

Macro Research

Weekly update 48/2019

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Highlights

The world around us

The Norwegian economy

Market charts & comments

The headlines are linked to the relevant section in the report

The elements on the the page "In this report" <u>are linked</u>

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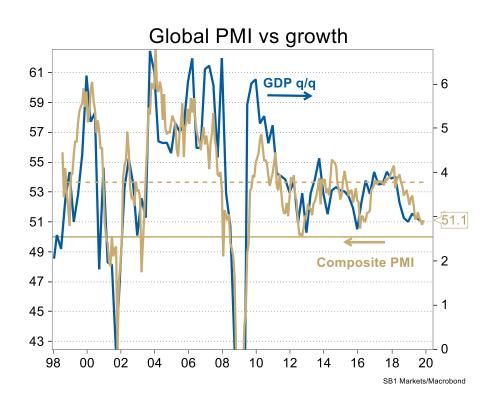
Last week – the main takes

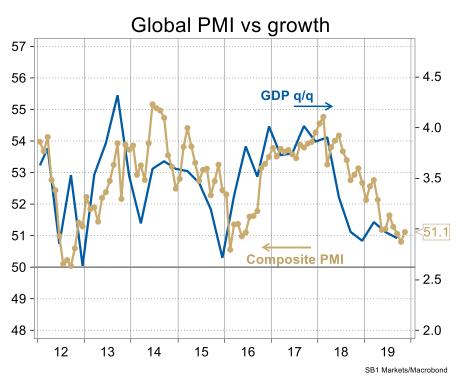
- The US/China trade negotiations soured last week, as China pressed for more tariff rollbacks, and the US claims China is not offering sufficient concessions on other areas. The Congress' passing of two US bills supporting the Hong Kong protests probably did not brighten the mood, and the landslide victory for the democratic movement in H-K election might further escalate the conflict with China (but perhaps calm down street riots)
- The global composite PMI probably rose by 0.3 p in November as the manufacturing index recovered for the 4th month in row, and approached the 50-line. The PMIs are still not signaling growth in manuf. production, and no more than 3% growth in global GDP, not sufficient to lift profits globally, or in Norway. The US PMIs rose further in November but 3 regional Fed manuf. surveys fell, of which 2 sharply. Eurozone PMI ticked down 0.3 p, manufacturing rose marginally while services slowed. The good news; orders are falling at a slower pace and inventories are being trimmed down and German PMI may be stabilizing (and the order/inventory ratio has turned up globally too). The bad news; EMU x Germany and France dropped to 50, for the first time since the Euro crisis.
- China is slowly stepping up its monetary easing. Last week, the 1 year prime loan rate was nudged down by 5 bps, bringing the total stimulus up to 16 bps (!) since August. Not a signal of desperation
- Another round of upbeat **US housing market data**; housing starts and permits are heading straight up, permits have soared to the highest level since before the financial crisis. **The Homebuilders** are somewhat more modest, although reporting improved market conditions. **Existing home sales** are climbing, up more than 10% since late 2018. **The leading index** is softening but points to some 1.5% Q4 GDP growth, much more upbeat than the nowcasters that are signaling 0.4 -0.7%. UoM consumer sentiment strengthened marginally in Nov, expected unch.
- The OECD once again revised down its forecast in global GDP growth. The 2020 f'cast was nudged down to 2.9% (unch vs 2019), from 3.0% in the Sept interim report and 3.4% in May. The risks are tilted to the downside, we expect 2.5% growth (which though new seems somewhat too pessimistic, given signs of stabilization in the PMIs and other surveys)
- In Norway, the **Q4 oil investment survey** was broadly as we expected. The oil companies' lifted the 2020 investment f'cast to NOK 183 bn, indicating that next year's investments will be lower than the level in Q4 '19. There are still substantial uncertainty regarding investments next year, but an important growth engine will anyway subside. Moreover, both manufacturing and power supply investments are set to decline sharply the coming year, bringing growth in total Mainland business investments sharply down. **Population growth remains** low, with just a 0.6% speed in Q3 but 'labour' immigration may have bottomed out. **Housing starts** fell in October, we assume the peak is behind us



Global PMI probably up in November, manufacturing back to 50

The index may have stabilised but is still not signalling more than 3% growth



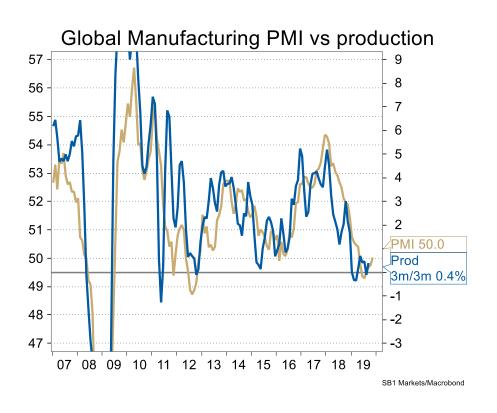


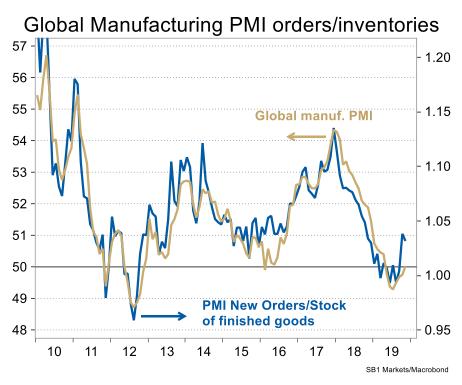
- The composite PMI rose 0.3 p to 51.1 in Nov (our estimate). The index is back to the same level as in April/May and confirms a close to 3% growth in global GDP a growth rate which has been rather stable since Q3 last year
 - » Our estimate is based on PMIs from the US, EMU, UK and Japan. Japan PMI fell steeply, our estimate may put too much emphasize on this
- The PMI has fallen by 4 points from the Jan '18 local peak, equalling some 1 pp slower global GDP growth (or a 10 pp slowdown in global MSCI earnings per share), down to zero —which now has been recognised by analysts



Global manufacturing PMI is has recovered past 4 months, back to 50

We estimate an 0.3 p uptick to 50.0 in November, signalling a marginal growth in production



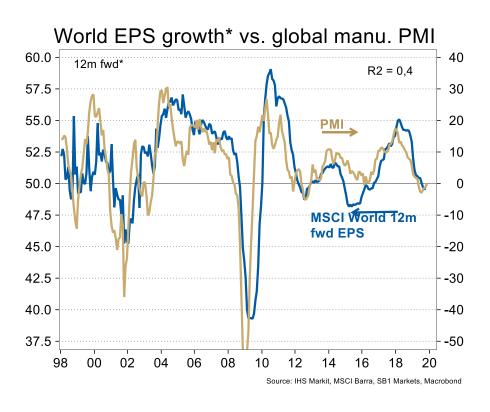


 Recent months orders have been recovering too, while growth in inventories have slowed, a favourable mix (more next page). Thus, the order/inventory ratio has climbed, normally a good signal – however not a leading indicator



A cycle is a cycle is a cycle

How to make a forecast (macro or micro): Listen to what companies said about the <u>previous</u> month



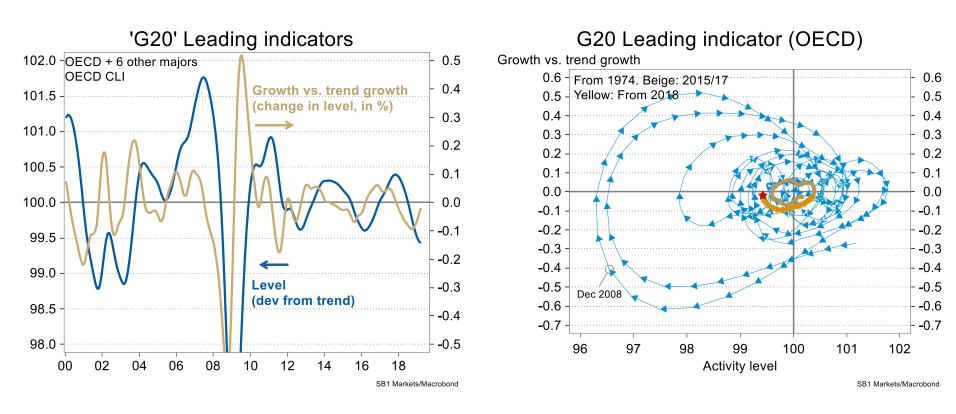


- A 1 p decline in the global PMI 'equals' approx ¼ pp slower growth in global GDP
- A 1 pp decline in global GDP 'equals' almost 10% decline in global corporate earnings (EPS) growth
 - » Thus: A 1 p decline in the global PMI 'equals' approx. 2.5 pp decline global EPS
- A model including global GDP, the oil price and the SDR/USD rate (to include f/x impacts), explains 90% of the global EPS cycle
- The PMIs (like the ISM) are <u>not</u> sentiment surveys. In the Purchasing Managers' Indices, companies are asked about actual changes in activity (orders, sales, employment etc) from the previous to the present month



OECD is still reporting activity below trend, and most are down recent months

However, the speed of decline has slowed but...

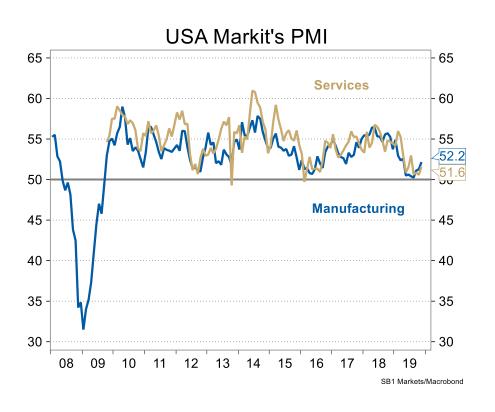


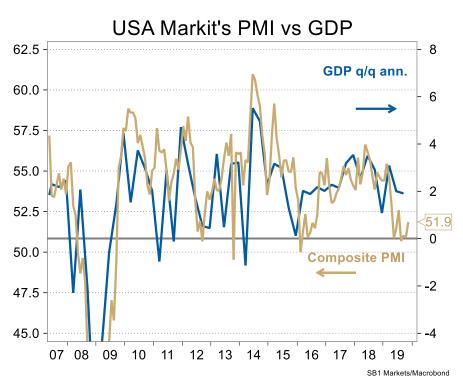
 OECD has reported a moderation of the slowdown for a long while but so far the bright spots have revised away, the downturn has become deeper



Manufacturing PMI continued up, the service sector index turned up too

The composite PMI is up from the bottom but is still signalling less than 1% GDP growth



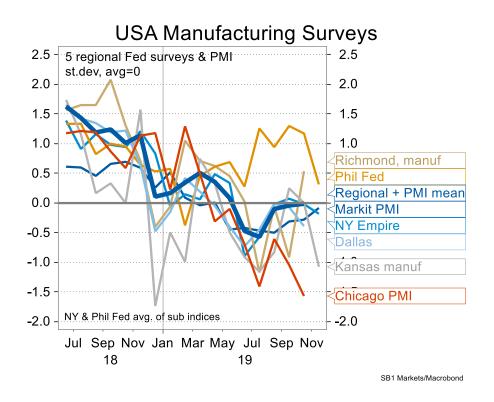


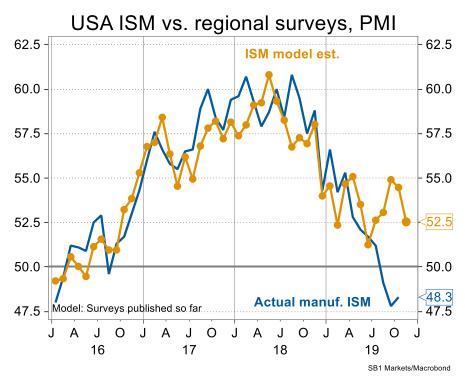
- The preliminary composite PMI rose 1 p 51.9, expected unch. The index have been more or less stable since May, however at level that is signalling growth below 1%
- The manufacturing PMI rose 0.9 p, the 3rd month of increase. The service sector index inched up 1 p to 51.5
 - » Manufacturing orders improved substantially in Oct, to 53, a promising sign. Even service orders rose in November
- The PMI is much more upbeat than the ISM (no Nov data yet) but all 3 regional Nov surveys so far published are all down



So far: 1 November survey up, 3 down

All 3 regional Fed manufacturing surveys published so far are down, 2 sharply. Still 'high' level



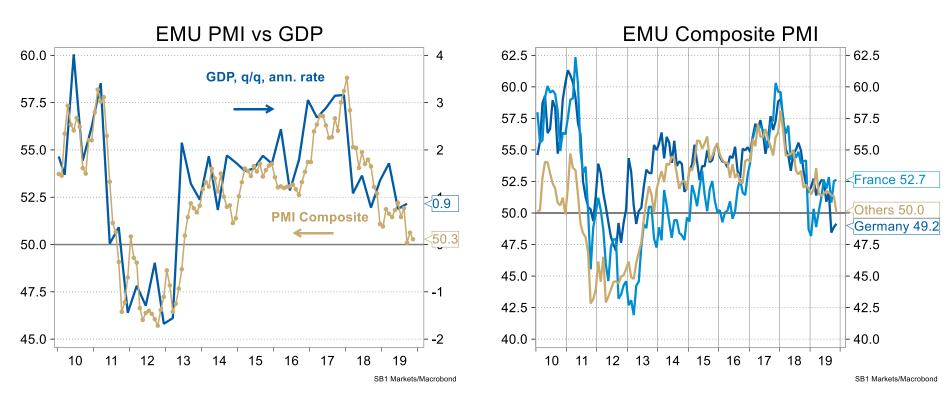


- The Philadelphia Fed index came in much weaker than expected in Nov, noting a 10 p decline. Still, the index remains more upbeat than most other surveys and is still above the avg level. The Kansas Fed's index fell sharply, to low level
- The NY Empire fell marginally in Nov and is more in line with others.
- Taken face value, these indices (including the more upbeat PMI) signals 2 p decline in the ISM index in November.
 However, the ISM index has been far weaker than other surveys past 3 months, and an uptick in the ISM is more likely than a downturn



Eurozone PMI fails to recover – but the details may offer some hope?

Composite PMI edged down 0.3 p in November, Germany and France inched up, 'others' fell to 50



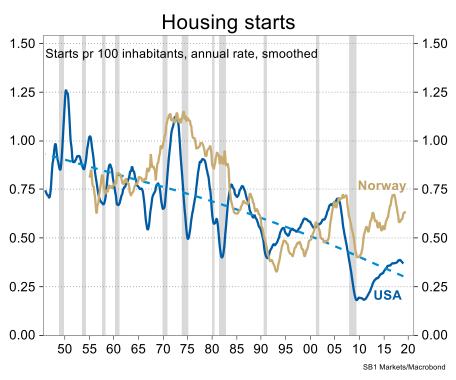
- The preliminary EMU composite PMI fell 0.3 p to 50.3 in November, a slight recovery was expected. The PMI is pointing
 to muted GDP growth in Q4, a substantial slowdown from the 0.9% Q3 pace
- The German composite PMI rose marginally, but remains weak, below 49.2 France one tick up, much stronger than the other major EMU indices. The implicit average of the other countries dropped 1.3 p to 50, the weakest since the Euro crisis. Is the German slowdown spreading to other countries?
- Manufacturing PMI improved marginally, to 46.6, while the services index noted softer growth



Housing permits are soaring, highest level since before the FC

Both housing permits & starts have perked up recently, demand must be thriving. Limited upside?



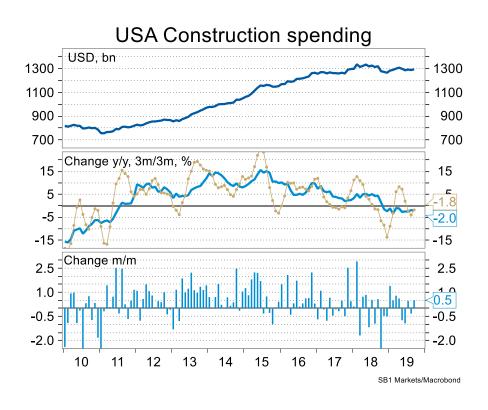


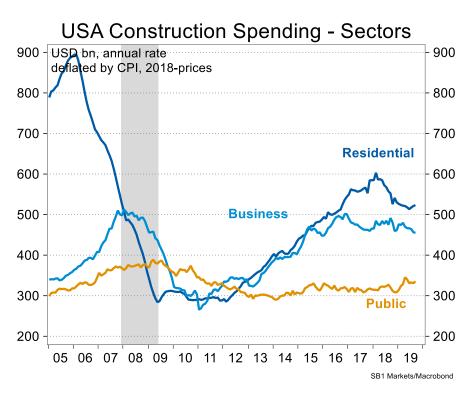
- Housing starts rose by 3.8% m/m in October, to an annual rate of 1.31 mill, a tad below expectations. Starts have climbed since last winter and are less than 2% below the 2018 peak level
- Housing permits increased by 5% m/m, far above expectations. Permits usually are less volatile than actual starts, thus, a more
 useful gauge of the activity in the sector than actual starts. The smoothed rate is just 0.7% below the 2018 peak, and unadjusted,
 the number of permits is the highest since 2007!
- Housing starts/permits reflect a solid housing market upswing, boosted by low mortgage rates. However, the Homebuilders' index do not suggest another lift. The level of housing starts is anyway not high, and the downside is modest compared to '06-'09



Construction spending has stalled – no growth since early 2018 (nominally)

Residential spending has turned up recent months, offset by declining business spending (CPI adj)





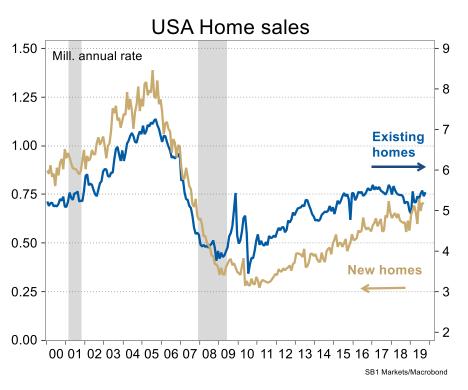
- Activity rose by 0.5% in Sept, but construction spending is heading slowly down, in nominal terms, annual rate at -2%
- Employment in the construction sector is no doubt exposed it has already slowed substantially



Existing home sales heading straight up, not far below 2018 peak level

Existing home sales are up 11% from the trough, a slightly slower upturn than new home sales





- Existing home sales rose 1.9% m/m in Oct, close to expectations, after falling the prior month
- Pending (existing) home sales are heading steeply up, reversing the early 2019 downturn. Pending sales are pointing to steady existing home sales, these are usually quite well correlated. New home sales have been soaring recent months
- · Strong home sales adds to upbeat housing data, demand must be booming

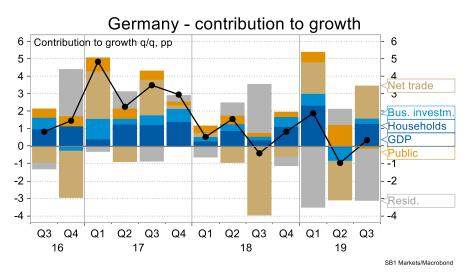


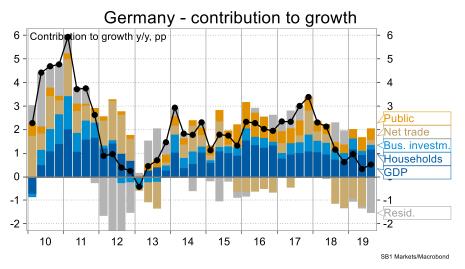
Q3 GDP details are surprisingly upbeat, household & business demand keep up

Household demand boosted growth and business investments increase – as did net trade



- GDP rose by 0.3% annualized in Q3, unch from the first est.
- Both private consumption and housing investments increased, thus, total household demand gave a 1.3 pp contribution to growth q/q. Business investments surprisingly rose and made a modest contribution. And net trade was the major growth contributor, due to a rise in exports. A huge inventory/residual shaved of 3 pp of the annualized q/q growth. Measured y/y, the contribution from households is the highest in 3 years
- The solid Q3 fundamentals provide some comfort on the German economy and the auto sector is showing signs of recovery

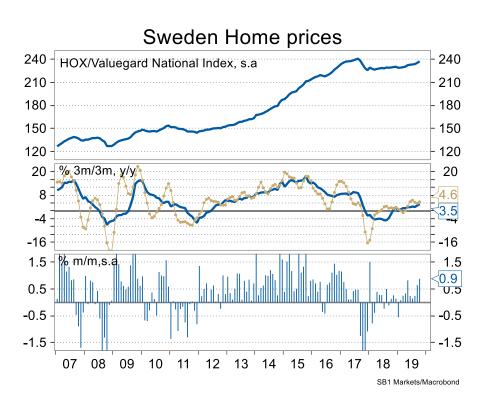


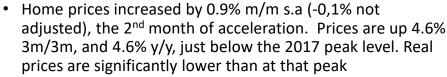




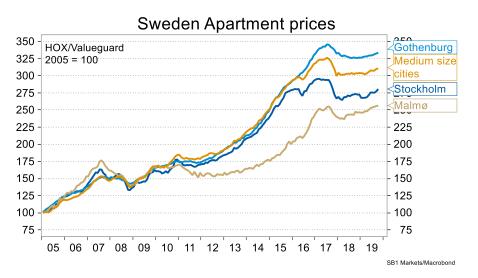
No signs of a softening housing market; house prices inflation accelerates

Prices spiked 0.9% m/m in October, underlying growth rose to 4.6%





- » Soaring Stockholm prices lifted growth, others rose moderately
- The number of transactions is heading up. Still, given several signs of slowdown in the Swedish economy, limited upside?

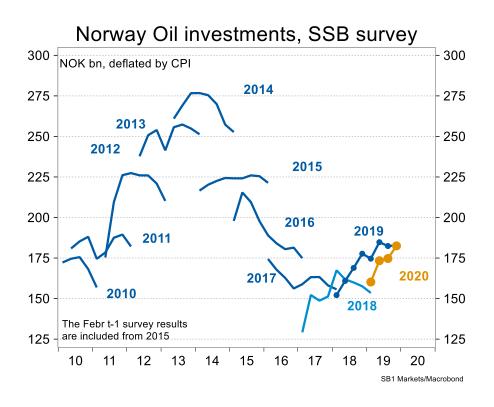






Oil investment f'casts close to expectations, investments are peaking now

2019 and 2020 f'cast nudged up modestly, indicating strong growth in Q4 and not much thereafter?

