October 10, 2022

Macro Weekly

Week 41

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Last week, I

- **The War/European Energy/Commodities**
  - » The war was not a success for Putin the last week either, not in Ukraine, not at Crimea – and there are suddenly a lot of signals of discomfort at the upper levels of the Russian elites
  - » **European gas prices** fell, taking **Nordic electricity** prices down (and now it's windy and raining again in Northern Europe)
  - » **The oil price** rose sharply on the surprisingly large 2 mill b/d Opec+ cut in production quotas
  - » **Metal prices** rose marginally, while **food prices** fell further
- **Auto sales**
  - » **Both US and EMU** reported higher sales in September, but sales fell in the **UK**. In **EM countries** that have reported so far, more are up than down. However, **China** has not reported, and there must be some downside risk from the high sales level the past 3 months. Sales **in Norway** (1st time regs) rose to a 'normal' level
- **Global PMIs & the US ISMs**
  - » The global composite PMI rose by 0.4 p to 49.7, far less that we assumed, as Chinese services surprised on the downside. The current level indicates a GDP growth at some 1.5% (considered a global recession). The composite PMIs are weak across rich nations (DMs), as in China. The manufacturing PMI fell and both new orders and production is well below par, while the service sector PMI recovered much of the August loss due to a better US print – but Chinese services reported an unusual decline in activity, which was not expected. The setback in the EMU was driven by a fall in new orders. The German index is still almost at the bottom of the league, as both the manufacturing and the service sector PMIs are very weak. In the US, S&P's PMI and the ISM are still diverging, with the ISM at 55.5 and the S&P PMI 6 p lower and in contractionary territory. Delivery times are mostly easing, and so are price indices, but the latter remains elevated. Real estate is the weakest sector globally, reporting a rapid decline
  - » The Norwegian manufacturing PMI fell to the 50-line, in good company with other rich countries. NHO's Norwegian survey confirmed a likely contraction in activity
- **USA**
  - » Mixed signals from the **labour market**: The **vacancy rate** fell much more than expected, by 0.6 pp to 6.2% in August, and as the **unemployment rate** fell back 3.5% in September, the vacancy rate has fallen from 7.3% at the peak in March, while unemployment has fallen 0.1 pp. If this can be duplicated 3 times, the vacancy surplus will have vanished! We still doubt it will. The 0.2 pp decline in unemployment in September was surprising, lifted bond yields and lowered the equity market. The **participation rate** reversed some of the August gain, and the trend is flat, even if demand for labour still is extremely strong. **Employment** growth is slowing. Small businesses say it is somewhat less difficult fill job openings but still plans to lift wages much more than expected. New jobless claims rose more than expected but the level is still low. **Wage inflation** is not accelerating, according to the payroll stats, but remains 2 pp higher than before the pandemic. Other wage indicators are reporting higher wage inflation. <u>In sum: The FOMC will still 'keep at it', the labour market is still too tight</u>
  - » **Atlanta Fed's GDP tracker** suggests 2.9% growth in Q3, up from close to zero some weeks ago. A large contribution from net trade is the main contributor, as the trade deficit has fallen sharply: Exports are finally climbing, and imports are falling

Last week, II

- **EMU**
  - » **Retail sales** declined in August and are now well below the 2%-trend from before the pandemic. Sales were down 0.3% m/m, 0.1 pp above expectations; but July data revised down to -0.4% from +0.3%
  - » **Industrial production** very likely rose in August (data for the whole region out this week), as France reported strong growth, followed by an increase in Spain too. Production in Germany was just marginally down, and total EMU production should increase substantially, even excluding the (crazy volatile) Irish numbers. The energy crisis has not yet beaten down that many European manufacturers
  - » In the minutes from the last ECB Board meeting,
- **Sweden**
  - » **GDP** has been strong going into Q3 but fell by 1.3% m/m in August. No details in the monthly data – but according to surveys and the manufacturing production data, the manufacturing sector is likely contributing to lower activity, as is trade as retail sales are falling
  - » After five months of falling prices, Swedish **apartment prices** rose by 0.8% m/m (seas. adj.) in September, according to realtors
- **Norway**
  - » **In the National Budget, the government** proposed a fiscal tightening in 2023 equalling 0.6 pp of Mainland GDP, we expected 0.5 pp. Model simulations suggest a close to neutral impact om GDP. The budget is also on the tighter side as transfers from the fund (=structural deficit ex. oil revenues) equals 2.5% of the fund, down from 2.6% in 2022 (revised down by 0.3 pp due to a symmetric (and correct) calculation of income and spending due to higher electricity prices), well below the 3% long term target. The proposed transfer equals 8.8% of Mainland GDP, while the 3% (of the Oil fund's value) spending rule 'allowed' a 10.4% transfer (the difference equals NOK 60 bn). Further on the tighter side, underlying growth in government spending is estimated to 1.3% well below trend growth in ML GDP
    - ▪ Others may have expected a tighter budget. In the Sep MPR NoBa assumed a 1.7 pp fiscal tightening. However, this estimate was strangely large given the Bank's modest forecast for growth in government demand. A 1.7 pp tightening has anyway never been proposed before
    - ▪ BTW, due to the ballooning income from the oil (and now even more the) gas sector**,** the **overall surplus in the public sector** equals almost 40% of ML GDP, <u>by far the largest surplus in any developed country ever</u> as revenues are even larger than Mainland GDP (!). The surplus in is transferred to the Oil Fund, for the benefit of future budgets & generations
  - » **Mainland GDP** grew 0.4%, and as expected in August, but the past two months were revised up by 0.5 pp, and suddenly GDP is back to the GDP path Norges Bank assumed in June – and 0.5% above the Bank's Sept path. Government demand (but just the volatile gov. investments), and business investments contributed at the upside in August, while household demand fell marginally. Still, growth has been modest since last September (1.1%), and productivity has been dismal, even after the upward GDP revision. Even so, the activity level is higher than expected and the budget proposal was not tighter than expected. Taken together, we believe that the downside risk to rates is reduced
  - » **Home prices** declined 0.6% in September, we expected -0.5% (NoBa -0.35%), following the 0.6% (surprising) lift in August. Prices are still up 4.4% y/y and have kept up much better than in other super-cyclical countries. The price fall in September was broad though, and the no. of transactions fell back to the 2019 level. However, the no. of homes approved for sale rose further, and is clearly above a normal level. The inventory of unsold homes rose, and over the past 3 months the inventory has increased faster than anytime before. Norges Bank expects a 4% price decline from August till next summer. We think the risk is on the downside. OBOS apartment prices in Oslo were down 0.9% in September. BTW, check the charts on rents vs. house prices

The Calendar: Fed Minutes, Atlanta wage tracker, retail sales. CPI in NOR/SWE/US/GER/CN

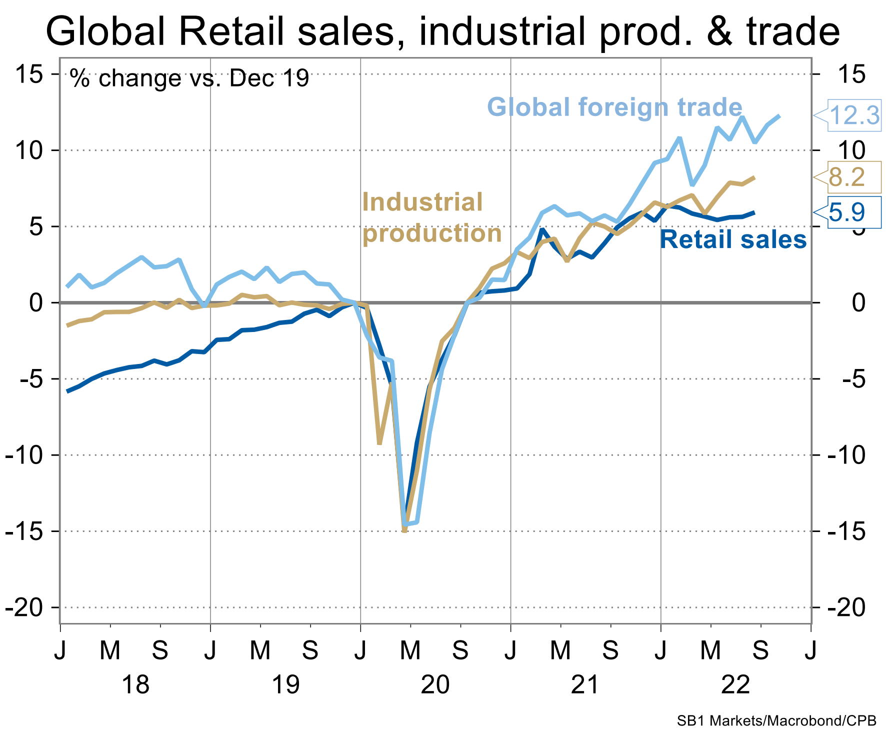
Time	Count.	Indicator	Period	Forecast	Prior
Monday October 10					
08:00	**NO**	**CPI YoY**	**Sep**	**6.3 (5.8)**	**6.5%**
08:00	**NO**	**CPI Underlying YoY**	**Sep**	**5.0 (4.6)**	**4.7%**
Tuesday October 11					
08:00	UK	Weekly Earnings ex Bonus	Aug	5.3%	5.2%
08:00	UK	Unemployment (LFS/ILO)	Aug	3.8%	3.6%
08:00	**NO**	**Retail Sales**	**Sep**	**(-1.5)**	**0.7%**
12:00	US	NFIB Small Business Optimism	Sep	91.8	91.8
15:00	WO	IMF World Economic Outlook			
Wednesday October 12					
06:00	SW	PES Unemployment Rate	Sep		3.2%
08:00	UK	Monthly GDP (MoM)	Aug	0.0%	0.2%
08:00	UK	Manufacturing Production MoM	Aug	-0.1%	0.1%
11:00	EC	Industrial Production SA MoM	Aug	1.2%	-2.3%
14:30	US	PPI Ex Food and Energy YoY	Sep	7.3%	7.3%
20:00	**US**	**FOMC Meeting Minutes**	**Sep-21**		
Thursday October 13					
08:00	SW	CPI YoY	Sep	10.5%	9.8%
08:00	SW	CPIF Excl. Energy YoY	Sep	7.5%	6.8%
14:30	**US**	**CPI YoY**	**Sep**	**8.1%**	**8.3%**
14:30	**US**	**CPI Ex Food and Energy YoY**	**Sep**	**6.5%**	**6.3%**
14:30	US	Initial Jobless Claims	Oct-08	225k	219k
Friday October 14					
	CN	Trade Balance	Sep	$81.20b	$79.39b
	CH	Exports YoY	Sep	4.0%	7.1%
	CH	Imports YoY	Sep	0.4%	0.3%
03:30	CN	PPI YoY	Sep	1.0%	-40.3b
03:30	CN	CPI YoY	Sep	2.8%	0.3%
11:00	EC	Trade Balance SA	Aug	-45b	-40b
14:30	US	Retail Sales Advance MoM	Sep	0.2%	0.6%
14:30	**US**	**Retail Sales Control Group**	**Sep**	**0.3%**	**0.4%**
16:00	US	Business Inventories	Aug	0.9%	0.60%
16:00	**US**	**U. of Mich. Sentiment**	**Oct P**	**58.8**	**58.6**
During the week					
	US	Monthly Budget Statement	Sep		-$219.6b
	CN	Aggregate Financing CNY	Sep	2700.0b	2430.0b
	CN	New Yuan Loans CNY	Sep	1810.0b	1250.0b

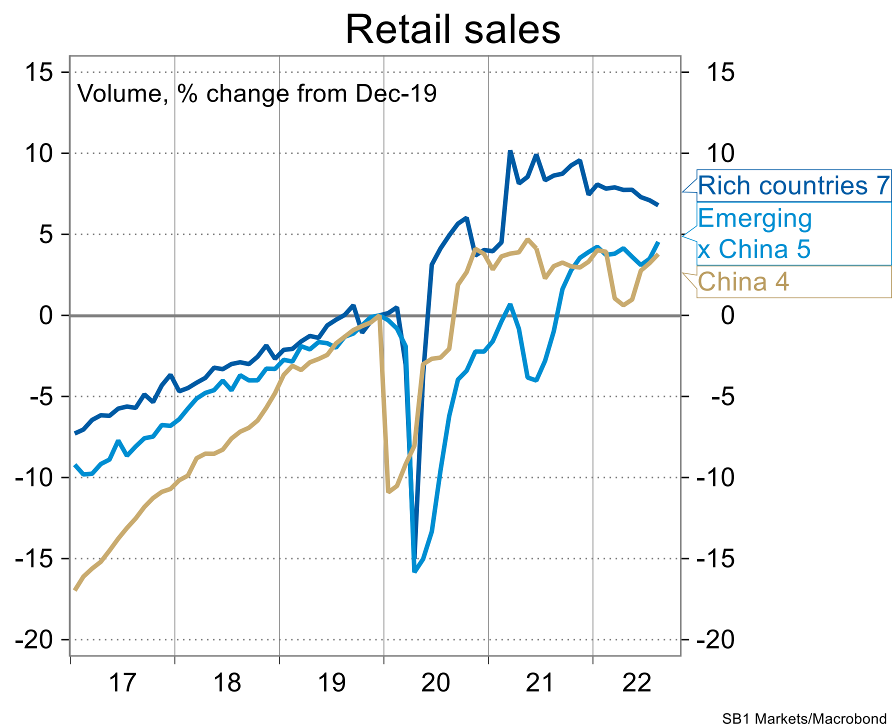
- **IMF**
  - ... will revise its growth forecasts down, and inflation estimates the opposite direction. Once more
- **China**
  - **Exports** fell in August, from a very high level (both in nominal and real terms). Lockdowns were probably not to blame but rather weaker demand from abroad, as signalled by manufacturing surveys. **Imports** have been flat since last summer in value terms, and have fallen sharply in volume terms
  - The **credit machine** is not working well. Bank lending has slowed, and local governments, which have lost almost half of the important revenues from land sales and a 'encouraged' by central authorities to gather the rubble after the crash in the construction sector are the main borrower in the bond market. The authorities have pushed the accelerator gently, but total credit growth is still slowing
- **USA**
  - The **FOMC Meeting Minutes** should not bring any surprises, as Jay Powell was very clear at the last FOMC meeting: "We will keep at it until the job is done" and "it will be enough" to get inflation under control. What to look for: discussions on downside risks (reasons to pivot, though likely absent) and on the housing market
  - **CPI** surprised on the upside in August, but has likely peaked. Like everywhere, inflation is broad. Energy is contributing less than in Europe, and core inflation is higher than elsewhere – with a large contribution from housing (usually lagging). Surveys are still reporting of price increases, albeit at a slower pace
  - **Retail Sales** has flattened in volume terms (goods), as real wages are declining. Higher interest rates are not encouraging either
  - The **Small Business Optimism Index** has been falling since June of last year, and although the index rose marginally in August, it was still far below average, and the outlook was dire as a result of high inflation, lack of labour and higher labour costs
  - **Atlanta Fed's median wage tracker** will be published towards the end of the week. So far, our favourite monthly wage indicators has not reported any meaningful slowdown in wage inflation. Some hope for Sept?
- **Sweden**
  - **Inflation** has surged recent months, to 9.8% y/y for the headline and the core CPI was up 6.8% y/y in August. All sectors have contributed on the upside in 2022. The Riksbank has taken notice and raised the policy rate by 100 bps to 1.75% in September – there are no signs that we have seen a peak here so far, but lower energy prices will likely bring the headline CPI down
- **Norway**
  - Headline **inflation** has been painfully high in Norway too, as elsewhere, due to high energy prices – but the core has also been above target since the spring of last year and was up 4.7% y/y in August. Energy prices, including gasoline prices, have since moderated and will contribute to bringing inflation down. Consensus/NoBa's f'cast for the core is at 5.0%, we expect 4.6%, and the headline CPI just below 6%, from 6.5% (consensus at 6.3%), as electricity fell due to the increase in the electricity subsides, and gasoline prices fell marginally
  - **Retail Sales** were up 0.7% in August, but have been trending down since July of last year. The level is now on the modest pre-pandemic trend path of 1%, but we expect sales to come down as interest rates rise and real income are declining

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

Retail sales are still soft, manufacturing production still strong

Global foreign trade is drifting upwards too. Both manuf. prod. & trade exposed to lower retail sales





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

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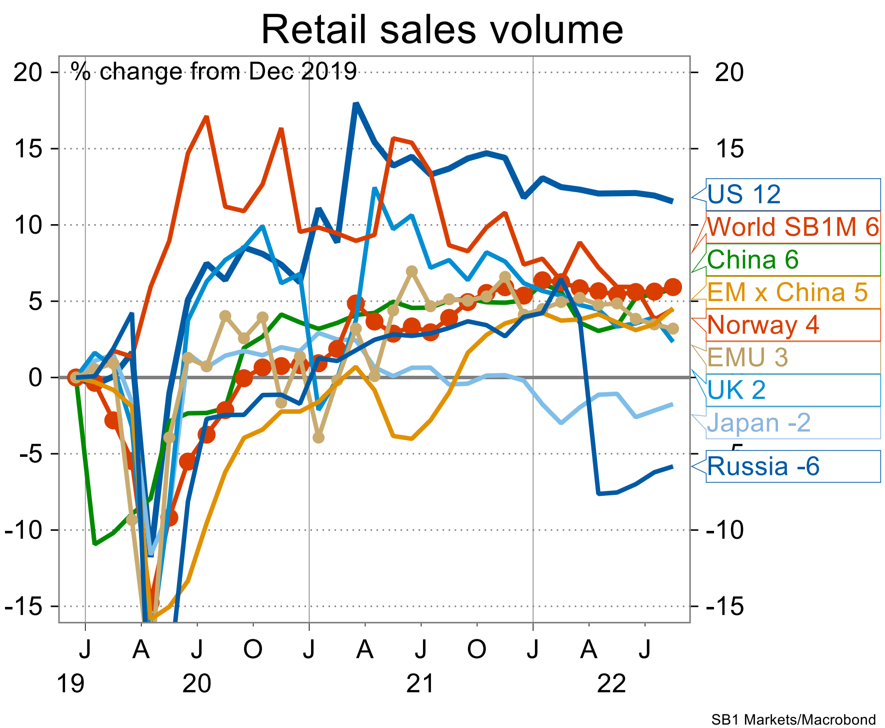
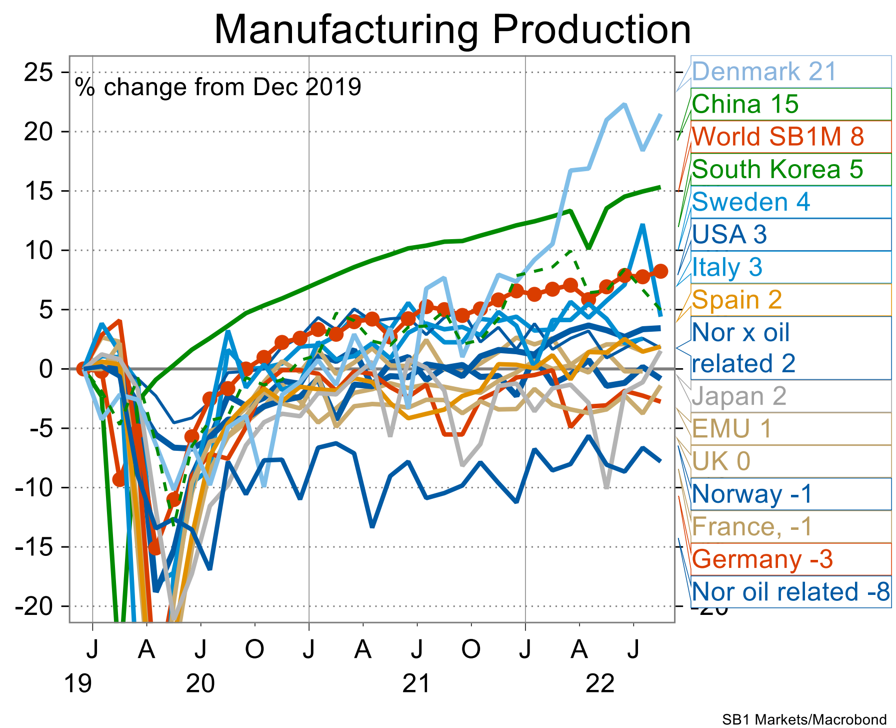
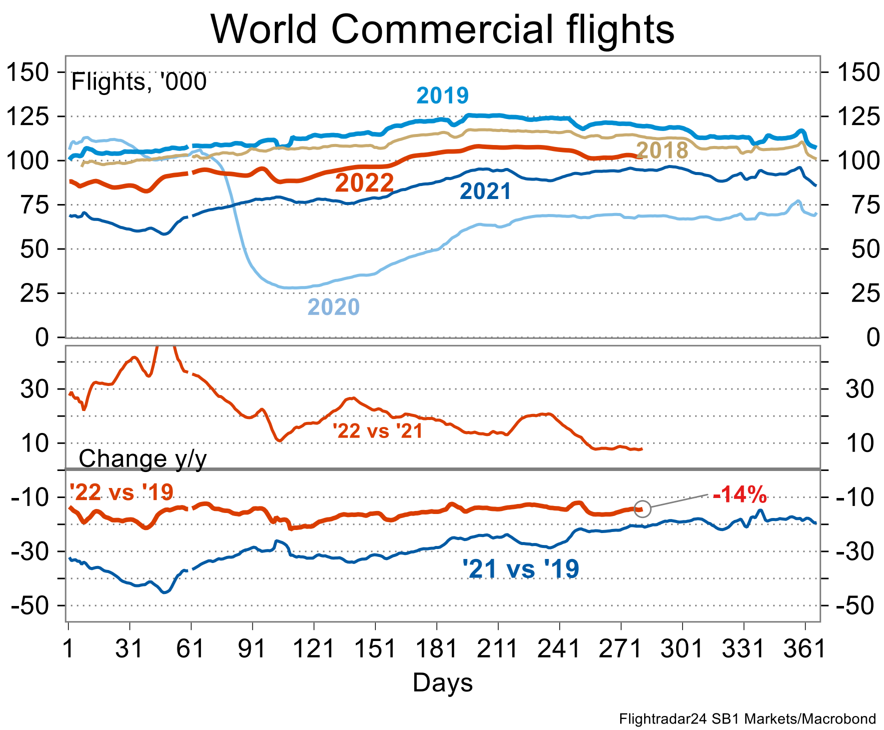
A broad slowdown of retail sales, at least in the rich part of the world

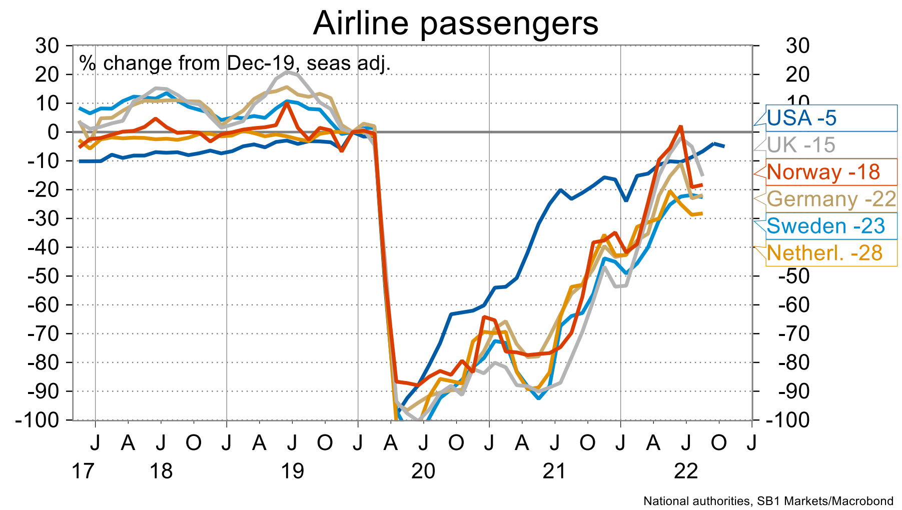
Is manufacturing exposed? Surveys, like the August PMIs send a warning sign too

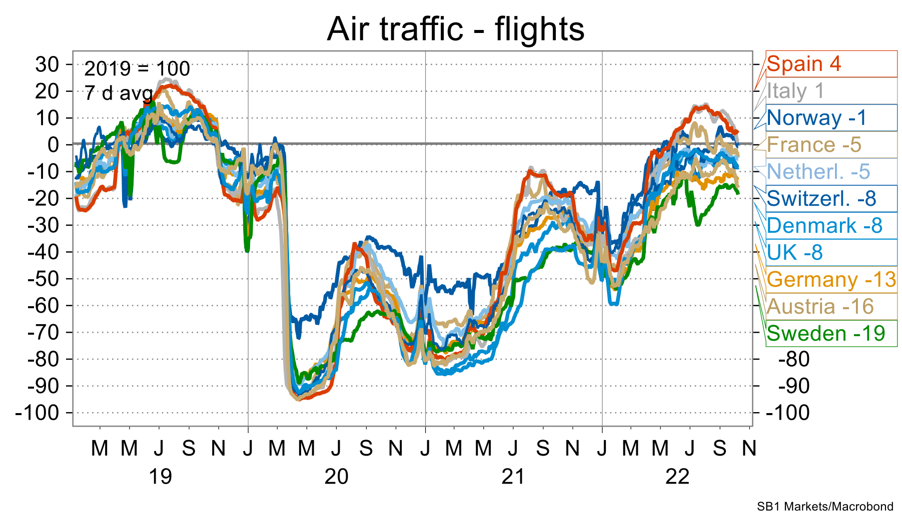




Global airline traffic down slightly up, still down 14% vs. 2019 level



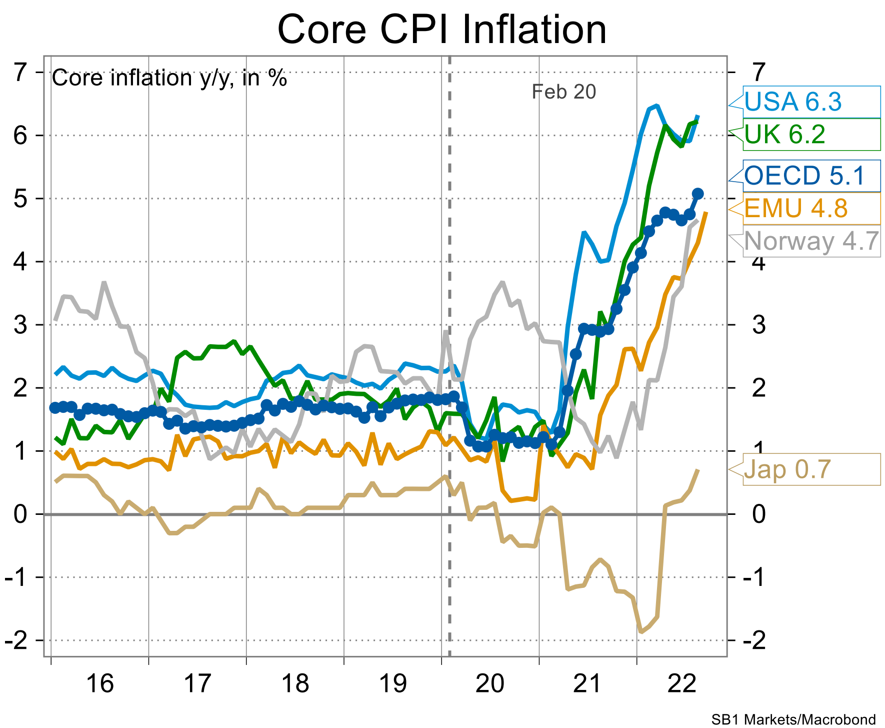


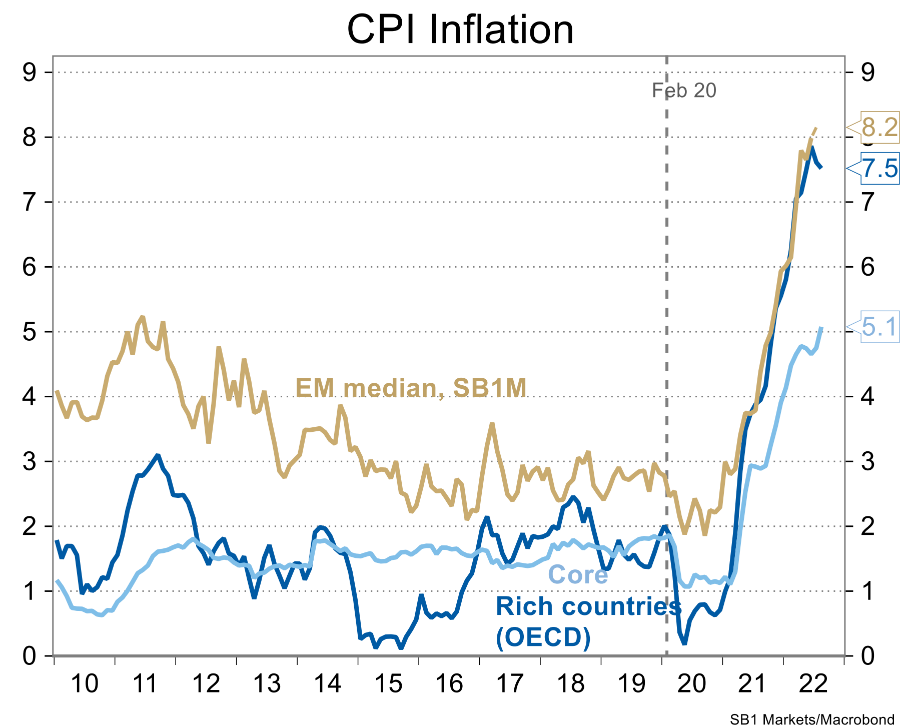


Global trade: The last months are estimates from Kiel Institute

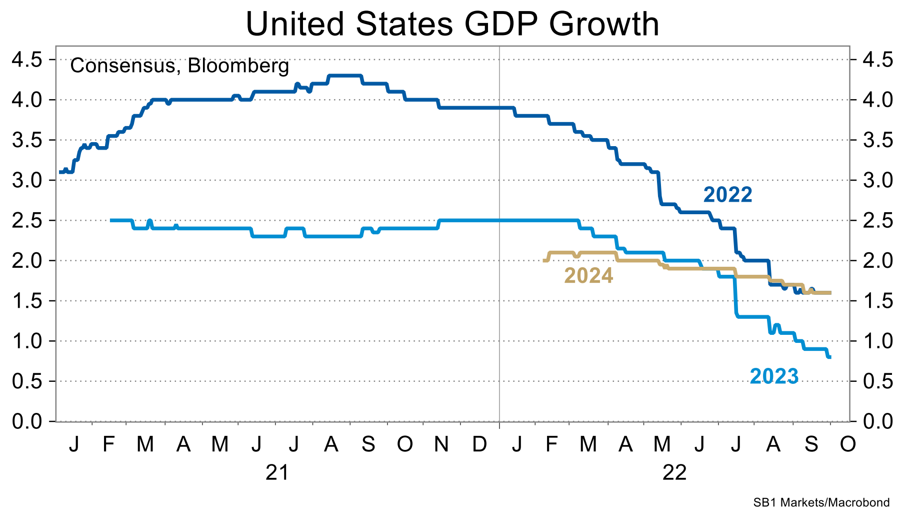
Peak inflation? Data are not that obvious anymore

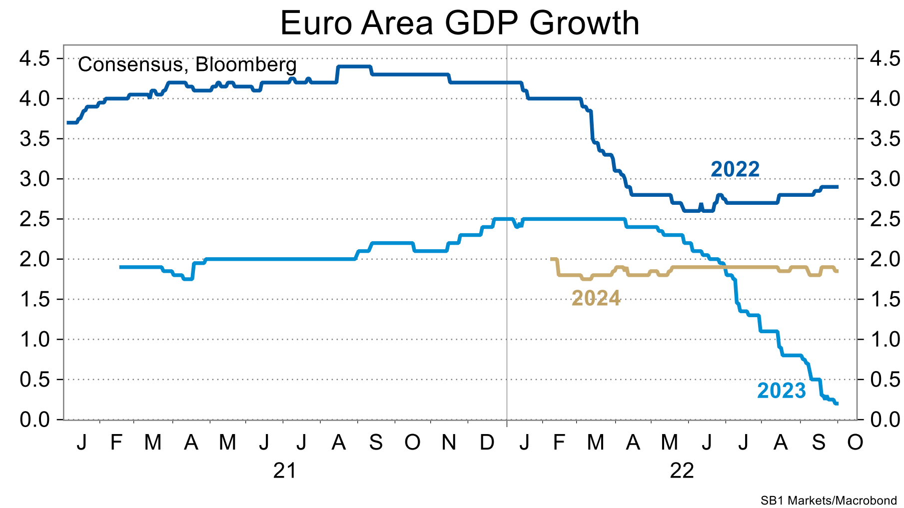
The going rate is 8% headline inflation, and 5% core inflation

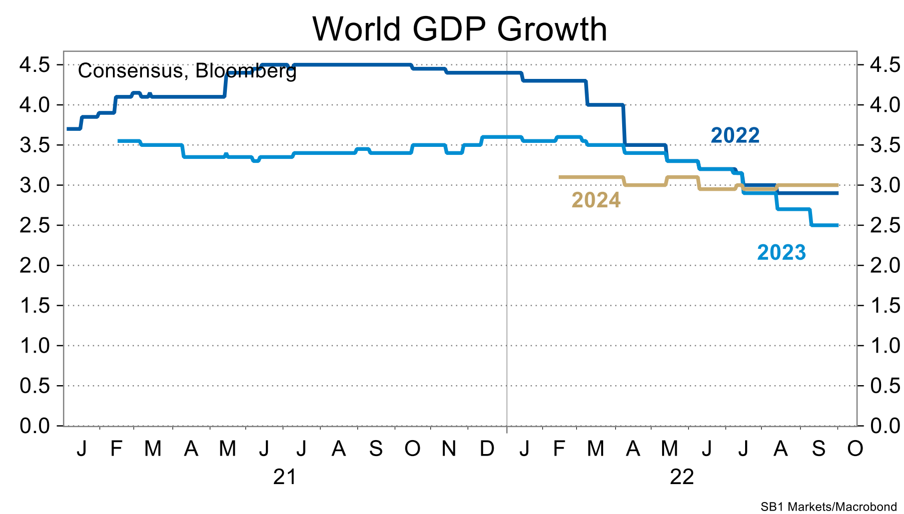




GDP growth expectations: 2023 forecasts are sliding down, and fast in the EMU

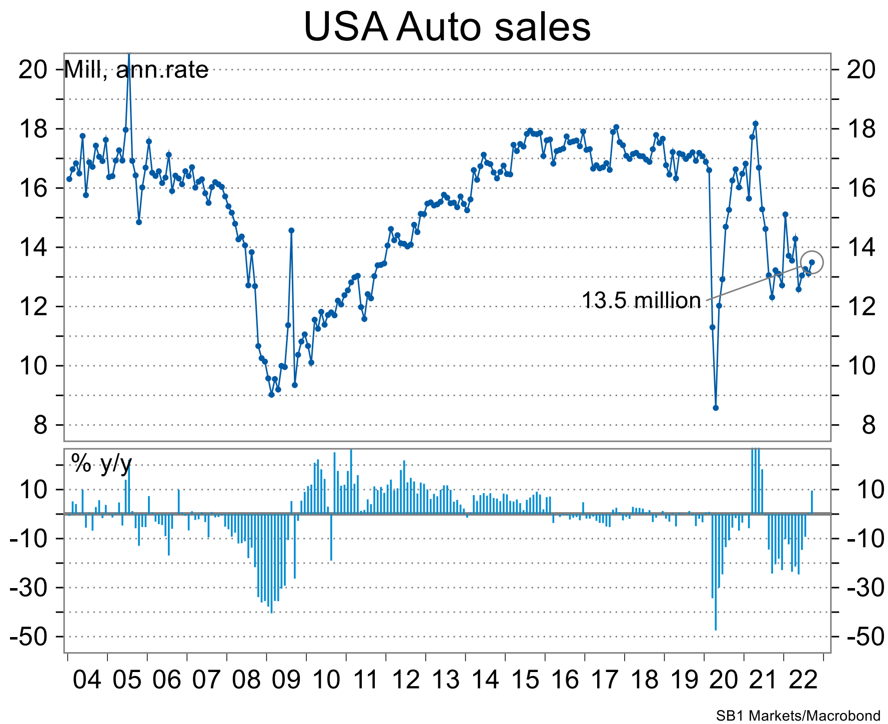


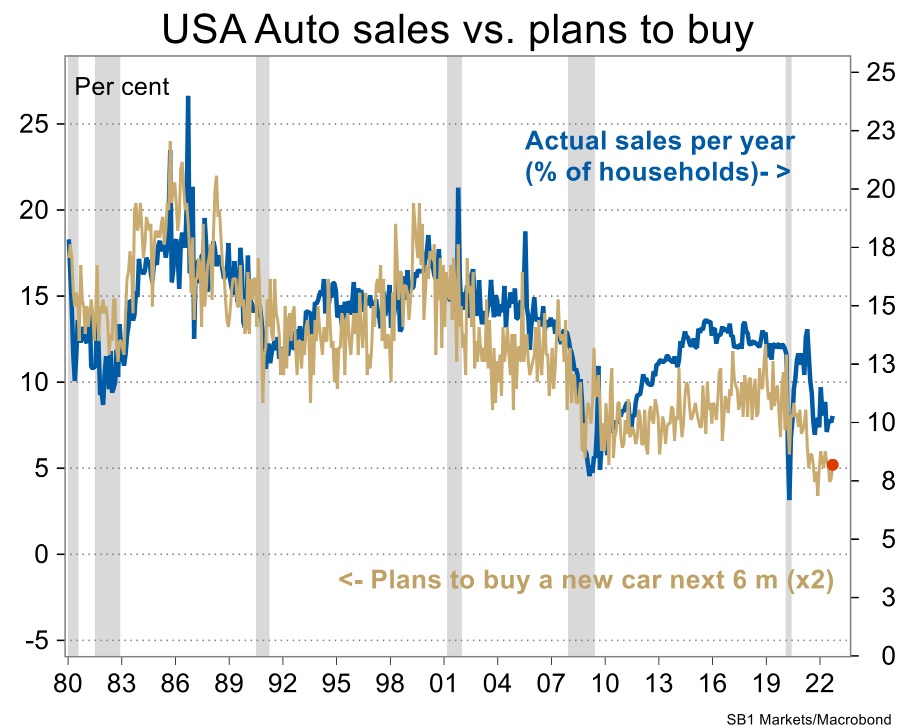




US auto sales slightly up in September, still at a very low level

Supply is still very likely the big problem, not demand





- Sales are down 22% vs. the 2019 level
- Plans for buying a new car has been stable at a record low level over the past year – but is now trending slowly down
- Some demand slowing: Prices for second hand cars are declining

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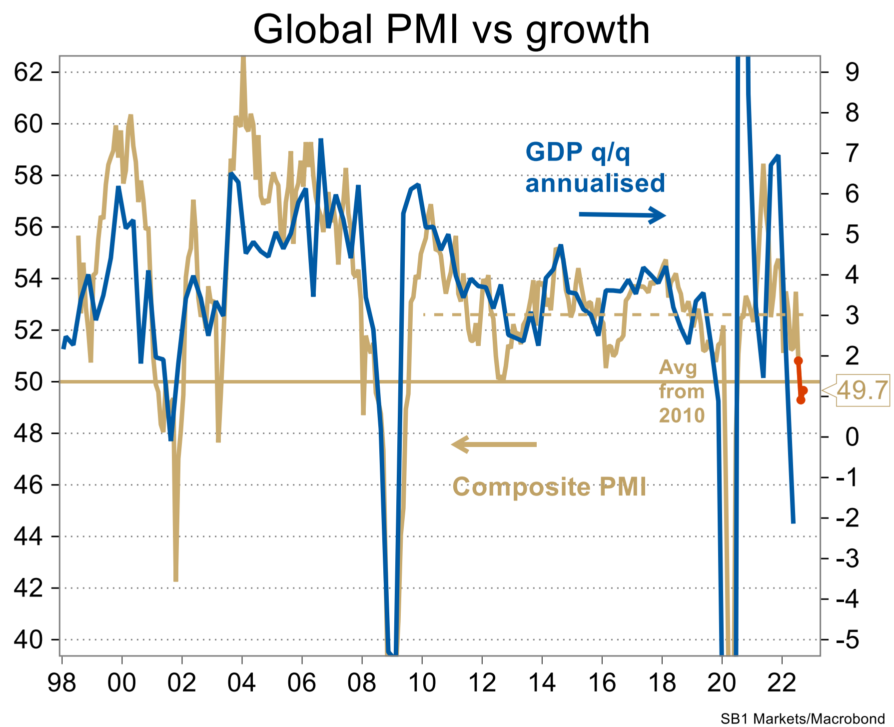
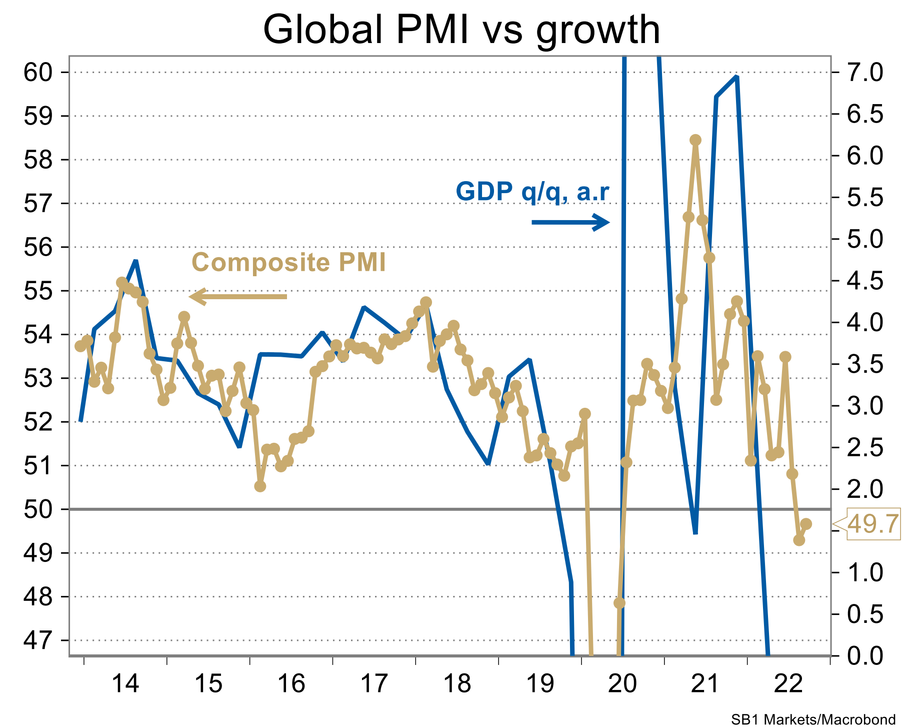
The global PMI up in September but still below the 50-line

The global index rose by 0.4 p to 49.7, 0.7 p below our estimate. The trend is still down

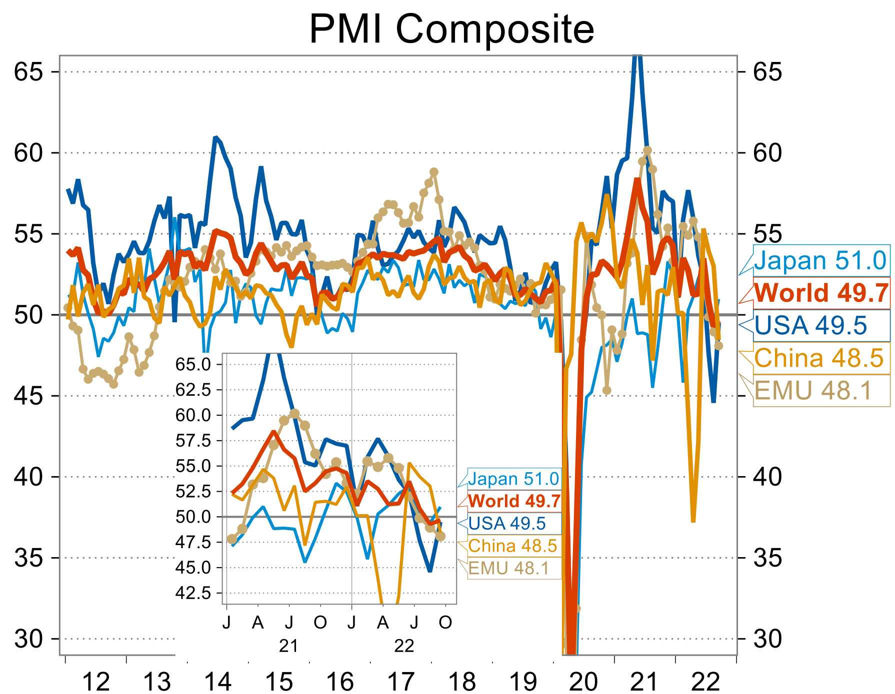




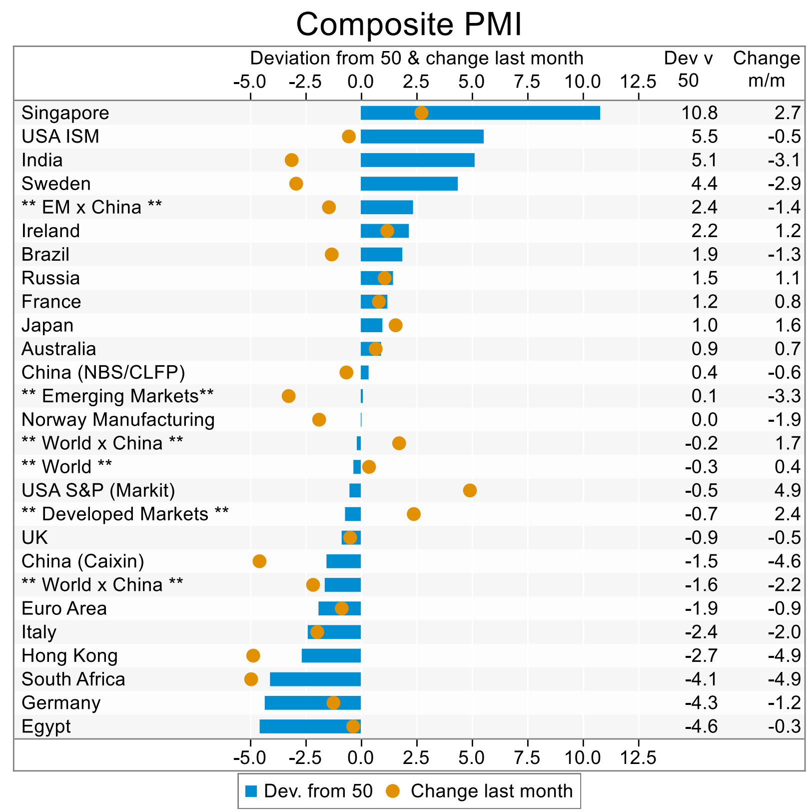
- The composite PMIs are weak in the US (S&P/Markit), the UK, and in the EMU as well, while China reported sharp decline, to well below the 50-line, expected close to unchanged
- The German index is at the bottom of the league (almost, Egypt even weaker), as both the manufacturing and the service sector PMIs are very weak – the service sector index is at 45 and the manufacturing index was dragged down by a fall in new orders and higher input prices (read: energy). The US S&P PMIs are below par too while the ISMs are still very strong
- New orders are weak across the EMU, but the US orders index rose above the 50-line in Sept

10 countries reported a higher composite PMI, 17 countries/region a decline

13 countries/regions below the 50 line (including EMU, UK, US); the majority is still above



Source: IHS Markit, SB1 Markets, Macrobond

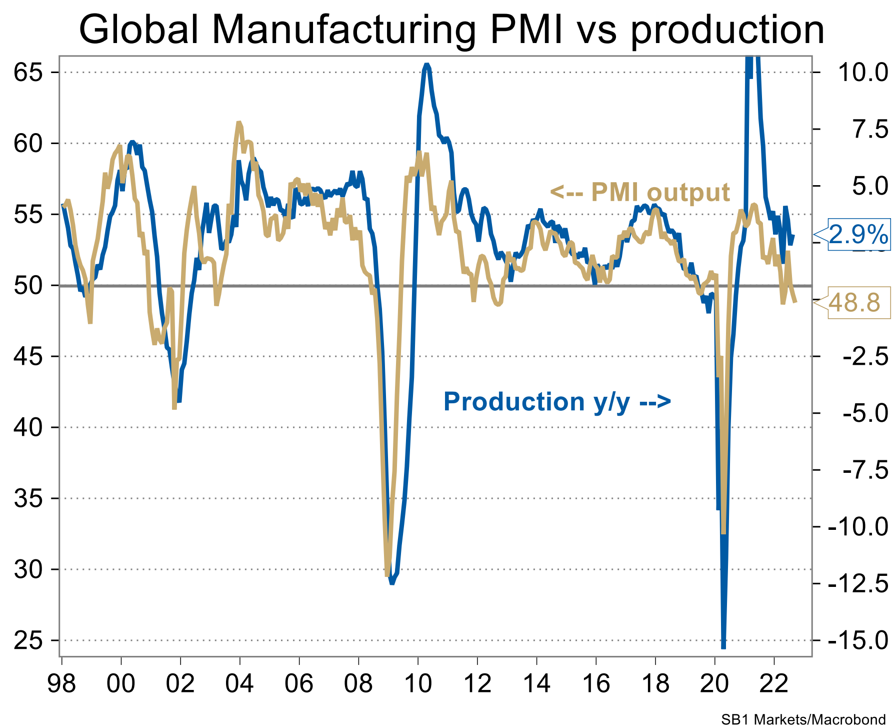


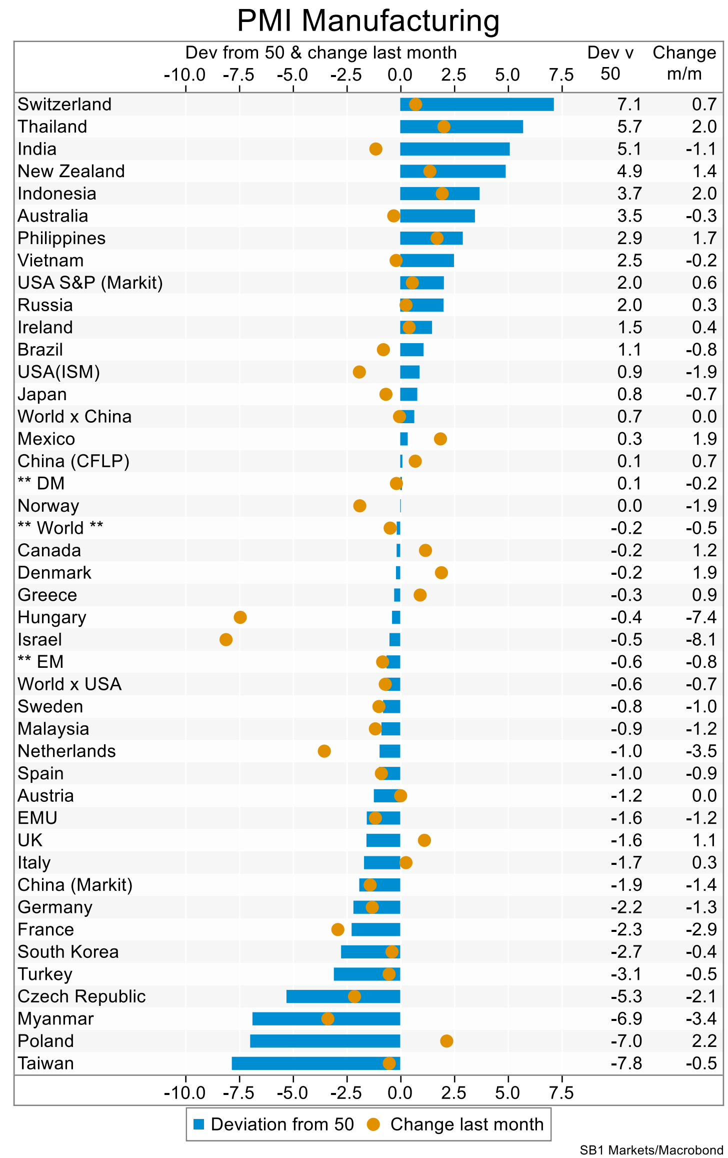
SB1 Markets/Macrobond

- **The rich countries'** (Developed Markets, DM) PMIs have fallen to the bottom of the list
  - » A couple of exceptions: The French and Swedish composite PMIs are still above 50 due to strength in the service sector
  - » The Chinese Caxin PMI fell 4.6 p to 48.5
- The **ISM survey** is far better than **S&P's (Markit) US survey** – the ISM 'composite' declined 0.5 p to 55.5, while S&P's PMI rose 4.9 p to 49.5. This discrepancy is more than strange – and is entirely due to the diverging service sector indices (ISM covers mostly larger companies)
- (**Norway** does not compete here, we just have a manufacturing PMI. The September index would have yielded a 14th place in the composite race)

Manufacturing total PMI down 0.5 p to 49.8; output index down to 48.8

60% down, and 55% are below the 50 line

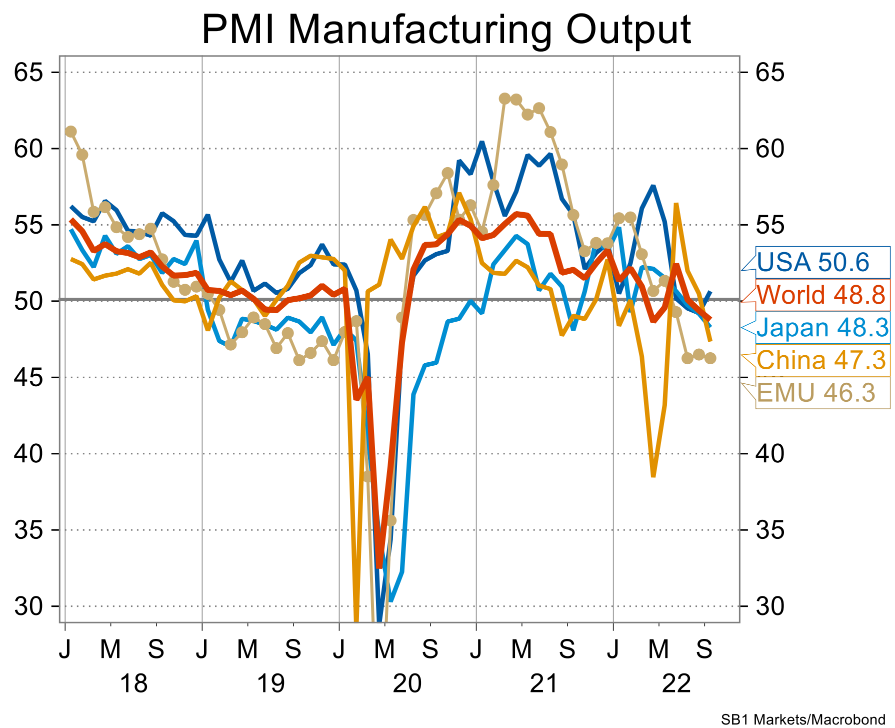


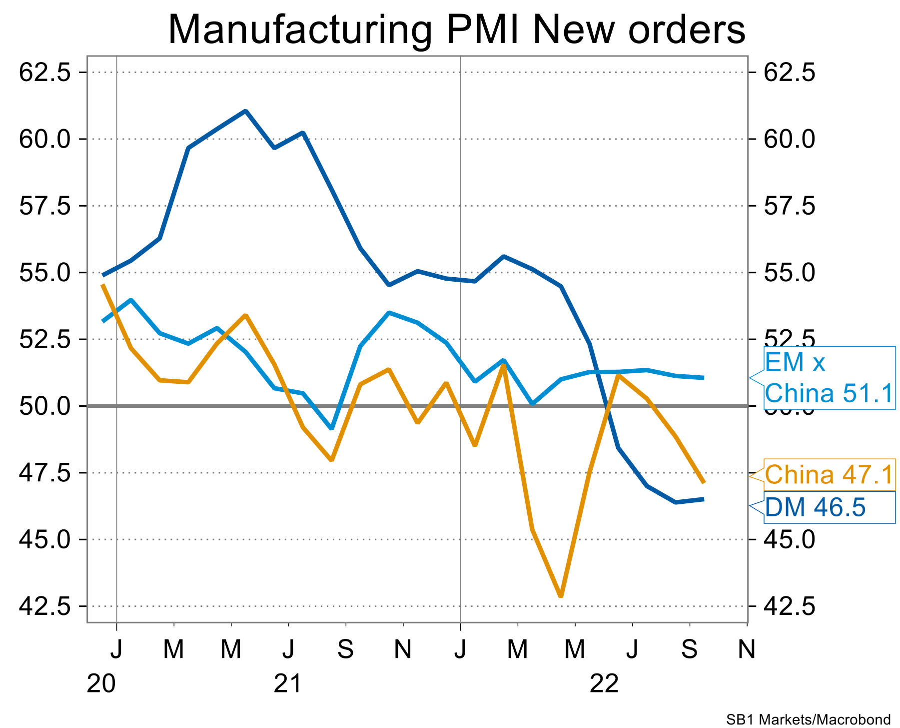


- A majority of countries reported lower activity in September
- **Rich countries are still** stronger than Emerging Markets measured by the total index but below EM x China. Also measured by the new order index, EM x China at 51.1 (and trending flat) are ahead of DM, which is below 50, at 46.5!
- **Norway** is falling down towards the middle of the list, and Sweden suddenly fell below the average – used to be at the top of the list

New orders and output are slowing in developed markets; not in EM x China

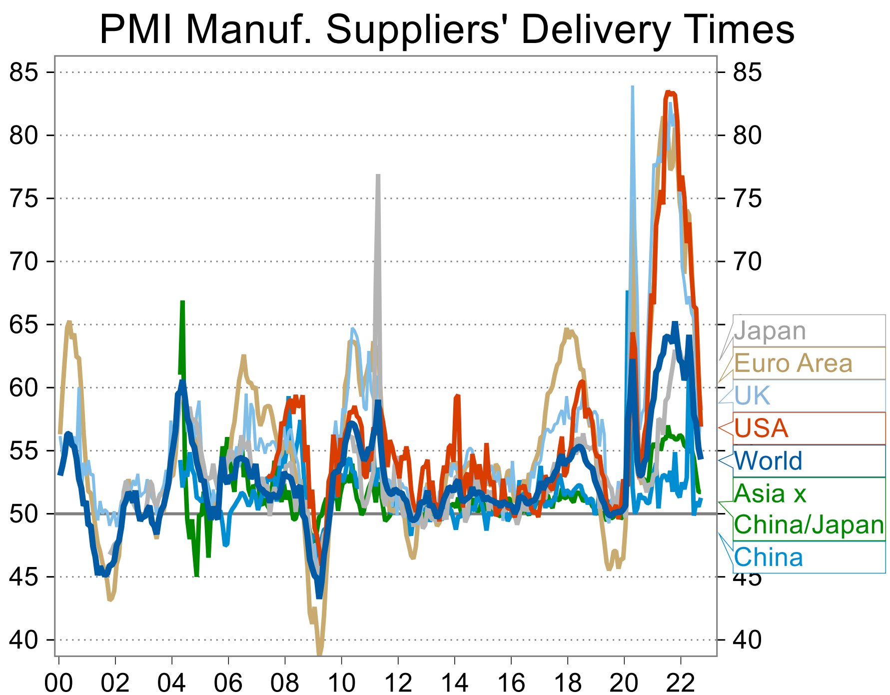
China reported a slowdown in September, with export orders in the 'lead'



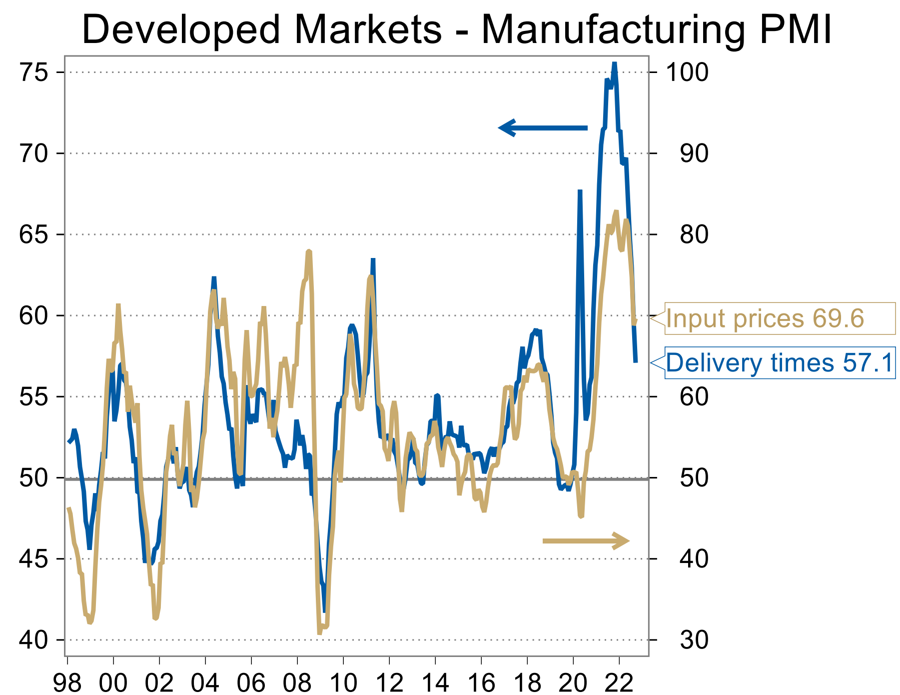


Delivery times and price indices are coming down rapidly, but both remain high

However, the input price index for DMs rose by 0.6 p in September



SB1 Markets/Macrobond



SB1 Markets/Macrobond

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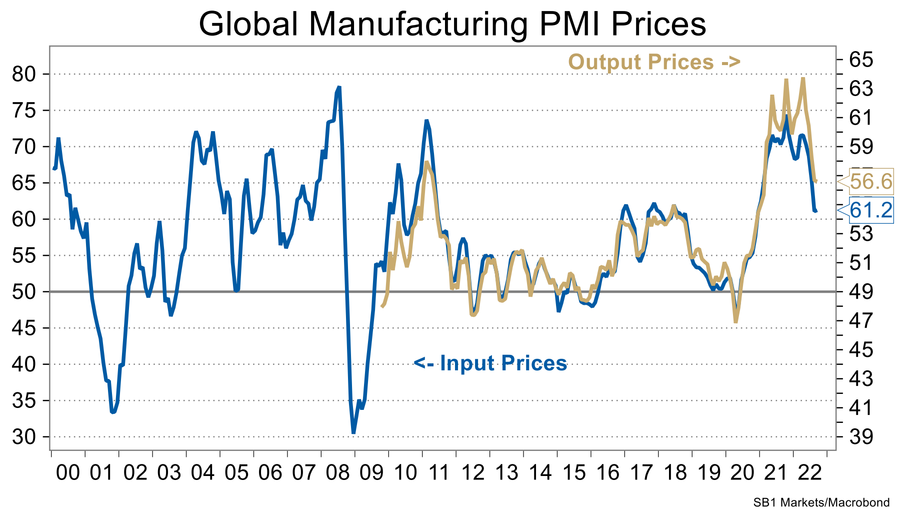
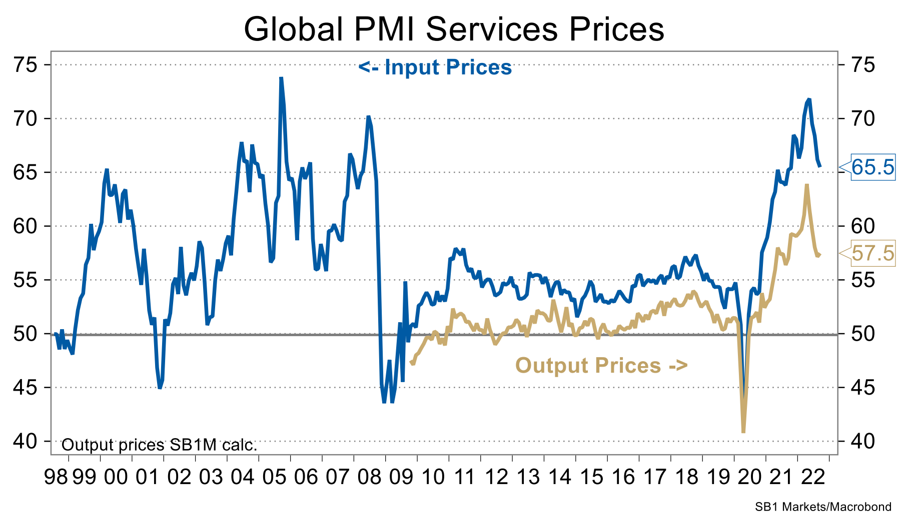
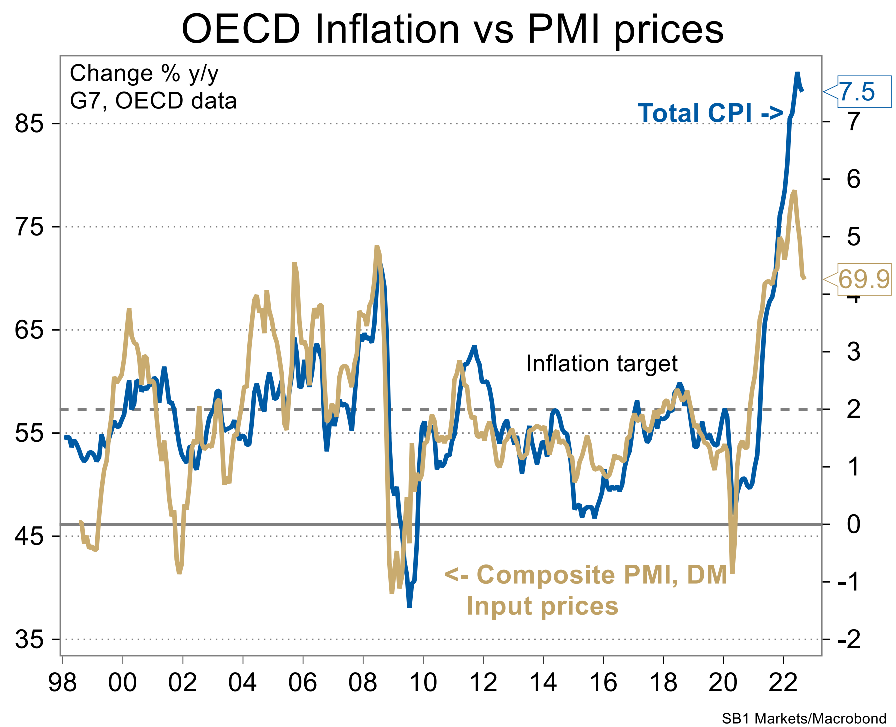
Price increases are slowing, according to the PMIs

All price indices remain at high or very high levels though

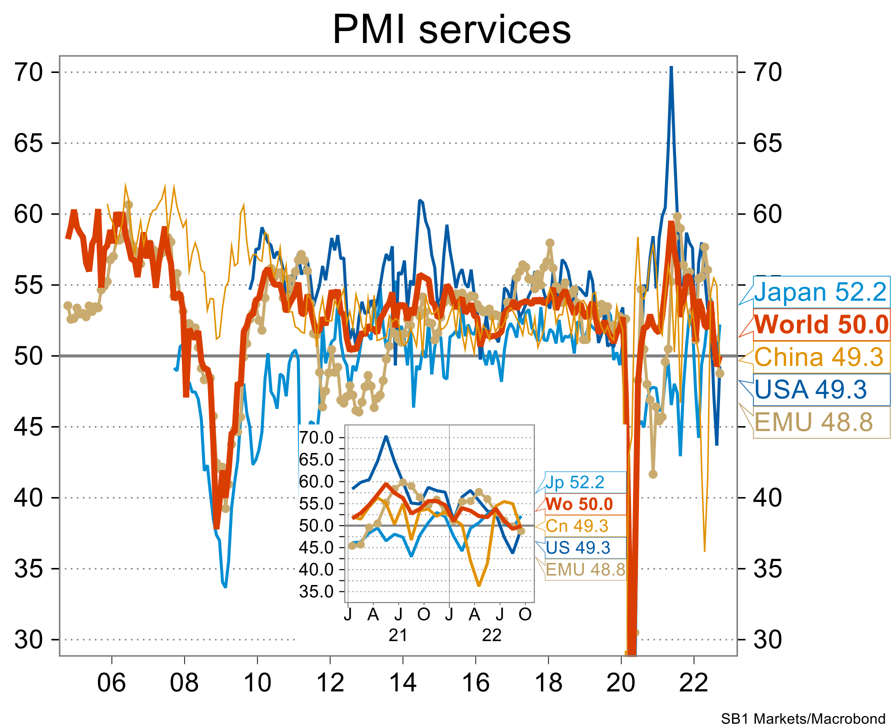


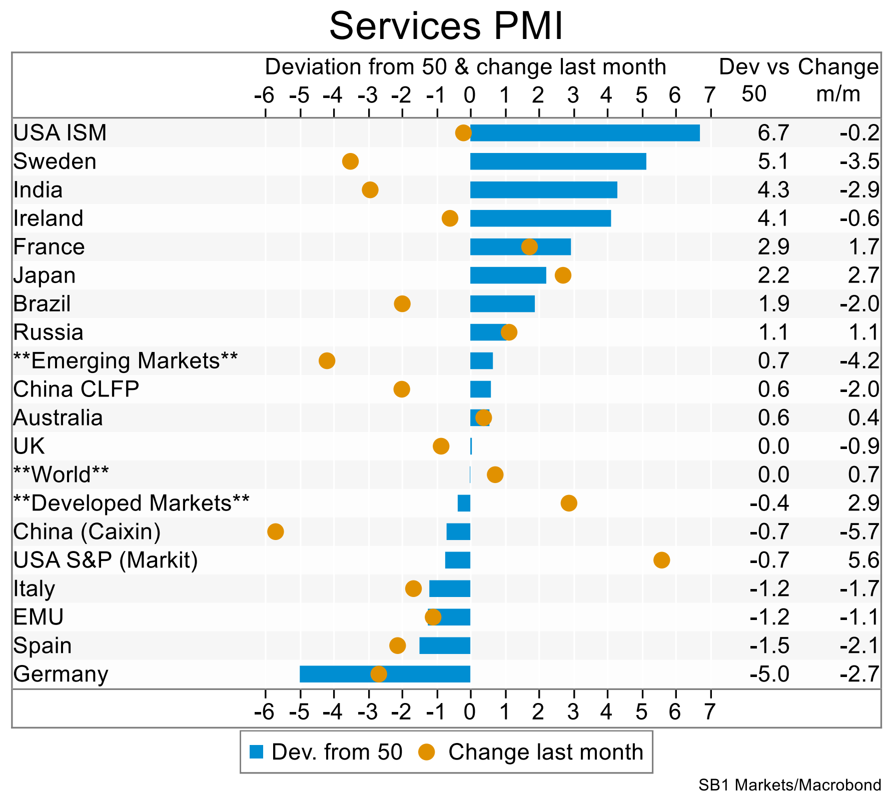




Services PMI up 0.8 p to 50 thanks to a sharp rebound in the US

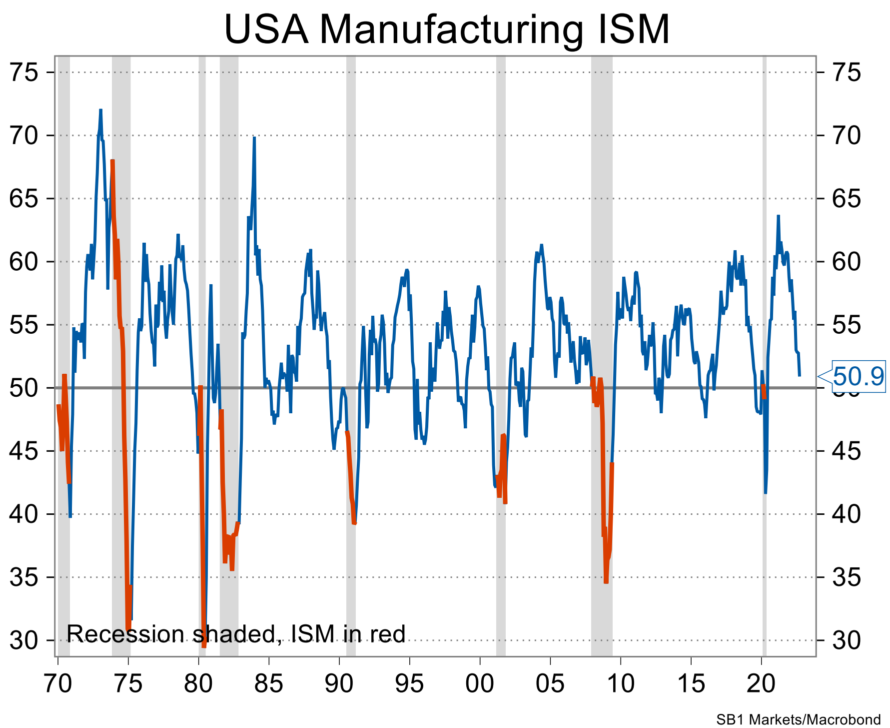
Germany at the bottom of the list, by far. China fell the most in Sept, to below the 50-line





The manufacturing ISM fell in September, but not into contraction territory

The index fell 1.9 p to 50.9, expected 52.2 – but the level is more in line with other surveys



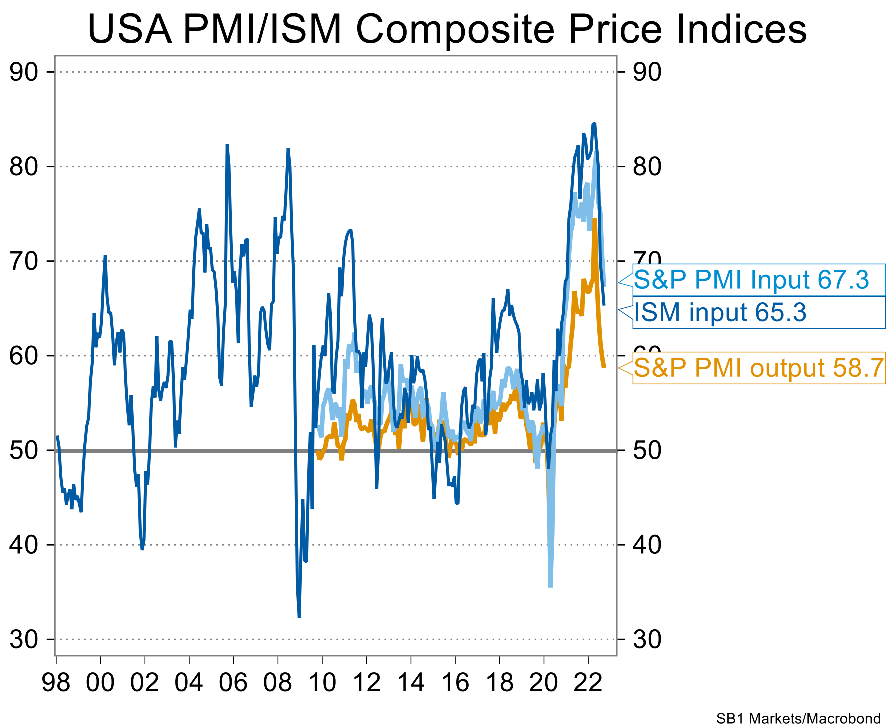
Even so, the **ISM manufacturing survey** confirms a gradual slowdown in the US economy, but not as much as the average (and median) of other surveys

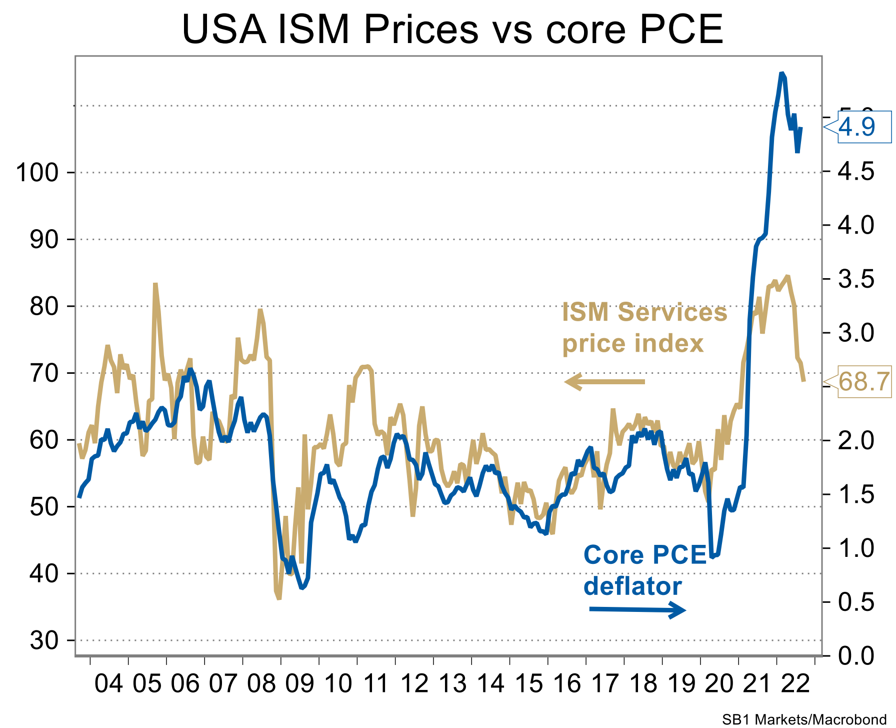
- In September, 9 of 18 manufacturing sectors reported **growth** (down from 10 in July), 7 sectors reported a decline (unch.)
- The **new orders index** fell into contractionary territory, down 4.2 p to 47.1 following the 3.3 p increase in August, as 13 of 18 sectors reporting declining orders. Other surveys agree
- The **production index** rose 0.2 p to 50.6, still a low level. The employment index fell by 5.5 p to 48.7 in September, signalling weaker demand for labour (which the Fed likes, we assume)
- **Supply chain** issues are dissipating: 15 commodities saw **price increases** (from 12 last month and 40 in May, and 56 at the peak). 16 were down in price, like aluminium, steel, and lumber. This is up from 14 in august. Just 7 commodities were reported in **short supply**, down from 8 in August (and far below the peak at 50 commodities a few months ago). The price index fell sharply to 55.7, signalling a rapid deceleration of input prices
- **Comments** are mixed – many are still reporting that labour is a scarce commodity, but several are acknowledging a slowdown in demand

SpareBank 1 MARKETS

Both input and output price indices further down in September

Lower but still higher inflation than normal is signalled in the PMI/ISMs





- Anyway, as wage inflation remains much higher than before, and there is no surge in productivity – the real inflation problem remains unsolved

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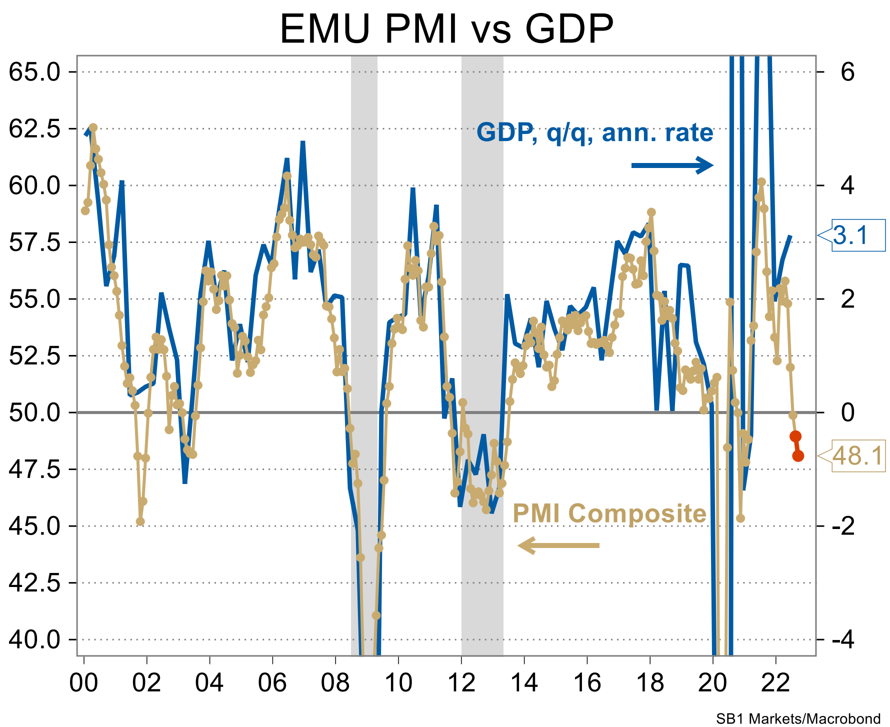
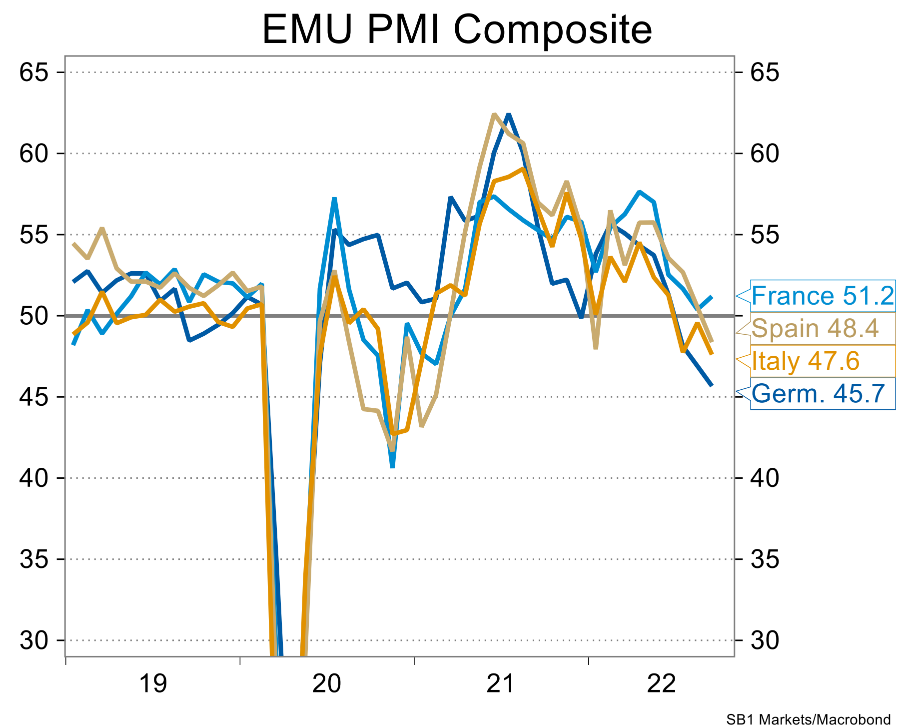
The Eurozone final PMIs confirmed in contractionary territory, but no full crisis

The composite down 0.9 p to 48.1; data weaker everywhere but the French service sector





- The decline in the flash EMU PMIs was confirmed. The German and the Italian PMIs, and the manufacturing sector in general are the weak links
- The **service PMI**, **manufacturing PMI** and the **manufacturing output** index all fell in September
- The Italian manufacturing PMI was the only print above expectations, but it is still signalling contraction in the sector, and the sum of the parts for the Eurozone points to around a 0.7% contraction in GDP
- GDP growth in both Q1 and Q2 has been revised up, in Q2 up to 3.1%
- The September data bear sign of higher energy costs and higher interest rates, as well as lower global demand, as demonstrated by the lower new order indices

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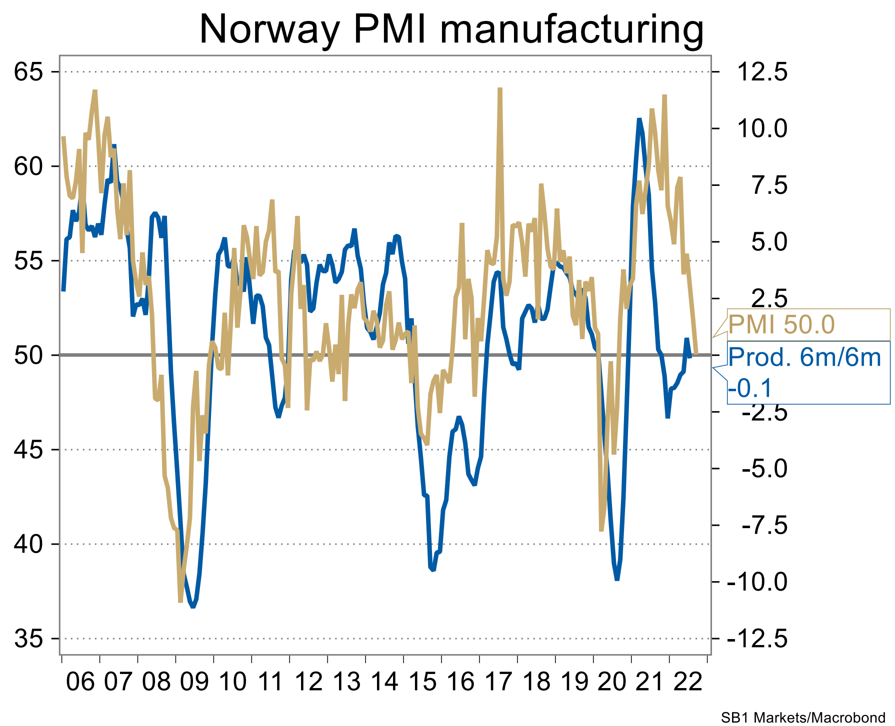
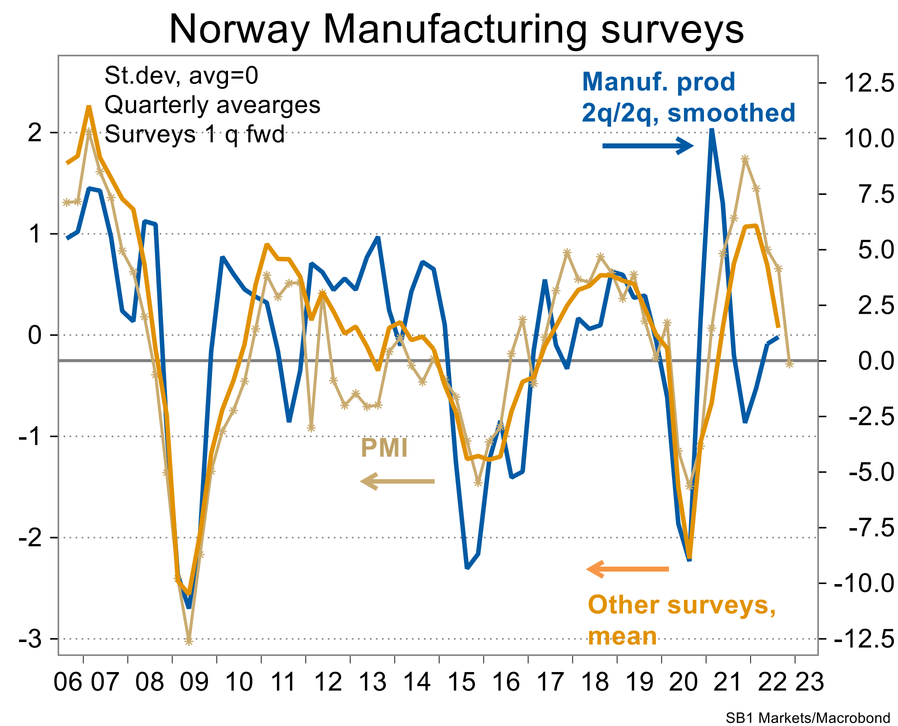
The manufacturing PMI down to 50 in September

The trend is down, new orders are falling. Delivery times slow a little, input price inflation still high





- The **manufacturing PMI index** fell -1.9 p to 50.0 in September and is trending down. The August print was revised down 0.4 p to 51.9
- Other **manufacturing surveys** are also down
- **Actual production** has been on the way down, but presented a small uptick in September

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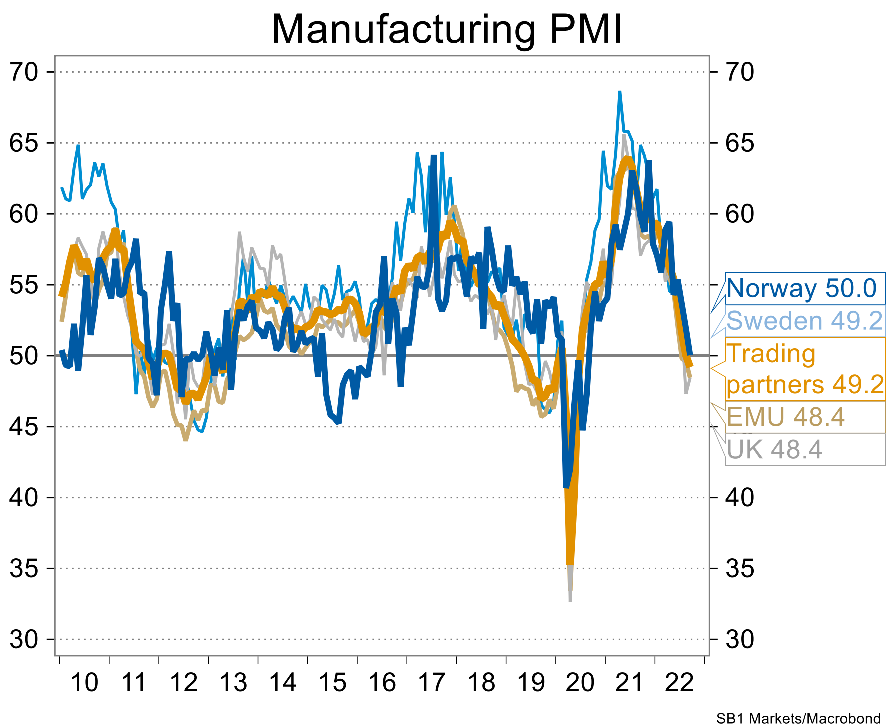
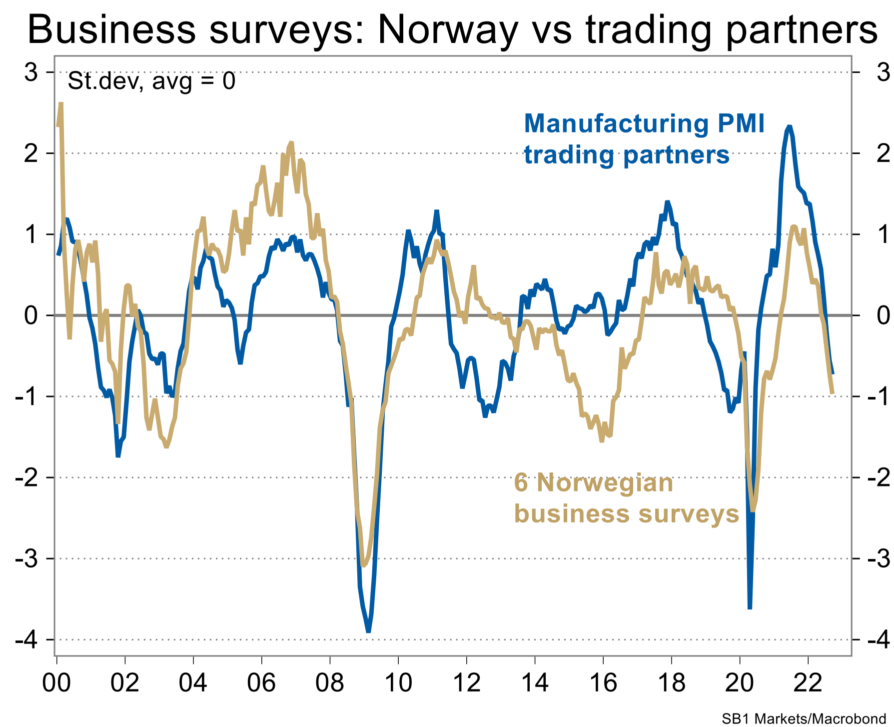
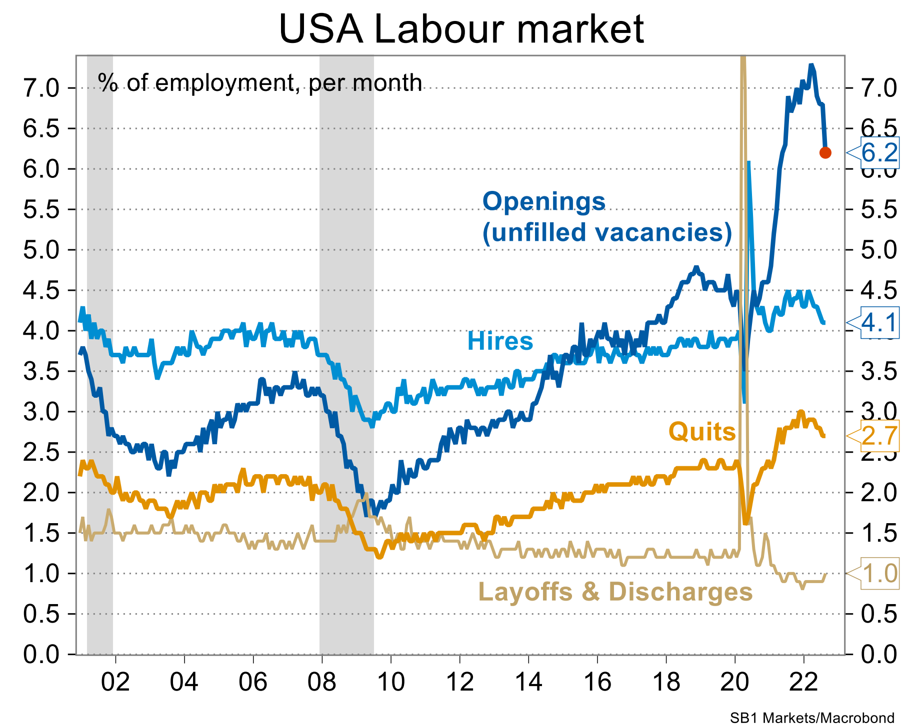
Norwegian manufacturers follow the rest of the world down





Just what the Fed could have hoped for: 1 mill fewer job openings (still 10 mill left)

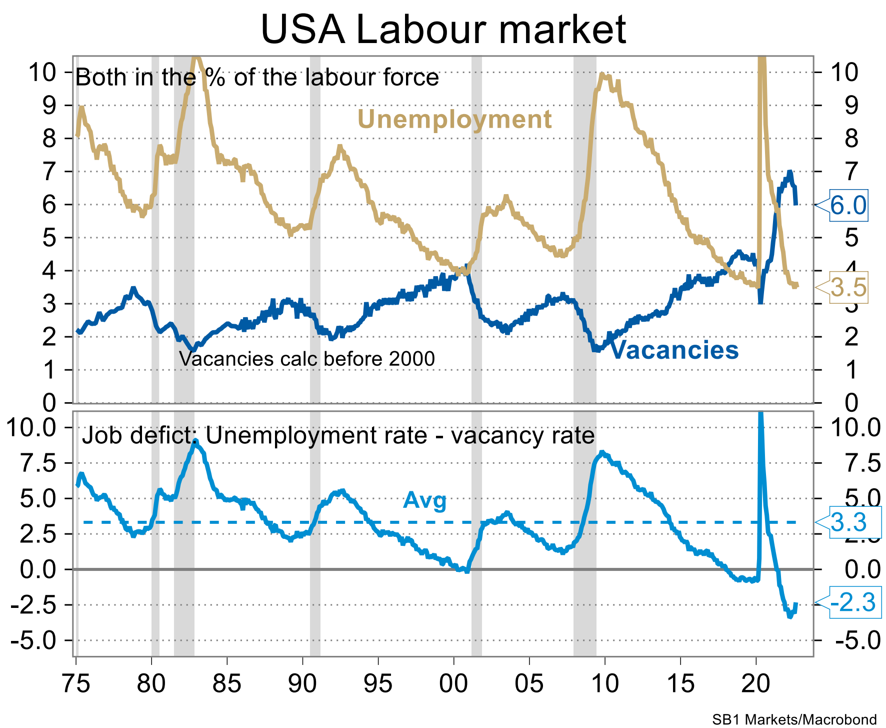
The vacancy rate fell to 6.2% in August from 6.8% in July, expected 6.6%

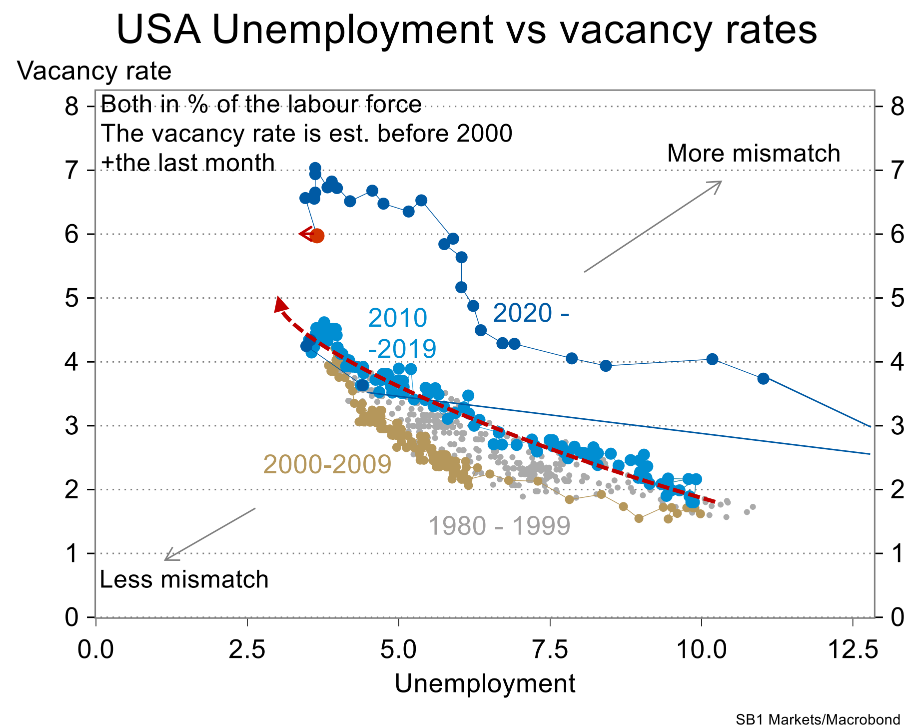


- The number of **unfilled vacancies fell by 1.1** mill to 10.1 mill in Aug, expected down to 10.8 mill. The rate (vs no. of employed) fell 0.6 pp to 6.2%
  - » This decline is the largest on record, barring the start of the pandemic
  - » The highest print ever before the pandemic was 4.7%, and the rate was 4.5% just before the pandemic hit – the current level is still high – but the tide has turned
- **The SMBs (NFIB survey)** reported that 46% of companies were not able to fill positions in September, down 3 p from August, but that number is still close to record high. These two series are very closely correlated – and both are signalling that the labour market is still very tight, but might be easing
- **New hires** rose 0.1 mill to 6.3 mill in August equalling 4.1% of the employment level (July was revised slightly up), The trend is down but the level is high
- The number of **voluntary quits** rose 0.2 mill to 4.2 mill, equalling 2.7%. However, the trend is down, signalling that workers have become somewhat more cautious leaving their current jobs
- **Layoffs** equalled 1.0% of employment in August, up 0.1 pp from July – still not signalling any wide spread
- **In sum:** The tide has turned, but the labour market is still tight, and it is unlikely that wage inflation will come down to a sustainable level without a substantial further weakening. Job openings are leading unemployment by some few months, though not by a stable lag (but the correlation is high). Thus, expect the unemployment rate to turn up, at least before Christmas

Layoffs fell 'more' than unemployment rose in August (and unempl. fell in Sept)

Will vacancies return to a normal level without an increase in unemployment (= a recession?)

