

SpareBank MARKETS



Macro Research

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Weekly update 3/2020

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SpareBank
MARKETS

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" are linked
A top right  button will bring you back to the content page*

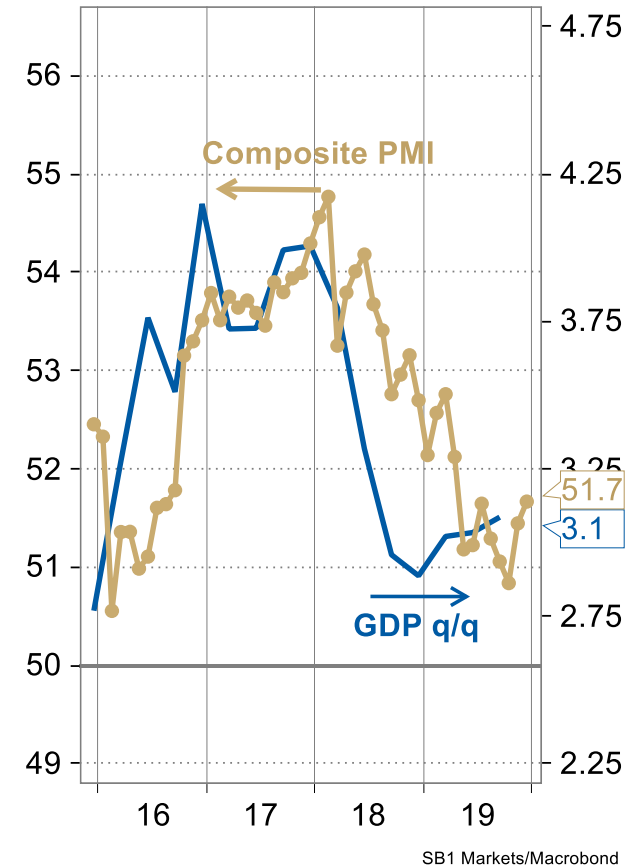
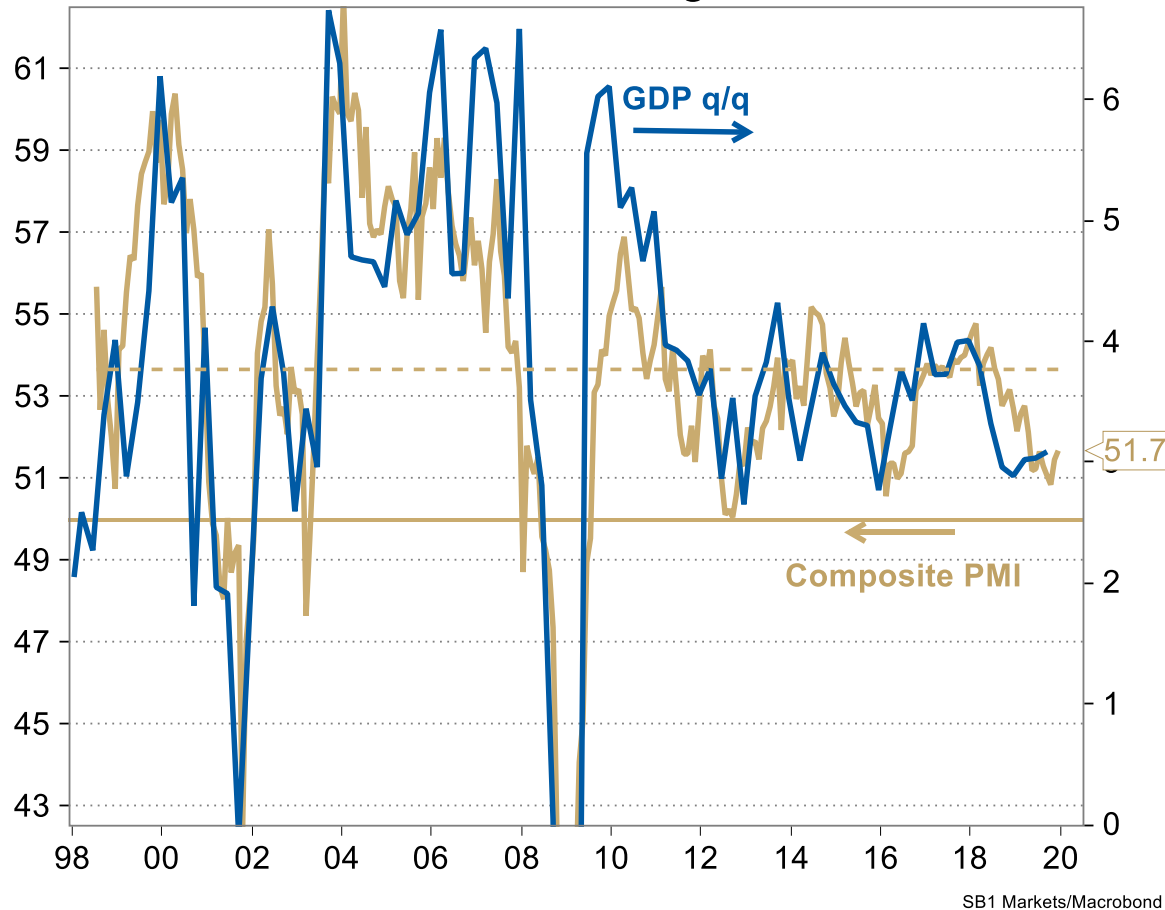
Last week – the main takes

- **Risk markets** shrugged off concerns on the US/Iran conflict, as both the Iranians and Trump signalled a de-escalation. China announced that a delegation will travel to the US to sign the **phase 1 trade deal** at Jan 15th
- **The global composite PMI** rose 0.2 p in Dec, to 51.7, we expected a 0.1 p decline. The uptick was due to a increase in the services PMI, the manufacturing index fell marginally, following a 4 month recovery. The composite PMI suggests just above 3% global GDP growth, a marginal acceleration from the previous quarters. Developed Markets rose modestly, in avg, and Emerging Markets spiked. **The US Non-manufacturing ISM** came in above expectations, at 55.0, confirming higher growth in services activity in Dec
- **Global auto sales** probably stable in Dec, but are still down 5% in '19 from '18. **US sales** are trending slowly down, as are **Chinese** sales. **EMU** sales have recovered recent months, and are back at a normal 'peak' level. Sales in EM x China rose in Q4, due to higher **Indian** sales
- **US employment** rose at a solid 145' pace in Dec, marginally weaker than expected. Unemployment unchanged at 3.5%. More surprisingly, wages rose just 0.1% and the annual rate fell to 2.9%, from 3.1%, trending down, broadly. **The total trade deficit** shrank as imports dropped, probably due to a mix of softening domestic demand, higher domestic oil production and trade war impacts (at least the deficit to China is reduced, but now other countries have 'contributed'). Exports have flattened
- **Eurozone core CPI inflation** held steady at 1.3% in Dec and underlying growth is ticking marginally up. Still, we doubt that inflation is accelerating now, after being flat for 3 years (but cost inflation is above 2%). **Unemployment** has stabilized at 7.5%, as the pace of decline has cooled substantially the past months. Brisk growth in **retail sales** in Nov, no signs of any consumption setback, even in Germany. **German industrial production** recovered modestly in Nov (and Spain, France increased), but trending straight down. Yet, the decline in **manufacturing orders** have eased, suggesting that the manufacturing contraction soon will bottom out. **German exports** are not weak either, down in Nov yet trending flat. Imports are climbing, domestic demand is not waning
- **Norwegian core CPI inflation** came in just below expectations in Dec, up 1.8%, from 2.0% in Nov. We and Norges Bank expected 1.9%, consensus 2%. Imported inflation may lift inflation somewhat the coming months, the impact has so far been modest. Total inflation fell to 1.4%, due to declining energy prices. **House prices** inched up 0.1% m/m s.a in Dec, in line with our f'cast. Prices are rising at a moderate pace and underlying growth just above 1%. Short term market flows signal somewhat higher growth the coming months, as the inventory of unsold homes has retreated slightly. **Total credit growth** steady at 5.6% in Nov, household debt is no doubt easing, and the debt/income ratio has fallen marginally recent quarters. **Manufacturing production** is decelerating, even as oil related sectors are still booming (but they are probably close to a peak now)

Global PMI better than we assumed in December, up 0.2 p to 51.7

We expected a 0.1 p decline, but several countries recovered. A 3%+ growth is signalled

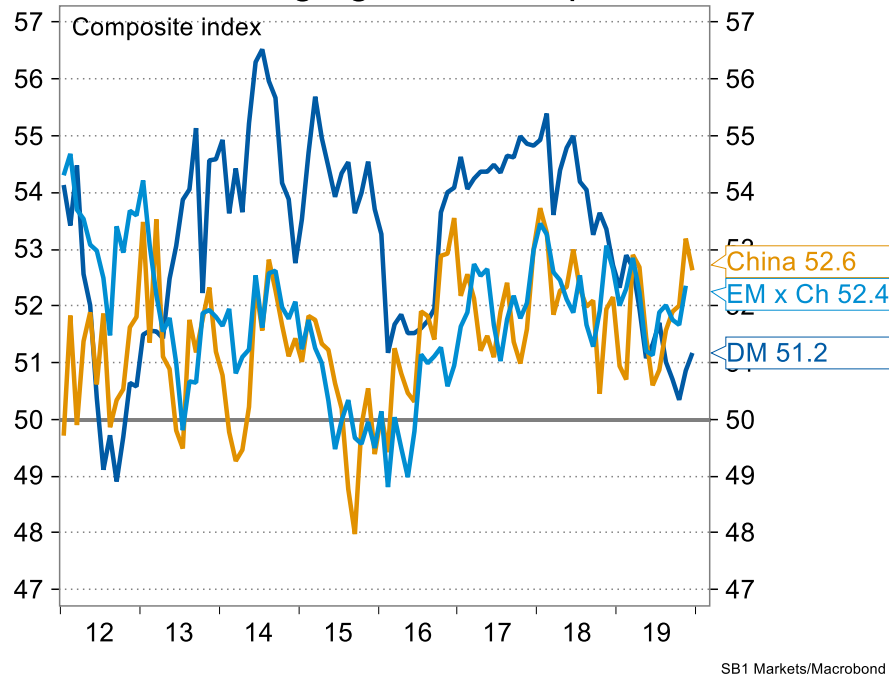
Global PMI vs growth



A broad uptick; both EM and DM up

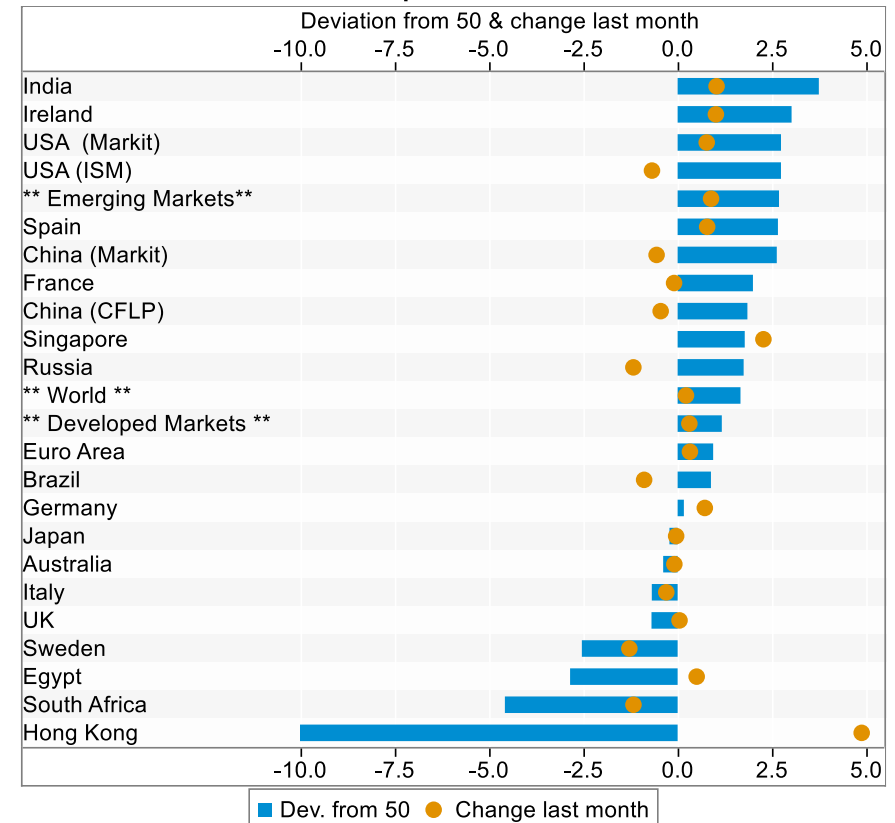
Most countries are reporting growth but DMs are lagging, in avg. UK, Sweden among the weakest

PMI Emerging vs Developed markets



- 12 countries/regions reported an increase m/m (thus, activity accelerated or fell at a slower pace), unchanged from Nov. 9 countries noted weaker activity (from 10)
- Most countries/regions are still reporting growth; 8 (from 10) countries below the 50-line, 16 above (from 13)
- DM average up 0.3 p, EM up 2.7 p, even if the Chinese PMI (Markit) declined by 0.5 p

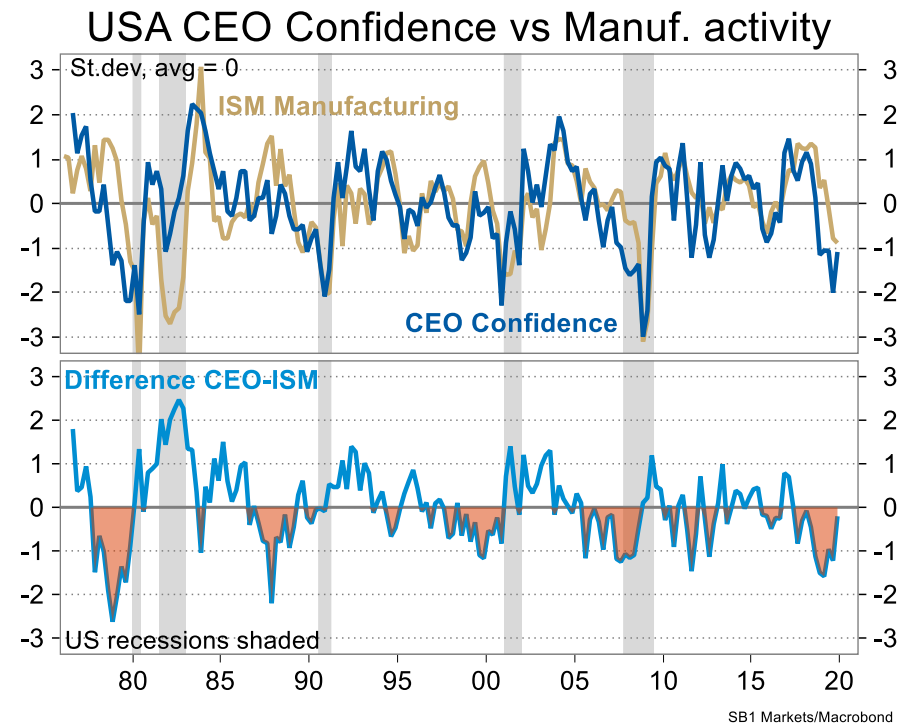
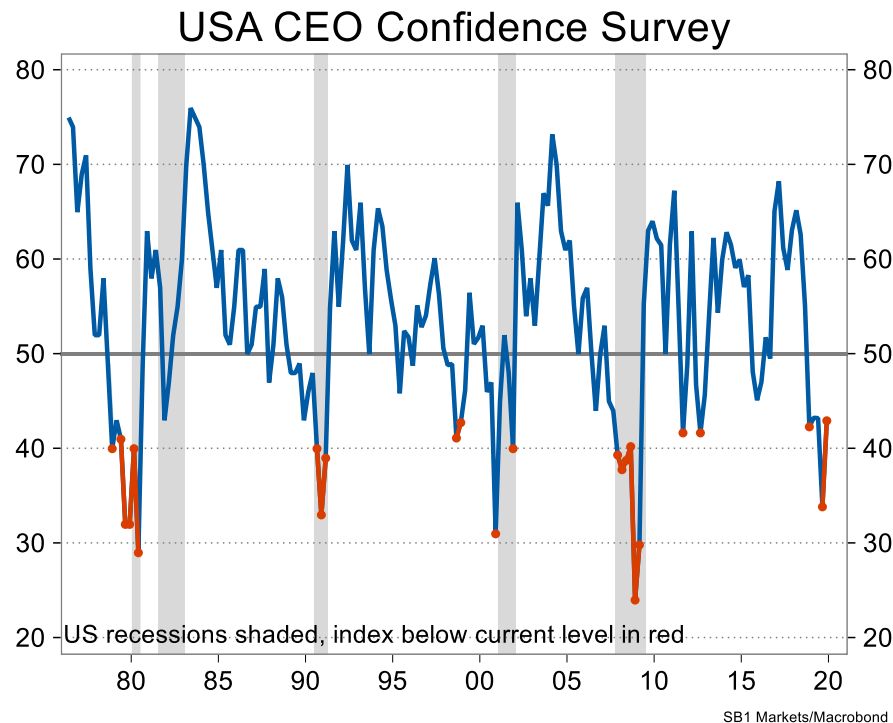
Composite PMI



Hong Kong services are collapsing, of course due the protests, composite PMI at 27 in Dec (the scale above is too narrow)

Big bosses are really worried – although less so in Q4

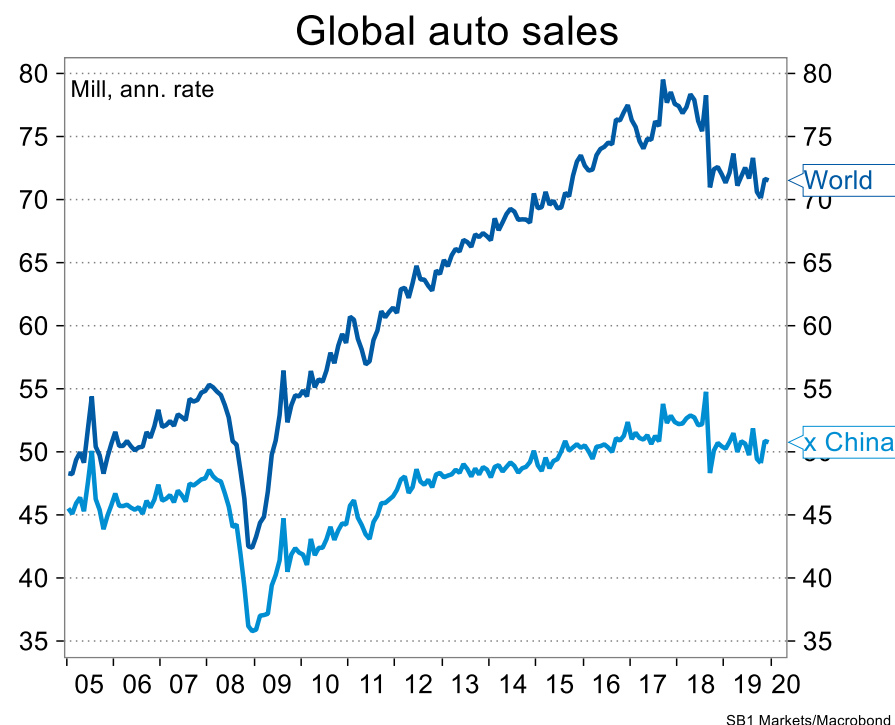
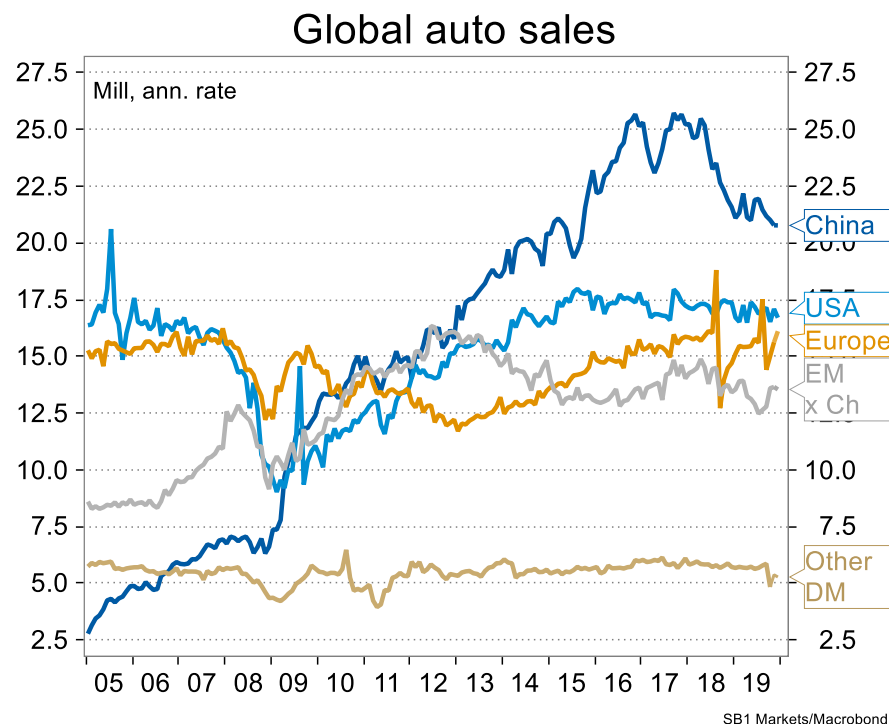
Conference Boards CEO confidence is well into recession territory, along with the ISM



- CEO confidence fell more than most other business surveys in Q3 and rebounded in Q4, reversing the entire Q3 drop. Thus, the index is back at the same level as in Q4 2018, and is almost back to the same level (vs the average) as the manufacturing ISM (but substantially weaker than most other business activity surveys). Trade policy worries have eased?
- The CEO confidence has been at the current level or weaker 10 times since 1975, of which 6 have been during/less than one year ahead of a recession. However, the index has never dropped to the Q3 level without entering or being in a recession
 - » In addition: The CEO confidence index has been weaker than the actual manufacturing activity data ahead of recessions in 1980, 2001, and 2007, partly also in 1991. Is weaker corporate profits the common explanation? The extra Q3 drop was no doubt due to the trade conflict

Auto sales stable in December, down 5% last year

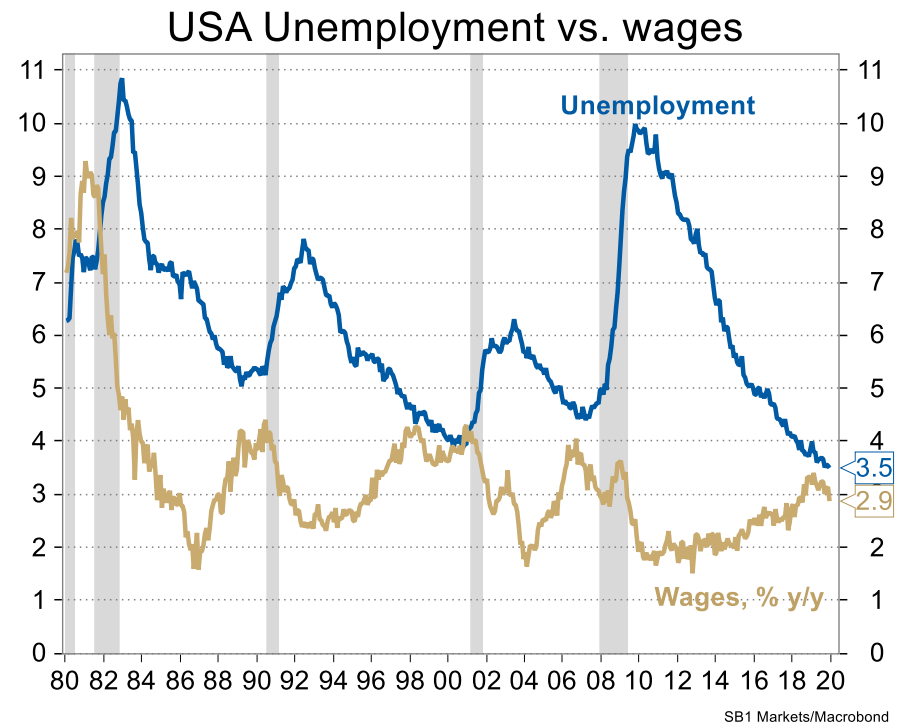
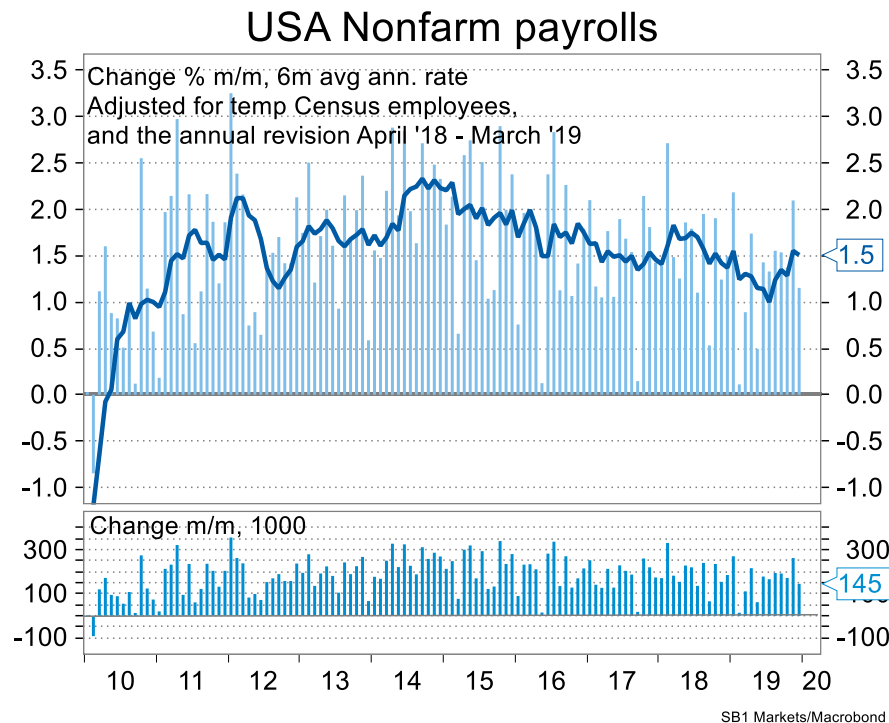
Sales still slide down in China, US, and still low in Japan – EMU and EM x China up last months



