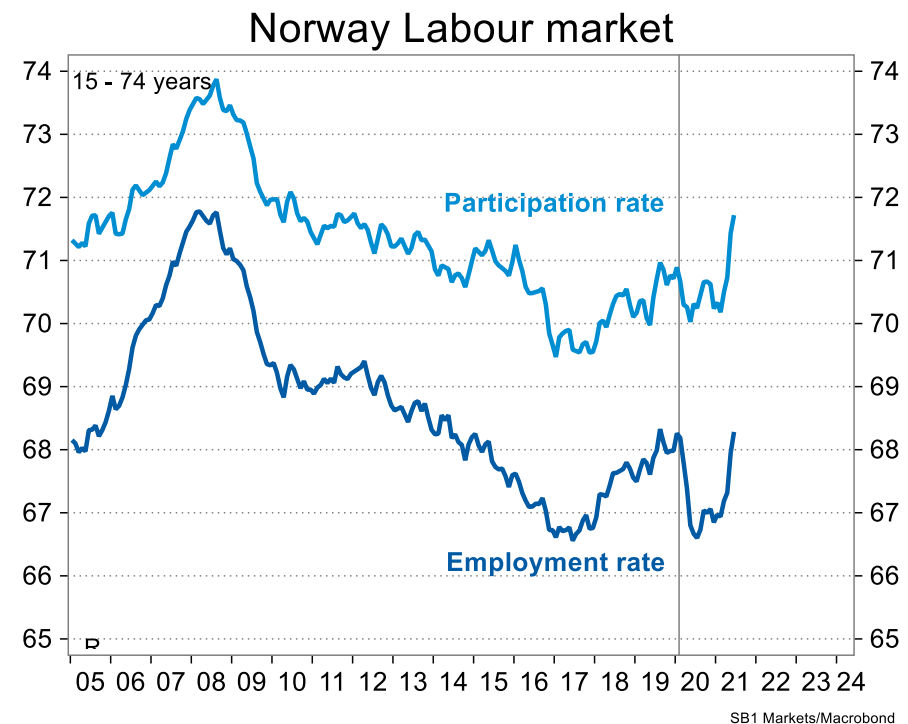
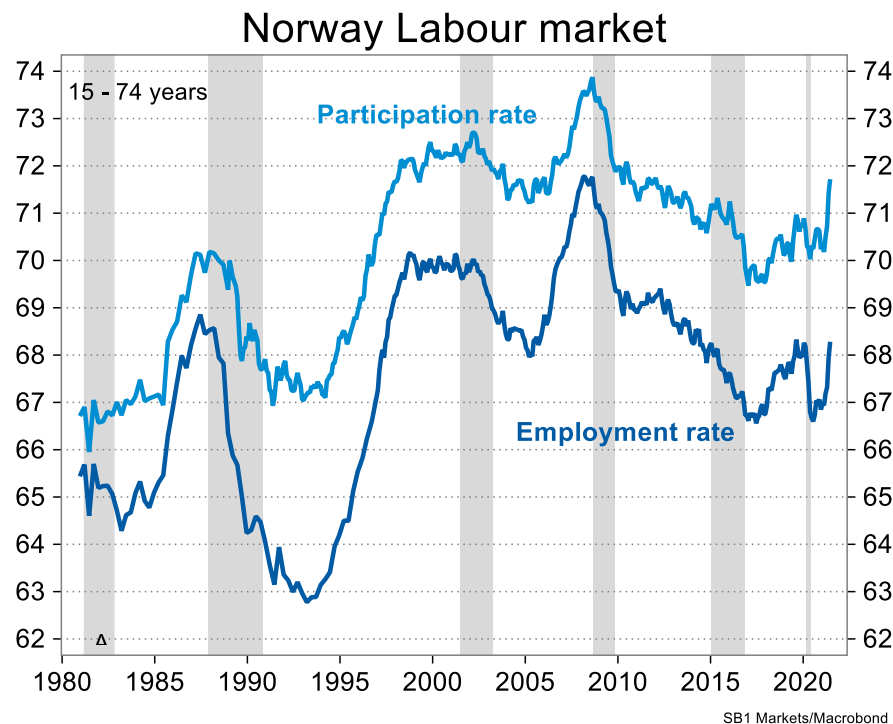
Unemployment down to 4.2% from 4.8%. And even more impressive, the participation rate is surging!



- **According the LFS, employment rose by 20' persons m/m in July (June-Aug avg), or by 0.7%, following the 0.5% lift the previous month! The employment level in July is 1.6% above the pre-pandemic level.** The monthly payroll stats is confirmed, 'national' employees are up 0.8%, following a 0.1% lift in Aug. The total no. of employees is still 0.1% below the pre-pandemic level, due to a decline in foreigners on short term stay
- The **employment rate** has shot up recent months, and it is now above the pre-pandemic level!
- The **labour force participation rate** has climbed even faster, and it is now 0.7 pp higher than before the pandemic – and the highest since 2011! This is incredible (even if population growth has slowed substantially)
- **LFS unemployment** 'collapsed' by 18', down to 4.2% from 4.8%, we expected 4.6% (after being disappointed a couple of months). The rate is still 0.7 pp above the pre-pandemic level – but just because the participation rate surged! The decline in the NAV unemployment rate is confirmed!

The participation rate is surging to far above the pre-pandemic level

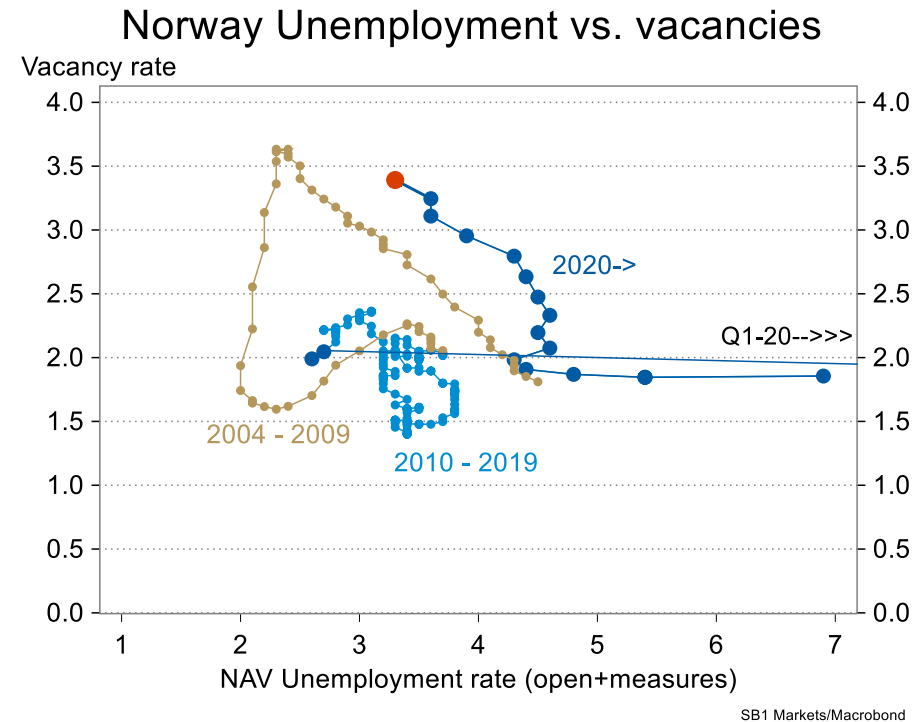
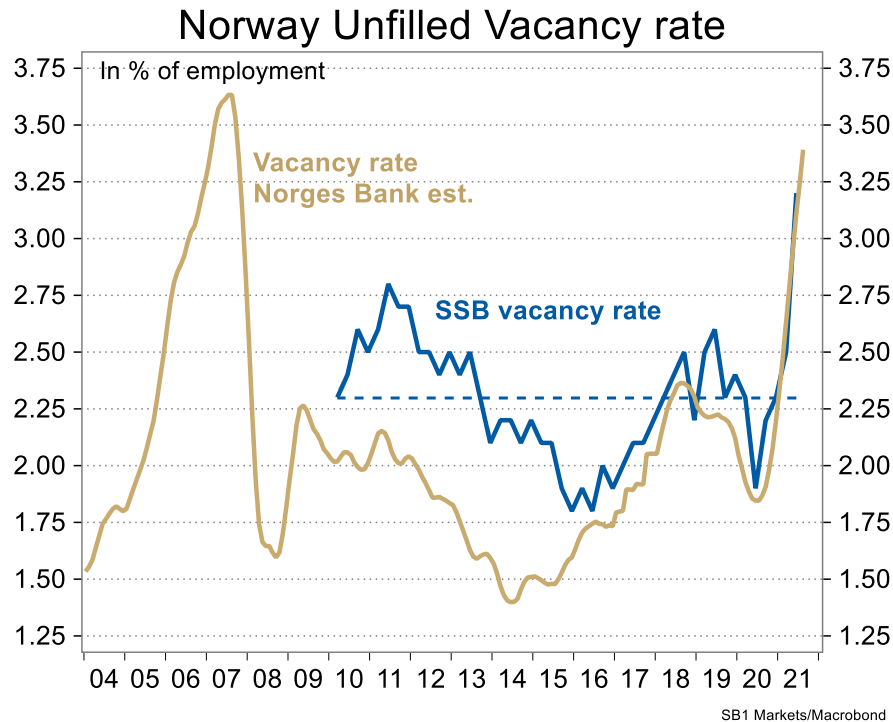
Is lack of foreign labour enhancing the opportunities for marginal national groups??



- The surge in participation & employment rates is rather incredible, especially the lift in the participation rate to far above the pre-pandemic level
- The no. of foreigners on short term stay in Norway has fallen by almost 1/3 or 25' persons vs the pre-pandemic level, equalling 0.6% of the working age population. If nationals (Norwegians or foreigners on permanent stay) have filled all of these positions, both the LFS participation & the employment rate would have increased by an equal amount. At least some of the increase in nationals' employment must be due to this effect
- If so, will these new national entrants remain in the labour market and keep their job when borders are fully opened up? We think they have a decent chance
 - » We are not sure if foreign workers will return as labour markets are tight everywhere now
 - » The Norwegian labour market is now very tight (see more next page)
 - » Those who have acquired a job now, will have qualified themselves

Unfilled vacancies are soaring, the 'Beveridge' curve may have moved outwards

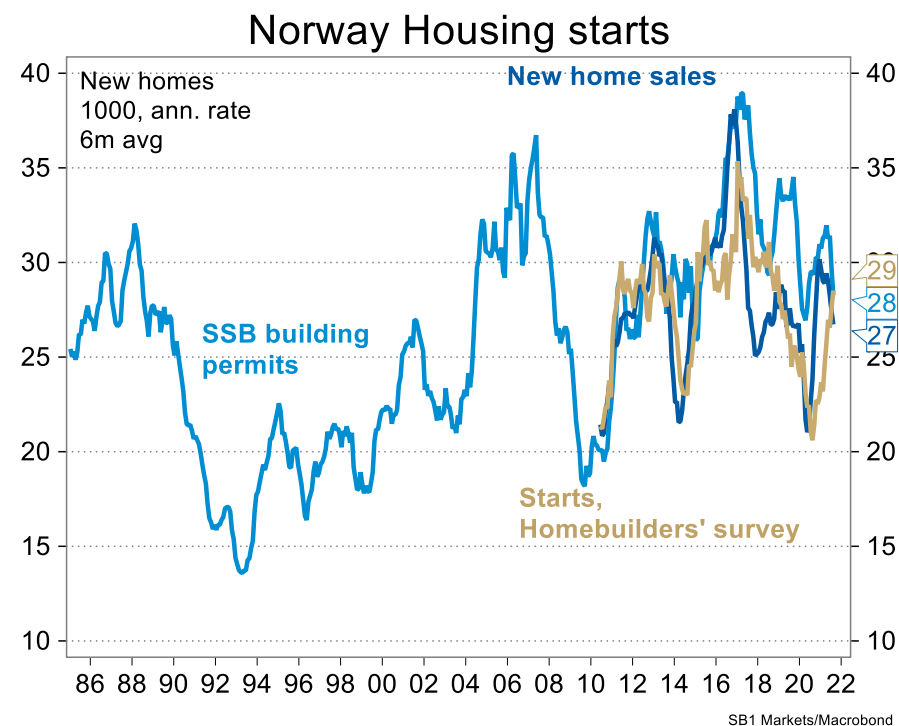
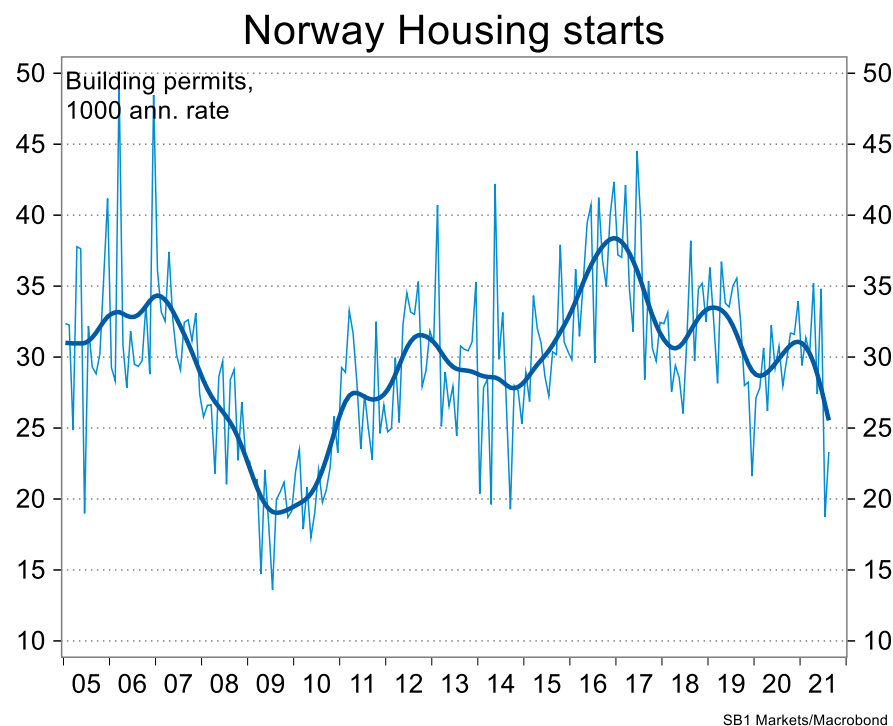
The vacancy rate is very high, and higher than it 'should' have been, vs. the unemployment rate



- Still, it is far too early to judge if the 'U/V' (Beveridge) curve has permanently moved outwards
- The uneven reopening and lack of foreign workers in some sectors may still create bottlenecks that will be sorted out over time

SSB: Building permits remained at a very low level in August

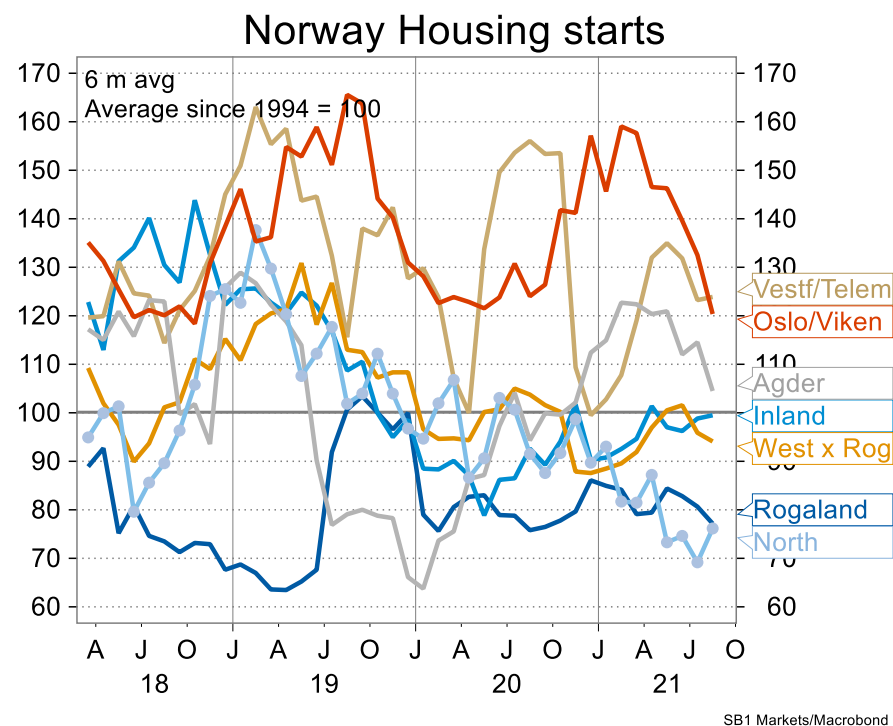
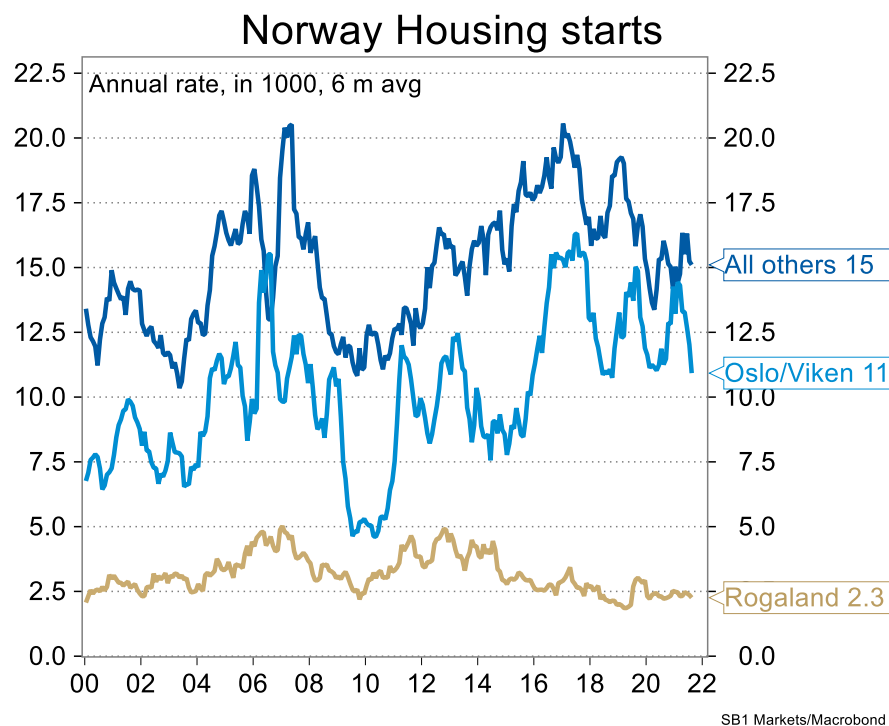
May confirm a slowdown in new homes sales. A response to the spike in construction costs?