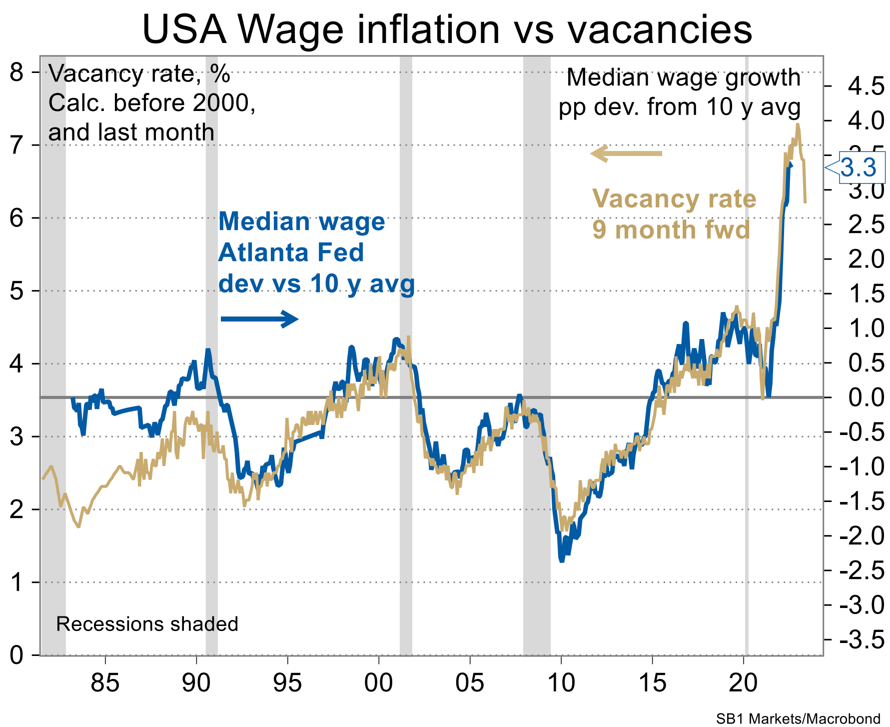


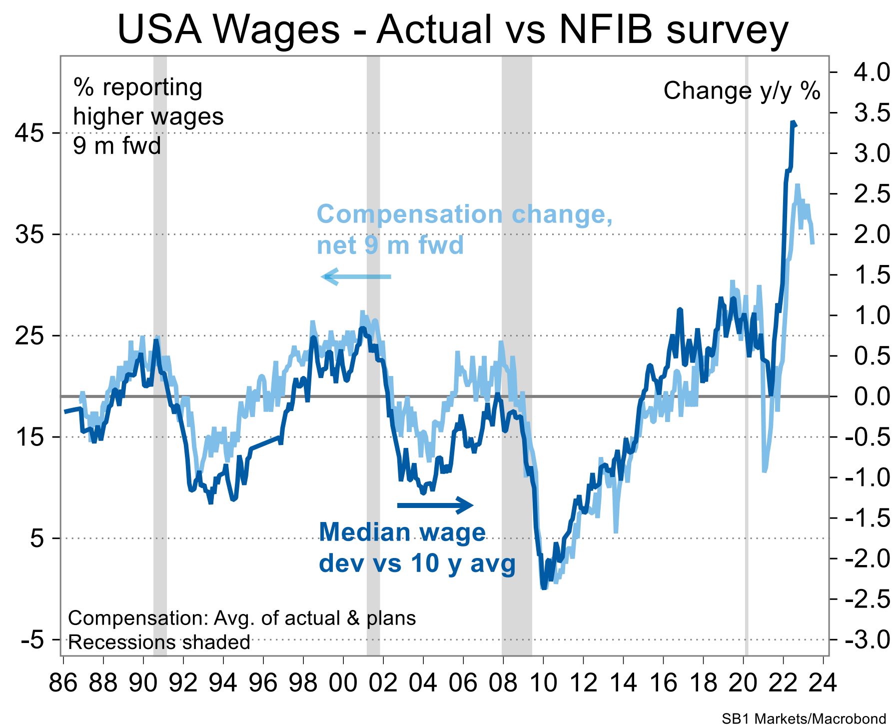


- In principle **vacancies may be reduced without pushing the unemployment rate** up (aka recession), as the vacancy rates is so much higher than normal. But even if the August data were positive (vacancies fell sharply while unemployment rose just 0.2 pp, and in Sept, the unemployment rate fell to 3.5% (illustrated by the red arrow at the chart to the right)) we think it would be hard to achieve, over time
  - » An economy that reduces overall demand for goods and services, and thus demand for labour, will hit both companies that have vacancies, and those which do not. The labour market is not so flexible that redundant labour in one company will seamlessly be transferred to fill still vacant positions in other companies/sectors/regions. If such a transfer had been easy, it would have taken place already, and the unemployment rate would have been lower

Fewer vacancies are signaling lower – but still far above normal – wage inflation

The same goes for companies' compensation plans

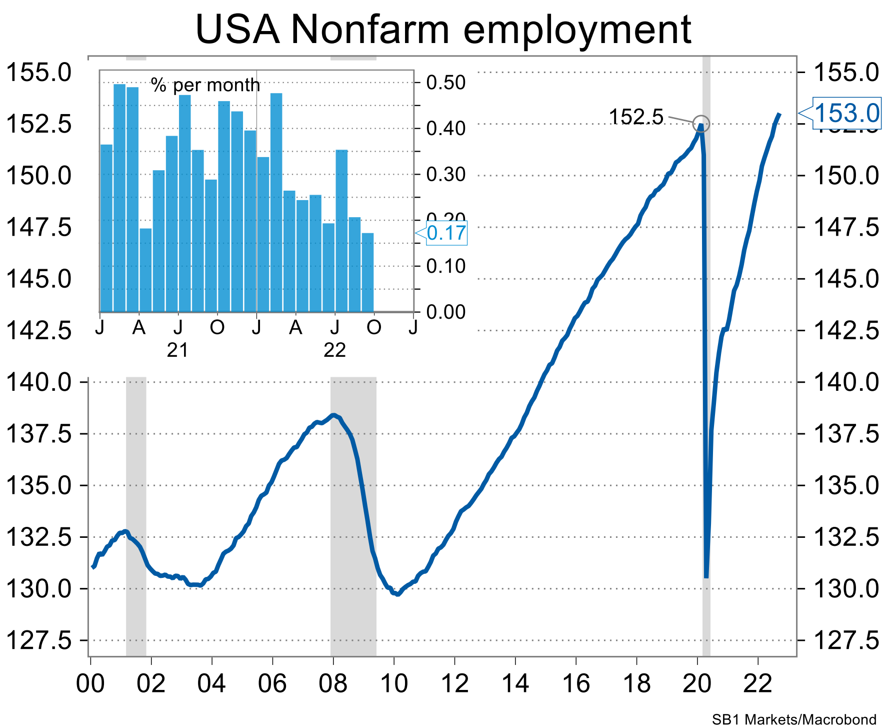


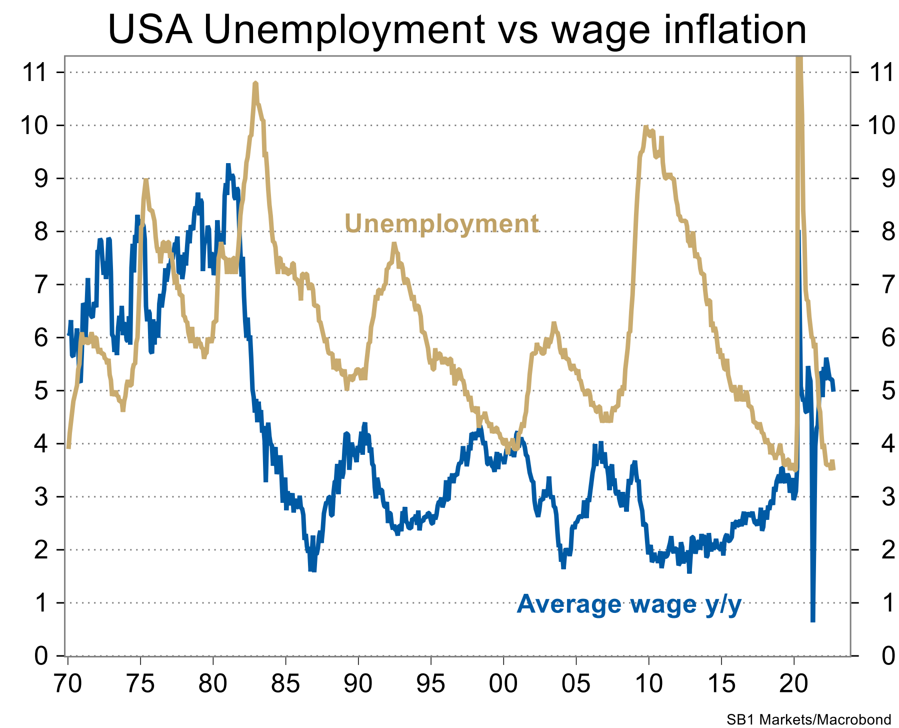


- **Our 'Phillips curve'** based on the vacancy rate signals a further increase in wage inflation the coming quarters even if vacances may have peaked, as the vacancy rate leads changes in wage inflation quite consistently by 3 quarters. However, we would not be surprised if the current extraordinary high wage inflation turns out to be the peak
  - » Companies (SMEs) compensation plans signal continued high wage inflation but not faster than the present
- **Wage inflation** has already accelerated by almost 3.4 pp vs the 10 y average (Atlanta Fed median) and cannot possibly generate a 2% price inflation rate over time. This is Fed's main headache, not the current high CPI inflation print. And it will become the stock owners' headache too, of course
- **Demand for labour has to be reduced sharply in order to get wage inflation back to a sustainable level! That's the recipe for an unavoidable RECESSION**
  - » Check under which circumstances wage inflation slows on the charts above (hint: find the shaded areas, follow the blue wage line - as well as the vacancy rate or the wage hike plans ☺). Fed will not be able to control inflation if demand for labour is not cut sharply. Exactly what Powell told us at the past couple of press conferences!

Employment growth slows but the unempl. rate down to rock bottom again

Wage inflation does not accelerate but remains far too high to reach the 2% inflation target

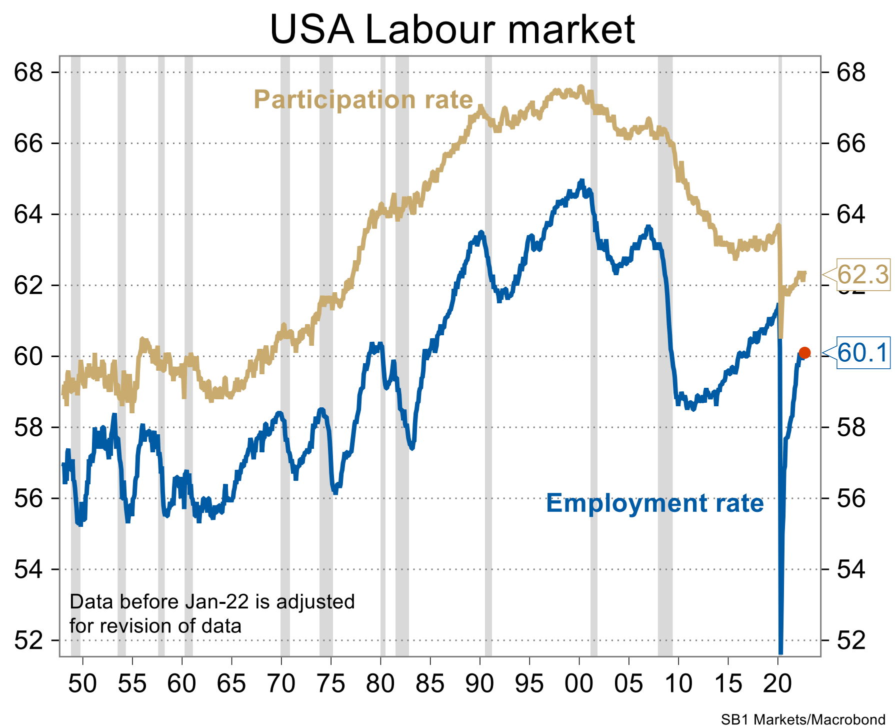


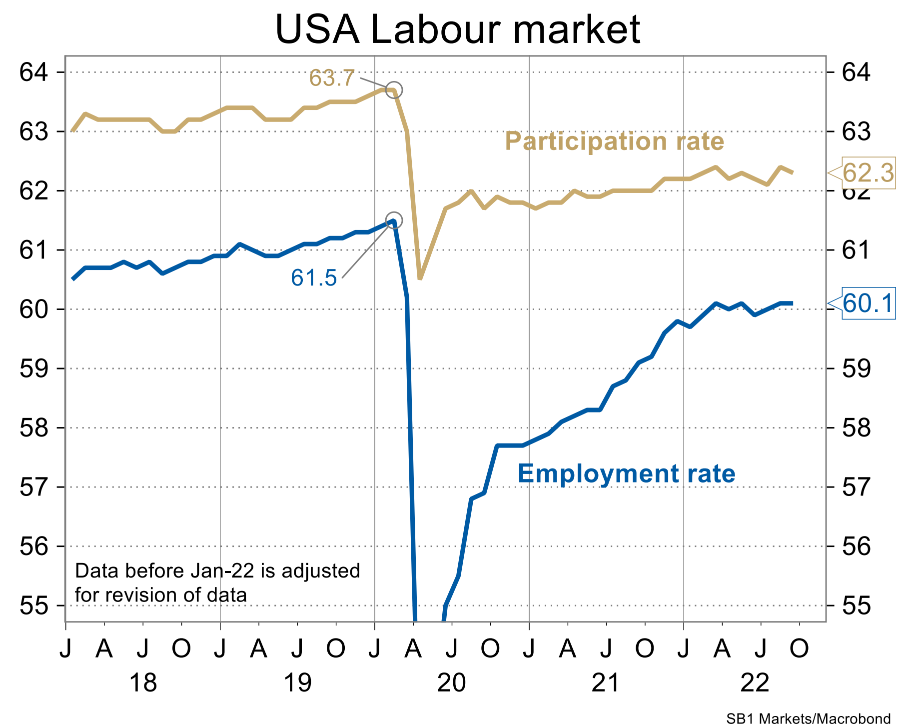


- **Nonfarm payrolls** rose by 263' in Sep, expected 315' (no important revisions), and growth is gradually slowing. The LFS employment rose by 204'. The **employment rate** was unch. at 60.1% and has flattened since March – not a signal of strength
- **The participation rate** decreased by 0.1 pp after the 0.3 pp surge in August. At 62.3%, the level has been flat so far this year. The unemployment rate fell by 0.2 pp to 3.5%, expected unchanged. The FOMC Q4 forecast at 3.8% is not far away, but unemployment moved in the 'wrong' direction in September… which the markets figured out Friday afternoon
- **Wages** rose 0.3% in Sept, as expected. Measured 3m/3m, wages are up 4.8%. The annual rate fell 0.2 pp to 5.0%, as expected. Before the pandemic, average wages rose by 3¼% in 2019, and well below 3% in the years before, and the wage level is now 4.6% above the pre-pandemic trend
- The unemployment rate is too low, and wage inflation is far too high. The FOMC can still 'keep at it'

Labour force survey: The participation rate down, the flattish in 2022

The employment rate unchanged in September – and the unemployment rate fell

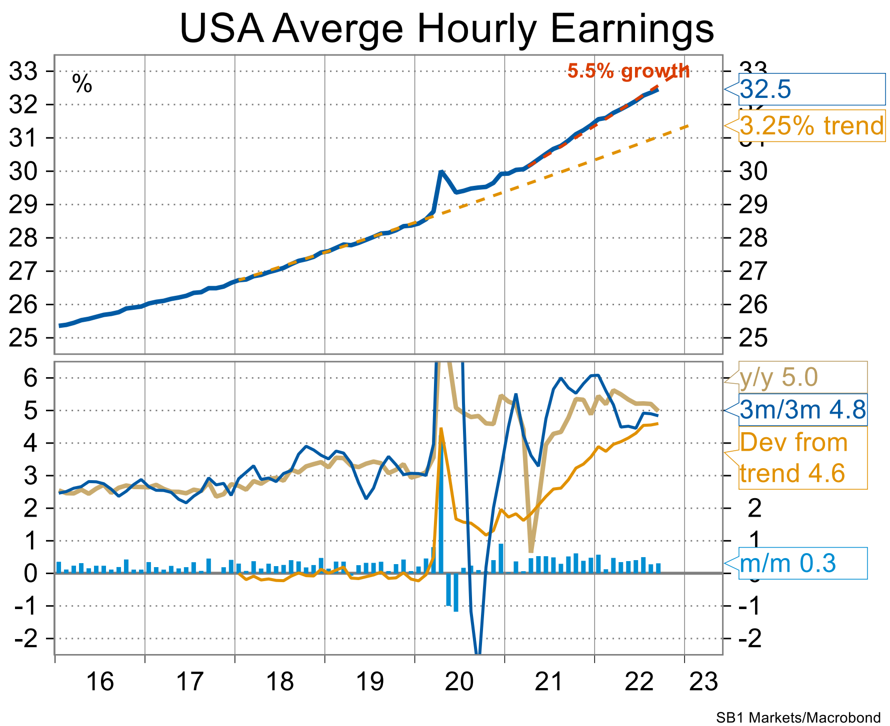


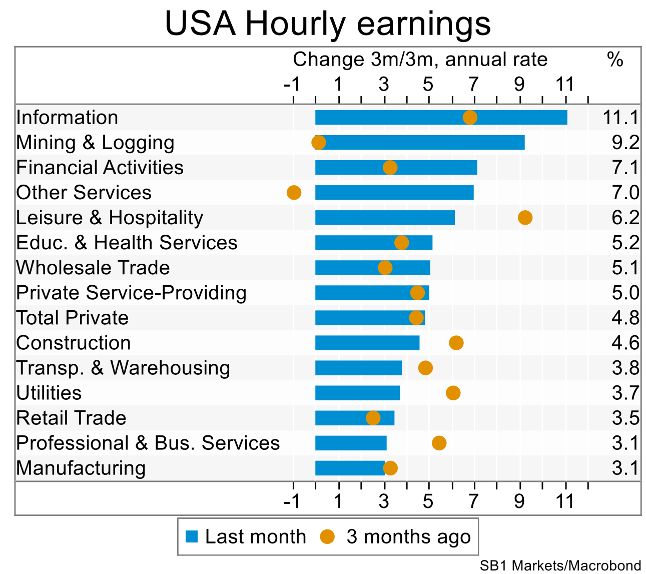


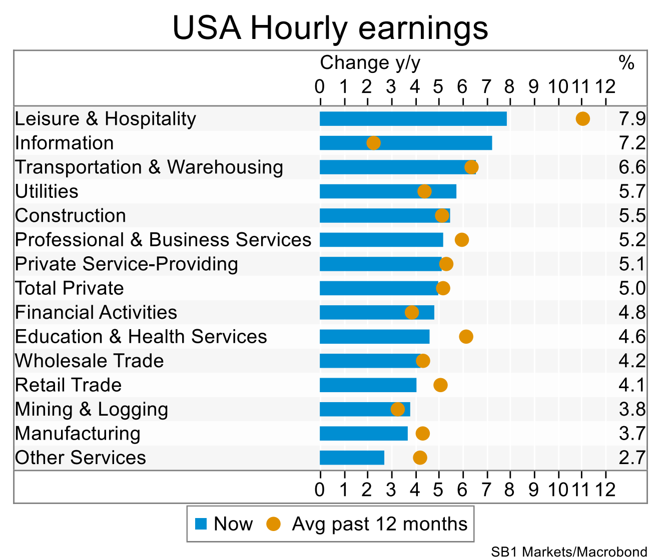
- In August, **the labour force participation rate** declined 0.1 pp to 62.2%, expected unch.! The participation rate has not climbed further in 2022, even if demand for labour has been – and still is strong. The participation rate is 1.4 pp (2.3%) below the pre-pandemic local peak – which again was way below the pre-IT bubble peak, in year 2000 – as the population ages (*check next page*)
- **The employment rate** was flat at 60.1%. The short term trend is flat too, as growth in employment has slowed. This rate is 1.4 pp (2.3%) below the pre-pandemic local peak

Wage growth at a 5% – 5.5% pace

6 sectors report slower underlying (3m/3m) wage growth, 8 sectors faster growth (than 3 months ago)



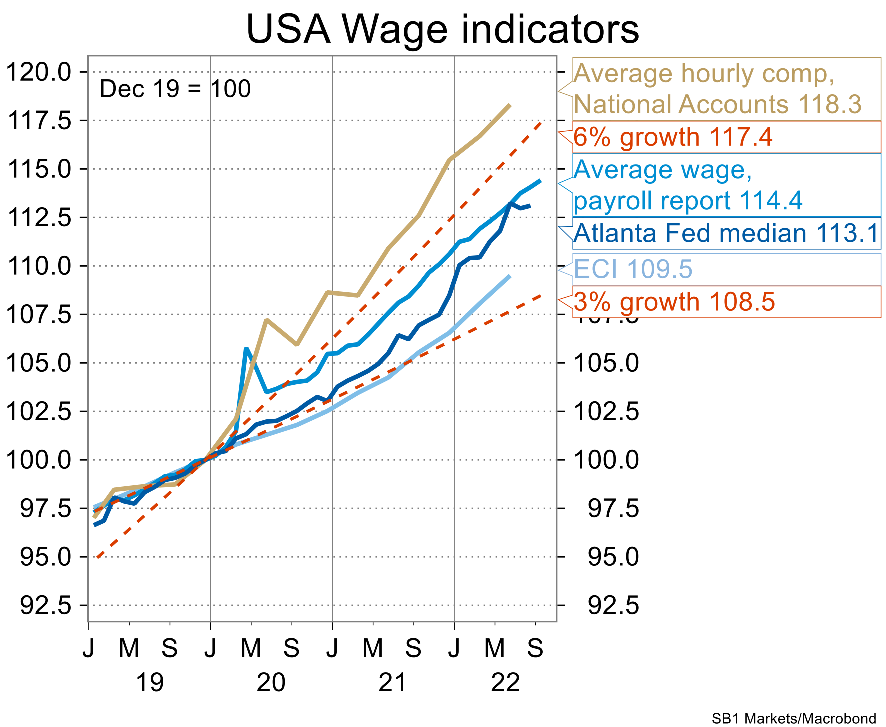


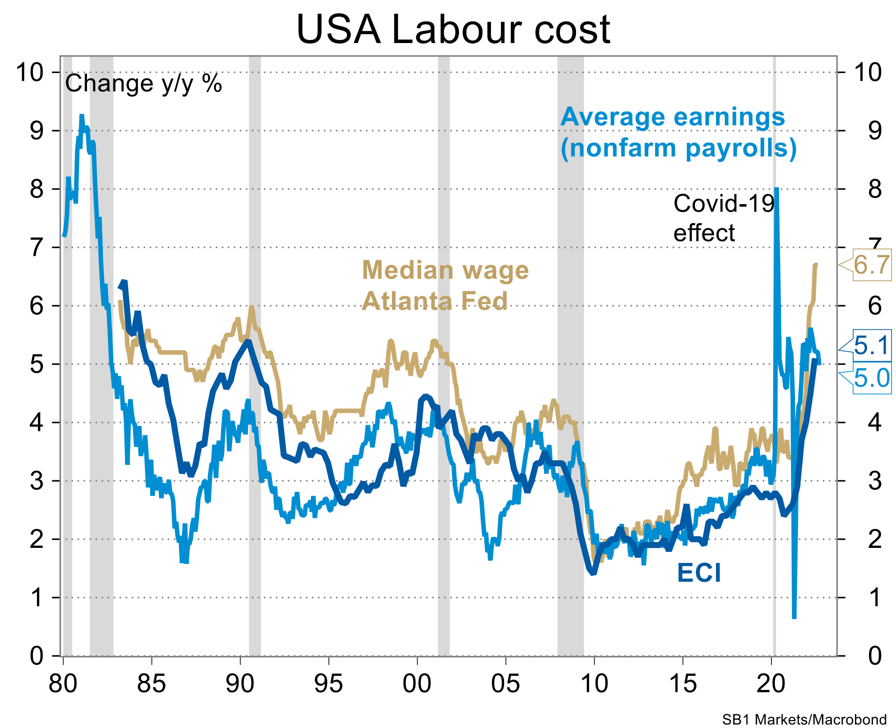


- The **average wage** rose by 0.3% in August, as expected. Annual wage inflation fell 0.2 pp to 5.0%, also in line with expectations
  - » Underlying (3m/3m) growth came down 0.1 pp to 4.8%
  - » Just before the pandemic, wage inflation was at approx. 3¼%, but it was below 3% until late 2018
- *These monthly wage data are not adjusted for the change in employment mix between sectors or within sectors. Check more wage indicators at the next pages*

All indicators combined: No signal of any slowdown in wage inflation

… and all are reporting much higher wage inflation than pre Covid: 2% price inflation 'impossible'

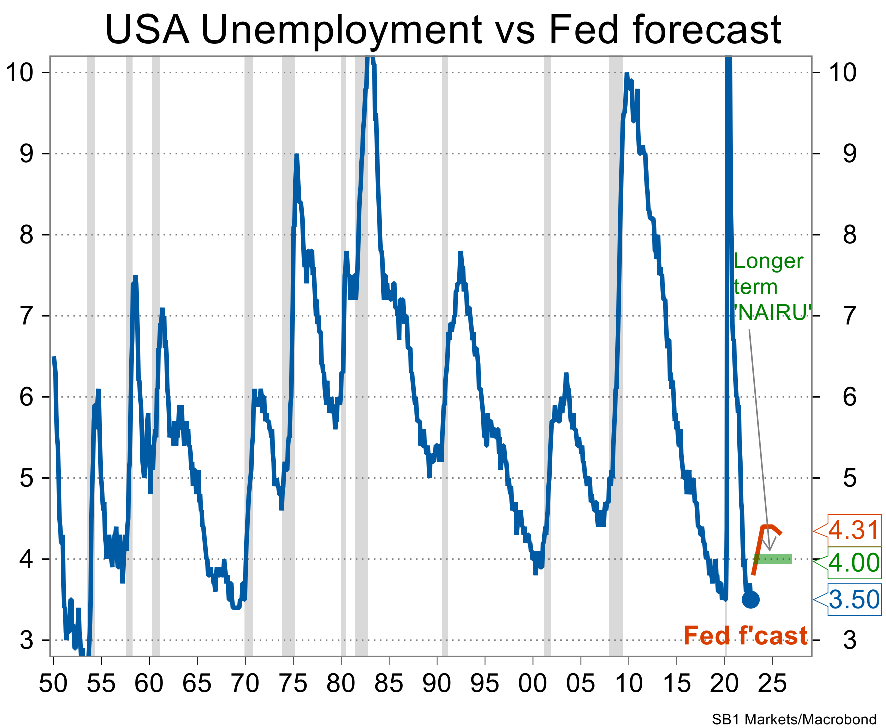


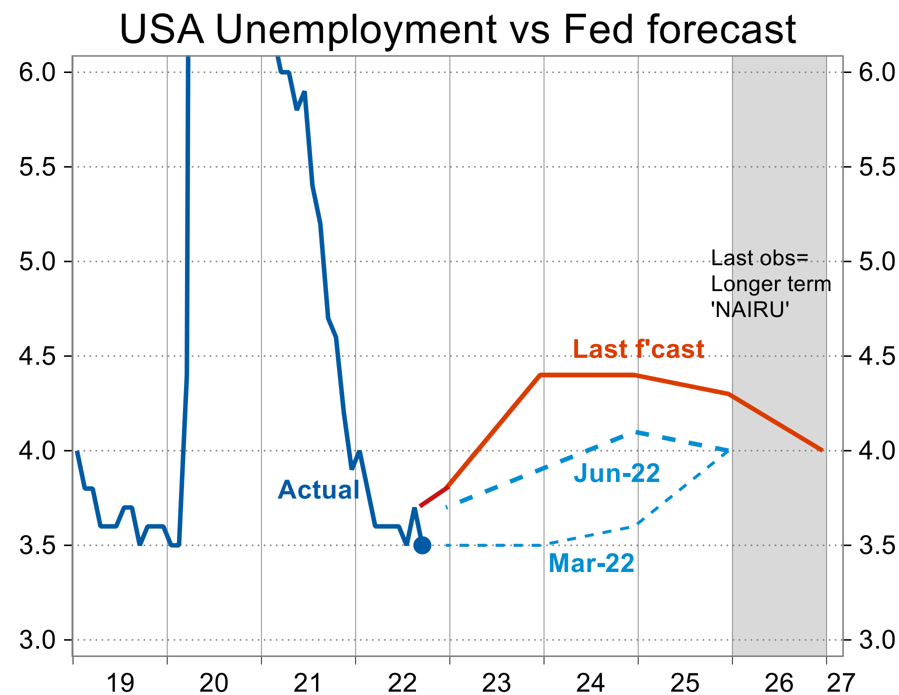


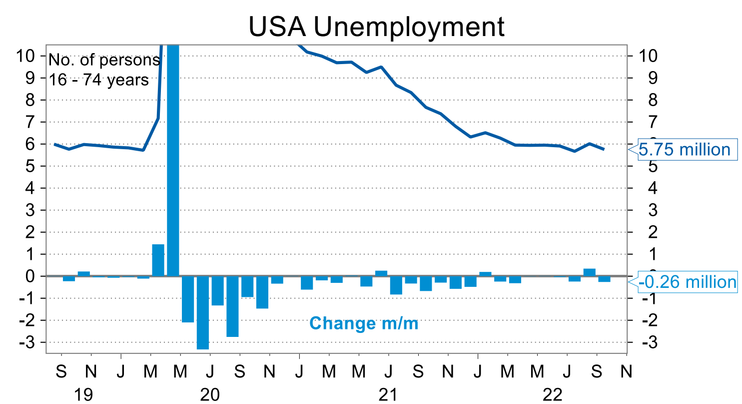
- **All wage indicators** are reporting faster wage growth, and all reporting wage growth well above the average recent years
- Growth in wage/earnings/compensation indicators are up 2.5 – 4 pp vs the their respective 10 y averages before the pandemic
- Over the past 10 years, inflation has been close to 2% (before the pandemic, that is)
- It will be a impossible to keep inflation at 2% if wage inflation remains at the current levels. Productivity growth has not accelerated. Profit margins may take a beating – and they no doubt will – but not sufficient to bring inflation down to acceptable levels on their own. Wage inflation will probably not slow by much before demand for labour weakens – and unemployment increases

Fed's hope: just a marginal increase in unemployment the coming years

Even if excess demand for labour has to be cut dramatically. Not impossible. But not likely







- Unemployment fell by 260' persons in September

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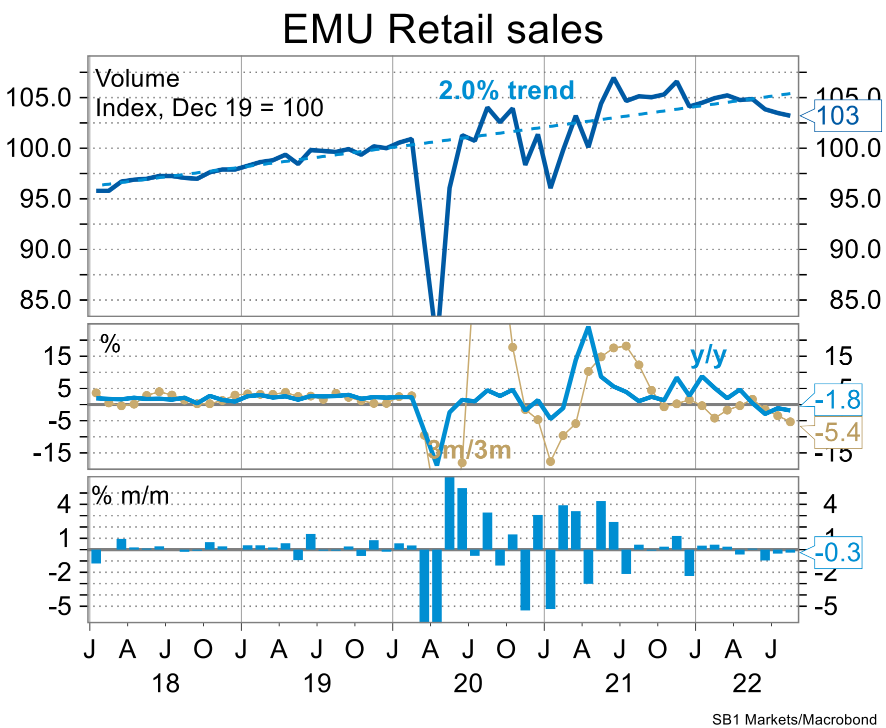
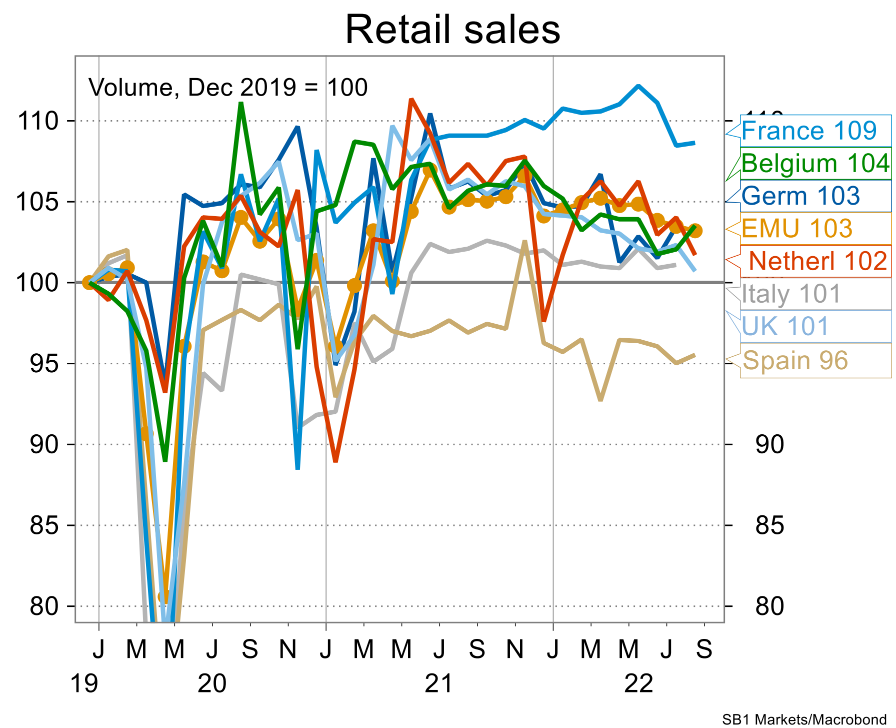
Retail sales lower in August, for the 3rd month, and well below trend

Sales came in 0.1 pp above expectations; but July data revised down to -0.4% from +0.3%





- Sales fell 0.3%, expected -0.4%
- The trend is down, and sales are now below the pre-pandemic growth path of 2%
  - » The trend is down all over the EMU

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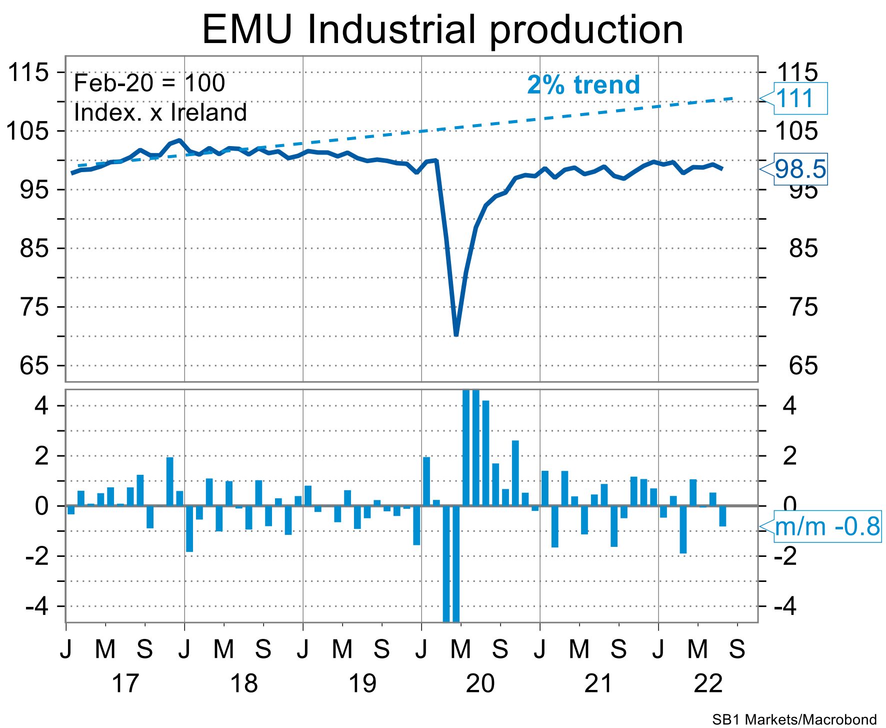
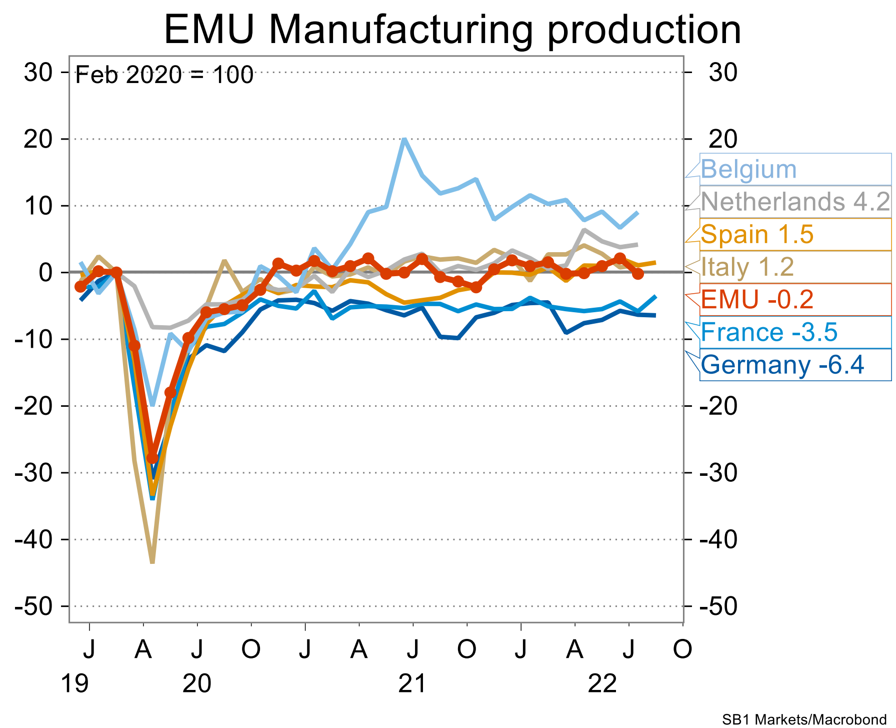
EMU industrial production sharply up in Aug, and well well in plus even x Ireland

… at least that's the forecast. Total production up 1.2% – 1.5% due to a surge in Irish production

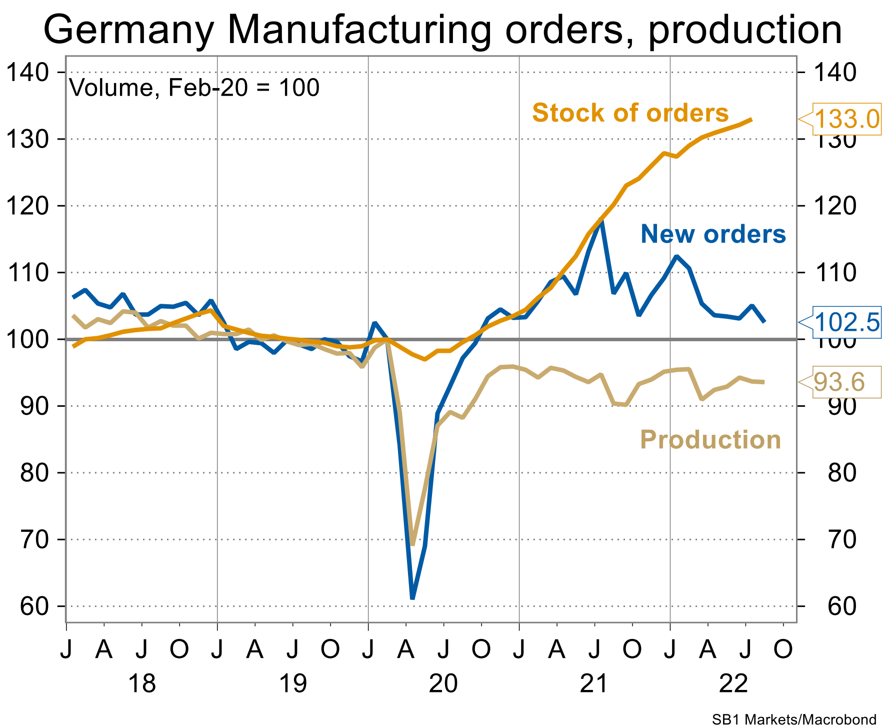


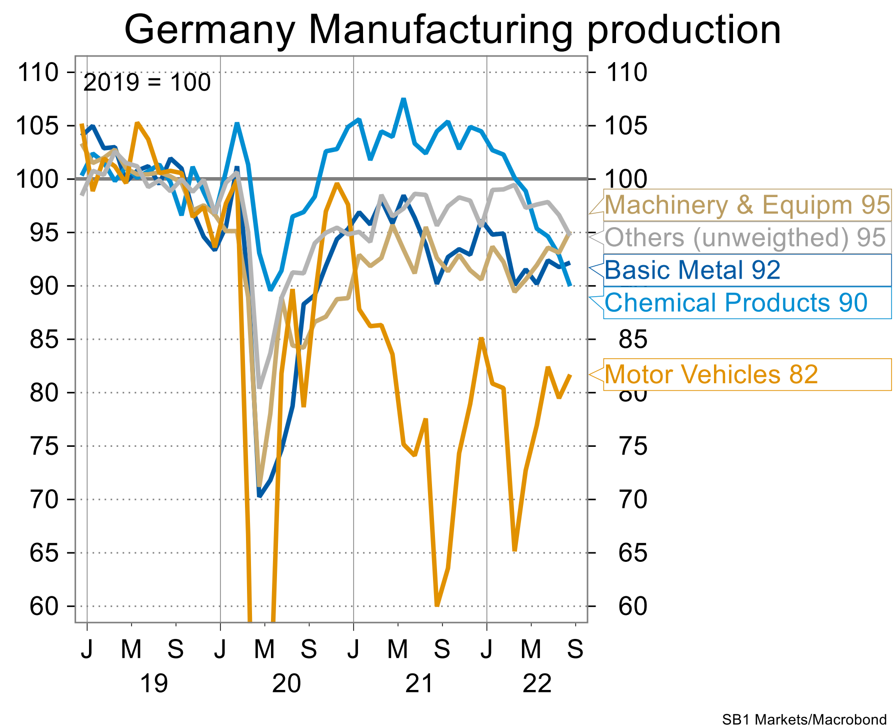


- In July, production fell 2.4%, mostly due to a large decline in production in Ireland (the Irish numbers are useless, probably tax motivated). I August, Irish production recovered, and will lift total EMU production significantly
- In July, production ex Ireland fell by 0.8%, and a 0.6% lift in August is likely
- In August, production rose sharply in France, somewhat in Spain, while production fell further in Germany. Production is still below the pre-pandemic level in France and even more in Germany (-6.4%)

Mixed between sectors production wise in July, no signs of 'energy shutdowns'

German factory orders keep falling – but the backlog is still growing (in volume terms)

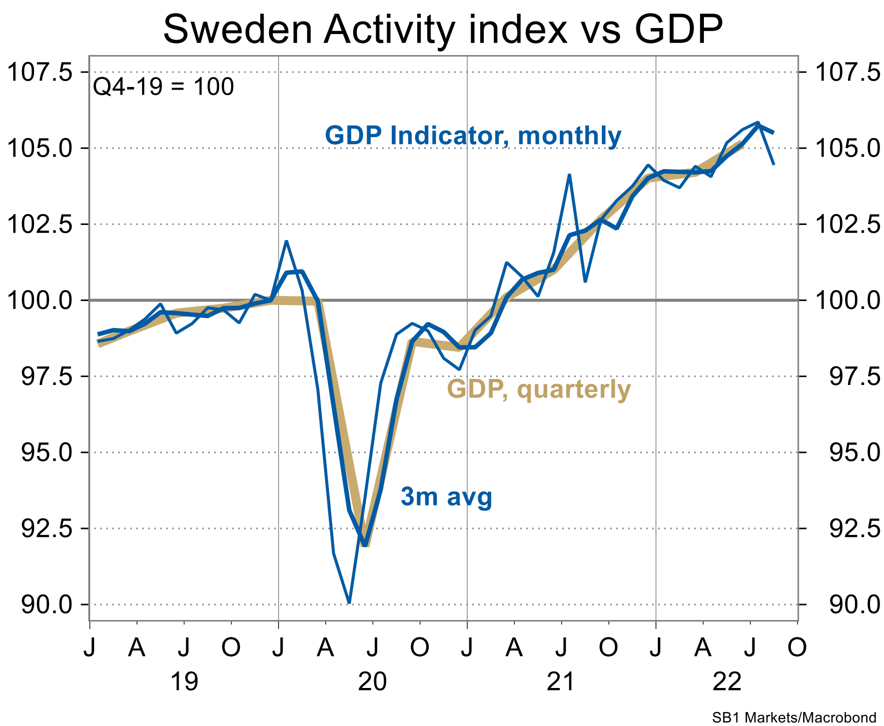


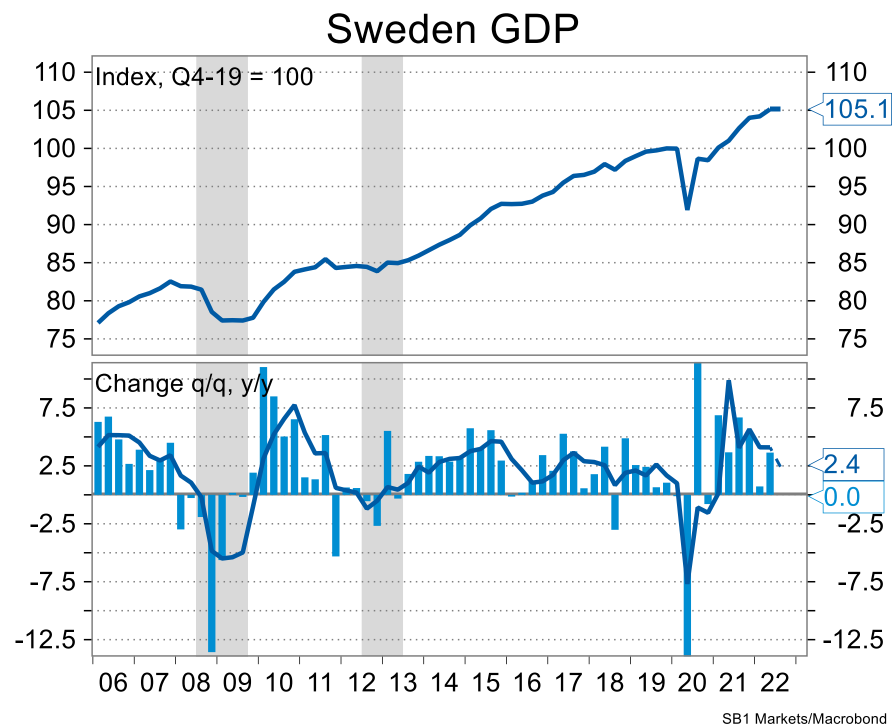


- Factory orders fell 1.1% m/m in July and are now 'just' 1.9% above the Feb-20 level, in volume terms. However, orders are down 14% y/y
- Manufacturing production fell by 0.1%
- Auto production is down 18% vs. the 2019 level. Metals and chemical productions are down 8% – 10%. Metals production has not been hard hit by the energy crisis, while chemical production has fallen sharply since late last year

Swedish GDP down 1.3% m/m in August

The first warning shot? If no correction up in Sept (somewhat pessimistic?), zero growth in Q3

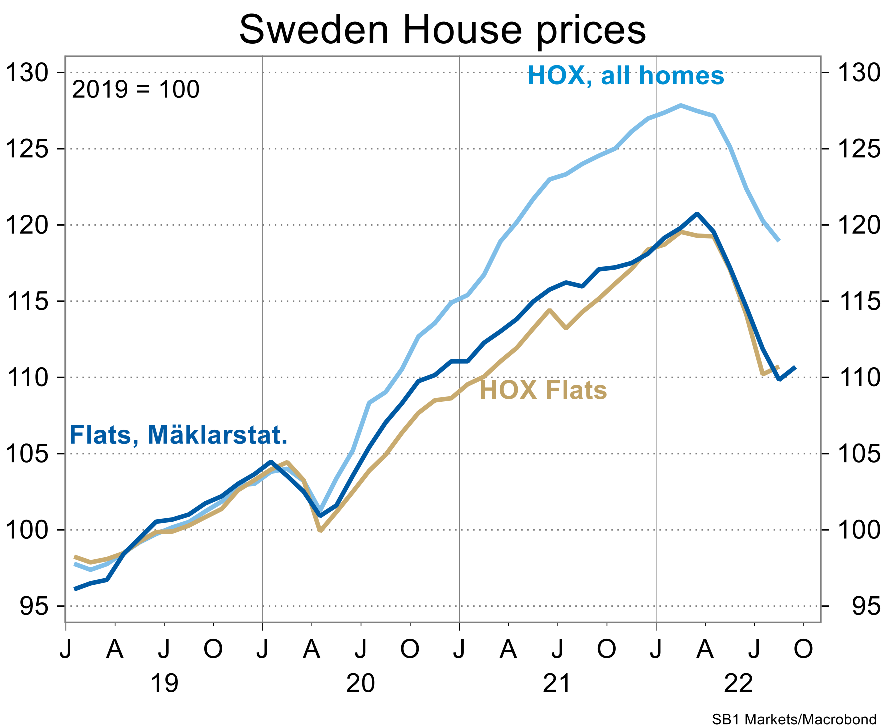


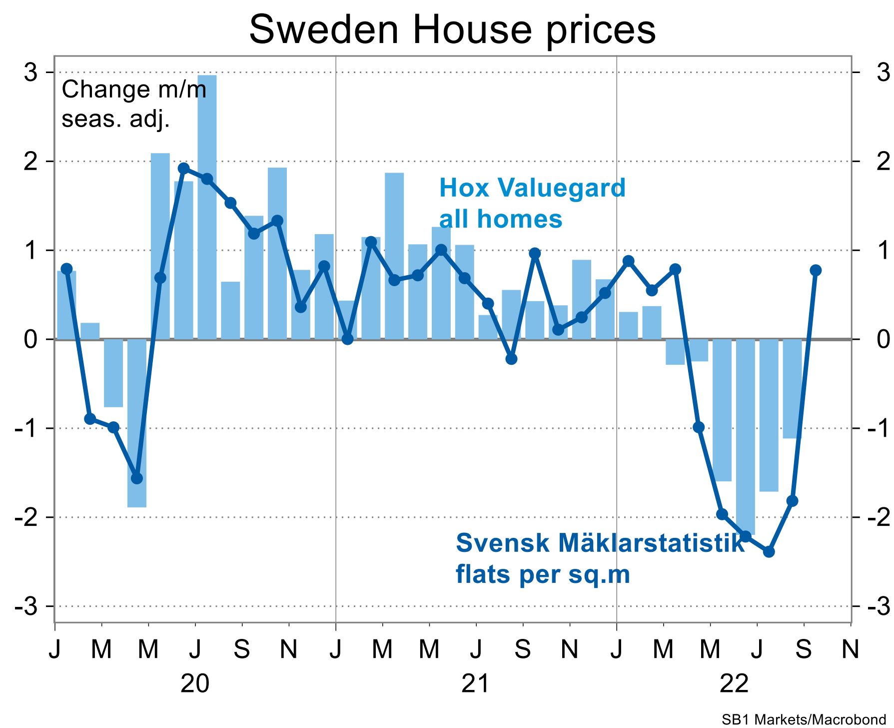


- The economy has weakened, especially on the manufacturing side as witnessed by lower industrial production and manuf. PMI
  - In Q2, GDP expanded by 3.6% (ann.)
- **The outlook** is also weakening, according to Swedish companies. The KI (NIER) has fallen to 0.9 st.dev below average, signalling zero growth

Swedish house prices rose in September, according to Svensk Mäklarstatistik

The realtors reported a 0.8% m/m (seas. adj.) increase in apartment prices in Sept, down 6.8% y/y

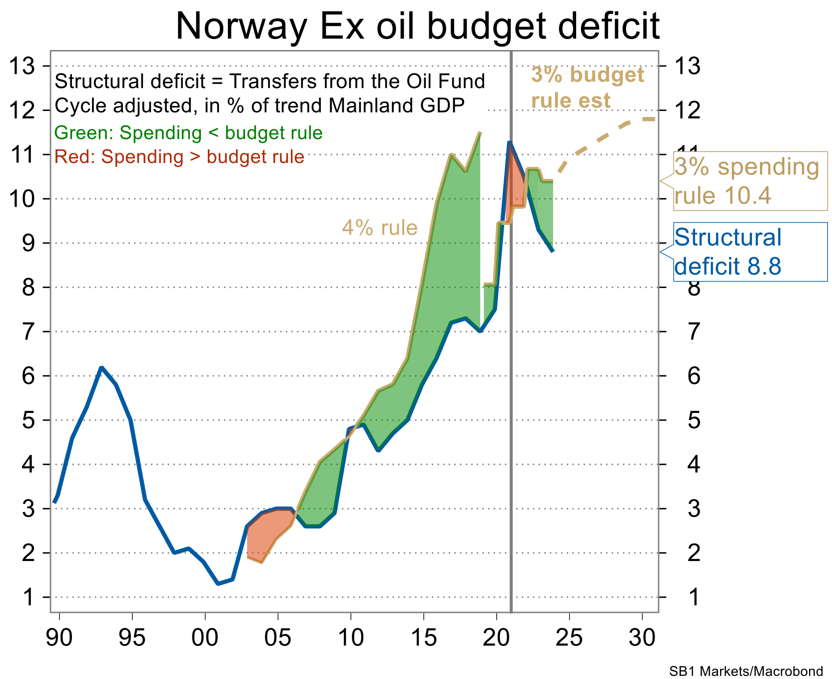




- Actual prices rose by 1.4%. Some early bird surveys suggested a sharp decline in September prices. August prices were revised down some 0.5%
- The HOX index reported a small uptick in flat prices in August (while single-home prices fell further). September data out next week

The budget: A mild 0.6 pp of GDP tightening, spending 1.6 pp of GDP<budget rule

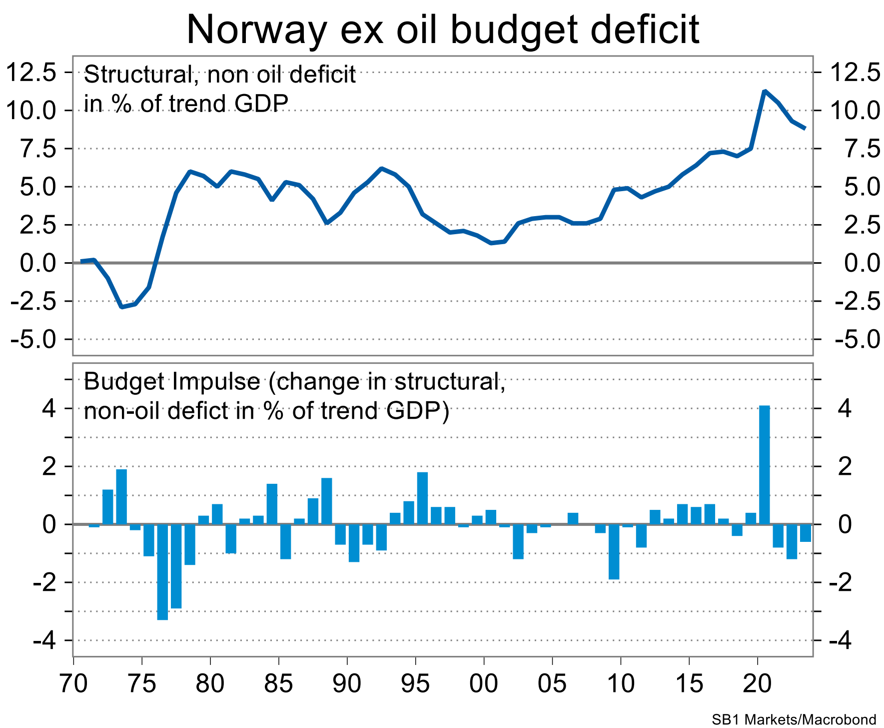
In addition: Underlying growth in spending 1.3% and below Mainland GDP trend growth

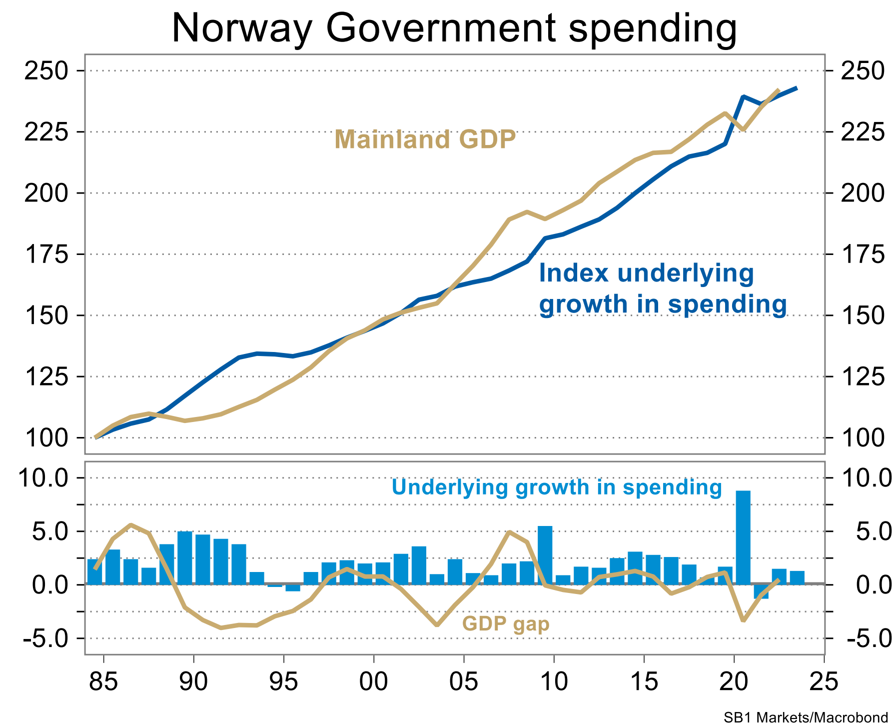


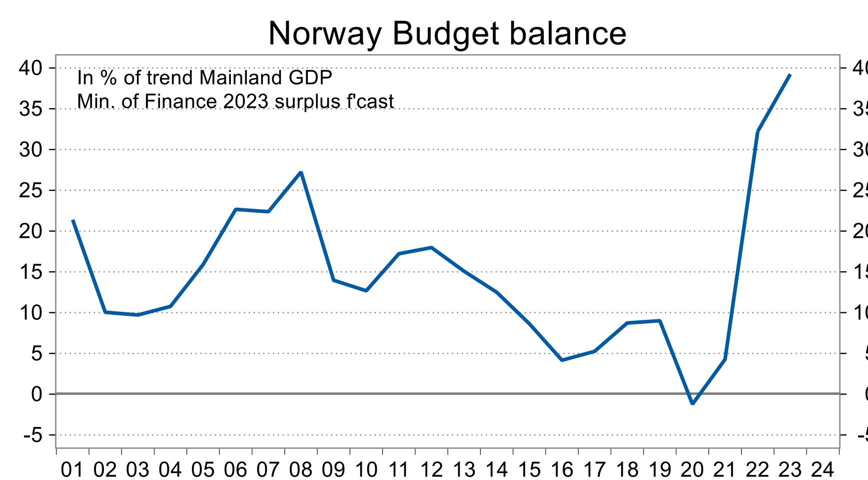
Fiscal indicators NOK bn, per cent	2019	2020	2021	2022	2023
Actual surplus, incl. oil	277	-39	133	1105	1402
Surplus ex. oil	-228	-371	-369	-304	-257
Structural surplus ex oil	**-224**	**-361**	**-354**	**-324**	**-317**
.. change in bn	-10	-361	-354	31	7
.. in % of GDP	**-7.3**	**-11.4**	**-10.8**	**-9.3**	**-8.8**
... Change (fiscal indicator)	**-0.5**	**-3.8**	**0.8**	**1.2**	**0.6**
.. in % of Oil Fund value	2.7	3.7	3.2	**2.6**	2.5
Spending rule, bn.	-261	-303	-327	-370	-375
Deviation from rule, bn.	37	-58	-27	47	58
Real growth in underlying spending	1.7	8.8	-1.3	1.5	1.3
Petroleum Fund, bn, ult.	10086	10907	12340	12500	14286

- **In the National Budget,** the government proposed a fiscal tightening in 2023 equalling 0.6 pp of Mainland GDP, we expected 0.5 pp. Model simulations suggest a close to neutral impact om GDP. The budget is also on the tighter side as transfers from the fund (=structural deficit ex. oil revenues) equals 2.5% of the fund, down from 2.6% in 2022 (revised down by 0.3 pp due to a symmetric (and correct) calculation of income and spending due to higher electricity prices), well below the 3% long term target. The proposed transfer equals 8.8% of Mainland GDP, while the 3% (of the Oil fund's value) spending rule 'allowed' a 10.4% transfer (the difference equals NOK 60 bn). Further on the tighter side, underlying growth in government spending is estimated to 1.3% well below trend growth in ML GDP
  - Others may have expected a tighter budget. In the Sep MPR NoBa assumed a 1.7 pp fiscal tightening. However, this estimate was strangely large given the Bank's modest forecast for growth in government demand. A 1.7 pp tightening has anyway never been proposed before
  - While the government assumes higher GDP growth and lower inflation than NoBa (but quite close to SSB's recent forecast!) we think it is irrelevant vs the proposed measures in the budget. Should inflation be higher, the budget will automatically become tighter. Should growth falter, nothing is easier than expanding the budget ☺
  - The actual transfer from the Fund is far below the estimated business cycle (structural) deficit at NOK 316 bn. The Government assumes that GDP far above trend increases Mainland taxes and lowers unemployment benefits payments by in sum by NOK 89 bn (but nobody looks at the actual low deficit number). Again, a sign of prudency
  - BTW, due to the ballooning income from the oil and (now even more the) gas sector, the **overall surplus in the public sector** equals almost 40% of ML GDP, by far the largest surplus in any developed country ever as revenues are even larger than Mainland GDP (!). The surplus in is transferred to the Oil Fund, for the benefit of future budgets & generations

A smaller ex oil deficit, modest growth in expenditure – and huge overall surplus

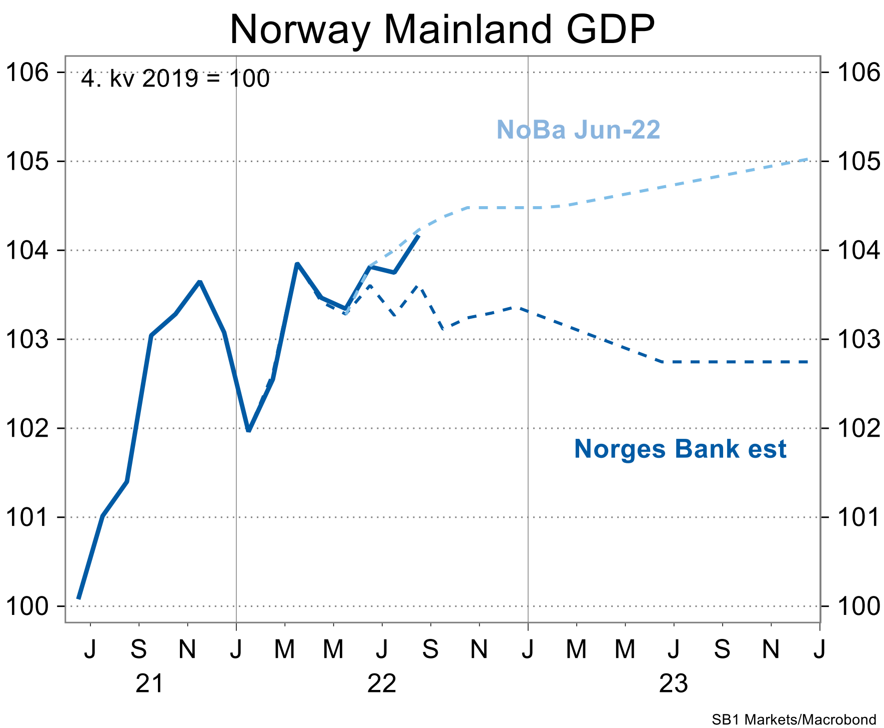






Mainland GDP revised up significantly – and growth in August as well

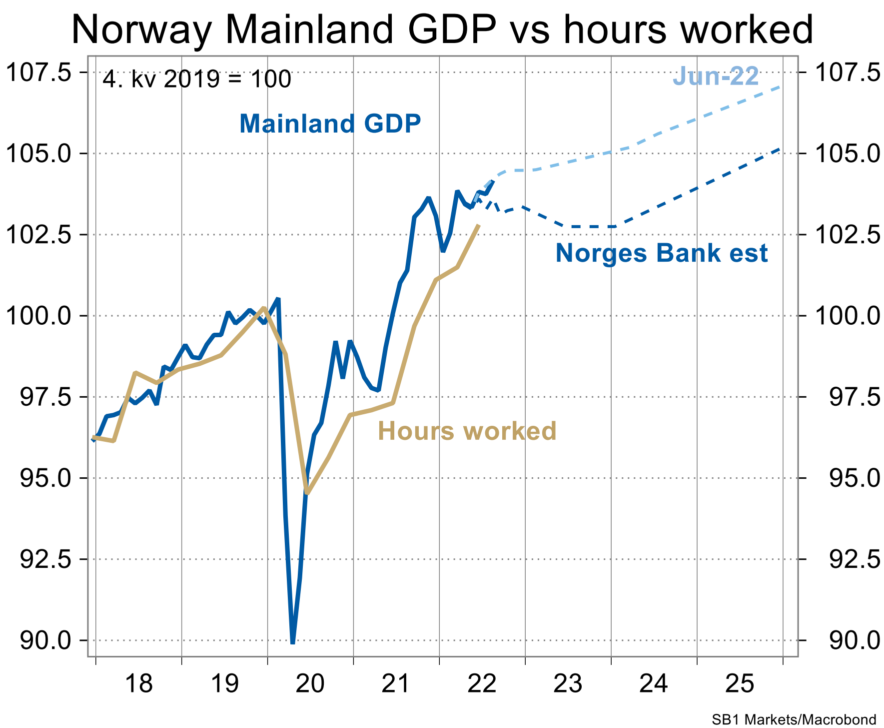
GDP rose by 0.4% in August, and 2.7% y/y. The GDP level is 0.7% above NoBa pre-revision estimate



- **Mainland GDP** grew close to expectations in August, by 0.4% (consensus 0.4%, NoBa & SB1M estimated 0.3% in the Sept MPR report). However, a 0.5% upward revision of the July GDP level, brought the activity level back to NoBa's June growth path, which was significantly above the Sept path
  - » Still, growth has been slow since Sep-21, ML GDP is up just 1.1%
  - » Upward revisions of services and public sector production, as well as higher oil related investments resulted in higher than previously reported growth in GDP
  - » One swallow does not make a summer, but still a signal that the momentum in the Norwegian economy was better than assumed over the summer
  - » We expect a 0.4% growth rate in Q3, well above our old f' cast and NoBa's -0.1% est.
- **Production**
  - » Manufacturing is the weakest sector and contracted 2.9% in August (much more than the production index signaled), while service sector production has showed continued strength. Oil & gas production was strong in August as well. Construction showed some weakness in August, which is likely to endure and even deteriorate in the coming months
- **Demand**
  - » Government demand (mostly investments) rose sharply in August, contributing 0.8 pp (twice the total growth rate), as did Mainland businesses. Housing investments fell. Mainland business investments have strengthened since last autumn, while oil sector and housing investments have fallen. Norwegians' consumption in Norway has fallen too. Net exports x energy have fallen substantially as well, as imports have been growing faster than exports
- **So what?**
  - » ML GDP surprised on the upside, and even if government demand was an important contributor, it still signals a stronger economy. Labour market data signals slower growth, but no setback. The only tell tale that the higher rates are softening demand, and thereby growth, is the housing market. The budget proposal was also less tight than assumed by NoBa (but NoBa estimates were rather strange). In sum: The downside risk to rates is reduced

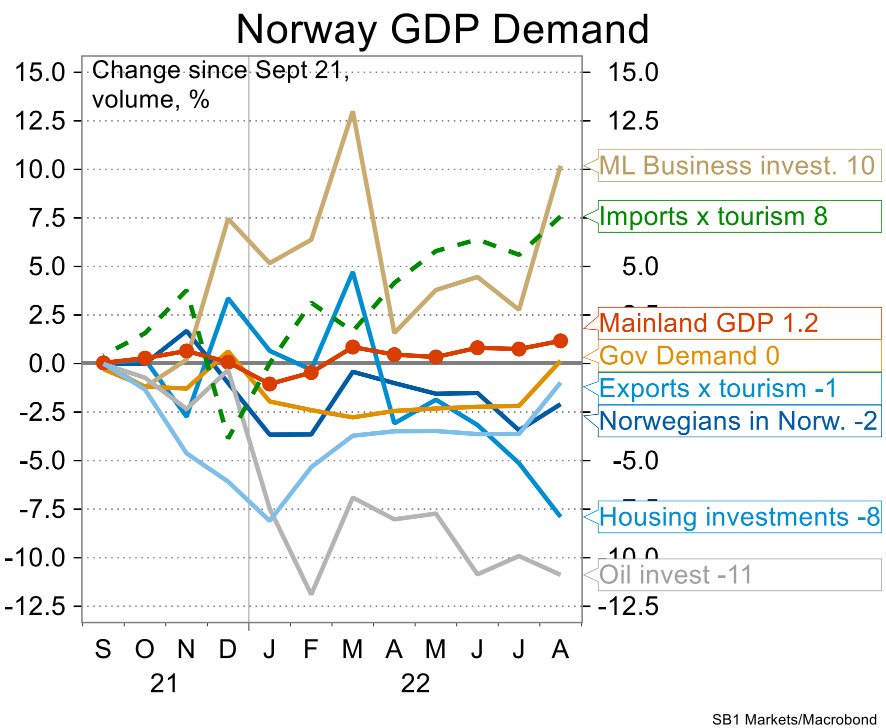
GDP up: Productivity will be revised up too, and unit labour cost inflation down

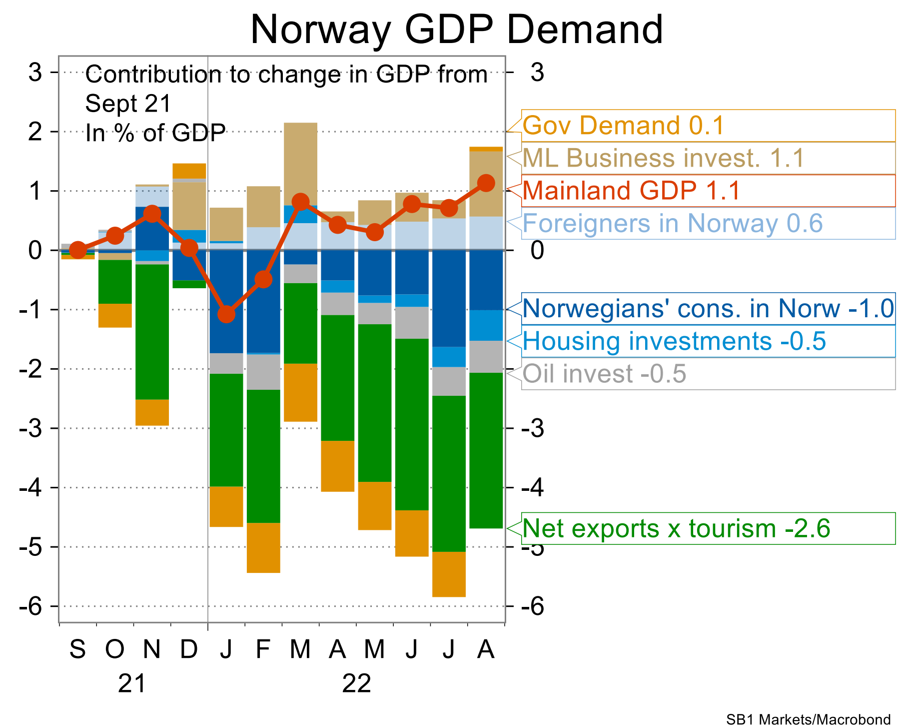
A little less worry for Norges Bank – but productivity growth is still very low



Demand: Housing investments keep falling, contributed 0.4% on the downside

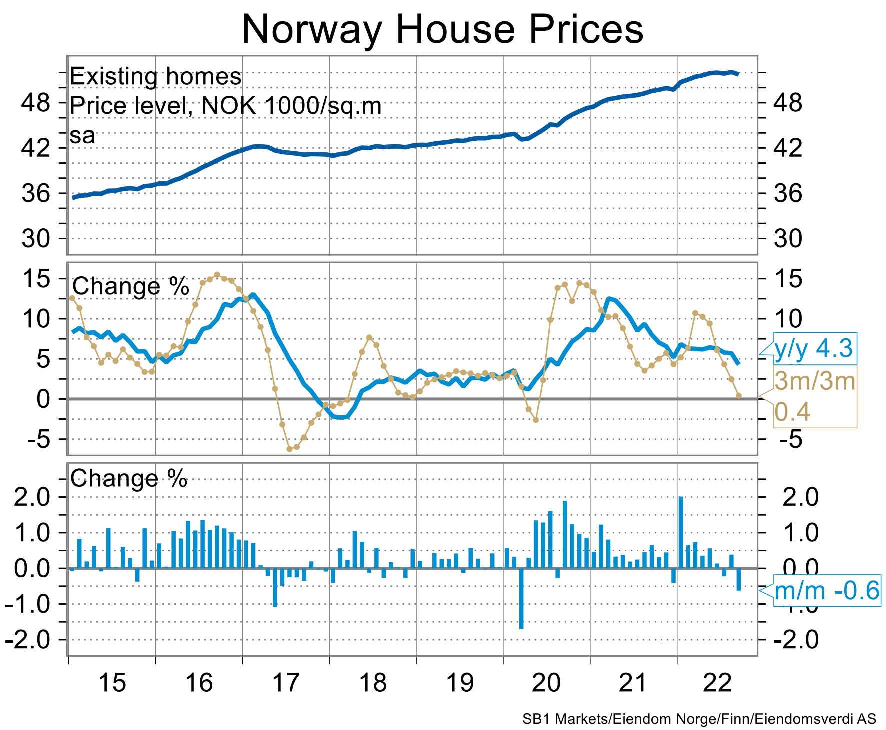
While business investments and consumption in Norway rebounded in August

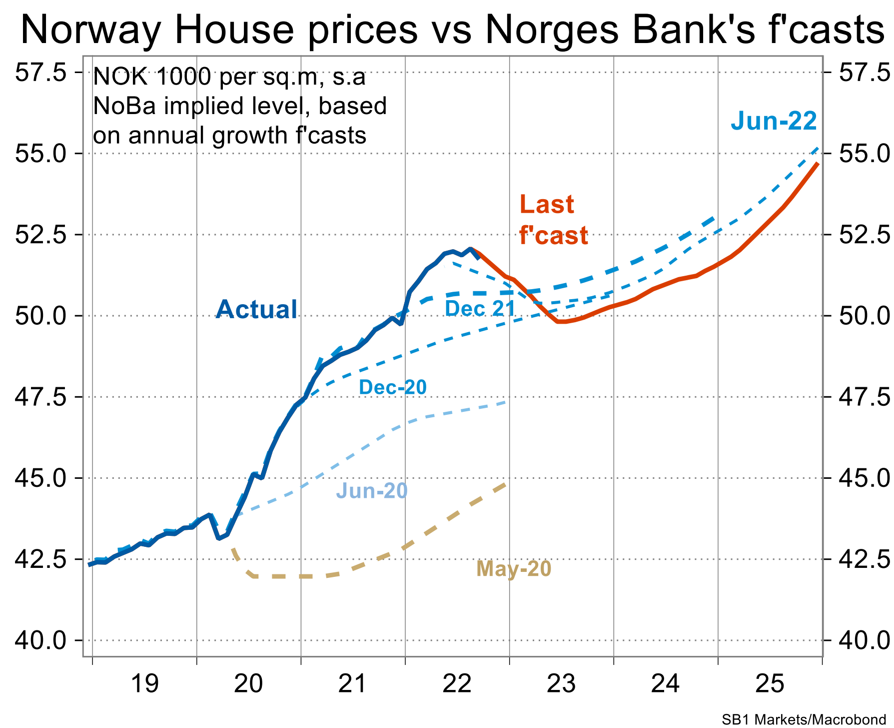




House prices fell in September – and more is very likely to come

No doubt, the surge in interest rates will lower house prices, probably substantially



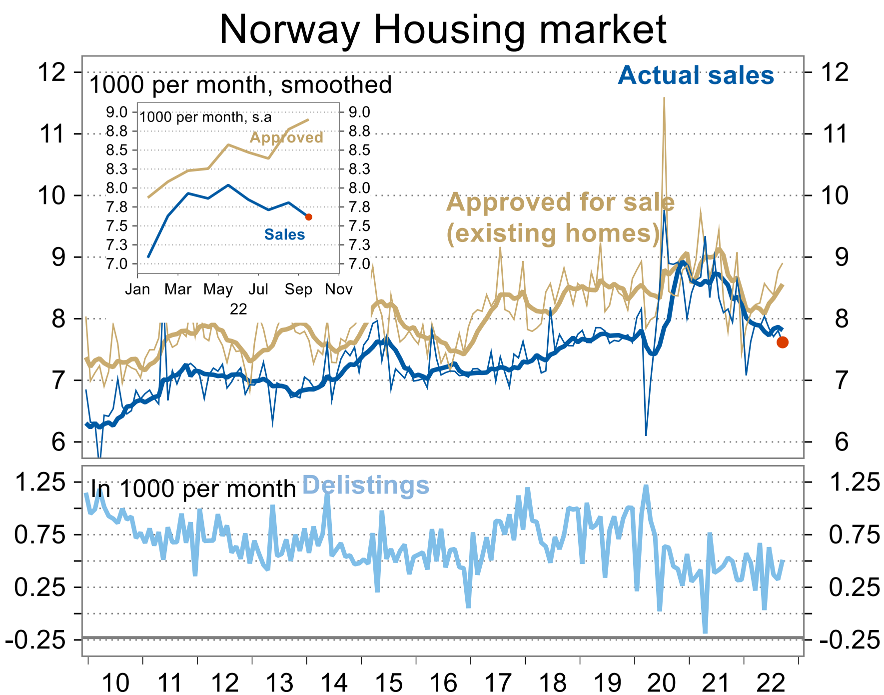


- **House prices** declined 0.6% in September, we expected -0.5%, following the 0.6% (surprising) lift in August. This was the largest decline m/m since the start of the pandemic, and before that in 2017. Norges Bank expected a 0.35% decline. Prices are still up 0.4% measured 3m/3m – and they are up 4.4% y/y. Prices fell in 15 of 16 cities, and were flat in 1 (Ålesund). Underlying (3/3m) are up in 5 cities, down in 11. Extra supply due to new documentation requirements is a possible explanations but higher mortgage rates are very likely more important
- **Existing home transactions** fell further, to 7.6' which is 15% below the peak during the pandemic but still just back to the average 2019 level. However, no. of **homes approved for sale** rose further, and is clearly above a normal level.
- **The inventory of unsold homes** rose by 1' units in September, to 11.5'. Over the past 3 months the inventory has increased faster than anytime before. Still, the time on market for those homes sold remains low
- **Norges Bank** expects a 4% price decline from August till next summer. We think the risk is on the downside

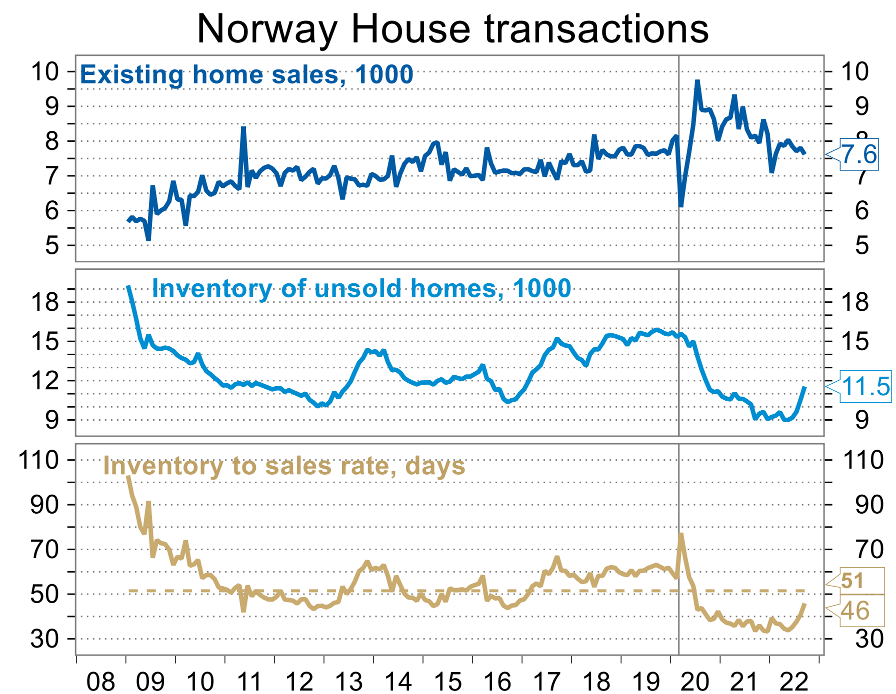
SpareBank 1 MARKETS

A record rapid pace of inventory accumulation as sales slow (to a normal level)

Even so, the inventory of listed homes is still below average



SB1 Markets/Macrobond

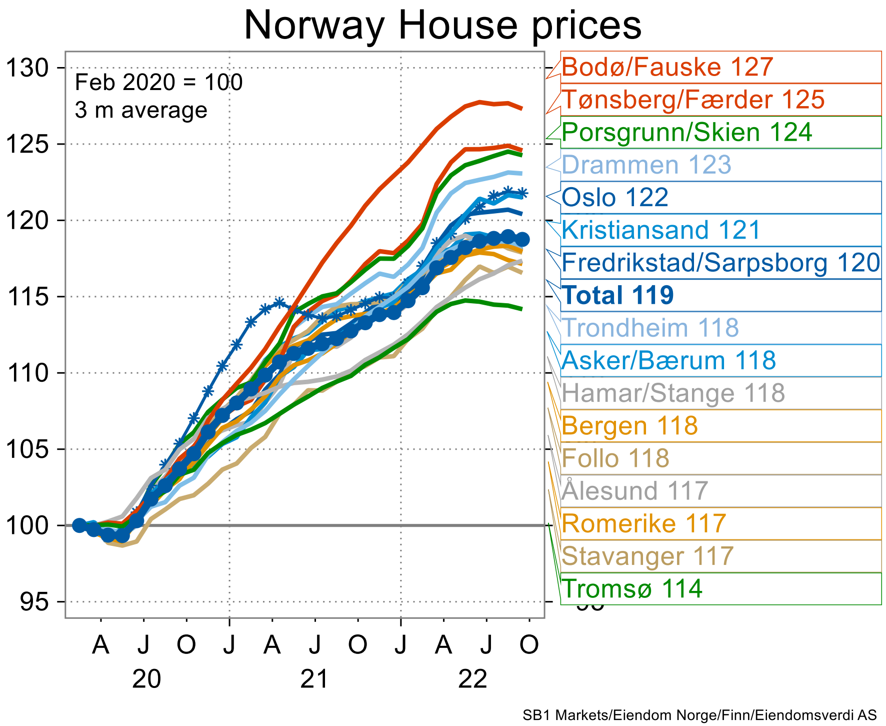


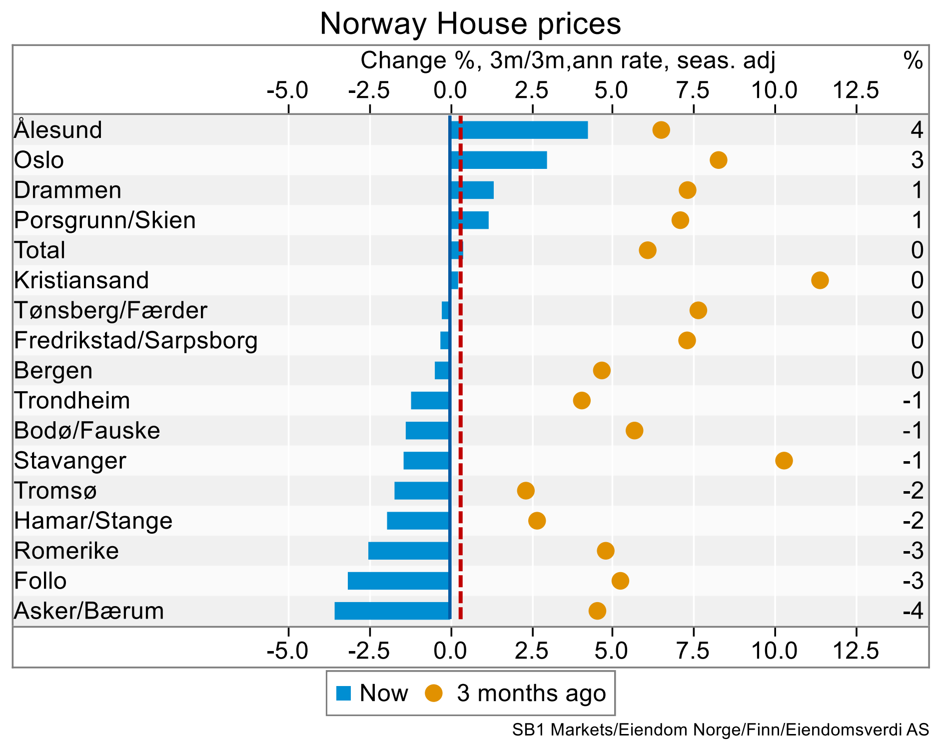
SB1 Markets/Eiendom Norge/Finn/Eiendomsverdi AS

- The **number of transactions** fell in September and is back to a 'normal' (2019) level, following the surge in the first part of the pandemic
- The **supply of new existing homes for sale (approvals)** rose further and to above a normal level in September
- The **inventory of unsold homes** rose sharply in August, and the lift the last 3 months is the fastest on record (over 3 months)
- The **inventory/sales ratio** added 5 days to 46 days, vs an average at 51 days
- The **actual time on market** for those homes actually was unchanged at 32 days (average 42 days) – so there is no buyer's strike here!