- Global sales were probably close to unchanged m/m in Dec and are down less than 1% y/y. Sales fell 5% in 2019 from 2018
- Sales keep declining in China but not sharply anymore. Sales fell 10% last year following the 4% decline in 2018. The decline in sales in China explains more than half of the reduction in global sales, other contributed by 2 pp (of the 5%)
- Sales in Europe have been zig-zagging due to emission regulations but ended 2019 on a strong note. US sales are trending slowly down (-2% last year). Sales in Japan recovered just partly in Nov/Dec, after plunging in October, due to the hike in the VAT rate
- Auto sales in EM ex. China were close to flat in Dec, and the level rose sharply in Q4, due to a recovery in Indian sales

Solid employment growth in Dec but wage growth slows

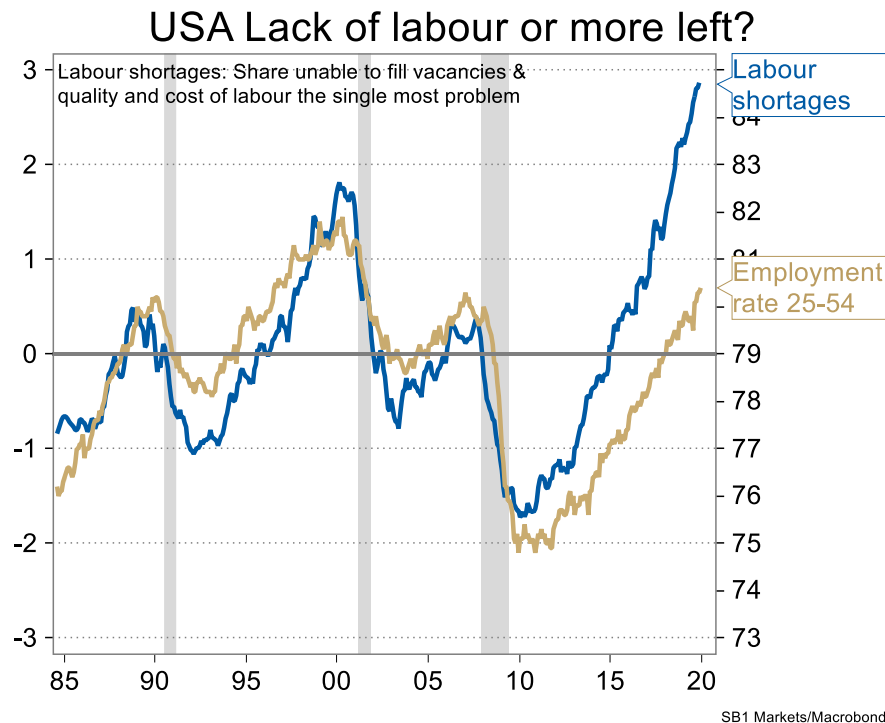
Employment rose 145', a tad weaker than expected. Unemployment unch, wage growth down 0.2 pp



- **Employment** rose by 145' in December, a solid print following the November spike, and just 15' lower than expected. Thus, employment growth accelerated in H2, the 6 m avg at a 1.5% pace, from 1% in July
- **Unemployment** was unchanged at 3.5%, the lowest in 50 years. Both the participation rate and the employment rate were unchanged. Participation is heading slightly upwards but too little to suggest that the supply side is now responding
- **Wages** rose just 0.1% m/m, 0.2 pp below expectations. The annual rate edged down 0.2 pp to 2.9%, even as companies are reporting close to record high difficulties attracting labour and very high compensation plans. However, wage growth is not low vs productivity
- Overall, these data confirms that the labour market remains strong

Lack of labour – or more left?

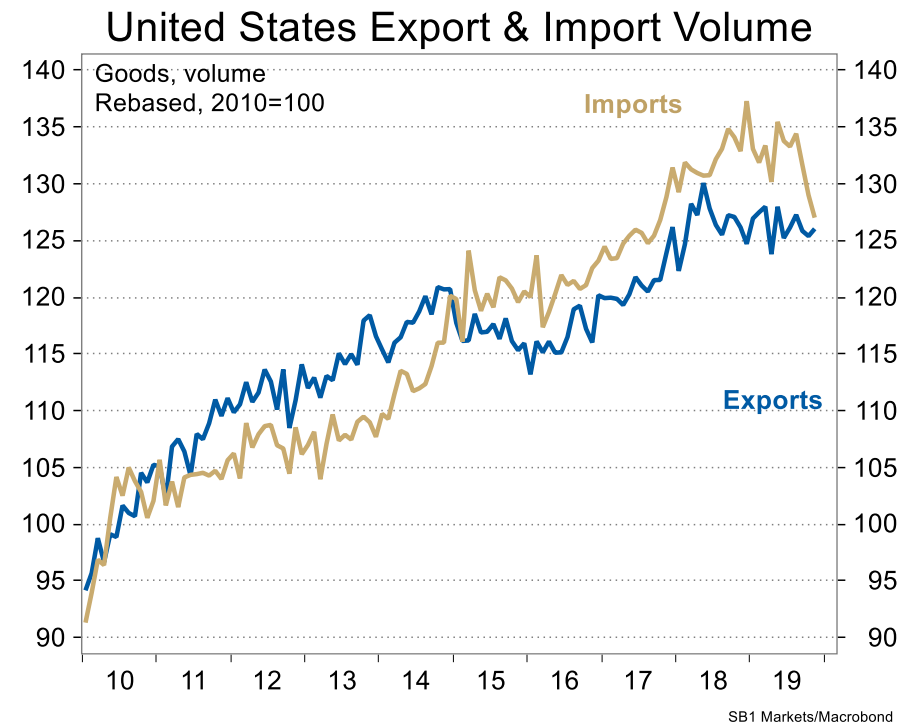
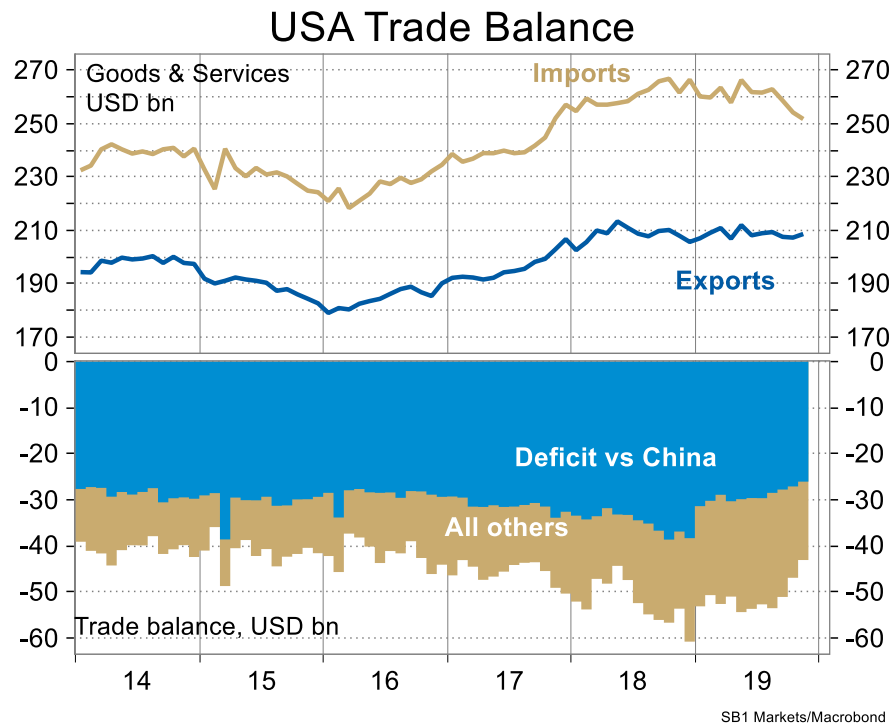
Why have not those at the side lines of the labour market turned up?



- The core age employment rate is at the peak levels seen in 1990 and 2007, but still clearly below the peak in 2000 – signalling that it is not impossible to imagine that the employment rate could increase further
- However, companies have never before reported problems finding labour like they do now. The number of unfilled vacancies is record high. Households are reporting that it is unusually easy to find a job
- Taken together, it seems rather unlikely that it should be easy to increase the employment rate sharply from the present level
- In addition, corporate profit rates are declining, as usual when the labour market is tight – confirming a mature cycle at the labour market

The trade deficit at 3 year low as imports wane and exports remain flat

Imports down the past months; softening demand, China tariffs, higher net oil exports all to blame?

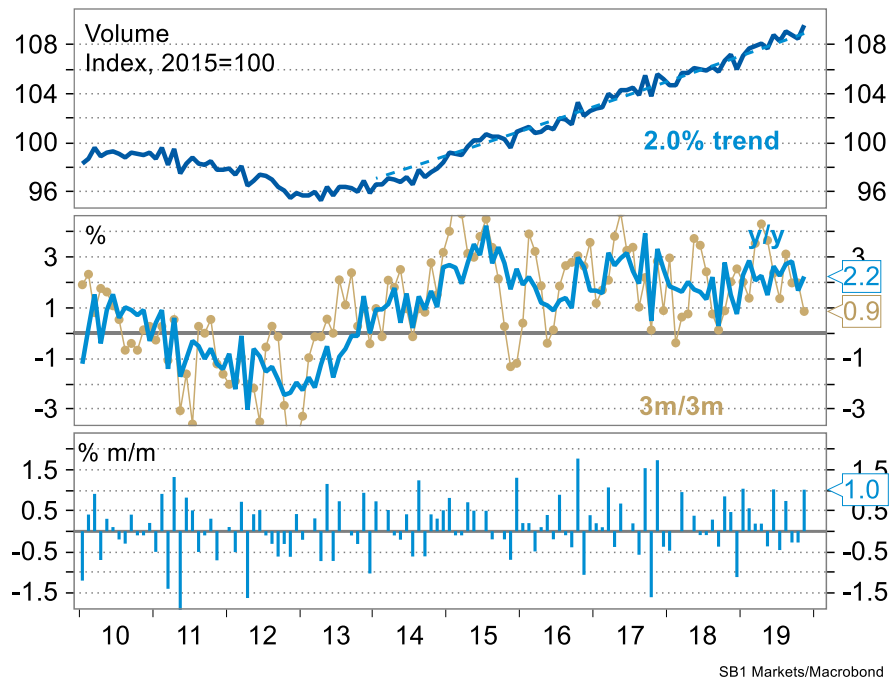


- The overall trade deficit of goods & services shrank to USD 43 bn in November, the lowest since late 2016. The deficit has declined rapidly the past months, probably due to both easing domestic demand, higher domestic oil production, and some tariff impacts
 - » Imports dropped 1.5% m/m in volume terms. Imports are down 4.6% y/y, the steepest decline since 2009! Domestic demand is no doubt a drag, check the next slide. However, the deficit to China is shrinking, whereas most others are trending out, indicating that the trade war has dampened imports. In addition, net petroleum exports have turned positive and explains 30-40% of the cut in the deficit since the summer – driven by higher shale oil production
 - » Export volumes rose 0.5% m/m in Nov. Exports have flattened out since mid-2018, the annual rate is now down by a marginal 0.7% pace
 - » Q4 is heading for a substantial positive net trade contribution to GDP growth
- The deficit vs. China is reduced substantially, no doubt due to the trade war. The deficit is still widening vs most trading partners

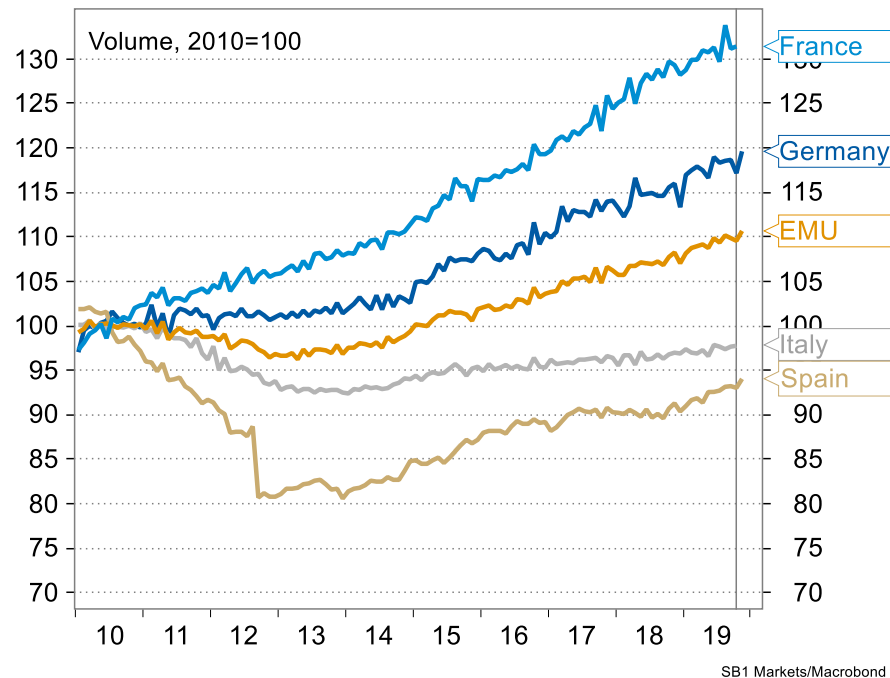
Retail sales bounced back in Nov, thanks to a German lift – trend still OK

Sales spiked 1% m/m and the 2% trend is well intact, suggesting a moderate Q4 growth contribution

EMU Retail sales



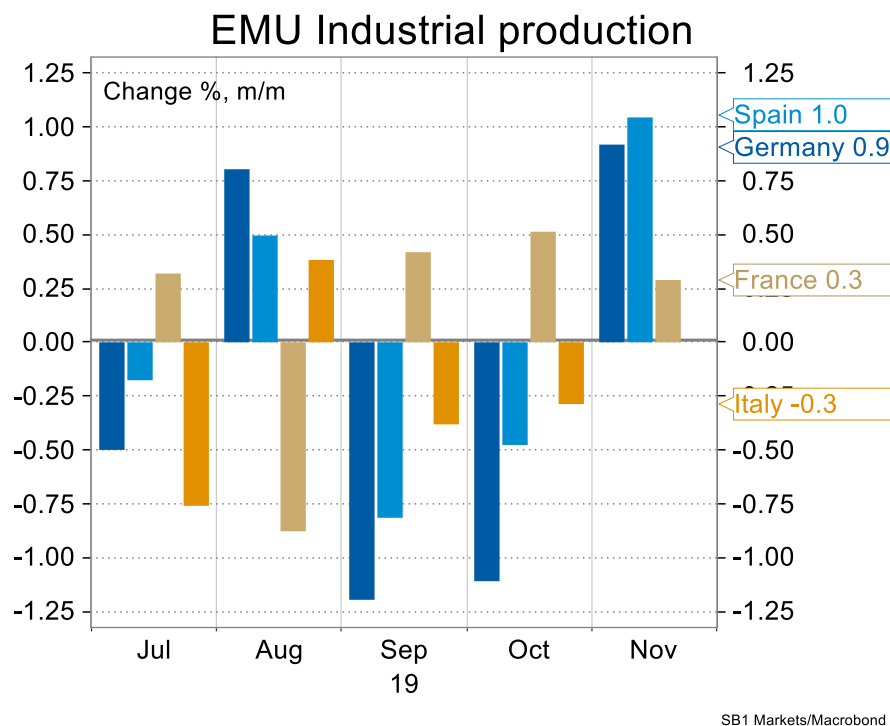
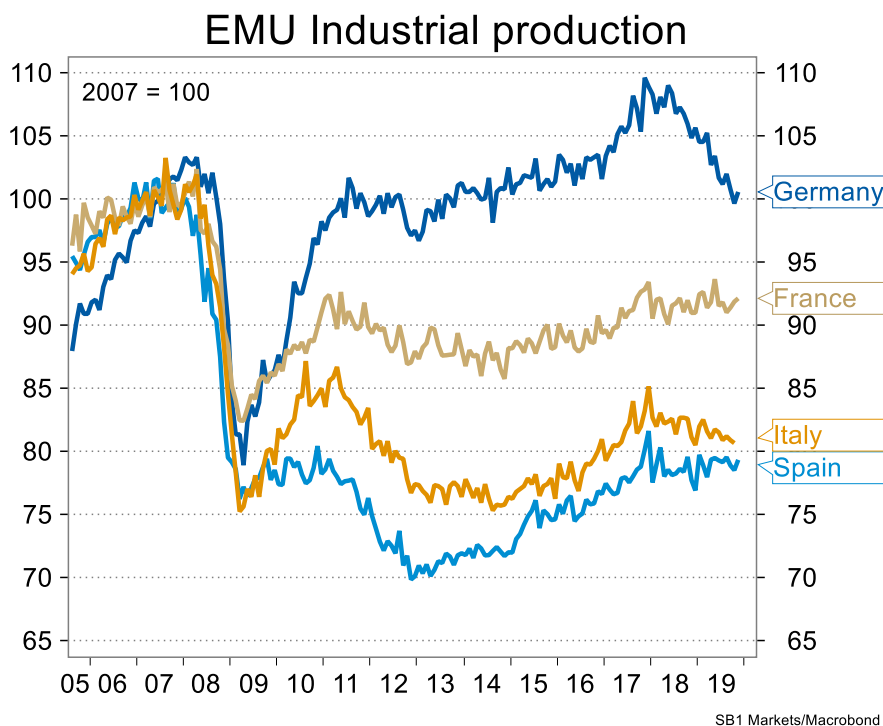
EMU Retail sales



- Retail sales volume rose by 1% m/m in November, 0.4 pp better than expected, and Oct was revised up to -0.3% from -0.6%. The upswing came after two months of slight decline. Sales are up at a stable 2.2% annual speed
 - » Germany reported 2.1% jump, more than reversing the Oct drop (which was smaller than first reported). Sales are trending up, in spite of the soft patch the German economy is on. In France, sales are growing steadily (no Nov data), and Spain is heading up. Italy marginally up, too
- Solid consumption growth adds to signs of a resilient service sector amid the manufacturing dip. Regardless, an acceleration from the current growth path is unlikely, as employment growth and thus, total wages, are slowing somewhat

Industrial production probably up in November but trend still weak

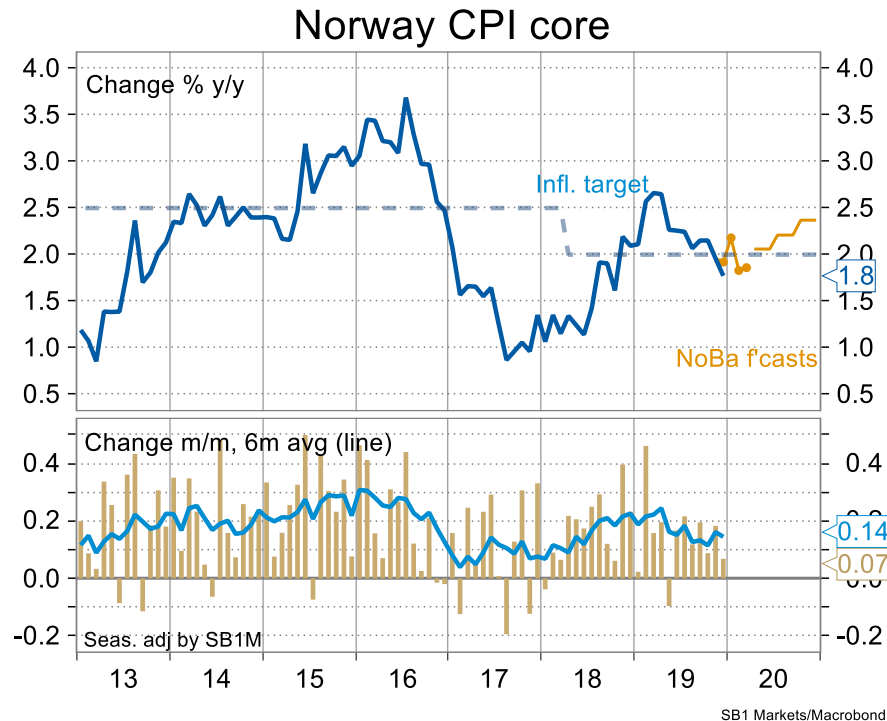
Production turned up in Germany, Spain and France, we estimate +0.5% m/m in total Eurozone



- EMU industrial production (ex construction) rose by 0.5% in November, according to our estimate, thus, reversing the October decline. Production is trending down but may stabilize in Q4 (if zero growth in Dec, the Q4 speed will be -0.1%)
 - » Production rebounded softly in Germany, after two months of steep decline. The trend is straight down and the 'hard data' do not signal a recovery. In Spain, production jumped, and France rose moderately. Netherland and Ireland (very volatile) declined
 - » Other major countries are so far holding up better than Germany but not are shining. Germany is down 8% from the 2018 peak. France has stagnated, Italy slides down slowly, while Spain is still heading very modestly up?
- Manufacturing PMI has stabilized at a low level, does not signal any fast recovery, but the contraction may have bottomed

Core inflation ticked down to 1.8% in Dec, just below expectations

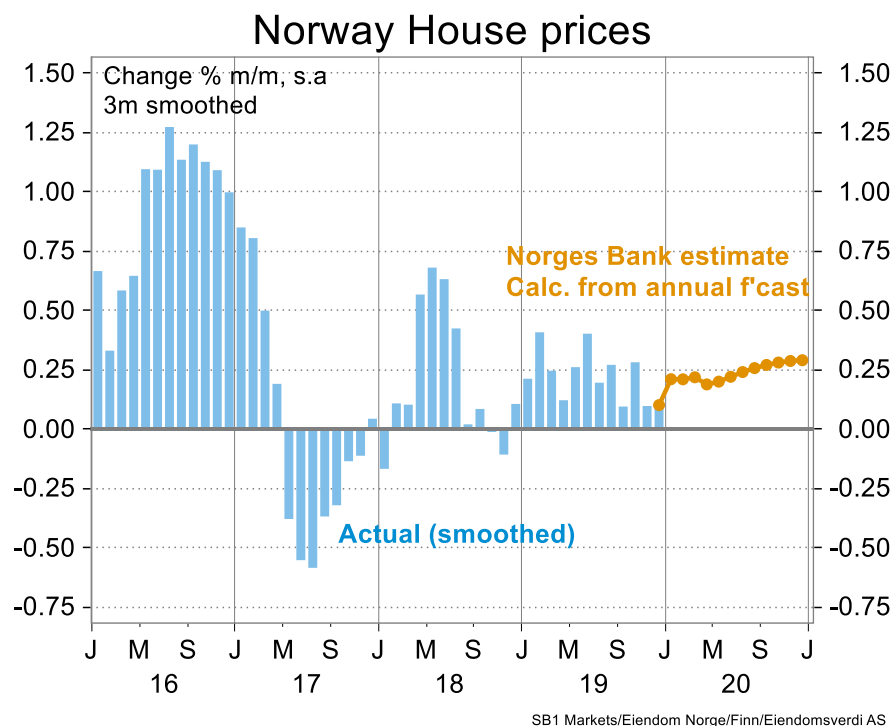
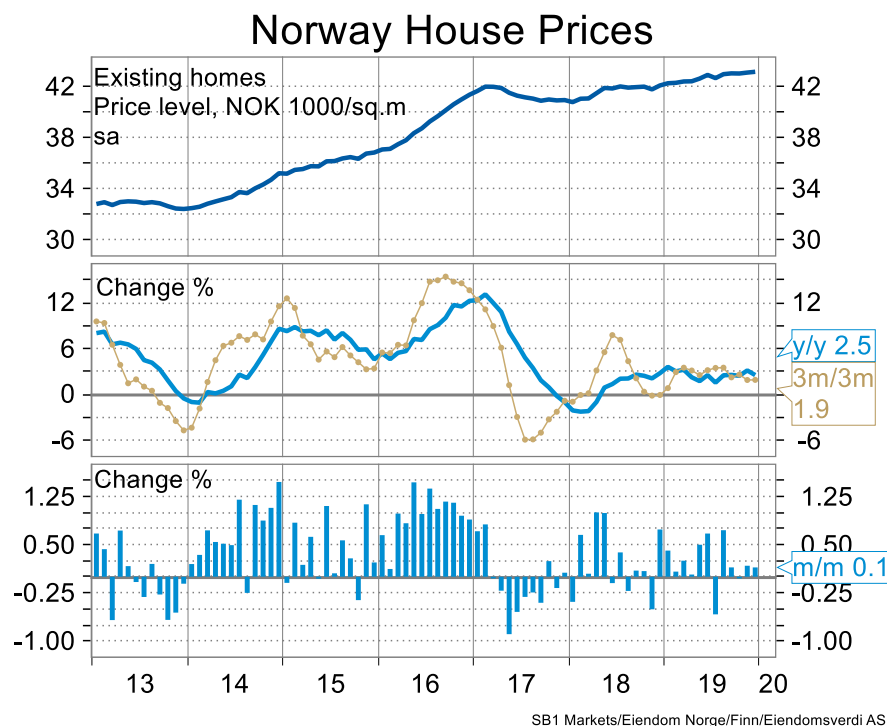
Core CPI inflation has softened since early 2019, bottoming now? Total inflation slowed to 1.4%