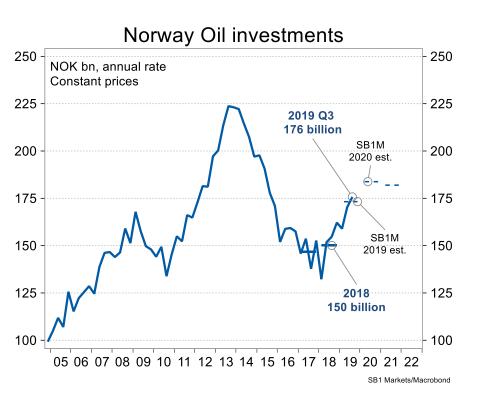


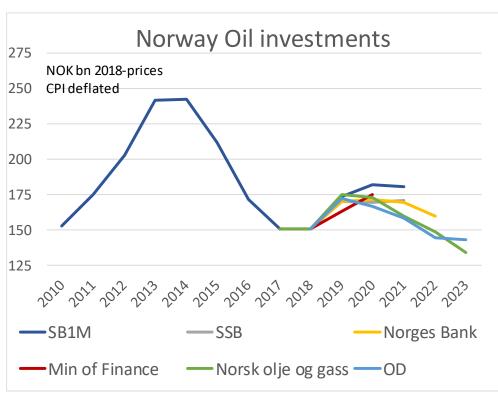
- In SSB's Q4 oil & gas investment survey, companies adjusted their 2019 investment f'cast up by NOK 1 bn to 183 bn.
 Based on the companies' investment reports, we nudge up our volume growth estimate to 15.3% in 2019 (from 14.5%)
 - » If our estimate is correct, investments will have to increase rapidly in Q4, by some 7% in volume terms (from Q3)
 - » Norges Bank projected a 14.5% 2019 growth back in Sept
 - » Investment goods & services price inflation is picking up, we estimate some 2% in 2019
- The 2020 estimate was raised by 9 bn to NOK 183 bn, 1 bn lower than we estimated. We adjust our 2020 volume estimate to 6.1% (from 4.5%), partly because a large PDO on the Balder X project is soon expected.
 - » Still, If our 2019 assumptions are accurate, the 2020 average level is 4 bn (2%) <u>lower</u> than the estimated Q4 2019 level. Thus, a crucial growth engine will subside, from an 0.7 pp direct GDP growth contribution in Q3, to a negative sign from here
 - » The 2020 f'cast is 3% above the equivalent 2019 f'cast
 - Norges Bank projects 2.5% volume growth in 2020, an upward revision is likely



Oil investments: Not much upside left

Our 2020 6% volume growth estimate implies an averagte 2020 level 2% below the Q4 19 estimate



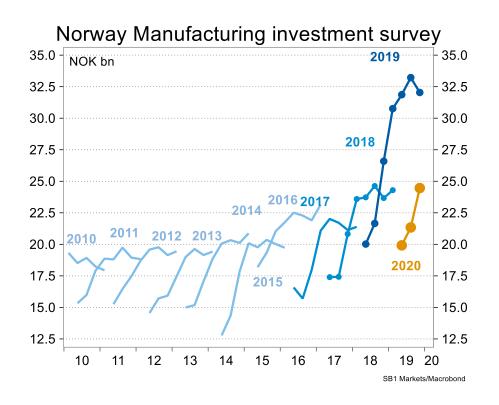


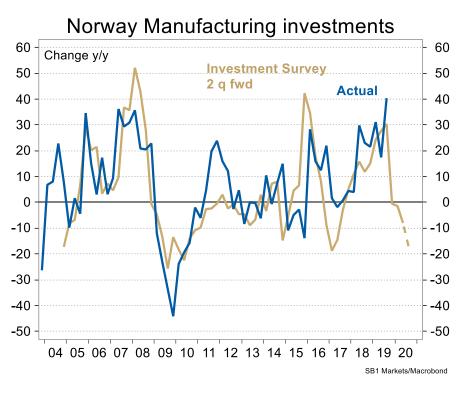
- We nudge our 2019 volume growth estimate up to 15.3%, from 14.5%, to a NOK 173 bn level. In Q3, investments came in at 176 bn, and investments will have to increase substantially in Q4 if the 2019 f'cast is to be reached. We assume a 7% volume growth
- We estimate 6.6% volume growth (from 4.5%) in 2020, with a 2020 investment level at NOK 185 bn. If our assumptions are correct, there is just some 5% upside left vs the Q3 investment level, and a decline of 6% vs the Q4 estimate. Hence, we stick to our view that oil investments will yield muted GDP growth impact in 2020
- After 2020 most forecasters expects a decline, as the Johan Sverdrup and Castberg projects are finalised and few new projects are announced. No doubt, the oil price will influence the investment level from 2020 onwards, as more projects may be added



Manufacturing investments at peak, down 15-20% in 2020

We expect a substantial cut in investments next year, following a 40% (!) boom in 2019



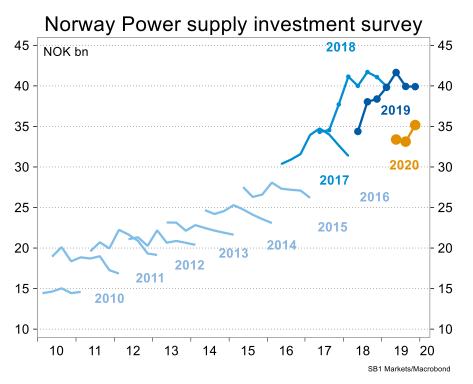


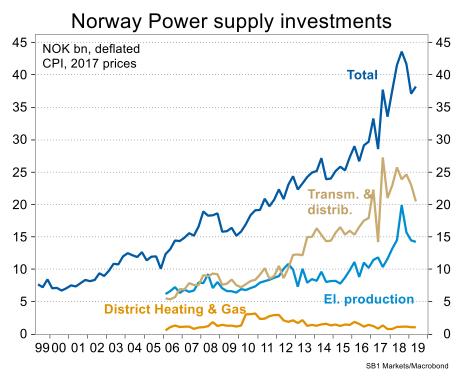
- Manufacturing companies adjusted their 2020 investment estimate up by NOK 3 bn in Q4, a tad more than we expected.
 The estimate is 8% lower than the equivalent 2019 estimate (from Q4 2018), and 24% below the likely 2019 final outcome.
 We expect the 2020 estimate to be nudged further up (as usual) but we still assume a 14% drop in nominal investments in 2020 –and a 18% decline in real term. Even so, the investment level will not be low
 - » Many sectors are contributing to the lift in 2019, particularly in the refined petro, food and metals



Power supply: A substantial slowdown into 2020, from a high level

2020 investment estimates signals a sharp decline from 2019, we expect a 15% drop



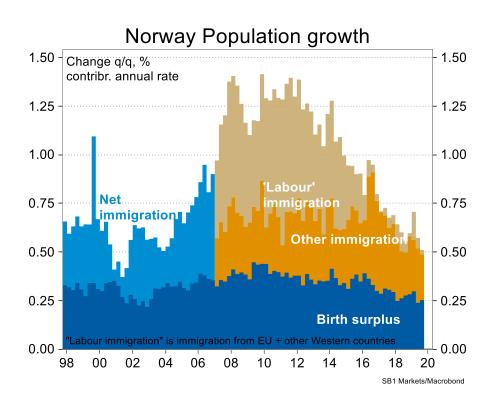


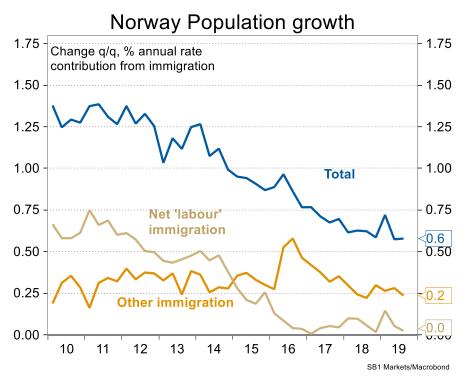
- Power supply (production & distribution) companies nudged up their 2020 investment f'cast by NOK 2 bn to NOK 35 bn. The
 estimate is 9% below the equivalent 2019 f'cast (from Q4 2018). We expect some 12% (nominal) decline in 2020 vs the 2019 level,
 based on the 'normal' adjustments through the year
 - » Investments in both transmission and distribution of electricity and electricity production have already fallen
- The 2019 estimate was held unchanged at 40 bn, 2% lower than the equivalent 2018 f'cast. The previous years, investments increased by a +15-20% (!) annual growth rate
- In 2018, investments rose more than 20%, and they have more than quadrupled in 25 years, more than 10% p.a in average. The
 investment level as % of Mainland GDP has been running at 1%, the highest in decades



Population growth remained low in Q3, net immigration bottoming out?

Growth in western ('labour') net immigration fell back to zero in Q3, has been muted since 2017



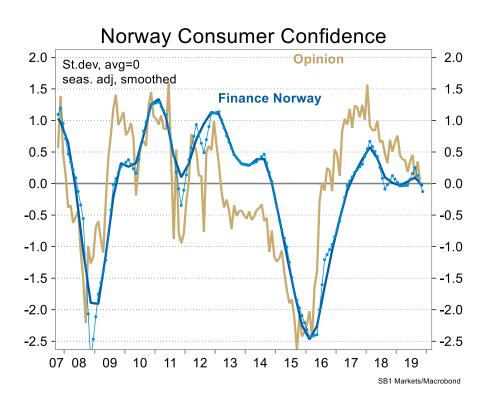


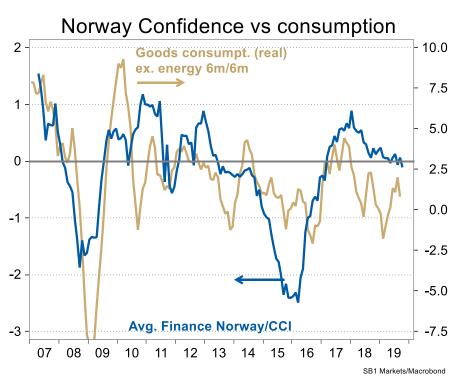
- Total population rose by 33' persons y/y in Q3, a marginal slowdown from Q2. Growth has stabilized since Q4 2018, at the
 lowest rates since 2005. Population is up 0.6% q/q annualised, unchanged from the previous quarter. Growth has been sliding
 steadily down since 2012, from a 1.3% annualised speed 60' persons)
 - » At the peak, labour net immigration (EU + other 'western') ran at 30' persons, equalling 0.75% of the population. It fell to zero in 2016 and remained marginally positive during 2017 and 2018. This year, net labour immigration has turned positive, before slowing to zero in Q3
 - » Non-western immigration increased marginally in Q2, growth is just below the 'normal level', after 'the Syrian' spike in 2016
 - » The net birth surplus has been steady the past year, at the lowest level since 2003, due to fewer births (not more deaths)



Consumer sentiment down in Q4, on weaker 'macro' confidence

Finance Norway's expectation survey fell to the weakest level since 2017 – just marginally below avg





- Finance Norway's quarterly consumer confidence index slipped to 12.1 p in Q4, (seasonally adjusted), from 16.8 in Q3. The trend adjusted index fell to just 0.04 st.dev below the avg level since 2007, the softest print since 2017
 - » Confidence in the Norwegian economy weakened, while the assessment of the personal economy improved
- Opinion's monthly CCI fell by 0.2 st.dev in Oct, and the uptick in Sep was fully reversed. While monthly data are somewhat volatile, the trend is no doubt downwards
- The avg of the two surveys is sliding down but just very slowly the past months, and do not signal any abrupt slowdown in consumption. Consumption of goods has been softer than indicated by the sentiment surveys (although the correlation is not strong). Slow growth in nominal and real income, low population growth may explain some of this gap, the 'new normal' is lower than before.



The Calendar

In focus: China PMIs, US capital goods orders, PCE, Fed's Beige Book, Norwegian unempl., credit

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		Indicator	Period	Forecast	Prior	
	y Nov 25					
10:00	GE	IFO Expectations	Nov	92.5	91.5	
14:30		Chicago Fed National Activity Index	Oct		-0.45	
Tuesday Nov 26						
14:30		Trade Balance, Goods	Oct	-\$71.3b	-\$70.4b	
15:00		CS 20-City House Prices MoM	Sep	0.4%	-0.16%	
16:00		New Home Sales	Oct	707k	701k	
16:00		Conf. Board Consumer Confidence	Nov	126.8	125.9	
Wednesday Nov 27						
08:00	NO	Unemployment Rate, LFS	Sep	3.7%(3.7)	3.7%	
14:30	US	GDP QoQ, Annualized	3Q S	1.9%	1.9%	
14:30	US	Durable Goods Orders	Oct P	-0.5%	-1.2%	
14:30		Capital Goods Orders, Core	Oct P	-0.4%	-0.6%	
14:30	US	Initial Jobless Claims	Nov-23		227k	
15:45		Chicago Manufacturing PMI	Nov	47.1	43.2	
16:00	US	Personal Income	Oct	0.3%	0.3%	
16:00	US	Personal Spending	Oct	0.3%	0.2%	
16:00		PCE Core Deflator YoY	Oct	1.7%	1.7%	
16:00	US	Pending Home Sales MoM	Oct	0.2%	1.5%	
20:00		Fed's Beige Book				
Thursday Nov 28						
08:00		Credit Growth YoY	Oct	(5.4)	5.8%	
09:00	SW	Economic Tendency Survey	Nov		93.6	
09:00	SW	Consumer Confidence	Nov		92.7	
09:30	SW	Retail Sales MoM	Oct	-0.2%	0.3%	
10:00		Norges Bank Expectations Survey	4Q			
11:00	EC	Economic Confidence	Nov	101	100.8	
Friday	Nov 29					
00:30	JN	Jobless Rate	Oct	2.4%	2.4%	
00:50	JN	Industrial Production MoM	Oct P	-2.0%	1.7%	
08:00		Retail Sales MoM	Oct	0.2%(0.3)	-0.1%	
08:00	GE	Retail Sales MoM	Oct	0.2%	0.1%	
09:30	SW	GDP QoQ	3Q	0.2%	0.1%	
10:00		Unemployment Rate, Registered	Nov	2.2%(2.2)	2.1%	
11:00	EC	Unemployment Rate	Oct	7.5%	7.5%	
11:00		CPI Core YoY	Nov P	1.2%	1.1%	
Saturday Nov 30						
02:00	СН	Composite PMI, NBS/CFLP	Nov		52	
Monday Dec 2						
01:30	JN	Manufacturing PMI	Nov F			
02:45	СН	Manufacturing PMI, Markit/Caixin	Nov	51	51.7	

China

» Both composite PMIs came in at decent levels in Oct. The manufacturing PMIs were split; Markit noted a steep upturn, NBS reported a slowdown

US

- » Both core durable and capital goods orders have stagnated, however, not yet declined. Manuf. orders surveys are stabilized, outlook not that bad?
- » Core PCE inflation rose just marginally m/m in Sept, an uptick is likely. Core CPI inflation is still higher than usual vs the PCE deflator
- » Private consumption is most likely slowing along with retail sales and auto sales dropped in October. We view the 0.3% f'cast to be quite upbeat
- » Fed's Beige Book will provide an important assessment of the state of the economy – we will particularly search for any signs of a manuf. recovery
- » The housing market seems to be thriving, more housing sales data and house prices are released this week

Eurozone

- » Unemployment has flattened out the past month, not surprising given the substantial slowdown of the Eurozone economy
- » Germany Ifo survey will most likely continue to reflect a gloomy outlook

Norway

- » Unemployment is probably still sliding down, at a slower pace. Still, we do not expect any sudden turnaround. Participation has been soaring recent months, our take is that the upturn is somewhat exaggerated
- » A decline in the annual credit growth rate is likely, simply due to base effects. Regardless, household credit growth is now cooling
- » Retail sales are growing modestly, marginally faster recent months





Our main views

<u> </u>	Our main views					
	Main scenario	Recent key data points				
Global growth cycle	The cycle is maturing, in the real economy, markets, and the trade conflict is now doubt a factor behind the recent slowdown, especially in the manufacturing sector. Rich countries (DM) are slowing, more to go in most EM. Unemployment is low, wage inflation on the way up (but slowing some places), not low vs. productivity. Most EM x China are in recovery mode. Some hotspots EM will get burned, as usual – but there are fewer EM imbalances than normal. Barring policy mistakes, the global economy is not yet rigged for a <i>hard</i> downturn. Investment rates are not far too high, few debt bubbles this time. Still, growth has slowed to 3% from 4%, and we expect a further slowdown to 2.5% in 2020, even if trade conflicts are 'solved'. If ramped up, more downside risk	Global composite PMI probably rose 0.3 p in Nov, and the manuf. survey rose for the 4 th month in row, to 50.0, still signalling flat production. The composite signals 3% growth. Global auto sales are still sliding down but slowly				
China	The governments' stimulus measures may have stabilised the economy, surveys and data do not point to a hard downturn, rather, a stabilization. The invest/GDP ratio is still sliding down. Debt growth has slowed, and will not accelerate much even if authorities are stimulating credit in order to compensate for the negative impacts from the trade war/previous tightening. Fiscal policy is also activated. Exports to US approx 2% of GDP, and a (so far) 20% decline here is manageable. A full scale trade and even more a tech war will of course hurt the economy. But a trade deal will not bring growth back up, as this is not the reason behind the Chinese slowdown	PBOC cuts interest rates marginally. Both manufacturing production and retail sales slowed in October, well below expectation. Investment growth slowed just marginally, monthly growth is steady				
USA	Growth has slowed, from well above trend. The employment rate is still trending up, and unemployment down, but wage growth is not accelerating. Price inflation is just marg. below target. No serious overinvestments but most sectors at/above trend and corporate debt is high. Business investments have weakened amid weaker growth in profits and trade war uncertainty. Recent consumption data are solid but may now be softening (and partly funded by lower, although still high savings). Housing mostly positive. Fiscal stimulus continues but not by much. The deficit is far, far too high, given the low unemployment rate. Recession risk is increasing, but still not overwhelming, short term. Risks: Trump/trade/business investments	All 3 Fed regional surveys fell in Nov, while the PMI rose. All housing market indicators are strong, both housing starts/permits and existing home sales are climbing. Jobless claims a tad up, still low				
EMU	Growth has slowed and manufacturing data are worrying while the consumer sector remain resilient. The labour market is still tightening, but at a slower speed, and labour cost infl. is back to a normal level. Investment ratios are above trend. Credit growth is accelerating, but still muted. Household savings are high, still consumption has kept up well. Policy: ECB has turned dovish but does not have that much ammunition left, barring a huge QE, and the ECB policy makers are split. Fiscal policy debate has turned. Risks: Trade war (but less risk for a US/EU war after G7). Italy. Weak short term data signal a substantial further slowdown risk	Eurozone composite PMI ticked down in Nov, to 50.3. Still, Germany improved slightly, and the decline in order inflows is now easing. Consumers are still rather upbeat amidst the manufacturing slowdown, a reassuring sign				
Norway	Growth is still above trend but may soon be peaking. Unempl. is still declining, although at a slower pace. Wage inflation is accelerating. Oil investments are peaking now. Mainland business inv. not low anymore, will probably slow in '20. Mixed signals from the housing market, starts probably slowing, prices rising moderately. Electr. prices have taken the headline CPI down but core still slightly above target. Credit growth slowing (households) still above income growth, is spite of heavy regulations. Risks: Debt, housing. A harsh global slowdown	Oil investment survey point to strong growth in Q4 but a rapid slowdown in 2020, a crucial growth boost will subside. Manuf, and power supply investments are/have peaked. Low population growth. Housing starts fell in Oct				



In this report

Global + PMIs China **USA**

- Global macro data slightly more negative vs expectations
- Global retail sales boosted by Japanese VAT, manufact, heads slowly upwards
- Global PMI probably rose 0.3p in Nov
- The global manuf. PMI up for the 4th month in row, orders are growing, inventories not
- All 3 US regional Fed surveys down, 2 sharply
- Eurozone PMI fails to recover but the details may offer some hope?
- OECD leading indicators are still signalling growth below trend
- Interest rates cut marginally, for the 3rd time
- No surprises from the Fed meeting minutes
- Housing permits are soaring, highest level since before the FC
 - Homebuilders' confidence steady in Nov, trending up
 - Existing home sales heading straight up, not far below 2018 peak level
 - UoM Consumer sentiment marginally up in Nov
 - Jobless claims are edging up, too early to call a warning sign
 - The leading indicators slide down but do not signal any abrupt slowdown
 - Nowcasters report 0.4 0.7% growth in Q4

EMU

- Consumer sentiment remains above avg, signs of a resilient consumer sector?
- German Q3 GDP details are surprisingly upbeat. household & business demand keep up

UK

 Manufacturing orders stumbles and inventories remain elevated, according to the CBI survey

Sweden

• No signs of a softening housing market; house prices inflation accelerates

Japan

- Core CPI inflation is turning very slowly up
- Business activity index soared ahead of the VAT increase, just noise

- Oil investment f'casts close to expectations, investments are probably peaking now
- Manufacturing investments at peak, down 15-20% in 2020
- Power supply investments: A substantial slowdown into 2020
- Population growth remained low in Q3, net immigration bottoming out?
- Consumer sentiment came down in Q4, on weaker macro confidence
- SSB confirms the Homebuilders' reports; housing starts have peaked



Highlights

The world around us

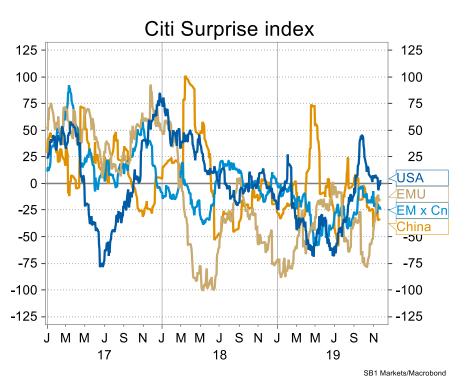
The Norwegian economy

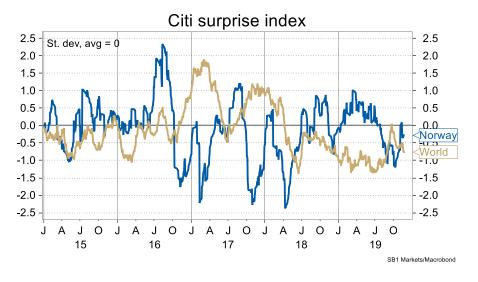
Market charts & comments



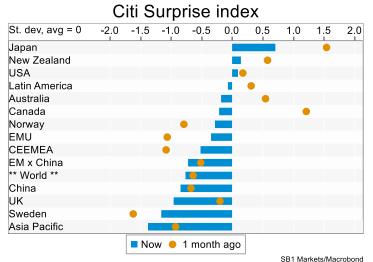
Global macro data slightly more negative vs expectations

Data from the US are marginally negative, again, EMU improves, while China misses expectations





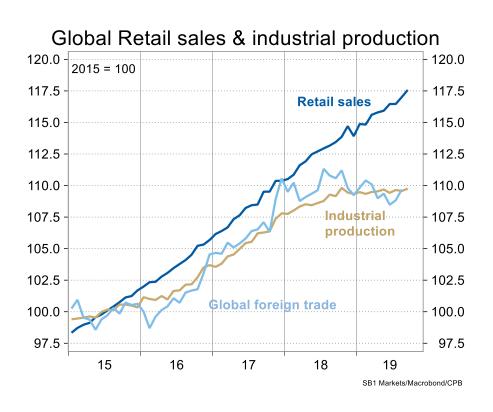
- The global surprise index climbed to a 'neutral' level for the first time this year in mid-Sept. Since then, data have been more disappointing, in sum
- US data flows were beating expectations in Oct, but have now turned negative again, partly due to weak manufacturing data (while some data, like housing, have been strong)
- EMU data have been less disappointing recently, several indicators have stabilized
- · China is sliding down again, Oct data below f'casts. A tad weaker than other EM
- Norwegian data are negative again, and Sweden is far into negative, both reasonable





Global retail sales boosted by Japanese VAT, manufact. heads slowly upwards

Global foreign trade rose further in August, has stabilised?