The big picture: Prices are now turning down most places

Prices measured 3m/3m are still up in Oslo, close to flat in total, but down in 11 of 16 cities

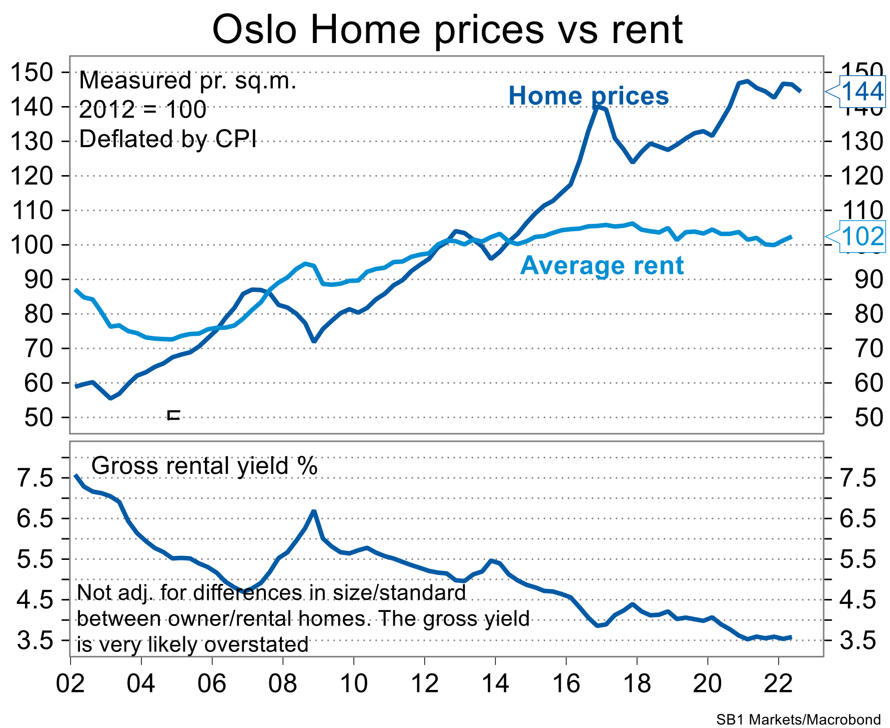


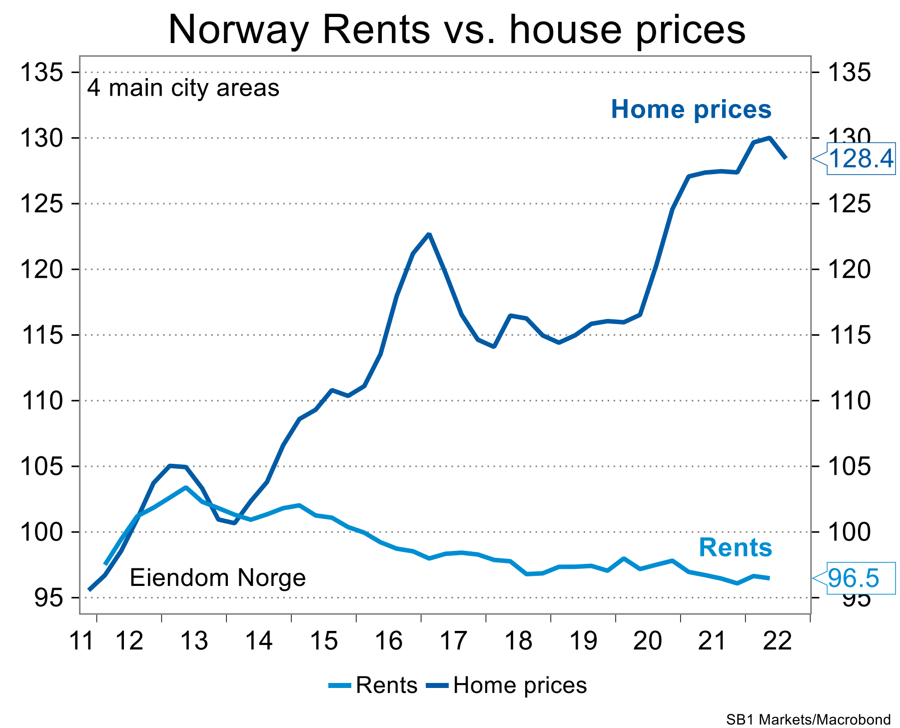


- Bodø the winner through the pandemic (but Oslo since 2016, check the previous page). Recent months, prices in Bodø have been falling
- After Bodø, south-eastern towns have been the winners since early 2020; Tønsberg, Porsgunn/Skien, Drammen, Oslo, and Fredrikstad/Sarpsborg. Prices are still drifting upwards in Oslo, Drammen and Porsgrunn/Skien but are falling in the two others
- Tromsø, Stavanger, and Romerike are at the bottom of the list (vs. early 2020)
- Now: Price inflation is slowing everywhere, and prices are falling in 11 'cities', while 5 still are up measured 3m/3m. Last month 5 cities had turned down, and 11 were still on the way up…

Why have house prices been so strong? Lack of housing?

If so, strange that rents have been so weak? May is just be 'search for yield' (as mortgage rates fell)

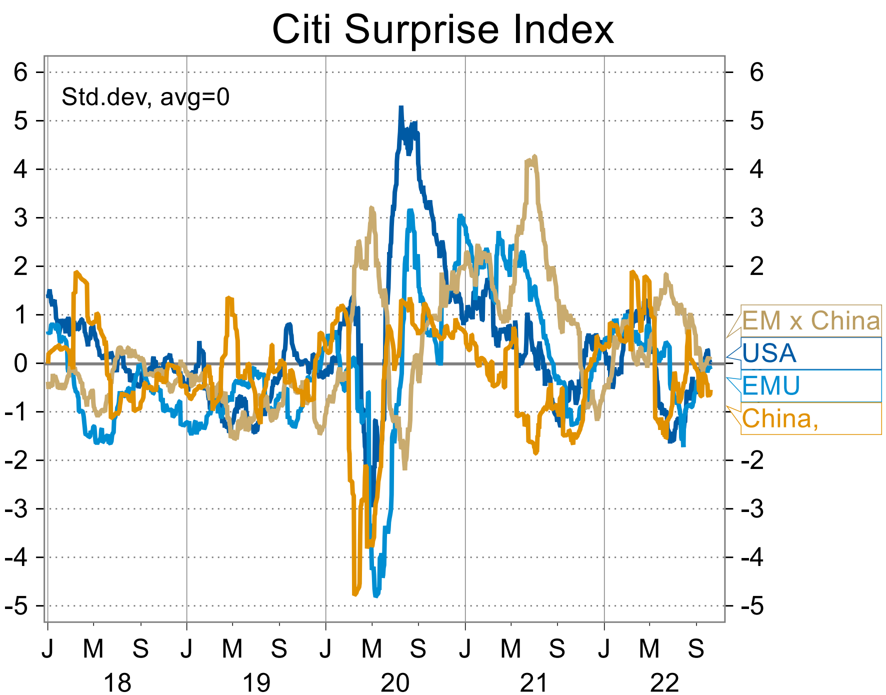




- Yield compression, as interest rates were low vs. income expectations
  - » Rents have been flat in real terms the past 10 years in Oslo, while prices are up 44% in real terms (almost 4% per year)
  - » Rents have fallen by 5% in real terms in the average of Oslo/Bergen/Trondheim and Stavanger areas, according to Eiendom Norge, while prices are up 28%
- BTW, mortgage rates are not falling anymore…

Data still slightly on the downside but most countries/regions close to neutral

China is below but EMU and US is close to neutral



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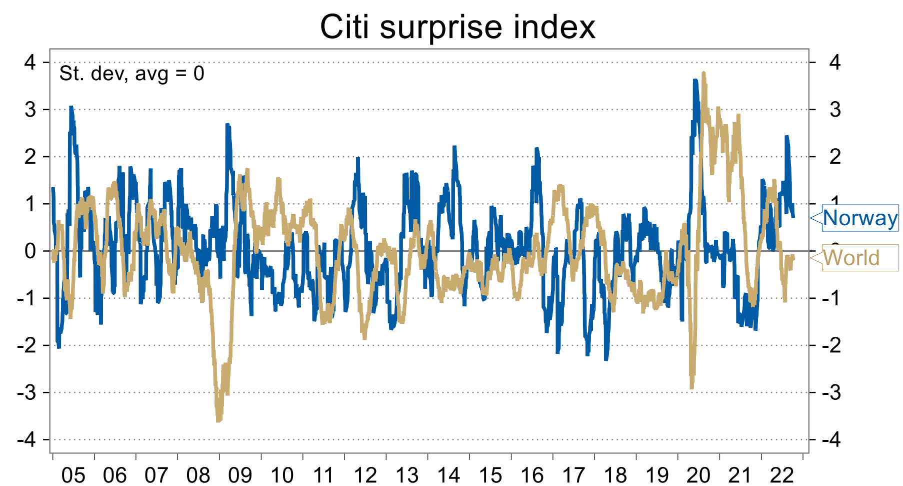

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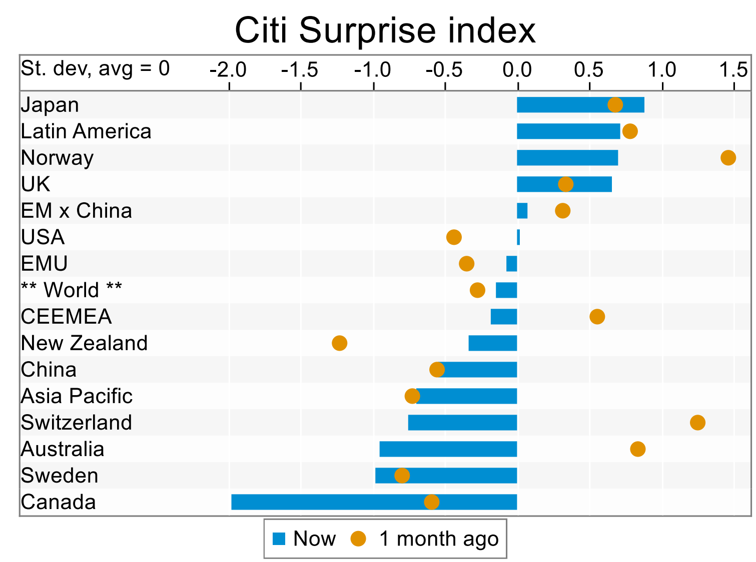


SB1 Markets/Macrobond

- **Norway** no. 3 on the list, according to Citi
- … even if our super-cycle friends **Australia, Canada, Sweden** all are at the bottom of the list (and NZ is below par too)

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

Highlights

The world around us

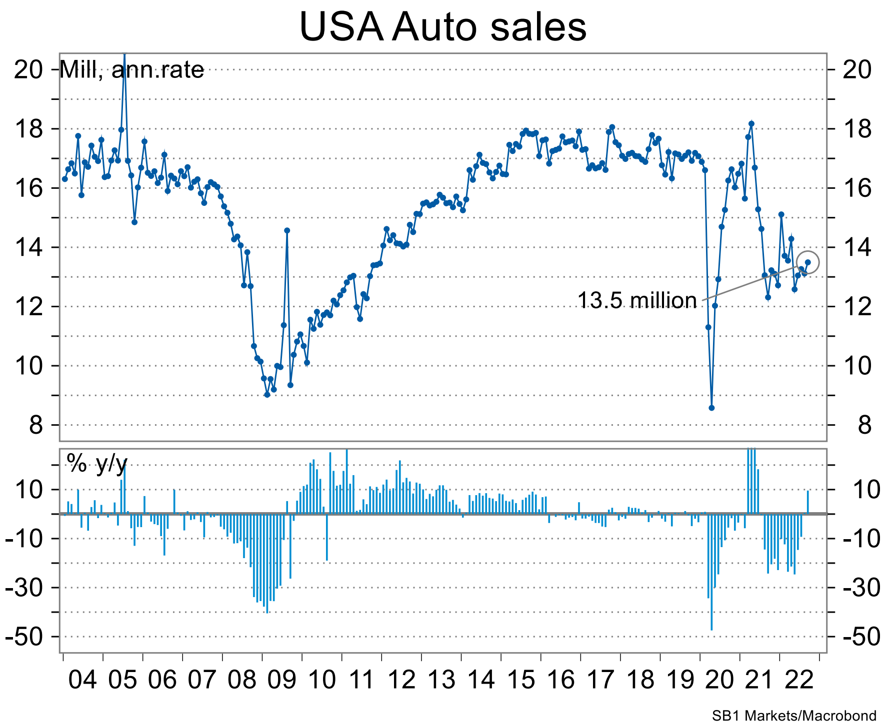
The Norwegian economy

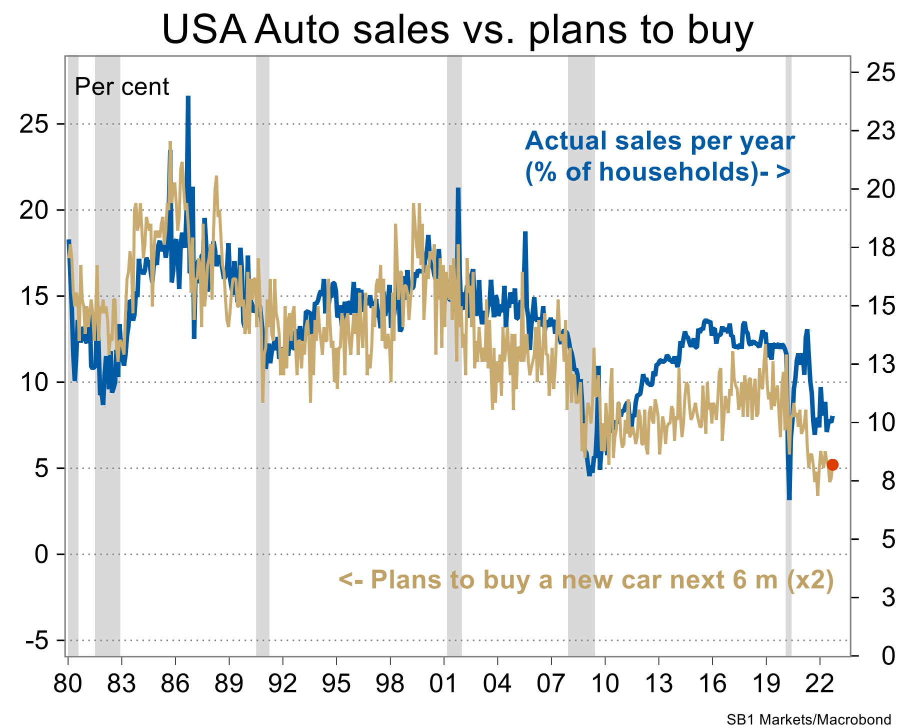
Market charts & comments

SpareBank 1 MARKETS

US auto sales slightly up in September, still at a very low level

Supply is still very likely the big problem, not demand

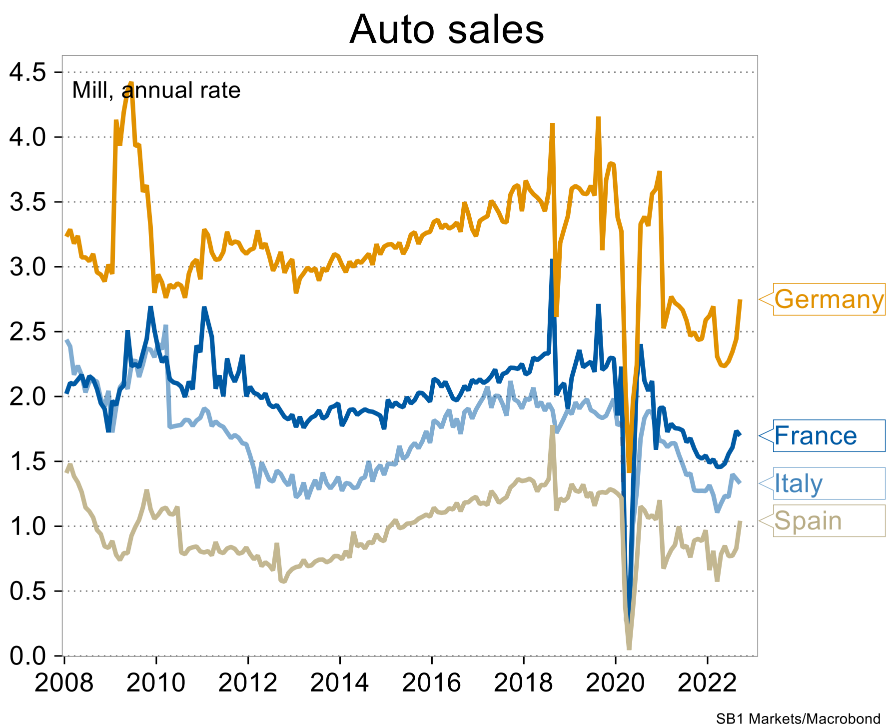


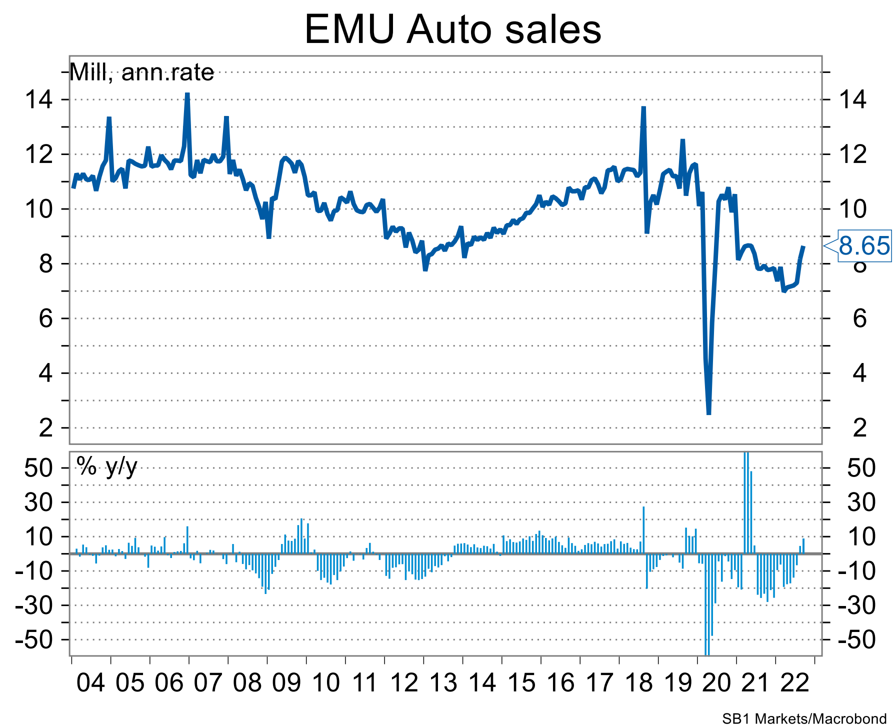


- Sales are down 22% vs. the 2019 level
- Plans for buying a new car has been stable at a record low level over the past year – but is now trending slowly down
- Some demand slowing: Prices for second hand cars are declining

EMU: Sales probably further up in September – best since early 2021, still low

Sales rose the most in Germany and Spain, slightly down in France & Italy

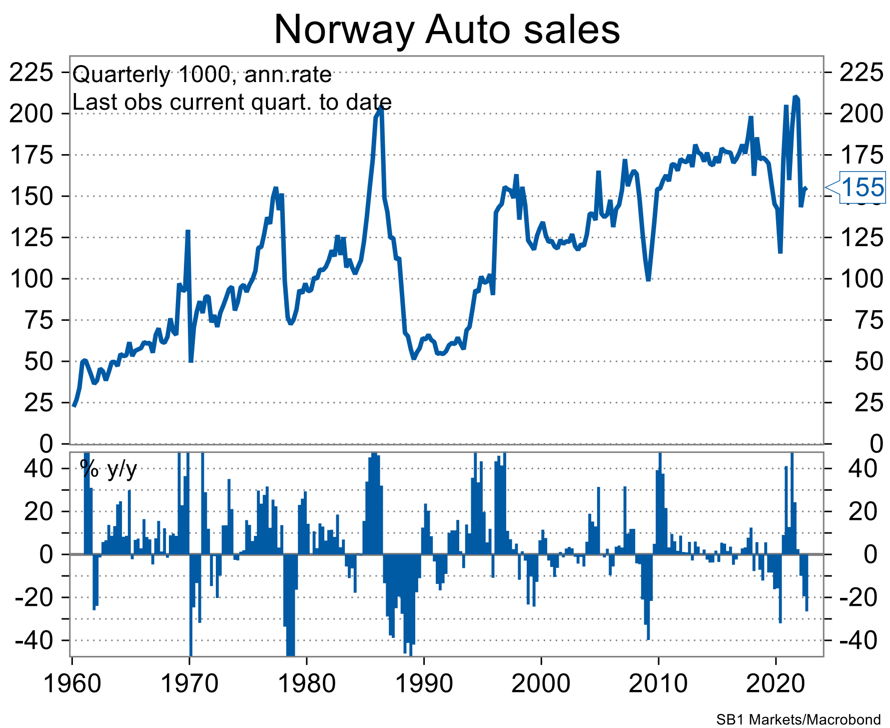


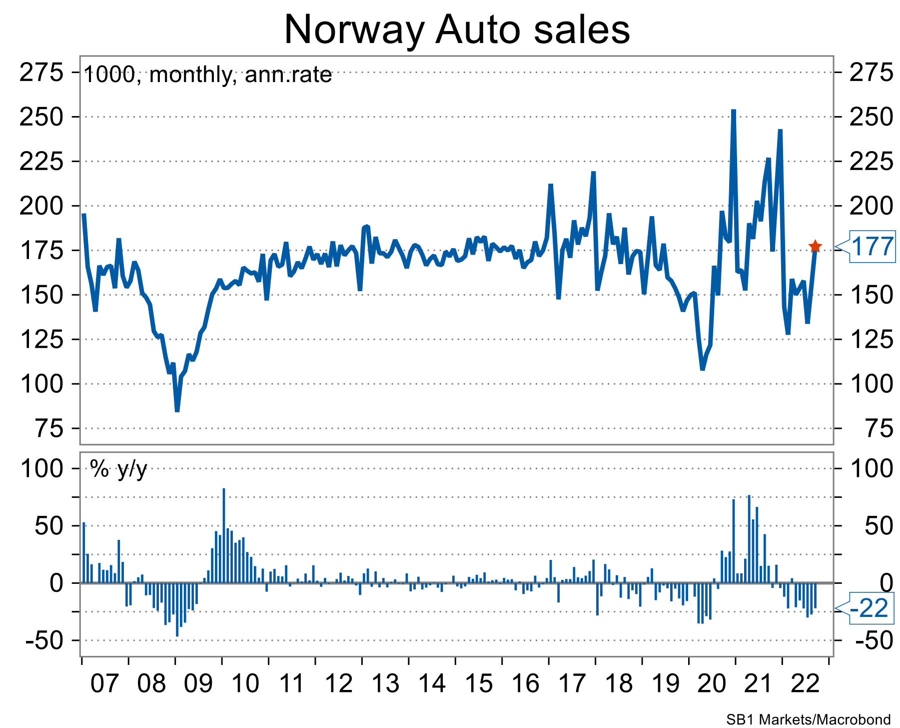


- Total EMU sales are our estimate

Norway: More new registrations in September, up to a ‘normal’ level

Media reports indicate that demand still is no problem, but deliveries are the real challenge

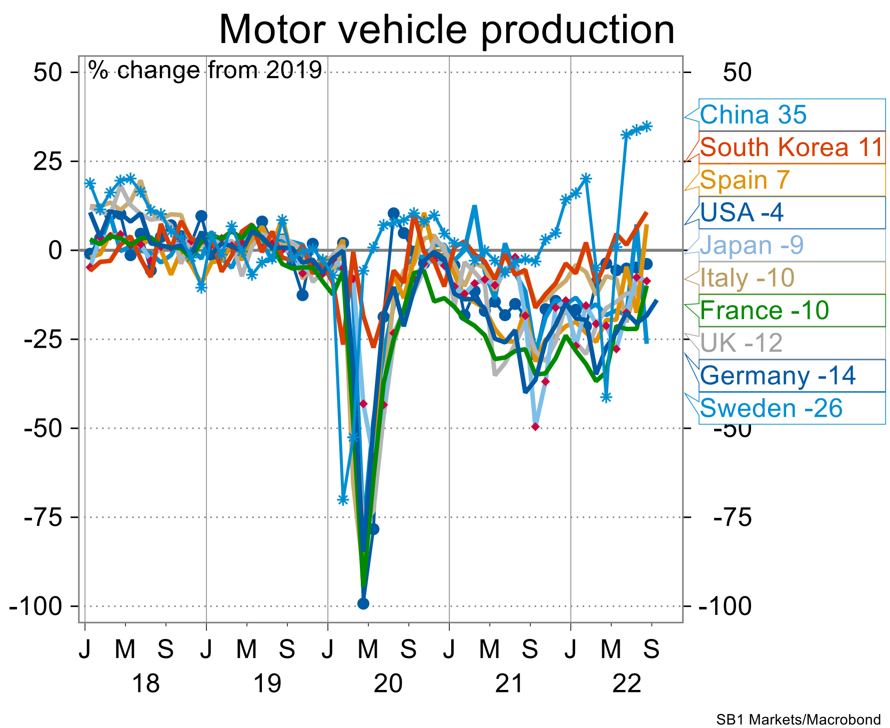




- New registrations up to 177’ from 145’ in Aug, and up to a normal level

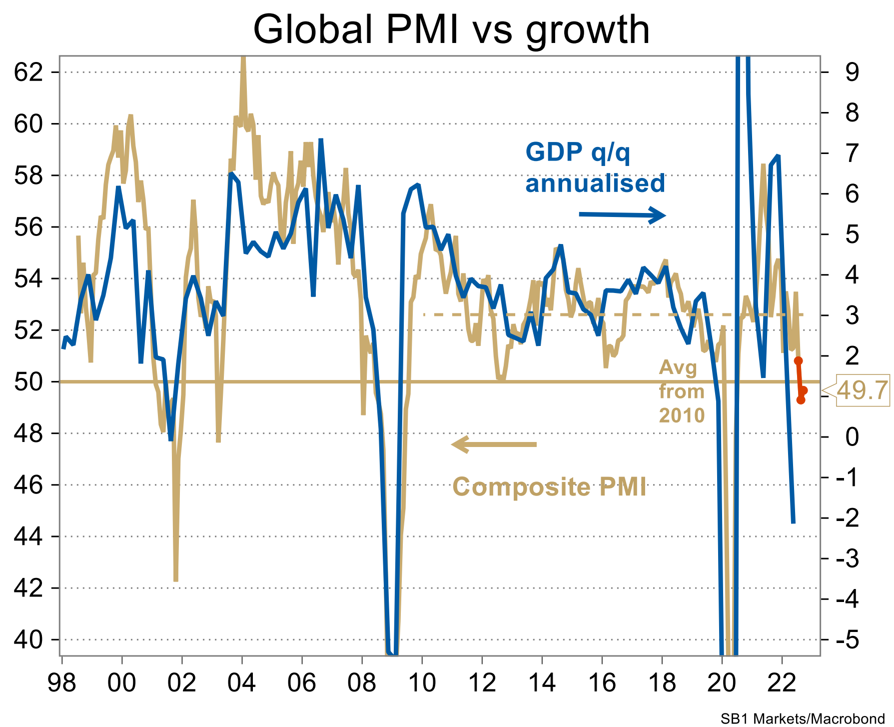
Full speed ahead in China – and other coutries are gradually recovering too

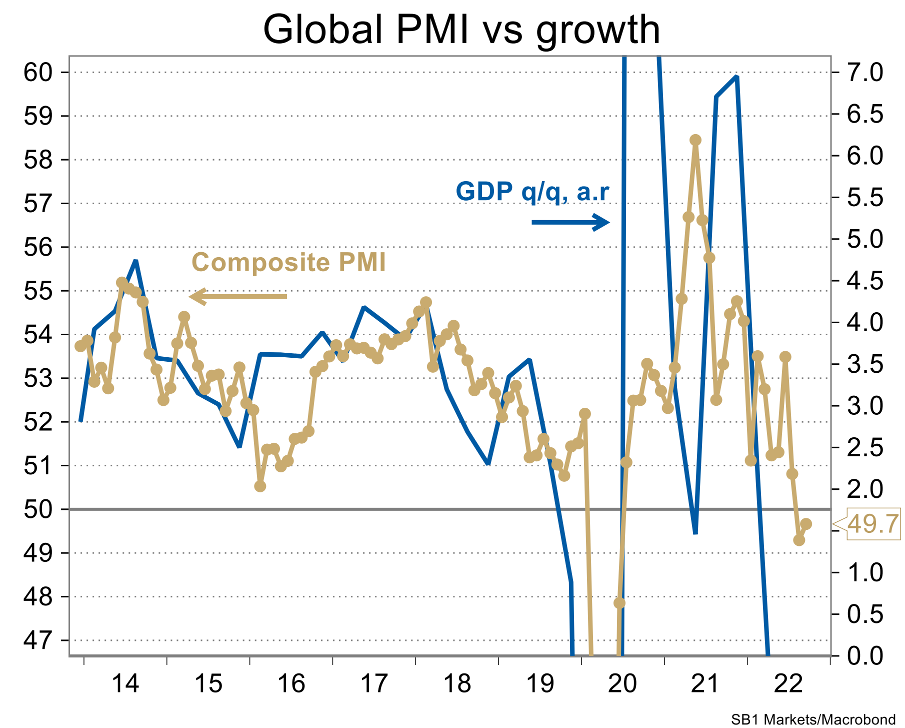
Will pent up demand keep demand and production up even if most economies slow?



The global PMI up in September but still below the 50-line

The global index rose by 0.4 p to 49.7, 0.7 p below our estimate. The trend is still down

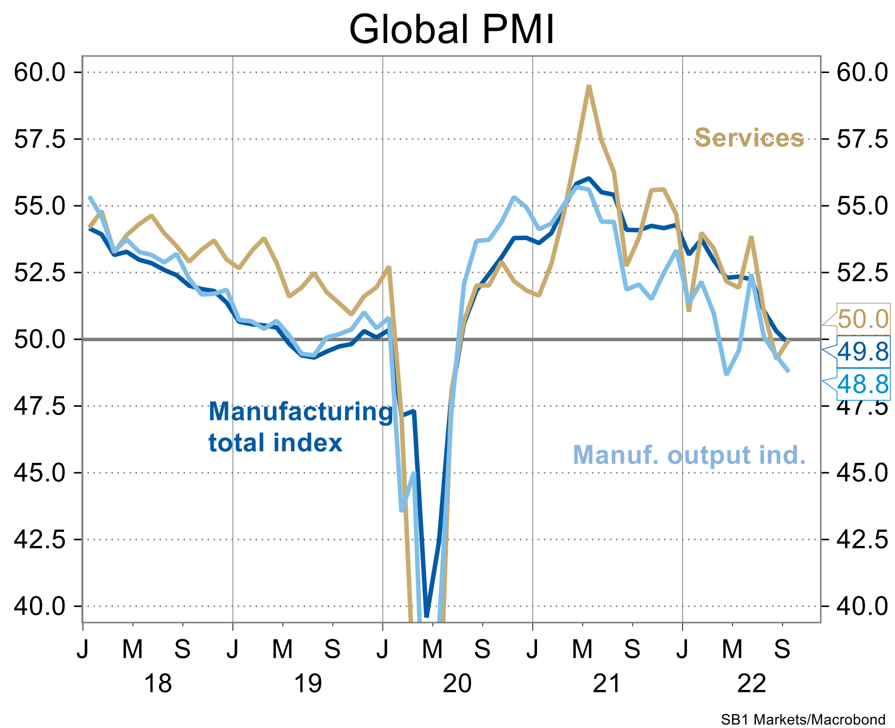


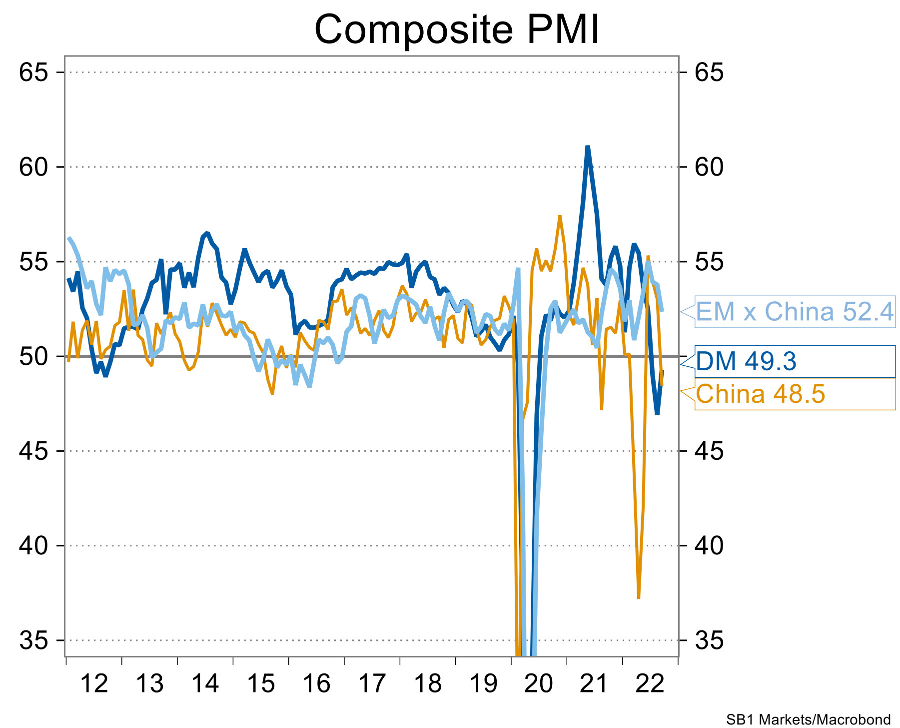


- The composite PMIs are weak in the US (S&P/Markit), the UK, and in the EMU as well, while China reported sharp decline, to well below the 50-line, expected close to unchanged
- The German index is at the bottom of the league (almost, Egypt even weaker), as both the manufacturing and the service sector PMIs are very weak – the service sector index is at 45 and the manufacturing index was dragged down by a fall in new orders and higher input prices (read: energy). The US S&P PMIs are below par too while the ISMs are still very strong
- New orders are weak across the EMU, but the US orders index rose above the 50-line in Sept

PMIs in rich countries somewhat stronger due to rebound in services

Emerging Markets x China kept up far better and remain well above 50





- The decline in the global aggregate in September is due to a decline in the manufacturing sector
- Developed markets still below 50, and the China is now below 50 too

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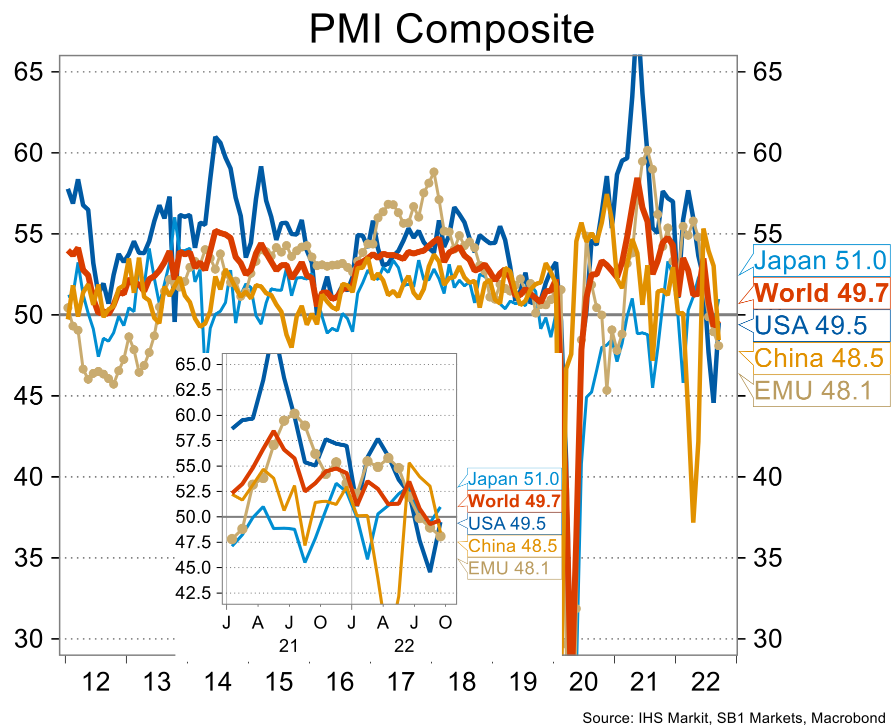
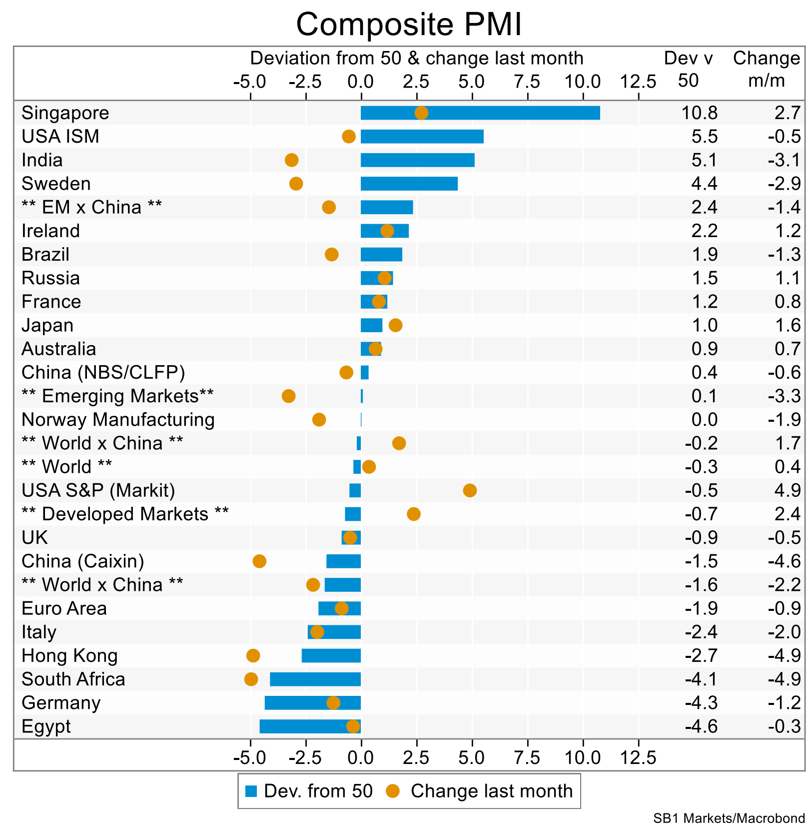
10 countries reported a higher composite PMI, 17 countries/region a decline

13 countries/regions below the 50 line (including EMU, UK, US); the majority is still above

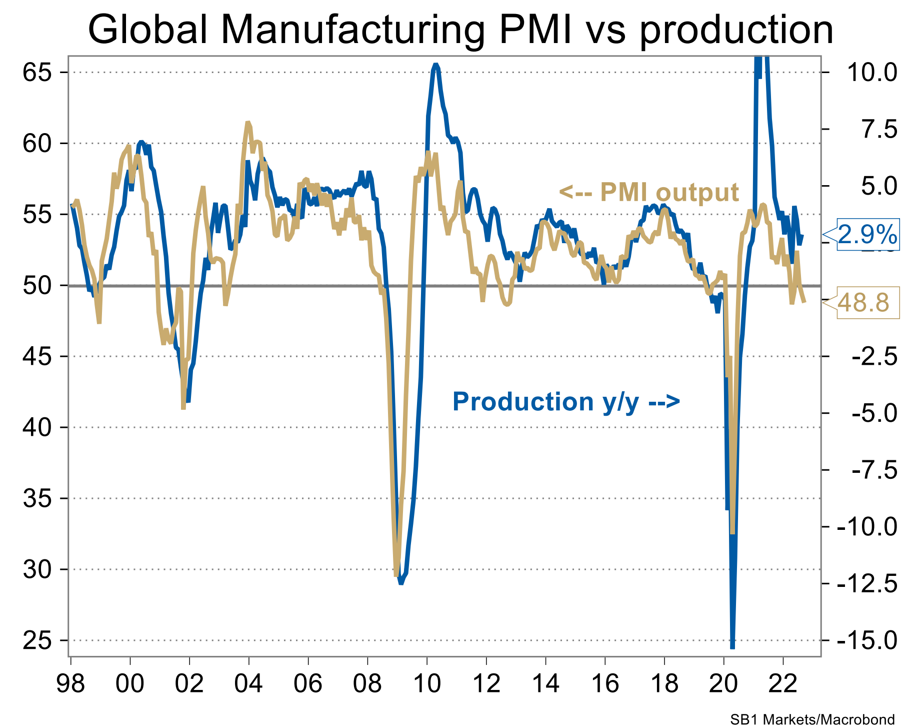


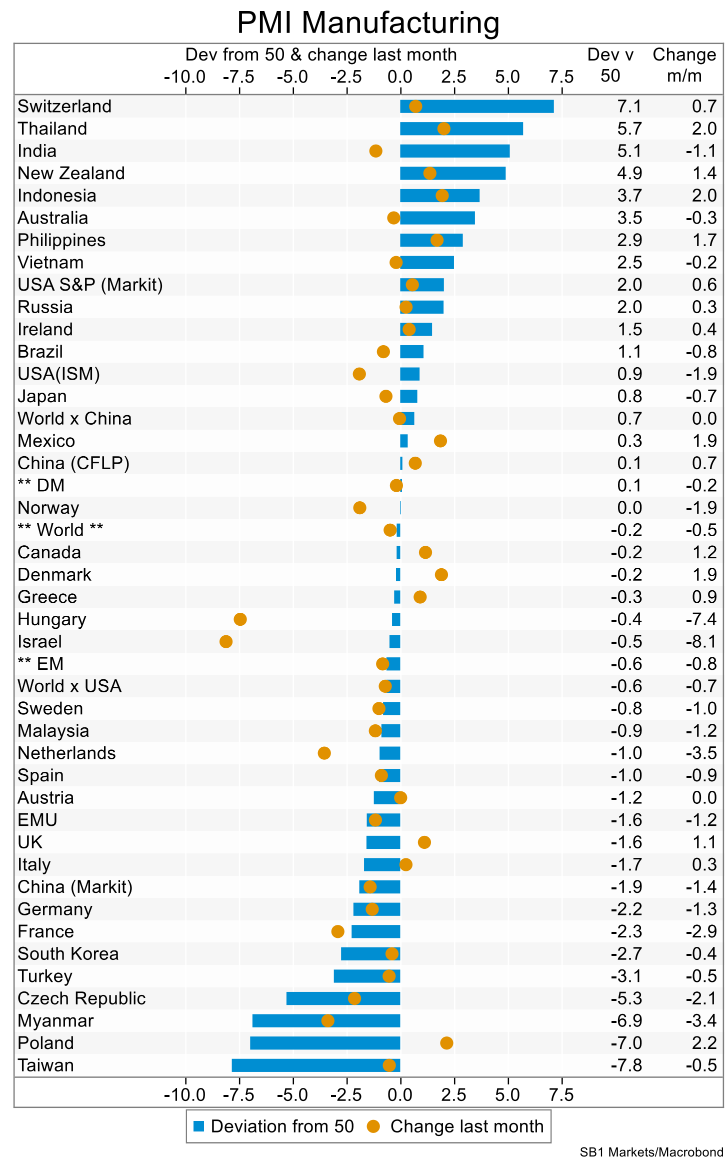


- **The rich countries'** (Developed Markets, DM) PMIs have fallen to the bottom of the list
  - » A couple of exceptions: The French and Swedish composite PMIs are still above 50 due to strength in the service sector
  - » The Chinese Caxin PMI fell 4.6 p to 48.5
- The **ISM survey** is far better than **S&P's (Markit) US survey** – the ISM 'composite' declined 0.5 p to 55.5, while S&P's PMI rose 4.9 p to 49.5. This discrepancy is more than strange – and is entirely due to the diverging service sector indices (ISM covers mostly larger companies)
- (**Norway** does not compete here, we just have a manufacturing PMI. The September index would have yielded a 14th place in the composite race)

Manufacturing total PMI down 0.5 p to 49.8; output index down to 48.8

60% down, and 55% are below the 50 line

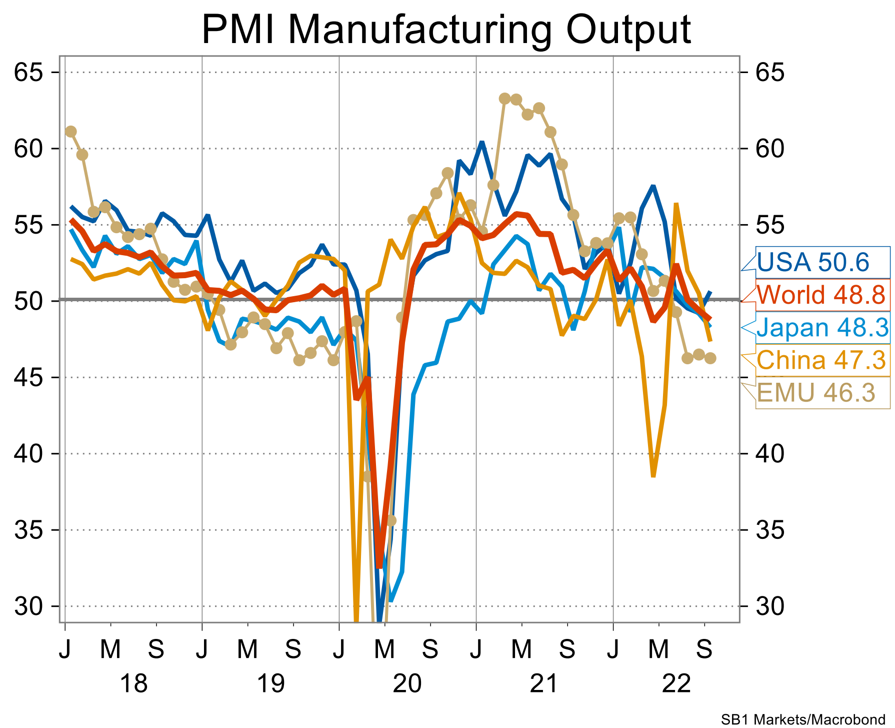


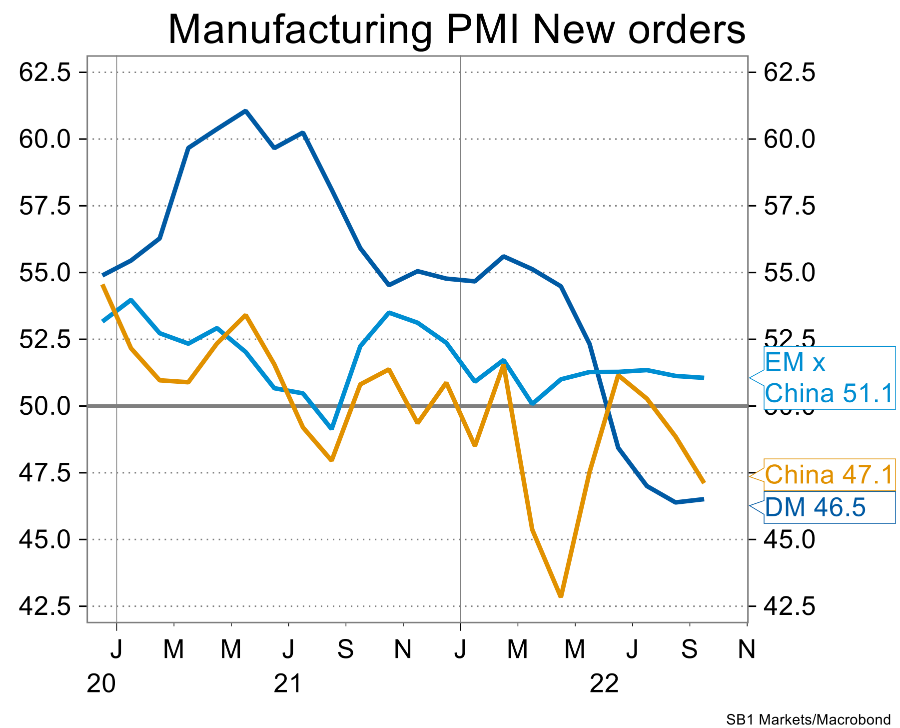


- A majority of countries reported lower activity in September
- **Rich countries are still** stronger than Emerging Markets measured by the total index but below EM x China. Also measured by the new order index, EM x China at 51.1 (and trending flat) are ahead of DM, which is below 50, at 46.5!
- **Norway** is falling down towards the middle of the list, and Sweden suddenly fell below the average – used to be at the top of the list

New orders and output are slowing in developed markets; not in EM x China

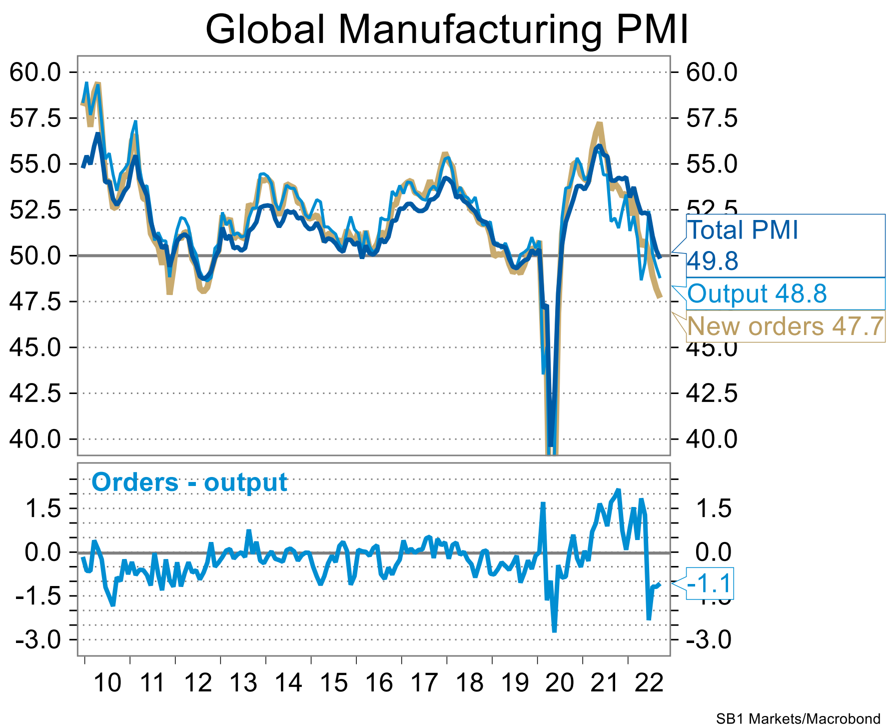
China reported a slowdown in September, with export orders in the 'lead'

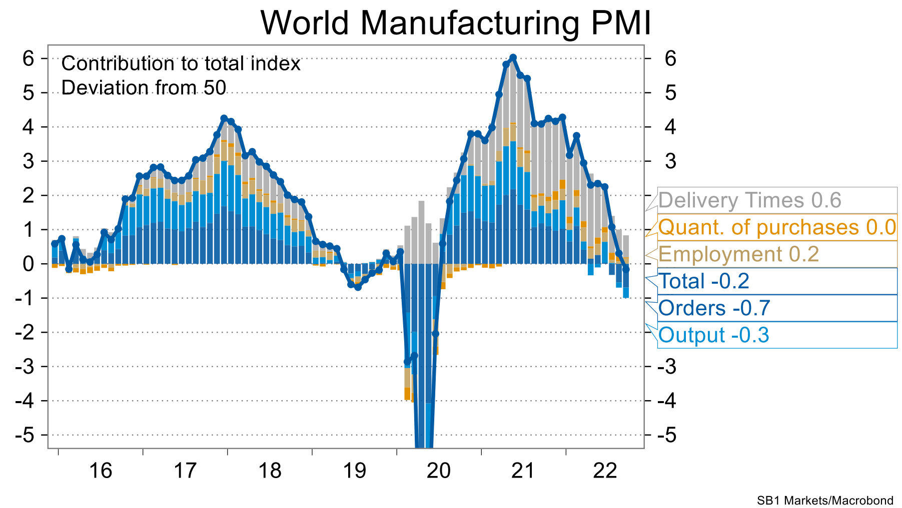


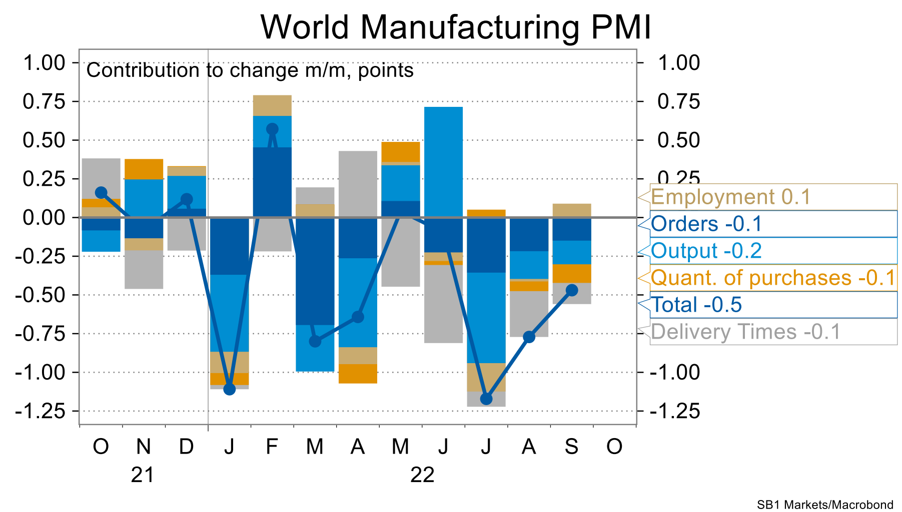


All sub-components of the total index, except employment, down in September

Easing supply problems are good news but may also be due to waning demand & activity







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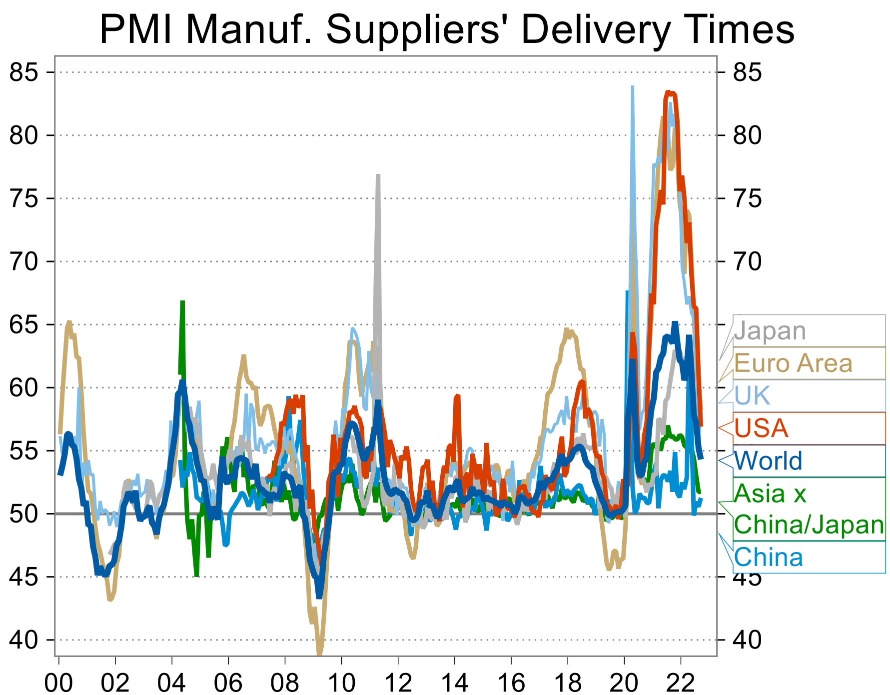
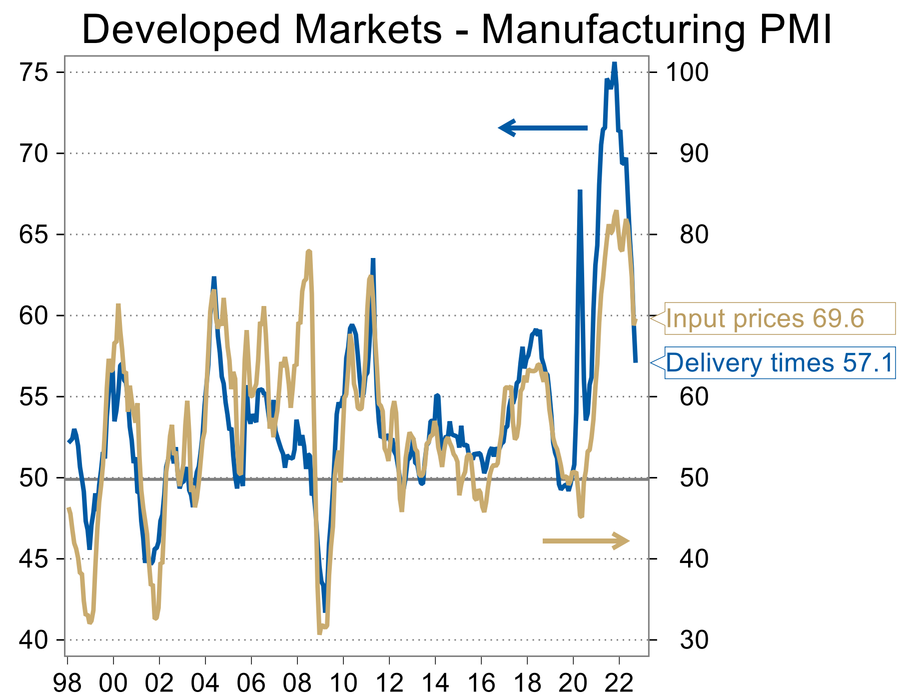
Delivery times and price indices are coming down rapidly, but both remain high

However, the input price index for DMs rose by 0.6 p in September



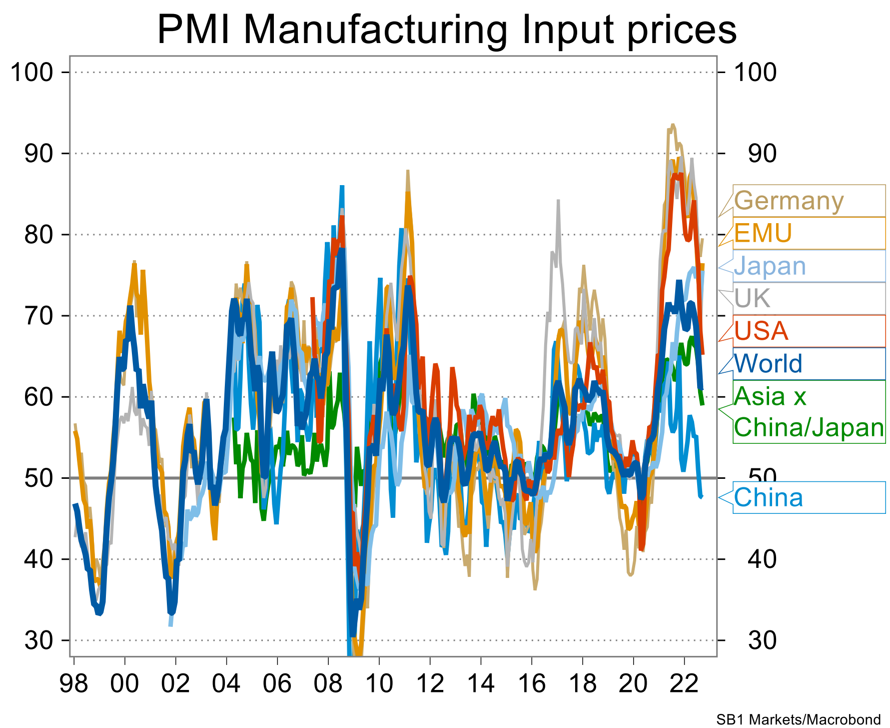
SB1 Markets/Macrobond

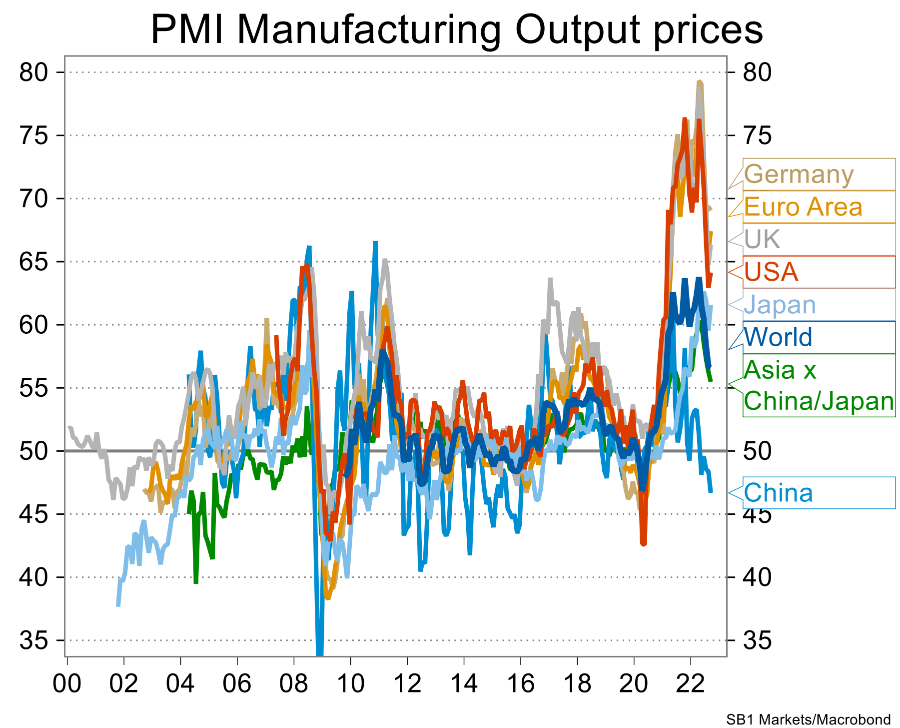


SB1 Markets/Macrobond

Output prices rose at a faster pace in September in Europe and the US

Price increases have mostly been a Western problem – because demand has been strong here

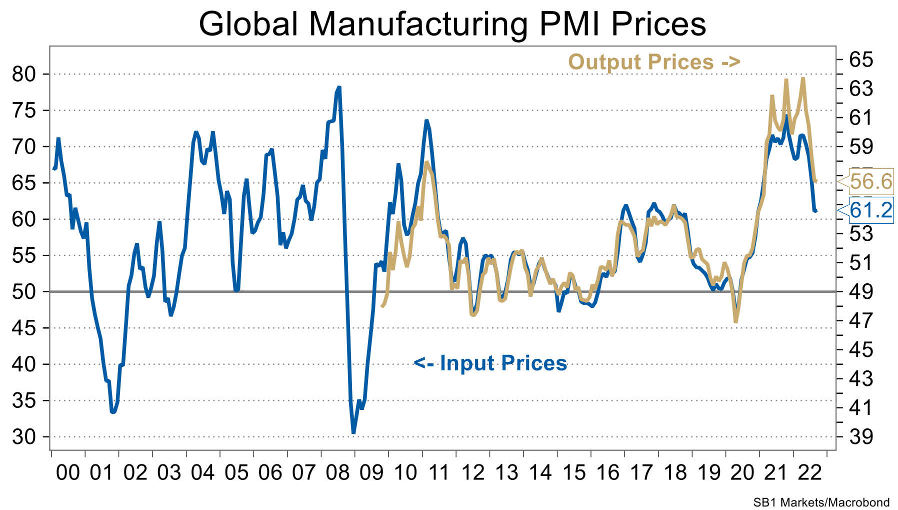


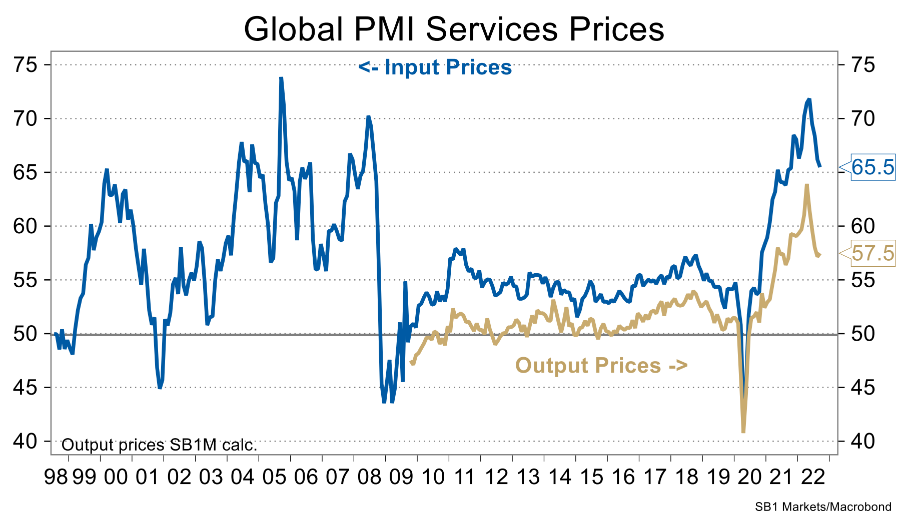


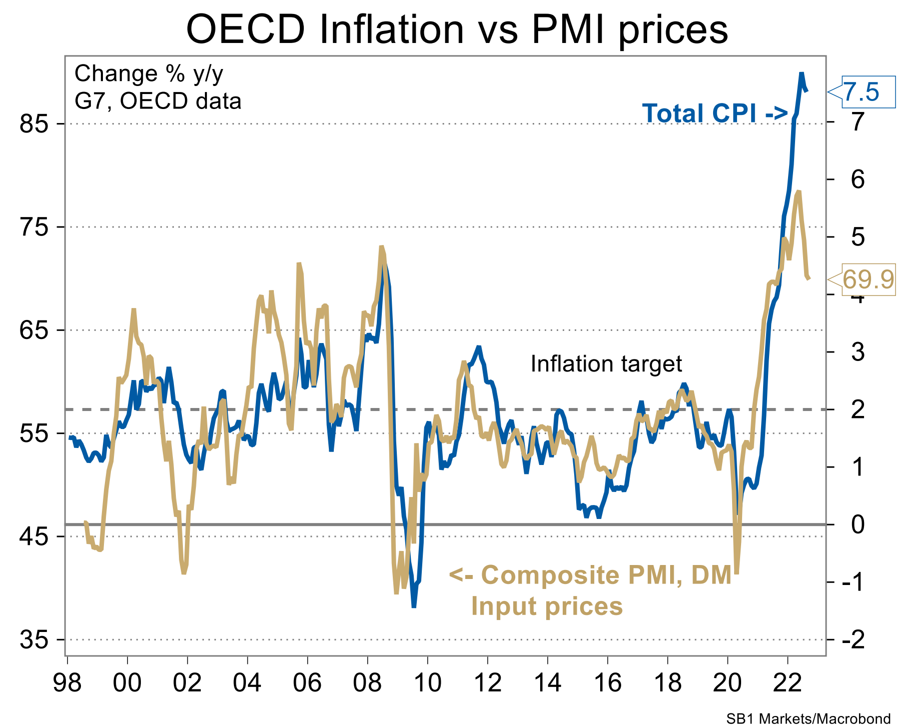
- Input prices fell in China and rose at a slower pace in the US, but the trend is down for both the input and the output price indices

Price increases are slowing, according to the PMIs

All price indices remain at high or very high levels though

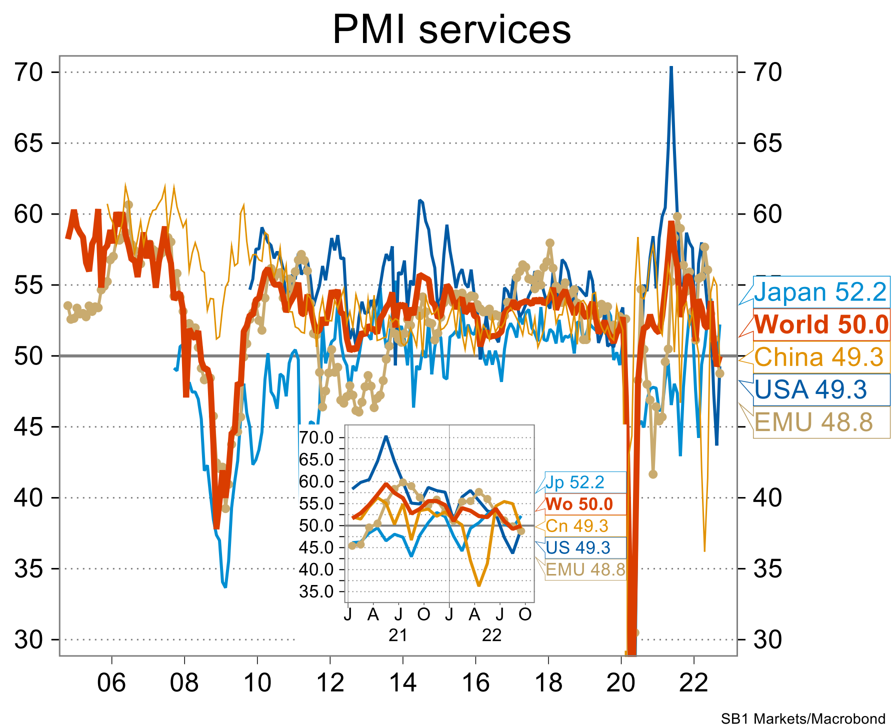


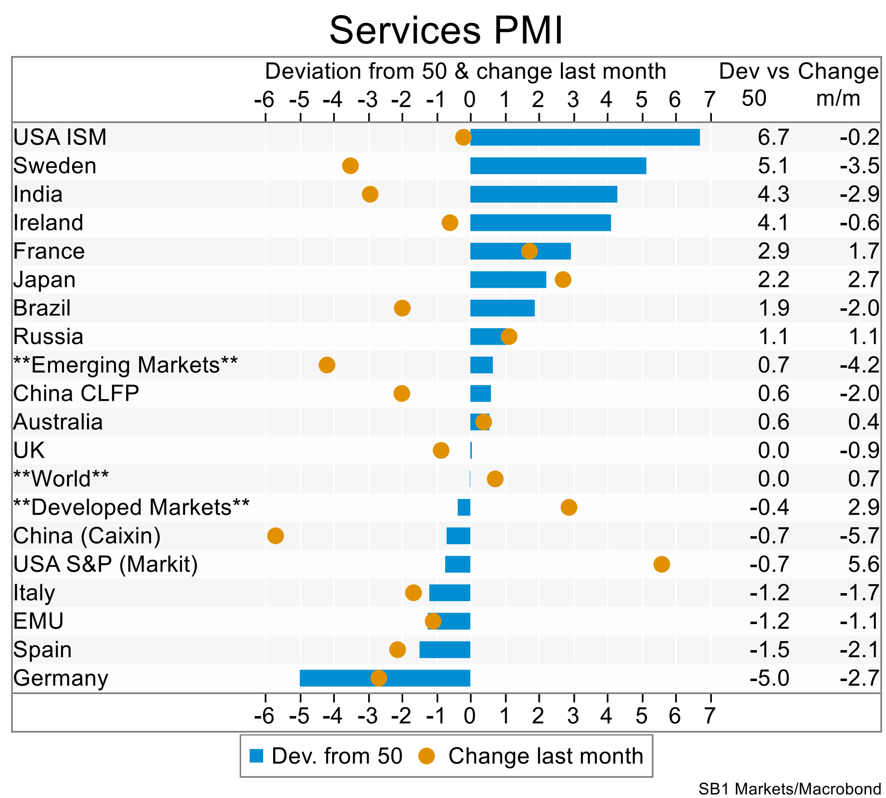




Services PMI up 0.8 p to 50 thanks to a sharp rebound in the US

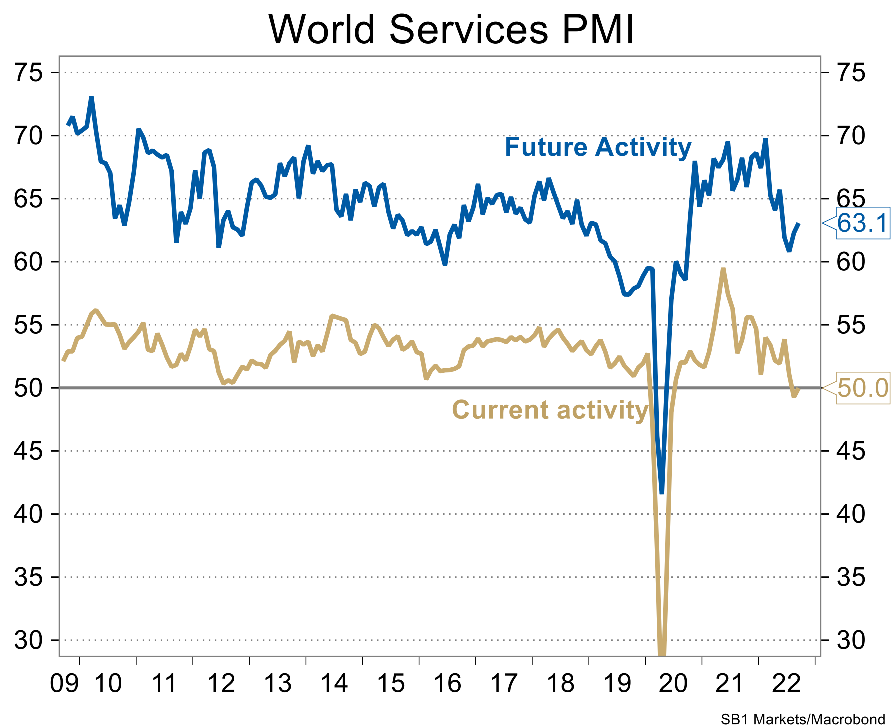
Germany at the bottom of the list, by far. China fell the most in Sept, to below the 50-line

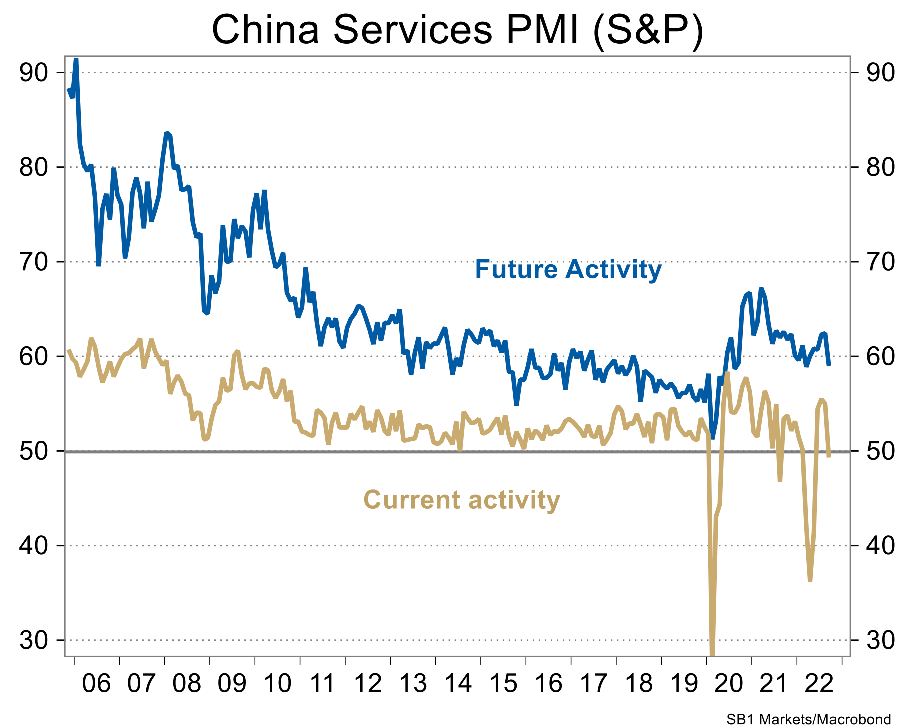




Future activity aspects in the service sector has turned up

(if not in China – but the level is still OK)





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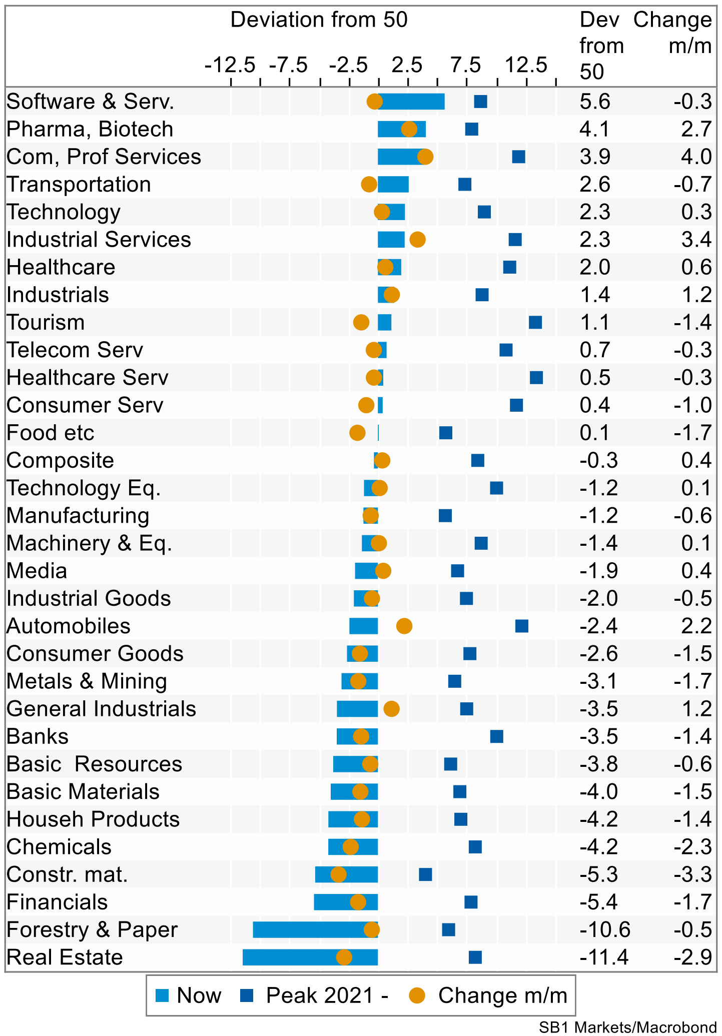
Globally: 2/3 of all sectors down in Sept, 2/3 are below the 50 line

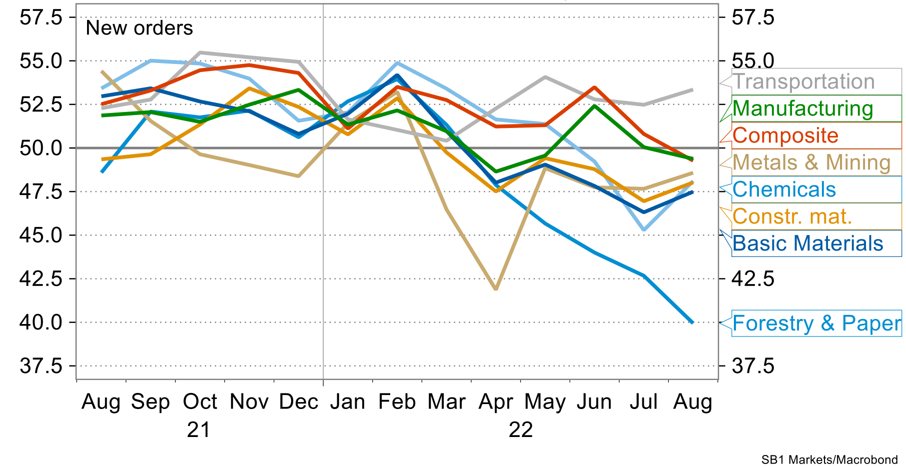
Still growth in software/tech, pharma/healthcare, prof. services & transportation

World PMI sectors

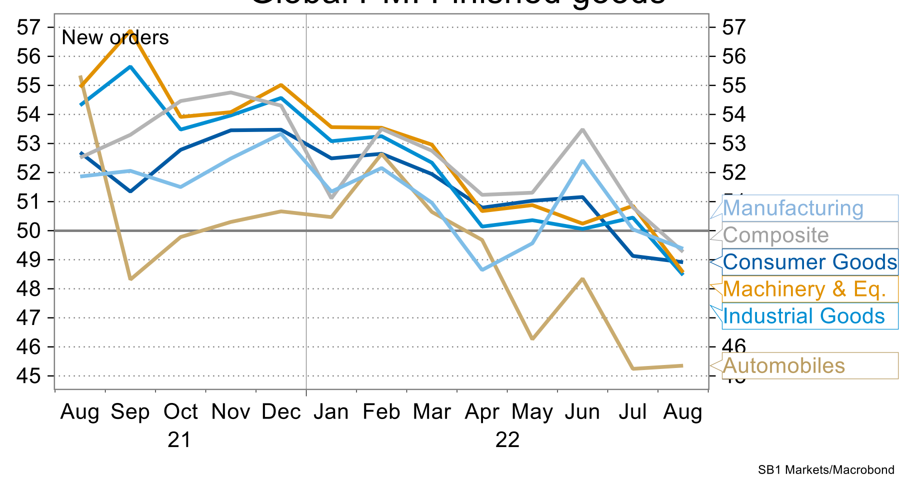


- Most sectors are reporting a decline in activity
- Financials, real estate at the bottom

Global PMI Commodity sectors

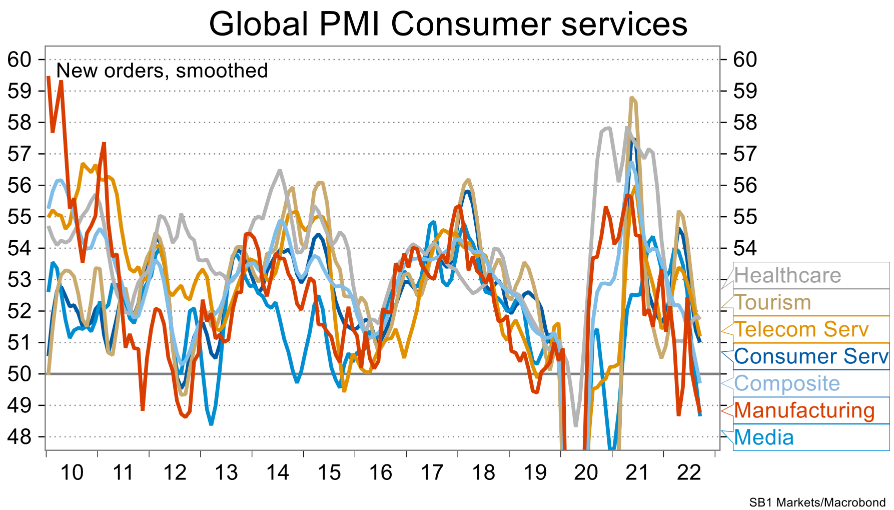


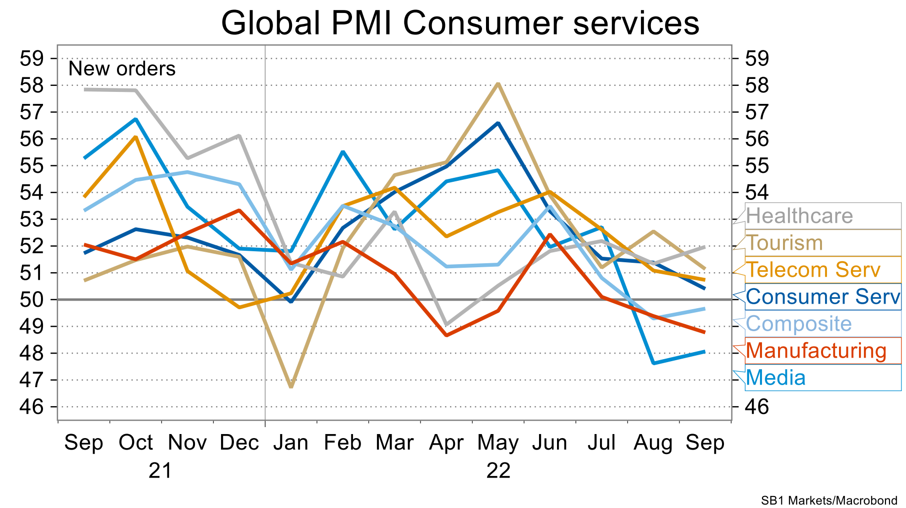
Global PMI Finished goods

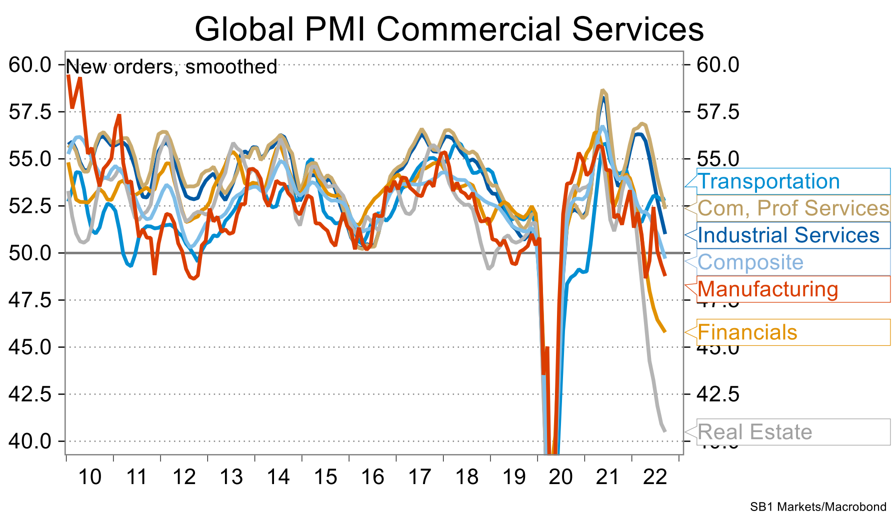


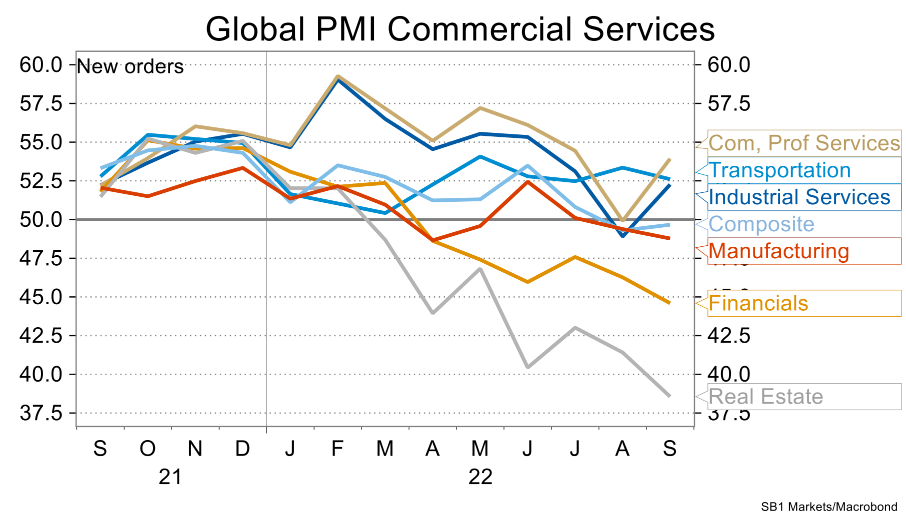
Services are contracting, and most sectors slowed in August

Beware real estate: has fallen sharply recent months. We think we know why



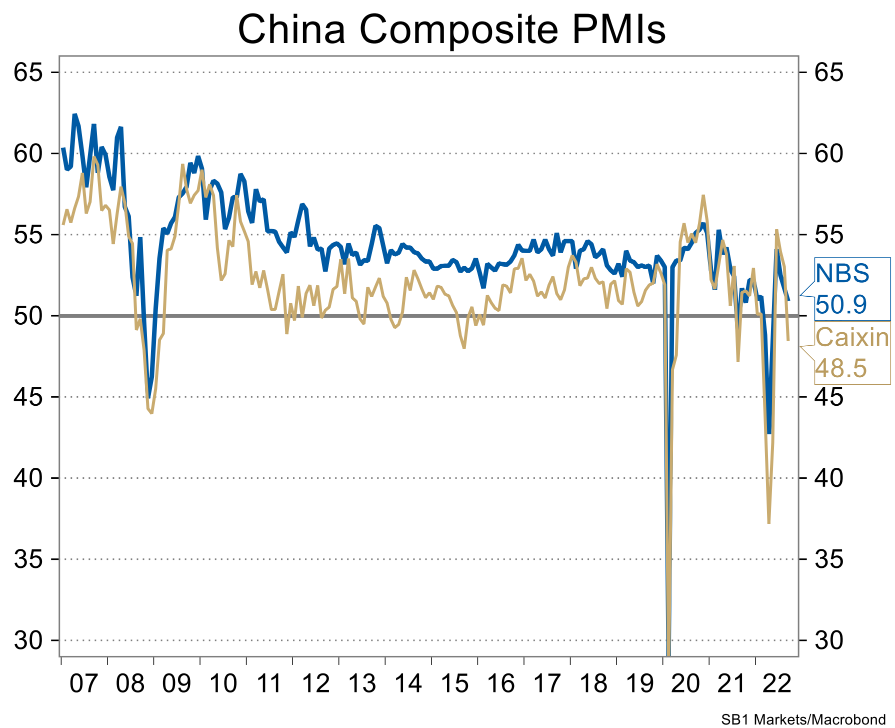


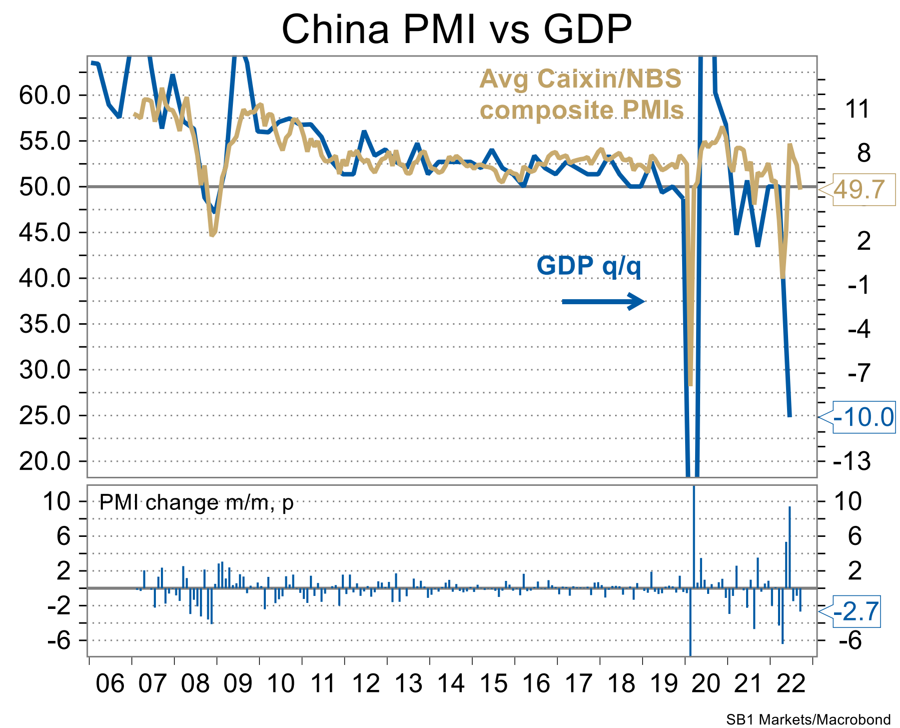




Both PMI data sets down in September, Caixin's and services the most

In sum, the PMIs signal modest growth in Q3. We think the outcome will be better

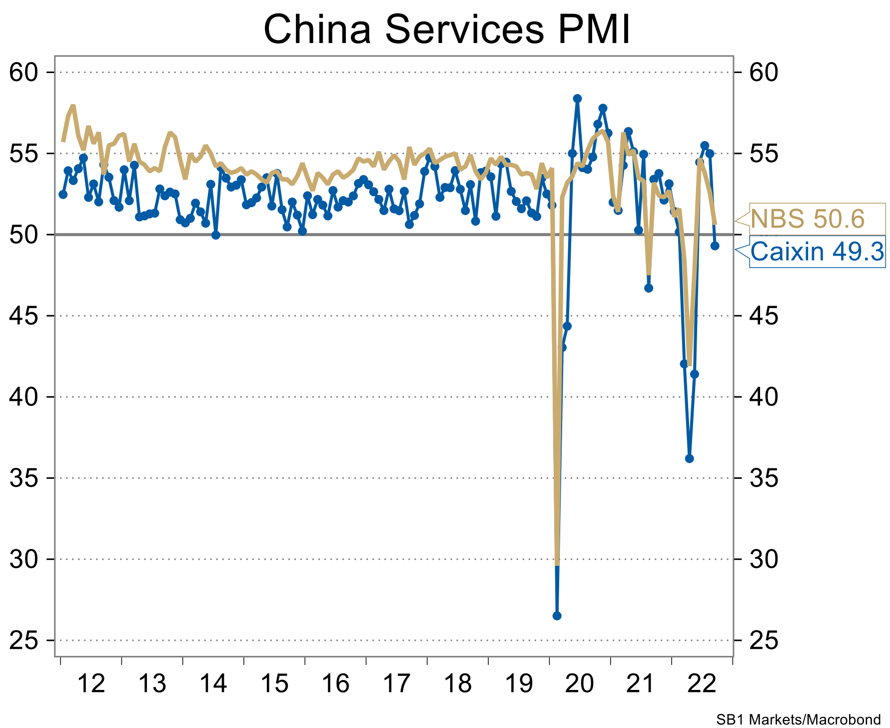


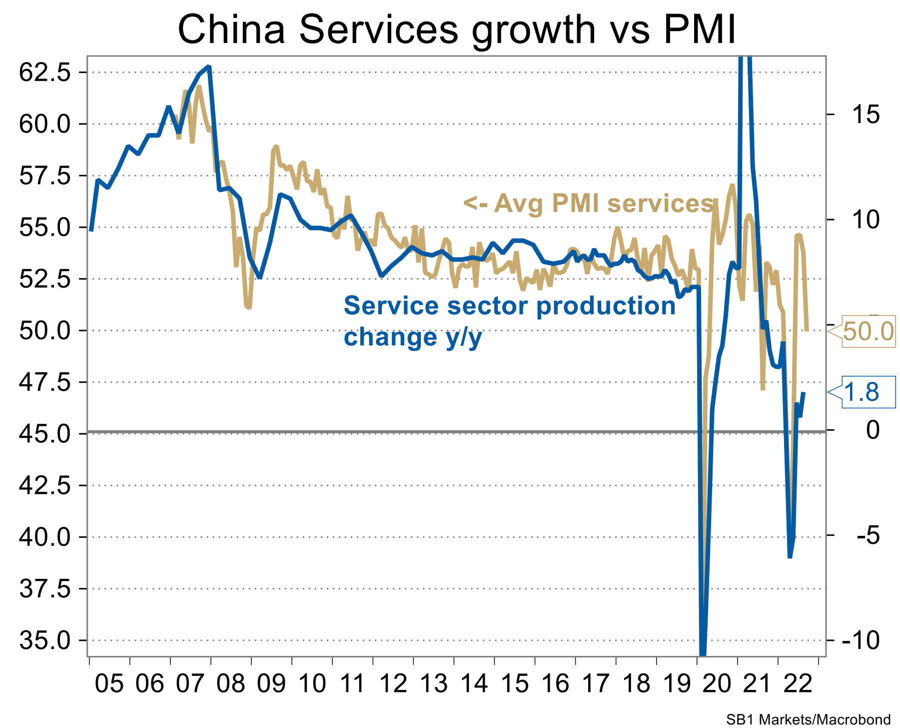


- … following the 10% setback in Q2 (2.6% not annualised), during the lockdowns. The average of the two data sets is at 49.7 in September, down 2.7 p from August, far below expectations (close to unchanged)
- The **NBS/CFLP composite PMI** fell by 0.8 p to 50.9, expected close to unchanged. The service sector reported a further slowdown to well below trend growth. The manufacturing sector reported higher growth, at almost a normal pace of expansion
- The **Caixin composite index** fell by 4.6 p to 48.5, expected down 0.3 p, as both the manufacturing sector and services reported a sharp decline in activity in September

Something happened in the service sector in September

Caixin's index fell even more than the NBS/CFLP survey. Lockdowns? Perhaps

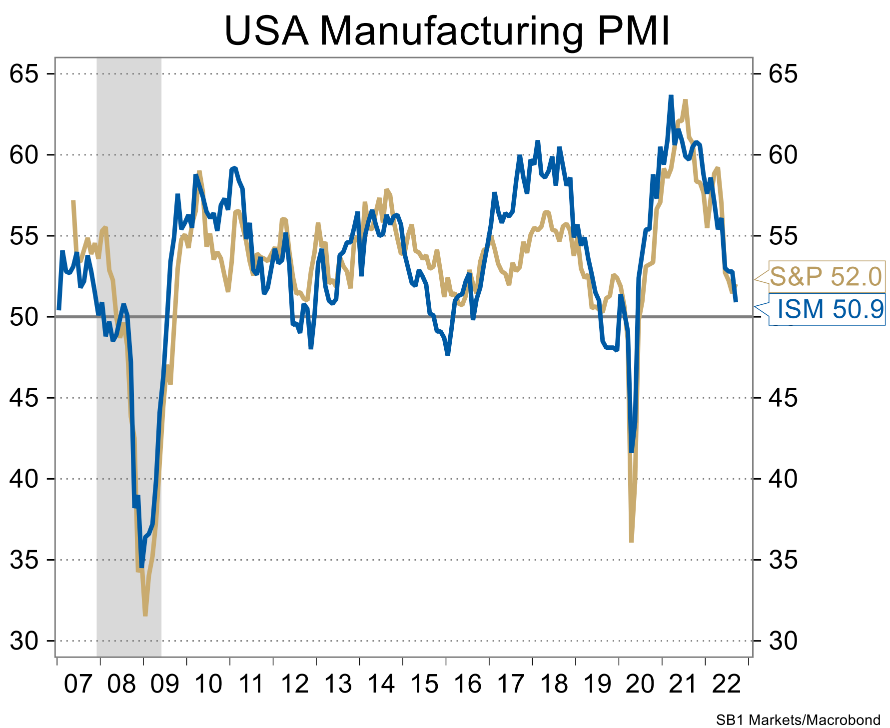


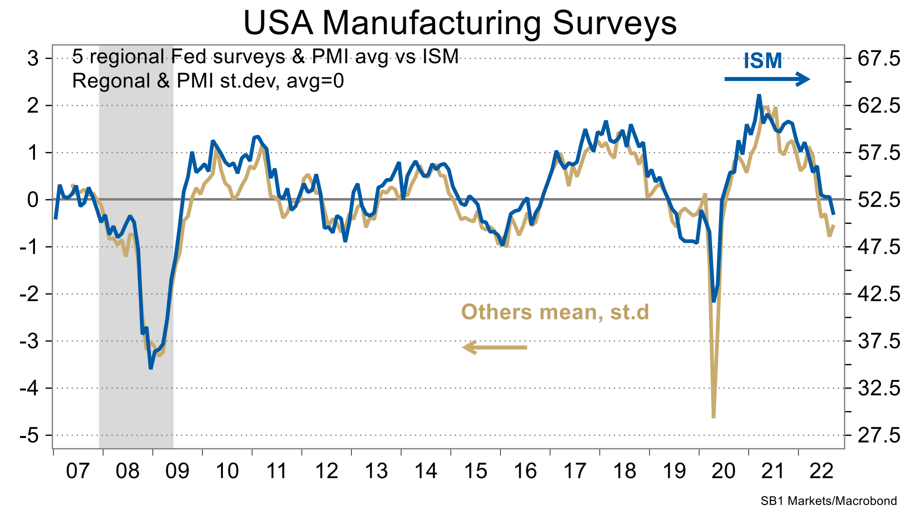


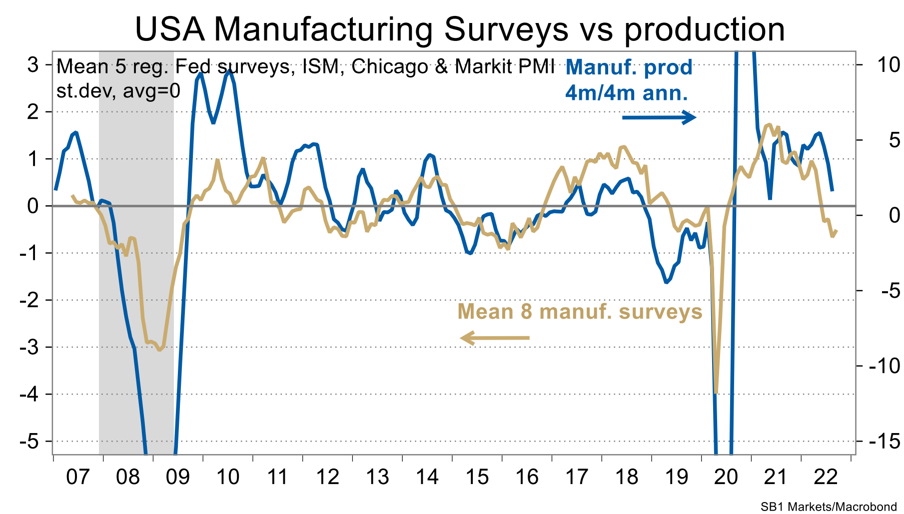
- Some few cities imposed serious restrictions in September
- Road congestion and metro data signals that mobility may have increase less than normal between August and September

Manufacturing surveys: Below average but not in the basement (yet)

Sector is still expanding according to the PMIs, but the trend is down



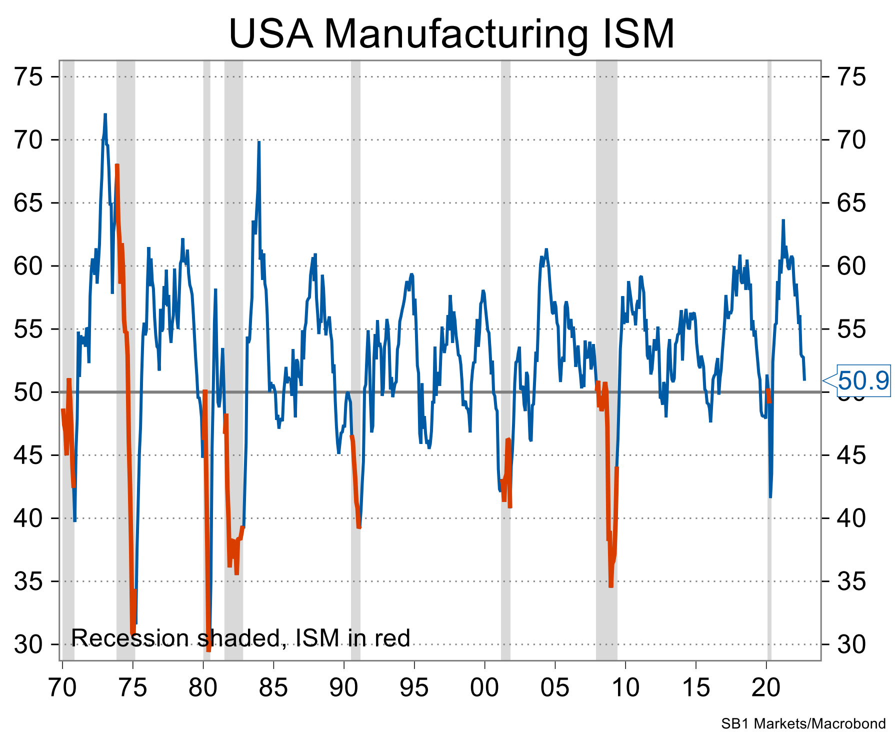




- Growth in actual manufacturing production is on the way down too
- We expect a continued slowdown the coming months, as orders are weak and demand is soft

The manufacturing ISM fell in September, but not into contraction territory

The index fell 1.9 p to 50.9, expected 52.2 – but the level is more in line with other surveys



Even so, the **ISM manufacturing survey** confirms a gradual slowdown in the US economy, but not as much as the average (and median) of other surveys

- In September, 9 of 18 manufacturing sectors reported **growth** (down from 10 in July), 7 sectors reported a decline (unch.)
- The **new orders index** fell into contractionary territory, down 4.2 p to 47.1 following the 3.3 p increase in August, as 13 of 18 sectors reporting declining orders. Other surveys agree
- The **production index** rose 0.2 p to 50.6, still a low level. The employment index fell by 5.5 p to 48.7 in September, signalling weaker demand for labour (which the Fed likes, we assume)
- **Supply chain** issues are dissipating: 15 commodities saw **price increases** (from 12 last month and 40 in May, and 56 at the peak). 16 were down in price, like aluminium, steel, and lumber. This is up from 14 in august. Just 7 commodities were reported in **short supply**, down from 8 in August (and far below the peak at 50 commodities a few months ago). The price index fell sharply to 55.7, signalling a rapid deceleration of input prices
- **Comments** are mixed – many are still reporting that labour is a scarce commodity, but several are acknowledging a slowdown in demand

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A warning sign: At the current pace of contraction in new orders…

…a recession usually follows. The '95 soft landing is the only clear exception.