- According to **SSB**, **building permits** were cut in half in July, to 18', from 34', and recovered to just 23' in August. The average level over the past 6 months is 28'
 - » The decline has been steep in Oslo/Viken while other regions have not reported a significant decline (in average, at least)
- **Homebuilders** reports a 26' pace for new starts, and sales at 29', following a rapid increase from last spring

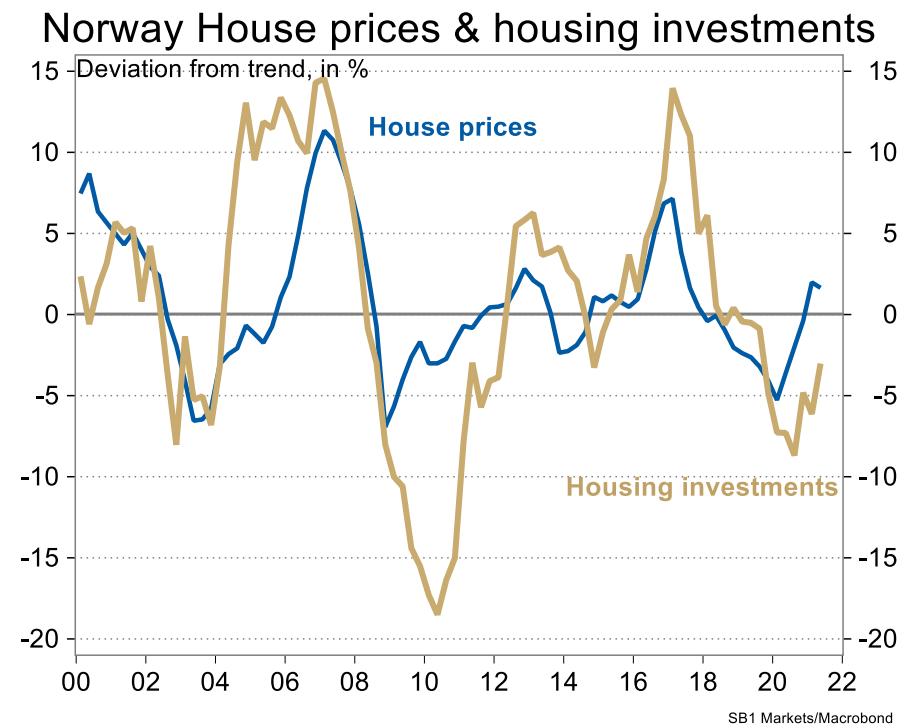
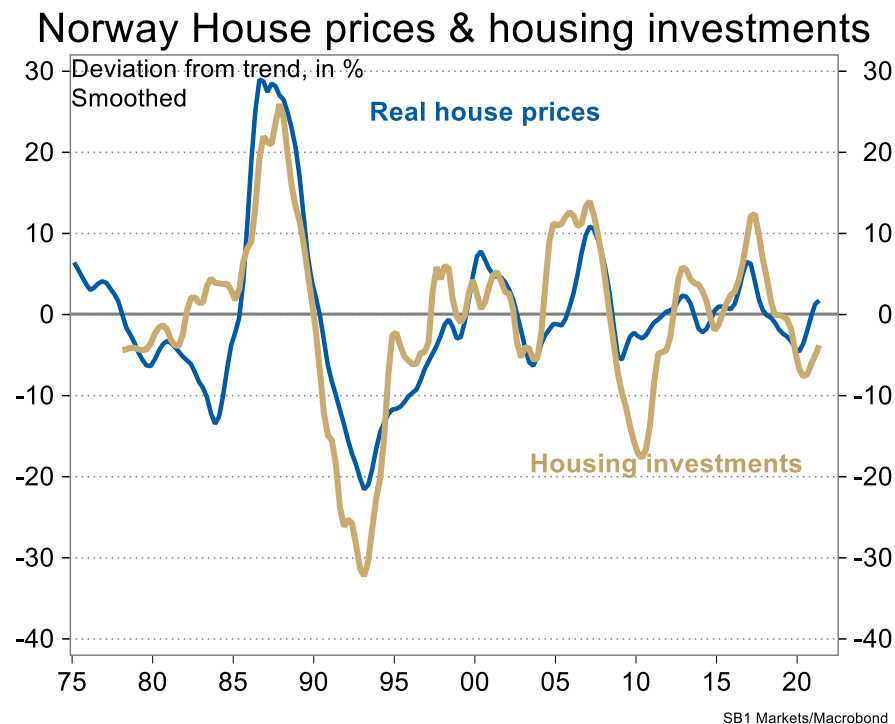
Starts have been weaker everywhere recent months, except Inland and the South

However, the steep drop in July was almost entirely due to Viken and Oslo (down 60-70% m/m)



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

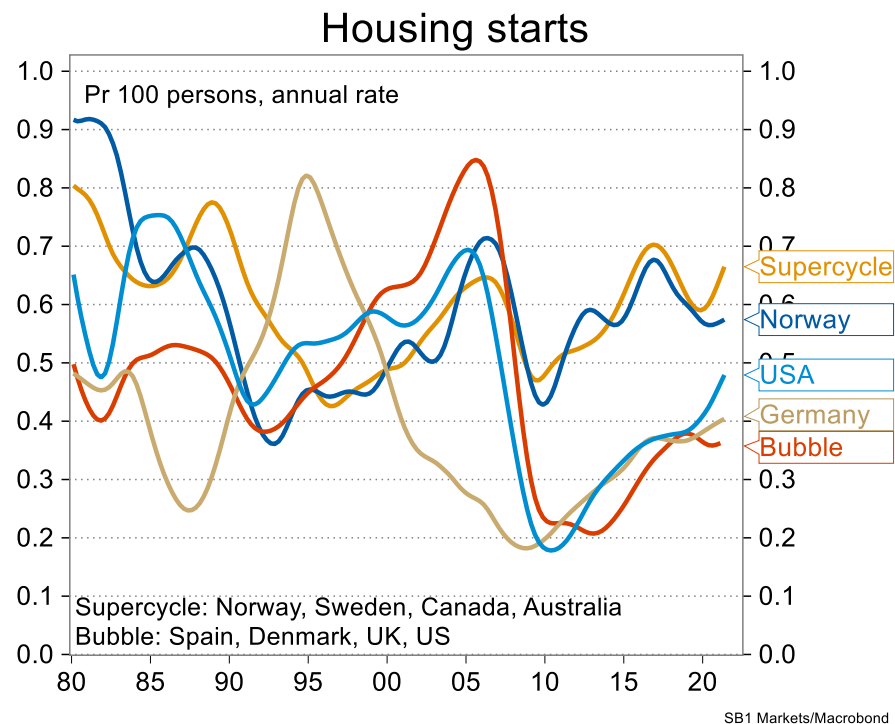
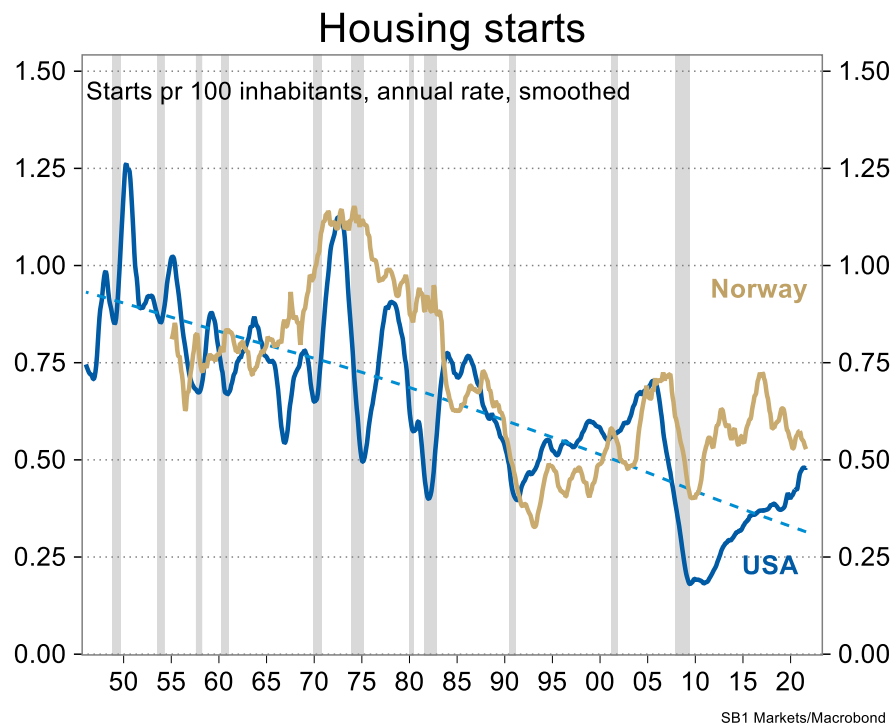
The rapid appreciation from last spring has contributed to an uptick in housing investments



- However, prices are yielding somewhat – and housing starts will slow?

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

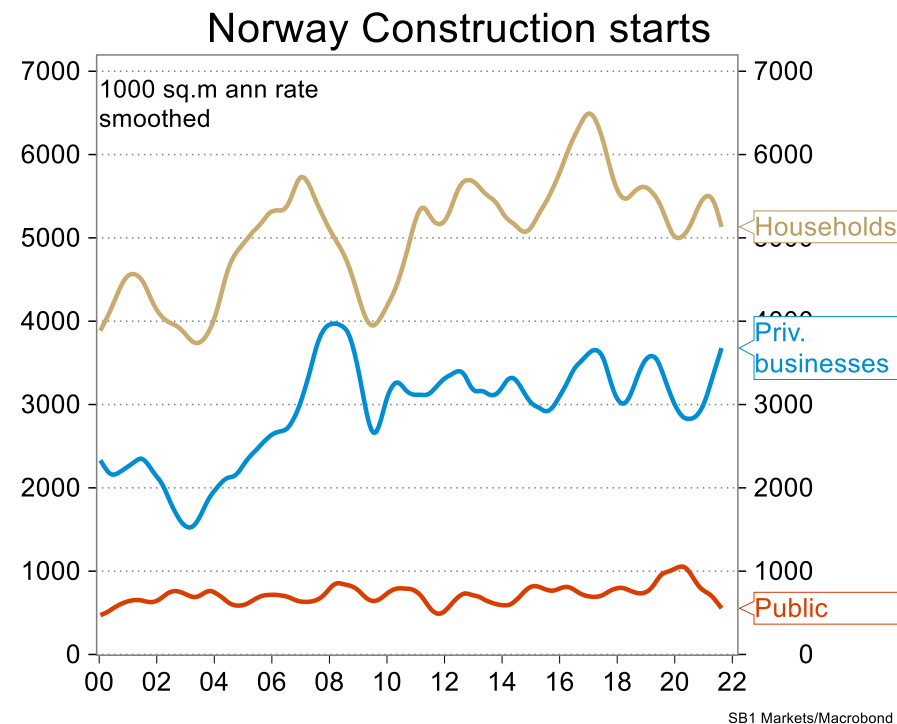
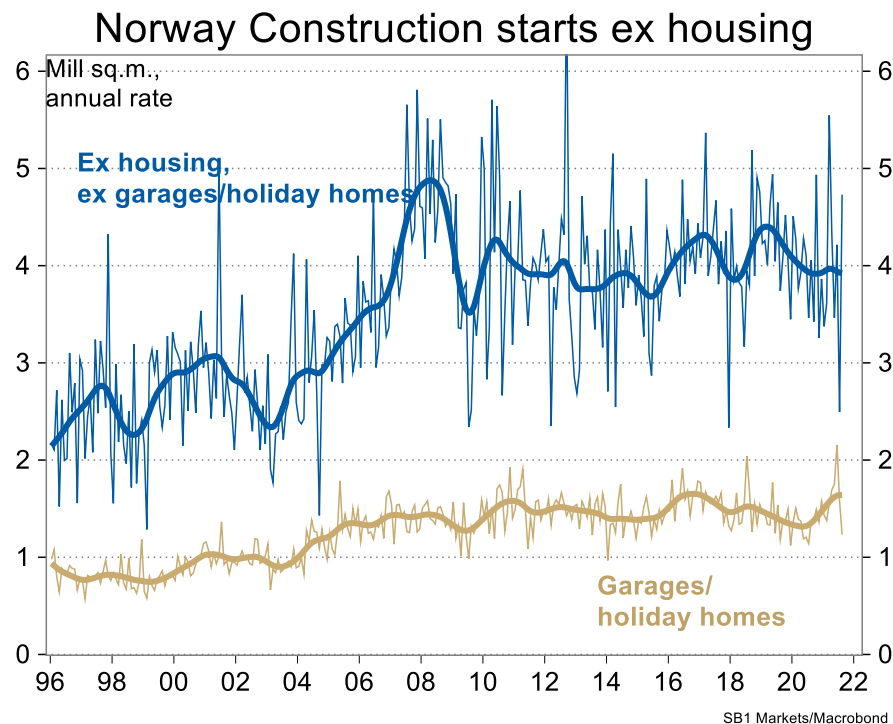
However, Norwegian housing starts are in line with other 'super-cycle' countries



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

Non-residential construction has flattened, garages/holiday homes are surging

... but not in August

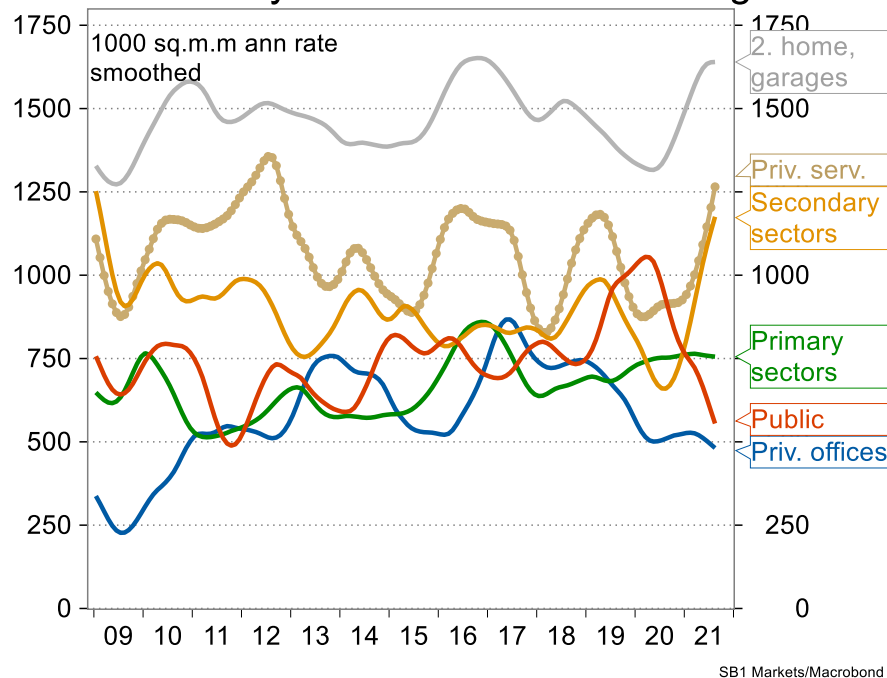


- **Construction starts ex housing & garages/cabins** recovered the sharp fall from July in August – and we assume the sudden decline for garages/holiday homes will be reversed too
 - » **Private non-residential starts** have recovered recent months
 - » **Public sector construction starts** have fallen almost 50% since early 2020
- **Construction starts of cabins/garages** is heading sharply up, following a decline from the peak in 2016

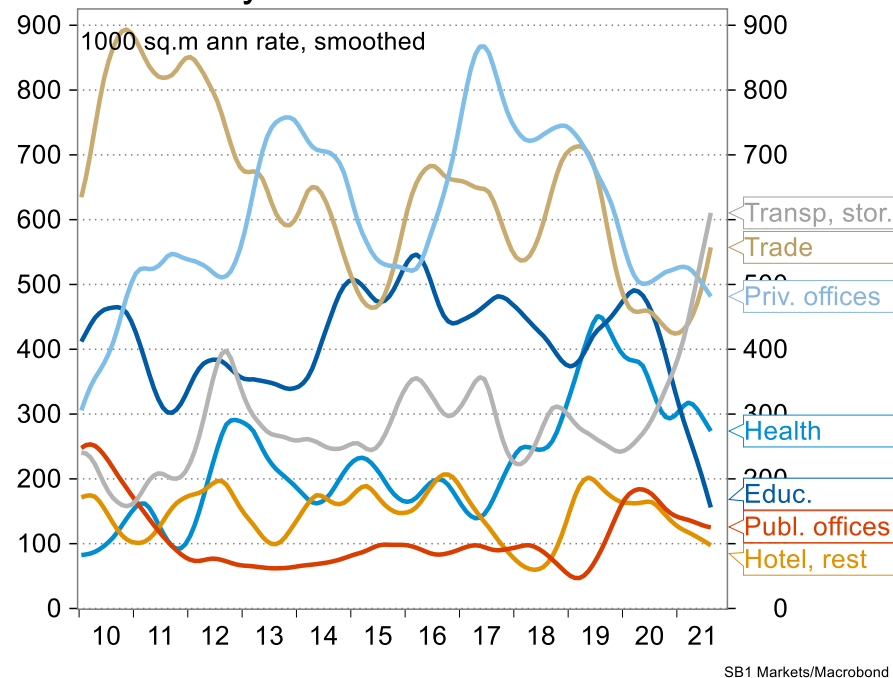
Volatile details: Trade down, hotels weak (of course), transport/storage up