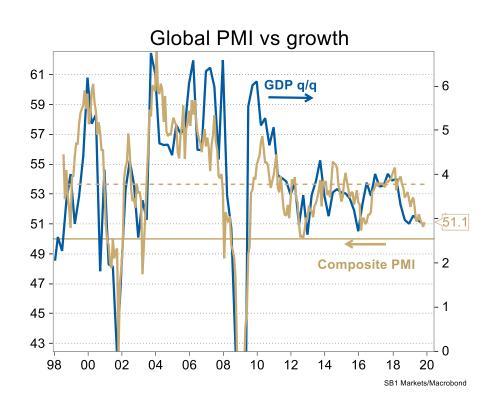


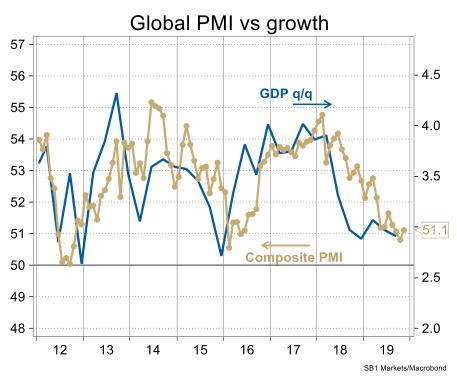
- Retail sales grew by 0.5% m/m in Sept (our prelim. est), as in Aug. Half of the 1% Aug/Sept lift is due to a 11% boost in retail sales in Japan ahead of the VAT hike in October just like we have seen before earlier Japanese VAT hikes, and sales will 'collapse' in Oct. Without this surge, the growth in Aug/Sept is in line with previous months, at a 3% pace
- Global industrial production rose 0.2% in Sept (our prelim. est). Recent months production has climbed marginally. Global business surveys signal a modest decline
- Global foreign trade rose by 0.8% m/m in August (with our seas adj.) up from 0.3% in July (revised down from 0.7%). Trade flows have been trending down since last summer, at 2% pace but may now have stabilised; the August level is the best since March



Global PMI probably up in November, manufacturing back to 50

The index may have stabilised but is still not signalling more than 3% growth



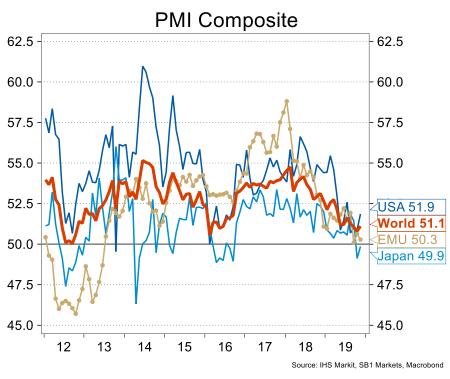


- The composite PMI rose 0.3 p to 51.1 in Nov (our estimate). The index is back to the same level as in April/May and confirms a close to 3% growth in global GDP a growth rate which has been rather stable since Q3 last year
 - » Our estimate is based on PMIs from the US, EMU, UK and Japan. Japan PMI fell steeply, our estimate may put too much emphasize on this
- The PMI has fallen by 4 points from the Jan '18 local peak, equalling some 1 pp slower global GDP growth (or a 10 pp slowdown
 in global MSCI earnings per share), down to zero —which now has been recognised by analysts

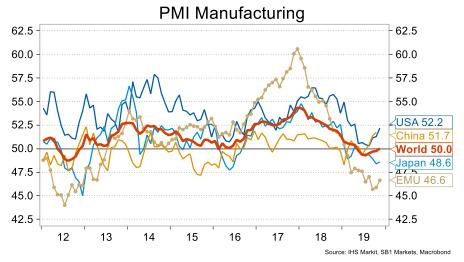


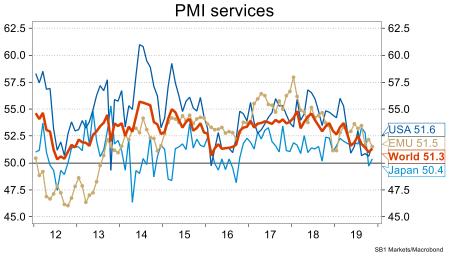
US, Japan up, EMU down, due to weak services

The manufacturing PMI further up, back to 50, trends up? Services rose too, but is trending down



- The Eurozone manufacturing PMI continued upwards in November, by 0.7p to 46.6, still a low level. The US survey rose for the 3rd month in row, to 52.2, still below average but signalling growth in manufacturing production. The global manuf. PMI rose for the 4th month in row
- The services sector PMI rose 0.3 p (our est) but is still trending down, with no sign of recovery in the main countries
- 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

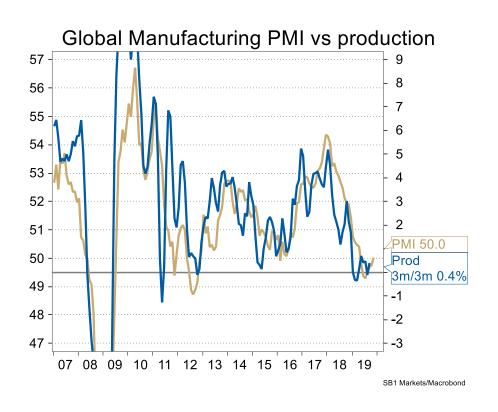


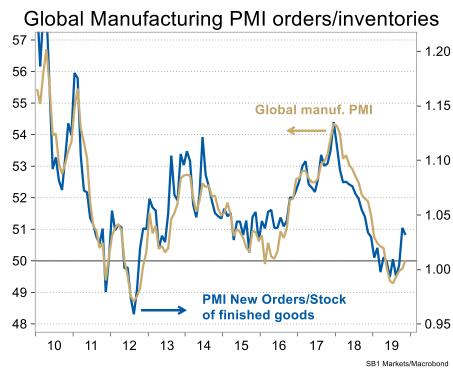




Global manufacturing PMI is has recovered past 4 months, back to 50

We estimate an 0.3 p uptick to 50.0 in November, signalling a marginal growth in production



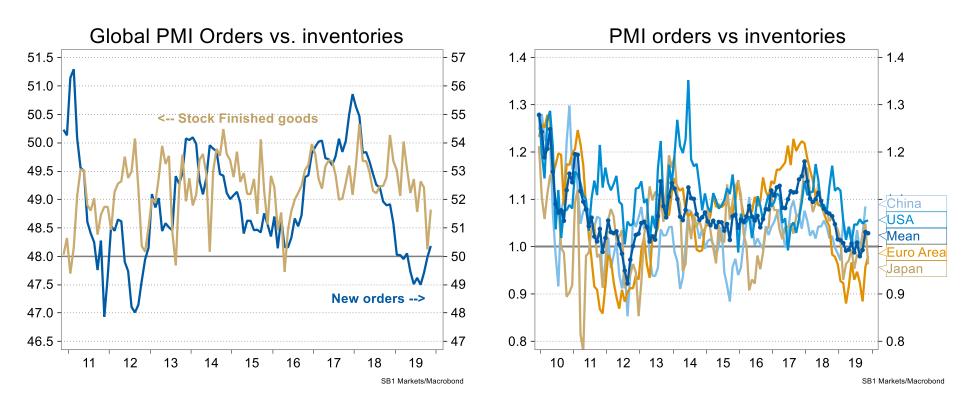


 Recent months orders have been recovering too, while growth in inventories have slowed, a favourable mix (more next page). Thus, the order/inventory ratio has climbed, normally a good signal – however not a leading indicator



Orders vs. inventories: Recovery everywhere, orders up, stocks trending down

... even if a lift in Japanese inventories in November lifted the global stock of finished goods index

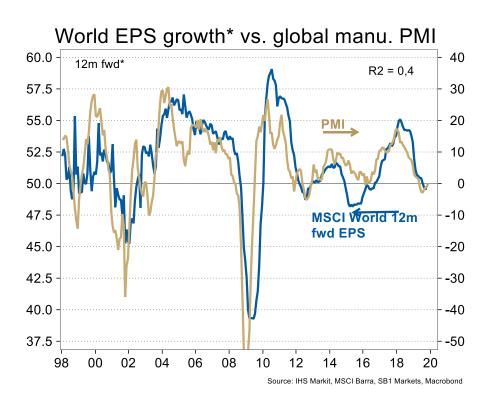


 Inventories are normally a lagging indicator but it is still good news that the growth in inventories of finished goods has slowed substantially – at the same time as order inflow has turn marginally positive



A cycle is a cycle is a cycle

How to make a forecast (macro or micro): Listen to what companies said about the <u>previous</u> month



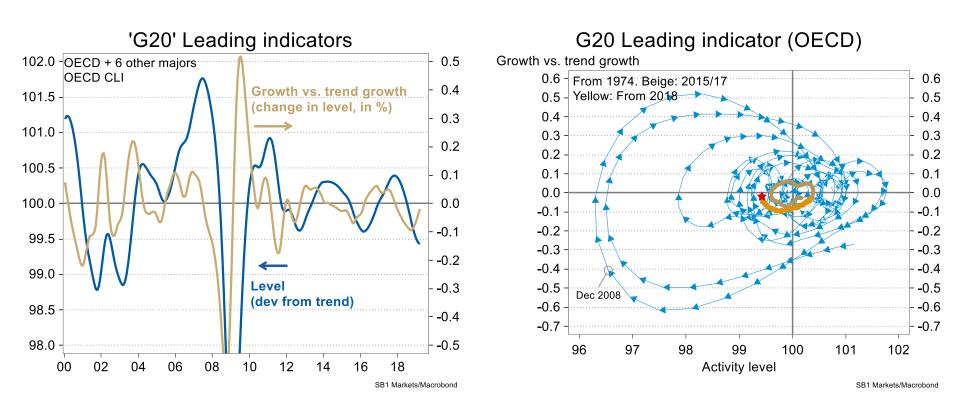


- A 1 p decline in the global PMI 'equals' approx ¼ pp slower growth in global GDP
- A 1 pp decline in global GDP 'equals' almost 10% decline in global corporate earnings (EPS) growth
 - » Thus: A 1 p decline in the global PMI 'equals' approx. 2.5 pp decline global EPS
- A model including global GDP, the oil price and the SDR/USD rate (to include f/x impacts), explains 90% of the global EPS cycle
- The PMIs (like the ISM) are <u>not</u> sentiment surveys. In the Purchasing Managers' Indices, companies are asked about actual changes in activity (orders, sales, employment etc) from the previous to the present month



OECD is still reporting activity below trend, and most are down recent months

However, the speed of decline has slowed but...



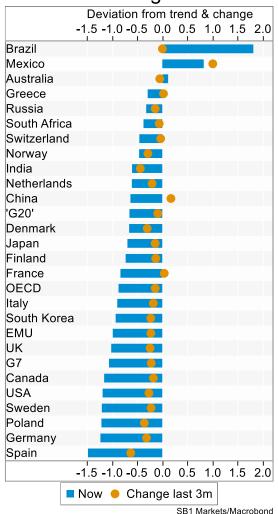
 OECD has reported a moderation of the slowdown for a long while but so far the bright spots have revised away, the downturn has become deeper



OECD CLI: Most countries are below trend, and growth is still below par

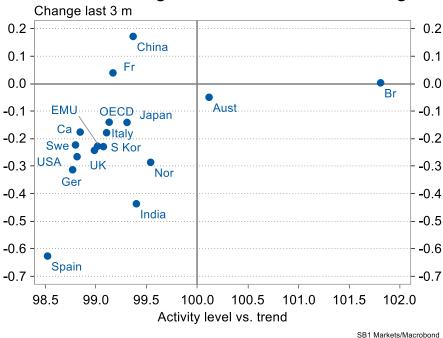
Just 2 countries are operating above trend (Aus/Brazil), just to growing faster than trend (China/Fr.)

OECD Leading indicators



- Almost all countries are operating below trend level, and growth is still slower than trend growth
- Spain and Germany at the bottom, level wise. Brazil at the top, with Mexico
- Spain is slowing at the fastest, before India, Germany and Norway (!) and US

OECD Leading indicators - level & change

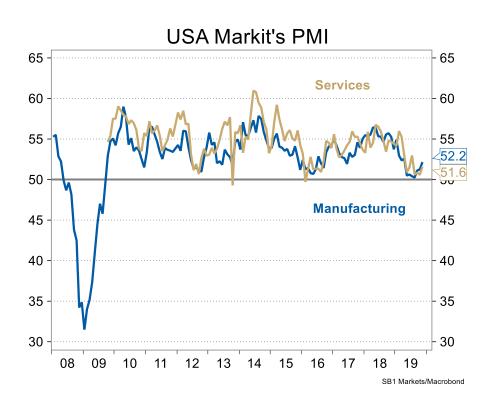


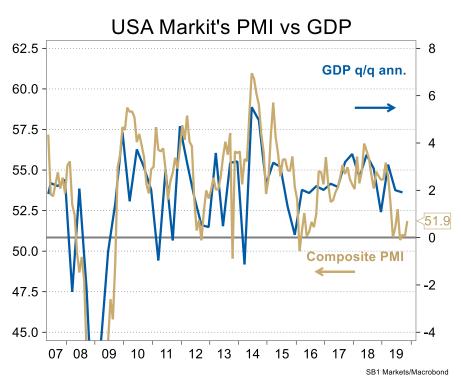
- The OECD composite leading indicators are tracking the short term cycles in the economy. It consist of different indicators, including both real and financial data
- Regrettably, <u>these indices are often revised</u>, and are only reliable for analysing previous cycles, not the present



Manufacturing PMI continued up, the service sector index turned up too

The composite PMI is up from the bottom but is still signalling less than 1% GDP growth



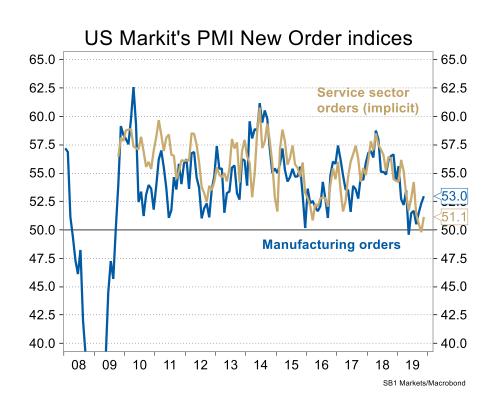


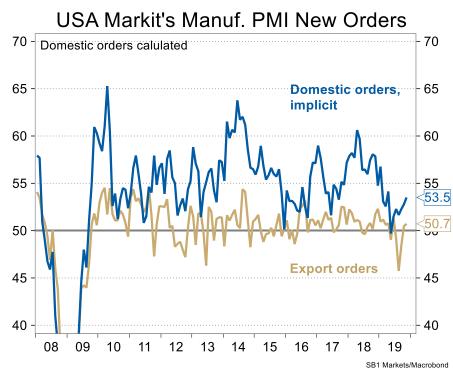
- The preliminary composite PMI rose 1 p 51.9, expected unch. The index have been more or less stable since May, however at level that is signalling growth below 1%
- The manufacturing PMI rose 0.9 p, the 3rd month of increase. The service sector index inched up 1 p to 51.5
 - » Manufacturing orders improved substantially in Oct, to 53, a promising sign. Even service orders rose in November
- The PMI is much more upbeat than the ISM (no Nov data yet) but all 3 regional Nov surveys so far published are all down



Manufacturing orders have turned the corned, at least domestic orders

Export manuf. order index above the 50-line, domestic has recovered to 53.5 from 50 in May

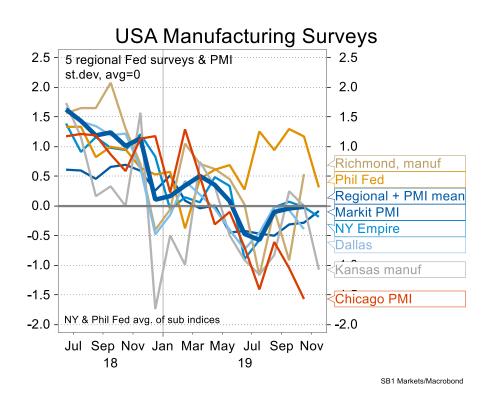


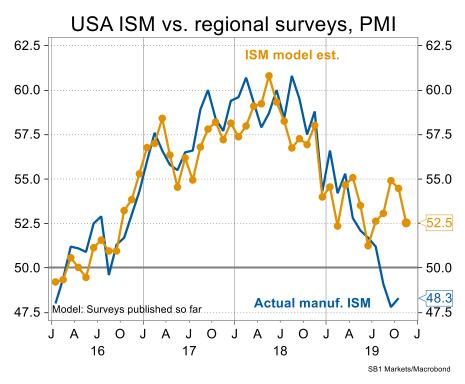




So far: 1 November survey up, 3 down

All 3 regional Fed manufacturing surveys published so far are down, 2 sharply. Still 'high' level



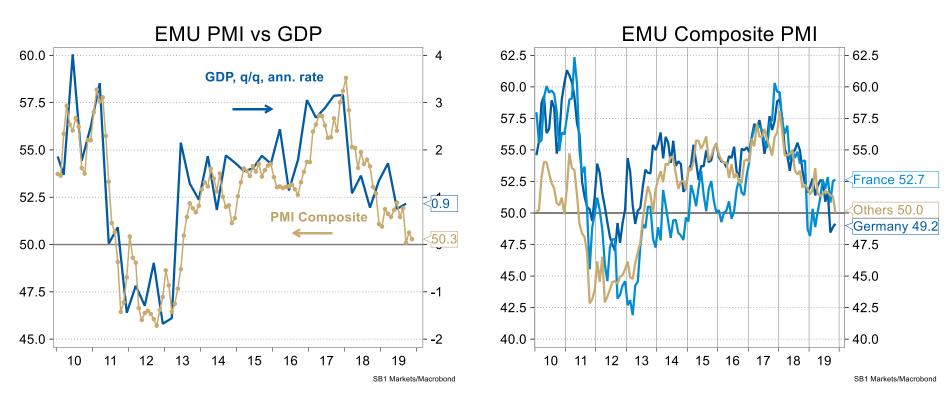


- The Philadelphia Fed index came in much weaker than expected in Nov, noting a 10 p decline. Still, the index remains more upbeat than most other surveys and is still above the avg level. The Kansas Fed's index fell sharply, to low level
- The NY Empire fell marginally in Nov and is more in line with others.
- Taken face value, these indices (including the more upbeat PMI) signals 2 p decline in the ISM index in November.
 However, the ISM index has been far weaker than other surveys past 3 months, and an uptick in the ISM is more likely than a downturn



Eurozone PMI fails to recover – but the details may offer some hope?

Composite PMI edged down 0.3 p in November, Germany and France inched up, 'others' fell to 50

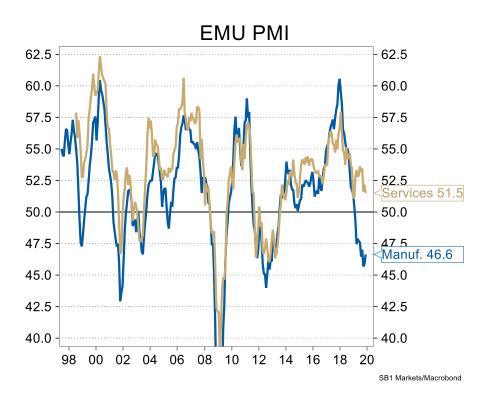


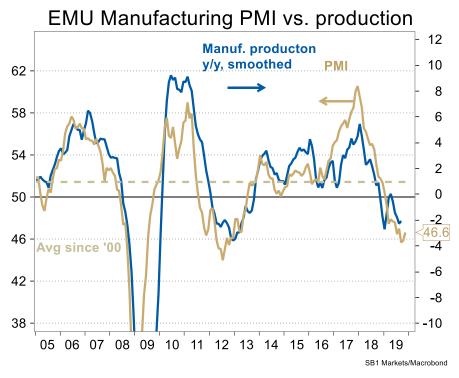
- The preliminary EMU composite PMI fell 0.3 p to 50.3 in November, a slight recovery was expected. The PMI is pointing to muted GDP growth in Q4, a substantial slowdown from the 0.9% Q3 pace
- The German composite PMI rose marginally, but remains weak, below 49.2 France one tick up, much stronger than the other major EMU indices. The implicit average of the other countries dropped 1.3 p to 50, the weakest since the Euro crisis. Is the German slowdown spreading to other countries?
- Manufacturing PMI improved marginally, to 46.6, while the services index noted softer growth



Finally some (early) signs of manufacturing stabilisation, but services are slowing

The manufacturing slump may have bottomed out, 2nd month of stabilization



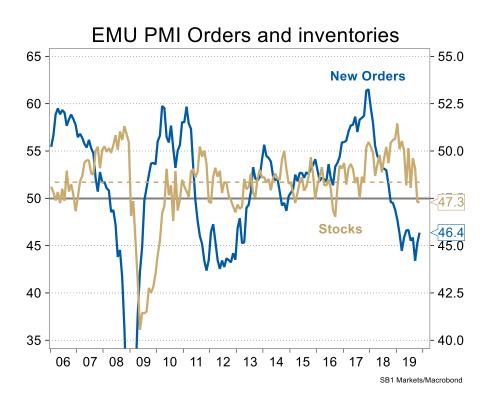


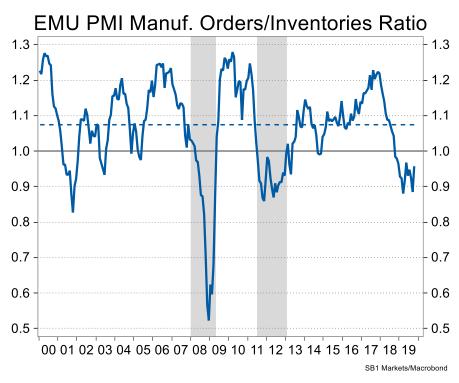
- Manufacturing PMI rose 0.8 p, to 46.6, just above expectations. An early sign that the steep contraction manufacturing
 activity may have bottomed out? Well, the level at 46.6 still points to a rapid decline in production, at some -3% y/y
- The services PMI came down 0.7 p in November, to the lowest since January (but just 0.1 p weaker than September).
 May be an indication of a spreading slowdown, however, the level is still moderate, and the direction is not obvious



The most promising sign; Inventories are reduced and the orders drop is easing

New orders are still falling steeply but less so recently, and the inventory adjustment has started?