The other 6 contractions are the past 6 recessions

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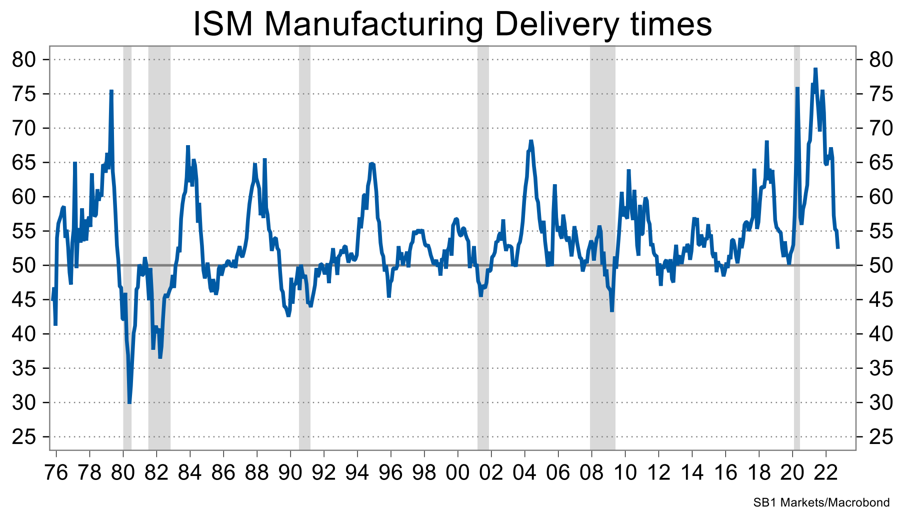
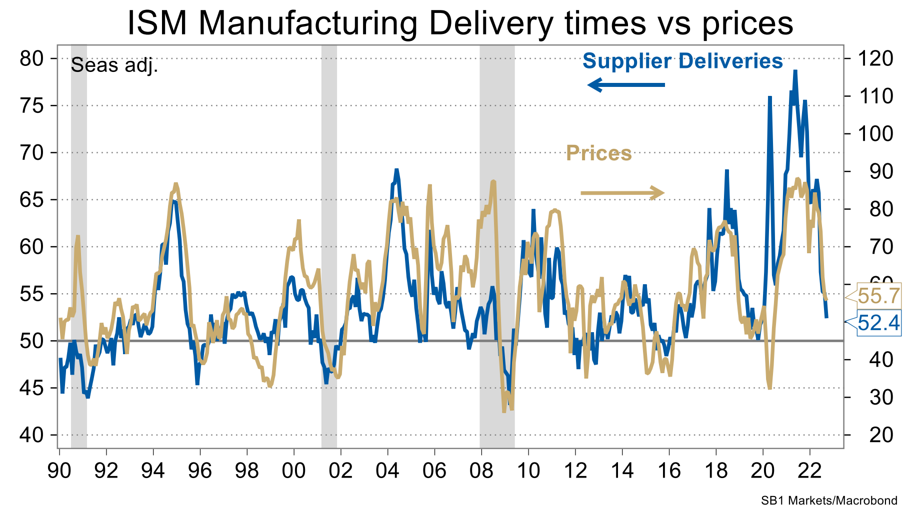
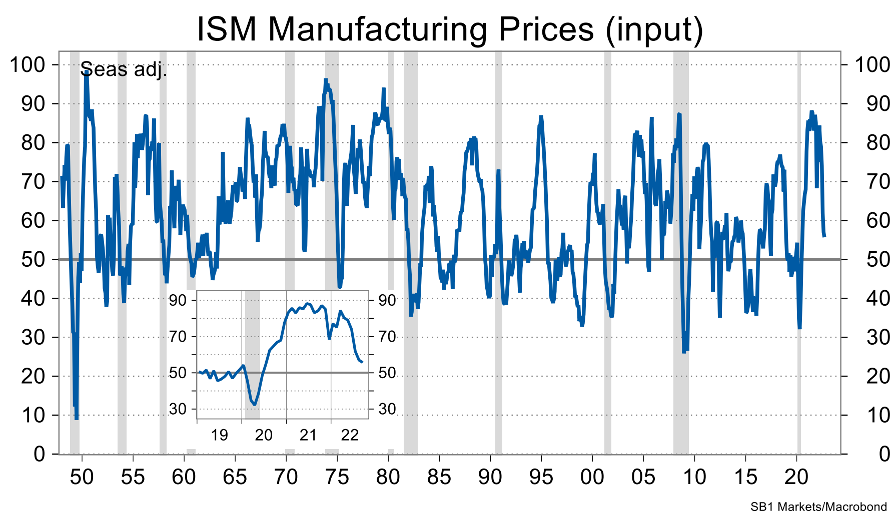
The delivery times index down to a normal level – as is the input price index!

Surely good news: Both indices higher than normal but not by much! The price index is now at 56



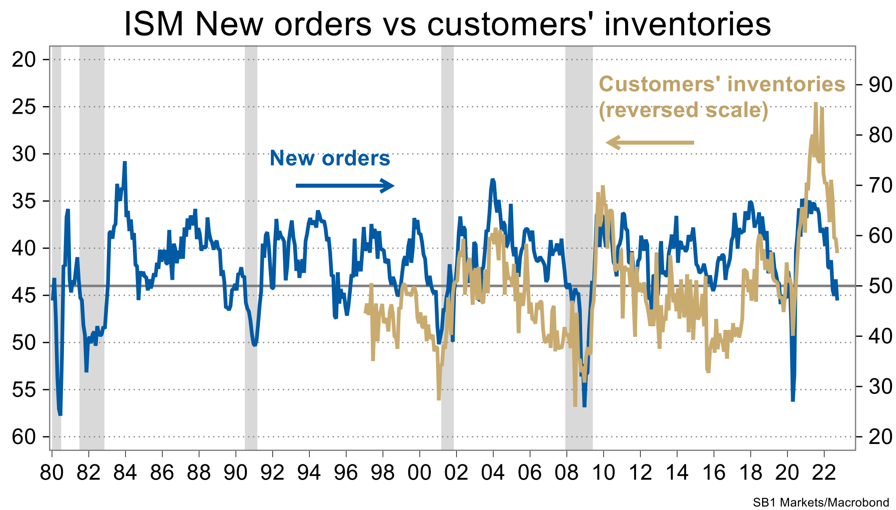


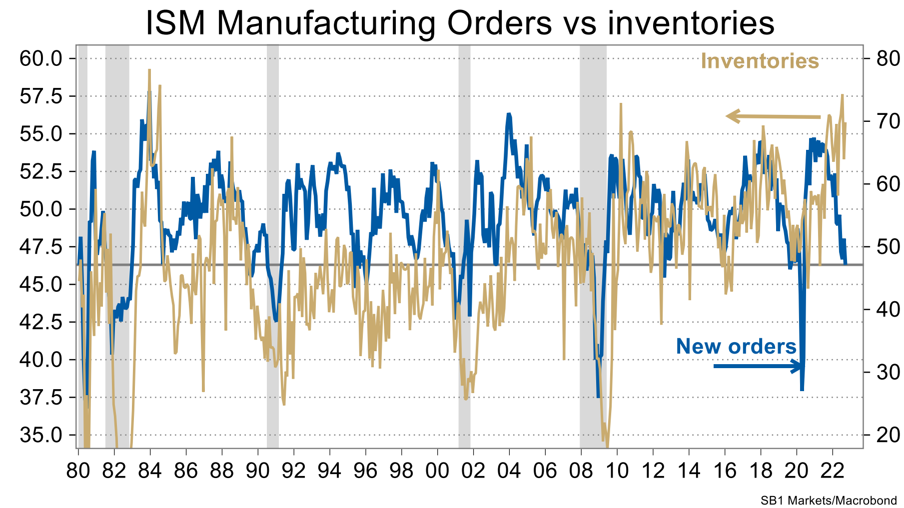


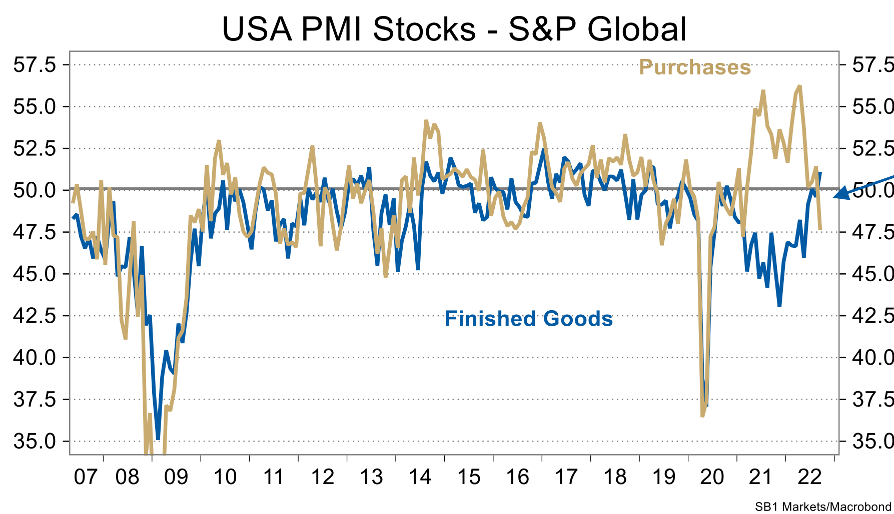
- Price increases are far less widespread, according to the ISM manufacturers (we have seasonally adjusted these data)
- The supplier deliveries index has fallen to 52 in September from 67 in April, very likely implying shorter delivery times, even if the index remain above the 50-line

Split reports on inventories – but customers' stocks are normalising?

ISM shows rapid growth in stocks of purchases, but S&P doesn't report add'l stocks of finished goods



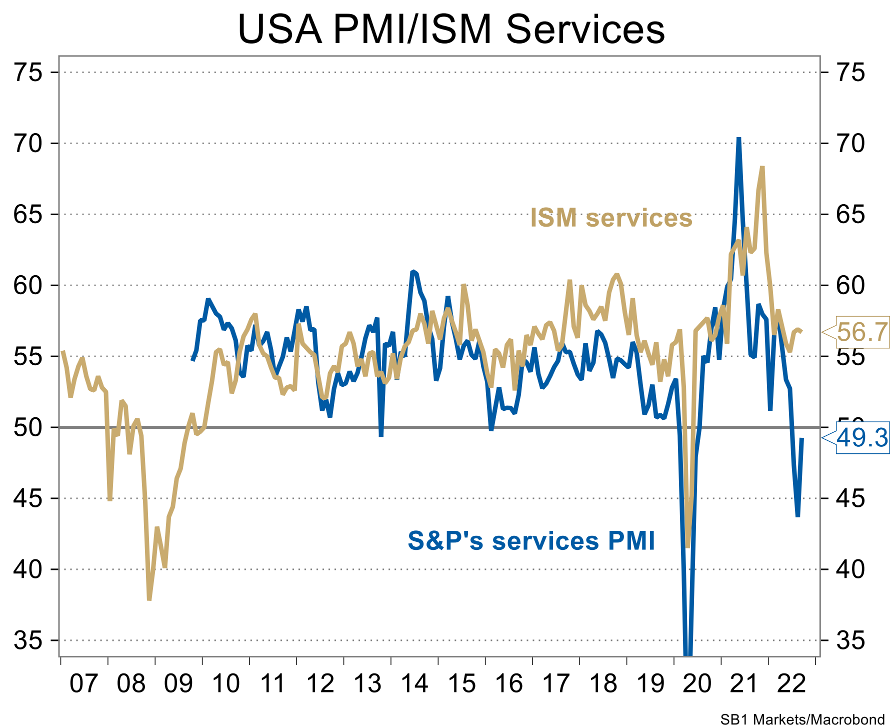


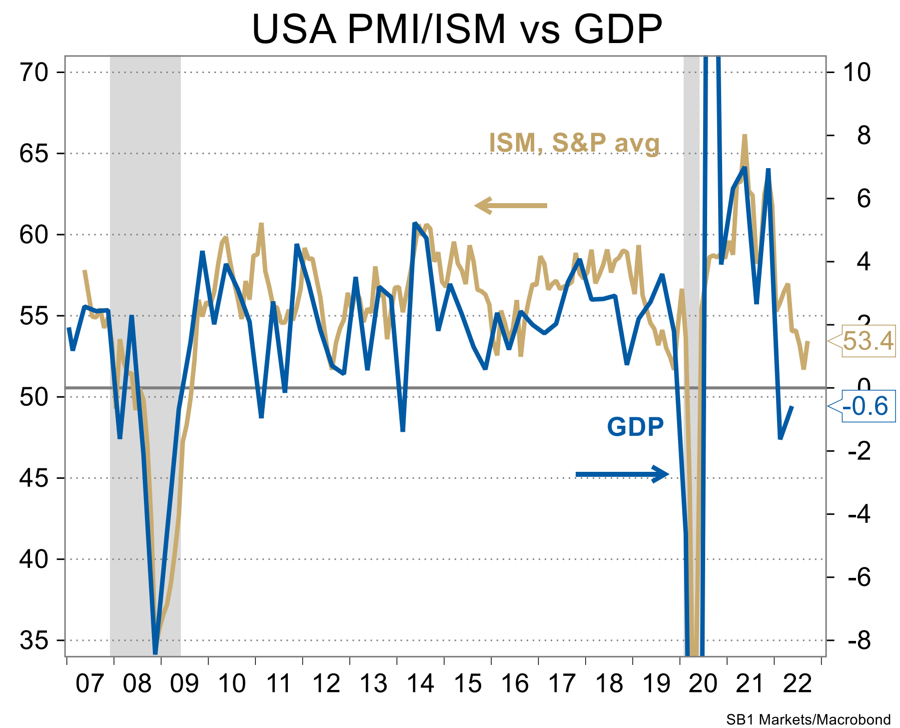


- At least, S&P Global is not reporting a further decline in finished goods inventories

Mind the gap: S&P says services are contracting, while the ISM reports OK growth

The history of the two surveys are too similar and too short to judge which is the best





- … but in some very few months we will find out ☺
- The ISM services index lost 0.2 p to 56.7, expected down to 56.0. This survey is tilted towards the larger companies compared to the S&P survey. The new order index remained above 60, input prices are increasing a little slower but still very fast
  - » Comments were in general much weaker than signalled by the actual index numbers
  - » 15 sectors reported growth, just 3 a decline vs. August, Hotels & restaurants, arts/entertainment/recreation and transport/warehousing
- S&P's services PMI (aka Markit's) was confirmed sharply up, but remained below 50
- The average of the ISMs and PMIs was up – but at 53 it is still below average. Some 1.5% growth is signalled, clearly below trend

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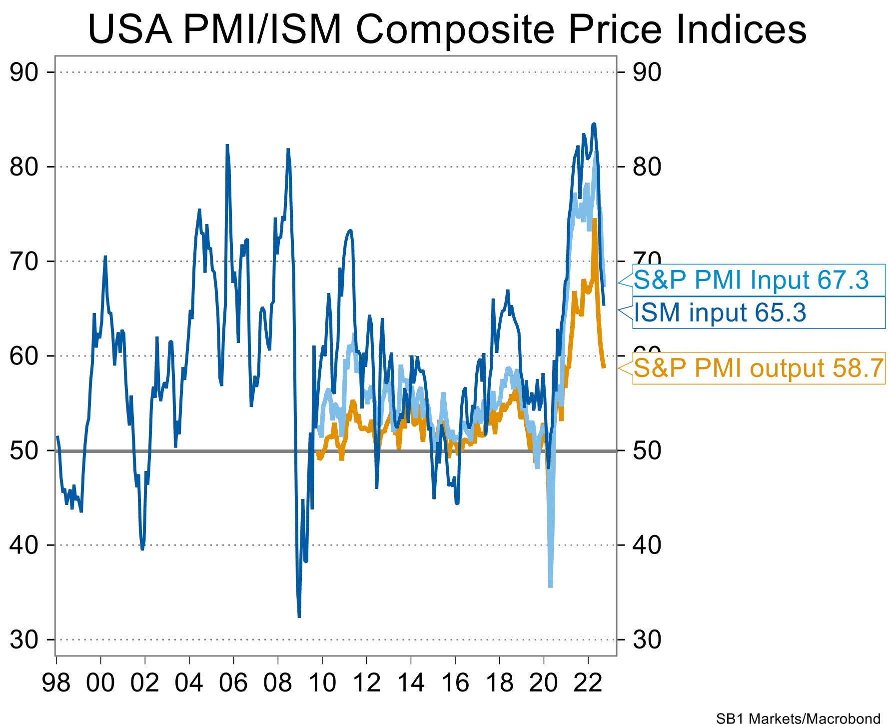
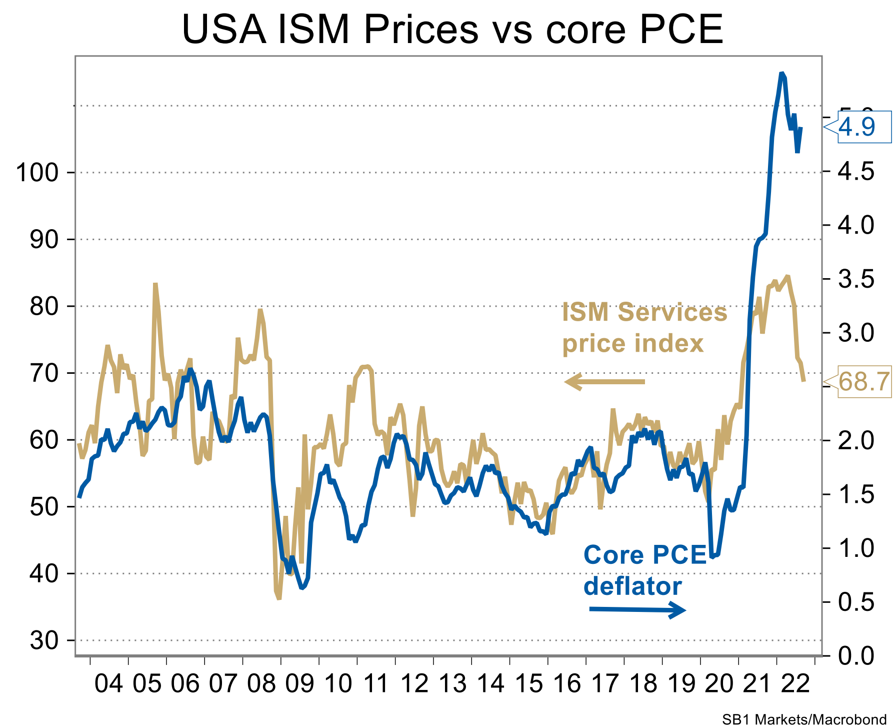
Both input and output price indices further down in September

Lower but still higher inflation than normal is signalled in the PMI/ISMs

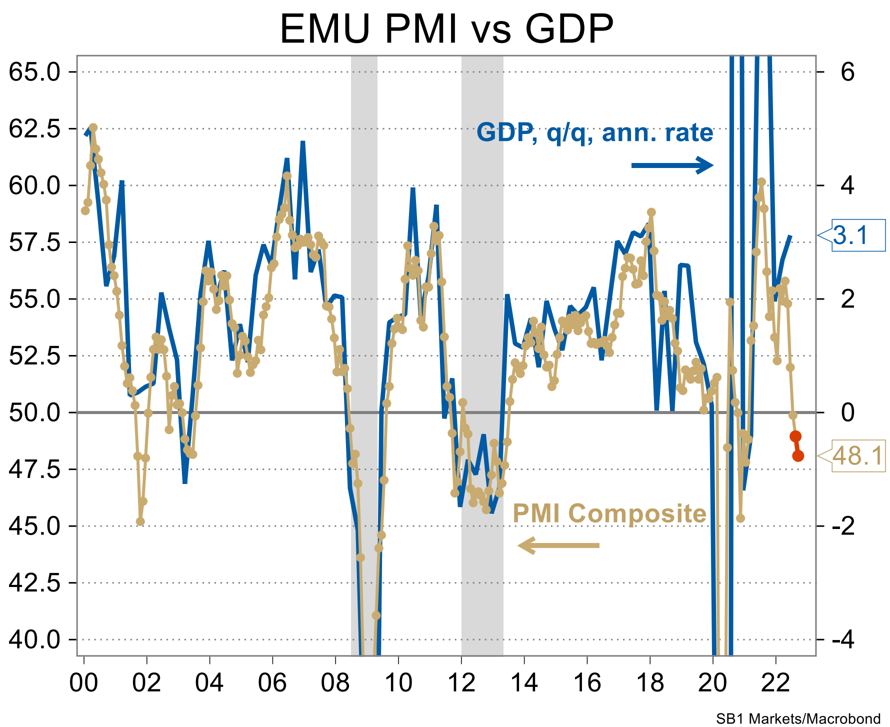


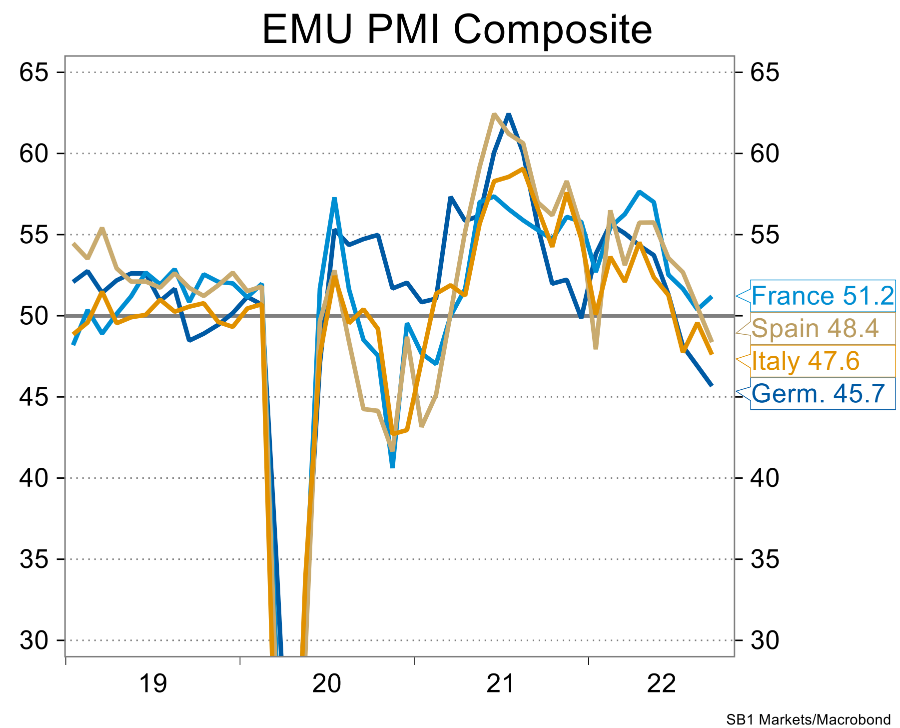


- Anyway, as wage inflation remains much higher than before, and there is no surge in productivity – the real inflation problem remains unsolved

The Eurozone final PMIs confirmed in contractionary territory, but no full crisis

The composite down 0.9 p to 48.1; data weaker everywhere but the French service sector

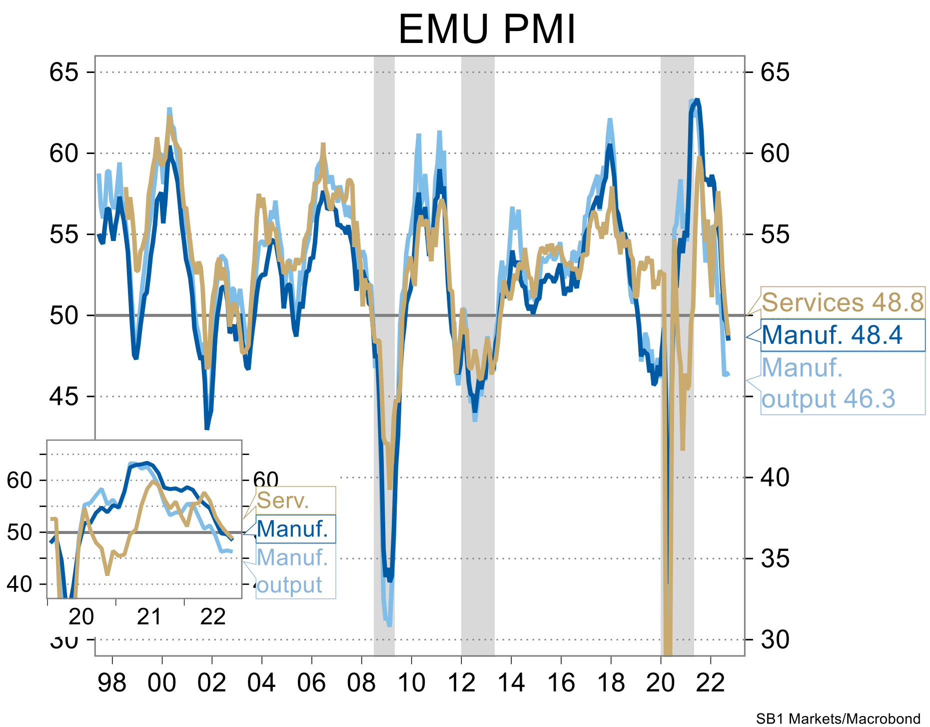


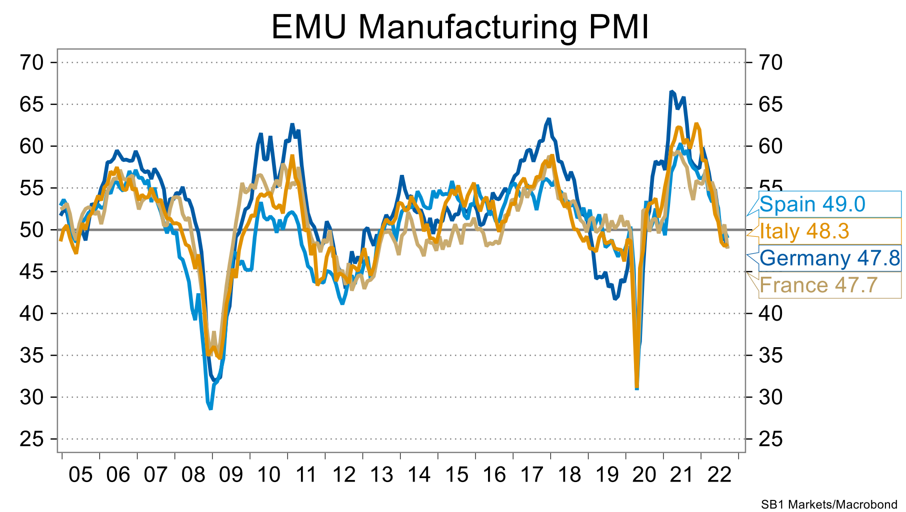


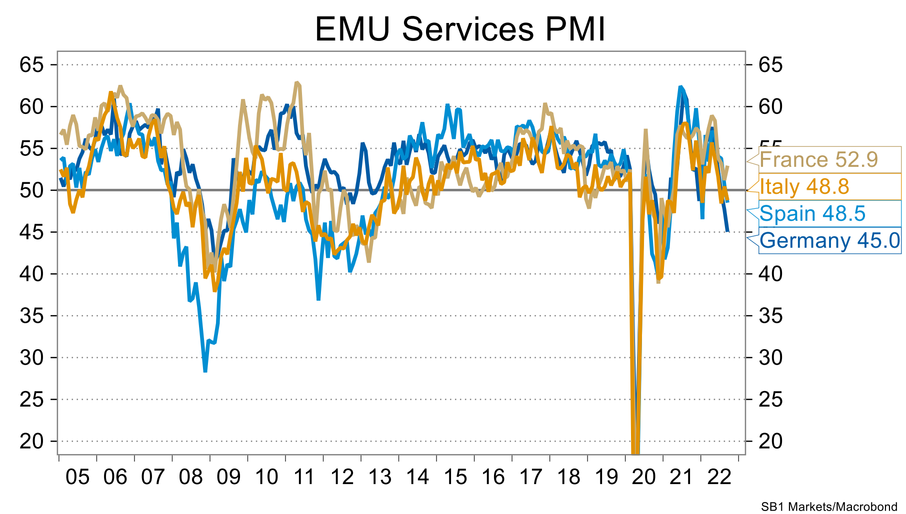
- The decline in the flash EMU PMIs was confirmed. The German and the Italian PMIs, and the manufacturing sector in general are the weak links
- The **service PMI**, **manufacturing PMI** and the **manufacturing output** index all fell in September
- The Italian manufacturing PMI was the only print above expectations, but it is still signalling contraction in the sector, and the sum of the parts for the Eurozone points to around a 0.7% contraction in GDP
- GDP growth in both Q1 and Q2 has been revised up, in Q2 up to 3.1%
- The September data bear sign of higher energy costs and higher interest rates, as well as lower global demand, as demonstrated by the lower new order indices

Manufacturing and services PMIs further down in the Eurozone

Manufacturing now below 50 in all of the big 4 – Services above 50 only in France



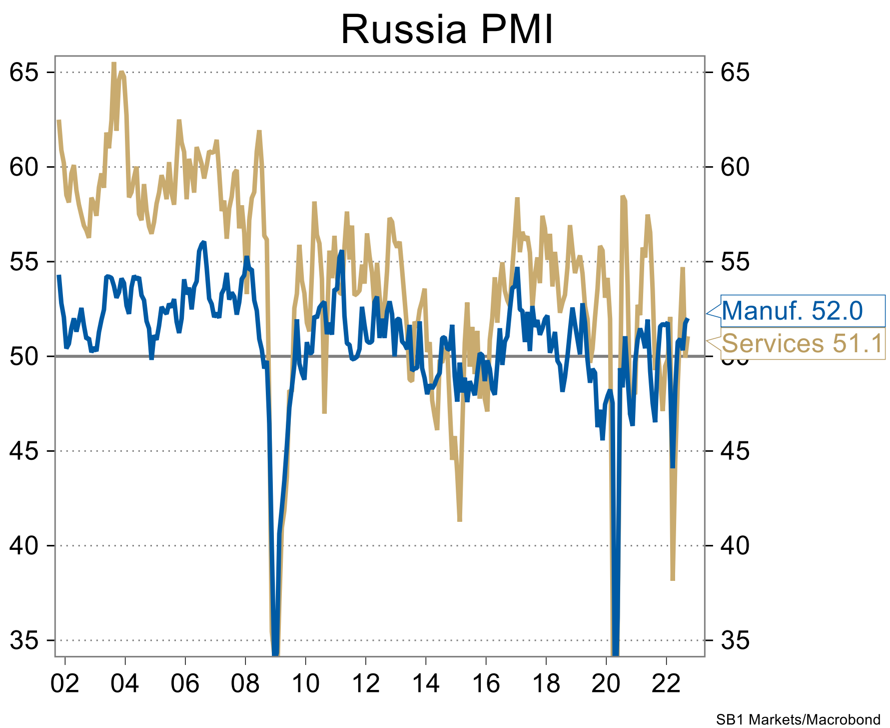


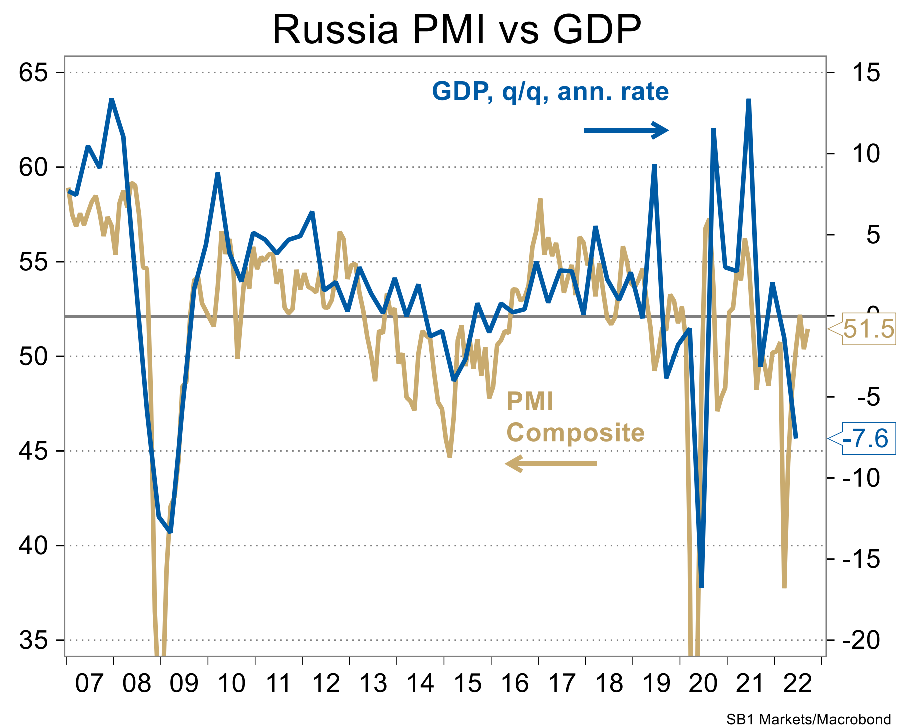


- The manufacturing output component is a warning sign. And even more the order index (which fell to the lowest level since June-09, barring the prints during the pandemic)

Russian PMIs stronger in September – the economy may have stabilised

The service sector PMI rose 1.1 p to 51.1; manuf. PMI was up 0.3 to 52.0

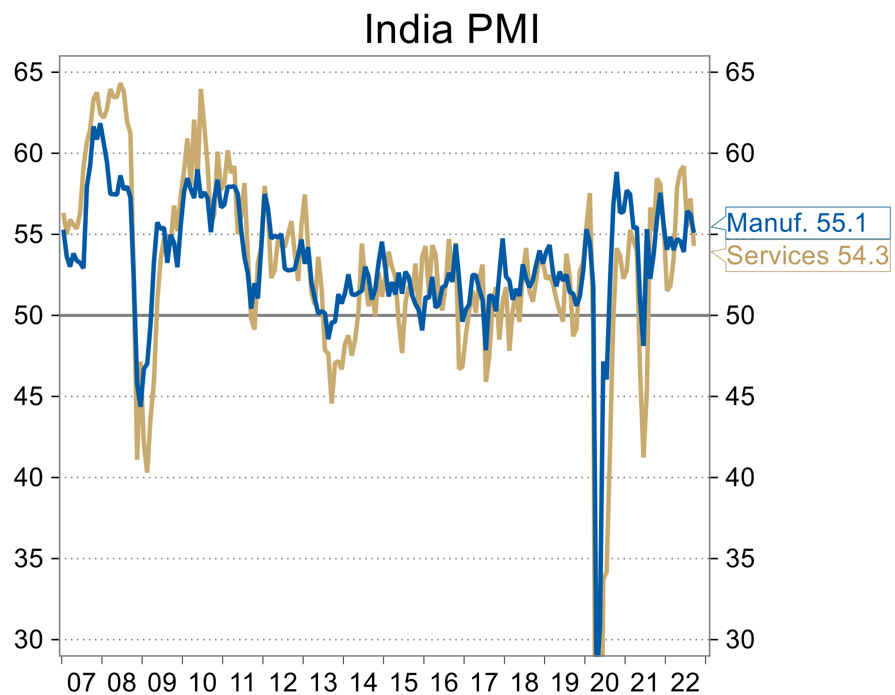




- **The composite PMI** was up 1.1 p to 51.5, which actually indicates a slight slowdown or zero growth at best (see graph to the right)
- **Reliable data from Russia** are in short supply these days. What we have? Retail sales are down 10%, auto sales are down 60%, imports have fallen sharply (based on export data from other countries). Still, industrial production is down just 4% since February even if oil and gas production is included. GDP fell by 7.6% (-2% not annualised) in Q2, far less than assumed when the war started
- **A reminder:** The PMIs are not sentiment surveys – respondents are asked about in changes in actual activity (new orders, output, employment, inventories) from the previous month

The composite PMI down 3.2 p to 55.1, as both services and manuf. declined

…but both services and manuf. PMI levels are very strong. 10% GDP growth??



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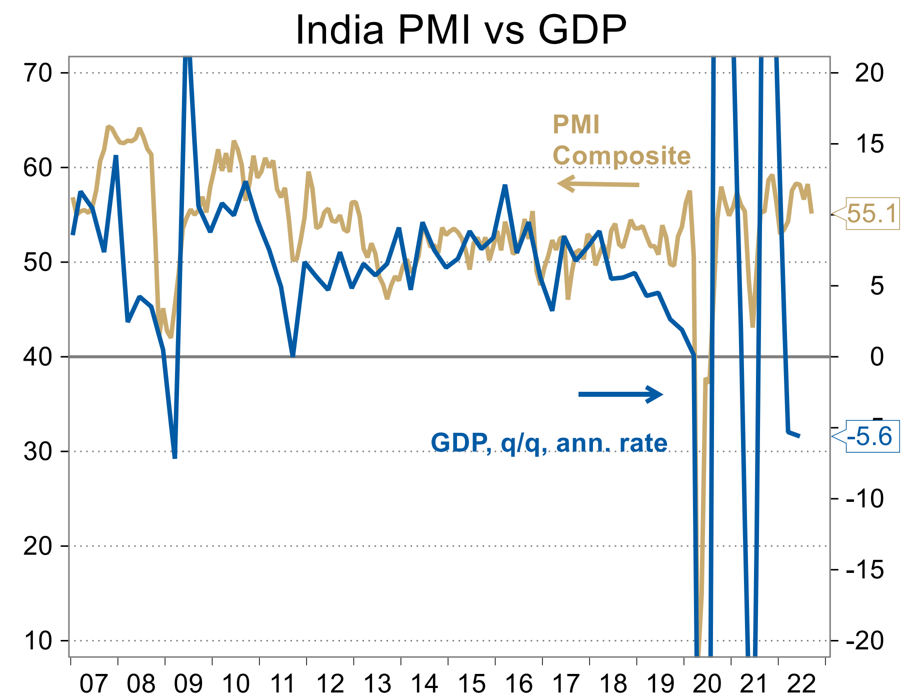

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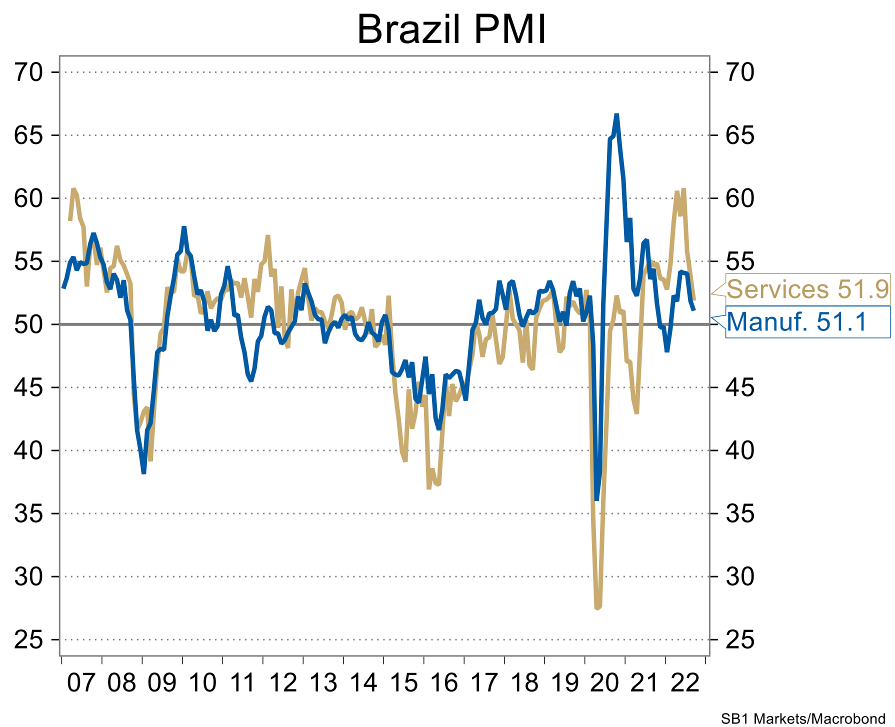
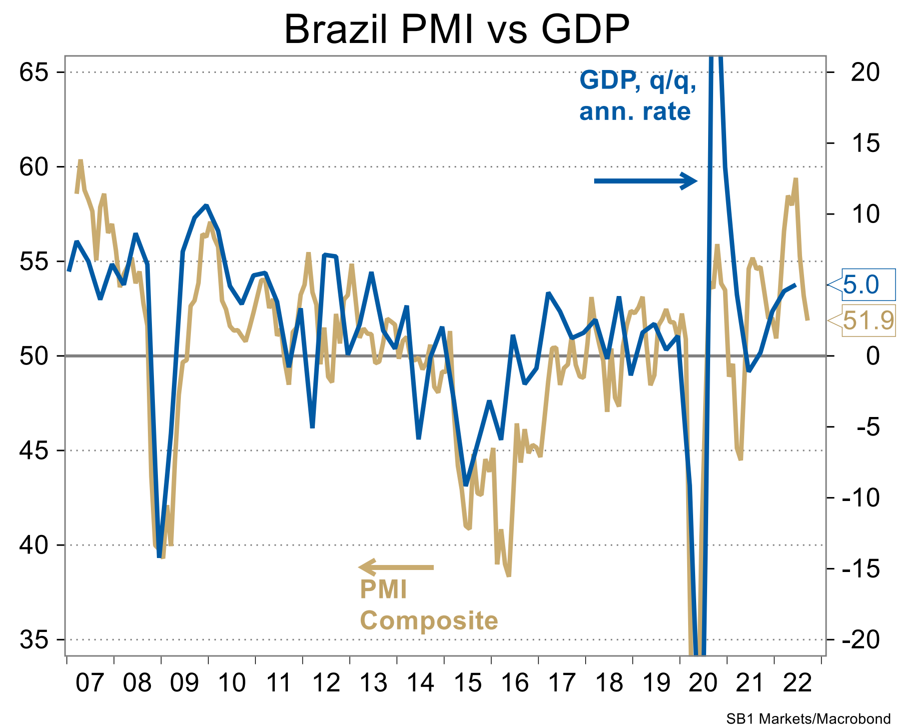
- So far in 2022, GDP has contracted! In Q2, **Indian GDP fell** at a 5.6% pace, close to the decline in Q1. The PMI signals a 10%+ quarterly growth rate in Q3 – which it has been doing for a while, at the same time as GDP growth was negative…
  - » The correlation between the Indian PMIs and its GDP has always been weak – and has been even worse during the pandemic
  - » Just for the record: Measured y/y GDP was still up in 13% y/y in Q2, up from 3.6% % in Q1

Both manufacturing and service sector PMIs weaker in September

Both are still reporting growth, and the composite PMI at 51.9 signals growth at 2.5% (with low confidence)

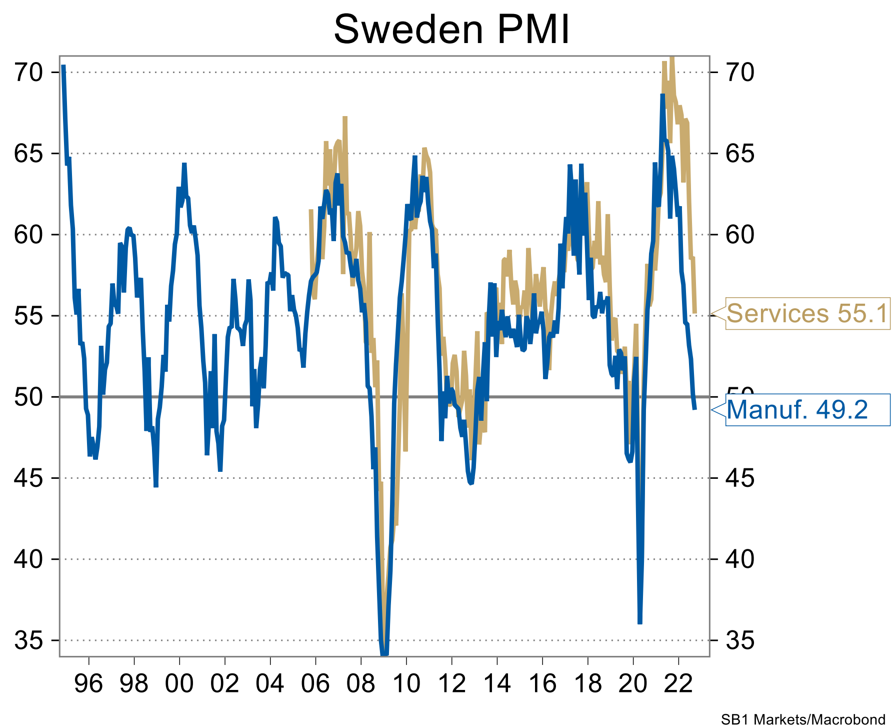


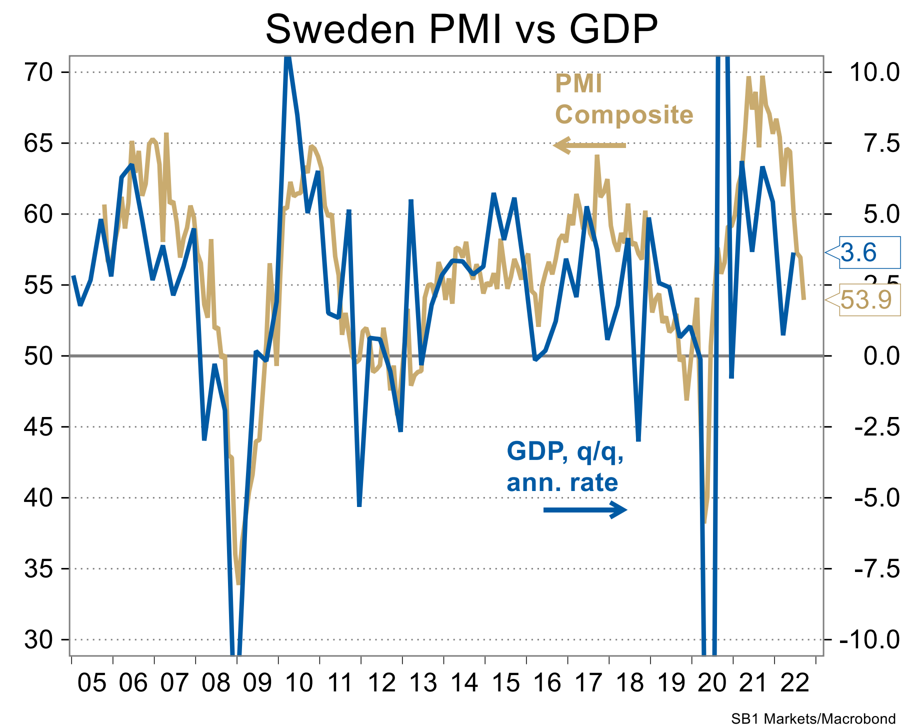


- Actual GDP growth has picked up some steam the past 3 quarters

Manufacturing PMI in contraction territory – services down but still solid

The service sector PMI fell 3.5 p to 55.1, while the manuf. PMI fell 1 p to 49.2

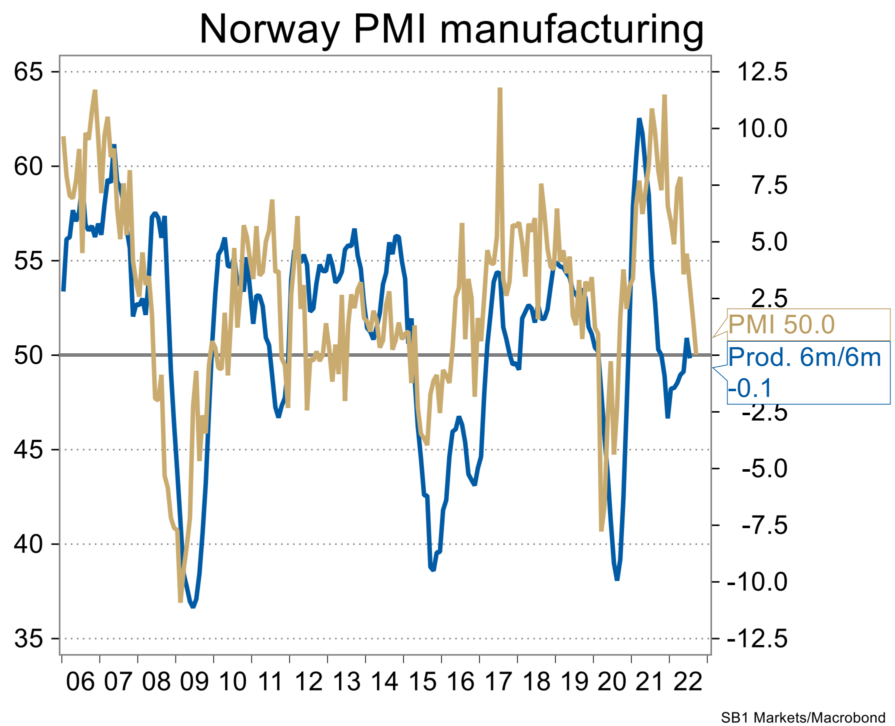


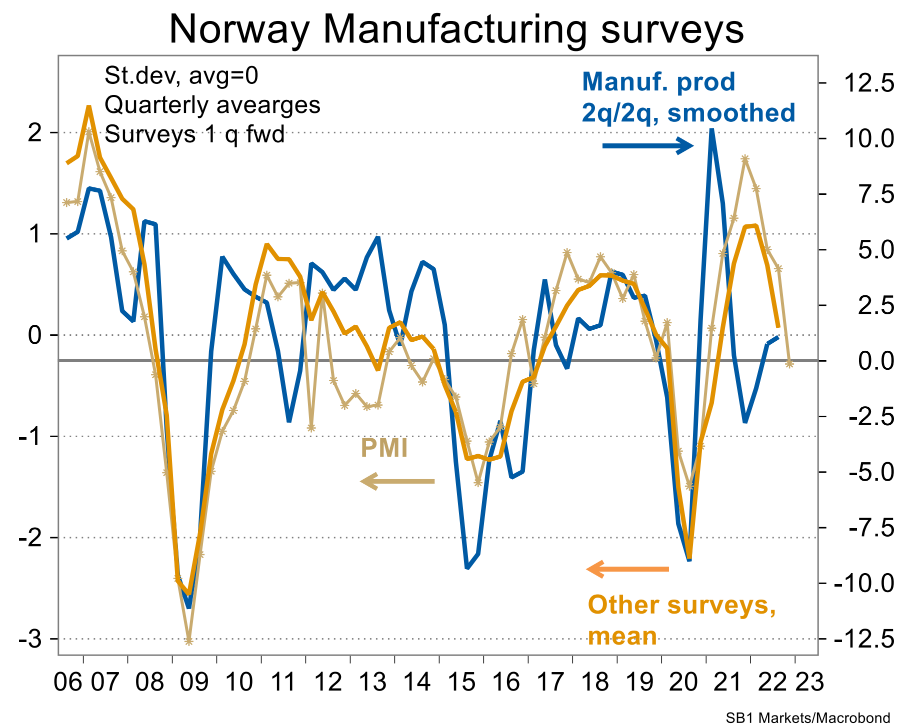


- The composite index fell 3 p to 53.9. Although the PMIs have come down recently, the service sector is at a decent level. The manufacturing PMI declined by 1 p and crossed the 50-line
- In Q2, **GDP** grew at a 3.6% pace (0.9% not annualised, and revised upward, together with the Q1 outcome). At current levels, the composite PMI is signalling a GDP growth at around 2%

The manufacturing PMI down to 50 in September

The trend is down, new orders are falling. Delivery times slow a little, input price inflation still high

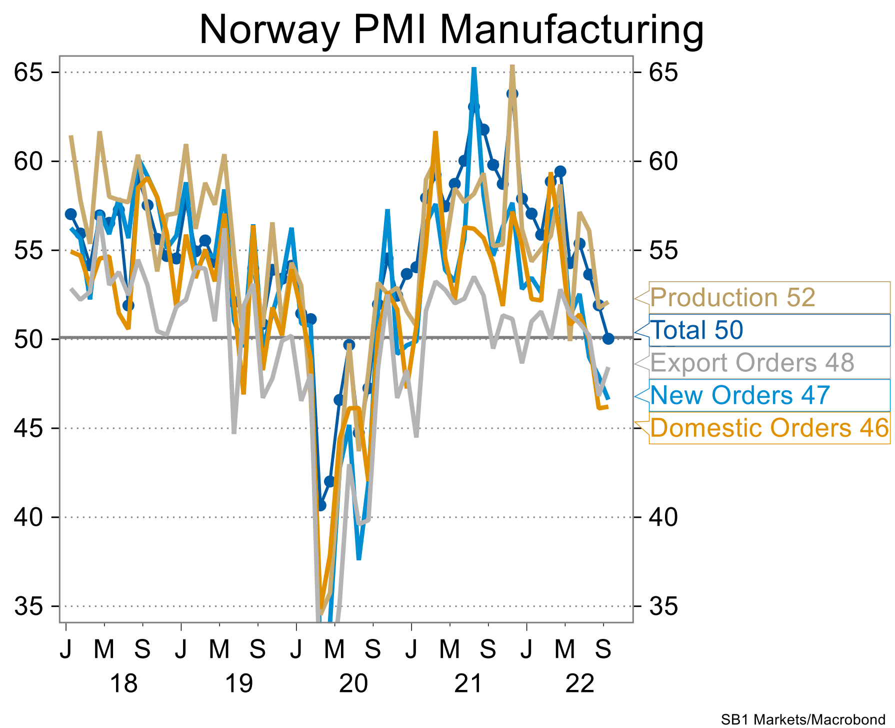


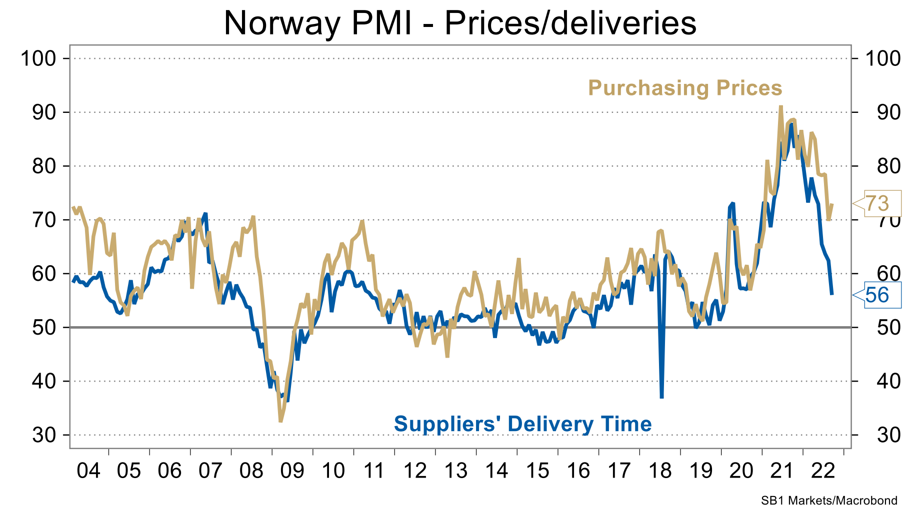


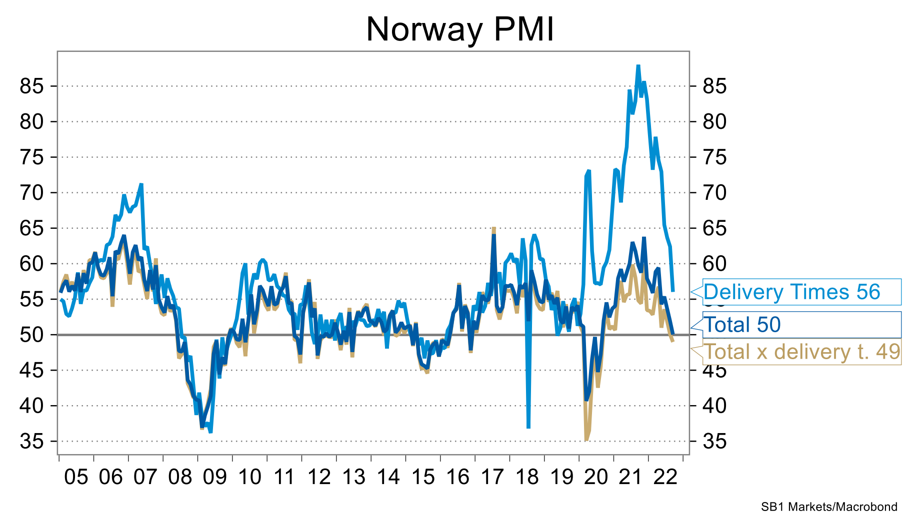
- The **manufacturing PMI index** fell -1.9 p to 50.0 in September and is trending down. The August print was revised down 0.4 p to 51.9
- Other **manufacturing surveys** are also down
- **Actual production** has been on the way down, but presented a small uptick in September

Core PMI crossed the 50-line in Sept, as delivery time approaches normal levels

Export orders are falling but at lower pace in Sept. Domestic & total orders are declining faster



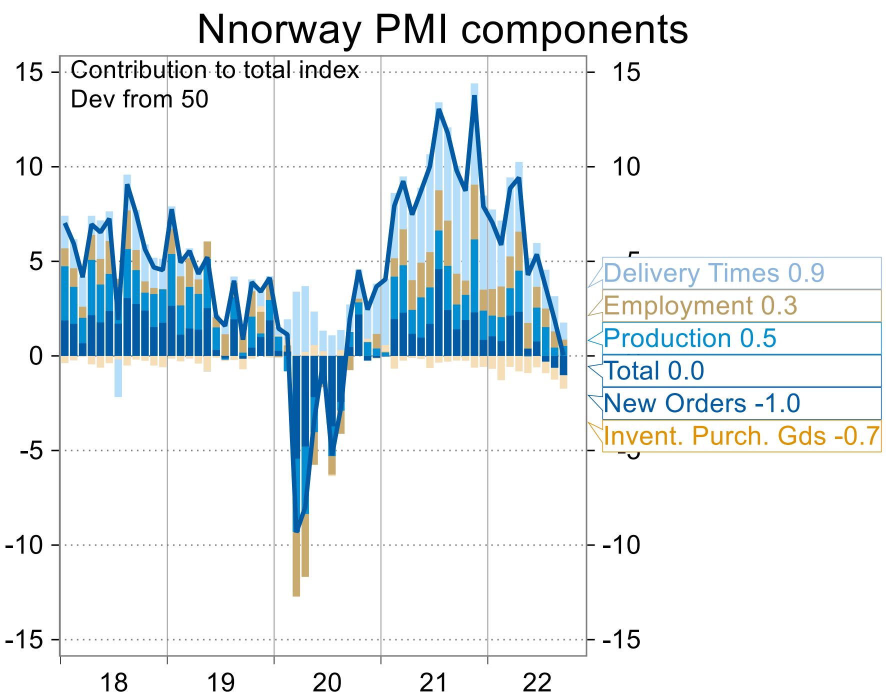




- **The input goods price index rose** by 2.3 p to 73 (!), signalling continue down to 56, and although many are still reporting of increasing prices, an increasing number of goods' prices are falling, according to NIMA/DNB
- **The delivery time index** declined by 6.3 p down to 56
- The 'core' PMI, the PMI x the delivery times index, has now crossed the 50-line

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

… But just by 0.9 p in September



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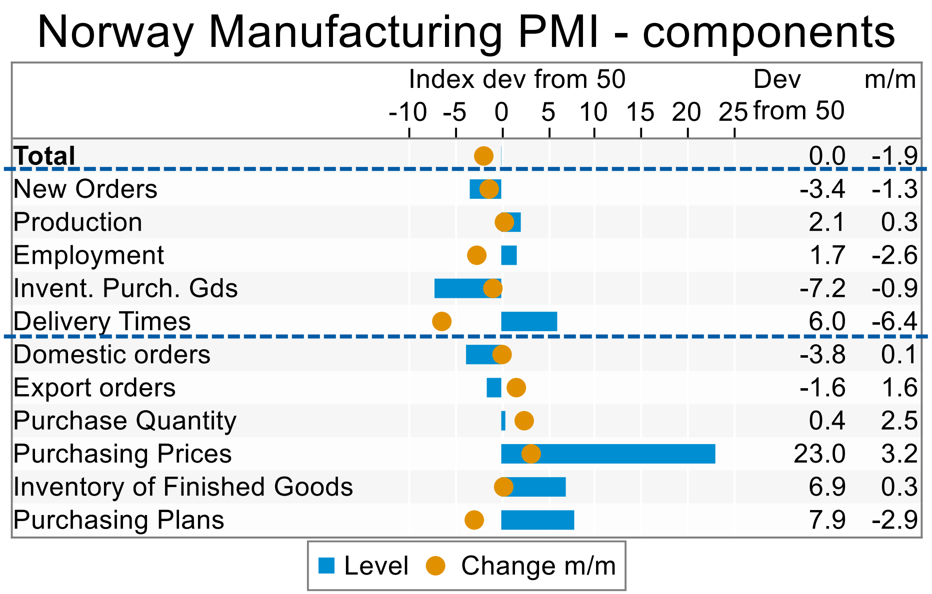

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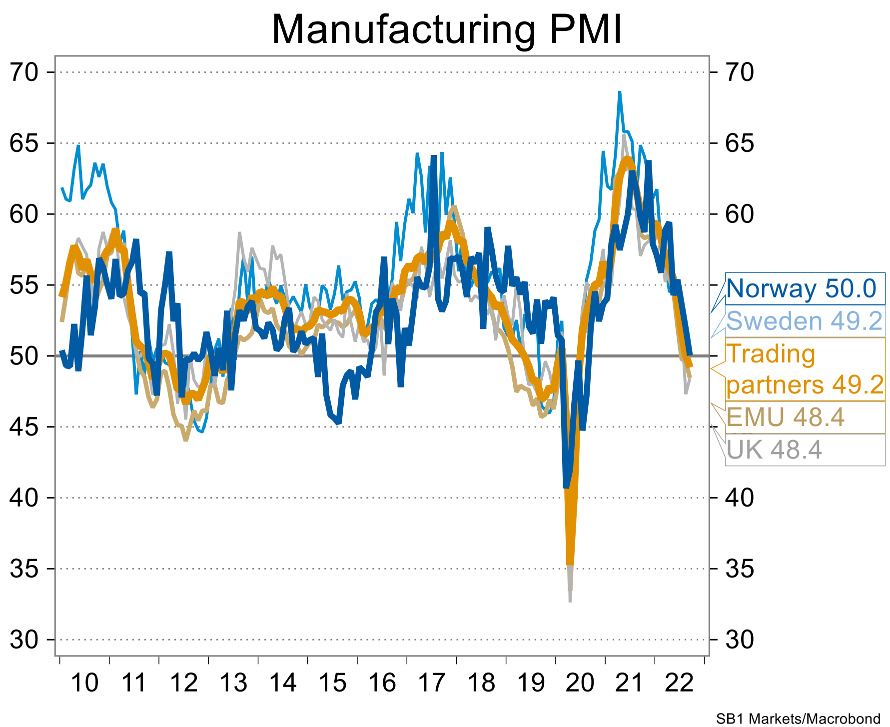
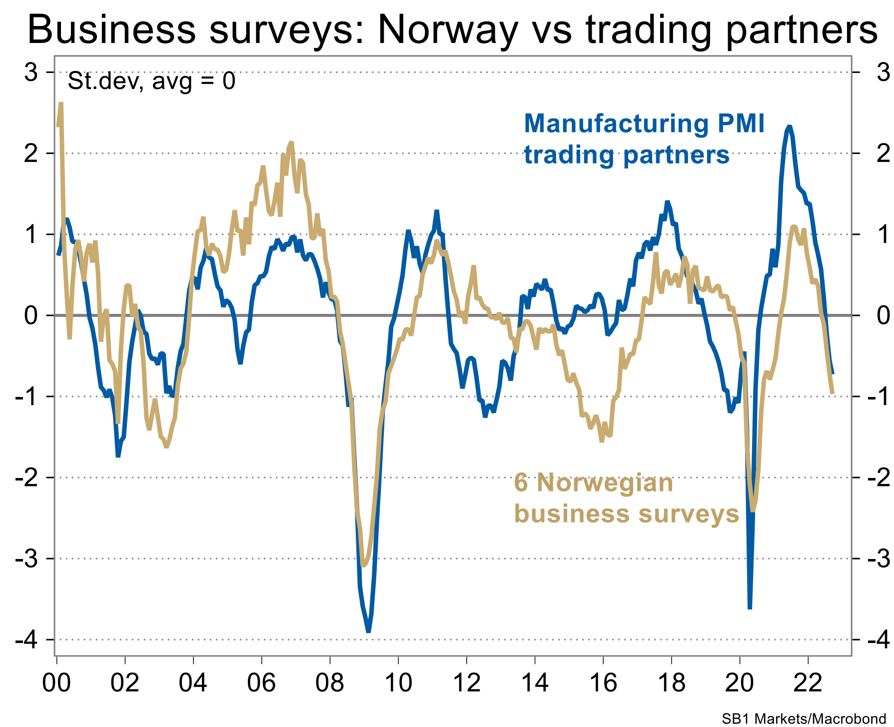
The total index is the average of the first 5 sub-indices

- Normally, the **delivery times index** has not had any significant impact on the total PMI index as the delivery times index has been quite closely correlated other components in the headline index. Post Covid, it has made a substantial difference, but is now normalising

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

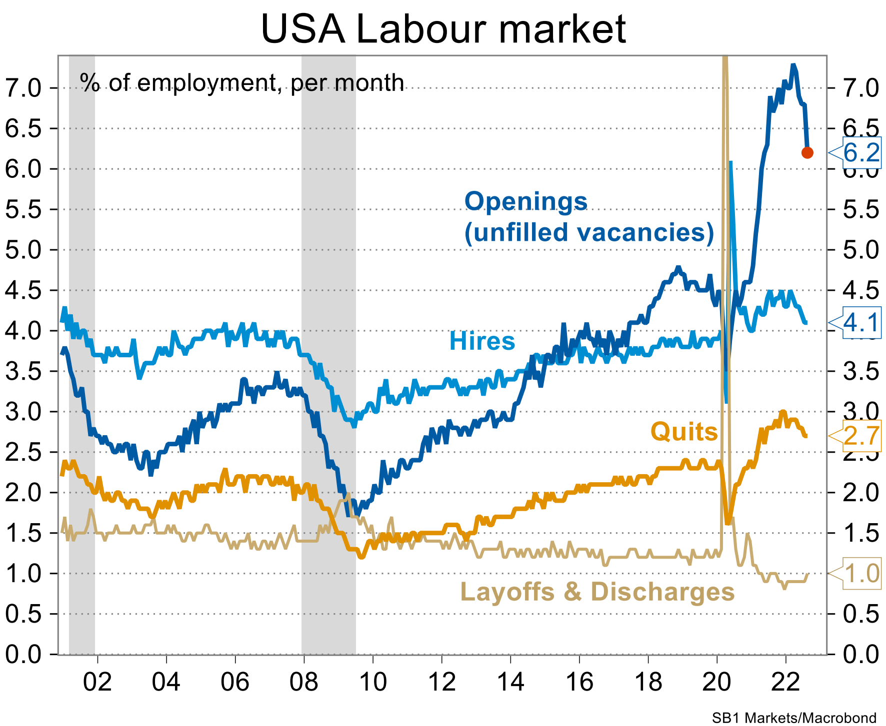
Norwegian manufacturers follow the rest of the world down





Just what the Fed could have hoped for: 1 mill fewer job openings (still 10 mill left)

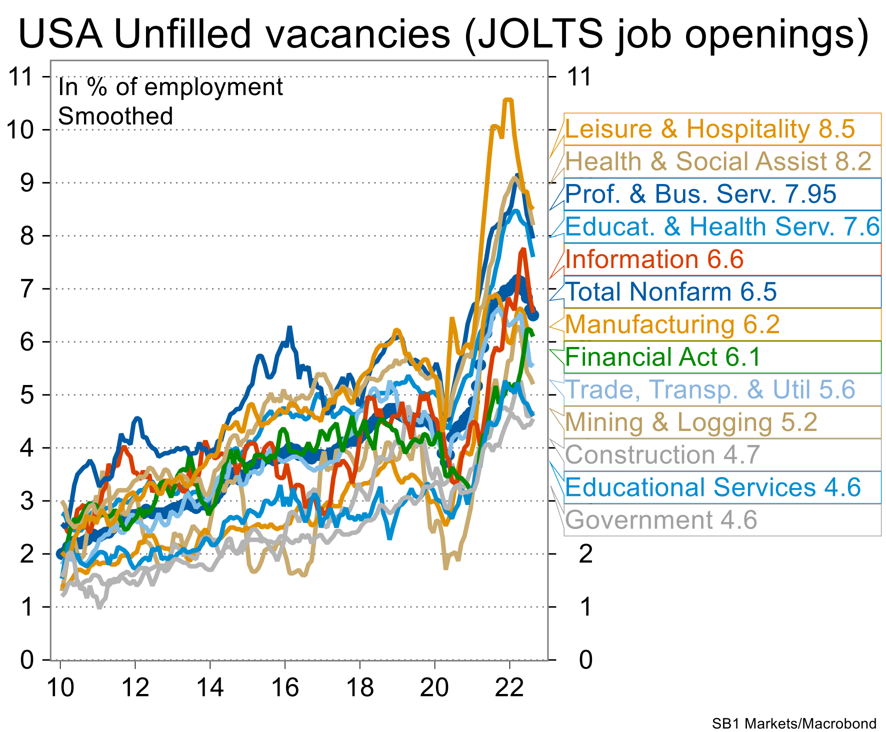
The vacancy rate fell to 6.2% in August from 6.8% in July, expected 6.6%

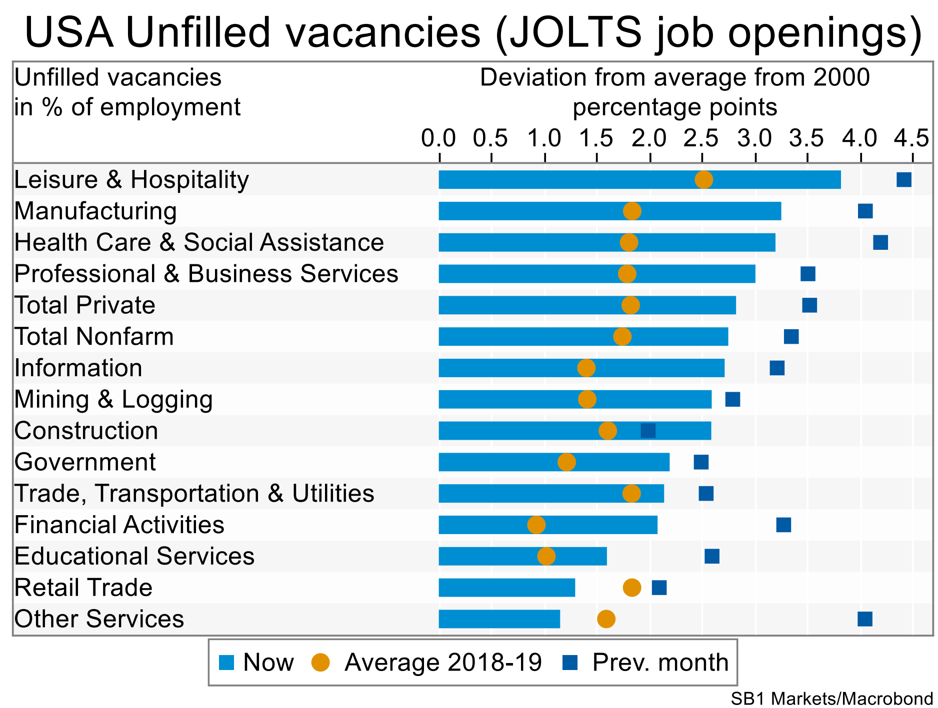


- The number of **unfilled vacancies fell by 1.1** mill to 10.1 mill in Aug, expected down to 10.8 mill. The rate (vs no. of employed) fell 0.6 pp to 6.2%
  - » This decline is the largest on record, barring the start of the pandemic
  - » The highest print ever before the pandemic was 4.7%, and the rate was 4.5% just before the pandemic hit – <u>the current level is still high – but the tide has turned</u>
- **The SMBs (NFIB survey)** reported that 46% of companies were not able to fill positions in <u>September</u>, down 3 p from August, but that number is still close to record high. These two series are very closely correlated – and both are signalling that the labour market is still very tight, but might be easing
- **New hires** <u>rose</u> 0.1 mill to 6.3 mill in August equalling 4.1% of the employment level (July was revised slightly up), The trend is down but the <u>level is high</u>
- The number of **voluntary quits** rose 0.2 mill to 4.2 mill, equalling 2.7%. However, the trend is down, signalling that workers have become somewhat more cautious leaving their current jobs
- **Layoffs** equalled 1.0% of employment in August, up 0.1 pp from July – still not signalling any wide spread
- **In sum:** The tide has turned, but the labour market is still tight, and it is unlikely that wage inflation will come down to a sustainable level without a substantial further weakening. Job openings are leading unemployment by some few months, though not by a stable lag (but the correlation is high). Thus, expect the unemployment rate to turn up, at least before Christmas

Most sectors are reporting significantly fewer vacancies

However, almost all sectors report more vacancies since before the pandemic





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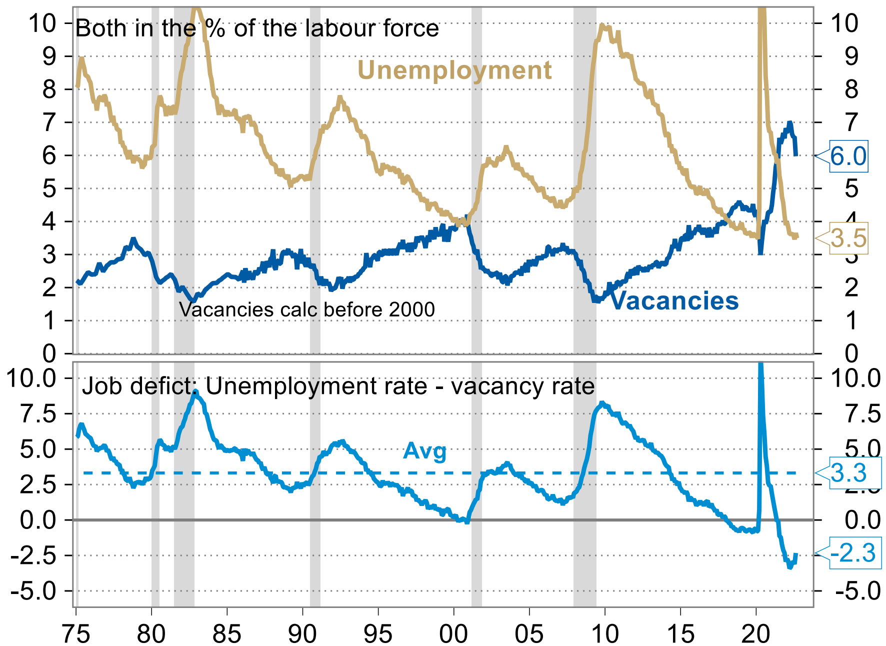
Layoffs fell 'more' than unemployment rose in August (and unempl. fell in Sept)

Will vacancies return to a normal level without an increase in unemployment (= a recession?)

USA Labour market



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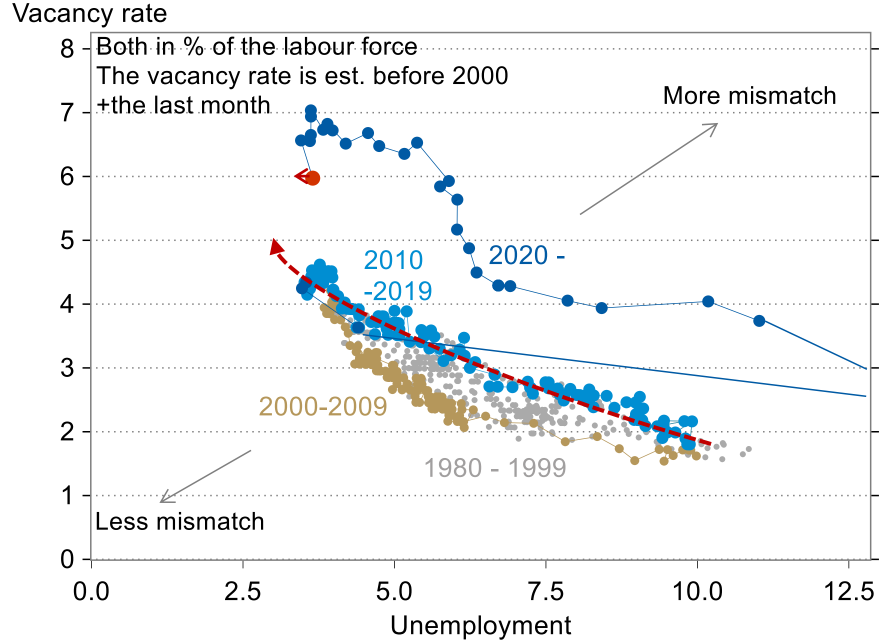
USA Unemployment vs vacancy rates



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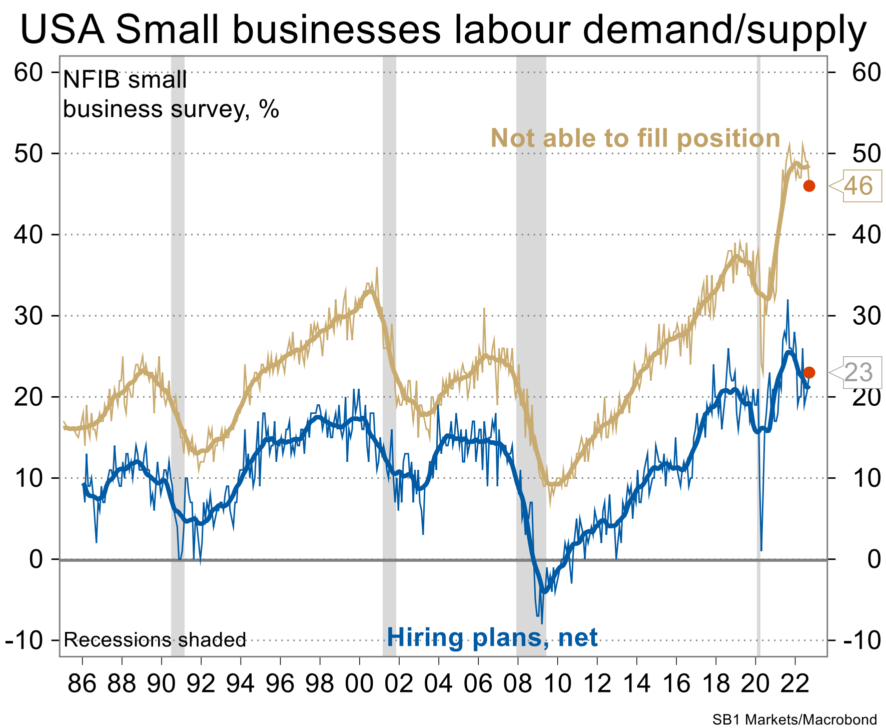
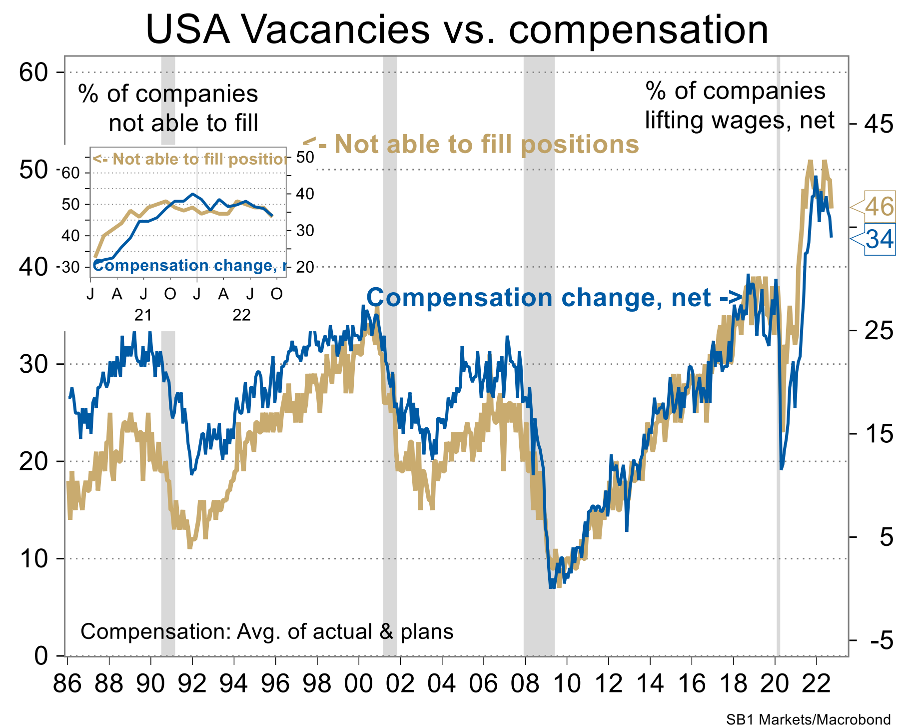
- In principle **vacancies may be reduced without pushing the unemployment rate** up (aka recession), as the vacancy rates is so much higher than normal. But even if the August data were positive (vacancies fell sharply while unemployment rose just 0.2 pp, and in Sept, the unemployment rate fell to 3.5% (illustrated by the red arrow at the chart to the right)) we think it would be hard to achieve, over time
  - » An economy that reduces overall demand for goods and services, and thus demand for labour, will hit both companies that have vacancies, and those which do not. The labour market is not so flexible that redundant labour in one company will seamlessly be transferred to fill still vacant positions in other companies/sectors/regions. <u>If such a transfer had been easy, it would have taken place already, and the unemployment rate would have been lower</u>

SMEs find it a little less difficult to fill vacancies but report high hiring plans

Some fewer companies are planning to lift wages, but still more than anytime before (x prev. months)





- 46% of SME's report they are **not able to fill open positions**, down from 49% in August. The share is still close to the peak level
- 23% of companies **plan to hire**, up 2 pp from August, still below the 32% at the peak in Aug-21. The trend is down but the level is unusually high
- 34% of companies report that they **plan to lift compensation** in the coming months, down from 36% in August. The peak was at 40% last December. Before that, the ATH was at 27%, while the average – signalling no acceleration in wage growth – has been at some 20%
- <u>There is still a way to go…</u>

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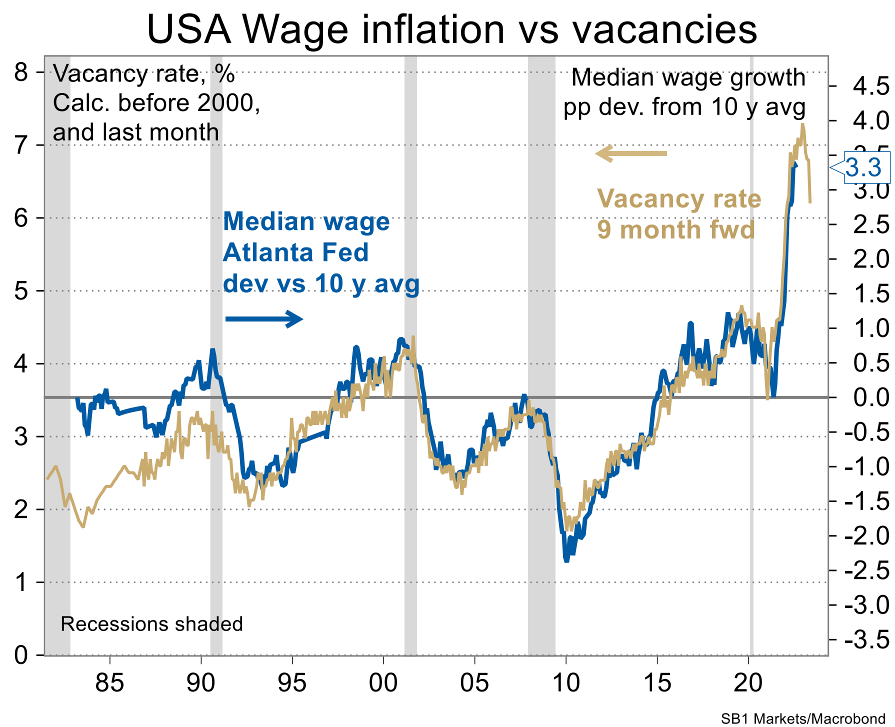
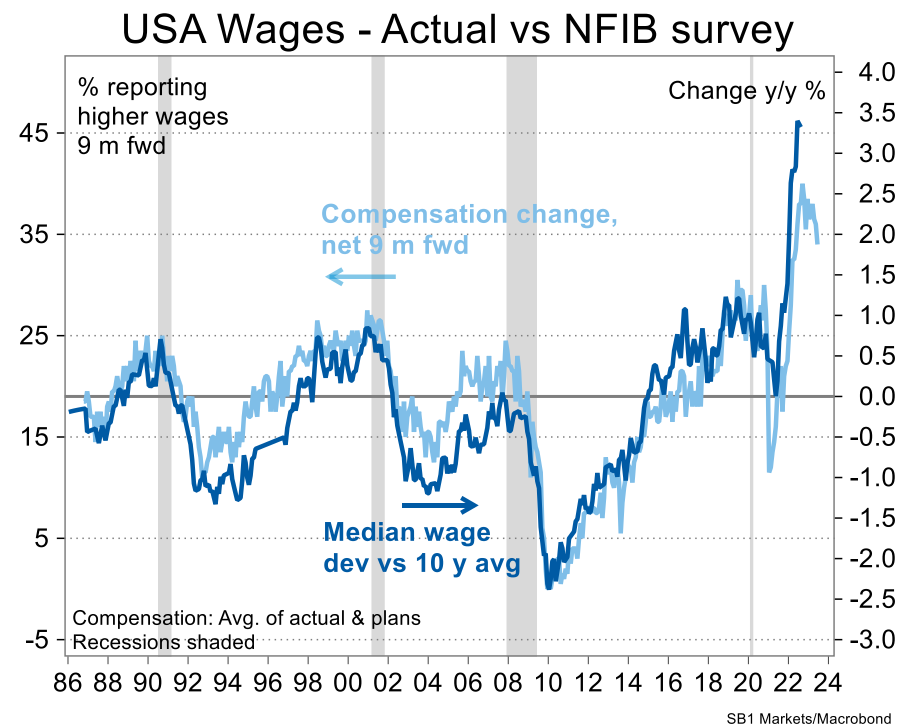
Fewer vacancies are signaling lower – but still far above normal – wage inflation

The same goes for companies' compensation plans



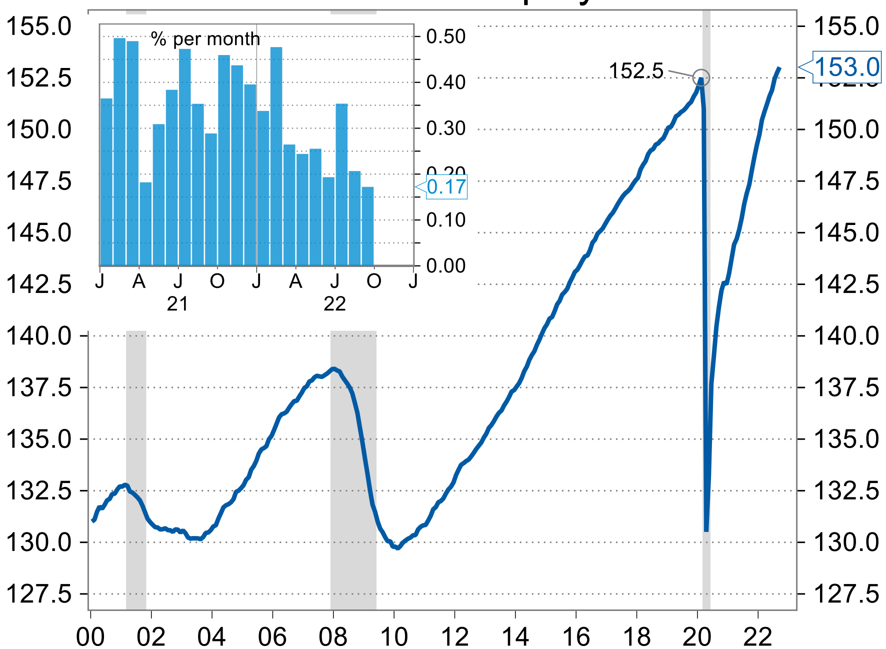


- **Our 'Phillips curve'** based on the vacancy rate signals a further increase in wage inflation the coming quarters even if vacances may have peaked, as the vacancy rate leads changes in wage inflation quite consistently by 3 quarters. However, we would not be surprised if the current extraordinary high wage inflation turns out to be the peak
  - Companies (SMEs) compensation plans signal continued high wage inflation but not faster than the present
- **Wage inflation** has already accelerated by almost 3.4 pp vs the 10 y average (Atlanta Fed median) and cannot possibly generate a 2% price inflation rate over time. This is Fed's main headache, not the current high CPI inflation print. And it will become the stock owners' headache too, of course
- **Demand for labour has to be reduced sharply in order to get wage inflation back to a sustainable level! That's the recipe for an unavoidable RECESSION**
  - Check under which circumstances wage inflation slows on the charts above (hint: find the shaded areas, follow the blue wage line - as well as the vacancy rate or the wage hike plans ☺). Fed will not be able to control inflation if demand for labour is not cut sharply. Exactly what Powell told us at the past couple of press conferences!

