27 January, 2020

Macro Research

Weekly update 5/2020

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

Synne Holbæk-Hanssen
Phone : (+47) 24 13 36 31
Mobile : (+47) 40 49 55 48
E-mail : shh@sb1markets.no

SpareBank 1 Markets
Phone : (+47) 24 14 74 18
Visit address : Olav Vs gate 5, 0161 Oslo
Post address : PostBox 1398 Vika, 0114 Oslo

The headlines are linked to the relevant section in the report
The elements on the the page "In this report" <u>are linked</u>
A top right [K] button will bring you back to the content page

Last week – the main takes

- Fears of the **coronavirus** outbreak and its potential growth impacts are weighing on global risk markets. The virus is much more contagious and spreads much more rapidly than the SARS virus in 2003 but so far the death risk is reported to be lower, and 'just' old, sick people are really exposed. Still, regional growth numbers will most likely be influenced, and some sectors like tourism and air travel may be hit as well – and the final outcome of the outbreak is certainly not yet clear. **The Trump impeachment** trial began last week and may or may not be finished this week. An (highly expected) acquittal will probably be marginally market positive

- **Global composite PMI** was probably upbeat in January, we estimate a 0.6 p lift. If so, the PMI points to an upturn in global GDP growth into 2020, some 0.3-0.4 pp increase. Services jumped, manufacturing rose moderately. **US composite PMI** edged up as services reported an acceleration, manufacturing slowed somewhat. Both PMIs are at decent levels. In the **Eurozone,** businesses reported unchanged growth. However, there are some encouraging signs; the manufacturing PMI has bottomed out and orders are moving closer to stabilization. **The UK PMI** spiked to a 16 month high of 52.4 as businesses cheered the results from the general election and hopes of an orderly Brexit. **PMIs recovered in Japan** too, and services rebounded swiftly from the VAT hike troubles.

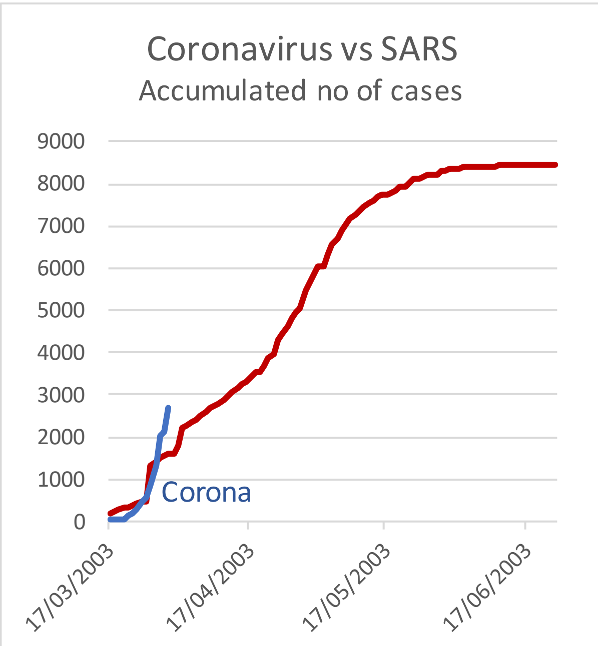
- **The US National activity index** edged down in December, pointing to 1.8% GDP growth in Q4, close to what the nowcasters are noting (1.2-1.8%) and the Leading Index, which signals 1.4% growth. **Existing home sales** surged in Dec and are up some 12% from the 2019 trough, reflecting a mild housing market boom

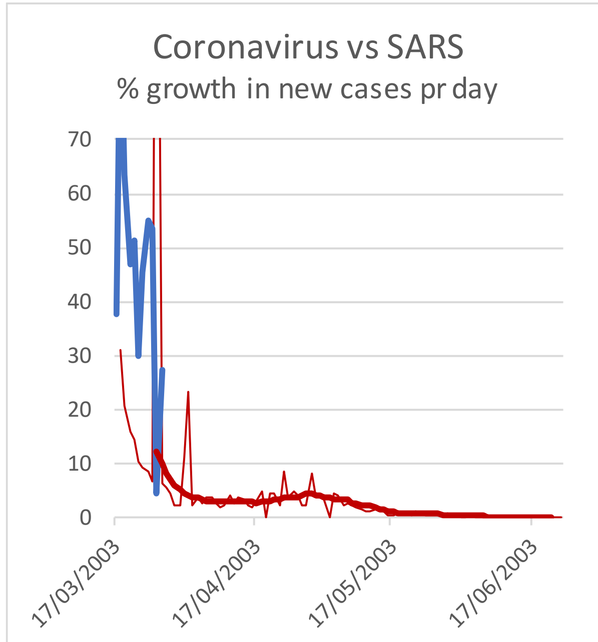
- **The ECB** made no changes to its monetary policy and most attention was shifted to the launch of the strategic review. The review will address the ECB's mission and tools with focus on challenges such as subdued inflation and low productivity growth, and is to be concluded by the end of the year. **The ECB lending survey** reported weaker credit demand from corporations, sagging investments are dragging demand down. On the positive note, household demand is expanding. **Eurozone consumer confidence** remains strong, adding to signs of solid consumer spending**. The German ZEW business survey** noted a strong rebound in Jan, adding to signs that the slowdown has bottomed out

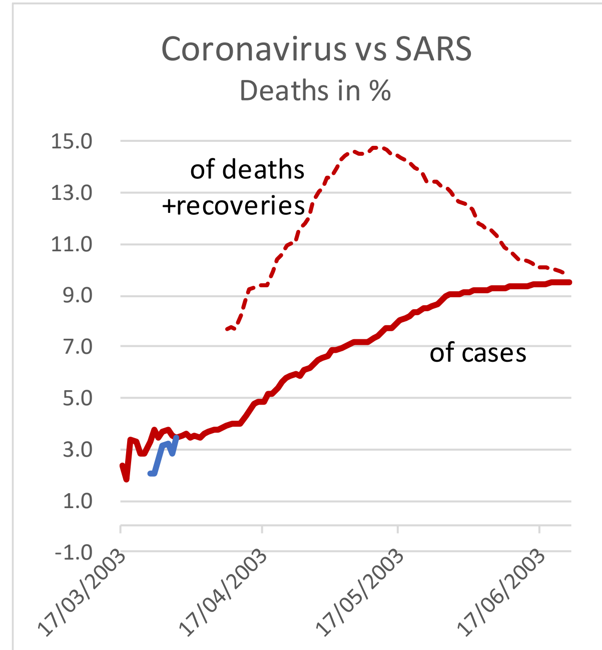
- **Norges Bank** signalled no changes to its monetary policy outlook at the January 'mid' meeting, as broadly expected. **Norwegian LFS unemployment** edged up to 4.0% in Nov, expected unchanged at 3.8%. Unemployment is up 0.5 pp from the spring, chiefly due to a rise in labour market participation. Employment has been softening the past few months. **SSB's industrial confidence** survey noted another downtick in Q4, signalling stagnating or modestly declining manufacturing output. Businesses expect falling orders in oil related sectors and modest growth in other sectors. **Housing starts** are heading steeply down, according to SSB's housing permits data, confirming the slowdown which the **Homebuilders'** have been reporting. However, **new home sales** have stabilized and do not suggest a steep downturn.

Corona vs. the 2003 SARS pandemic

The coronavirus seems to more contagious – and death rates are not that low





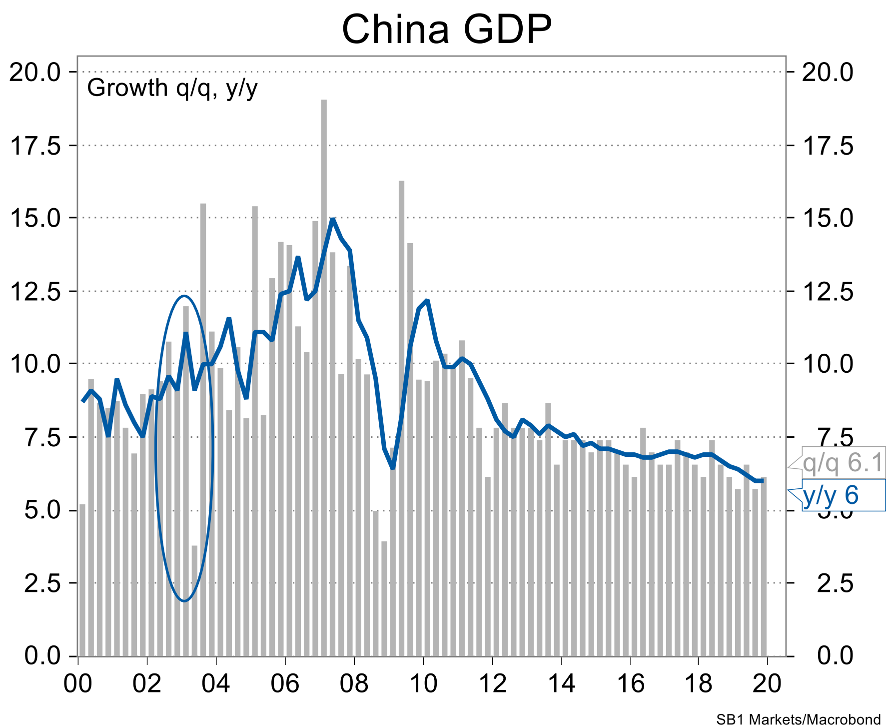


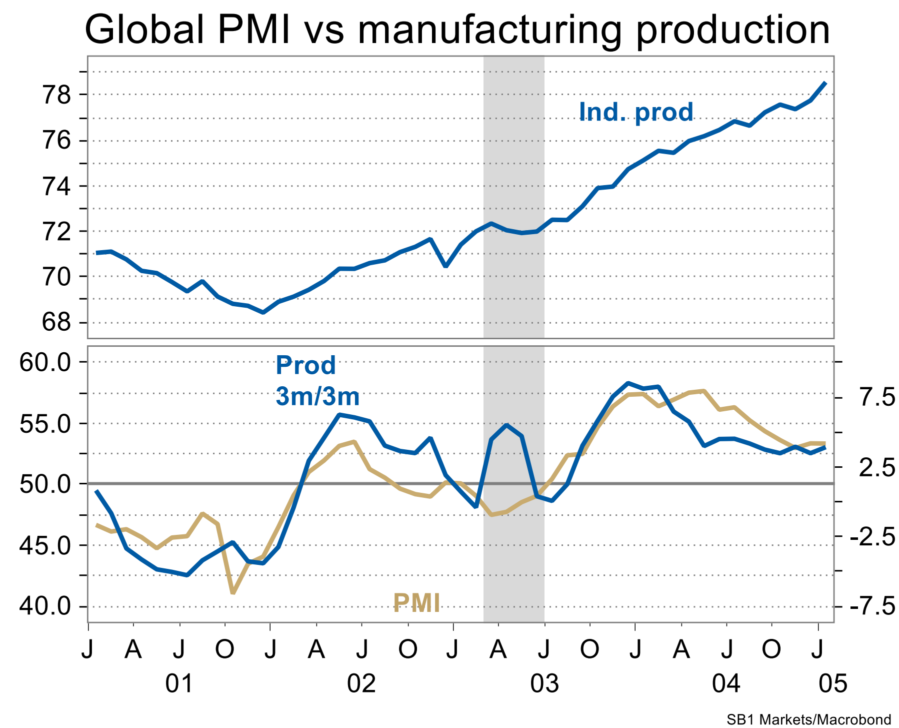
- The SARS virus spread by approx 10% per day in the first phase, from mid March, then slowed rapidly (over a couple of weeks) to less the 5%. From early May the rate fell further, and the problem was in reality 'solved'
- The coronavirus cases are increasing by some 50% per day, at least until yesterday – but reporting may still be unreliable (like cases being reported too late)
- Death risk too early to judge well as the no of cases is rising rapidly, few have been sick for a long period yet
- Just for the record: 800 persons died from SARS in 2003 (10% of the infected). The normal flu season in the US kills 35.000 persons, mostly old and sick, world wide some 0.25 – 0.5 mill.

Coronavirus vs. the timeline of SARS in 2003. Corona data starts at Jan 14, and are updated through Jan 26. Sources WHO, media reports, SB1M calculations

SARS vs the economy

China/Hong Kong was hit, the world not. However, China is much larger today…

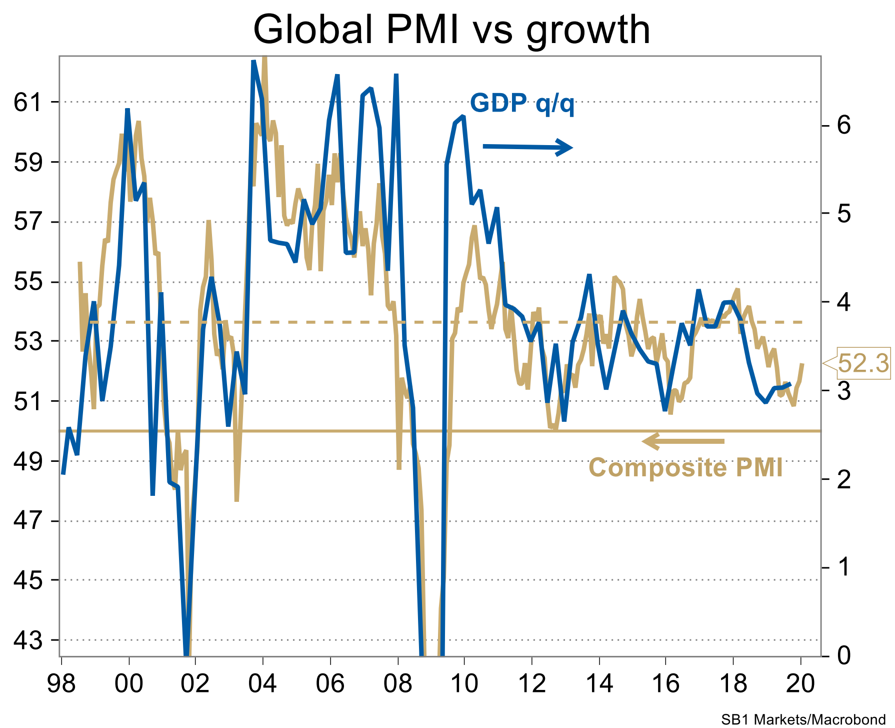


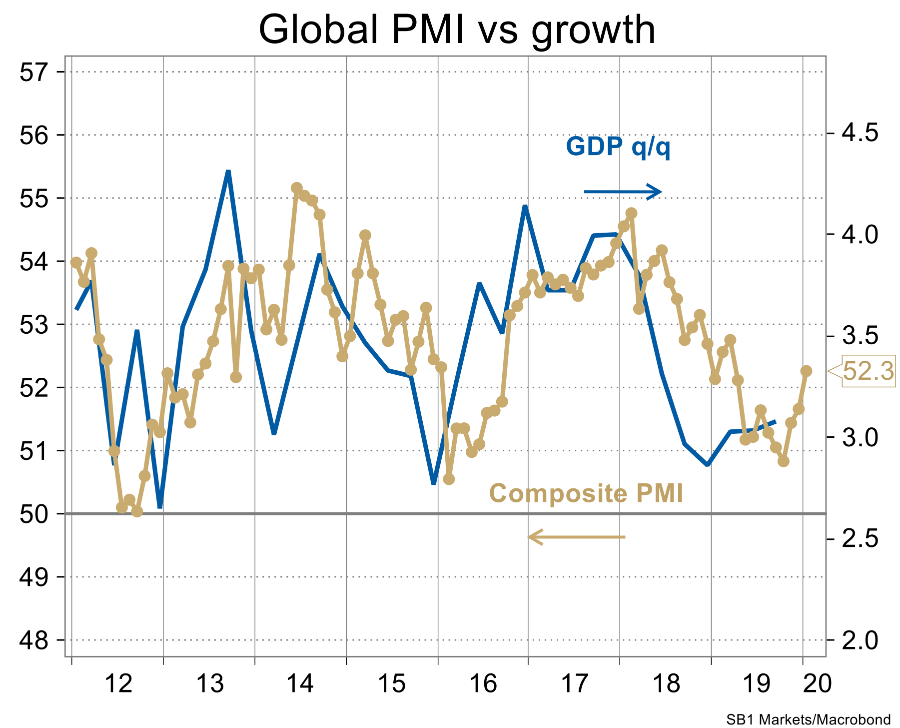


- Chinese GDP fell by just 3.7% in Q2 2003, an uncertain estimate, down some 7 pp from the previous quarters
  - » The level recovered rapidly, GDP grew rapidly in Q3 (15%+)
  - » Should China slow 7 pp now, the global impact would be far larger, because China constitutes a much larger proportion of the global economy
- The global economy was totally unaffected by the SARS epidemy during March – late May 2003. The global PMI started to rise from below 50 in April, and actual production was somewhat weaker, but far from significant. Global GDP accelerated in Q2 2003!
- The US invasion in Iraq was much a more important event, it started March 20, just as the SARS came info focus.

Global PMI set to rise to a 10 month high in January, suggesting a growth uptick

We estimate a 0.6 p increase in the composite PMI, to 52.3, signalling 3.3-3.4% global GDP growth



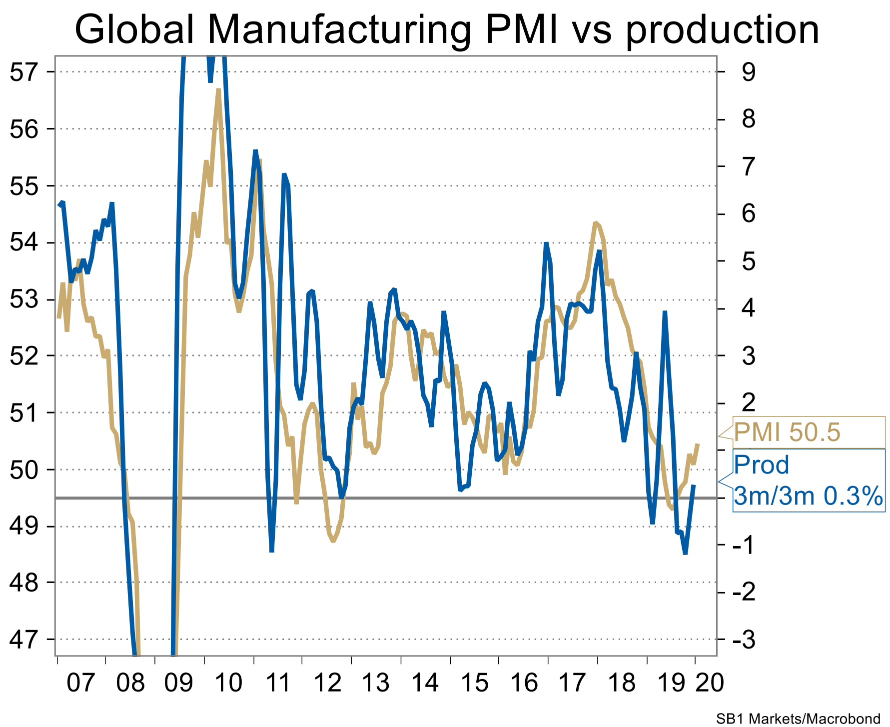


- Based on the preliminary PMIs released this far (US, EMU, UK and Japan), we estimate a 0.6 p rise in the global composite PMI. Businesses have been reporting higher growth the past 3 months, and the current level suggests a modest acceleration in global GDP growth into 2020, to 3.3-3.4% (vs 3% pace in Q3). And by the way, GDP growth has been rather stable since Q3 2018
- After the recent recovery, 1/3rd of the decline in the global composite PMI from early 2018 to last October is reversed
- *The 2003 drop in the PMI at the chart above was in March, before SARS became a main topic. The US invasion in Iraq was…*

Our estimate is based on the preliminary composite PMIs from EMU, Japan UK, and US. The estimate is uncertain

Global manufacturing PMI recovers, signalling 1% growth in global production

We estimate a 0.4 p increase in January, to 50.5, pointing to 1% growth in global production

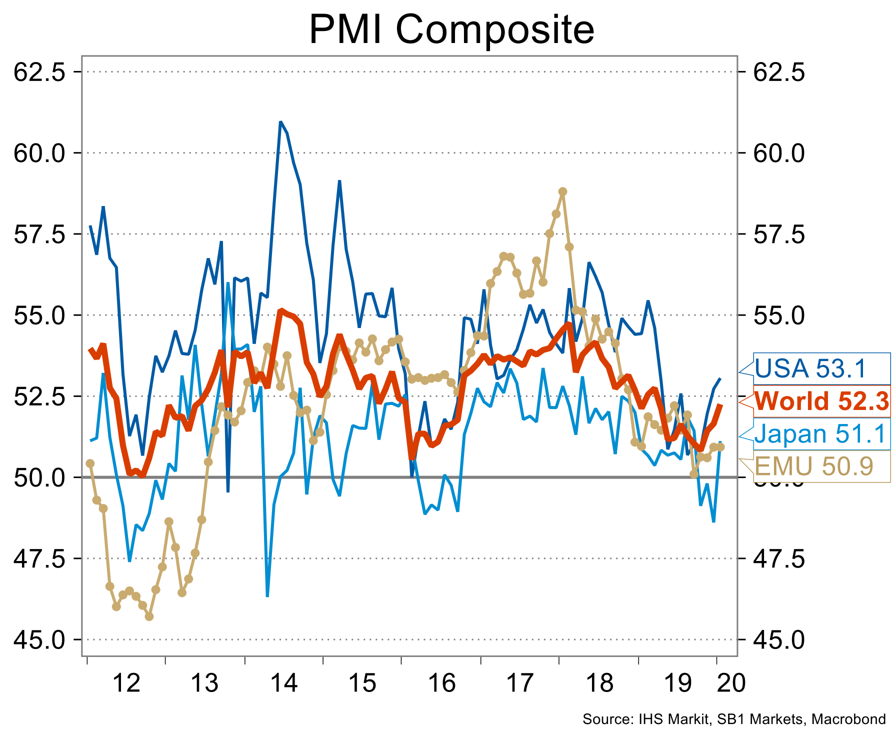


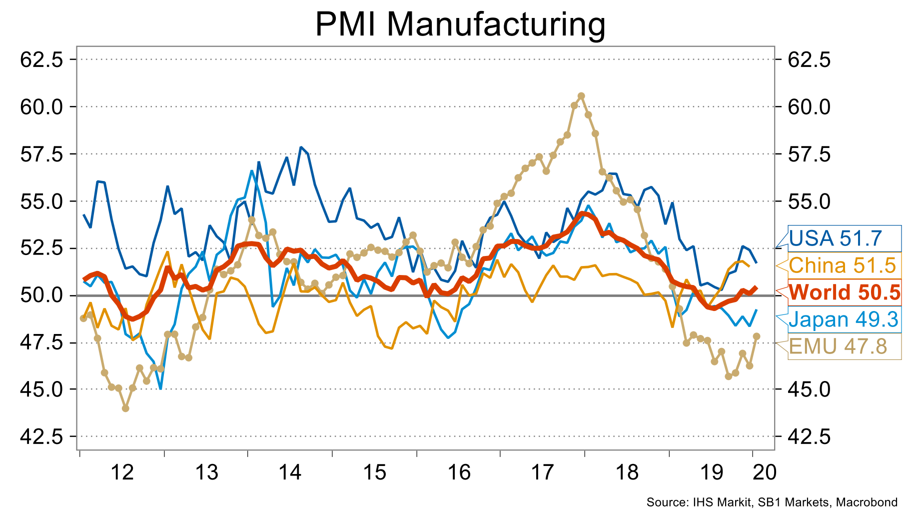
- The global manufacturing orders index probably increased in January, at least based on the countries reporting so far. Since August, orders have been recovering, while growth in inventories have slowed, a favourable mix. Thus, the order/inventory ratio has climbed (and we estimate another lift in January), normally a good signal – however not a leading indicator

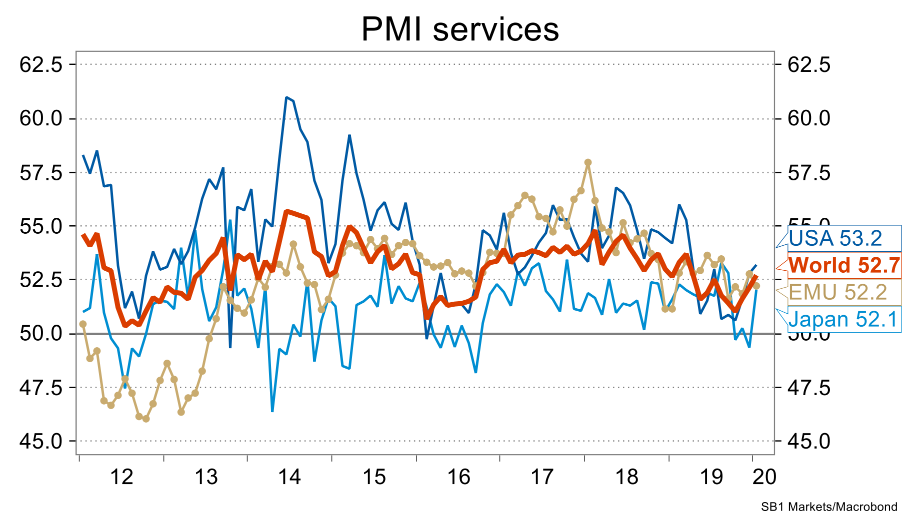
Memo: the last PMI data are our estimates on November PMI

A broad upturn; services the major engine in January (as in Dec)

Mixed in manufacturing, EMU closer to recovery, while services accelerated in Japan, UK, US







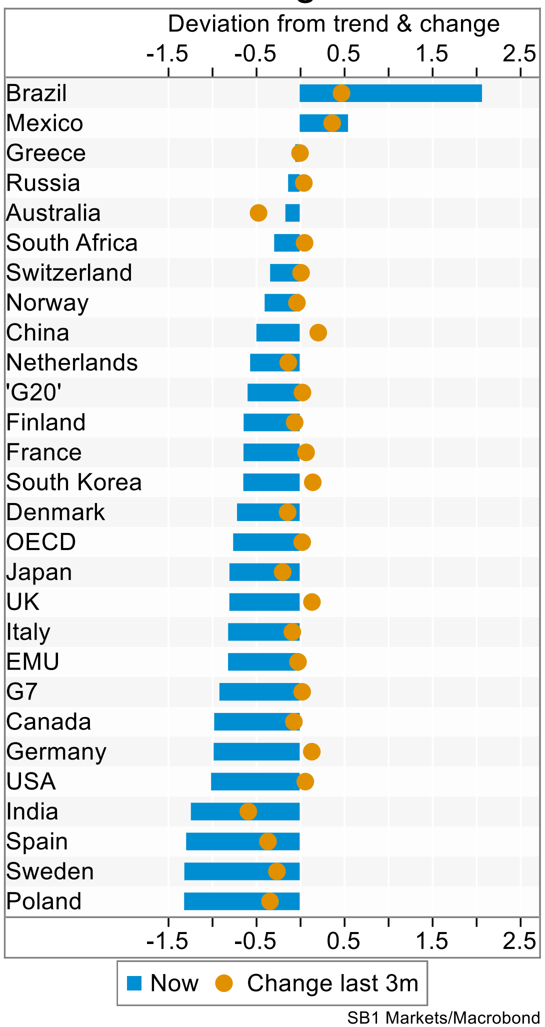
- Composite PMIs improved in both the US, UK and Japan in January, EMU unchanged, all in growth territory
- Most manufacturing PMI have edged up the past months. In the US, manufacturing is recovering, EMU and Japan are still declining but have bottomed out
- Services gained pace in January, in all countries x EMU. Both Japan and UK services PMIs jumped, lifting the global estimate
- Memo:
  - » The last obs for world PMIs are our estimates, based on preliminary data from the US, EMU, Japan and UK. Markit has not yet reported PMIs from China

SpareBank 1 MARKETS

OECD CLI: Almost all countries operates bellow trend but may are growing faster

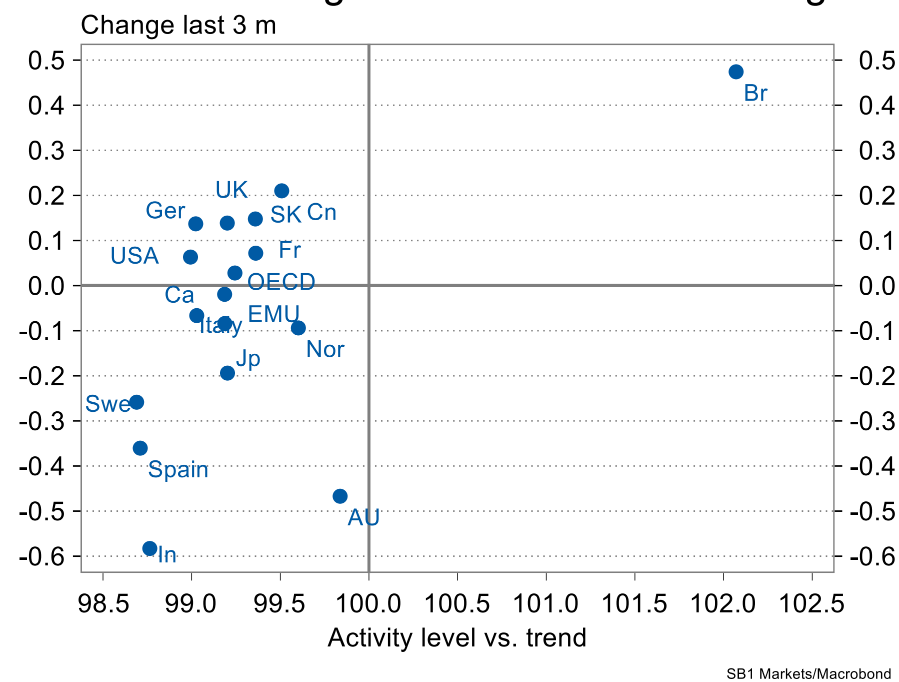
Just 2 countries are operating above trend, but 13 are growing faster than trend (vs 7 one month ago)

OECD Leading indicators



- Almost all countries are operating below trend level
  - » Just 2 countries are above trend level; Brazil and Mexico. The Brazilian figure seems strange
- Sweden and Poland at the bottom, level wise, together with India and Spain
- India is slowing fastest, followed by Australia and Spain
- A lot of countries have moved upwards the previous months, reporting above trend growth

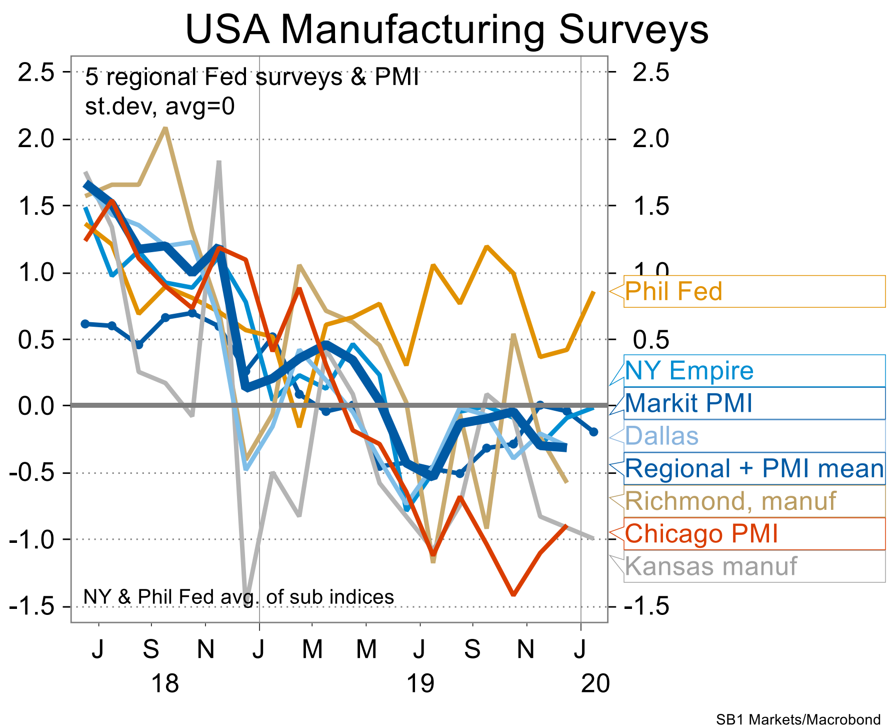
OECD Leading indicators - level & change

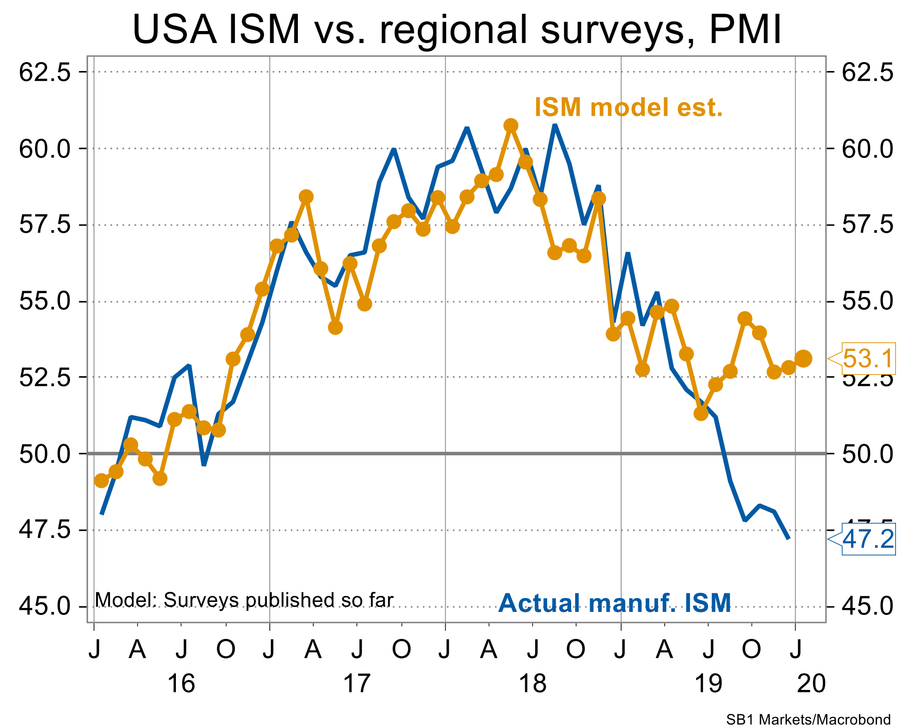


- OECD composite leading indicators are tracking the short term cycles in the economy. It consist of different indicators, including both real and financial data
- Regrettably, these indices are often revised, and are more reliable for analysing previous cycles, than the present

So far: 2 January manufacturing surveys improved, 2 down

NY & Phil Fed up, Markit's PMI and Kansas Fed edged down; suggesting a marginal increase in ISM

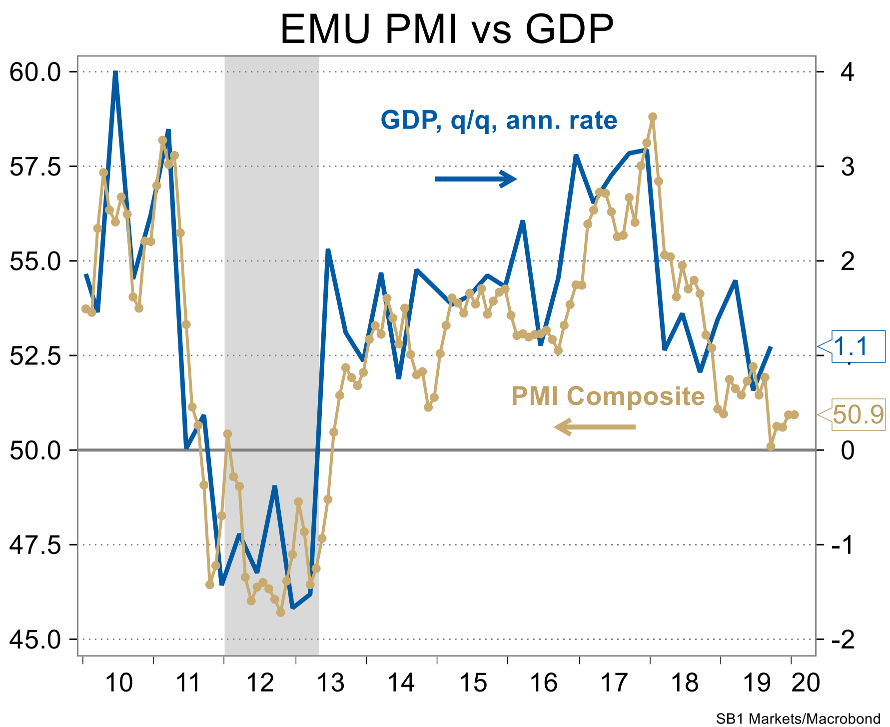


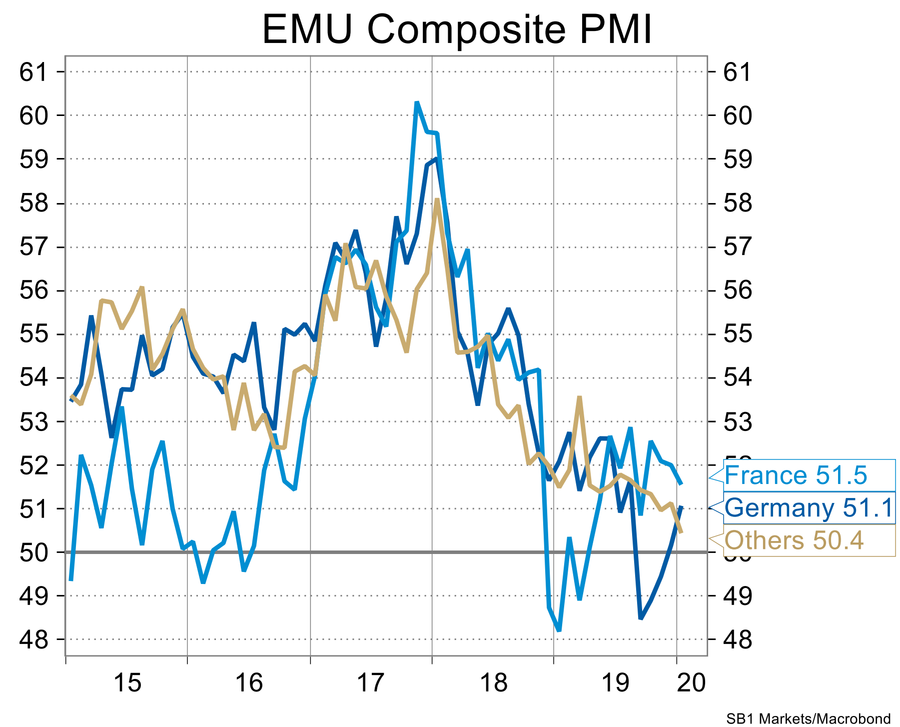


- Phil Fed's manufacturing survey recovered in January, the index is still well above the average level but has been more upbeat than all the other surveys since early 2019. The NY Empire index, which has been more in line with other surveys, inched up in January, back to the average level. Kansas Fed fell marginally, and Markit's PMI weakened
- Taken face value, these indices signal a 0.3 p increase in ISM index in January. However, the ISM index has been far weaker than other surveys since mid-2019, and a larger recovery in the ISM index seem reasonable one of the coming months

Eurozone PMI points to muted growth – but manufacturing has bottomed out

Composite PMI steady at 50.9 in Jan, as Germany recovers and France slows a tad, as do 'others'

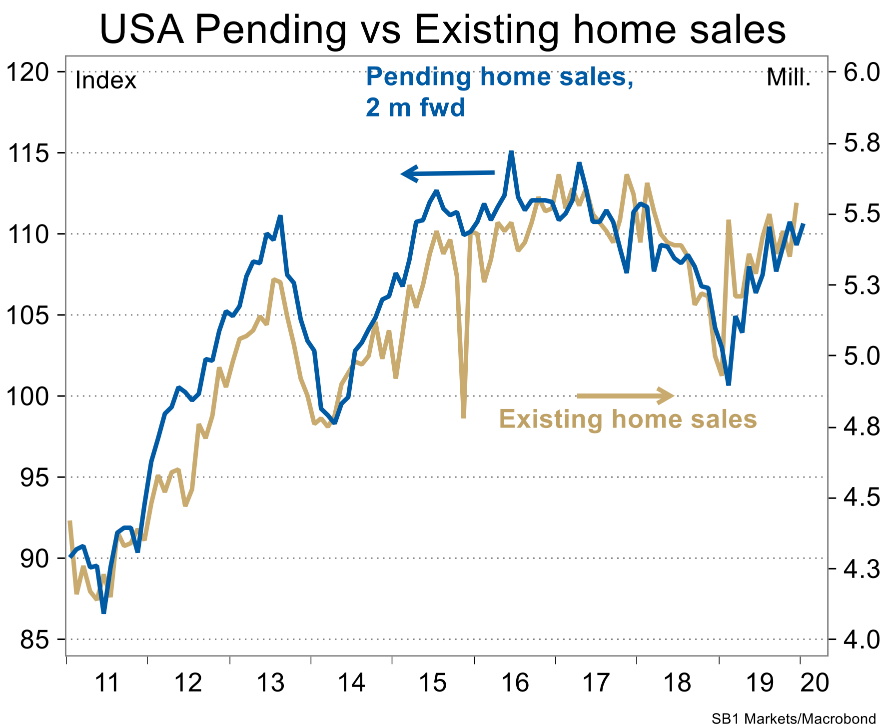


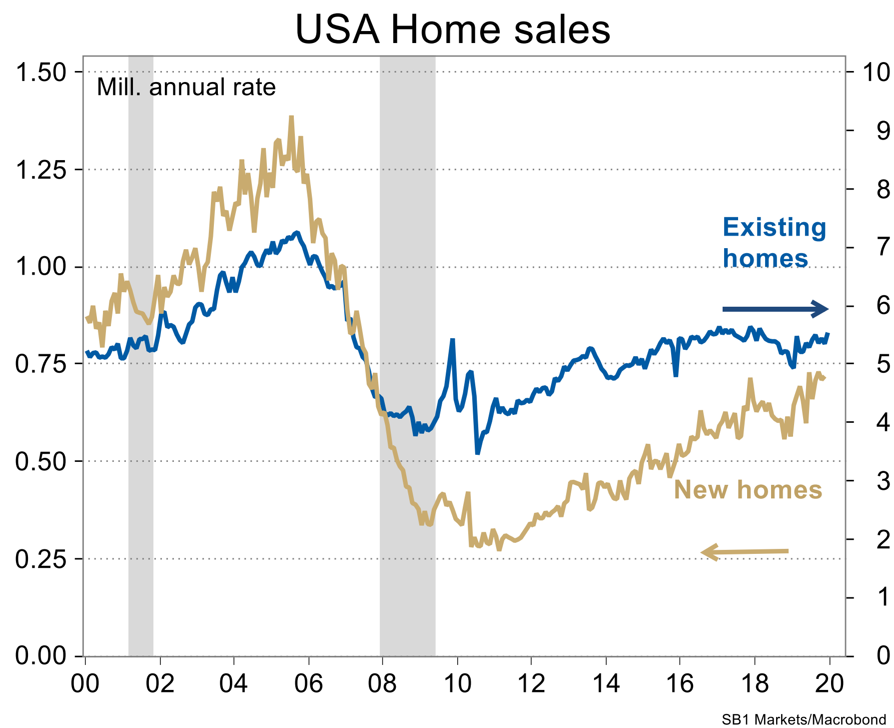


- The preliminary EMU composite PMI was unchanged at 50.9 in Jan, vs the 0.2 p expected increase. The PMI has edged up since September, however, the level is still signalling low GDP growth, by just below 0.5% annualized
- On the positive note, the German composite PMI was flat at 49.4, still weak, as the manufacturing contraction intensified marginally, while services gained pace. France one tick down, together with the implicit average of the other countries

Existing home sales straight up in Dec, with other housing market indicators

Existing home sales are up 12% from the trough and just marginally below the 2017-18 peak level

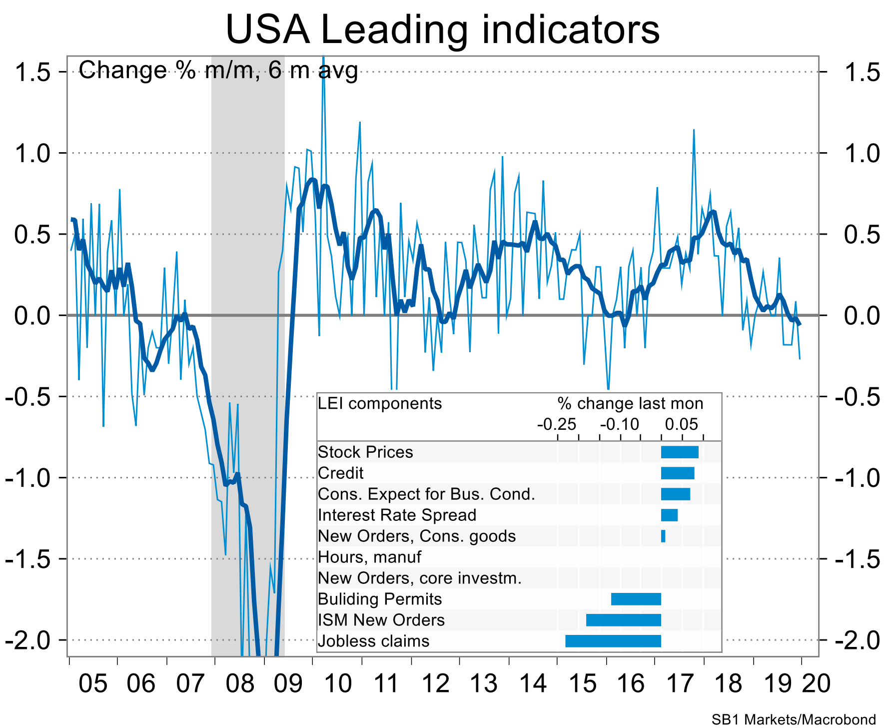


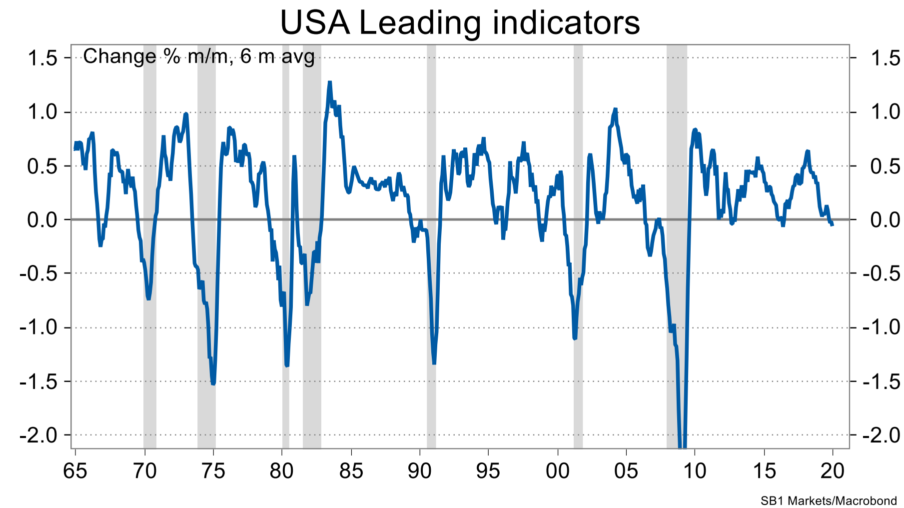


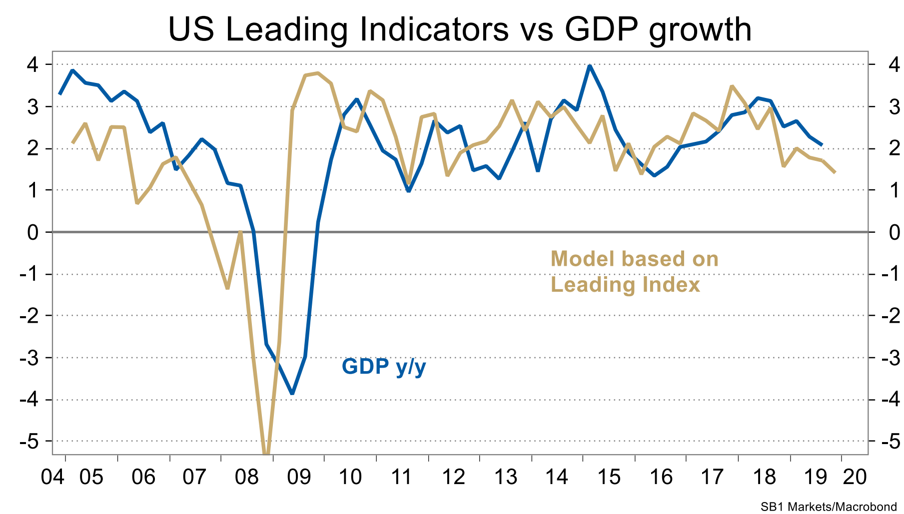
- Existing home sales surged 3.6% m/m in Dec, to 5.5 mill (annual rate), higher than expected. The prior months, sales slowed somewhat, the December rebound confirms that sales are still growing strongly. Sales are just 2% below the 2017 peak
  - » Pending (existing) home sales are heading up too, but do not signal another uptick in actual existing home sales
- Housing market data are upbeat, demand must be booming, supported by low mortgage rates

The Leading indicators down in Dec, signals 1.4% Q4 GDP growth

The LEI is sliding down, pointing to some 1.4% GDP growth, close to the nowcasters at 1.2-1.8%







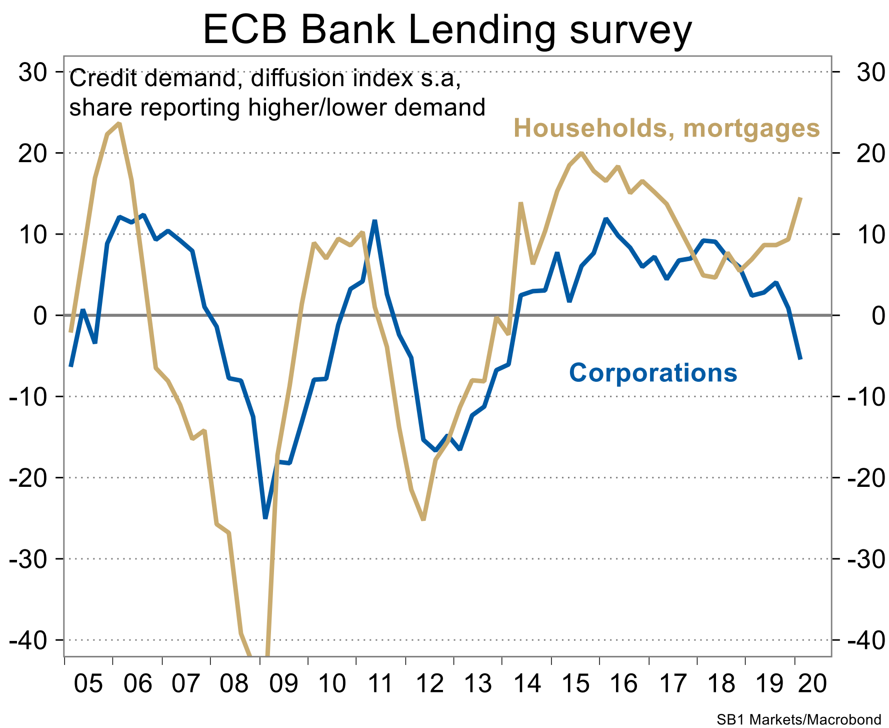
- Conference Board's Leading indicators declined by 0.3% m/m in Dec, the weakest month in 4 years. The 6m average m/m change has fallen to 0.1%, the same level as in 2016 and 2012
  - » ISM new orders, building permits (following strong growth) and jobless claims (Thanksgiving distortions) sent the LEI down; stock markets, credit and cons. confidence were positive contribution
- Face value, the LEI is signals 1.4% GDP growth in Q4

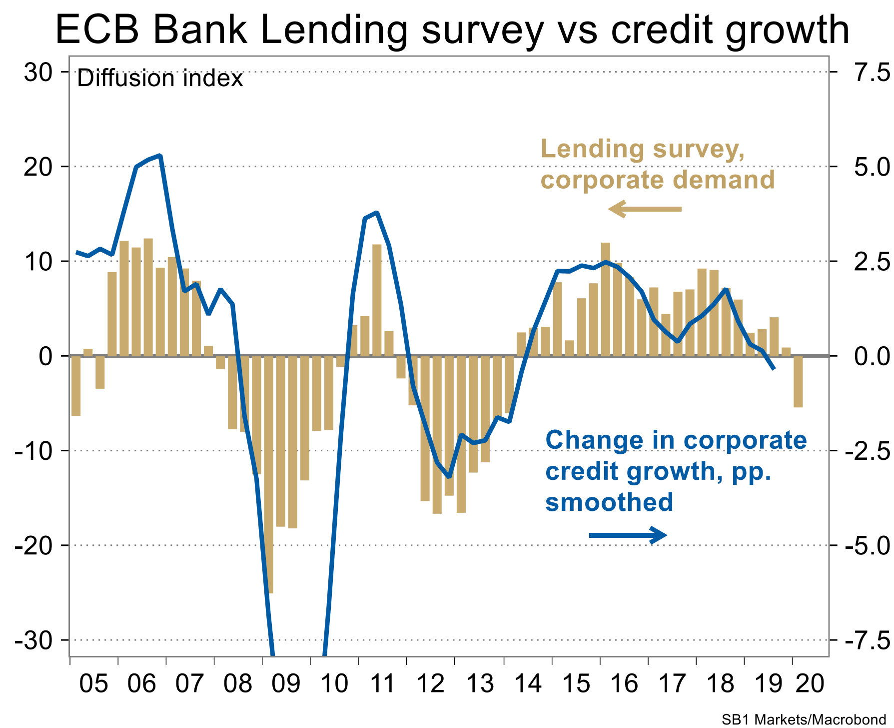
Conference Board's Leading Index (LEI) is a composite index based on ten already published leading indicators that are judged to be leading the overall cycle

SpareBank 1 MARKETS

Lending survey: Corporate credit demand pulls back for the first time since 2014

Household credit demand is accelerating, while subdued investments drag corp. demand down

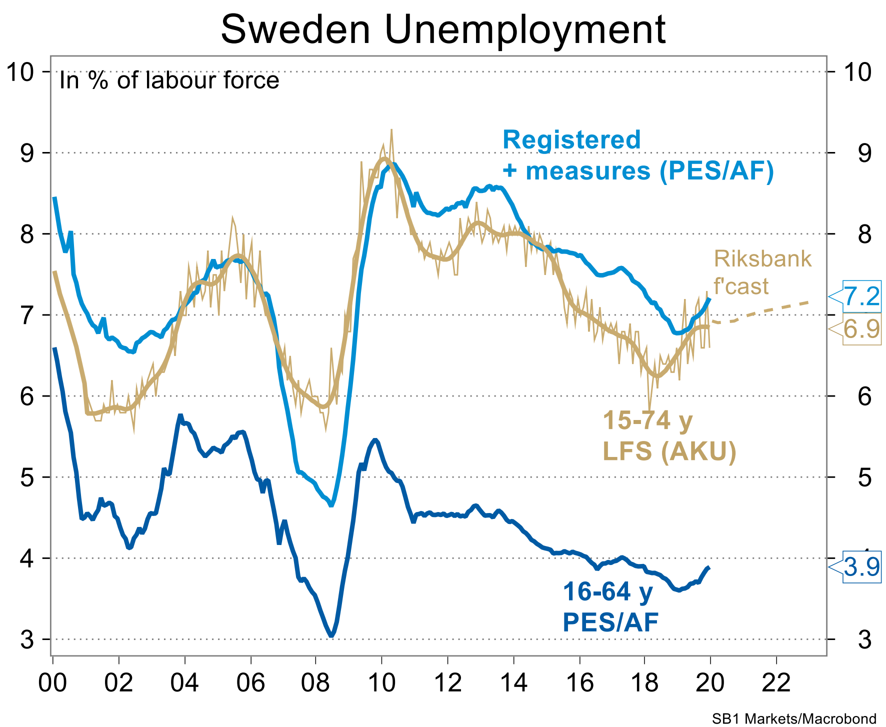


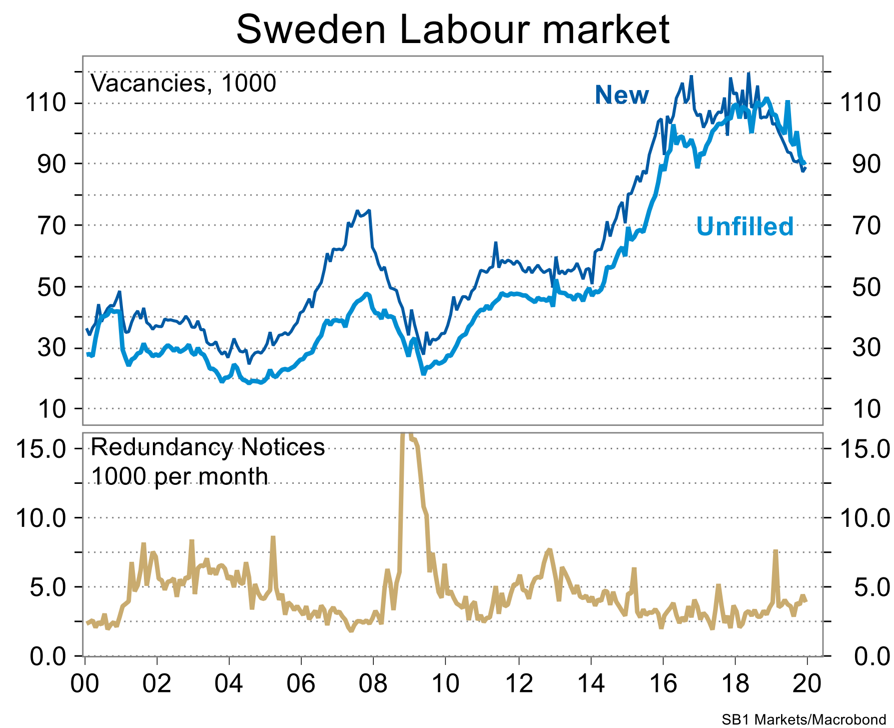


- In ECB's Q4 Bank lending survey, banks reported higher net household credit demand for house purchases
- Corporate credit demand slipped, the first decline in 6 years, in spite ECB's efforts to boost bank lending. Lower fixed investments and wider availability of alternative financing were cited as the major drags on demand
  - » Banks in Spain noted the biggest fall, while demand in Germany increased slightly. France and Italy close to unchanged
- Actual corporate credit is growing by 3.4% y/y, growth has slowed just modestly (the 2nd derivative is marginally negative). The lending survey signals a substantial slowdown in the first quarter of 2020

LFS unemployment climbs, but stabilized the past 4 months

LFS unemployment (smoothed rate) steady at 6.9% since Aug, after a steep upswing

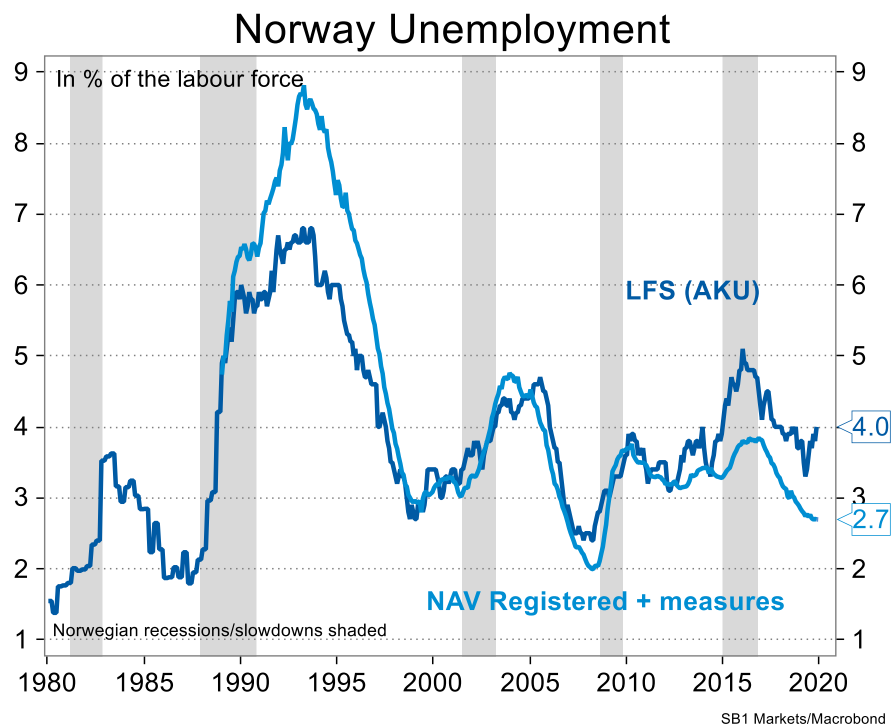


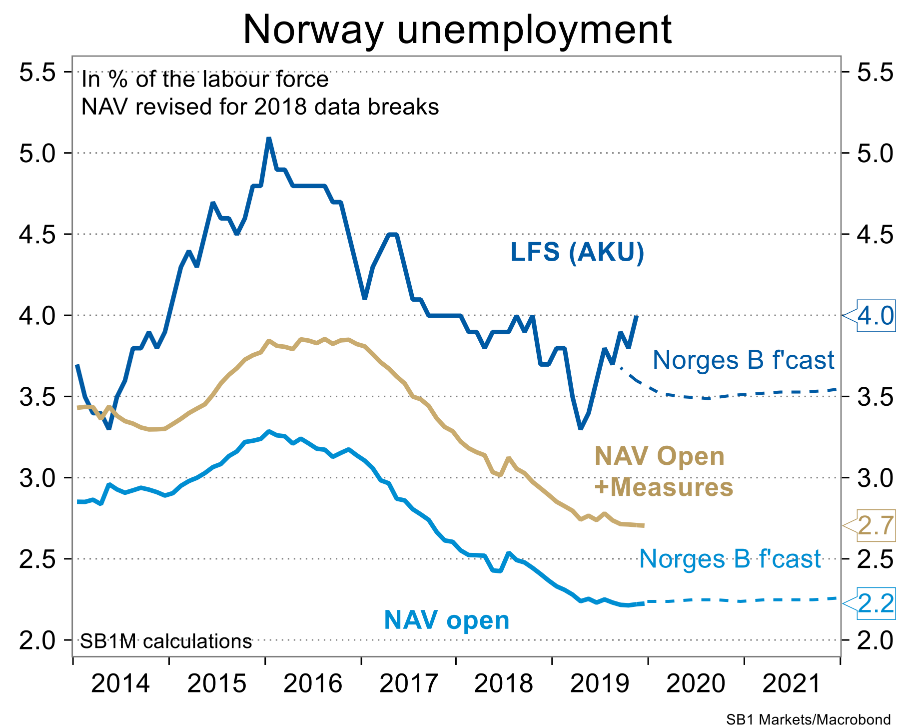


- LFS unemployment held steady at 6.9% in Dec, measured by the smoothed rate, steady since Aug, and up from 6.3% in early 2018. The unadjusted, volatile rate retreated to 6.6%, from 7.3%.
  - » The PES/AF registered unemployment rate (far less volatile than LFS data) confirms that unemployment has turned up. Open unempl. is up 0.3 pp. Both new and unfilled vacancies have fallen steeply down from the peak, confirming a cooling labour market
- The labour market is no doubt weakening. The good news; Employment is still inching up, although the upward speed has slowed. Labour market participation is increasing at a faster pace,. We would be much more concerned of a rapid downturn in the Swedish economy if the unemployment uptick was due to declining employment!