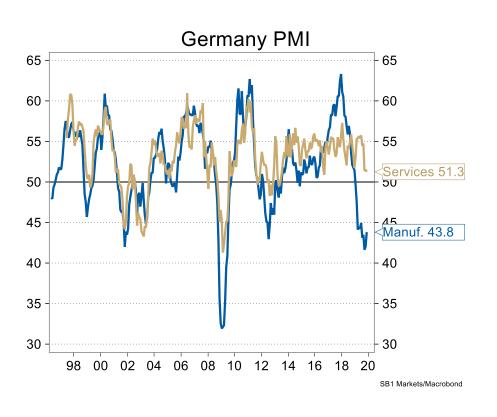


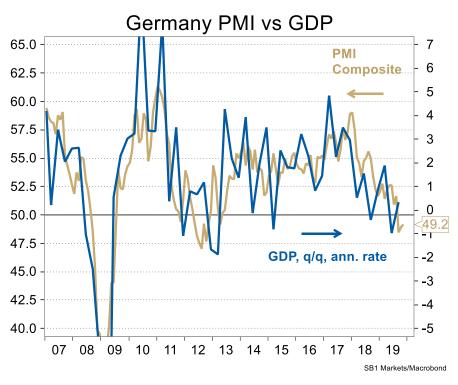
- The decline in total orders eased for the 2nd month in November, the PMI rose 1.1 p. The level at 46.4 still reflects the steepest decline in orders since the Euro crisis
- The inventories of finished goods <u>index</u> held steady at 47.3, the lowest level in 3 years. The level is now signalling a
 moderate drawdown of inventories, suggesting that the inventory adjustment cycle may be underway



Manufacturing contraction slowed in Nov, slower growth in service sector

Manuf. rose to 43.8, services a tad down. Composite PMI indicates marginally positive growth





- The manufacturing PMI rose 1.8 p in November, the steepest rise in 2 years. Nonetheless, the level at 43.8 still points to a deep contraction in German manufacturing and one months upturn is not efficient to call any recovery
- The services PMI fell 0.3 p this month and is trending straight down. The PMI still signals modest growth, but the
 direction may be reflecting a spreading manufacturing dip



Orders are falling at the slowest rate in 10 months, signs of stabilization?

Both domestic (implicit) and exports orders PMIs have recovered somewhat. Actual exp. orders flat



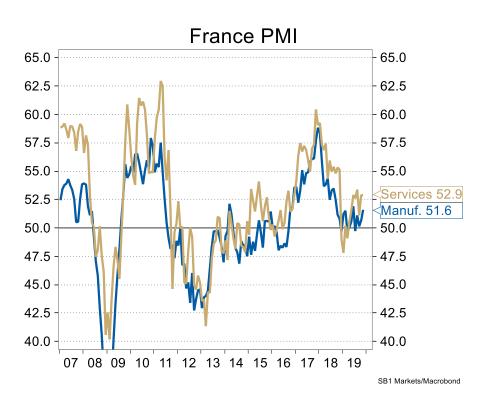


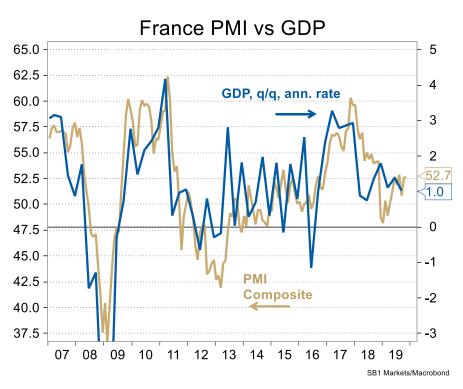
- Export orders are still signalling a much steep decline in actual export orders. Actual orders have fallen but much less than
 the PMI indicates, and even stabilized recent months. Still, the direction of the PMI may confirm a soft recovery
- The most plausible explanation of the German slowdown may be a mix of a maturing German manufacturing cycle, trouble
 in the auto industry and global uncertainties stemming from the trade war and Brexit influencing domestic demand. Now,
 global uncertainties have eased somewhat (at least until last week's trouble in the US/China trade negotiations) and the
 auto industry is showing some early signs of a turnaround



Both PMIs are improving, composite points towards a decent 1.5% growth rate

Manufacturing PMI edged up to 51.6 in November, services flat at 52.9, after a swift recovery



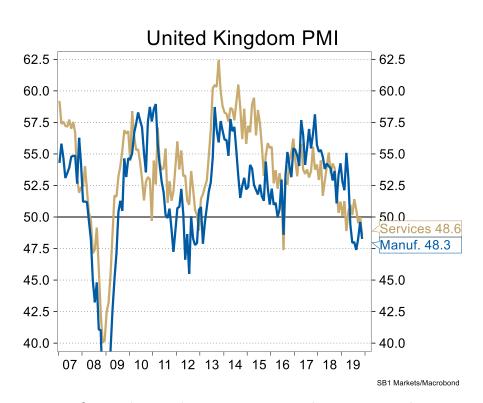


- Services reported improved conditions in October, the PMI rose 1.8 p, reflecting moderate growth
- The manufacturing PMI has increased the past two months, and the level now indicates to modest growth. French manufacturing has been holding up much better than the other 'major' Eurozone countries
- The composite PMI rose marginally to 52.7, pointing to a decent 1.5% GDP increase

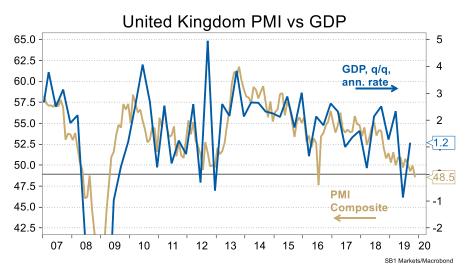


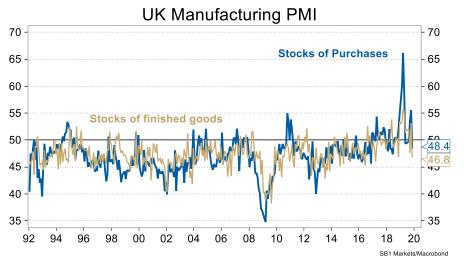
Both PMIs slipped in Nov, composite PMI points to a stagnation

An inventory build up ahead of the Oct Brexit deadline acted as a headwind on manuf. activity, again



- Manuf. PMI dropped 1.3 p in to 48.3. The prior month, businesses ramped up stockpiling as businesses were preparing for the October Brexit deadline. In November, these effects were put in reverse, dampening activity
 - » The inventory build up was much more modest than in the spring
- Services PMI slipped 1.4 p, the level at 48.6 confirms a broad slowdown in the UK economy

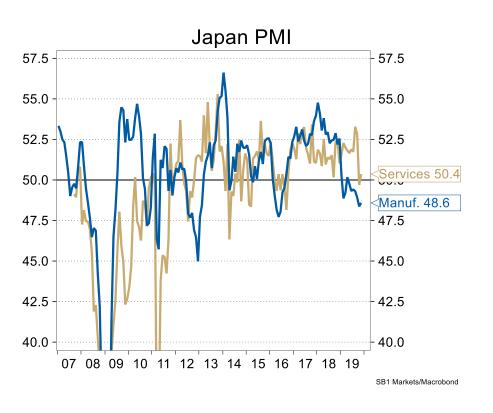


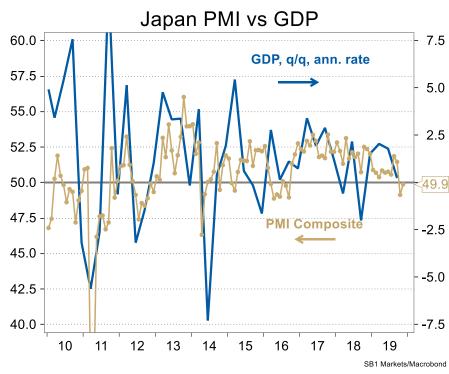




Manufacturing PMI remained weak in Nov, services a tad up

Businesses are still struggling in the aftermath of the October VAT hike, a gradual rebound is likely



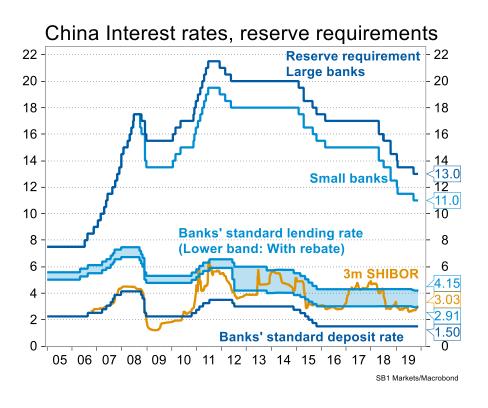


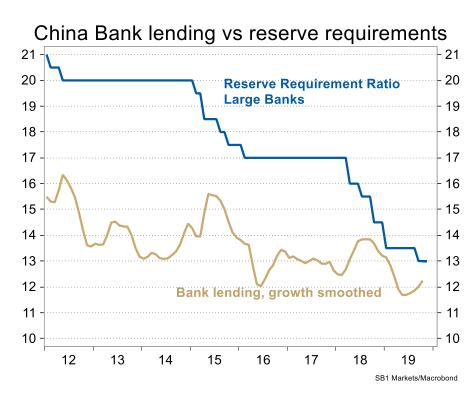
- Composite PMI rose 'just' 0.8 p in Nov, following the 2.3 p drop in Oct. The index points to close to zero GDP growth
 - » The services PMI failed to recover substantially from the Oct plunge. We expect a further recovery, but it may take some time. In 2014, the last time consumer tax was raised, the services PMI was back at the pre-hike level after 3-4 months. Thus, during these months, we cannot tell whether or not the weak prints reflect a 'fundamental' slowdown
 - » Manufacturing PMI inched up to 48.6, still reflecting declining activity. Japanese manufacturing is slowing along with global demand
- Other Japanese surveys confirms a slowdown but not more than in '16, 13' or 11'



Interest rates cut marginally, for the second time

Policy turns more accommodative as rates are cut and reserve requirements have been slashed



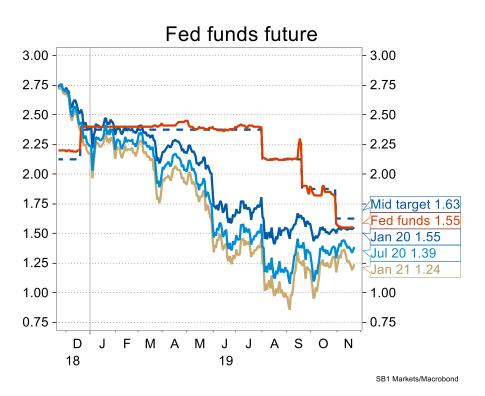


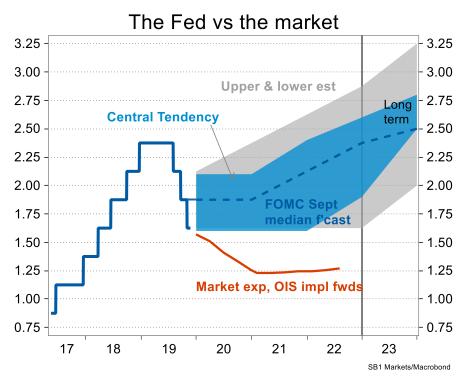
- Last Wednesday, the one year loan prime rate was cut marginally to 4.15%, from 4.2%, following the 6 bps cut in August and 5 bps in September (sum 16 bps, fine tuning!). Moreover, last Monday, the short term market rate (the 1 week reverse purchase rate) was by cut for the first time in four years, by 5 bps to 2.5%
 - » In October, the PBOC cut the one year medium term facility rate (MLF) by 5 bps
- Thus, China is slowly stepping up monetary easing, however, so far the interest rate cuts have been modest
- In October, the PBoC announced a CNY 200 bn cash injection into the banking system to ease lending conditions. This amount equals just 1/10th of one month's increase in bank lending, and cannot have any significant impact on credit condition



No surprises from the Fed October meeting minutes

Minutes reinforced Powell's message that the monetary easing would most likely be put on hold





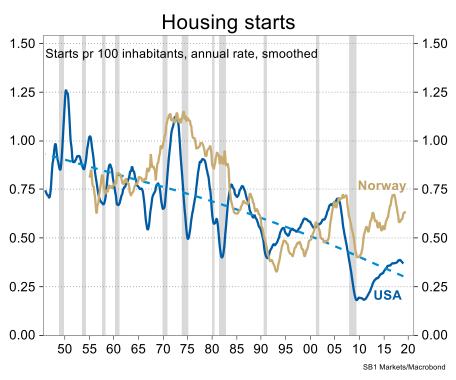
- Minutes from the Oct 30 meeting, at which the Fed cut the Fed funds rate for the 3rd time this year, did not reveal many substantial news. Most member agreed that the cut was appropriate given the weakness in business investments, global trade uncertainties and inflation running below the target. Two of ten voted against the cut, arguing that the economic outlook remained broadly positive and that inflation was moving up towards the target
 - » The FOMC agreed that the current monetary policy stance should be held unchanged as long as the economy did not deteriorate substantially
 - » The Fed Funds rate was cut by 25 bps to 1.5-1.75% and there was no new 'dot plot' at this meeting, the path at the chart above is from September
- Market reactions were muted, market rates continued to slide down on Wednesday, triggered by reports of trouble in the China/US trade deal negotiations. 'Everyone' expects an unchanged interest rate at the December meeting



Housing permits are soaring, highest level since before the FC

Both housing permits & starts have perked up recently, demand must be thriving. Limited upside?



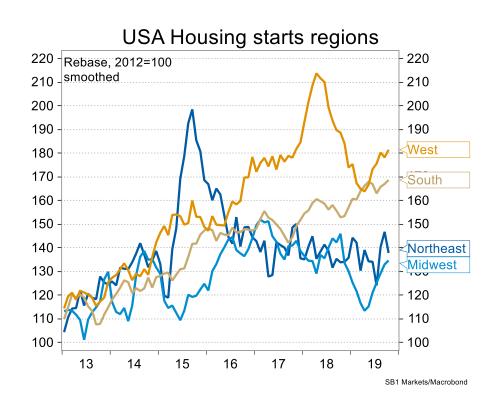


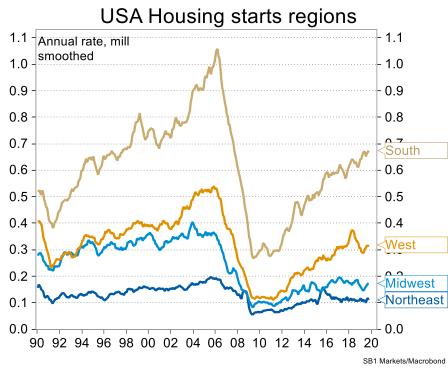
- Housing starts rose by 3.8% m/m in October, to an annual rate of 1.31 mill, a tad below expectations. Starts have climbed since last winter and are less than 2% below the 2018 peak level
- Housing permits increased by 5% m/m, far above expectations. Permits usually are less volatile than actual starts, thus, a more
 useful gauge of the activity in the sector than actual starts. The smoothed rate is just 0.7% below the 2018 peak, and unadjusted,
 the number of permits is the highest since 2007!
- Housing starts/permits reflect a solid housing market upswing, boosted by low mortgage rates. However, the Homebuilders' index do not suggest another lift. The level of housing starts is anyway not high, and the downside is modest compared to '06-'09



A broad upturn; Home building is rising in almost all regions

The West and South are in the lead, Midwest have recovered too. And Northeast marginally up?

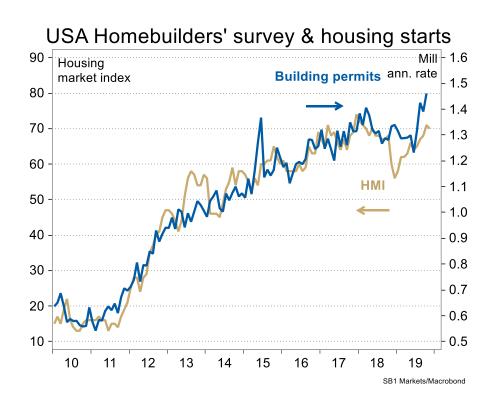


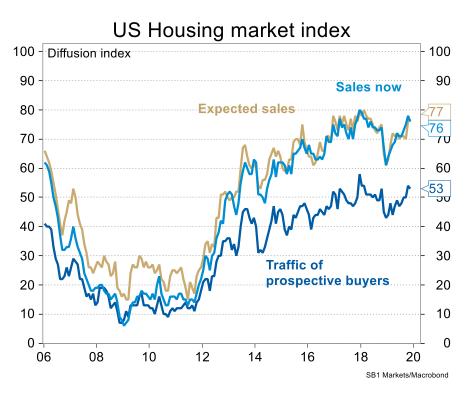




Homebuilders' confidence steady in Nov, trending up

The HMI is back at the early '18 levels but does not signal higher starts – and it is usually leading



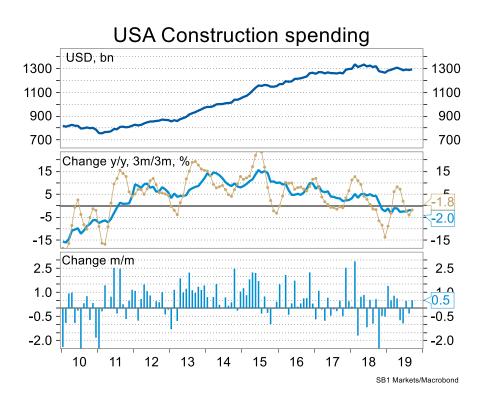


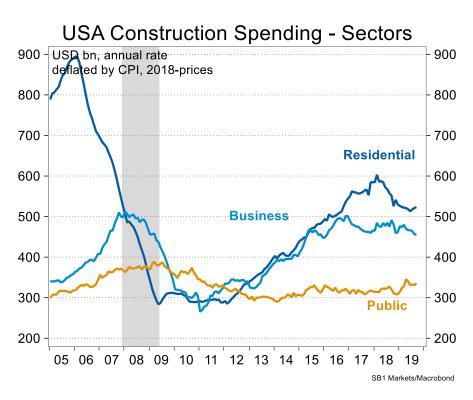
- The housing market index (HMI) edged down one point to 70 in Nov, expected unchanged. The homebuilders have been
 reporting improved market conditions this year, the HMI index is above the 2018 avg and just 4 p below the '18 peak
 - » According to the homebuilders, low mortgage rates and strong demand (fuelled by a strong labour market) are boosting activity. The builders are complaining about lack of labour and lack of building lots
- Building permits have jumped recent months, the HMI does not signal another lift (although it has been too downbeat for the past year). Historically, the index has been leading both permits and starts by approx. one year limited upside on starts!



Construction spending has stalled – no growth since early 2018 (nominally)

Residential spending has turned up recent months, offset by declining business spending (CPI adj)





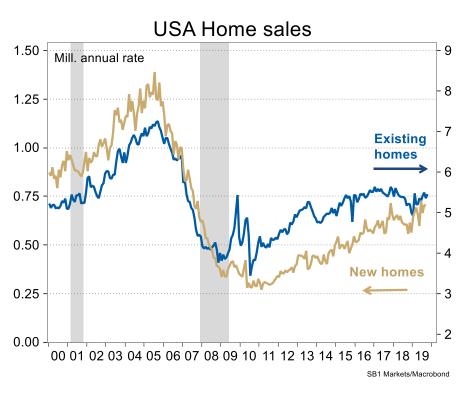
- Activity rose by 0.5% in Sept, but construction spending is heading slowly down, in nominal terms, annual rate at -2%
- Employment in the construction sector is no doubt exposed it has already slowed substantially



Existing home sales heading straight up, not far below 2018 peak level

Existing home sales are up 11% from the trough, a slightly slower upturn than new home sales



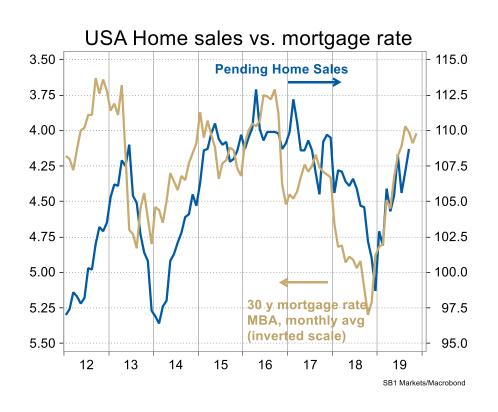


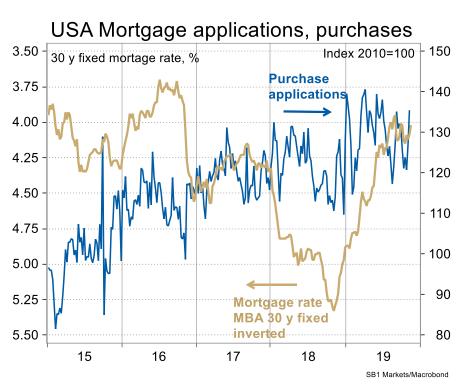
- Existing home sales rose 1.9% m/m in Oct, close to expectations, after falling the prior month
- Pending (existing) home sales are heading steeply up, reversing the early 2019 downturn. Pending sales are pointing to steady existing home sales, these are usually quite well correlated. New home sales have been soaring recent months
- Strong home sales adds to upbeat housing data, demand must be booming



Mortgage application bounced back up, confirming strong demand

All housing demand indicators mirror an upswing



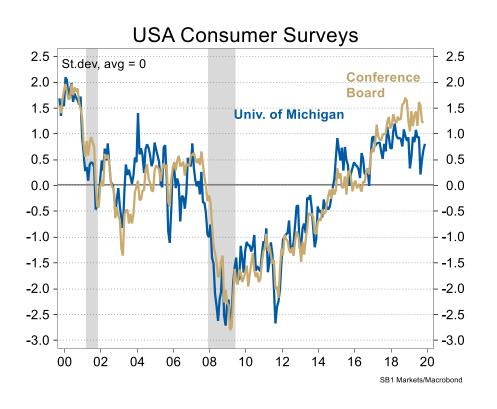


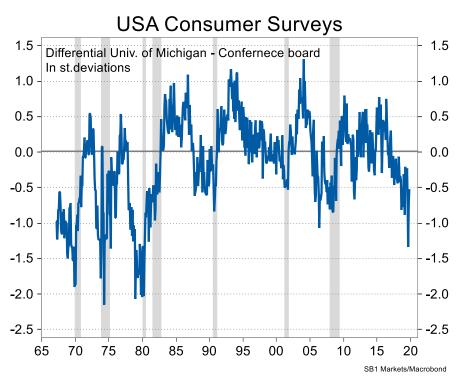
Disclaimer: Demand for new mortgages has <u>not</u> been a reliable leading indicator for the housing market



UoM Consumer sentiment further up in November

Sentiment rose marginally and the level is far above avg, another sign of solid consumer demand



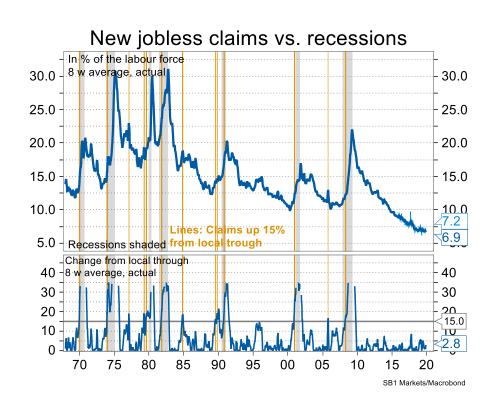


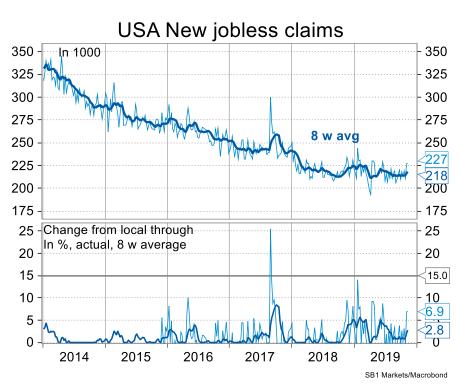
- University of Michigan's sentiment survey rose 1.3 p 96.8 in Nov, expected unch. The index is just 2.4 p below the July level, from before the index dropped steeply in August. Expectations rose, while the assessment of the present situation fell. Both sub indices are above an average level, the current situation index is still in the lead
- The gap to the Conference Board's consumer confidence index remains more elevated than usual and it is not a signal of strength: Thus always happens ahead of economic downturns. However, the gap has narrowed substantially since July
 - » Both the view of the current situation and expectations have improved the past 3 months. Expectations are marginally above avg, curr. sit. well above
- CB's consumer confidence index was flat in October, trending more or less flat recent months, at a high level
- These surveys do not point to any sudden halt in consumption



Jobless claims are edging up, too early to call a warning sign

Jobless claims rose to 227' last week, above the 8 w average at 218, which is still very low



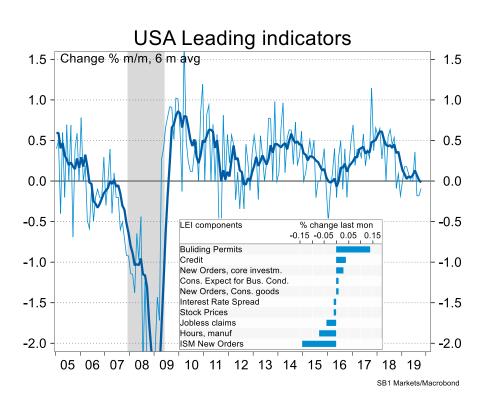


• A more than 15% increase in jobless claims (measured by the 8 week avg) is usually a good indication of a recession, and a yellow 'recession' warning line is to be drawn, check the chart to the left. So, no reason to worry now?