Employment growth slows but the unempl. rate down to rock bottom again

Wage inflation does not accelerate but remains far too high to reach the 2% inflation target

USA Nonfarm employment



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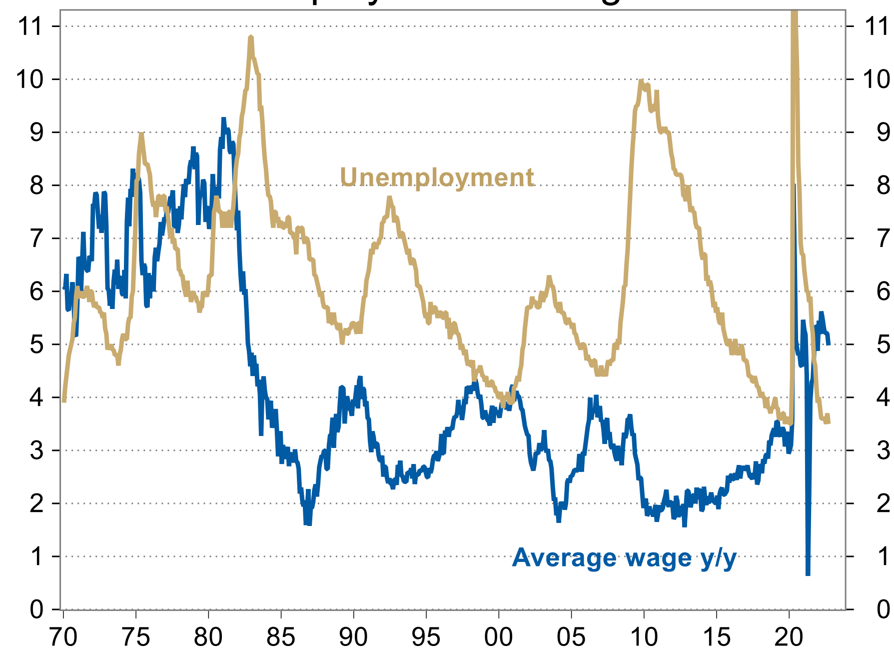
USA Unemployment vs wage inflation



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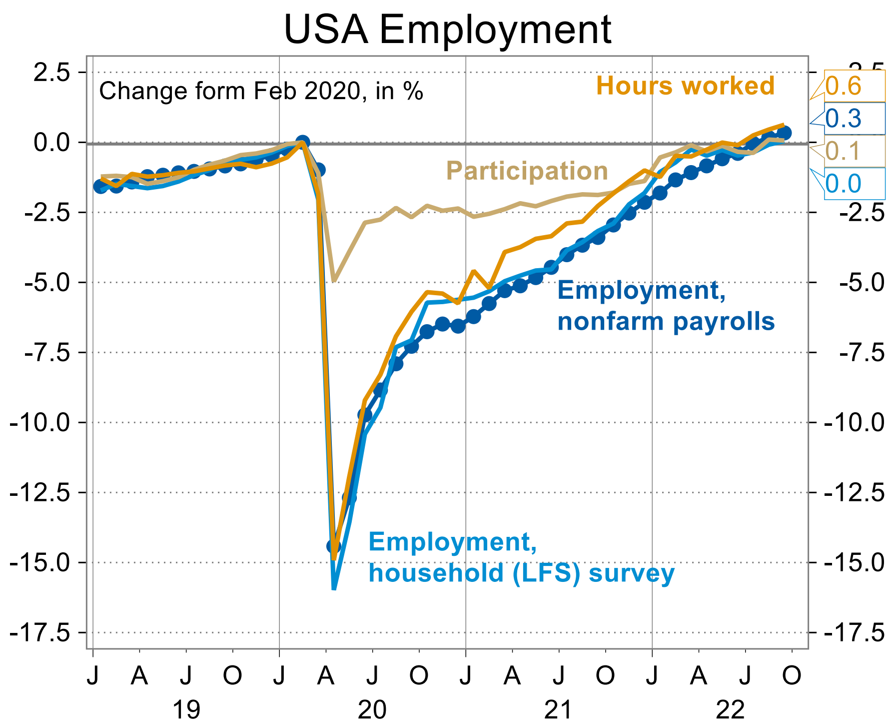
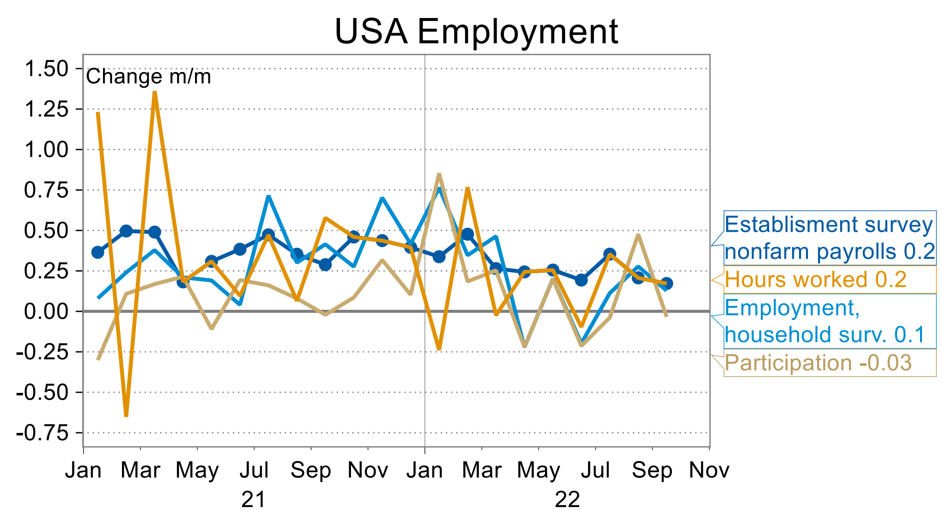
- **Nonfarm payrolls** rose by 263' in Sep, expected 315' (no important revisions), and growth is gradually slowing. The LFS employment rose by 204'. The **employment rate** was unch. at 60.1% and has flattened since March – not a signal of strength
- **The participation rate** decreased by 0.1 pp after the 0.3 pp surge in August. At 62.3%, the level has been flat so far this year. The unemployment rate fell by 0.2 pp to 3.5%, expected unchanged. The FOMC Q4 forecast at 3.8% is not far away, but unemployment moved in the 'wrong' direction in September… which the markets figured out Friday afternoon
- **Wages** rose 0.3% in Sept, as expected. Measured 3m/3m, wages are up 4.8%. The annual rate fell 0.2 pp to 5.0%, as expected. Before the pandemic, average wages rose by 3¼% in 2019, and well below 3% in the years before, and the wage level is now 4.6% above the pre-pandemic trend
- The unemployment rate is too low, and wage inflation is far too high. The FOMC can still 'keep at it'

The labour market is back to the pre-pandemic starting point

... Before we adjust for growth in population since early 2020



- **Nonfarm payrolls** (employees) are now 0.3% above the Feb '20 level, while **total employment** measured by the **household survey** (LFS/'AKU') is unch., and it has flattened since Q1. The survey data are more volatile the payrolls stats, but the two measures are quite similar over time. The **employment rate** is 2.3% below the pre-pandemic level
- **Labour market participation** is 0.1% above the Feb-20 level. **The participation rate** was reported down by 0.1 pp to 62.3%, still down 2.3%
- **Aggregate hours worked in private sector** gained 0.2% in August, due to the increase in employment



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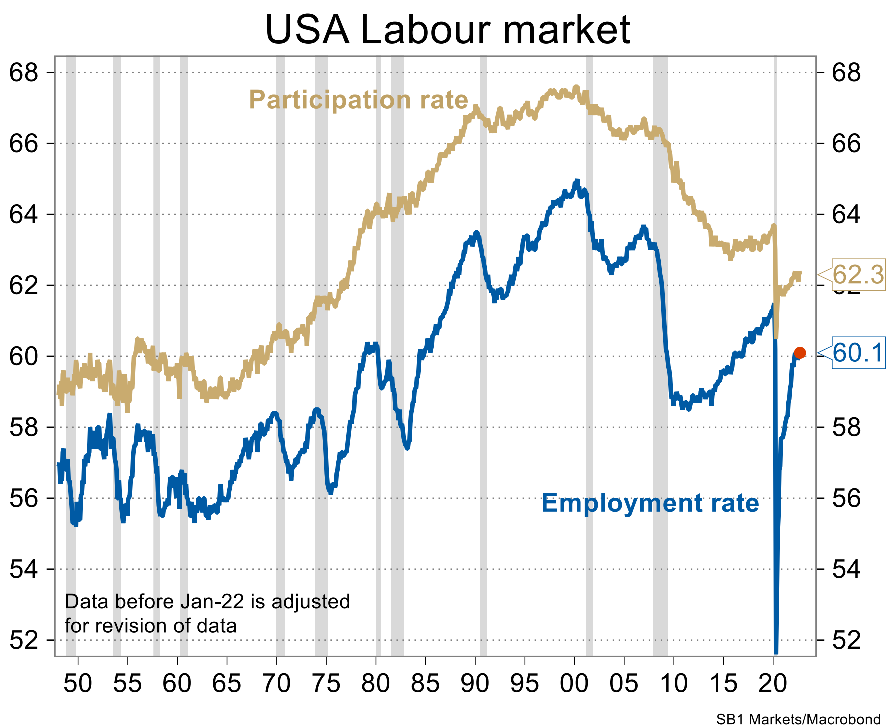
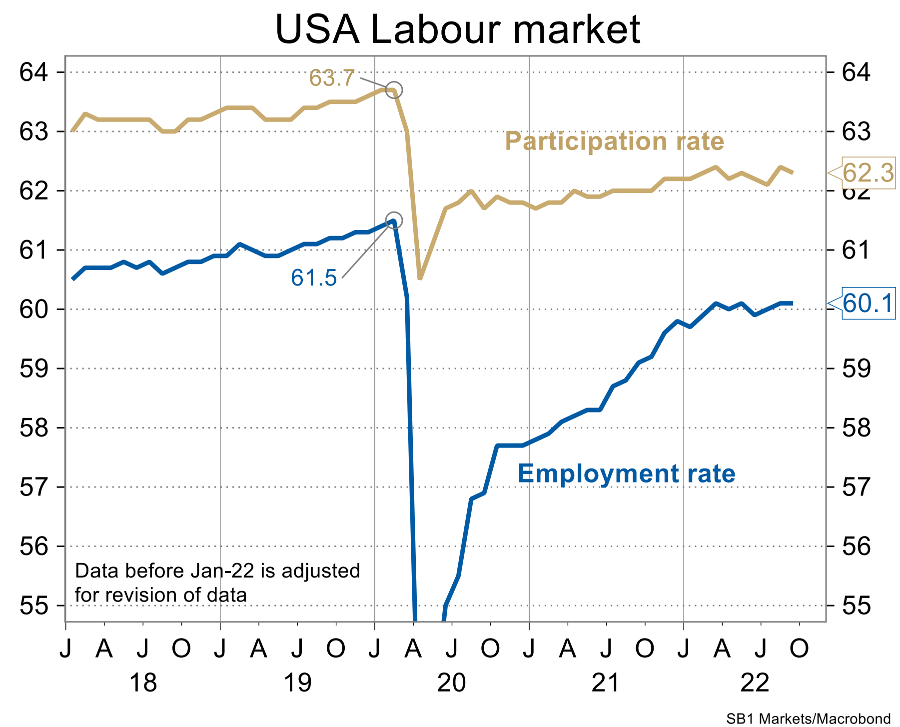
Labour force survey: The participation rate down, the flattish in 2022

The employment rate unchanged in September – and the unemployment rate fell





- In August, **the labour force participation rate** declined 0.1 pp to 62.2%, expected unch.! The participation rate has not climbed further in 2022, even if demand for labour has been – and still is strong. The participation rate is 1.4 pp (2.3%) below the pre-pandemic local peak – which again was way below the pre-IT bubble peak, in year 2000 – as the population ages (*check next page*)
- **The employment rate** was flat at 60.1%. The short term trend is flat too, as growth in employment has slowed. This rate is 1.4 pp (2.3%) below the pre-pandemic local peak

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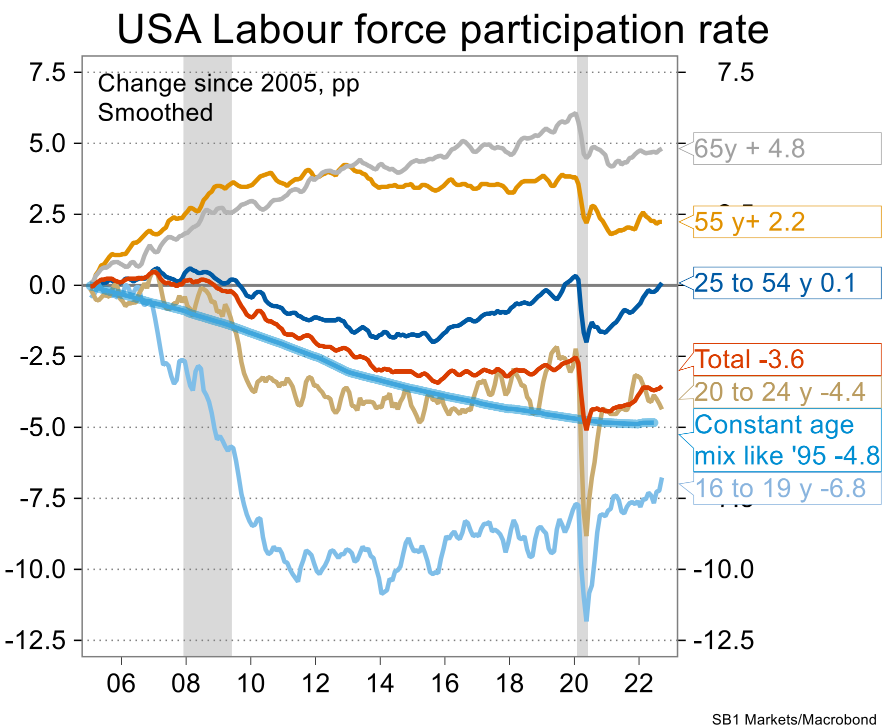
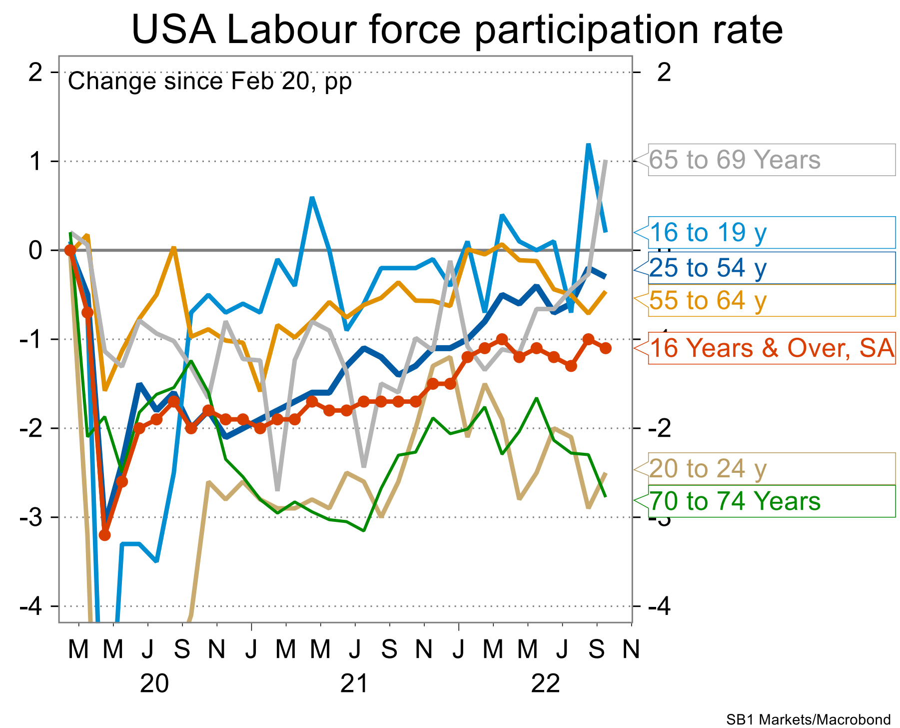
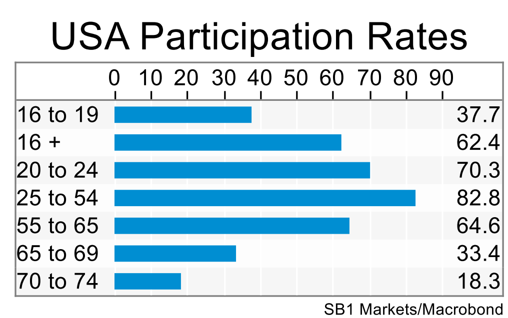
Participation rates: Core age groups almost back to pre-Covid & pre-GFC levels

Thus, the core reserve may be limited. The 65+ segment seems hard to get back



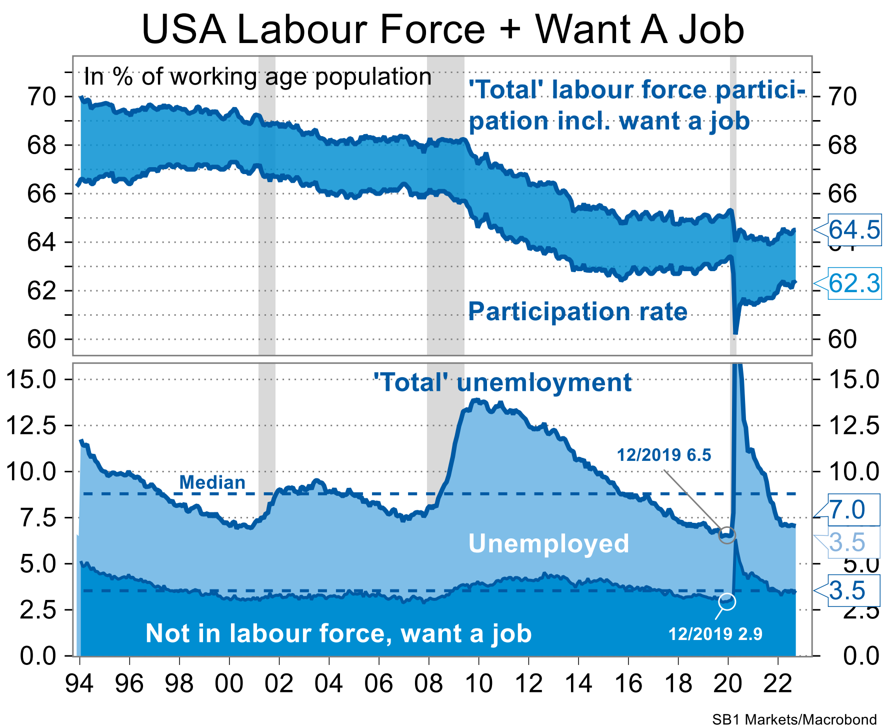


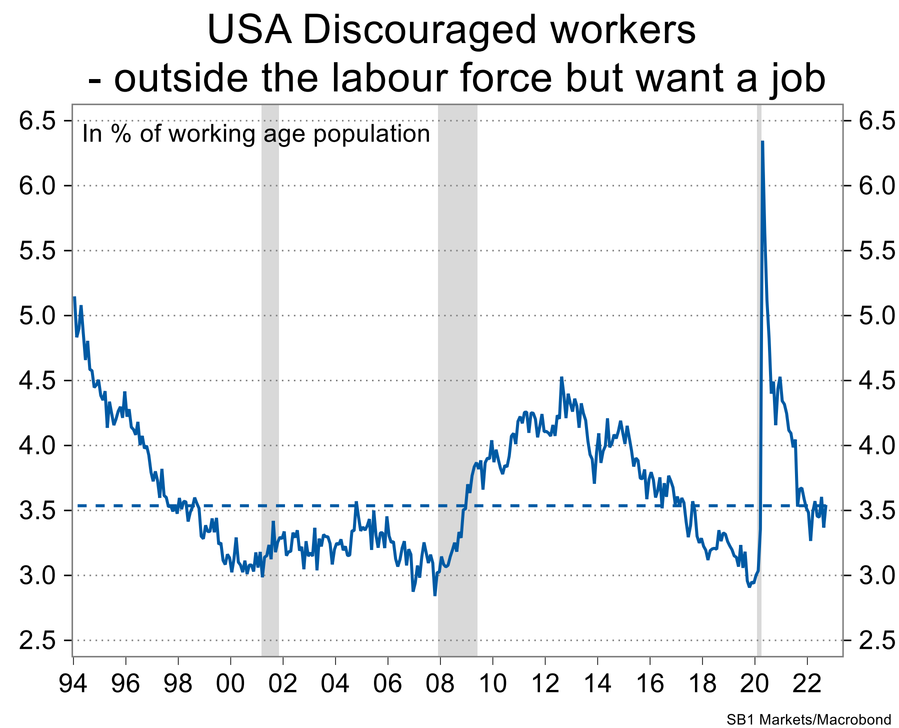
- The **participation rate** among the 25 – 64 y group is now almost back to the level from before the pandemic. The 20 – 24 y group remains well below. The 65+ group is still below the early 2020 level
- As the US population is aging, a decline in the average participation rate over time is no surprise. The chart above illustrates the impact. The thick light blue line illustrates the participation rate if each group kept their participation rate at the 2005 level. The decline is due to the larger old cohorts



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

These outsiders equal 3.5% of the labour force, equal to the historical average

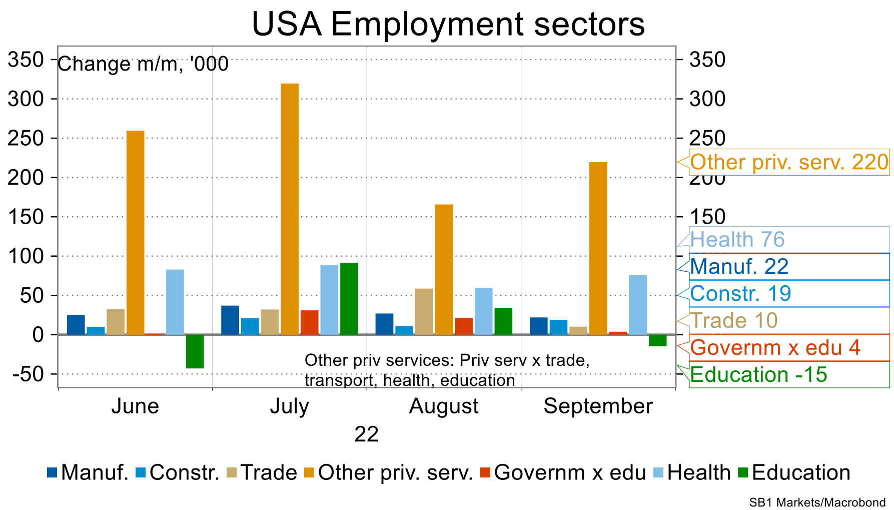


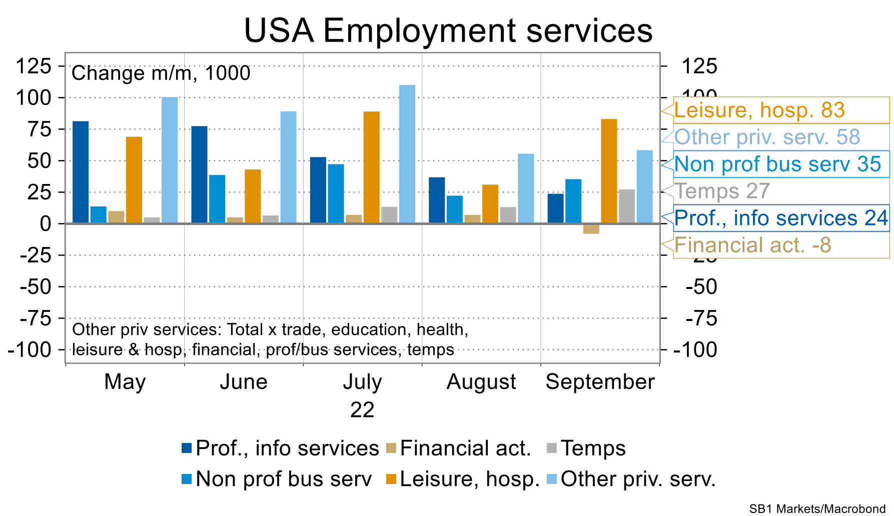


- Normally, the ‘discouraged workers’ rate is lower than average in booming times. Those who sat they cannot work due covid now constitutes just a small fraction of the 3.5% rate
- Given the present high vacancy rate it seems to be rather challenging to squeeze this part of the population into the labour market (qualification mismatch etc.)

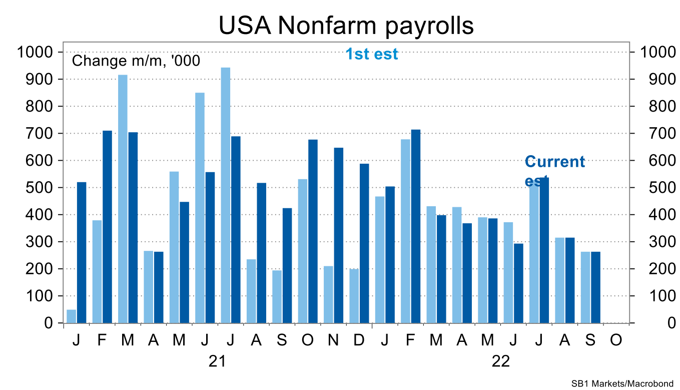
In September: Solid growth in most sectors, services in the lead – as usual

The financial sector, and education the only main sectors down



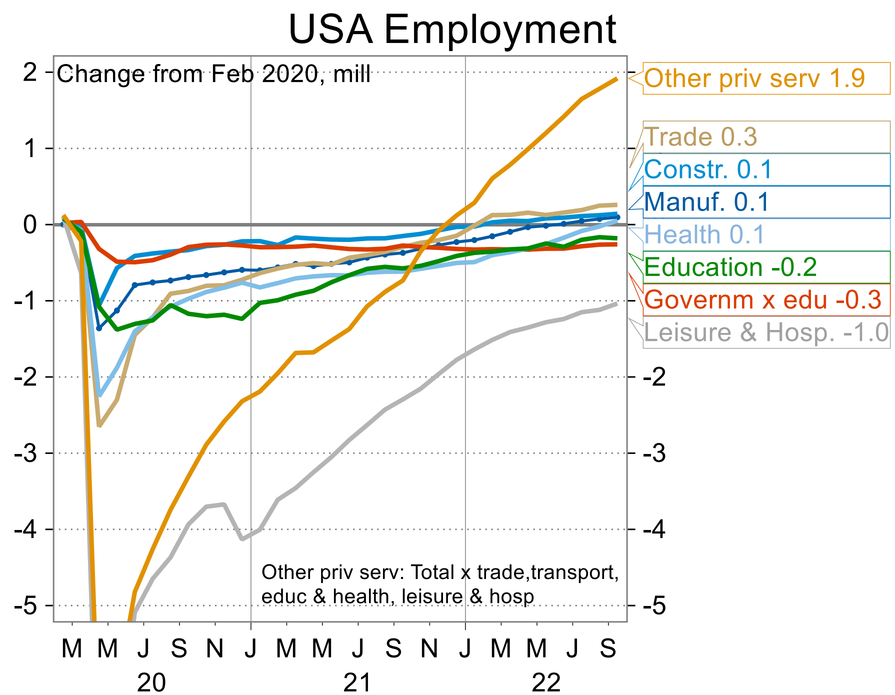


- **Last month:**
  - **Leisure & hospitality** (restaurants ¾ of the total, hotels, parks, gambling, arts++) added 83' jobs, above the average over the previous months
  - **Trade** added 10' jobs but growth will likely, alongside flattening retail sales of goods, come down
  - A broad increase in payrolls in other **private services**
  - **Manufacturing** added 22'; growth is slowing but it is still higher than normal
  - **Construction** sector employment up by 19', less than normal, but still higher than construction activity suggests. A decline in employment is quite likely
  - **Education** (private & public) down by 15'
  - Employment in **government** (ex education) rose by 4', better than normal – and growth has turned positive recently



Vs. Feb-20: Several private services are up, but leisure/hospitality still down 6.7%

Trade, manufacturing and construction are back to their pre-pandemic levels



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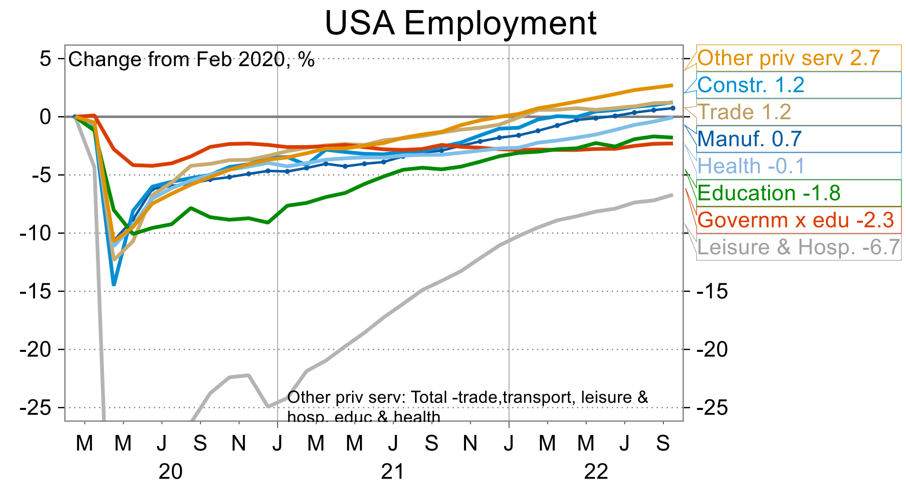
- Recent months, underlying growth (3m/3m) has slowed in manufacturing and in 'other services' – others are reporting faster growth



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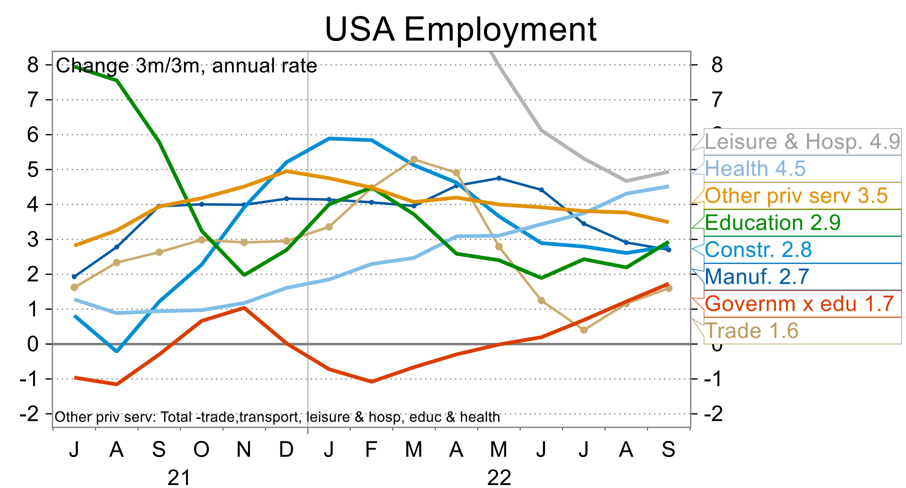

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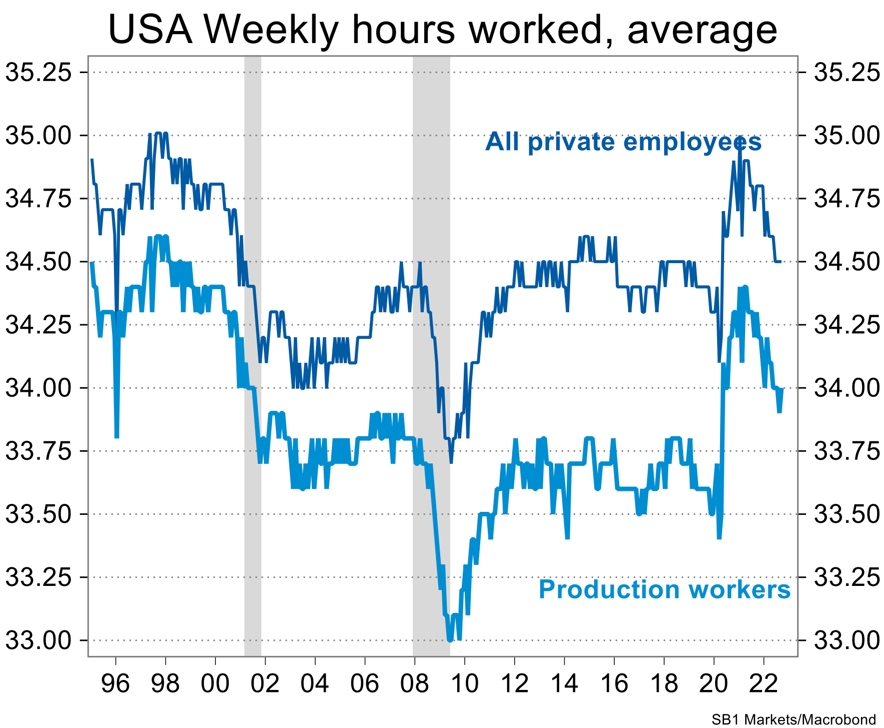
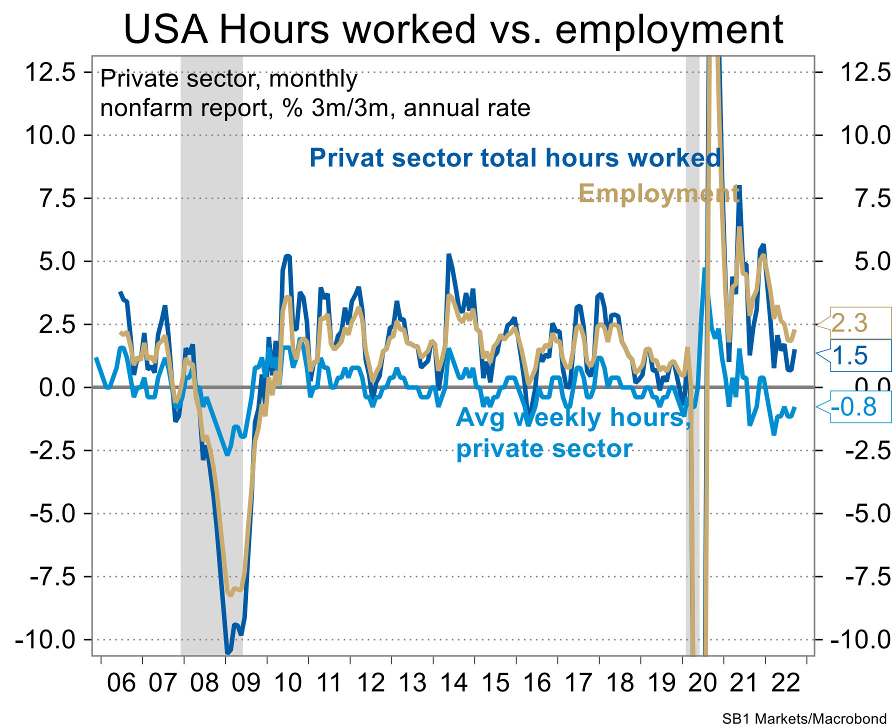
Average weekly hours is trending down, but stabilised in September

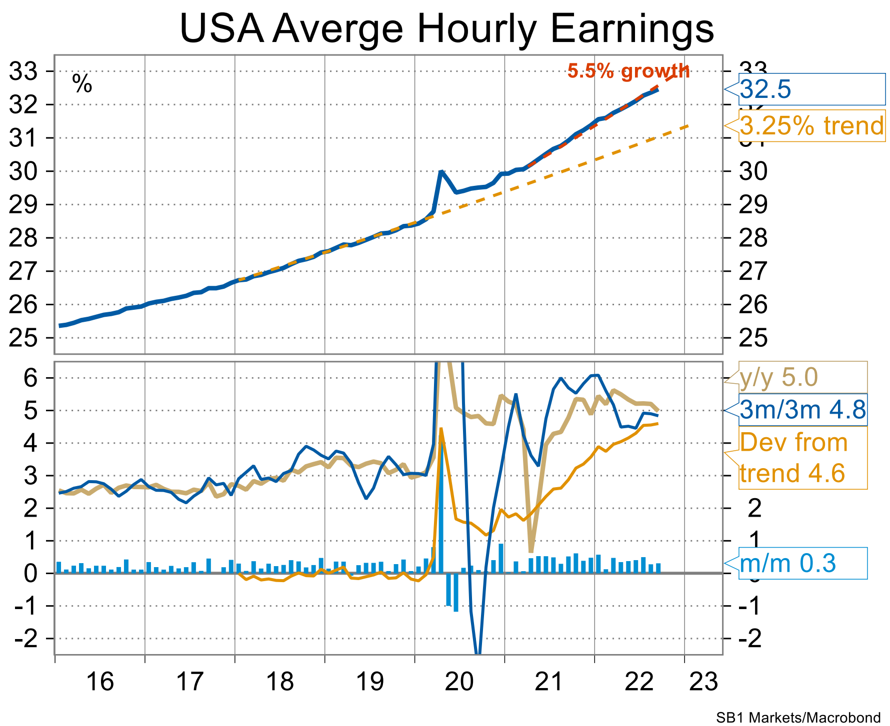
The decline from Nov-21 is strange, given lack of labour. Total hours worked up at a 1.5% pace in Q3

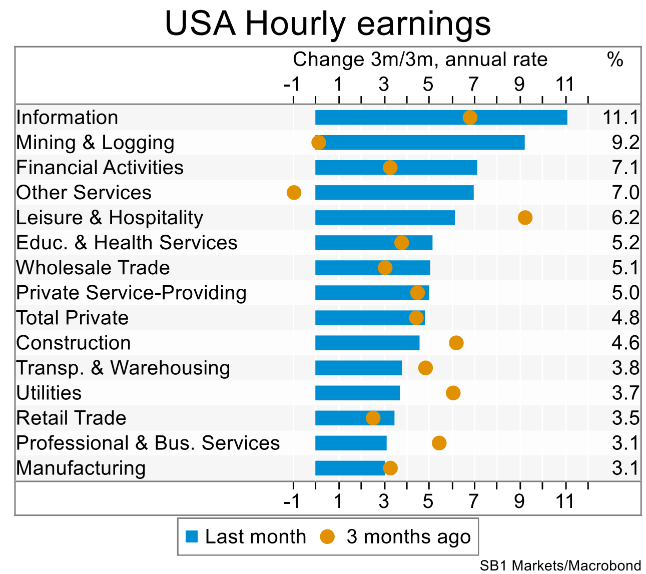


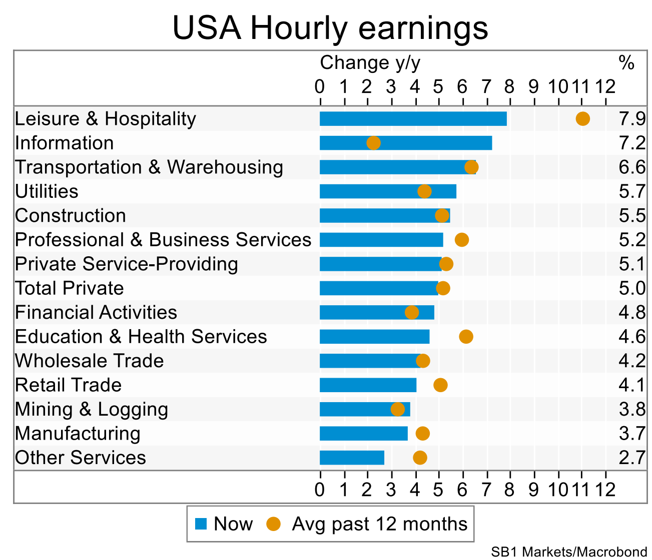


Wage growth at a 5% – 5.5% pace

6 sectors report slower underlying (3m/3m) wage growth, 8 sectors faster growth (than 3 months ago)



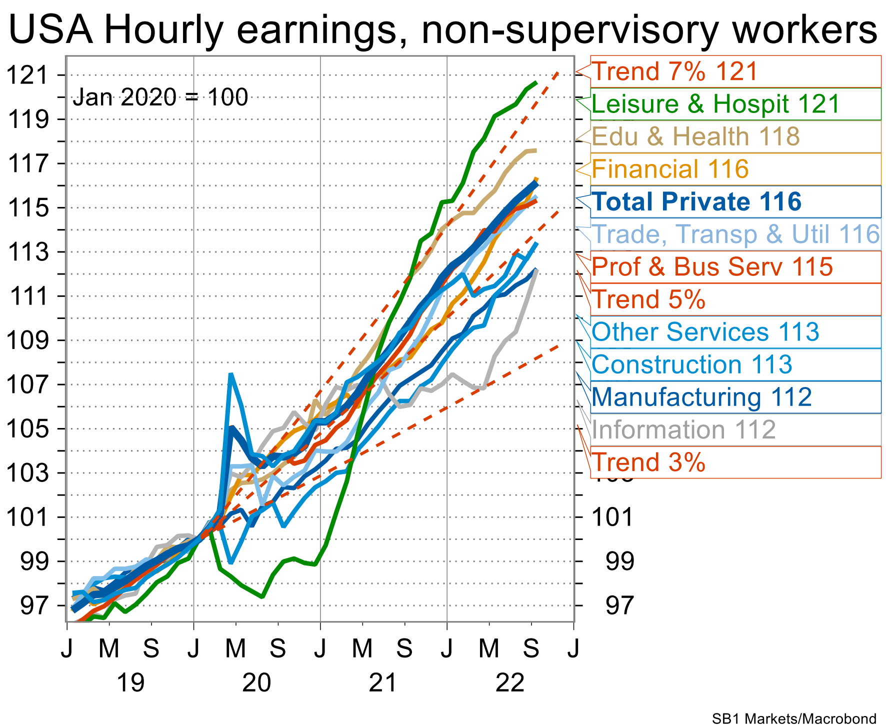




- The **average wage** rose by 0.3% in August, as expected. Annual wage inflation fell 0.2 pp to 5.0%, also in line with expectations
  - » Underlying (3m/3m) growth came down 0.1 pp to 4.8%
  - » Just before the pandemic, wage inflation was at approx. 3¼%, but it was below 3% until late 2018
- *These monthly wage data are not adjusted for the change in employment mix between sectors or within sectors. Check more wage indicators at the next pages*

Wages are climbing at a 4% – 7% pace

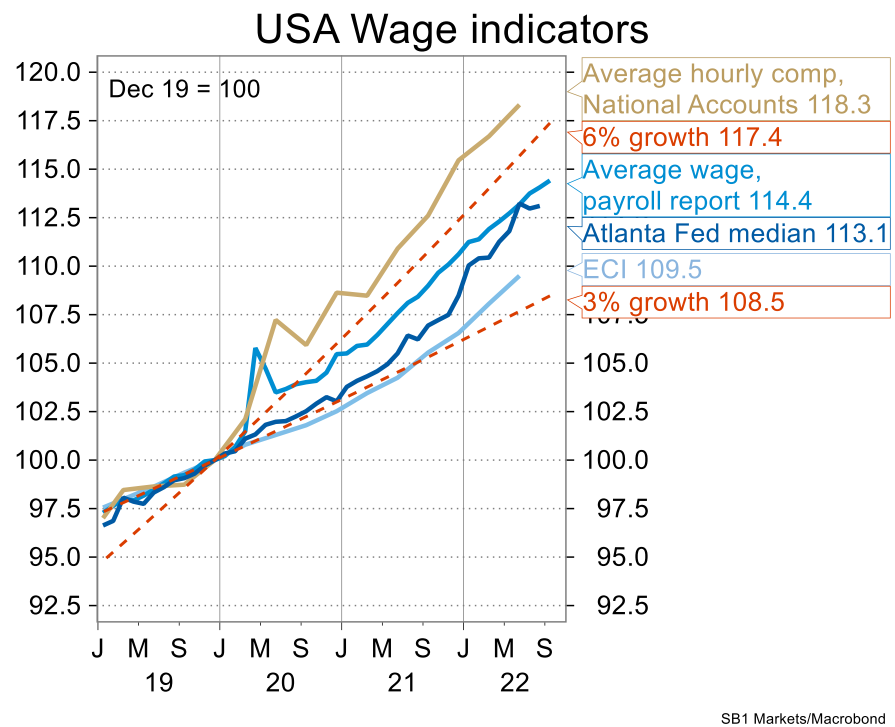
… And well above the pre-pandemic growth paths in all sectors

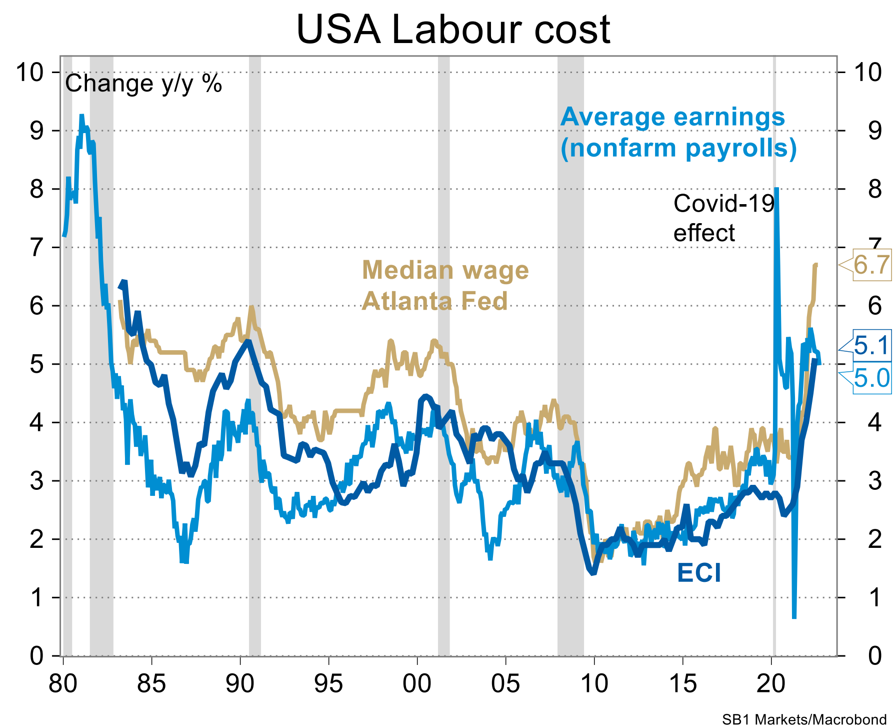


Memo: On the chart above, wages for non-supervisory workers are shown. When all employees are included, growth is slightly lower in most sectors

All indicators combined: No signal of any slowdown in wage inflation

… and all are reporting much higher wage inflation than pre Covid: 2% price inflation 'impossible'

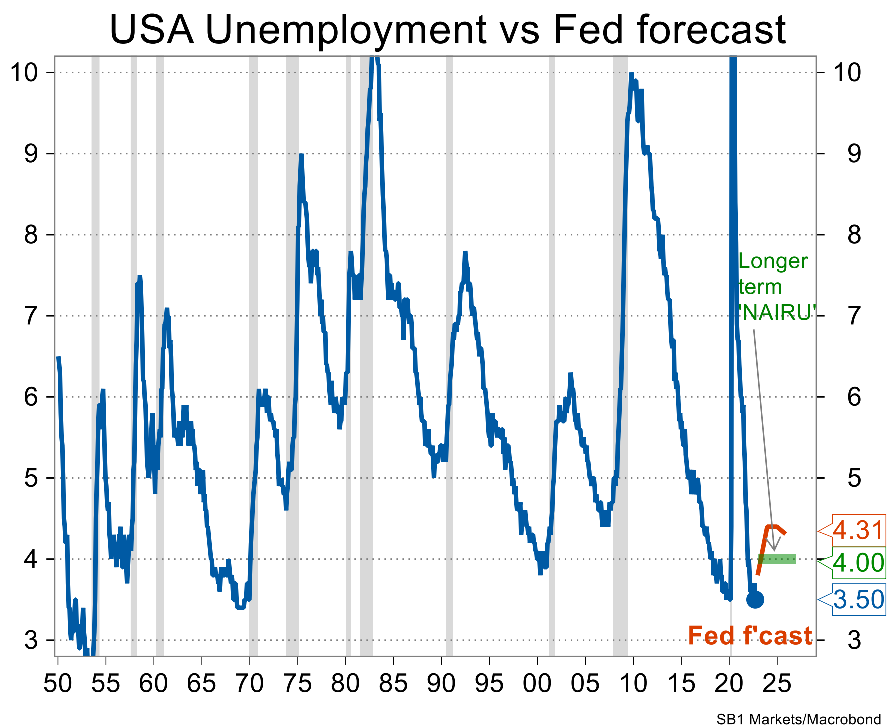


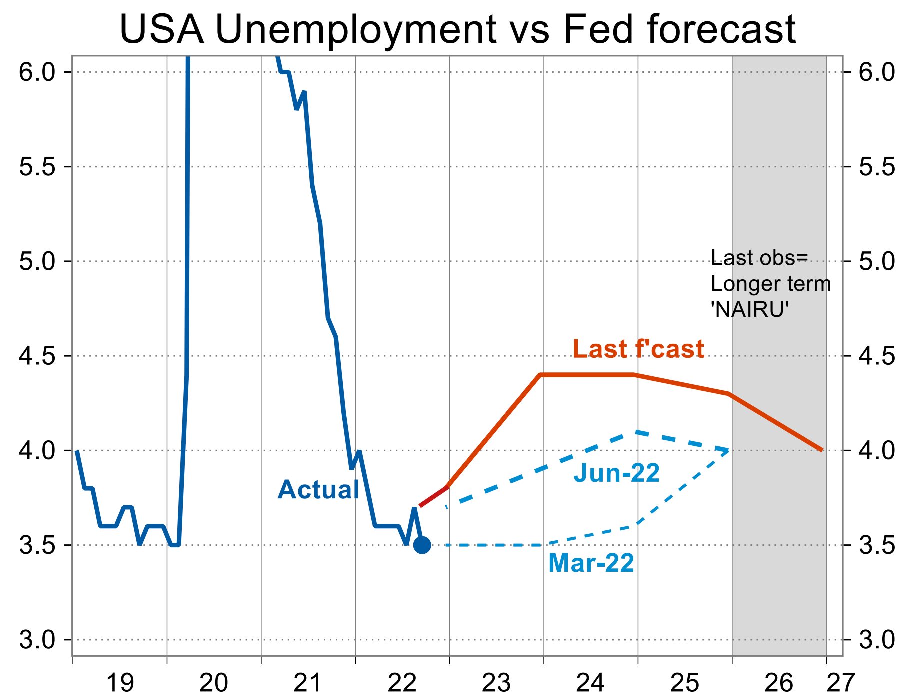


- **All wage indicators** are reporting faster wage growth, and all reporting wage growth well above the average recent years
- Growth in wage/earnings/compensation indicators are up 2.5 – 4 pp vs the their respective 10 y averages before the pandemic
- Over the past 10 years, inflation has been close to 2% (before the pandemic, that is)
- It will be a impossible to keep inflation at 2% if wage inflation remains at the current levels. Productivity growth has not accelerated. Profit margins may take a beating – and they no doubt will – but not sufficient to bring inflation down to acceptable levels on their own. Wage inflation will probably not slow by much before demand for labour weakens – and unemployment increases

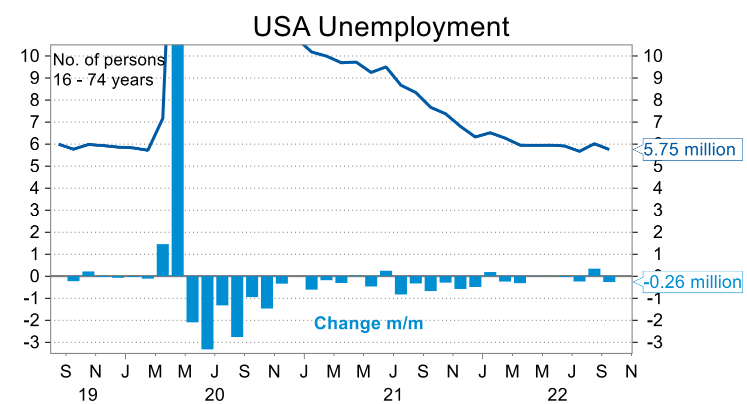
Fed's hope: just a marginal increase in unemployment the coming years

Even if excess demand for labour has to be cut dramatically. Not impossible. But not likely



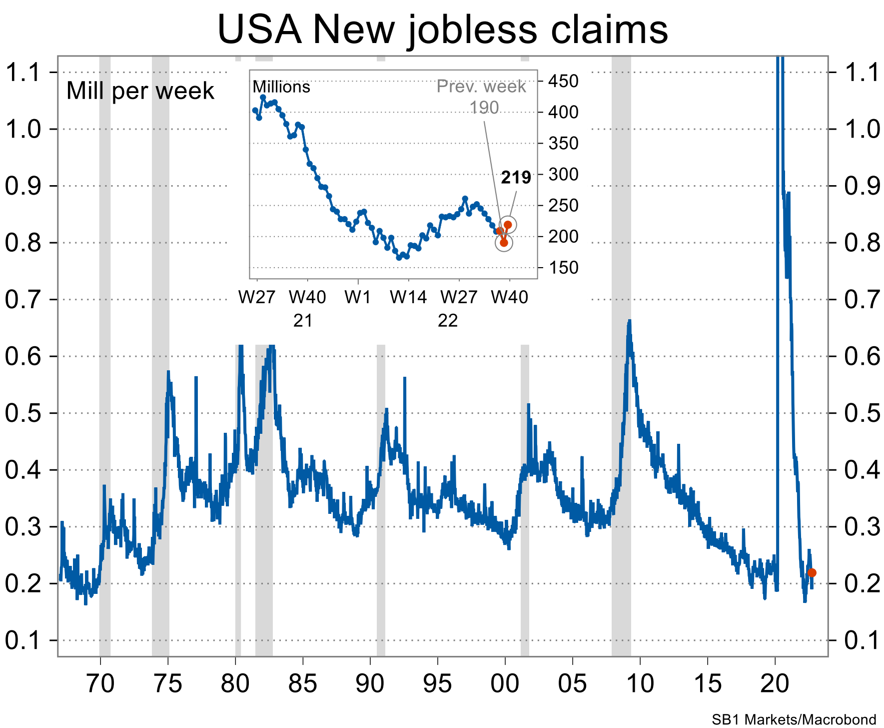


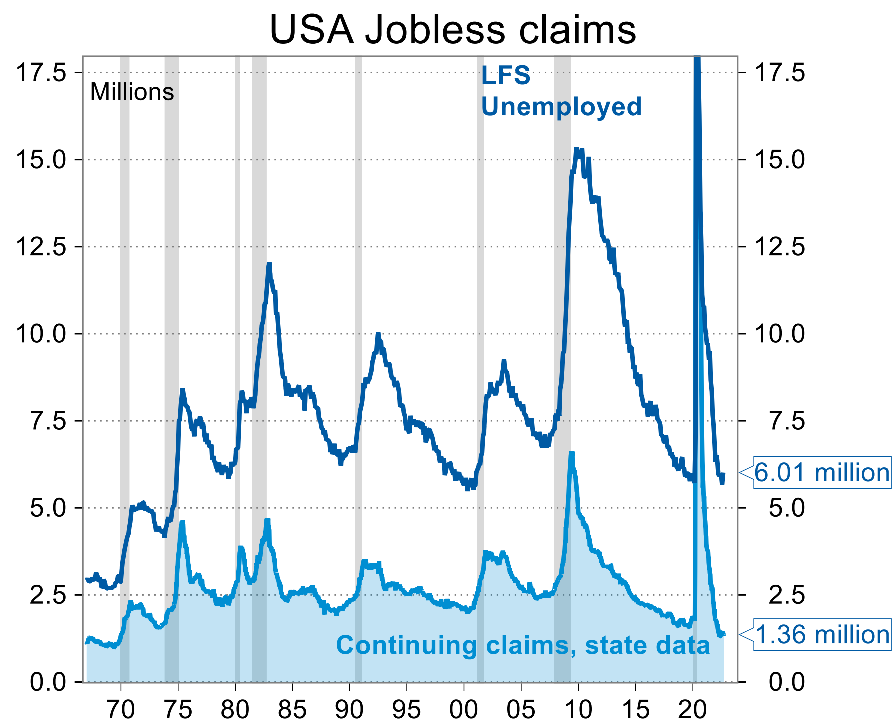
- Unemployment fell by 260' persons in September



New jobless claims rose, but the labour market is still extremely tight

New jobless claims were up by 29' to 219', expected 203'.

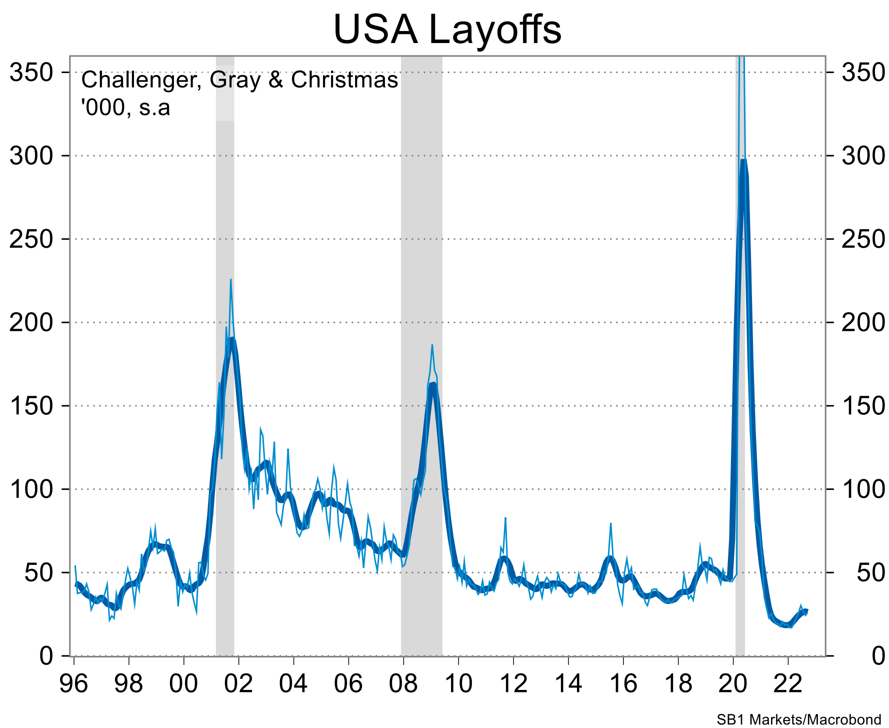


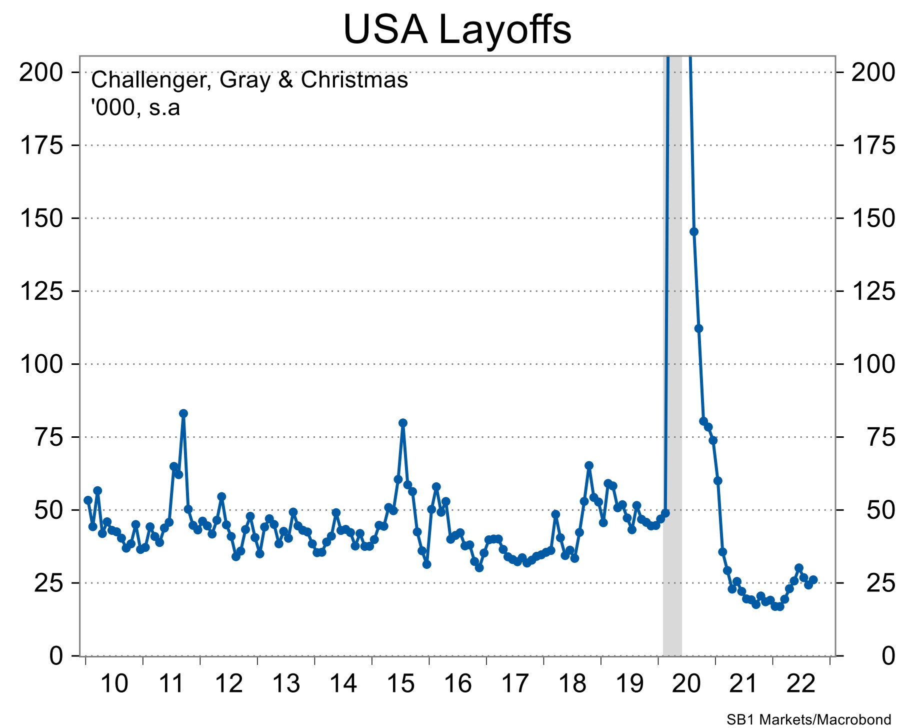


- **New jobless claims** have fallen since the summer, to 190' the previous week from above 250'. The increase last week was not a significant signal
- **Continuing claims** rose by 15' in week 38, also below expectations

Challenger & Co: Job cuts surge 46% in Sept, up 68% y/y. What a drama!

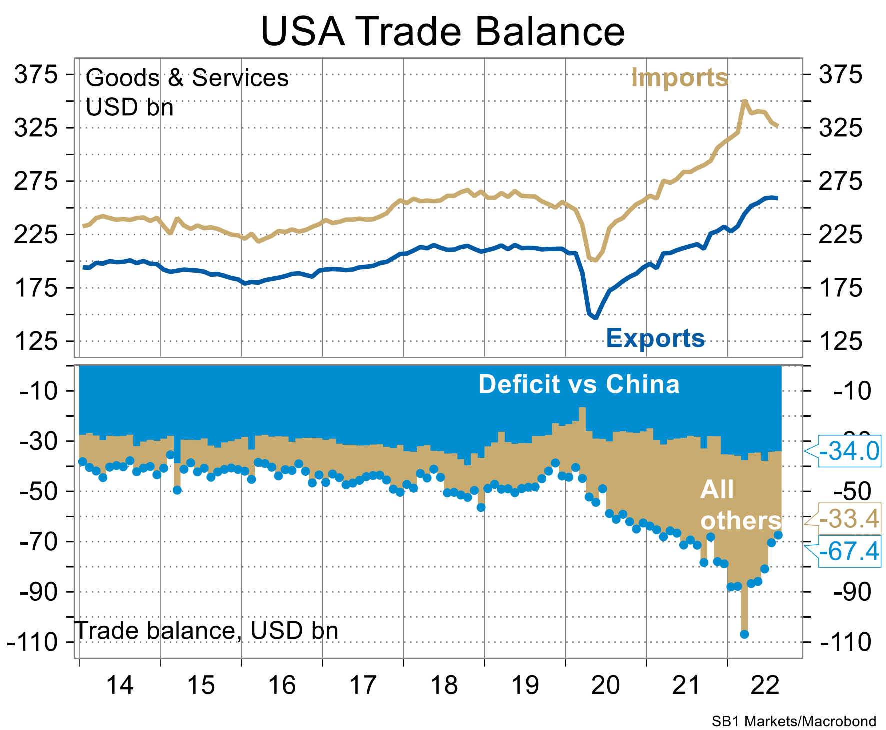
… until you check the charts: Seasonally adj. close to unchanged! The level still very low

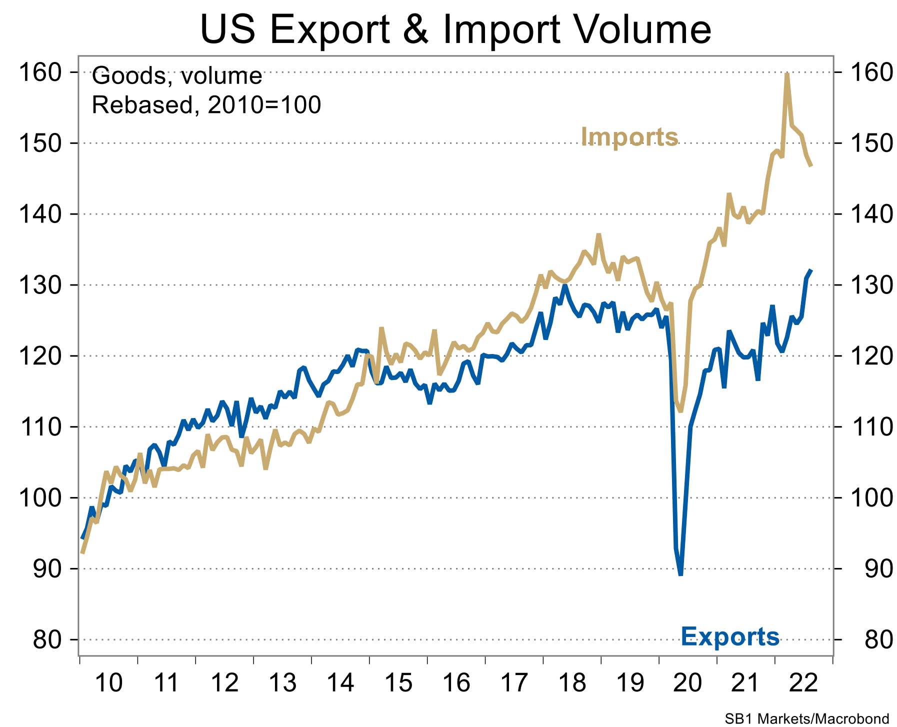




US trade deficit keeps shrinking, a huge contribution to growth in Q3

Deficit shrank to USD 67 bn in August – as imports fell. Export volumes are surging, imports shrinking

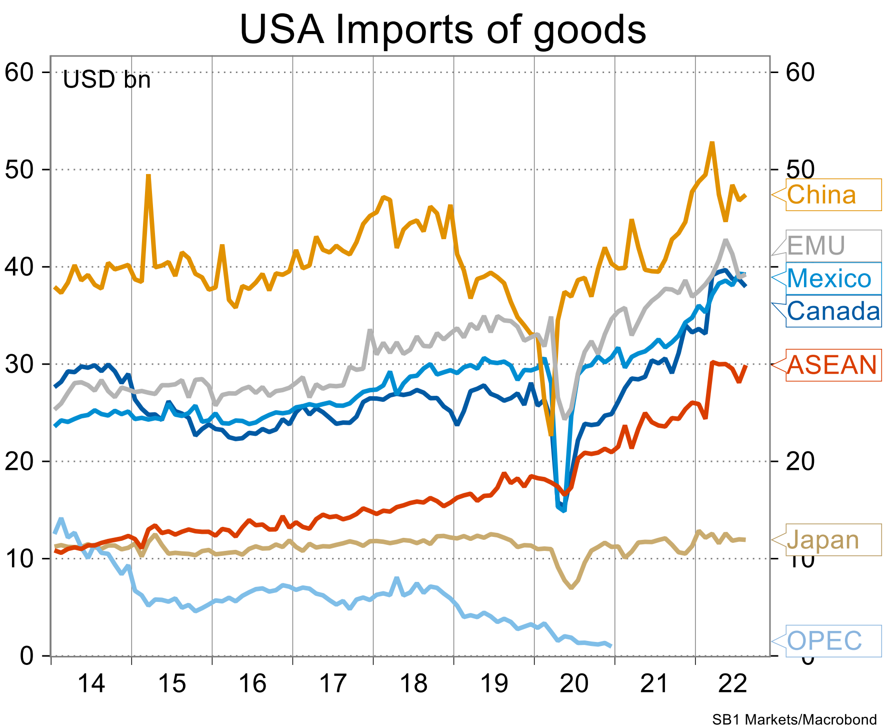


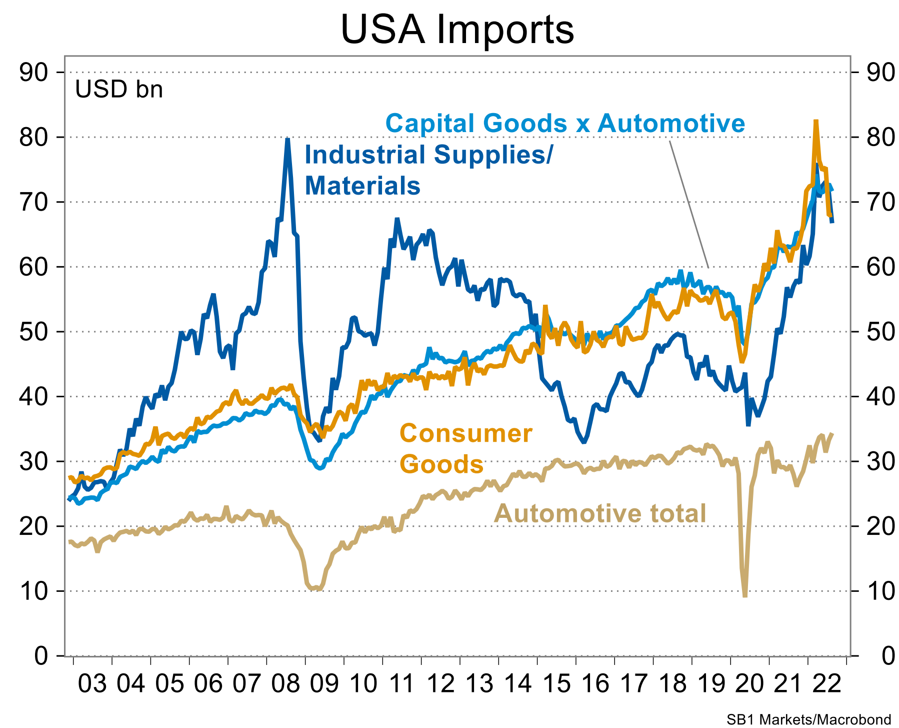


- **Imports** (goods and services) fell by 1% in August and are down 7% from the peak in March - but are still 30% above the pre-pandemic level, in nominal terms! In volume terms (and just for goods), the decline in August was 1%, and down 8% from March, and the volume is up 16% vs Feb-20, still a very high number! Demand for goods has been strong during the pandemic, driving imports – even if auto imports have been low. The sharp decline in import volumes recent months is probably due to a slowdown in domestic final demand as well as an inventory drawdown
- **Exports** rose 0.2% m/m in July, and the level is up 20% vs Feb-20. The export volume (for goods) rose 1%, and growth has been unusually strong recent months. However, in volume terms exports for goods are just 6% above the pre-pandemic level (vs 16% for imports)
- **The trade deficit** shrank to USD 67 bn, from 70 bn in July. However, at 3.3% of GDP, the deficit is, of course, still sizeable
  - » The deficit vs. China has been remarkable stable in 2022, now at USD 34 bn, half of the total

Imports of consumer goods are coming down but level is still very high

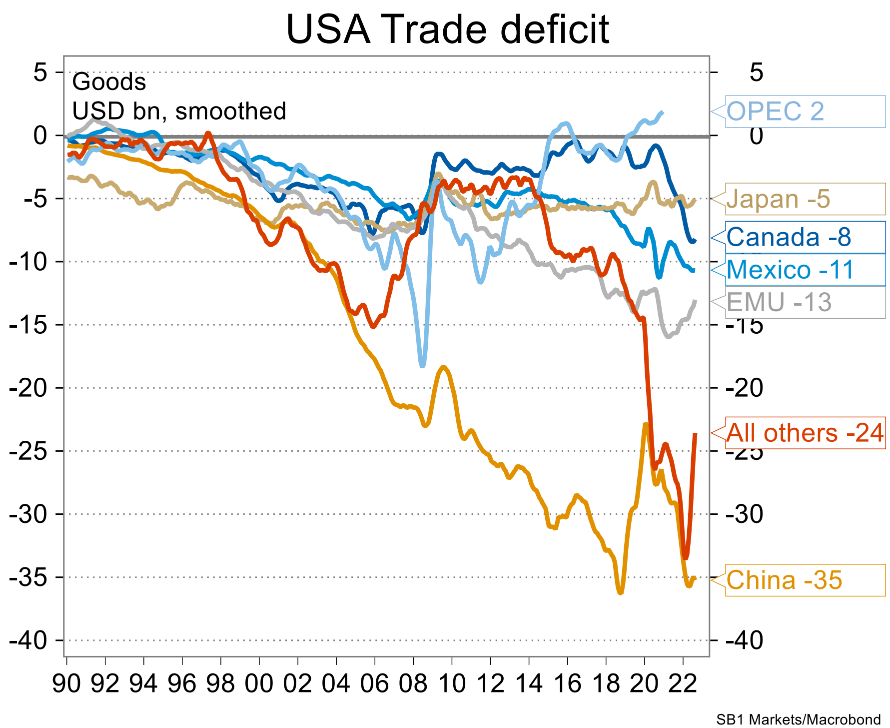
Imports are yielding/flattening from all corners





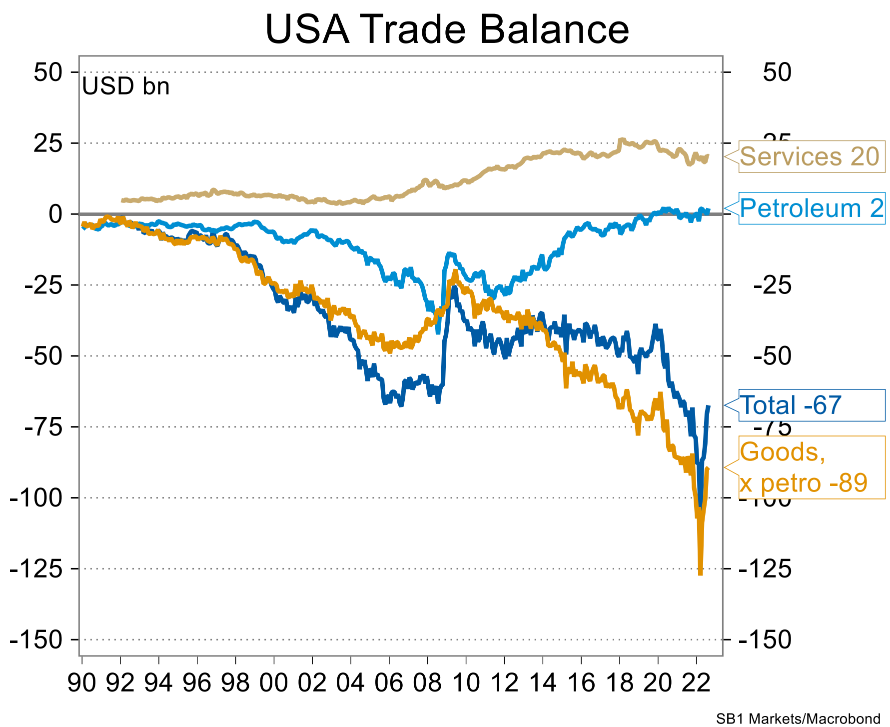
- **Imports from regions:**
  - » A trend shift in imports from all countries recent months vs the surge the previous 2 years
- **Imports by type of goods:**
  - » The import of all types of goods has been surging since the pandemic, but the import of consumer goods has fallen since March, as have industrial supplies. Imports of autos are on the way up (all data are nominal)

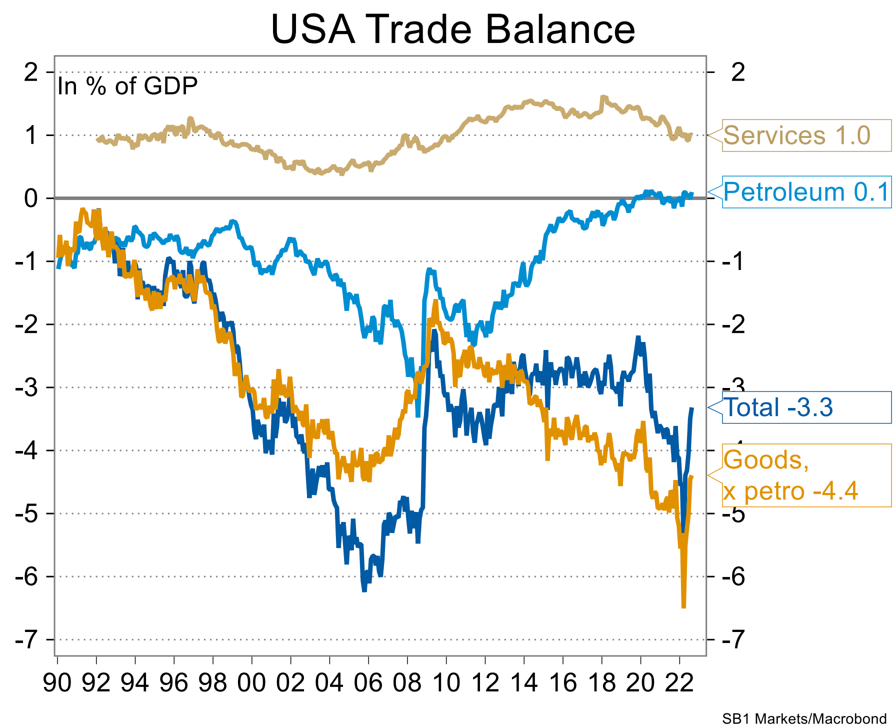
Mixed changes in the trade deficit vs. regions – no change vs Mex/Canada/China



Goods x petroleum deficit very high, even in % of GDP

Surplus in services keeps narrowing





- The **total trade deficit** at USD 71 bn equals 3.5% of GDP. The deficit has widened from 2.5% in early 2020 – as domestic demand has been stronger in the US than abroad
- **The US runs a surplus in services** at USD 20 bn, equalling 1.0% of GDP, but this surplus is trending down (and the downturn started well before Covid)

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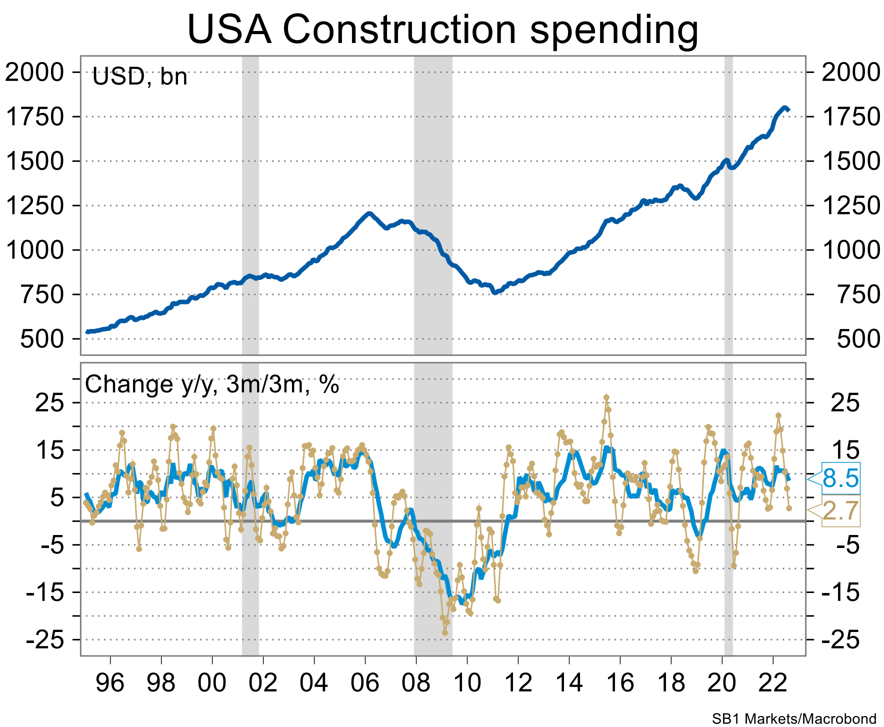
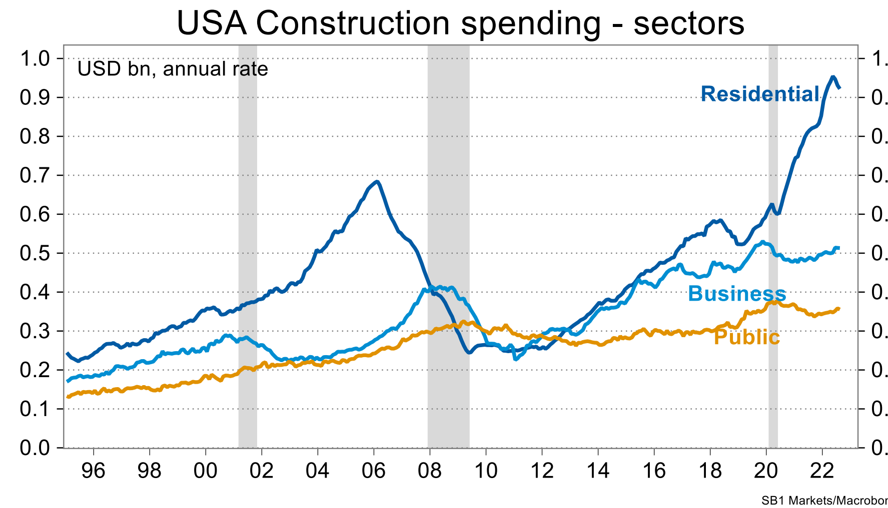
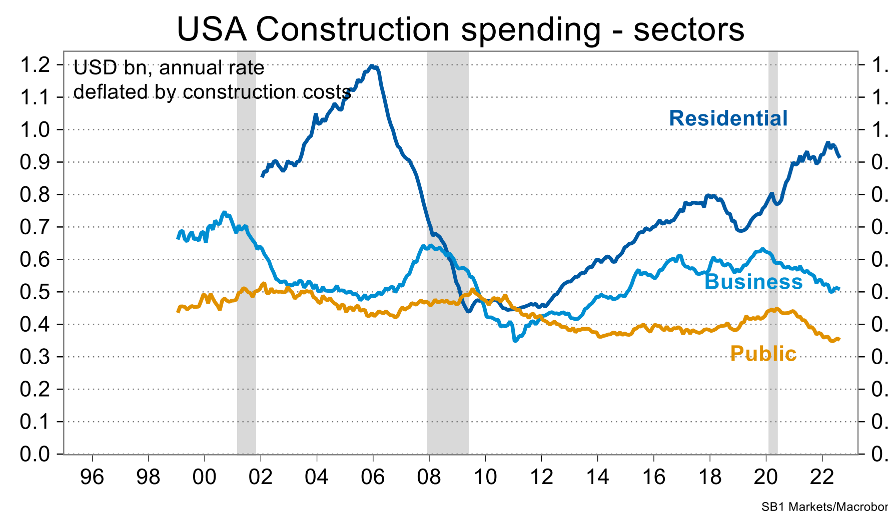
USA construction spending has probably peaked, even in nominal terms

Volumes are down, now even for residential construction, as starts has already fallen 20%



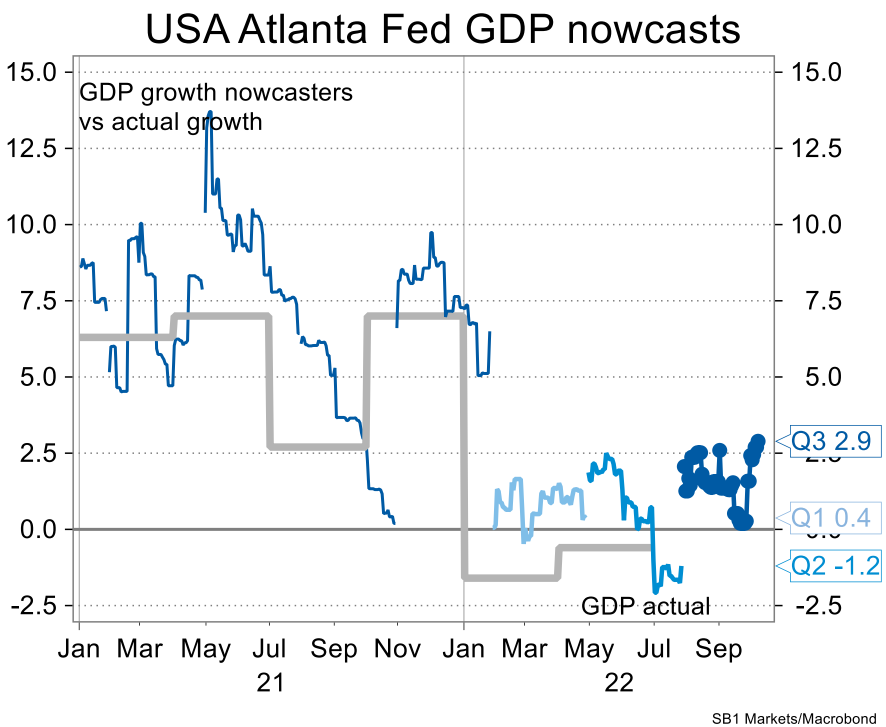


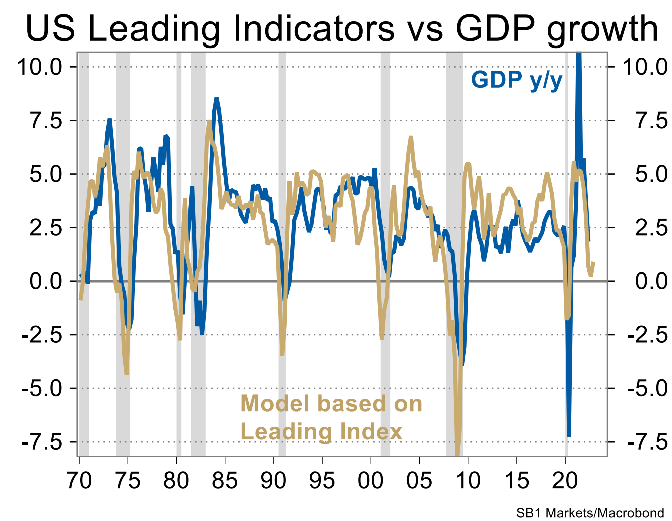


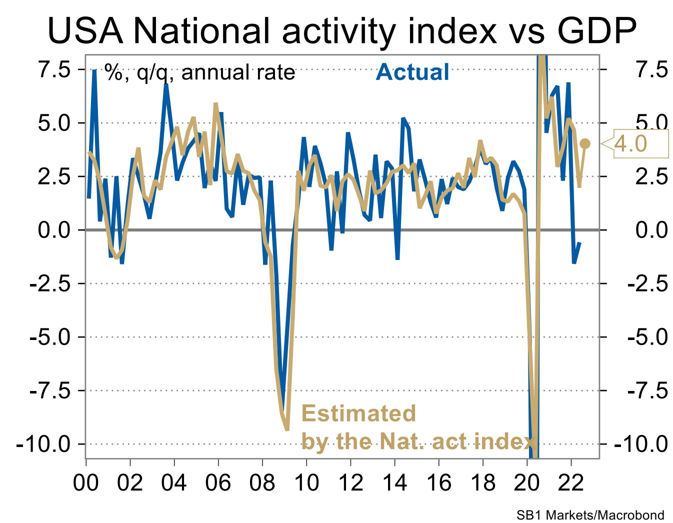
- **Residential construction investment** volumes are now falling
- **Business construction investment** volumes have been falling since before the pandemic – which is good news: the downside is not that large
- **Public sector investment** volumes have fallen since early 2021 (Biden's infrastructure success?)