Education sharply down too

Norway Construction ex housing



Norway Construction starts services

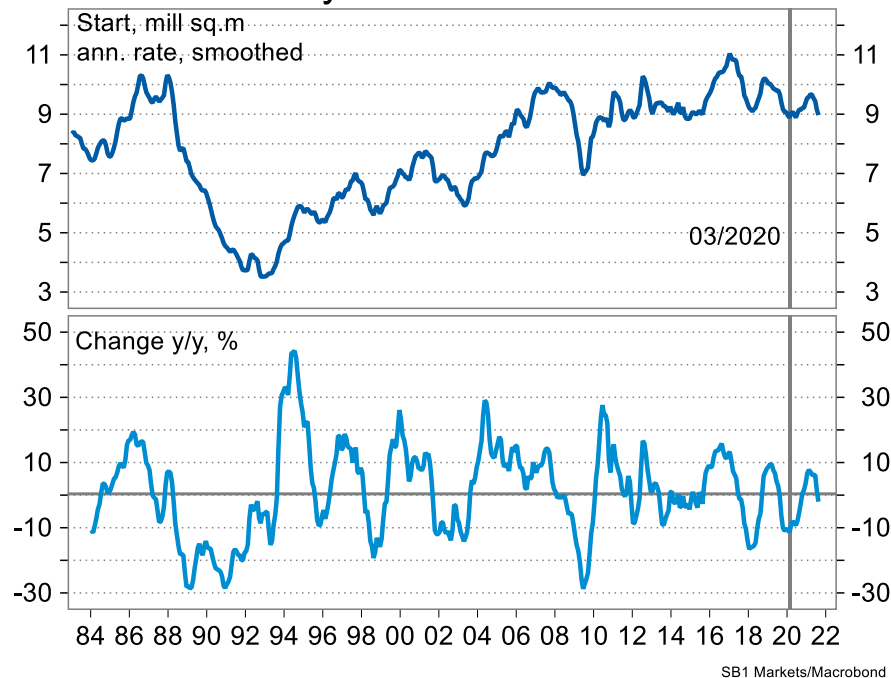


- Education has lost steam, no big projects started recently

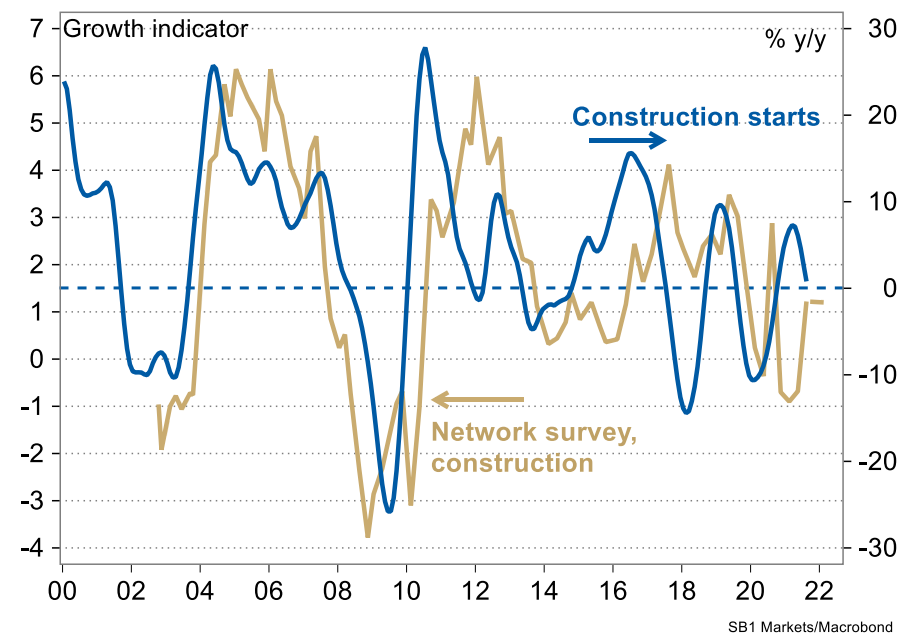
The Q3 NoBa Regional Network signals growth below par

...and construction starts are trending down

Norway Construction starts



Norway Construction activity - Regional Network



- Actual starts are close to flat y/y – and the trend is down since early 2017

Highlights

The world around us

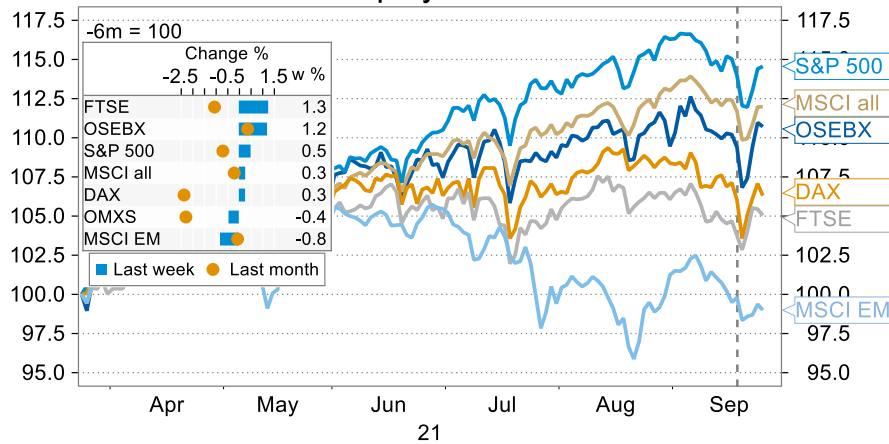
The Norwegian economy

Market charts & comments

Equities mostly up, bond yields further up, as were oil, metals too

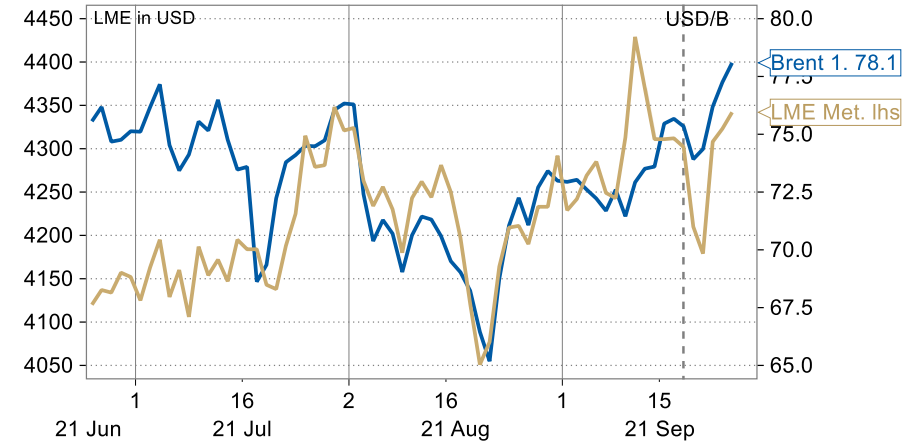
China Evergrande scared markets for 1 day. The oil price the highest in almost 3 years!

Equity Indices



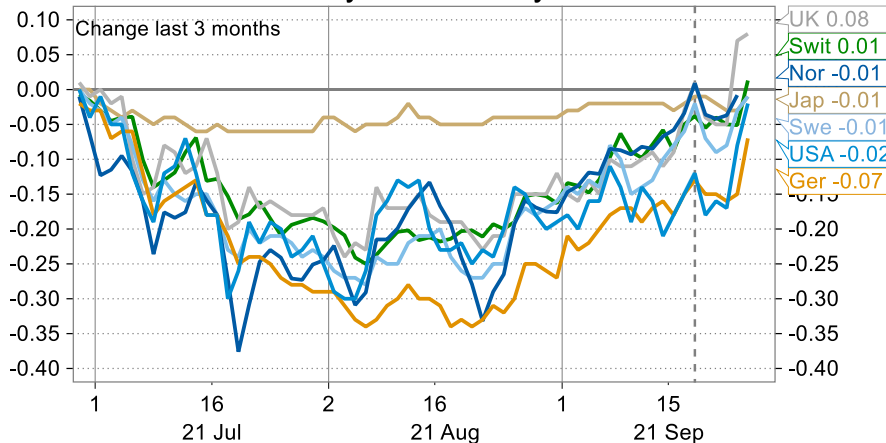
SB1 Markets/Macrobond

Oil vs. metals



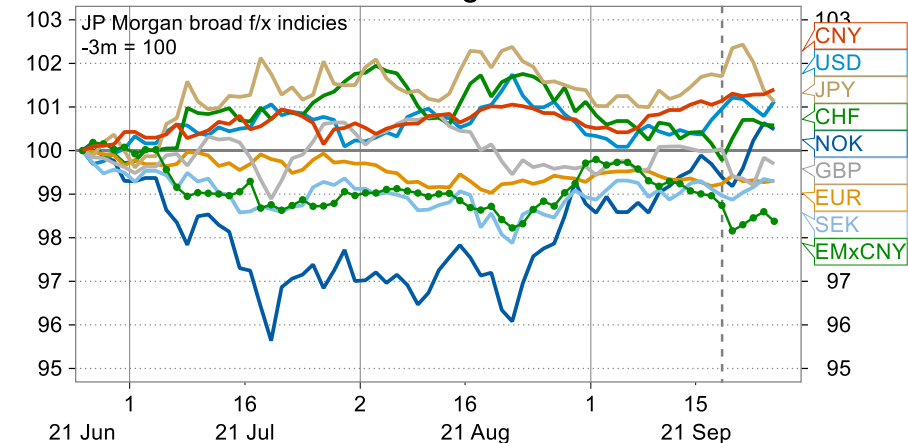
SB1 Markets/Macrobond

10 y Gov bond yield



SB1 Markets/Macrobond

Exchange rates

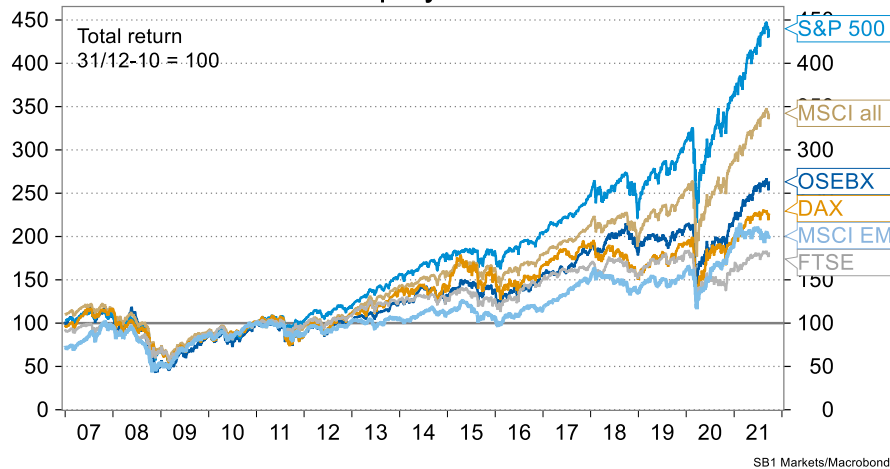


SB1 Markets/Macrobond

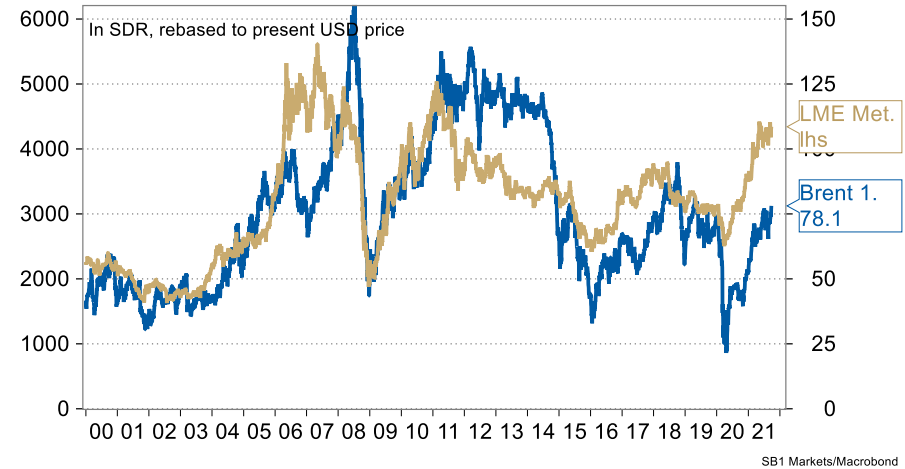
The big picture: Strong stock markets, commodities have taken a breather

Yields have turned up recently but yields are low. The EUR is drifting down, the CNY up

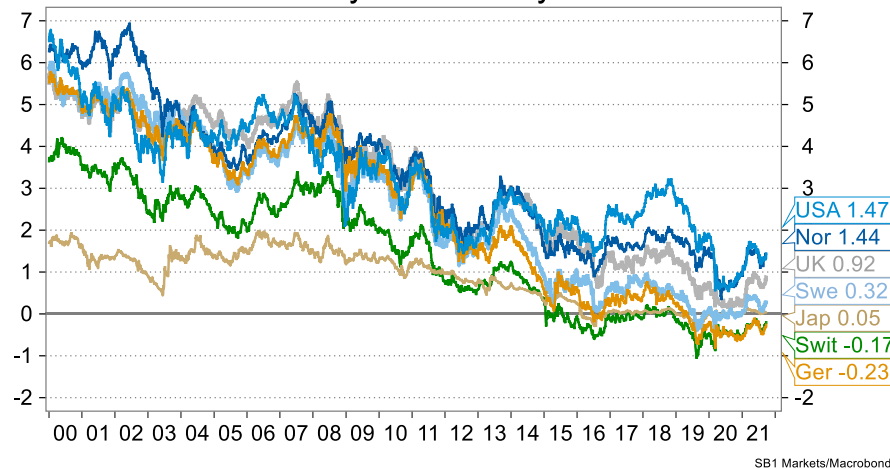
Equity Indices



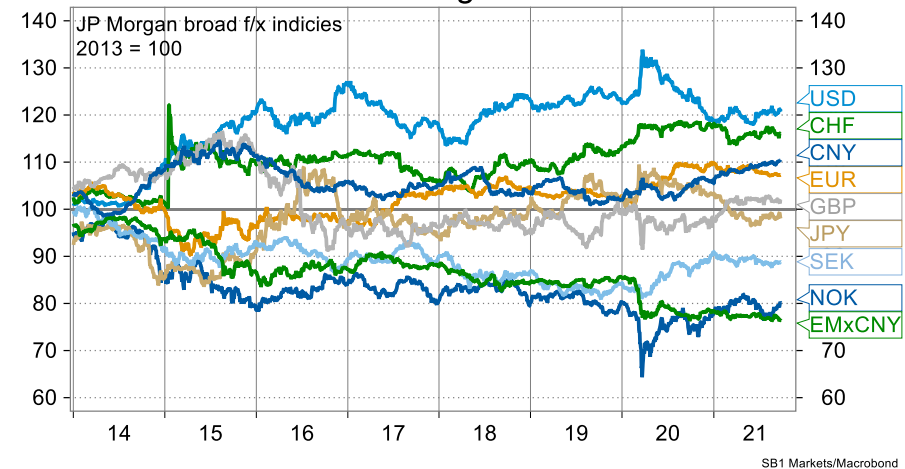
Oil vs. metals



10 y Gov bond yield



Exchange rates

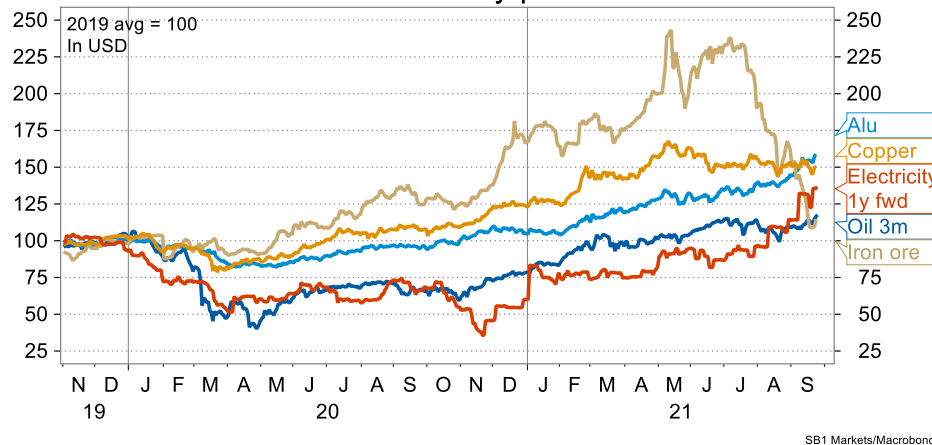


EM x China f/x are drifting down

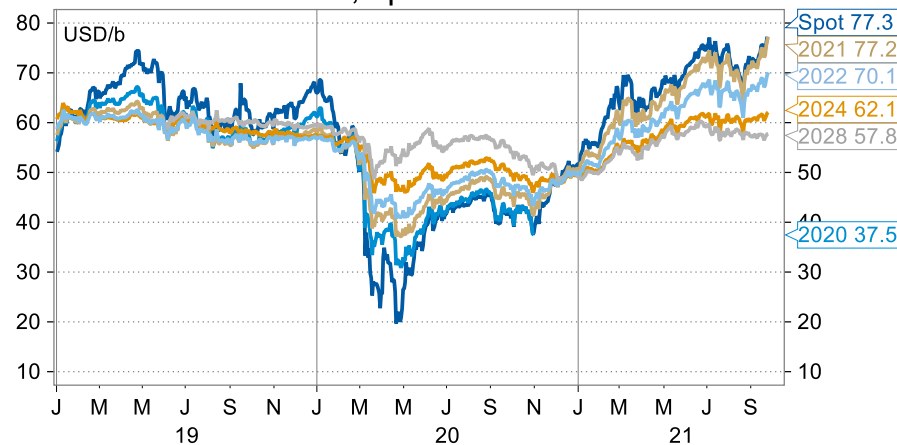
Mixed commodity prices, iron ore down 50% from July – still not that low