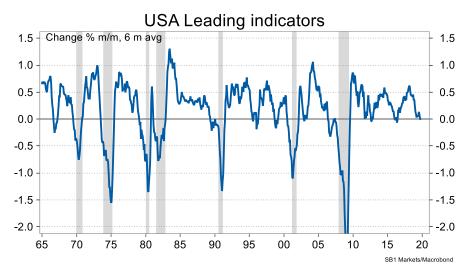


The Leading indicators slide down but do not signal any abrupt slowdown

LEI points to some 1.5% GDP growth, much more upbeat than the nowcasters at 0.4%



- Conference Board's Leading indicators fell 0.1% m/m Oct, and Sept was revised down slightly. The 6m average m/m change has fallen to zero
 - » The ISM, manufacturing hours worked (due to the GM strike) and jobless claims dragged the LEI down this month, building permits the major positive contribution
- Face value, the LEI is signals 1.5% GDP growth into Q4



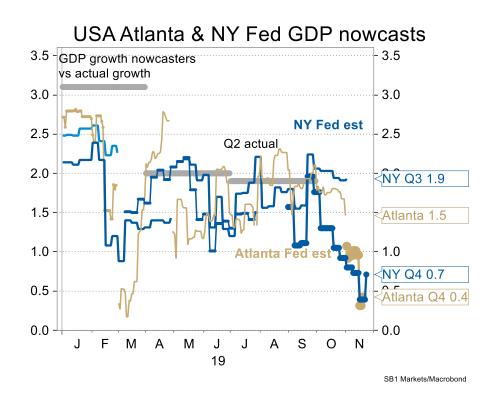


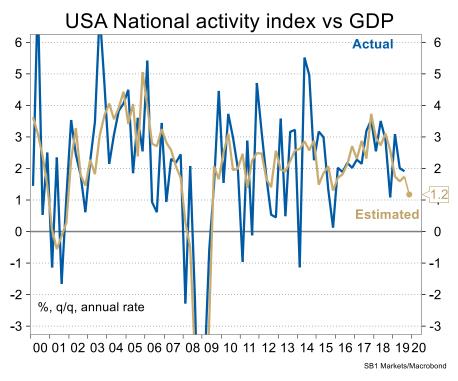
Conference Board's Leading Index (LEI) is a composite index based on ten already published leading indicators that are judged to be leading the overall cycle



Nowcasters still guessing slow growth in Q4

Both NY & Atlanta Fed nowcasters fell of the cliff two weeks ago, lowering the Q4 GDP sharply



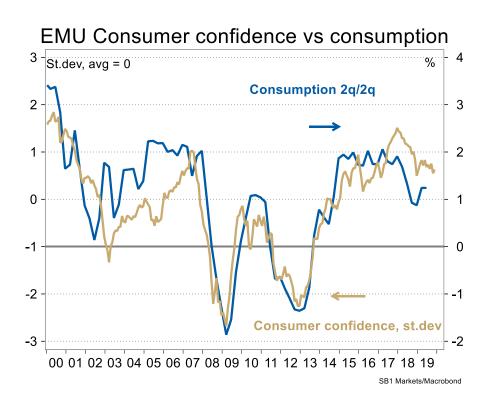


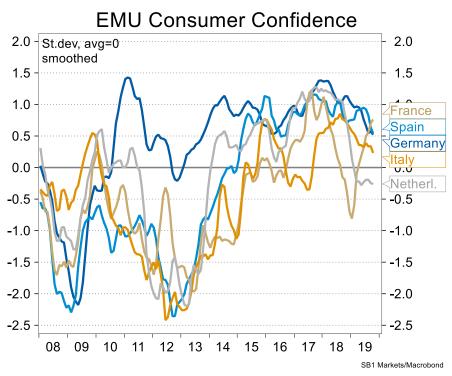
- NY Fed's forecast back up to 0.7%, from 0.4%
- Atlanta Fed's forecast up one tick 0.4%
- The National Activity Index, which suggested 1.8% GDP growth in Q3 (0.1 pp below the actual number), now points to a slowdown to 1.2% into Q4 (Sept data)



Consumer sentiment remains above avg, signs of a resilient consumer sector?

Consumer confidence inched up in Nov, trending slowly down but the level is elevated, as in the US



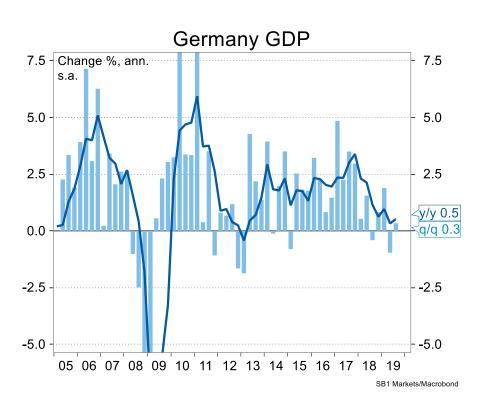


- Consumer confidence recovered modestly in November, after a drop in October. The CCI has anyway stabilized at a solid level this year, after a rapid decline through 2018. A reassuring sign among many soft (manufacturing) data points
 - » Confidence is softening in Germany, Italy and Spain, however none of these are weak. The CCI confirms that the household sector remains strong, as retail sales and credit have been indicating. In France, confidence rebounded strongly when the protests subsided in early '19. Netherlands is struggling the most. (No Nov country data)
 - » Real wages + hours worked, a good proxy of total disposable income is expanding approx. at the same speed as sales and do not signal weaker consumption either

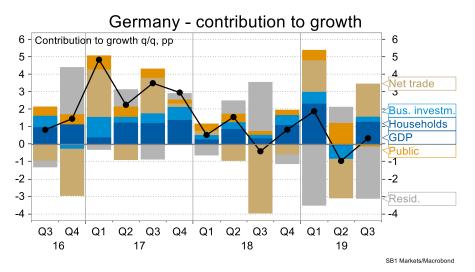


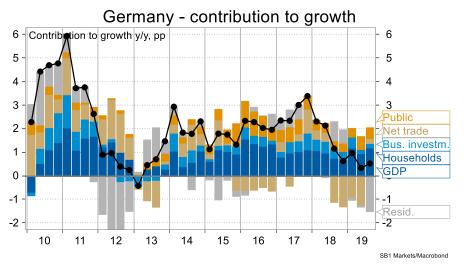
Q3 GDP details are surprisingly upbeat, household & business demand keep up

Household demand boosted growth and business investments increase – as did net trade



- GDP rose by 0.3% annualized in Q3, unch from the first est.
- Both private consumption and housing investments increased, thus, total household demand gave a 1.3 pp contribution to growth q/q. Business investments surprisingly rose and made a modest contribution. And net trade was the major growth contributor, due to a rise in exports. A huge inventory/residual shaved of 3 pp of the annualized q/q growth. Measured y/y, the contribution from households is the highest in 3 years
- The solid Q3 fundamentals provide some comfort on the German economy – and the auto sector is showing signs of recovery

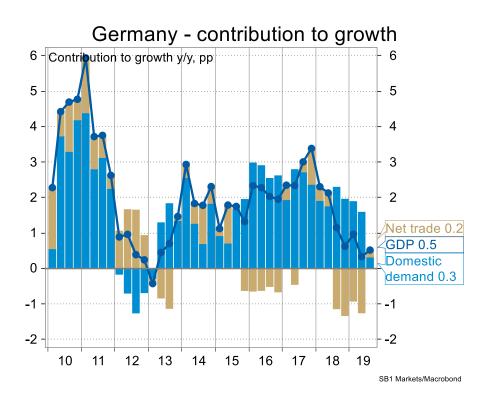


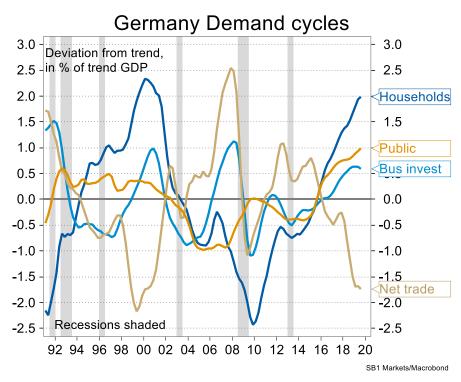




Consumer sector the major growth engine, business investments have peaked?

Net trade has been dragging growth down, and domestic demand ex households has slowed



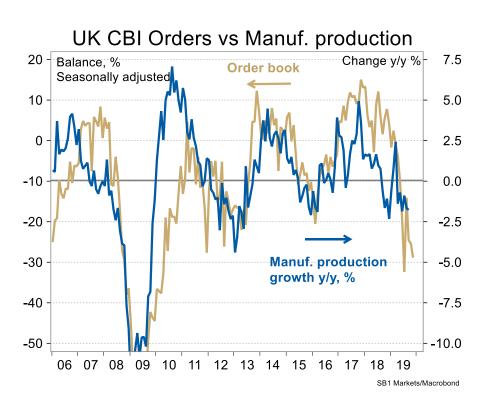


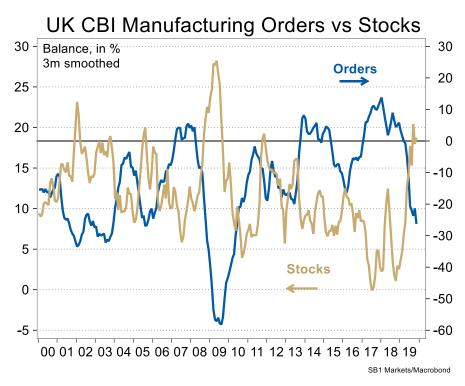
- The past year, imports have been expanding while exports have stalled until Q3, when exports rebounded, and net trade was not a drag measured y/y!)
- Household and public demand are trending straight up, business investments are softening



Manufacturing orders stumbles and inventories remain elevated

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



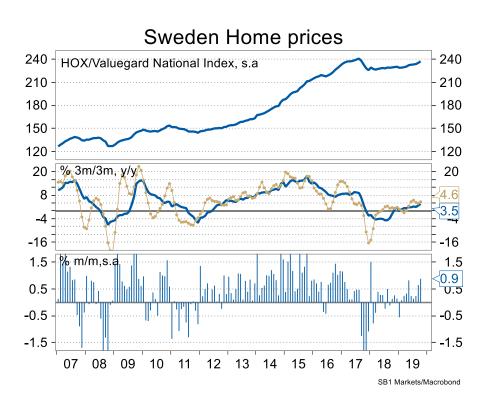


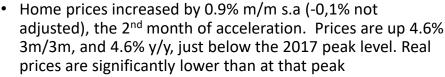
- The CBI order book index fell further to -29 (-26 not seas. adj) in Nov, the 2nd lowest level since the Financial Crisis) signalling a steep decline in manufacturing order inflows & in actual production.
 - » In the spring, demand was kept up by emergency stockpiling ahead of the original Brexit deadline. Since then, businesses have reducing new orders significantly. According to the CBI, inventories are still being built up quite rapidly, at one point they will have to be trimmed!
 - » Both domestic and export orders are falling, export orders have improved somewhat, domestic demand must be waning along with global



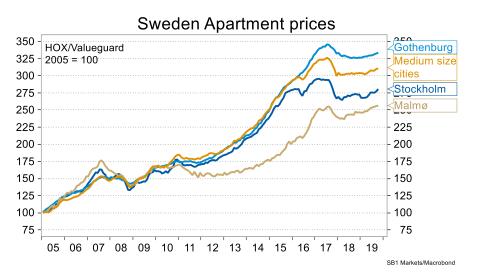
No signs of a softening housing market; house prices inflation accelerates

Prices spiked 0.9% m/m in October, underlying growth rose to 4.6%





- » Soaring Stockholm prices lifted growth, others rose moderately
- The number of transactions is heading up. Still, given several signs of slowdown in the Swedish economy, limited upside?



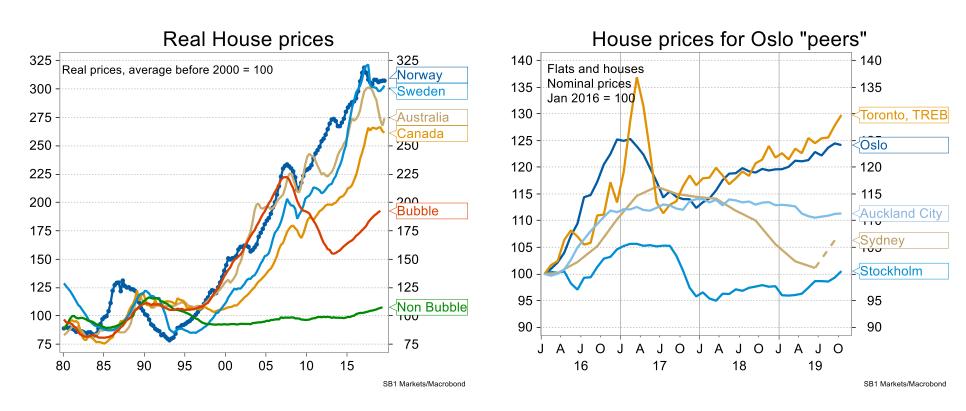


SB1 Markets/Macrobond



Real home prices have fallen/flattened out in all supercycle countries

Sweden down 6% in real terms, Norway 4% and Australia 9%, Canada 2%

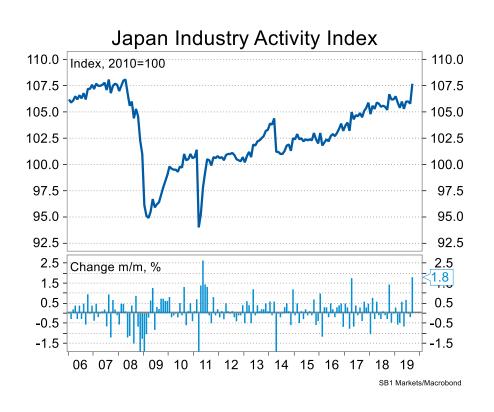


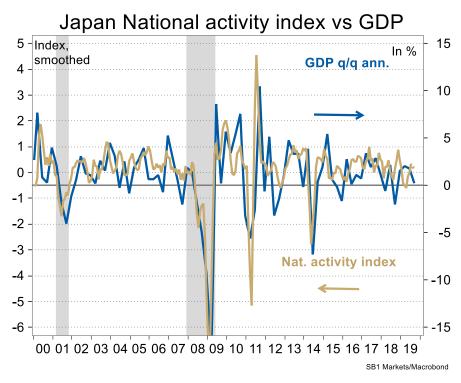
- Prices are mostly climbing among the supercycle guys recently: Oslo and Stockholm prices are rising moderately, Toronto has
 gained pace recently. Auckland is trending down but has stabilised/increased marginally recently. Sydney, on the other hand, has
 been falling steeply, down 12% from the peak in Q2 2017, in nominal terms (data just until Q2) but has recovered sharply in Q3
 as interest rates have been cut, and lending standards eased
- 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



Business activity index soared ahead of the VAT increase, just noise

Activity spiked in Sept, will retreat in October, the index does not point to any 'real' growth rebound





The activity index spiked 1.8% m/m in Sept. The upturn was driven by soaring demand ahead of the October tax (VAT)
hike. Barring the Sept increase, the index has been more or less flat recent months, suggesting modest GDP growth



Highlights

The world around us

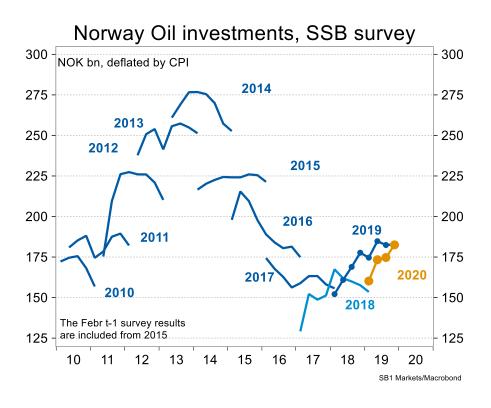
The Norwegian economy

Market charts & comments



Oil investment f'casts close to expectations, investments are peaking <u>now</u>

2019 and 2020 f'cast nudged up modestly, indicating strong growth in Q4 and not much thereafter?

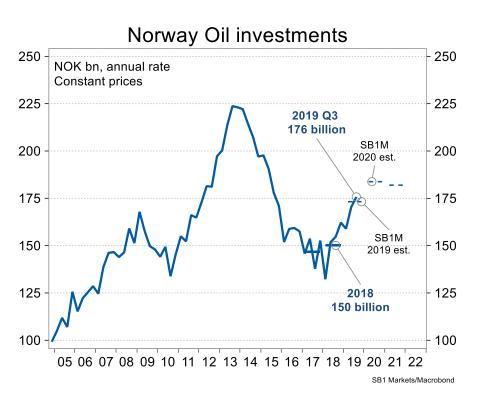


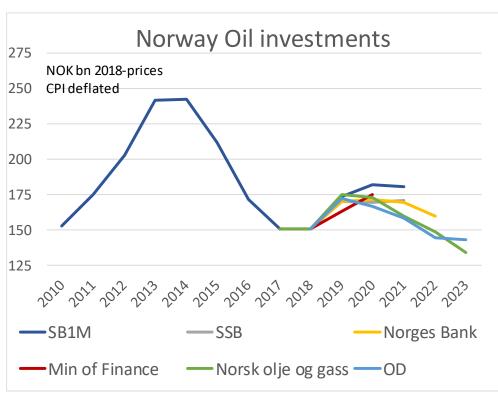
- In SSB's Q4 oil & gas investment survey, companies adjusted their 2019 investment f'cast up by NOK 1 bn to 183 bn.
 Based on the companies' investment reports, we nudge up our volume growth estimate to 15.3% in 2019 (from 14.5%)
 - » If our estimate is correct, investments will have to increase rapidly in Q4, by some 7% in volume terms (from Q3)
 - » Norges Bank projected a 14.5% 2019 growth back in Sept
 - » Investment goods & services price inflation is picking up, we estimate some 2% in 2019
- The 2020 estimate was raised by 9 bn to NOK 183 bn, 1 bn lower than we estimated. We adjust our 2020 volume estimate to 6.1% (from 4.5%), partly because a large PDO on the Balder X project is soon expected.
 - » Still, If our 2019 assumptions are accurate, the 2020 average level is 4 bn (2%) <u>lower</u> than the estimated Q4 2019 level. Thus, a crucial growth engine will subside, from an 0.7 pp direct GDP growth contribution in Q3, to a negative sign from here
 - » The 2020 f'cast is 3% above the equivalent 2019 f'cast
 - Norges Bank projects 2.5% volume growth in 2020, an upward revision is likely



Oil investments: Not much upside left

Our 2020 6% volume growth estimate implies an averagte 2020 level 2% below the Q4 19 estimate



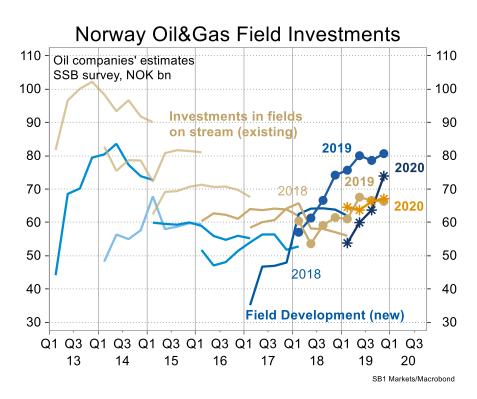


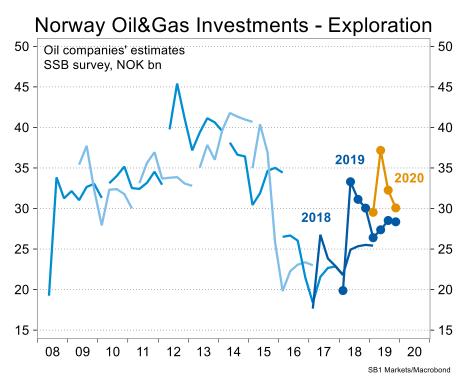
- We nudge our 2019 volume growth estimate up to 15.3%, from 14.5%, to a NOK 173 bn level. In Q3, investments came in at 176 bn, and investments will have to increase substantially in Q4 if the 2019 f'cast is to be reached. We assume a 7% volume growth
- We estimate 6.6% volume growth (from 4.5%) in 2020, with a 2020 investment level at NOK 185 bn. If our assumptions are correct, there is just some 5% upside left vs the Q3 investment level, and a decline of 6% vs the Q4 estimate. Hence, we stick to our view that oil investments will yield muted GDP growth impact in 2020
- After 2020 most forecasters expects a decline, as the Johan Sverdrup and Castberg projects are finalised and few new projects are announced. No doubt, the oil price will influence the investment level from 2020 onwards, as more projects may be added



Both exploration and field investments are probably close to peak

2020 f'cast on investments in new fields are flat vs the equivalent '19 estimate; Exploration cuts