Atlanta Fed's Q3's forecast up 2 pp to 2.4%, due to net exports, the GDP revision

Sure, these measures are volatile but trade data were strong. Inventories the uncertain element now



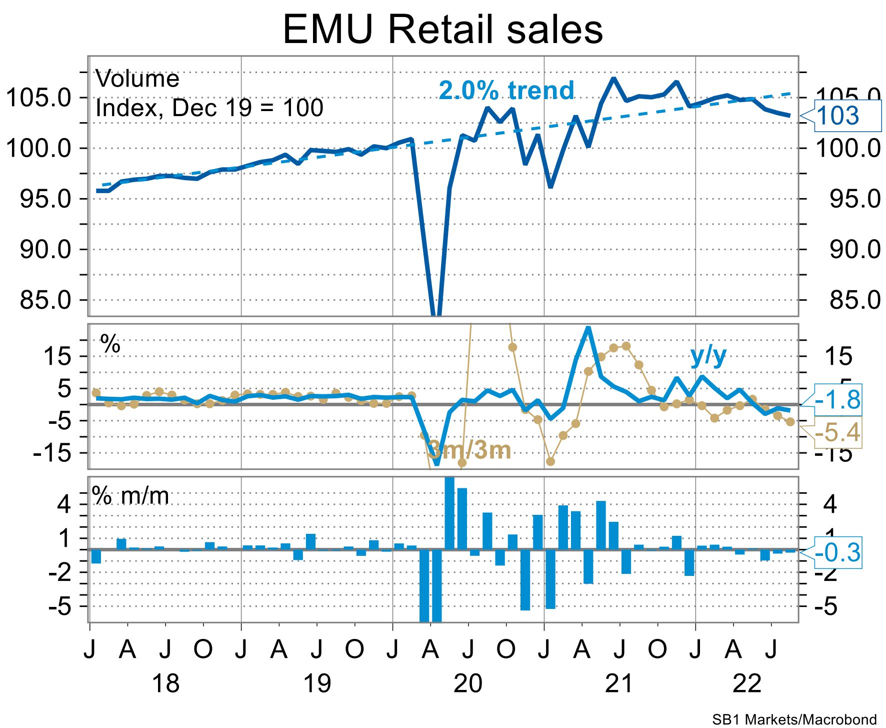


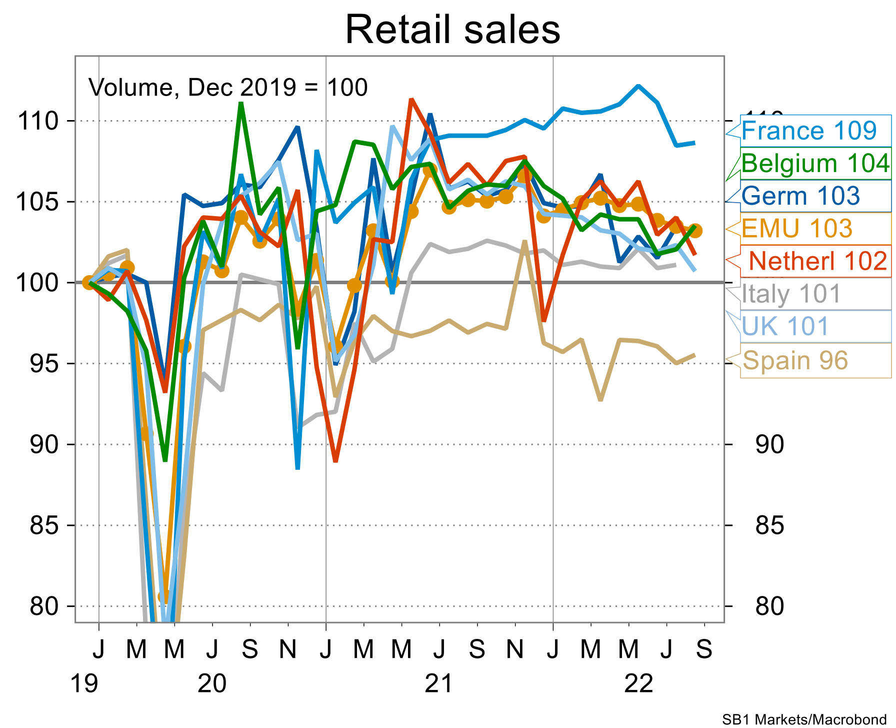


- National Activity index suggests 4% (the July pace). Leading indicators say zero!
- **Q2 GDP** fell 0.6%, revised up from -0.9%

Retail sales lower in August, for the 3rd month, and well below trend

Sales came in 0.1 pp above expectations; but July data revised down to -0.4% from +0.3%

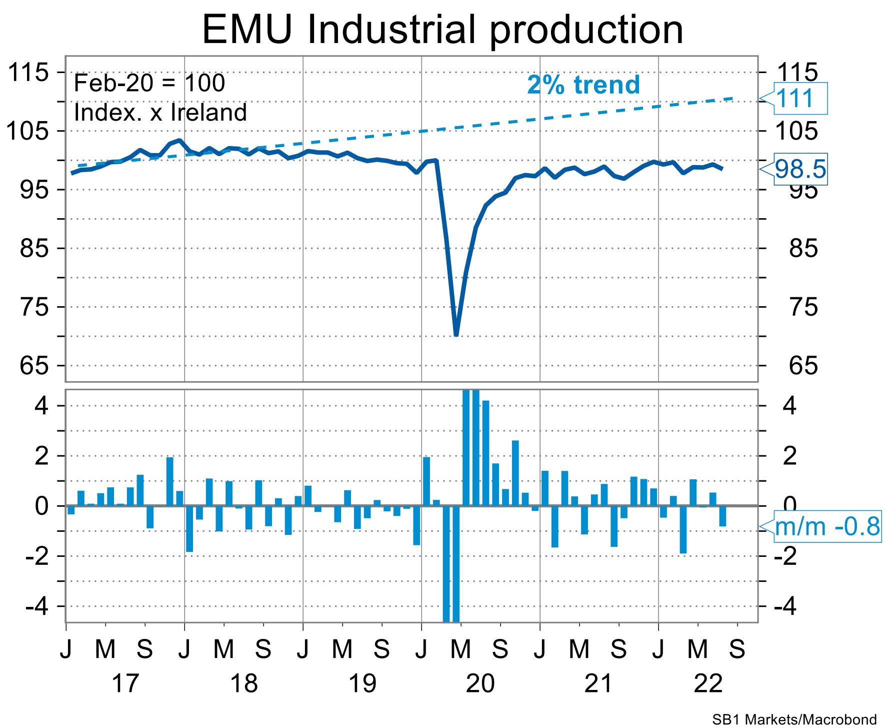


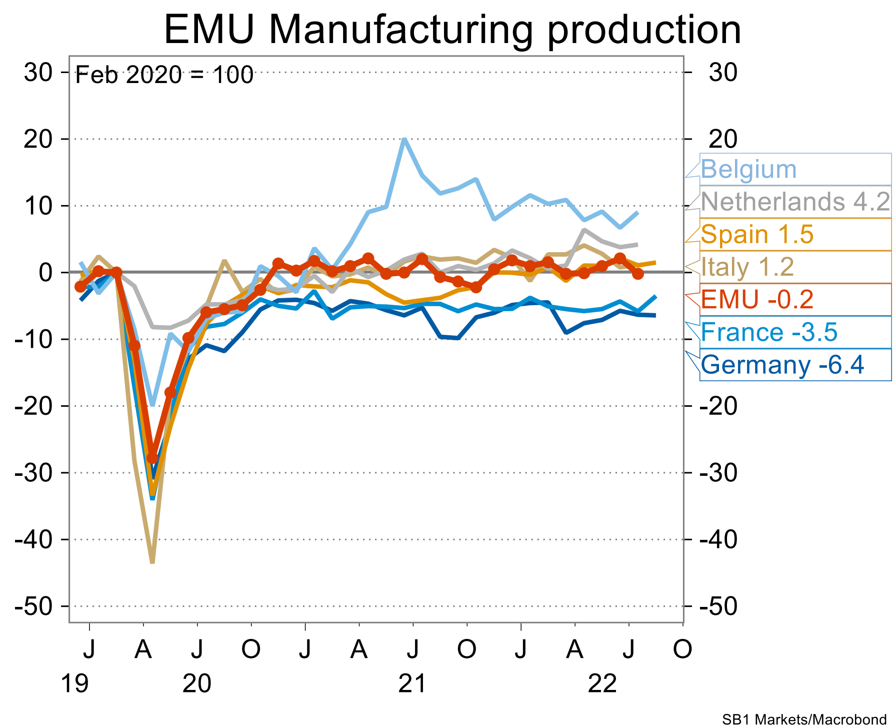


- Sales fell 0.3%, expected -0.4%
- The trend is down, and sales are now below the pre-pandemic growth path of 2%
  - » The trend is down all over the EMU

EMU industrial production sharply up in Aug, and well well in plus even x Ireland

… at least that's the forecast. Total production up 1.2% – 1.5% due to a surge in Irish production

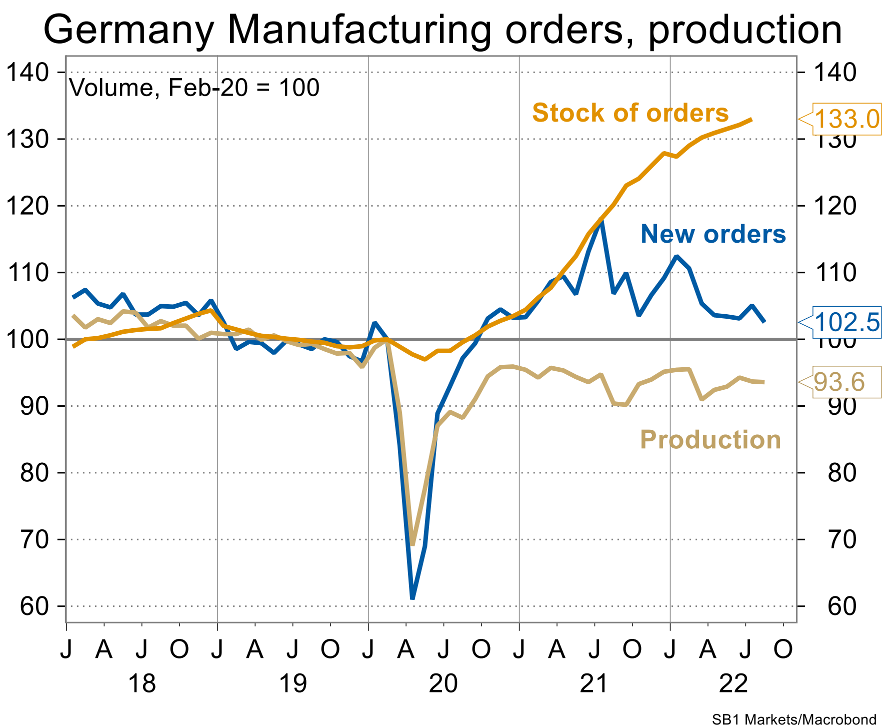


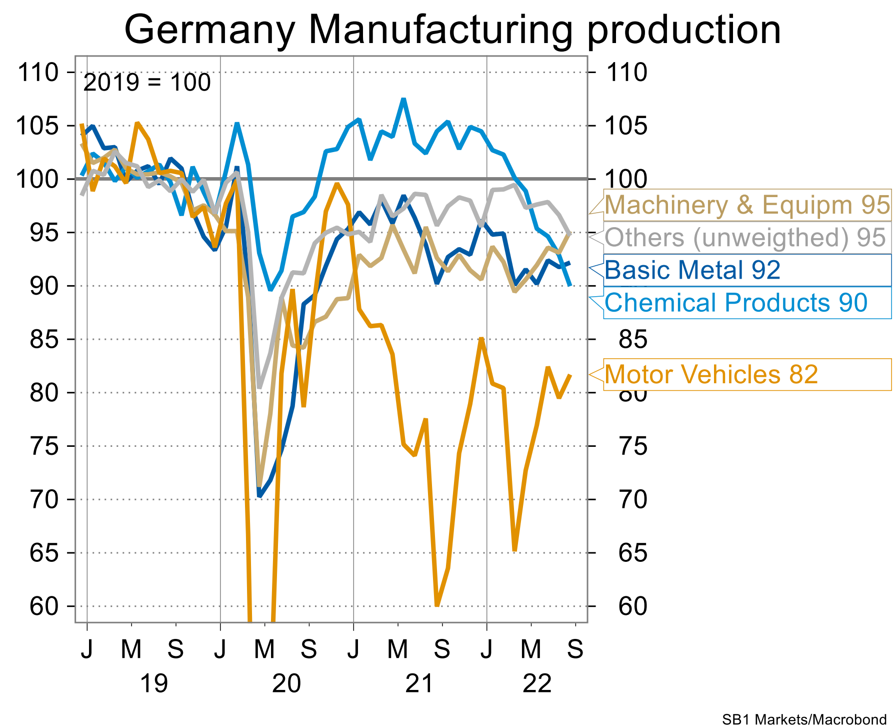


- In July, production fell 2.4%, mostly due to a large decline in production in Ireland (the Irish numbers are useless, probably tax motivated). I August, Irish production recovered, and will lift total EMU production significantly
- In July, production ex Ireland fell by 0.8%, and a 0.6% lift in August is likely
- In August, production rose sharply in France, somewhat in Spain, while production fell further in Germany. Production is still below the pre-pandemic level in France and even more in Germany (-6.4%)

Mixed between sectors production wise in July, no signs of 'energy shutdowns'

German factory orders keep falling – but the backlog is still growing (in volume terms)

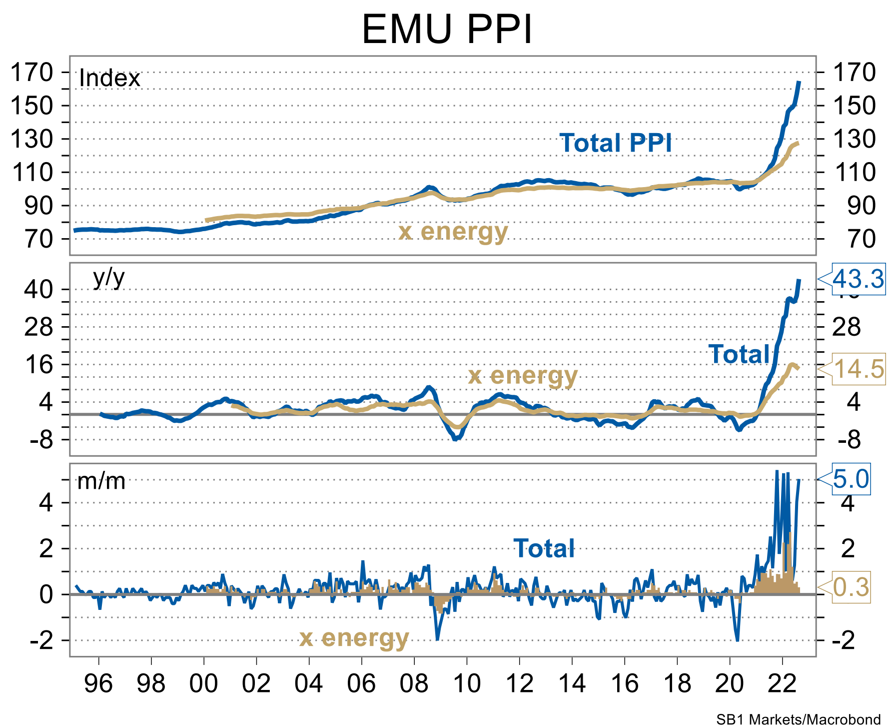


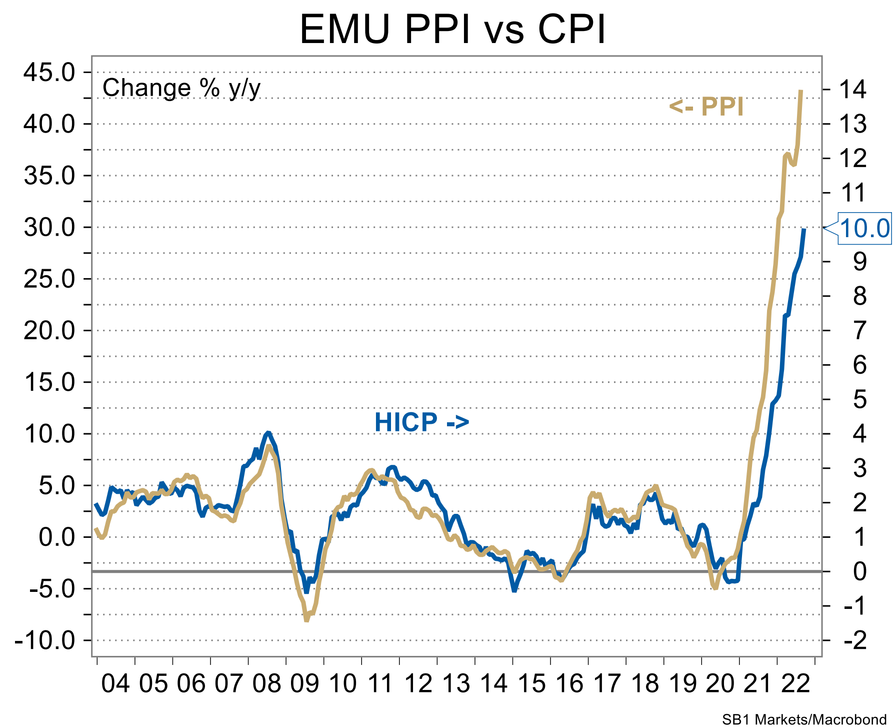


- Factory orders fell 1.1% m/m in July and are now 'just' 1.9% above the Feb-20 level, in volume terms. However, orders are down 14% y/y
- Manufacturing production fell by 0.1%
- Auto production is down 18% vs. the 2019 level. Metals and chemical productions are down 8% – 10%. Metals production has not been hard hit by the energy crisis, while chemical production has fallen sharply since late last year

Producer prices keep rising, but PPI x energy has peaked?

The total PPI rose 5% m/m in September, the core index added 0.3%

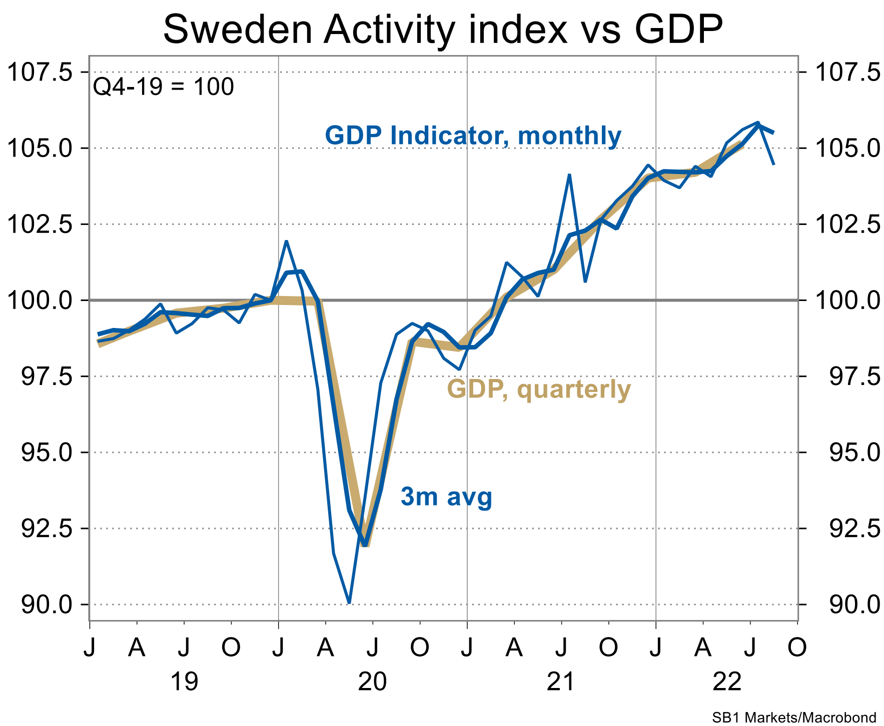


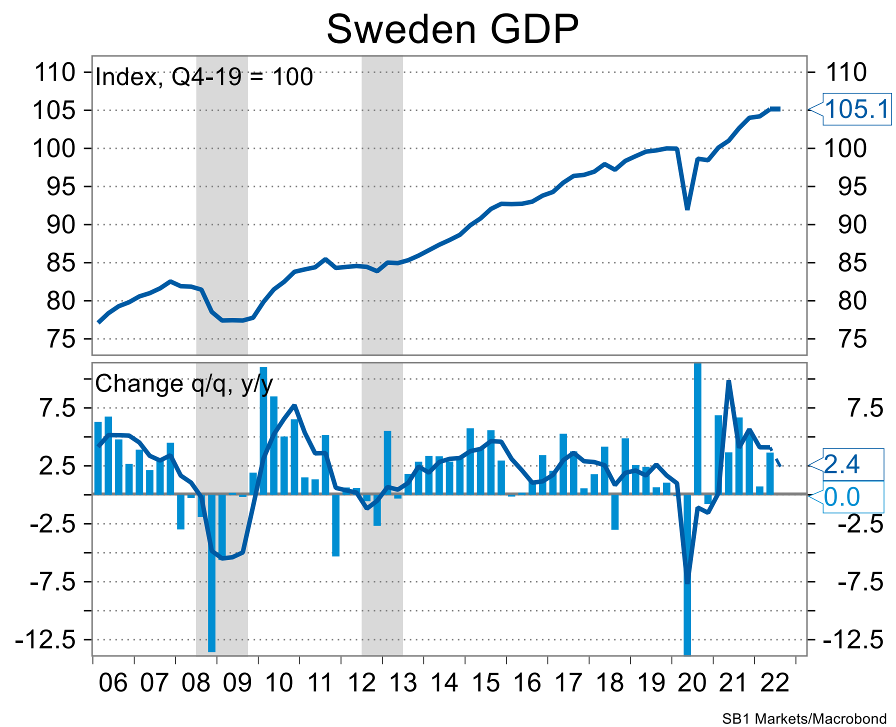


- PPI was up 43% y/y, all included, and 14.5% x energy
- No guarantee that energy prices cannot rise from here come winter time, but the core is likely coming down

Swedish GDP down 1.3% m/m in August

The first warning shot? If no correction up in Sept (somewhat pessimistic?), zero growth in Q3

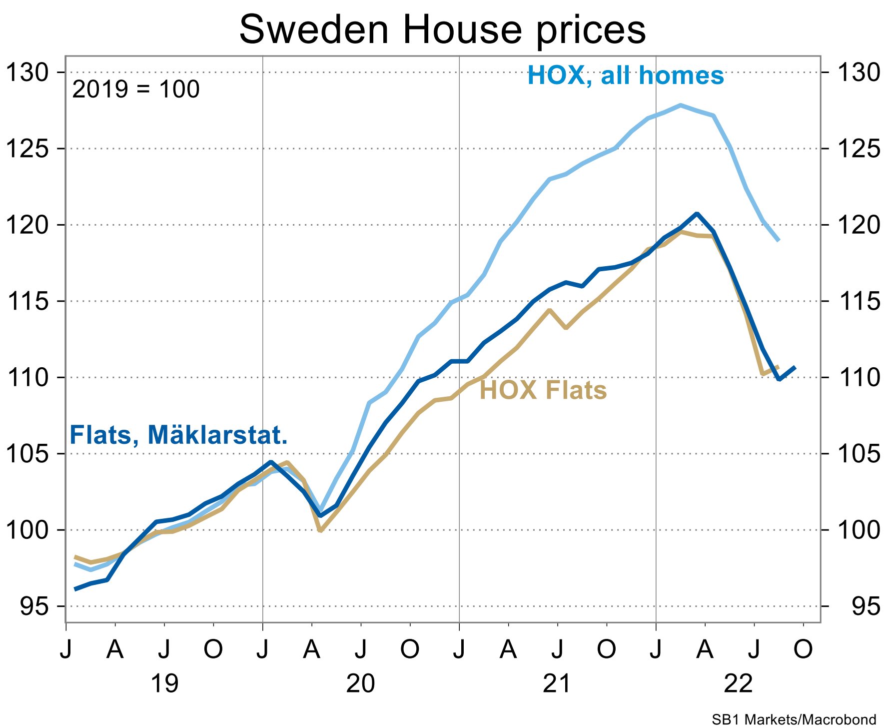


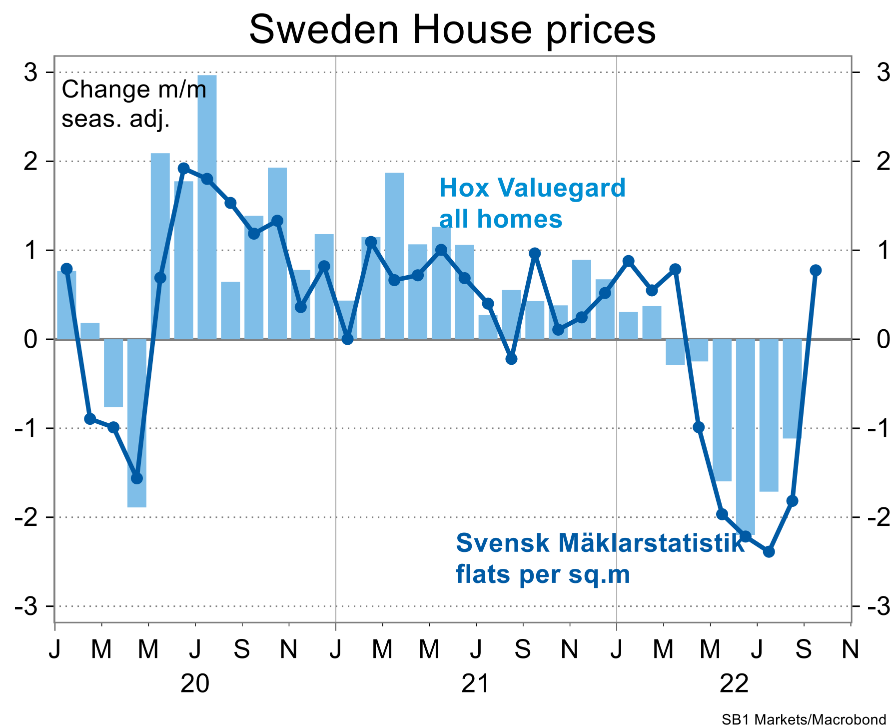


- The economy has weakened, especially on the manufacturing side as witnessed by lower industrial production and manuf. PMI
  - » In Q2, GDP expanded by 3.6% (ann.)
- **The outlook** is also weakening, according to Swedish companies. The KI (NIER) has fallen to 0.9 st.dev below average, signalling zero growth

Swedish house prices rose in September, according to Svensk Mäklarstatistik

The realtors reported a 0.8% m/m (seas. adj.) increase in apartment prices in Sept, down 6.8% y/y





- Actual prices rose by 1.4%. Some early bird surveys suggested a sharp decline in September prices. August prices were revised down some 0.5%
- The HOX index reported a small uptick in flat prices in August (while single-home prices fell further). September data out next week

Highlights

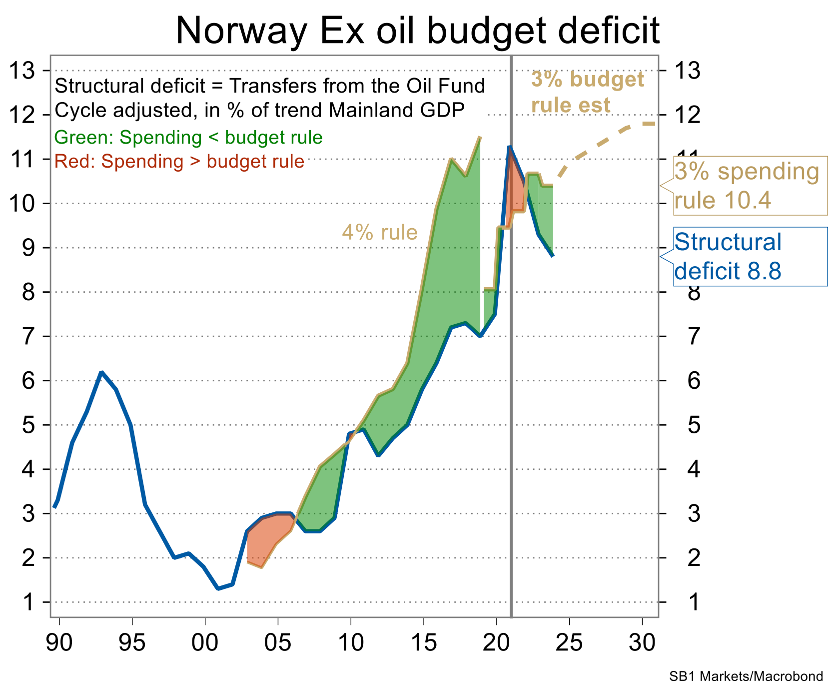
The world around us

The Norwegian economy

Market charts & comments

The budget: A mild 0.6 pp of GDP tightening, spending 1.6 pp of GDP<budget rule

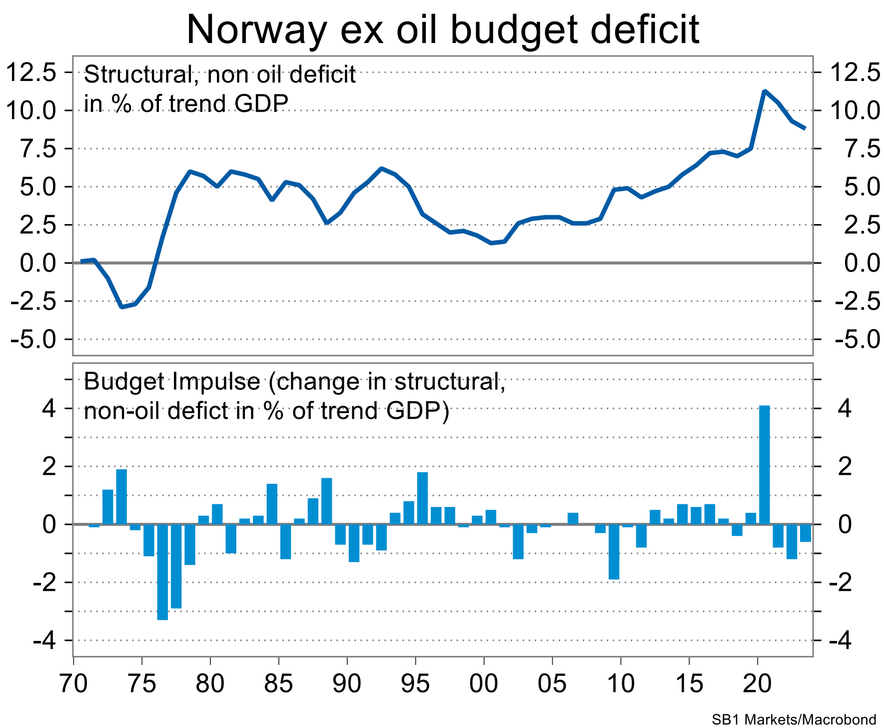
In addition: Underlying growth in spending 1.3% and below Mainland GDP trend growth

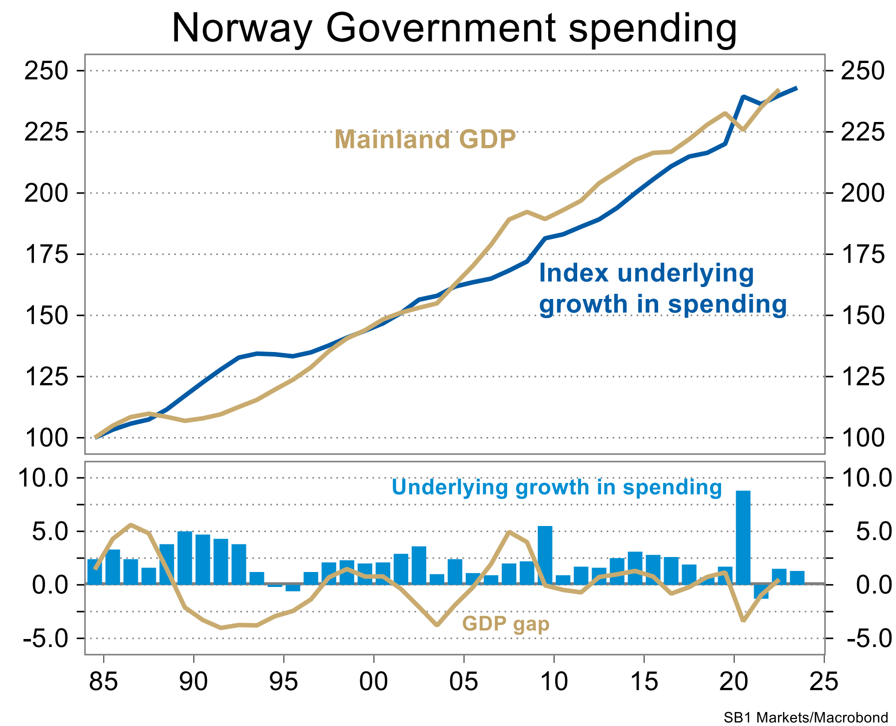


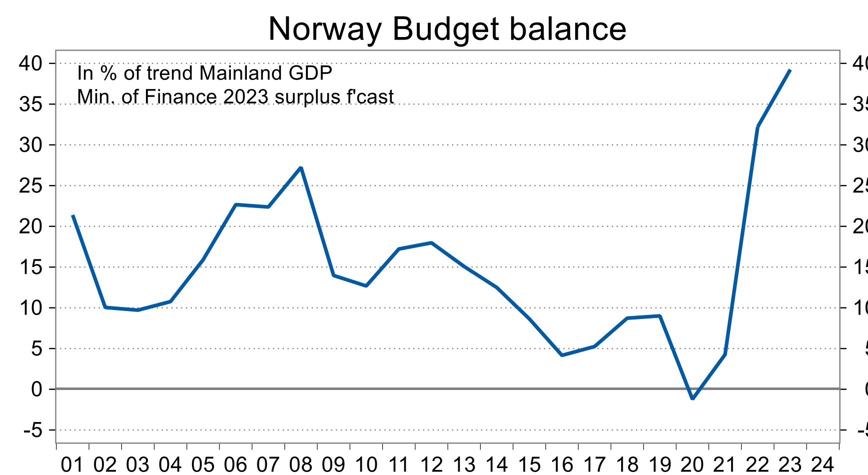
Fiscal indicators					
NOK bn, per cent	*2019*	*2020*	*2021*	*2022*	*2023*
Actual surplus, incl. oil	*277*	*-39*	*133*	*1105*	*1402*
Surplus ex. oil	*-228*	*-371*	*-369*	*-304*	*-257*
Structural surplus ex oil	***-224***	***-361***	***-354***	***-324***	***-317***
.. change in bn	*-10*	*-361*	*-354*	*31*	*7*
.. in % of GDP	***-7.3***	***-11.4***	***-10.8***	***-9.3***	***-8.8***
... Change (fiscal indicator)	***-0.5***	***-3.8***	***0.8***	***1.2***	***0.6***
.. in % of Oil Fund value	*2.7*	*3.7*	*3.2*	***2.6***	*2.5*
Spending rule, bn.	*-261*	*-303*	*-327*	*-370*	*-375*
Deviation from rule, bn.	*37*	*-58*	*-27*	*47*	*58*
Real growth in underlying spending	*1.7*	*8.8*	*-1.3*	*1.5*	*1.3*
Petroleum Fund, bn, ult.	*10086*	*10907*	*12340*	*12500*	*14286*

- **In the National Budget,** the government proposed a fiscal tightening in 2023 equalling 0.6 pp of Mainland GDP, we expected 0.5 pp. Model simulations suggest a close to neutral impact om GDP. The budget is also on the tighter side as transfers from the fund (=structural deficit ex. oil revenues) equals 2.5% of the fund, down from 2.6% in 2022 (revised down by 0.3 pp due to a symmetric (and correct) calculation of income and spending due to higher electricity prices), well below the 3% long term target. The proposed transfer equals 8.8% of Mainland GDP, while the 3% (of the Oil fund's value) spending rule 'allowed' a 10.4% transfer (the difference equals NOK 60 bn). Further on the tighter side, underlying growth in government spending is estimated to 1.3% well below trend growth in ML GDP
  - » Others may have expected a tighter budget. In the Sep MPR NoBa assumed a 1.7 pp fiscal tightening. However, this estimate was strangely large given the Bank's modest forecast for growth in government demand. A 1.7 pp tightening has anyway never been proposed before
  - » While the government assumes higher GDP growth and lower inflation than NoBa (but quite close to SSB's recent forecast!) we think it is irrelevant vs the proposed measures in the budget. Should inflation be higher, the budget will automatically become tighter. Should growth falter, nothing is easier than expanding the budget ☺
  - » The actual transfer from the Fund is far below the estimated business cycle (structural) deficit at NOK 316 bn. The Government assumes that GDP far above trend increases Mainland taxes and lowers unemployment benefits payments by in sum by NOK 89 bn (but nobody looks at the actual low deficit number). Again, a sign of prudency
  - » BTW, due to the ballooning income from the oil and (now even more the) gas sector, the **overall surplus in the public sector** equals almost 40% of ML GDP, by far the largest surplus in any developed country ever as revenues are even larger than Mainland GDP (!). The surplus in is transferred to the Oil Fund, for the benefit of future budgets & generations

A smaller ex oil deficit, modest growth in expenditure – and huge overall surplus

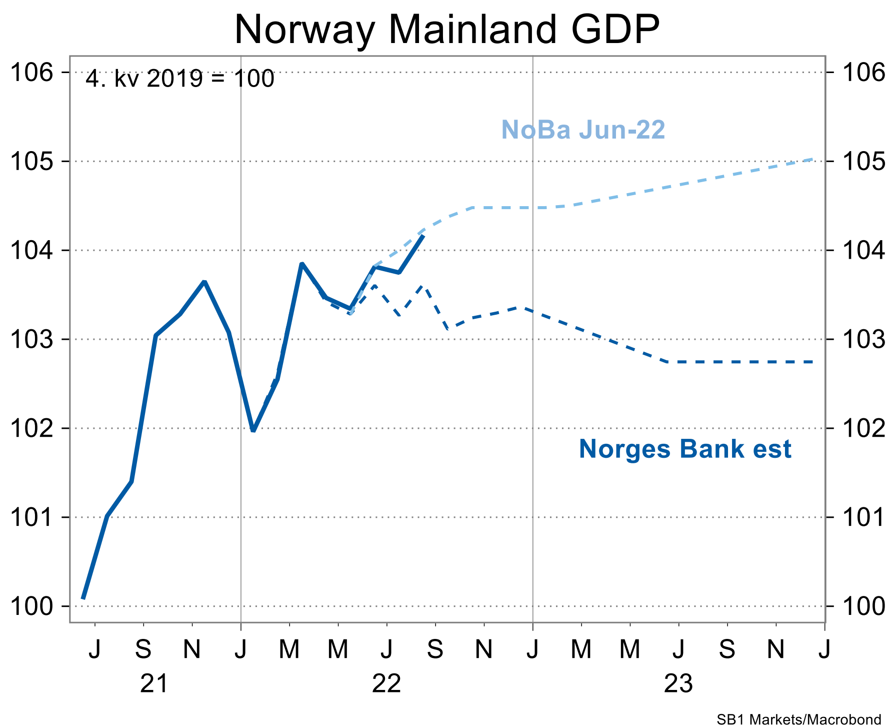






Mainland GDP revised up significantly – and growth in August as well

GDP rose by 0.4% in August, and 2.7% y/y. The GDP level is 0.7% above NoBa pre-revision estimate

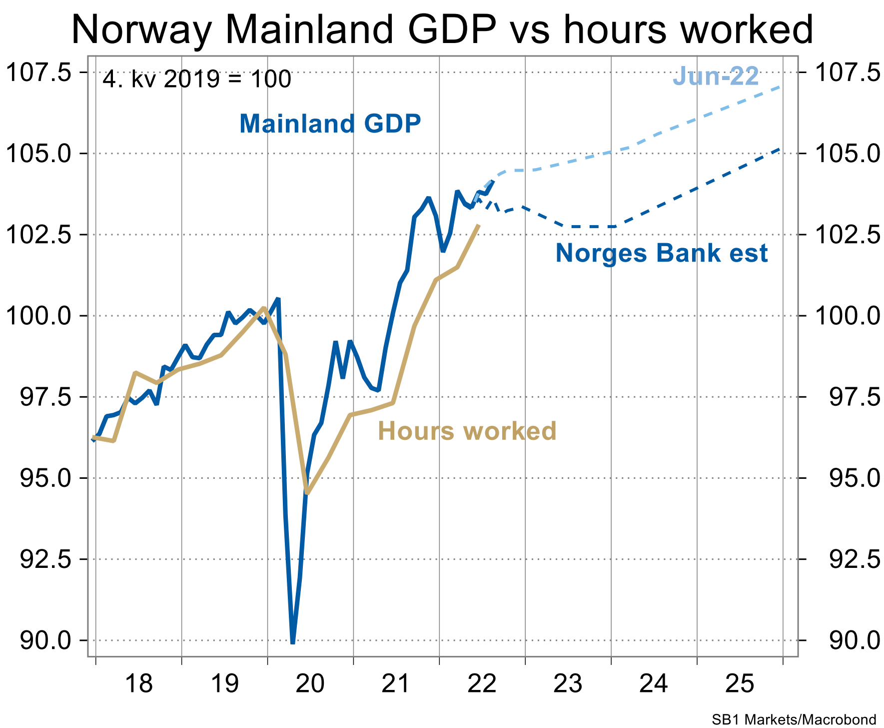


- **Mainland GDP** grew close to expectations in August, by 0.4% (consensus 0.4%, NoBa & SB1M estimated 0.3% in the Sept MPR report). However, a 0.5% upward revision of the July GDP level, brought the activity level back to NoBa's June growth path, which was significantly above the Sept path
  - » Still, growth has been slow since Sep-21, ML GDP is up just 1.1%
  - » Upward revisions of services and public sector production, as well as higher oil related investments resulted in higher than previously reported growth in GDP
  - » One swallow does not make a summer, but still a signal that the momentum in the Norwegian economy was better than assumed over the summer
  - » We expect a 0.4% growth rate in Q3, well above our old f' cast and NoBa's -0.1% est.
- **Production**
  - » Manufacturing is the weakest sector and contracted 2.9% in August (much more than the production index signaled), while service sector production has showed continued strength. Oil & gas production was strong in August as well. Construction showed some weakness in August, which is likely to endure and even deteriorate in the coming months
- **Demand**
  - » Government demand (mostly investments) rose sharply in August, contributing 0.8 pp (twice the total growth rate), as did Mainland businesses. Housing investments fell. Mainland business investments have strengthened since last autumn, while oil sector and housing investments have fallen. Norwegians' consumption in Norway has fallen too. Net exports x energy have fallen substantially as well, as imports have been growing faster than exports
- **So what?**
  - » ML GDP surprised on the upside, and even if government demand was an important contributor, it still signals a stronger economy. Labour market data signals slower growth, but no setback. The only tell tale that the higher rates are softening demand, and thereby growth, is the housing market. The budget proposal was also less tight than assumed by NoBa (but NoBa estimates were rather strange). In sum: The downside risk to rates is reduced

SpareBank 1 MARKETS

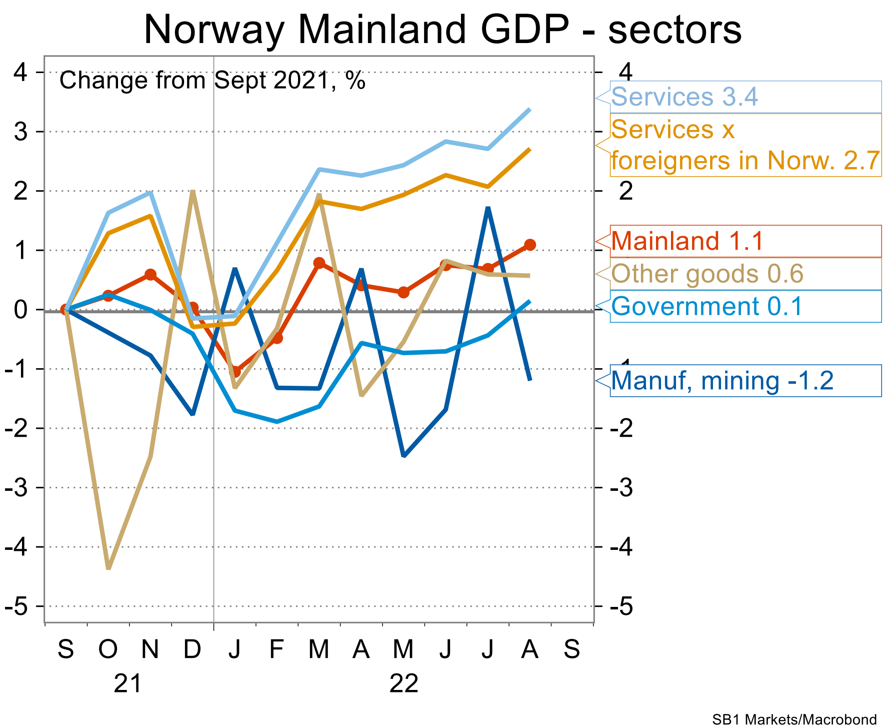
GDP up: Productivity will be revised up too, and unit labour cost inflation down

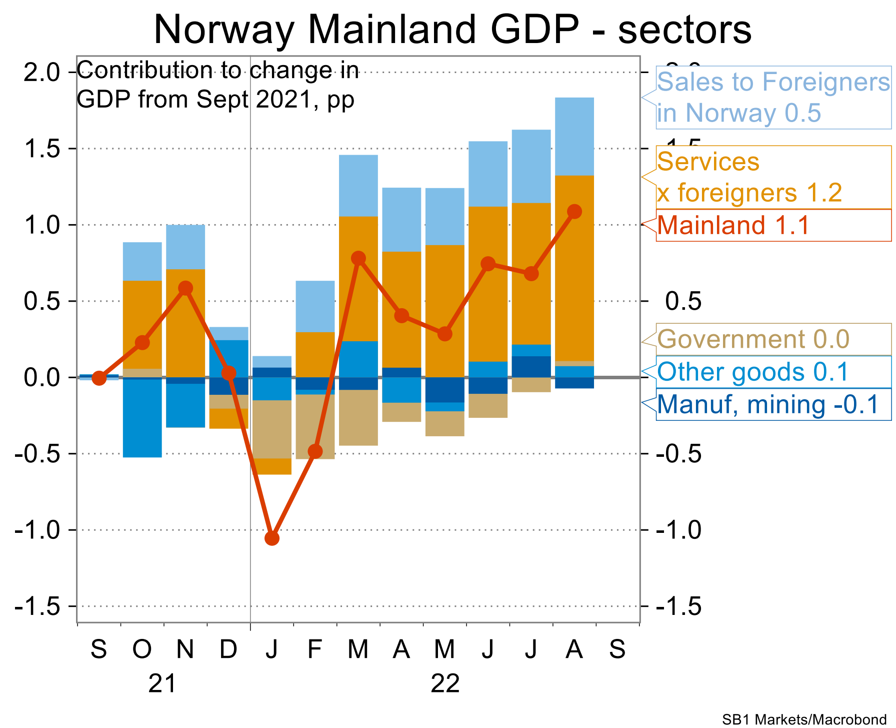
A little less worry for Norges Bank – but productivity growth is still very low



Production: Manufacturing the only weak sector in August– contracted 2.9%

Public sector growth has been weak over the past year, but grew 0.6% m/m in Aug





- The ‘other goods’ sector includes among other sectors fish-farming, fisheries and construction

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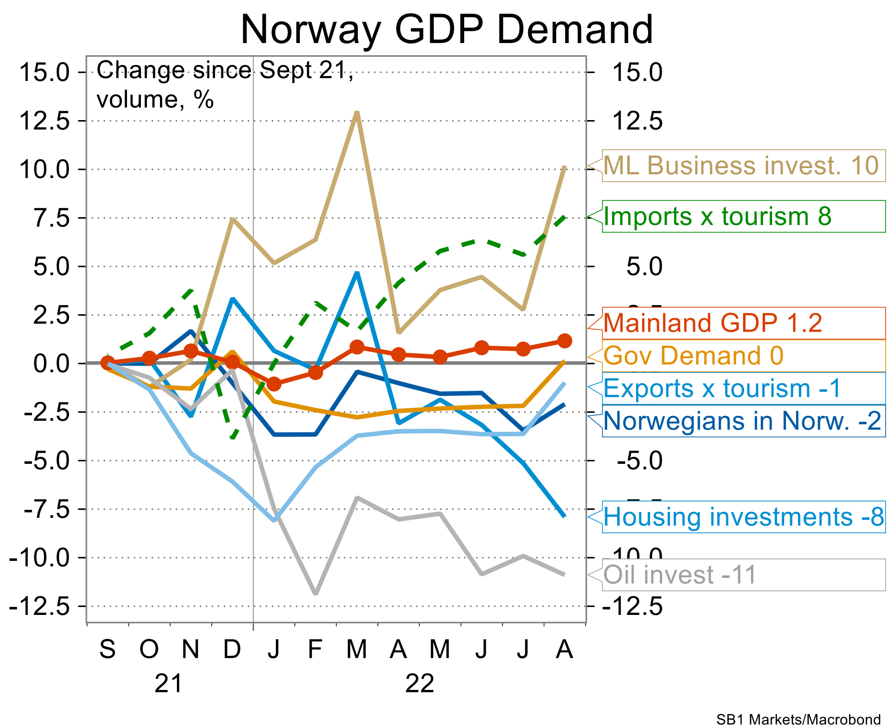
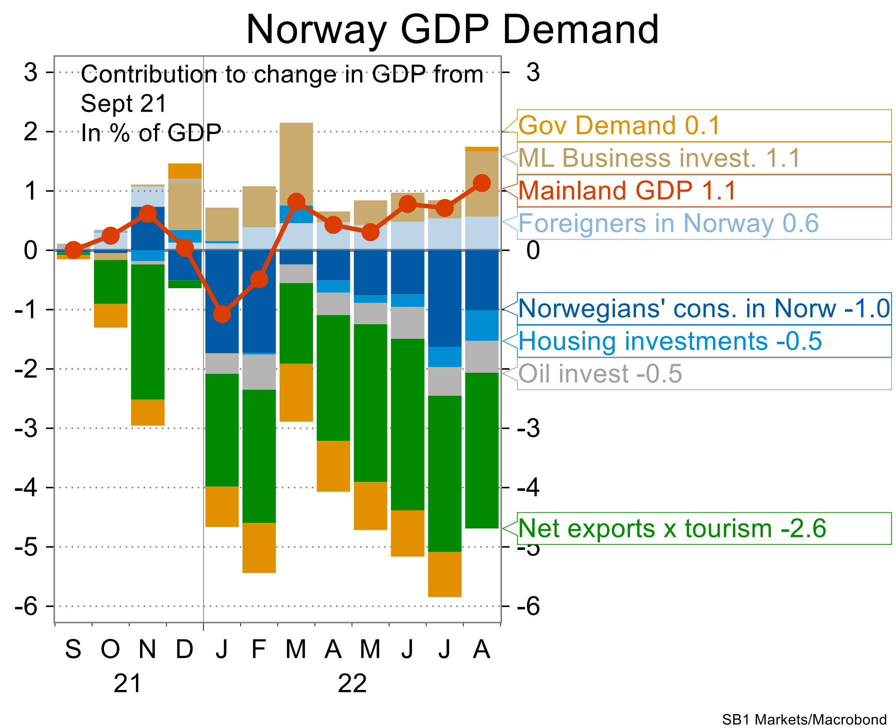
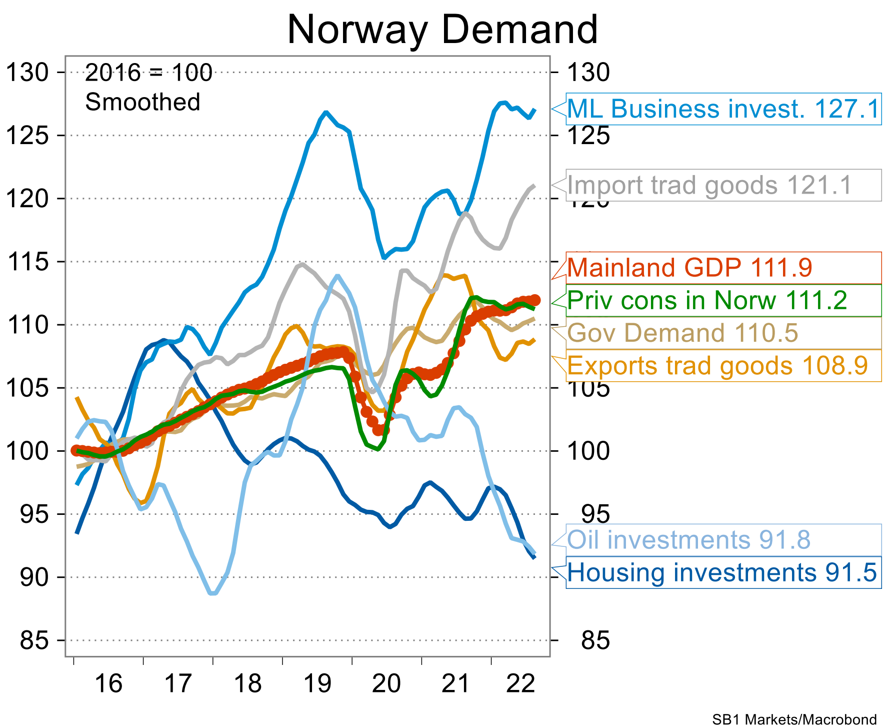
Demand: Housing investments keep falling, contributed 0.4% on the downside

While business investments and consumption in Norway rebounded in August



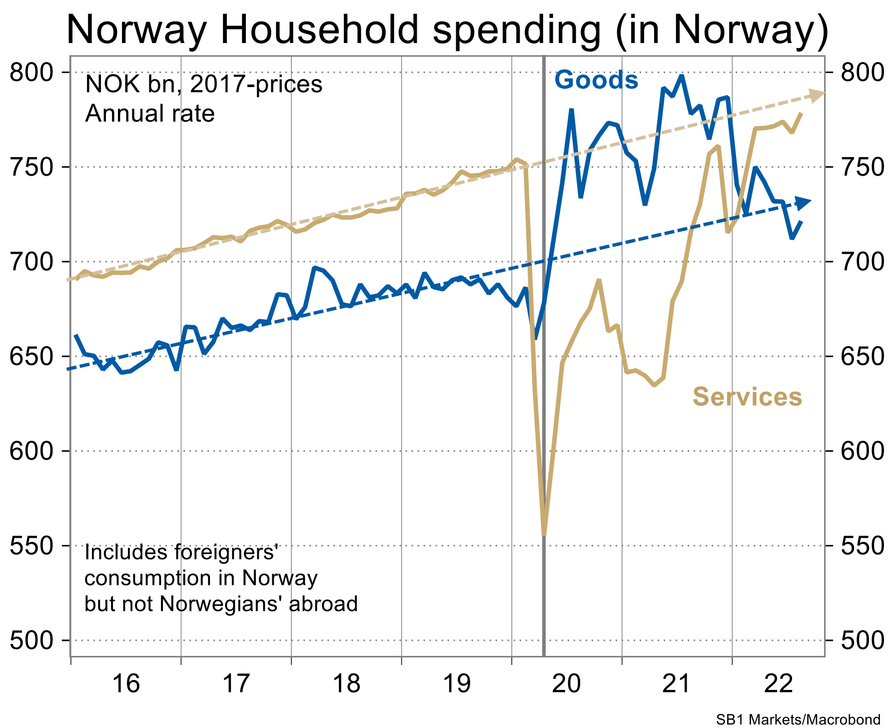


A longer and smoothed demand view



Household spending in Norway back up in August

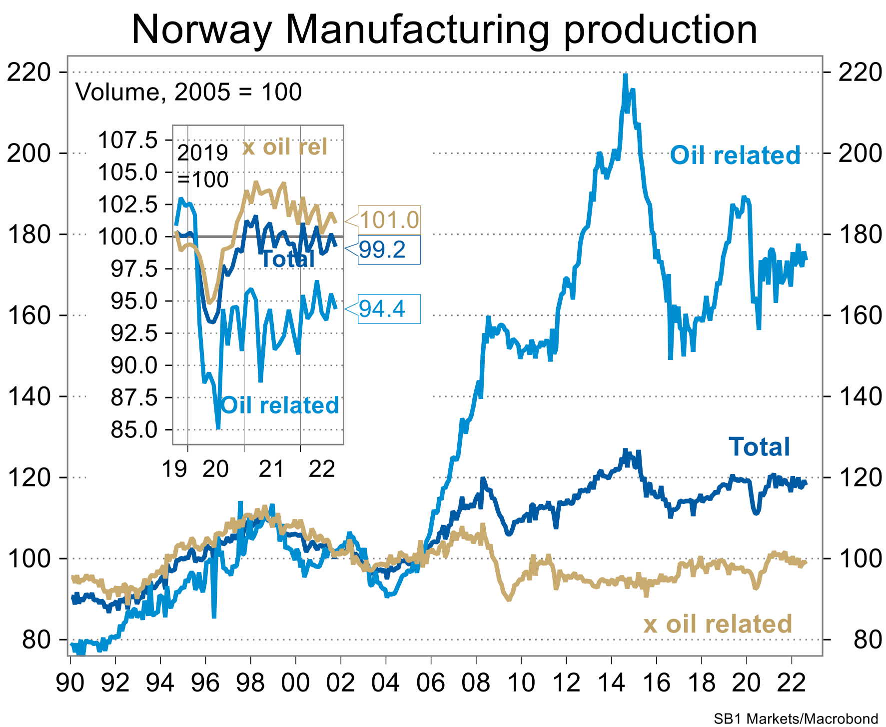
Norwegians spending abroad up 3.1% m/m; foreigners spending in Norway up 2.4%

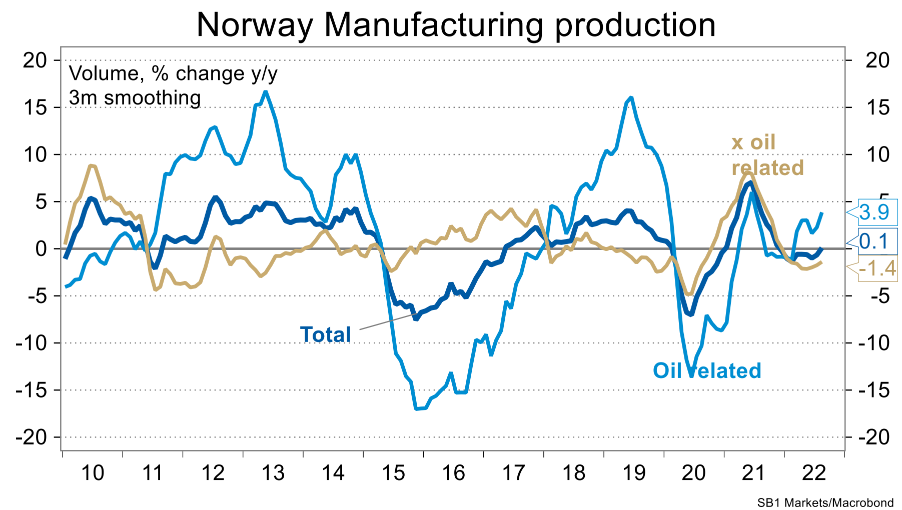


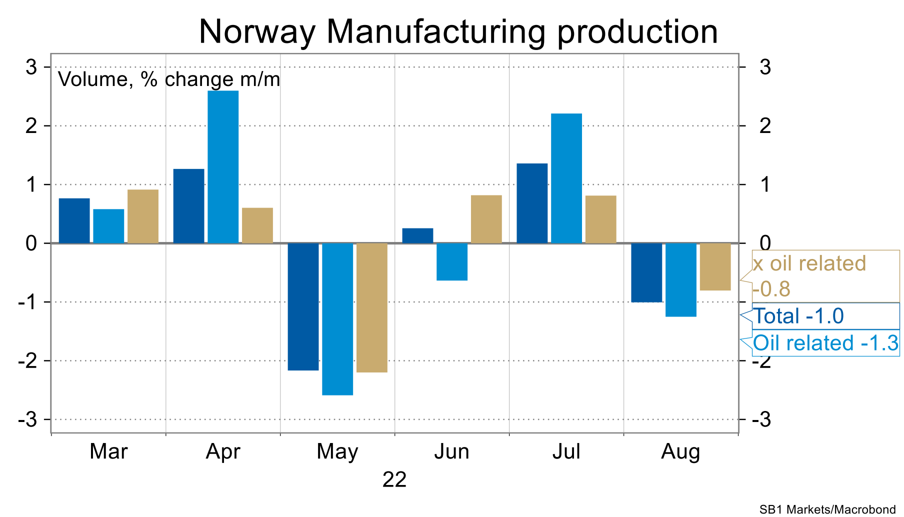
- Both service and goods consumption were up in Aug, and the consumption of services is still not back to the pre-pandemic trend
- Spending abroad is still some 20% below a normal level – but will probably recover further the coming months/quarters
- Foreigners' spending in Norway is also down approx. 20% vs the pre-pandemic level

Manufacturing production down 1% in August, broadly. Trend flat, at best

Surveys signal a mixed outlook: Oil related still OK, others not that good



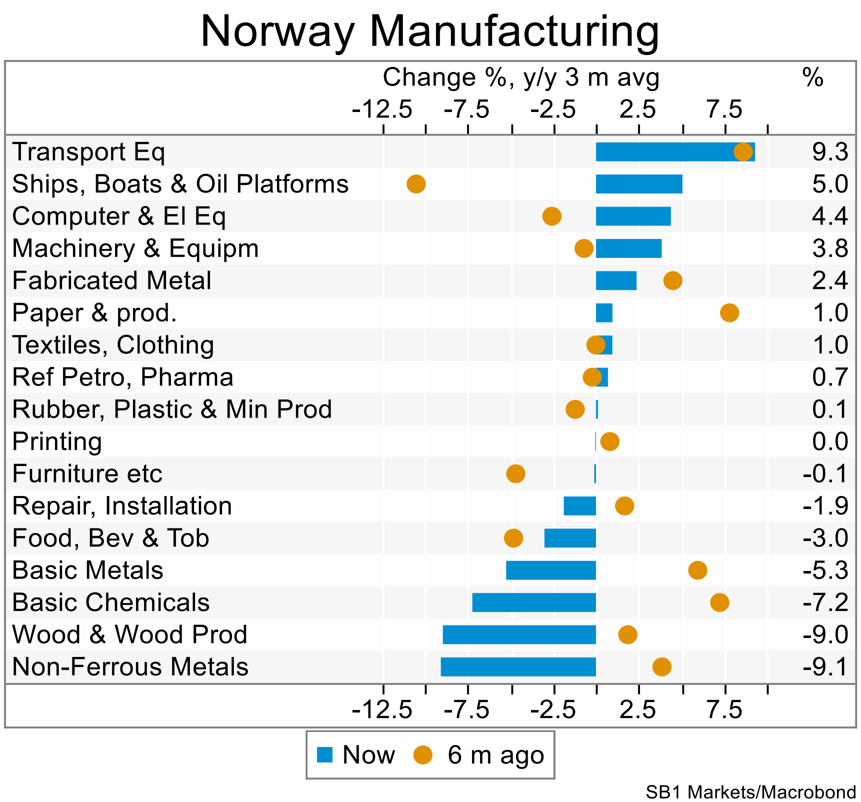


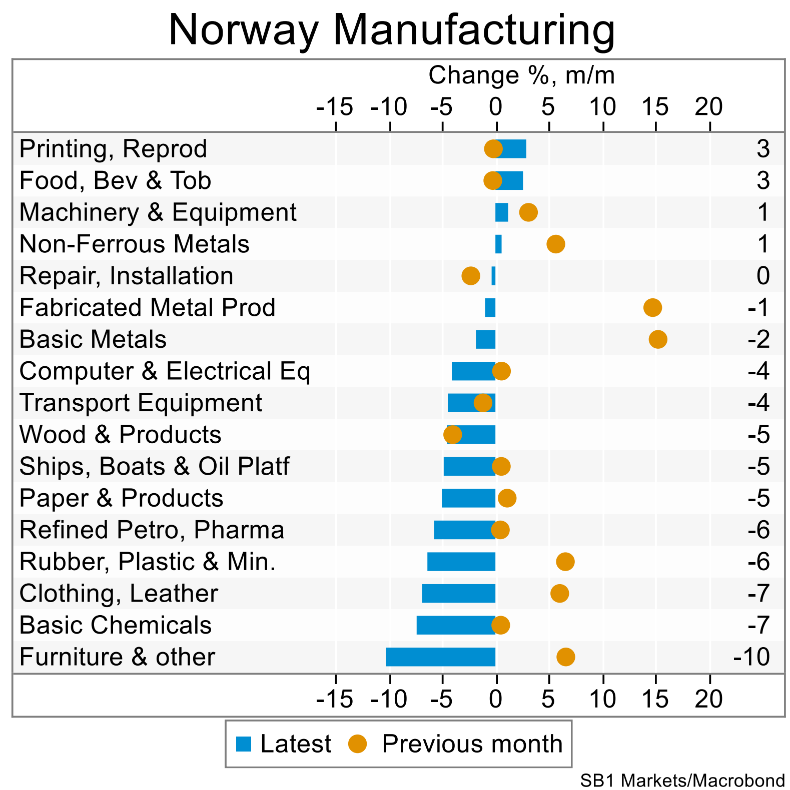


- **Oil related manufacturing production** (yards etc) fell 1.3% but are drifting upwards, at a 4% pace
- **Other sectors** reported a 0.8% decline – and the trend is slowly down, at some 1% p.a
- **Manufacturing surveys** have been signalling strong growth in production but so far not much have been delivered - and now surveys are heading south

Almost all sectors down in August – but trends are mixed

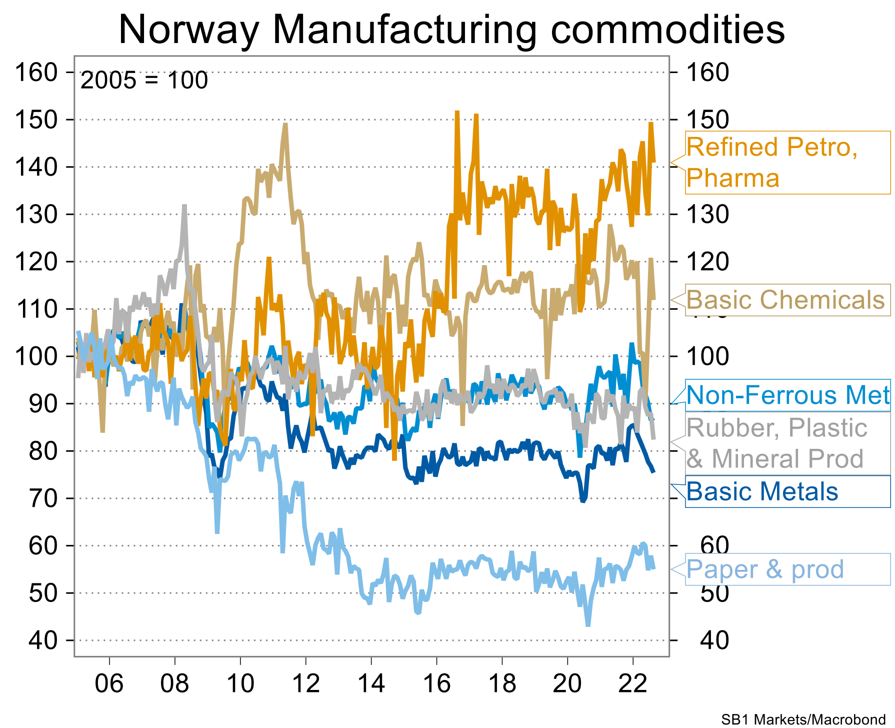
Oil related at the top, metals, chemicals and wood/products at the bottom

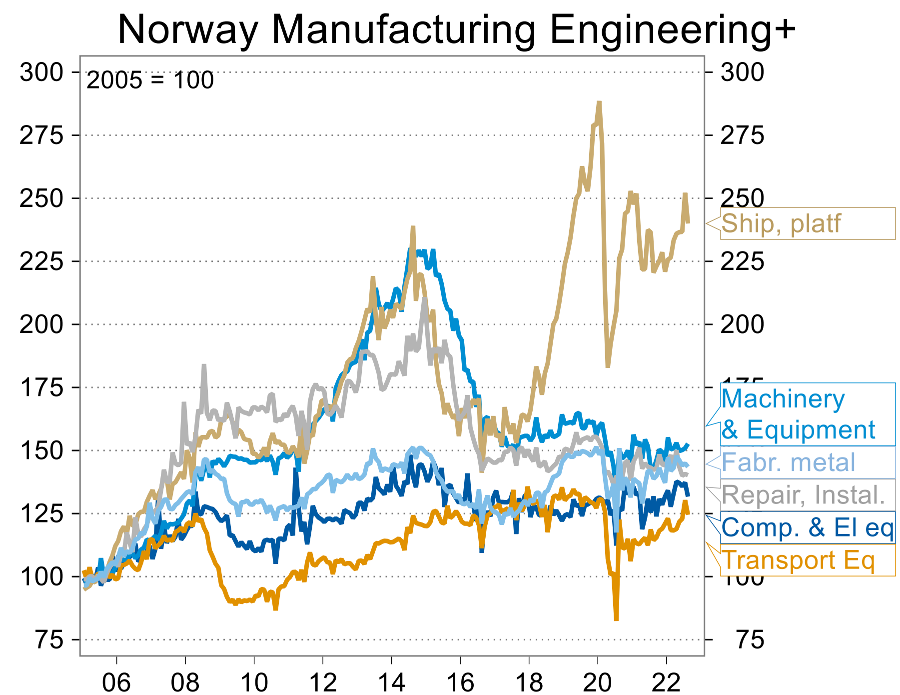


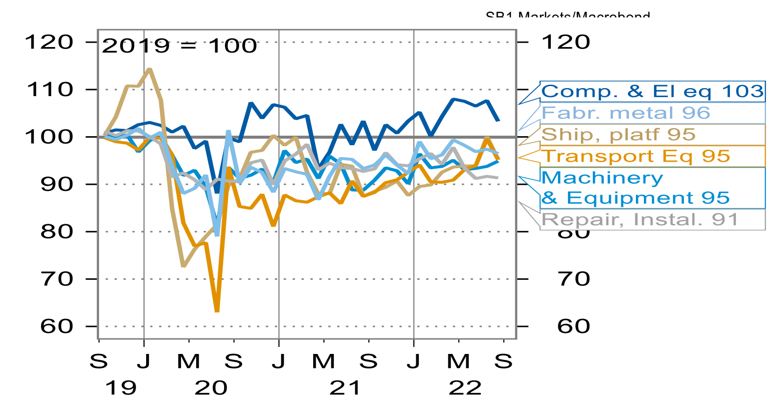


Engineering on the way up, now even ships and platforms

Mixed within commodities: refined petro, pharmaceuticals, chemicals up – metals and paper down

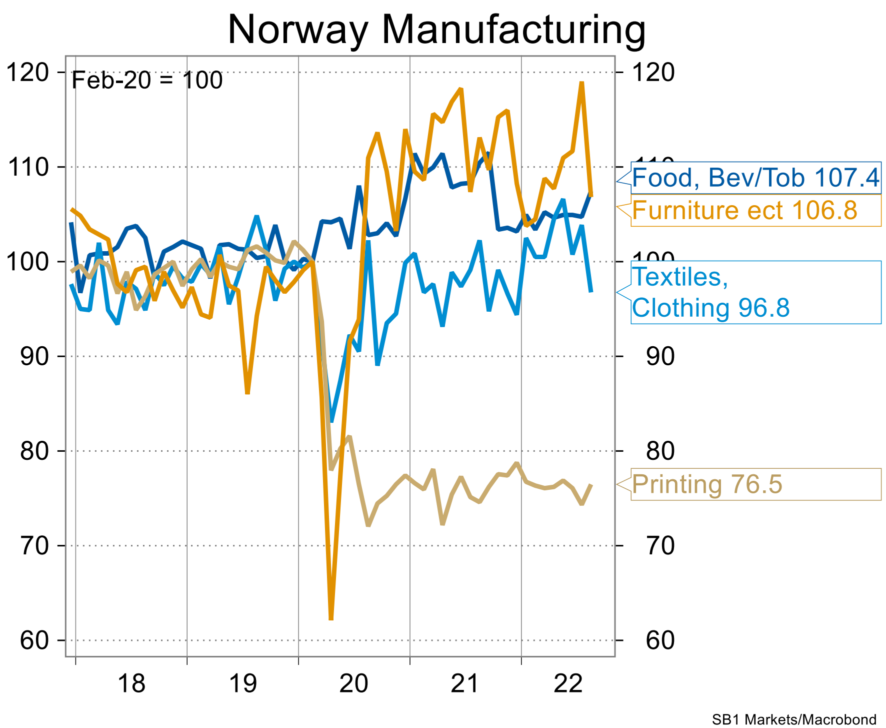






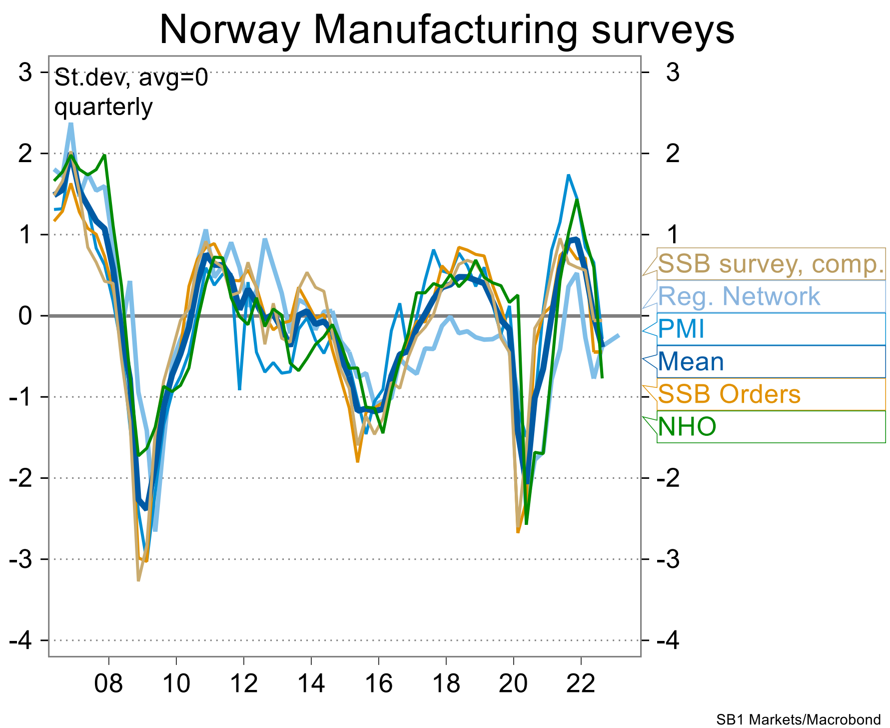
Food production is back to a normal level, and has flattened

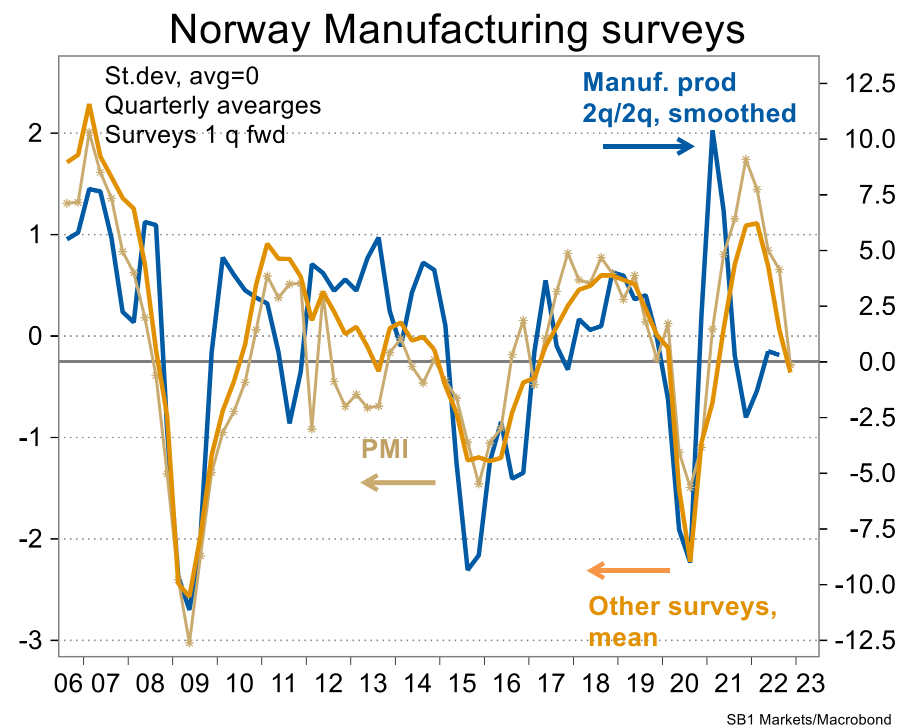
Furniture, textile/clothing are still above pre-pandemic levels. Printing is not, down 23%



Surveys are signalling slower growth (like elsewhere)

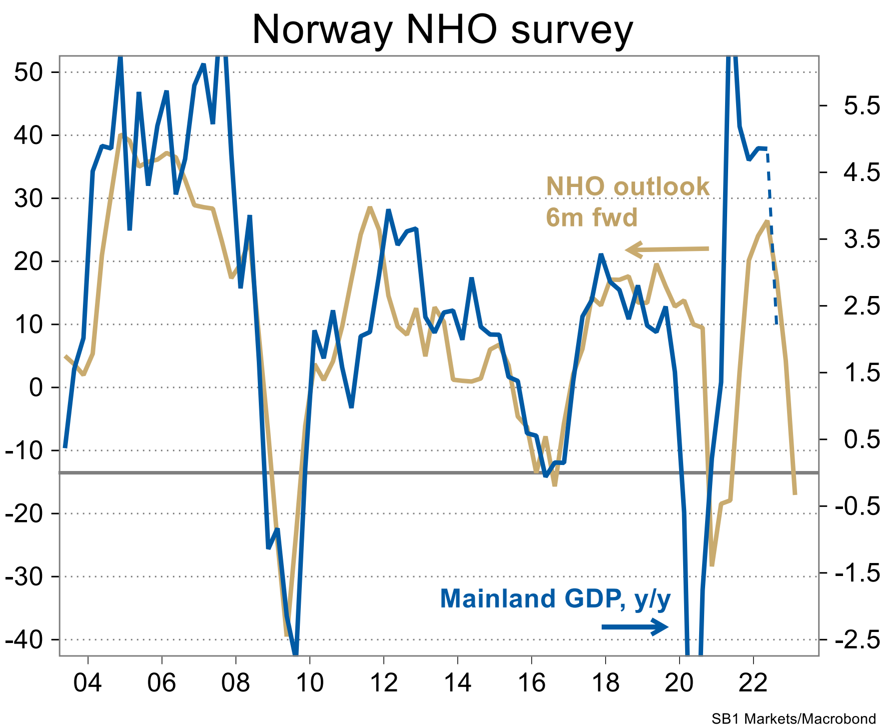
… production has not been that impressive (like most other places) when surveys were strong

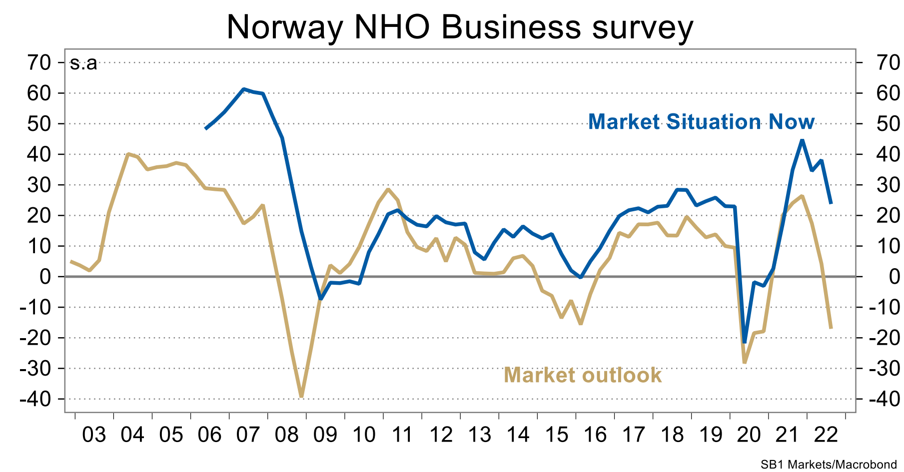


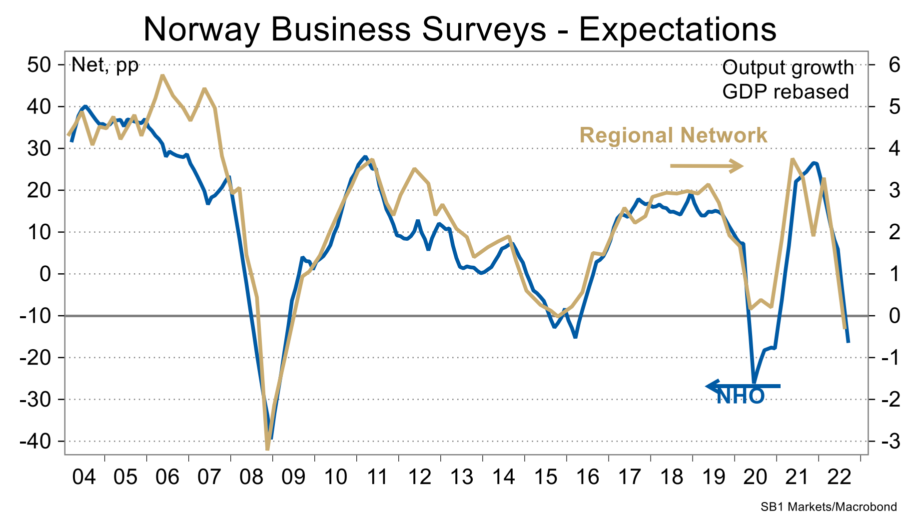


NHO Q3 survey says growth is OK now, but the outlook has darkened rapidly

A 0.5% GDP contraction is signalled – in line with Norges Bank's Regional Network survey

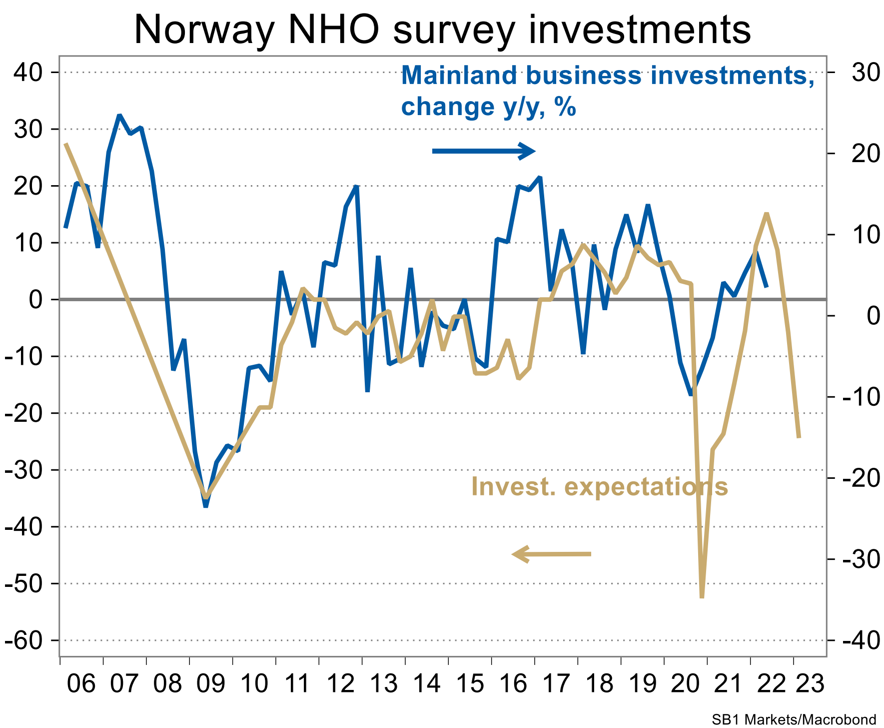


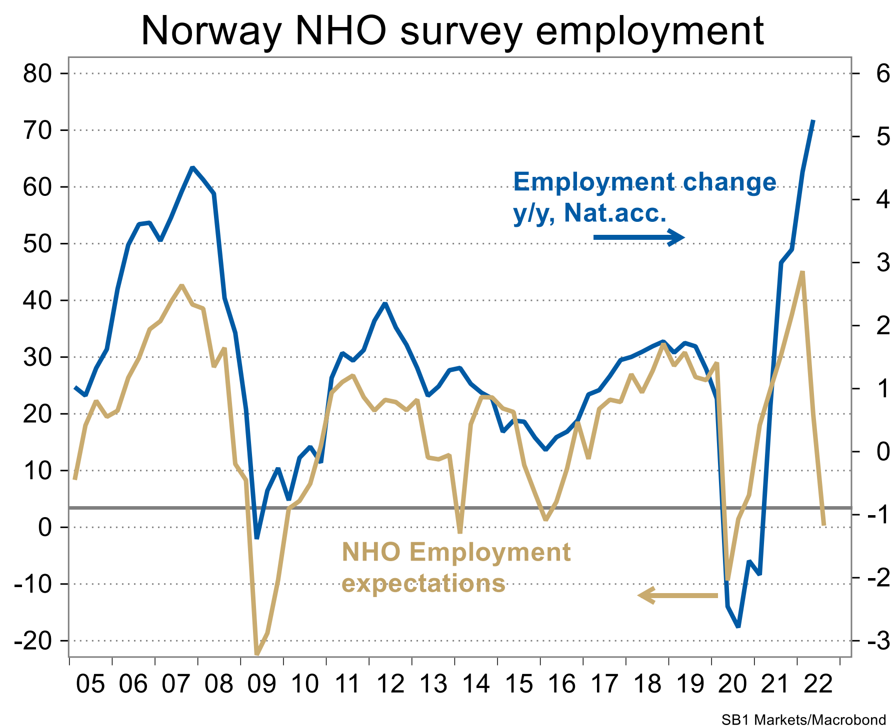




A sharp reversal of investment and employment expectations

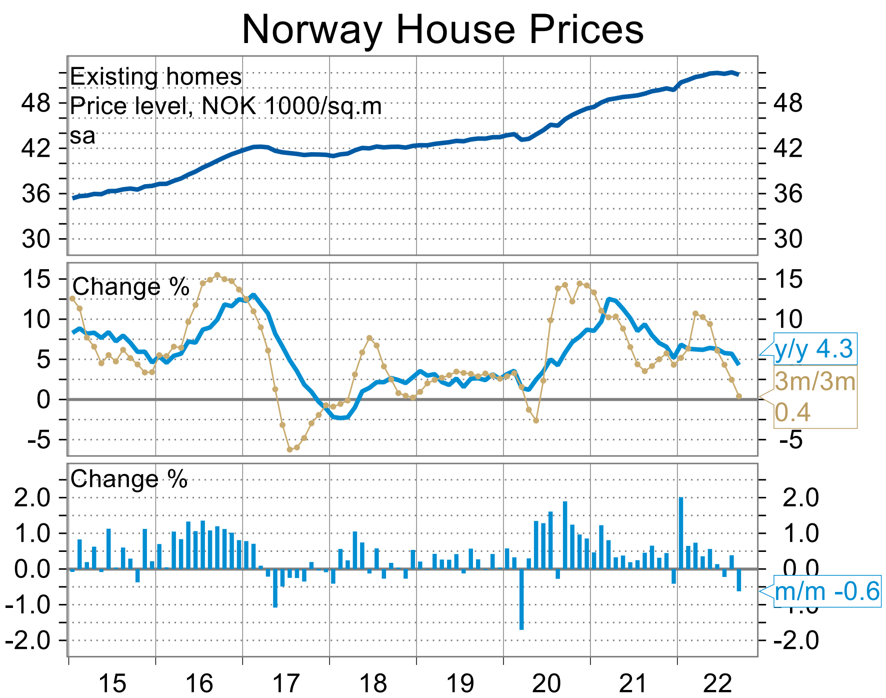
Companies are very likely revising their expansion plans downwards





House prices fell in September – and more is very likely to come

No doubt, the surge in interest rates will lower house prices, probably substantially



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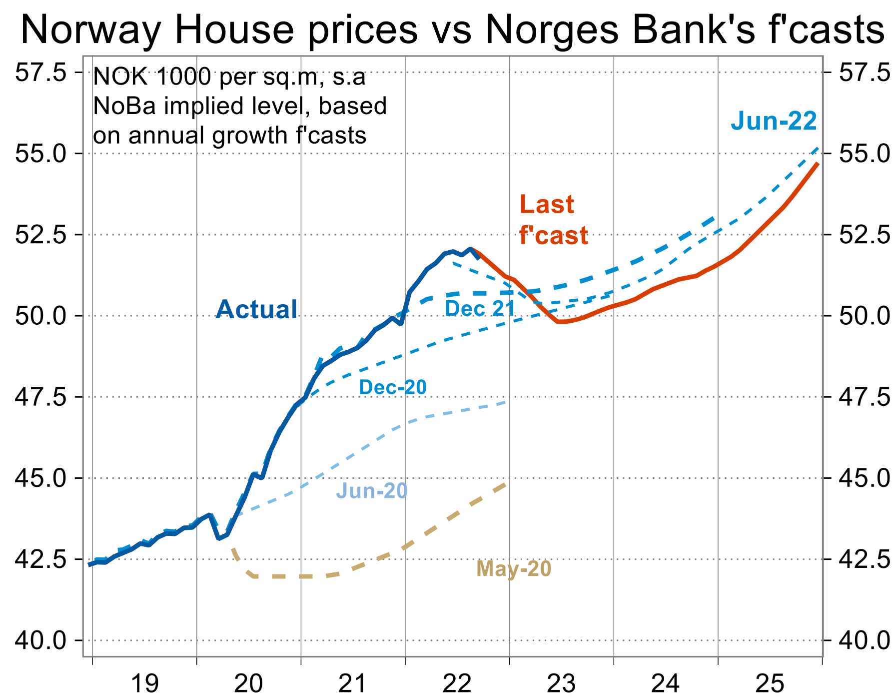
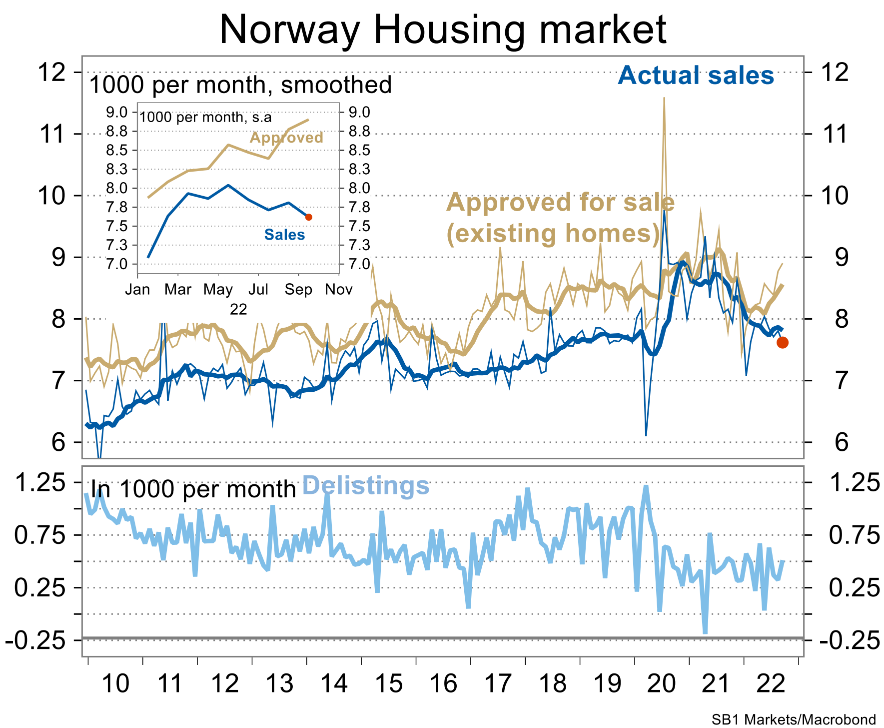


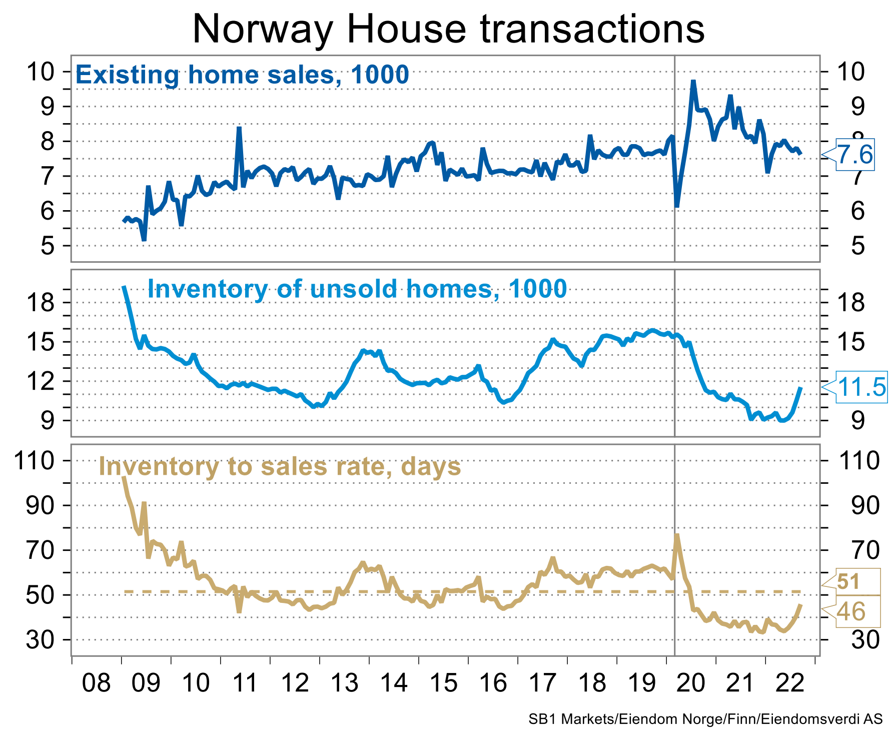
SB1 Markets/Macrobond

- **House prices** declined 0.6% in September, we expected -0.5%, following the 0.6% (surprising) lift in August. This was the largest decline m/m since the start of the pandemic, and before that in 2017. Norges Bank expected a 0.35% decline. Prices are still up 0.4% measured 3m/3m – and they are up 4.4% y/y. Prices fell in 15 of 16 cities, and were flat in 1 (Ålesund). Underlying (3/3m) are up in 5 cities, down in 11. Extra supply due to new documentation requirements is a possible explanations but higher mortgage rates are very likely more important
- **Existing home transactions** fell further, to 7.6' which is 15% below the peak during the pandemic but still just back to the average 2019 level. However, no. of **homes approved for sale** rose further, and is clearly above a normal level.
- **The inventory of unsold homes** rose by 1' units in September, to 11.5'. Over the past 3 months the inventory has increased faster than anytime before. Still, the time on market for those homes sold remains low
- **Norges Bank** expects a 4% price decline from August till next summer. We think the risk is on the downside

A record rapid pace of inventory accumulation as sales slow (to a normal level)

Even so, the inventory of listed homes is still below average

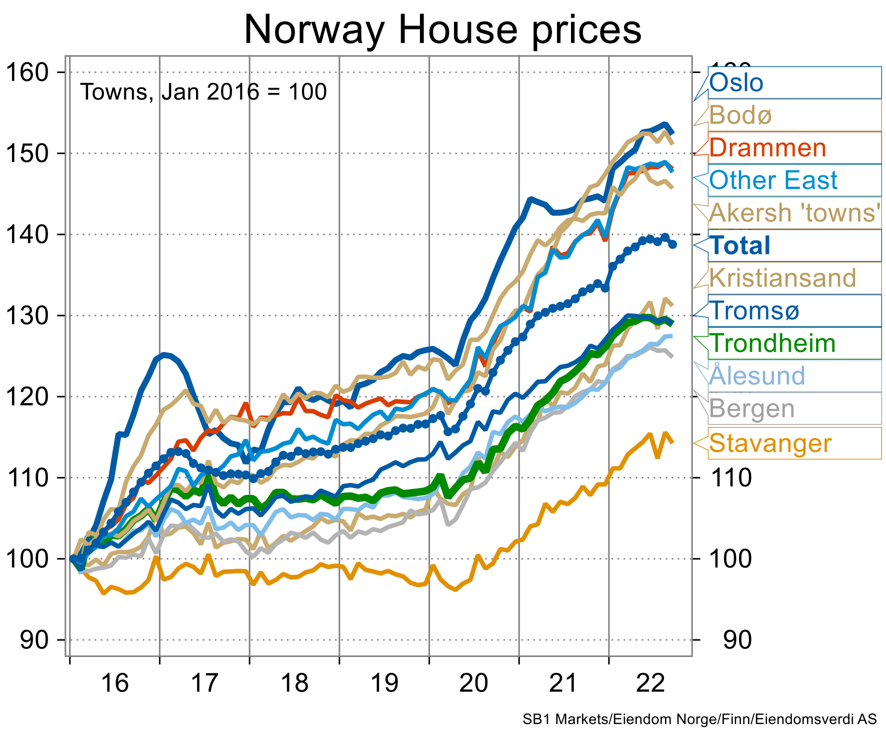


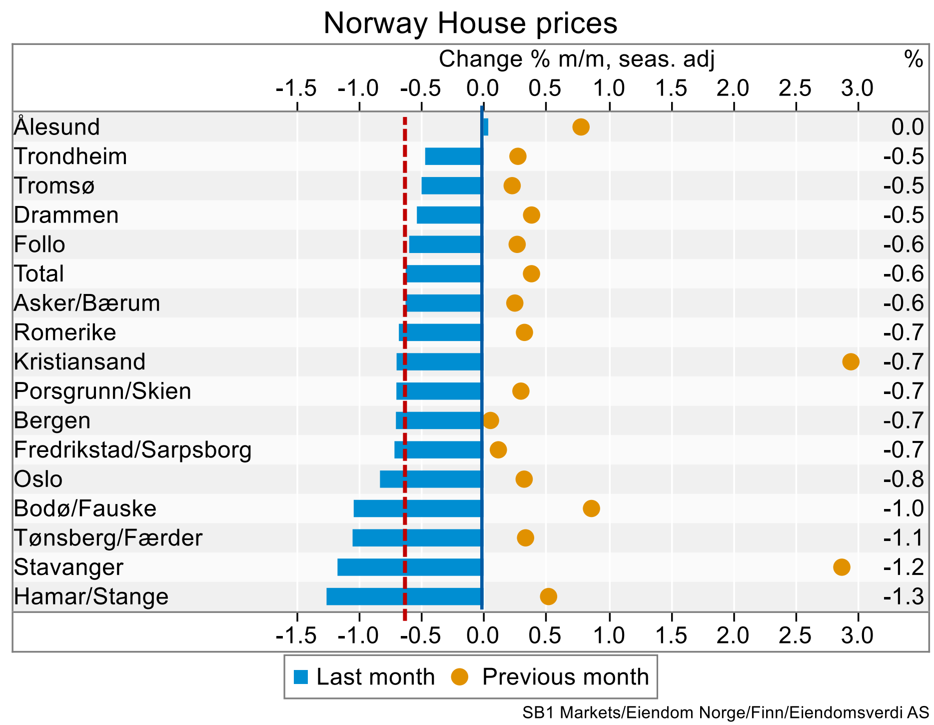


- The **number of transactions** fell in September and is back to a 'normal' (2019) level, following the surge in the first part of the pandemic
- The **supply of new existing homes for sale (approvals)** rose further and to above a normal level in September
- The **inventory of unsold homes** rose sharply in August, and the lift the last 3 months is the fastest on record (over 3 months)
- The **inventory/sales ratio** added 5 days to 46 days, vs an average at 51 days
- The **actual time on market** for those homes actually was unchanged at 32 days (average 42 days) – so there is no buyer's strike here!