- CPI-ATE (ex. energy and taxes) rose by 1.8% y/y in December, down from 2.0% the prior month. Core inflation came in 0.2 pp below consensus' f'cast and 0.1 pp below ours and Norges Bank's estimates
 - » CPI-ATE rose 0.1% m/m (seas adj), below the 6 m avg
 - » No major surprises this month; airline ticket prices and furnishing dragged monthly inflation down
 - » Imported goods are up just 0.6% y/y, the NOK depreciating points to somewhat higher imported inflation. Domestic goods & serv. up 2.4%, due to wage inflation above 3%, slow productivity growth and capacity to increase prices, as demand is not weak
- Total CPI growth slowed to 1.4%, from 1.6%, 0.2 pp lower than expected. Annual inflation is dragged down by electricity prices, which are down 10% y/y
- **Implications**
 - » Core inflation is close to the price target, and our inflation model suggests an uptick to above the target the coming months. Norges Bank's f'casts are well within reach. We anyway expect the Bank to keep interest rates on hold for a while
 - » No significant market reaction, NOK depreciated some 0.2% following the report but soon recovered the marginal loss

House prices keep rising moderately, in a well balanced market

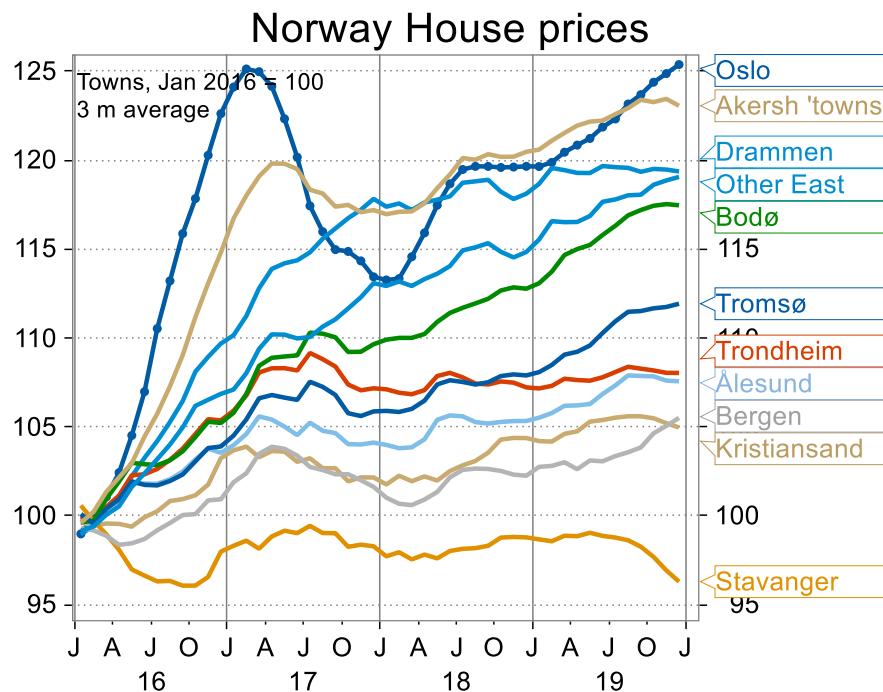
Prices rose 0.1% m/m in Dec, underlying growth flat at 1.9%. Supply down from peak, still high



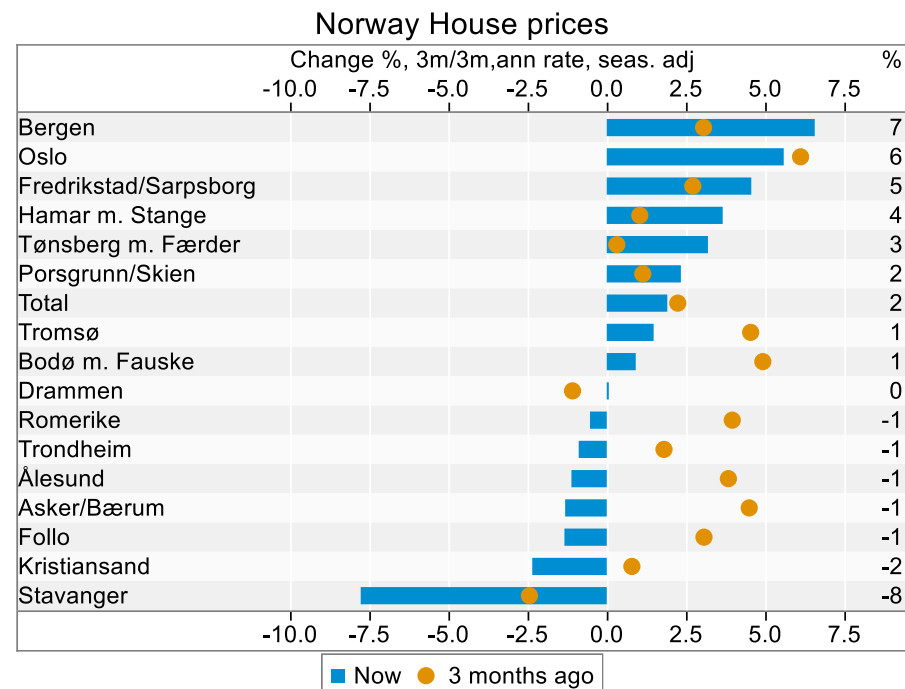
- **House prices** rose 0.1% m/m (seas. adj), as we expected. Prices fell 0.8% not s.a. Growth has been modest the past 6 months, the avg is just 0.1%. Still, measured 3m/3m growth was unch at 1.9%, a tad lower than in mid-2019. Norges Bank's implicit f'cast amounts to slightly higher growth the coming months
 - » Mixed within the regions; Prices are soaring in Oslo and in Bergen most recently. In Stavanger, prices are falling steeply
- **The number of unsold homes** kept unchanged in Dec, at an elevated level. However, the inventory has probably peaked, along with a downturn in the number of new listings (from a very high level). The number of transactions has flattened at a high level
- **Short term dynamics signal a price acceleration the coming months, but our take is anyway that the risks are tilted to the downside, as rates are hiked, and credit growth is slowing. And we may not have seen the full impacts of the interest rate hikes and the debt registry**

Mixed recent months; Oslo prices are soaring, Stavanger tumbling

Prices are accelerating in Bergen. In Drammen, Kr.sand, Trondheim, Ålesund, prices are flattening



SB1 Markets/Eiendom Norge/Finn/Eiendomsverdi AS



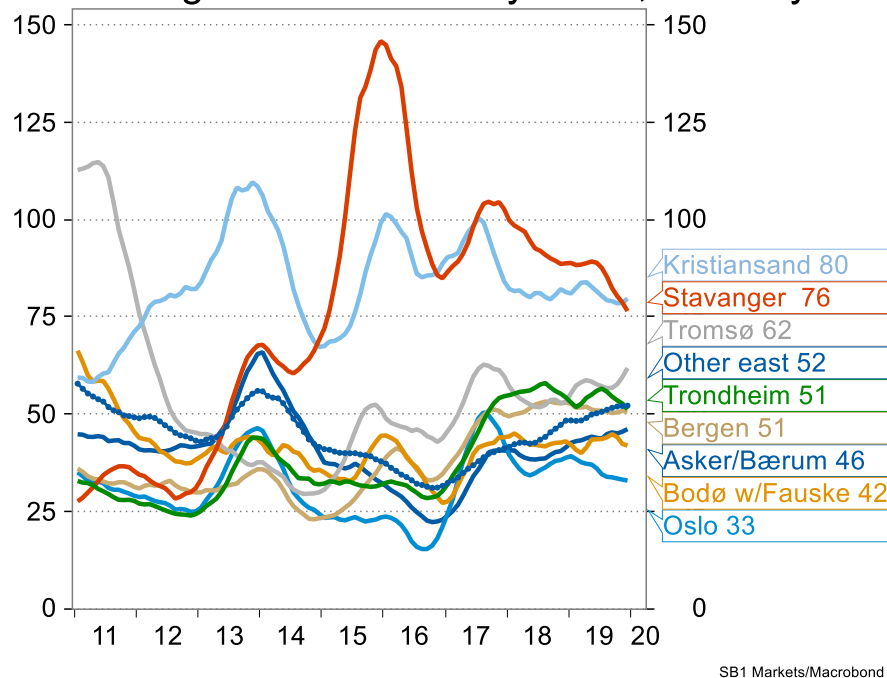
SB1 Markets/Eiendom Norge/Finn/Eiendomsverdi AS

- Measured 3m/3m, prices are now rising in 8 of 16 cities and declining in 7 (flat in 1, Drammen). Oslo prices are up 7% annualized, Bergen accelerating to 6%, and Fredrikstad, Hamar, Tønsberg all gaining pace. Stavanger prices are down 8% and the speed down is accelerating! Kristiansand, Asker/Bærum, Follo have been declining modestly the past months.
 - Compared to 3 months ago, prices are accelerating in 5 cities, slowing but still increasing in 3 regions, and falling in 6 (of which 5 were increasing 3 months ago)
- Prices in most cities are now above the local 2017 peak levels
 - In December, Oslo prices beat the (very high) 2017 peak. Bergen is just above the peak level, too. Stavanger is 13% below the 2013 peak. Housing starts are reduced by some 50% since, but still many homes are built, we assume because 2.hand prices are still high enough to make new construction profitable

Inventories are on the way up

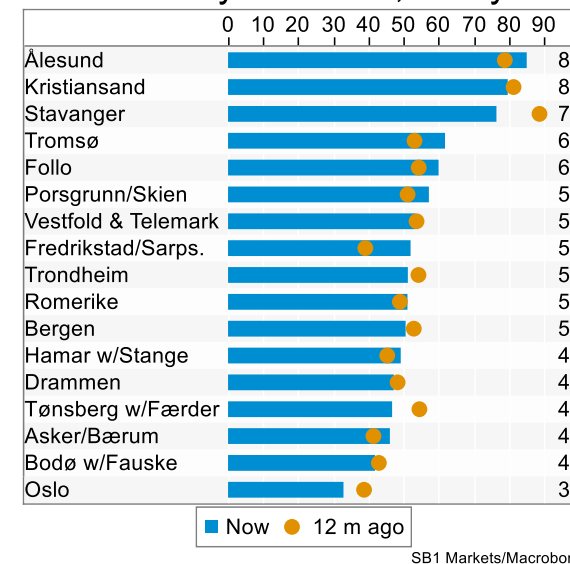
... and more than sales, most places

Existing homes Inventory/sales, # of days

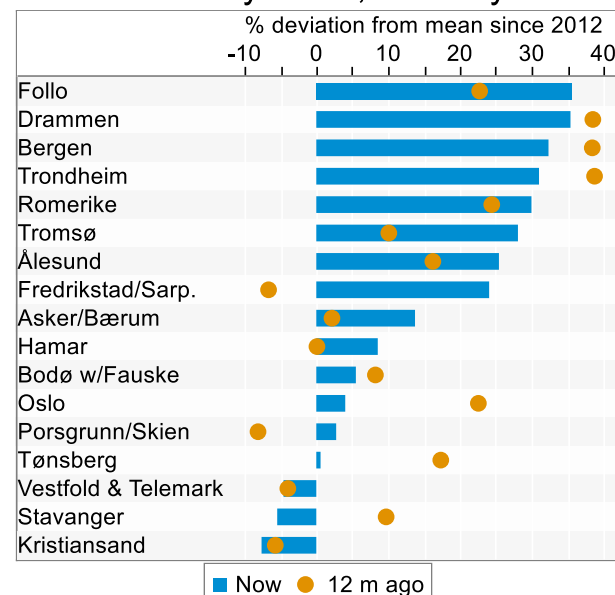


- The inventory/sales ratios are still high in Kristiansand and in Stavanger but they are declining. Ålesund has the highest inventory vs sales
- In Oslo, the inventory/sales ratio is declining, from a normal, low level
- In the rest of the country, the ratio is on the way up, and it is higher than normal

Inventory vs. sales, # days

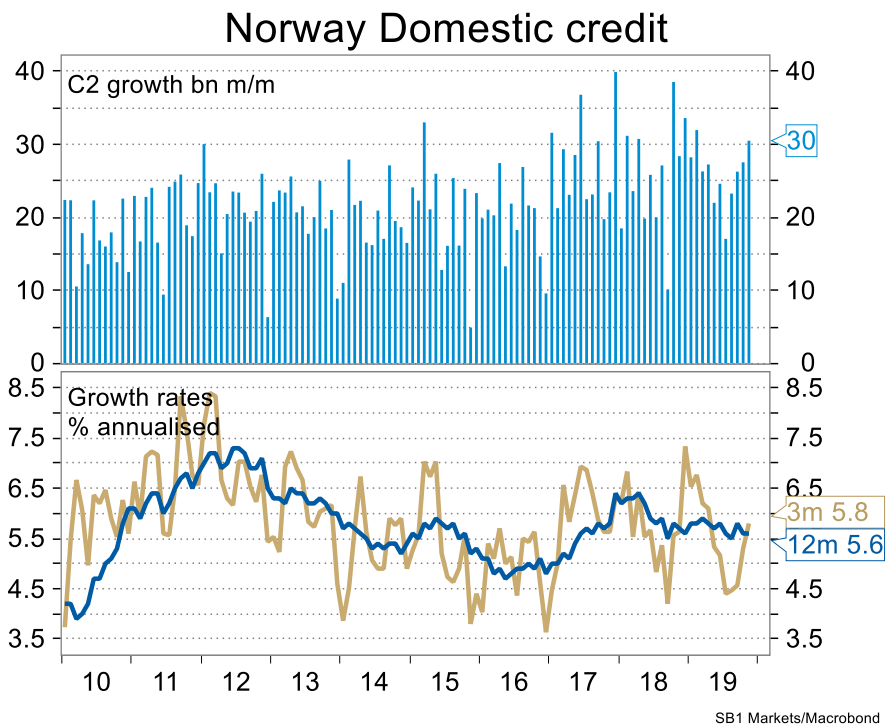
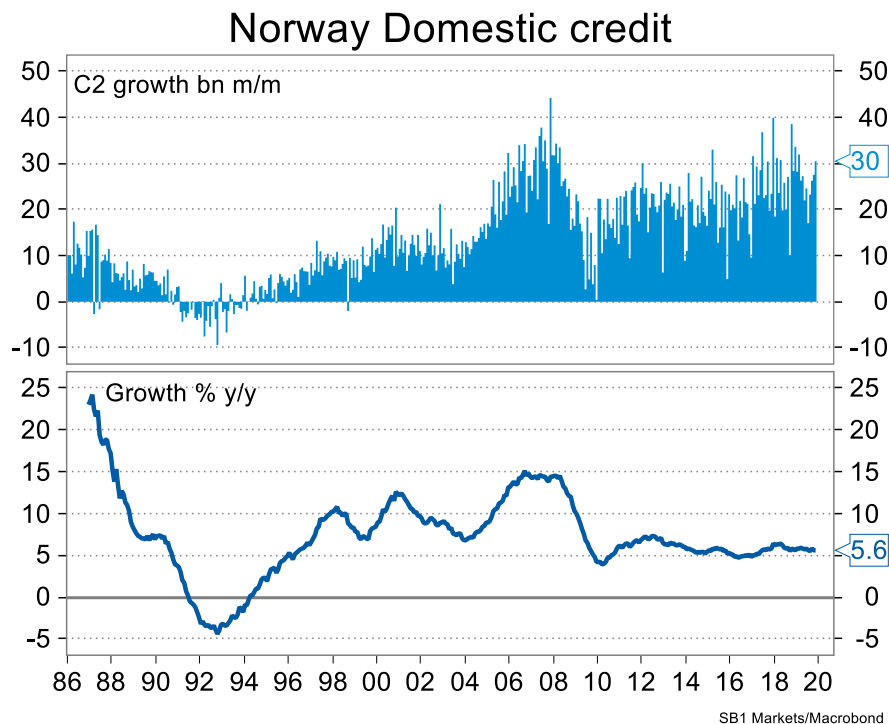


Inventory/sales, # of days



Credit growth is slowly cooling, driven by households

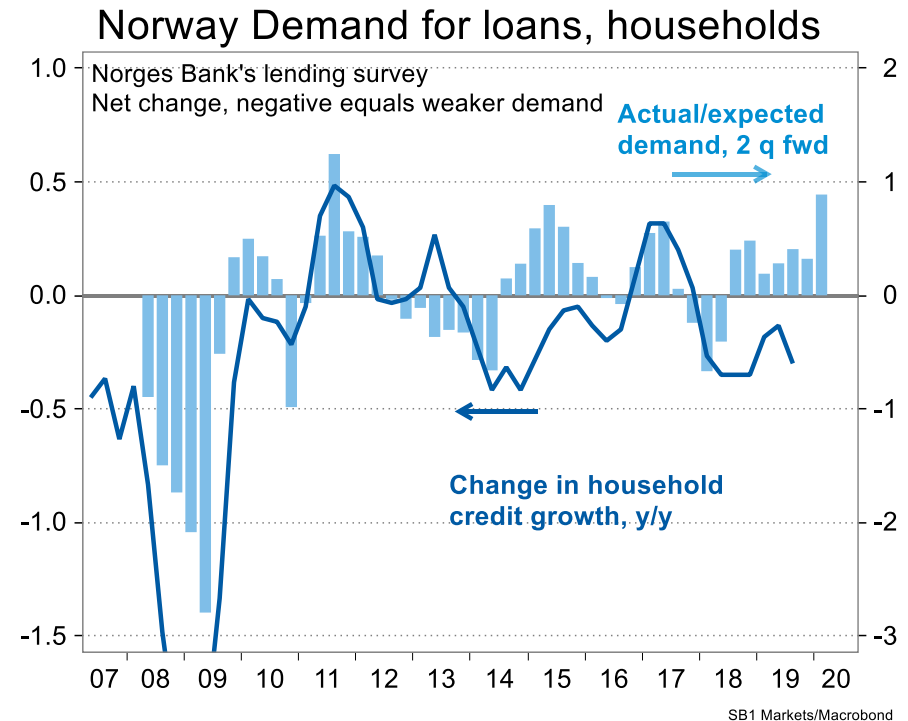
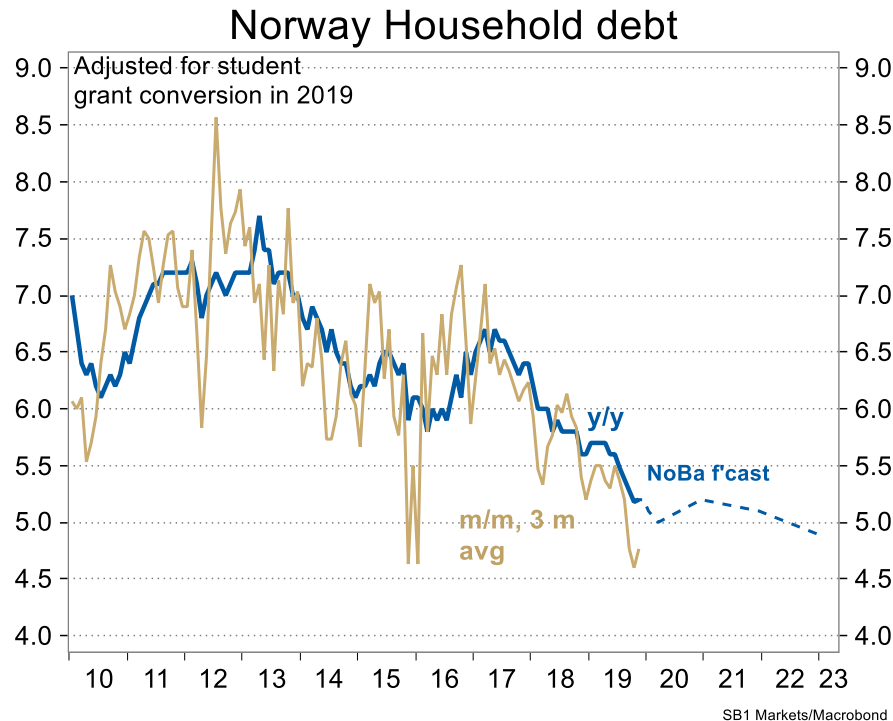
Total credit growth steady at 5.6% y/y in Nov, with some help from a change in student loan conversion timing



- Total domestic debt (C2) rose by NOK 30 bn m/m in November. The annual rate was unchanged at 5.6%, we expected a 0.1 pp downtick. Credit growth is heading slowly down, dragged down by households
- Household credit growth increased somewhat in November, even after adjusting for a change in the timing of student loan/grant conversions. The annual rate has decelerated to 5.2% down from 5.7-5.8% in early 2019. The interest rate hikes have probably dampened mortgage demand, along with slower growth in consumer credit loans following tighter regulations, and the debt registries
- Corporate credit growth slowed this month but has gained some pace recent months. Annual rate at 5.8%
- Local governments are increasing their debt at an unsustainable pace, close to 8%

Underlying growth down, below income growth

Growth is slowing visibly, even as banks were expecting higher demand in Q3

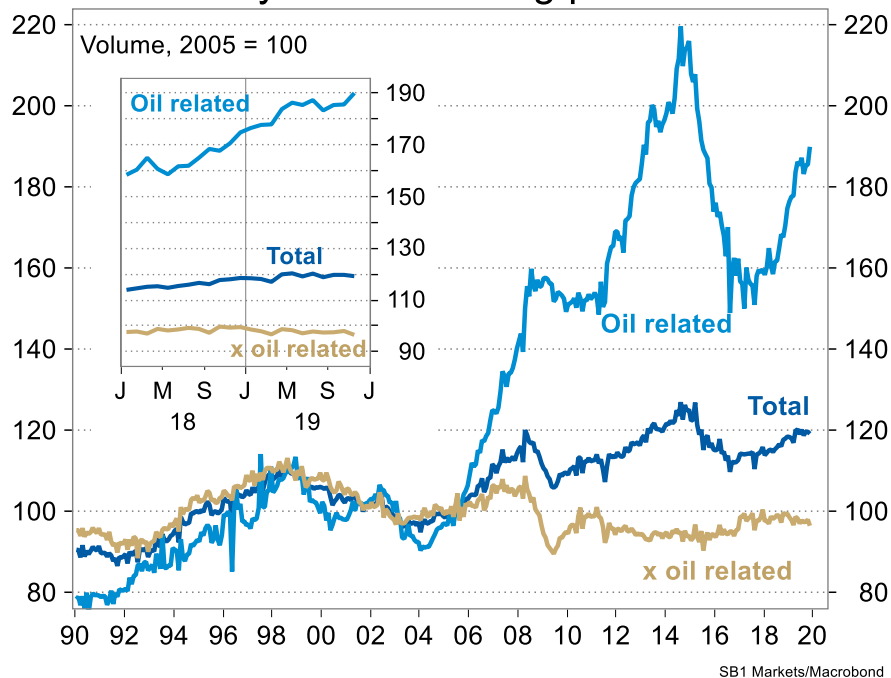


- In the longer term, household credit growth is slowing, from above 7% in 2012-2013 to just above 5% now. The underlying growth rate has slowed the past months, but turned marginally up in Dec but still at 4.7%
 - » Household income growth has turned up, to 6.5% in Q3. Thus, the deb/income ratio has fallen marginally – but remain at a very high level
- Surprisingly, banks in NoBa's Q3 lending survey reported higher household loan demand and they even expected an uplift in Q4. Strange, if not the whole slowdown recent months is due to a faster contraction in consumer credit. The Q4 lending survey will be released later this week

Manufacturing production down in November, even if oil related is still booming

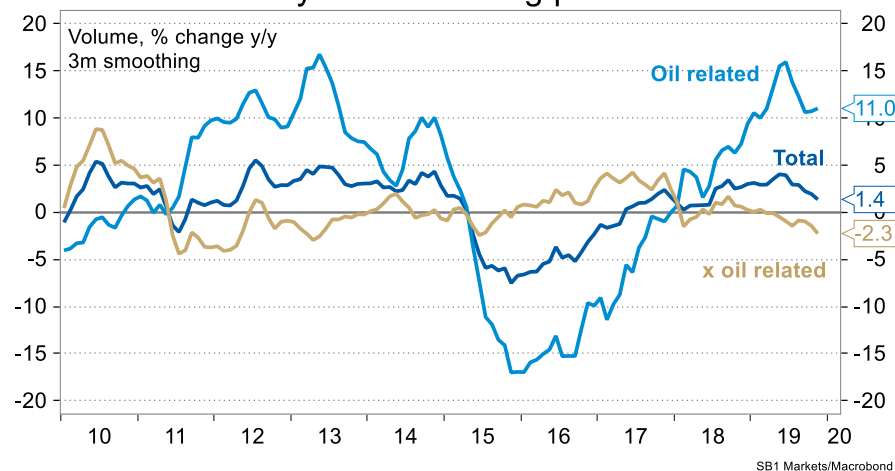
Total production down 0.4%, we expected unch. Non-oil related production down 1.5%

Norway Manufacturing production

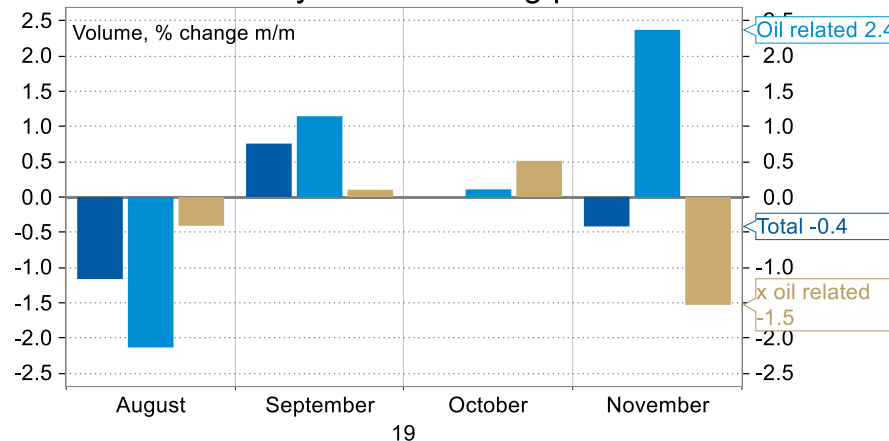


- Total manuf. production has been flat since the spring – even if oil related production has increased further. Production in other sectors are declining
- Production in oil related sectors are probably close to peak, as oil investments are most likely peaking in Q4
- We have no reason to expect any recovery in non oil related sectors. Production is trending down, has been flat the past couple of years (and the past 25 years!)
- Surveys (ex. the strong PMI) have softened and point to a slowdown, to some 2% growth