LFS unemployment rose to 4% and employment growth is easing

Unemployment has turned up, partly due to higher participation, but employment may be softening

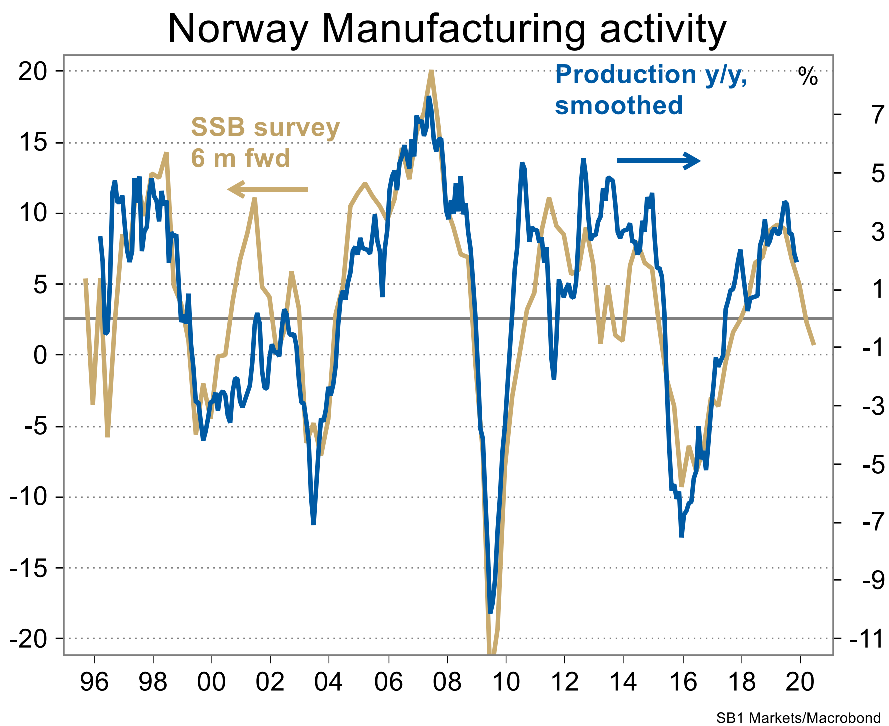


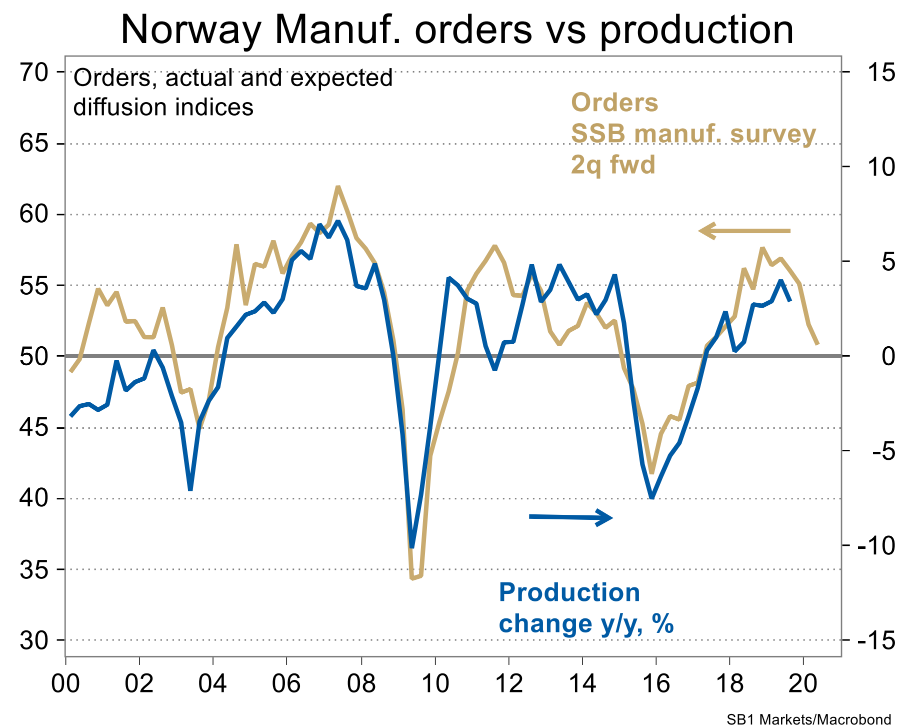


- LFS (AKU) unemployment rose to 4.0% in November (avg Oct-Dec), we and consensus expected an unchanged rate at 3.8%. Unemployment is up 0.3 pp from the last 3 month period (August) and has ticked up from 3.3% in the spring. These data are volatile and we doubt that unemployment is heading speedily up, however, there is little doubt that unemployment has bottomed out
  - » LFS unempl. is already well above NoBa's f'cast from Dec, the bank expected 3.6% in Nov and a further decline to 3.5% the coming months. Too optimistic, now
- Labour market participation is heading up, and faster than employment, bringing unemployment up. The past few months, employment growth has been slowing, the annual rate is just 0.9%. Employment is anyway growing faster than working age population, and the employment rate is trending up
- NAV unemployment has flattened out, confirming a cooling labour market. LFS data are often leading but are more volatile, we prefer NAV

SSB's manufacturing confidence drops, suggesting declining production

Businesses are reporting sagging orders and employment plans are nudged down substantially

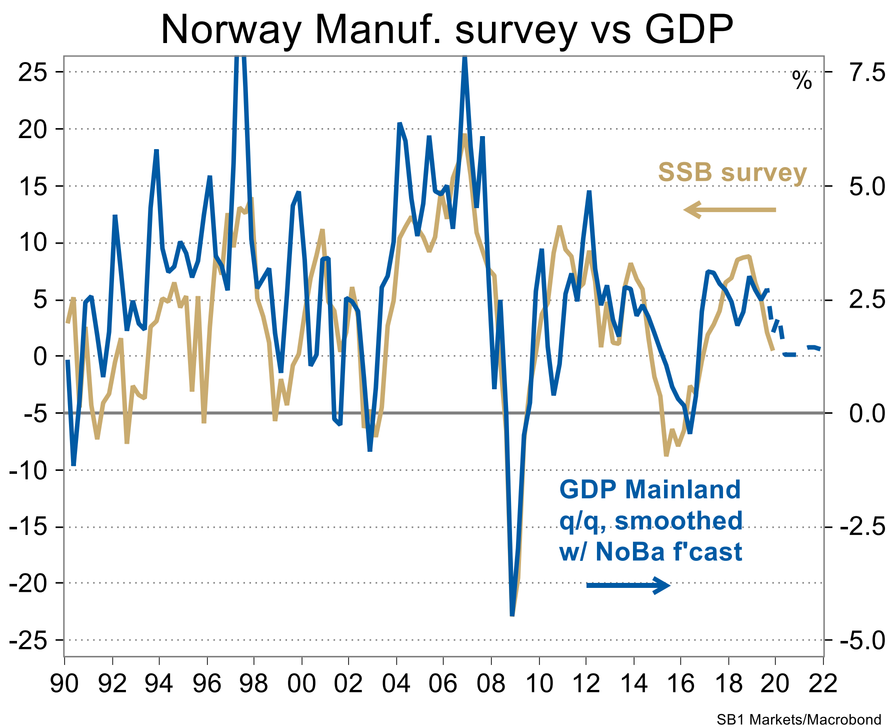


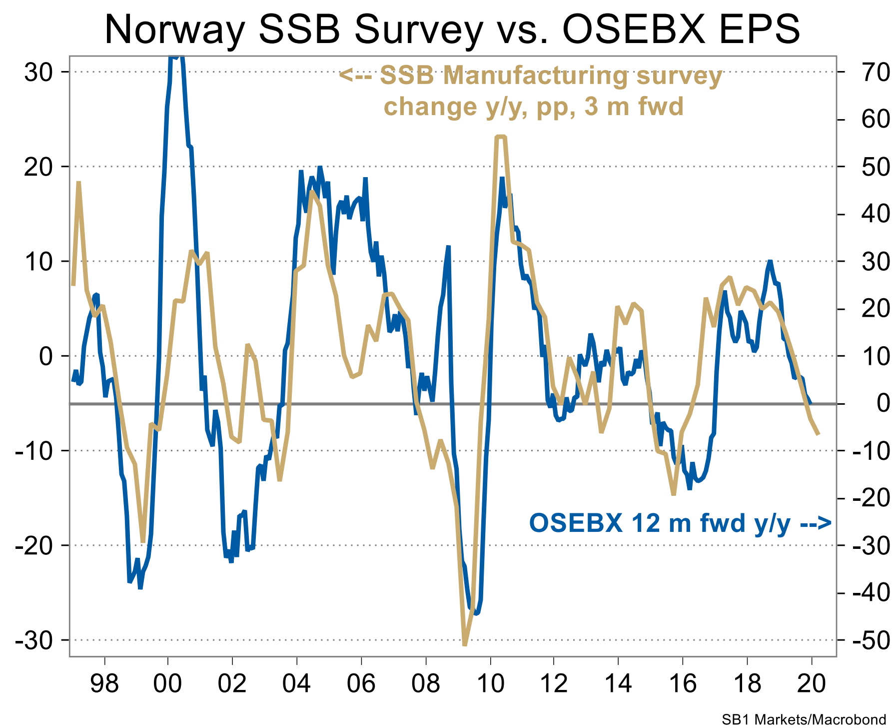


- The composite index in SSB's industrial survey (manuf. index) fell to 0.7 p in Q4, from 2.5 in Q3. The decline was close to our expectations (of 0.5 p) but appears to be weaker than the broader consensus
  - » An index at 0.7 signals close to a 1% decline in production – but with a wide margin of error
  - » Manufacturing businesses are expecting dropping orders in oil related sectors, whereas non-oil related are still expanding modestly. The slowdown is rather broad sector wise, in line with what the manufacturing investment survey noted
- SSB's industrial confidence survey is somewhat more downbeat than other business surveys, however, all surveys (x the PMI) are suggesting that growth is set to slow the coming months/quarters, the growth peak is no doubt behind us

Just above 1% GDP growth and declining OSEBX earnings?

SSB manufacturing survey signals a swift slowdown, and NoBa's f'casts are not much more upbeat

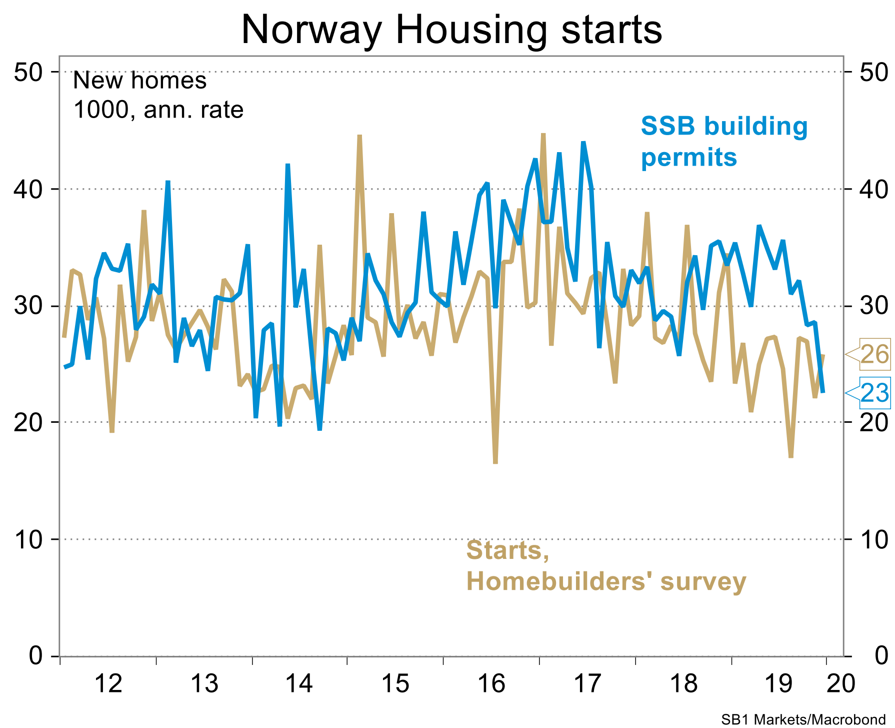


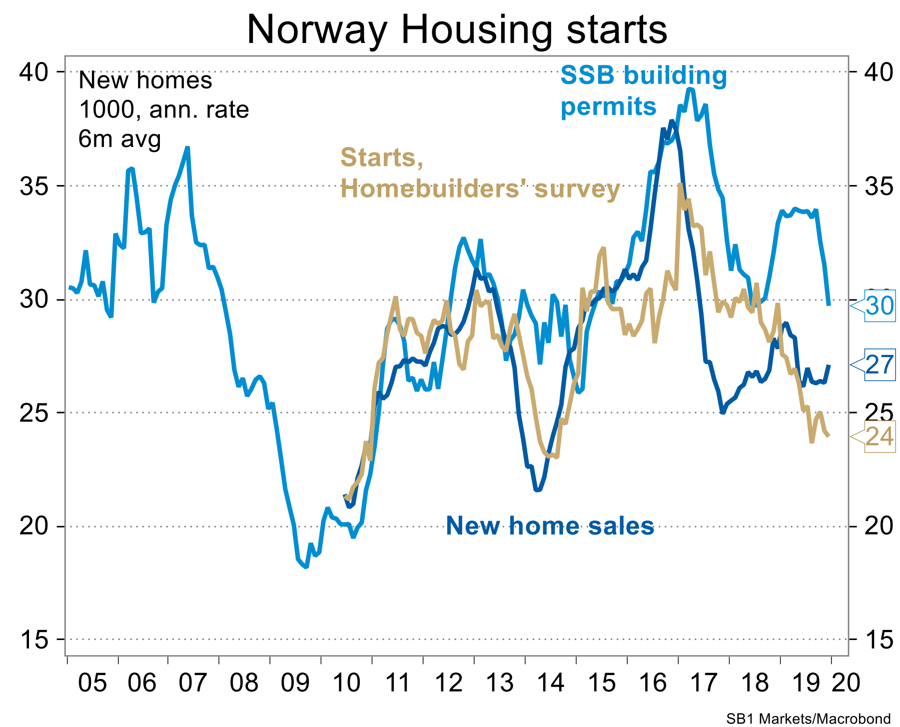


- Whereas SSB's survey points to a slowdown to just above 1% Mainland GDP growth in Q1, Norges Bank f'casts a drop to 1.3% growth by Q2 (implied), thus, none of them may be that far off

SSB housing starts are sliding rapidly down, lowest since 2014 in December

SSB confirms the downturn which the homebuilders have reported – but sales have stabilized





- SSB reported housing starts (building permits) dropped to 23' annually in December, the lowest since 2014. The 6m average fell 30', down from 34' in Sept, and back to the 2018 local trough
- The Homebuilders have been reporting declining starts since early 2017. Soaring building of student housing in early 2019, which is only included in the SSB figures, partly explains the gap to SSB's starts. Recent months, the Homebuilders have reported a stabilization in starts. New home sales have flattened out the past 6 months and spiked in Dec, do not signal additional decline of starts
- Slowing housing starts indicate a muted housing investments. However, starts are not low; the level is still above the average since 2000, and close to the per capita average – with low population growth and real income growth much below what we have been used too

SpareBank 1 MARKETS

The Calendar

In focus: China PMIs, US and EMU Q4 GDP, Fed/BoE meeting, Norwegian unempl., credit growth

Time	Country	Indicator	Period	Forecast	Prior
Monday Jan 27					
10:00	GE	IFO Expectations	Jan	94.8	93.8
16:00	US	New Home Sales	Dec	730k	719k
Tuesday Jan 28					
09:30	SW	Retail Sales MoM	Dec	-0.9%	-0.4%
14:30	US	Durable Goods Orders	Dec P	1.0%	-2.1%
14:30	US	Capital Goods Orders Core	Dec P	0.2%	0.2%
15:00	US	House Prices, CS 20-City MoM	Nov	0.4%	0.4%
16:00	US	Conf. Board Consumer Confidence	Jan	128.0	126.5
Wednesday Jan 29					
09:00	SW	Economic Tendency Survey	Jan	--	93.3
09:00	SW	Consumer Confidence	Jan	--	94.1
14:30	US	Trade Balance Advanced	Dec	-$64.5b	-$63.2b
16:00	US	Pending Home Sales MoM	Dec	0.7%	1.2%
20:00	US	Fed Rate Decision	Jan-29	1.5-1.75%	1.5-1.75%
Thursday Jan 30					
08:00	NO	Retail Sales MoM	Dec	-0.6%	1.0%
11:00	EC	Economic Confidence	Jan	101.8	101.5
11:00	EC	Unemployment Rate	Dec	7.5%	7.5%
13:00	UK	Bank of England Bank Rate	Jan-30	0.75%	0.75%
14:30	US	GDP QoQ Annualized	4Q A	2.2%	2.1%
14:30	US	Core PCE Inflation QoQ	4Q A	1.6%	2.1%
14:30	US	Initial Jobless Claims	Jan-25	213k	211k
Friday Jan 31					
00:30	JN	Jobless Rate	Dec	2.3%	2.2%
00:50	JN	Retail Sales MoM	Dec	1.2%	4.5%
00:50	JN	Industrial Production MoM	Dec P	0.7%	-1.0%
02:00	CH	Composite PMI, NBS/CFLP	Jan	--	53.4
08:00	NO	Credit Growth YoY	Dec	5.4%(5.4)	5.6%
10:00	NO	Unemployment Rate, Registered	Jan	2.4%(2.4)	2.2%
11:00	EC	GDP QoQ	4Q A	0.2%	0.2%
11:00	EC	CPI Core YoY	Jan P	1.2%	1.3%
14:30	US	Employment Cost Index	4Q	0.7%	0.7%
14:30	US	Personal Income	Dec	0.3%	0.5%
14:30	US	Personal Spending	Dec	0.3%	0.4%
14:30	US	PCE Core Deflator YoY	Dec	1.6%	1.6%
16:00	US	U. of Mich. Consumer Sentiment	Jan F	99.1	99.1
Monday Feb 3					
01:30	JN	PMI Manufacturing	Jan F	--	--
02:45	CH	PMI Manufacturing, Markit/Caixin	Jan	51	51.5

Source: Bloomberg. SB1M est. in brackets. The key data points are highlighted

- **China**
  - » **PMIs** have turned up and hard data confirm a growth pickup, at least in manufacturing. No substantial changes are expected this month
- **US**
  - » Nowcasters and indices are suggesting a slowdown to **1.2-1.8% GDP growth in Q4**, vs the 2.1% speed in Q3. Consensus at 2.1% is on the upside; consumption growth slowed and business investments have not turned up. Housing and net trade will support growth, though
  - » Since the last **Fed meeting**, macro data have been supportive to Fed's neutral stance. No 'dot plot' or f'casts at this meeting, attention is shifted to any new signals on the 'quasi-QE' Treasury bill purchases
  - » **Privat consumption** most likely accelerated in Dec, however, growth no doubt slowed in Q4 (to some 2%), after soaring in Q2/Q3 (close to 4%)
  - » **Durable/capital goods orders** have stagnated but not fallen, and we have no indications of a sudden downturn now
- **EMU**
  - » **GDP growth** most likely remained subdued in Q4, PMIs and other surveys have stabilized but do not point to any swift growth recovery
  - » **Core CPI inflation** has inched up to 1.3%, from 1.0%, we expect a retreat the coming months
- **UK**
  - » **Bank of England** is expected to keep the bank rate unchanged at 0.75%, and markets have lowered cut expectations to 50%. The Jan PMI report gave another argument for the bank to wait and see
- **Norway**
  - » **Registered unemployment** is flattening out, the labour market is slowly softening. We expect a unempl. rate at 2.4% in Jan (+.2 pp, but unch at 2.2% s.a)
  - » **Credit growth** is slowly losing speed as the household sector slows. However, banks did not confirm any cool off in demand in the Q4 lending survey
  - » **Retail sales** are sluggish, we f'cast a decline in Dec, after Nov spike

Our main views

	Main scenario	Recent key data points
Global growth cycle	The cycle is maturing, in the real economy, markets. The trade conflict has no doubt contributed to the slowdown, especially in the manufacturing sector. Unemployment is low, wage inflation is not low vs. productivity. Most emerging countries (EM) x China are in recovery mode, but have been slowing somewhat too. Some hotspots EMs will get burned, as usual – but there are fewer EM imbalances than normal. The global PMI has stabilized. Barring policy mistakes, the global economy is not rigged for a *hard* downturn. Investment rates are not far too high, and there are few debt bubbles this time. **Growth has slowed to 3% from 4%, but has stabilized since Q4 2018. We expect a modest slowdown to 2.8% in 2020, even if trade conflicts are 'solved'**	We estimate a 0.6 p lift in the global PMI in January, both manufacturing and services contributed. If correct, the level at 52.3 is the highest in 10 months, pointing to an acceleration to 3.3-3.4% global GDP growth (vs 3.0% in Q3). The recovery is rather broad among the major economies
China	Growth has slowed just marginally, and inched up through 2019, we do not expect a collapse in 2020 either. Surveys and data indicate a mild recovery at the end of '19, even without much extra policy stimulus, especially on the fiscal side. Exports to the US is down but total exports not. The invest/GDP ratio is sliding gradually down. Debt growth turned up in '19, and the authorities do not want to push the accelerator, barring a serious economic dip. **De-escalation of the trade war is fine but the real risks are the high debt level & possible over- investments**	GDP growth held steady in Q4, up 6% y/y. Industrial production is gaining pace, and investments, marginally. Retail sales volume slides down. Credit growth slowly accelerating, steady in Dec. Exports rose to an ATH in Dec!
USA	Growth will most likely not accelerate in 2020, from the 2% speed in H2. Unemployment is low, profits under pressure, and corporate debt is high. Business investments are above trend, and have yielded in H2. Households are in a much better shape, the debt burden is sharply reduced, and the savings rate is 'high'. The housing market seems balanced. Just a marginal fiscal stimulus in 2020 but the impact of 3 Fed cuts last year are not yet consumed. Price inflation is close to target, and the Fed can focus at the real economy. Recession risk is not overwhelming, short term, and further rate cuts are unlikely, barring a much weaker economy. **Risks: Trump/trade/business investments &debt, not household demand or debt**	PMI does no longer signal a steep slowdown, just to 1.5% growth (Markit) Existing home sales spiked in Dec and are trending up, as other housing market indicators. The National Activity index signals 1.8% GDP growth in Q4, vs 2.2% last month, the Leading Index fell in Dec and notes 1.4% growth. The nowcasters say 1.2-1.8%
EMU	Growth will remain muted in 2020 but there are few signs of hard landing. The manufacturing downturn may be easing, at least that is what some surveys are indicating. The consumer side has been quite resilient. The labour market is tight, and labour cost infl. is back to a normal level. Investment ratios are above trend. Credit growth is increasing, but still muted. Household savings are high, still consumption has kept up well. Policy: ECB does not have that much ammunition left, barring a huge QE, and the ECB policy makers are split. Fiscal policy debate has turned, some stimulus possible. **Risks: Trade war (but less risk for a US/EU war after G7). Italy, as always**	Manufacturing PMI is still weak but recovering, services steady at a decent level. Consumer confidence slides slowly down but the level reflects a strong consumer sector. The German ZEW survey is in recovery mode and suggests a more swift comeback than other surveys
Norway	Growth has been above trend, will slow substantially in 2020. Unempl. has flattened out. Wage inflation is above 3%. Oil investments probably peaked in Q4. Mainland business inv. are not low anymore, will slow substantially in '20. Housing starts are slowing. Electr. prices have taken the headline CPI down, core is still close to target. Growth in households' debt has slowed to close to income growth. **Risks: Debt, housing. A harsh global slowdown**	SSB's manufacturing survey another step down, reporting a rapid slowdown. LFS unemployment surprisingly edged up to 4.0% and employment growth is cooling. Housing starts are slowing, dragging housing investments down

Colour codes: Green=more to go. Yellow=the cycle is maturing, close to peak. Orange=at peak, downside risk. Red=recession level

In this report

Global

- Global macro data are beating expectations for the first time in almost 2 years
- Global industrial production probably further up in Dec, retail sales close to flat
- Global PMI set to rise to a 10 month high in January, suggesting a growth uptick
- Global manufacturing PMI recovers, suggesting 1% growth in global production
- A broad upturn; services the major engine in January
- US Composite PMI further up in Jan, suggesting some 1.5% GDP growth
- Eurozone PMI points to muted growth – but manufacturing has bottomed out
- UK PMIs soar as political uncertainties ease and businesses prepare for Brexit
- Both Japan PMIs rebound in January, services back to pre-VAT hike level

US

- Existing home sales straight up in Dec, with other housing market indicators
- Jobless claims back to a very low level
- The Leading indicators down in Dec, signals 1.4% Q4 GDP growth
- Nowcasters signal 1.2 – 1.8% Q4 GDP growth

EMU

- Lending survey: Corporate credit demand pulls back for the first time since 2014
- Consumer sentiment remains strong, a sign of a resilient consumer sector
- ZEW survey notes a strong comeback of expectations, highest since 2015!

UK

- Unemployment has flattened out – but employment still straight up
- Manufacturing orders still low and stocks are soaring, not a promising mix

Japan

- Business activity index remained weak following 'VAT collapse'
- Core CPI inflation ticked up to 0.6%, headline +0.8%, still muted VAT impact

Sweden

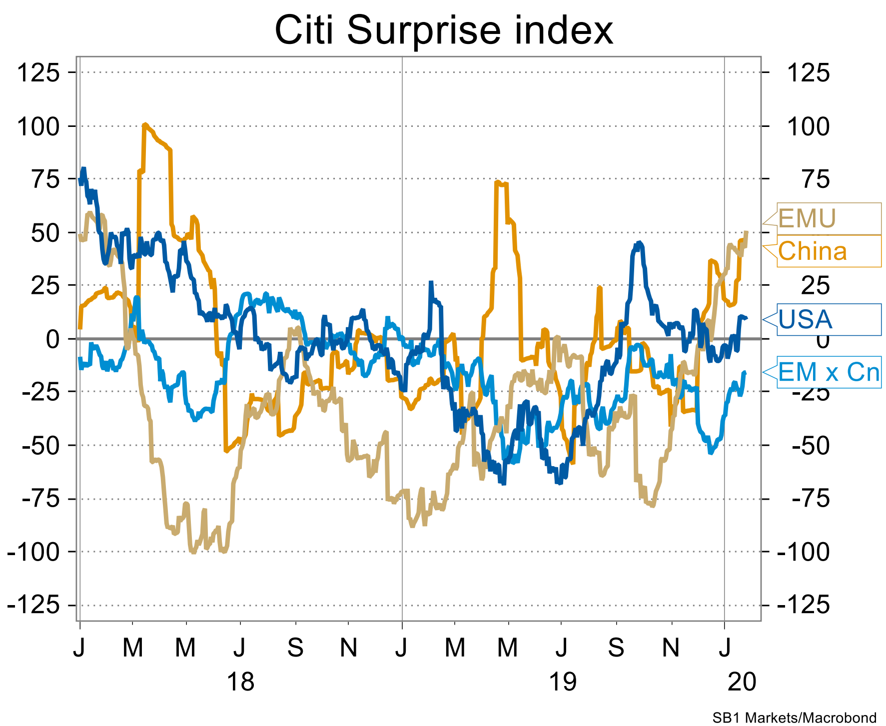
- LFS unemployment climbs, but stabilized the past 4 months
- House price inflation is accelerating

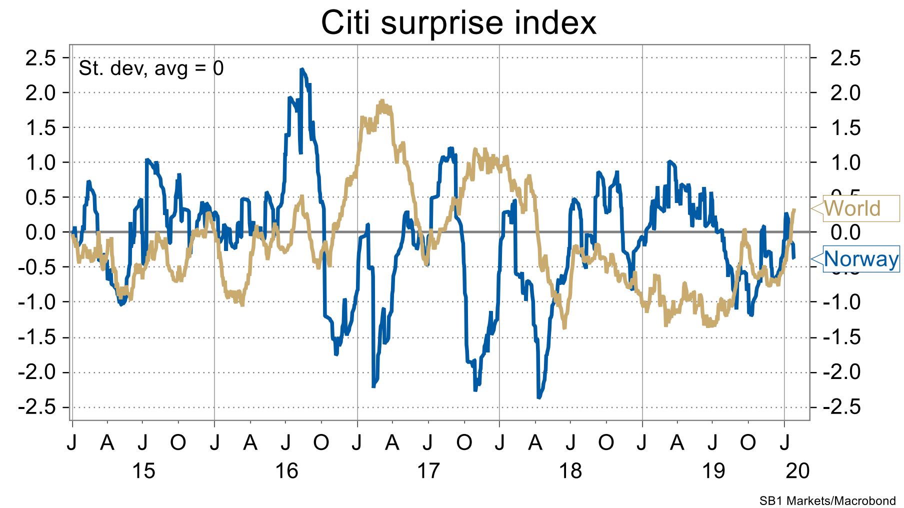
Norway

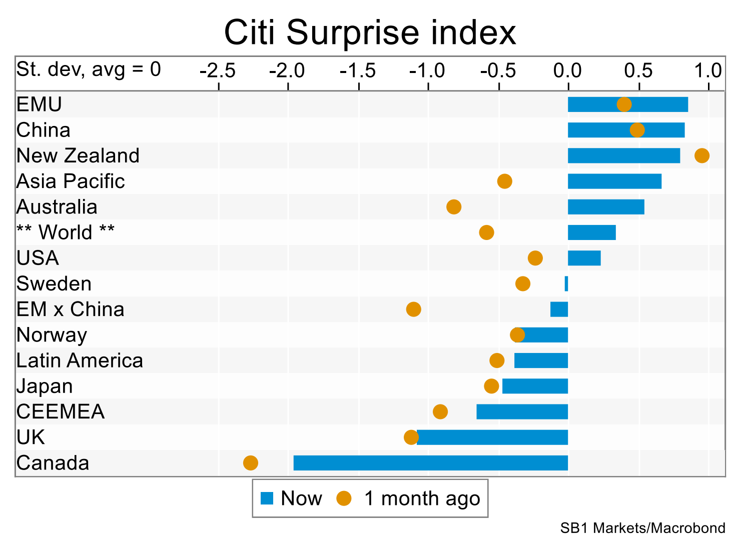
- LFS unemployment rose to 4% and employment growth is easing
- SSB's manufacturing confidence drops, suggesting a falling production
- SSB housing starts are sliding rapidly down, lowest since 2014 in December

Global macro data are beating expectations for the first time in almost 2 years

Data from China, EMU, US are all more upbeat then expected, and EM x China less disappointing







- Global macro data are in sum marginally better than excepted, for the first time since April 2018 (barring one day in Sept). The surprise index has moved up since mid-Dec
- Stronger than expected December/Q4 Chinese data lifted the surprise index. Other EM data are still on the weak side but much less than it have the past month
- EMU data are upbeat vs expectations, the best in 2 years. UK still very weak
- The US index has been hovering around a ‘neutral’ level since the autumn, up last week
- Norwegian data are marginally disappointing vs f’casts, we’re surprised its not by more

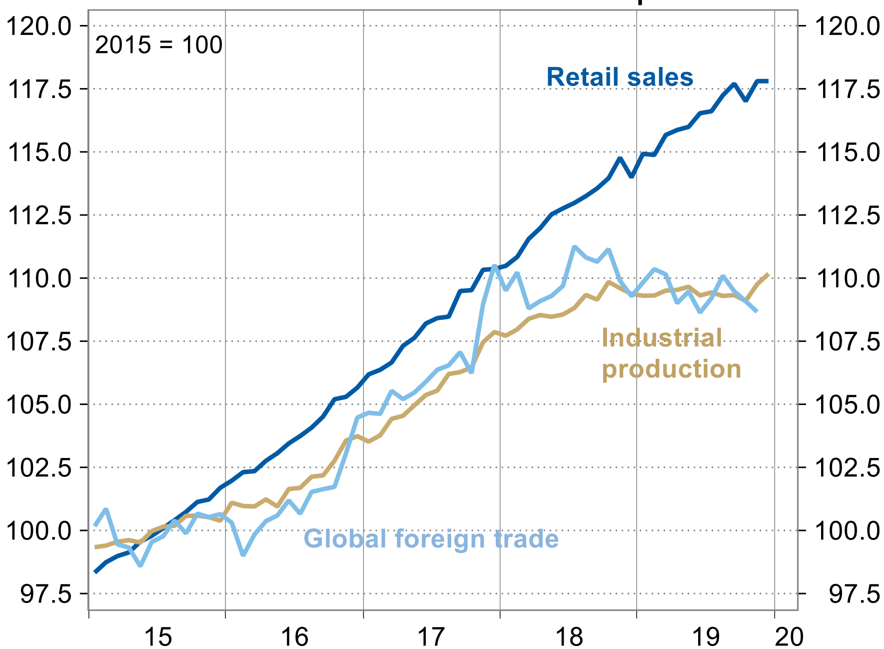
Surprise-indices measure the difference between economists’ expectations and the actual outcome over a 3 month rolling window

SpareBank 1 MARKETS

Global industrial production probably further up in Dec, retail sales close to flat

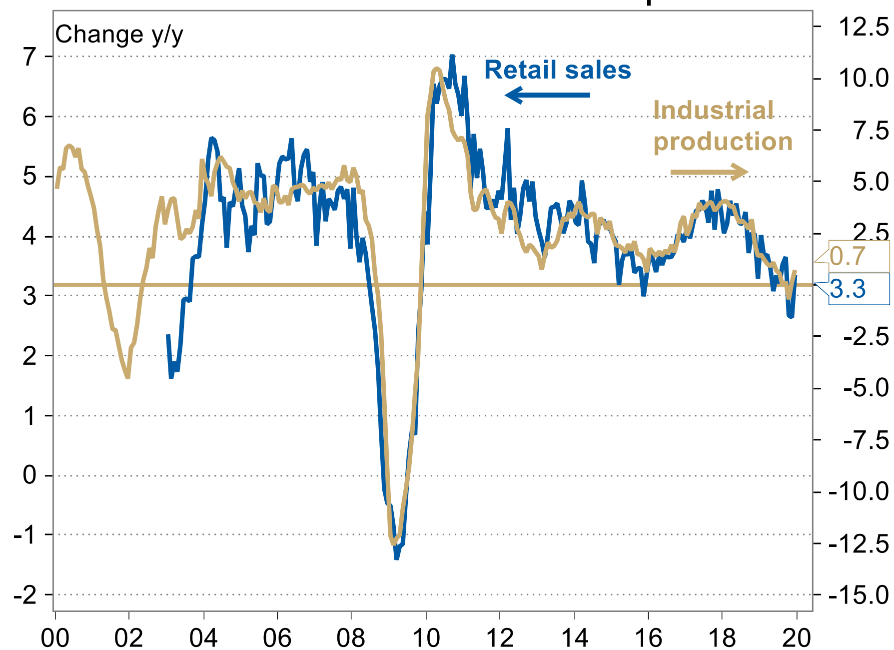
Global trade stabilized in the autumn, industrial production is recovering, retail trade stalling

Global Retail sales & industrial production



SB1 Markets/Macrobond/CPB

Global Retail sales & industrial production



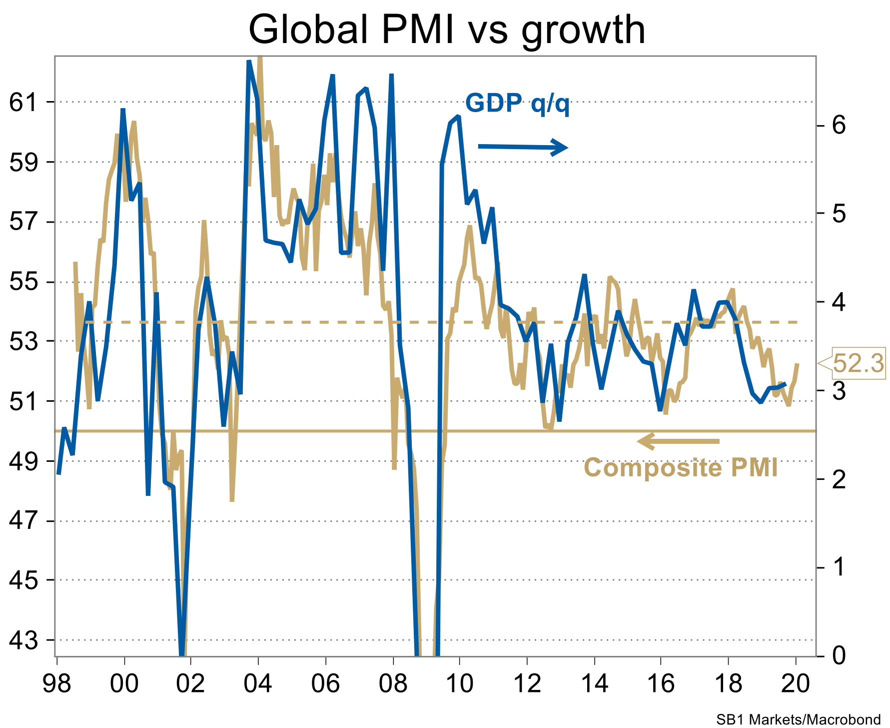
Memo: Keep in mind the different scales at the chart above

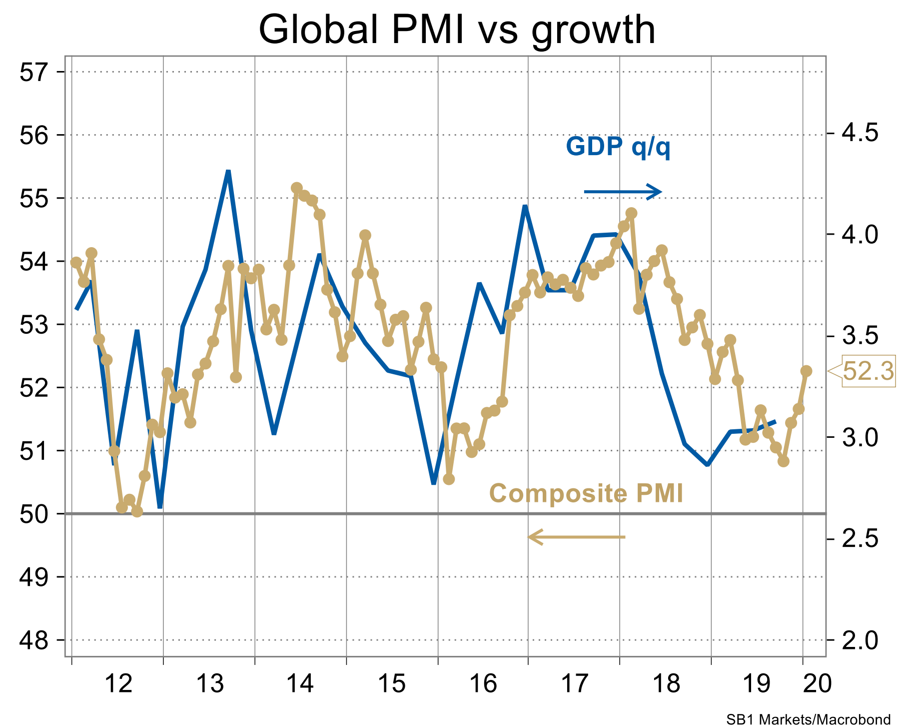
SB1 Markets/Macrobond

- **Global industrial production** rose by 0.4% in <u>December</u> (our prelim est), possibly bringing production back to the Nov 2018 peak level. Global PMI has recovered the past 5 months, now signalling a 0.5 - 1% growth pace
- **Retail sales** were probably close to flat in <u>Dec</u> after the 0.7% increase in Nov. The recent volatility is mostly due to the VAT hike in Japan, which pushed sales forward to Aug/Sept, before collapsing in October, like ‘usual’ following such VAT hikes
- **Global foreign trade** dropped by 0.4% m/m in <u>October</u>, with our seasonal adjustment (up 0.4% unadjusted). Trade flows have been sliding slowly down since Q3 2018 and the annual rate is down 2% y/y, however, following the uptick in the late summer, underlying growth has ticked up to 1% (measured 3m/3m), reflecting a stabilization since the spring

Global PMI set to rise to a 10 month high in January, suggesting a growth uptick

We estimate a 0.6 p increase in the composite PMI, to 52.3, signalling 3.3-3.4% global GDP growth



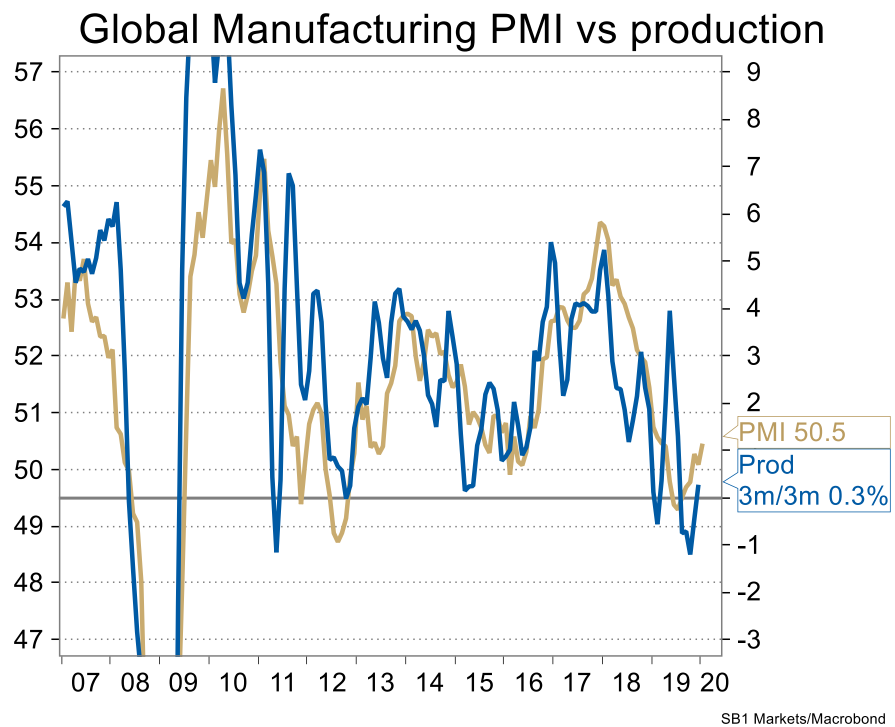


- Based on the preliminary PMIs released this far (US, EMU, UK and Japan), we estimate a 0.6 p rise in the global composite PMI. Businesses have been reporting higher growth the past 3 months, and the current level suggests a modest acceleration in global GDP growth into 2020, to 3.3-3.4% (vs 3% pace in Q3). And by the way, GDP growth has been rather stable since Q3 2018
- After the recent recovery, 1/3rd of the decline in the global composite PMI from early 2018 to last October is reversed
- *The 2003 drop in the PMI at the chart above was in March, before SARS became a main topic. The US invasion in Iraq was…*

Our estimate is based on the preliminary composite PMIs from EMU, Japan UK, and US. The estimate is uncertain

Global manufacturing PMI recovers, signalling 1% growth in global production

We estimate a 0.4 p increase in January, to 50.5, pointing to 1% growth in global production

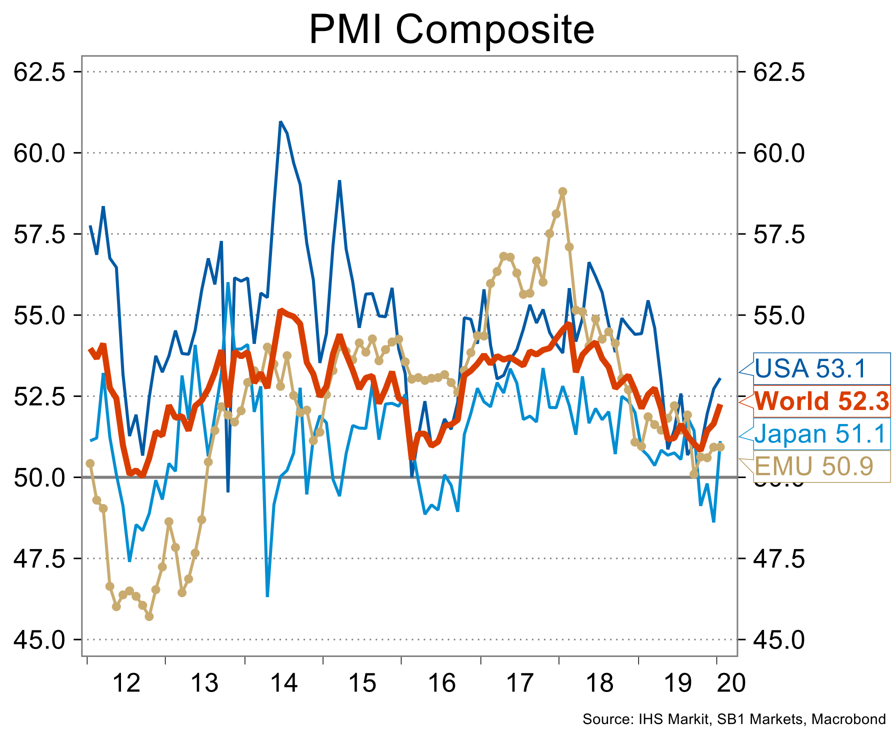


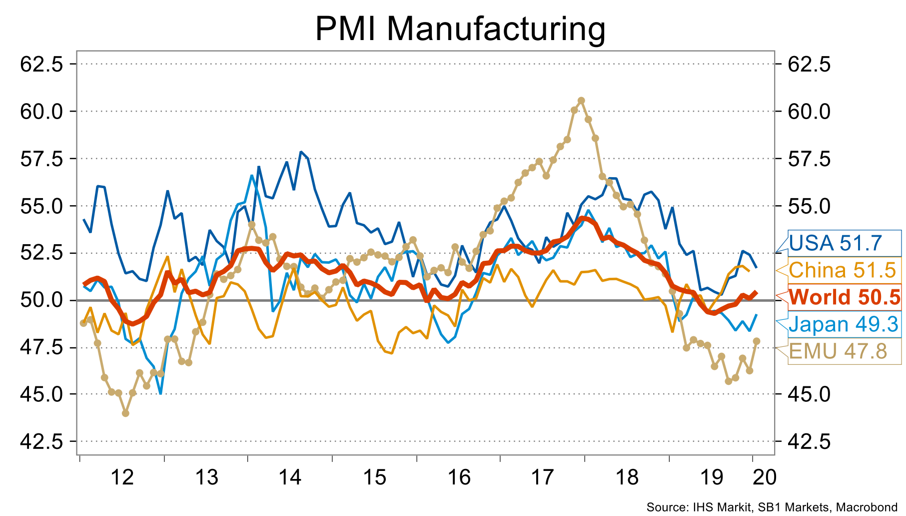
- The global manufacturing orders index probably increased in January, at least based on the countries reporting so far. Since August, orders have been recovering, while growth in inventories have slowed, a favourable mix. Thus, the order/inventory ratio has climbed (and we estimate another lift in January), normally a good signal – however not a leading indicator

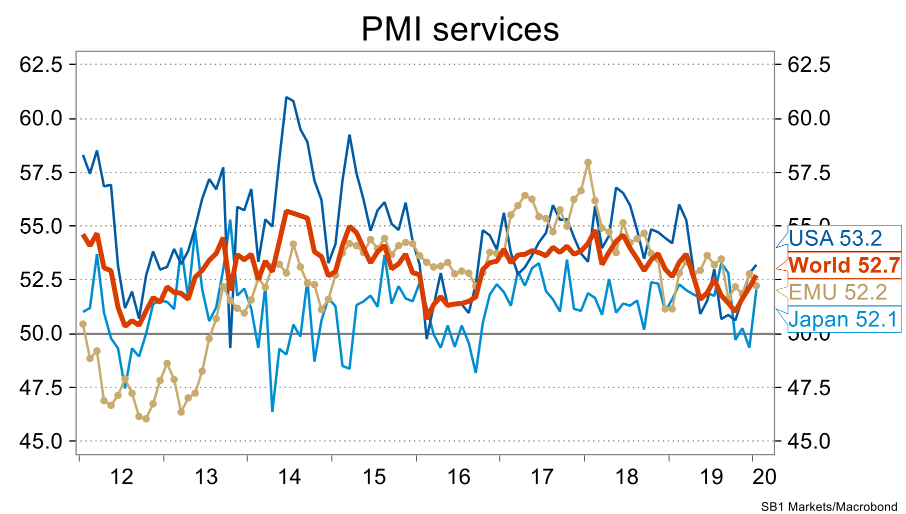
Memo: the last PMI data are our estimates on November PMI

A broad upturn; services the major engine in January (as in Dec)

Mixed in manufacturing, EMU closer to recovery, while services accelerated in Japan, UK, US