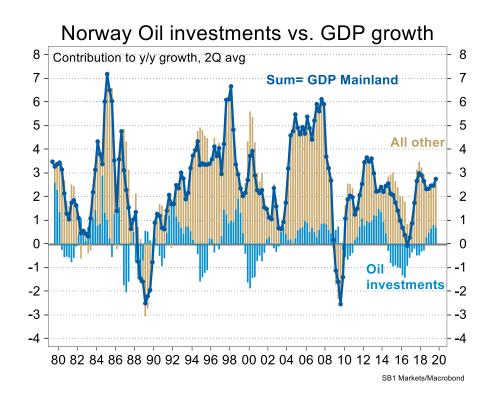


- One new PDOs (plans for development and operation) is included in the Q4 survey. SSB expects a PDO on the extensive Balder X project in later this year, and some smaller PDOs next year. The Balder X PDO will lift the '20 estimate (when submitted) by some NOK 8 10 bn
- 2020 exploration investments were revised down by NOK 2 bn (as usual in the 4th estimate), flat vs the equivalent 2019 f'cast. Explorations will most likely not increase much in 2020, and the levels are far lower than before the 2014 oil setback
- F'casts for 2020 fields developments were nudged up, to the same level as the equivalent 2019 f'cast. Investments in existing fields, on the other hand, are almost 19% higher than the 2019 f'cast (from Q4 2018). Still, we do not expect any similar upward revisions as in 2019. These numbers are anyway uncertain



The 'oil boom' was not that large – but has given a decent GDP support

The contribution will rapidly decline towards zero the coming quarters, from some 0.7 pp now

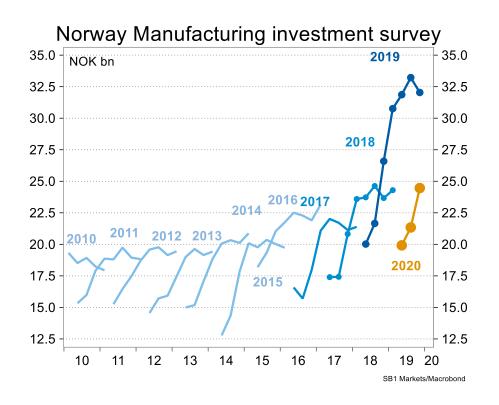


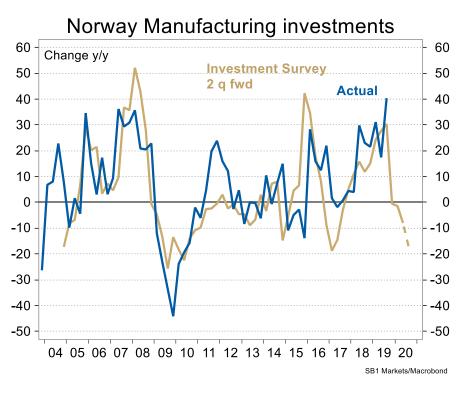
- The contribution on the chart is not adjusted for direct and indirect import to oil sector investments the net impact is less than the gross contribution.
 - » On the other hand, the income multiplier is not included either



Manufacturing investments at peak, down 15-20% in 2020

We expect a substantial cut in investments next year, following a 40% (!) boom in 2019





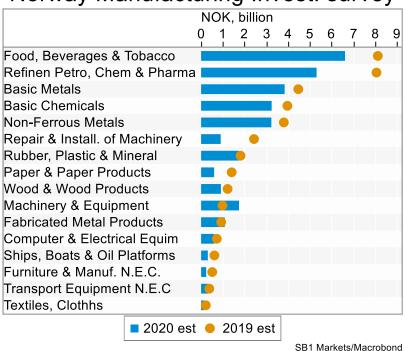
- Manufacturing companies adjusted their 2020 investment estimate up by NOK 3 bn in Q4, a tad more than we expected.
 The estimate is 8% lower than the equivalent 2019 estimate (from Q4 2018), and 24% below the likely 2019 final outcome.
 We expect the 2020 estimate to be nudged further up (as usual) but we still assume a 14% drop in nominal investments in 2020 –and a 18% decline in real term. Even so, the investment level will not be low
 - » Many sectors are contributing to the lift in 2019, particularly in the refined petro, food and metals

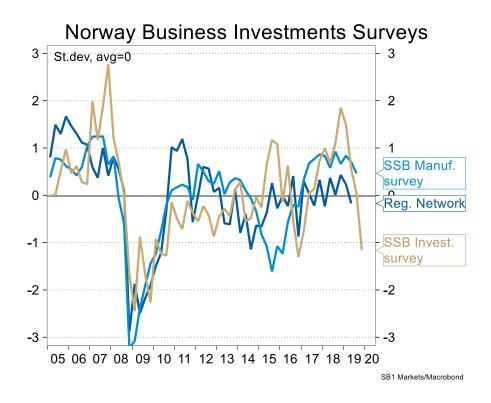


Refined petro, food and metals have been lifting total investments

The investment survey signals a steeper downturn than other surveys – but all are pointing down

Norway Manufacturing Invest. survey



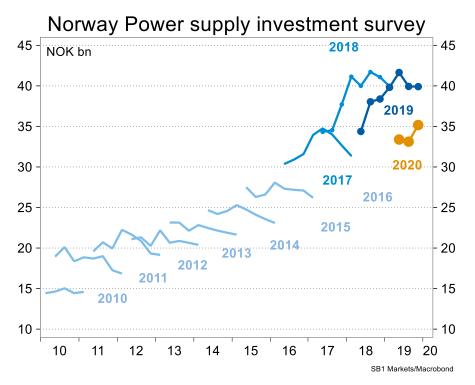


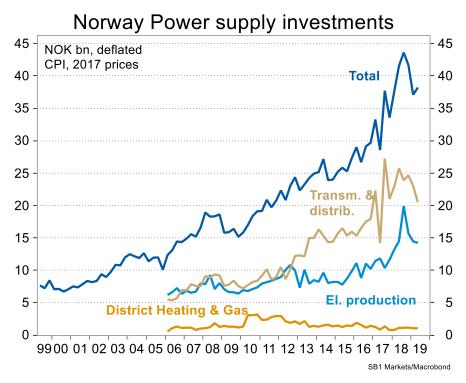
- In late 2018 and early 2019, the SSB manuf. investment survey was much more upbeat than other surveys (and it was right, as usual). Now, however, the level is far weaker. SSB's manufacturing survey (not investment survey) point to slower growth, Norges Bank's Network (until Q3) quite stable, at an average level
- SSB's investment survey is usually quite precise



Power supply: A substantial slowdown into 2020, from a high level

2020 investment estimates signals a sharp decline from 2019, we expect a 15% drop



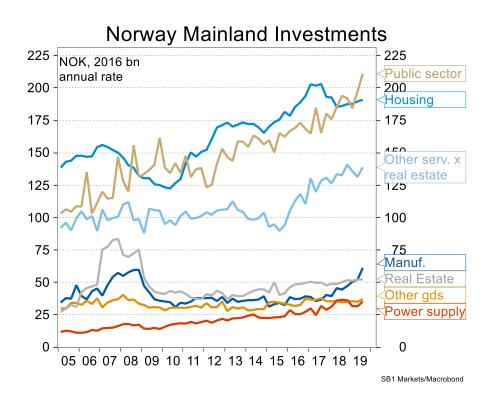


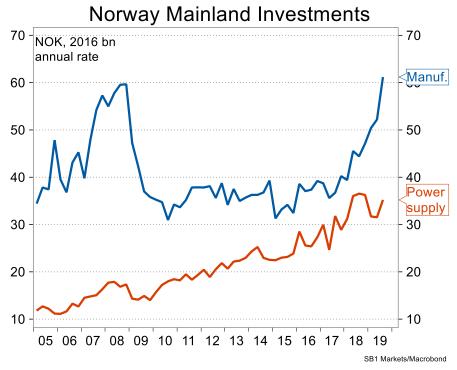
- Power supply (production & distribution) companies nudged up their 2020 investment f'cast by NOK 2 bn to NOK 35 bn. The estimate is 9% below the equivalent 2019 f'cast (from Q4 2018). We expect some 12% (nominal) decline in 2020 vs the 2019 level, based on the 'normal' adjustments through the year
 - » Investments in both transmission and distribution of electricity and electricity production have already fallen
- The 2019 estimate was held unchanged at 40 bn, 2% lower than the equivalent 2018 f'cast. The previous years, investments increased by a +15-20% (!) annual growth rate
- In 2018, investments rose more than 20%, and they have more than quadrupled in 25 years, more than 10% p.a in average. The
 investment level as % of Mainland GDP has been running at 1%, the highest in decades



Power supply investments have peaked, manuf. investments will soon turn

Both equal 1 - 1.5% of Mainland GDP and some 5-6% of Mainland investments



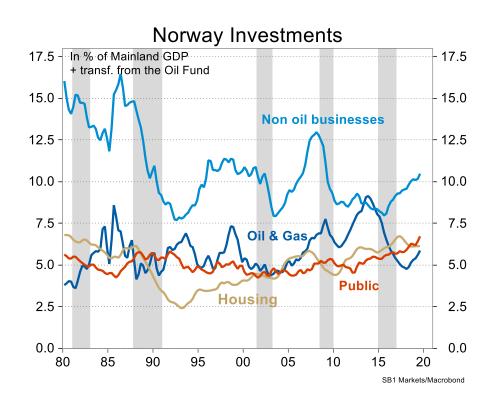


- In volume terms, investments in the manufacturing have accelerated sharply the past two years, but companies are signalling a sharp decline in 2020
 - » Real estate investments and investments in other private services are the main components in Mainland <u>business</u> investments and they remain at high levels
- The outlook for Mainland investments is not very upbeat, given the expected decline investments in manufacturing and power supply - and probably a limited upside on real estate investments, as housing starts are most likely flattening out. The public sector cannot continue to climb for a long time either? Check the next slide for more



The investment cycles: Mainland business investments are not low anymore

Downside risk, manufacturing, power supply down – and service sector investments are quite high

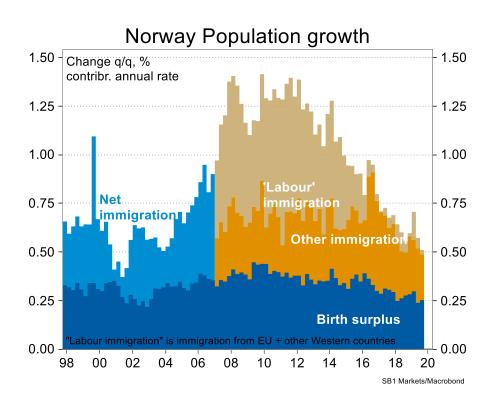


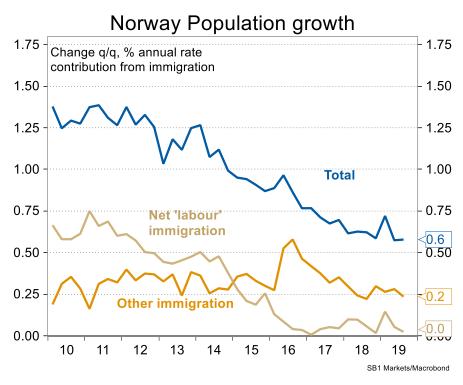
- Oil investments have turned up since late 2017, most likely peaking now
- Mainland businesses have increased their investments sharply since '16, and the level is not low anymore. They are probably at peak, too
- Government investments are the highest in decades, vs GDP. Will come down long term, but limited downside short term
- Housing investments have peaked but remain at a high level. Still, the downside is not large compared to the recent downturn in oil investments (barring a total housing marked breakdown)



Population growth remained low in Q3, net immigration bottoming out?

Growth in western ('labour') net immigration fell back to zero in Q3, has been muted since 2017



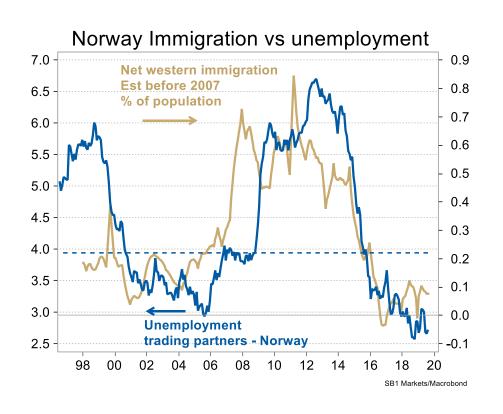


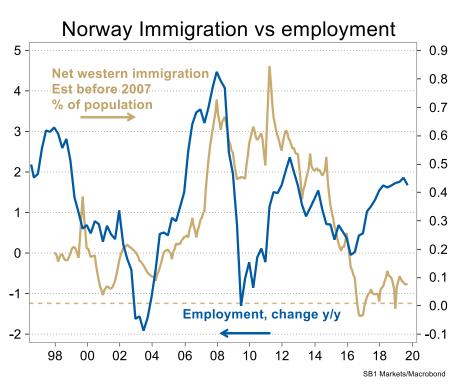
- Total population rose by 33' persons y/y in Q3, a marginal slowdown from Q2. Growth has stabilized since Q4 2018, at the
 lowest rates since 2005. Population is up 0.6% q/q annualised, unchanged from the previous quarter. Growth has been sliding
 steadily down since 2012, from a 1.3% annualised speed 60' persons)
 - » At the peak, labour net immigration (EU + other 'western') ran at 30' persons, equalling 0.75% of the population. It fell to zero in 2016 and remained marginally positive during 2017 and 2018. This year, net labour immigration has turned positive, before slowing to zero in Q3
 - » Non-western immigration increased marginally in Q2, growth is just below the 'normal level', after 'the Syrian' spike in 2016
 - » The net birth surplus has been steady the past year, at the lowest level since 2003, due to fewer births (not more deaths)



Labour immigration is mostly a cyclical phenomenon

Relative Norwegian unemployment (& employment) one of several elements



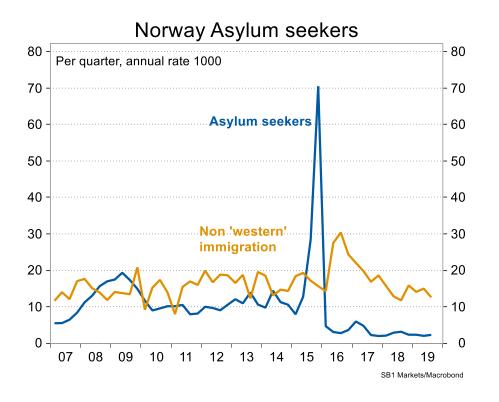


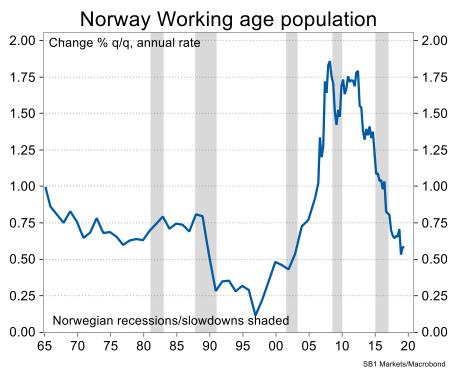
- Labour immigration (in percent of the population) slowed in Q3 and is trending very modestly up from the 2016 bottom. Labour immigration has fallen sharply since the 2011
 - » Unemployment in Norway has been higher than 'normal' vs unempl. among our trading partners the past years. This partly explains the slowdown in western immigration since 2014
- The Norwegian labour market has been strengthening, along with most our trading partners, suggesting that labour immigration may be bottoming out. However, relative unemployment does not point to any upswing
 - » Employment is growing strongly, suggesting higher immigration. Yet, the correlation to employment is not that strong as vs relative unempl. 76



Non-western immigration back to normal. Working age population grows by 0.6%

Growth in non-western immigration is close to the avg rate, asylum seeks well below



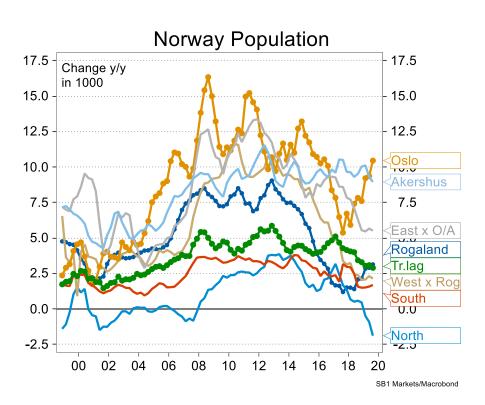


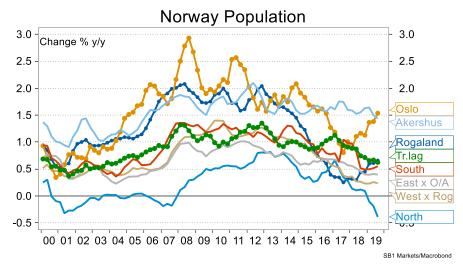
- Growth in non-western immigration has slowed, following the 'Syrian' surge in 2016. The past year, non-western
 immigration has been expanding steadily, at a 'normal' pace
 - » The inflow of asylum seekers have stabilised at a low level, well below ½ of the 'normal' level. Signals a continued 'low' non-western immigration the coming quarters
- Growth in the working age population was steady at a modest 0.6% pace in Q3, down from 1.8% in 2012

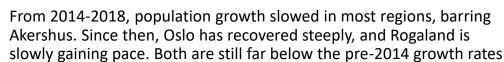


Population growth soars in Oslo, Akershus steady, most others slowing

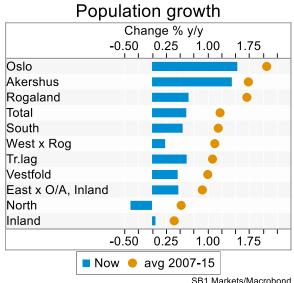
Population growth is decreasing everywhere x Oslo/Akershus and Rogaland, which is picking up







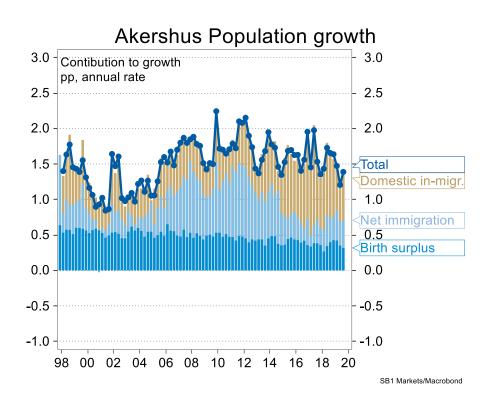
 Population growth has cooled substantially in all other regions, below 2010-15 levels everywhere. <u>But the South, West x Rogaland and East x</u> <u>O/A may now have stabilized</u>. <u>Due to accelerated domestiv out-</u> migration, population is falling rapidly in the 3 northern counties

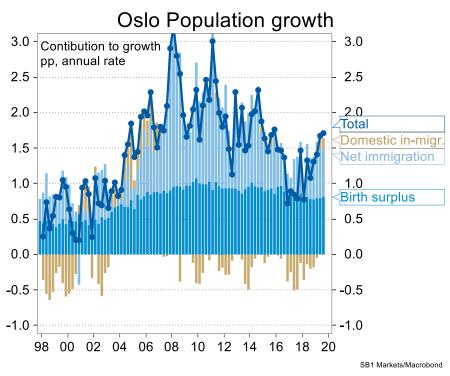




Akershus losing some speed, Oslo straight up

Population growth in Akershus has been kept up by a very high domestic in-migration



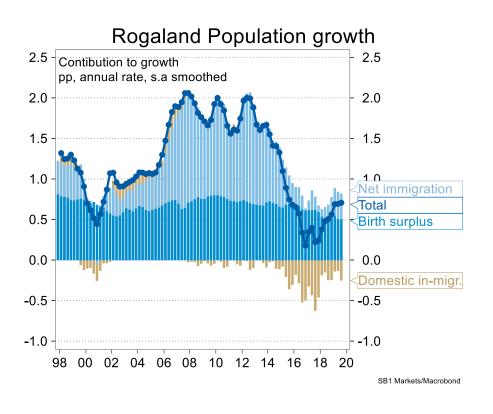


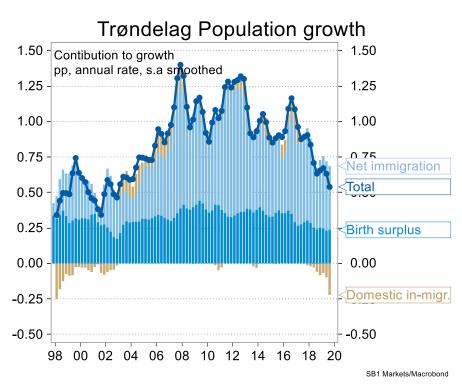
... While people have been out-migrating from Oslo to other parts of the country (as usual, but nobody knows it!!). However, the past two quarters, domestic in-migration in Oslo has turned positive, for the first time since 2006 (barring a small plus in 2016)



A mild (oil) recovery in Rogaland; while population growth in Trøndelag slows

Population is growing faster in Rogaland than Trøndelag, which has been slowing the past 2 years



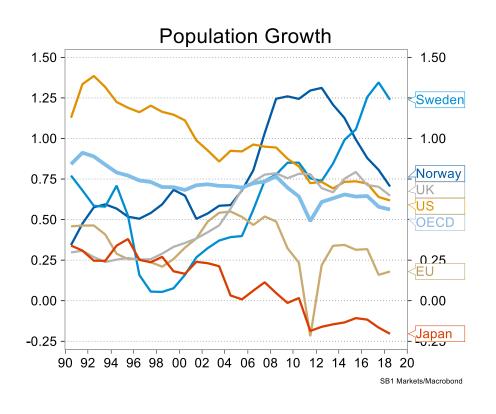


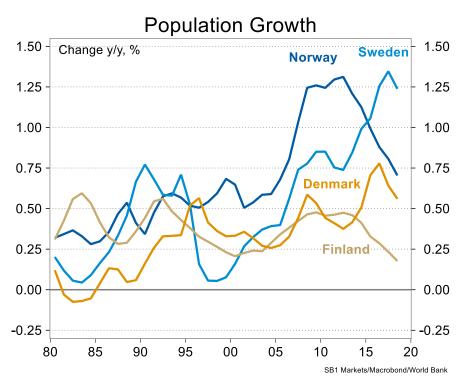
- Total population growth in Rogaland accelerated marginally to 0.7% q/q in Q3, climbing since 2016. Domestic in-migration is still declining, and it fell by more in Q3, yet much less than it did 2-3 years ago
- Population growth in Trøndelag has been edging down since 2016, to 0.5% in Q3. Domestic in-migration has turned negative, and it dropped in Q3, the steepest decline since 1998!