Norway Manufacturing production

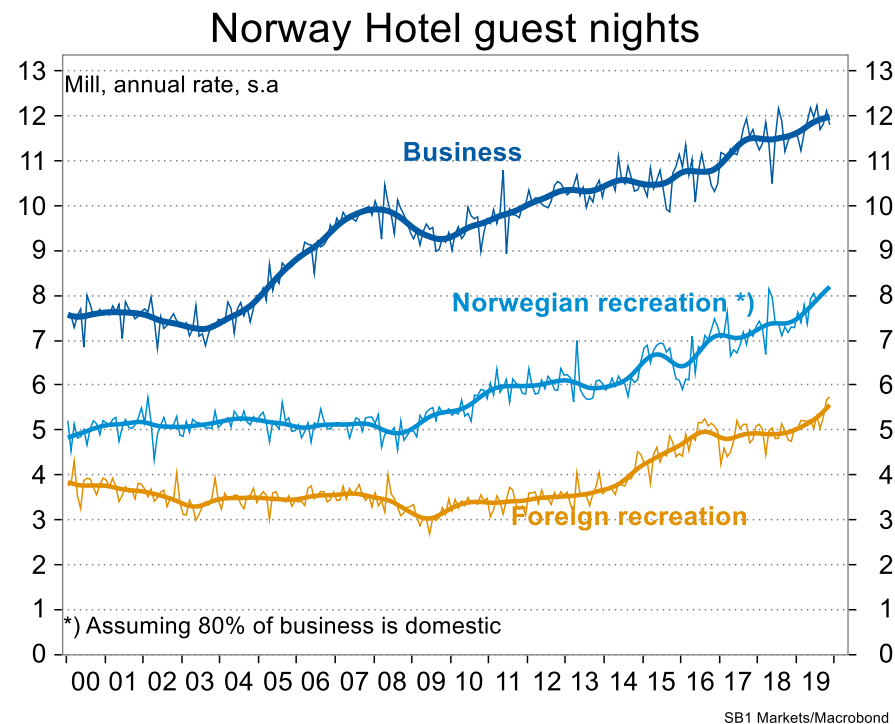
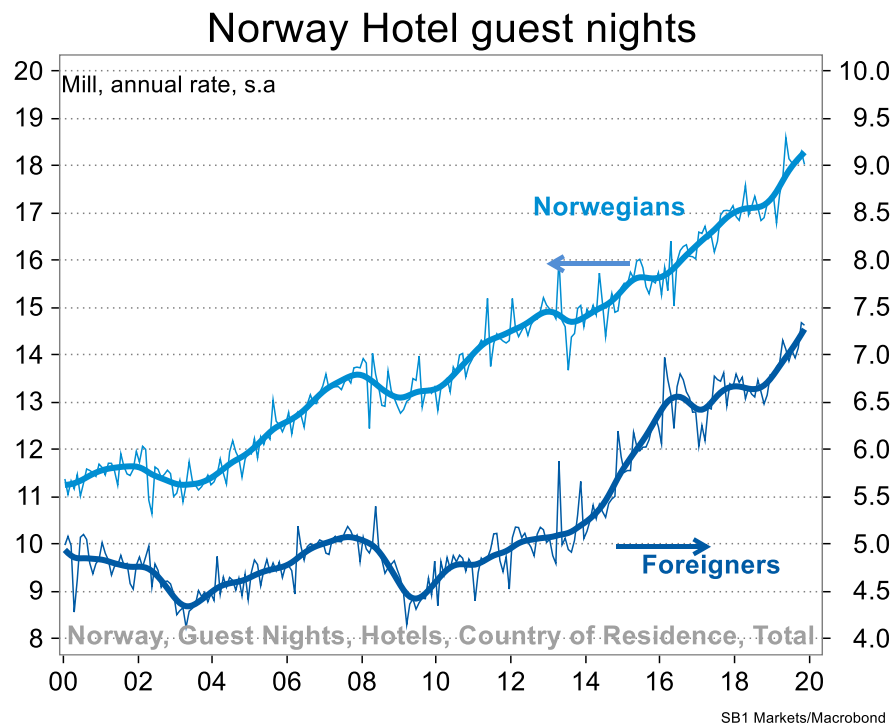


Norway Manufacturing production



Strong growth in hotel guest nights – but not much more than capacity growth

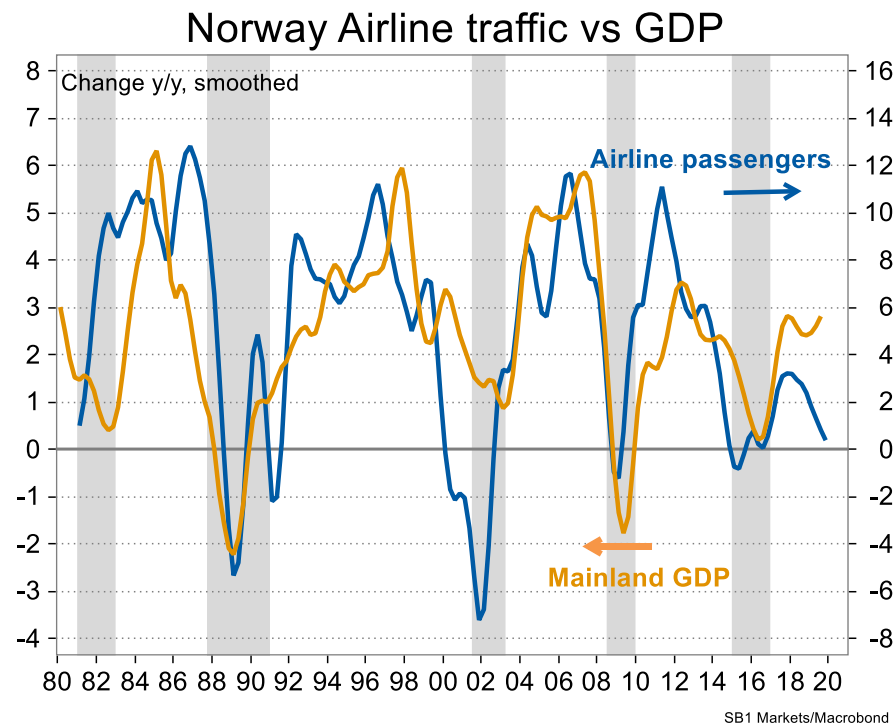
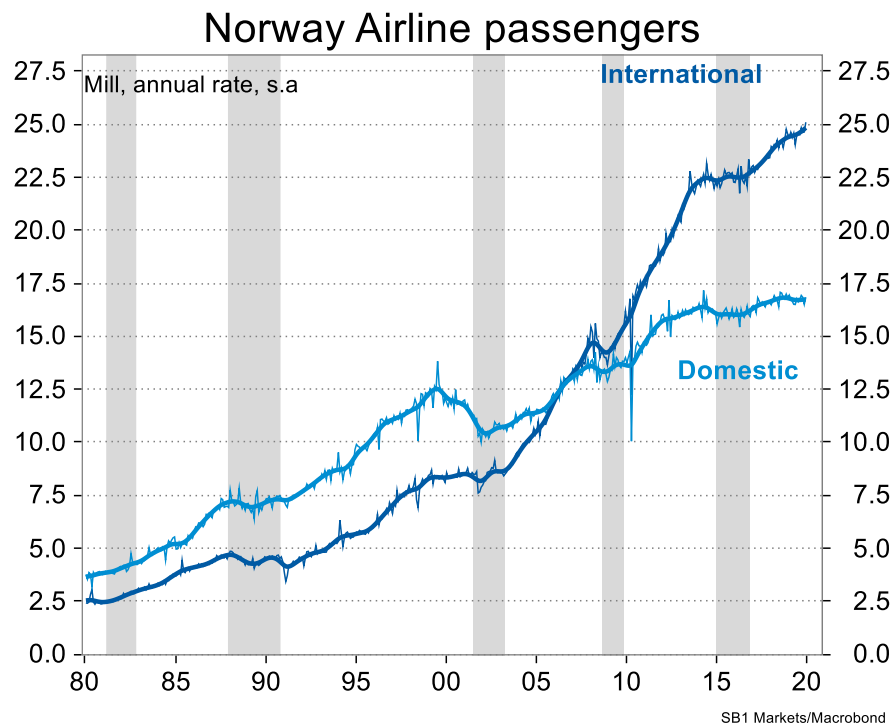
Guest nights trending up 8% y/y! Both foreign & domestic demand up, recreation more than business



- Overall growth in guest nights some 7-8% recent months. Both Norwegian and foreign bookings are growing at the same speed, and both have accelerated through 2019. A weak NOK is no doubt supportive for both groups
- Recreation guest nights are up 10 – 12% y/y, 'business demand' 4%
- Capacity growth is close to growth in demand, utilisation by and large flat since 2016 (but slightly up y/y now). Pricing power not impressive, room prices are up 2%, well below wage growth. Real room prices (deflated by CPI) has fallen by more than 10% over the past 10 years – but has been close to flat since 2015

Domestic air traffic is flattening, international traffic is still growing (slowly)

Passenger traffic up some 1% y/y, domestic marginally down, international +2%



- Growth in air passenger traffic is much slower than normal, and much lower than normal vs. Mainland GDP growth.
 - » Are some feeling some shame??

The Calendar

In focus: China Q4 GDP & Dec data, US manufacturing and Jan surveys, NoBa Q4 lending survey

Time	Country	Indicator	Period	Forecast	Prior
TBA	CH	Total Credit Growth CNY	Dec	--	1750.0b
Monday Jan 13					
10:30	UK	Manufacturing Production MoM	Nov	-0.3%	0.2%
20:00	US	Monthly Budget Statement	Dec	\$5.0b	-\$208.8b
Tuesday Jan 14					
	CH	Exports YoY	Dec	2.5%	-1.3%
06:00	SW	PES Unemployment Rate	Dec	--	3.9%
12:00	US	NFIB Small Business Optimism	Dec	104.8	104.7
14:30	US	CPI Ex Food and Energy YoY	Dec	2.3%	2.3%
Wednesday Jan 15					
08:00	NO	Trade Balance	Dec	--	18.8b
09:30	SW	CPIF Excl. Energy YoY	Dec	1.8%	1.8%
10:30	UK	CPI Core YoY	Dec	1.7%	1.7%
11:00	EC	Industrial Production MoM	Nov	0.3%	-0.5%
14:30	US	PPI Core YoY	Dec	1.3%	1.3%
14:30	US	NY Empire Manufacturing Survey	Jan	4	3.5
20:00	US	Fed's Beige Book			
Thursday Jan 16					
00:50	JN	Core Machine Orders MoM	Nov	3.0%	-6.0%
02:30	CH	New Home Prices MoM	Dec	--	0.3%
10:00	NO	Norges Bank Lending Survey (Agg. index)	4Q		0.04
14:30	US	Retail Sales Advance MoM	Dec	0.3%	0.2%
14:30	US	Retail Sales Core (Control Group)	Dec	0.3%	0.1%
14:30	US	Philadelphia Fed Business Outlook	Jan	3.4	0.3
14:30	US	Initial Jobless Claims	Jan-11	--	214k
16:00	US	NAHB Housing Market Index	Jan	74	76
Friday Jan 17					
03:00	CH	Retail Sales YoY	Dec	7.9%	8.0%
03:00	CH	Industrial Production YoY	Dec	5.9%	6.2%
03:00	CH	Investments YoY	Dec	5.2%	5.2%
03:00	CH	GDP QoQ	4Q	1.4%	1.5%
10:30	UK	Retail Sales Core MoM	Dec	0.9%	-0.6%
14:30	US	Building Permits	Dec	1469k	1482k
14:30	US	Housing Starts	Dec	1380k	1365k
15:15	US	Manufacturing Production	Dec	0.2%	1.10%
16:00	US	UoM Consumer Sentiment	Jan P	99.2	99.3
16:00	US	JOLTS Job Openings	Nov	7270	7267
Monday Jan 20					
02:30	CH	1-Year Loan Prime Rate	Jan	4.10%	4.15%
05:30	JN	Industrial Production MoM	Nov F	--	-0.9%

• China

- » Surveys suggest an uptick in **GDP growth** in Q4. However, consumption is probably slowing and net trade may be a drag on growth, due to strong imports. Thus, an unchanged speed from Q3 seems plausible
- » **Manufacturing production** is most likely gaining pace, at least that is what the PMIs are indicating. Production spiked in November, we doubt December will expand equally
- » **Investments** are growing steadily and there are no signs of setback
- » **Retail sales volumes** are struggling amid soaring price inflation
- » **Credit growth** is slowly accelerating, due to higher bank lending

• US

- » **Core CPI inflation** may be at peak, producer prices and inflation models do signal much higher inflation. Total inflation turns up with the oil price
- » **Manufacturing production** most likely fell in Q4, and we expect a downturn in Dec. PMI/ISM are unusually diverged. The two first January **regional Fed manufacturing surveys** will be published this week
- » **Retail sales** are slowly decelerating but any hard downturn is unlikely
- » **Housing starts/permits** are soaring, along with most other housing market indicators

• Eurozone

- » We f'cast a 0.5% rise in **industrial production** in Nov, reversing the 0.5% drop in Oct. However, surveys are not signalling an imminent recovery

• Norway

- » We will be rather surprised if **Norges Bank Q4 lending survey** should not report softer demand for mortgages. Household credit growth is slowing visibly (even as this may partly be due to consumer credit). Credit standards vs corporates should be stable, but is demand from the corporate sector slightly weaker too?

Our main views

	Main scenario	Recent key data points
Global growth cycle	The cycle is maturing, in the real economy, markets. The trade conflict has no doubt contributed to the slowdown, especially in the manufacturing sector. Unemployment is low, wage inflation is not low vs. productivity. Most emerging countries (EM) x China are in recovery mode, but have been slowing somewhat too. Some hotspots EMs will get burned, as usual – but there are fewer EM imbalances than normal. The global PMI has stabilized. Barring policy mistakes, the global economy is not rigged for a <i>hard</i> downturn. Investment rates are not far too high, and there are few debt bubbles this time. Growth has slowed to 3% from 4%, but has stabilized since Q4 2018. We expect a modest slowdown to 2.8% in 2020, even if trade conflicts are ‘solved’	<u>Global composite PMI ticked up 0.2 p in Dec, 0.3 p better than we expected, due to a lift in services. The PMI at 51.7 signals above 3% GDP growth. The manufacturing PMI inched down 0.2 p, to 50.1, still suggesting a mild recovery in global production</u>
China	Growth has slowed just marginally, and will most likely not collapse in 2020 either. Surveys signal a mild recovery at the end of 2019, even without much extra policy stimulus, especially on the fiscal side. Exports to the US is down but total exports not. The invest/GDP ratio is sliding gradually down. Debt growth was slowing but turned up in 2019, and the authorities do not want to push the accelerator, barring a serious economic downturn. A de-escalation of the trade war is fine but the real risks are the high debt level & possible over- investments	<u>Total CPI inflation steady at 4.5%, core inflation subsidies. Manufacturing PMI held steady according to NBS/CFLP, Markit’s a tad down, both suggest a growth rebound in manufacturing. Both composite PMIs fell but still remains ‘strong’</u>
USA	Growth will most likely not accelerate in 2020, from the 2% speed in H2. Unemployment is low, profits under pressure, and corporate debt is high. Business investments are above trend, and have yielded in H2. Households are in a much better shape, the debt burden is sharply reduced, and the savings rate is ‘high’. The housing market seems balanced. Just a marginal fiscal stimulus in 2020 but the impact of 3 Fed cuts last year are not yet consumed. Price inflation is close to target, and the Fed can focus at the real economy. Recession risk is not overwhelming, short term, and further rate cuts are unlikely, barring a much weaker economy. Risks: Trump/trade/business investments & debt, not household demand or debt	<u>Nonfarm payrolls confirm a strong labour market, employment rose at a solid pace in Dec. Still, wage growth is easing, strangely. Markit’s composite PMI 0.5 p better than first reported, up to 52.7, thanks to services. ‘Composite’ ISM inched up. The trade deficit shrinks as imports are falling steeply.</u>
EMU	Growth will remain muted in 2020 but there are few signs of hard landing. The manufacturing downturn may be easing, at least that is what some surveys are indicating. The consumer side has been quite resilient. The labour market is tight, and labour cost infl. is back to a normal level. Investment ratios are above trend. Credit growth is increasing, but still muted. Household savings are high, still consumption has kept up well. Policy: ECB does not have that much ammunition left, barring a huge QE, and the ECB policy makers are split. Fiscal policy debate has turned, some stimulus possible. Risks: Trade war (but less risk for a US/EU war after G7). Italy, as always	<u>Composite PMI edged up 0.3 p, to 50.9 (first reported unchanged). PMI still signals weaker growth than in Q3. Retail sales are growing steadily and core CPI inflation kept up at 1.3%, underlying growth a tad up. Unemployment has flattened out, almost no decline in Nov</u>
Norway	Growth has been above trend, will slow substantially in 2020. Unempl. has flattened out. Wage inflation is above 3%. Oil investments probably peaked in Q4. Mainland business inv. are not low anymore, will slow substantially in ‘20. Housing starts are slowing. Electr. prices have taken the headline CPI down, core is still close to target. Growth in households’ debt has slowed to close to income growth. Risks: Debt, housing. A harsh global slowdown	<u>Core CPI is easing, down to 1.8% in Dec. House prices rose 0.1% m/m sa in Dec. The no of unsold homes has probably peaked. Household credit growth slows (but not in Nov). Manufacturing production fell in Nov, will slow in 2020</u>

In this report

Global, PMIs, Auto

- Global macro data are improving vs expectations
- Global foreign trade has not recovered, retail sales still struggling from VAT hike
- Global PMI better than we assumed in December, up 0.2 p to 51.7
- US, EMU, China and Japan are all edging up
- US non-manufacturing ISM bounced back to 55 in Dec, above expectations
- Eurozone final December PMI better than first reported
- Global auto sales stable in December, down 5% last year

China

- Total inflation steady at 4.5% in Dec, core CPI inflation sliding down, to 1.4%

US

- Solid employment growth in Dec but wage growth abated
- Wage growth is subsiding, December below f'casts
- Small companies report record high wage increases, still tight labour markets
- The trade deficit at 3 year low as imports wane and exports remain flat
- Nowcasters signal 1.2 – 2.3% Q4 GDP growth, Nat. Act. Index at 2.2%

EMU

- Core CPI inflation steady at 1.3% in Dec, underlying growth inches up
- Unemployment flattening out amid growth slowdown
- Retail sales bounced back in Nov, thanks to a German lift – trend still OK
- EU economic sentiment stabilized along with other surveys?
- Consumer sentiment remains above avg, signs of a resilient consumer sector?
- Industrial production prob. rebounded in Nov
- German manufacturing orders keeps declining but the speed down is easing, export orders up
- German exports down in Nov, trending flat, imports trending up

Sweden

- Retail sales growing moderately, a tad slower recent months?

Norway

- Core inflation ticked down to 1.8% in Dec, just below expectations
- House prices keep rising moderately, in a well balanced market
- Credit growth is slowly cooling, driven by households
- Manufacturing production down in November, even if oil related is still booming
- GDP growth up 1.1% 3m/3m annualized, Q4 will not be impressive
- Financial News Index steady the past 2 months, trending down

Highlights

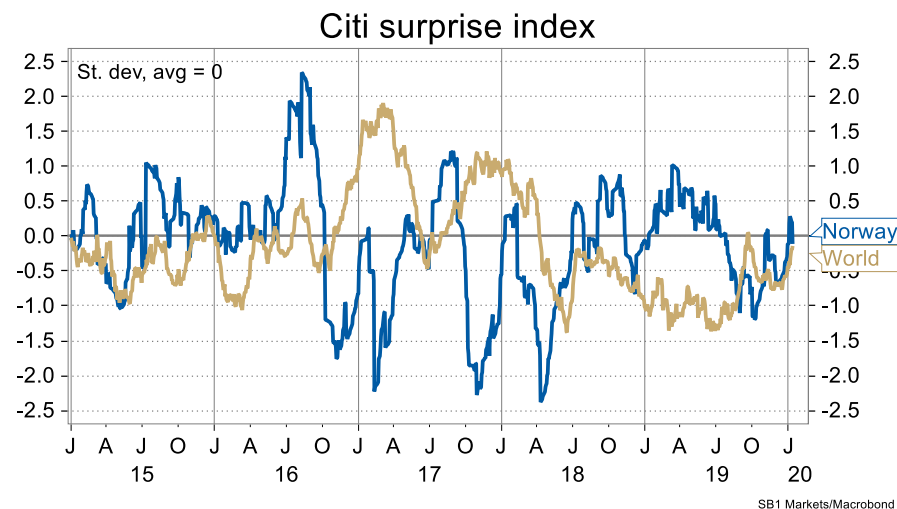
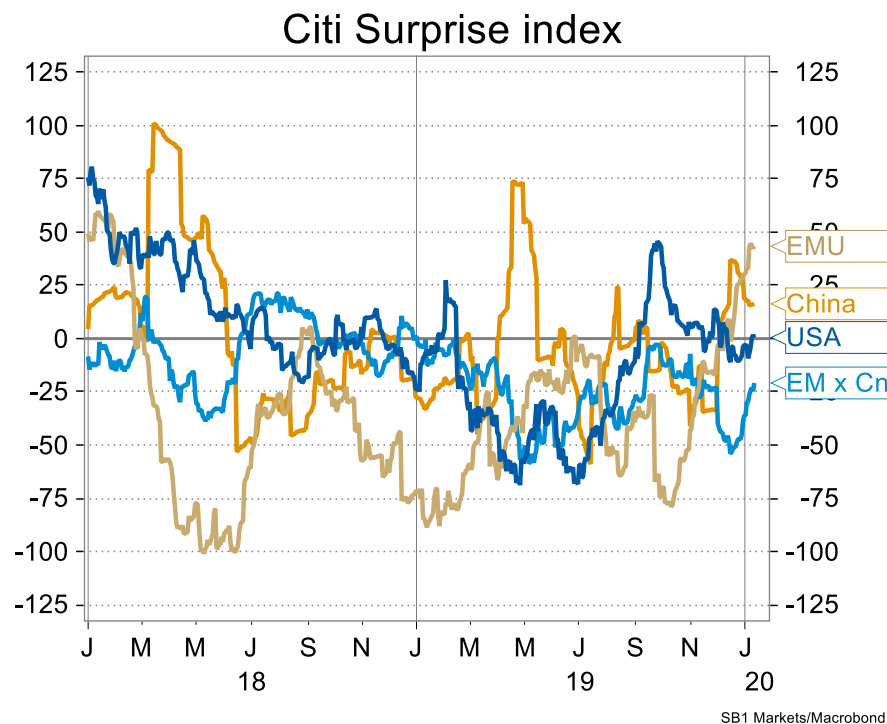
The world around us

The Norwegian economy

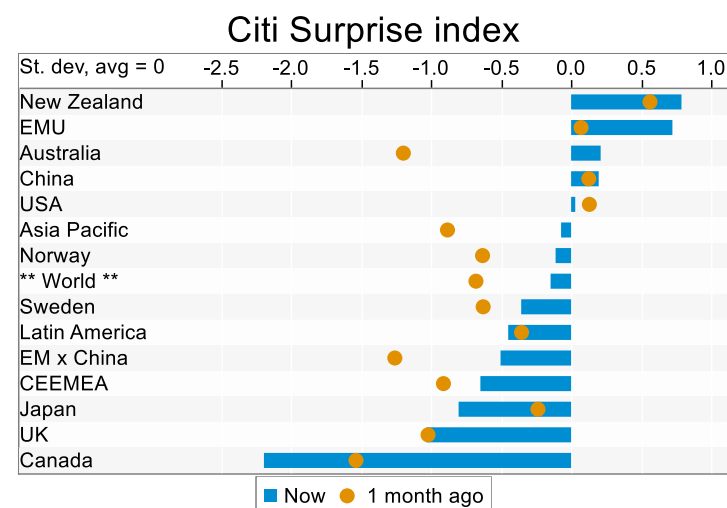
Market charts & comments

Global macro data are improving vs expectations

EMU at 2 year high, China data above expectations, US neutral and EM x China less disappointing

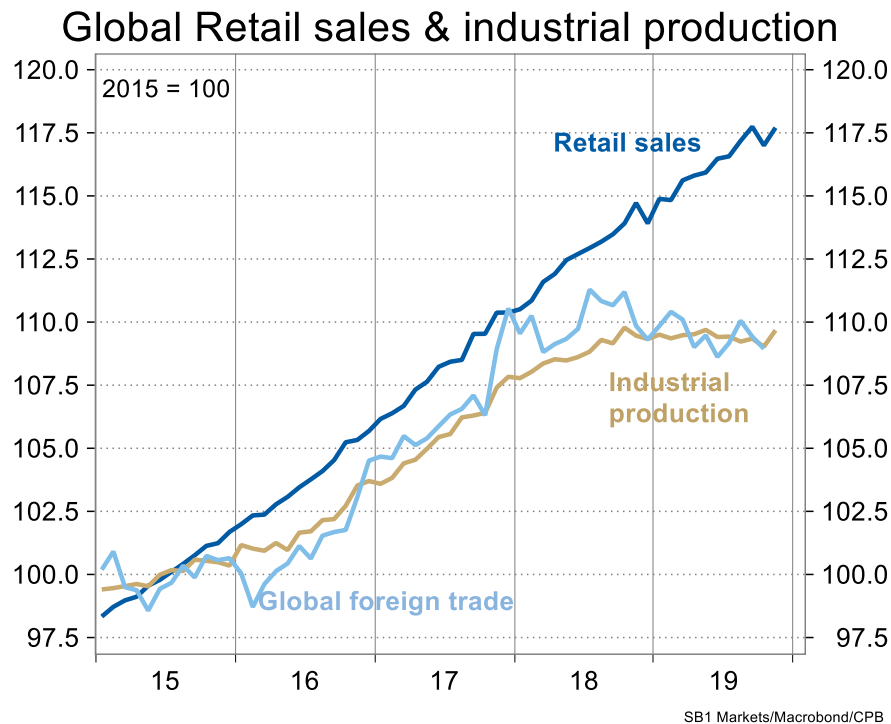


- Global macro data have in sum been disappointing vs expectation since early 2018, barring one spike up to neutral in Sept. The surprise index has edged up since mid-Dec, close to neutral now
- Since late October, the US surprise index has been hovering around a 'neutral' level
- EMU data are far more upbeat than expectations, the best in 2 years. Due to somewhat better data (PMIs/other surveys, German exports, retail) – and adjusted expectations?
- China above expectations, lifted by strong November data and rising PMIs (barring a retreat in Dec). Other EM are much weaker – but less so the past weeks
- Norwegian data are close to neutral