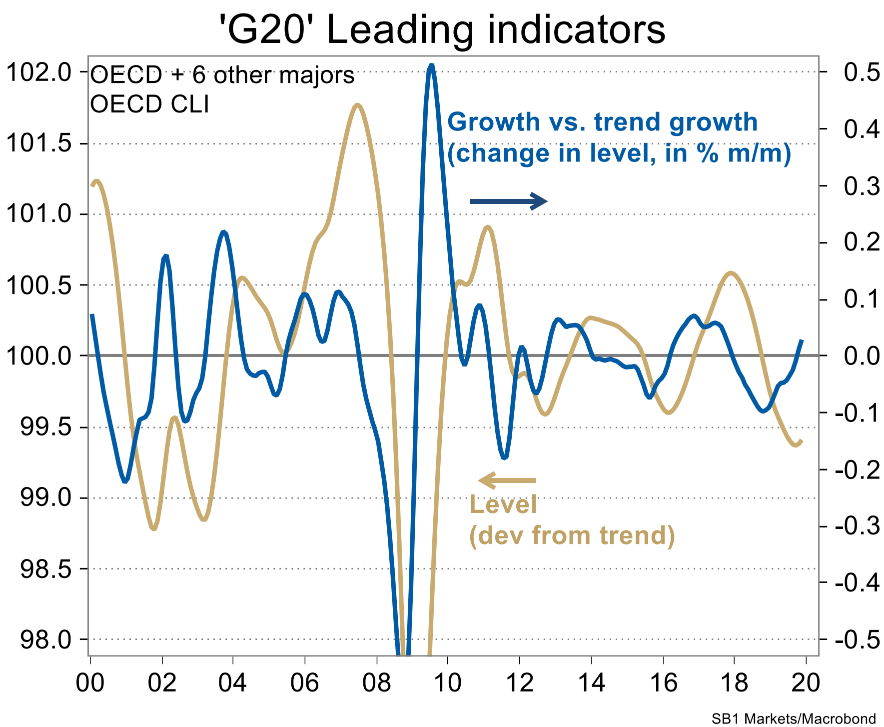


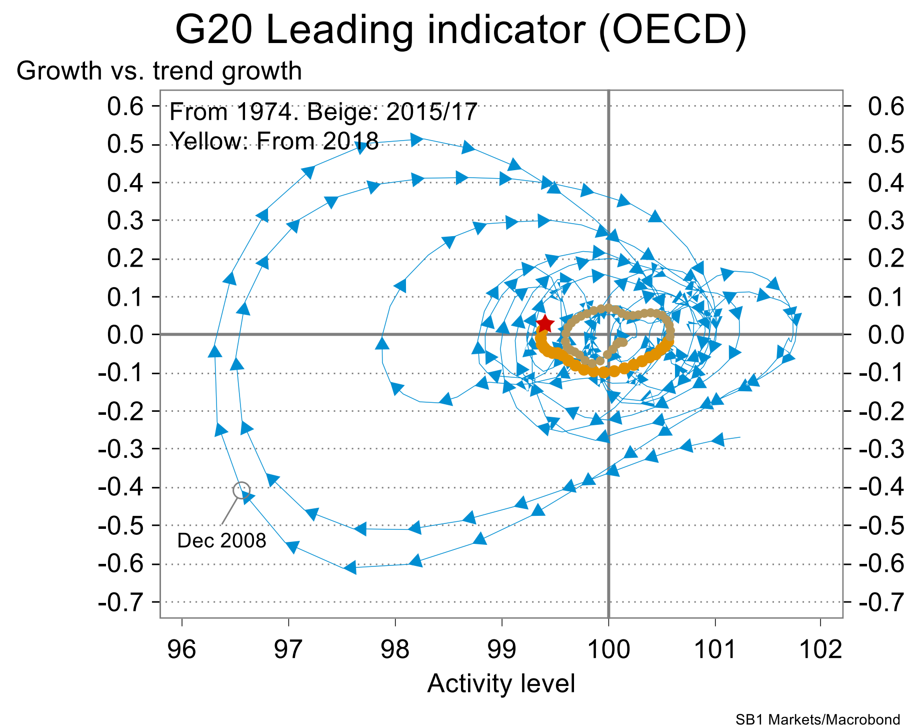


- Composite PMIs improved in both the US, UK and Japan in January, EMU unchanged, all in growth territory
- Most manufacturing PMI have edged up the past months. In the US, manufacturing is recovering, EMU and Japan are still declining but have bottomed out
- Services gained pace in January, in all countries x EMU. Both Japan and UK services PMIs jumped, lifting the global estimate
- Memo:
  - » The last obs for world PMIs are our estimates, based on preliminary data from the US, EMU, Japan and UK. Markit has not yet reported PMIs from China

OECD CLI confirms a stabilization of the global economy

OECD still reports a low activity level vs trend level but growth is no longer below par

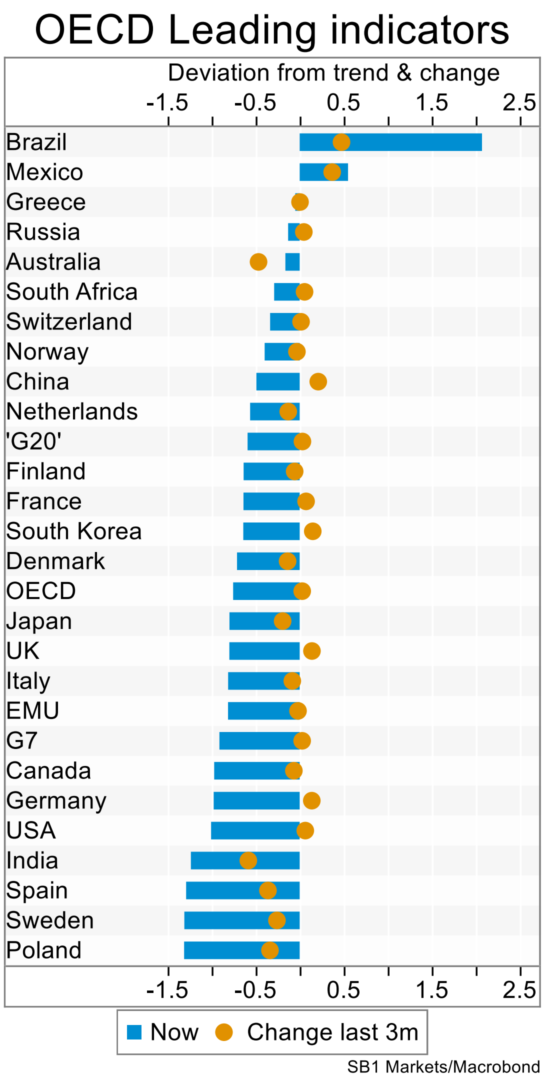




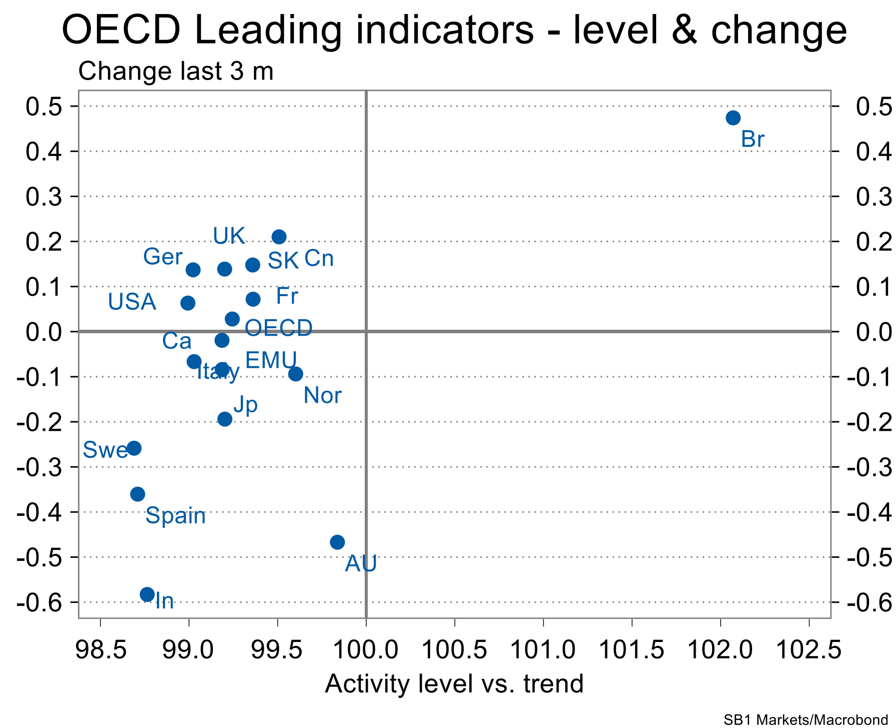
- OECD's leading indicators have reported a moderation of the slowdown since late 2018, and now growth rate has climbed to slightly above trend growth, following 22 months with growth below trend
- The activity level is still below trend in almost all countries
- Warning: OECD's CLI (leading indicators) are often subject to substantial revisions. The present 'comeback', growth recovering up to trend growth, has is fact been announced for a long while

OECD CLI: Almost all countries operates bellow trend but may are growing faster

Just 2 countries are operating above trend, but 13 are growing faster than trend (vs 7 one month ago)



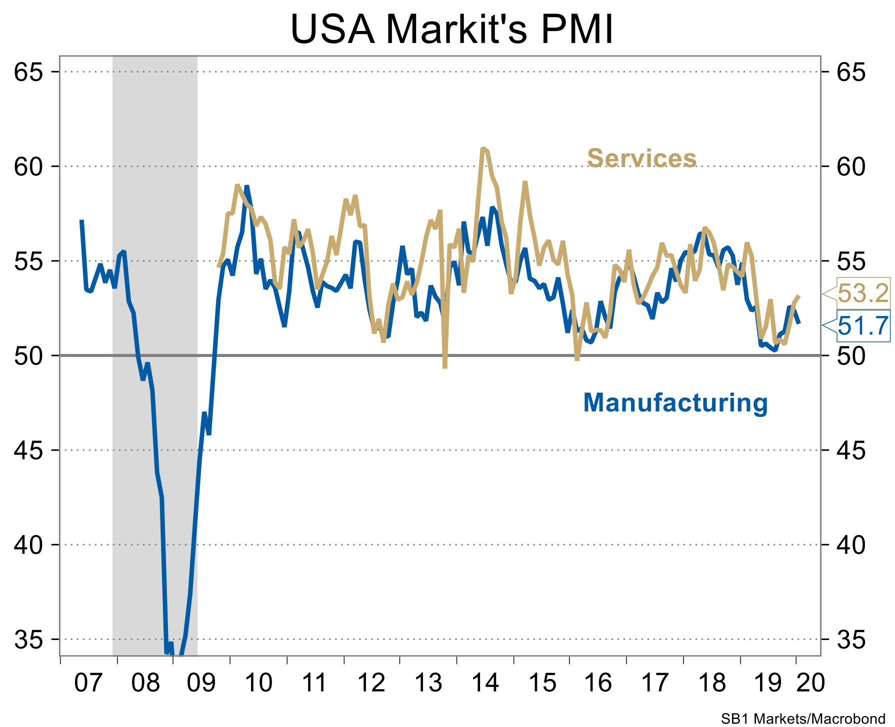
- Almost all countries are operating below trend level
  - » Just 2 countries are above trend level; Brazil and Mexico. The Brazilian figure seems strange
- Sweden and Poland at the bottom, level wise, together with India and Spain
- India is slowing fastest, followed by Australia and Spain
- A lot of countries have moved upwards the previous months, reporting above trend growth

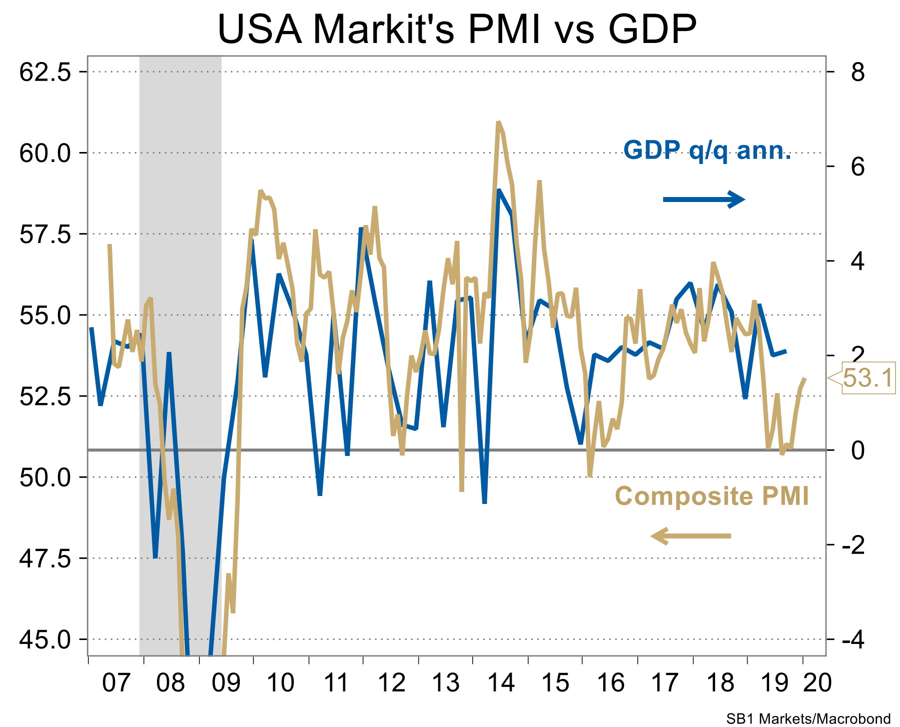


- OECD composite leading indicators are tracking the short term cycles in the economy. It consist of different indicators, including both real and financial data
- Regrettably, these indices are often revised, and are more reliable for analysing previous cycles, than the present

Composite PMI further up in Jan, still suggests just some 1.5% GDP growth

Manufacturing softened, no brisk recovery signalled. Services accelerates, bringing composite up

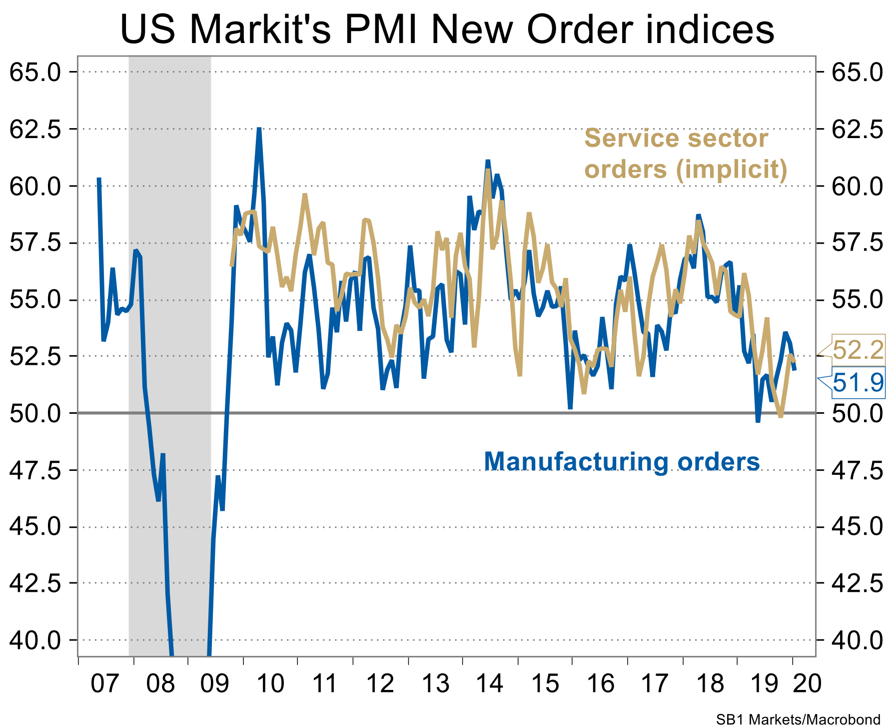


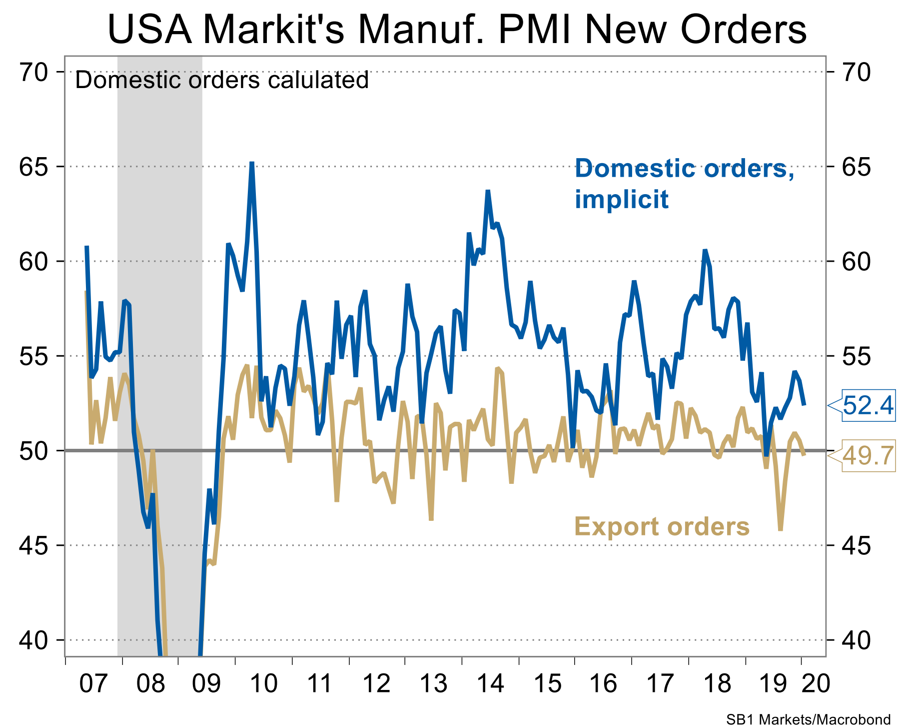


- The preliminary composite PMI rose 0.4 p to 53.1 in January, better than expected. The index stabilized in the spring and has turned up the past 3 months, thus, it is no longer signalling any slowdown (towards zero) in the US economy
- Manufacturing businesses reported a slightly slower growth in January, the PMI fell by 0.7 p (but the output index was unchanged). The level at 51.7 does not point to any increase in manufacturing production, rather, a stabilization
- The service sector index edged up 0.4 p, the 3rd monthly increase, reflecting a modestly accelerating expansion

Both manufacturing and services orders are expanding modestly

Export manuf. orders are stalling, domestic has recovered but softened in January



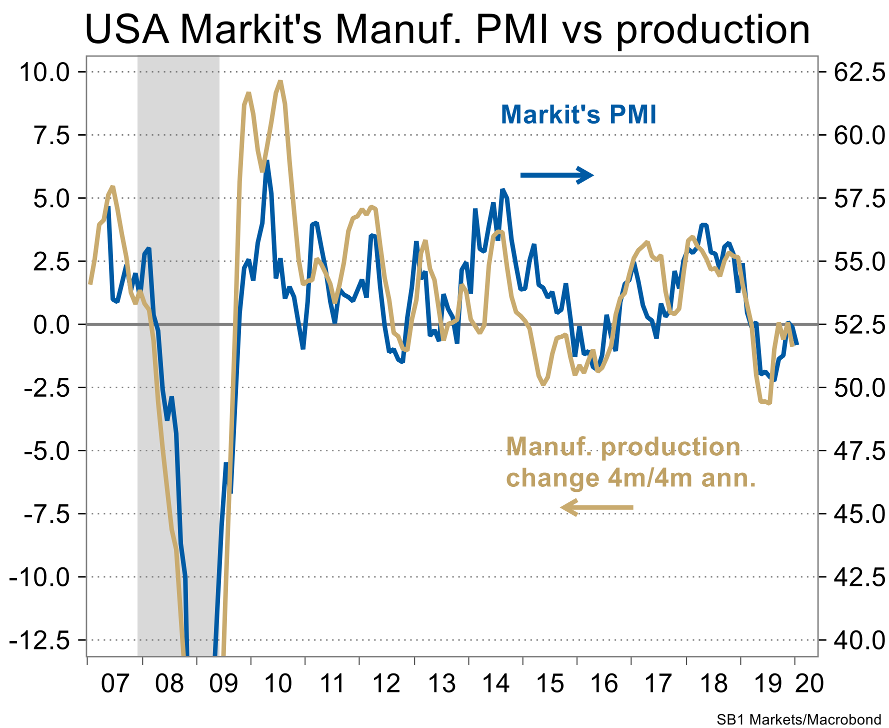


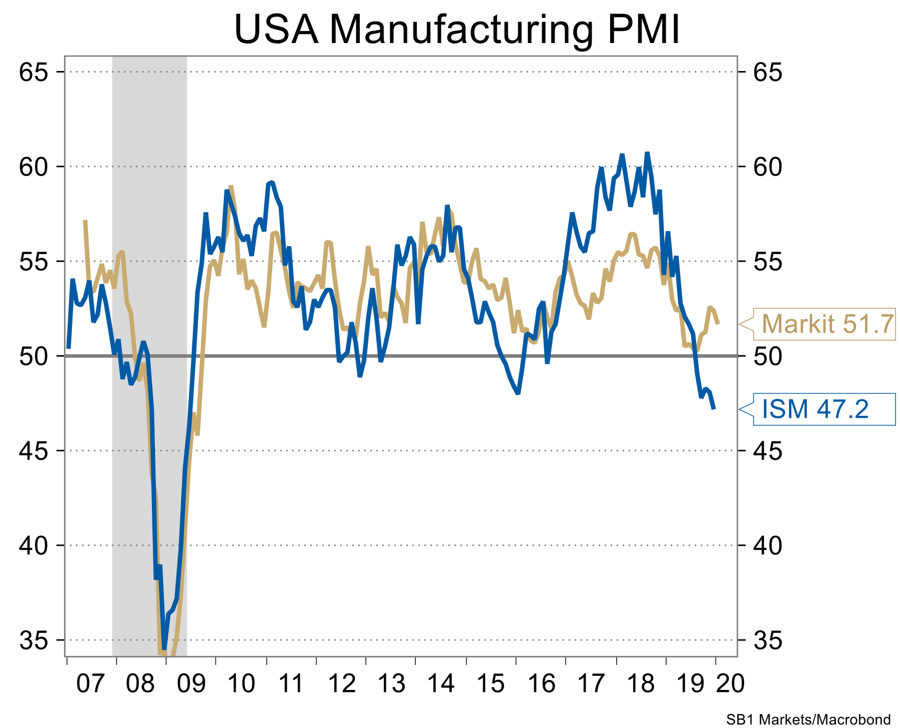
- In January, manufacturing orders moderated while services orders were growing at the same pace as in Dec

SpareBank 1 MARKETS

Manuf. PMI confirms a production stabilization but do not signal an upturn

The PMI has more or less recovered, but is still suggesting a marginal decline in production

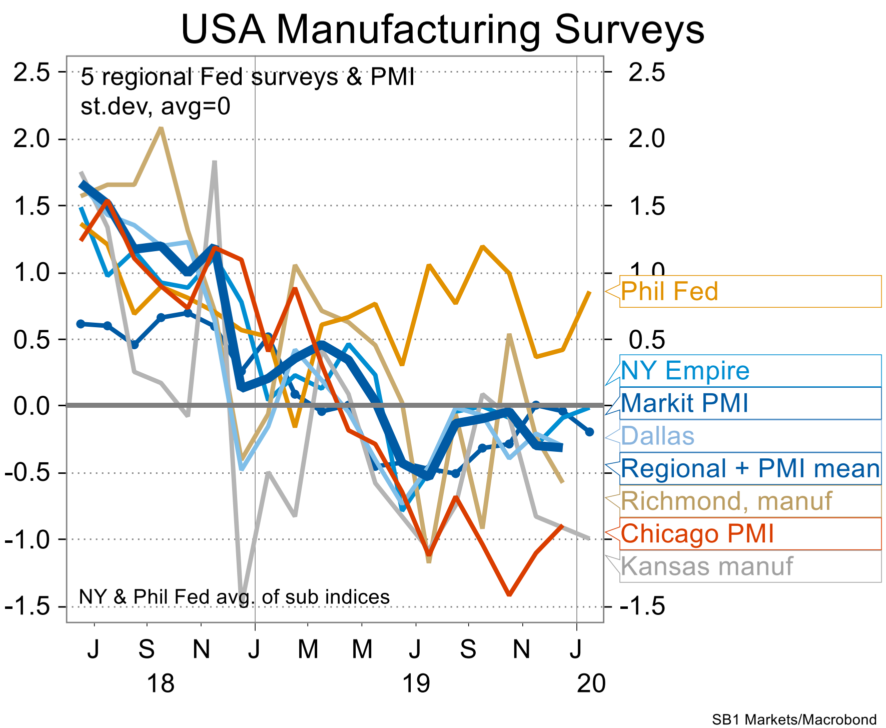


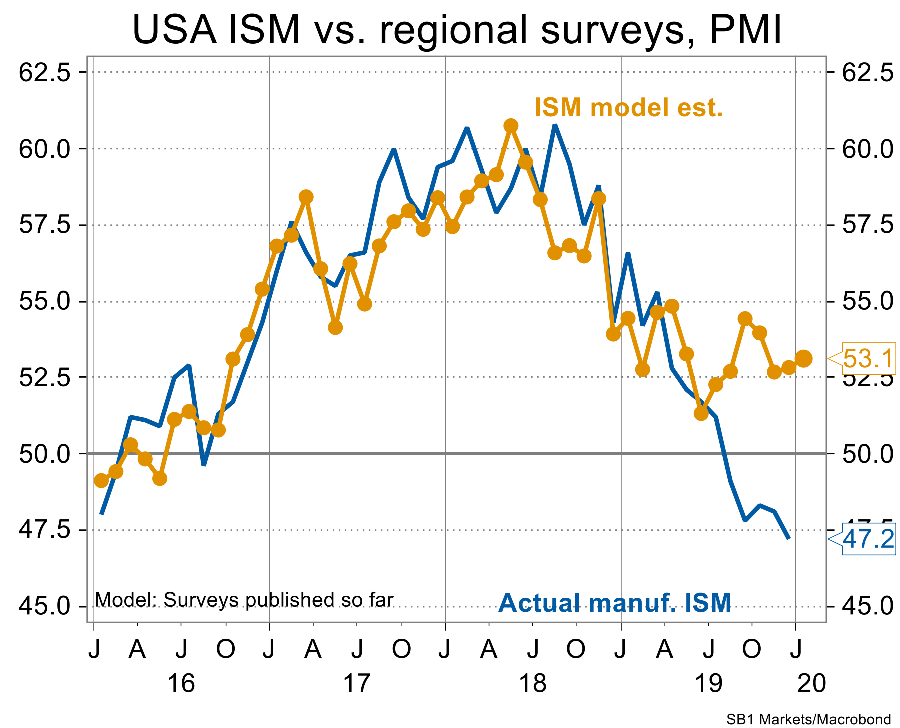


- The manufacturing ISM has been much weaker than Markit's PMI recent months, and points to a steep decline in production. Markit's PMI has been closer to the ball vs actual growth in manufacturing production the most recent years

So far: 2 January manufacturing surveys improved, 2 down

NY & Phil Fed up, Markit's PMI and Kansas Fed edged down; suggesting a marginal increase in ISM

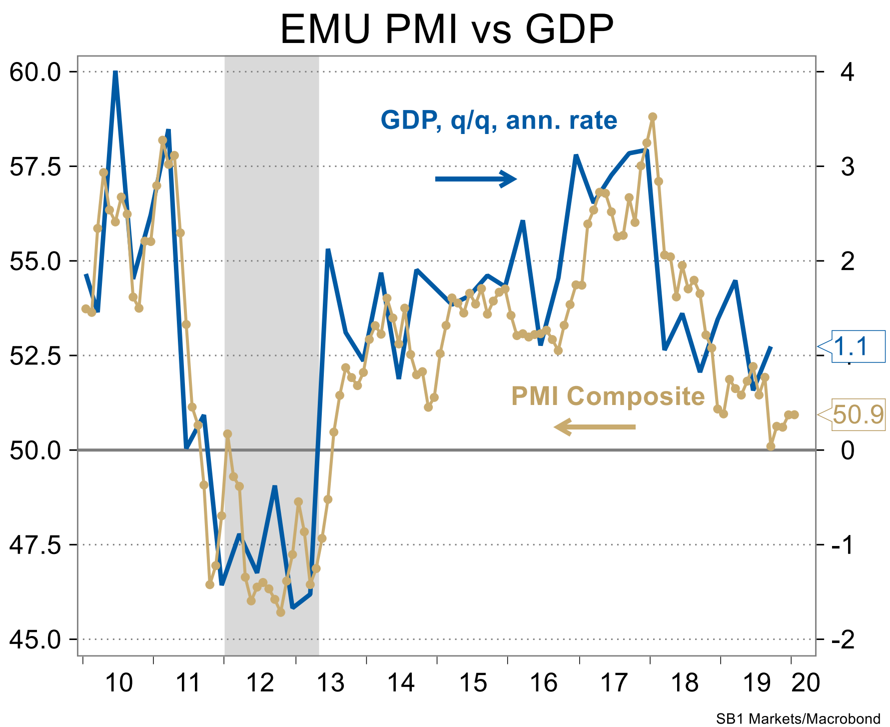


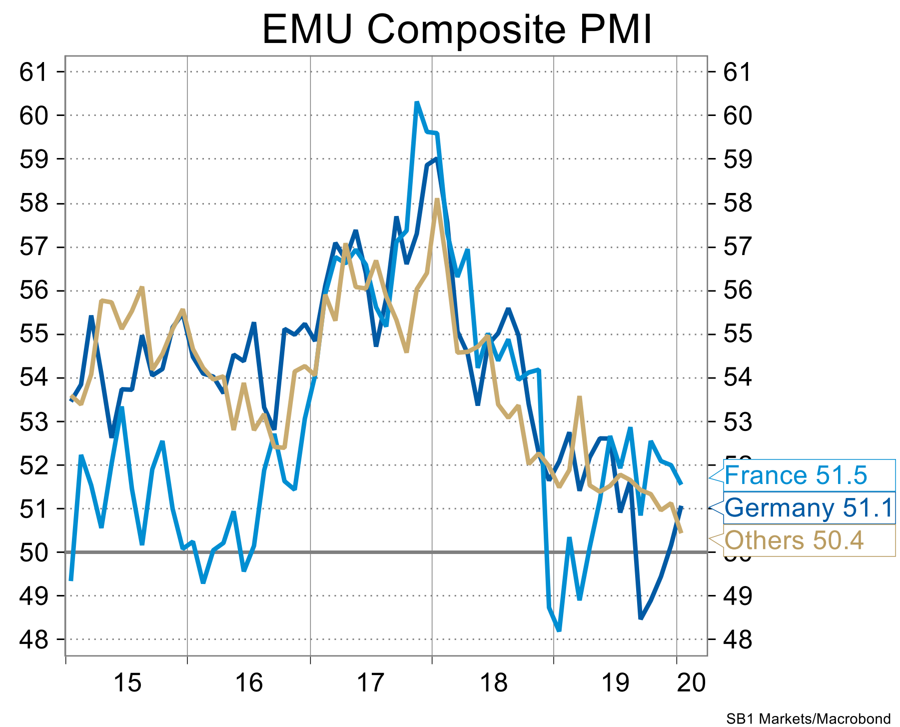


- Phil Fed's manufacturing survey recovered in January, the index is still well above the average level but has been more upbeat than all the other surveys since early 2019. The NY Empire index, which has been more in line with other surveys, inched up in January, back to the average level. Kansas Fed fell marginally, and Markit's PMI weakened
- Taken face value, these indices signal a 0.3 p increase in ISM index in January. However, the ISM index has been far weaker than other surveys since mid-2019, and a larger recovery in the ISM index seem reasonable one of the coming months

Eurozone PMI points to muted growth – but manufacturing has bottomed out

Composite PMI steady at 50.9 in Jan, as Germany recovers and France slows a tad, as do 'others'

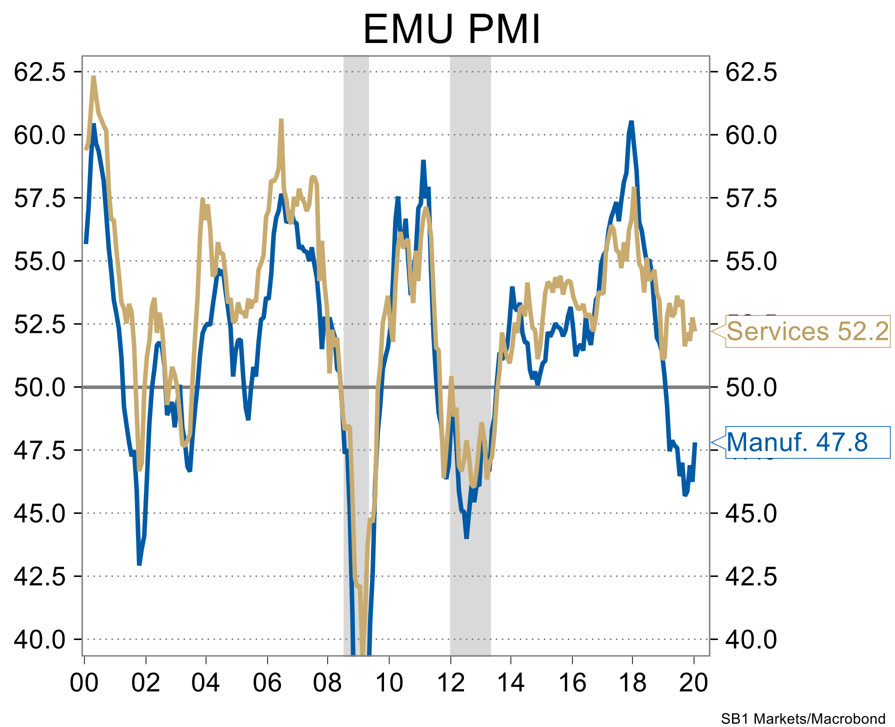


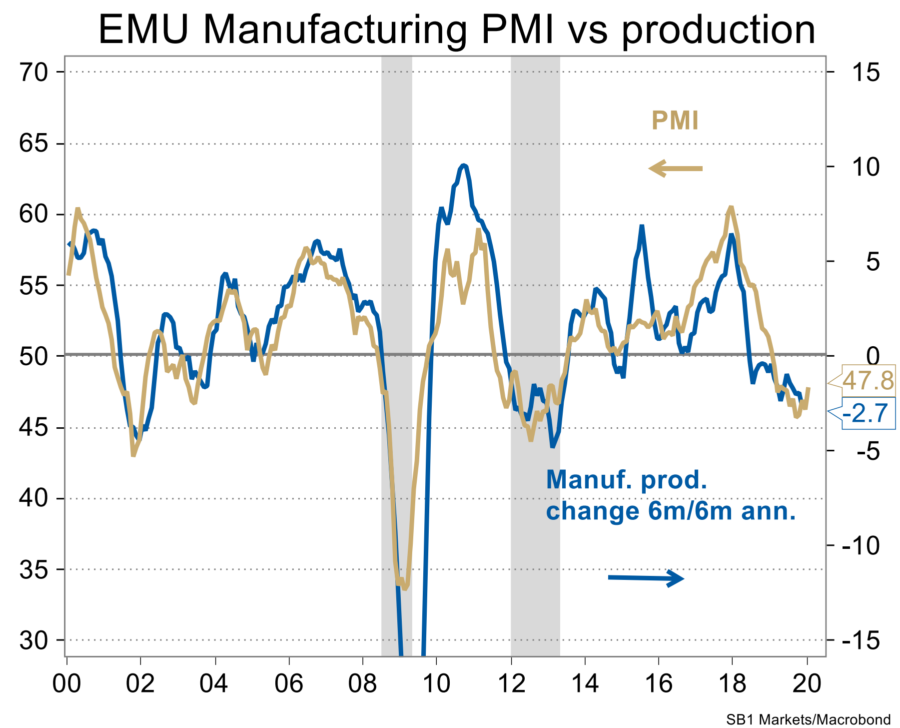


- The preliminary EMU composite PMI was unchanged at 50.9 in Jan, vs the 0.2 p expected increase. The PMI has edged up since September, however, the level is still signalling low GDP growth, by just below 0.5% annualized
- On the positive note, the German composite PMI was flat at 49.4, still weak, as the manufacturing contraction intensified marginally, while services gained pace. France one tick down, together with the implicit average of the other countries

Manufacturing still falls steeply but may be bottoming out, services stable

The rate of decline in manufacturing is slowly easing, offering hope of a Eurozone recovery

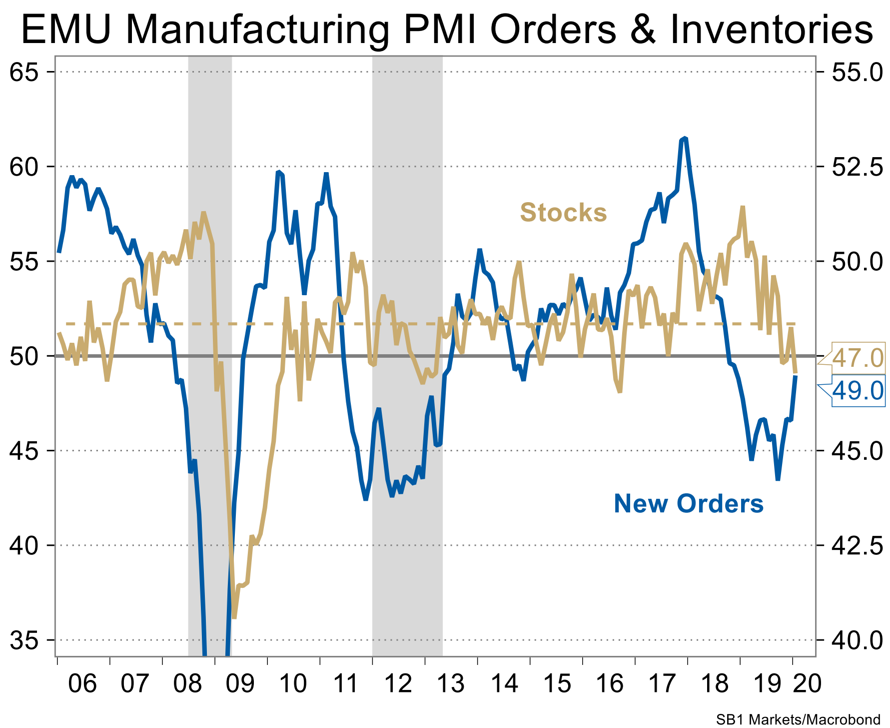


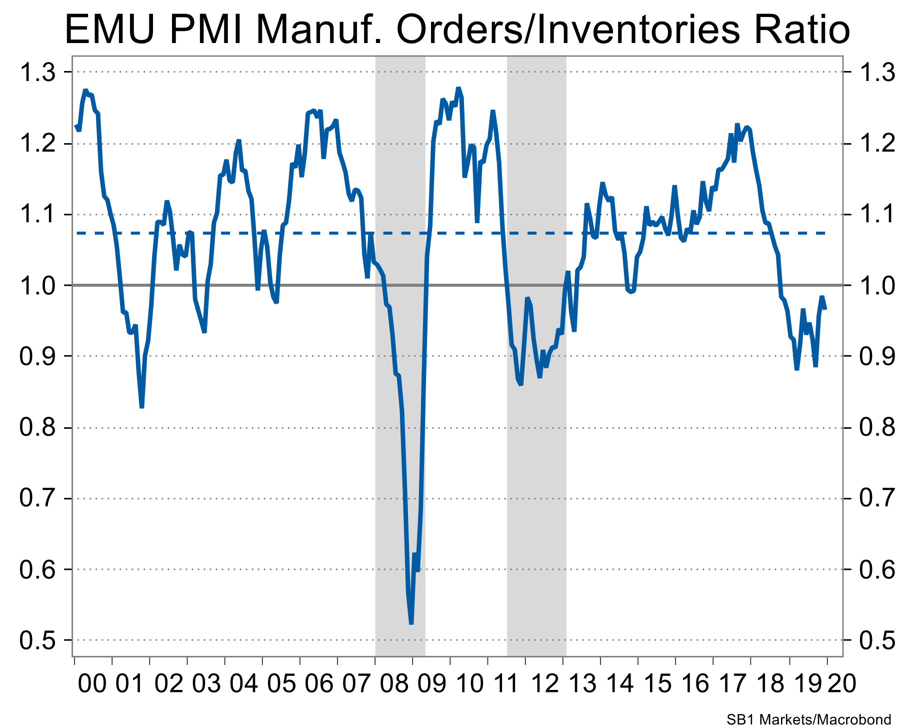


- Manufacturing PMI rose 1.6 p in Jan, to 47.8, the highest level since April. The January upturn adds to signs of a moderating manufacturing contraction, however, no swift recovery is yet signaled. Manufacturing production was down 2.7% measured 6m/6m in Nov, the PMI suggests marginally less
- The services PMI ticked down 0.6 p in Jan. Businesses have been reporting more or less steady growth the past months, at a moderate speed. Hence, there are no sign that the manuf. contraction has brought the rest for economy to a halt

Signs of recovery; Orders move closer to stabilization and stocks are reduced

The decline in manufacturing orders is the mildest in a year and the inventory PMI at 3 year low



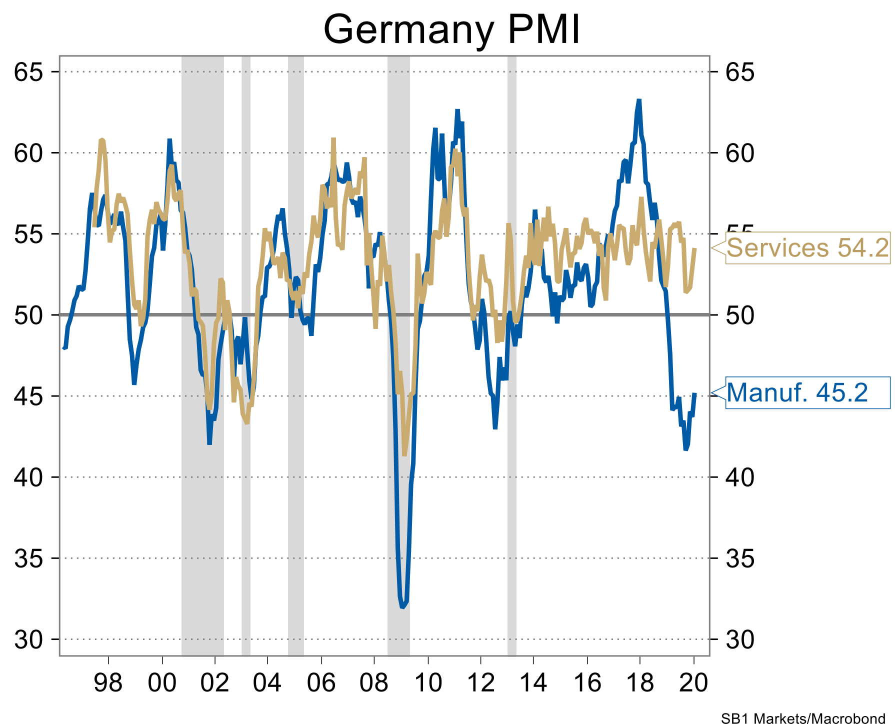


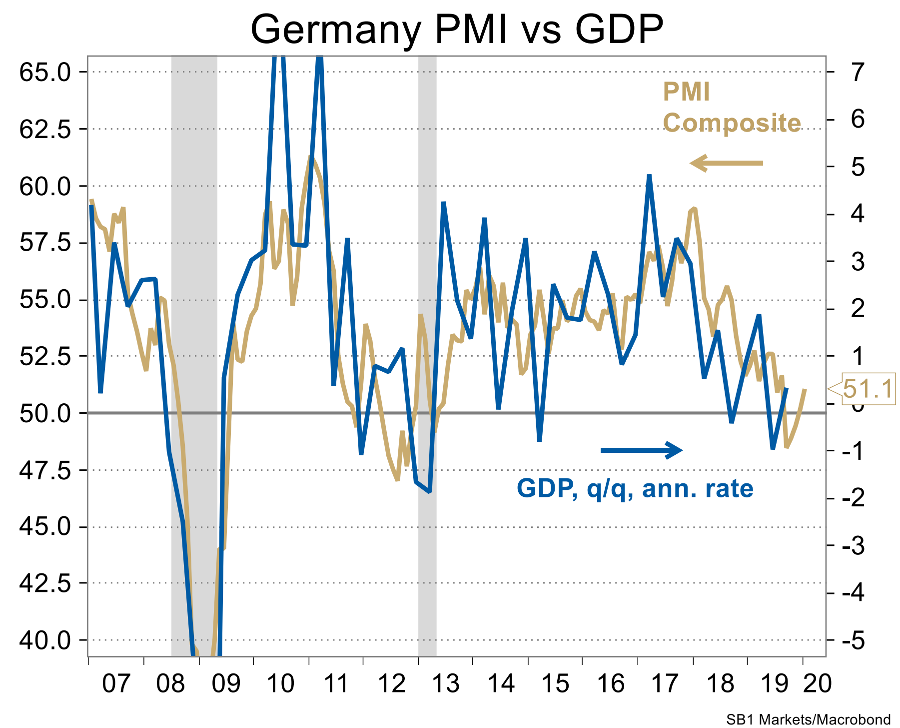
- The decline in total orders eased by 2.4 p in January, to the highest level since Dec 2018
- The inventories of finished goods index dropped to 47.0, reflecting the largest inventory draw back since 2016. Thus, an inventory adjustment cycle may be underway

SpareBank 1 MARKETS

Both PMIs up in January and the manufacturing contraction moderates

Composite PMI ticked up 0.9 p, suggesting steady, low GDP growth into 2020



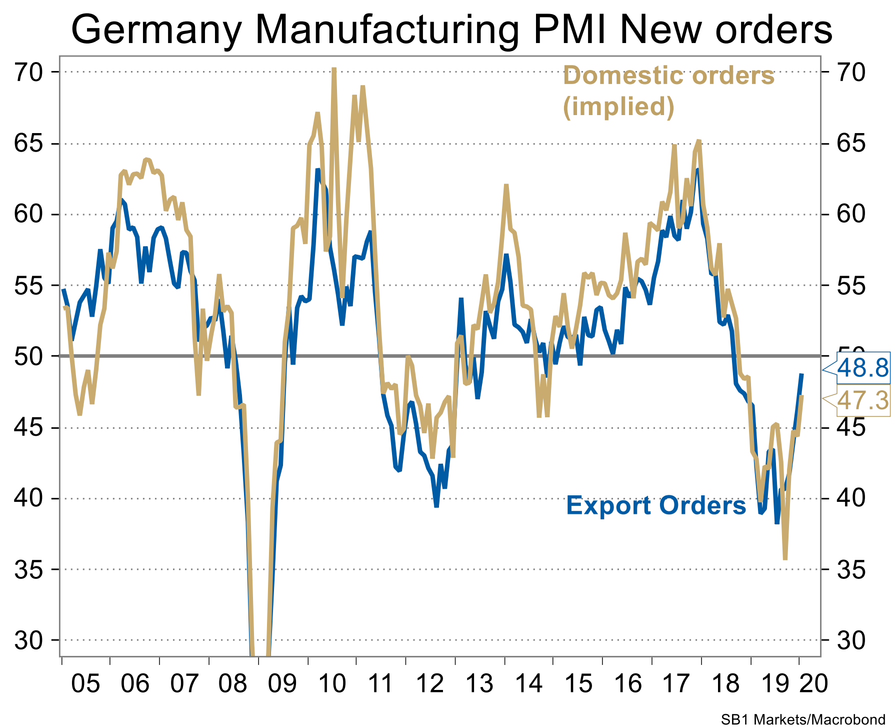


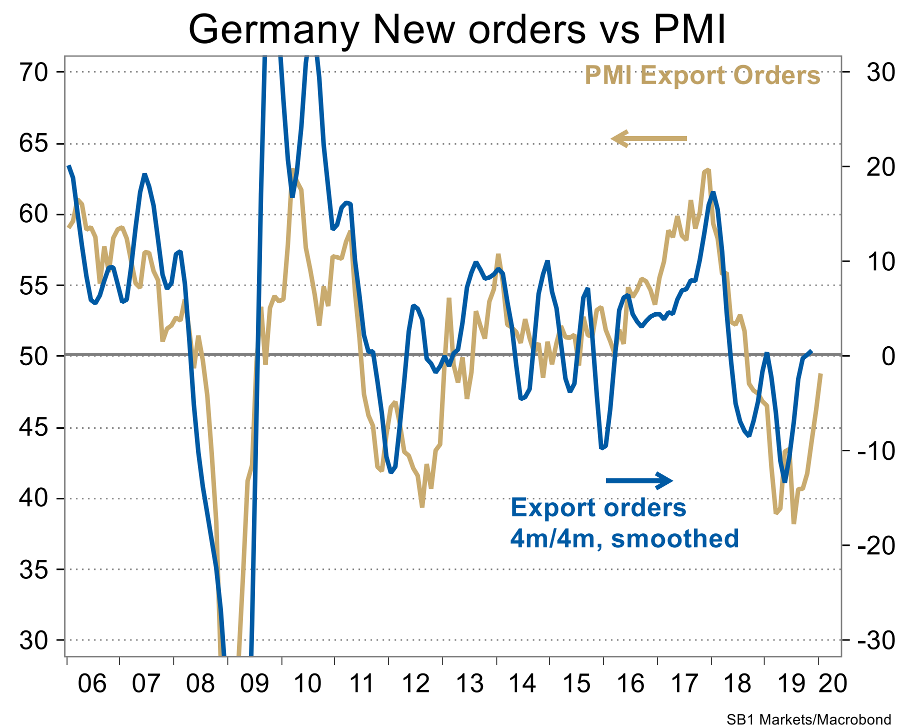
- The manufacturing PMI jumped 1.5 p in January, to the highest level in 11 months. The PMI still reflects a deep contraction in German manufacturing activity, but the speed down is no doubt softening. The most promising data at hand are probably the new orders PMIs, flip to the next slide
- The services PMI rose 1.2 p, the 4th month of increase, and the level indicates solid growth in the service sector
- The composite PMI at 51.5 does not indicate any swift growth recovery but rather a steady growth rate of 0.25-0.5%

SpareBank 1 MARKETS

Orders are falling at the slowest pace in 15 months

Both domestic (implicit) and exports orders PMIs are recovering. Actual export orders have stabilized

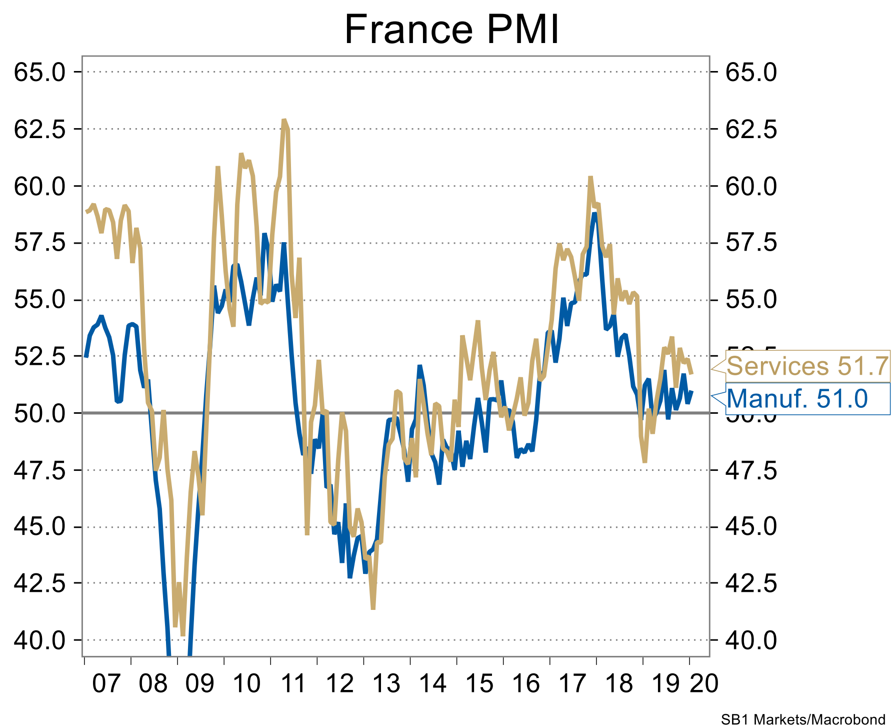


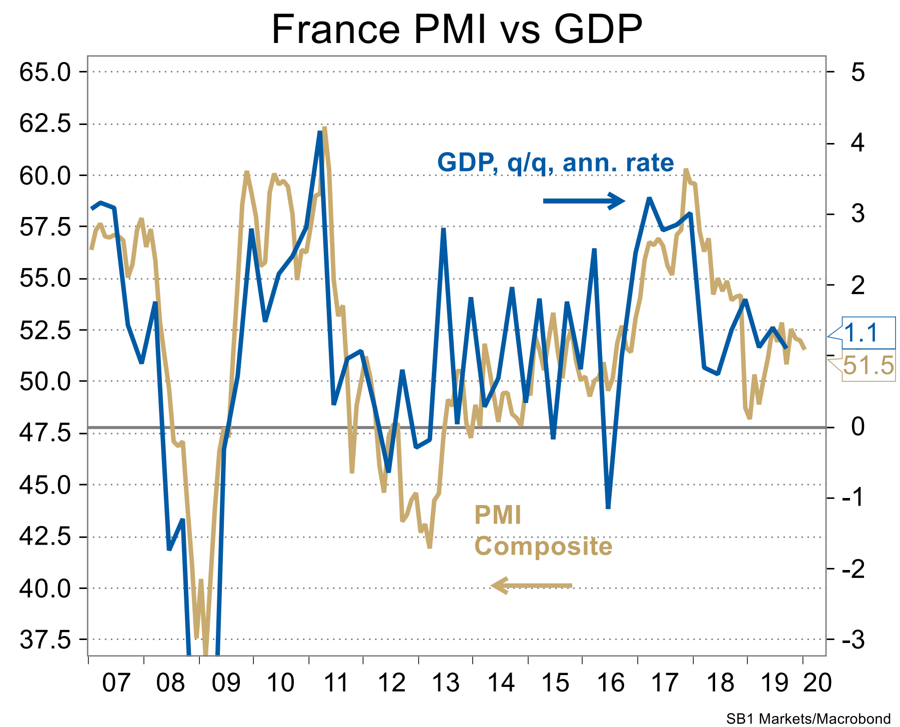


- In January, the total new orders PMI jumped to 48.0, a 2.7 p increase from Dec and up from 38.2(!) in Sept
- The decline in both export- and domestic (implicit) orders is softening. Export orders are no longer pointing to a steep decline in actual export orders. Actual orders have stabilized recent months
- The most plausible explanation of the German dip is probably a mix of a maturing manufacturing cycle, trouble in the auto industry and global uncertainties stemming from the trade war and Brexit influencing domestic demand. <u>Now, global uncertainties have eased somewhat and the auto industry is showing some early signs of a turnaround</u>

PMI a tad down in January, indicating steady GDP growth

Manufacturing PMI inched up to 51, services slowed 51.7, both have been rather stable

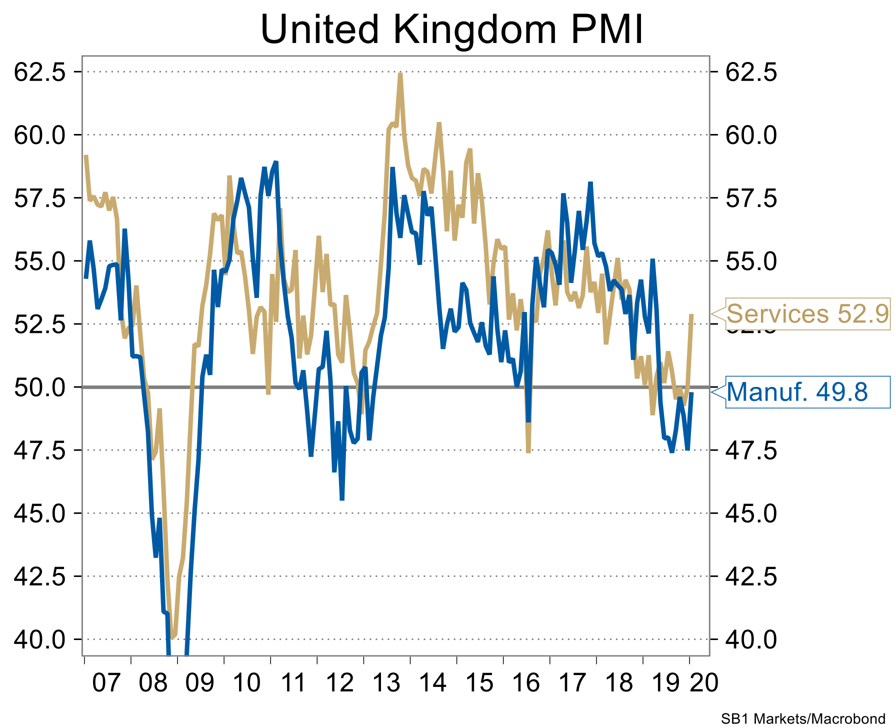


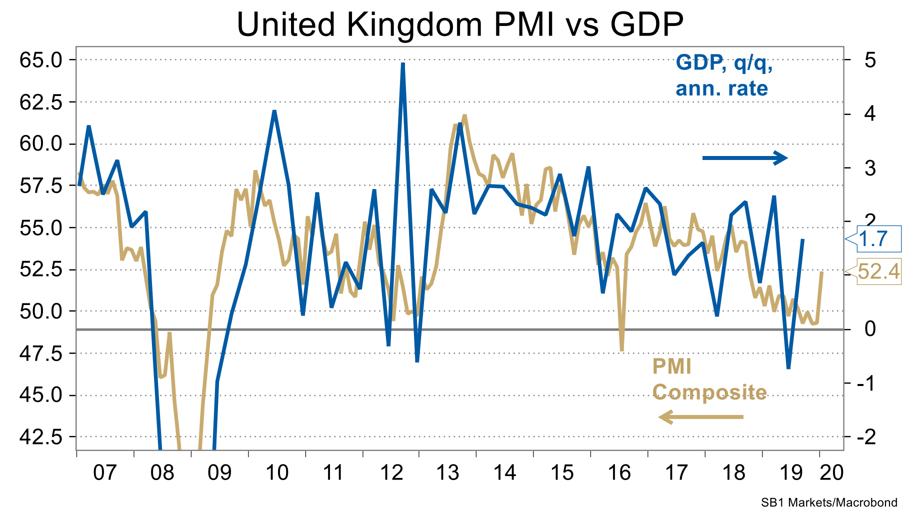


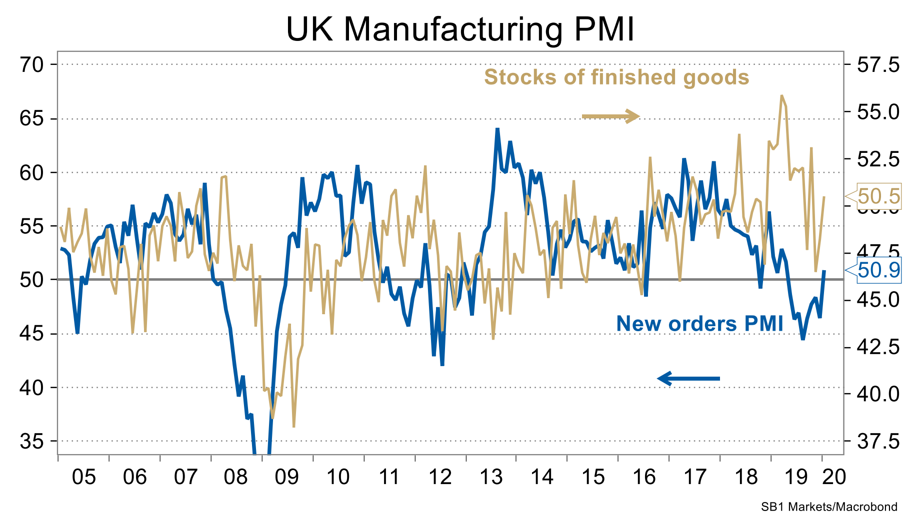
- Businesses in the service industry reported slightly slower growth in activity in January, level steady recent months
- Manufacturing PMI has been holding up better than other major Eurozone countries, hoovering just above 50 the past year
- The composite PMI came down 0.5 p in January, pointing to a modest, stable GDP expansion at just above 1%