Population growth has slowed much more rapidly than in other DM

Particularly compared to Sweden, where immigration is still high

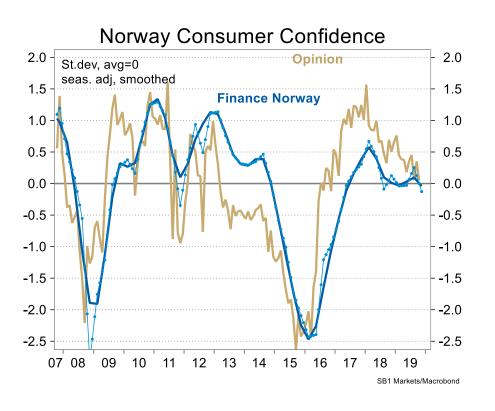


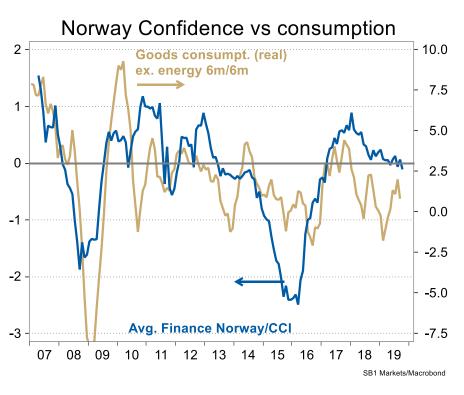




Consumer sentiment down in Q4, on weaker 'macro' confidence

Finance Norway's expectation survey fell to the weakest level since 2017 – just marginally below avg



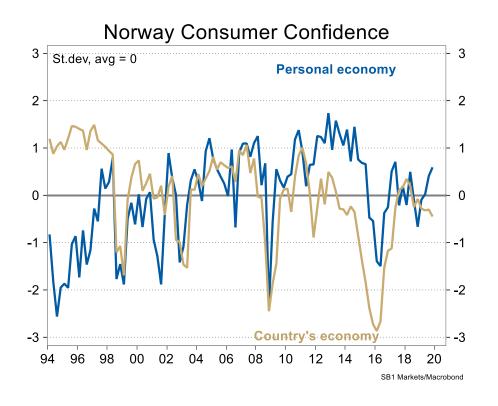


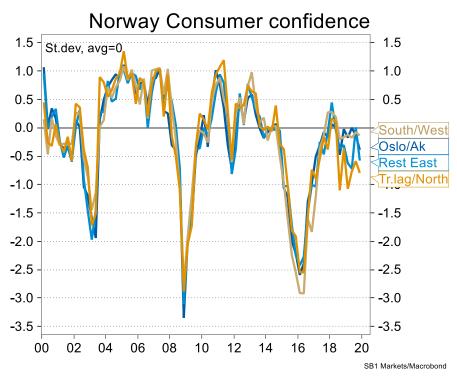
- Finance Norway's quarterly consumer confidence index slipped to 12.1 p in Q4, (seasonally adjusted), from 16.8 in Q3. The trend adjusted index fell to just 0.04 st.dev below the avg level since 2007, the softest print since 2017
 - » Confidence in the Norwegian economy weakened, while the assessment of the personal economy improved
- Opinion's monthly CCI fell by 0.2 st.dev in Oct, and the uptick in Sep was fully reversed. While monthly data are somewhat volatile, the
 trend is no doubt downwards
- The avg of the two surveys is sliding down but just very slowly the past months, and do not signal any abrupt slowdown in consumption. Consumption of goods has been softer than indicated by the sentiment surveys (although the correlation is not strong). Slow growth in nominal and real income, low population growth may explain some of this gap, the 'new normal' is lower than before.



Consumers are upbeat with regards to their personal economy, not the macro

Assessment of the personal economy at 2 ½ year high, the Norwegian economy at 2 ½ year low



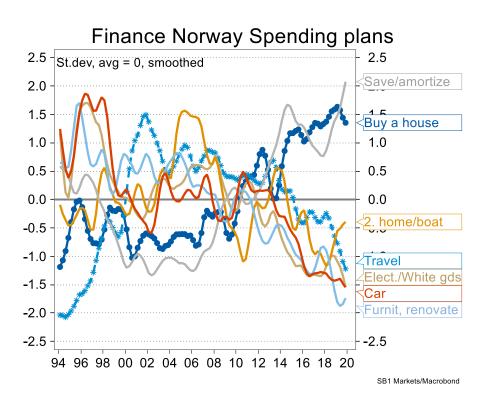


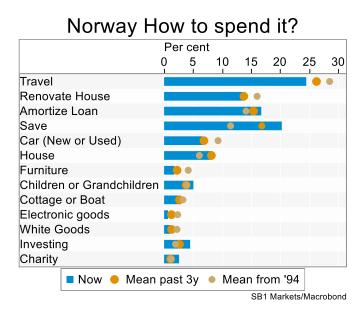
- Confidence in the Norwegian economy declined in Q4, and is much weaker than the 'micro' index. The micro assessment is
- Regions are usually moving in tandem, and they did even during the oil downturn. Now, Trøndelag and North are lagging the others.
 Consumers in South/West (oil heavy) region is the most upbeat, with East in the middle



They want to save more/pay down debt, they say, highest saving plans ever!

Fewer (still many) are planning to buy a house and more will buy a cabin. And not travel elsewhere?



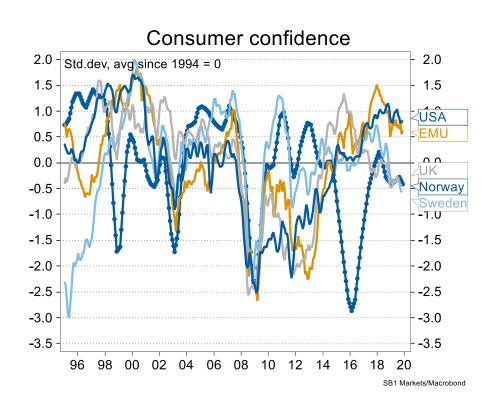


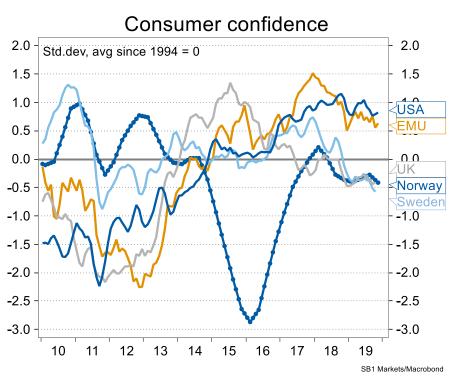
- Why are saving plans soaring? The interest rate hikes have probably affected consumer patterns, and fewer are now
 planning to buy a new home. However, savings/amortize plans have trended up since 2017, before Norges Bank started
 raising rates, thus, there must be another underlying cause. Demographic factors and rising focus on individual pension
 savings probably key reasons
- Plans to buy a house are still at an unusually elevated level, and plans for a cabin/boat are rising
- Then there is less to spend; Plans for purchases of furniture/renovation, electronics/white goods, cars and travel are all at record low levels (since 1994)



Little mirror on the wall... No, the Norwegians are not the most optimistic

At least not compared to what people usually report. US, EMU more upbeat than the Nordics + UK



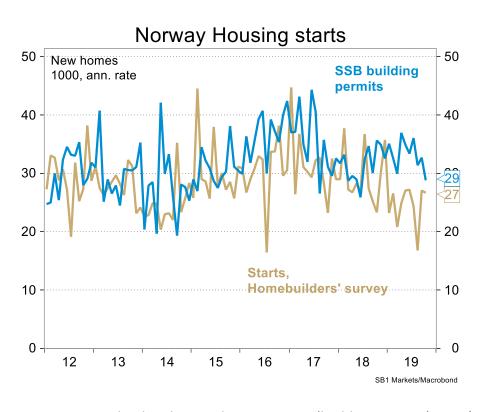


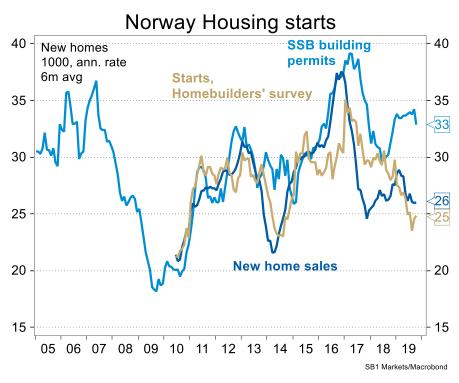
- (Well, the Chinese are even more optimistic, according to the NBS survey)
- Consumer confidence in Norway is in line with levels in Sweden and the UK



SSB confirms the Homebuilders' reports; housing starts have peaked

SSB housing permits fell to 29' in October, sliding down the past 3-4 months



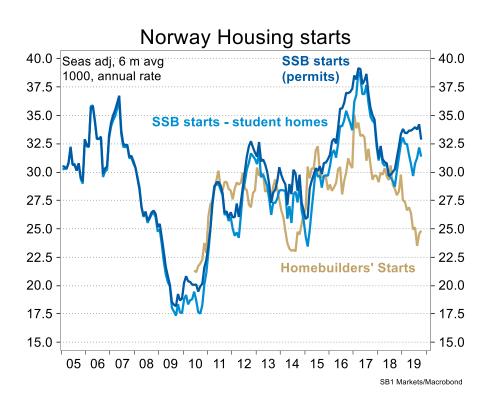


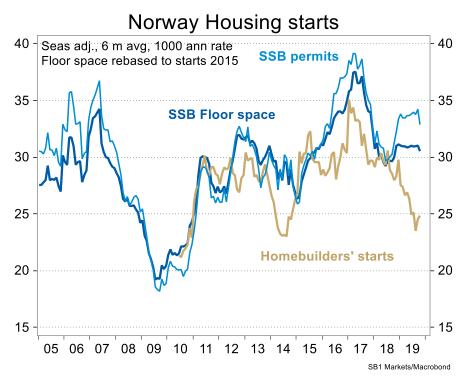
- SSB reported a slowdown in housing starts (building permits) to 29' annually in October, from 33' the prior month, and the lowest in more then a year. The 6m average fell 33' from 34'. Housing starts probably peaked in Q2
- The Homebuilders are reporting declining starts since early 2017 and the gap to the SSB data is unusually wide. Student homes, which is only included in the SSB figures, explains some of the difference. In Q3, student housing starts dropped after a steep rise in Q2. New home sales are still sliding down (according to the homebuilders), and do not signal higher starts
- In spite of somewhat contrasting reports, we assume that housing starts have peaked, indicating a muted/no growth in housing investments. Starts are not running at a low level, although well below the '16-'17 peak. Starts are above the average since 2000, and approx. at the per capita average (with low population growth and real income growth much below what we have been used too)



Student housing partly explains the gap on housing starts data

Ex student housing, starts have turned down, although much steeper according to the Homebuilders



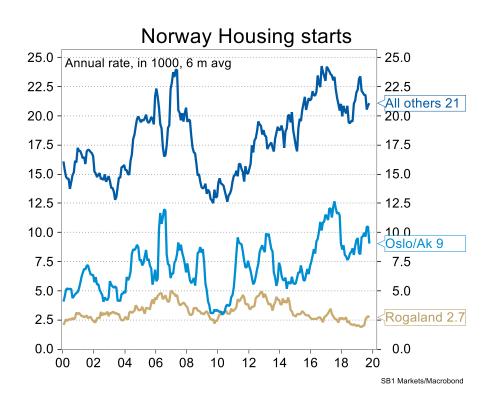


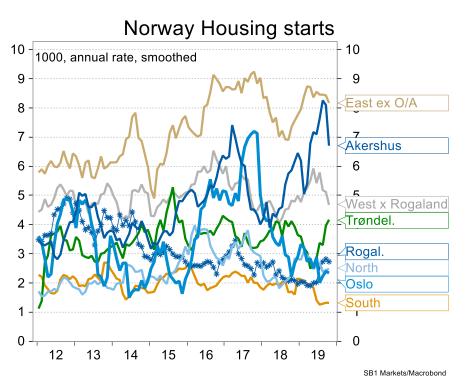
- Student housing, which is only included in SSB's statistics, has explained some half of the gap between SSB and the Homebuilders' housing starts. In Q3, student home construction dropped, after a steep rise in Q2, thus, starts x student homes spiked. Total housing starts dropped in October
 - » Student homes are smaller than other homes, and the contribution to construction activity is less than for other housing (some 1/3rd per unit we guess)
 - » Measured by total sq.m., starts have flattened out recent quarters according to SSB and fell in October
- If Homebuilders' data were representative, it would have substantial impact on the assessment of the Norwegian economy. Norges Bank's regional network did not report any weakening in the construction sector in Q3, and supply constraints were more important than demand challenges
- Still, we cannot disregard data from the homebuilders either, and they are supported by other reports of slower new home sales



Starts have turned down in most regions, Trøndelag and Rogaland gain pace

Starts have peaked in Akershus and other East and the West – and Oslo starts are trending down





- Housing starts x Oslo and Akershus have declined this year, reversing more than half of the steep 2018 upturn. The level is still higher than 'normal' the past 20 years
 - » The upturn has been driven by a steep rise in East x Oslo/Akershus and West x Rogaland, both of these have fallen/flattened out. The South and North are not thriving either, both trending down. But starts in Trøndelag and Rogaland are now picking up steam
- In Akershus, starts dropped steeply in October, after a strong acceleration. A spike in starts of student homes in Q1 (explaining more than 30% of total starts in Q1!), and a following retreat partly explains the recent zig-zag. We assume that starts have anyway peaked here too. In Oslo, starts fell much more than in Akershus in late 2017-2018 and have been heading down recently, the level miles below peak, as the builders are coping with a mild supply overhang



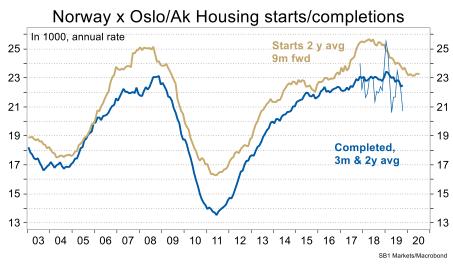
Housing completions close to peak but will remain high for some time

Oslo supply is soaring, Akershus may have peaked temporary, others more permanently





- The number of completed homes in Oslo is rising steeply and it will remain higher than 'normal' (the past 10 years) for some time. 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 <u>behind</u> us, and the recent hike in starts is at least partly due to student homes
- In the rest of the country, the upside is not large but supply will remain high the coming months – as the inventory of unsold homes is still increasing form a high level
- 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





One house per new inhabitant (or 2 new house per 'normal household)?

Based on pop. growth, too many homes have been built recently, except for Oslo/Akershus?



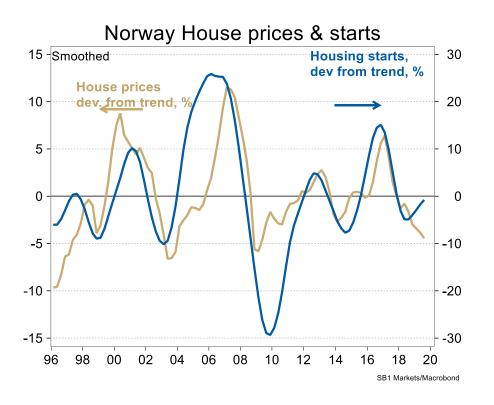


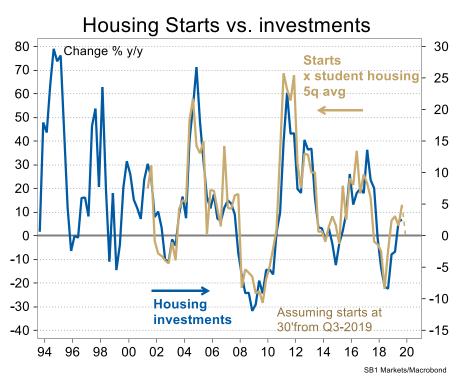
More new homes than people have been the norm in periods with high domestic migration, which is not the case now



Soft house prices indicate lower housing starts – and muted investments?

Housing investments have turned up but the upside is not large, given the level of starts (x student)



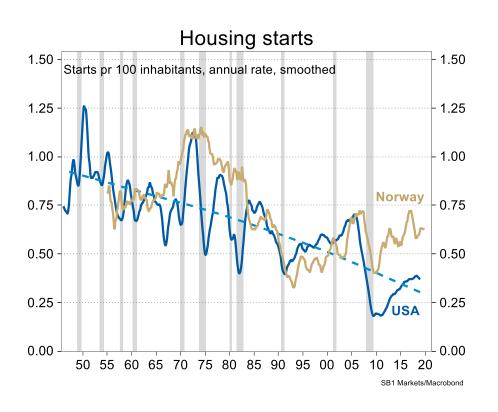


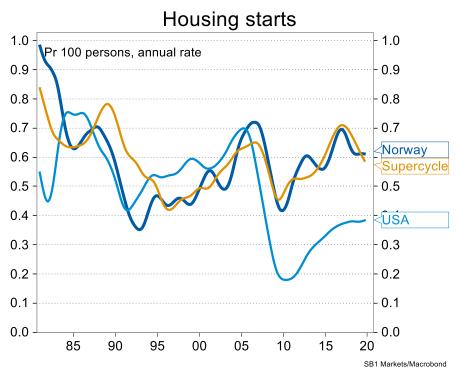
- Housing investments rose by 2.6% y/y in Q3
- In the Sept MPR, Norges Bank nudged up its forecast on 2019 housing investments to 0.9% (up 0.6 pp). Given the level of total starts, this estimate is on the soft side. However, conducting student housing, which is contributing very modestly to investments, points to muted growth (the answer is probably somewhere in between)



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



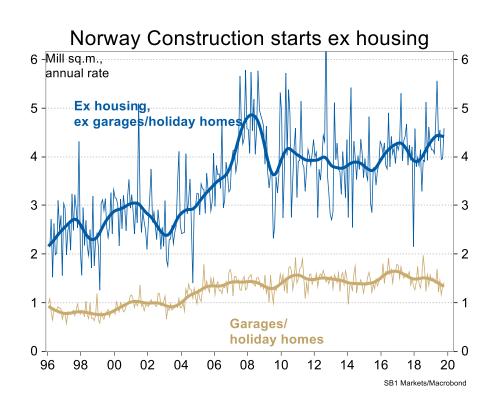


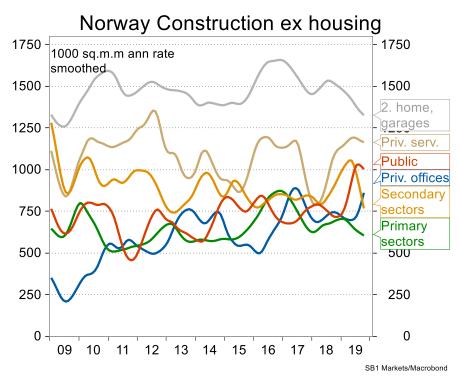
- The cycles among the supercyclicals (Australia, Canada, Norway, Sweden) have been quite closely correlated the past decades. Starts have fallen in both AUS and SWE and has flattened during the past 2 years (and in Norway before the recent uptick)
- House price and debt inflation are higher and rental 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 at the highest level since 2008, at peak?

Business construction has increased rapidly the past year, now flattening? Cabins/2nd home down



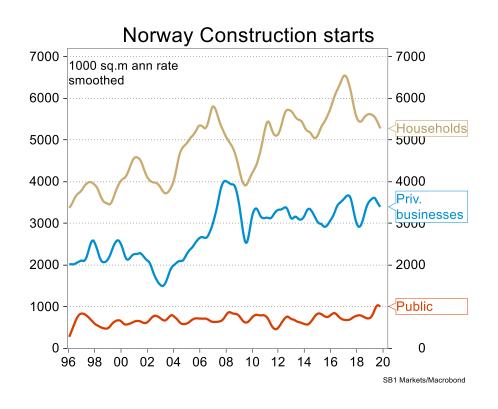


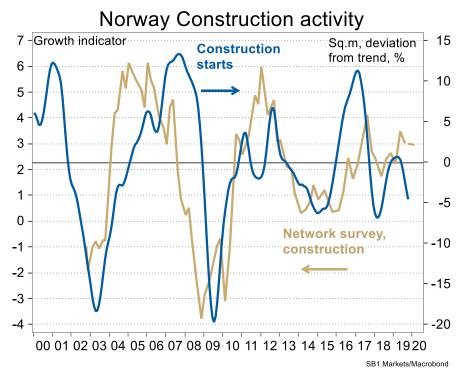
- Construction ex housing, garages/cabins has been accelerating and is higher than the 2016 level
 - » The upswing has been driven partly by the secondary (industry) sector, which is now retreating. The investment survey signals a sharp decrease in construction in manufacturing, and in power supply. Mixed in private services, following a lift trough 2018, the sum slightly down
 - » Public sector construction starts were very high in the summer, as the new hospital in Stavanger was included. The upswing in trade is probably turning, which is not surprising given the weakness in retail sales. Construction of private offices is picking up
- Construction starts of cabins/garages is heading slowly down and the level is the lowest since 2009



Regional Network expects construction growth slightly above trend

Total construction has been lifted by business constr., which now may have peaked. Public up







Highlights

The world around us

The Norwegian economy

Market charts & comments

0.1

0.0

-0.1

-0.2

elsewhere

16

19 Sep



69

67

65

59

57

15 22

15 22

Brent 1. 63.4

LME Met. Ihs

107.5

GBP

SEK

CNY

USD

CHF NOK

92.5

EMxCNY

Stocks, bond yields edge down as markets digest US/China rumours

Jap 0.19

UK 0.19

0.0

-0.1

-0.2

SB1 Markets/Macrobono

15

19 Nov

2875 - Index

2850

2825

2800

2775

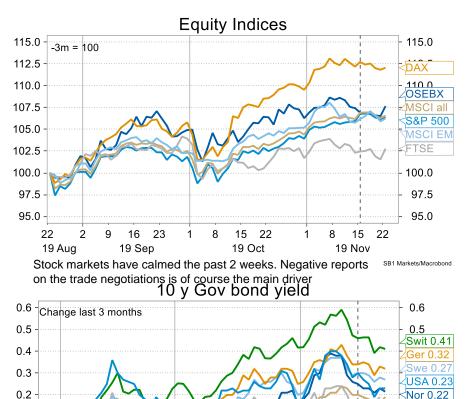
2750

2725

2700

22

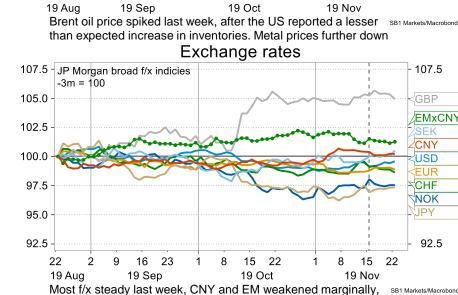
... at least until Friday. Anyway, the oil price soared to 64 USD



16

Bond yields fell everywhere last week, and more in the US than

19 Oct



USD strengthened somewhat. NOK inched down, again

16 23

Oil vs. metals

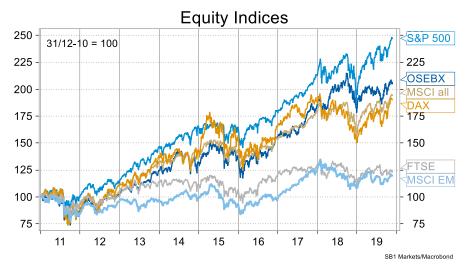
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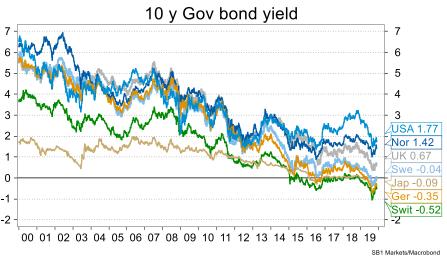
USD/B