Global foreign trade has not recovered, retail sales still struggling from VAT hike

Global foreign trade is heading slowly down, industrial production trending flat, retail still up

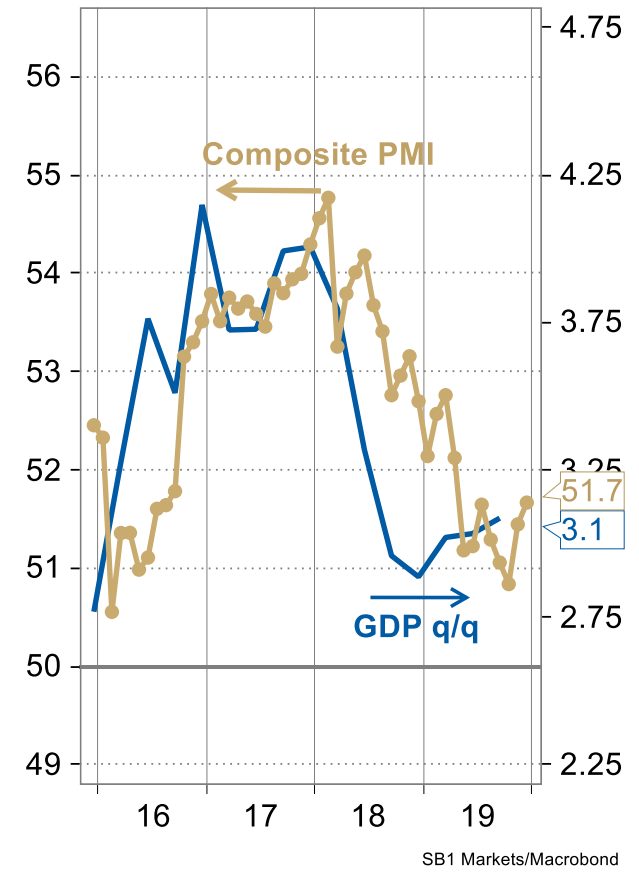
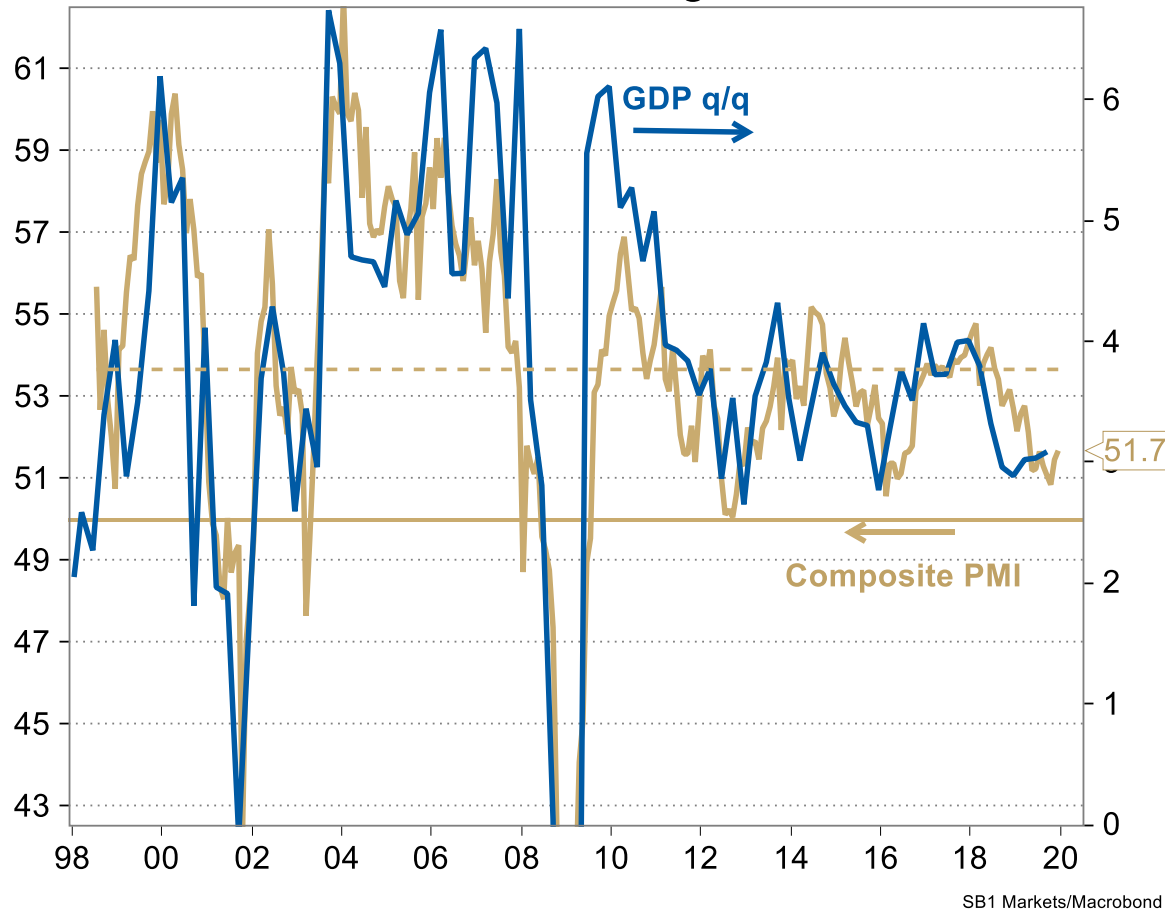


- **Global foreign trade** dropped by 0.4% m/m in October, with our seasonal adjustment (up 0.4% unadjusted). Trade flows have been sliding slowly down since Q3 2018 and the annual rate is down 2% y/y, however, following the uptick in the late summer, underlying growth has ticked up to 1% (measured 3m/3m), reflecting a stabilization since the spring
- **Global industrial production** probably rose by 0.5 % in November (our estimate), bringing production almost back to the May level. If production remains unch in Dec, the Q4 level will be marginally higher than Q3. Global PMI has recovered the past 5 months (albeit not further in Dec), now signalling a 0.5 - 1% growth pace
- **Retail sales** probably recovered by 0.6% in November (our estimate), following an equal decline in October. The recent volatility is mostly due to the hike in VAT in Japan, that pushed sales forward to Aug/Sept, before they collapsed by 14% in October, like 'normal' following Japanese VAT hikes ([check for more here](#)). We expect a gradual rebound in sales the coming months

Global PMI better than we assumed in December, up 0.2 p to 51.7

We expected a 0.1 p decline, but several countries recovered. A 3%+ growth is signalled

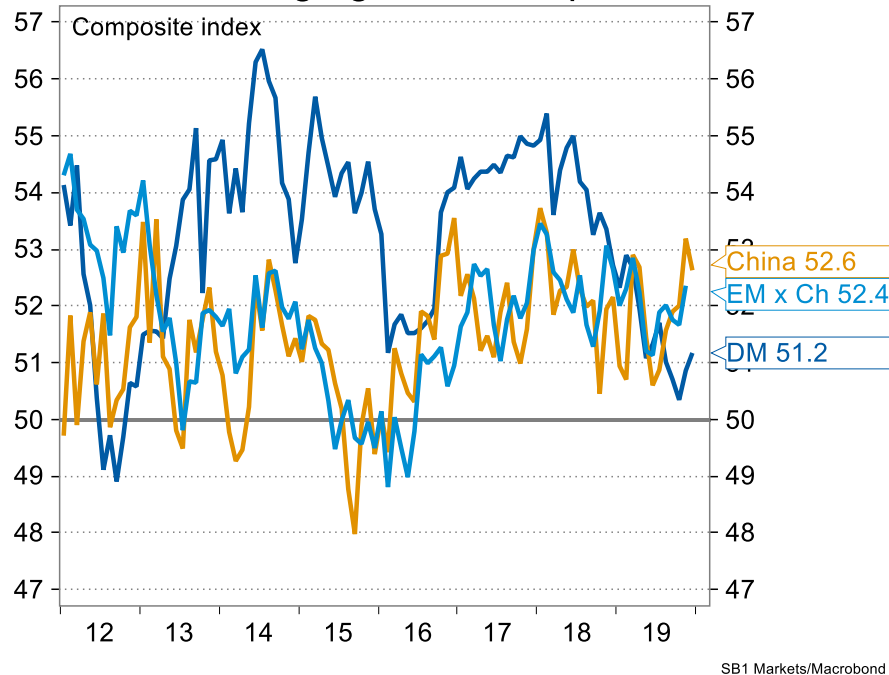
Global PMI vs growth



A broad uptick; both EM and DM up

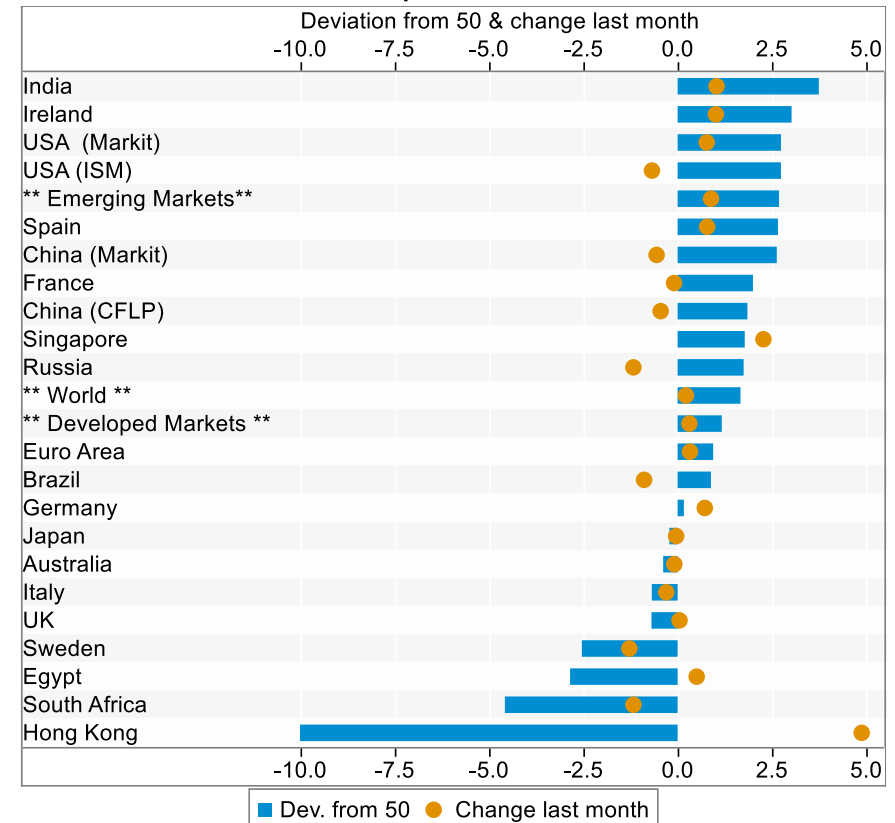
Most countries are reporting growth but DMs are lagging, in avg. UK, Sweden among the weakest

PMI Emerging vs Developed markets



- 12 countries/regions reported an increase m/m (thus, activity accelerated or fell at a slower pace), unchanged from Nov. 9 countries noted weaker activity (from 10)
- Most countries/regions are still reporting growth; 8 (from 10) countries below the 50-line, 16 above (from 13)
- DM average up 0.3 p, EM up 2.7 p, even if the Chinese PMI (Markit) declined by 0.5 p

Composite PMI

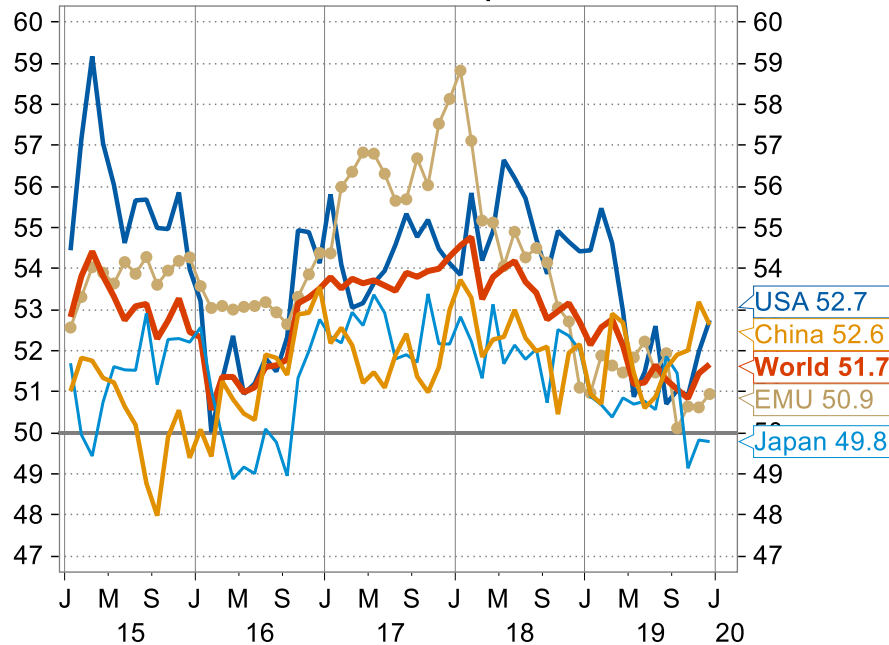


Hong Kong services are collapsing, of course due the protests, composite PMI at 27 in Dec (the scale above is too narrow)

US, EMU, China and Japan are all edging up

Manufacturing is in recovery mode in the US, China, EMU still weak. Services at decent levels, x Japan

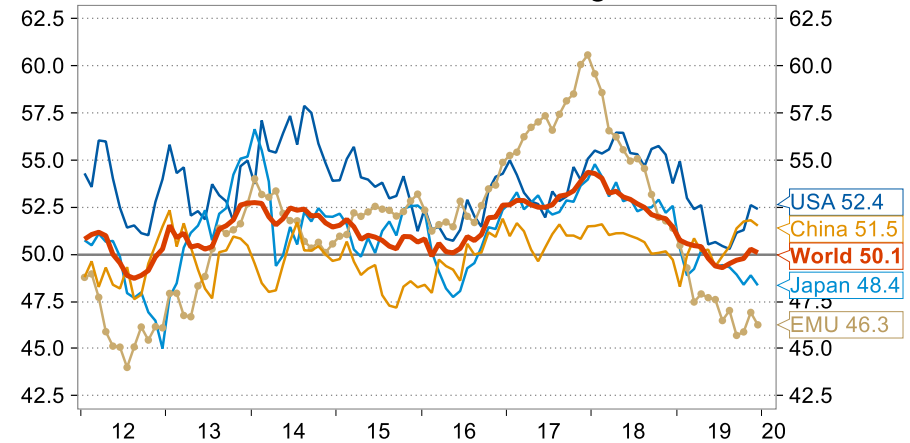
PMI Composite



Source: IHS Markit, SB1 Markets, Macrobond

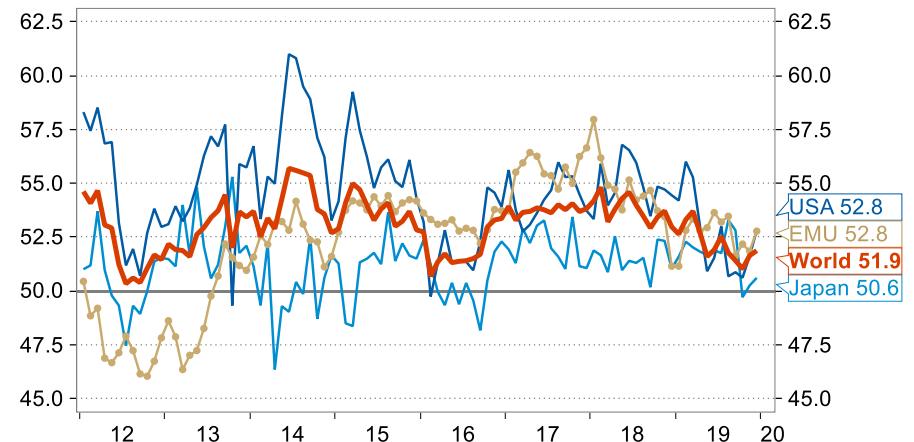
- The composite China PMI (from Markit) fell in Dec but the level is decent following a 5 months recovery. Markit's PMI from the US rose further, and more than first reported. The EMU PMI rose further, but remains at a low level
- The service sector PMI rose further in Dec but the trend is still downward

PMI Manufacturing



Source: IHS Markit, SB1 Markets, Macrobond

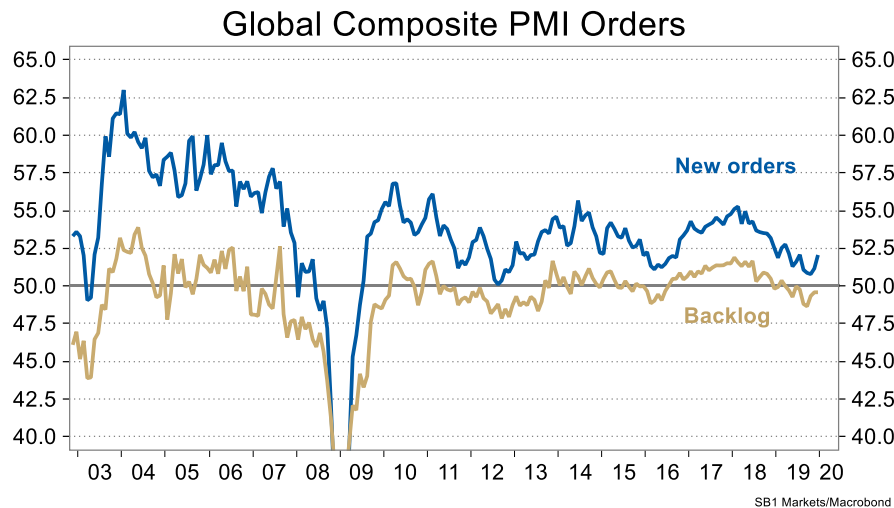
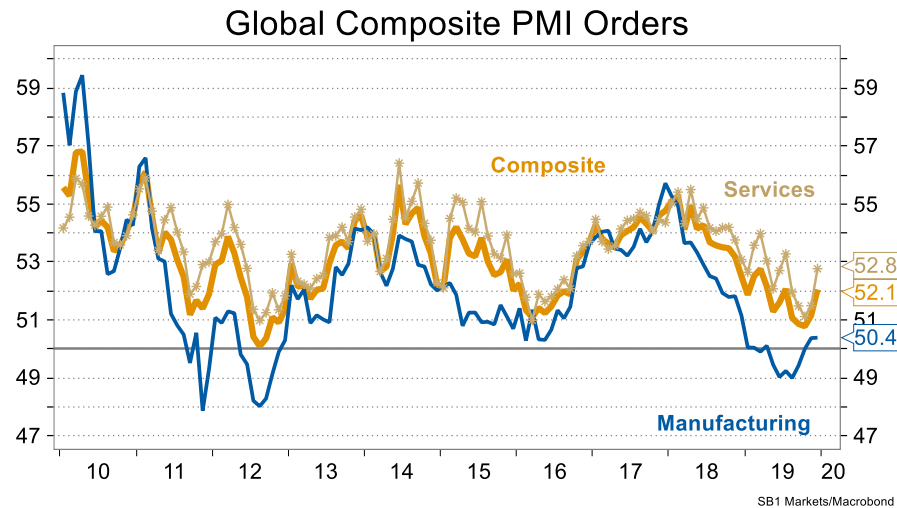
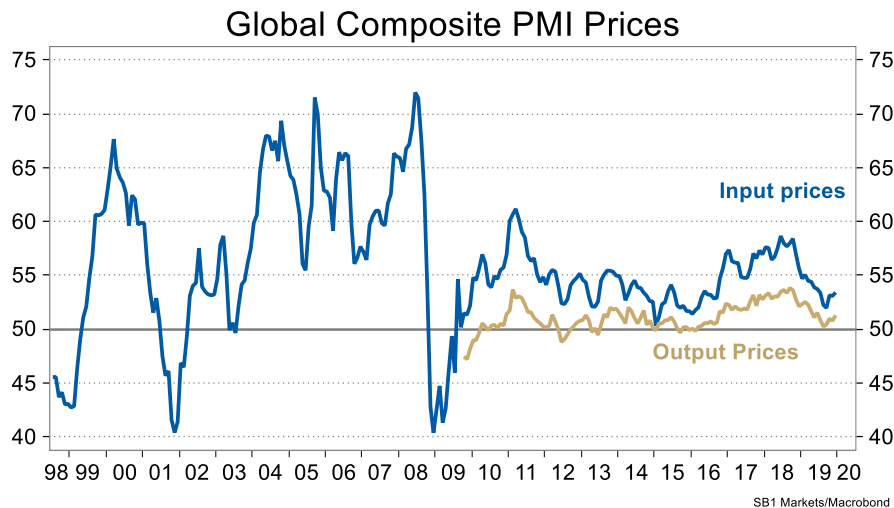
PMI services



SB1 Markets/Macrobond

Composite orders and prices have stabilised

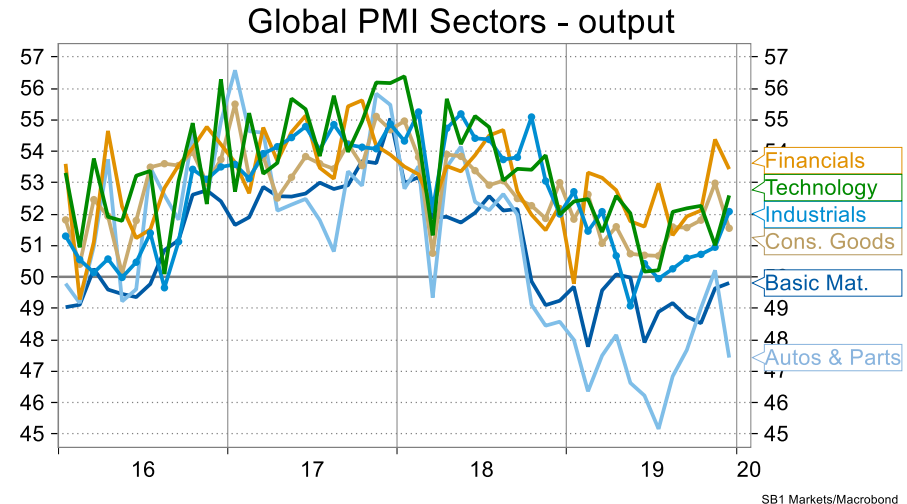
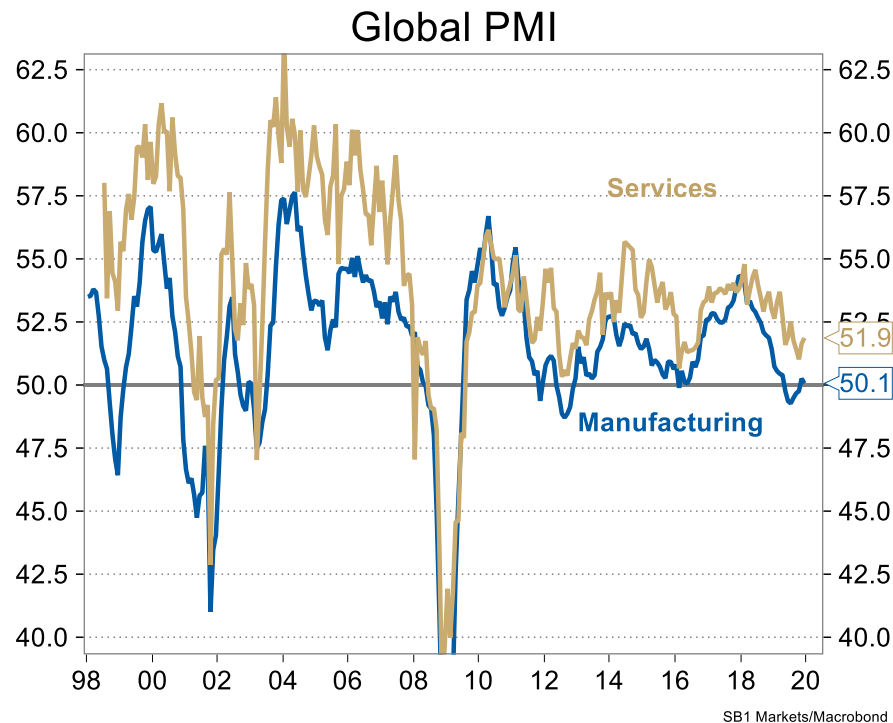
Manuf. orders flat 11 month high, service orders rose sharply



- The PMI manufacturing orders index has recovered the past months and was unchanged at 50.4 in Dec, the best since Dec 2018
- The volatile services orders PMI rose sharply in Dec, to 52.8
- Both input and output price inflation has been easing but prices have gained some speed the past 3 – 4 months

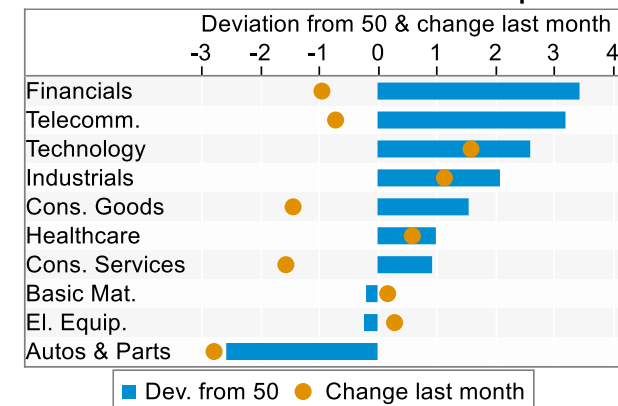
The manufacturing PMI has stabilized, services have gained pace in Nov/Dec