However, oil (and gas, electricity) prices rose, at least on the short end of the price curve

Commodity prices

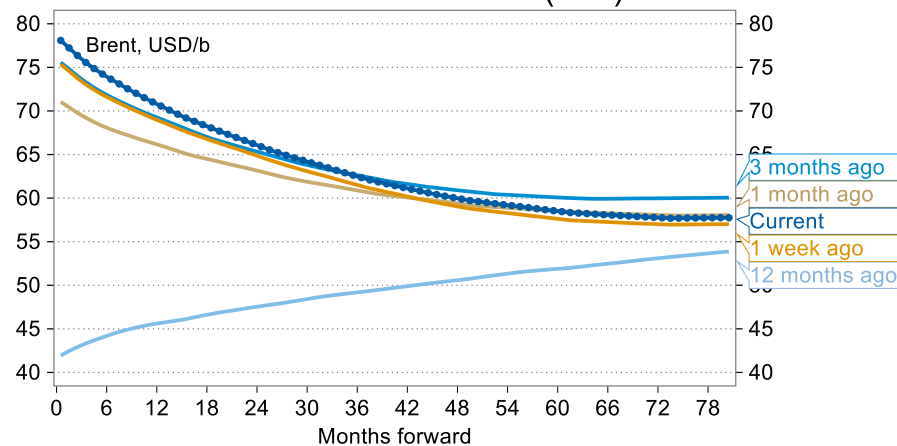
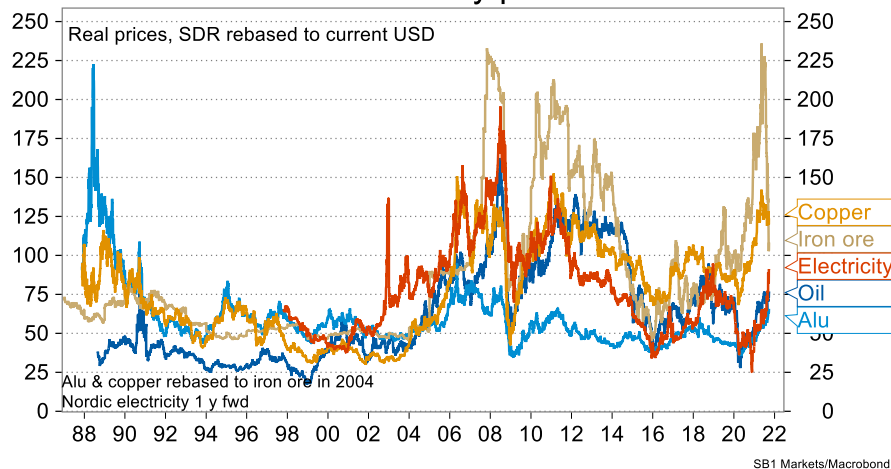


Brent oil, spot & Dec contracts

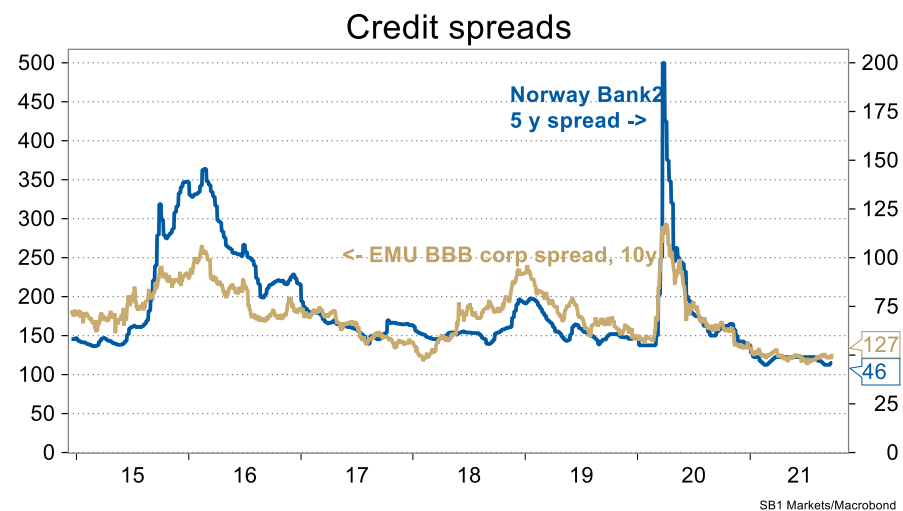
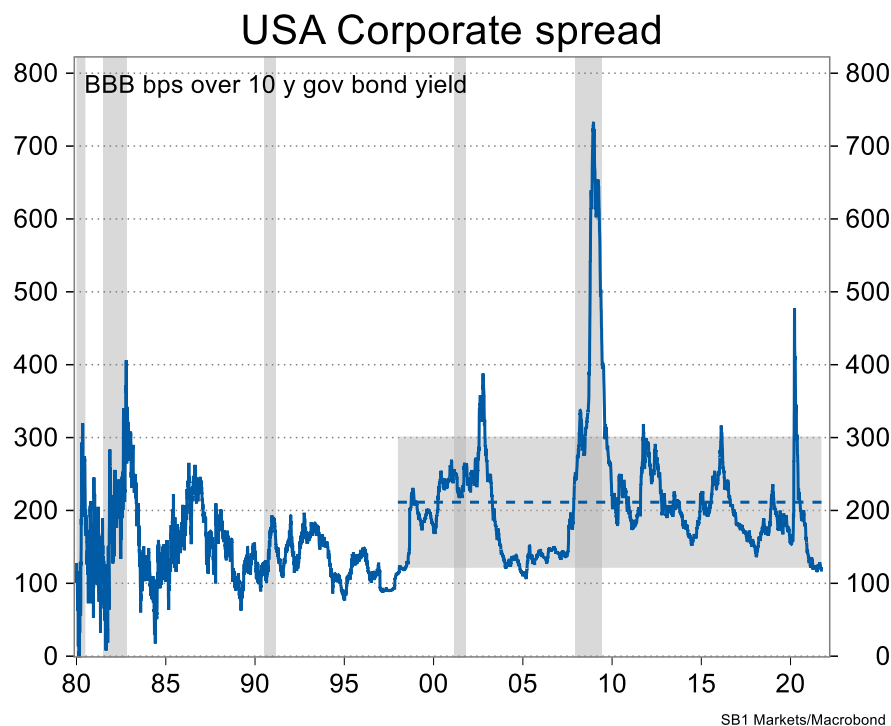


Longer dated oil contracts are heading down
The short end of the curve sharply up recent weeks
Brent oil futures (ICE)

Commodity prices

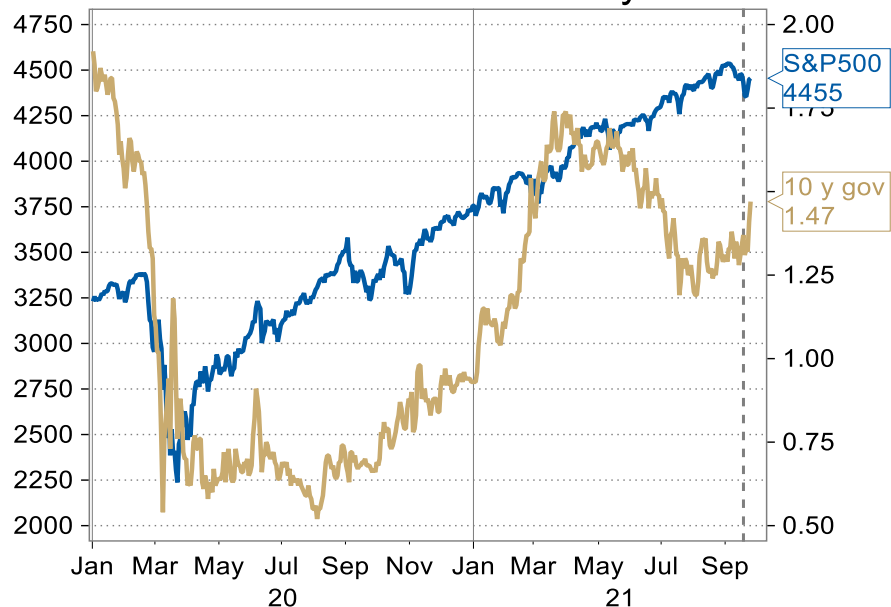


The US industrial BBB sharply down late last week, close to June cycle bottom

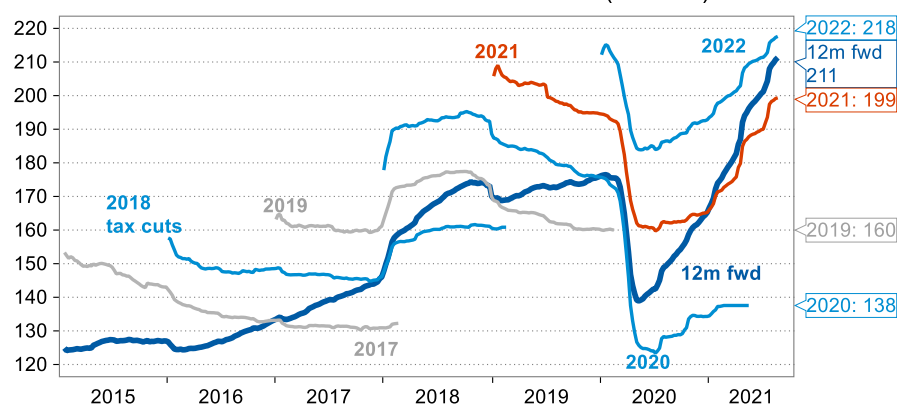


S&P 500 up 0.5%. Bond yields up 10 bps – and they are drifting upwards again

USA S&P 500 vs. bond yields

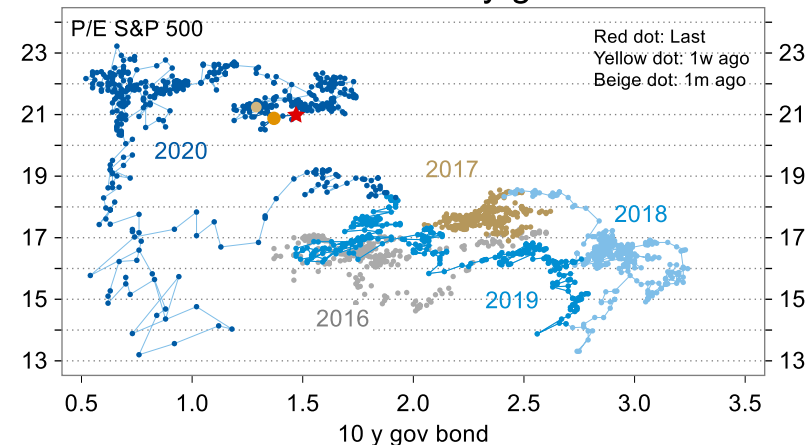


Annual S&P 500 EPS consensus (Factset)



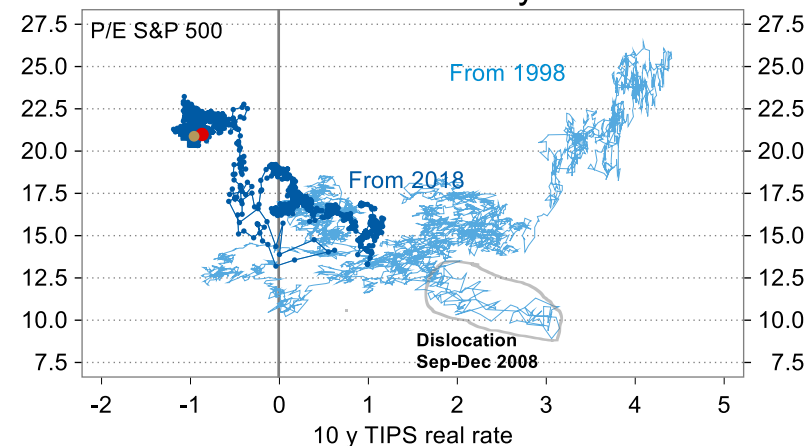
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S&P 500 vs US 10 y gov bond



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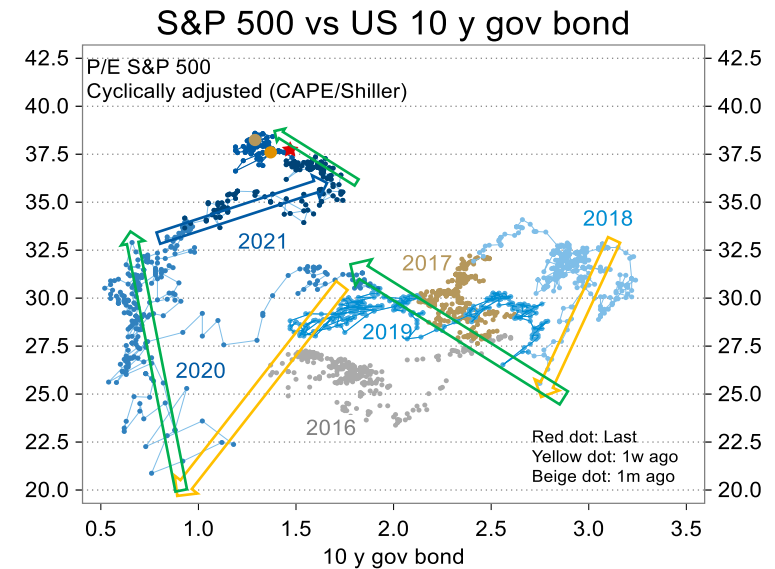
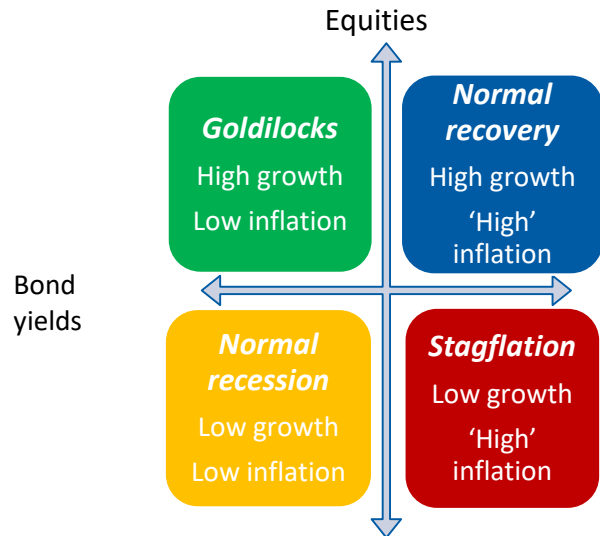
S&P 500 vs US 10 y TIPS



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Still well into the 'Goldilocks corner'

But will markets remain there? Actual wage/price inflation dynamics will in the end decide. And not the Fed...