PMIs soar as political uncertainties ease and businesses prepare for Brexit

The composite PMI spiked 3.1 p to a 16 month in Jan, as services spiked and manufacturing stabilizes



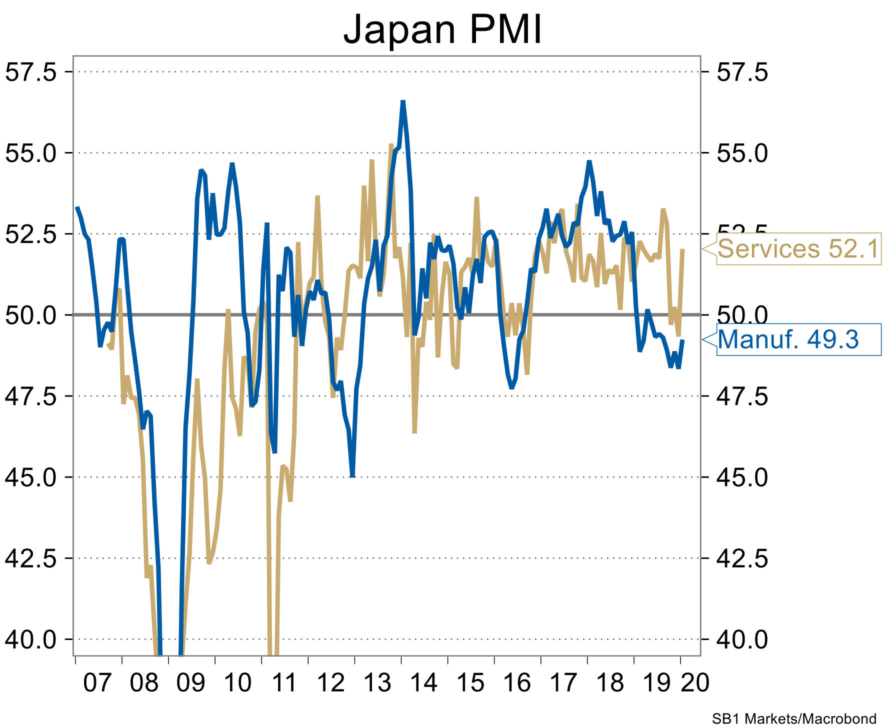


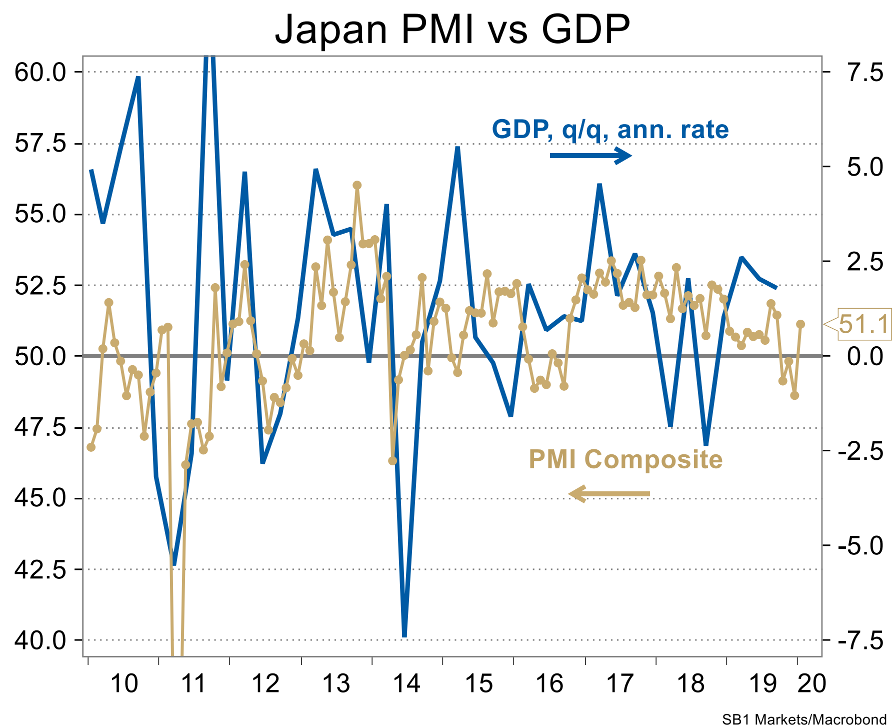


- Manuf. PMI jumped 2.3 p in Jan, signalling a stabilization, after struggling from Brexit uncertainties as well as inventory adjustments through 2019. New orders increased marginally, however, stocks were built up, again, suggesting that pre-Brexit deadline stockpiling may have lifted activity
- Services PMI soared 2.9 p to the highest level since Sept ‘18, lifting the composite PMI to 52.4. The PMI signals approx. 1% GDP growth, from 1.7% in Q3

Both PMIs rebound in January, services back to pre-VAT hike level

Services PMI spiked 2.7 p, signaling that the economy is on a recovery track following VAT struggles

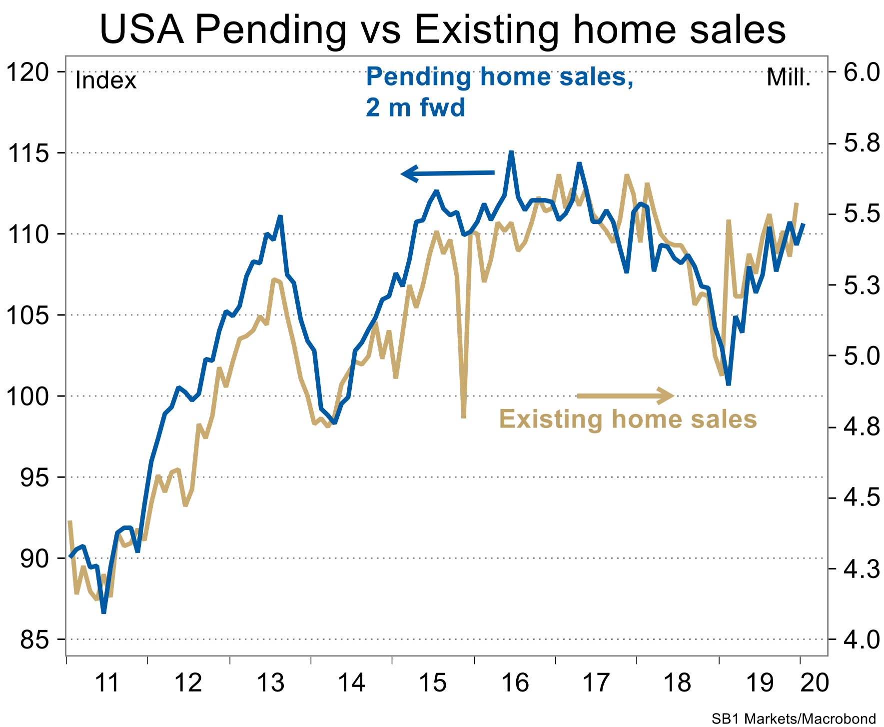


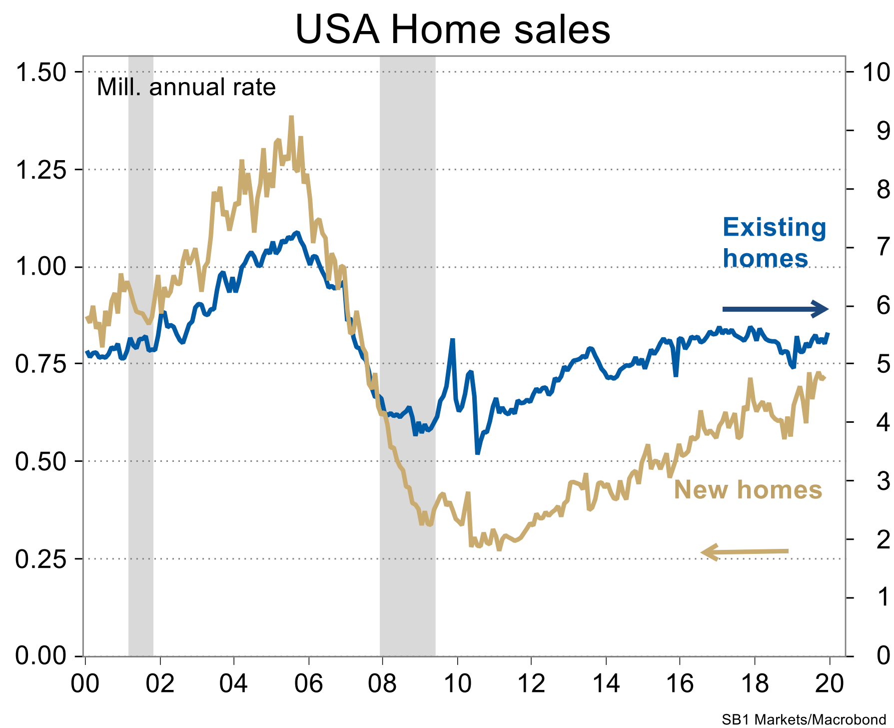


- Composite PMI rose 2.5 p to 51.1 in January, even higher than the pre-VAT levels in the spring/summer (PMIs soared ahead of the October tax increase and later plummeted). The composite index still points to slower GDP growth than the 1.8% annualized rate in Q3
  - » Services noted a strong rebound in Jan, a promising sign. Manufacturing PMI edged up too, to 49.3, still in contraction territory
  - » Other Japanese surveys have so far not confirmed a strong recovery, the avg of surveys were at the lowest level in 2011 in Dec (few others have reported January data)

Existing home sales straight up in Dec, with other housing market indicators

Existing home sales are up 12% from the trough and just marginally below the 2017-18 peak level



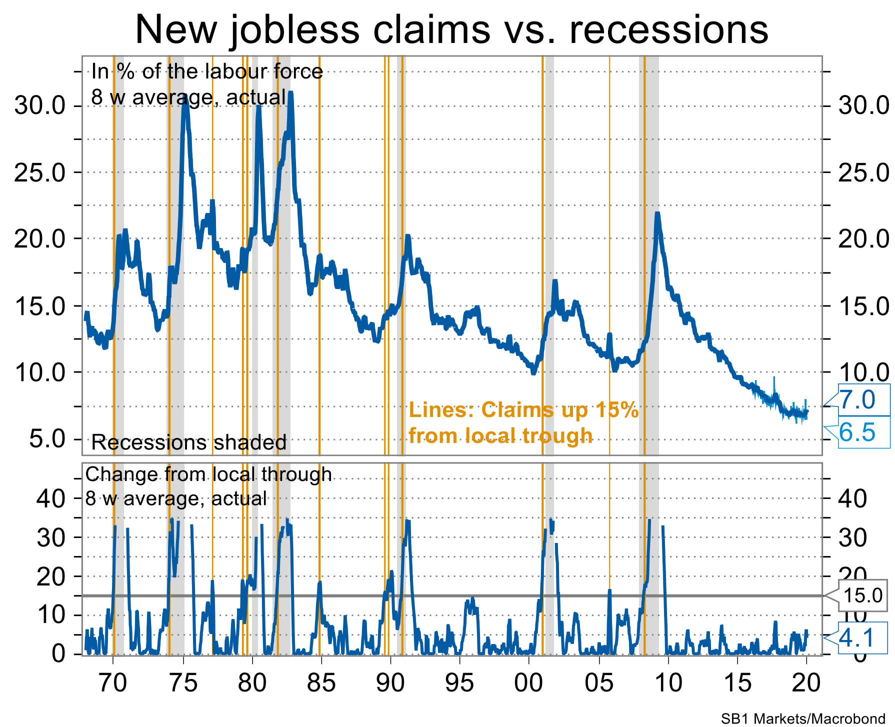


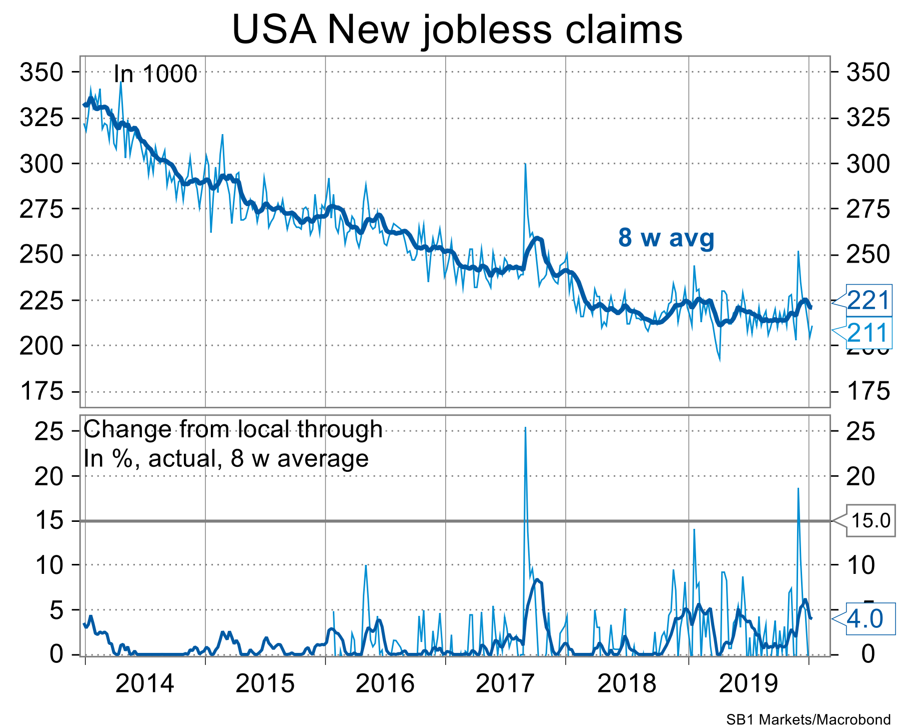
- Existing home sales surged 3.6% m/m in Dec, to 5.5 mill (annual rate), higher than expected. The prior months, sales slowed somewhat, the December rebound confirms that sales are still growing strongly. Sales are just 2% below the 2017 peak
  - » Pending (existing) home sales are heading up too, but do not signal another uptick in actual existing home sales
- Housing market data are upbeat, demand must be booming, supported by low mortgage rates

SpareBank 1 MARKETS

Jobless claims back to a very low level

Claims remained very low at 211' last week. Thus, no labour market weakness spotted!

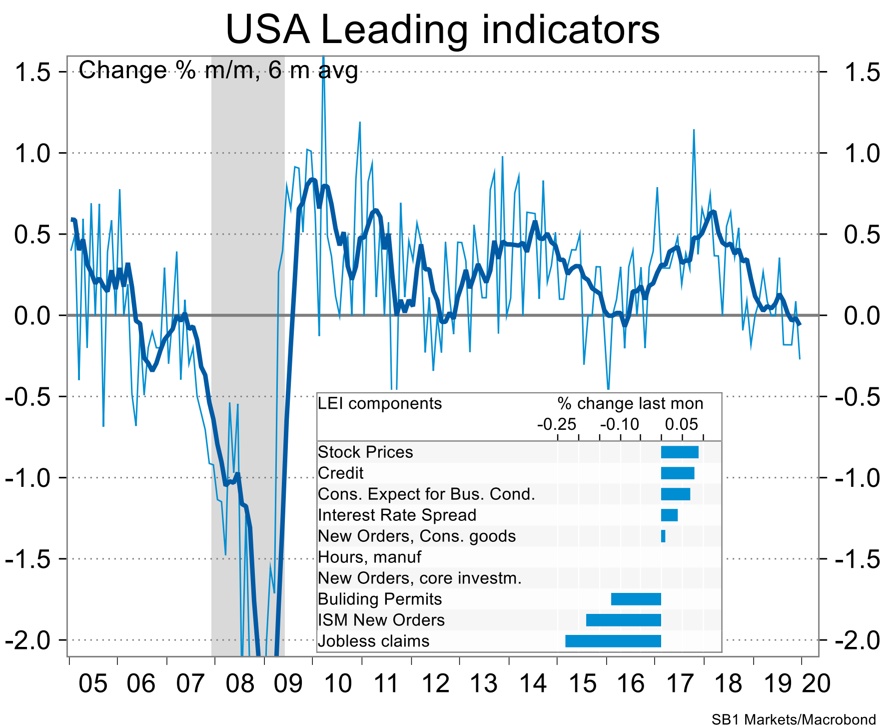


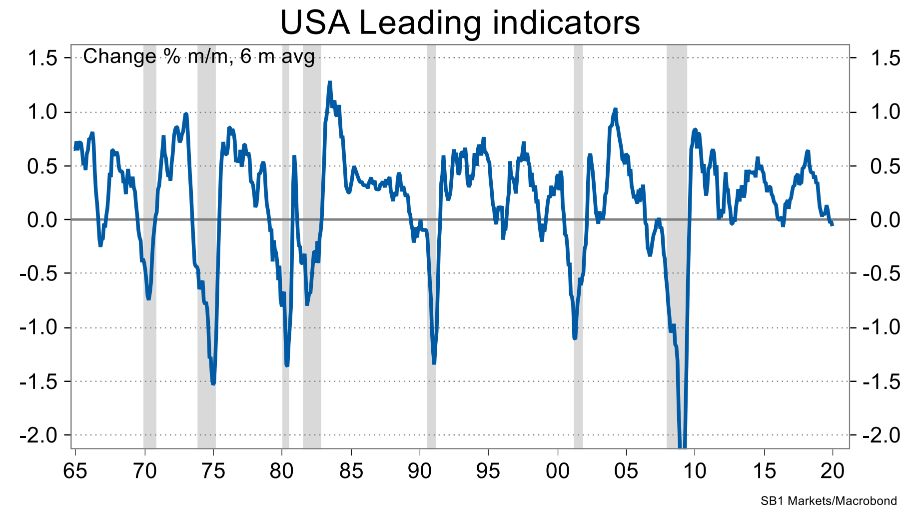


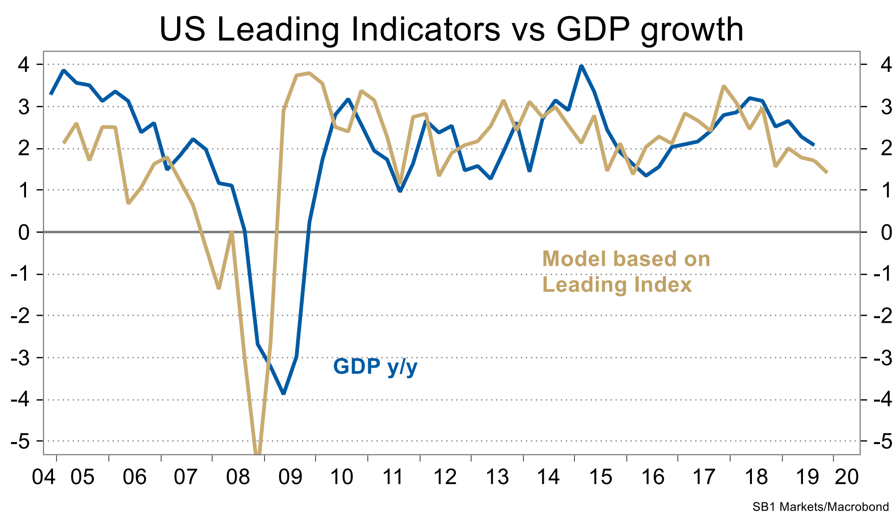
- In December, jobless claims were distorted by a later than usual Thanksgiving holiday. Now, claims have fallen down to a very low level again, confirming that the upswing was not based on any underlying weakness
- A more than 15% increase in jobless claims (measured by the 8 week avg) is usually a good indication of a recession, and a yellow 'recession' warning line is to be drawn, check the chart to the left. So, no reason to worry now?

The Leading indicators down in Dec, signals 1.4% Q4 GDP growth

The LEI is sliding down, pointing to some 1.4% GDP growth, close to the nowcasters at 1.2-1.8%





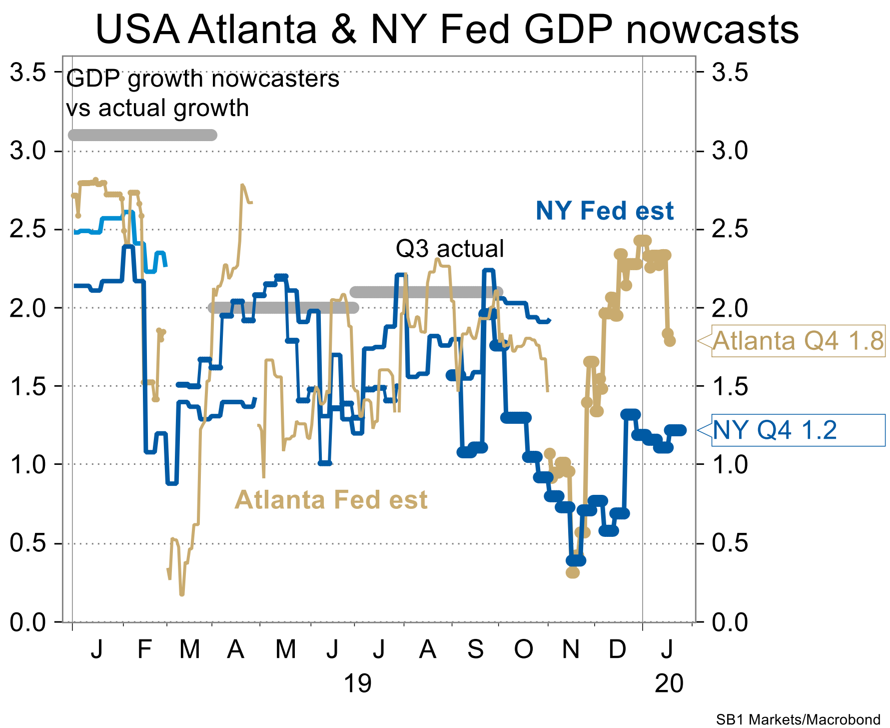


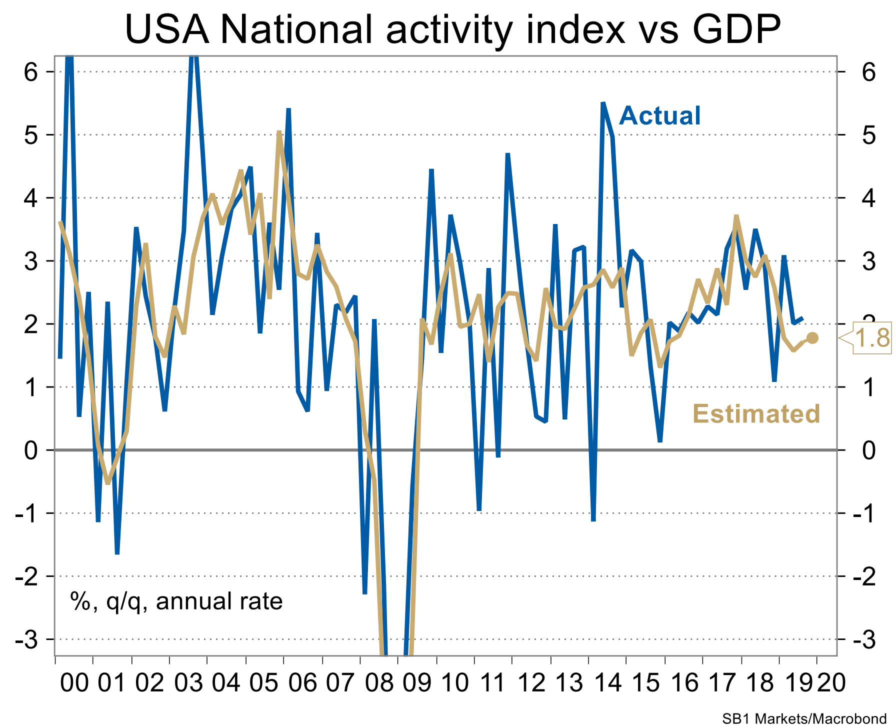
- Conference Board's Leading indicators declined by 0.3% m/m in Dec, the weakest month in 4 years. The 6m average m/m change has fallen to 0.1%, the same level as in 2016 and 2012
  - » ISM new orders, building permits (following strong growth) and jobless claims (Thanksgiving distortions) sent the LEI down; stock markets, credit and cons. confidence were positive contribution
- Face value, the LEI is signals 1.4% GDP growth in Q4

Conference Board's Leading Index (LEI) is a composite index based on ten already published leading indicators that are judged to be leading the overall cycle

Nowcasters signal 1.2 – 1.8% Q4 GDP growth

The National Activity index says 1.8% growth, nowcasters 1.2-1.8%



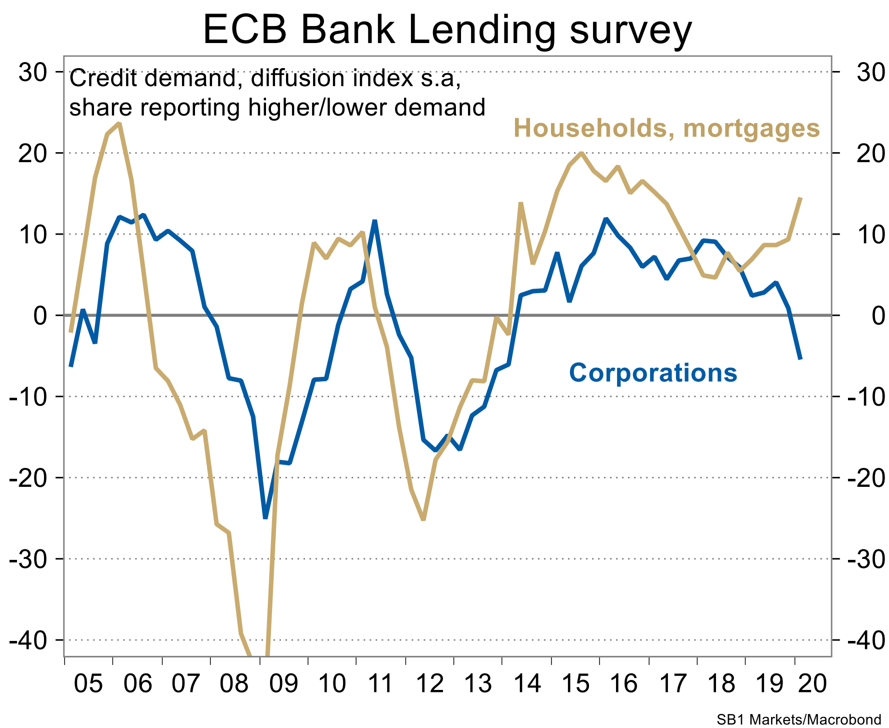


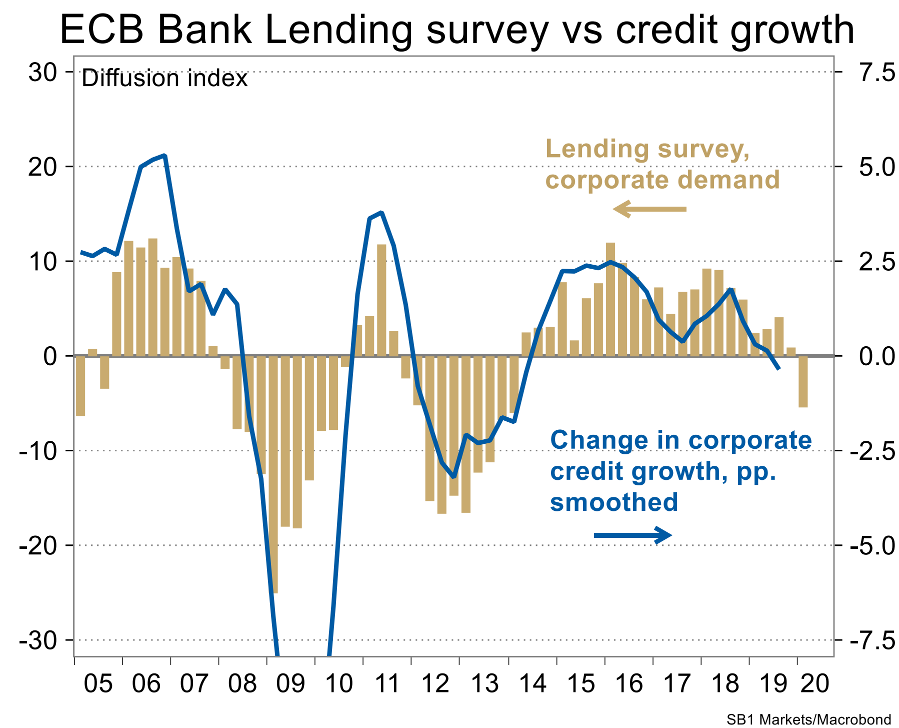
- The National Activity Index came down in December and now signals 1.8% growth in Q4, down 0.4 pp from November

SpareBank 1 MARKETS

Lending survey: Corporate credit demand pulls back for the first time since 2014

Household credit demand is accelerating, while subdued investments drag corp. demand down



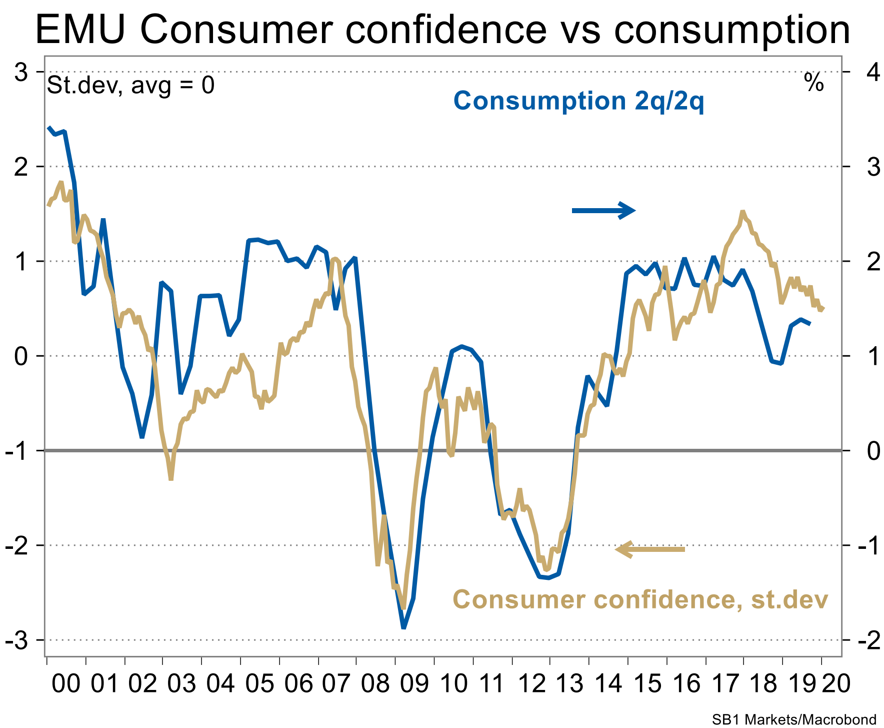


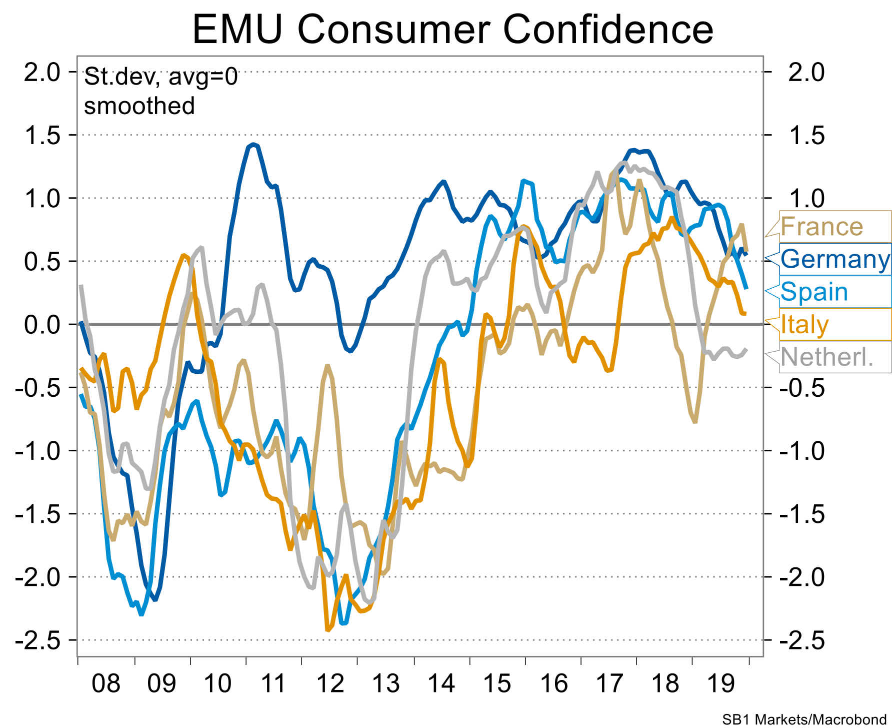
- In ECB's Q4 Bank lending survey, banks reported higher net household credit demand for house purchases
- Corporate credit demand slipped, the first decline in 6 years, in spite ECB's efforts to boost bank lending. Lower fixed investments and wider availability of alternative financing were cited as the major drags on demand
  - » Banks in Spain noted the biggest fall, while demand in Germany increased slightly. France and Italy close to unchanged
- Actual corporate credit is growing by 3.4% y/y, growth has slowed just modestly (the 2[nd] derivative is marginally negative). The lending survey signals a substantial slowdown in the first quarter of 2020

SpareBank 1 MARKETS

Consumer sentiment sliding down but is still above average

Consumer confidence slides slowly down but the level is still elevated, as in the US

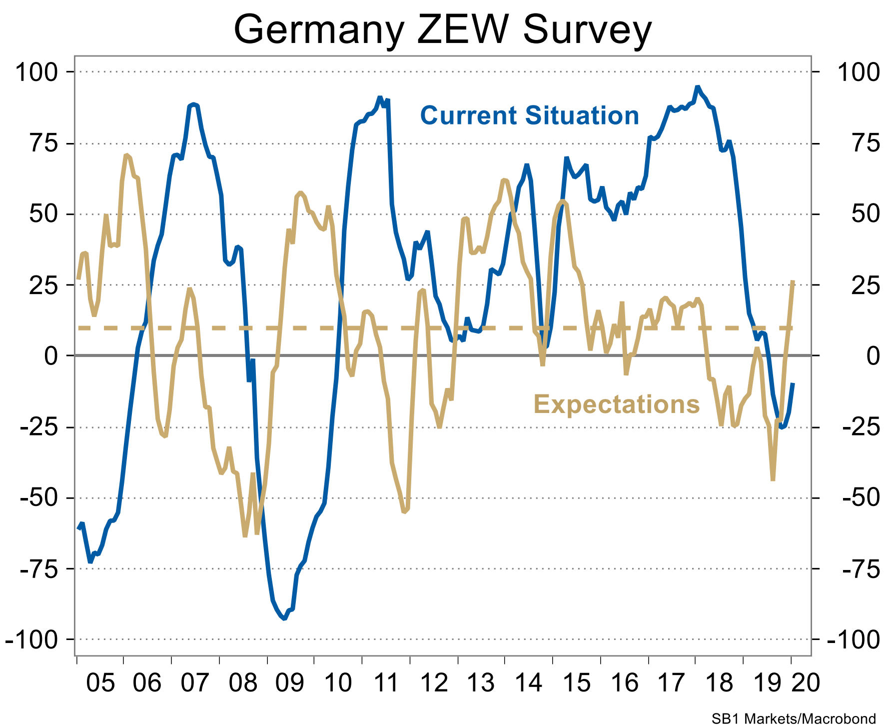


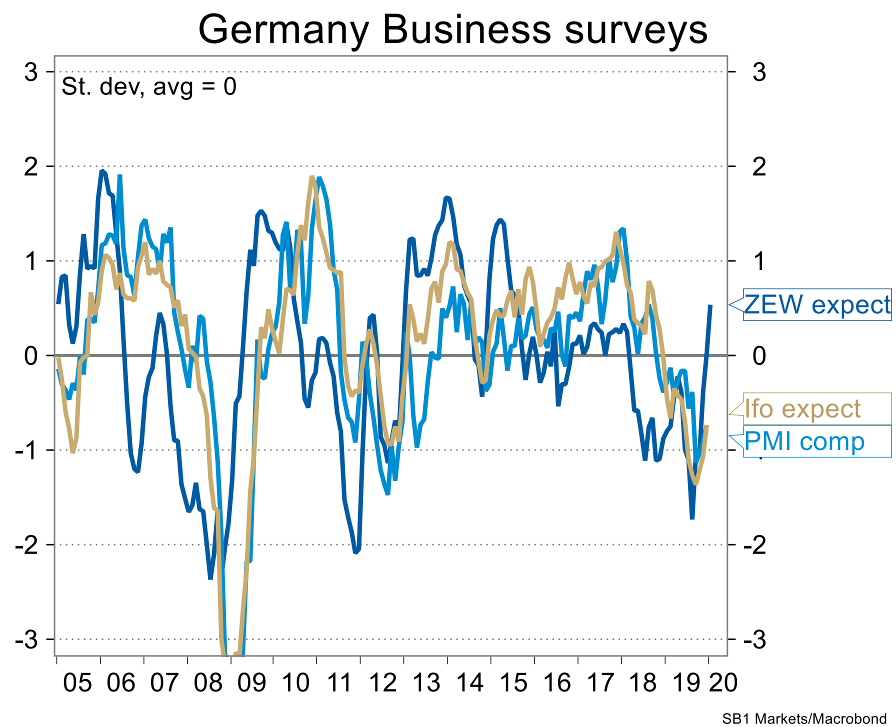


- » Consumer confidence rose marginally in January, trending slowly down since early 2019. The level is 0.5 st.dev above the average and is not weak (bellow avg) in any of the 4 major countries. The CCIs reflect that household demand has been solid amid the manufacturing dip, and do not confirming any slowdown in retail sales
- » Confidence is softening in Italy and Spain, however none of these are yet weak. Germany has stabilised recent months. In France, confidence rebounded strongly when the protests subsided in early ‘19. Netherlands is struggling the most. (No Jan country data)
- » Real wages + hours worked, a good proxy of total disp. income, expanded by 2.3% in Q3, do not signal weaker sales

ZEW survey notes a strong comeback of expectations, highest since 2015!

The view of the current situation is improving too. Unfortunately, other surveys are less upbeat



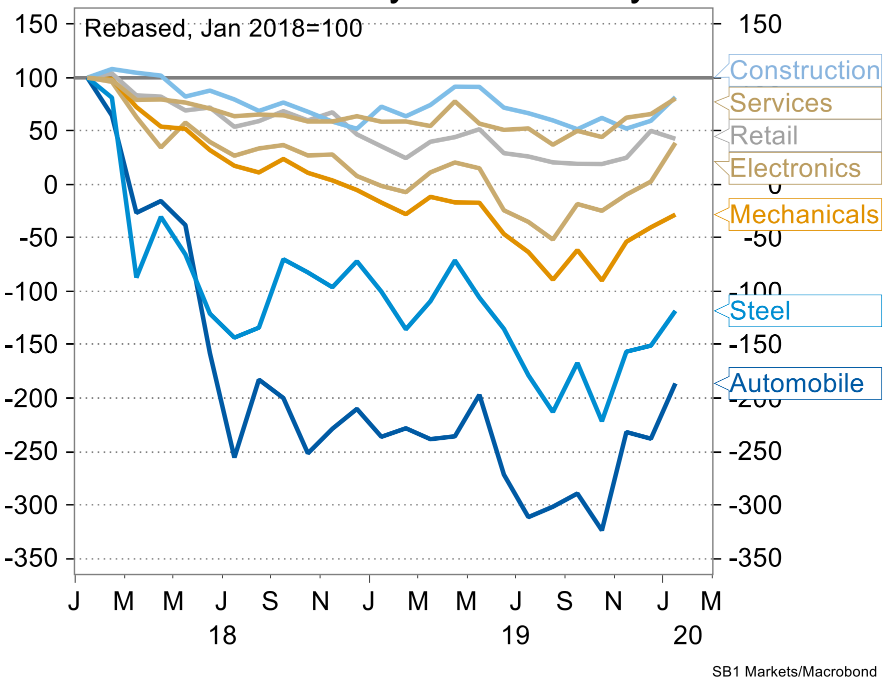


- The US/China trade dispute, Brexit turmoil and subpar domestic data flows darkened the economic outlook through 2018 and most of 2019. However, over the past 4 months, expectations in the ZEW survey have rebounded swiftly. In January, expectations rose to the highest level in 4 ½ years, at an above average level!
  - » Steady exports and increasing private consumption are cited as major contributors to the lift in sentiment, reducing concerns of a hard downturn
- The assessment of the current situation is edged up too, but the level is still below average (but not by much)
  - » The ZEW is a sentiment survey among economists and investors, and not a business survey, as the PMI and Ifo. ZEW is usually leading the Ifo and PMI – however with a rather weak correlation, and the correlation to actual economic growth is weaker than the two other surveys. We prefer the business surveys
- ZEW is more upbeat than other, more reliable surveys, however, all surveys are now suggesting that the downturn has bottomed out

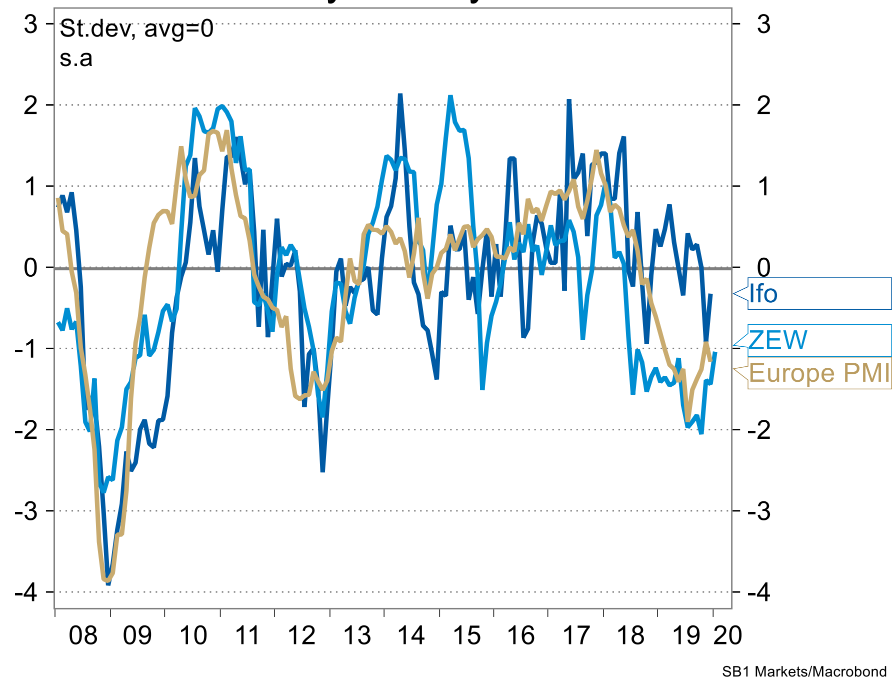
ZEW: All sectors are edging up, even autos have probably bottomed out

None are reporting an auto stabilization but both ZEW, Ifo and PMI (Europe) indicate a milder decline

Germany ZEW survey

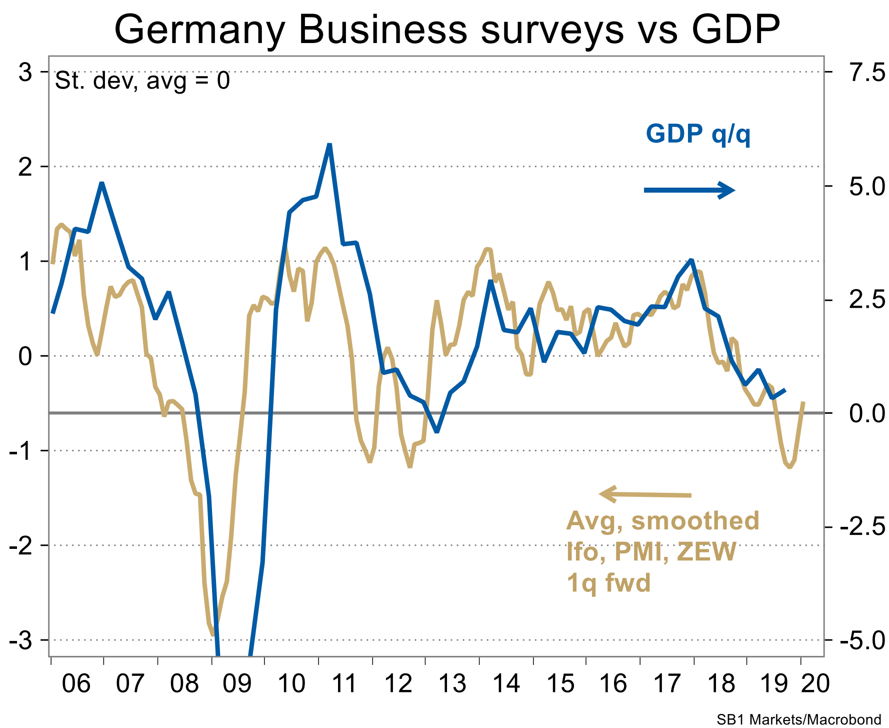


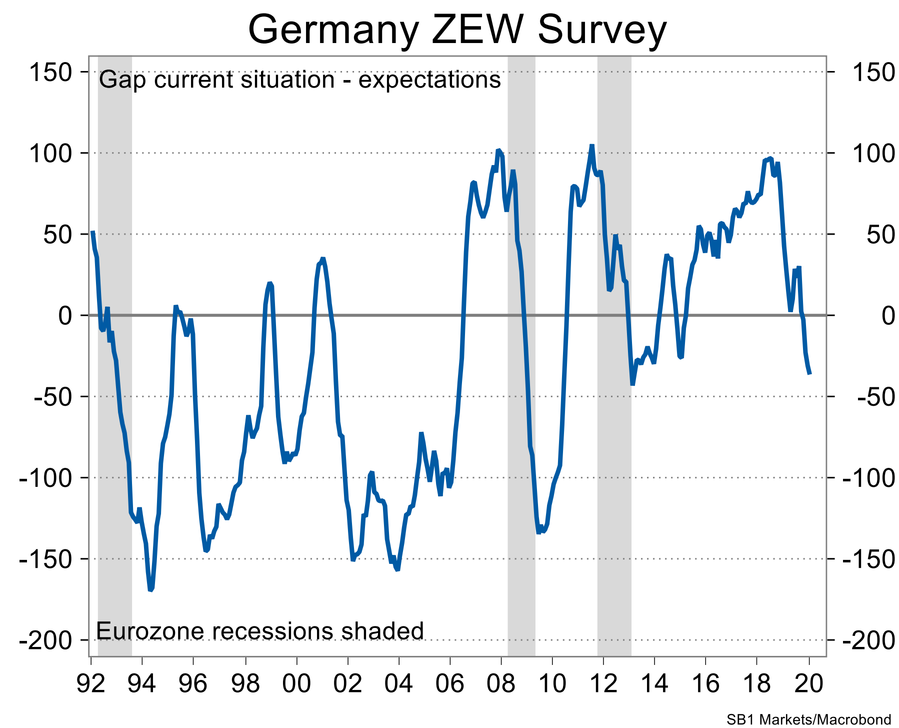
Germany Surveys Auto sector



Surveys do no longer point to a deeper downturn

The avg level of PMI, Ifo and ZEW do not signal any strong recovery but the direction may?