Auto industry reported a surprising drop in activity, after a recovery. Industrials up, consumer down



- The manufacturing PMI bottomed out in July, recovering 0.8 p since
- Services report a marked slowdown but has edged up the past two months
- In December, industrials, technology & el. equipment and basic materials PMIs improved. The important – and leading – consumer goods PMI fell to 51.5, still a decent level. Basic metals are still reporting declining activity, but just marginally, and the mildest in 7 months (also a leading sector)
- Surprisingly, the auto sector PMI slipped 2.6 p to 47.4, reversing two months' upturn

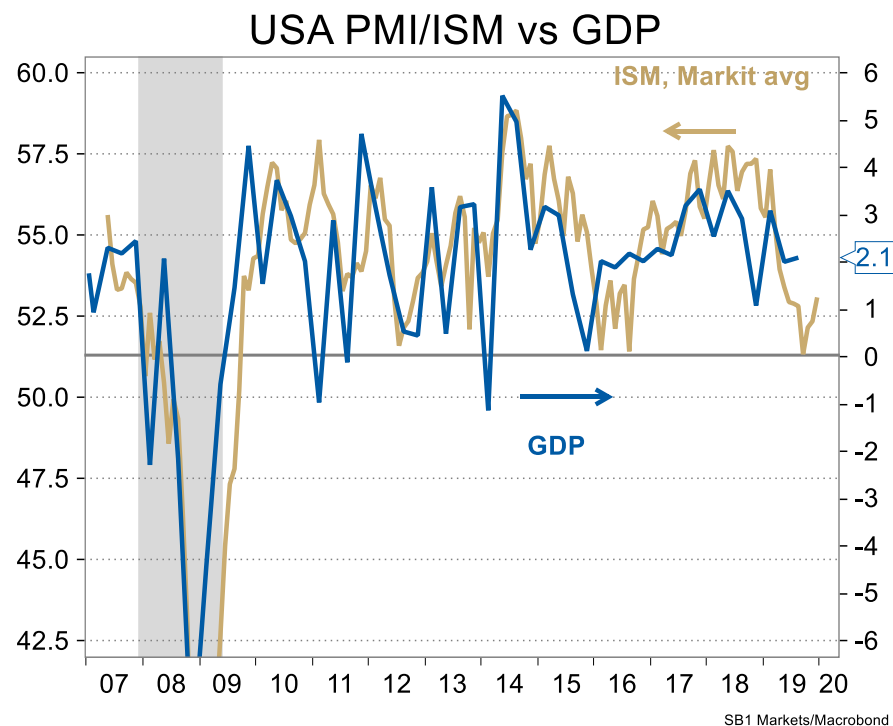
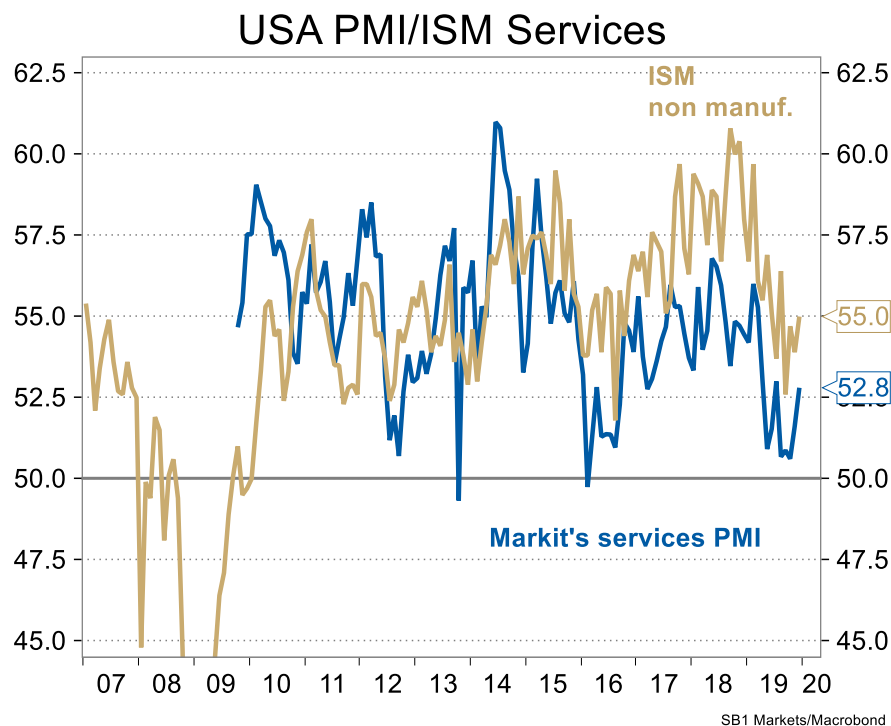
Global PMI Sectors - output



SB1 Markets/Macrobond

Non-manufacturing ISM bounced back to 55 in Dec, above expectations

The 'composite' ISM rose to 53.4, Markit's PMI to 52.7, the avg signals just 1% GDP growth

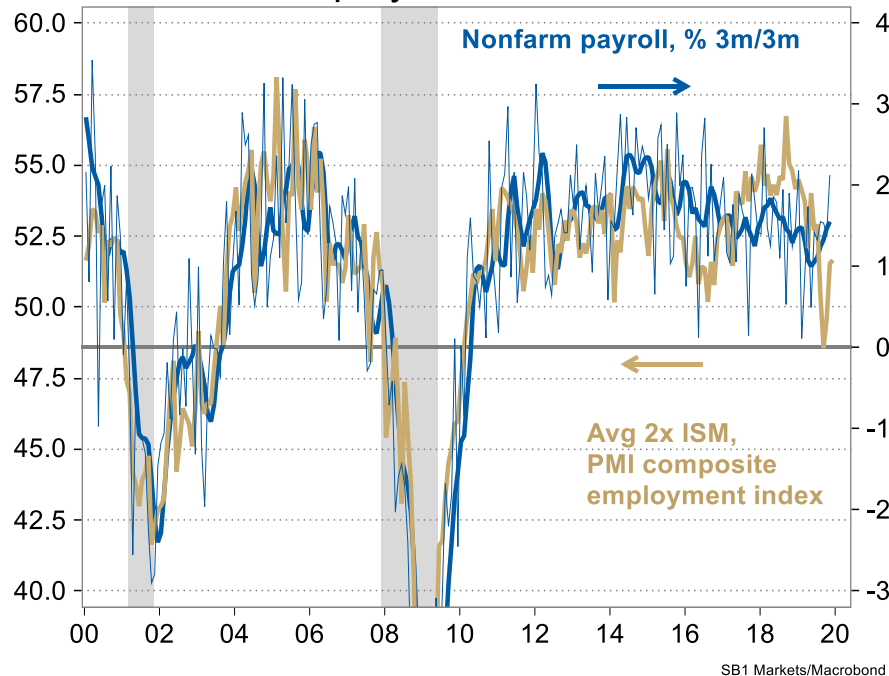


- Non-manuf. ISM rose by 1.1 p in December, 0.5 p stronger than expected. The level at 55.0 still signals a decent growth rate, although the index is far weaker than quarters ago
 - » 11 of 18 non-manuf. sectors reported growth, from 12 in Nov, and 6 reported a decrease (from 5)
 - » The details were not that upbeat; the new order index fell by 2.2 p to 54.9, and the employment index inched down (still at a solid level)
- Markit's service sector PMI rose 2.2 p in Dec, 0.6 p higher than the prelim. report. Composite PMI rose 0.7 p to 52.8, the 2nd month of increase
- **The avg of the composite PMI/ISM still points to weaker growth in the US economy, some 1% pace**

PMI/ISM employment indices rebounding, signals slightly softer empl. growth

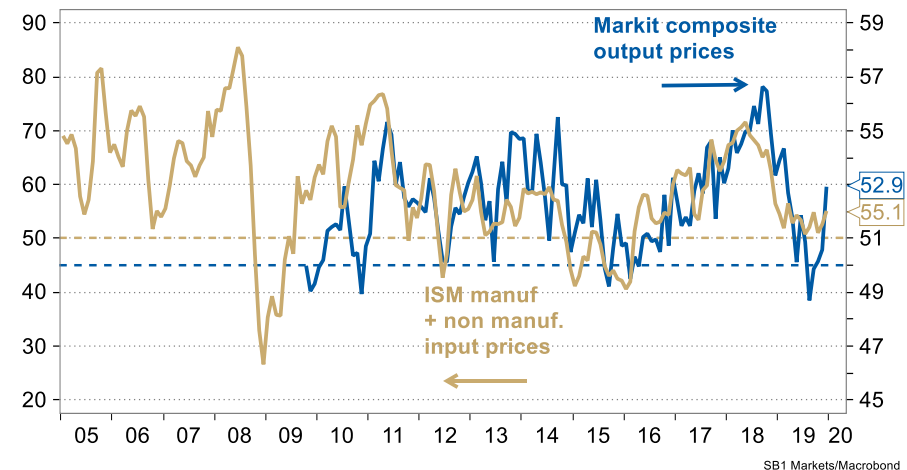
Composite orders are expanding modestly, prices accelerate? At least according to Markit's PMI

USA Employment vs ISM/PMI

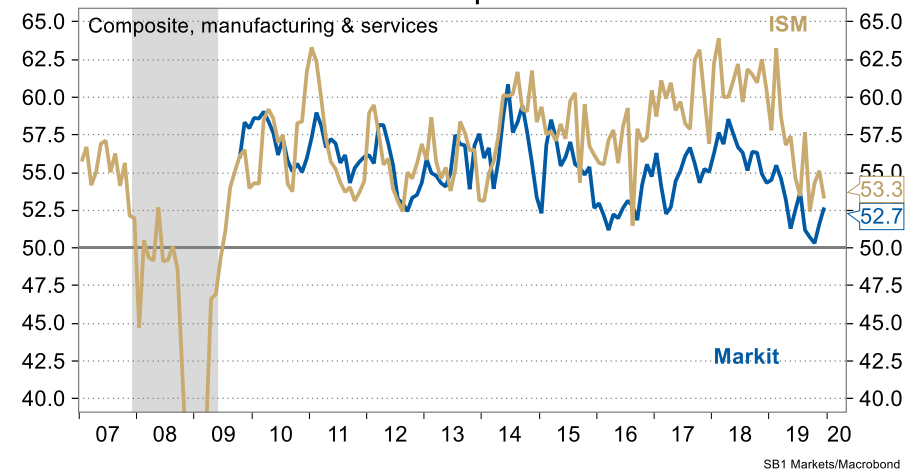


- Both Markit and ISM employment indices have recovered the past 2 months, after a steep downturn. The avg of the surveys signals somewhat slower employment growth, down to a 1%3m/3m speed, from 1.6% now
- Composite orders are still expanding, at a much slower pace. The indices were mixed in Dec, Markit edged up, ISM retreated
- ISM reports modestly increasing prices, the index is just above average. However, Markit's PMI (output prices) soared to 52.9, far above the avg level. Due to capacity constraints, we assume

USA PMI/ISM Price Index

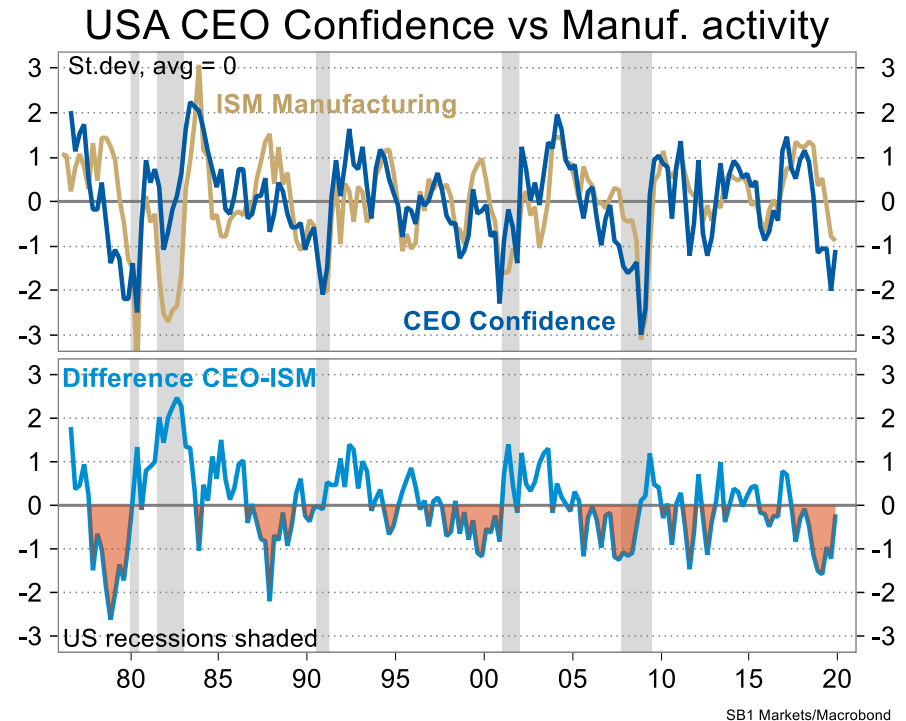
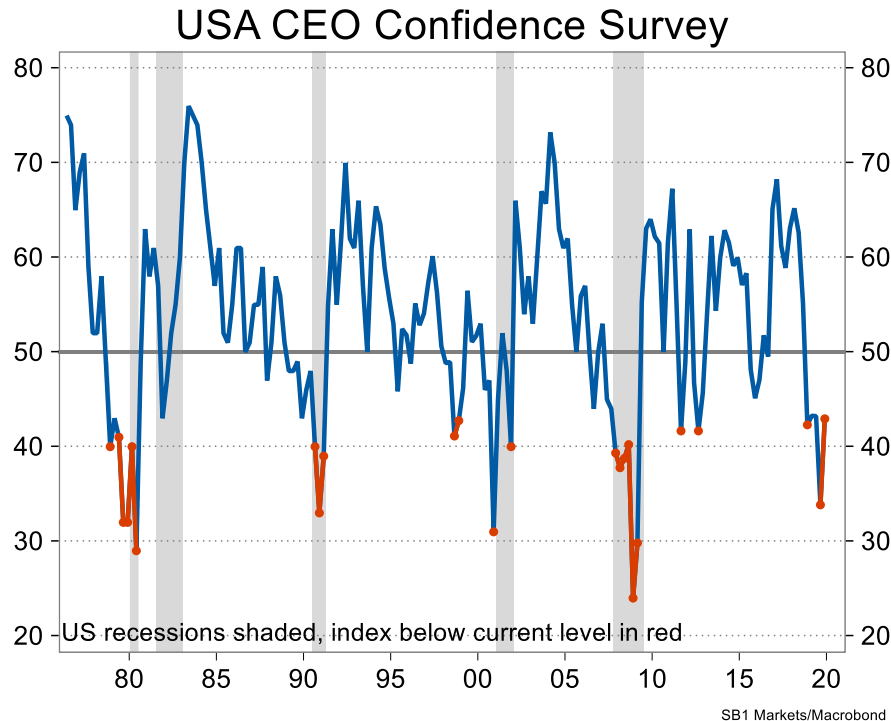


USA ISM/PMI Composite new orders



Big bosses are really worried – although less so in Q4

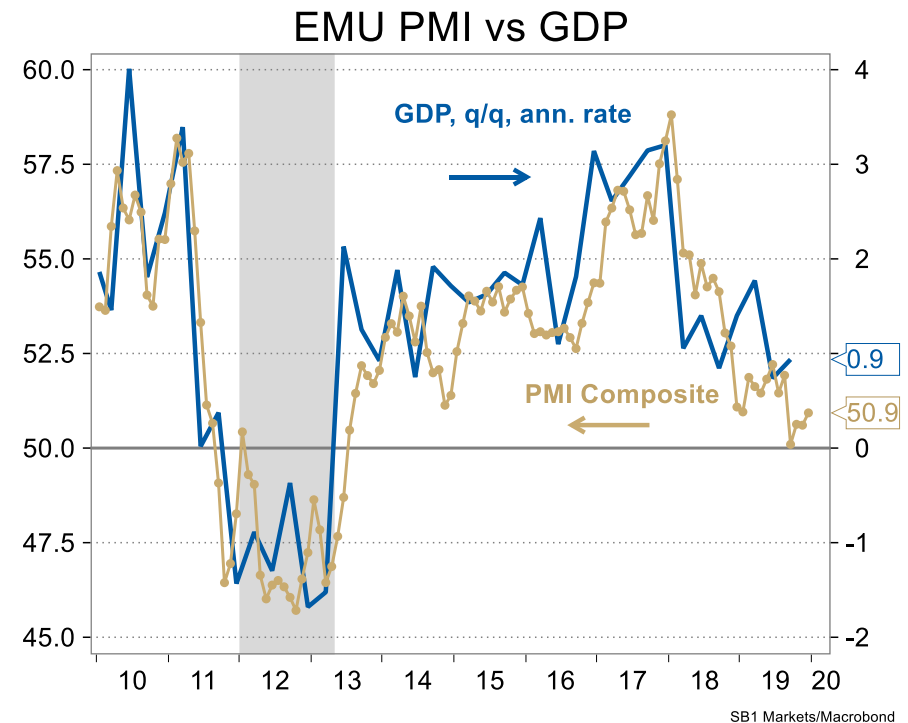
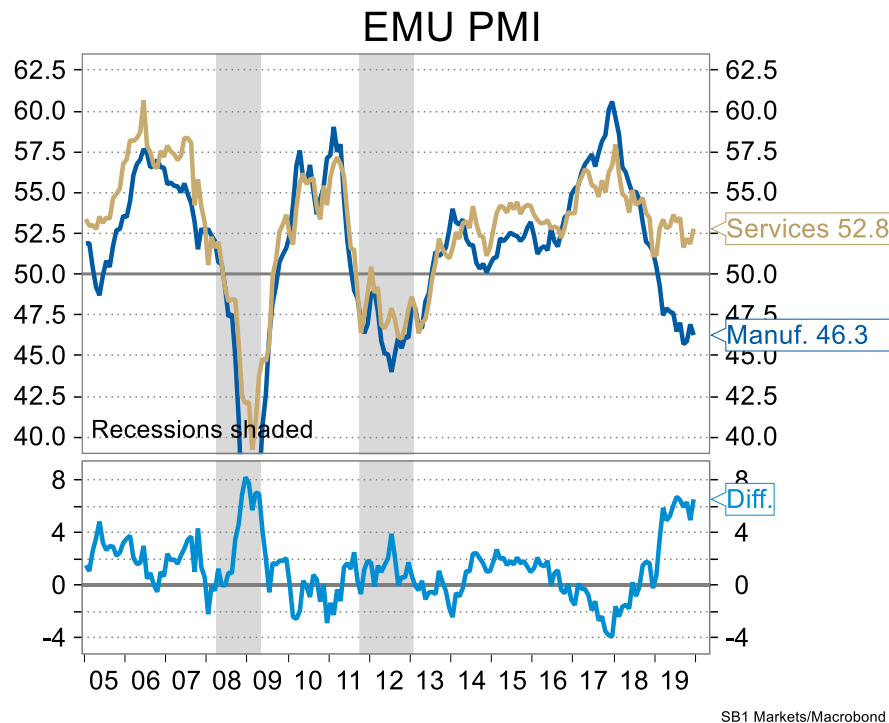
Conference Boards CEO confidence is well into recession territory, along with the ISM



- CEO confidence fell more than most other business surveys in Q3 and rebounded in Q4, reversing the entire Q3 drop. Thus, the index is back at the same level as in Q4 2018, and is almost back to the same level (vs the average) as the manufacturing ISM (but substantially weaker than most other business activity surveys). Trade policy worries have eased?
- The CEO confidence has been at the current level or weaker 10 times since 1975, of which 6 have been during/less than one year ahead of a recession. However, the index has never dropped to the Q3 level without entering or being in a recession
 - » In addition: The CEO confidence index has been weaker than the actual manufacturing activity data ahead of recessions in 1980, 2001, and 2007, partly also in 1991. Is weaker corporate profits the common explanation? The extra Q3 drop was no doubt due to the trade conflict

Eurozone final Dec PMI better than first reported, still just 0.4% growth signalled

Composite PMI rose 0.3 p, the 3rd month of a soft recovery. Still, the PMI suggest a slowdown in Q4

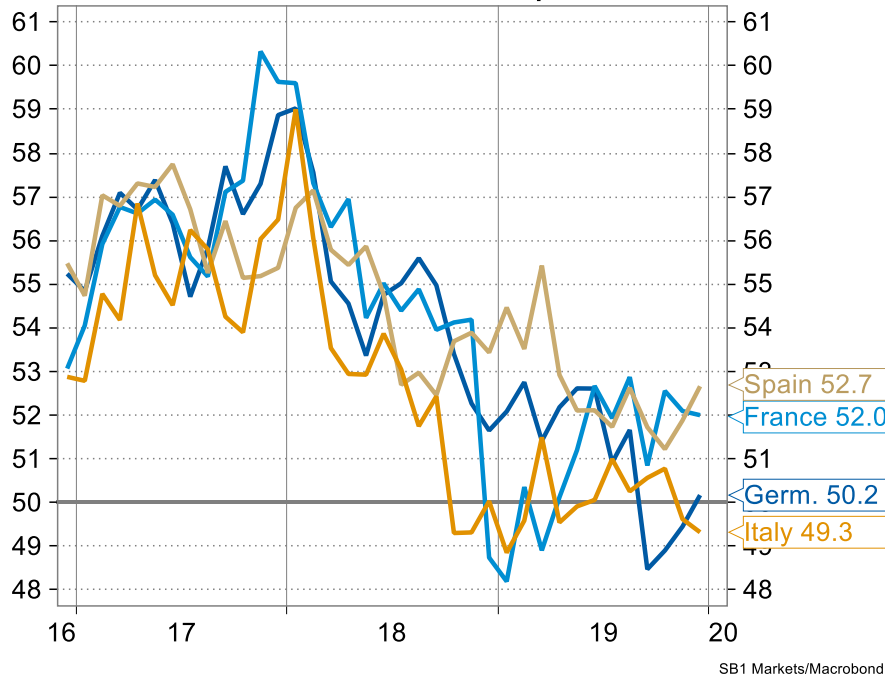


- The final EMU composite PMI edged up 0.3 p in Dec, to 50.9, first reported unchanged at 50.6. The PMI has climbed 0.8 p since September, however, the level anyway reflects weak growth in the last months of 2019. PMI suggests some 0.4 % GDP growth
 - » Manufacturing PMI fell in Dec, after edging up the prior 2 months. The manufacturing contraction may have bottomed out but there are no signs of any swift recovery. Services gained speed in Dec and the trend over the past year is slightly upwards
- **Is the Eurozone economy about to rebound?** Data are not conclusive, at least with the small Dec manufacturing setback. Still, businesses are at least not signalling a faster downturn in the manufacturing sector, along with global manufacturing surveys – and improved global export. German business surveys have ticked up. Consumer confidence is still strong and consumption is increasing steadily. Credit growth is rising, although there is no boom

German manufacturing still the main drag, the downturn may now be easing

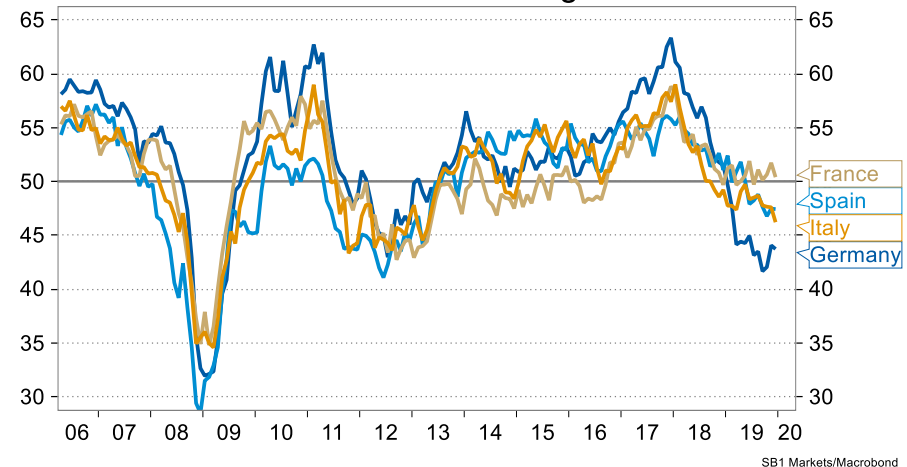
Services are reporting growth in all four main countries, manufacturing just (marginally) in France

EMU PMI Composite

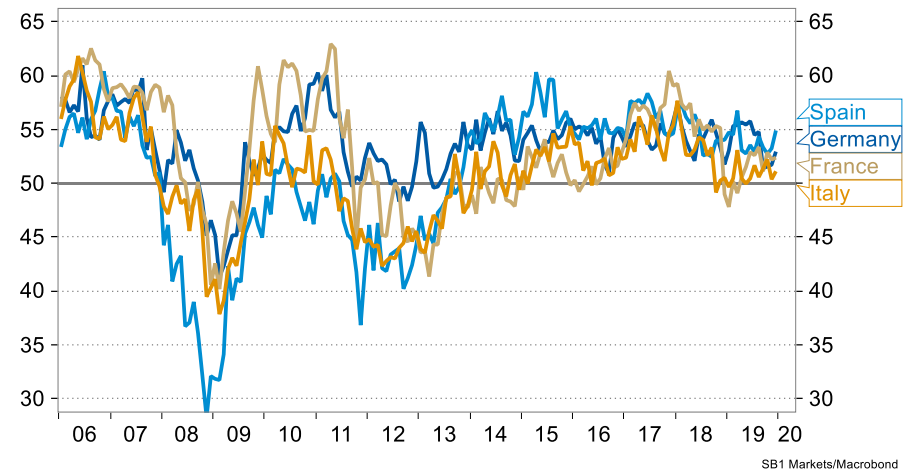


- Spain and France are reporting decent growth in the total economies, Germany and Italy still struggle, but Germany may now be stabilizing
- Composite orders are increasing marginally, manufacturing orders are declining, however, at the lowest pace in 4-5 months