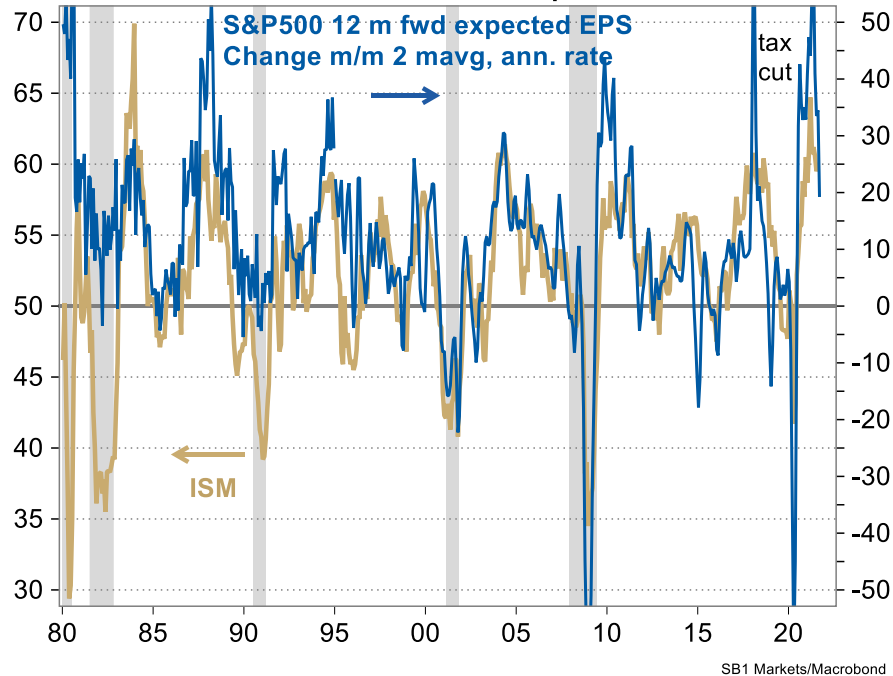
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- Usually, we have associated drifts towards the 'green corner' - low inflation and solid growth at the same time - as a temporary sweet spot for markets
 - Interest rates have climbed 100 bp+, and stock valuations have kept up or climbed (like the Shiller PE). Still, we deem the current yield level to qualify for the "Goldilocks" corner (especially the real bond yield, check the chart on the previous page). Where to go from here?
- The inflation/growth mix will decide:
 - If 'nothing' happens, we can stay in this Green quadrant. Raw material prices normalise, wage inflation is kept in check because the US labour supply finally returns to normal. Inflation turned out to be transitory, profits are OK, yields remain low
 - If the labour supply in the US does not yield, wage inflation will very likely accelerate
 - If companies are able to increase their selling prices, profits will be kept up, but higher inflation will very likely push the Fed to tighten monetary policy, which is challenging for high multiples. Move to the blue quadrant. However, after a while profits will anyway come under pressure. The stock market will be rewarded with lower profits & lower multiples (it will resemble the Red corner, before moving to the Yellow)
 - If companies are not able to increase their selling prices, inflation will be kept in check but profits will decline rapidly. A 2% lift in wages, cuts profits by well above 10%. That's the Yellow corner

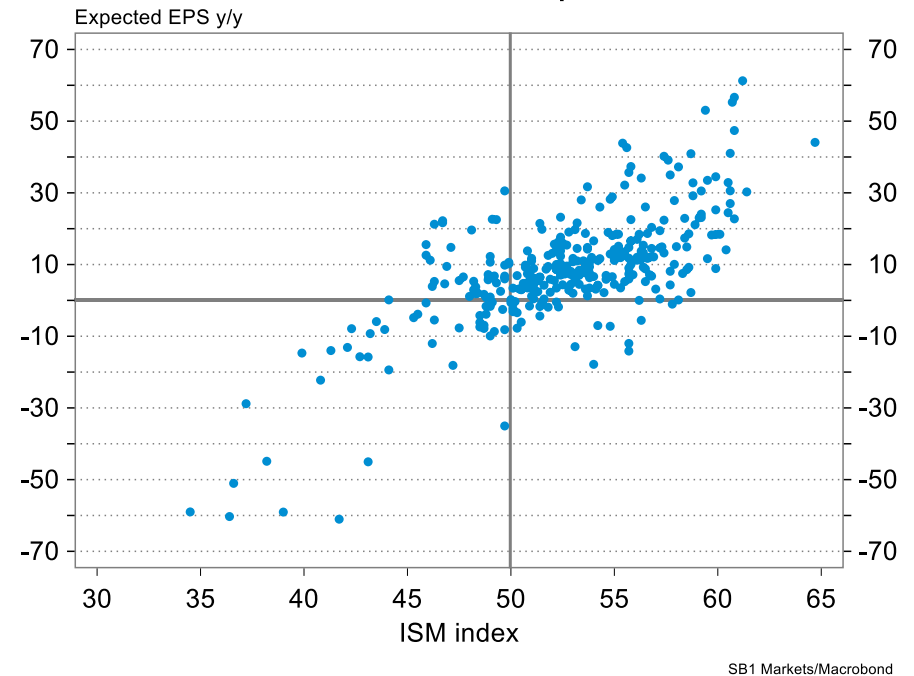
Do not forget what drives the momentum in expected earnings

It's the momentum in the economy today!

USA ISM vs. EPS expectations



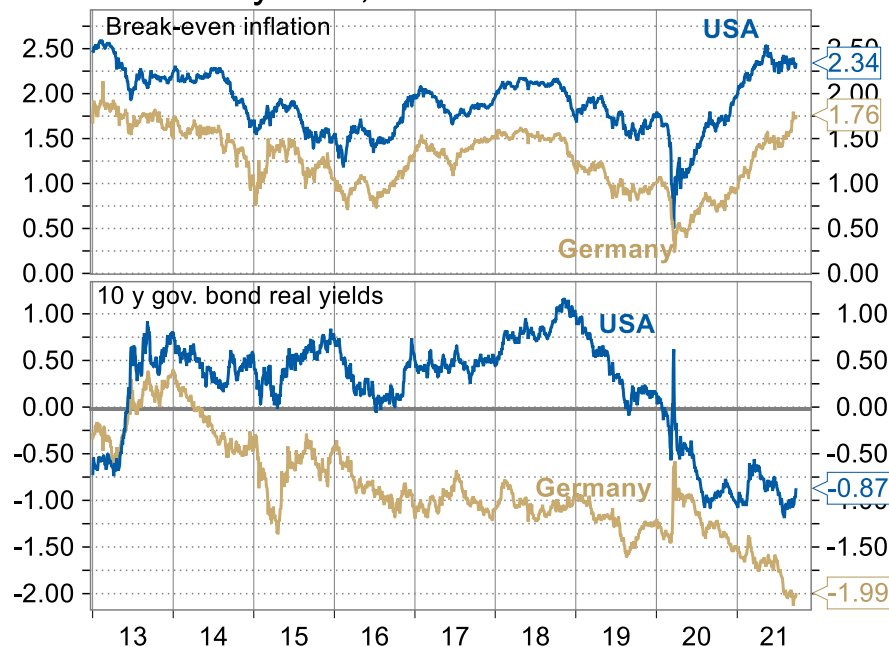
USA ISM vs. EPS expectations



Real yields are drifting upwards in the US, still very low at -0.87%

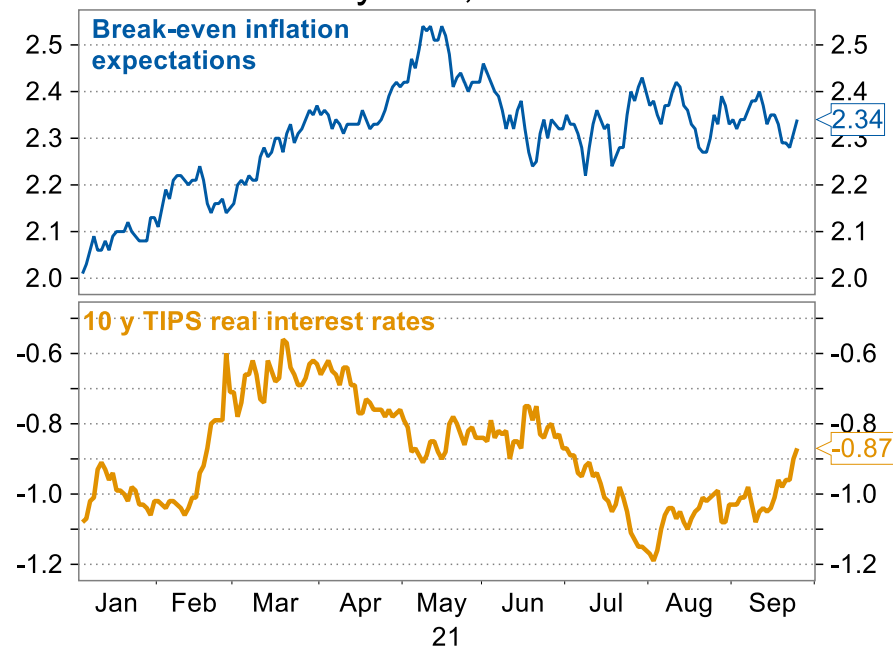
10 y TIPS +9 bp, as last week. Inflation expectations + 1 bp. German yields further up too

Real yields, break-even inflation



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USA TIPS Real yields, break-even inflation



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US & Germany 10 y Gov bond yield

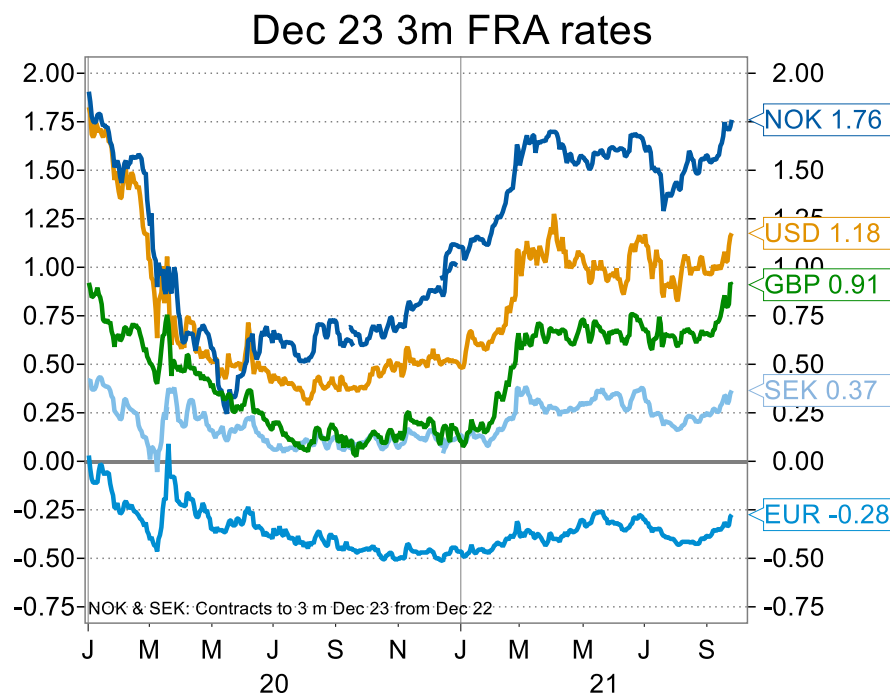
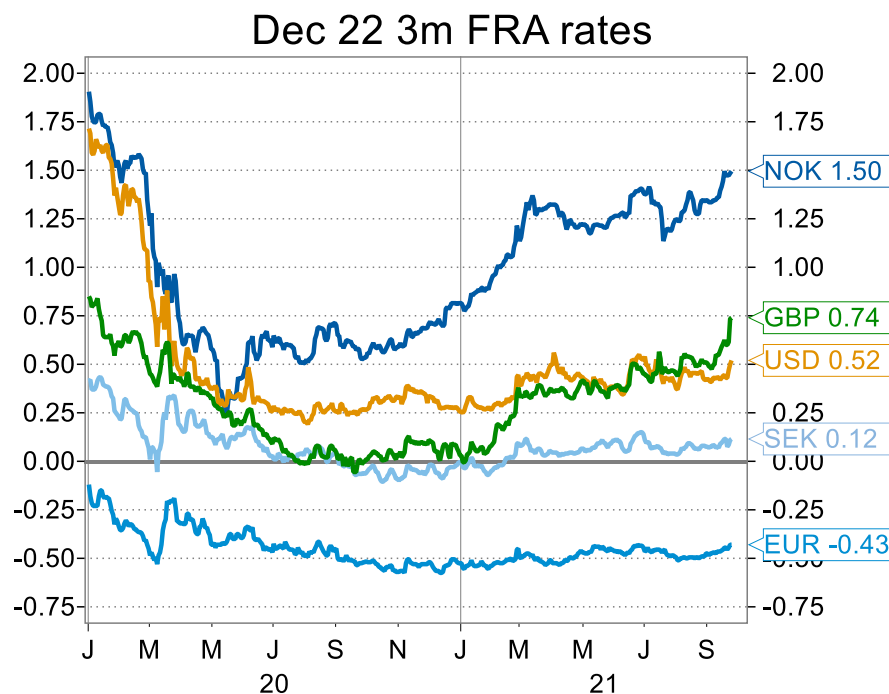
| | Yield | Change 1w | Change 1m | Min since April-20 |
|-----------------------------|-------|-----------|-----------|--------------------|
| USA nominal treasury | 1.47 | 0.10 | 0.18 | 0.52 |
| .. break-even inflation | 2.34 | 0.01 | 0.04 | 1.06 |
| .. TIPS real rate | -0.87 | 0.09 | 0.14 | -1.19 |
| Germany nominal bund | -0.23 | 0.06 | 0.25 | -0.65 |
| .. break-even inflation | 1.76 | 0.02 | 0.21 | 0.40 |
| .. real rate | -1.99 | 0.04 | 0.04 | -2.13 |

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- German real yields are still close to record low, the 10 y at -1.99%
- German inflation expectations have climbed to 1.76%, still below ECB's new 2% target – but among the highest prints the past decade. Is ECB finally gaining some traction in its fight to get inflation up?

FRAs: Up everywhere, now the most in UK as BoE was rather hawkish

The GBP Dec-22 3 m FRA up 11 p, and the USD Dec-23 FRA up 9 p. NOK FRAs close to unchanged

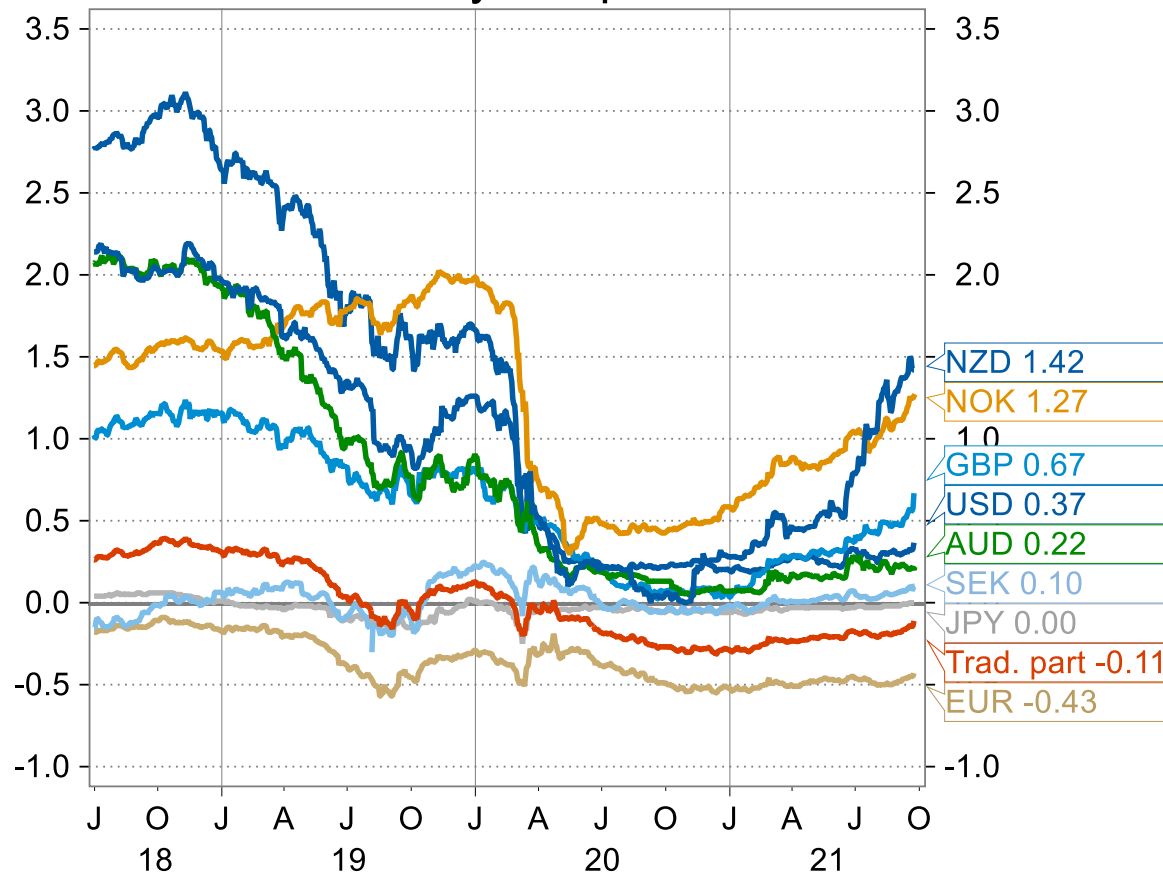


- The market expects the **Federal Reserve** to start hiking next year
- The Bank of England may start even late 2021 (but still less than 50% probability)

Up, almost everywhere – except in New Zealand, but they are at the top

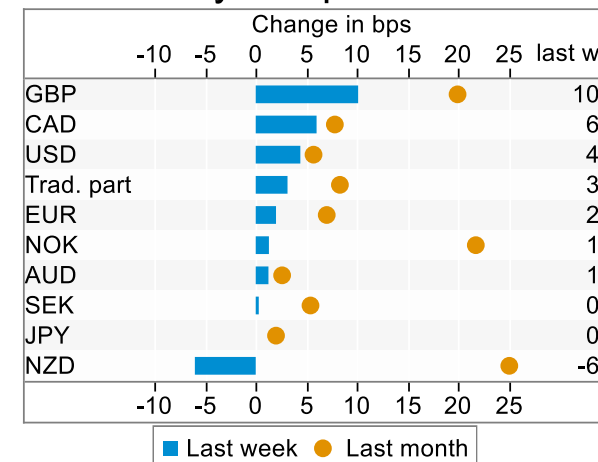
EUR rates more up than NOK rates last week. So much for the 'hawkish' NoBa