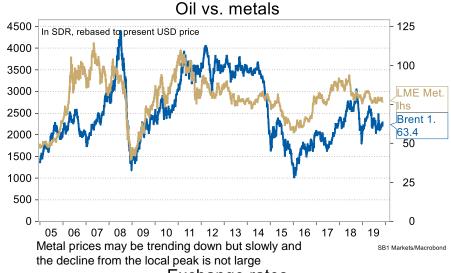


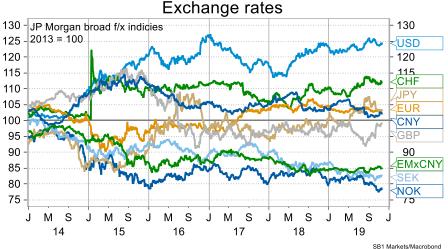
In the long run: US stocks at/close to ATH, bond yields not that far above ATL

Oil, metals are trending slowly down. The trade war rules. And then some economic data





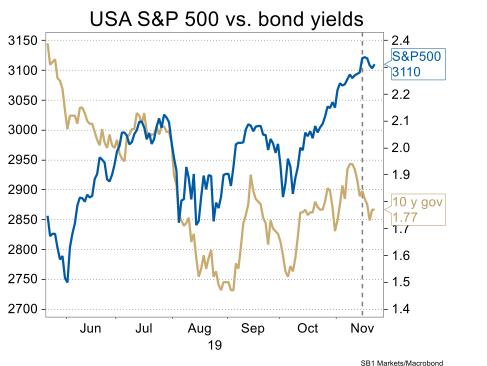


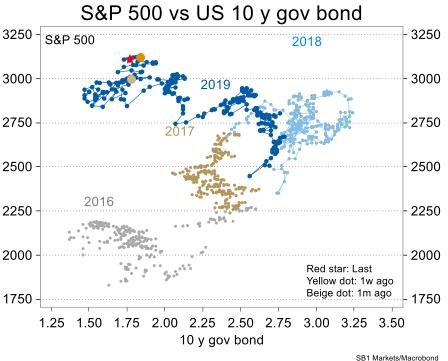




US: Bond yields zigzag on trade deal prospects, even stock markets are uncertain

The 10y gov bond yield fell 7 bps last week, S&P down 0.5%



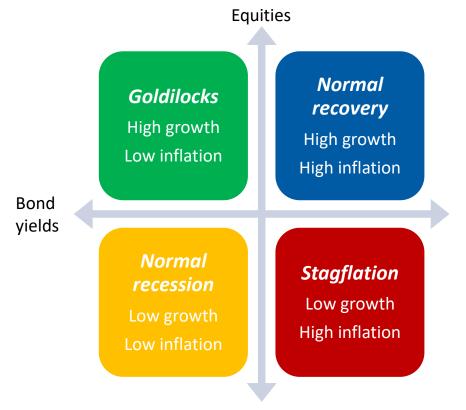


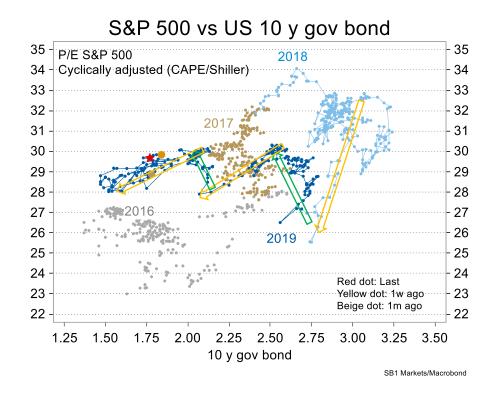
- Last week, the stock markets rally paused, as investors digested some downbeat reports/quotes on the US/China trade negotiations. Stock markets have been soaring since early October, to more than 3% above the July peak (S&P500)
- Bond yields have retreated the past two weeks, reversing the early November upswing. The 10 y gov is back at 1.77%,
 after reaching (intraday) 2% two weeks ago. Both inflation expectations and real rates have contributed to the decline
 in nominal rates



US markets are moving towards the normal recovery corner

Well, at least until recently, when markets took a small step towards the goldilocks'



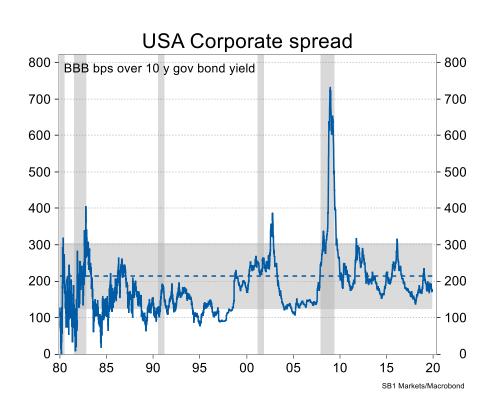


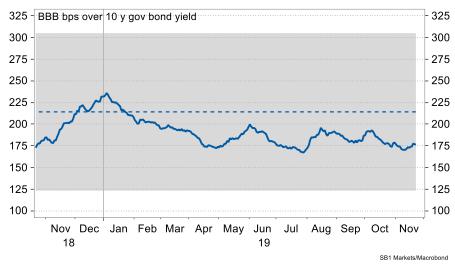
- Recent months, markets have been zig-zagging along with developments/news on the trade war. In October and early
 November, trade news have been positive and markets have moved towards the 'normal recovery' corner. The past week
 weeks, doubts on the trade deal sent bond yields steeply down, while stock markets fell just marginally
- We do not think a long term Goldilocks scenario is likely. Should yield 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 will happen only if central banks make serious policy mistakes, over time. So, the normal
 recession/recovery axis is the most likely

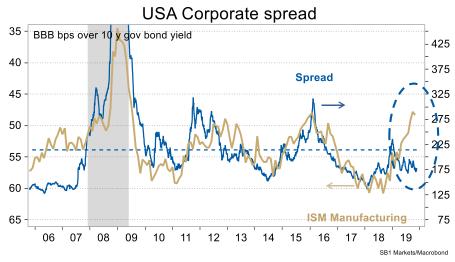


Credit spreads are below an average level, far too low?

Spreads are far too low if the ISM is correct; that is, if growth is slowing



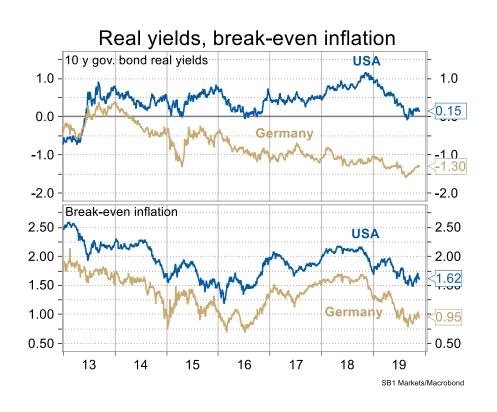


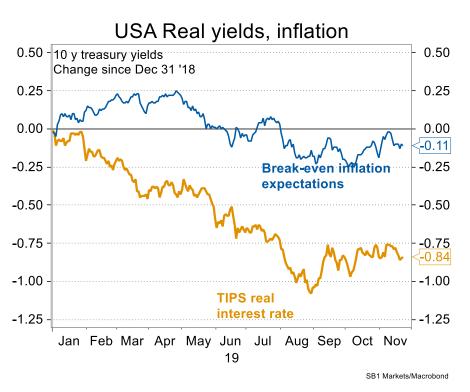




Both US real rates, inflation expectations have turned down

Last week, the real rate did the job. German real rates are slowly climbing



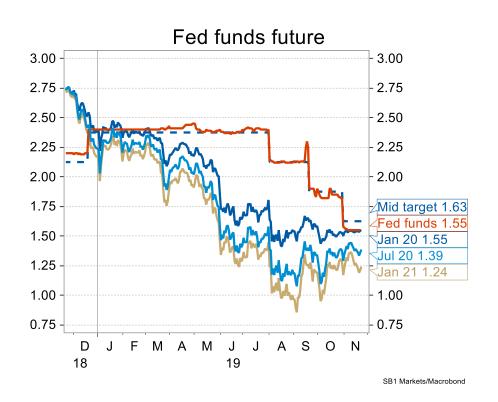


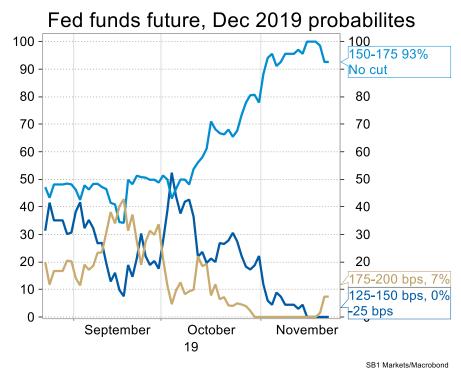
- Both real rates and break even inflation have been heading steeply down this year, in US and Germany. In September and
 October, real rates recovered somewhat more than inflation expectations, primarily due to hopes of a trade war solution
- US 10y inflation expectations held steady last week, the level at 1.62% seems more reasonable. The real rate dragged the nominal yield down, <u>0.15% is very low</u>
- German real rates have bottomed out and are slowly edging up. -1.30% is still very low. Inflation expectations at 0.95% does not seem that far off, although far below the ECB's price target at close to 2%



Still limited expect. of a Dec Fed cut – but cut in H1 2020 likely, market tells

Further out on the curve, Fed funds future rates have fallen, on uncertainties regarding a trade deal



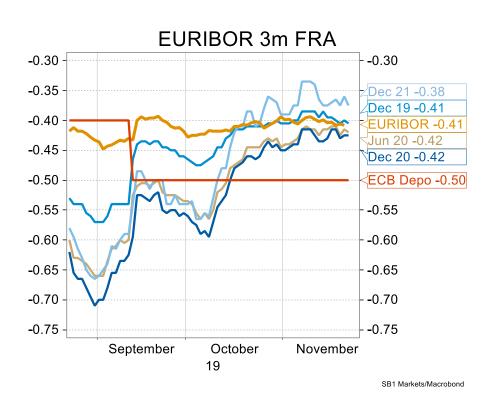


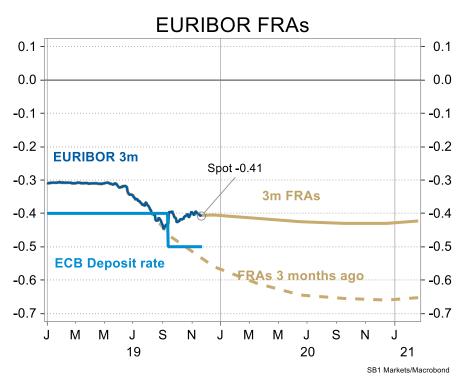
- The minutes from the October meeting did not provide any new signals on the monetary policy outlook, <u>check this slide</u>. The Fed will keep the interest rate unchanged unless the economy deteriorates substantially
- Markets are now more in line with the Fed's plans than in a long time. Probabilities for another 2019 cut have been reduced to close
 to zero (albeit depending whether the mid target rate at 1.625% or today's actual Fed funds rate at 1.55%, which is strangely low, is
 deemed to be the best estimate for the Fed funds rate in January, if Fed' corridor is kept unchanged (that is, no cut in Dec)
- Longer term FRAs fell last week, the Jan '21 contract at 1.21% indicates market is pricing a high probability of 2 interest rate cuts (by some 70% of a second cut), through 2020. One cut is expected before June 2020



EUR FRAs hold steady, interest rate cut expectations have vanished

Markets are expecting an unchanged interest rate the coming year





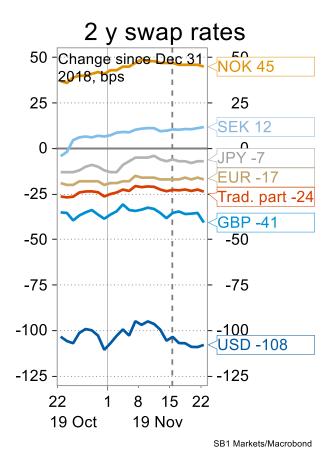
- Since early October, the FRA rates have turned steeply up all over the curve. Several rounds of positive news from the US/China trade talks turned the mood, as well as hopes of a soft Brexit. A divided ECB has no doubt lifted interest rate projections, as the ECB board is split on the appropriate level of monetary easing
- The past two weeks, the FRAs have flattened out, and fallen somewhat in the long end. Markets are pricing an unchanged interest rate this year and in 2020 – and some 50% probability of a 2021 hike



Short term rates were slowly edging up

Last week, short term rates were mostly flat, US & UK rates a small step down



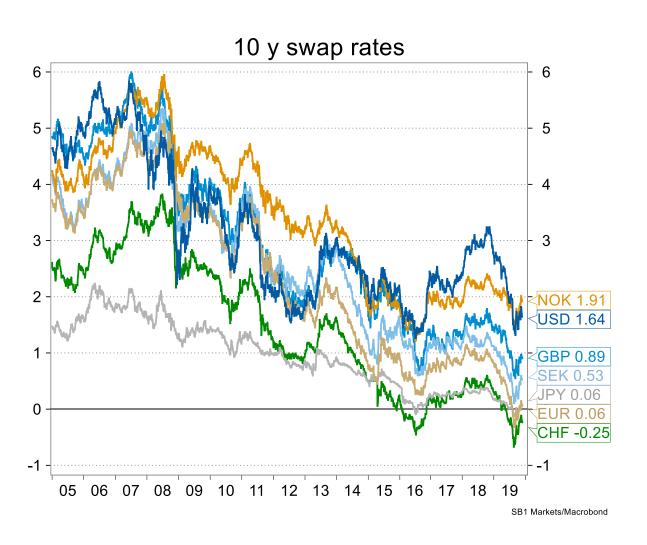


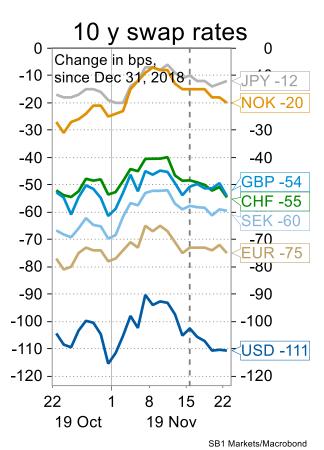
SB1 Markets/Macrobond



Long term swap rates have recovered all over, until early Nov

The past 2 weeks, rates have fallen everywhere, of course triggered by US/China turbulence

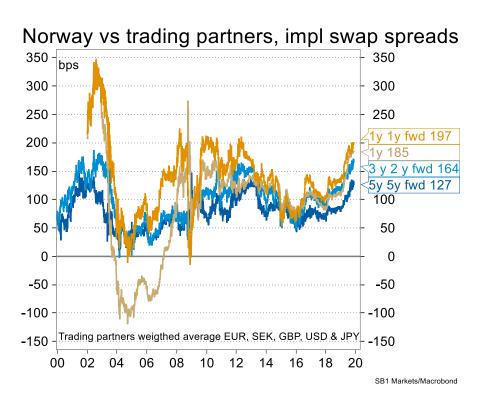






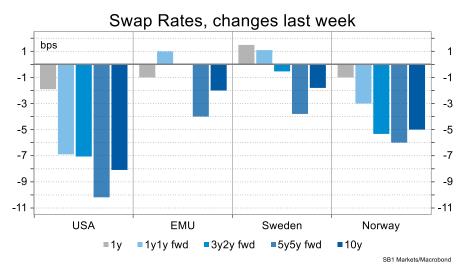
Swap spreads vs trading partners are trending out but narrowed last week!

Last week, swap spreads finally caved in, at least in the long end, as EMU rates ticked up



- Swap spreads between NOK rates and our trading partners have been widening rapidly this year, all over the curve
- While the short term spread is well explained, we have been surprised by the wide spread in the long end of the curve of the since March. A 5y 5y fwd spread at 127 bps is far too wide, long term

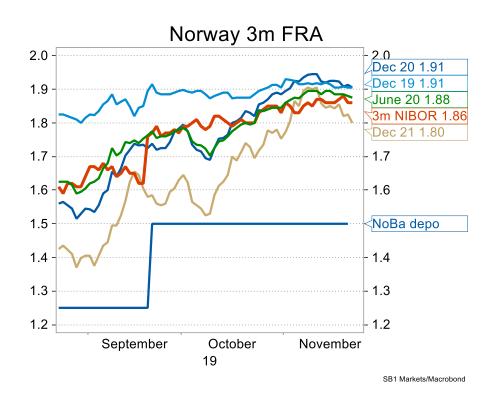


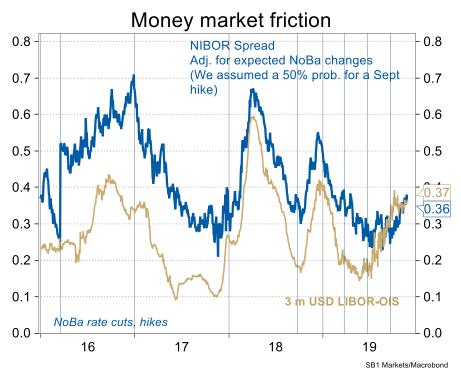




NIBOR and short term FRAs stable, the long end down

Dec 20 FRA at 1.91% signals a somewhat higher NIBOR. Cut expectations still subdued



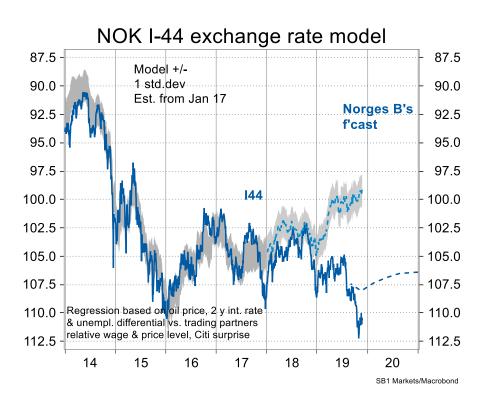


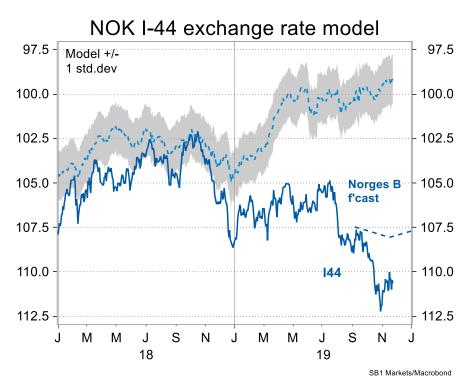
- The 3m NIBOR was flat at 1.86% last week. The Dec '19 FRA inched down to 1.91%, implying a 41 bps NIBOR NoBa deposit spread. The US the LIBOR-OIS spread is 36 bps, like the actual NIBOR spread (assuming no expectations of any NoBa change the next 3 months). Historically, the NIBOR spread has been significantly wider than the LIBOR-OIS spread. We expect the 3m NIBOR to drift up the coming weeks
 - » The Dec spread may be influenced by expectations of a year end liquidity squeeze which has happened before
- Longer dated FRAs rate fell last week. The Dec 21 3m FRA fell by 2 bps to last week. Still, the FRA path reflects expectations
 of an unchanged interest rate through 2020 and some 30% probability of a cut in 2021



NOK depreciated marginally last week, after a soft recovery

NOK is 11% below the standard model and 5% below the oil stocks & the supercycle models

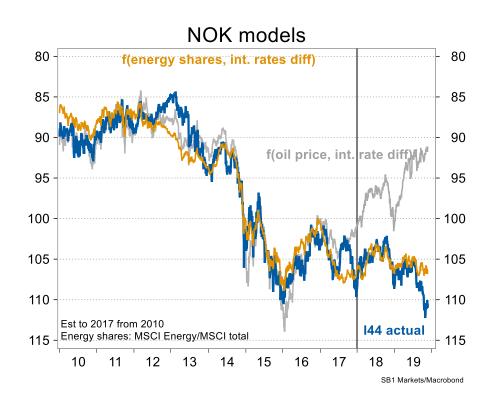


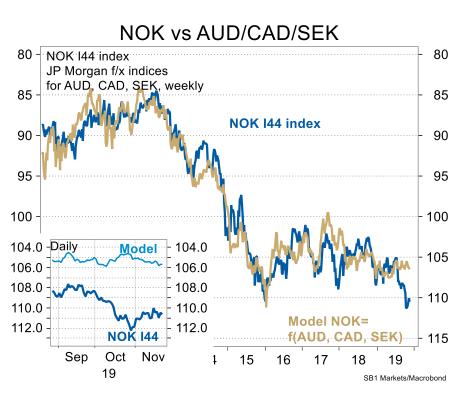


- NOK depreciated 0.5% last week, and is up some 1.5% from the record low bottom late October. The gap between the
 our 'old', standard model estimate and the actual I44 index is more than 11%, still extremely high
- Our 'new' models, based on the other super cyclical currencies or energy (oil) equities are far closer to the ball (check next page), but still the NOK is 'too' weak
- We stick to our buy NOK recommendation



NOK remains weak vs our 'alternative' models too



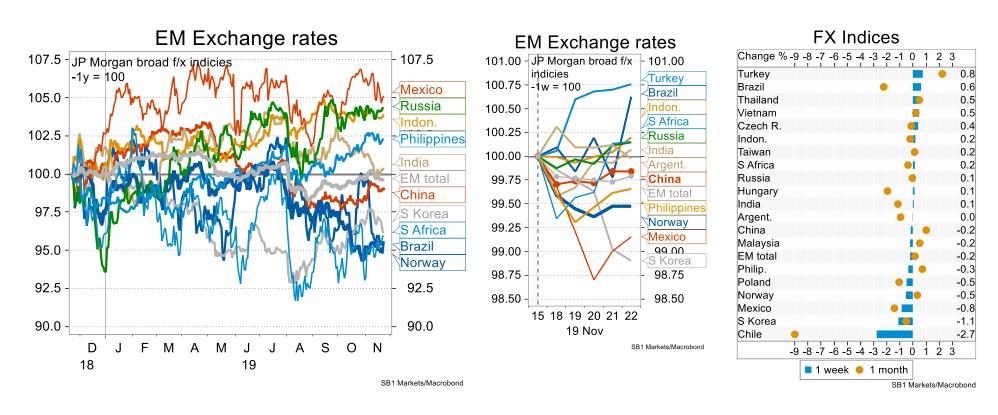


- Our NOK model based on pricing of oil companies has 'explained' the weak NOK much better than our traditional model since 2017, as have our 'supercycle currency model (NOK=f(AUD, CAD, SEK)
- Both AUD and CAD are sensitive to oil/energy prices and together with the SEK global growth outlook
 - » In October, both CAD, AUD and SEK recovered, probably fueled by hopes of Brexit solution, and a (slight) de-escalation of the US/China trade war. Unlike our peers, the NOK tumbled. The past weeks, NOK has recovered softly, without help from our friends or energy stocks



EM f/x depreciates modestly, trending slowly up this autumn

Last week, the CNY weakened on less hopes of a phase 1 US/China trade deal



- Most EM currencies have stabilized/recovered this autumn, trade war de-escalation probably the best explanation. The
 past two weeks, the mood has turned, and currencies in Mexico, South Korea and Brazil have weakened, along with the
 CNY. Still, the decline has so far been very modest
- BTW, if we take out the Argentinian peso, the NOK has fallen substantially more than most of the main EM currencies the
 past year!! Even after the small NOK 'recovery' recently



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