Prices fell everywhere in September, except for Ålesund

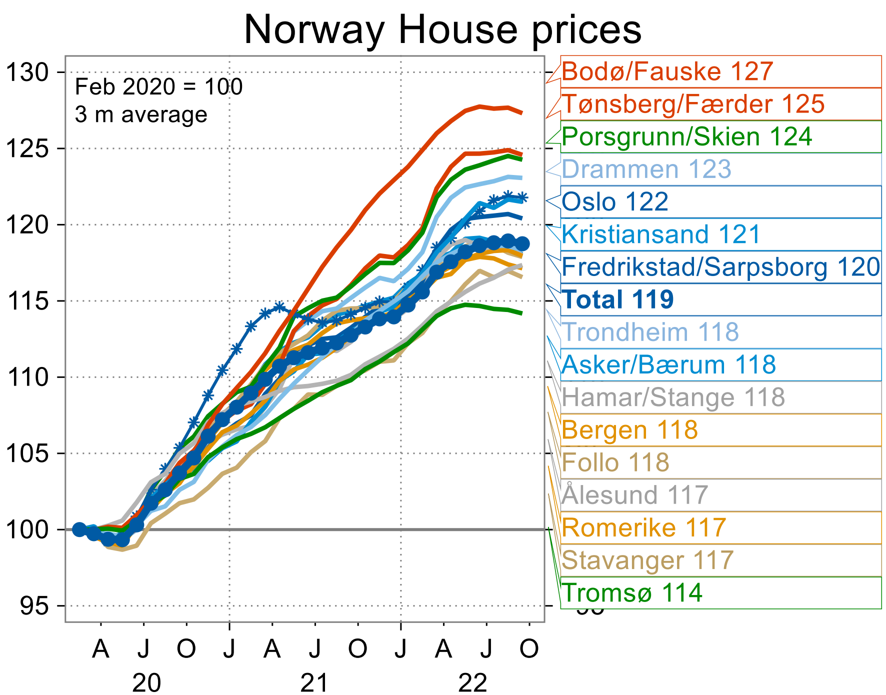
Hamar and Stavanger reported the largest monthly declines



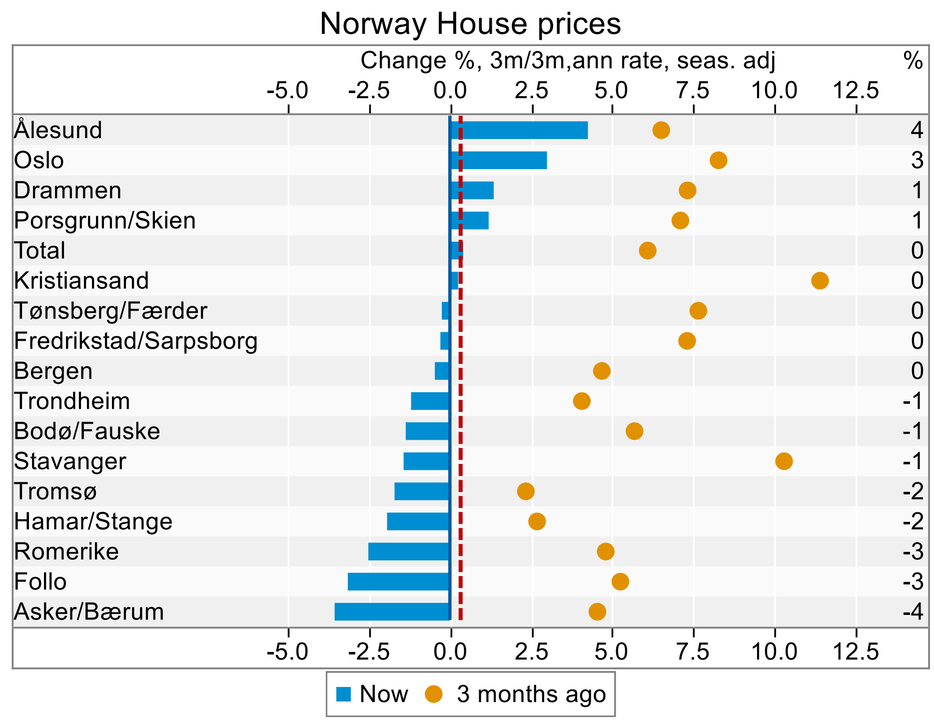


The big picture: Prices are now turning down most places

Prices measured 3m/3m are still up in Oslo, close to flat in total, but down in 11 of 16 cities



SB1 Markets/Eiendom Norge/Finn/Eiendomsverdi AS

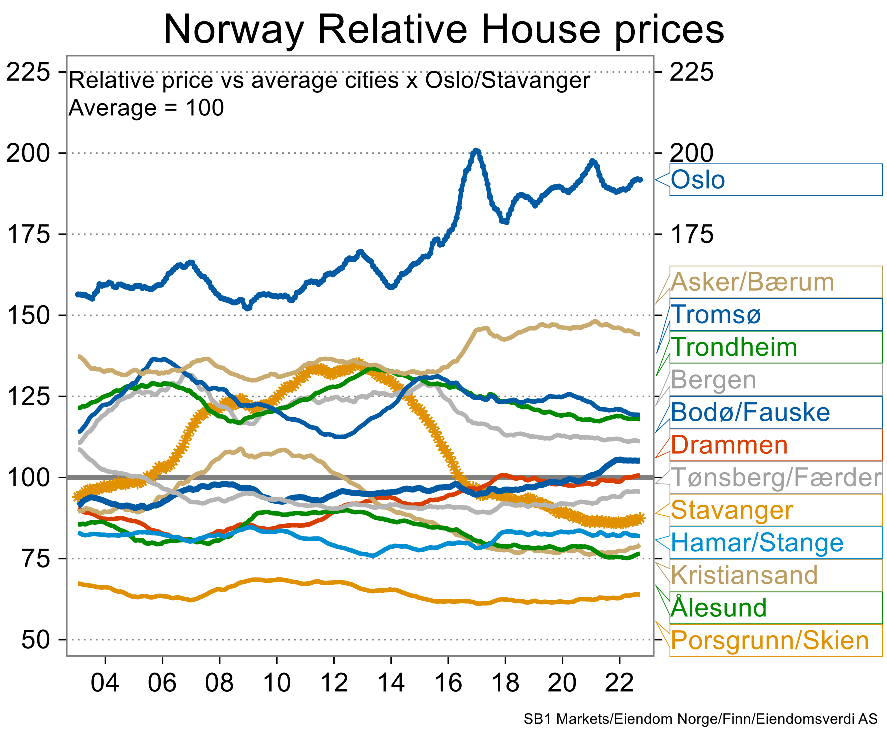


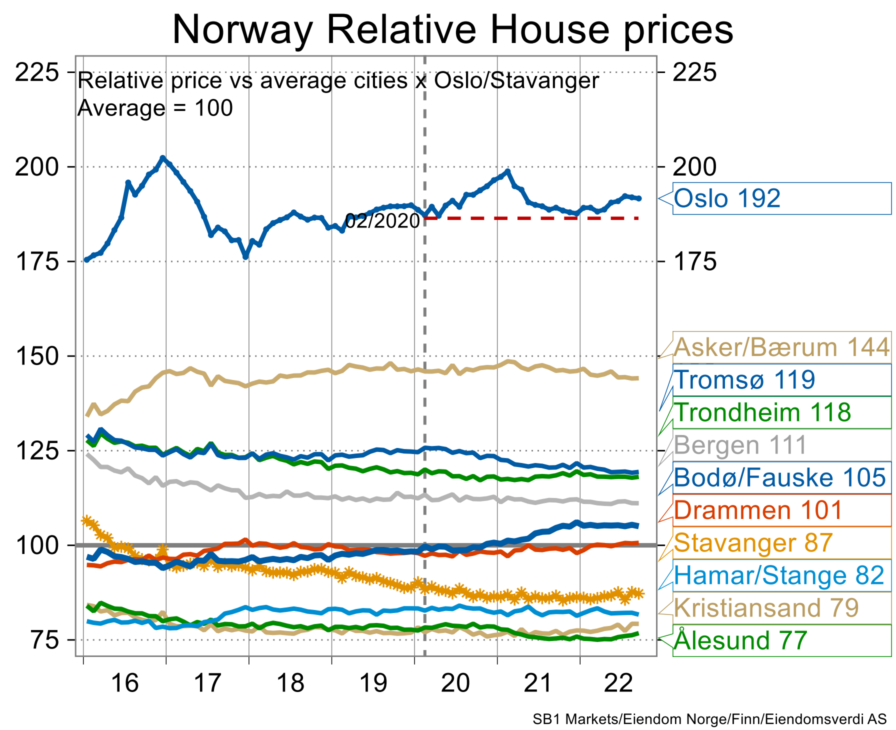
SB1 Markets/Eiendom Norge/Finn/Eiendomsverdi AS

- Bodø the winner through the pandemic (but Oslo since 2016, check the previous page). Recent months, prices in Bodø have been falling
- After Bodø, south-eastern towns have been the winners since early 2020; Tønsberg, Porsgunn/Skien, Drammen, Oslo, and Fredrikstad/Sarpsborg. Prices are still drifting upwards in Oslo, Drammen and Porsgrunn/Skien but are falling in the two others
- Tromsø, Stavanger, and Romerike are at the bottom of the list (vs. early 2020)
- Now: Price inflation is slowing everywhere, and prices are falling in 11 'cities', while 5 still are up measured 3m/3m. Last month 5 cities had turned down, and 11 were still on the way up…

Oslo relative prices above the pre-pandemic level again

Stavanger has been slowly recovering



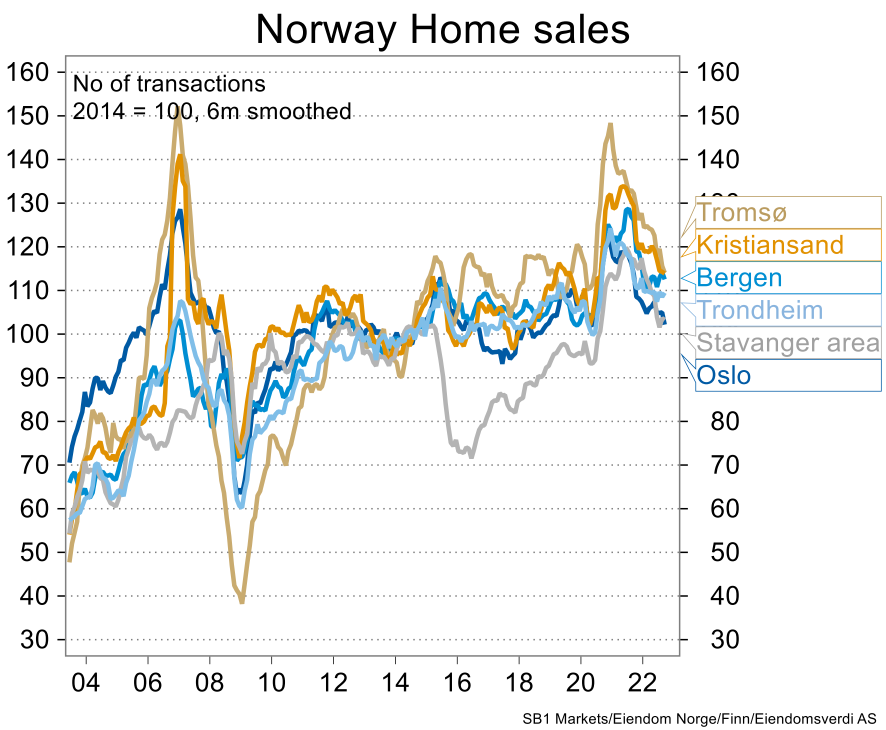


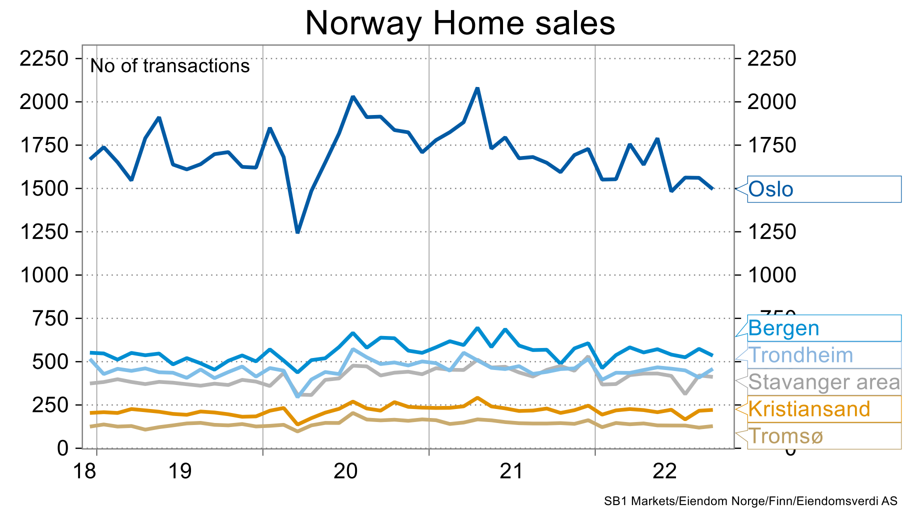
- Housing starts in Stavanger/Rogaland are still not lower than normal. It is still profitable to build, even at 'Hamar/Stange' prices! And why shouldn't it??

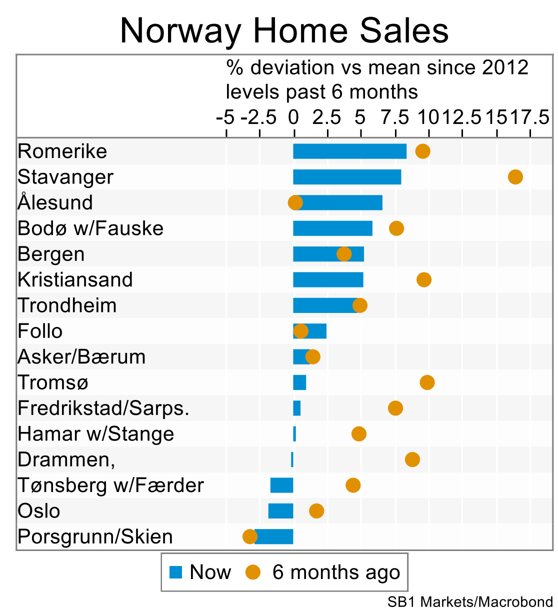
SpareBank 1 MARKETS

Sales down form the peak everywhere

… but not by much in many cities through 2022 – and sales are higher than 10 y avg. most places

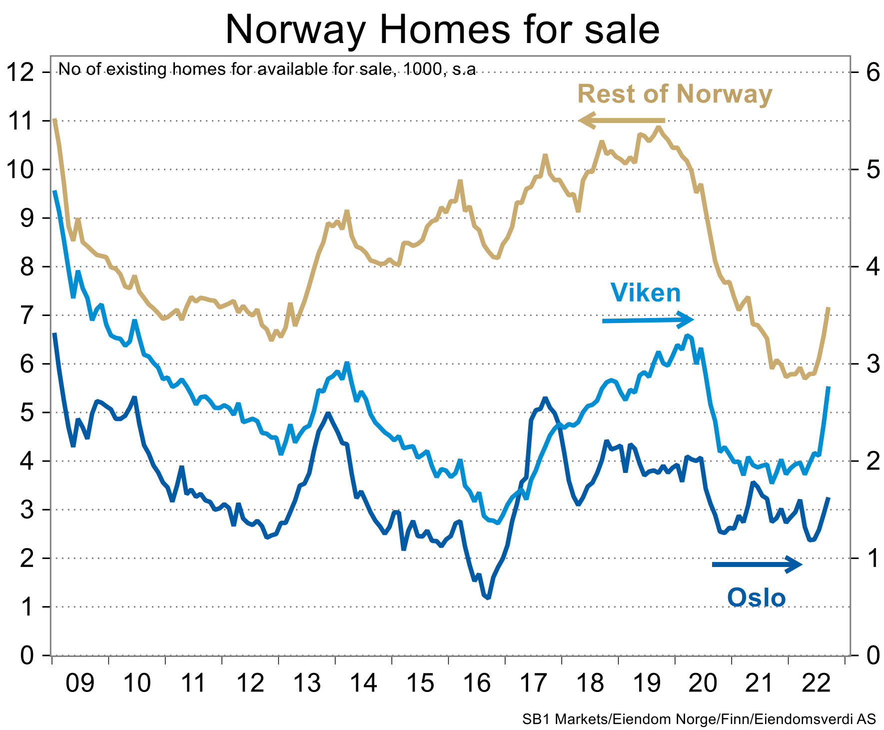


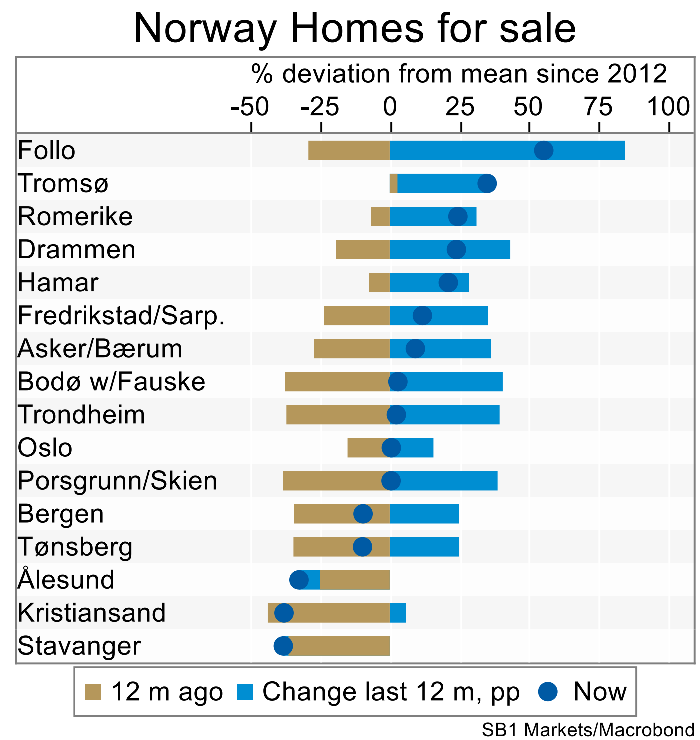




The inventory on the way up everywhere, and the fastest ever most places

14 of 16 cities reported higher inventories than one year ago

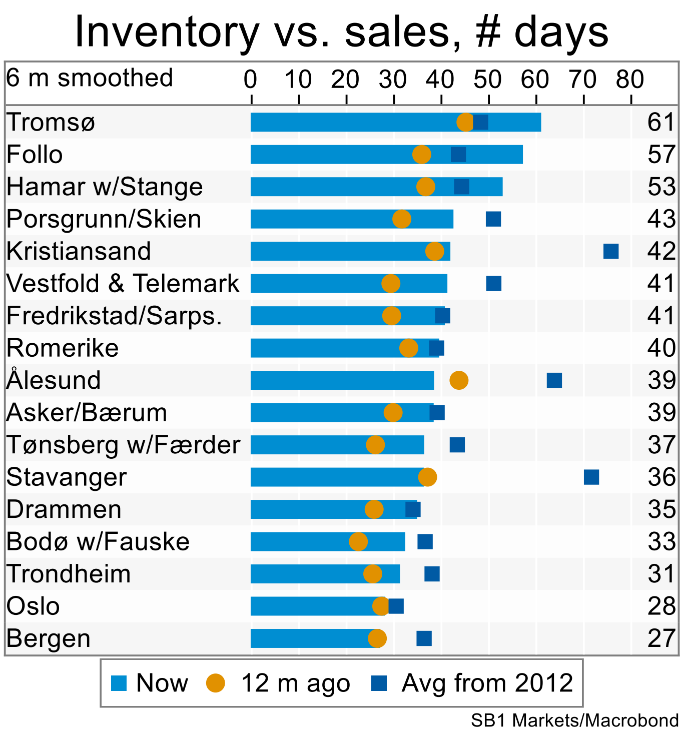




- Follo is reporting the largest increase last year – and
- The inventory has increased the fastest past 3 months in Porsgrunn/Skien, Drammen, Follo and Bergen

The inventory is turned around faster than normal almost everywhere

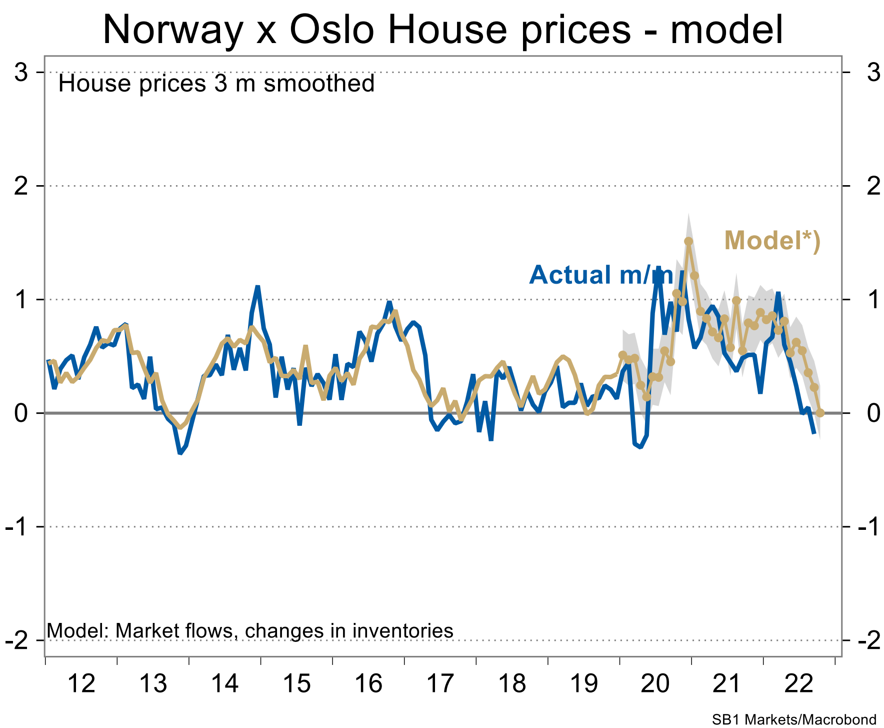
Still, almost all cities report higher turnaround times than one year ago, just one is down

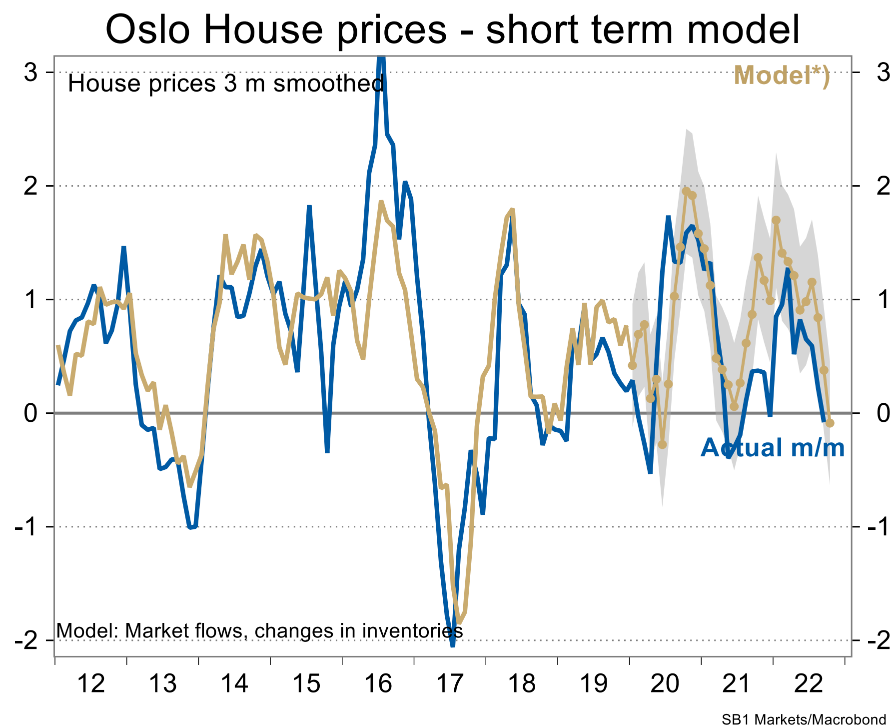


- On average, the i/s ratio higher than it was a year ago
- Just Ålesund is still reporting a lower turnaround time than one year ago
- Tromsø, Follo, and Hamar now report a higher turnaround time than the avg. from 2012!

Short term market flows suggest continued price growth, especially in Oslo

But at a slower pace. May higher mortgage rate also contribute to a slowdown coming months?



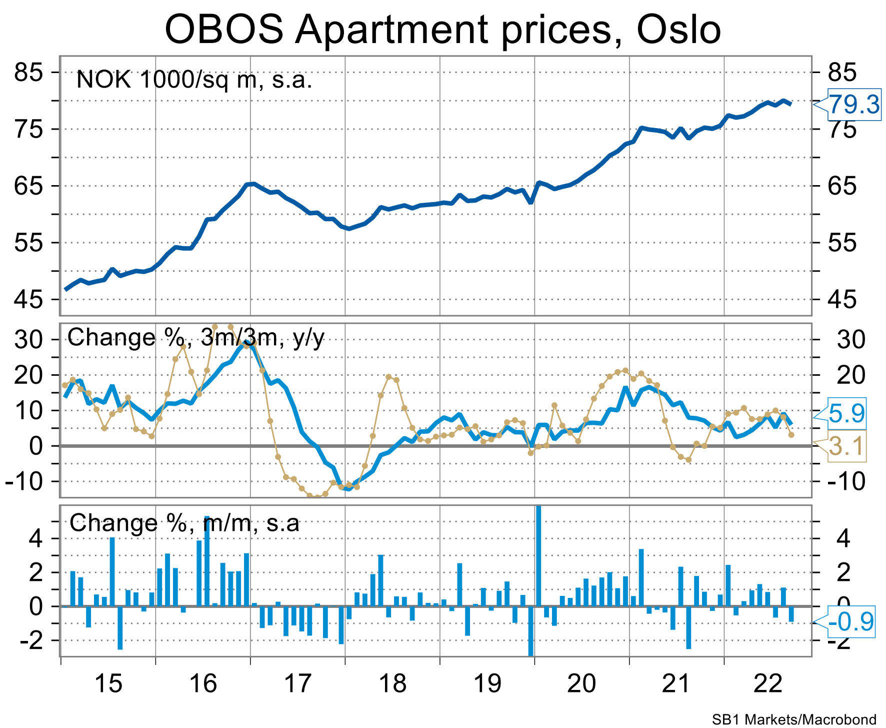


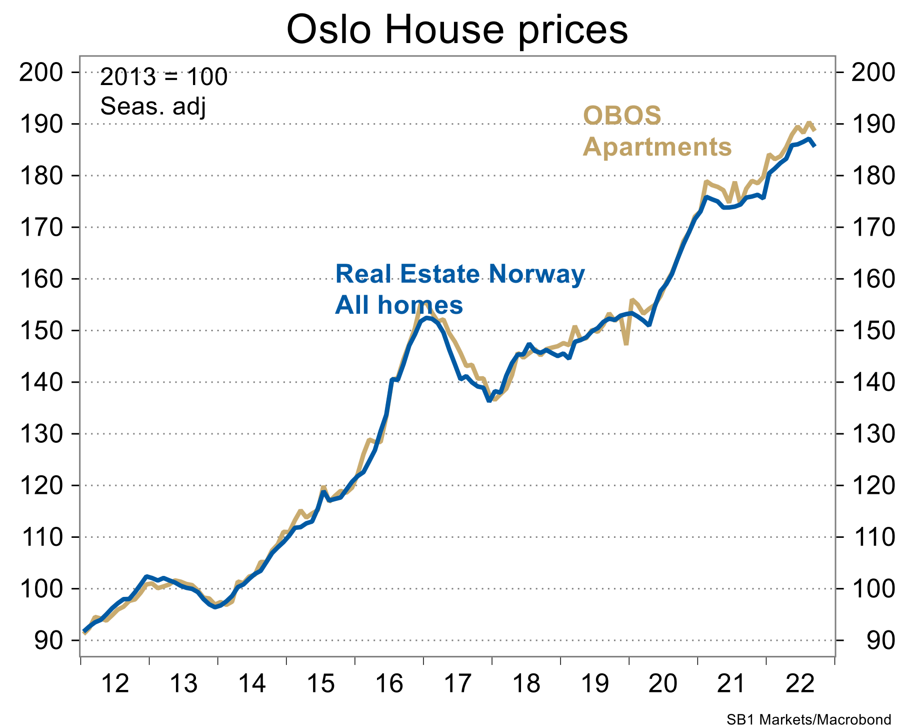
- Our **national x Oslo model** based on flows and the inventory signals no growth in house prices (in comparison, prices in Norway x Oslo fell by 0.5% in September)
- Our **Oslo model also** signals flattish prices
- **Mortgage rates** are not included in these short-term market models, because they have not consistently added to the models' performance. Still, over time, mortgage rates and credit growth are important driver for house prices, and now rates are on the way up
- *These models are not long-term price models, just short-term models based on flows of (existing) houses approved for sale, actual sales and changes in inventories – which are normally correlated to prices*

SpareBank 1 MARKETS

OBOS apartment prices down 0.9% in September

Close to the overall home price decline in Oslo

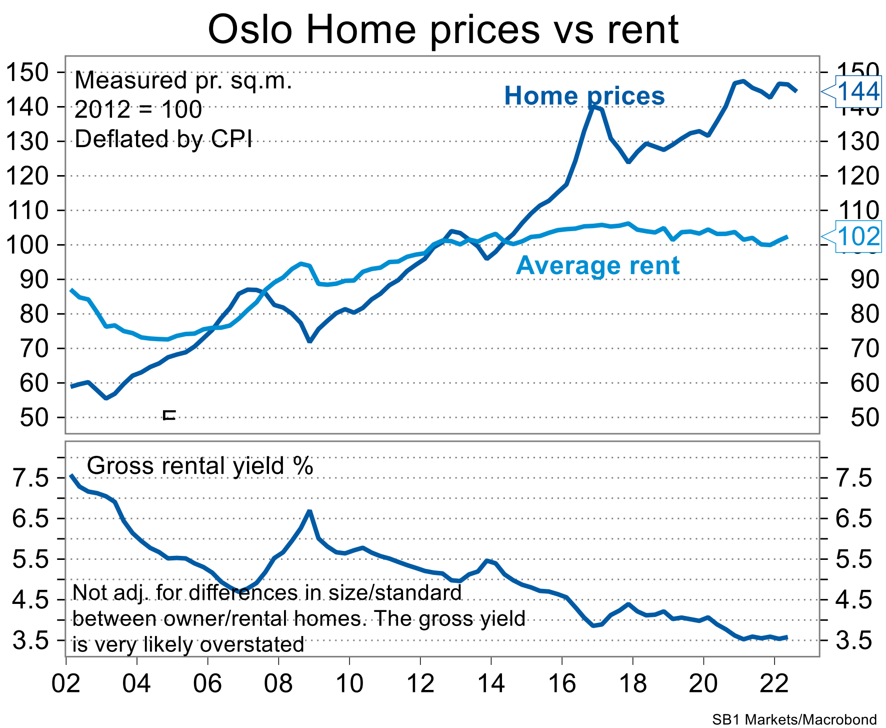


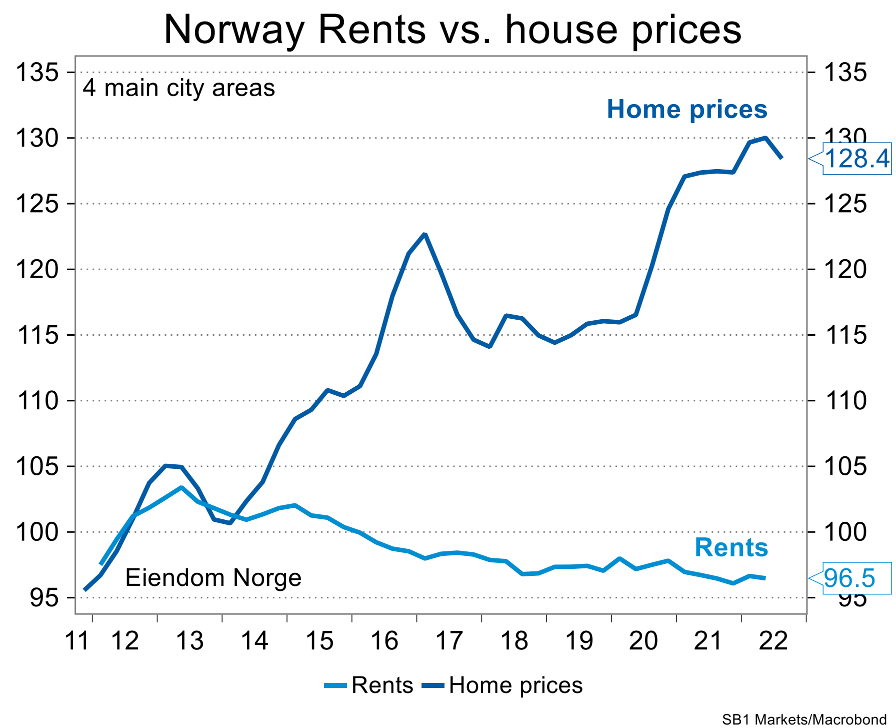


Co-op apartment prices follow the overall Oslo market quite closely, the average price level is somewhat lower than total Oslo market

Why have house prices been so strong? Lack of housing?

If so, strange that rents have been so weak? May is just be 'search for yield' (as mortgage rates fell)



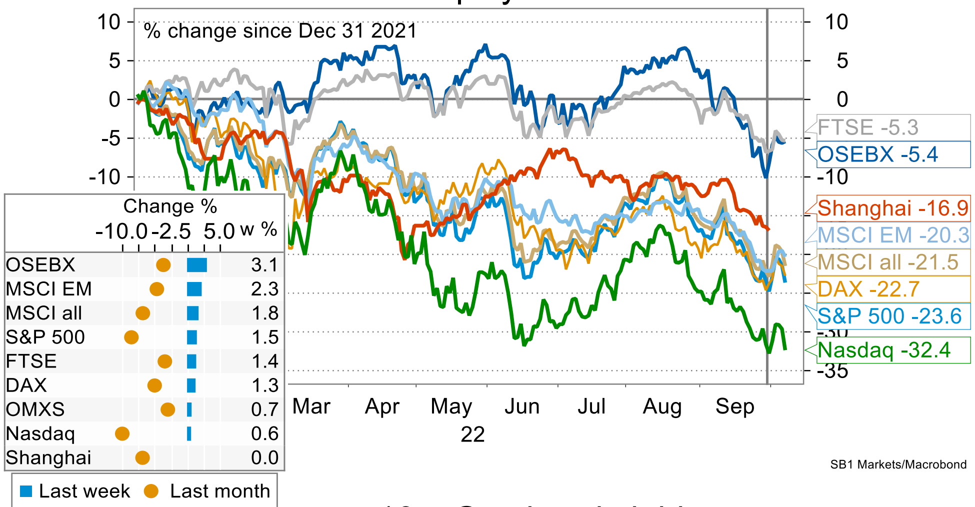


- Yield compression, as interest rates were low vs. income expectations
  - » Rents have been flat in real terms the past 10 years in Oslo, while prices are up 44% in real terms (almost 4% per year)
  - » Rents have fallen by 5% in real terms in the average of Oslo/Bergen/Trondheim and Stavanger areas, according to Eiendom Norge, while prices are up 28%
- BTW, mortgage rates are not falling anymore…

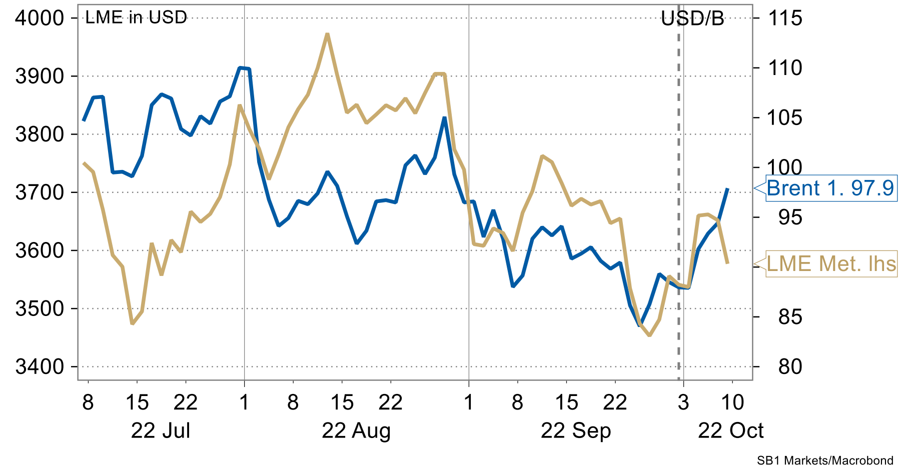
SpareBank 1 MARKETS

Risk on, sort of. Equities up, volatile bonds in the end up. Metals, NOK up too

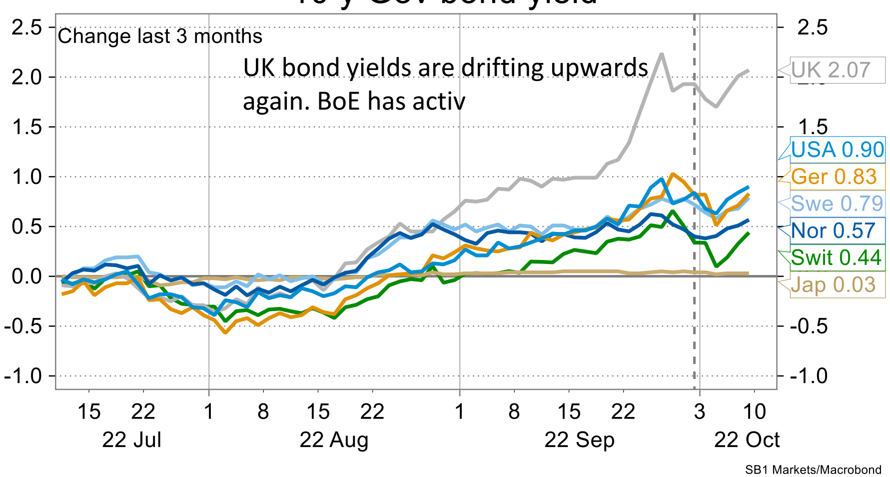
Equity Indices



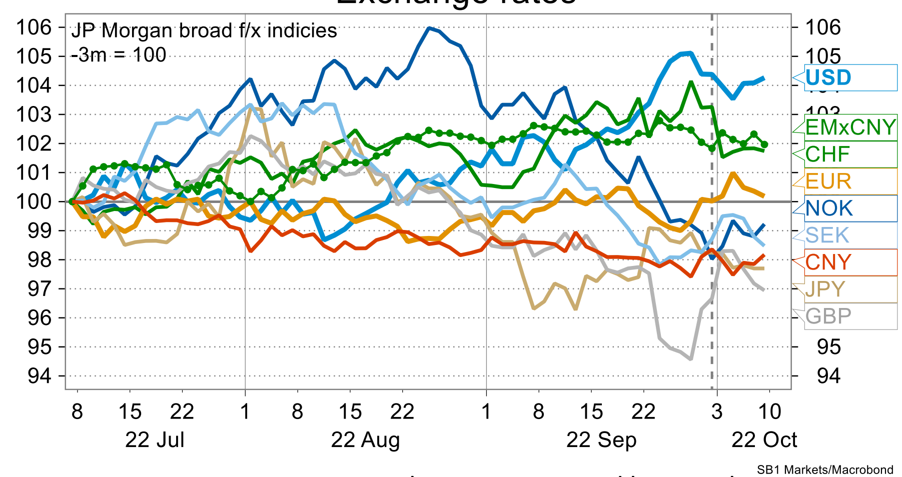
Oil vs. metals



10 y Gov bond yield



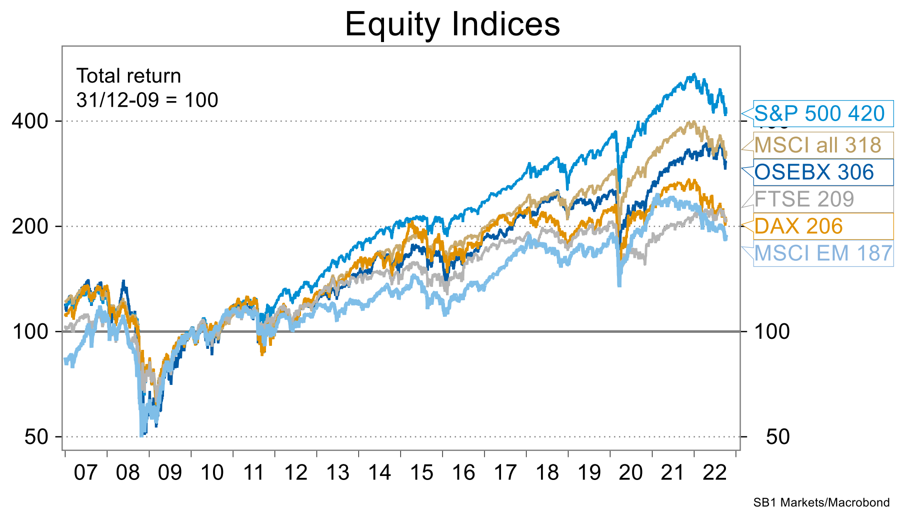
Exchange rates

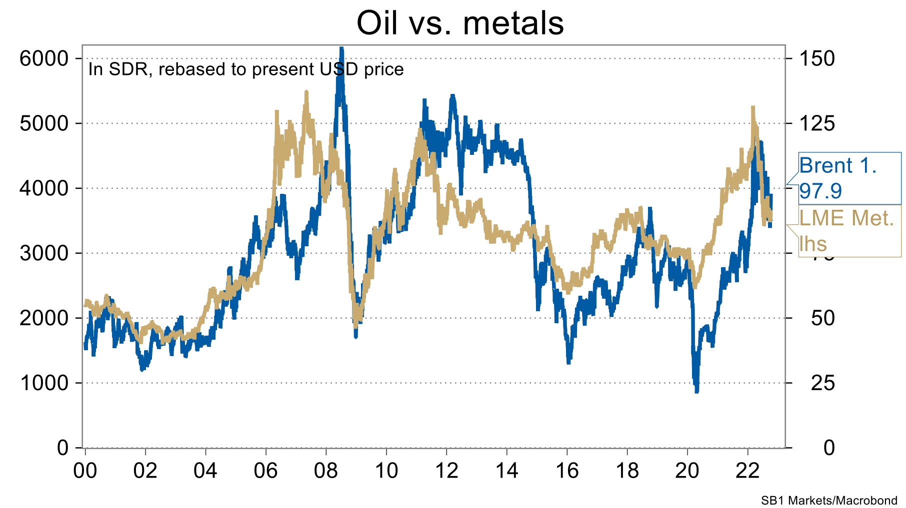


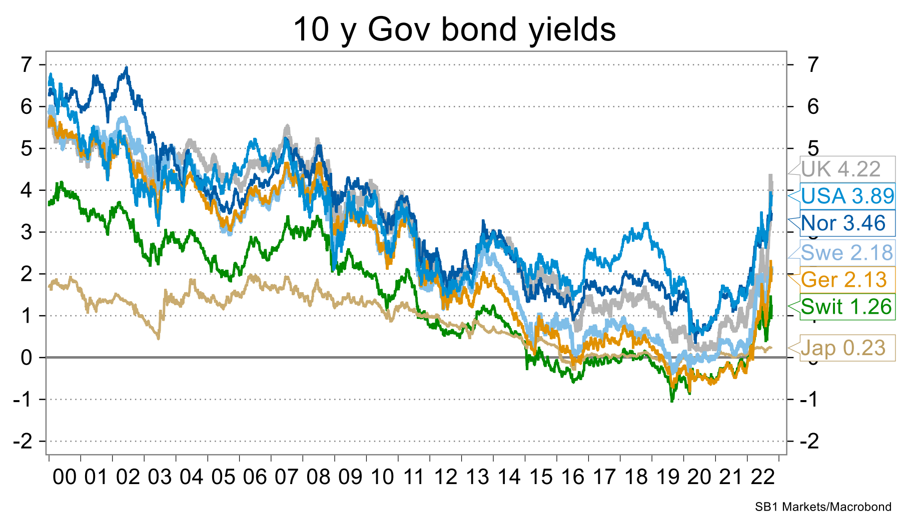
The GBP recovered last week

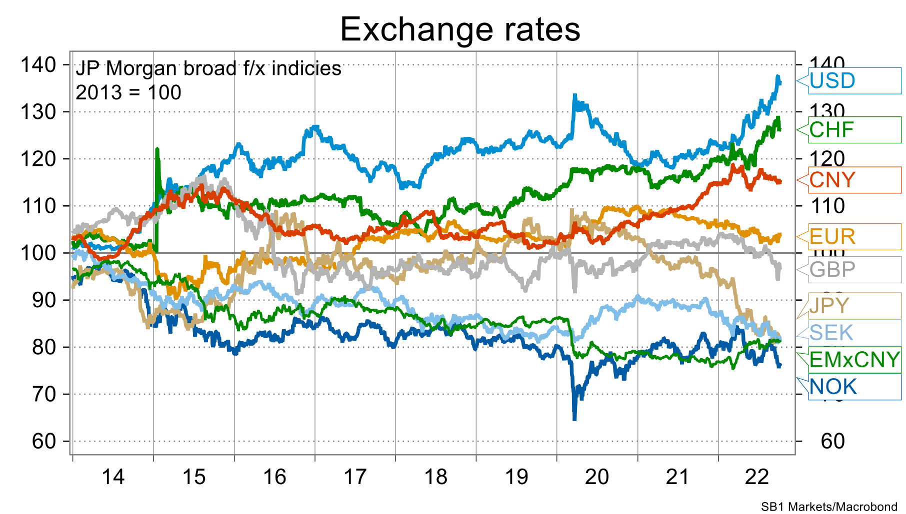
The big picture: Stock markets down, commodities down, bond yields up

The USD is very strong, most other DMs are slipping, NOK including



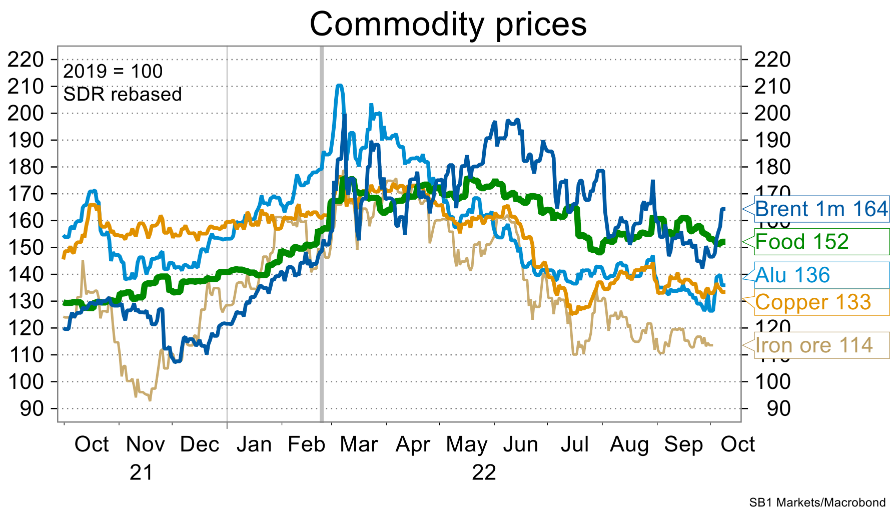


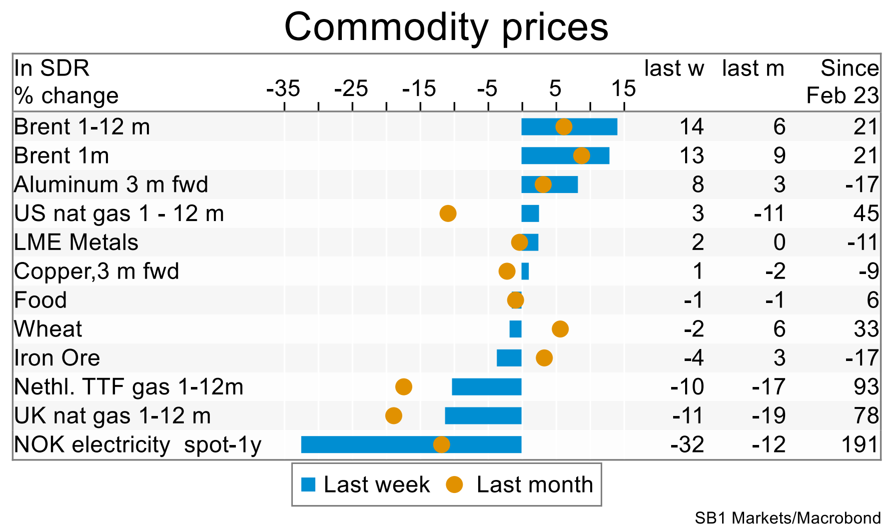


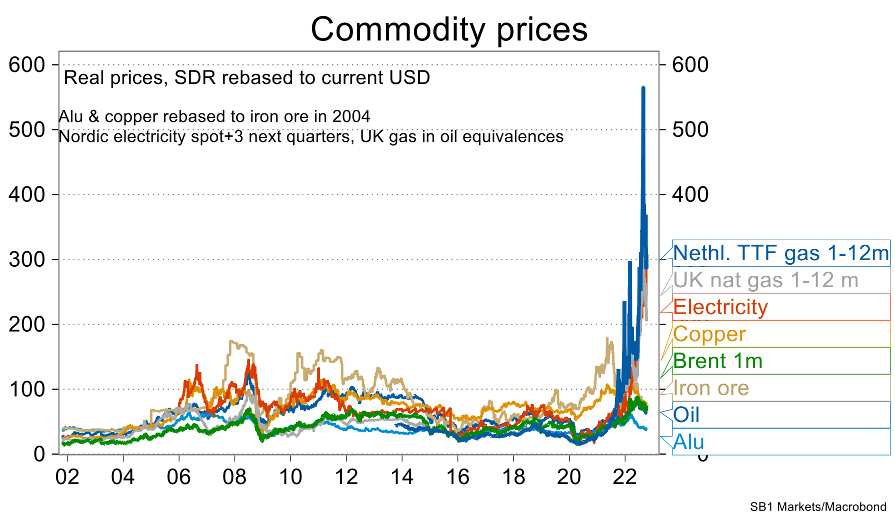


SpareBank 1 MARKETS

Oil prices up on the OPCE+ large cut. European gas/electricity prices down







Last week

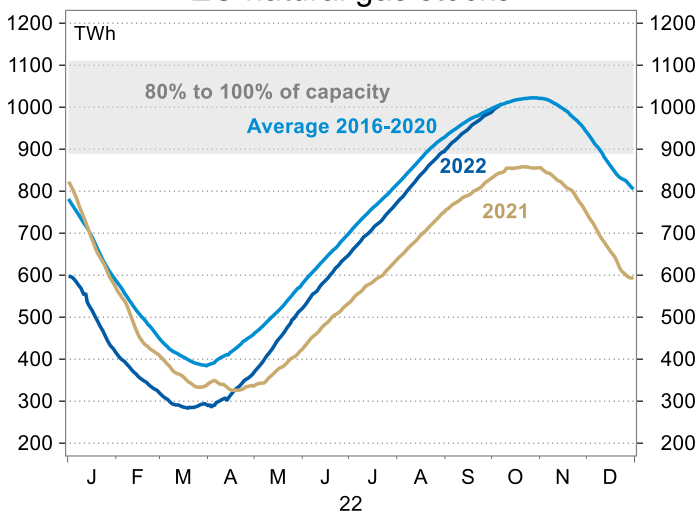
- **European natural gas** fell sharply last week, all over the curve, perhaps as gas stocks are still being filled up. **Nordic electricity prices** fell sharply as well
- **Oil prices** rose sharply as Opec+ decided to cut production quotas more than expected, by 2 mill b/d. The effective cut will be far less, but the oil market will anyway be tighter than expected. US threatened to retaliate with…. something
- The Economist's **food commodity inched down 1% last week** (in SDRs), and are down 1% last month
- **Metal prices** were mostly up

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

European gas/electricity prices have stabilised, as gas stocks are well filled

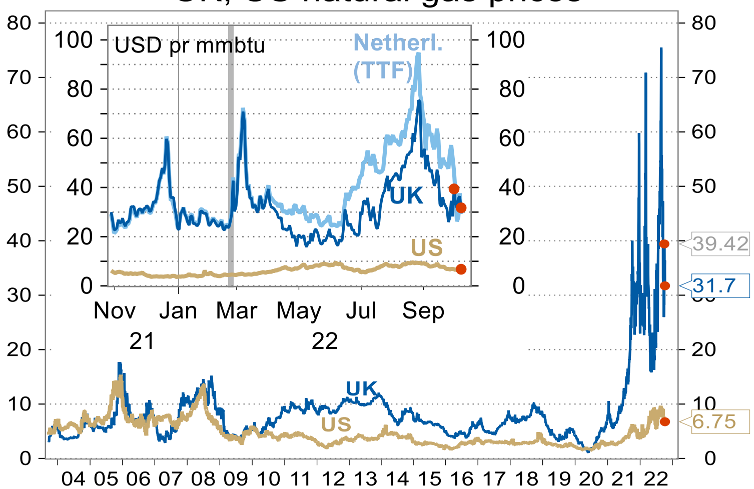
The sabotage against the two Nord Stream pipelines did not shock the market

EU natural gas stocks



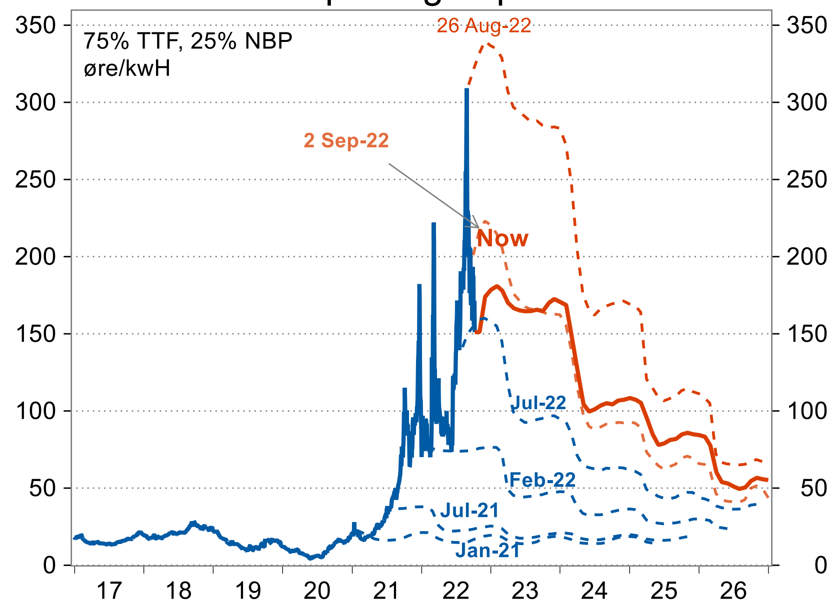
SB1 Markets/Macrobond

UK, US natural gas prices

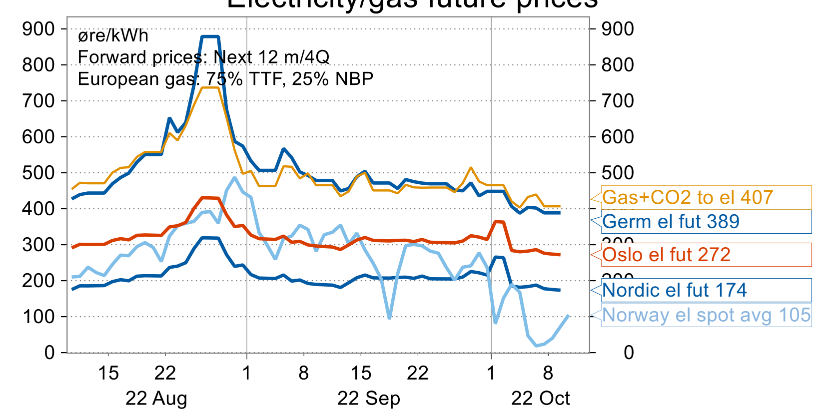


SB1 Markets/Macrobond

European gas prices



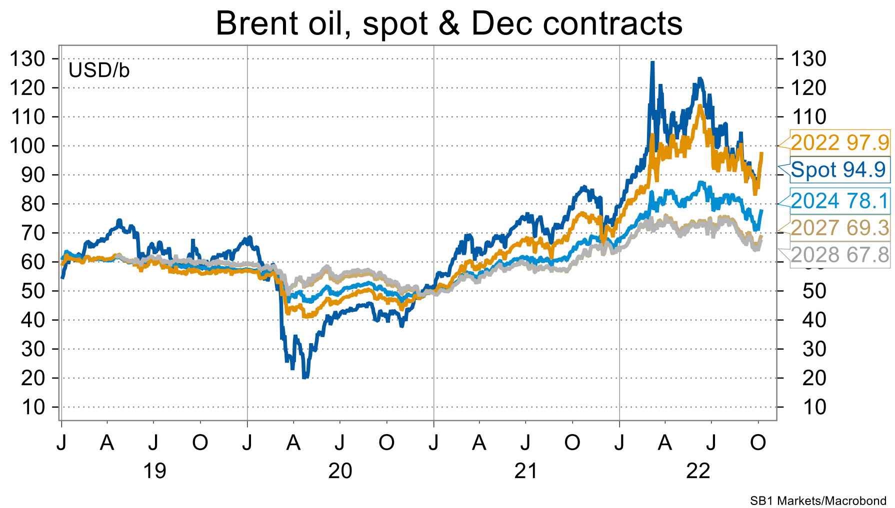
Electricity/gas future prices

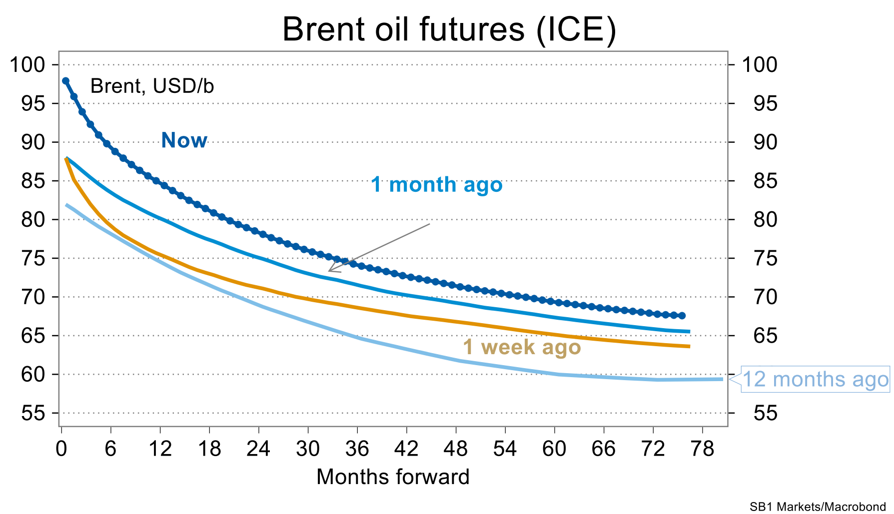


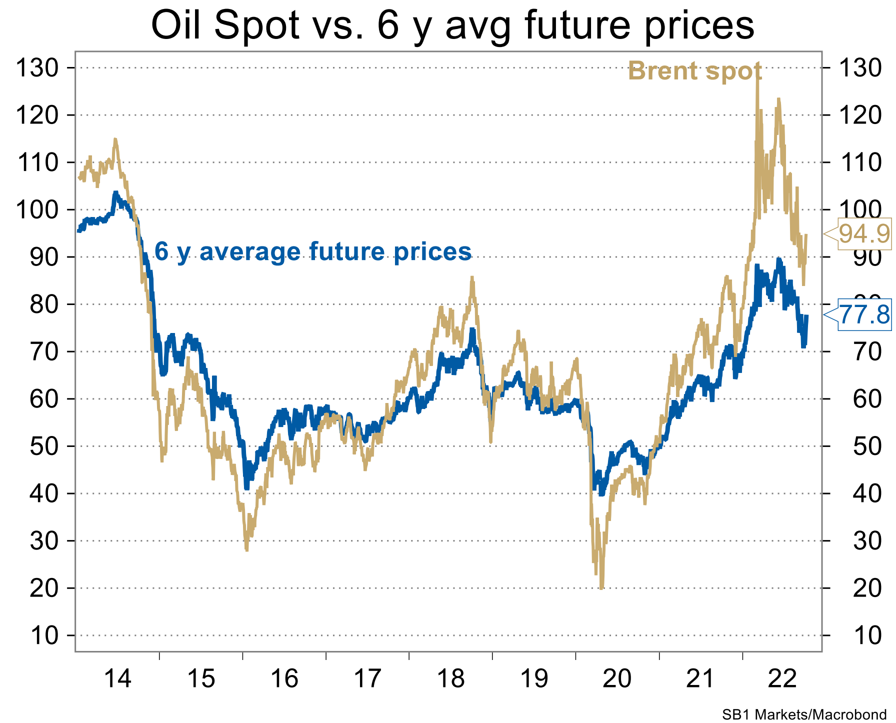
SB1 Markets/Macrobond

The OPEC+ 2 mill/b day cut in oil production quotas lifted oil prices sharply

The cut was far larger than expected just a week ago – and the whole price curve got a lift



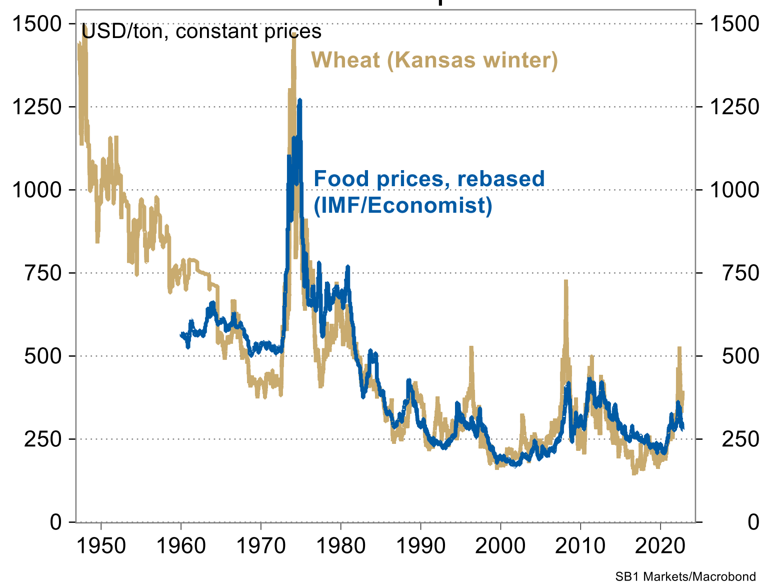


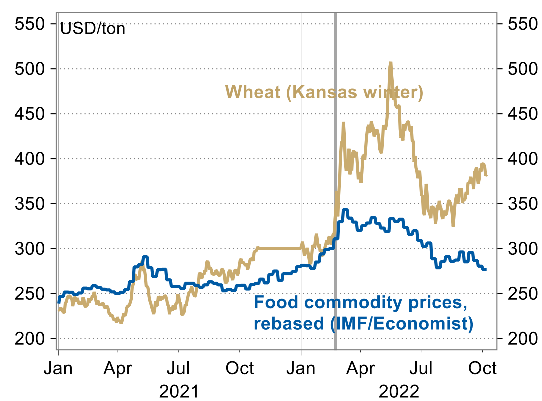


Food prices down last week & are trending down in spite of higher wheat prices

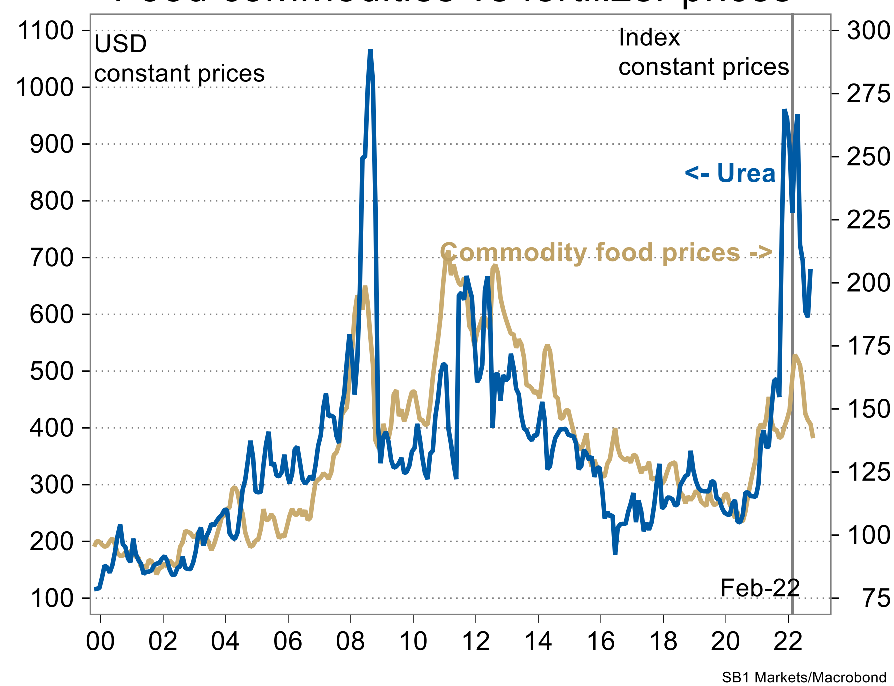
The real price level is not that high, *and close to the 10 y average. A global food crisis??*

Food/wheat prices





Food commodities vs fertilizer prices

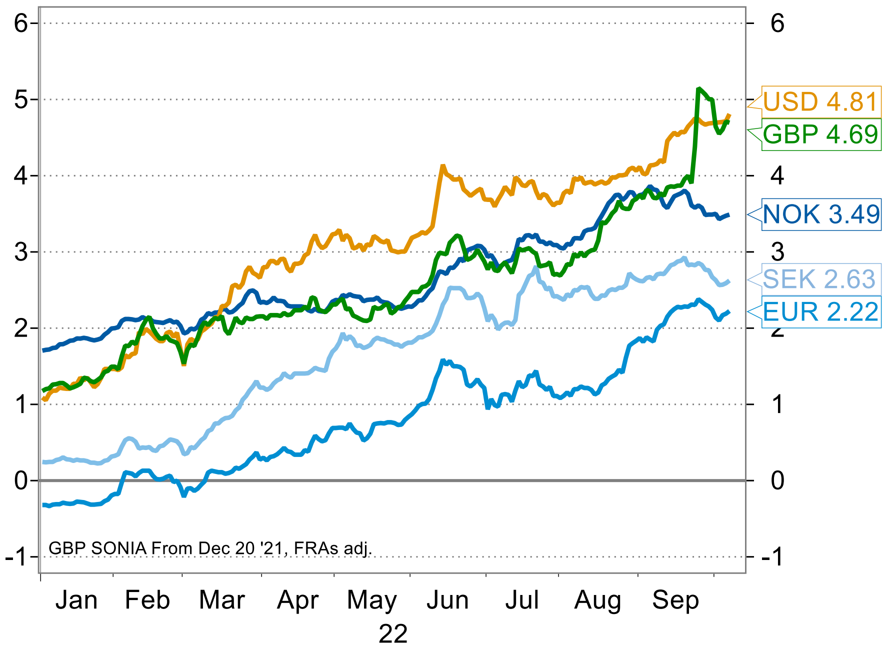


Urea prices have been falling too

FRAs up all over the place

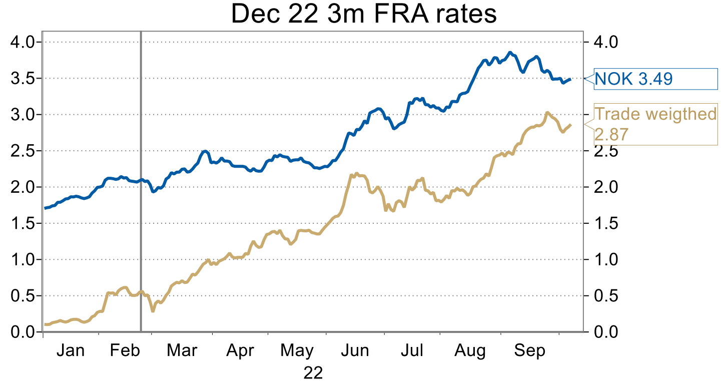
UK rate expectations are too aggressive, the UK economy will be 'killed' by such rates. NOK FRAs up too

Dec 22 3m FRA IBOR rates

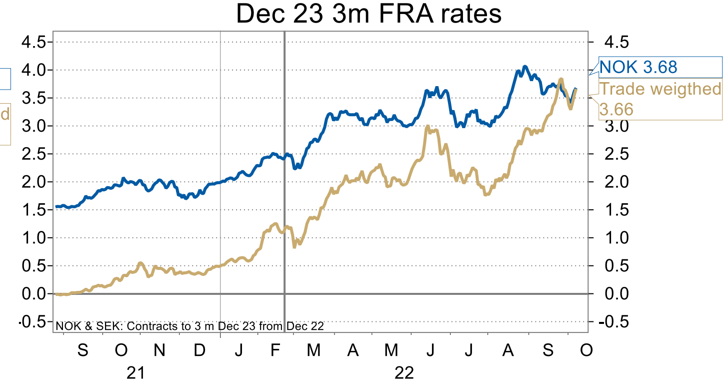


Dec 23 3m FRA IBOR rates

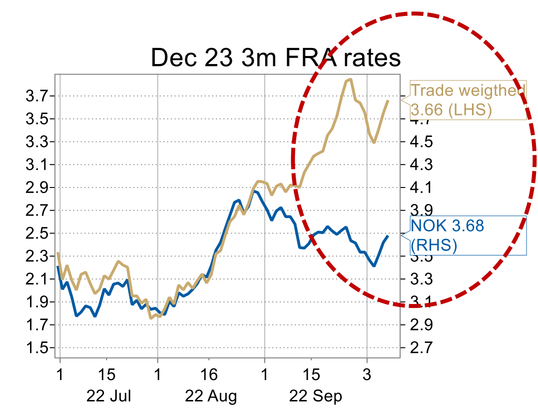
Dec 22 3m FRA rates



Dec 23 3m FRA rates



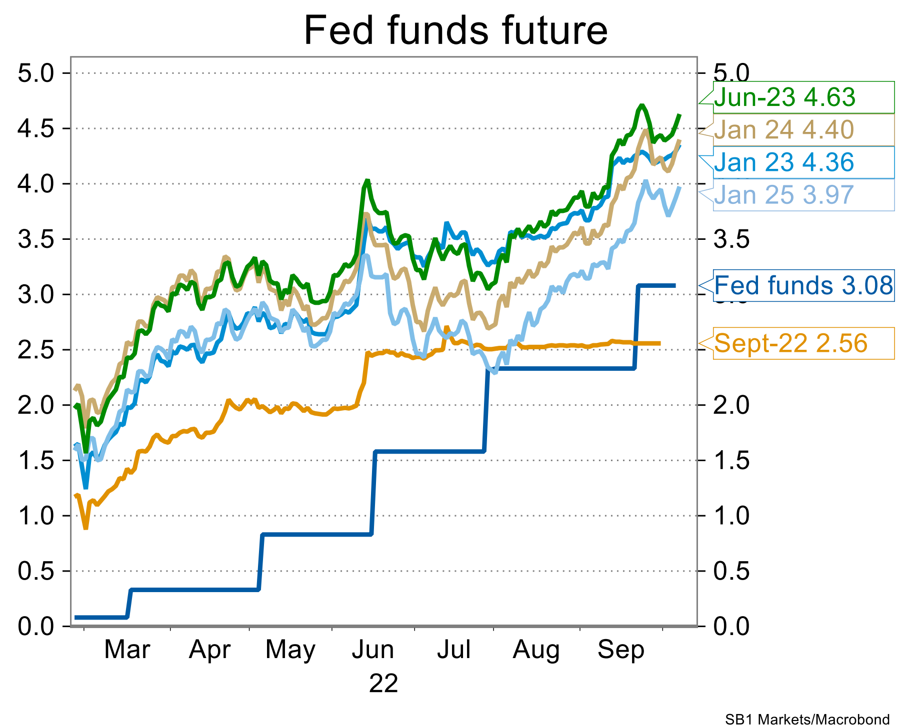
Dec 23 3m FRA rates

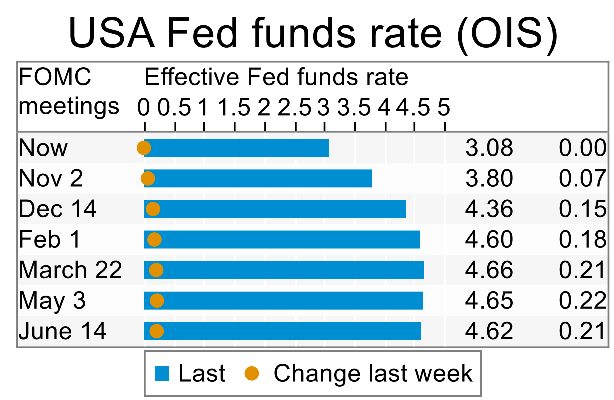


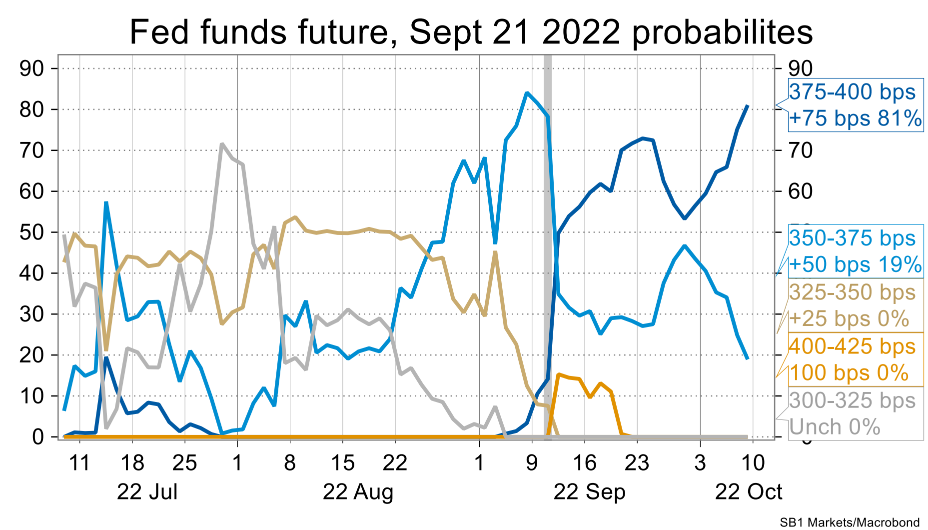
SB1 Markets/Macrobond

Another ‘triple’ hike in November most likely

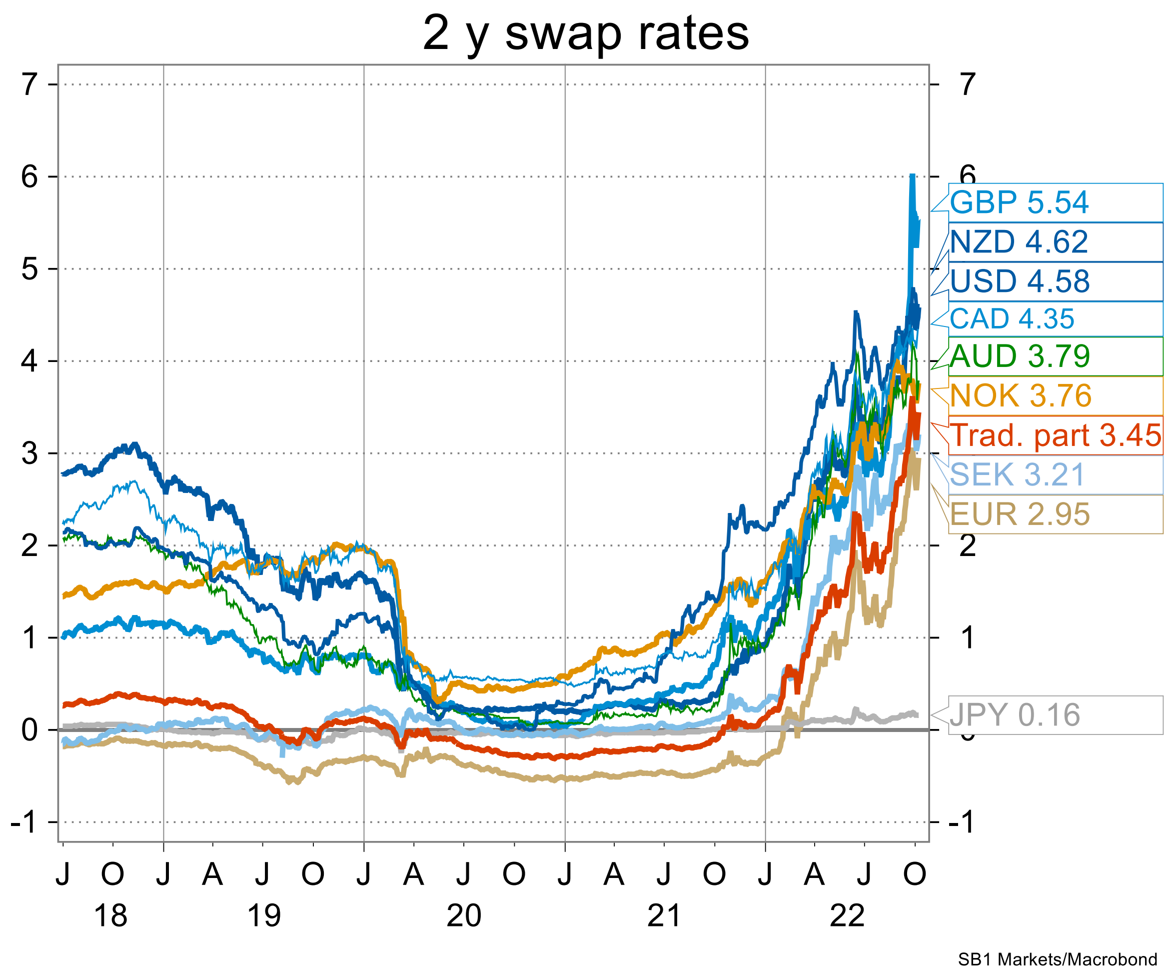
… and then ‘just’ 50 bps in Dec. The peak is pushed back to March-23, from May, at 4.66%, up 21 bps

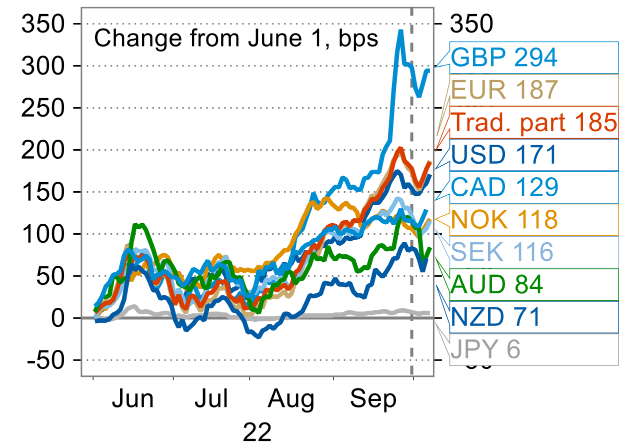


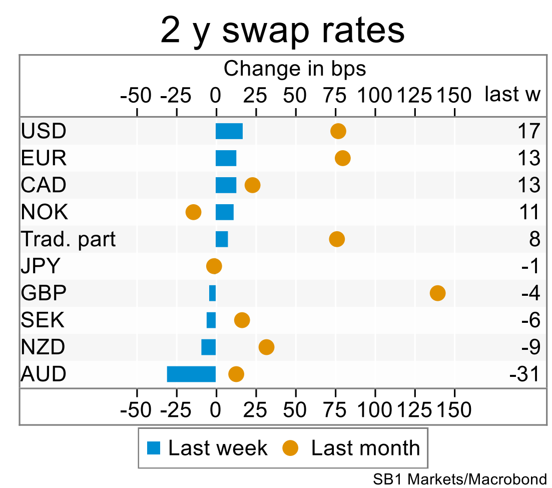




Most 2 y swap rates up, incl. NOK rate but ‘the other’ super-cyclicals were down



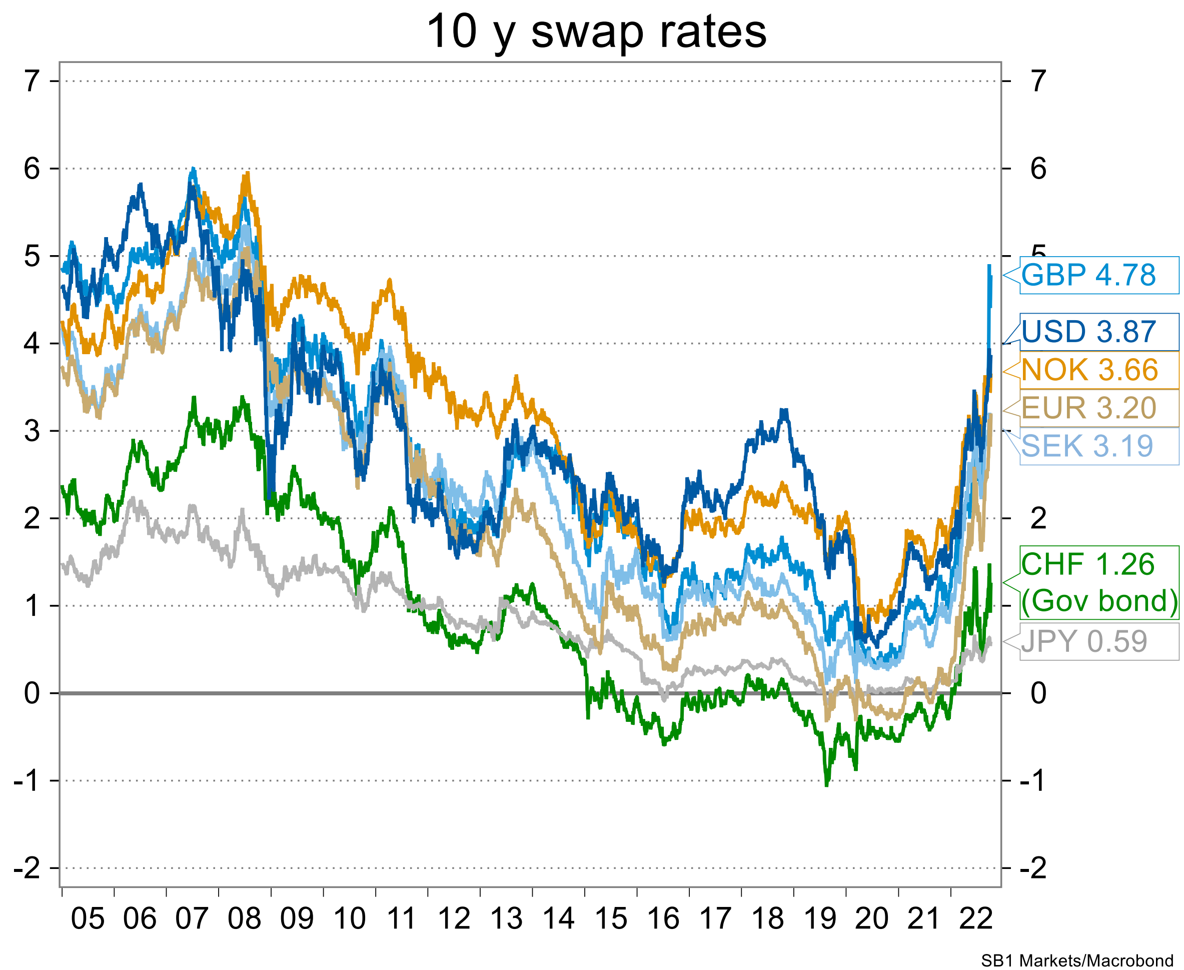


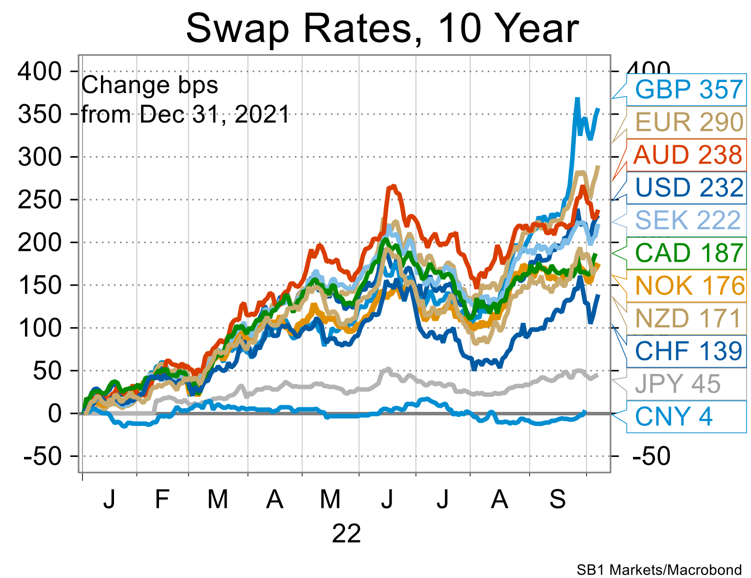


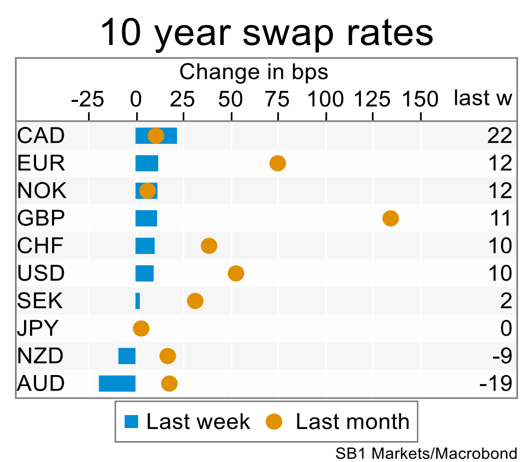
SpareBank 1 MARKETS

All but the 'down unders' up last week, even NOK rates joined the party again

EUR rates further up – and GBP rates are not that far below the pre BoE bazooka announcement level



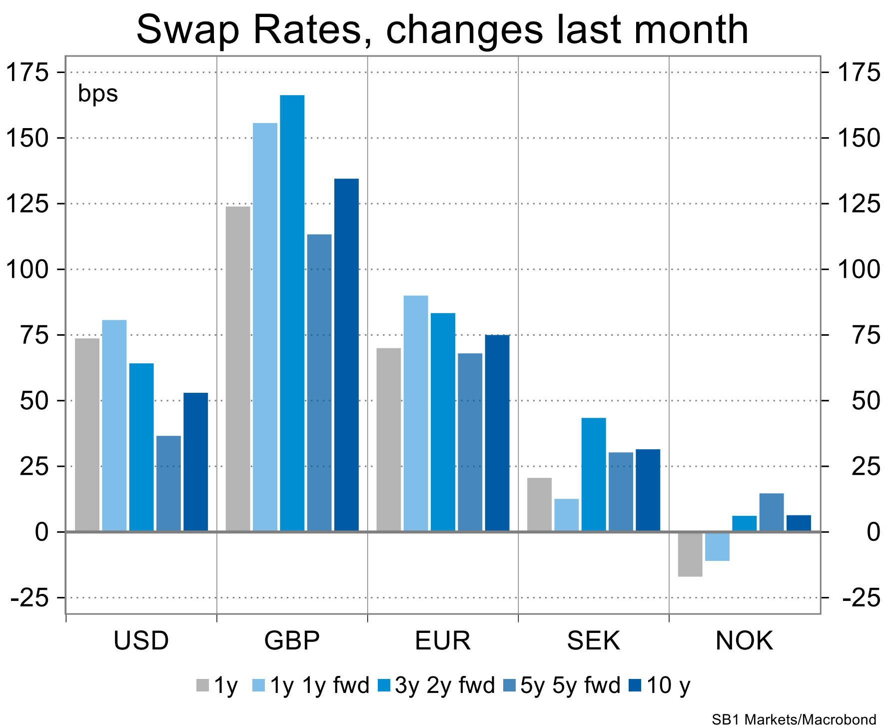


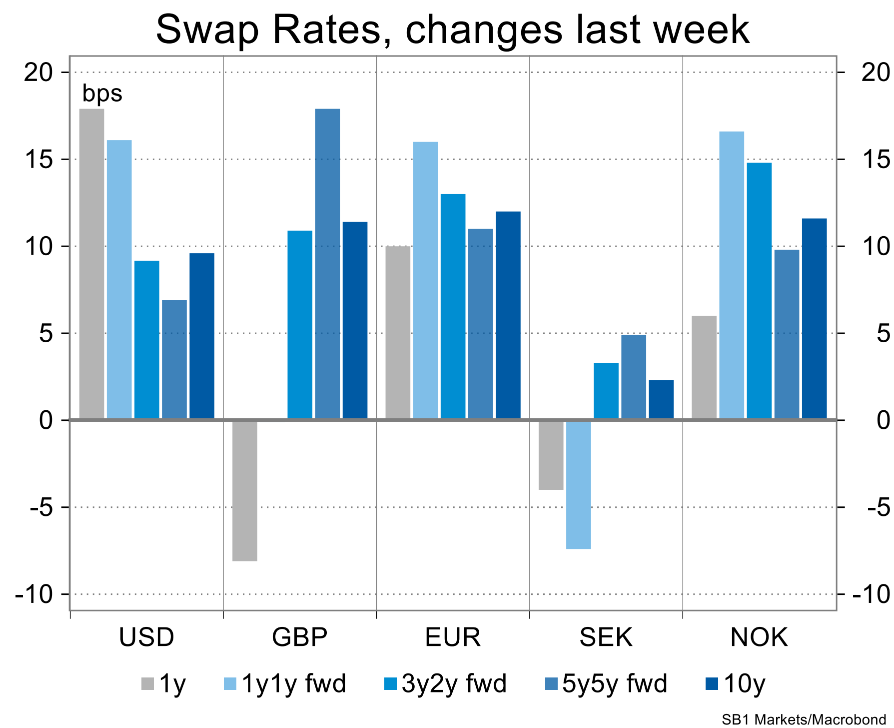


CHF: 10 y government bond yield

Moderate lifts in interest rates last week – just Sweden close to unchanged

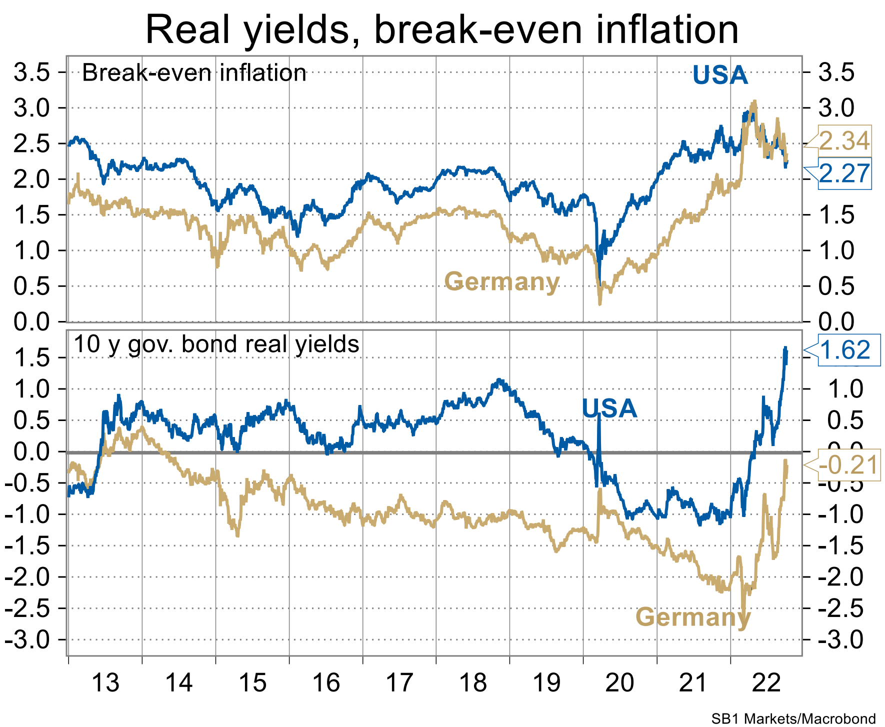
Close to parallel shifts upwards everywhere last week. NOK the big 'loser' last month (Sweden no. 2)

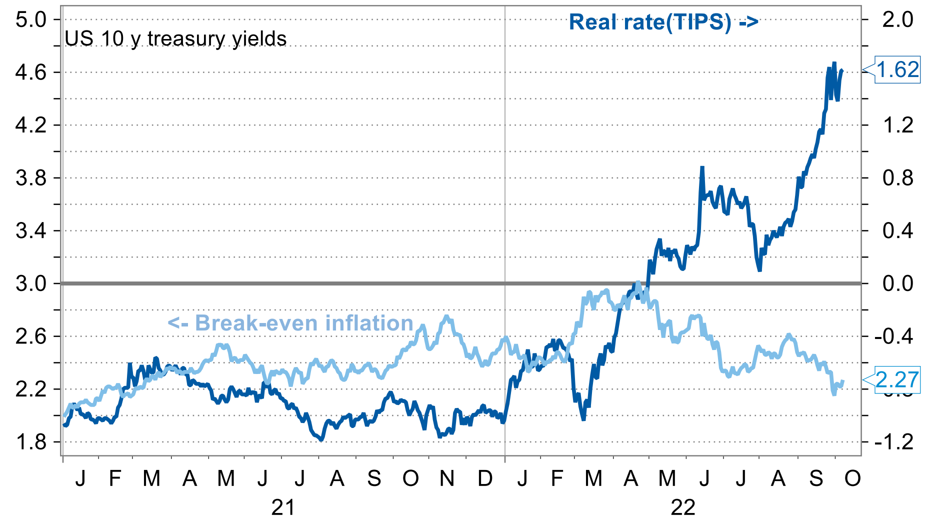




A small uptick in inflation expectations, due to the lift in the oil price

10 y real rates marginally down both in the US and in Germany – following the rapid rise recent weeks





US & Germany 10 y Gov bond yield

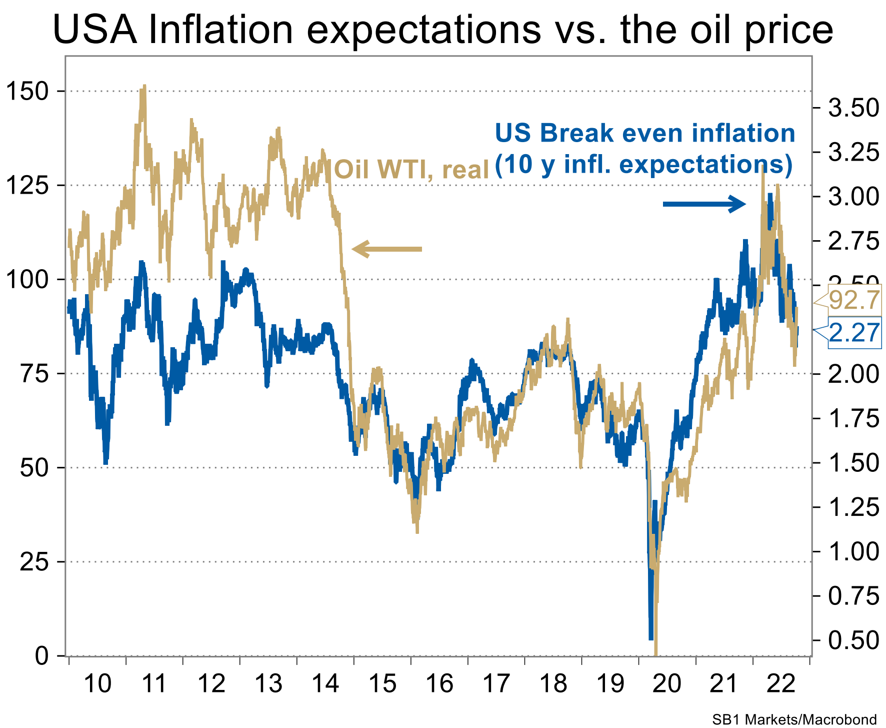
	Yield	Change 1w	Change 1m	YTD	Min since April-20
USA nominal treasury	3.89	0.06	0.62	2.37	0.52
.. break-even inflation	2.27	0.12	-0.18	-0.29	1.06
.. TIPS real rate	1.62	-0.06	0.80	2.66	-1.19
Germany nominal bund	2.13	0.01	0.55	2.34	-0.65
.. break-even inflation	2.34	0.10	-0.11	0.45	0.40
.. real rate	-0.21	-0.09	0.66	1.89	-2.80

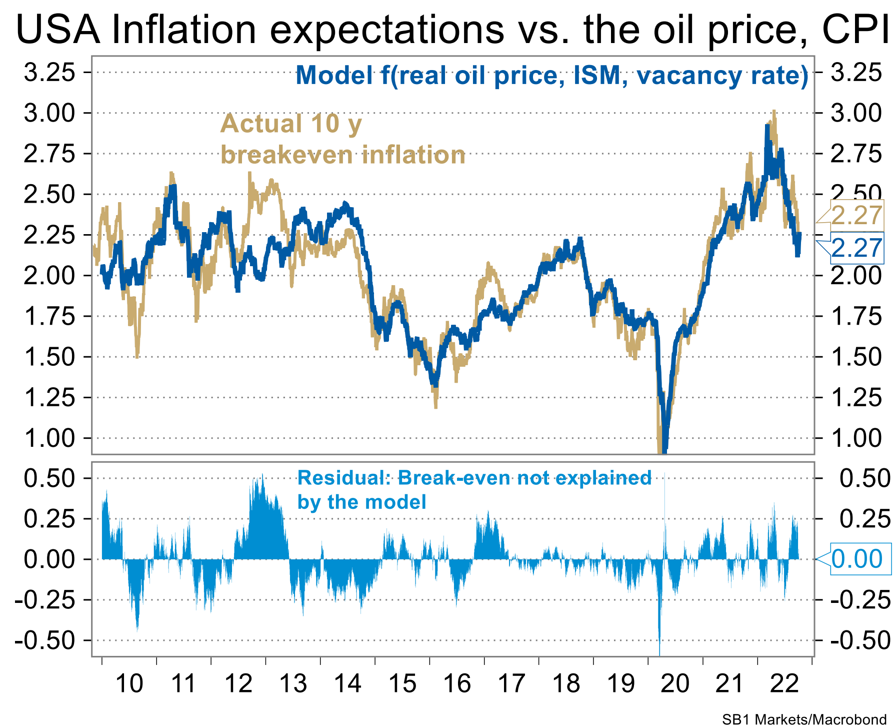
SB1 Markets/Macrobond

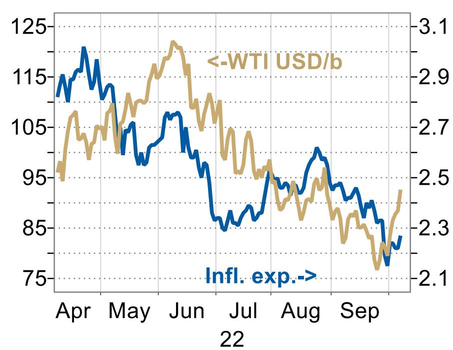
- These movements are for the history books!
- No signs of war angst or flight to safety
- No signs of fear of QE measure (a la BoE's gilt stunt) creating more inflation
- In the US, a 10 y CPI expectation at 2.27% is close to Fed's 2% target for the PCE-deflator (which on average is some 0.3 pp below CPI inflation)

(Longer-term) Inflation expectations are trending down, as our model suggests

If the economy slows – and the oil price does not surge – inflation exp. should come further down





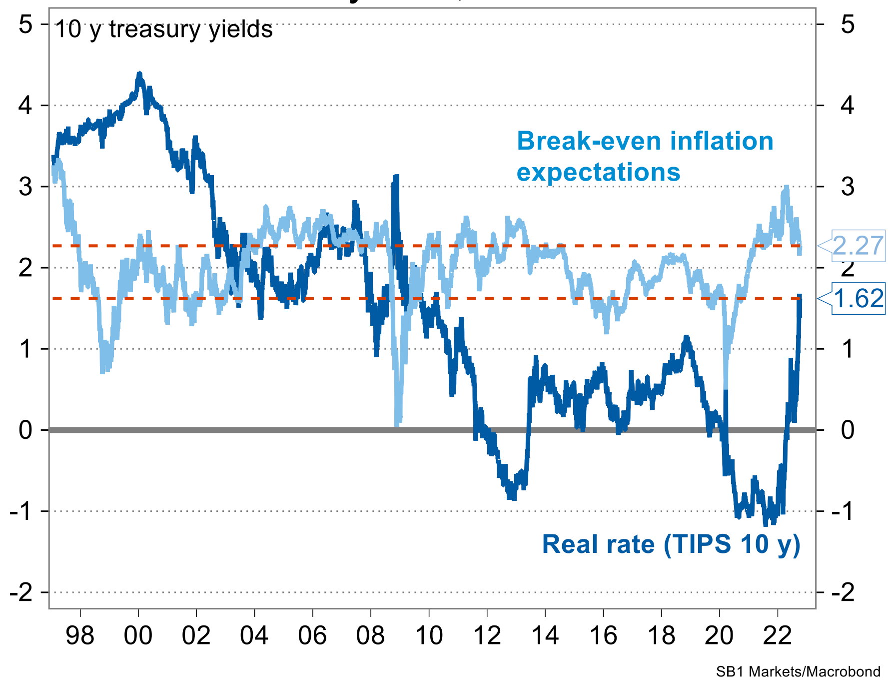


- A simple model including the <u>spot</u> oil price, the <u>current</u> ISM and the <u>current</u> vacancy rate pretty well explains the <u>long-term</u> breakeven inflation expectation in the bond yield curve
- What now? We are uncertain about the oil price, but rather confident that both the ISM, and the vacancy rate will decline. Impact vs the 10 y break-even expected inflation rate
  - » -5 ISM points: -12 bps
  - » -3 vacancy pts, (to 3.2% from 6.2%): -36 bps
  - » - 10 USD/b: -10 bps

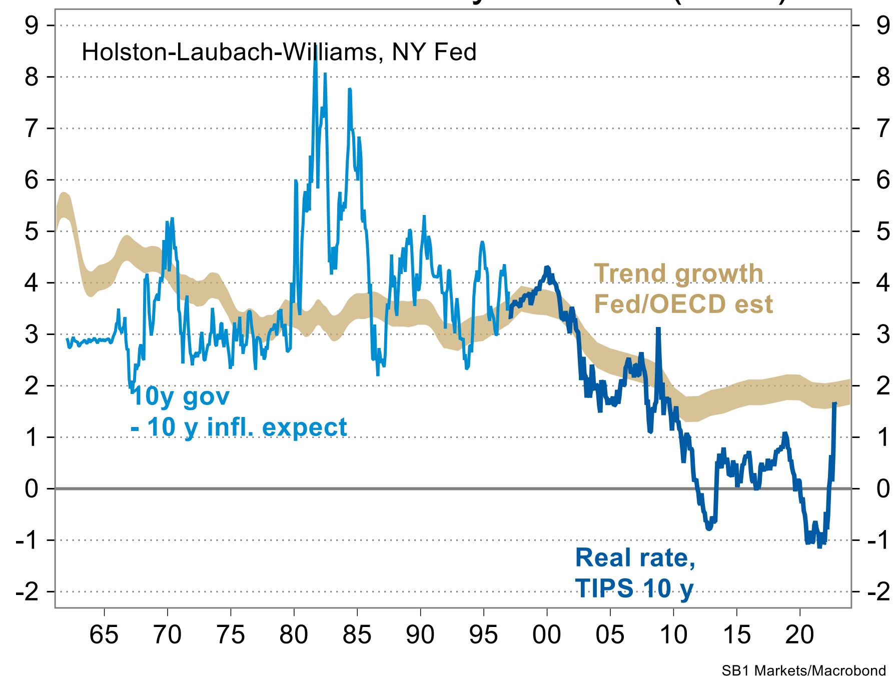
Growth vs real rates: Mind the gap, it has closed!