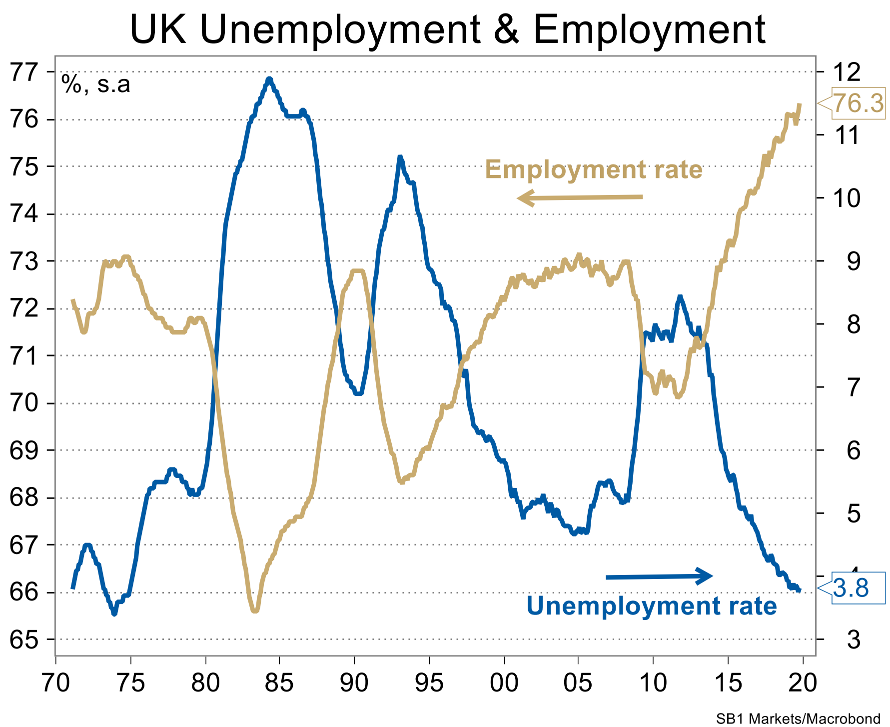


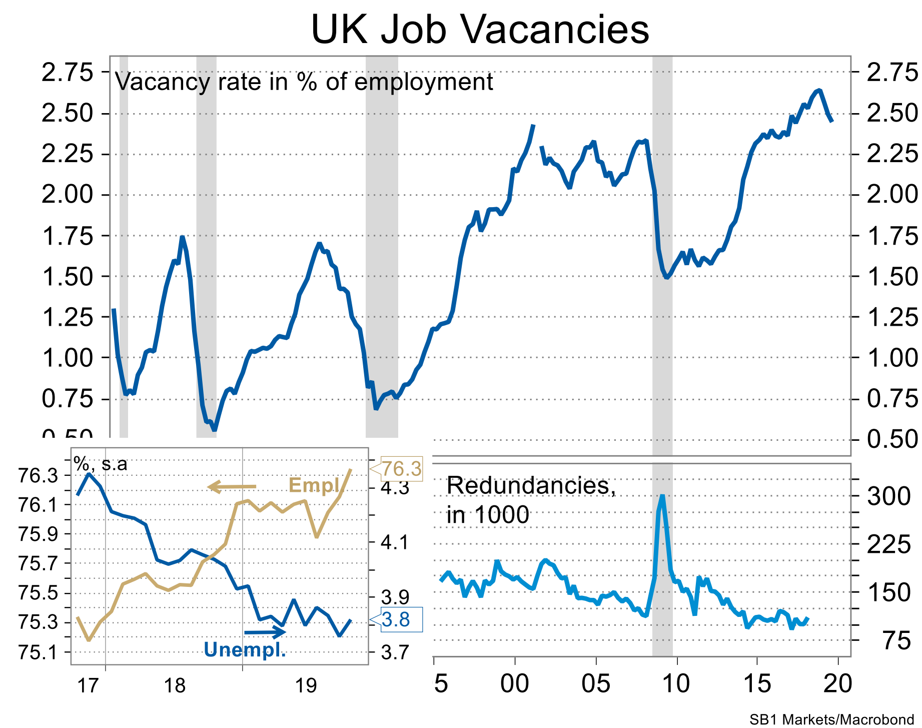


- The gap between the ZEW current situation and expectations is now closing (and even reversed). Just before recessions hit (the 3 recessions since 1990 at least), the expectations component of the ZEW survey has fallen steeply, while the view of the current situations remains elevated. So, some comfort now?
  - » We highly doubt the EMU (or Germany) is in/on the edge of a recession, as parts of the economy are holding up well in spite the manufacturing dip; the consumer sector is still growing moderately, credit is increasing and overall unemployment is still declining

Unemployment has flattened out – but employment still straight up

A strong labour market; unemployment unch at low 3.8%, employment up, but wage growth cools

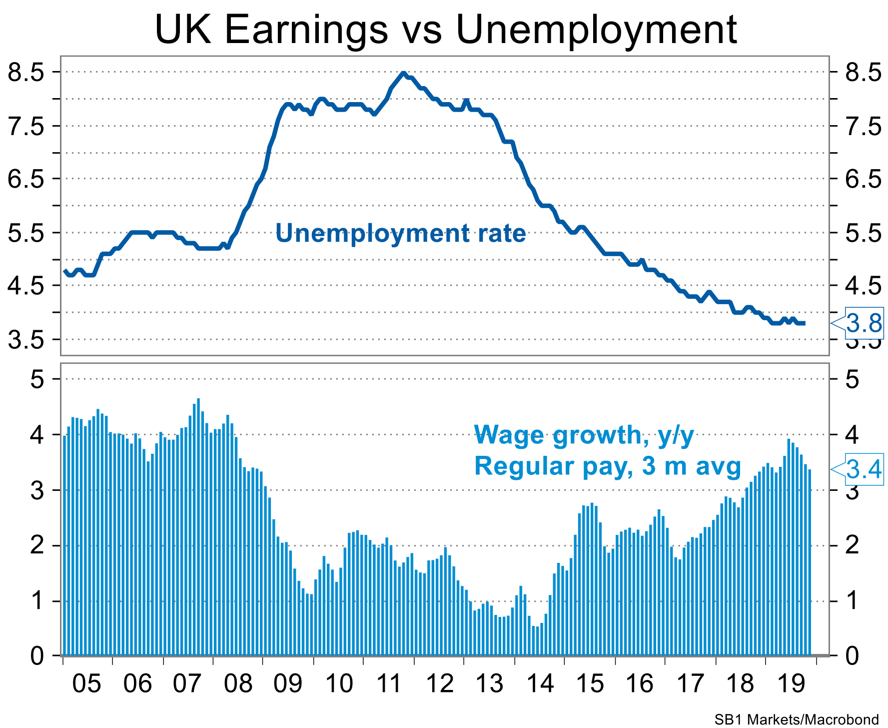


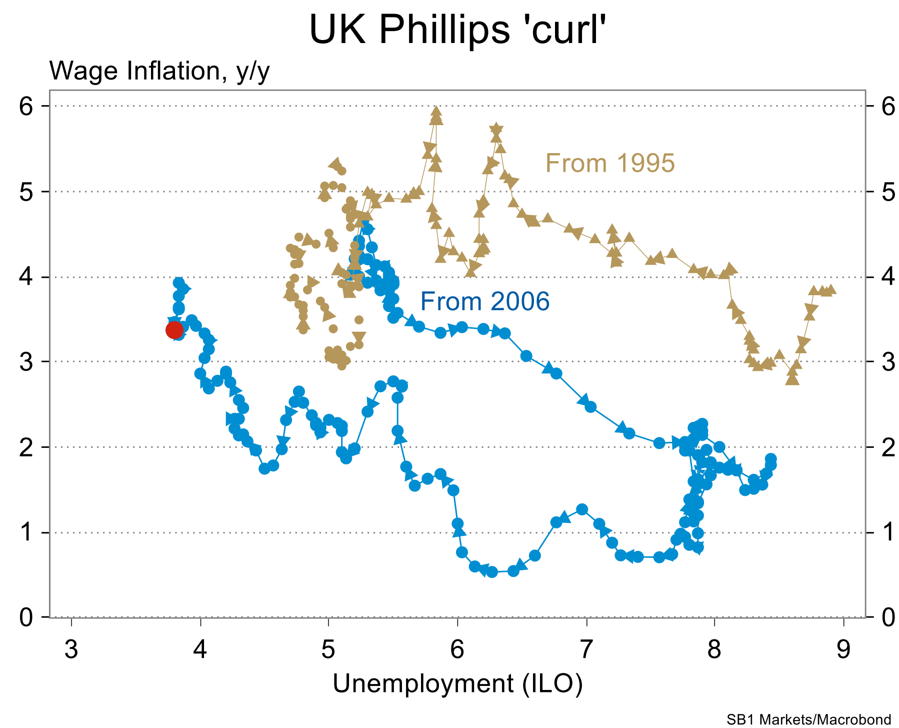


- Unemployment (LFS/ILO) was flat at 3.8% in Nov (avg Oct-Dev), (avg July-Sept) Unemployment has flattened out since early 2019, at the lowest level since 1974
- The employment rate ticked up to 76.3%, steeply up the past 3 months, after stabilizing in H1 2019. Employment is increasing by 1% y/y, growing steadily for the past 3 years
- The vacancy ratio has fallen to 2.4%, down from 2.6% in late 2018
- These data signal that the tight labour market is tight, however, declining wage inflation indicates a softening. Still, it is high at 3.4%

Wage inflation is slowing, to 3.4%, still a rather high level…

.. without productivity growth. A tight labour market has been boosting wage inflation

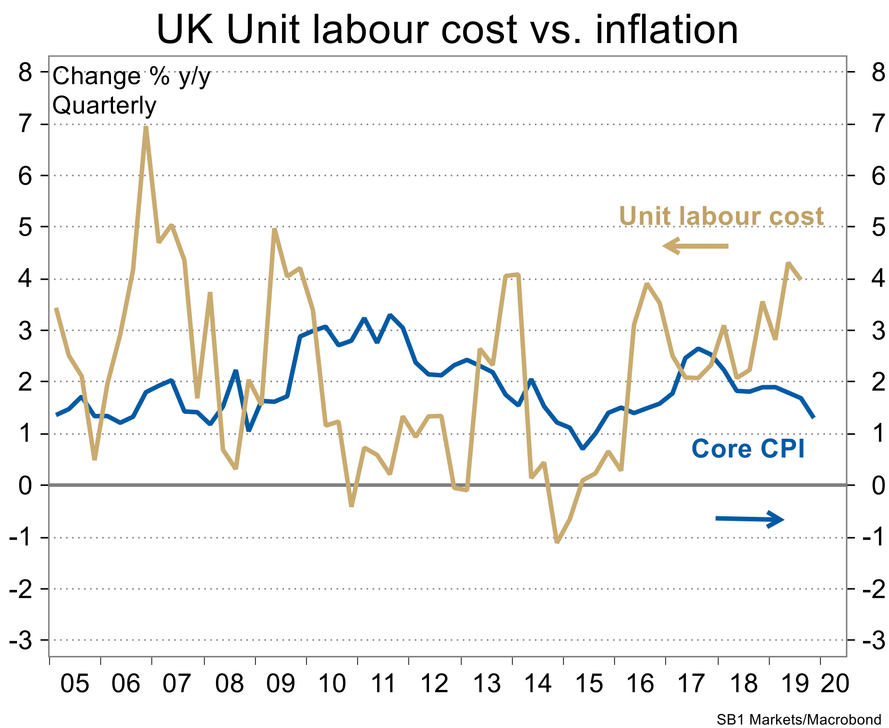




- Wage growth (regular pay) was unchanged at 3.3% y/y in Nov, after peaking at 4%. The smoothed rate (which we apply at the chart above) inched down to 3.4%, the 5rd month of deceleration
- UK productivity growth close to zero, and unit labour cost inflation is now running at close to 4%!
  <u>Cost pressure are building up and profits are under pressure, regardless of the retreat in wage growth</u>

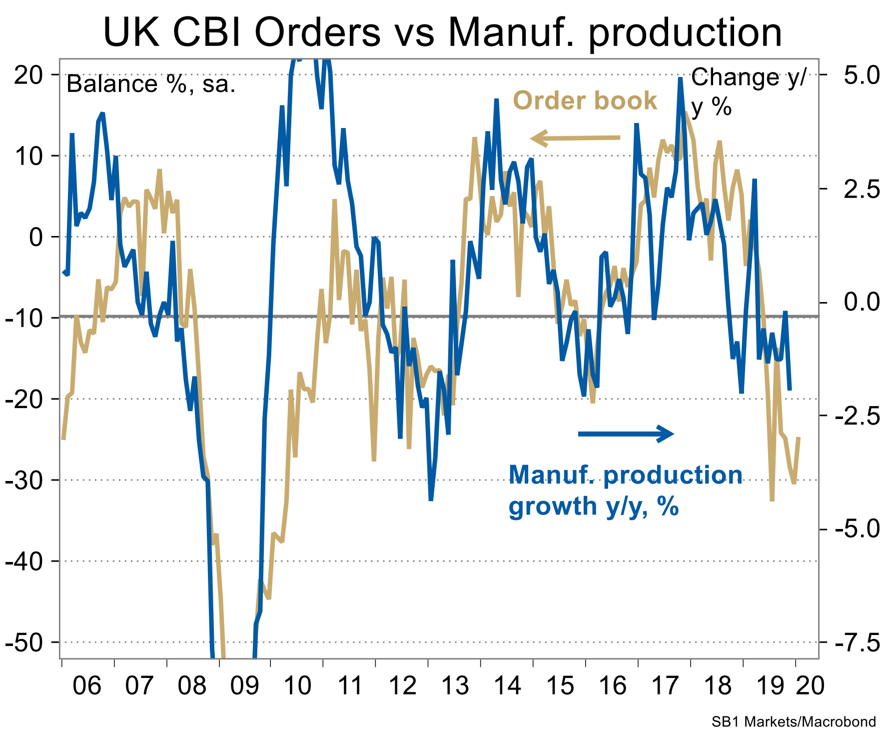
Cost inflation is not low at all

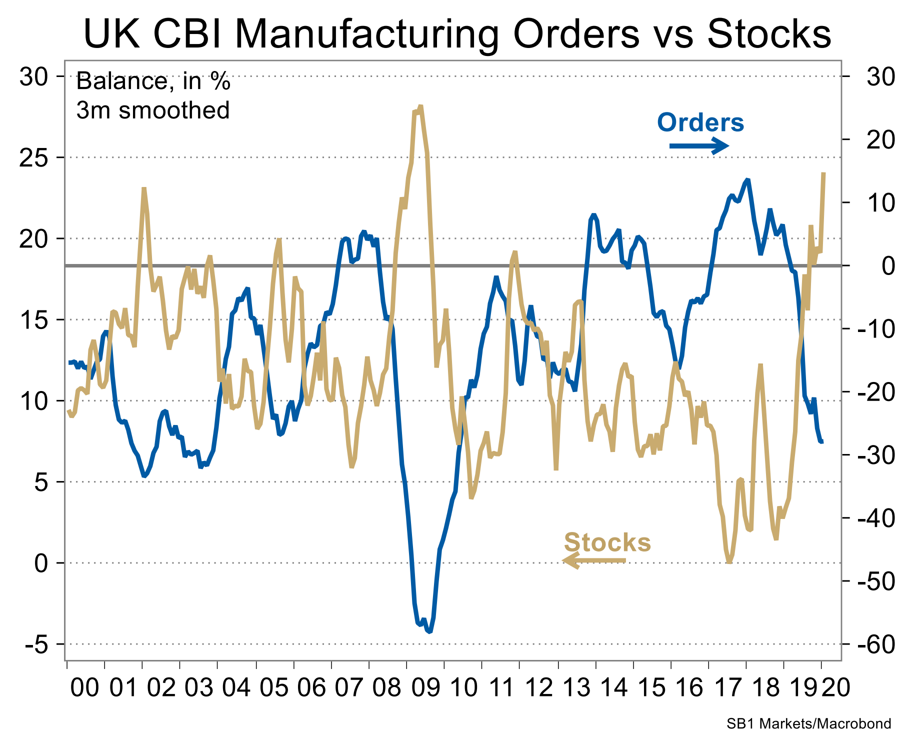
Unit labour costs rose 4.0% in Q3 and growth is trending up



Manufacturing orders still low and stocks are soaring, not a promising mix

UK businesses are struggling with massive Brexit inventory build ups, will have to keep cutting orders

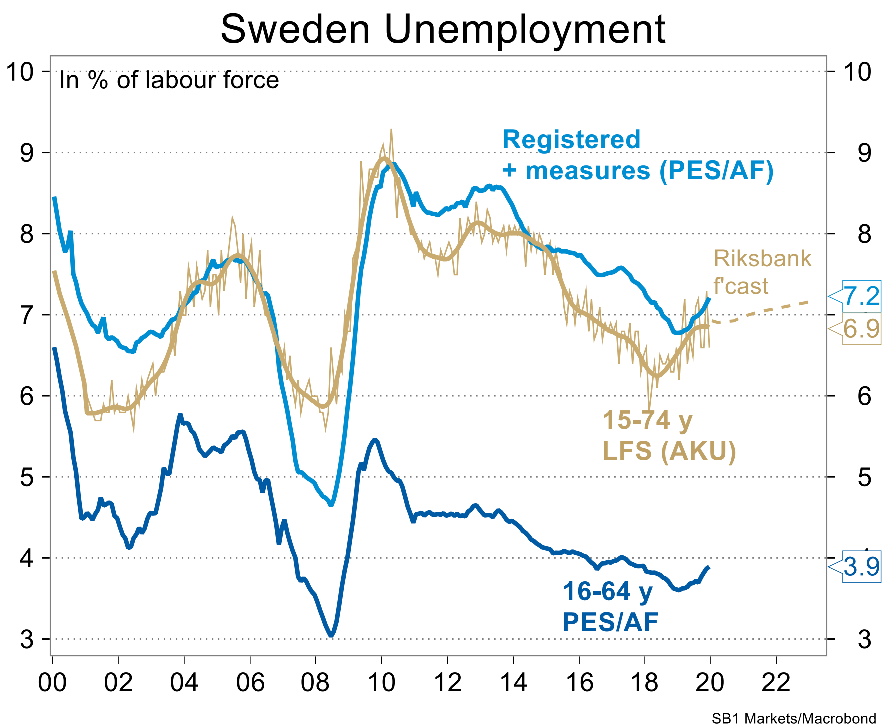


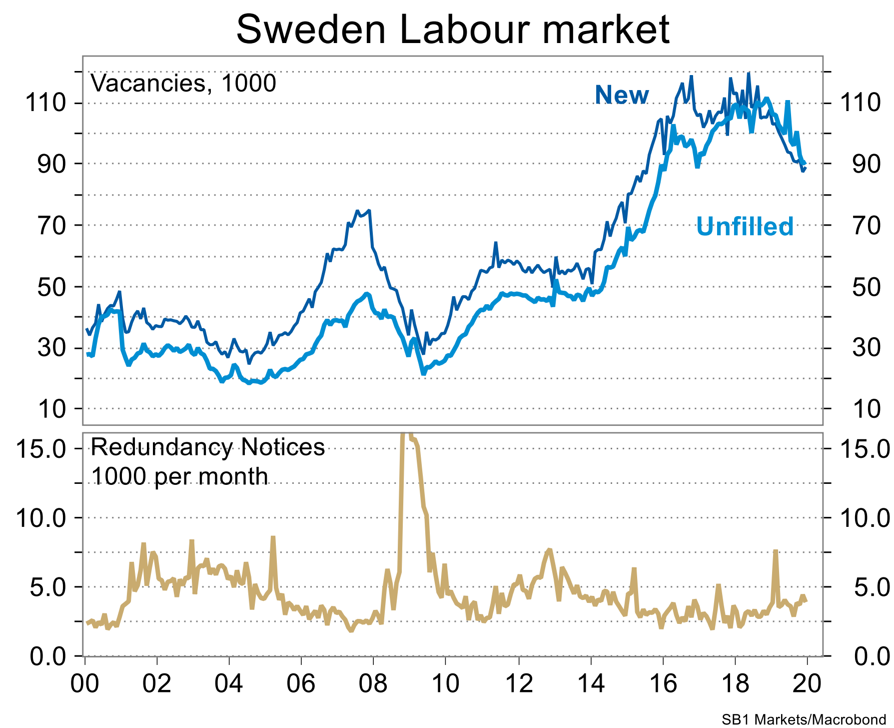


- The CBI order book index edged up to -24 in January, from -30 in Dec (seasonally adjusted). The index is still noting a decline in manufacturing orders – and signals a steeper decrease in actual production
  - » UK manufacturers have been through at least two rounds of Brexit preparation which later have been hurting activity. Orders tumbled in the aftermath of the emergency stockpiling ahead of the original Brexit deadline in March. Since then, businesses have reducing new orders significantly, even as they built up inventories once again before the October deadline. Both domestic and export orders are still falling
- According to the CBI, inventories are now being built up at the fastest pace since the financial crisis. At one point, they will have to be trimmed!

LFS unemployment climbs, but stabilized the past 4 months

LFS unemployment (smoothed rate) steady at 6.9% since Aug, after a steep upswing

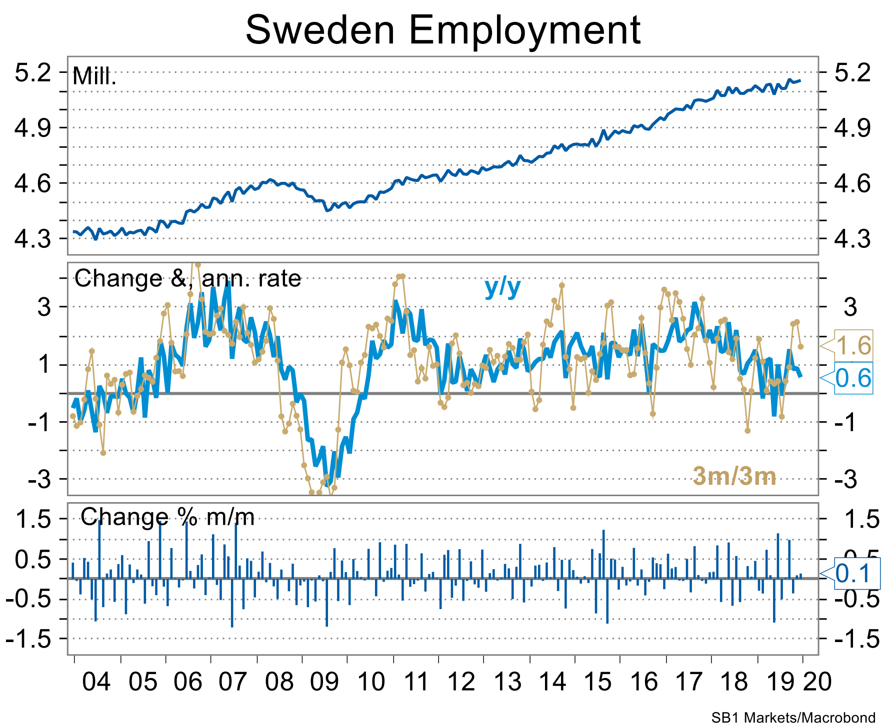


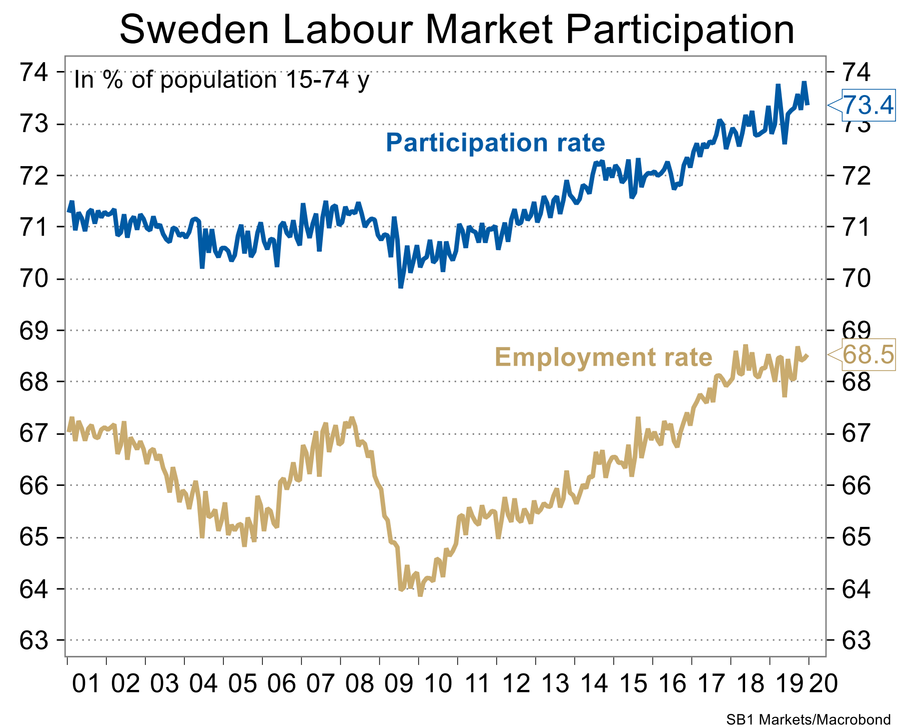


- LFS unemployment held steady at 6.9% in Dec, measured by the smoothed rate, steady since Aug, and up from 6.3% in early 2018. The unadjusted, volatile rate retreated to 6.6%, from 7.3%.
  - The PES/AF registered unemployment rate (far less volatile than LFS data) confirms that unemployment has turned up. Open unempl. is up 0.3 pp. Both new and unfilled vacancies have fallen steeply down from the peak, confirming a cooling labour market
- The labour market is no doubt weakening. The good news; Employment is still inching up, although the upward speed has slowed. Labour market participation is increasing at a faster pace,. We would be much more concerned of a rapid downturn in the Swedish economy if the unemployment uptick was due to declining employment!

Employment is still growing modestly – and participation up

The employment rate has flattened out, while participations is climbing, bringing unempl. up

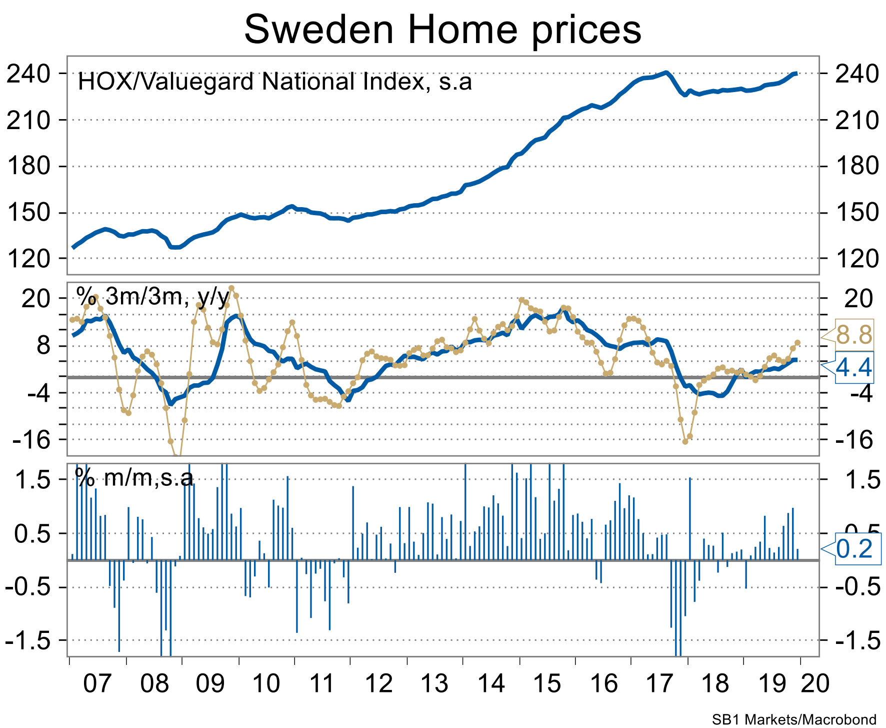


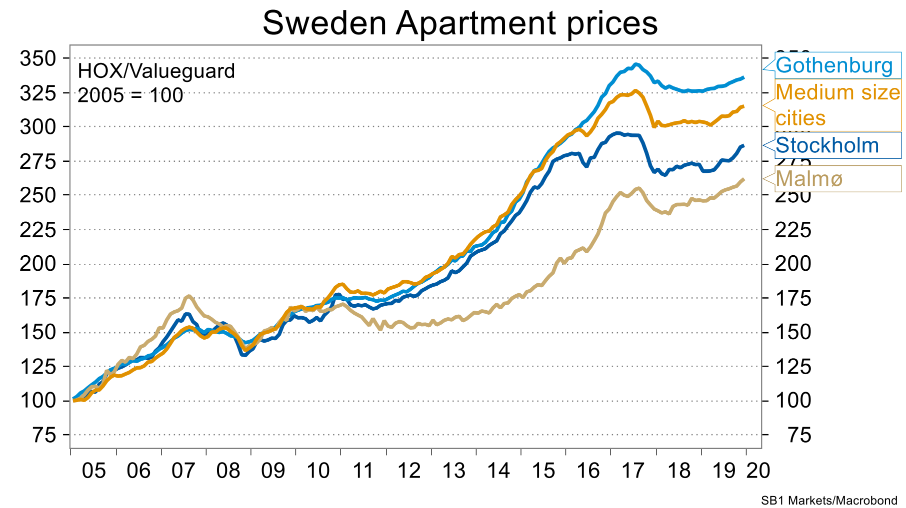


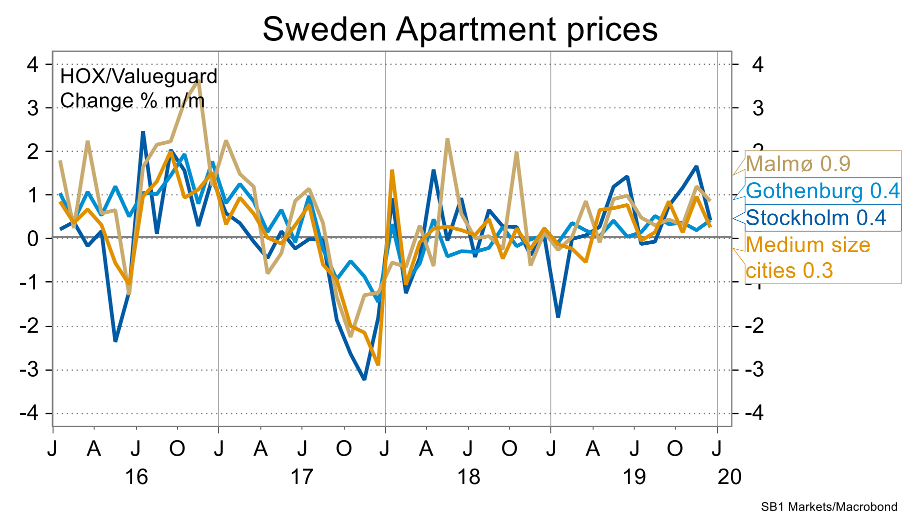
- Employment increased by 0.1% m/m December, the same pace as the prior month. Employment rose 1.6% annualized in Q4, a solid expansion. The annual rate up modestly 0.6%. The employment rate was unchanged at 68.5, flattening out since early 2018 (but slightly up recent months)
- Labour market participation edged down to 73.4% in Dec, reversing most of the Nov jump. Participation is heading up more steeply than employment, bringing unemployment up

House price inflation is accelerating

Prices rose just 0.2% in Dec but accelerated to 8.8% in Q4 (ann), and the level is back at 2017 peak



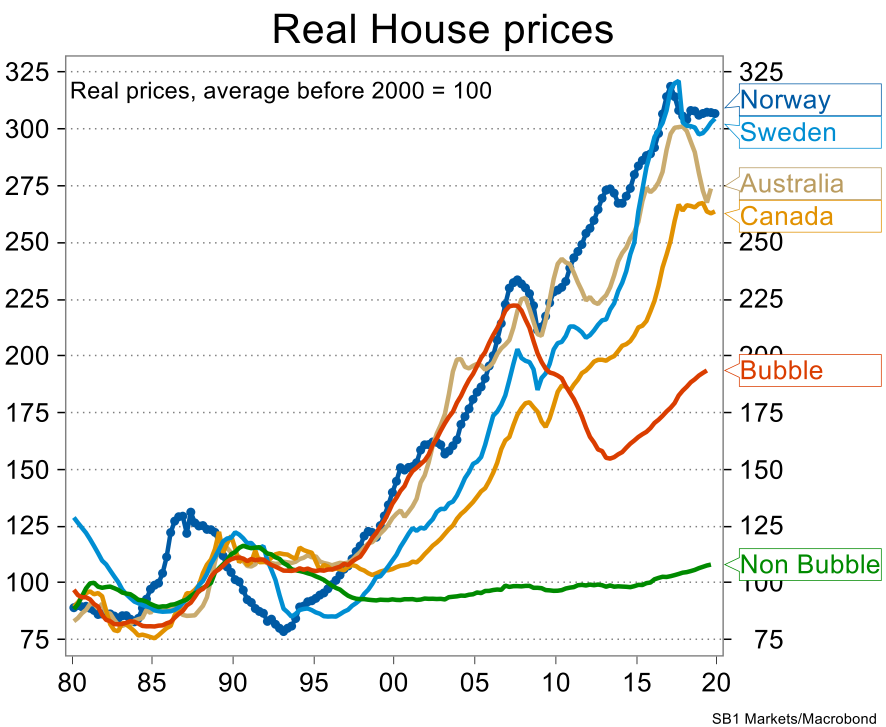


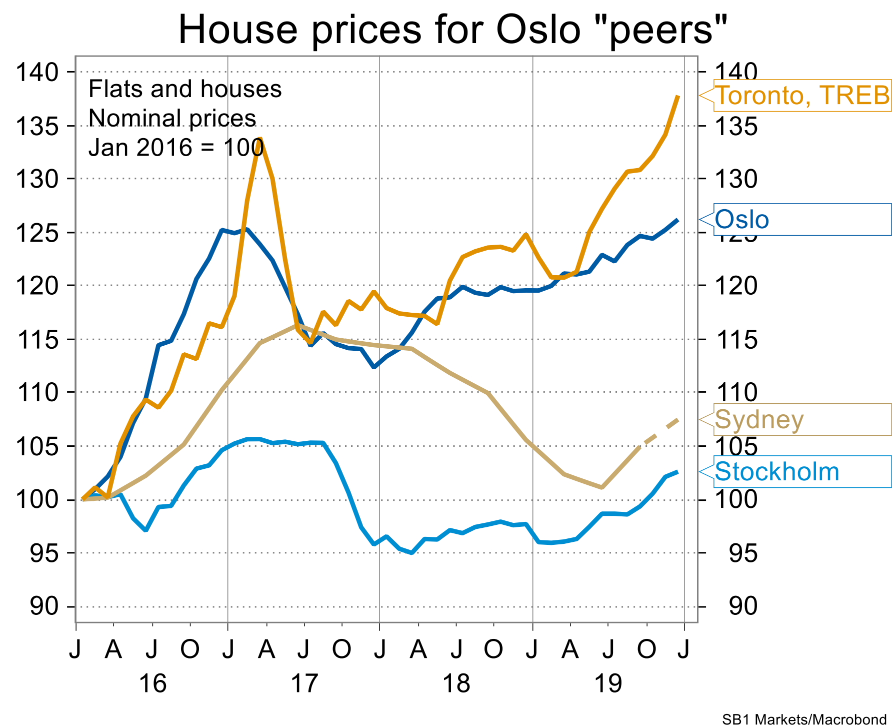


- House prices increased by 0.2% m/m s.a in Dec, after accelerating the prior 3 months. Prices are up 8.8% 3m/3m annualized, the fastest speed in almost 3 years. The price level is just 0.4% below the 2017 peak level. Real prices are significantly lower than at that peak
  - » Soaring Stockholm prices lifts price inflation, but all are increasing
- The number of transactions is heading up but dropped in Dec. Given several signs of slowdown in the Swedish economy, limited upside on the housing market?

Supercycle home prices on the way up again

Following weakness in 2017/18, prices are now climbing. Real prices still well below peak



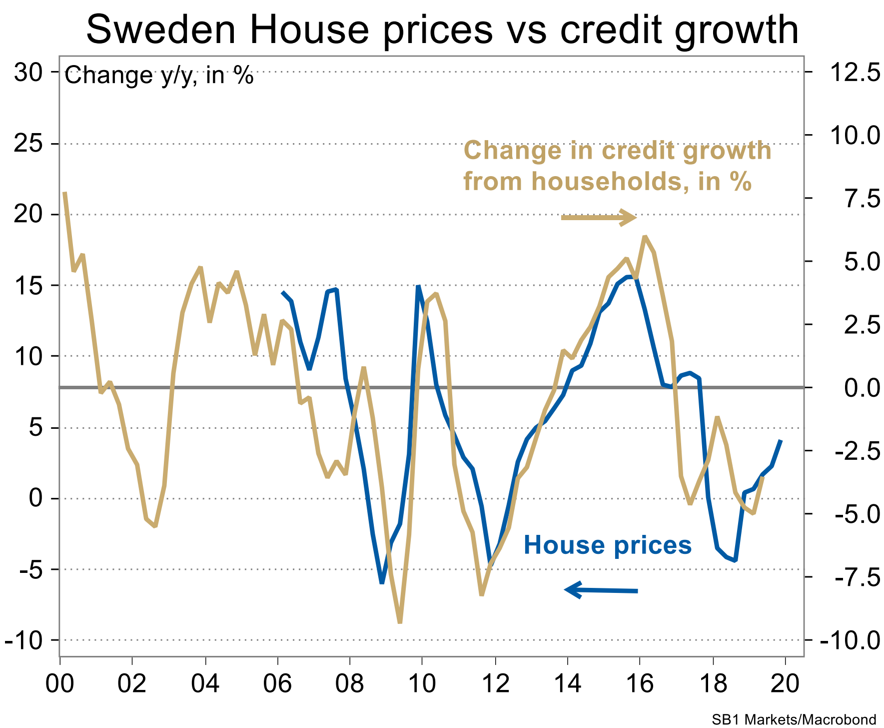


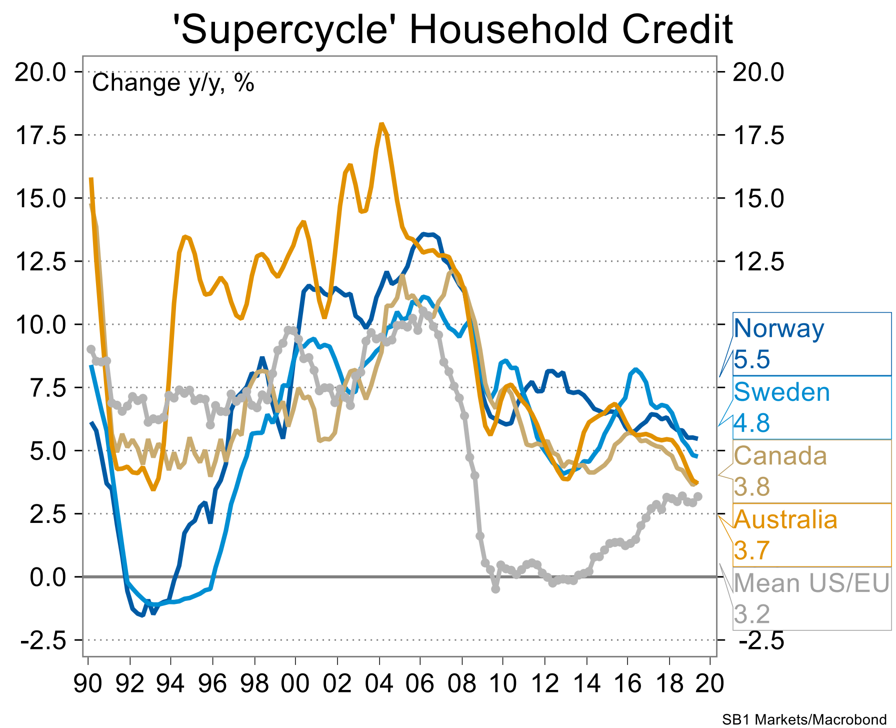
- Price growth have picked up among the supercycle guys recently, Oslo and Stockholm prices are increasing, Toronto soaring, and Sydney has sharply gained pace since the summer (interest rates have been cut, and lending standards eased)
- Still, household credit growth is slowing in all these countries, and unemployment has flattened out (and it is increasing in Sweden and Australia), the upside on the housing market must be limited?
- New housing market/debt regulations (foreigner buying restrictions, LTV/LTI/mandatory amortisation) – and in Canada higher interest rates – probably created 'some turbulence' in 2017 and 2018, prices slowed or decline in all countries

SpareBank 1 MARKETS

Credit growth is abating while house price inflation gains pace

Decelerating credit growth may signal a limited upside on house prices

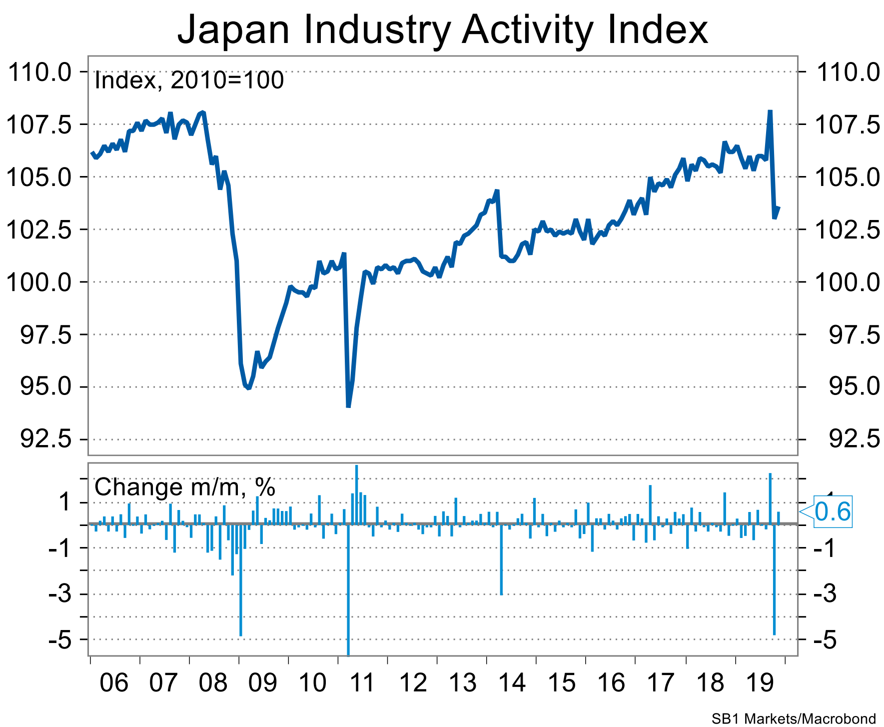


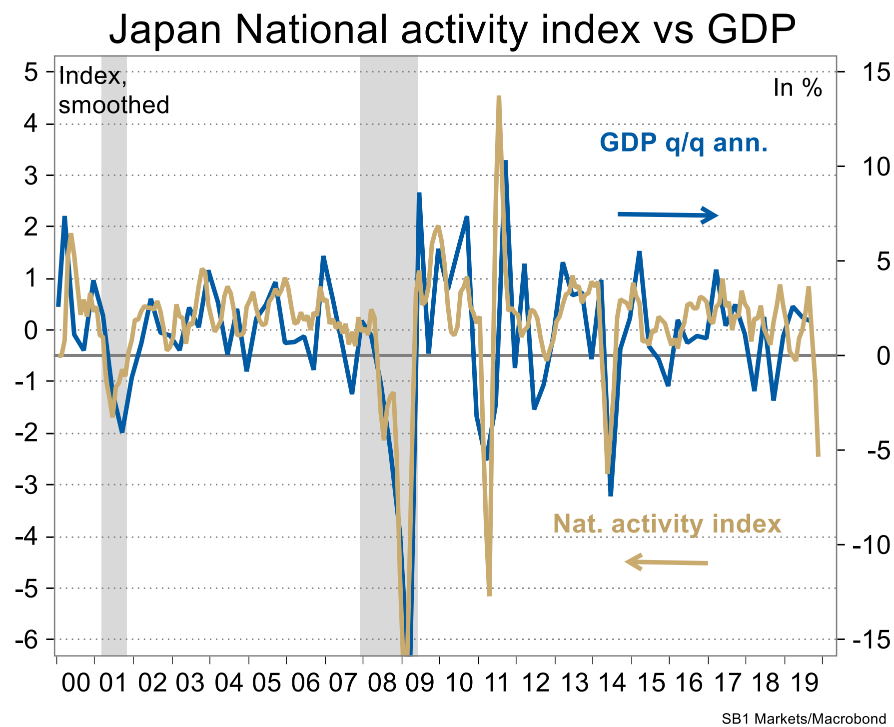


- Credit growth is slowing in all supercycle countries (thus, the 2nd derivate is negative at the chart to the left). At the same time, house price inflation is picking up in all these countries. Limited upside??
- On the other hand, the current household debt slowdown may be a consequence of sagging housing markets in 2017/2018. However, as the growth momentum in most supercycle countries is not shifting down, we doubt credit growth (and house prices) will accelerate much. In Sweden, like in Norway, lending regulations has dampened – and will continue to limit the upside for debt inflation, even if households should want to borrow more

Business activity index remained weak following ‘VAT collapse’

The index inched up in Nov, after a plunge in Oct, signals an steep decline in GDP in Q4

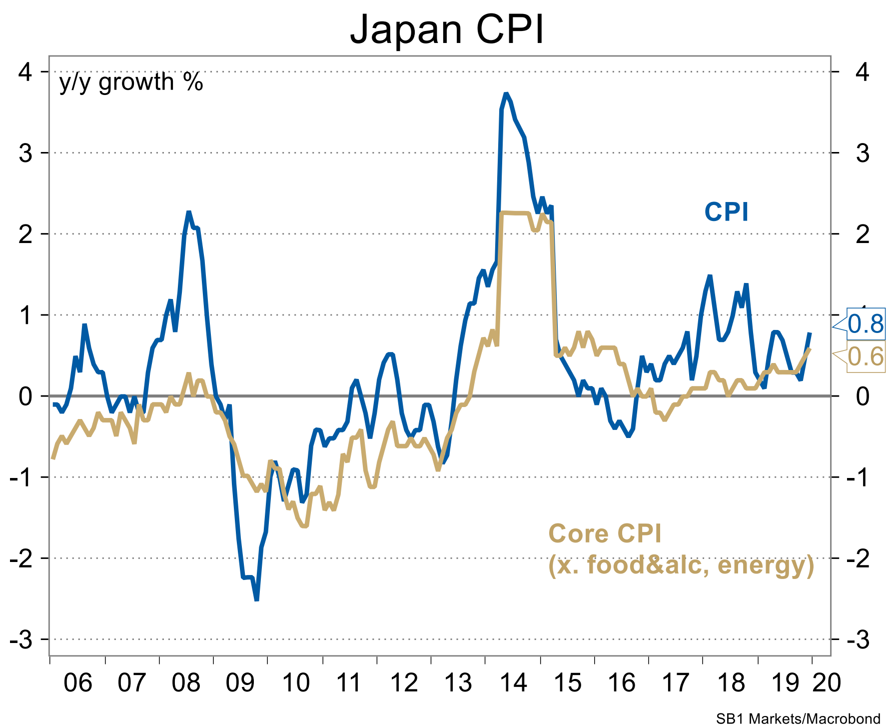


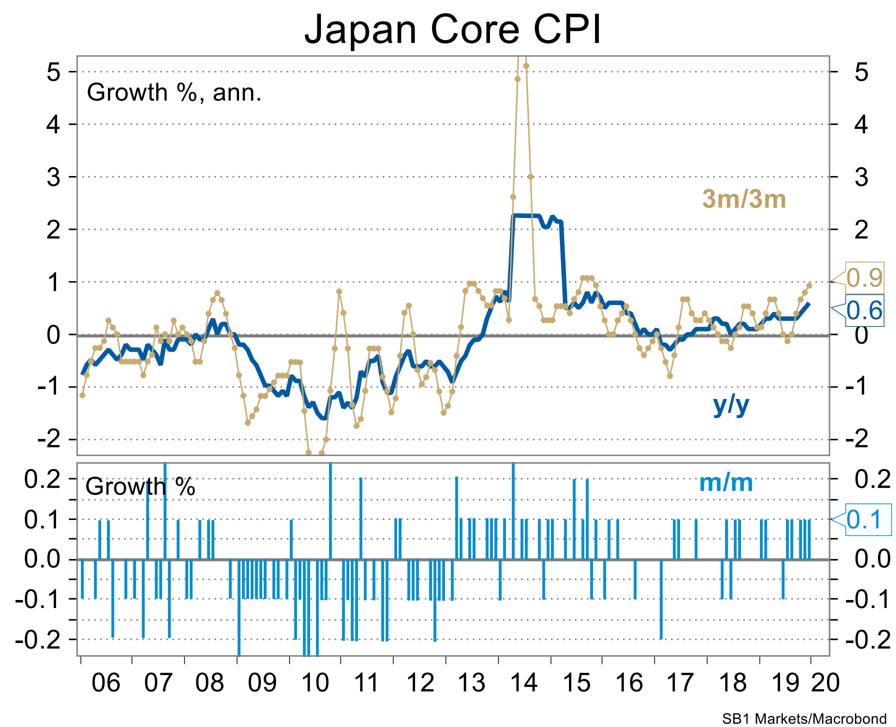


- The activity index inched up just 0.6% m/m in November, after plummeting by 4.8% in October (even steeper than first reported), after the consumer tax (VAT) hike. The Oct decline was much steeper than the last time the VAT was raised, in 2014, when it dropped 3.1%, however, this year, activity soared ahead of the hike, the avg of Sept/Oct was a -1% decline
- We expect a gradual rebound but it may take a long time before the economy has fully recovered – as it did in 2014. The smoothed index still points to a steep drop in GDP in Q4, down some 5%. In Q2 2014, GDP fell 7.4%..

Core CPI inflation ticked up to 0.6%, headline +0.8%, still muted VAT impact

Total inflation is up ‘just’ 0.6 pp since the Oct VAT hike, a larger impact will soon materialize?





- Total inflation ticked up to 0.8% y/y in Dec, from 0.5%. Core inflation rose to 0.8%, trending slowly up
- In October, VAT rates were hiked to 10%, from 8%, and the inflation impact has so far been modest. Seems unlikely, the last time taxes were lifted, in 2014, inflation soared. Some have been reporting that weak consumer demand is keeping companies from passing the increased VAT on to consumers. We highly doubt that businesses are able to continue to do that
- Wage inflation has fallen steeply this year and does not indicate accelerating price growth

Highlights

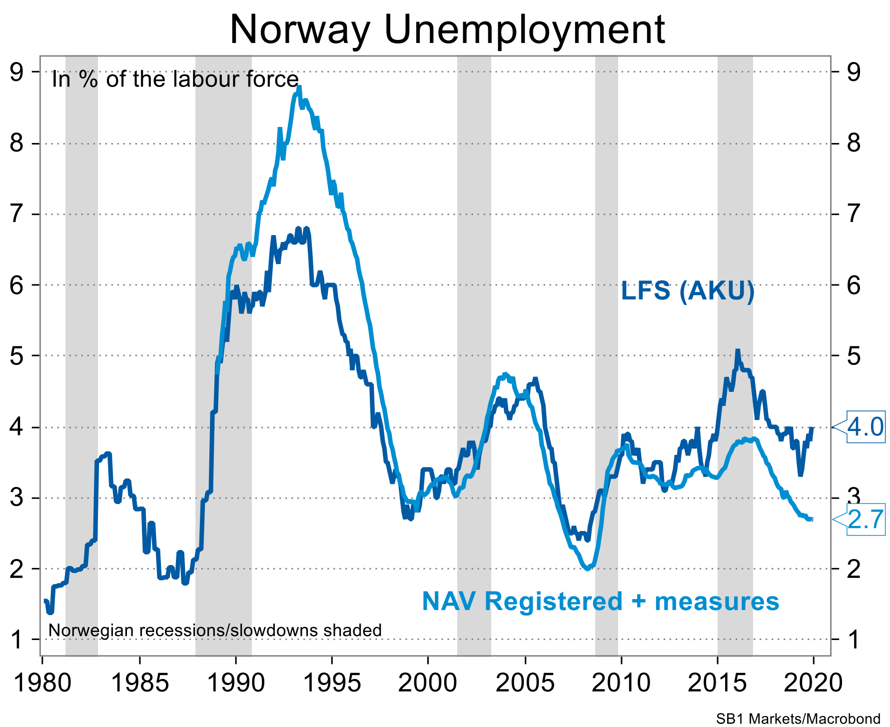
The world around us

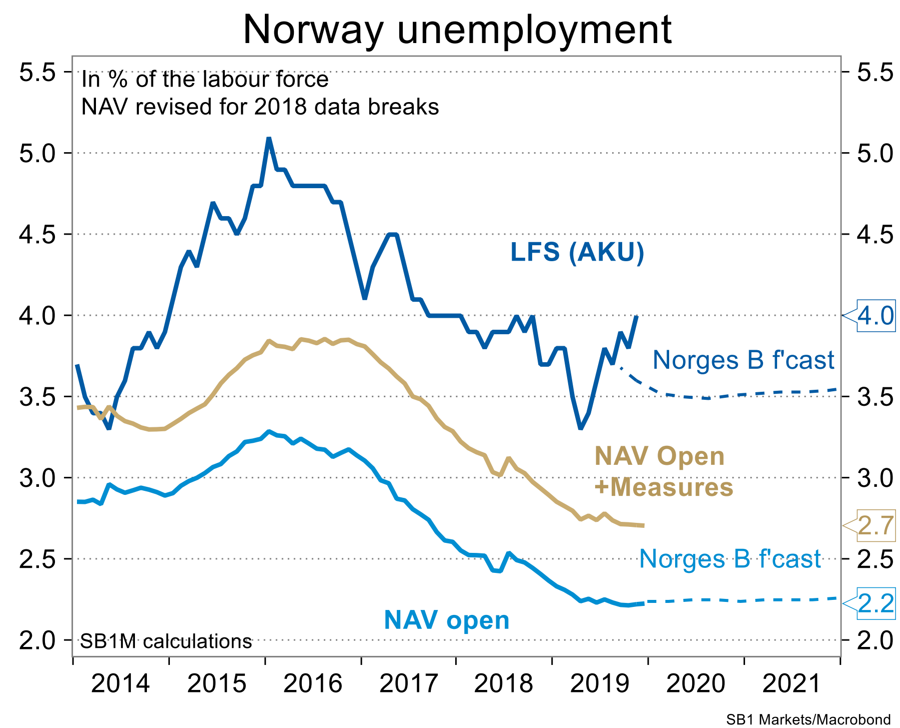
The Norwegian economy

Market charts & comments

LFS unemployment rose to 4% and employment growth is easing

Unemployment has turned up, partly due to higher participation, but employment may be softening

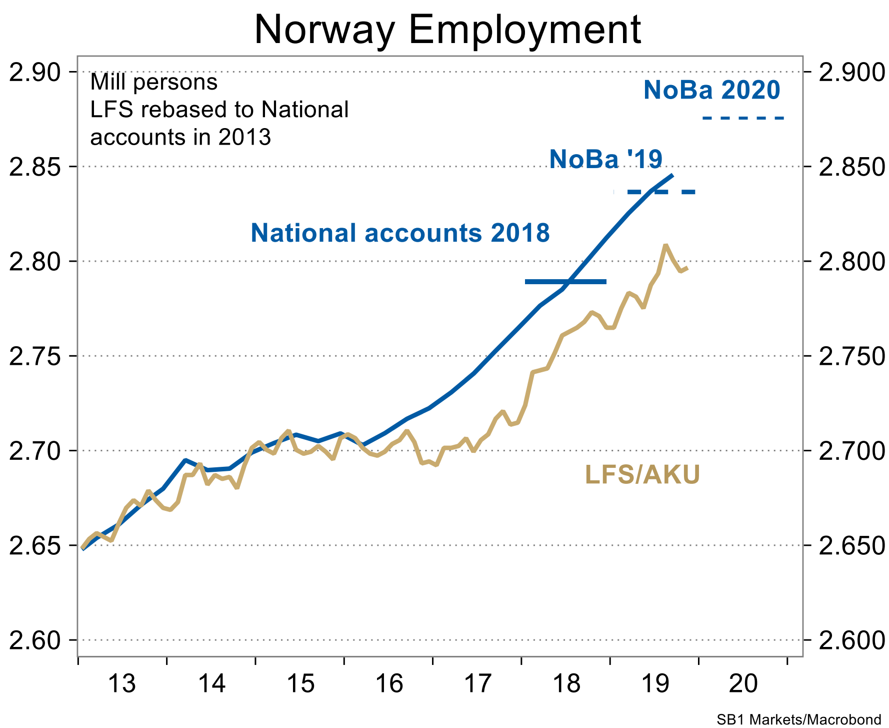


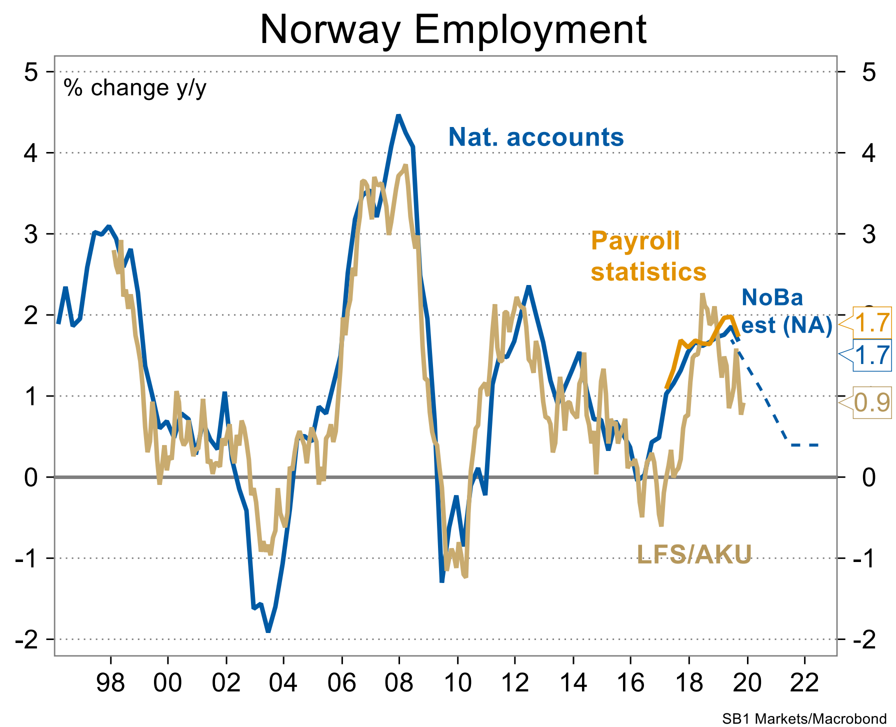


- LFS (AKU) unemployment rose to 4.0% in November (avg Oct-Dec), we and consensus expected an unchanged rate at 3.8%. Unemployment is up 0.3 pp from the last 3 month period (August) and has ticked up from 3.3% in the spring. These data are volatile and we doubt that unemployment is heading speedily up, however, there is little doubt that unemployment has bottomed out
  - » LFS unempl. is already well above NoBa's f'cast from Dec, the bank expected 3.6% in Nov and a further decline to 3.5% the coming months. Too optimistic, now
- Labour market participation is heading up, and faster than employment, bringing unemployment up. The past few months, employment growth has been slowing, the annual rate is just 0.9%. Employment is anyway growing faster than working age population, and the employment rate is trending up
- NAV unemployment has flattened out, confirming a cooling labour market. LFS data are often leading but are more volatile, we prefer NAV

Employment down since August, growth is slowing modestly

LFS empl. is up 0.9% y/y, 0.8 pp below the Q3 National Accounts and 0.6 pp below NoBa's f'cast

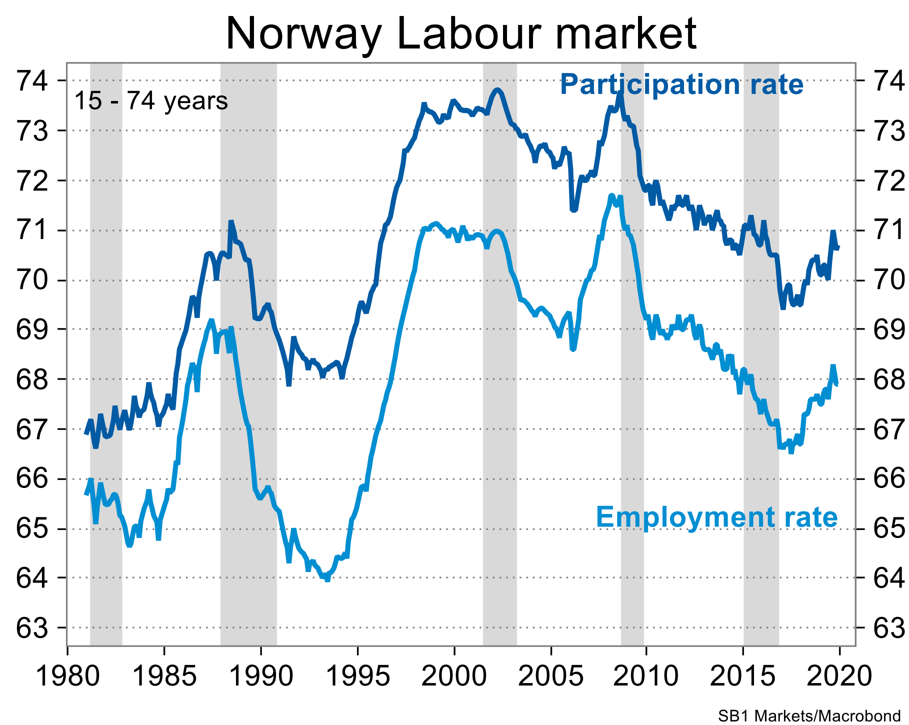


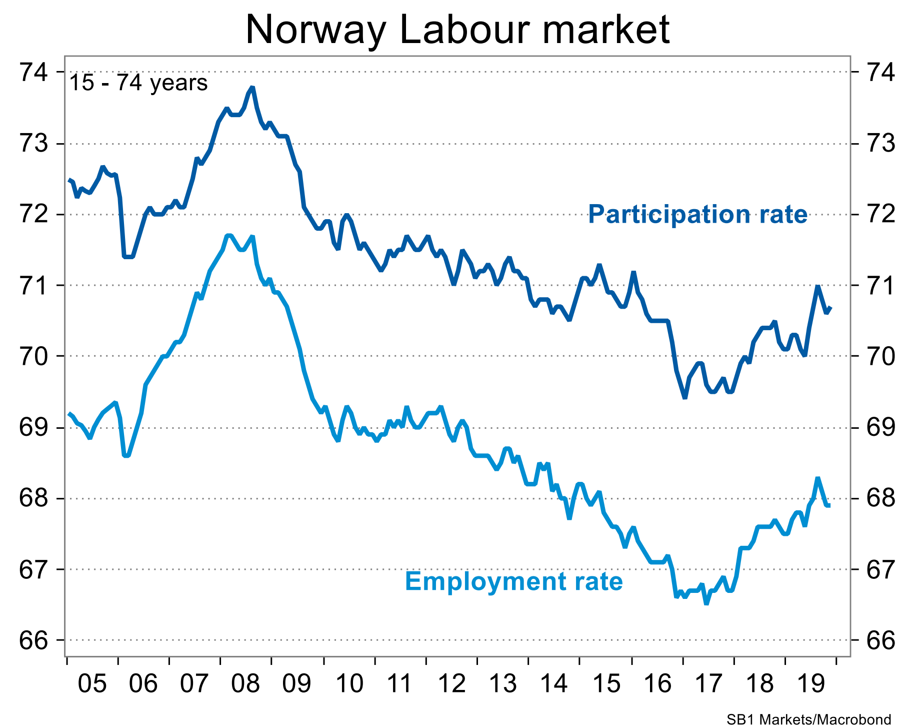


- Employment measured by the LFS accelerated through 2017 and H1 2018, to above 2%. Through 2019, employment growth slowed modestly, the annual rate down to 0.9% in November, from 1.5% at the beginning of the year
  - » National accounts' employment figures (and the new quarterly registry statistics) are more accurate than the LFS survey's volatile data. Nat. Acc. is noting higher employment growth, at 1.7% y/y in Q3. Payroll statistics (also Q3) confirms 1.7% growth
  - » The working age population rose 0.5% y/y in Q3. Thus, a 1.7% (or 0.9%) employment growth is above trend, lifting the employment rate
- We expect a substantial slowdown in employment the coming years, both due to supply side and demand side factors