2 y swap rates



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2 y swap rates

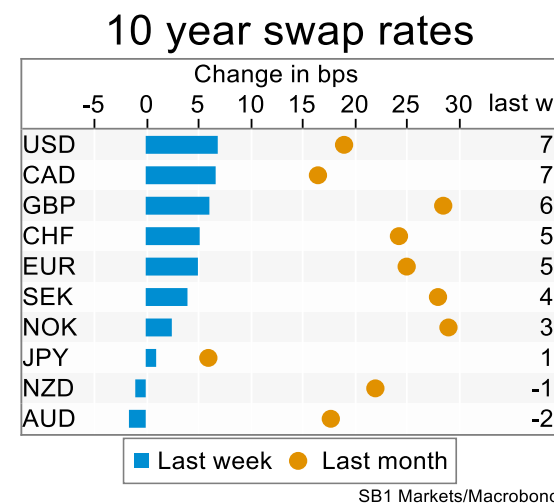
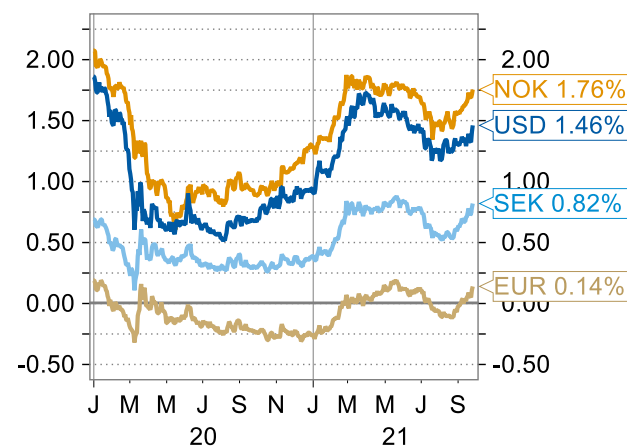
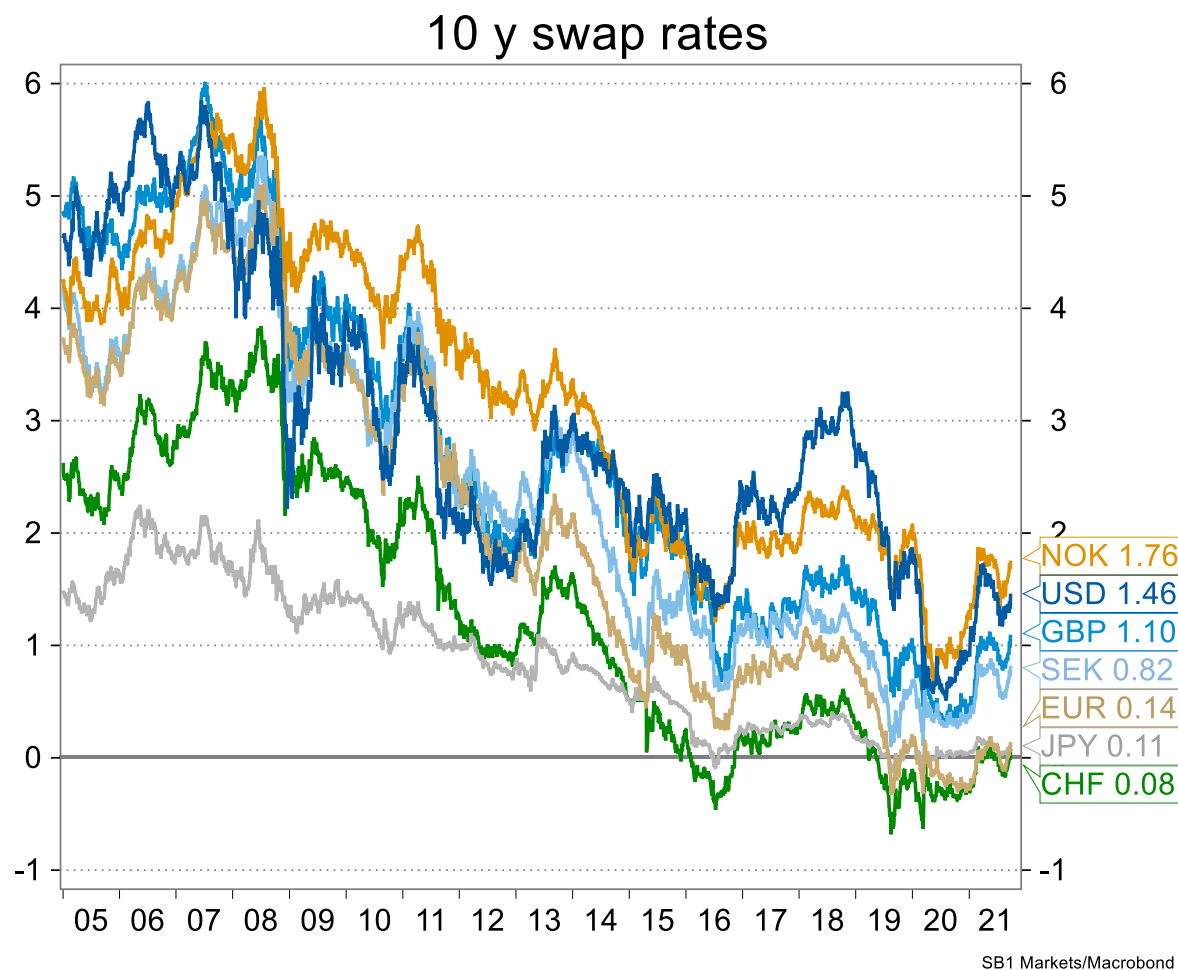


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10 y swap rates

A further lift in rates, for the 5th week in a row

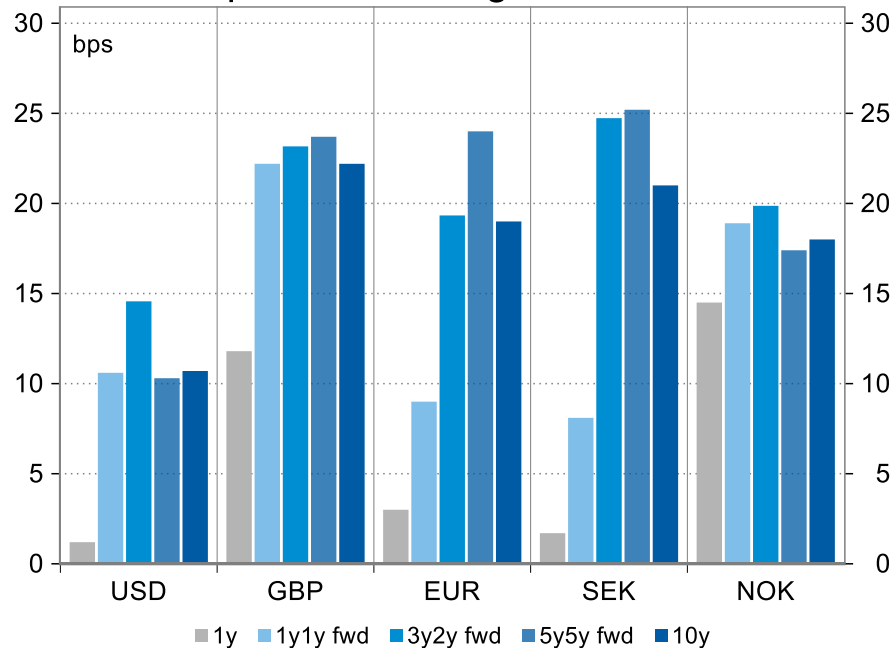
Yield up some 20 bps since mid July



Rates up everywhere, and less in Norway than abroad

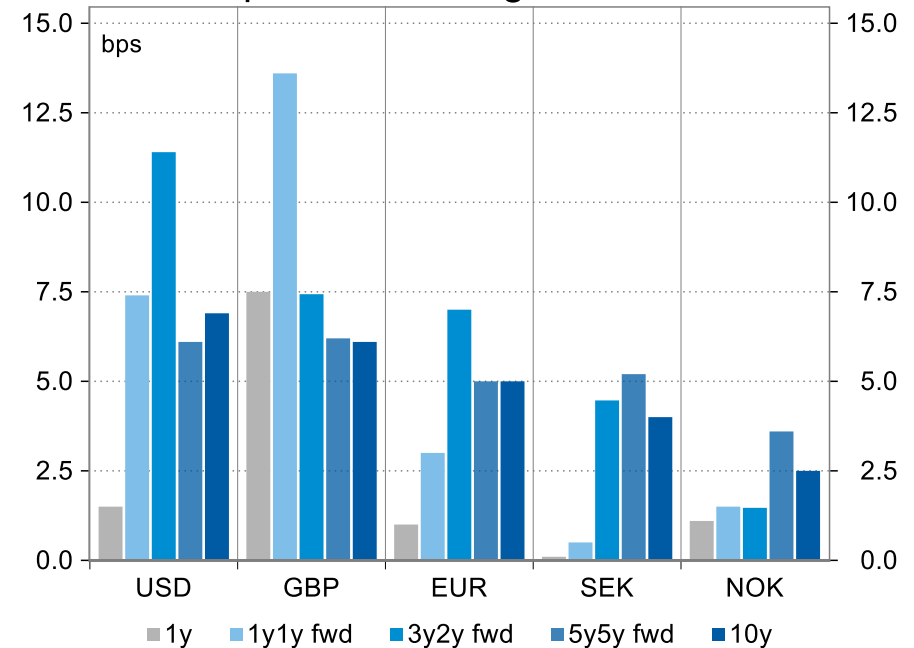
GBP rates took the lead last week – due to hawkish signals from Bank of England

Swap Rates, changes last month



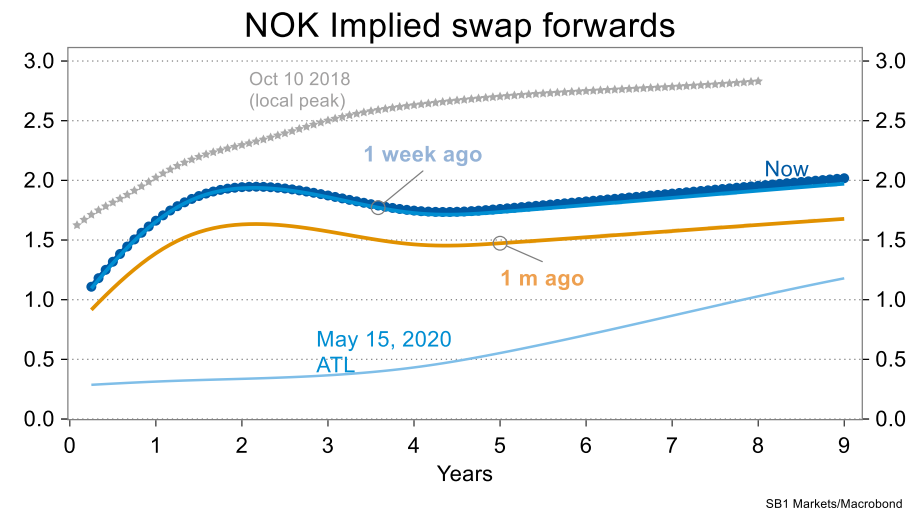
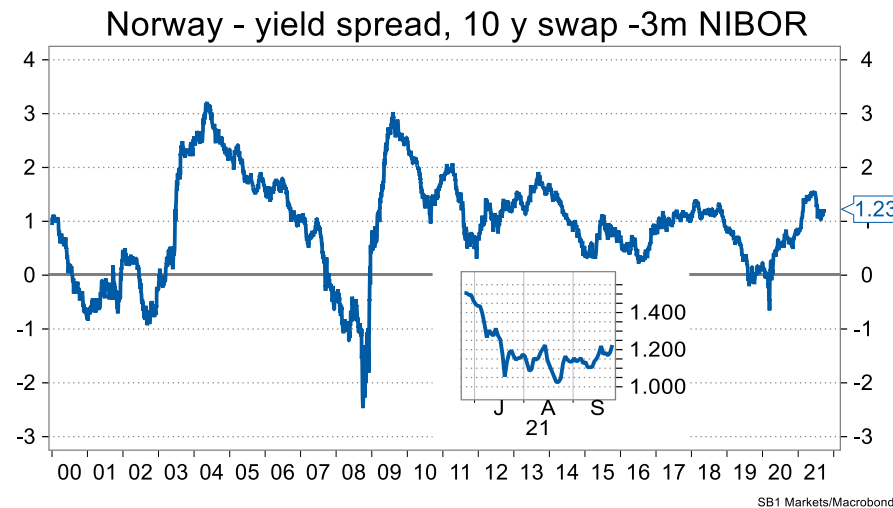
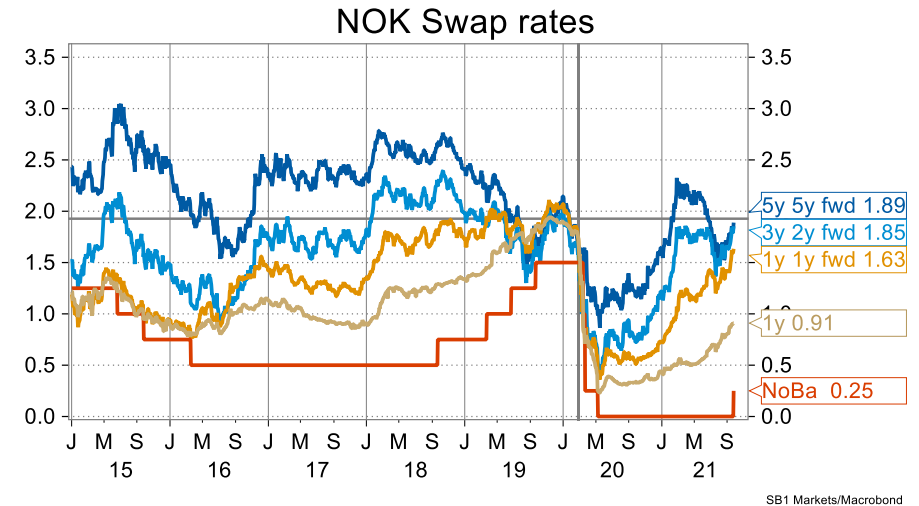
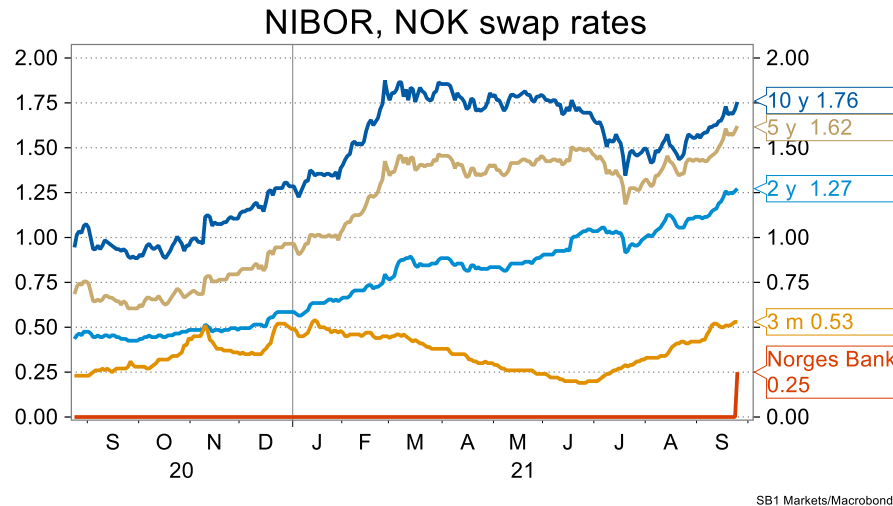
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Swap Rates, changes last week



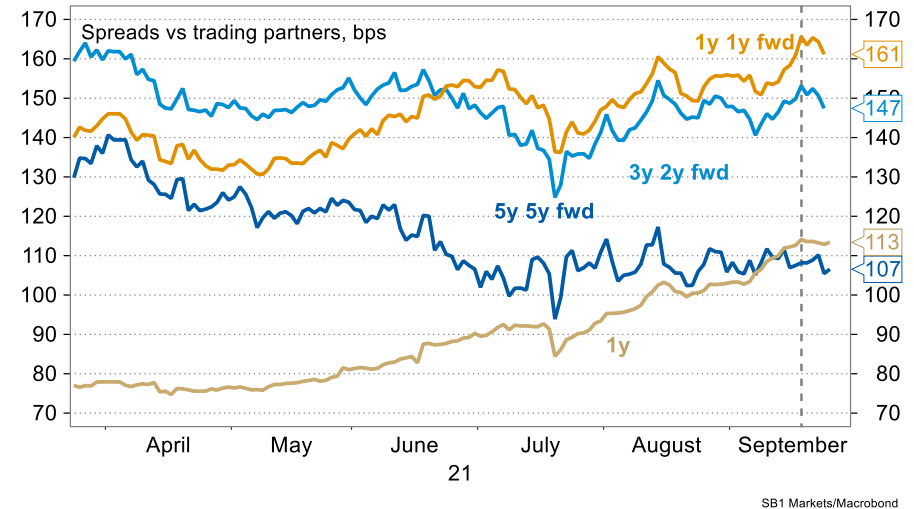
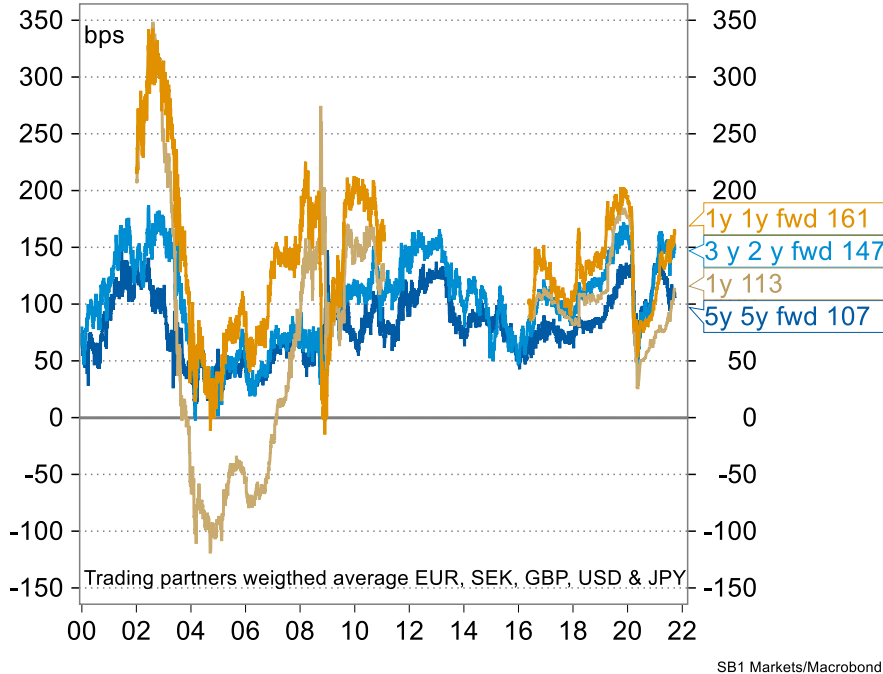
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The trend is up, just a small lift upwards last week