Real rates are up, while short/medium-term growth expectations are declining

USA TIPS Real yields, break-even inflation

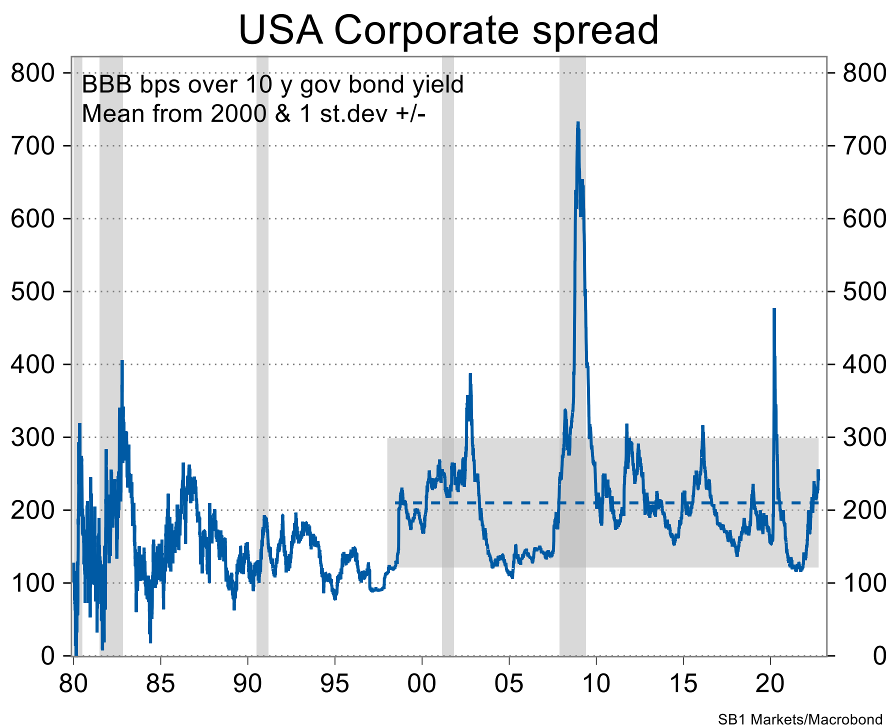


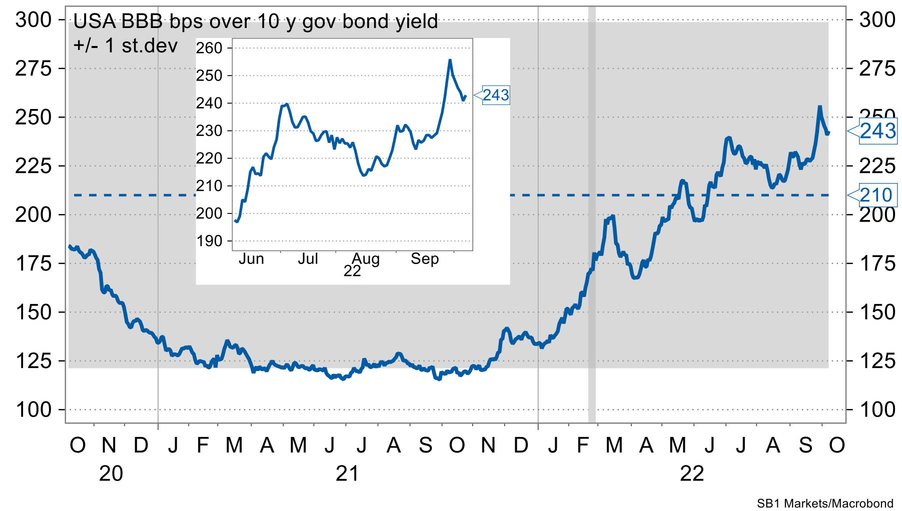
USA Growth vs 10 y real rate (TIPS)



Risk on: Credit spreads down, and 'more' than the equity market gained

Still, the trend is up – and we expect more to come

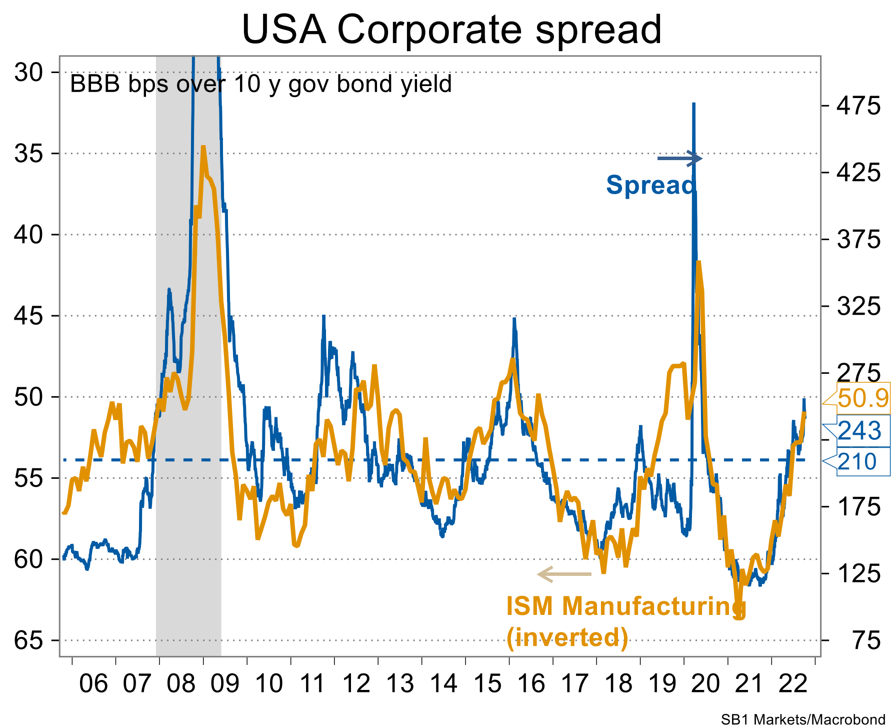


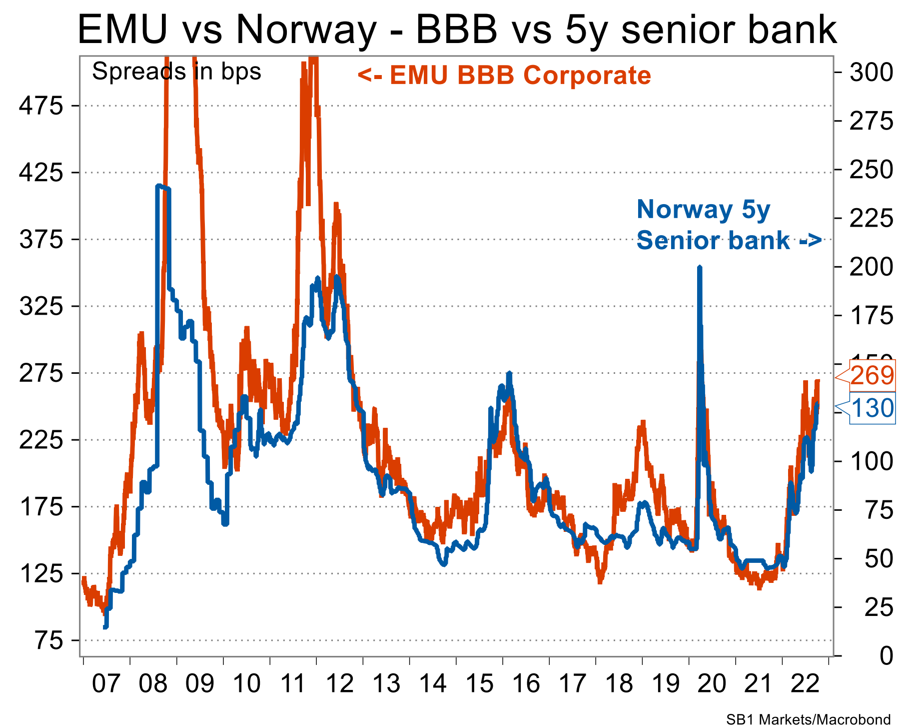


- The US BBB spread is up more 130 bps from the bottom last autumn, almost a doubling
- In addition, real rates have increased by more than 250 bps since late last year
- Thus, the basis for all valuation metrics has changed dramatically, check the chart two pages forward!

Why have credit spreads widened in 2022? Could it be the slowing economy?

What do you think is more likely: An ISM at 45 or 60 in some few months time? We are quite sure…

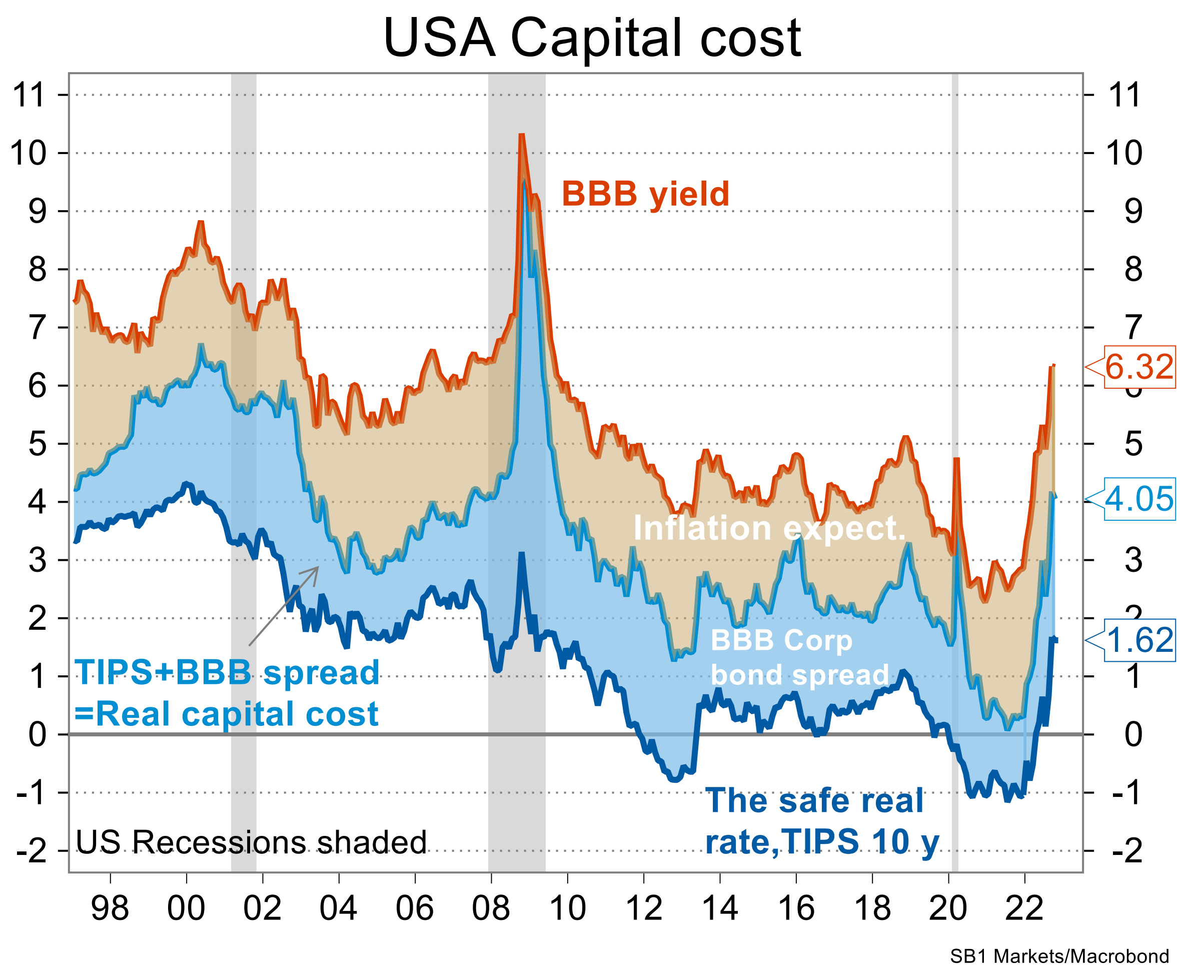




- The answer is not irrelevant for your view on the outlook for spreads, we think
- And do you think Norwegian spreads will be influenced by changes in the global credit market?
- Last week: Norwegian credit spreads rose in sympathy with higher spreads abroad the previous week
- The good news: The recent hike in spreads have made these credit instruments far more attractive, at least from a hold to maturity perspective

The cost of capital is not what it was some few months ago

All valuation metrics have changed dramatically. *As have all calculations of return on capital*



- The total real borrowing cost for a BBB company has increased to 4.2% bps from zero by the end of last year:
  - » The TIPS real rate is up from -100 to + 162 bps
  - » The BBB corporate investment grade spread is up from 120 bps to 243!
- Add on modest inflation expectations, the nominal borrowing cost has increase from well below 3% to above 6%

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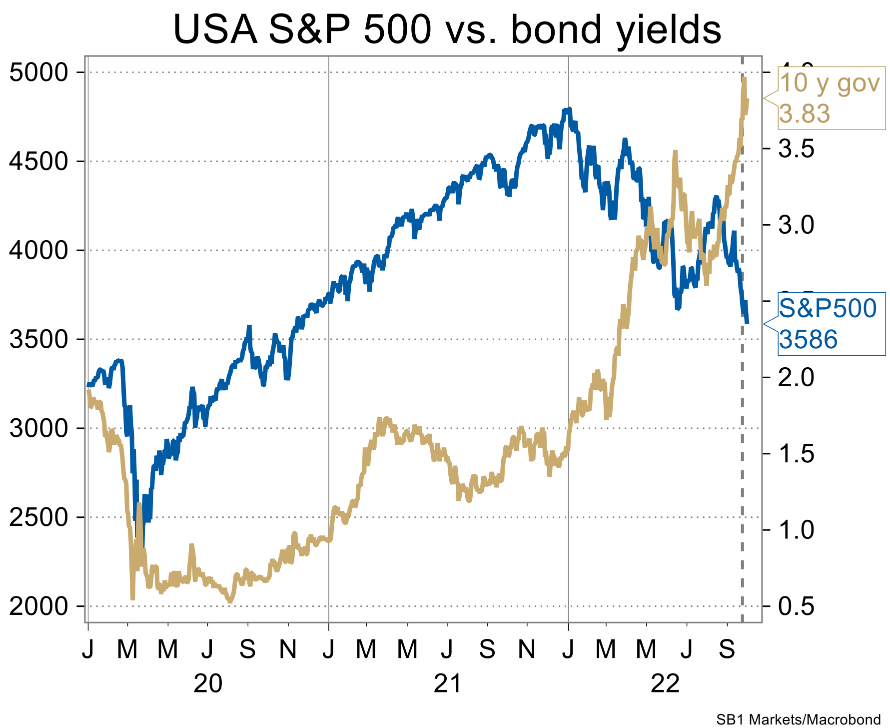
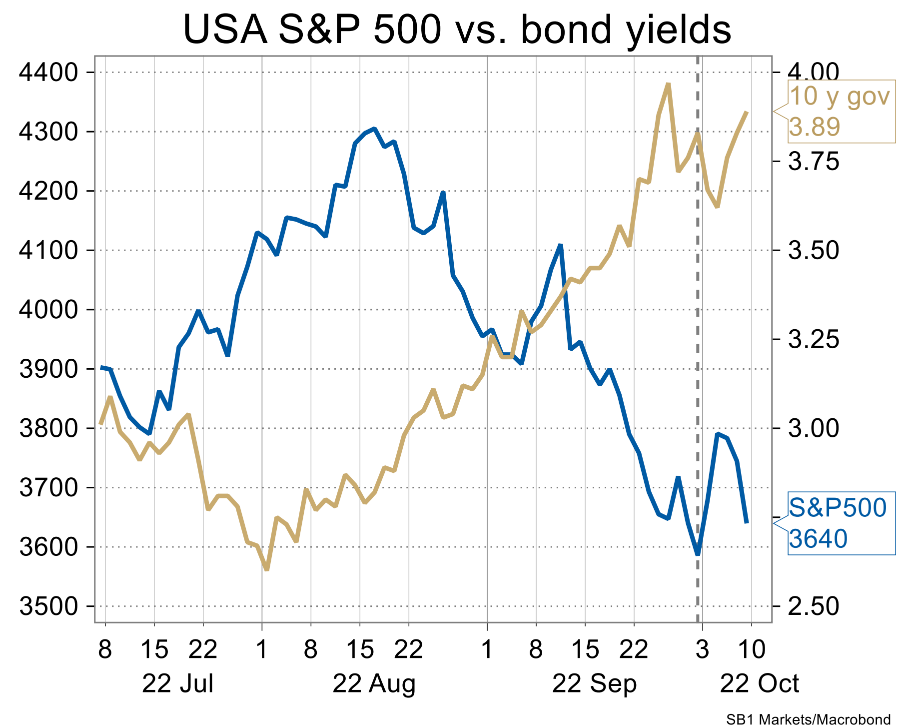
And last week it was… too low unemployment? S&P still up on the week

And the 10 y gov bond yield ended up just 6 bps, but were all over the place in between

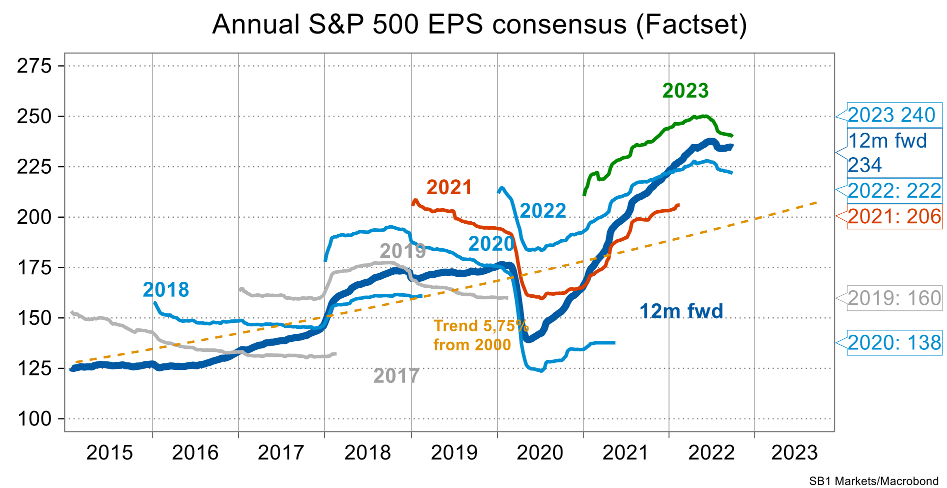


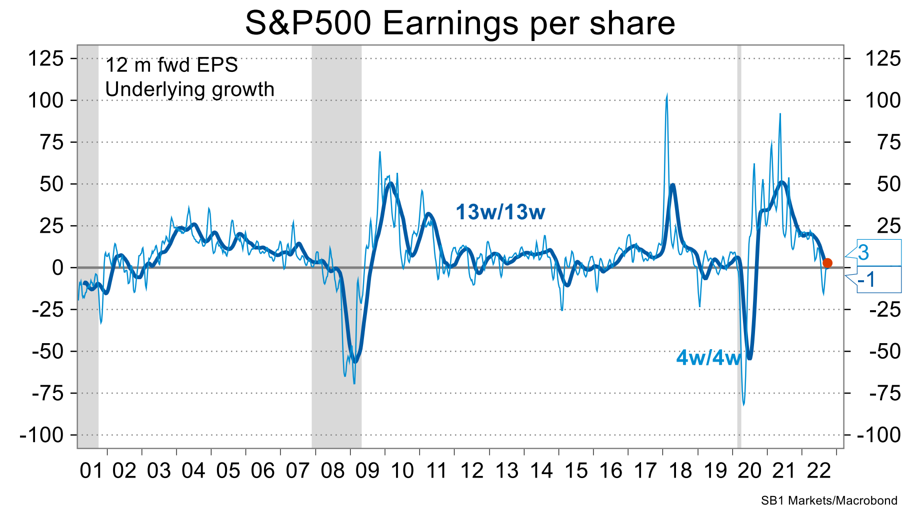


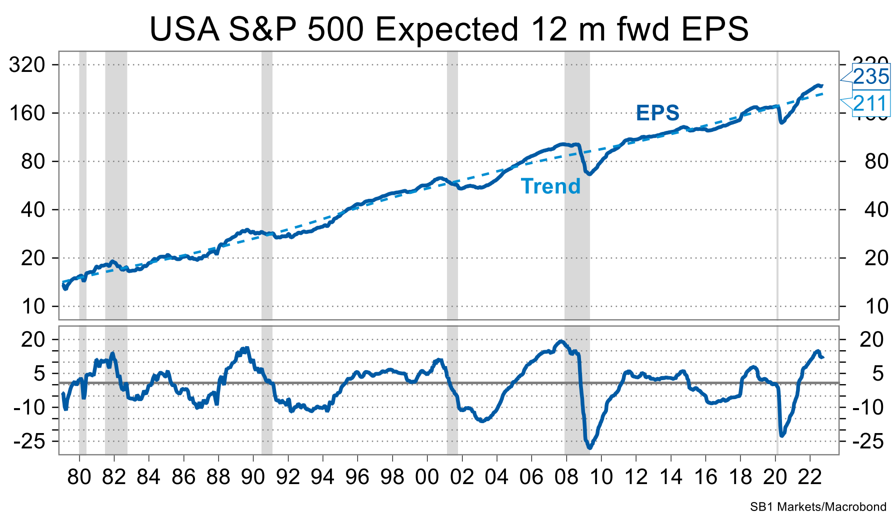
- Bond volatility has surged recent weeks/months, to levels not seen in 15 years. 'Something' is going on

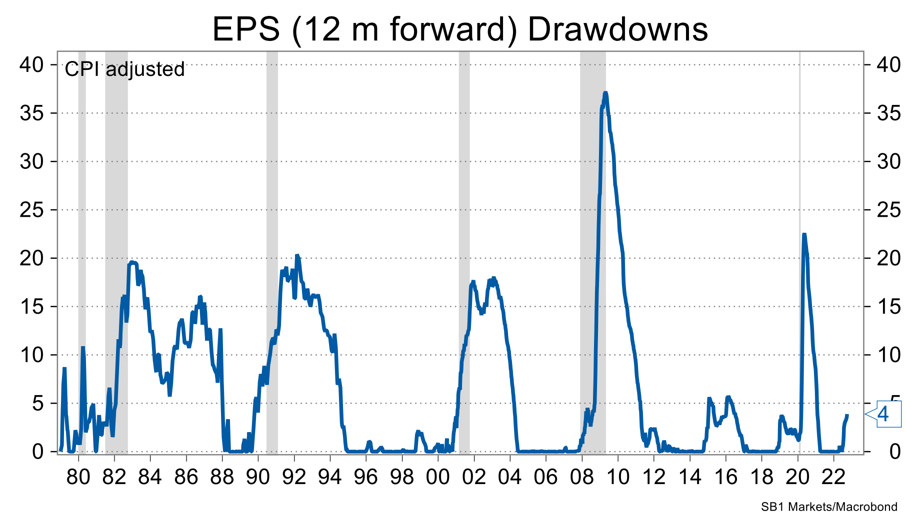
Earnings forecasts have flattened recent weeks, rather surprising

S&P 500 expected 12 m fws EPS was some 15% above trend and has just fallen some 4%



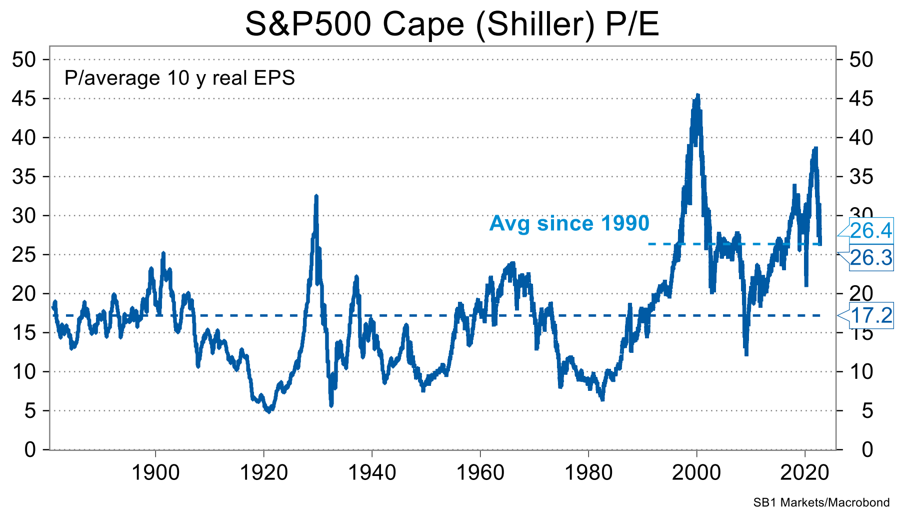


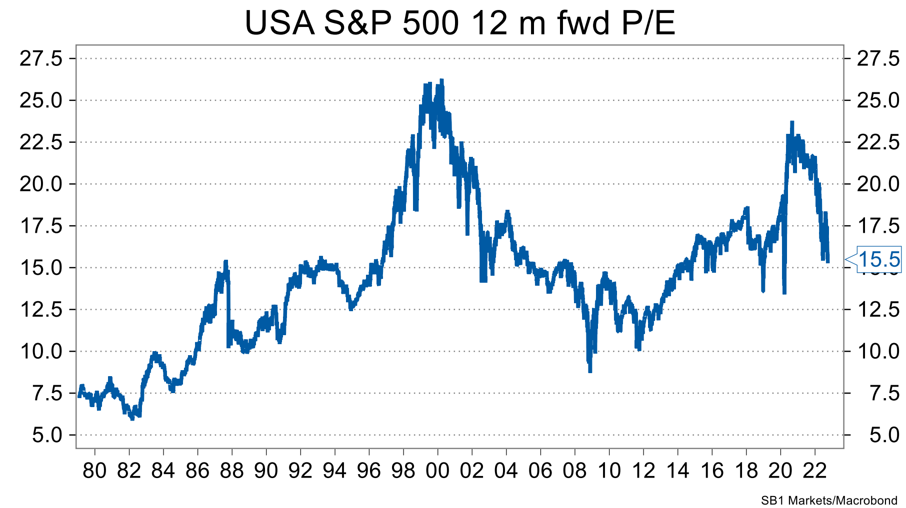


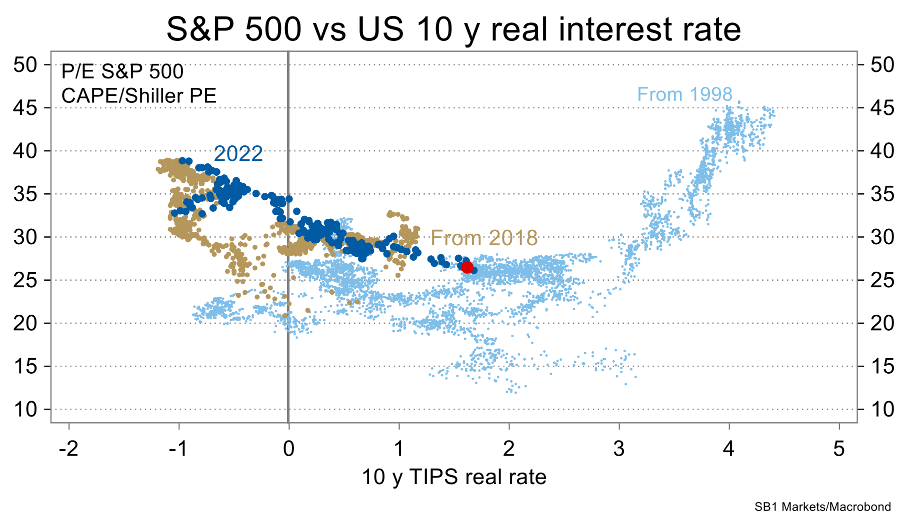


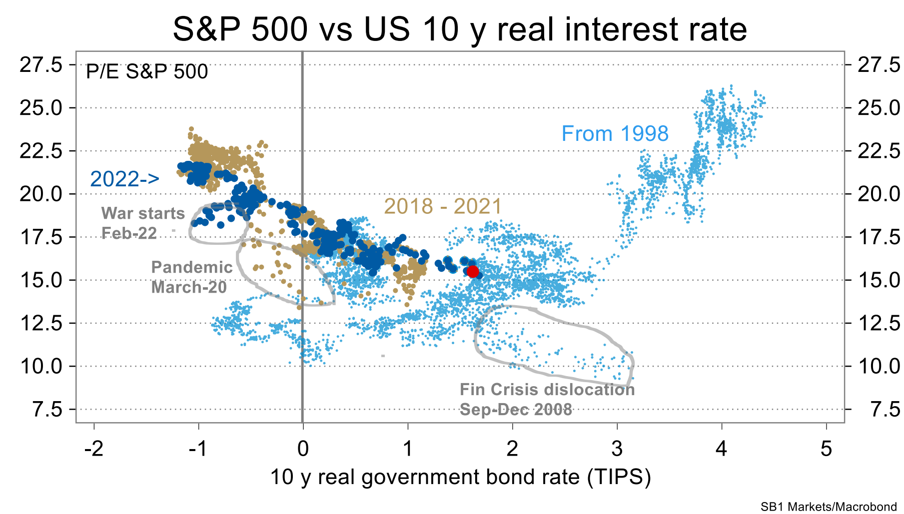
4 valuation charts: Check the extreme tight correlation between real rates, P/E

The TIPS real rate has been the main driver for the P/E since 2018. And it still probably is









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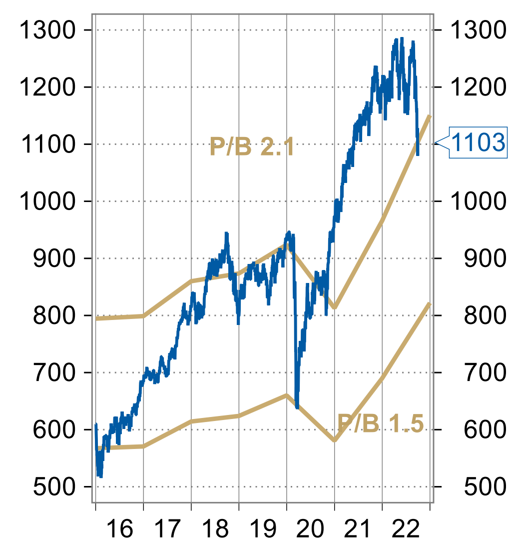
Finally, OSEBX almost hit the upper band of the 1.5/2.1 Price/Book corridor

Thus, it is just 29% down the lower (1.5) band, at 800! A <u>very</u> safe bottom at 500 (P/B=1)

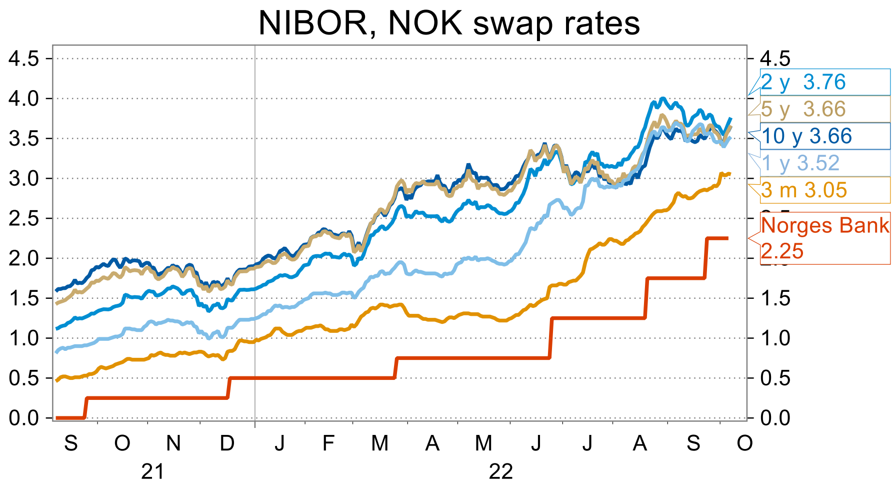
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

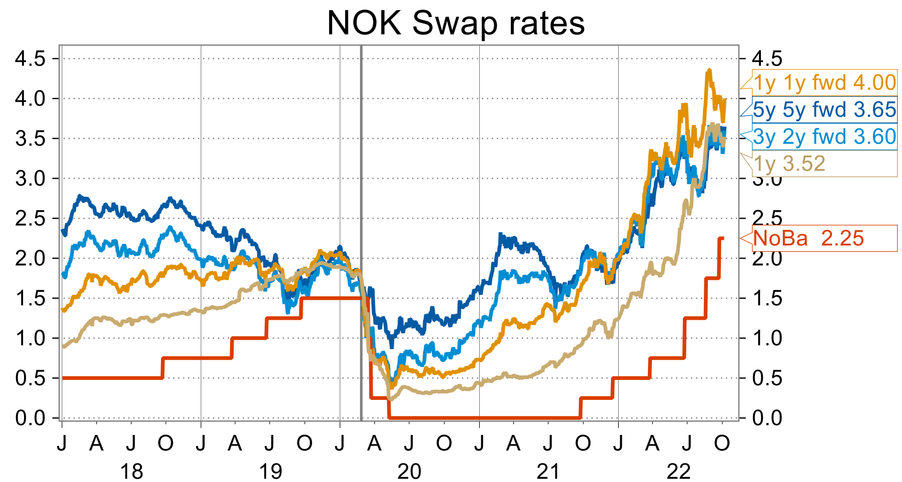


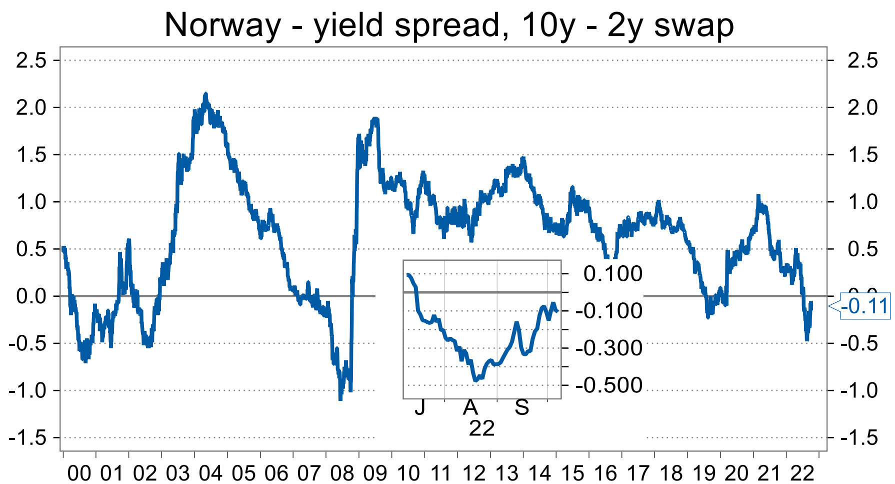
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.

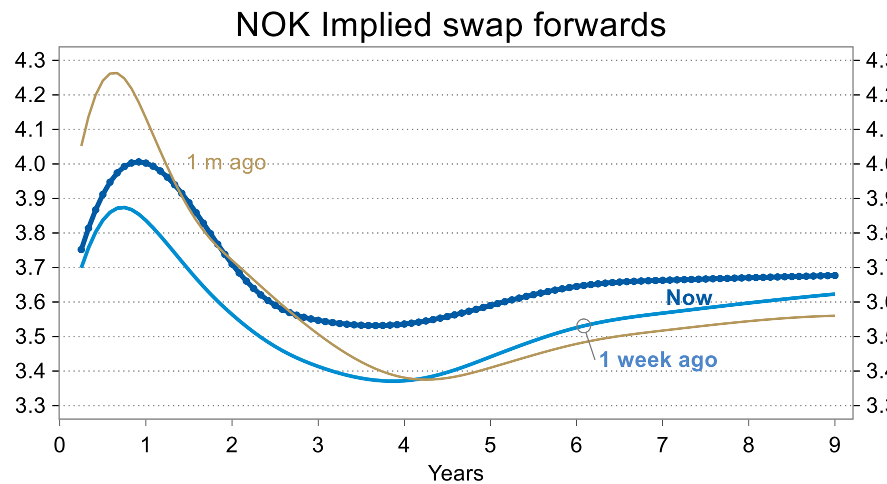
Norwegian swaps up all over the curve

The 3m NIBOR up 11 bp to 3.05%, mostly due to liquidity problems in Norwegian money market



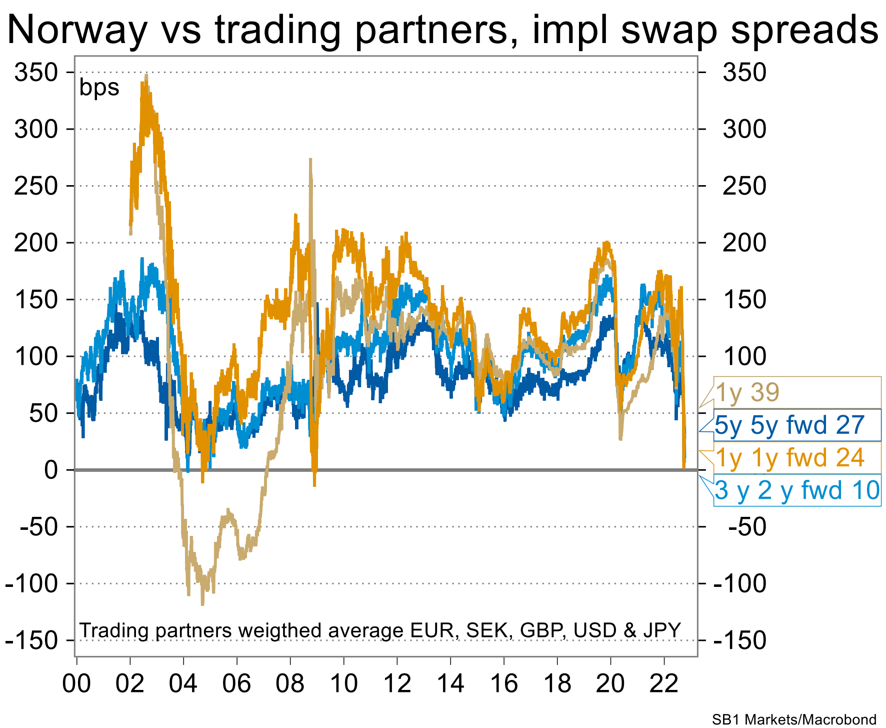


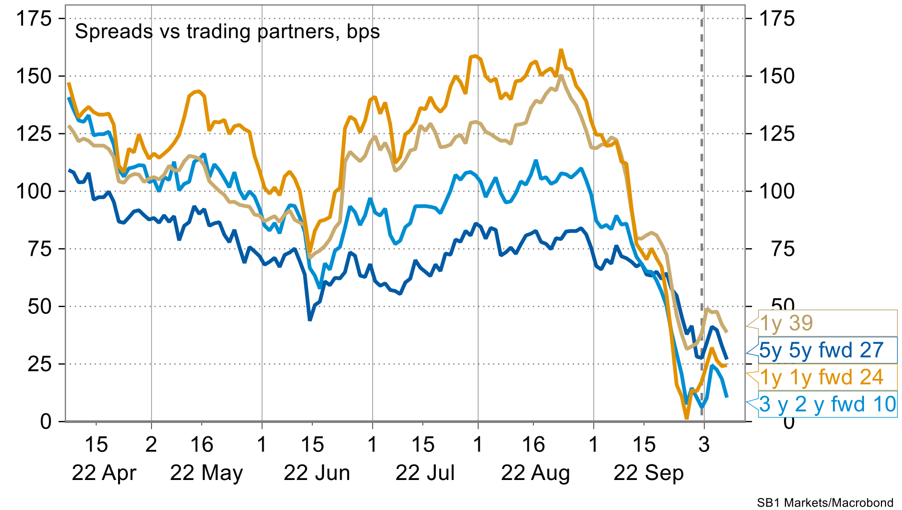




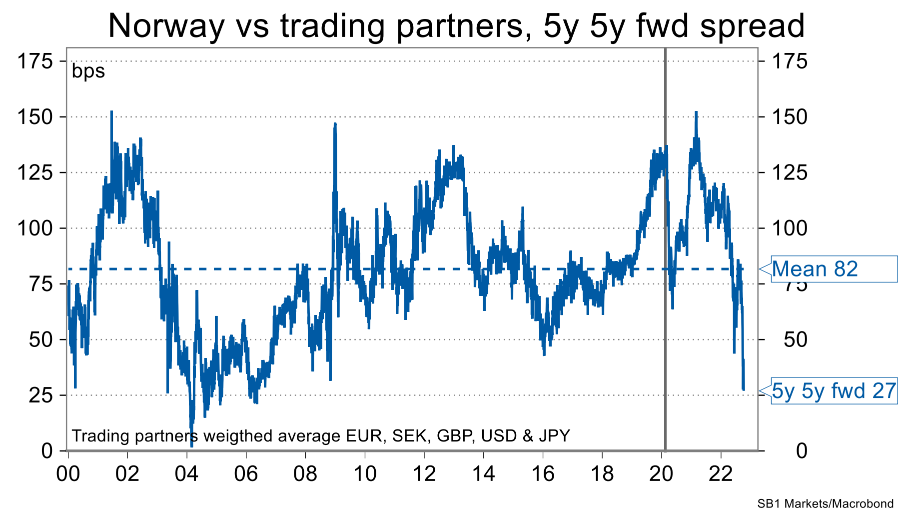
Spreads vs trading partners are collapsing, much faster than we expected

Implied spreads have fallen to low levels all over the curve



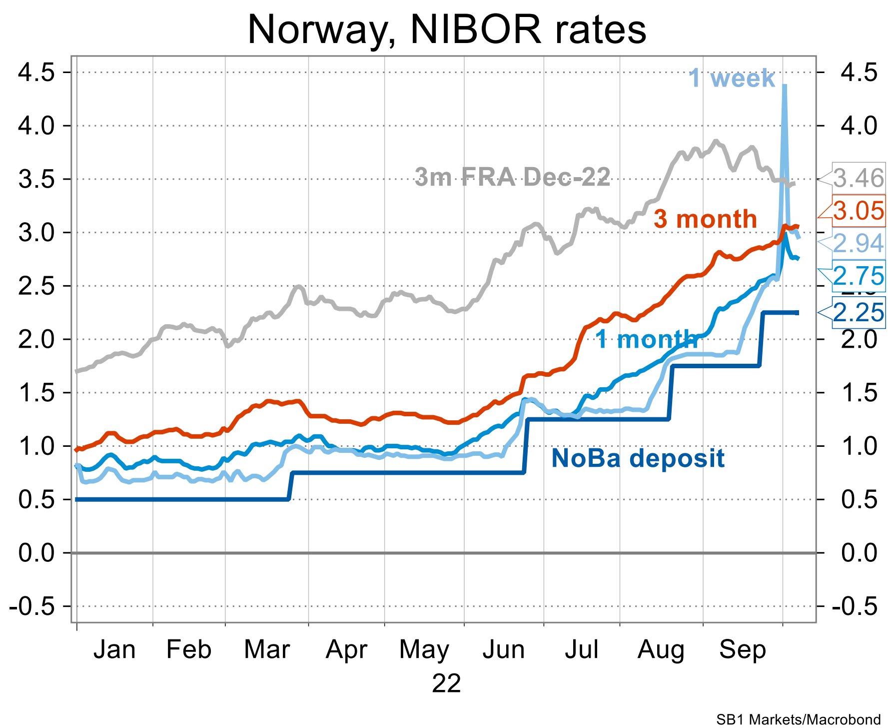


- NOK rates are still above the average level among our trading partners – but the margins were sharply reduced last week. We have long argued that NOK rate expectations were too high vs. our trading partners but did not expect such a rapid decline
- However, the 'structural' low rates in the Euro Area (compared to the Anglo Saxon countries) may take the trading partners' average too far down
- **Now, there is still some downside potential in the short end, given the still rather aggressive NOK FRA-rate path (check next page)**



Some stress in the very short end of the curve: Huge payment of oil taxes, again

Last Monday the market suddely recognised that NOK liquidity was a scarce commodity

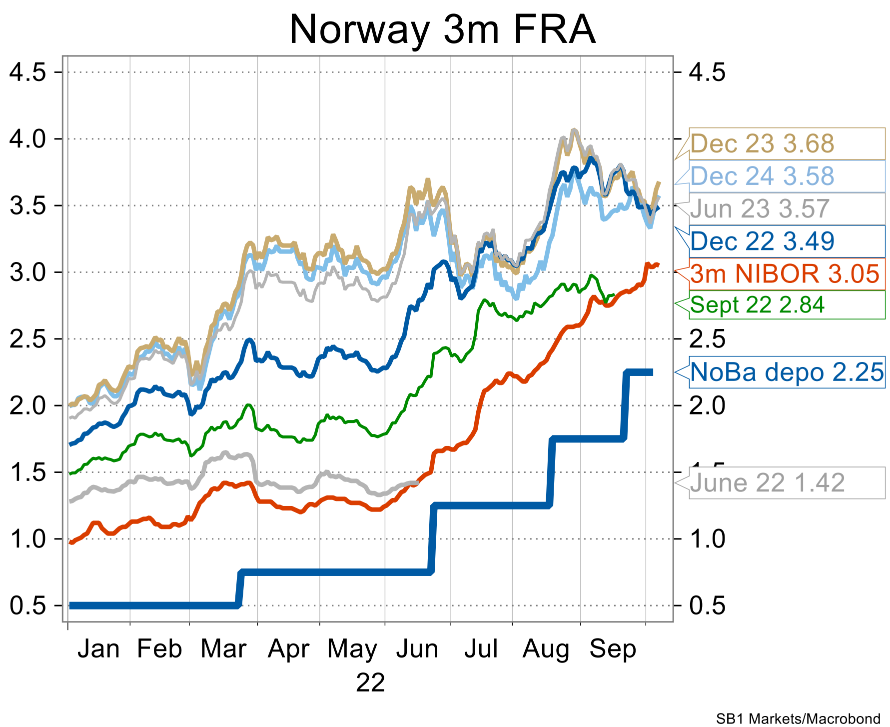


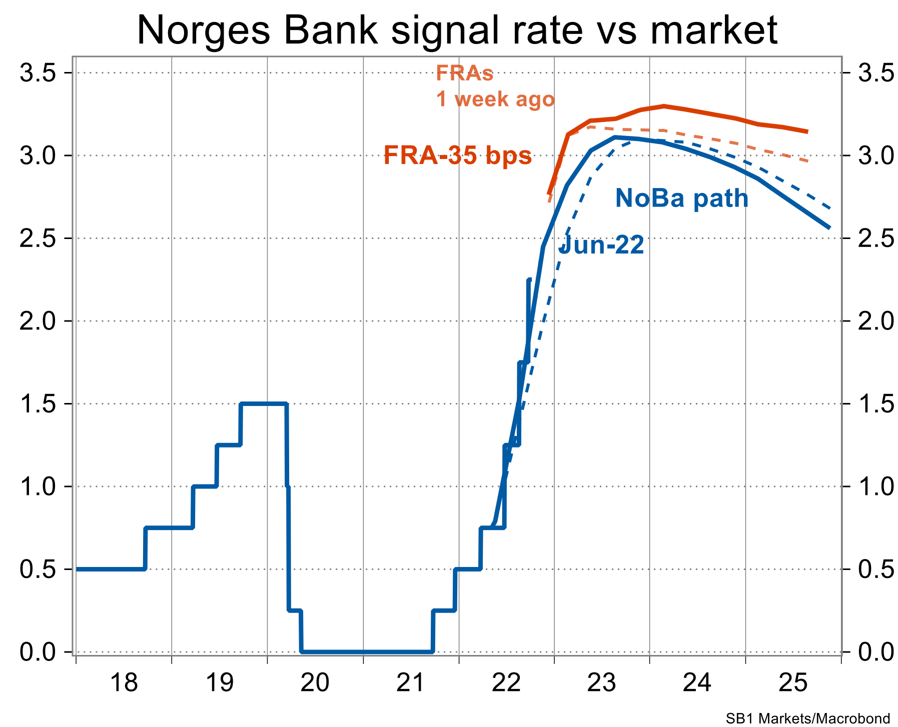
- … ahead of large tax payments to the government from the oil companies, as well as an upcoming V.A.T payment
- Thus, short term interest rates shot up, before Norges Bank (of course) offered another F-loan to banks, in order to strengthen liquidity
- However, the 1 week NIBOR is still at 2.94%, implying a 69 bps spread vs. NoBa's signal rate, far above the typical 10 – 20 bps spread, signalling still some stress in the money market
- The 1 month NIBOR spread at 50 bps is also 25 bps 'too high', implying that the 3 m spread at 80 bps is significantly lifted by liquidity constraints.
- The (rather illiquid though) OIS rates suggest that the market expect Norges Bank to hike by 25 bps in November and 25 bp in December
- Given the current 3 m NIBOR at 3.05% and the Dec-22 3 m FRA at 3.49% (see more next page) the OIS swap rates imply that the NIBOR spread is expected to remain at 55 – 70 bps, which we think is a rather unlikely expectation vs a normal level at 20 – 40 bps
- So, the market's 'real' expectation for NoBa hikes is somewhere between 25+25 and 50+50

- Two weeks ago, NoBa lifted the daily f/x buying program to an amount equalling 4.3 bn/d in October, from 3.5 bn in September – in order to supply the market with NOK liquidity as oil companies are steadily buying NOK ahead of the tax payment dates. That was not sufficient for the current market imbalance
- The enormous flow of oil taxes and transfers to the Oil Fund that requires a gradual, but now extremely large NOK buying and thereafter an exchange back to f/x (for the Oil Fund) may be more than the Norwegian money market can handle without huge frictions. The model seems ripe for reform, like letting oil companies pay their taxes in f/x, instead of having to exchange into NOK first

FRAs up last week, and very likely not due to a permanently high NIBOR spread

In very the short end, spreads have likely widened due to the current liquidity problems



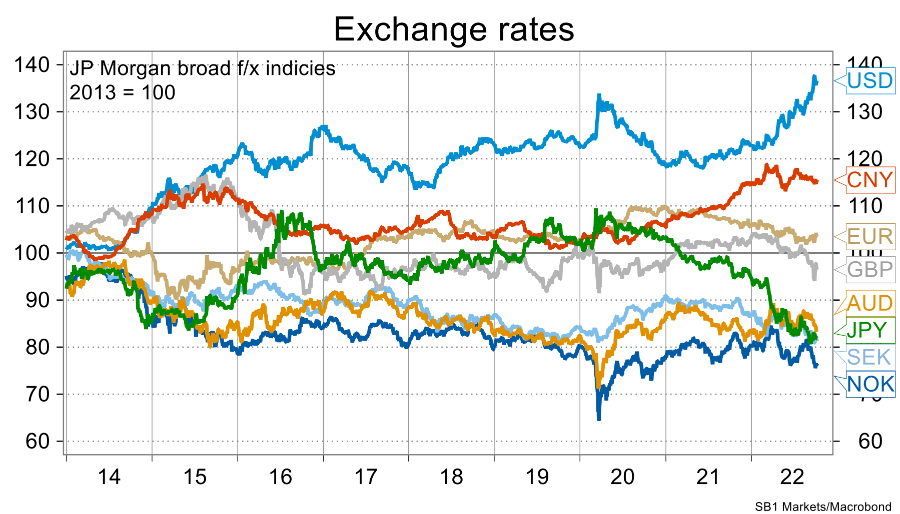


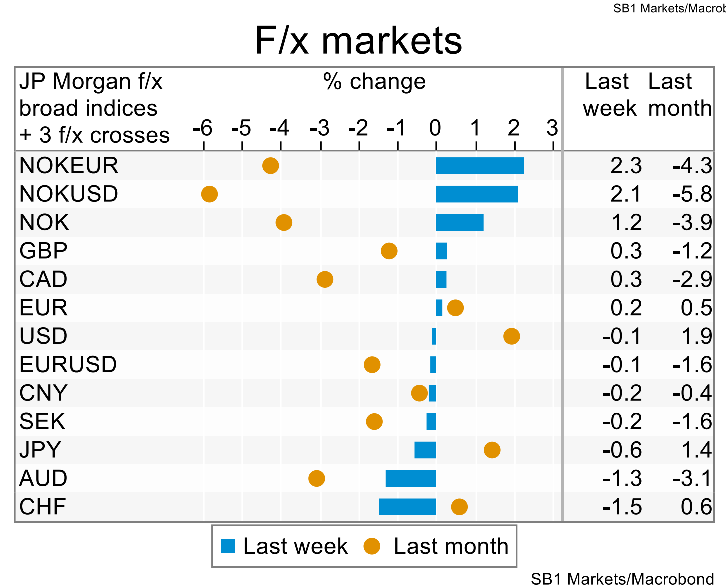
- **The 3m NIBOR** added 11 bps to 3.05% last week. 3m FRA rates rose by up to 10 – 15 bps in the long end while the shorter dated contracts were unch. (Dec-22) or just marginally up (Mar-23 +4 bps)
- **NoBa** signalled +25 bps in Nov and +25 bps in Dec. Given a 'normal' 35 bps NIBOR spread, the **FRA market** assumes 50 bps in November, and a 40% for another 50 bps in December (given 25 bps as the alternative).
- However, the actual **NIBOR spread** has widened substantially in the short end (check the previous page). The 1m NIBOR spread is 25 bps higher than 'normal' if NoBa does not hike in November, and 18 bps higher if NoBA hikes by 50 bps). Thus, an upward revision in spreads seems reasonable but probably not as much as signalled by the OIS rates. So until further notice, we assume the market is somewhat split between a 50 and 25 bps hike in November and is inching towards 25 bps in December. We still think 25 + 25 bps is the most likely scenario

SpareBank 1 MARKETS

NOK from the bottom of the list, to the top (a rather normal flip flop)

However, rather unusual: NOK up, the other super-cyclicals down. The GBP has stabilised

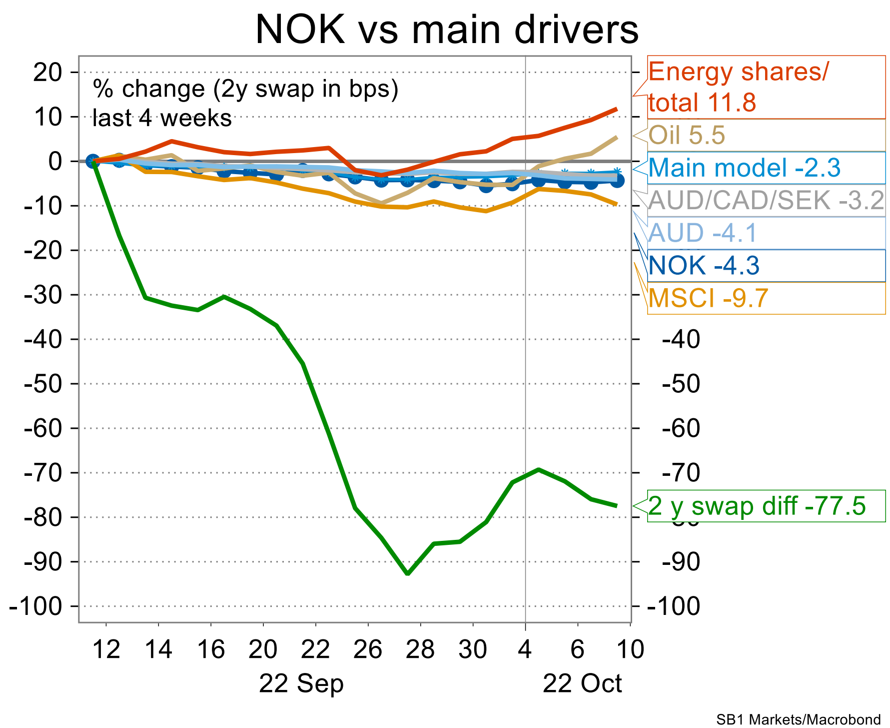


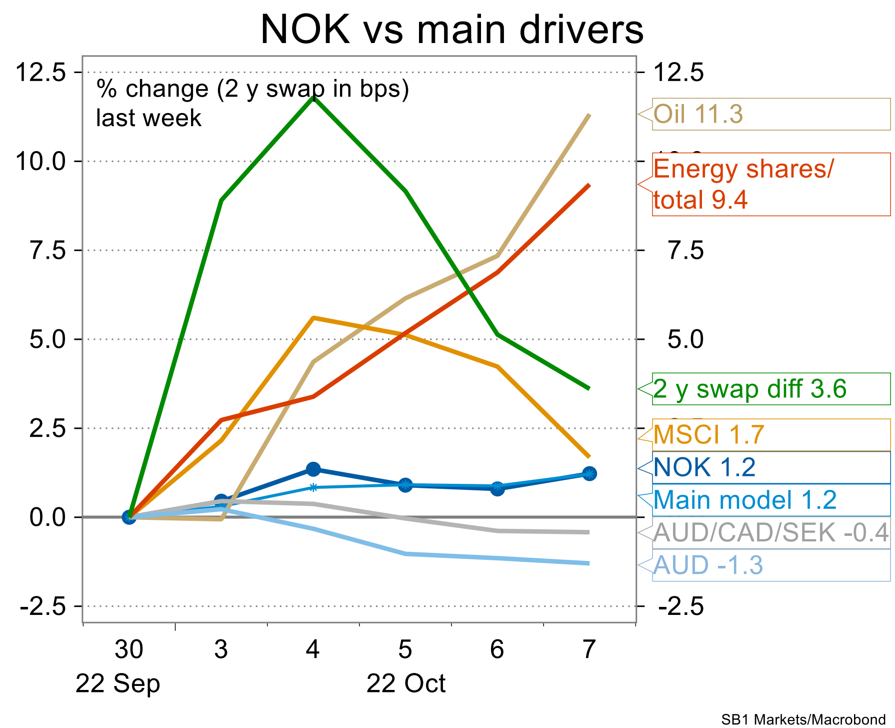


JP Morgan f/x broad indices + 3 f/x crosses	Last week	Last month
NOKEUR	2.3	-4.3
NOKUSD	2.1	-5.8
NOK	1.2	-3.9
GBP	0.3	-1.2
CAD	0.3	-2.9
EUR	0.2	0.5
USD	-0.1	1.9
EURUSD	-0.1	-1.6
CNY	-0.2	-0.4
SEK	-0.2	-1.6
JPY	-0.6	1.4
AUD	-1.3	-3.1
CHF	-1.5	0.6

NOK up 1.2% in line with our model f'cast. Opec+ cuts lifted the oil price

In addition the 2 y swap spread vs trading partners finally widened, and risk was 'on'. However, the AUD fell





Gaps vs. out model estimates mixed last week

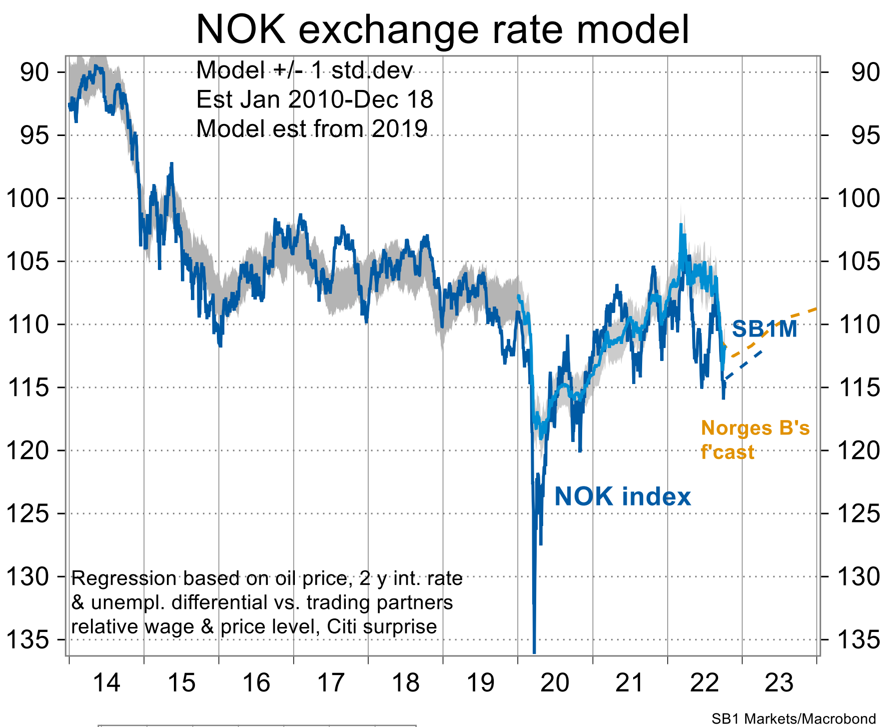
- ***NOK is 2.5% <u>below</u> our main model estimate (unch.)***
- The NOK is 8% <u>weaker</u> than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts, a substantial weakening (from -10%)
- NOK is 5% weaker than an estimate from a model that includes global energy companies equity prices (vs the global stock market) (from -4%)

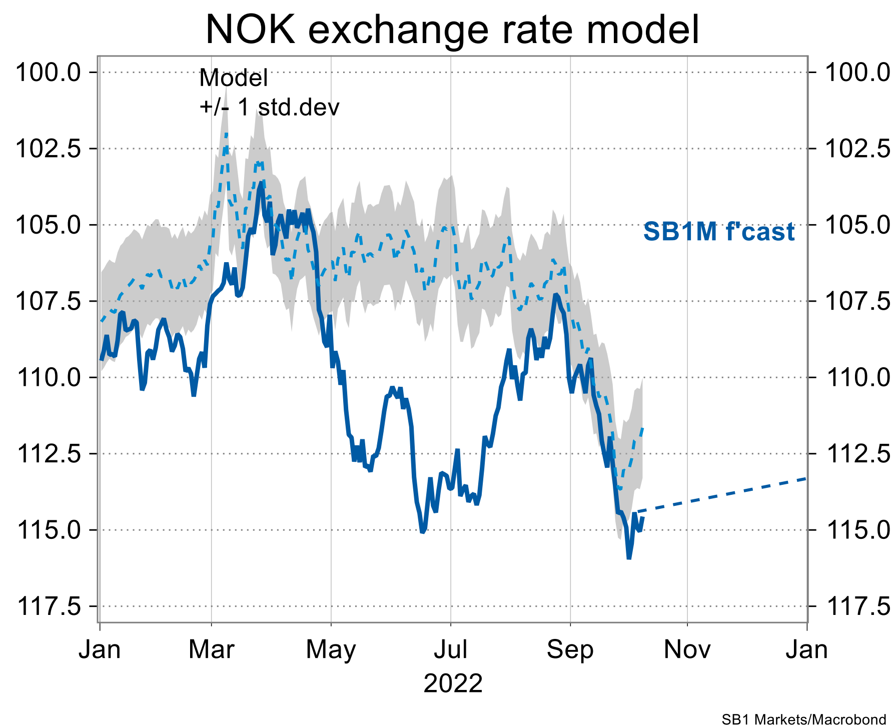
In our monthly report, we forecasted a mild NOK appreciation, from a weak position vs. all of out yard-sticks

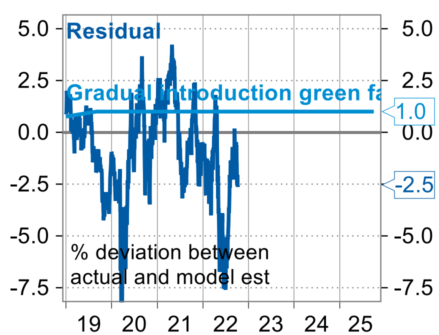
At this and the following pages we have swapped Norges Bank's I44 index for JP Morgan's broad NOK index and rebased it to the current index value for the I44. The I44 has an earlier closing time than the 'official' closing time for f/x crosses. There are no substantial difference between these two indices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

The NOK 2.5% below the model estimate

Both are heading down of course







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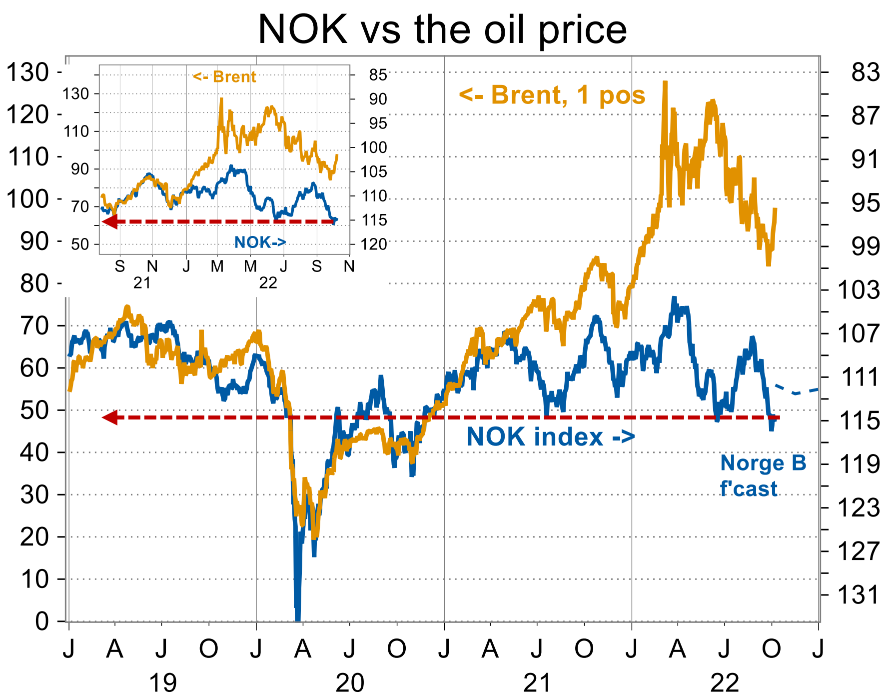
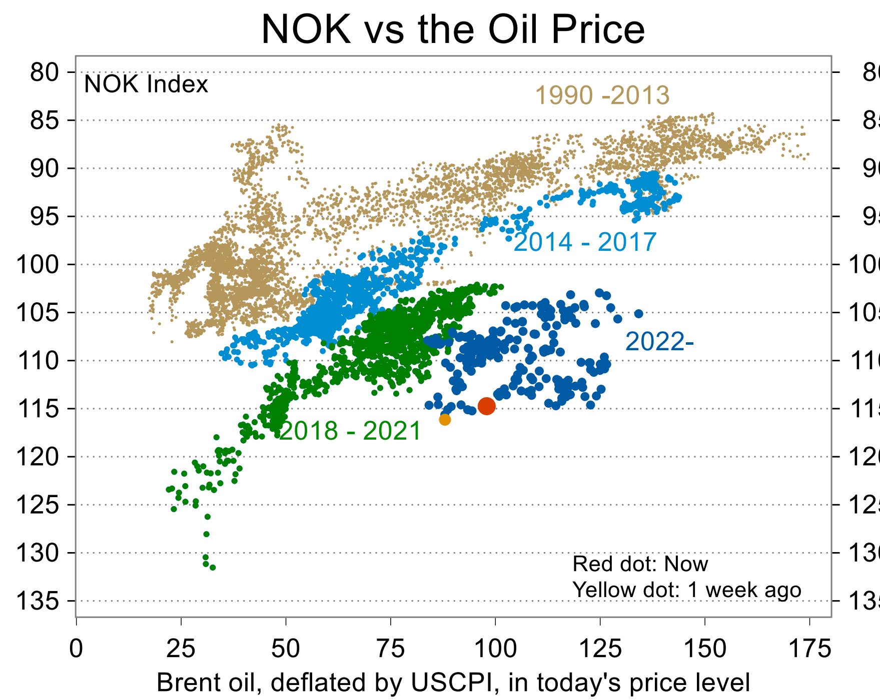
NOK up, but less than the lift in the oil price suggested

NOK +1.2%; oil price +11.3%

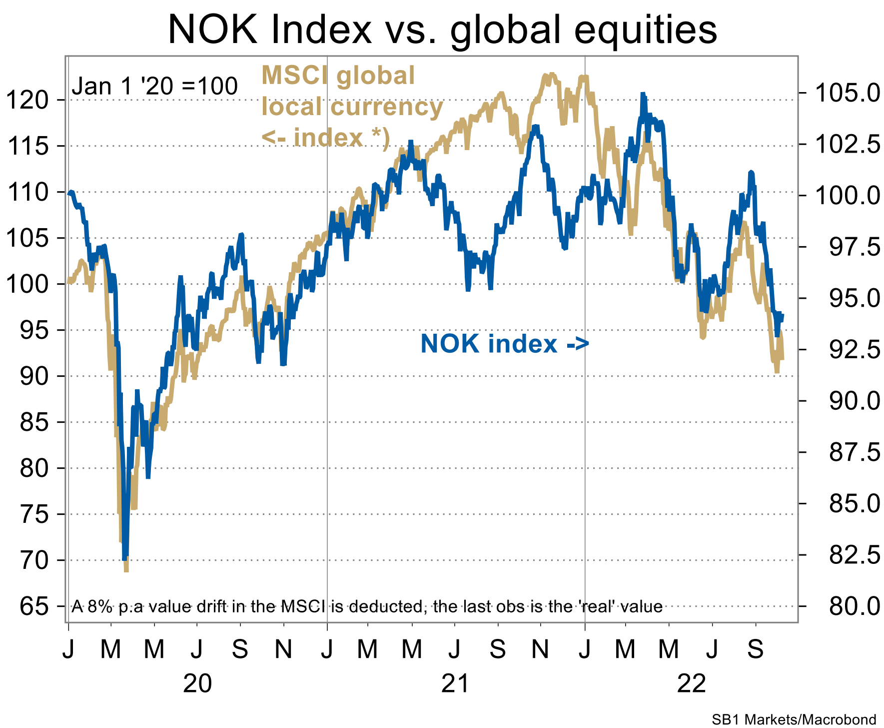


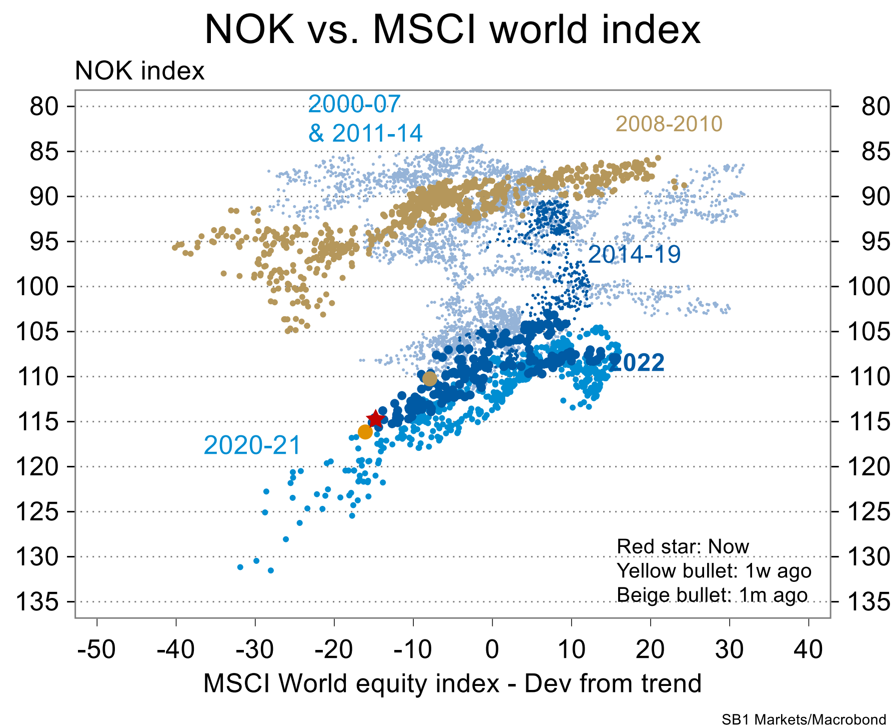


- The correlation between the NOK and the oil price has been close to non-existent since the start of 2022

The NOK has joined global stock markets, down. And then upwards last week

The NOK has been more in sync with stock markets than normal since April

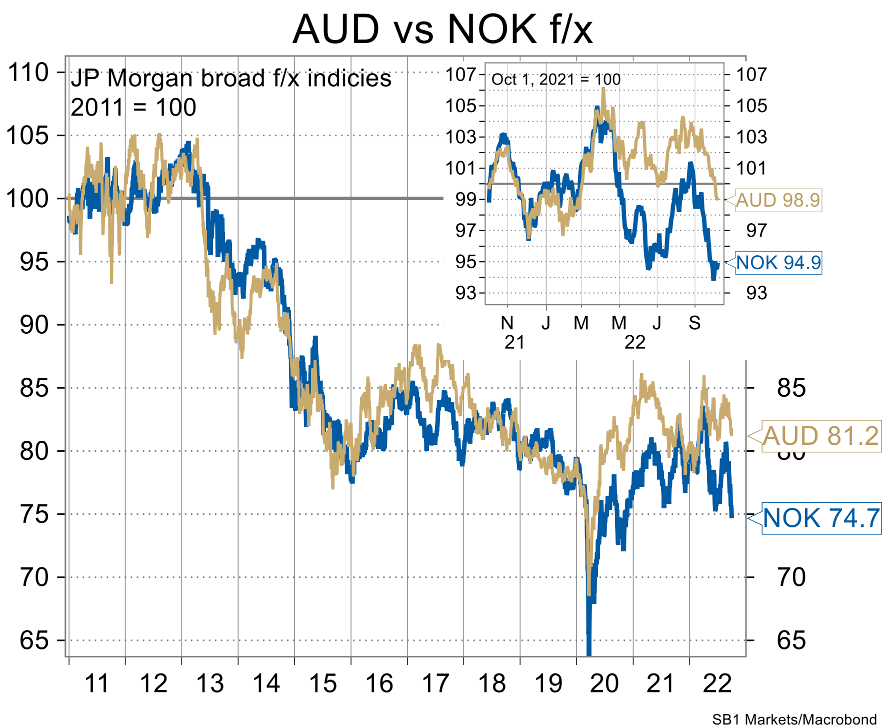


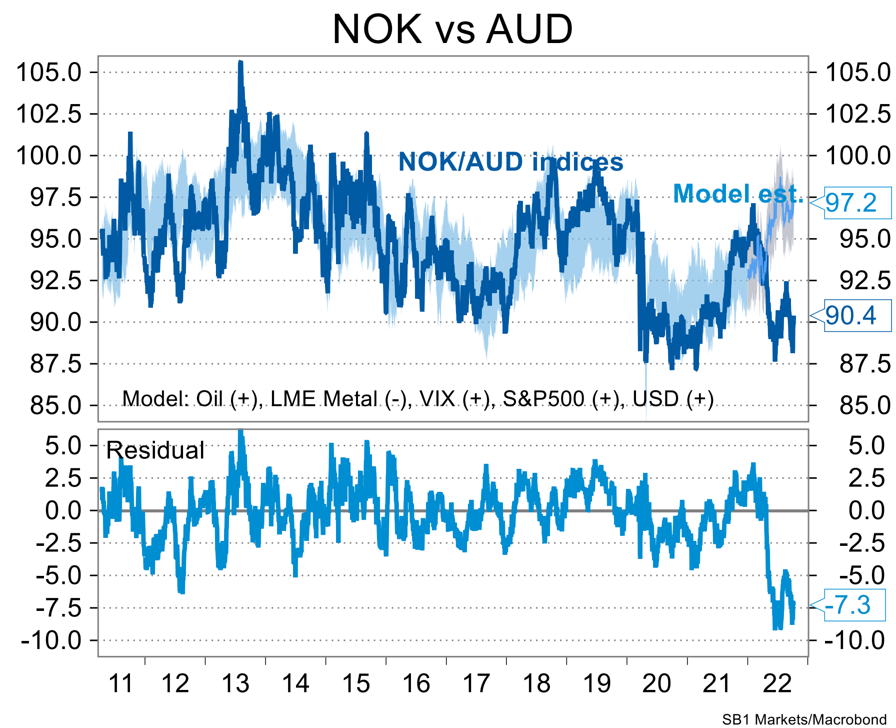


- There is no stable correlation over time, and when it is, the oil price is normally the real driver. Not so much now

AUD down, the NOK up – but the gap remains large

NOK is 7% below our model f'cast vs AUD, even if the gas price is <u>not</u> included





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

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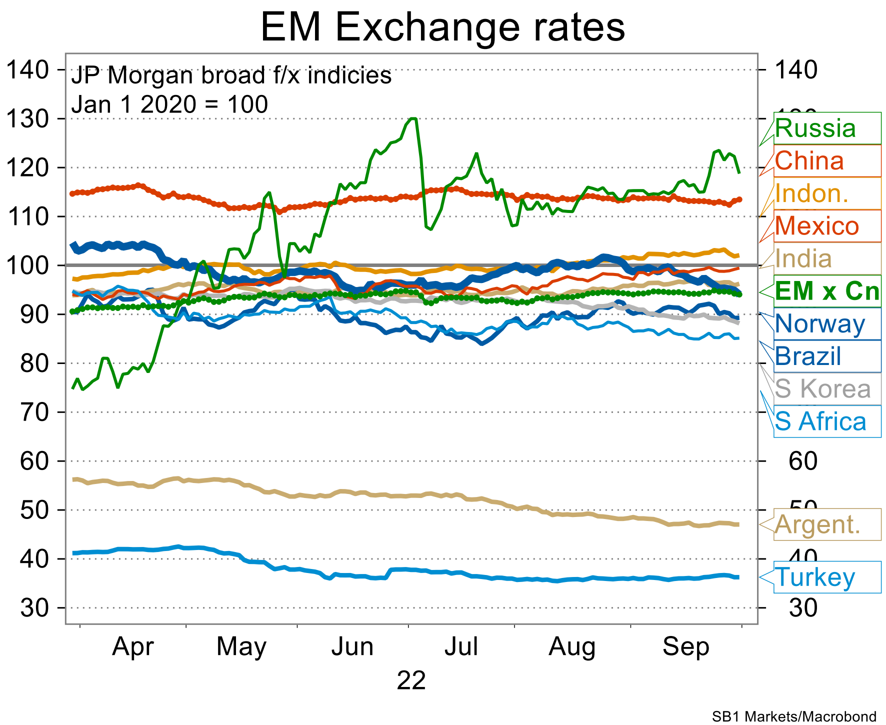
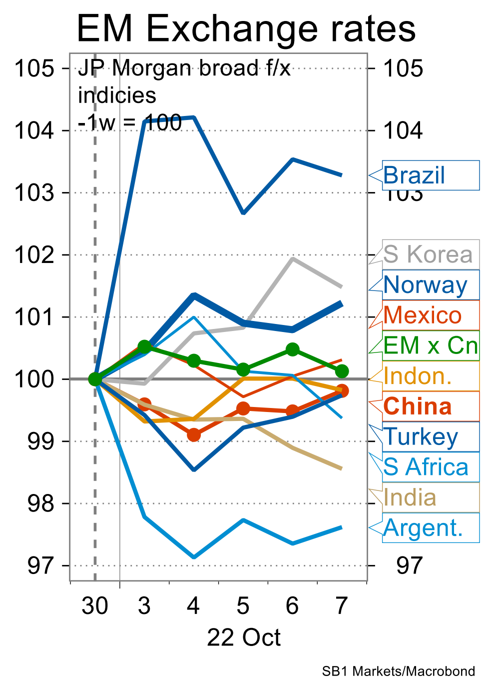
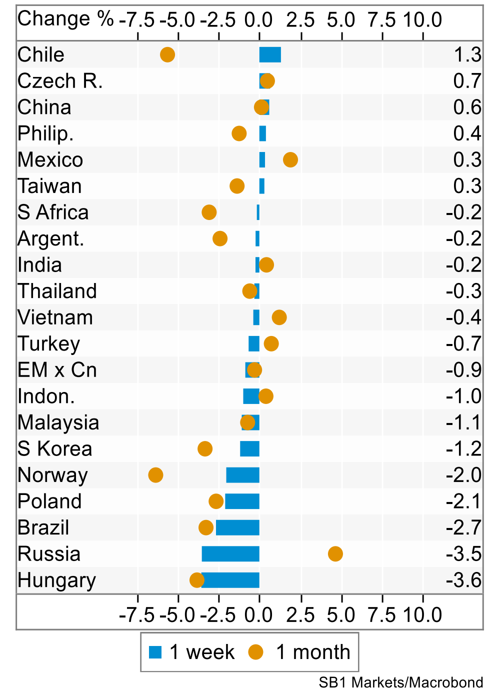
EM f/x (x China) mostly on the downside, risk off & liquidity uncertainties

Contagion to Emerging markets from a candidate member in trouble (aka UK)?







- The CNY has been slightly on the weak side recent weeks but recovered last week. The weakness vs. the USD is due to a strong USD, not a very weak CNY, trade weighted

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