Labour market participation & employment down, trends are still up

The uptick in participation since 2017 may reflect that there is still some excess capacity

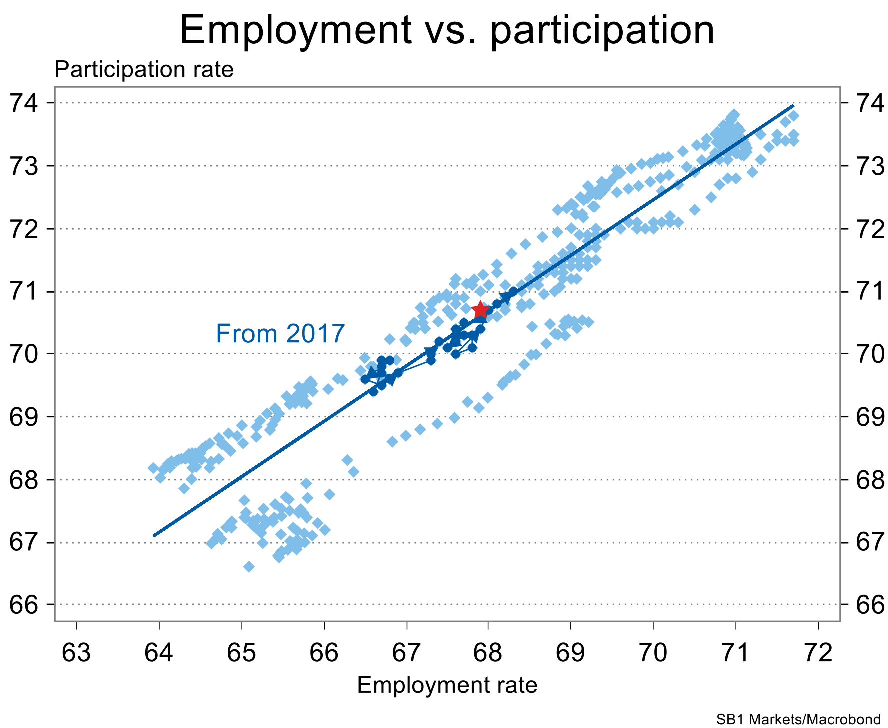


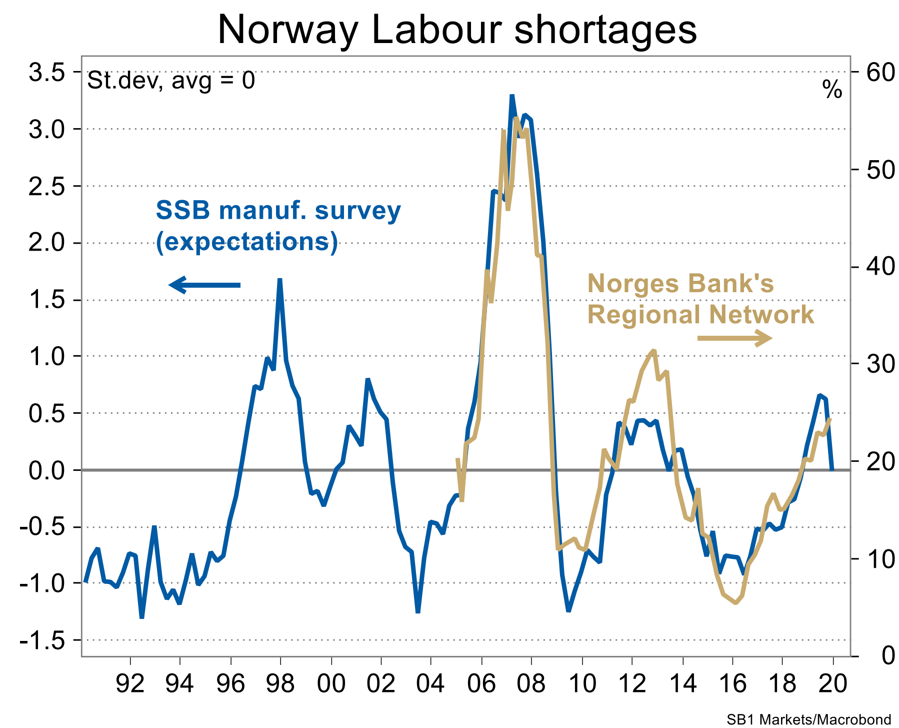


- The long term downturn in the participation and employment rates bottomed in 2017 and have turned up since then. Through most of 2019, the participation rate climbed speedily, up 0.9 pp in May-Aug, suggesting labour supply was responding to strong demand. The past few months, participation has retreated
  - » Demand for labour has been strong for a while, we are unsure why supply would suddenly respond now
- The employment rate is trending up too, but turned down along with participation since August. As long as employment is rising at a moderate pace, we are not worried about any rapid labour market weakness

Participation rate is at a 'normal' level given the current employment rate

Businesses are not reporting high capacity constraints (on labour), and manufacturers expect a drop

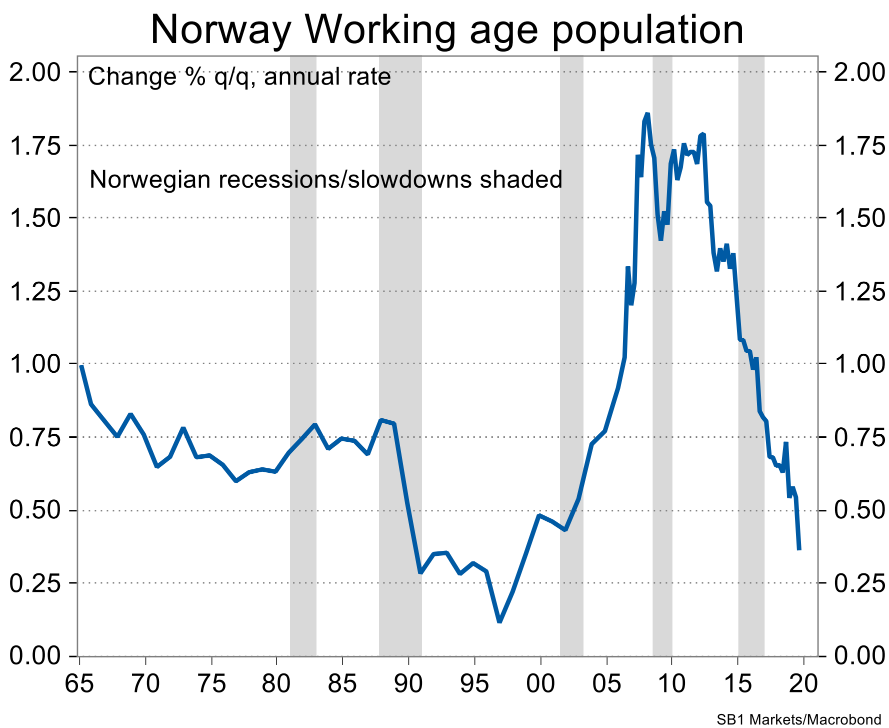


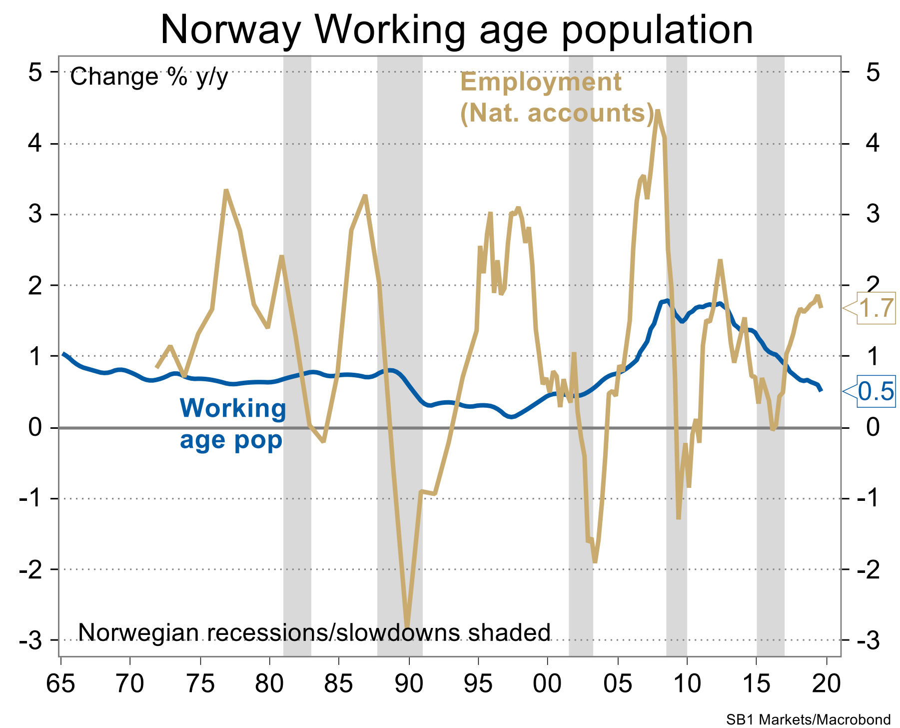


- The Norwegian unemployment rate is quite stable compared to changes in the employment rate – because the participation rate usually is quite responsive to the chances of getting a job; the employment rate. Flexible labour immigration from the EU has also contributed to keep the Norwegian unemployment rate stable
  - » In average since 1980, the labour force participation changes almost 0.9 x the change in the employment rate. Recent years, the response has been somewhat less, say 0.75. However, in 2019, the participation rate followed employment up
- Norges Bank's Network reported rising labour shortages in Q4, however, the level is low and does not signal a very tight labour market. The SSB Q4 manufacturing survey note a steep drop in labour shortages, back to a normal level

Working age population growth the slowest in 2 decades

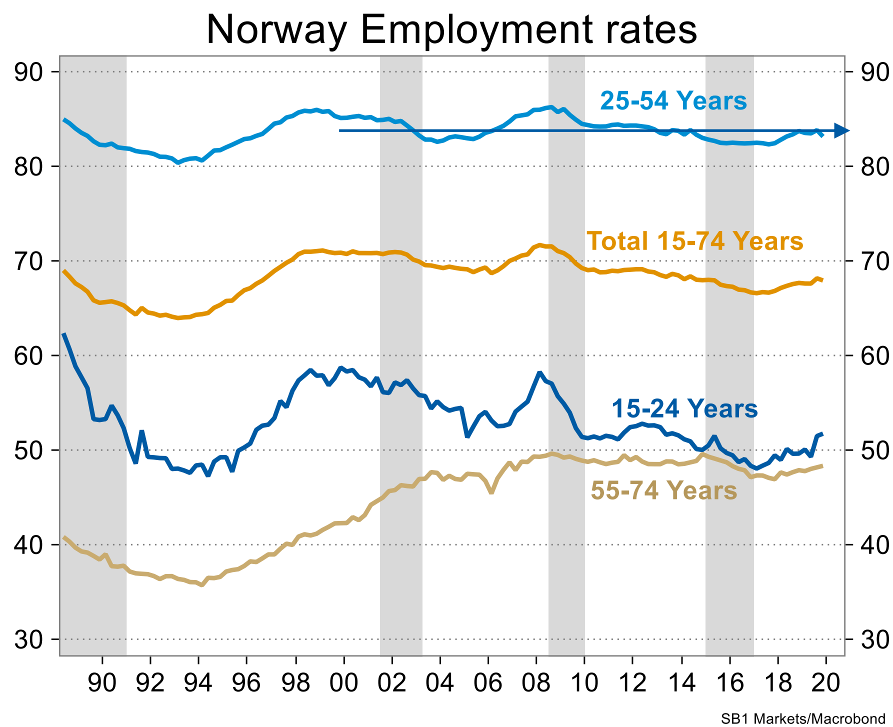
Over time, impossible to keep employment up at today's level

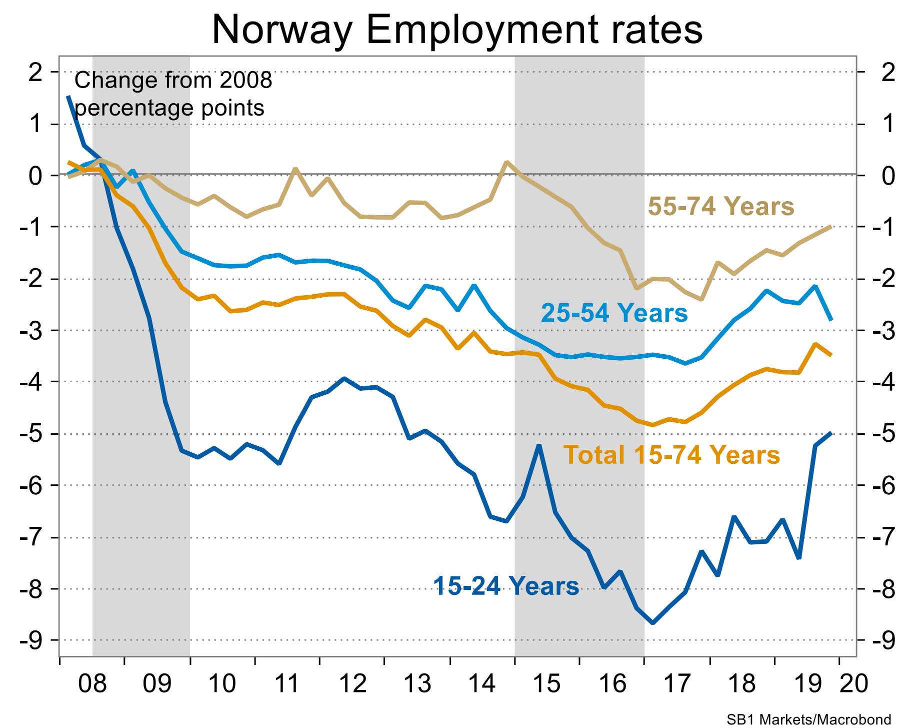




Employment rates trending up among most ages – but 'core' group is stalling

Employment rates among the youngest group have been soaring, due to higher participation



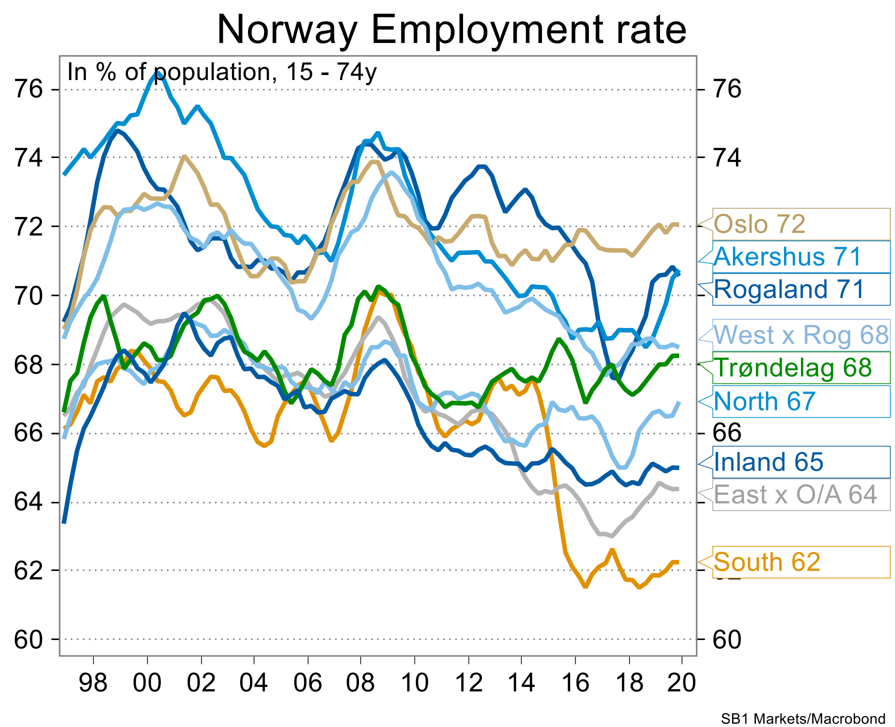


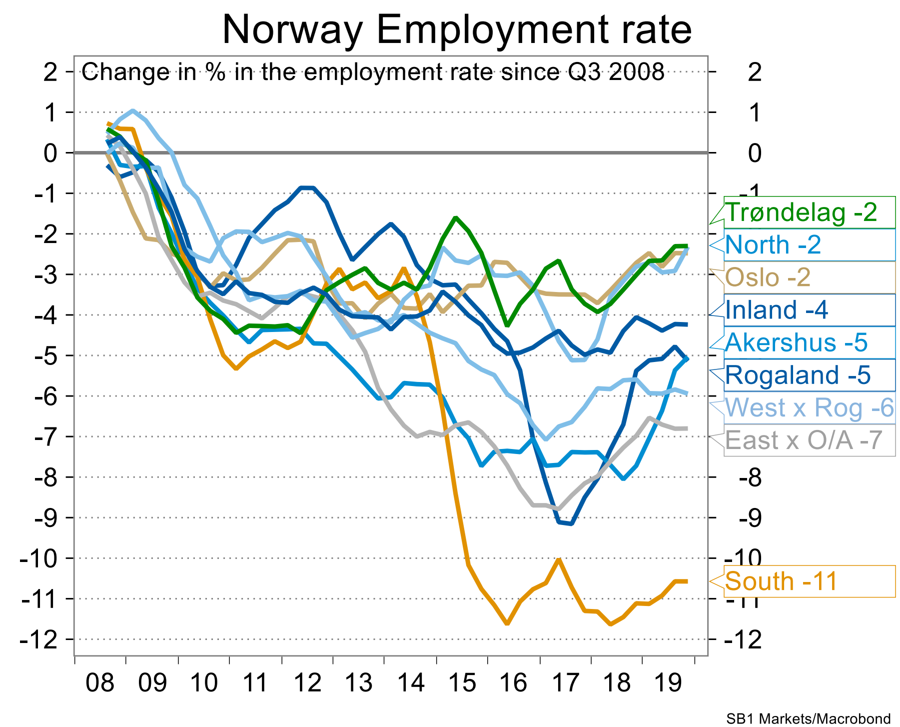
- Employment in the core 25 – 54y group turned up in 2017 and 2018, after sliding down since 2008. In 2019, employment flattened out and it fell in Q4, bringing total employment down
- Employment in the 55y + group is slowly rising, following the decline during the 2015/16 slowdown
- Employment in the 'young' sub group, 15-24 years increased rapidly in Q3 and kept up in Q4, to the highest level since 2013. The upturn is due to higher labour market participation, we doubt this upsurge will extend
- (Quarterly data at the charts above)

SpareBank 1 MARKETS

Employment rates still rising in most regions, stagnating in East, West x Roga.

Employment rates are flattening out in Oslo, East x Akershus, Inland and West x Rogaland

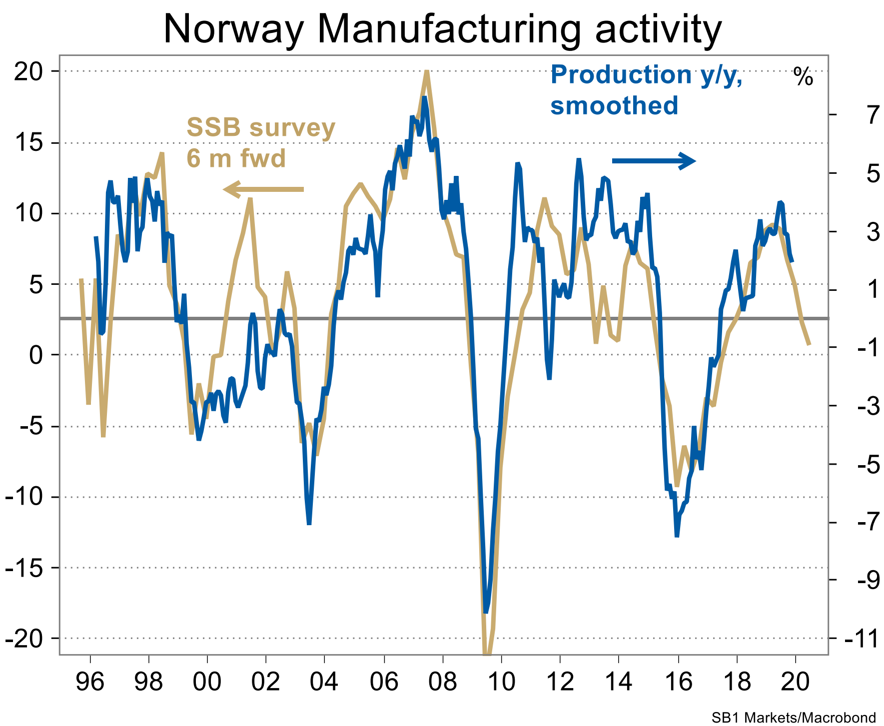


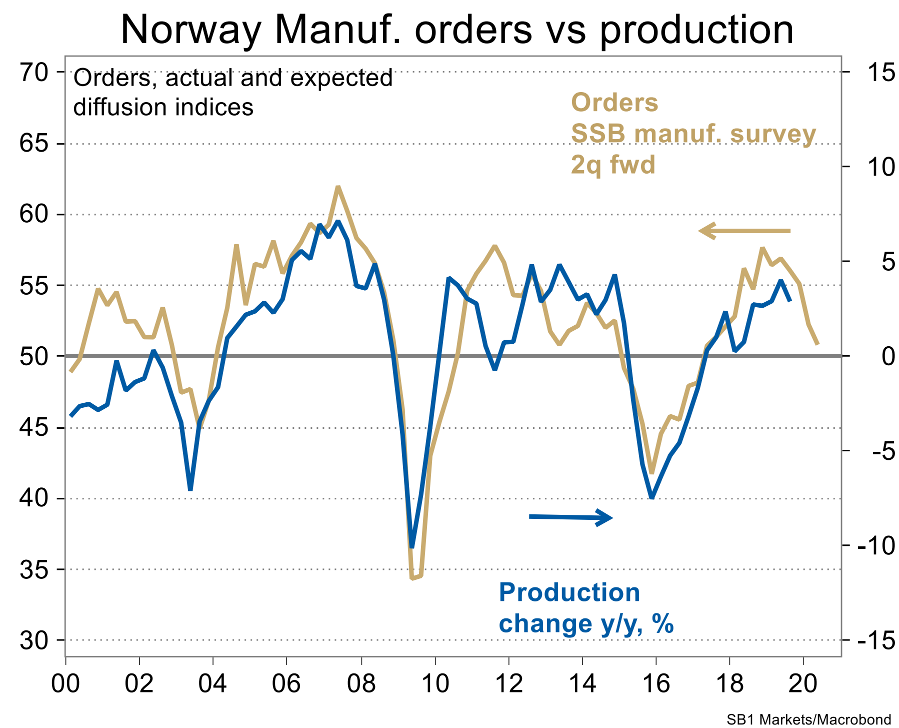


- Employment rates are still below the pre-2008 peak level in all regions and Southern regions have struggled the most, still 11% below the 2008 peak. Oslo, Trøndeland and North (!) are 'just' 2% below the peak level
  - » The LFS might have exaggerated the prior declines in the employment rates (nationally and in regions) but there was no doubt a disturbingly weak development in some parts of the labour market from 2015-2017
- Akershus, North, Trøndelag, Rogaland and South (marginally) are heading up, most others have flattened out this year
- *Disclaimer: The quarterly data are very volatile, data are smoothed in the charts above*

SSB's manufacturing confidence drops, suggesting declining production

Businesses are reporting sagging orders and employment plans are nudged down substantially

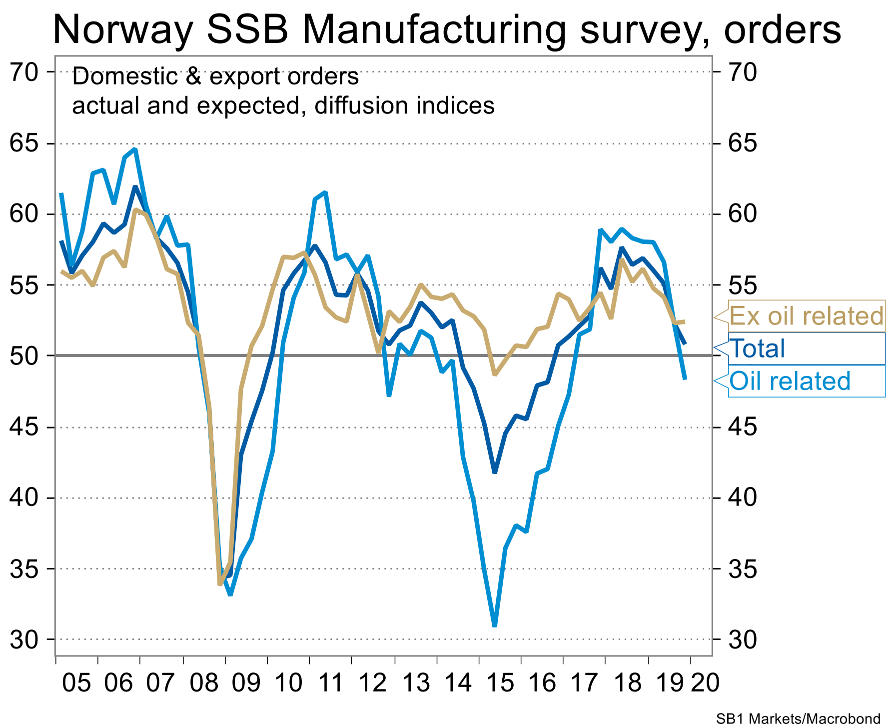


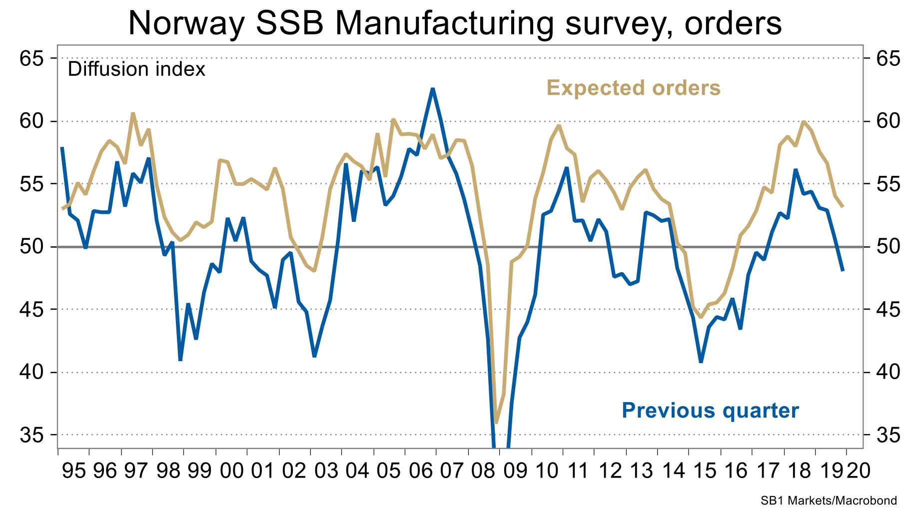


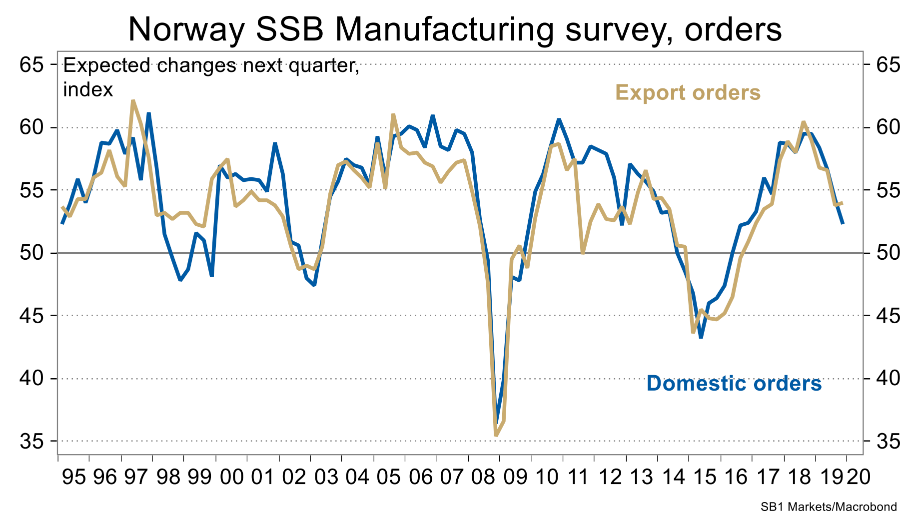
- The composite index in SSB's industrial survey (manuf. index) fell to 0.7 p in Q4, from 2.5 in Q3. The decline was close to our expectations (of 0.5 p) but appears to be weaker than the broader consensus
  - » An index at 0.7 signals close to a 1% decline in production – but with a wide margin of error
  - » Manufacturing businesses are expecting dropping orders in oil related sectors, whereas non-oil related are still expanding modestly. The slowdown is rather broad sector wise, in line with what the manufacturing investment survey noted
- SSB's industrial confidence survey is somewhat more downbeat than other business surveys, however, all surveys (x the PMI) are suggesting that growth is set to slow the coming months/quarters, the growth peak is no doubt behind us

Manufacturing order inflows are softening sharply and broadly

In Q4, businesses reported declining oil related orders. Steady, modest growth in other sectors



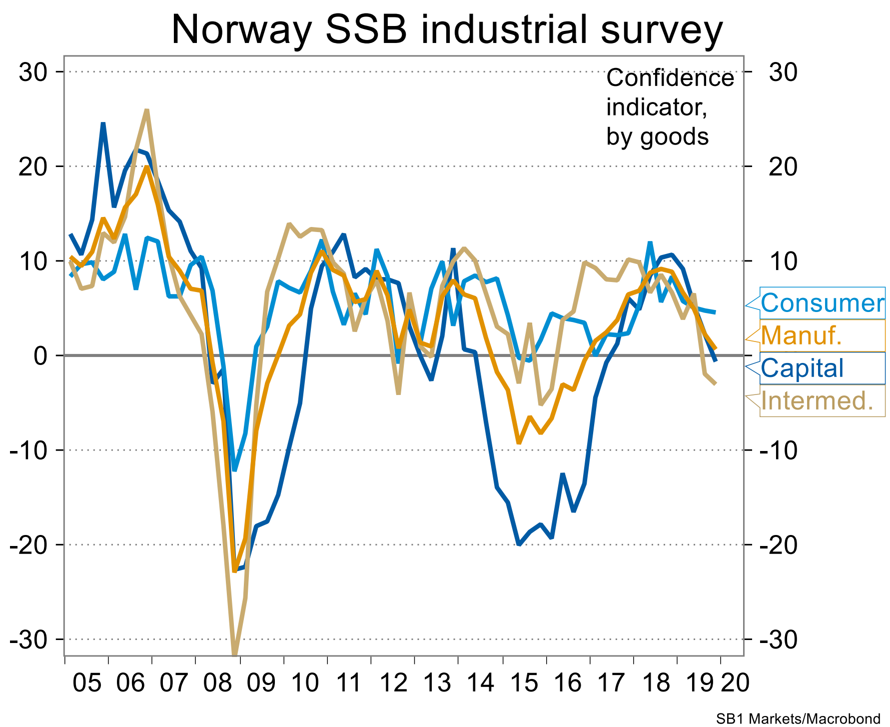


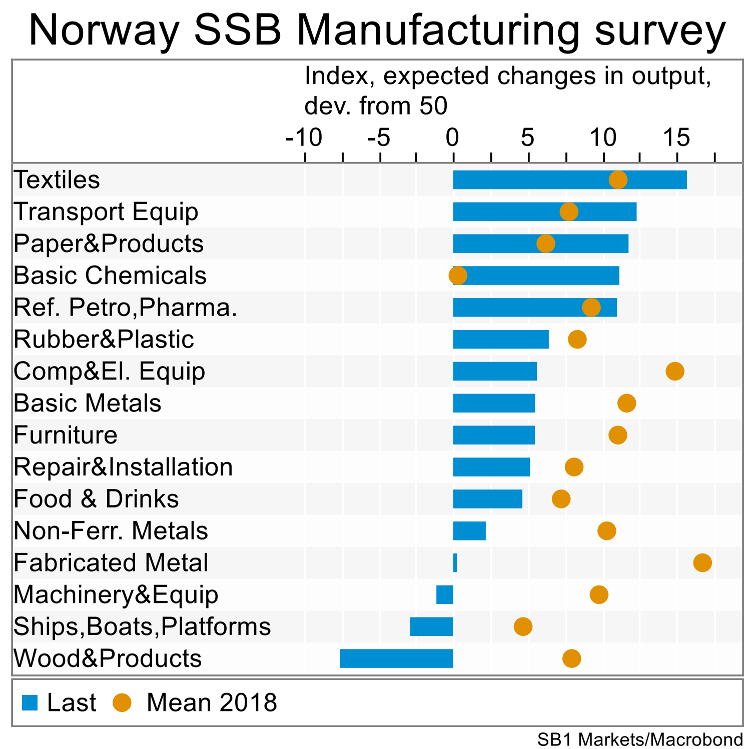


- Businesses reported a decline in total manufacturing orders in Q4. Expectations on the coming quarter still in growth territory (this index is usually more upbeat), but at a substantially slower pace than in most of ‘17-’19
- Both domestic and foreign demand is waning

A broad downturn; 11 of 16 sectors are expecting slower production growth

Just 3 sectors are expecting declining output, of which a large part is oil related

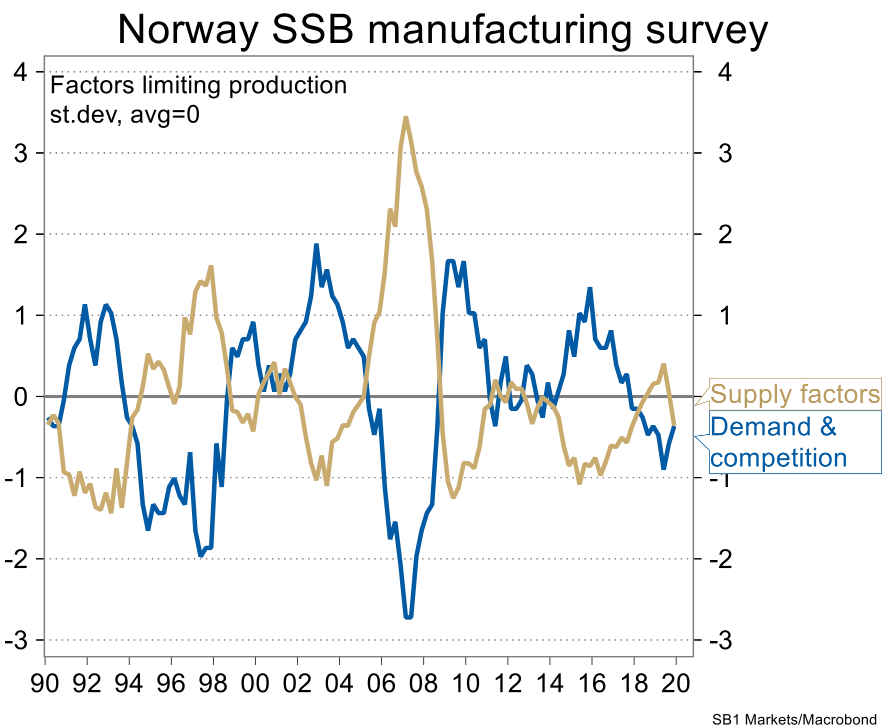


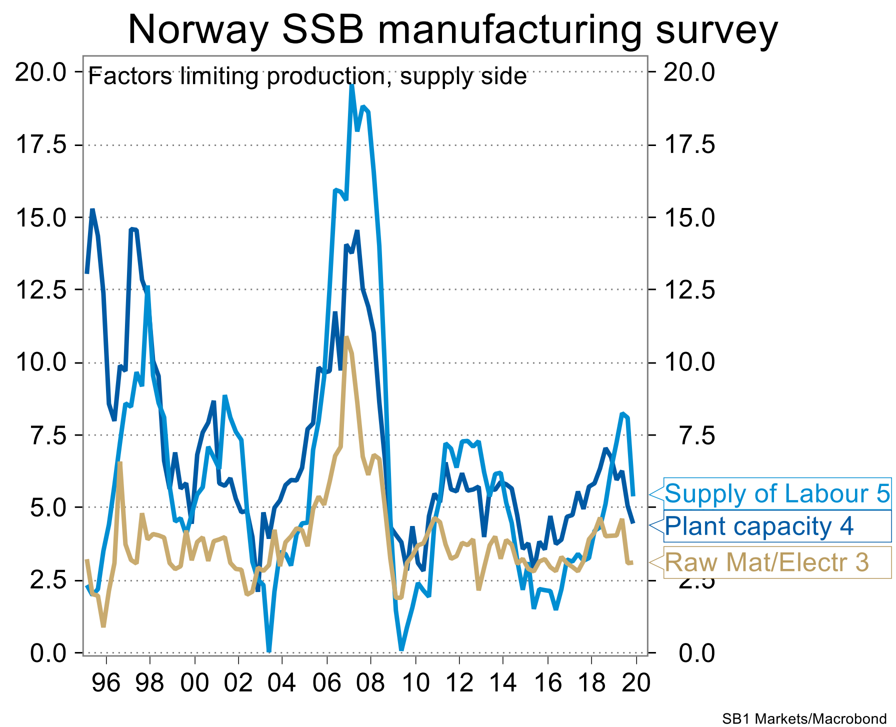


- Consumer goods are holding up better than the other sectors
- In Q4, expectations on production the next quarter weakened in 7 sectors and improved in 8 sectors vs Q3 (and 1 unch)

Manufacturers report less tight labour market – and softer demand

The share of businesses reporting labour shortages dropped in Q4

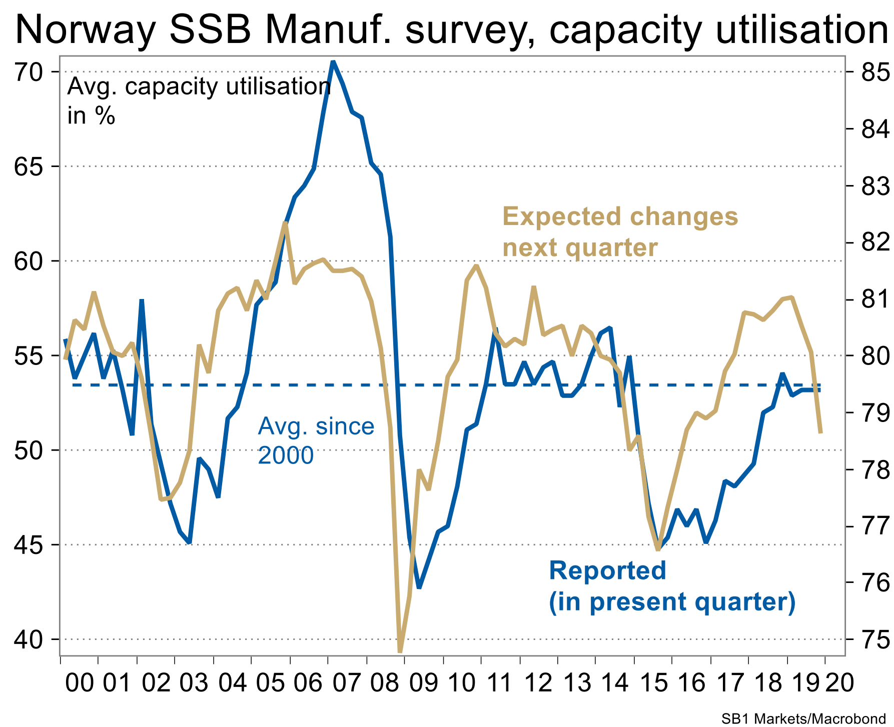


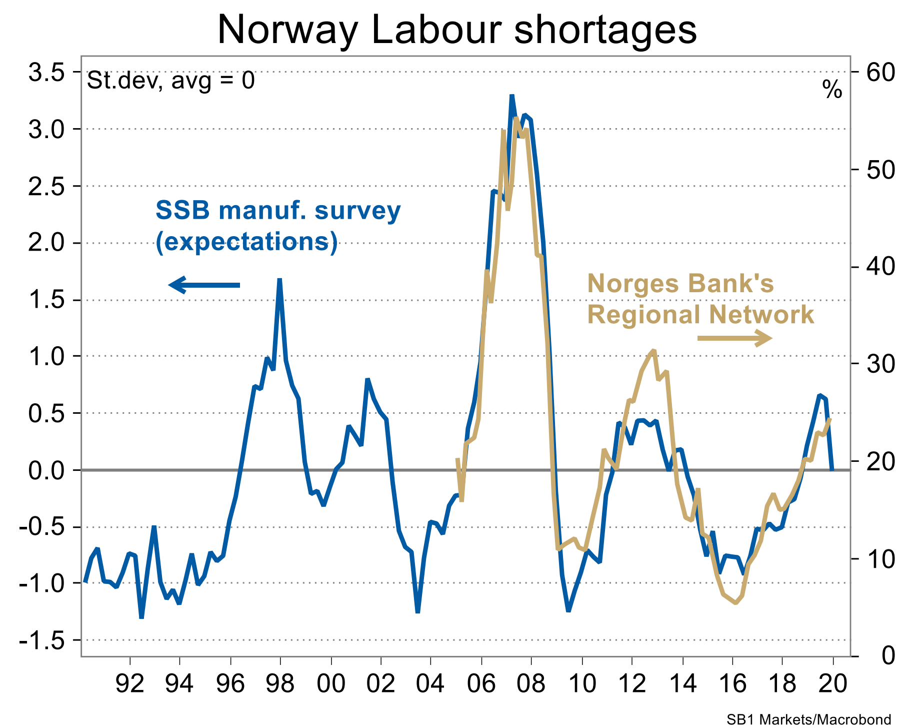


- The share of companies reporting lack of labour slipped from 8% in Q3 to 5% in Q4. The level is just below avg (at 6%), suggesting that labour markets in manufacturing are not particularly tight (nor have they been, in this cycle)
- Plant capacity constraints are falling too, to well below an average level
- Raw materials are not any problem
- More (but still fewer than normal) companies reported lack of demand/too much competition as a constraint in Q4

Reported capacity utilisation flat but expectations are tumbling

Expected capacity utilisation peaked in Q1 ‘19, reported capacity utilisation has flattened

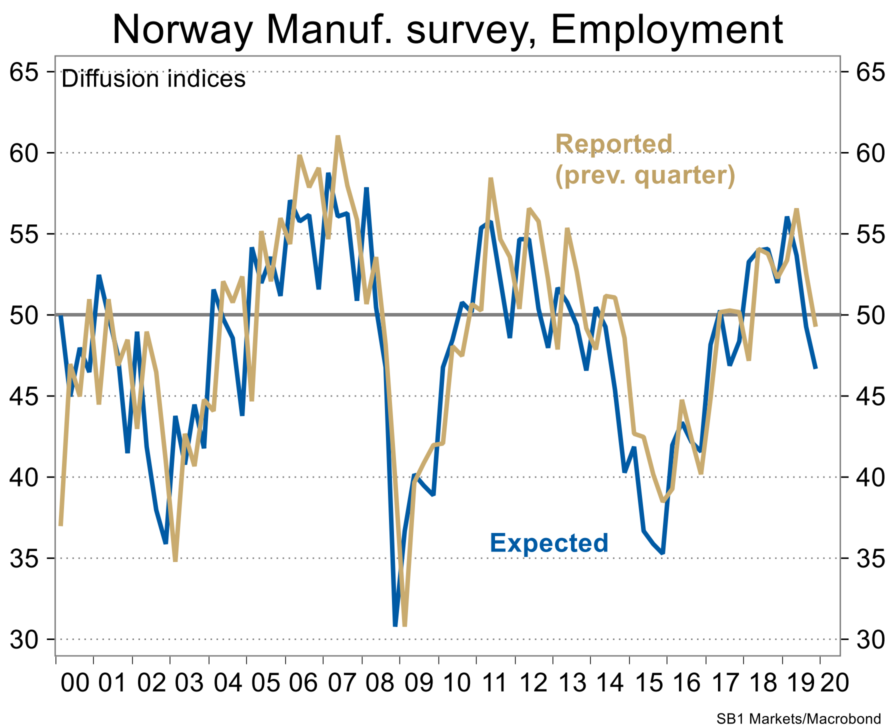


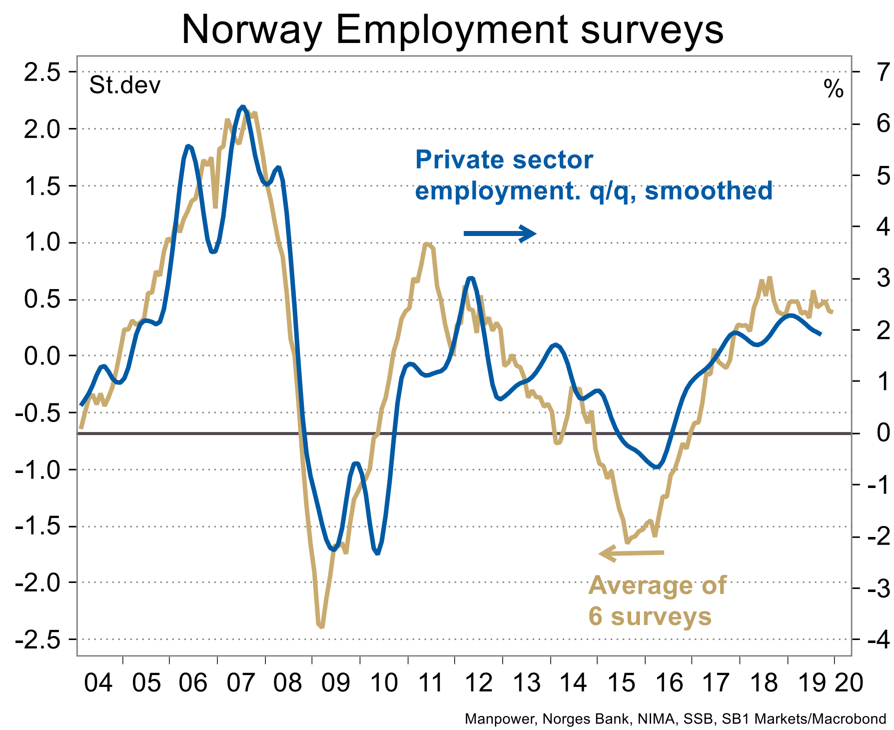


- Norges Bank’s Regional Network reported higher labour shortages in Q4 – at a much lower level than during previous peaks. SSB reported a tighter labour market than Regional Network until the index dropped in Q4

Manufacturers are reporting stalling employment, expect a decline in Q1

Still, the avg of employment surveys points to steady employment growth at just above 2%

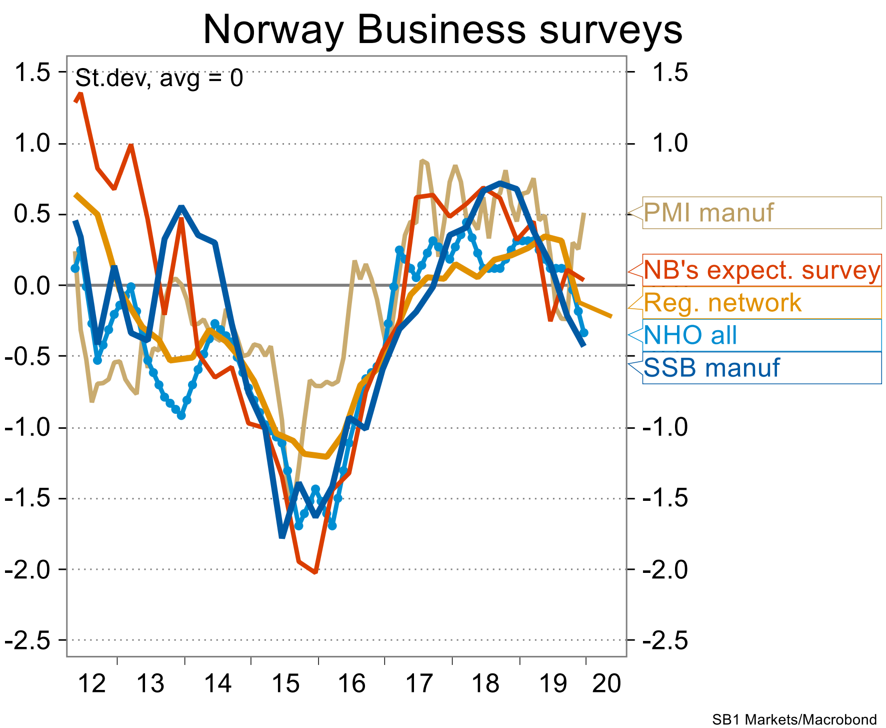


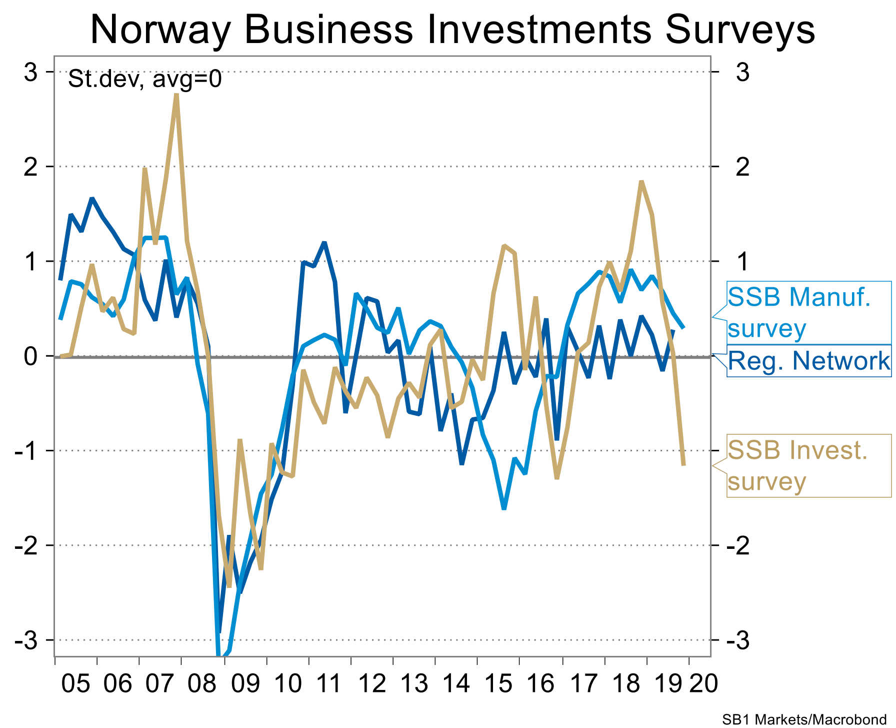


- Manufacturing businesses reported a steep slowdown in both previous and expected employment. The expected employment index at 46.7 is the lowest in 3 years
- Other employment surveys are in sum more upbeat than SSB's manufacturing survey

All business surveys barring the PMI report that growth has peaked

SSB is the most downbeat but the avg of 7 business surveys has fallen to an average level

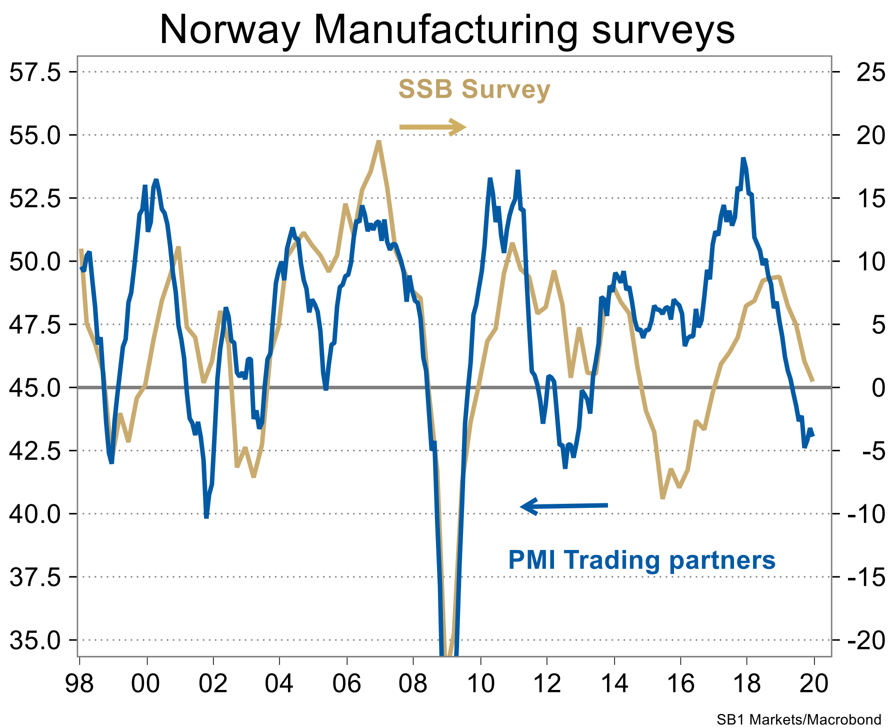


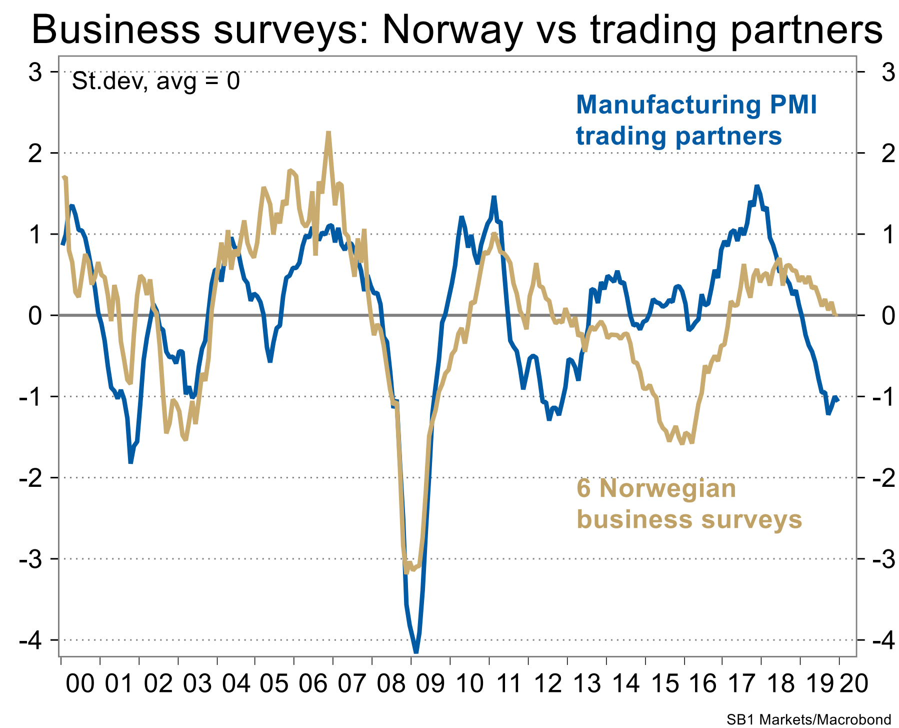


- The Q4 Regional Network confirmed the slowdown which several other surveys had noted
- In the Q4 investment survey, manufacturers reported a steep decline in investments, following a surge in 2019
- The PMI is reporting an acceleration in manufacturing activity. However, we find this survey to be much less reliable than SSB's survey and the Network

Norway is following its trading partners down, as usual

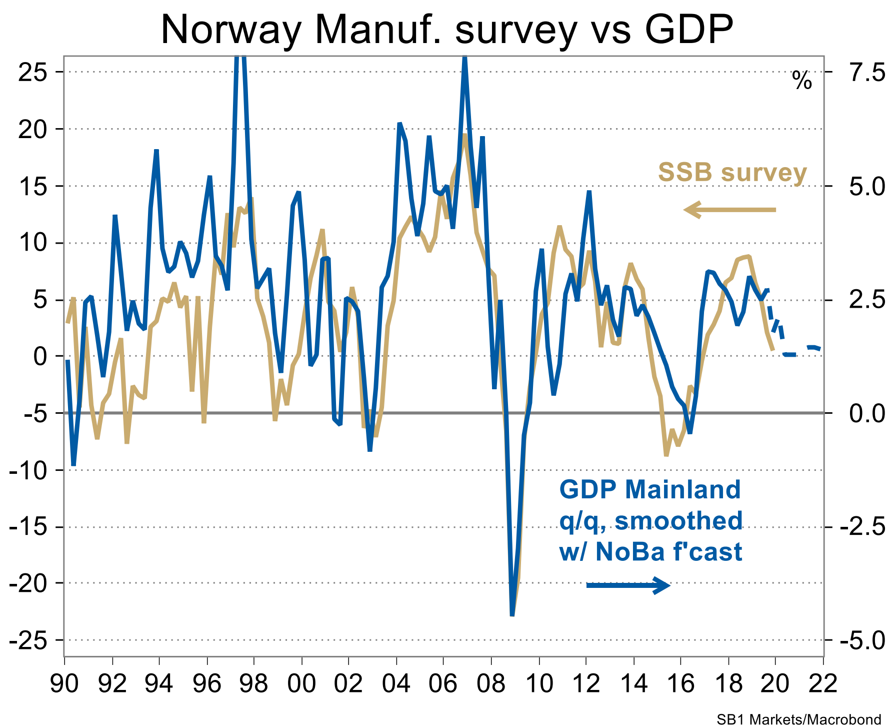
Both SSB's survey and the mean of several surveys are heading down

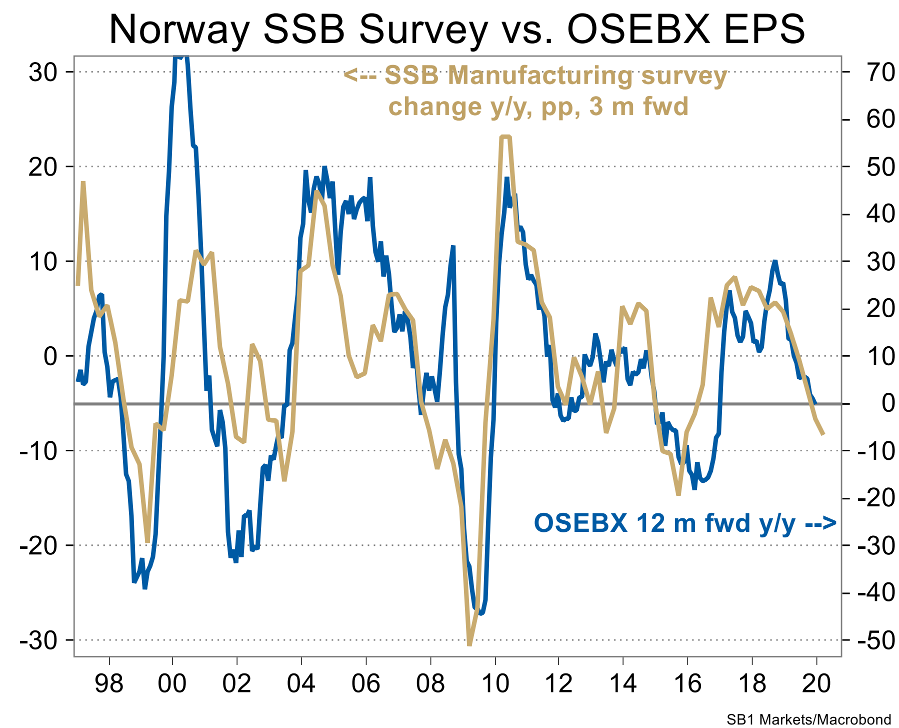




Just above 1% GDP growth and declining OSEBX earnings?