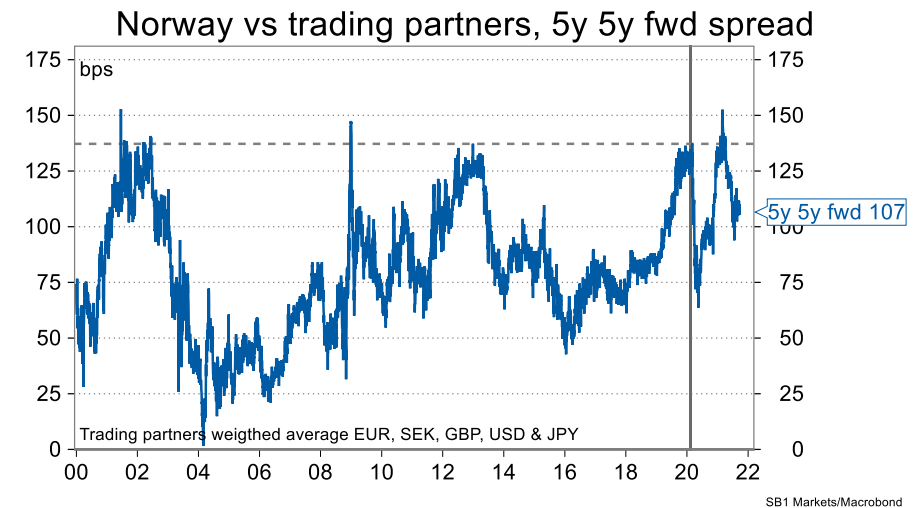


Forward spreads vs trading partners down last week

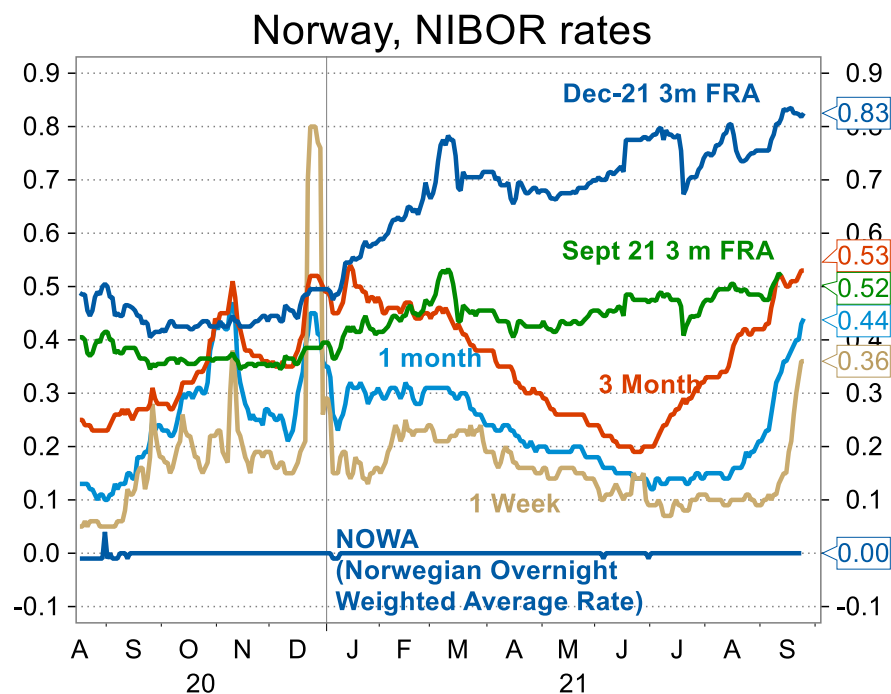
Norway vs trading partners, impl swap spreads



- The 5 y 5y fwd spread is still in the upper part of the historical range

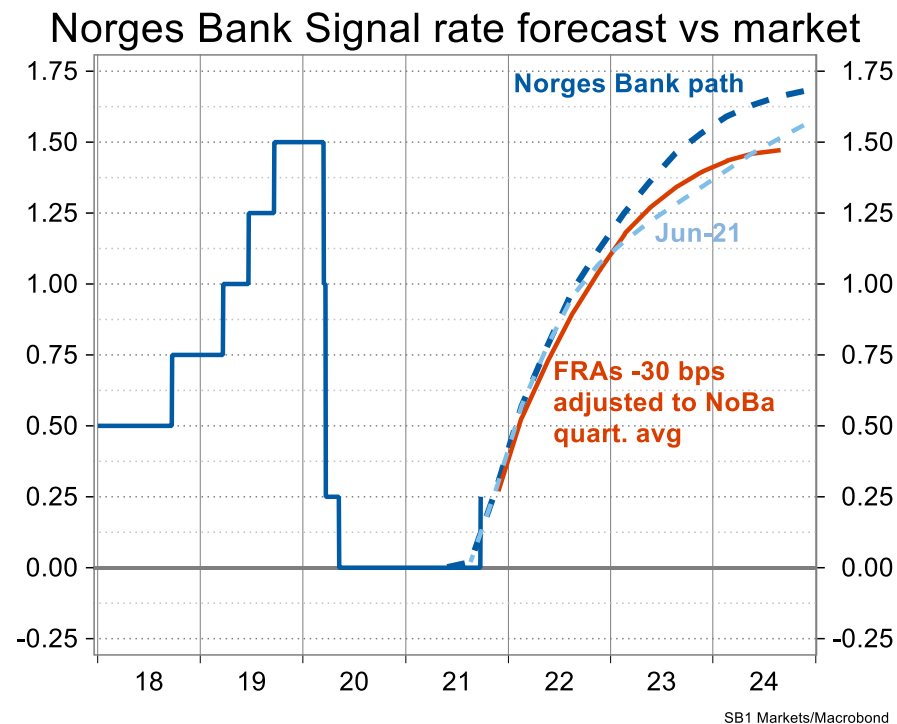
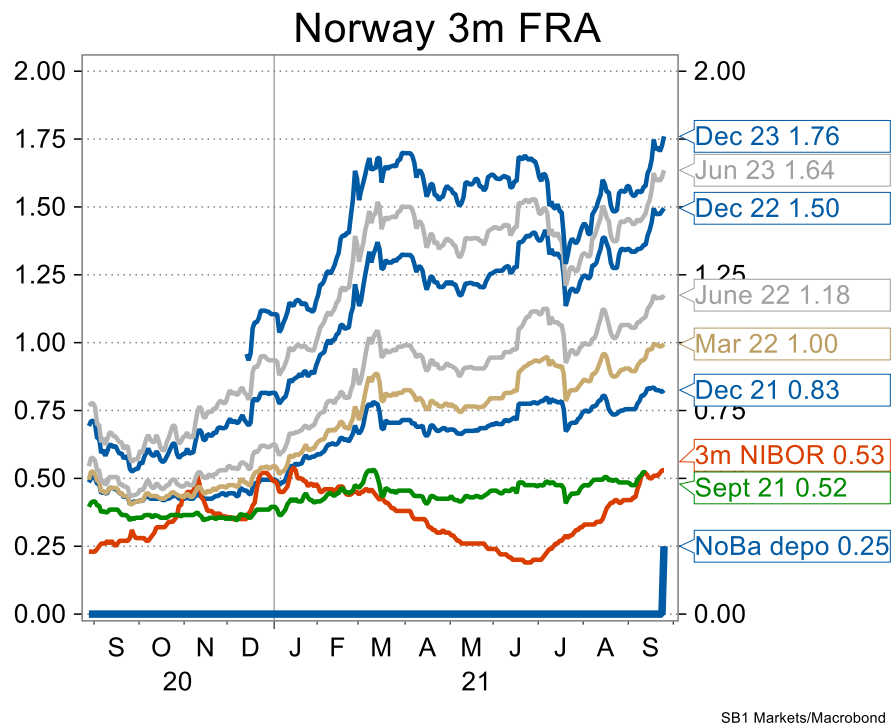


3 m NIBOR 2 bp down to 0.53% - more to come the next weeks & months



The FRA curve just marginally up on the 'hawkish' NoBa message

Over the previous weeks, a substantial lift in the FRA curve

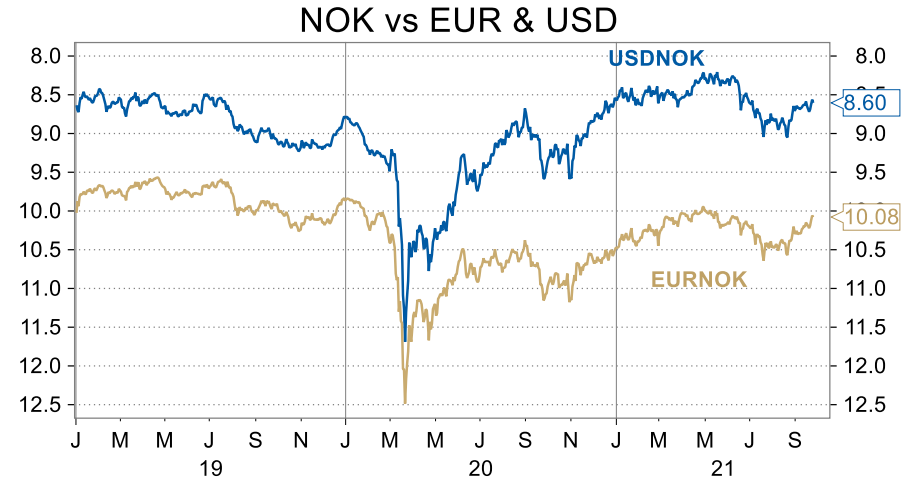


- The market is discounting a new NoBa hike to 0.5% in Dec by a 86% probability (the Dec-21 2 m FRA unch. at 0.83%)
- The Mar-22 FRA at 1.00% implies 80% probability for a 3rd NoBa hike in March, given a 2nd hike in December (like one week act)
- In 2023, the FRA-path is marginally below the new Norges Bank path

NOK last week's (and month's) winner. Oil more to blame than rates

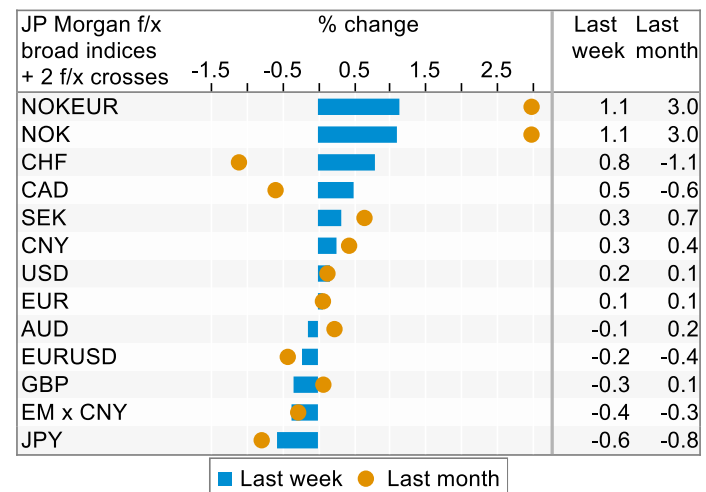


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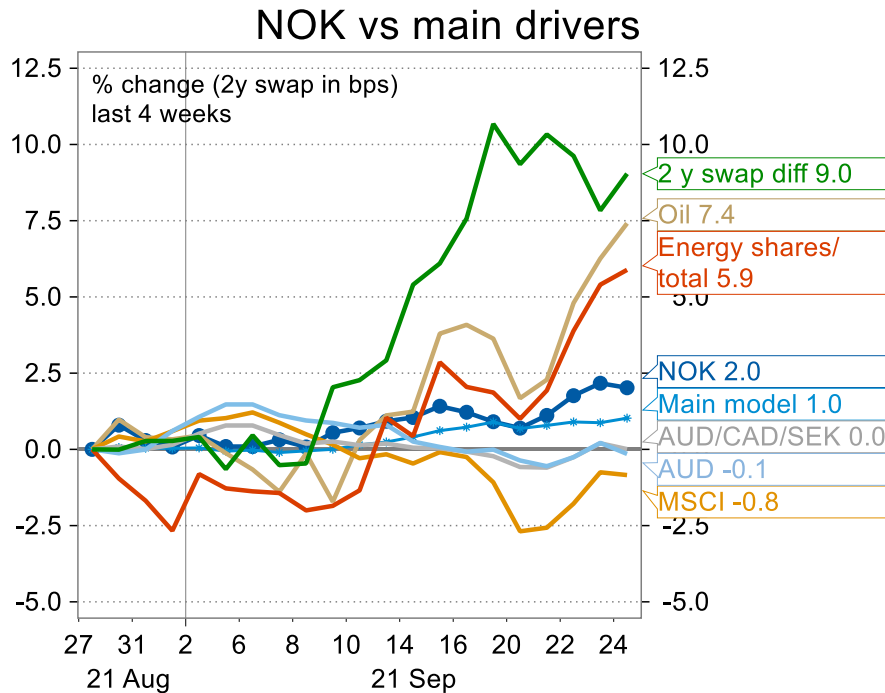
F/x markets



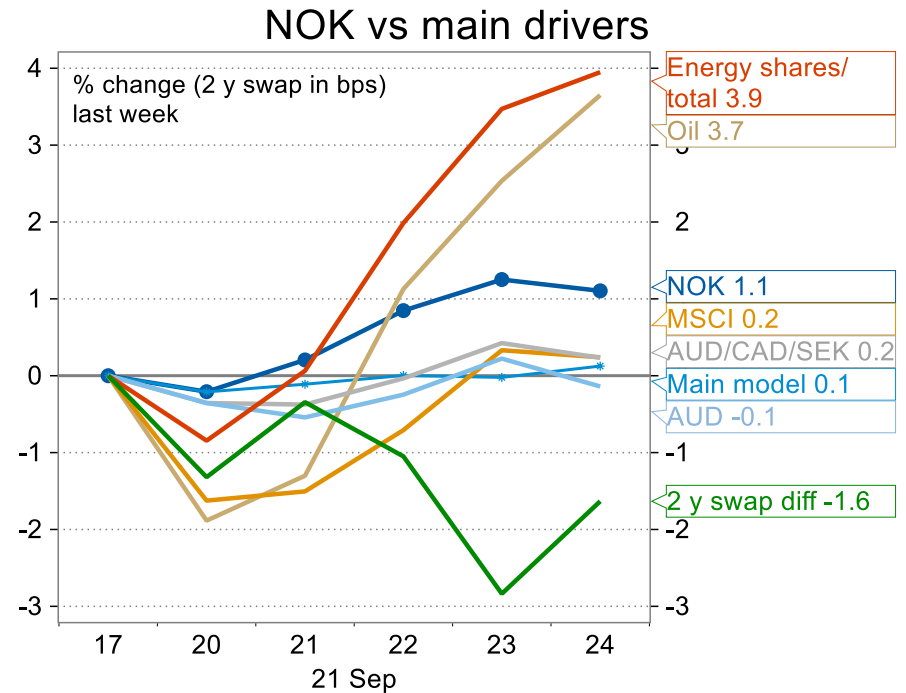
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NOK up 1.1%, our model said +0.1%