EMU Manufacturing PMI

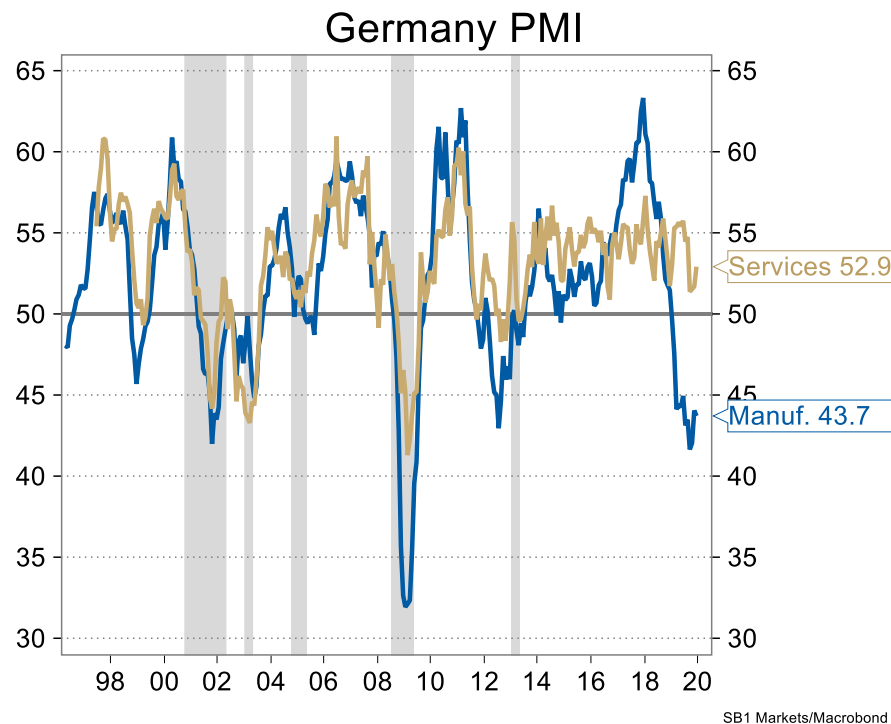


EMU Services PMI



The composite PMI signals zero GDP growth

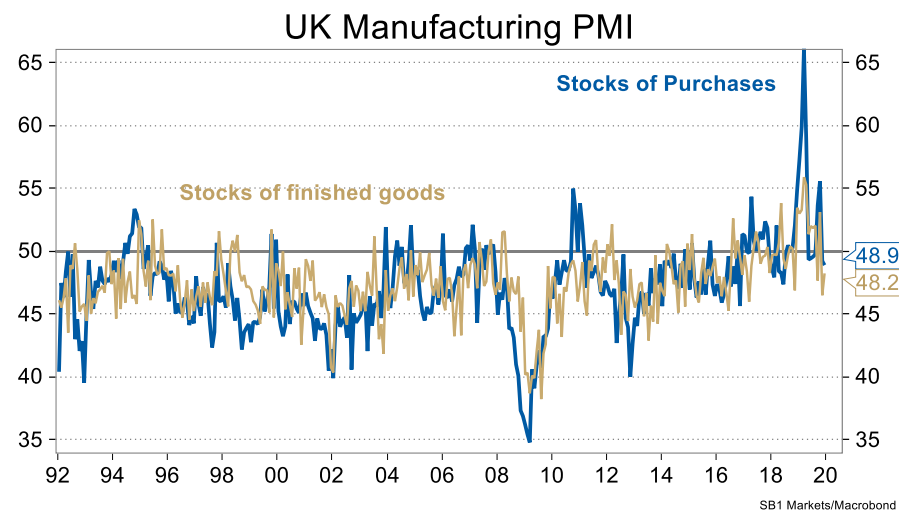
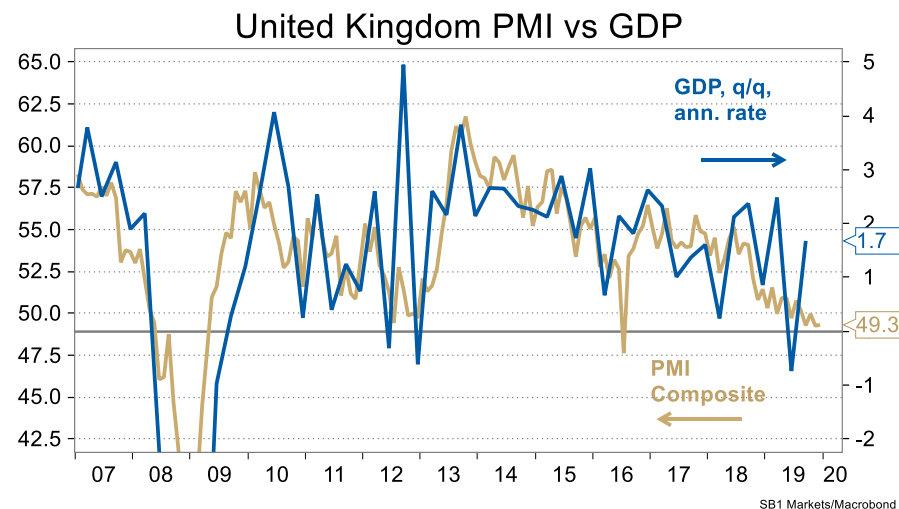
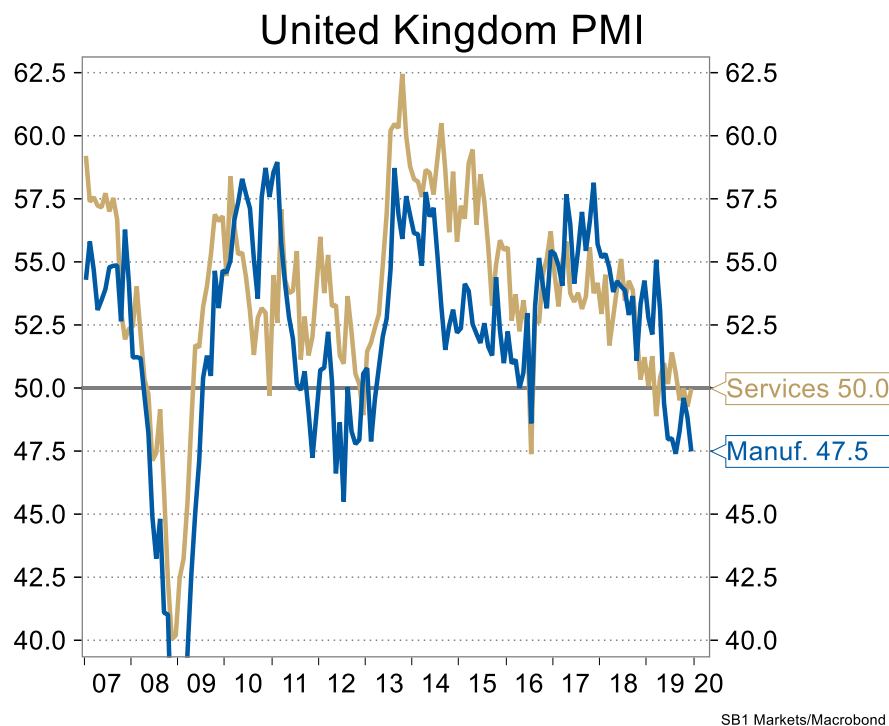
Manuf. inched down in Dec, services improved, better than prelim. The PMI still signals a stagnation



- The manufacturing PMI is up 2 p from the September bottom, indicating that the contraction may be easing. However, the level at 43.7 does not point to any swift recovery! In Dec, the index fell 0.3 p
- The services PMI spiked 1.2 p in Dec, to 52.9, better than the first report. The composite PMI still signals zero growth in GDP, down from the meagre 0.3% growth in Q3

Composite PMI flat at a low level in Dec, better than first reported

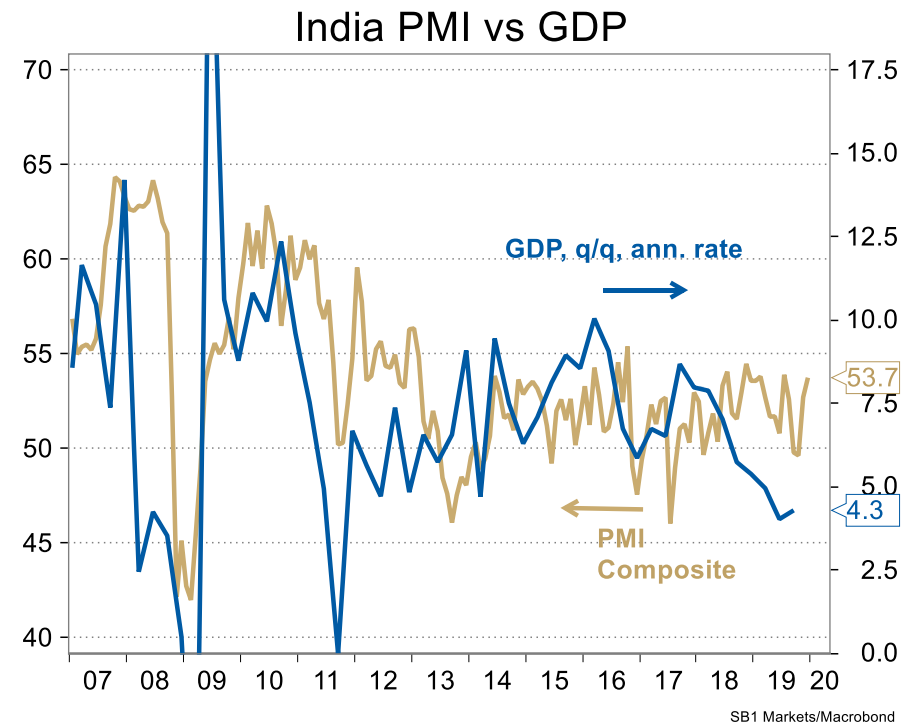
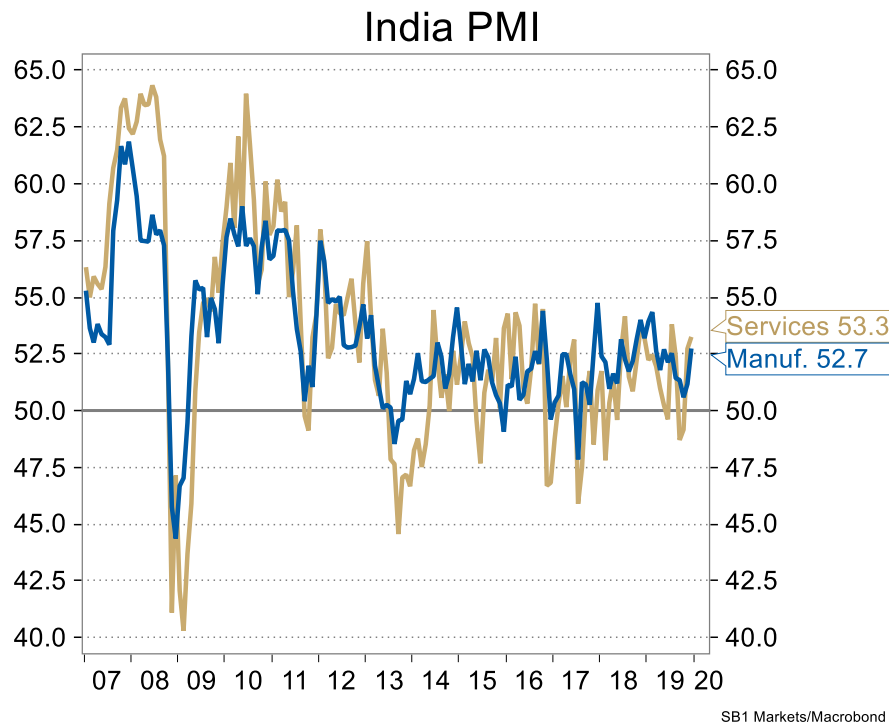
Manufacturing activity is once again hit by efforts to trim Brexit related inventories



- Composite PMI held unchanged in Dec, 0.8 p better than first reported. The PMI at 49.3 anyway signals no GDP growth
- Manuf. PMI fell 0.1 p more than first reported, to 47.5. Manufacturing is struggling in the aftermath of pre-Brexit stockpiling, which is now dampening activity
- Services PMI rebounded in Dec, up 0.7 p, still at just 50. The soft patch which services are confirms a broad slowdown

Composite PMI rebounds, far away from actual growth

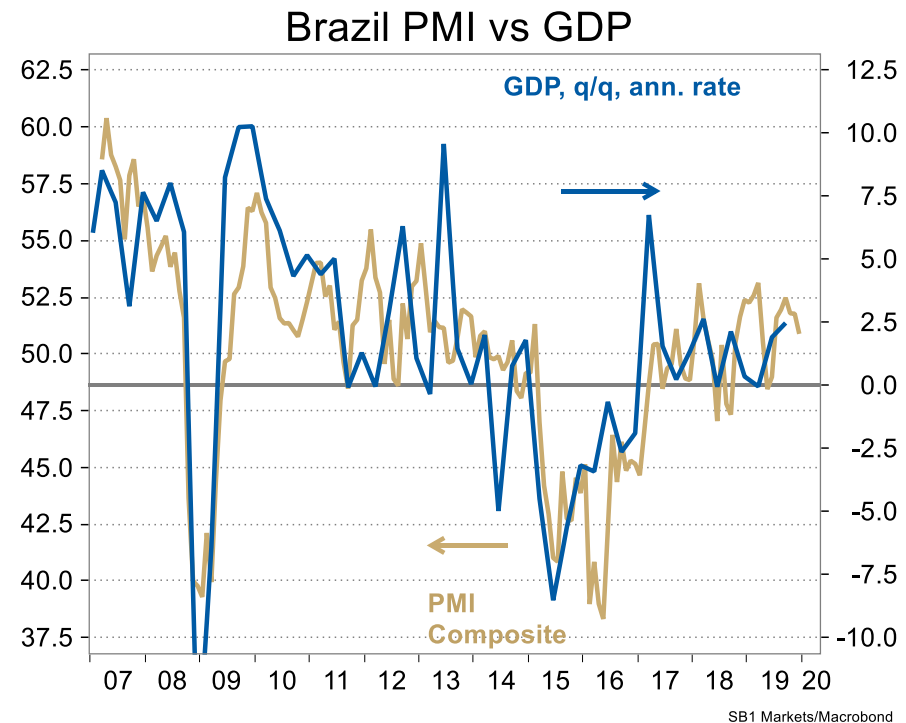
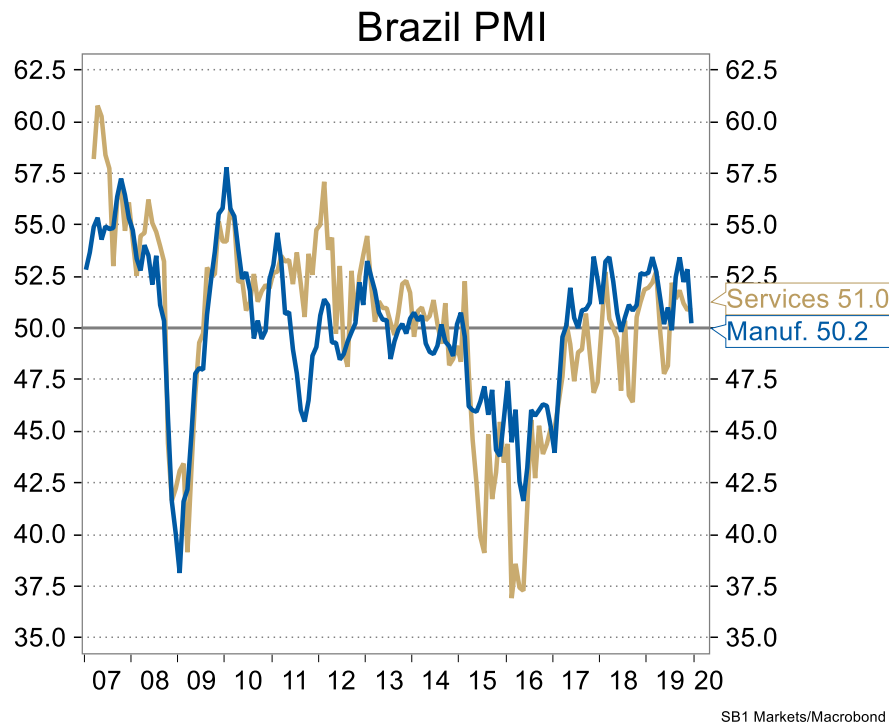
PMI rose to 53.7 in Dec, has not recognised the significant decline in actual GDP growth



- The Indian PMI does not correlate well with reported GDP growth. The setback in GDP growth to 4% from 8% the past year has not been detected by the PMI

Composite PMI down on weaker manufacturing in Dec

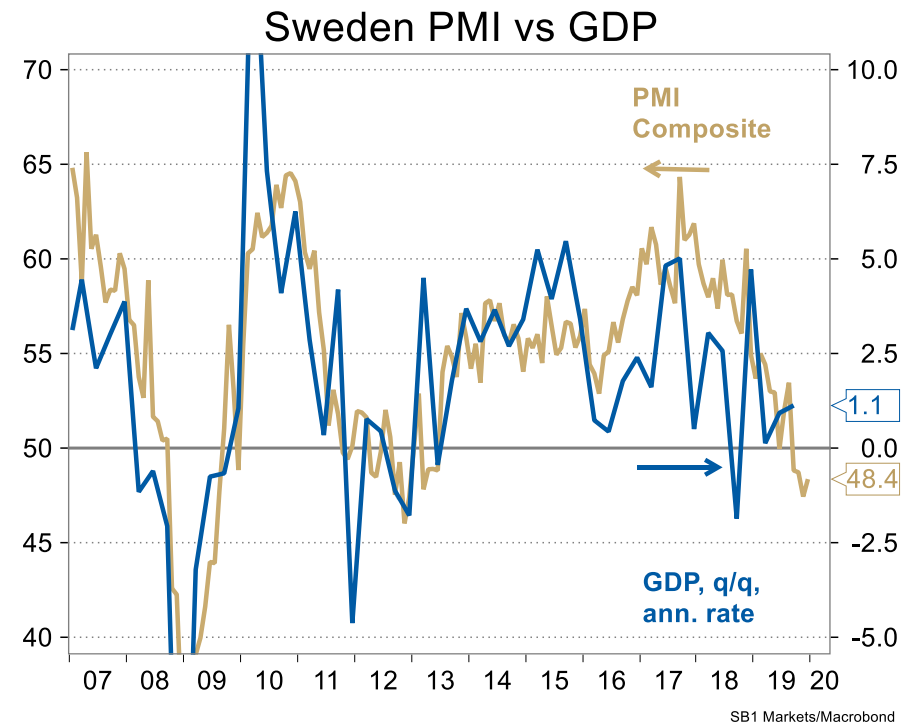
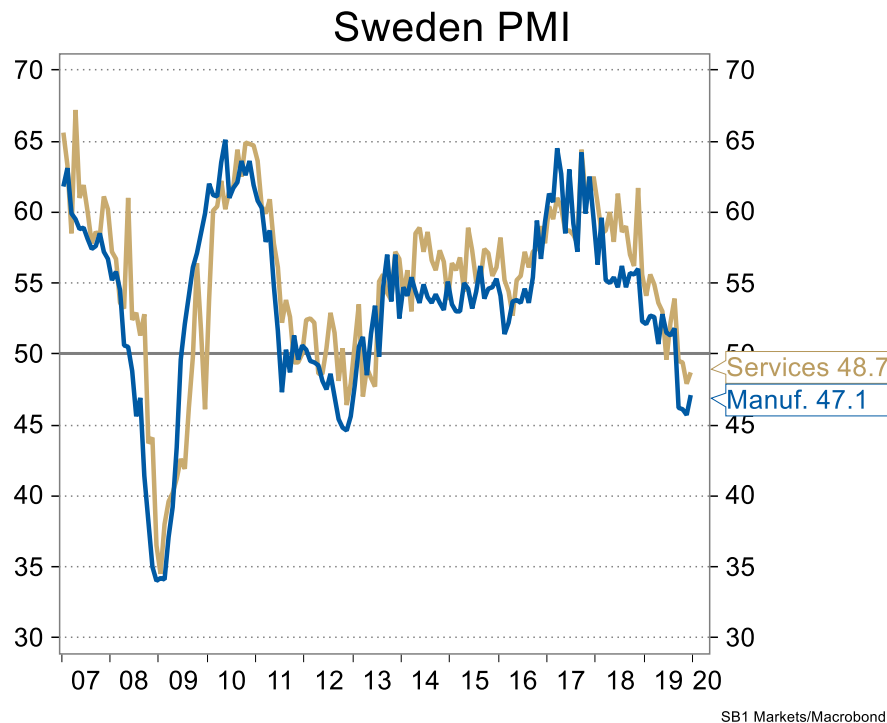
Both manufacturing and services have edged down the past months but none are weak



- GDP growth was up 2.5% in Q3, the 2nd quarter of recovery from a weak Q4/Q1
- Disclaimer: The Brazilian PMI is rather volatile –and does not predict quarterly GDP particularly well but the growth cycle is well represented by the PMI

PMIs recovered marginally, still pointing to a steep downturn

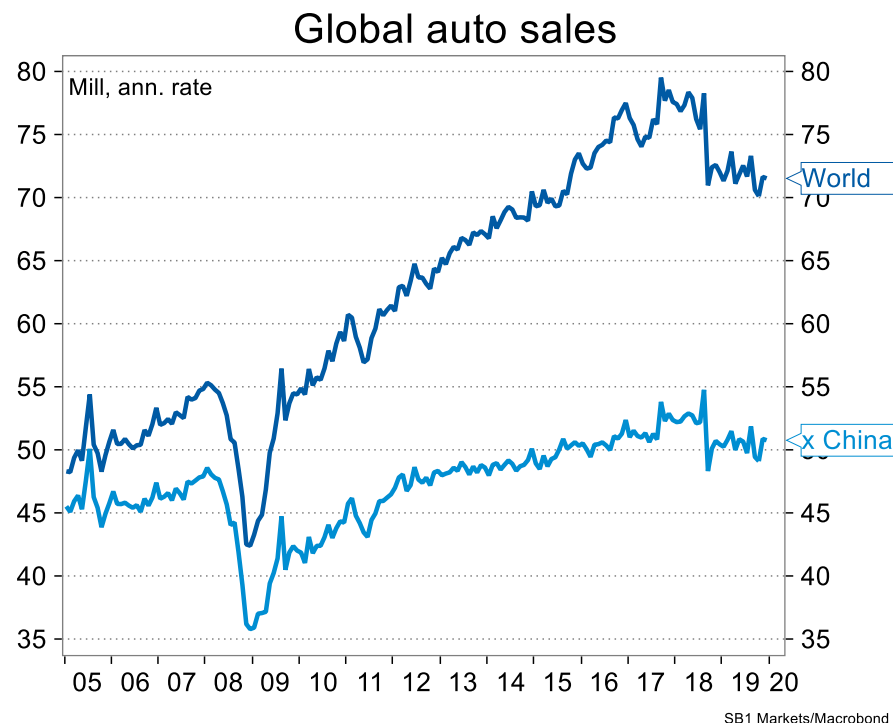
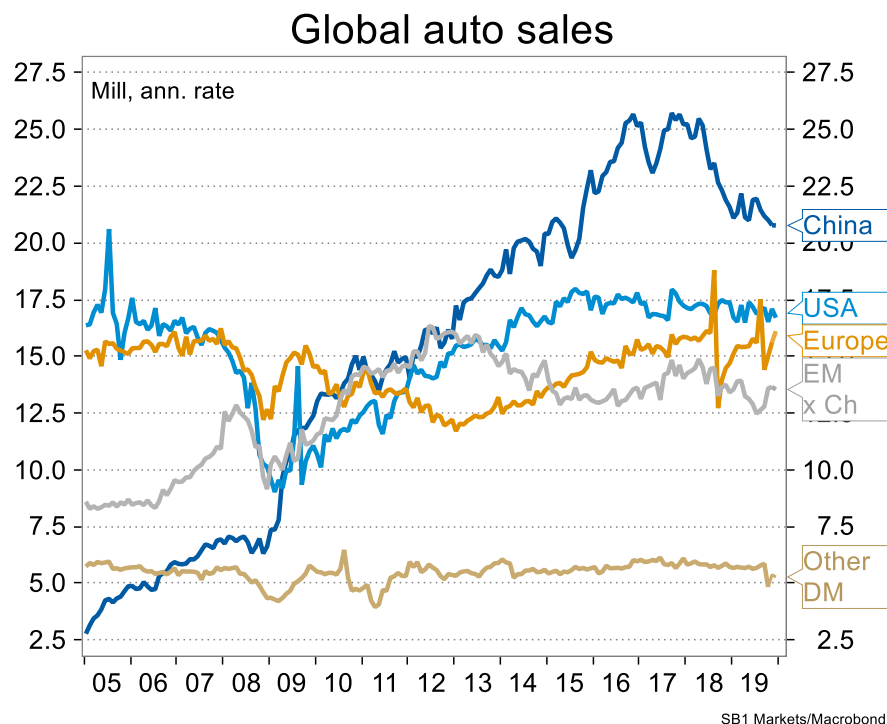
Both PMIs are sliding steeply down, adding to signs of a weakening Swedish economy



- Manufacturing PMI rose by 1.4 p in Dec, however, the level at 47.1 points to a steep contraction in production
 - » Swedish economy is hit by global uncertainties but also sharp deterioration of domestic demand. Export order PMI has recovered somewhat the past month (although still noting a steep decline in orders) while domestic orders are tumbling
- Services have been following manufacturing down, the composite PMI at 48.4 signals a 1% decline in GDP in Q4 (vs 1.1% growth in Q3)