SSB manufacturing survey signals a swift slowdown, and NoBa's f'casts are not much more upbeat

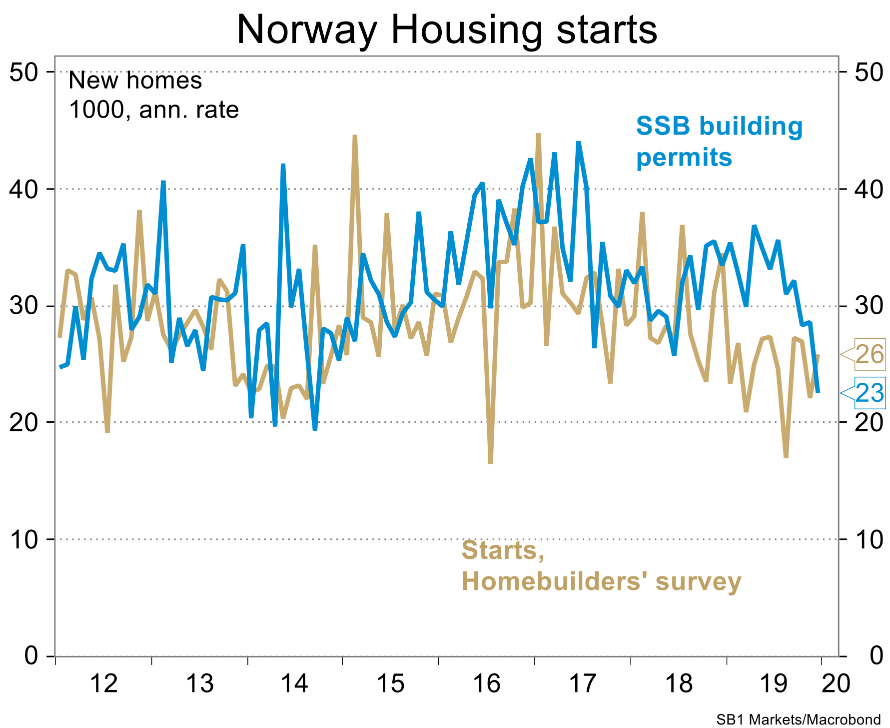


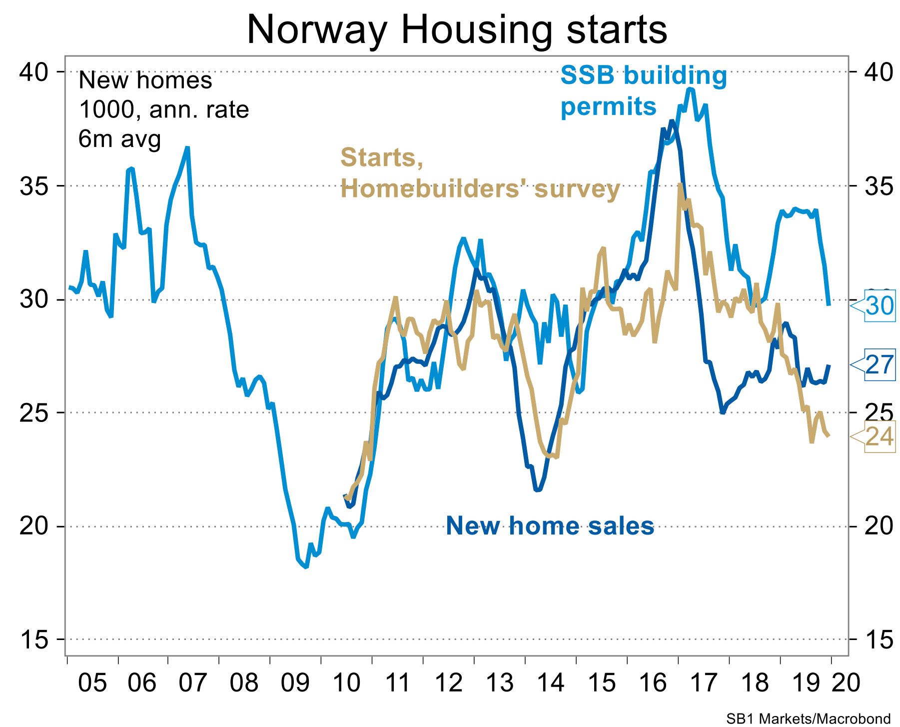


- Whereas SSB's survey points to a slowdown to just above 1% Mainland GDP growth in Q1, Norges Bank f'casts a drop to 1.3% growth by Q2 (implied), thus, none of them may be that far off

SSB housing starts are sliding rapidly down, lowest since 2014 in December

SSB confirms the downturn which the homebuilders have reported – but sales have stabilized

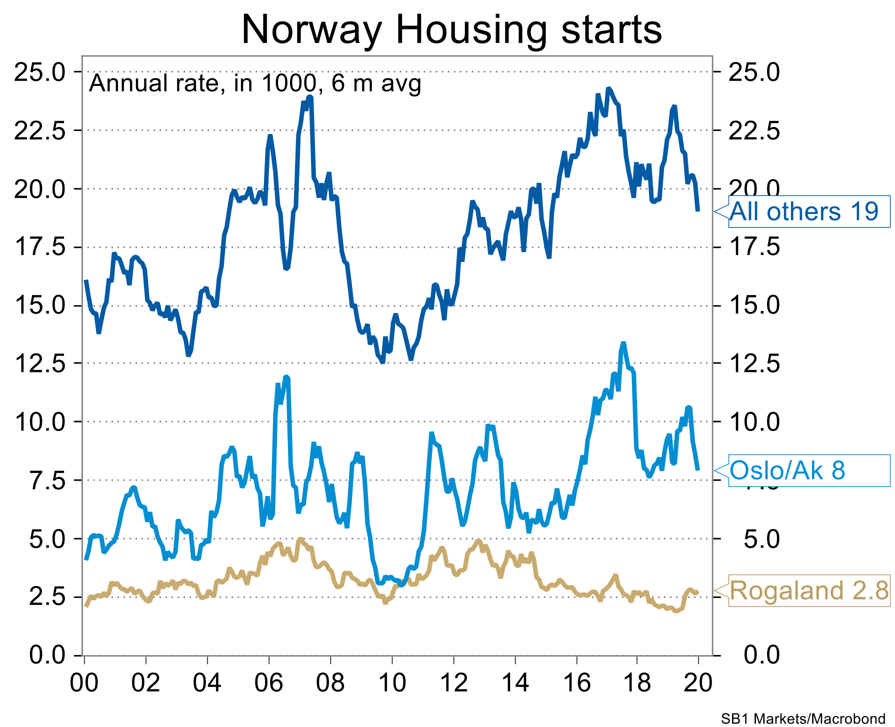


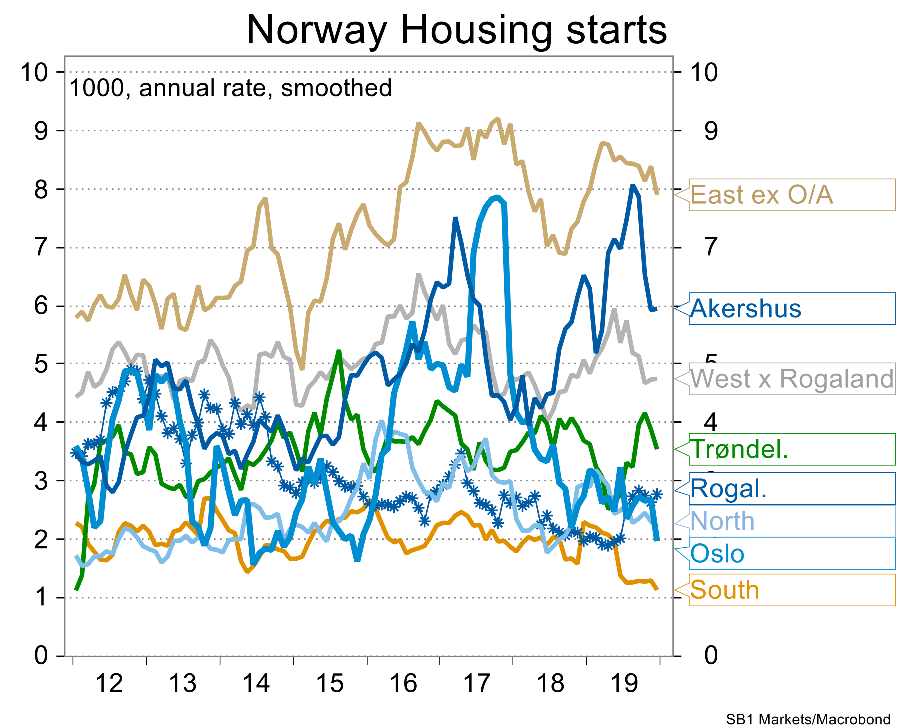


- SSB reported housing starts (building permits) dropped to 23' annually in December, the lowest since 2014. The 6m average fell 30', down from 34' in Sept, and back to the 2018 local trough
- The Homebuilders have been reporting declining starts since early 2017. Soaring building of student housing in early 2019, which is only included in the SSB figures, partly explains the gap to SSB's starts. Recent months, the Homebuilders have reported a stabilization in starts. New home sales have flattened out the past 6 months and spiked in Dec, do not signal additional decline of starts
- Slowing housing starts indicate a muted housing investments. However, starts are not low; the level is still above the average since 2000, and close to the per capita average – with low population growth and real income growth much below what we have been used too

Starts have turned down almost everywhere, just Rogaland a tad up

The most rapid decline has taken place in Akershus the past months, and in Oslo the past 2 years



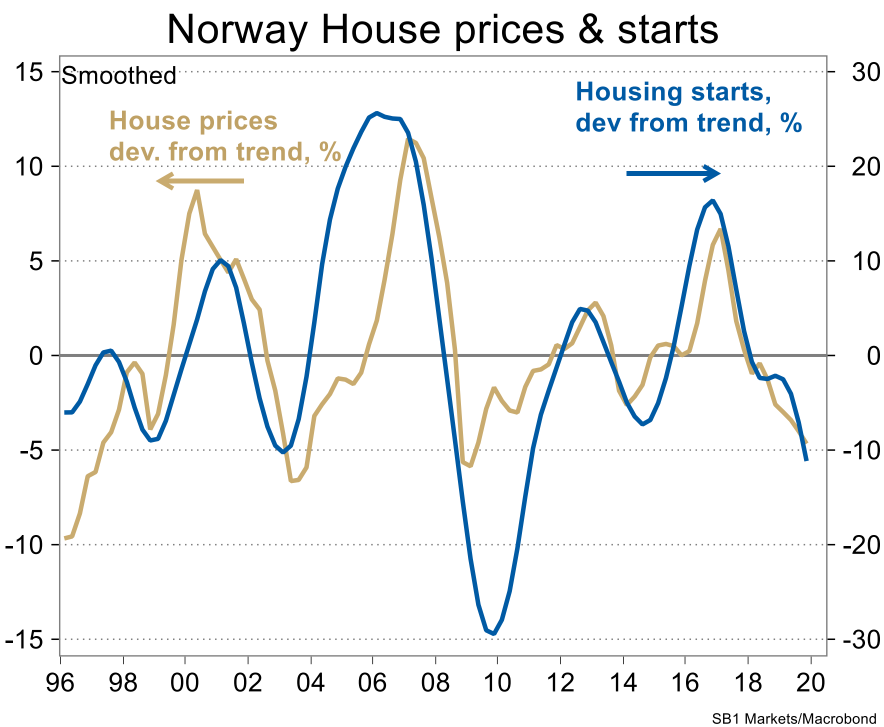


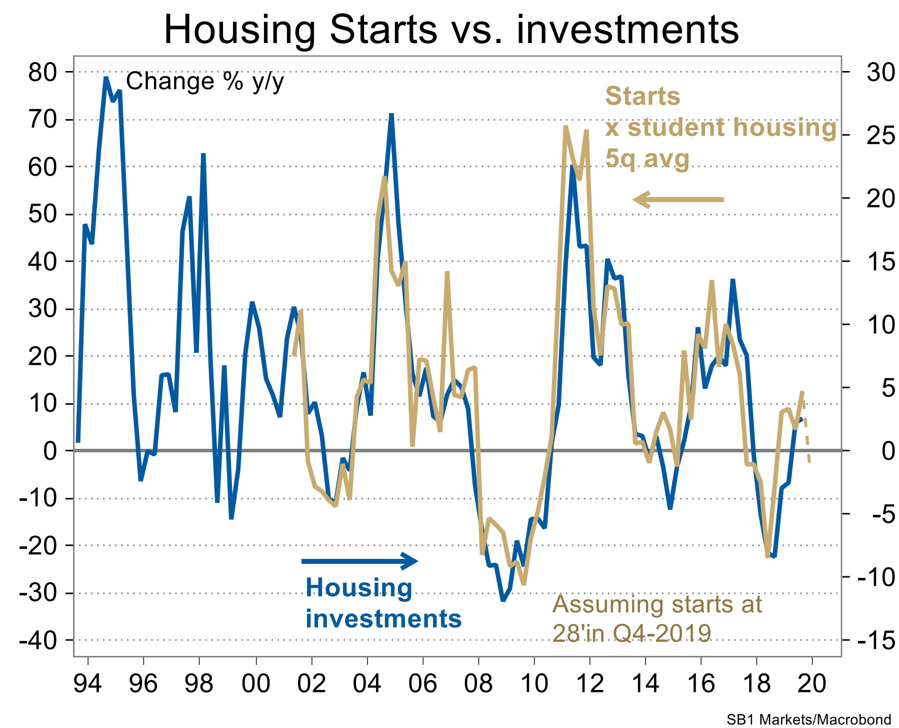
- Housing starts x Oslo and Akershus have fallen to below the 2018 trough, back to the 2015 level. The level is still somewhat higher than the 20 year average, of 18’. All ex Rogaland have turned down the past year, just Trøndelag still trending up (and fell in Q4), and Rogaland, from a low level
- In Akershus, starts have plunged since the summer but are still well above the 2018 bottom. The recent decline is partly explained by a spike in starts of student homes in Q1 and a following retreat partly explains the recent zig-zag. In Oslo, starts fell much more than in Akershus in late 2017-2018, the builders are coping with a mild supply overhang

SpareBank 1 MARKETS

Soft house price growth indicates lower starts – and muted investments

However, the downside on starts is not that large, given the normal correlation to house prices

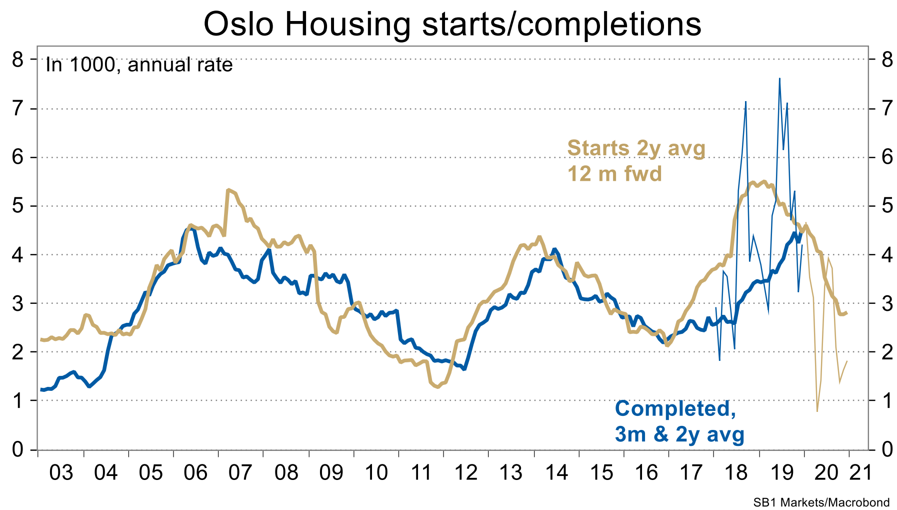


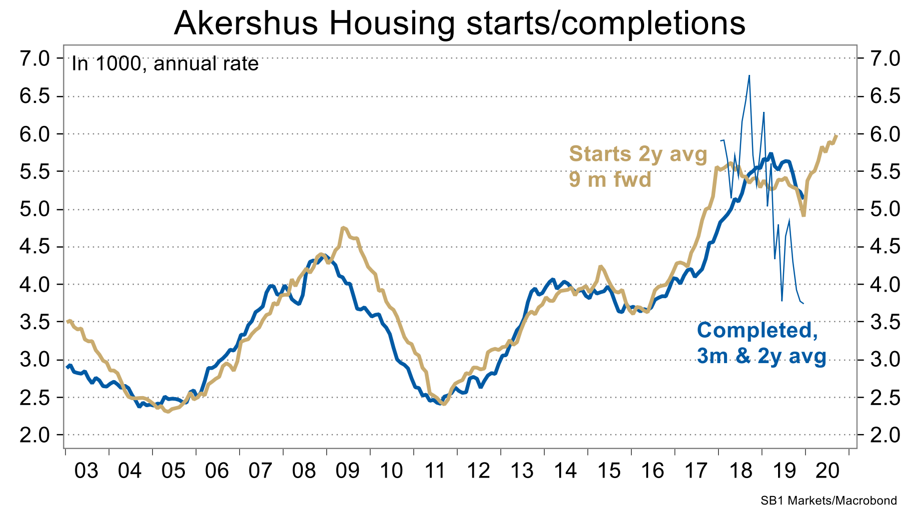


- Housing investments rose by 2.6% y/y in Q3
- In the Dec Monetary Policy Report, Norges Bank nudged down its forecast on 2020 housing investments to 0.5%. Given the level of total starts, this estimate is seems plausible
- At the chart above, we have conducted student housing, which is contributing very modestly to investments. Starts x student homes points to muted growth

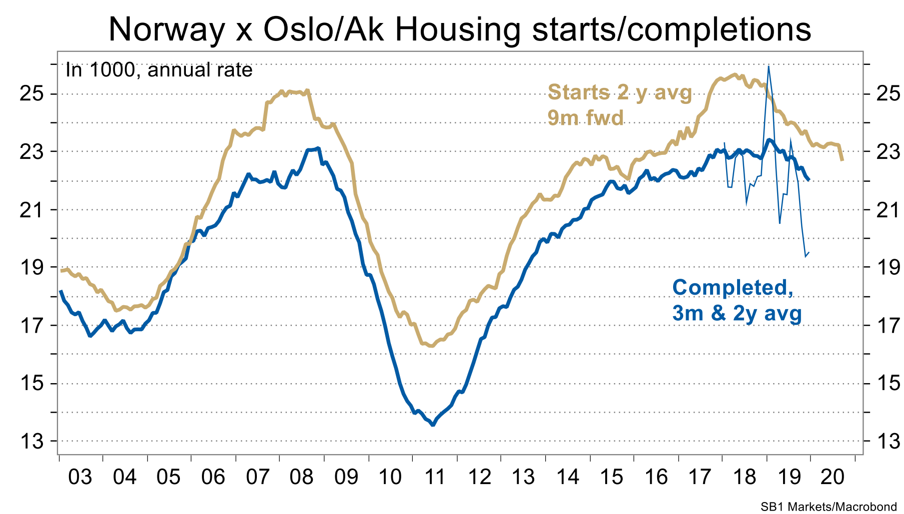
Housing completions at peak but will remain high for some time

Oslo supply is soaring, Akershus has peaked temporary, others more permanently





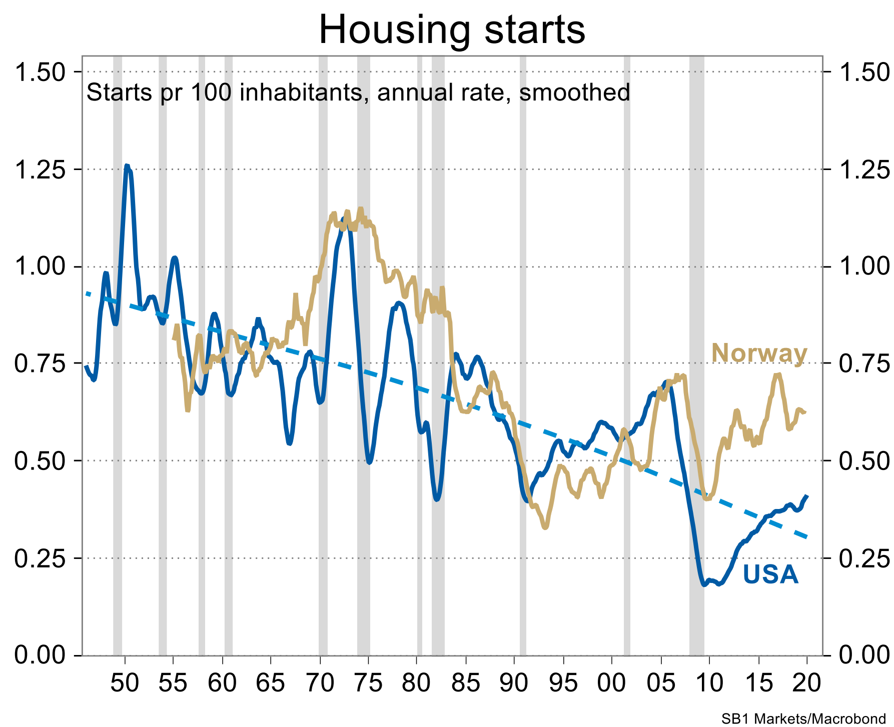
- The number of completed homes in Oslo is rising steeply and it will probably remain higher than 'normal' (the past 10 years) for some months. However, starts have fallen to a rather low level in 2019, implying a low supply of finished homes in 2020/21
- In Akershus, supply upswing is probably behind us, and the recent hike in starts is at least partly explained by student homes
- In the rest of the country, the upside is not large but supply will remain high the coming months
- Usually, some of the permits are not utilised and the supply of new homes is some per cent lower than the number of permits indicate

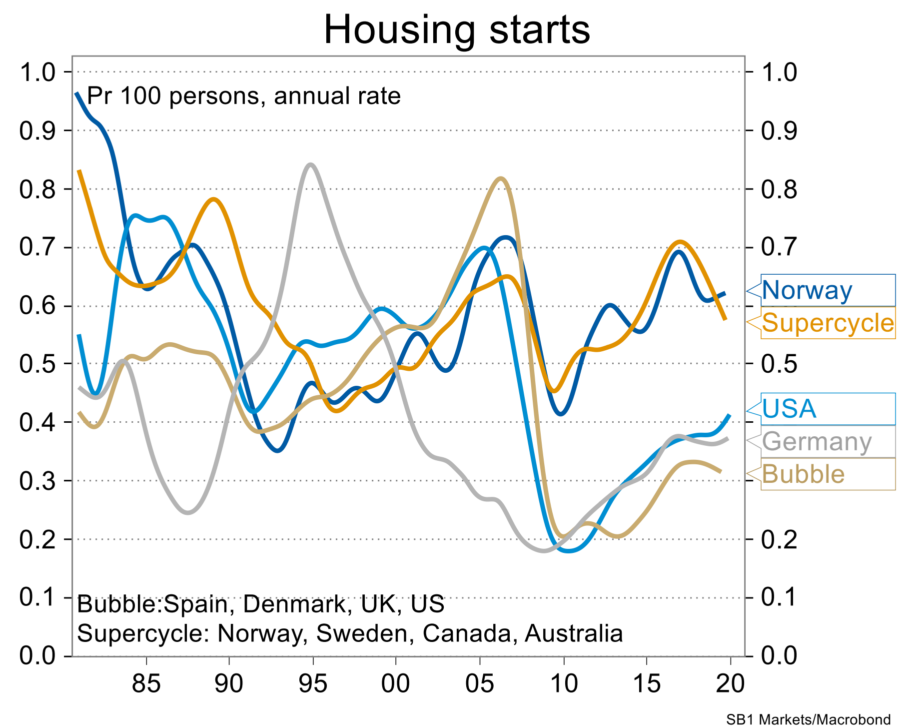


SpareBank 1 MARKETS

Home building is still quite high vs. other countries

Except from the other 'supercycle' countries, in which starts have been 2 x higher than in other DM

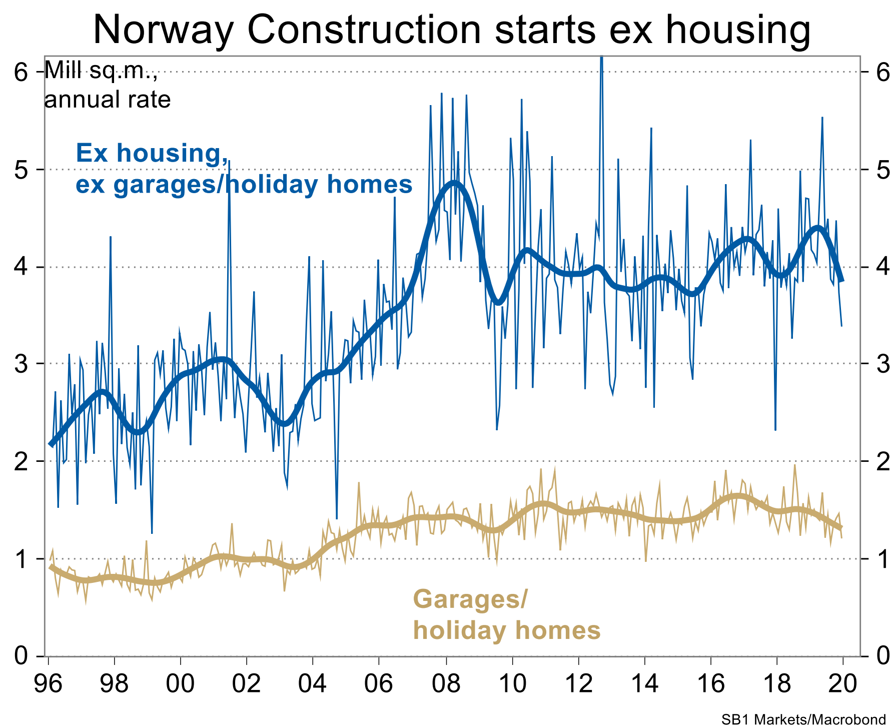


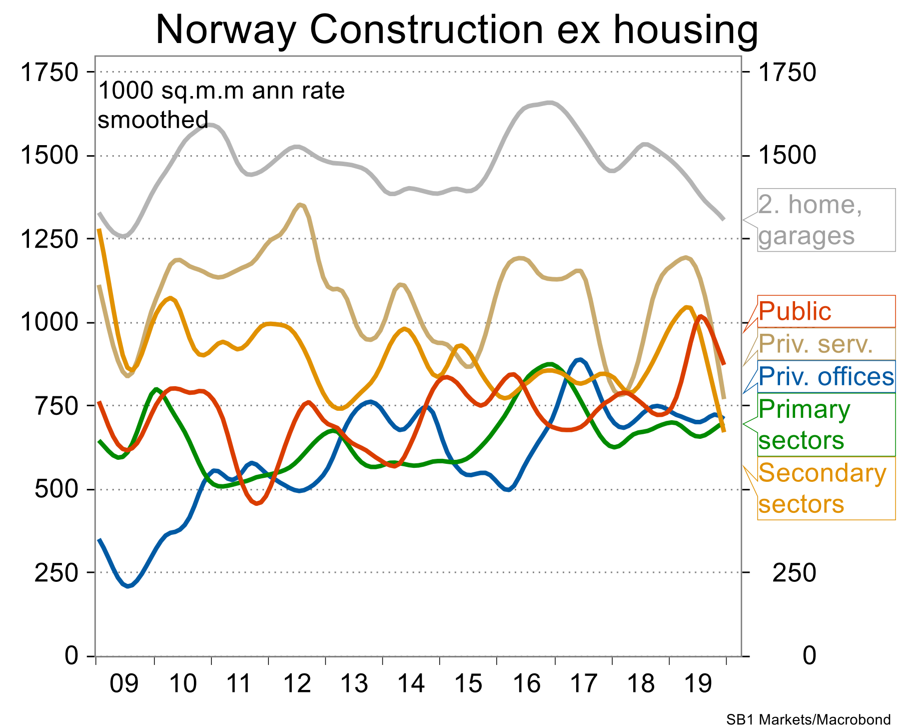


- The cycles among the supercyclicals (Australia, Canada, Norway, Sweden) have been quite closely correlated the past decades. Starts have fallen rapidly in Australia and Sweden, more modestly in Norway and Canada
- House price and debt inflation are higher and rental yields are lower in these supercycle countries than other DMs. Because interest rates were cut to more or less the same level as in countries that actually needed a strong monetary stimulus?

Construction ex. housing is slowing too

Business construction down from peak (highest since 2008). Cabins/2nd home slide down



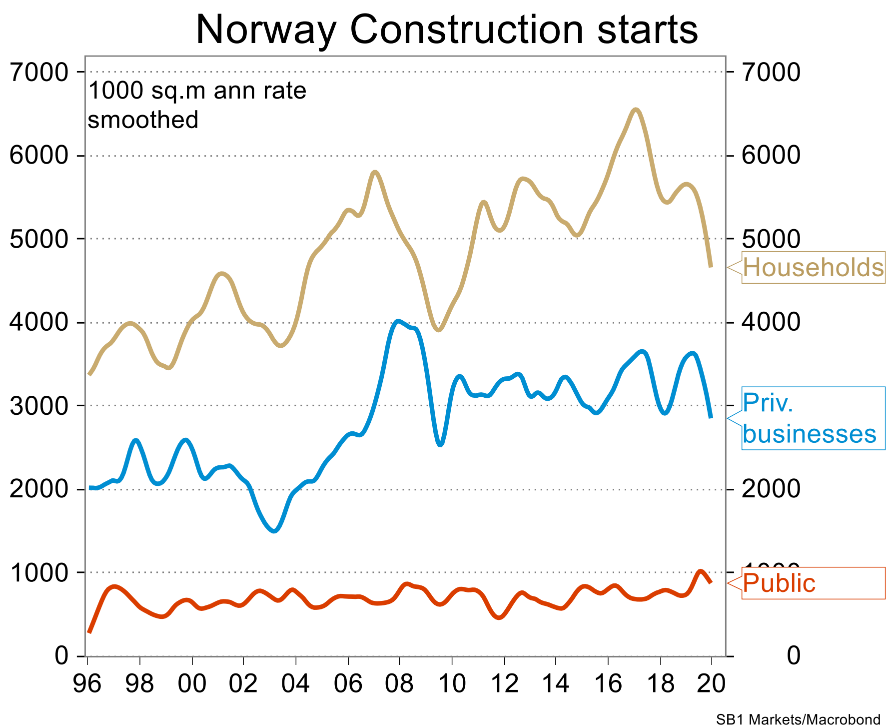


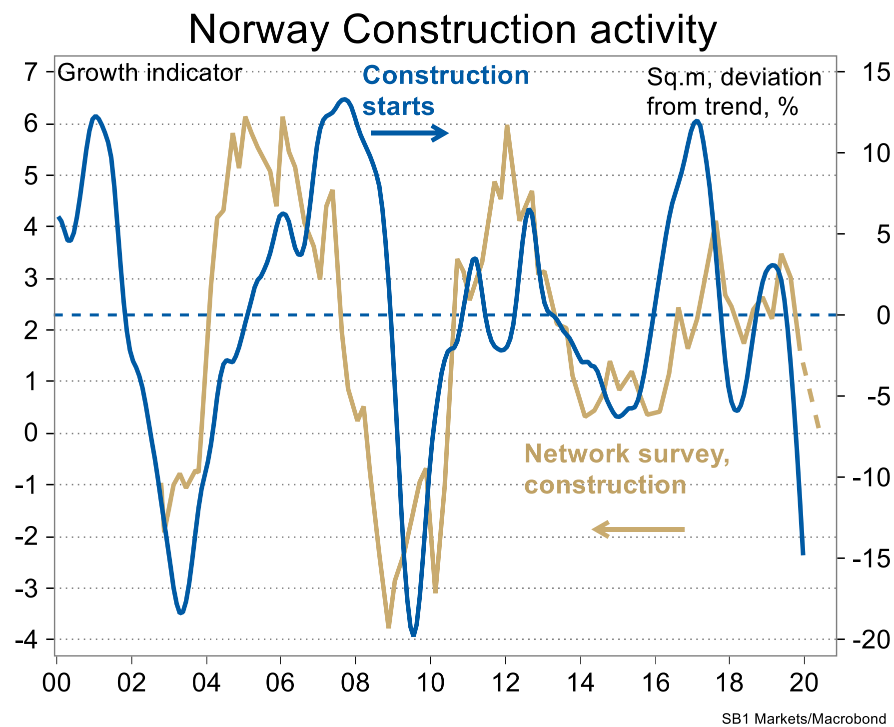
- Construction ex housing, garages/cabins has turned down since early 2019, reversing the 2018 expansion
  - » Construction in the secondary (industry) sector is retreating rapidly. The investment survey signals a sharp decrease in construction in manufacturing and in power supply. Private services (in sum) steeply down, after a lift trough 2018
  - » Public sector construction starts were very high in the summer, as the new hospital in Stavanger was included. Construction of private offices is more or less flat, so are primary sectors
- Construction starts of cabins/garages are heading slowly down and the level is the lowest since 2009

SpareBank 1 MARKETS

Regional Network expects a steep drop in construction growth

Trouble in infrastructure projects, and housing starts on the way down





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

Highlights

The world around us

The Norwegian economy

Market charts & comments

Risk off; All markets slide down amid Coronavirus outbreak

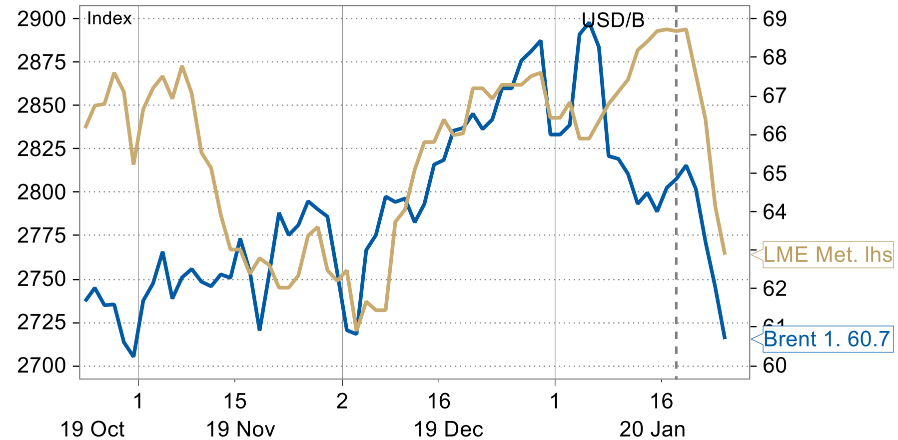
Fears of downside growth impacts from the spreading virus sent all markets, oil price, CNY down last week

Equity Indices

S&P held up better than other markets. OSEBX down with oil

SB1 Markets/Macrobond

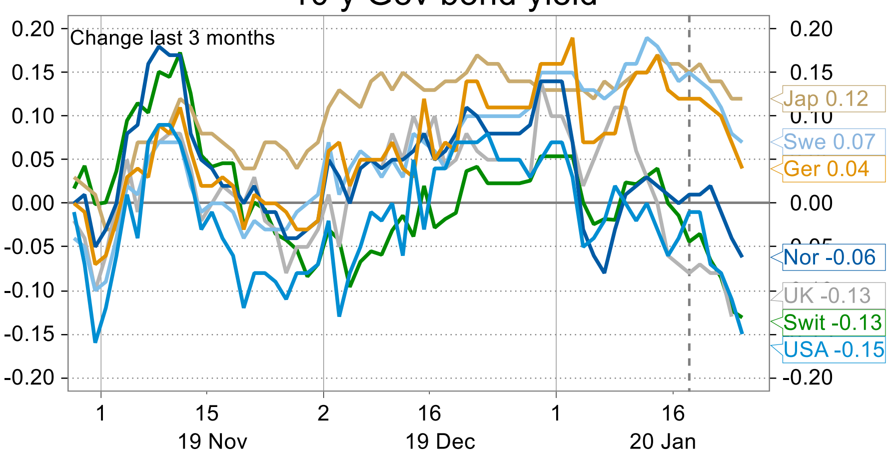
Oil vs. metals



The oil price dropped 4 USD to 61/b last week, the lowest since early December. Metals steeply down too

SB1 Markets/Macrobond

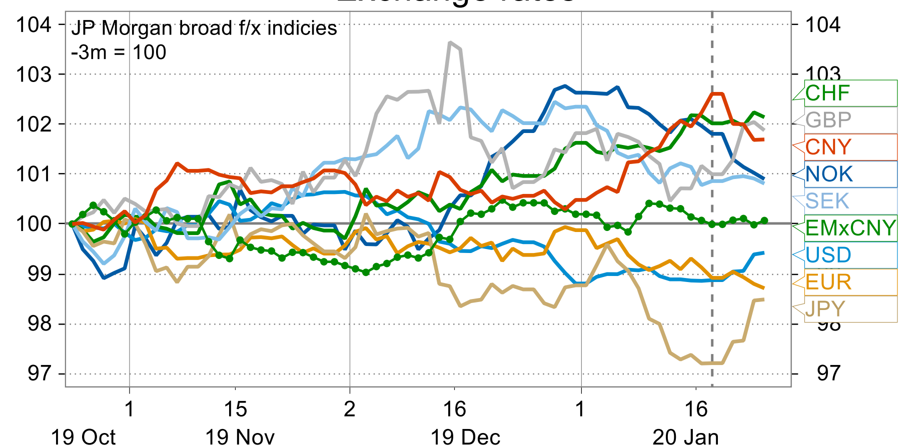
10 y Gov bond yield



Bond yields continued to slide down last week, hit by growth fears

SB1 Markets/Macrobond

Exchange rates



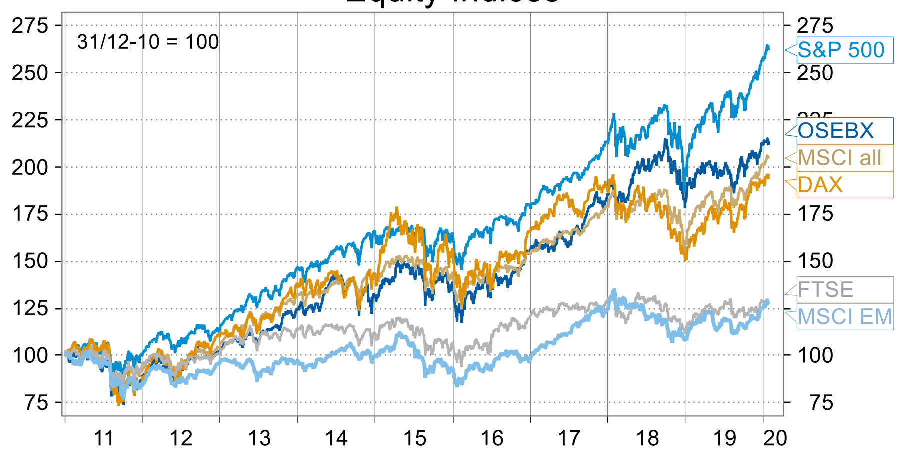
CNY reversed some of the Jan appreciation, probably due to the virus. JPY appreciates, USD too, and NOK down, with the oil price. Risk off

SB1 Markets/Macrobond

In the long run: US stocks at ATH, bond yields not that far above ATL

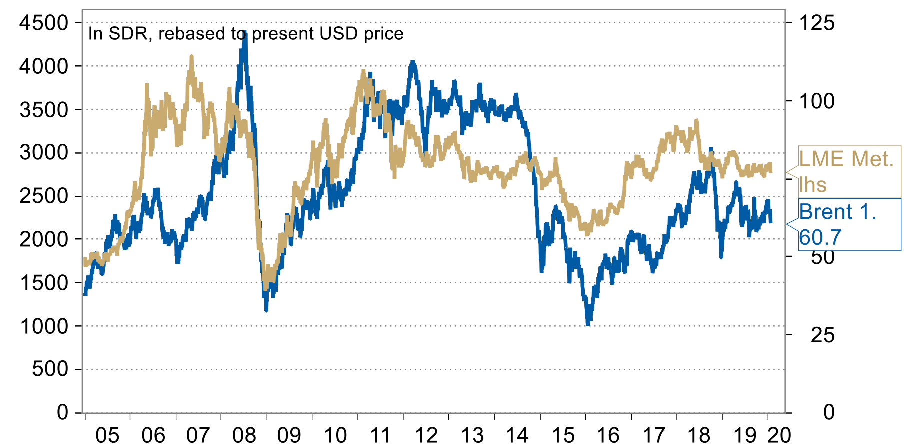
Raw material prices have not followed equities up

Equity Indices



SB1 Markets/Macrobond

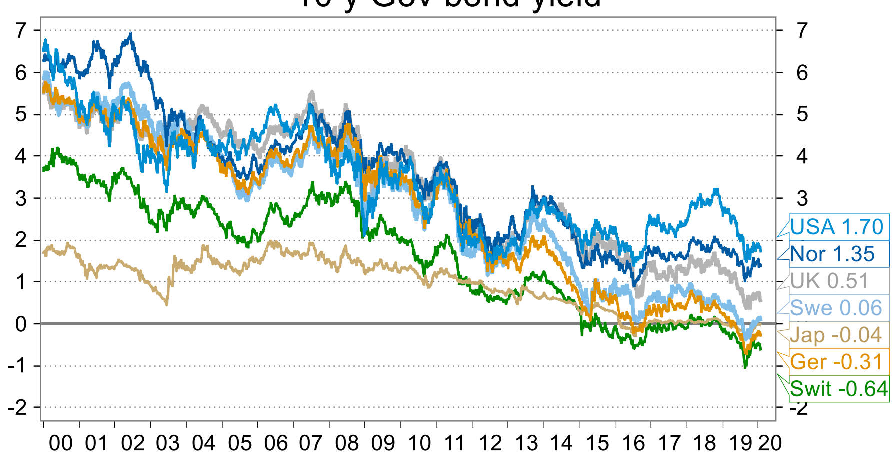
Oil vs. metals



Metal prices close to flat recent months. Oil prices are quite stable too

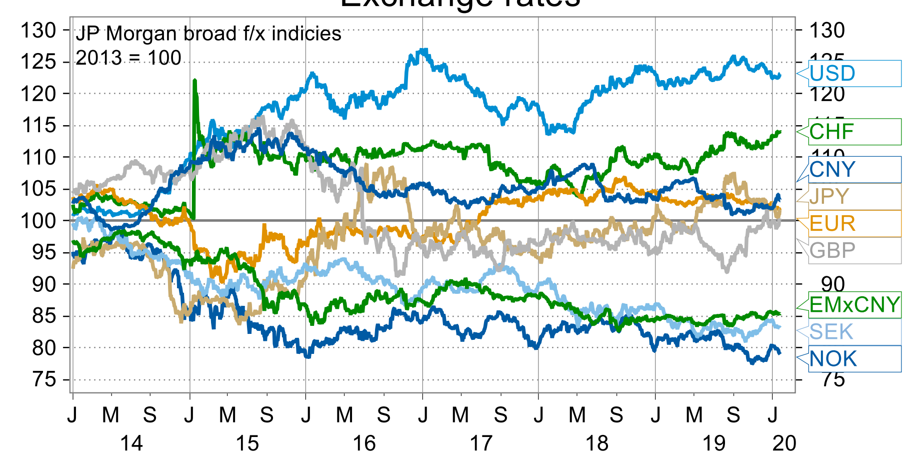
SB1 Markets/Macrobond

10 y Gov bond yield



SB1 Markets/Macrobond

Exchange rates

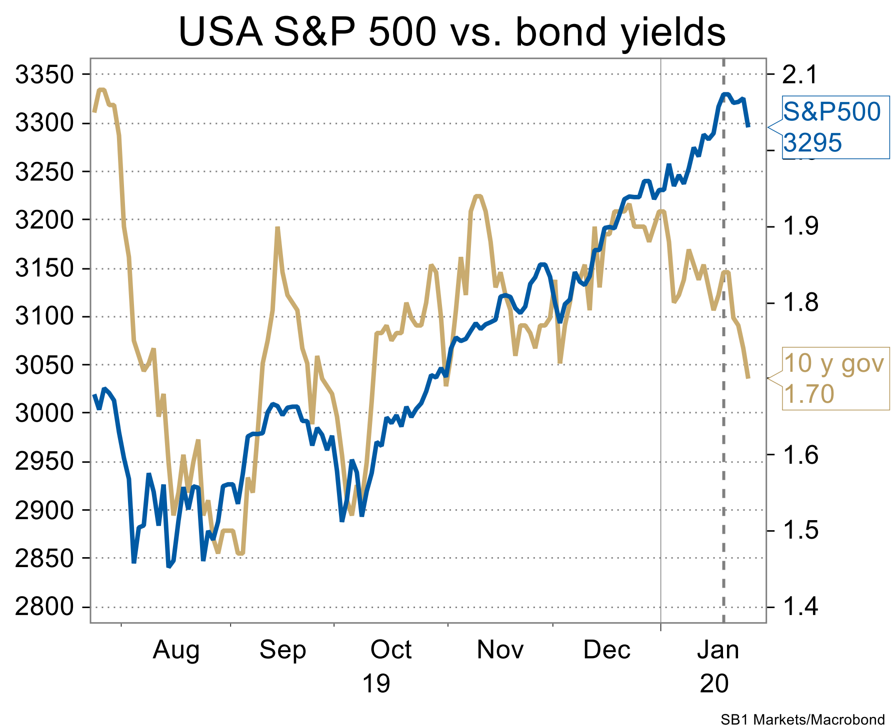


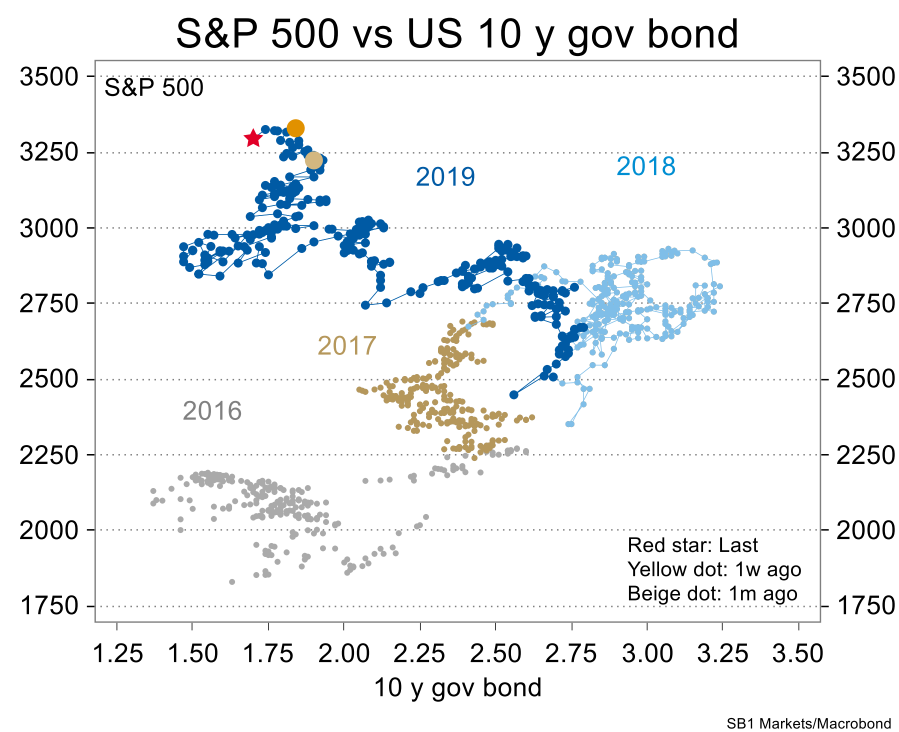
SB1 Markets/Macrobond

SpareBank 1 MARKETS

US: S&P rally set on pause, bond yields steeply down

S&P inched down 1% last week and the 10 y gov dropped 14 bps, and is down 22 bps this month



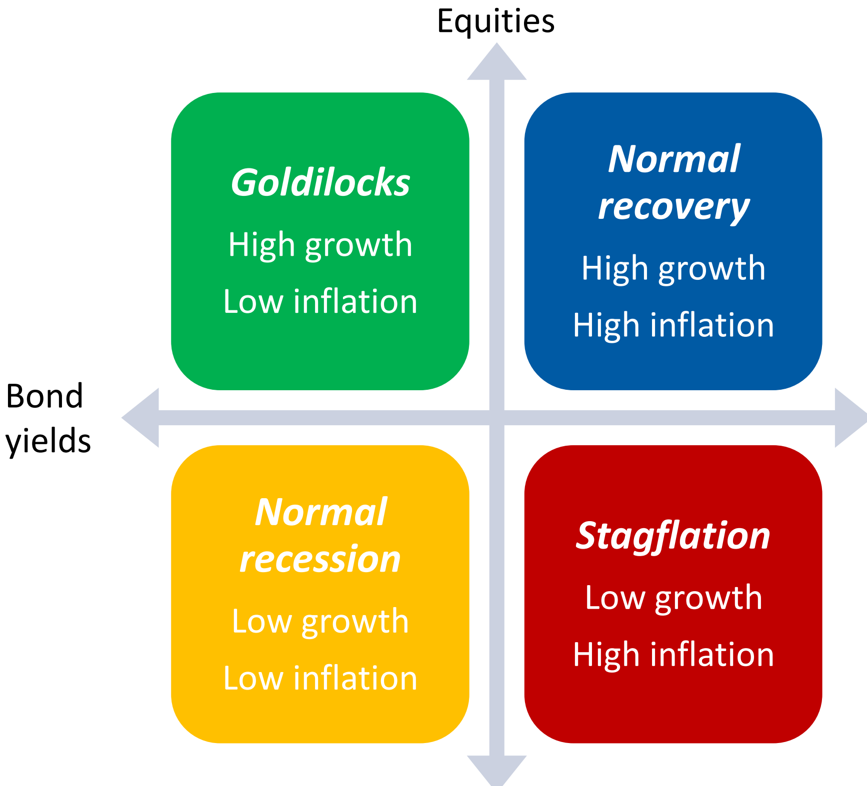


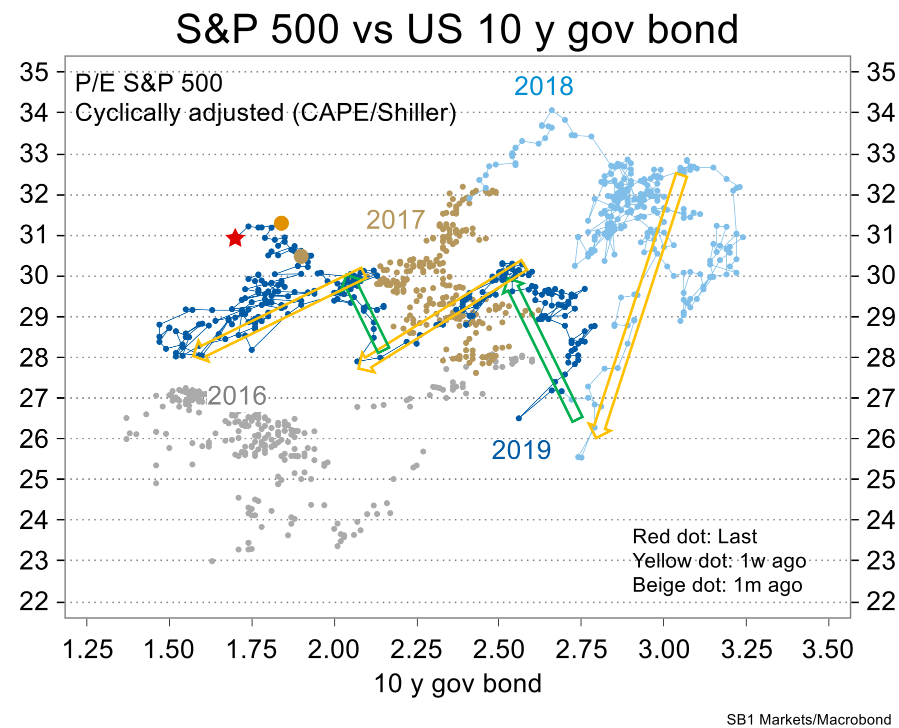
- US stock markets have been soaring, as somewhat stronger global macro data, US China phase 1 trade deal and strong company earnings reports have lifted sentiment. Last week, the rally was dampened by fears that the spreading coronavirus will dent global growth
- In spite a positive macro news flow, bond yields have been ebbing since Jan 1. Last week, the 10 y government bond yields slipped 14 bp, as the corona outbreak dented sentiment

SpareBank 1 MARKETS

A small turn towards the 'normal recession' corner

Stock markets and bond yields down, even though data have been OK. Some disease angst?