Our super-cyclical peers, and global equities were both up 0.2% last week



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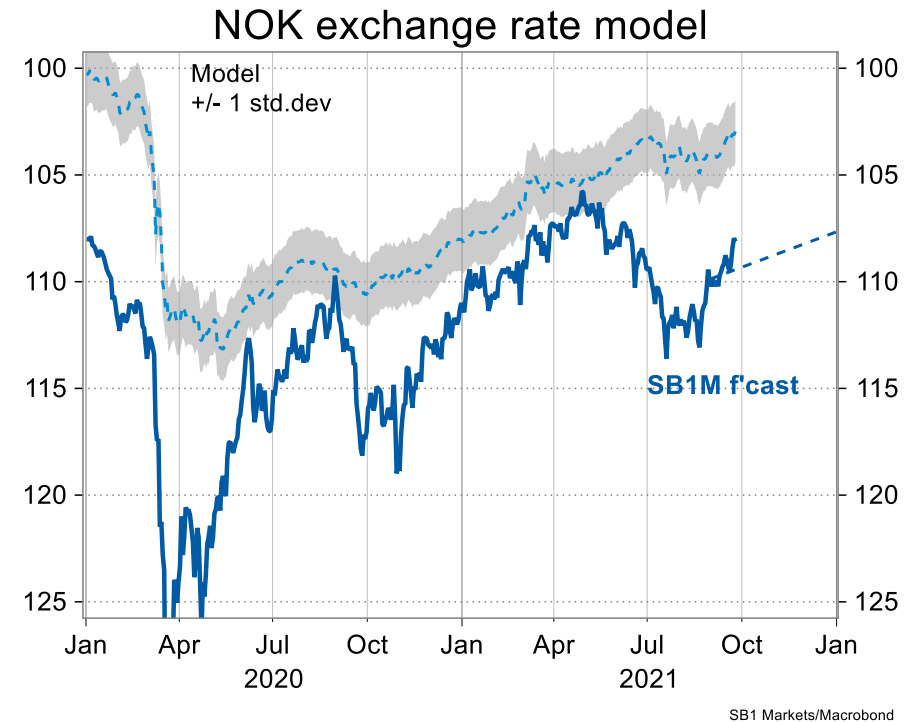
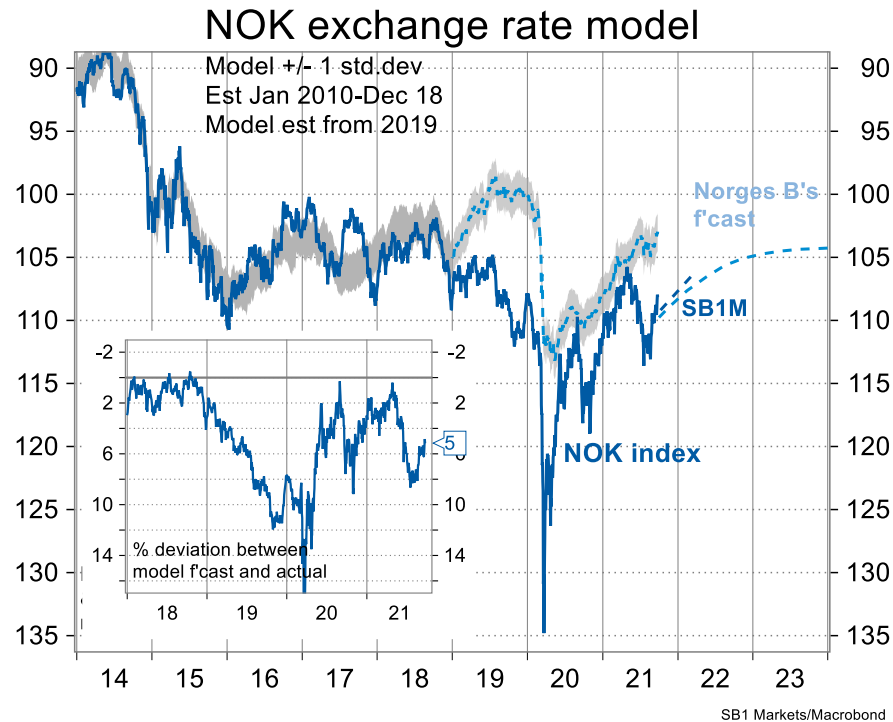
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The status vs. the normal drivers:

- **The NOK is 5% weaker than suggested by our standard model (from -6%)**
- The NOK is 5% 'weaker' than the global stock market vs the correlation between the two since beg. of 2020 (from -6%)
- The NOK is 5% 'weaker' than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts (unch.)
- NOK is far (10%) 'stronger' than a model which includes global energy companies equity prices (vs the global stock market) (from +11%)

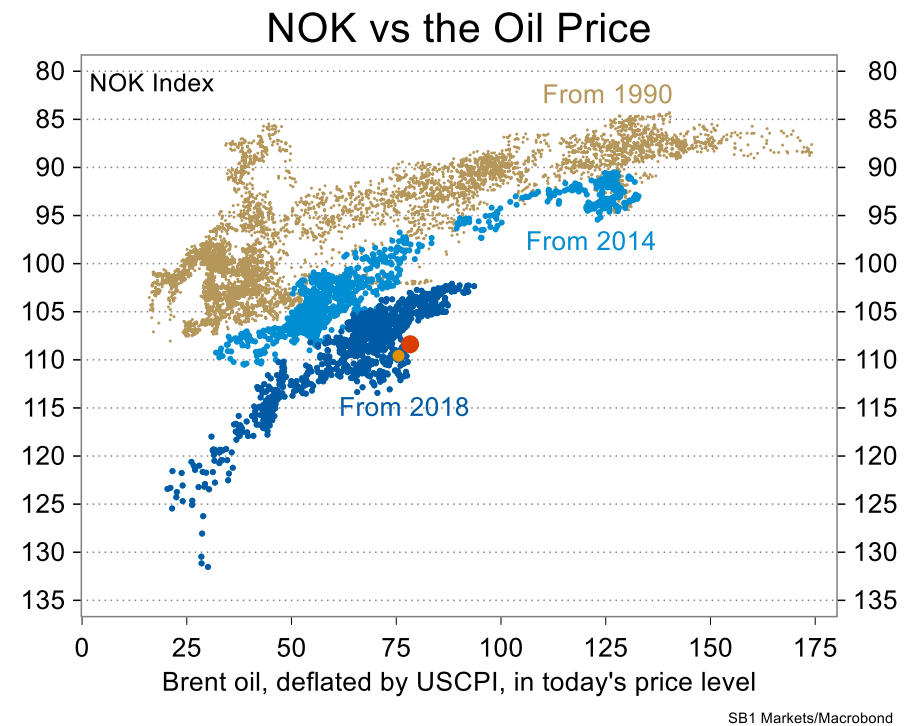
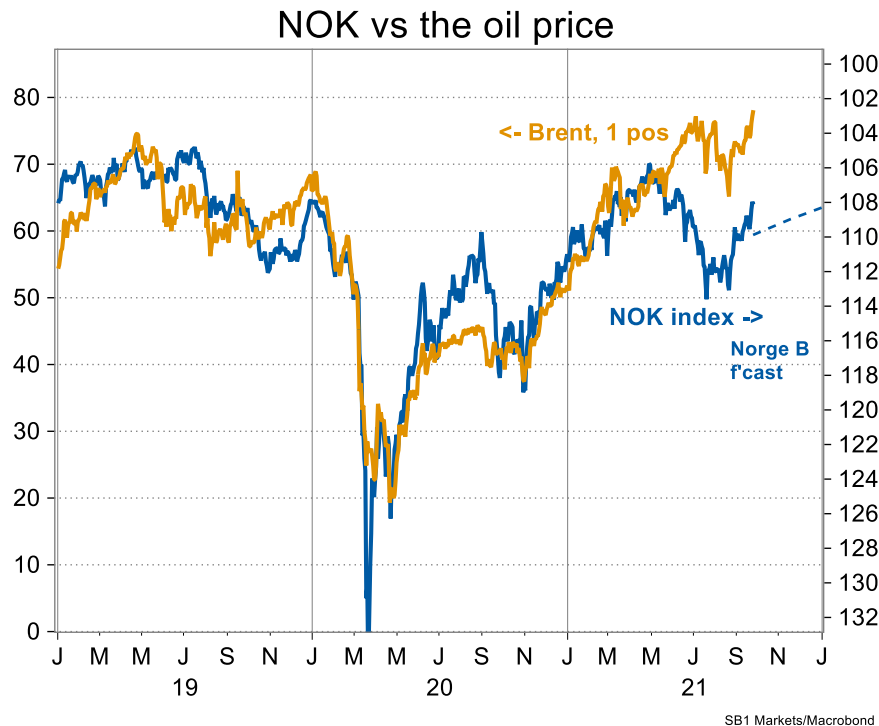
For September, we repeated our NOK buy recommendation. A new f/x report out this week

NOK 5% below our workhorse model



Oil up, NOK up

The NOK is still on the weak side vs the oil price



- NOK is still correlating quite closely to the oil price but at a lower level than before 2018 – and now the NOK is weak even vs the past 3 years' relationship
- A USD 10 drop in the oil price weakens the NOK by some 2.5%, as a partial effect. Within a broader model, the impact is somewhat smaller

The global stock market slightly up, the NOK more

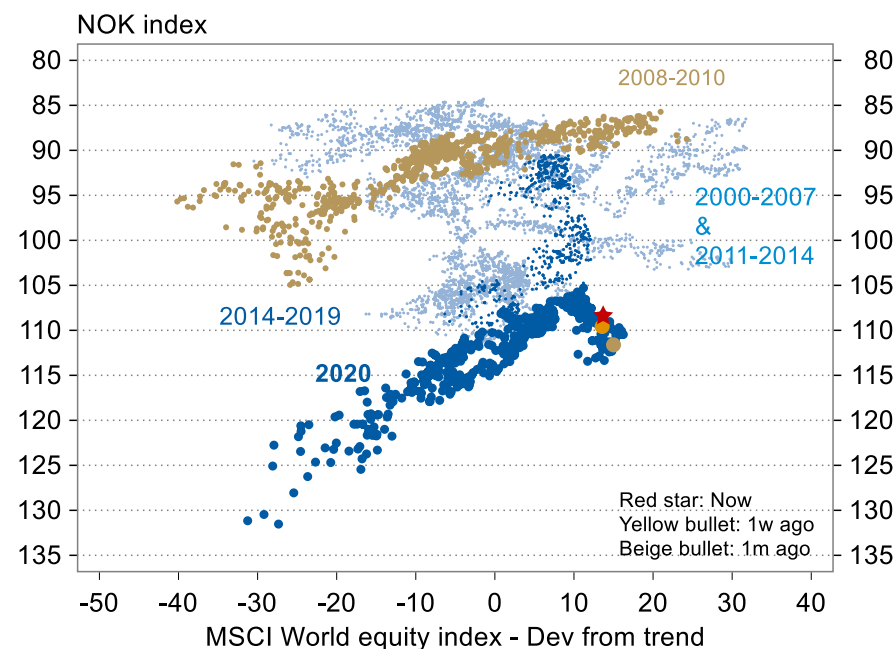
However, the NOK has lost 4% vs. global stocks since May (the gap was 9% at the peak in August)

NOK Index vs. global equities



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NOK vs. MSCI world index



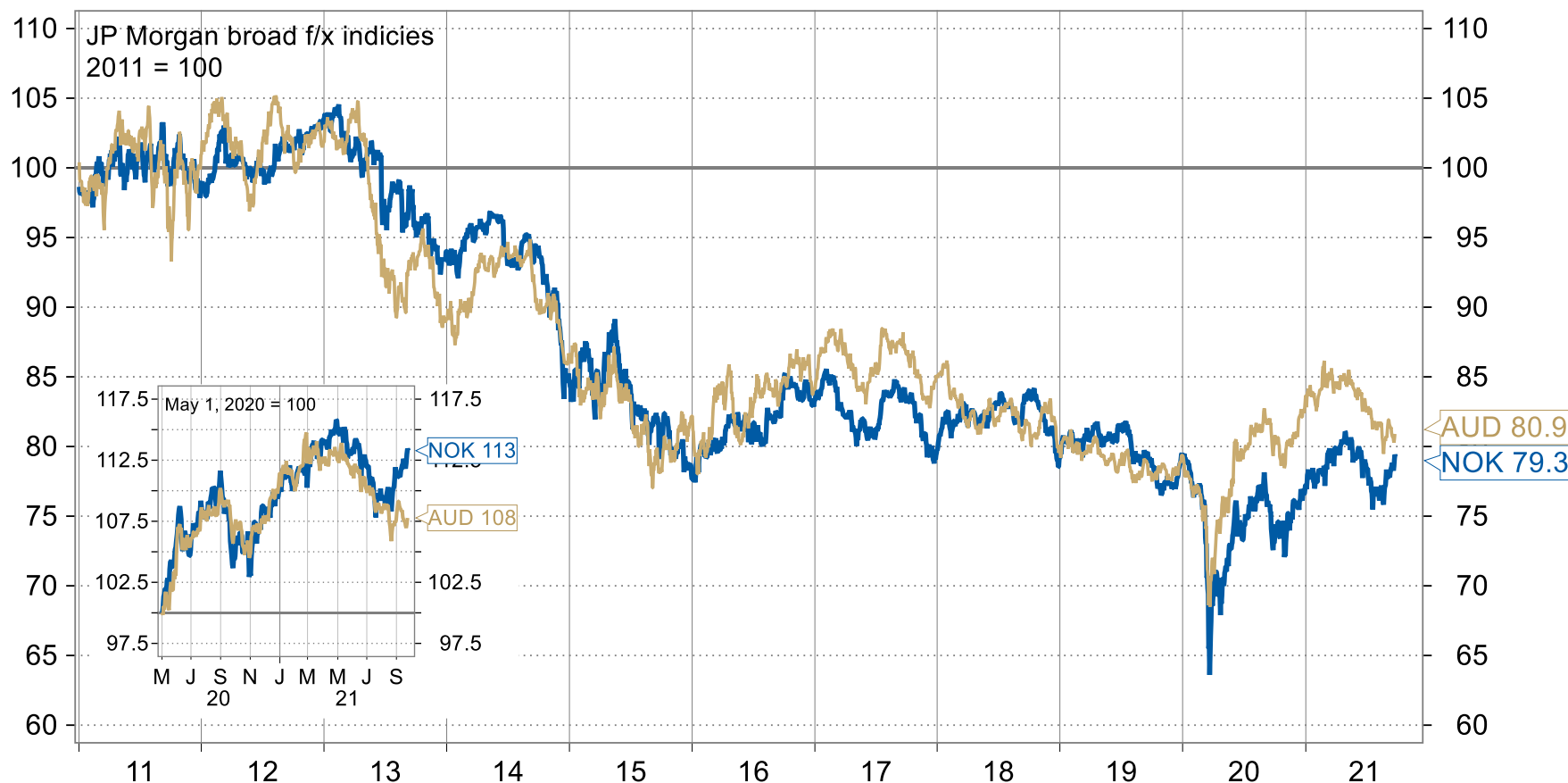
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- Over time, there has not been any stable correlation between NOK and stock markets (the Oslo Stock Exchange, S&P 500 or the MSCI, the global equity index. (On the chart to the right, we have detrended the stock market as equities are drifting upwards,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

NOK closes further in on the AUD as iron ore prices collapse, gas prices surge

NOK still 1.5% vs the pre-pandemic 'parity' but the gap is reduced by almost 5% recent weeks!

AUD vs NOK f/x

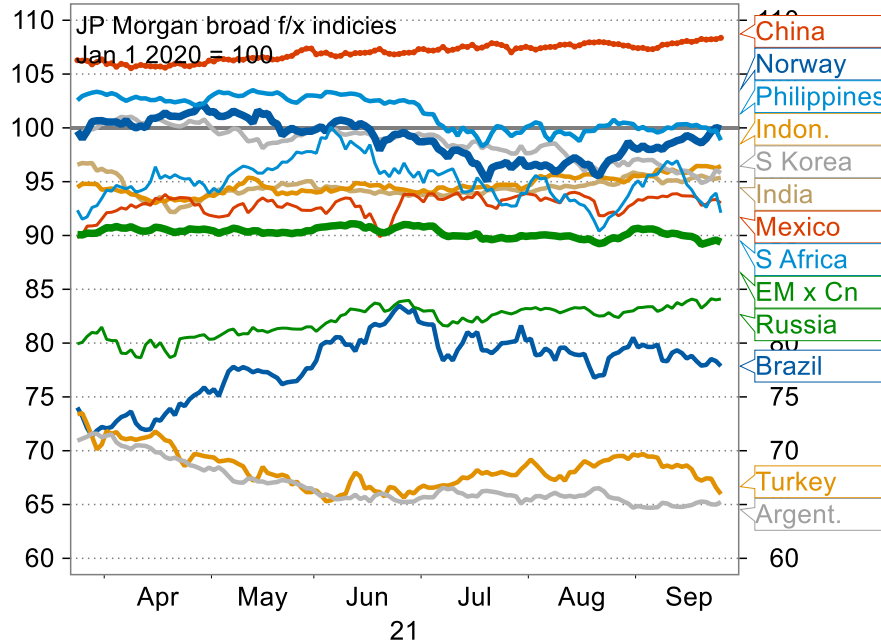


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EM x China further down, the CNY still on the way up

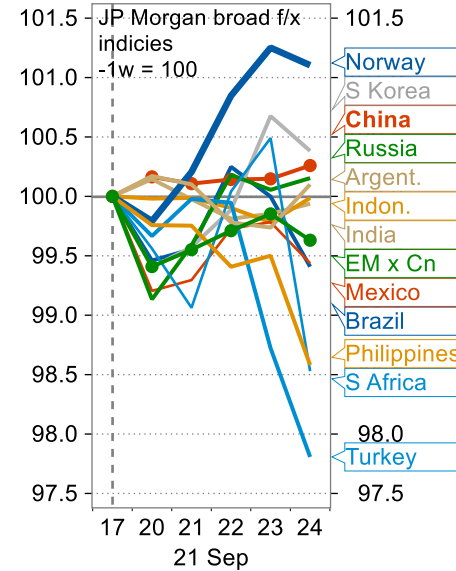
The Turkish lira on the way down again, the central bank has lost confidence

EM Exchange rates



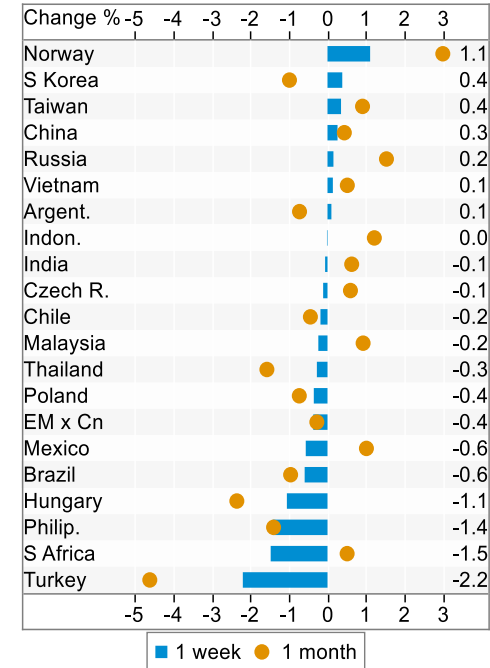
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EM Exchange rates



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FX Indices, J.P. Morgan



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