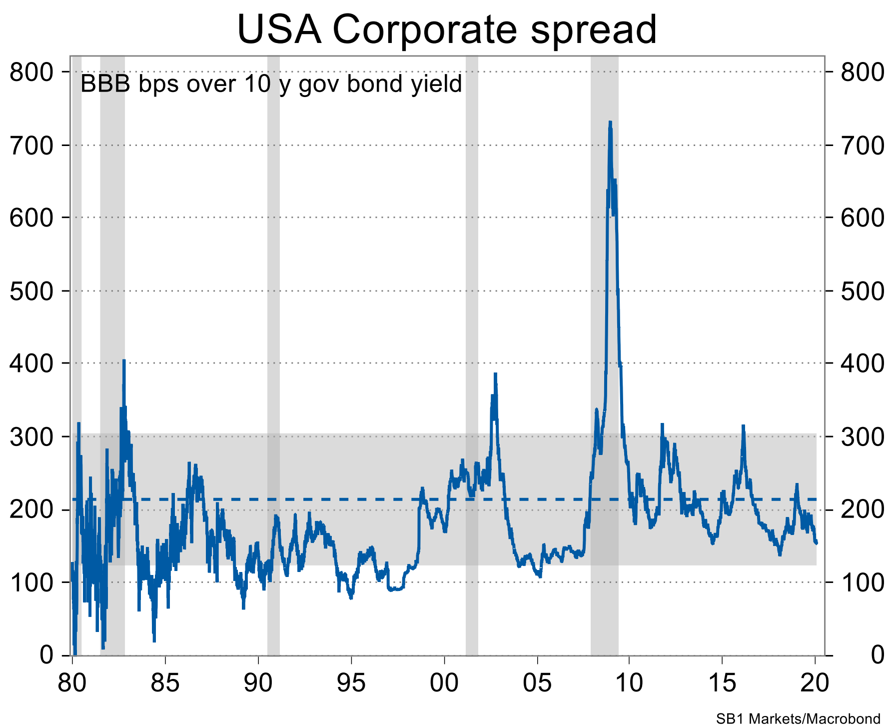


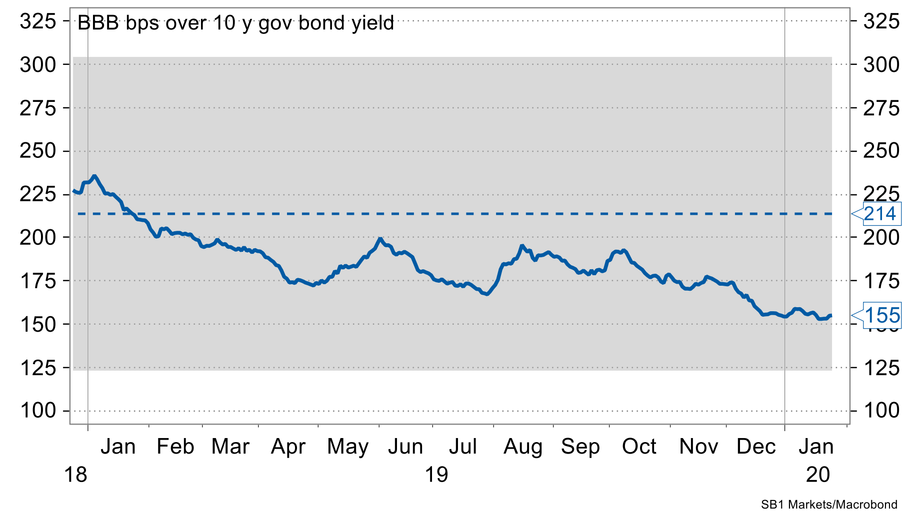


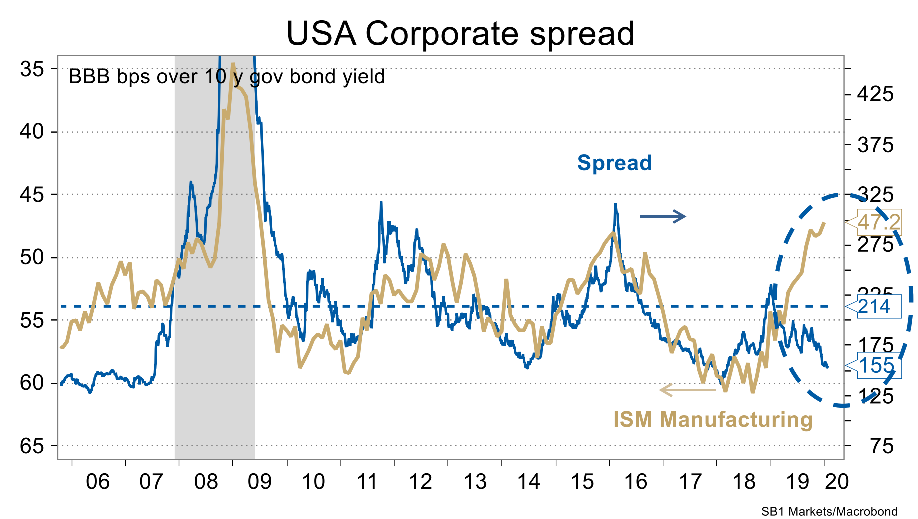
- Recent months, markets have been zig-zagging along with news on the trade war, most of the time along the 'normal recession/recovery' axis. Over the last month, stock markets have surged (until last week, that is), while bond yields have turned down, towards a Goldilocks' scenario
- We do not think a long term Goldilocks scenario is likely. Should yields decline substantially, it will be due to really weak economic news, which will not be good news for the equity markets. We are not that worried for the 'Stagflation' corner either; a take off in inflation without strong growth seems unlikely. Thus, the normal recession/recovery axis is the most likely in the short term – growth will be the main driver for both markets, not inflation

Credit spreads are very low, well below an average level

Spreads are far too low *if growth is slowing* as ISM (and even stronger surveys) are indicating

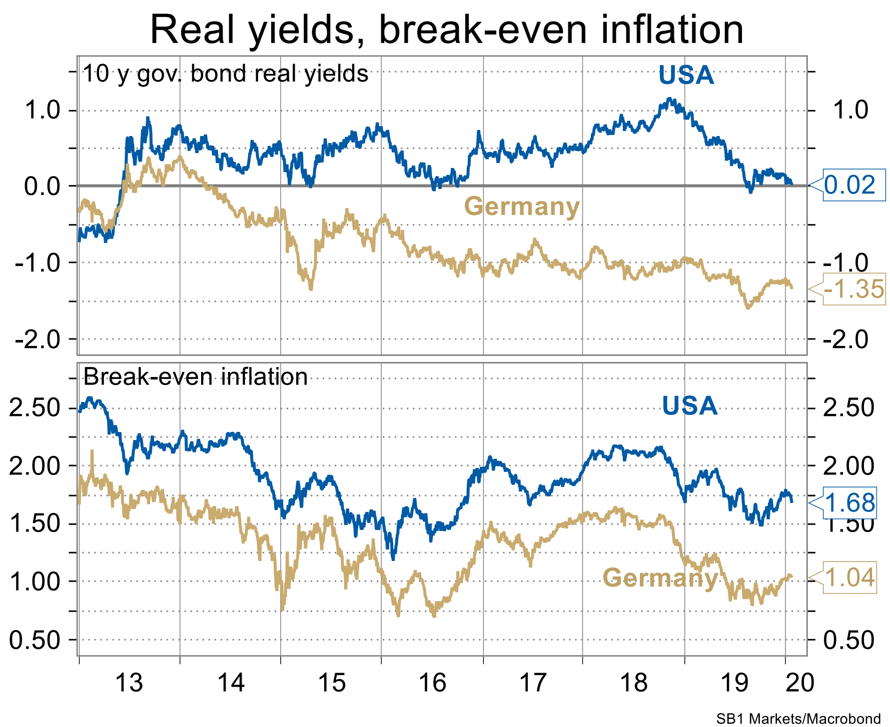


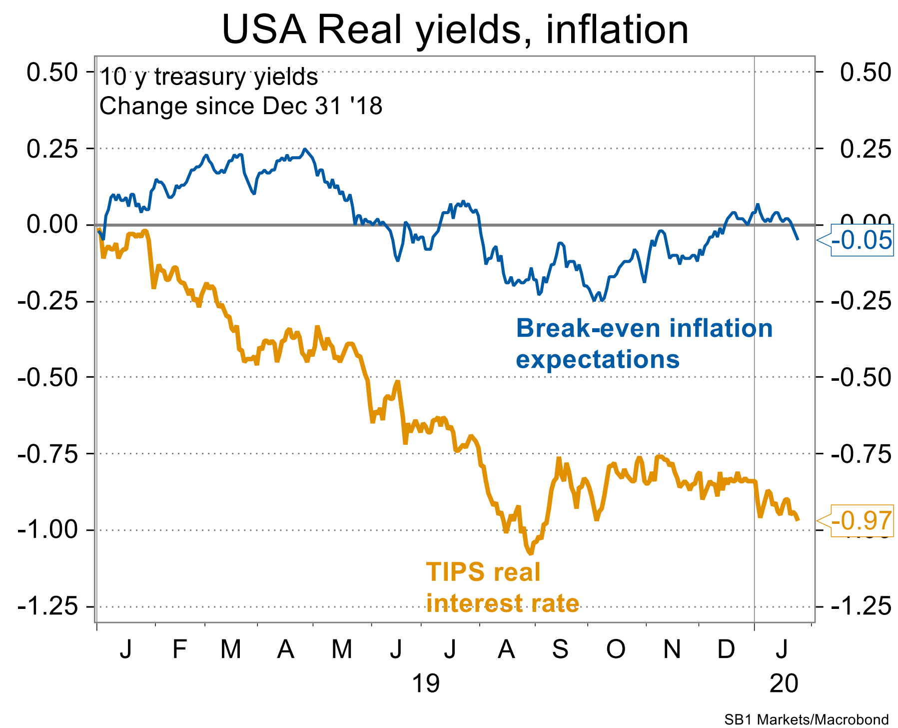




Higher inflation expectations recent months, real rates flat/down

This month, both real rates and inflation exp. have edged down, even as macro data have improved

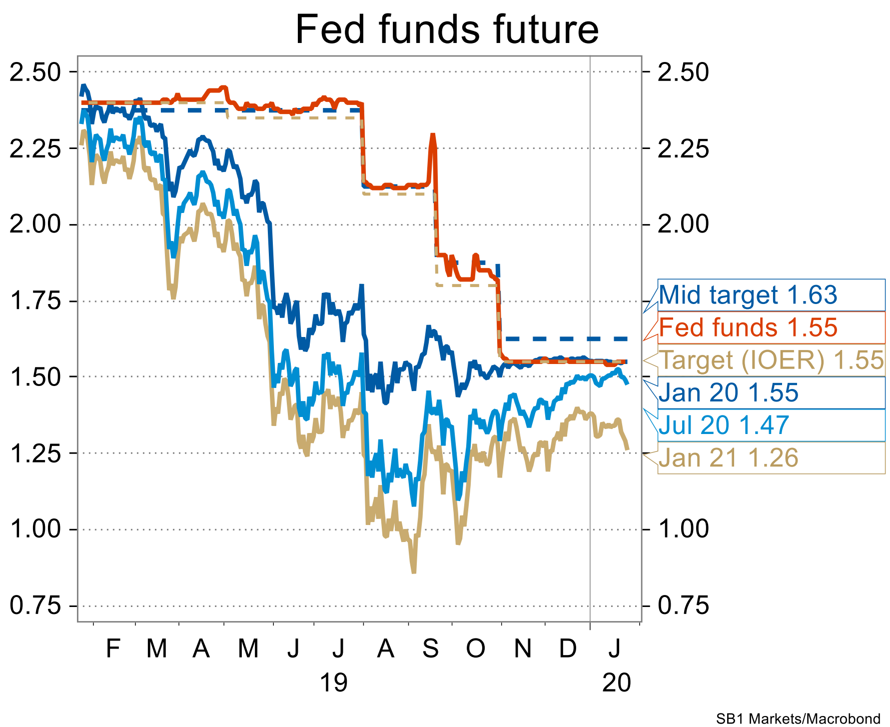


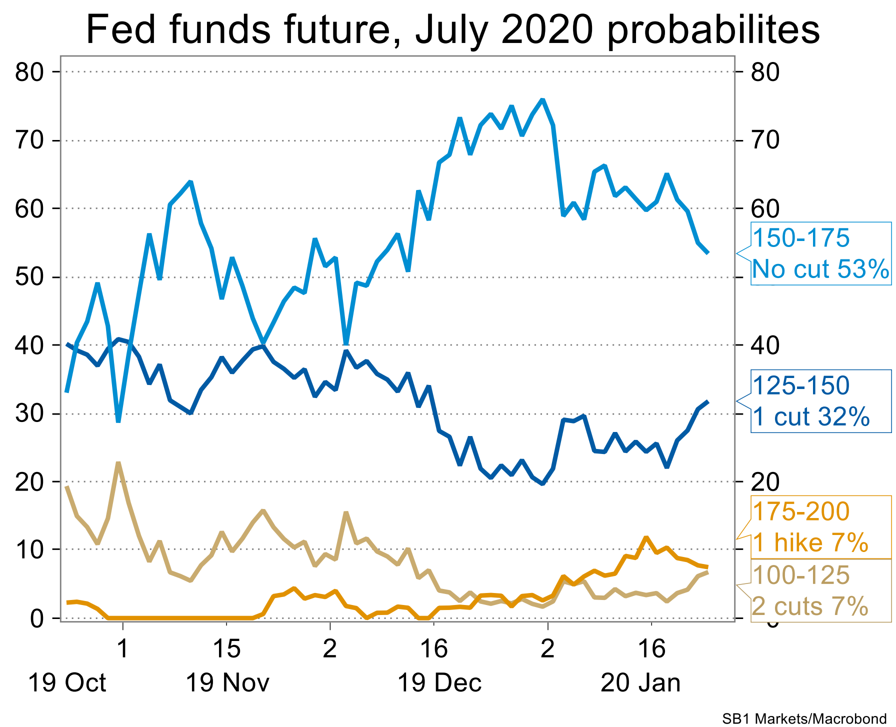


- In November-late December, US inflation expectations increased, while real rates retreated slightly. The pattern was similar in Germany. In January, US inflation expectations have inched down, real rates more steeply down. German real rates have followed the US down, inflation expectations have been steady, probably due to a small lift in core CPI inflation
  - » US 10y real rate at 0.02% is not far above the local bottom last August
  - » The 10 y German real rate at -1.35% is ridiculously low. Inflation expectations at 1.04% are not that far off, although well below the ECB's price target at close to 2%

Short term FRAs trending up, down last week

Markets are fully pricing a 2020 cut (of 25 bps) but still just some 30% of a cut in H1

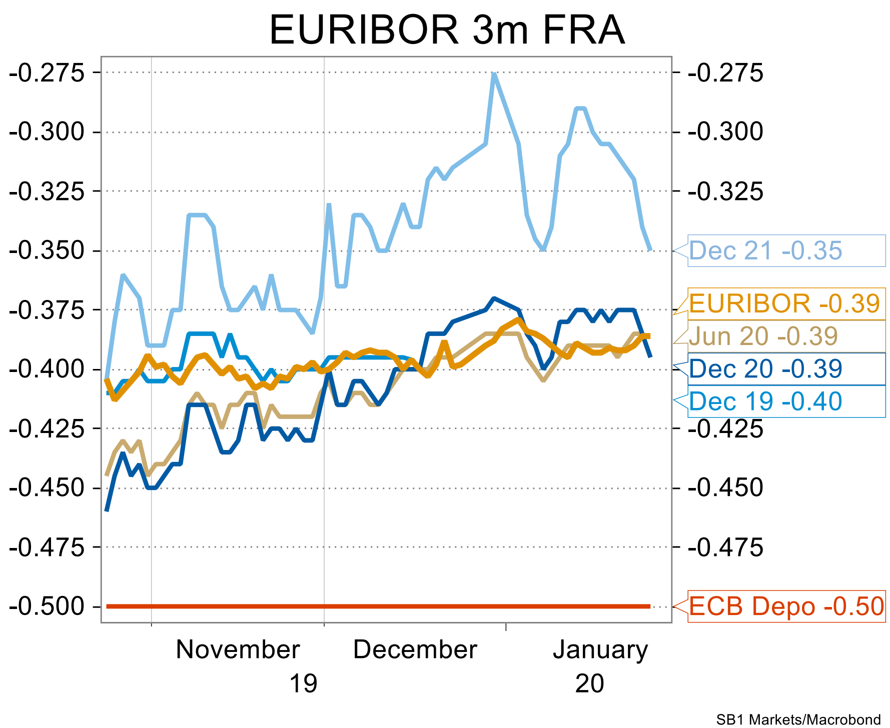


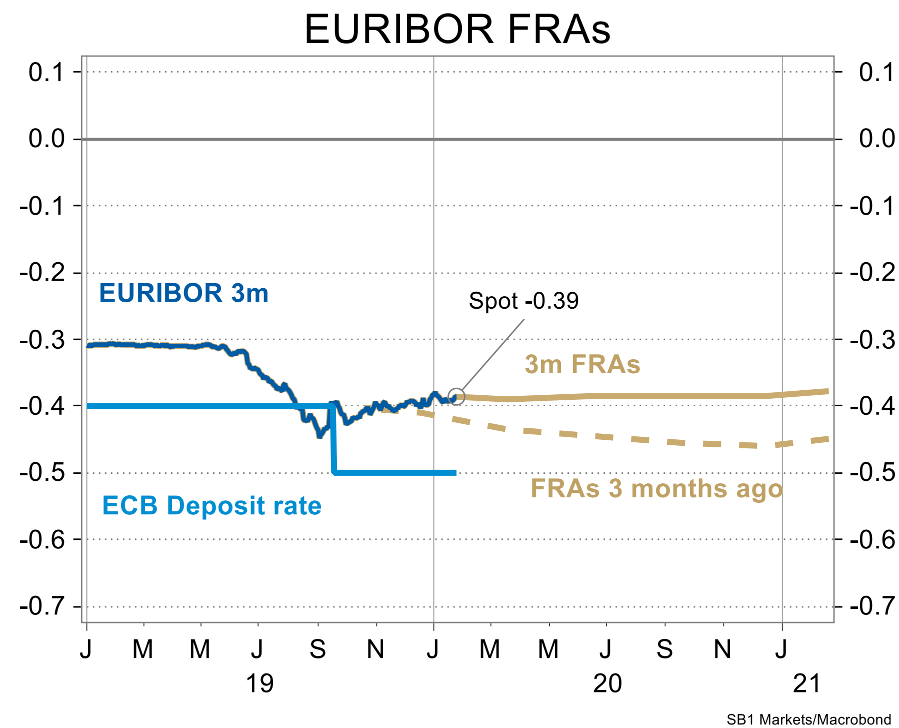


- Fed Funds futures climbed steadily through December and dropped on the Iran/US tension in early January. Since then, rates have stabilized, until the coronavirus outbreak in China sent rates down last week
- Markets are expecting a cut by the end of 2020. Probabilities of a H1 cut are still low, although having inched up to 30%
- The actual Fed funds (daily clearing) rate remains close to the target IOER (rate on bank's excess reserves at the Fed) at 1.55%, as the Fed has gained control on the short end of the curve

EUR FRAs have climbed, zero cut expectations

Markets are betting on an unchanged interest rate the coming year – and a hike in 2021?



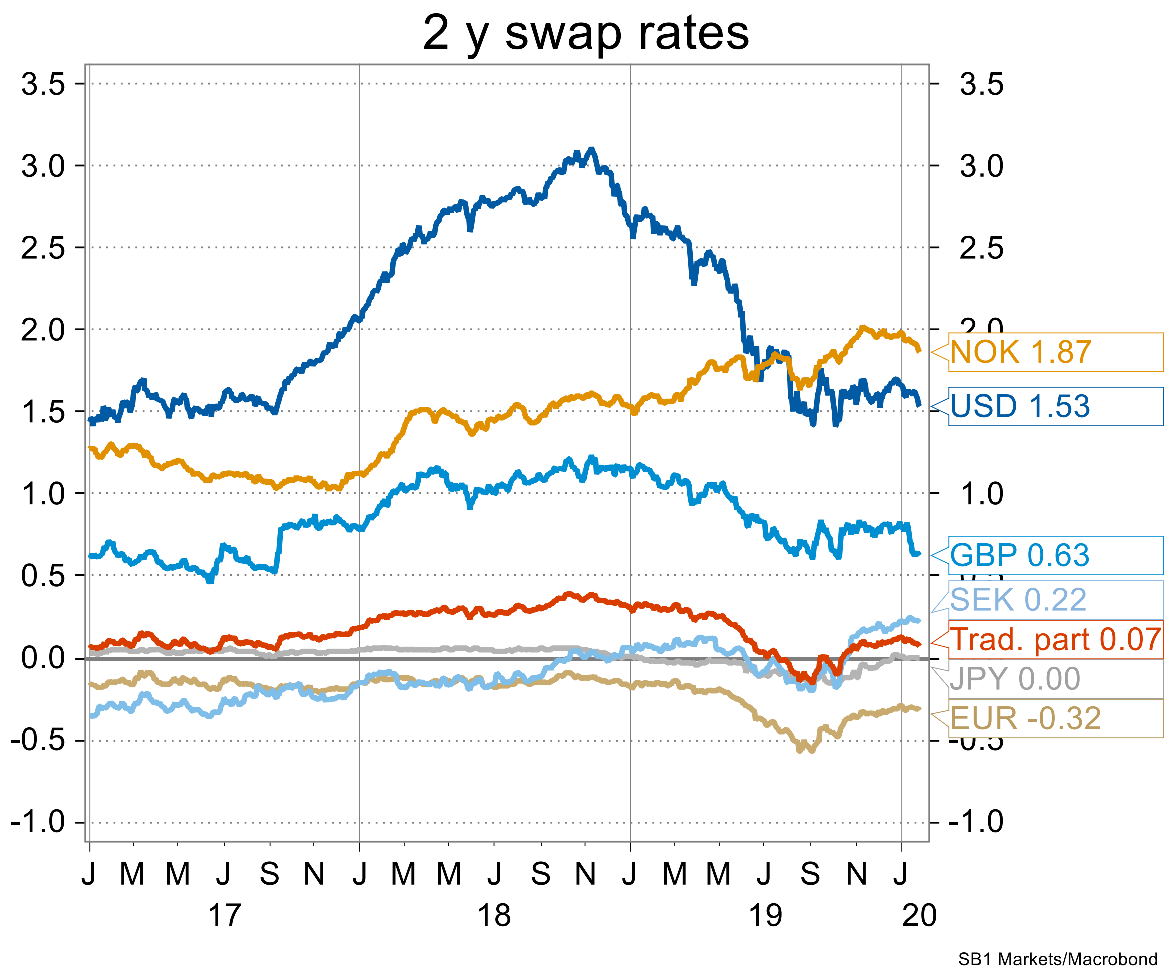


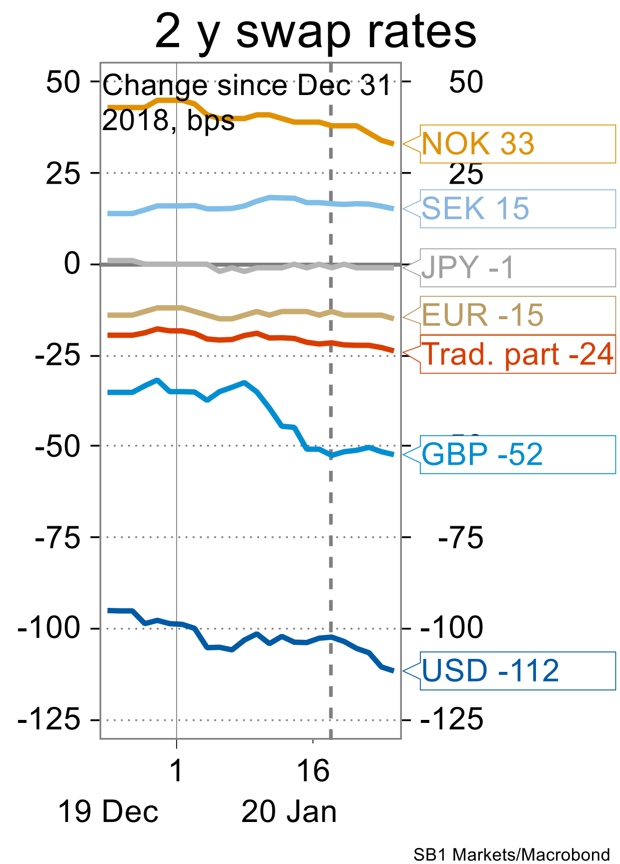
- Since early October, the FRA rates have turned up all over the curve, on positive US/China trade war news and expectations of a soft Brexit, as well as somewhat more upbeat macro data from the Eurozone and globally
- FRAs tilted downwards late last week, probably both on some slightly more dovish comments on the growth outlook than expected from Lagarde at the ECB meeting, and global fears of the virus outbreak
- Markets are pricing an unchanged interest rate this year and in 2020, and some 50-60% probability of a hike in 2021

SpareBank 1 MARKETS

Short term rates slowly down among trading partners, NOK rates down too

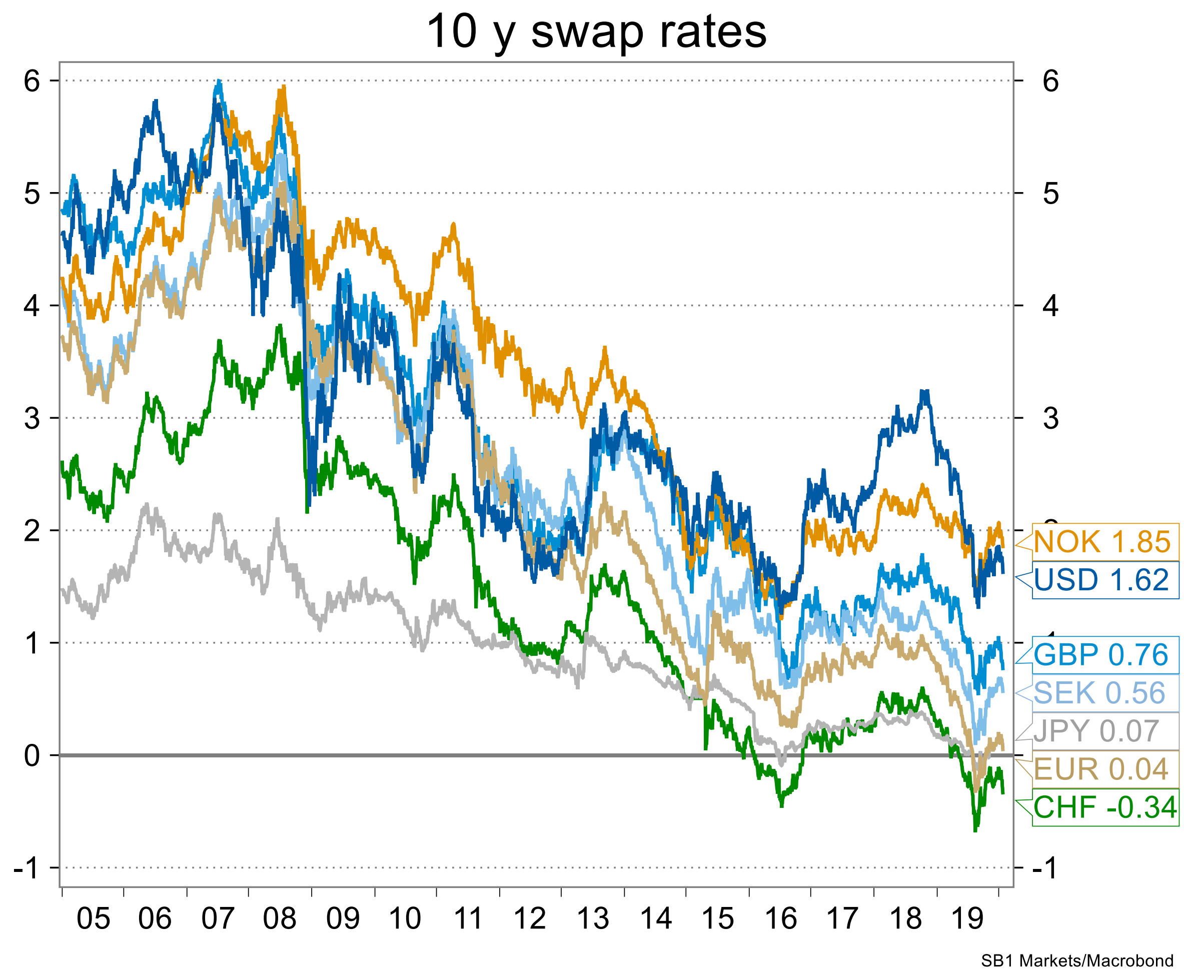
Steepest decline in the UK the past weeks, chiefly on BoE talk of cut. US, NOK down too, EUR steady

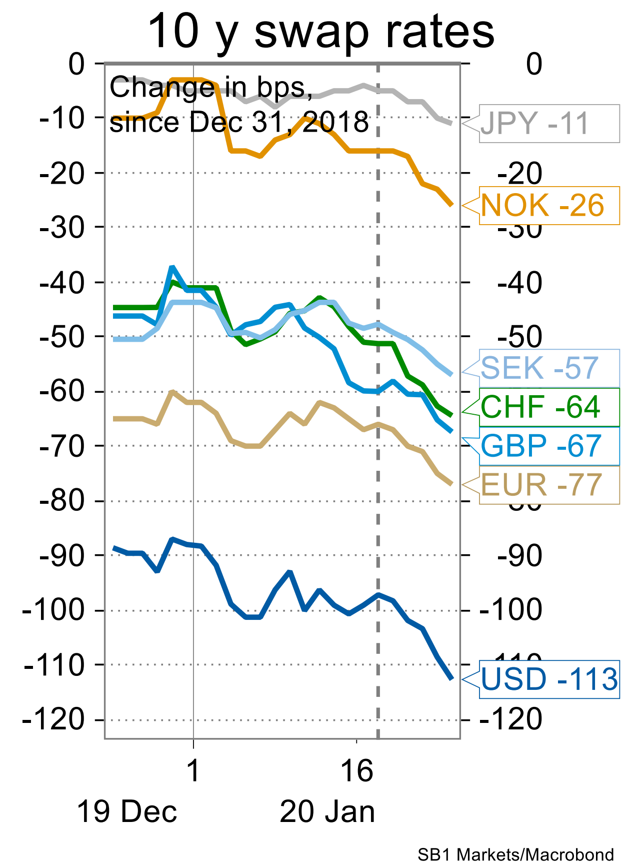




Long term swap rates down everywhere in January, and faster due to corona?

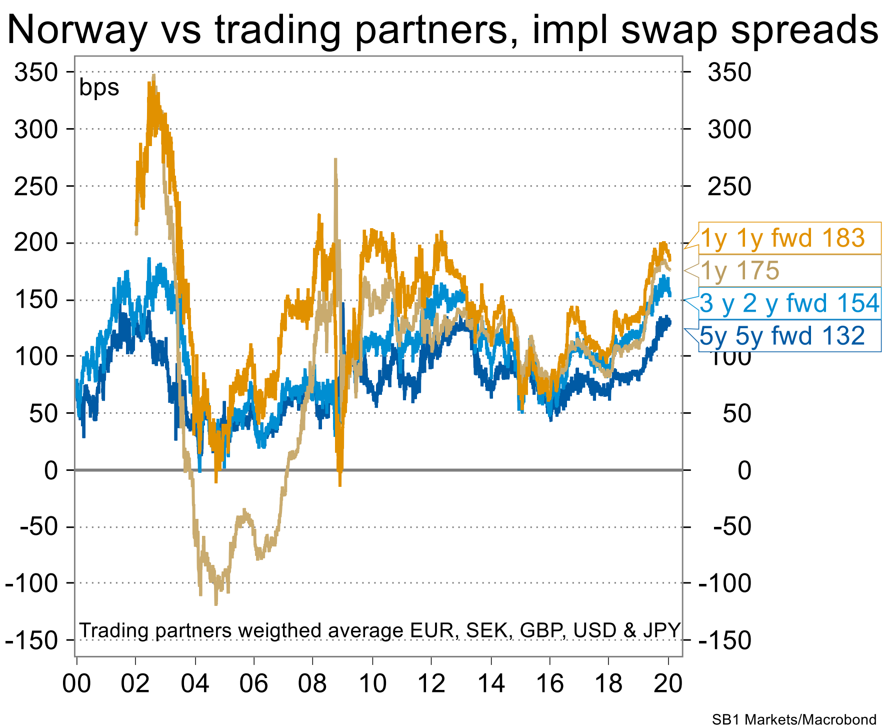
USD swap rates are still some 30 bps higher than at the Sept trough, EUR +40 bps, NOK +40

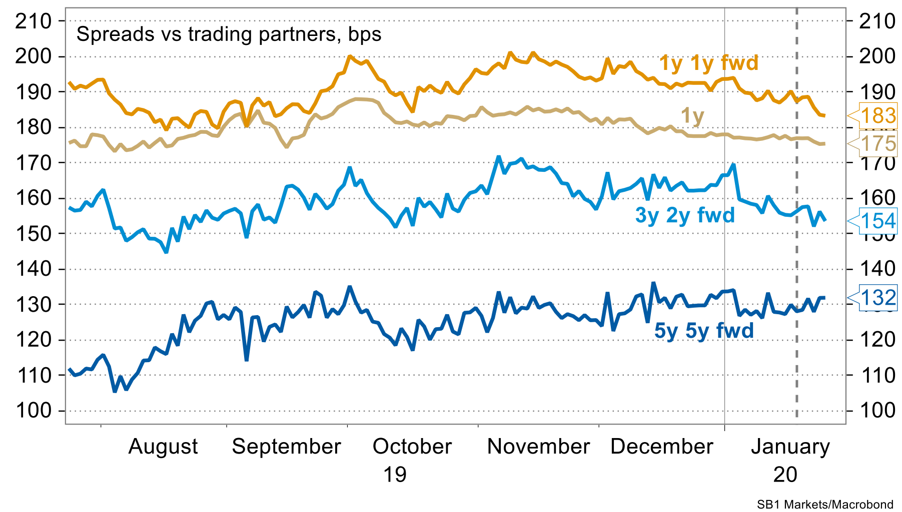


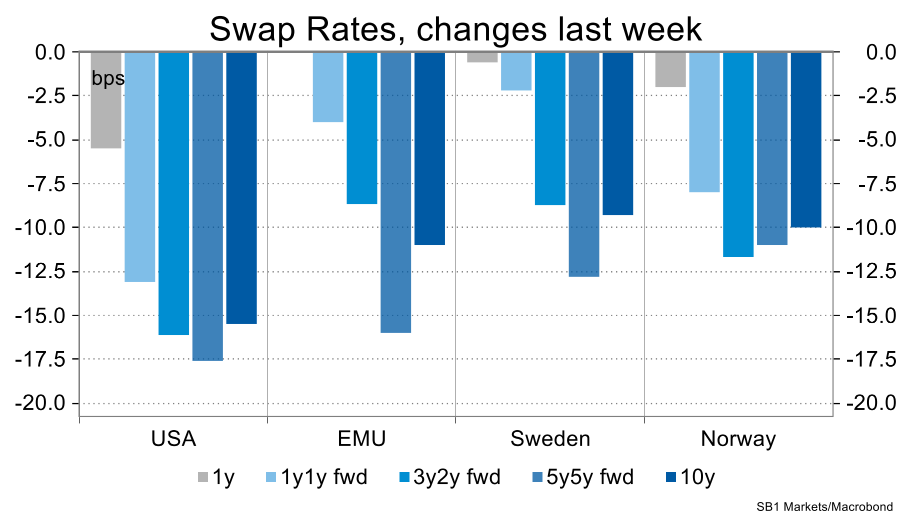


Swap spreads vs trading partners are shrinking, at least in the short end

Spreads are down along most of the curve, long end steady, and still far too wide?





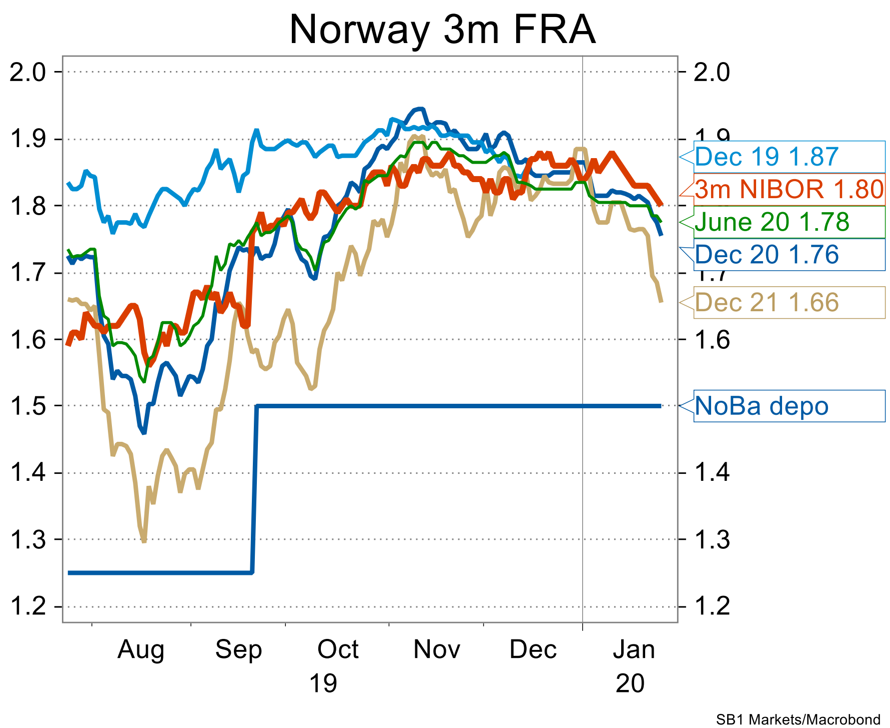


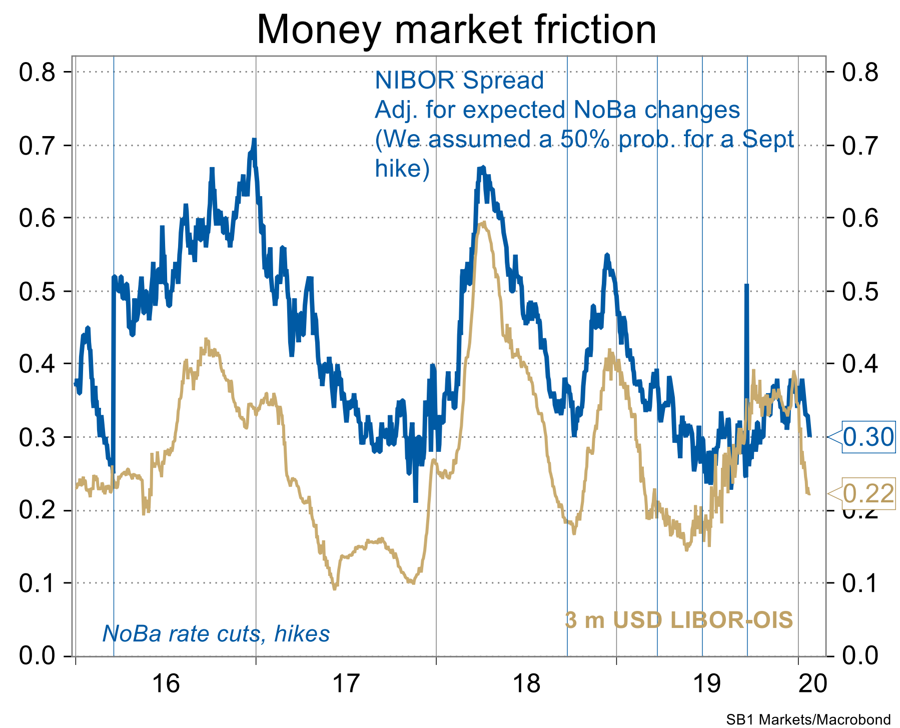
- Swap spreads between NOK rates and our trading partners have been widening rapidly the past year, all over the curve. Since November, spreads have been trending in on the short end of the curve, spreads are down almost 20 bps. At the long end of the curve, the spreads have flattened out
- While the short term spread has bee well explained, we have been surprised by the wide spread in the long end of the curve. A 5y 5y fwd spread at 132 bps is still too wide, long term

SpareBank 1 MARKETS

FRAs slide down, alongside lower rates abroad

3m NIBOR edged down to 1.80%, probably more due to lower NIBOR spread than cut expectations

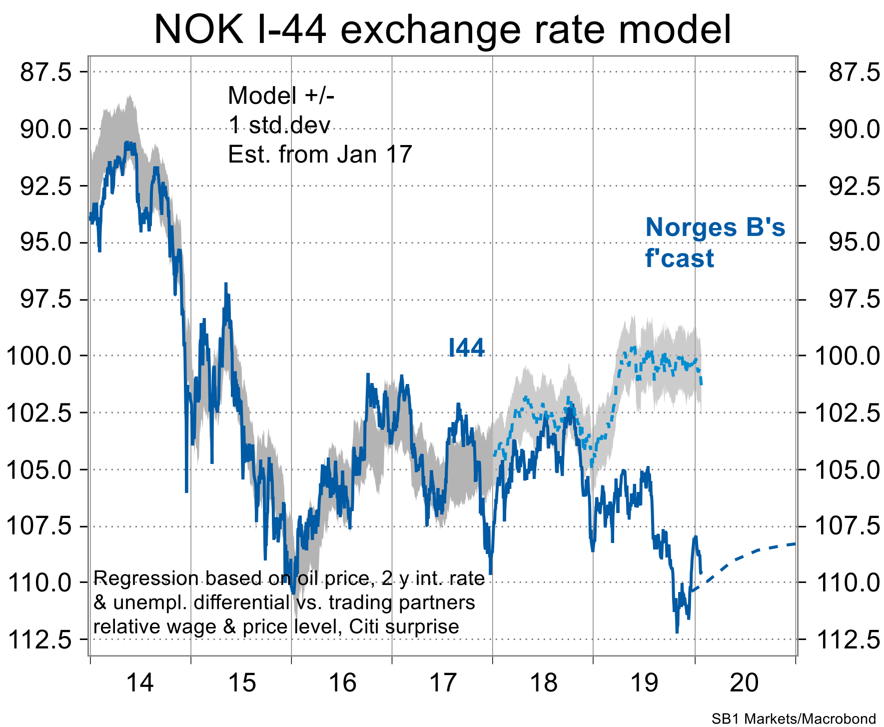


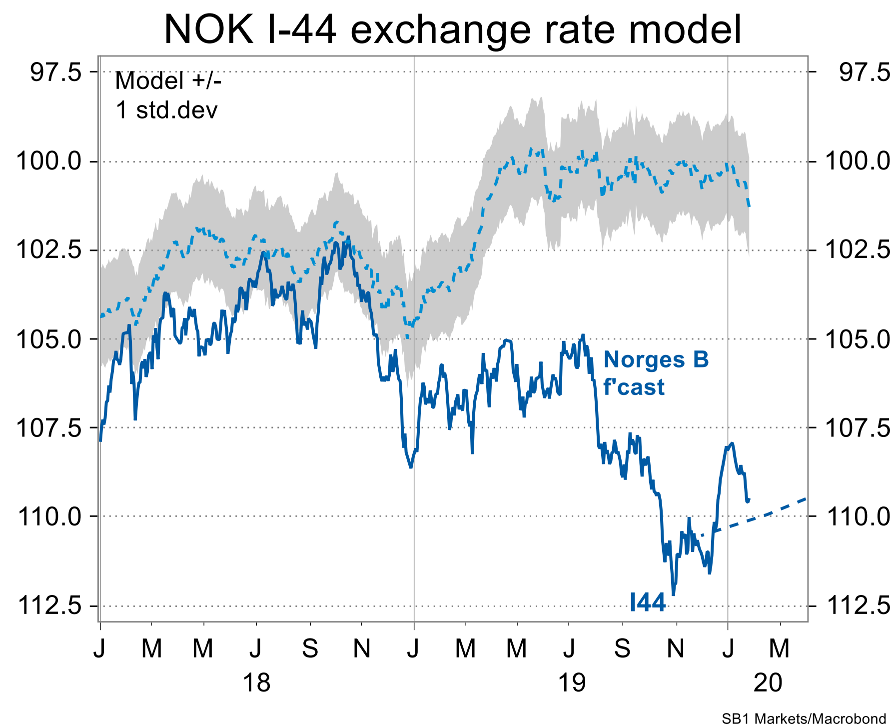


- The 3m NIBOR fell 3 bps to 1.80% last week, the second week of decline, following a steady Dec/early Jan
  - The 3 m NIBOR now implies a 30 bps spread vs the signal rate, lower than Norges Bank f'cast of a 35 bps spread
  - The US 3m LIBOR-OIS spread has fallen to 22 bps, from almost 40 before new years eve. Historically, the NIBOR spread has been significantly wider than the LIBOR-OIS spread
- Longer dated FRAs rates have turned down the past month too, tilting the FRA curve slightly downwards, we assume due to increased expectations of an interest rate cut, not collapsing NIBOR spread expectations. Markets are still expecting an unchanged interest rate this year, but expectations of a 2021 cut have increased to close to 75%, from 50% the prior week

NOK down with the oil price, reversing almost half the Dec upturn

NOK is far too weak vs our ‘old’ model and somewhat too weak vs our alternative models

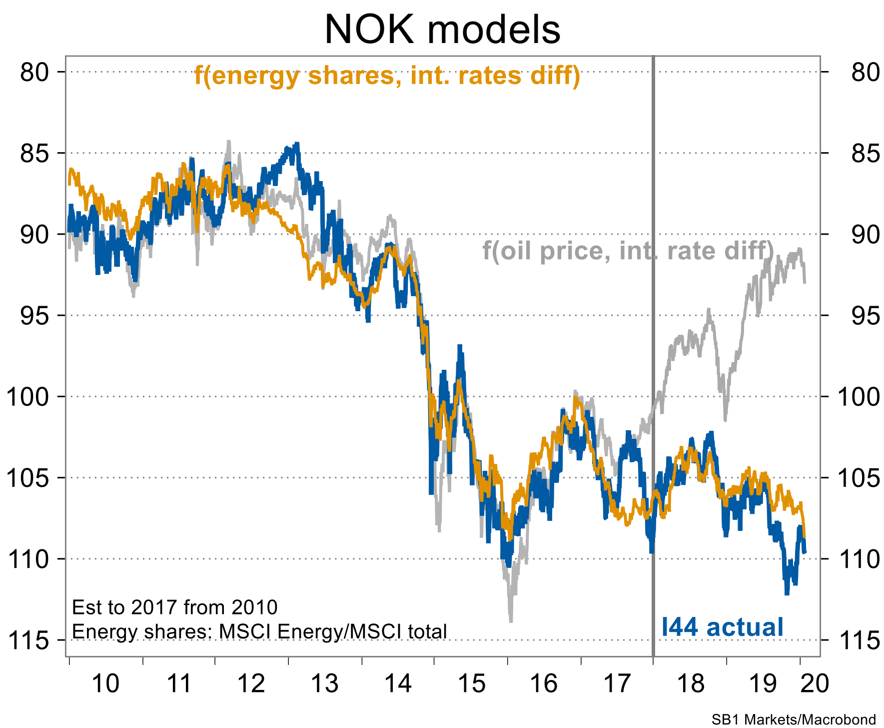


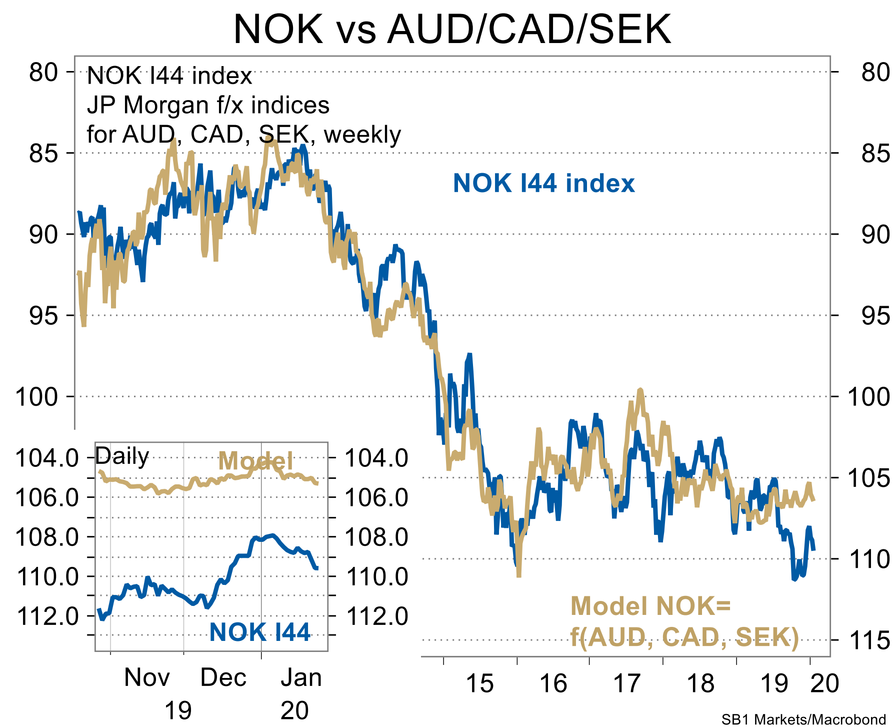


- Until January, NOK strengthened by 4% from the late Oct ATL and by close to 3% from the local bottom at Dec 10. This month, NOK has depreciated by 1.5%, of which 0.6% last week. The gap between the our ‘old’, standard model estimate and the actual I44 index is wide, at ‘just 8.5%, but much lower than the ATH at 12% in Oct/Dec!
  - » Last week, the NOK decline was well explained by the model, as the oil price fell, probably on corona fears
- Our ‘new’ models, based on the other super cyclical currencies or energy (oil) equities are far closer to the ball (check next page), and the NOK is just marginally ‘too’ weak vs these models now
- We stick to our **buy NOK** recommendation

NOK still (marginally) too weak vs our 'alternative' models

NOK is 4% too weak vs the other 'supercycle' currencies and just 1% below the oil stock price model

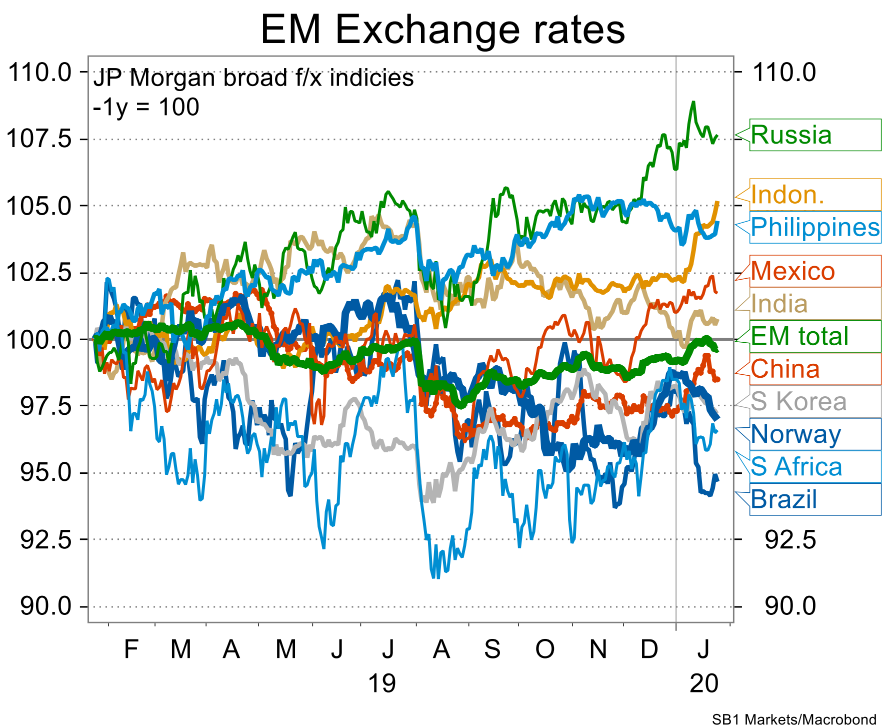


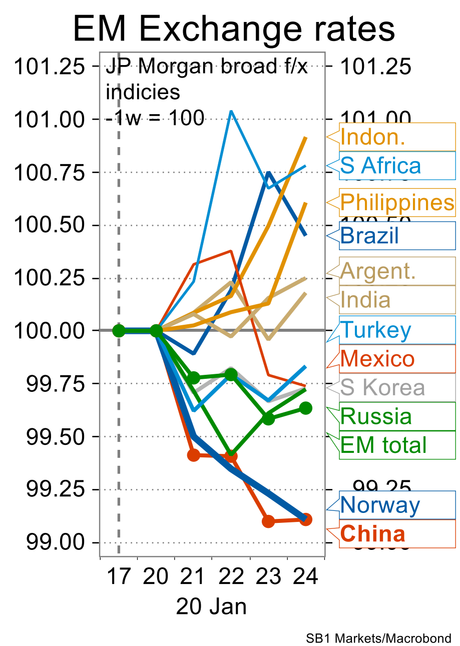


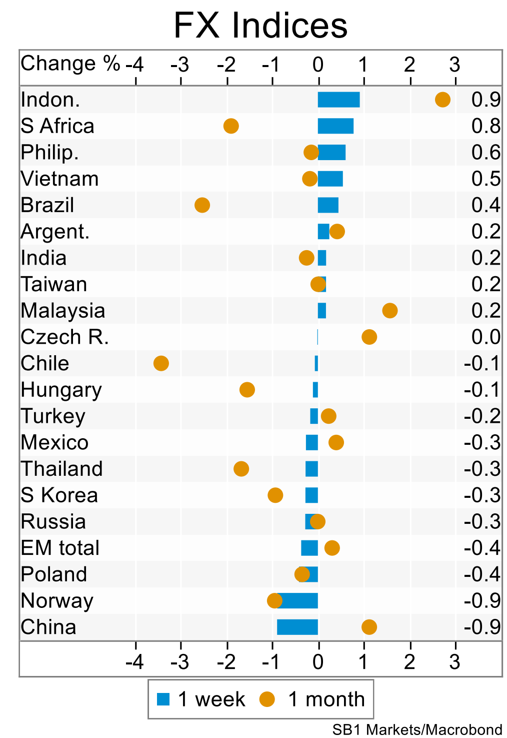
- Our NOK model based on pricing of oil companies has 'explained' the weak NOK much better than our traditional model since 2017, as have our 'supercycle' currency model (NOK=f(AUD, CAD, SEK), with just a marginal contribution from SEK). The EM x CNY currency aggregate is also quite closely correlated to NOK)
- Both AUD and CAD are sensitive to oil/energy prices and – together with the SEK – global growth outlook
  - » Last week, both CAD and AUD weakened with the NOK, SEK held steady

EM currencies down with risk assets as fears of coronavirus spread

The CNY weakened some 0.9% last week, after a 2.5% increase earlier in Jan







- Most EM currencies stabilised/recovered in the autumn, trade war de-escalation and signs of a slight recovery in the global manufacturing sector probably the best explanations. Since November, the EM average has been rather stable

DISCLAIMER

DISCLAIMER

SpareBank 1 Markets AS ("SB1 Markets")

This report originates from SB1 Markets' research department. SB1 Markets is a limited liability company subject to the supervision of The Financial Supervisory Authority of Norway (Finanstilsynet). SB1 Markets complies with the standards issued by the Norwegian Securities Dealers Association (VPFF) and the Norwegian Society of Financial Analysts.

No investment recommendation

Any views and opinions relating to securities mentioned in this report should be interpreted as general market commentary, and not as investment recommendations within the meaning of section 3-10 of the Norwegian Securities Trading Act.

No personal recommendation

The information contained in this publication is general and should not be construed as a personal recommendation within the meaning of the Norwegian Securities Trading Act, section 2-3 (4). It does not provide individually tailored investment advice regarding a particular financial situation, investment experience, risk profile or preferences of the persons who may receive this report. For tailored investment advice regarding stocks mentioned in this publication, please consult our brokerage desk or your individual investment advisor.

Research for the purposes of unbundling

This report is deemed to constitute a minor non-monetary benefit for the purposes of the inducement rules under MiFID II. The report is publicly available on our website (no log-in required).

Conflicts of interest

SB1 Markets, affiliates and staff may perform services for, solicit business from, hold long or short positions in, or otherwise be interested in the investments (including derivatives) in any stock mentioned in this publication. To mitigate possible conflicts of interest and counter the abuse of confidential information and insider knowledge, SB1 Markets has set up effective information barriers between divisions in possession of material, non-public information and other divisions of the firm. Our research team is well versed in the handling of confidential information and unpublished research material, contact with other divisions, and restrictions on personal account dealing. The views expressed in this report accurately reflect the analyst's personal views about the companies and the securities that are subject of the report, and no part of the research analyst's compensation is related to the specific recommendations or views expressed in this report.

Accuracy of sources

All opinions and statements in this publication are, regardless of source, given in good faith, and may only be valid as of the stated date of this publication and may be subject to change without notice. SB1 Markets has taken all reasonable steps to ensure that the information contained in this report is true and not misleading. Notwithstanding such efforts, we make no guarantee as to its accuracy or completeness.

Risk information

Return on investments is inherently exposed to risks. The value of an investment position may both rise and fall during the investment period. If the return on investments is positive at one time, there is no guarantee that it will remain such in future. In certain cases, losses may exceed the sum of the original investment.

Limitation of liability

Any use of information contained in this report is at your own individual risk. SB1 Markets assumes no liability for any losses caused by relaying on the information contained in this report, including investment decision taken on the basis of this report.

Limitation on distribution

This publication is not intended for, and must not be distributed to, individuals or entities in jurisdictions where such distribution is unlawful.