Auto sales stable in December, down 5% last year

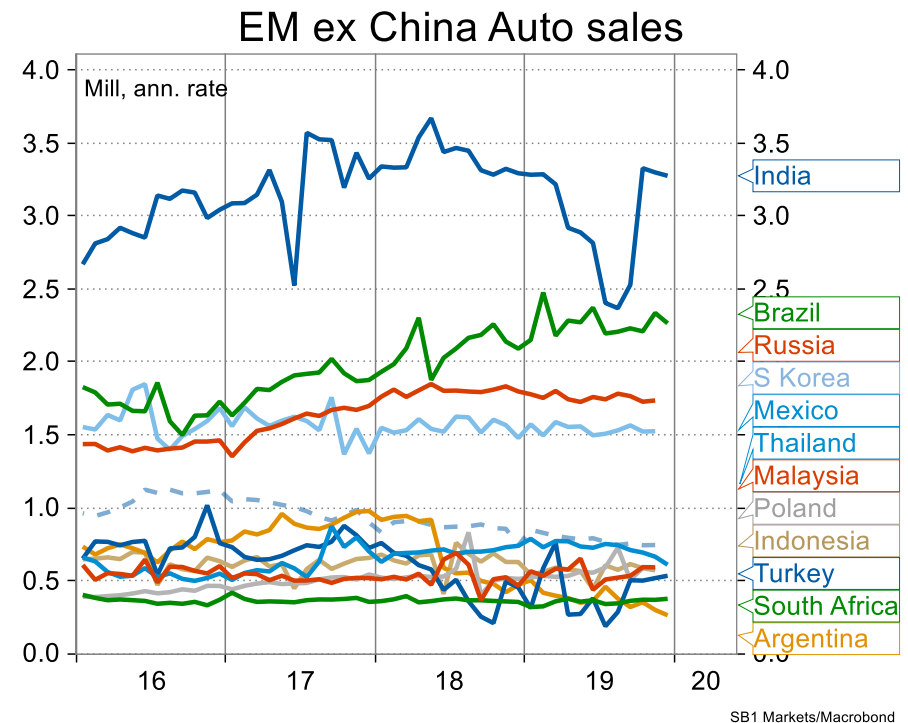
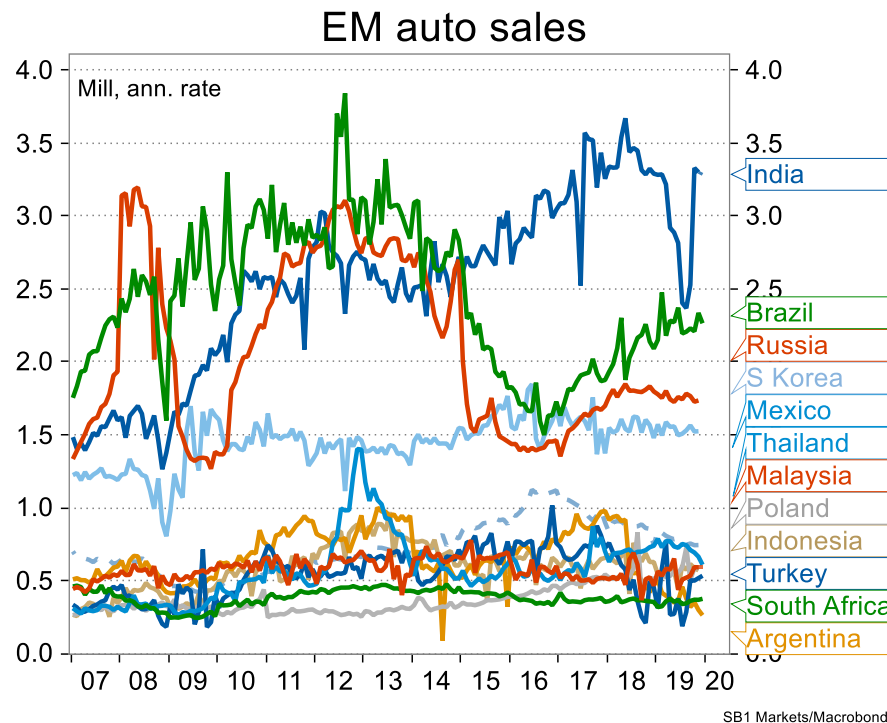
Sales still slide down in China, US, and still low in Japan – EMU and EM x China up last months



- Global sales was probably close to unchanged m/m in Dec and are down less than 1% y/y. Sales fell 5% to 2019 from 2018
- Sales keep declining in China but not sharply anymore. Sales fell 10% last year following the 4% decline in 2018. The decline in sales in China explains more than half of the reduction in global sales, other contributed by 2 pp (of the 5%)
- Sales in Europe have been zig-zagging due to emission regulations but ended 2019 on a strong note. US sales are trending slowly down (-2% last year). Sales in Japan recovered just partly in Nov/Dec, after plunging in October, due to the hike in the VAT rate
- Auto sales in EM ex. China were close to flat in Dec, and the level rose sharply in Q4, due to a recovery in Indian sales

Indian auto sales steady in Nov/Dec, H1 downturn reversed

EM x China sales probably fell marginally in December

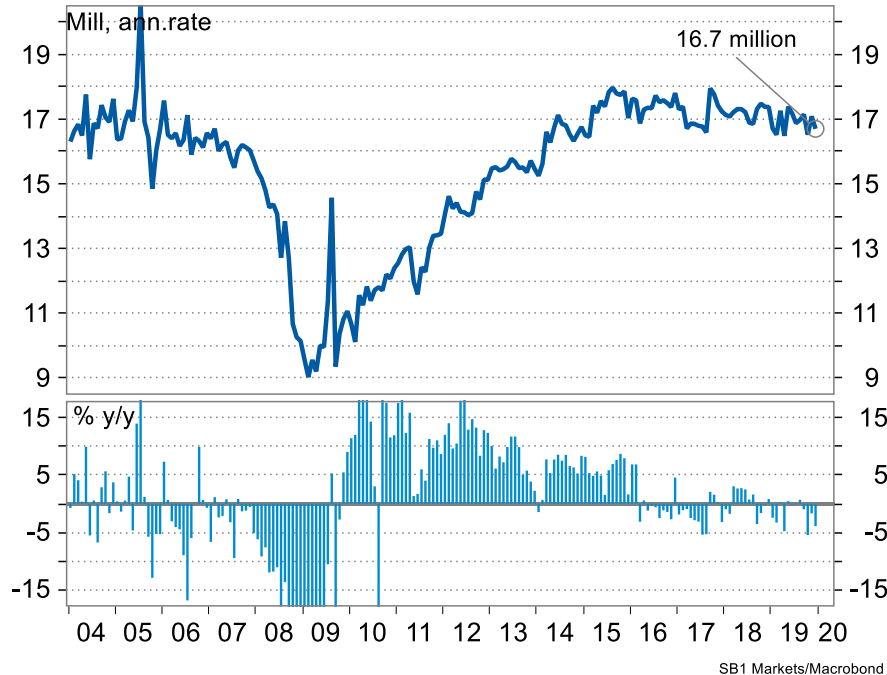


- Indian sales fell sharply until September last year – but rose sharply in Q4, almost back to the previous peak level
- Brazilian sales flattened last year, following a sharp recovery since 2016
- Sales in Russia are still trending slowly down, as in Mexico. Sales are flat in South Korea

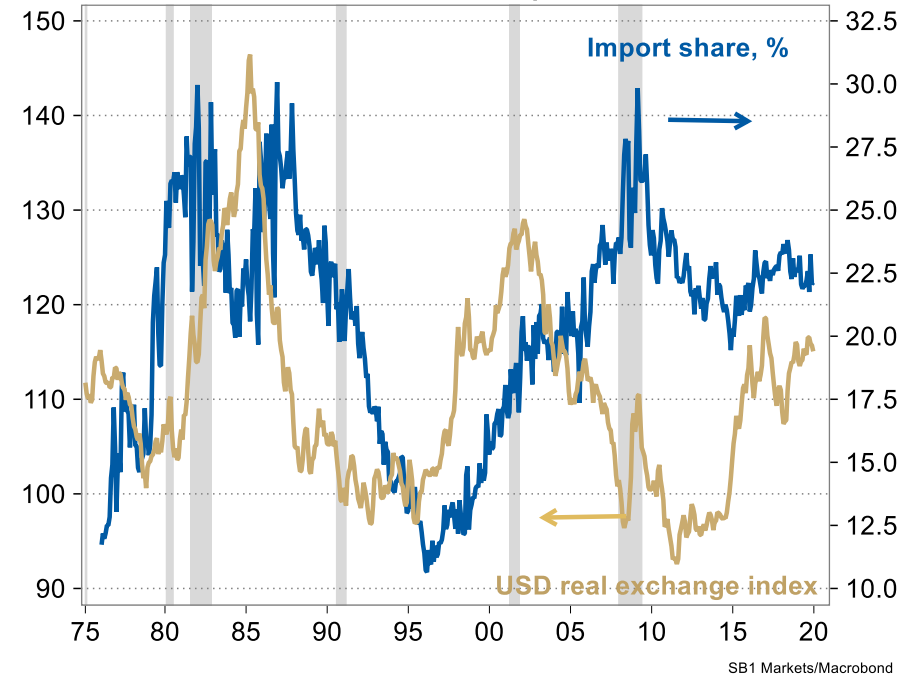
Auto sales fell modestly in Dec, trending slowly down

Sales fell 2% to 16.7 mill, a tad lower than expected

USA Auto sales



USA Auto imports

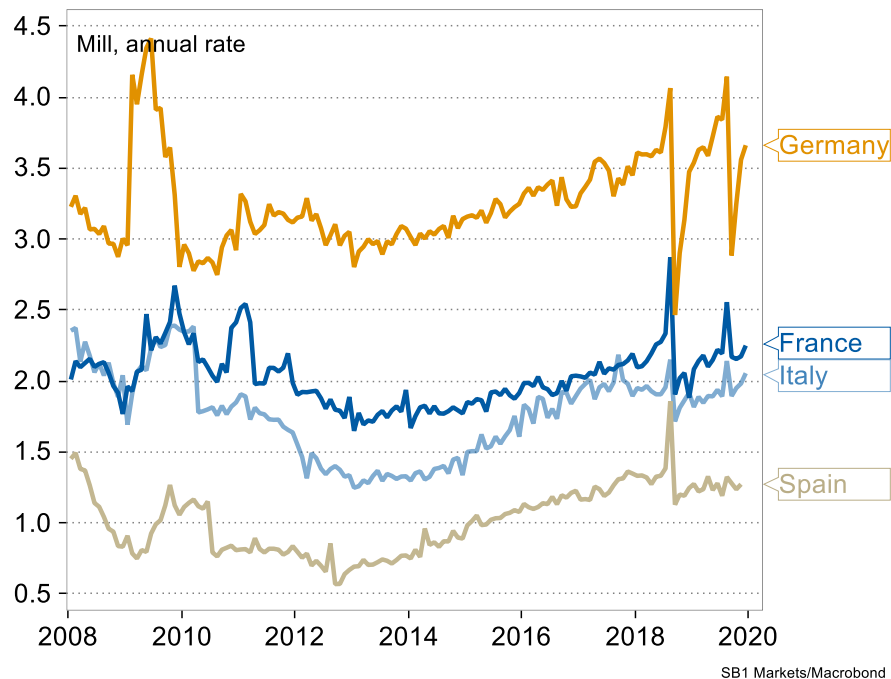


- Sales are trending slowly down, from the local peak in 2015 (!)
- The import share has stabilised – following a small decline from early 2018. At 22% the import share is above the long term average – but it has been far higher several times before.

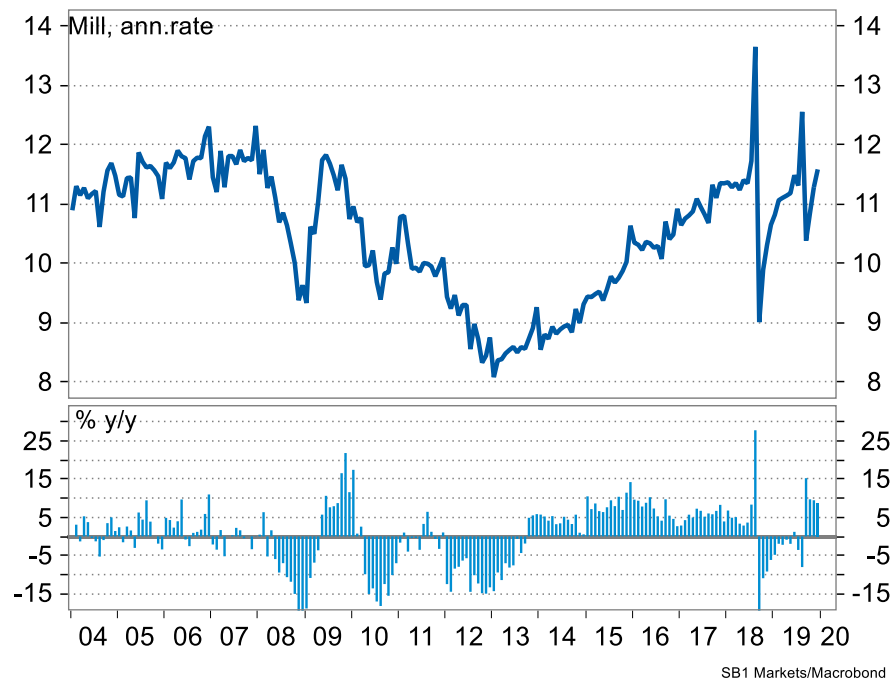
Auto sales further up in December, back to a normal level

Sales up everywhere in Dec, and is trending up most places. New 2020 regulations, a + or -, now??

Auto sales



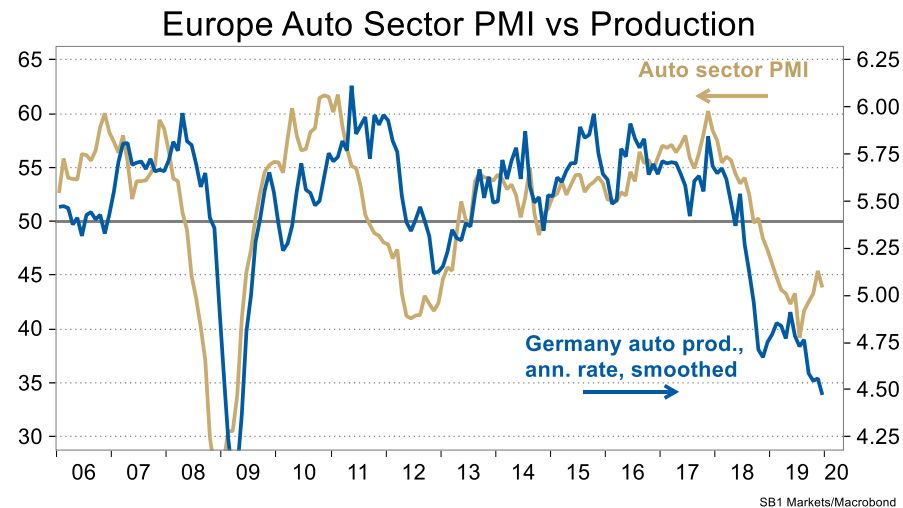
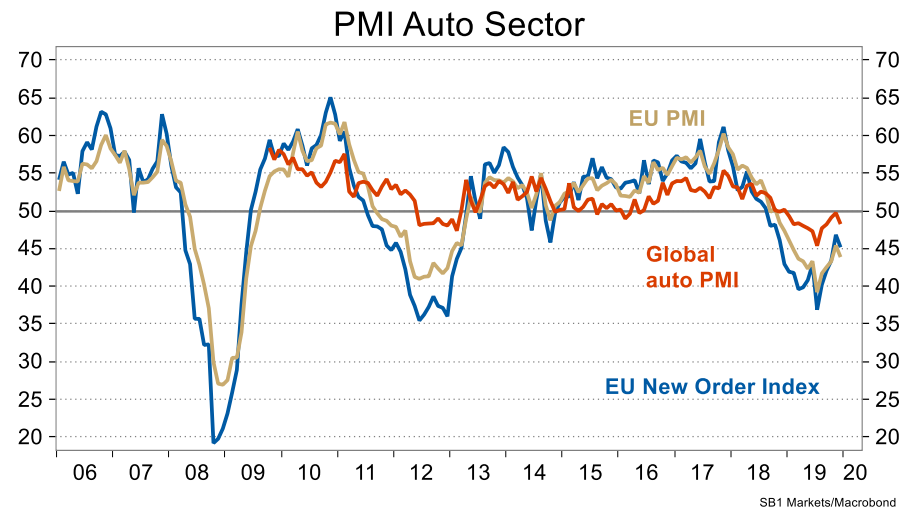
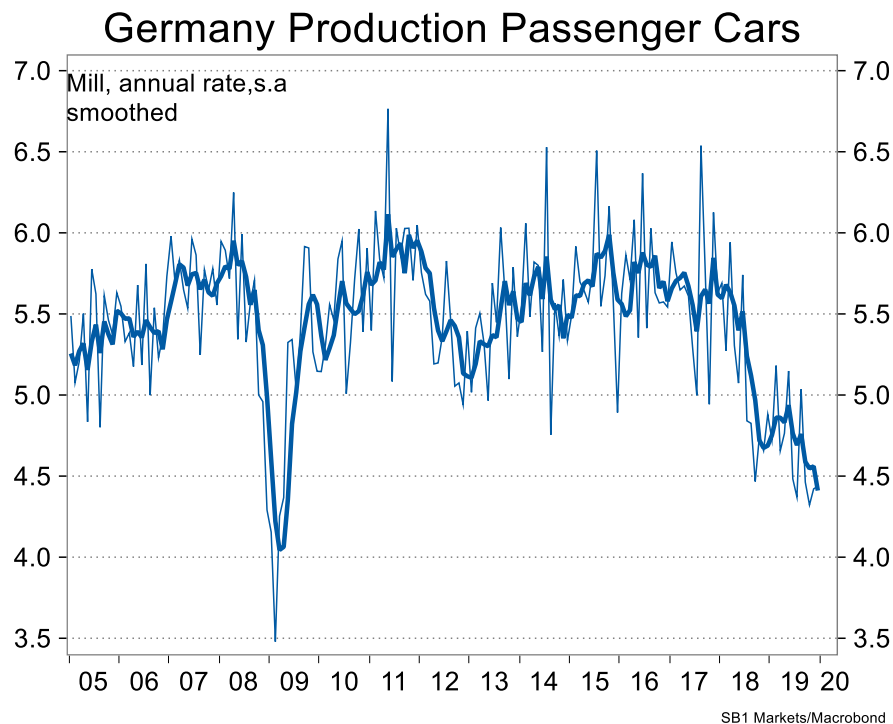
EMU Auto sales



- Sales in the EMU at 11.5 mill (annual rate) is close to a 'normal peak' level. Sales have been heavily influenced by new EU regulations, and they may still be
 - » From Jan, new EU emission regulation will be implemented; the max avg emission of the new vehicle fleet for each producer will be 95g of CO₂/km. If these levels are not reached, producers will be fined. Thus, auto producers (except Tesla) have large incentives to postpone deliveries of low emission cars of new EVs to next year. On the other hand, other producers have been incentivised to sell 'old' cars before January. The net is uncertain
- Sales rose by 2% in 2019, up from 1% in 2018, the 6th annual increase. Sales are up some 35% from the bottom in 2013
- Still, the auto industry is struggling, especially the German producers, check next page

German auto production weak in Dec too, and the auto sector PMI fell

German auto production is remarkably weak given German, European or global auto sales

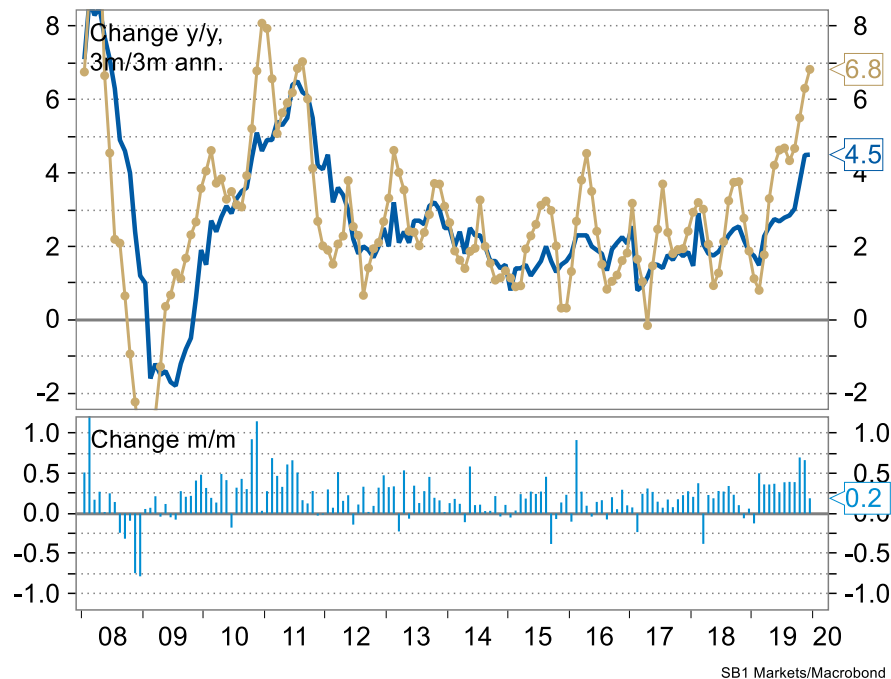


- German auto production is down approx 23%, an incredible number, given auto sales in Germany, EMU or even the world, which have fallen far less than 10% from the peak
- The European auto sector PMIs have recovered recent months, and sharply in Nov – but fell marginally in December. The level is below 50, but is probably signalling higher production the coming months (the PMI is leading the production level by some months, and is not that closely correlated to growth in production)
- The global auto (total) PMI fell 1.5 p to 48.2 in December

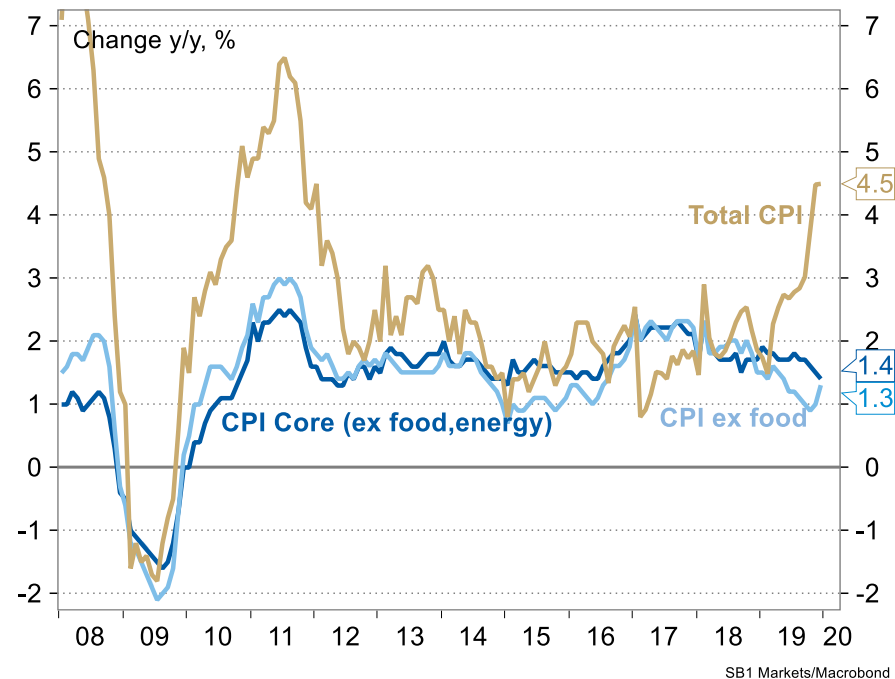
Total inflation steady at 4.5% in Dec, core CPI inflation sliding down, to 1.4%

Total inflation has soared on a rapid increase in pork prices, while core inflation is trending down

China Total CPI



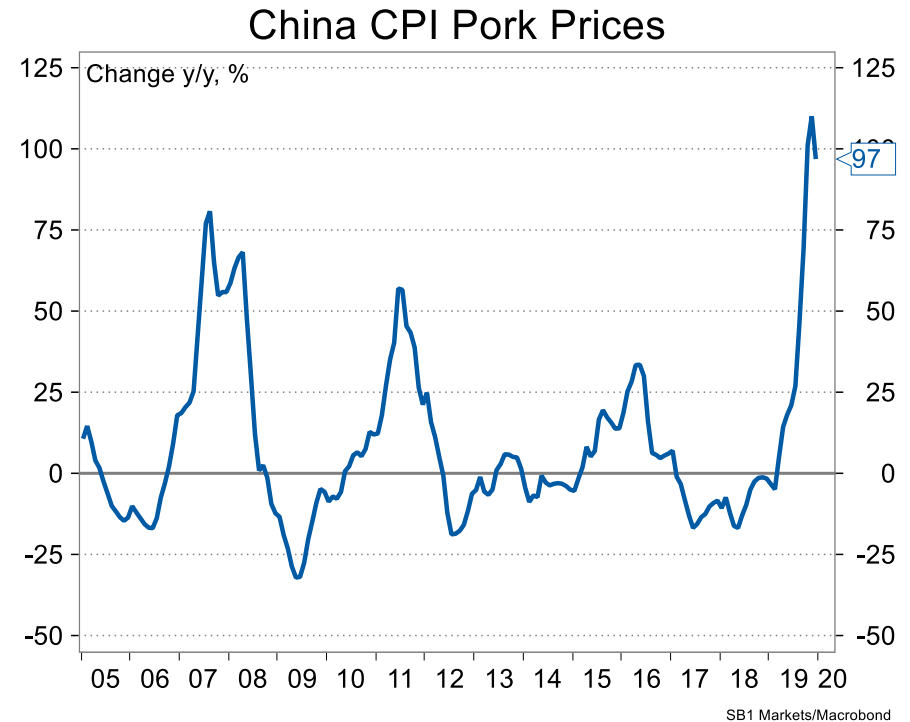
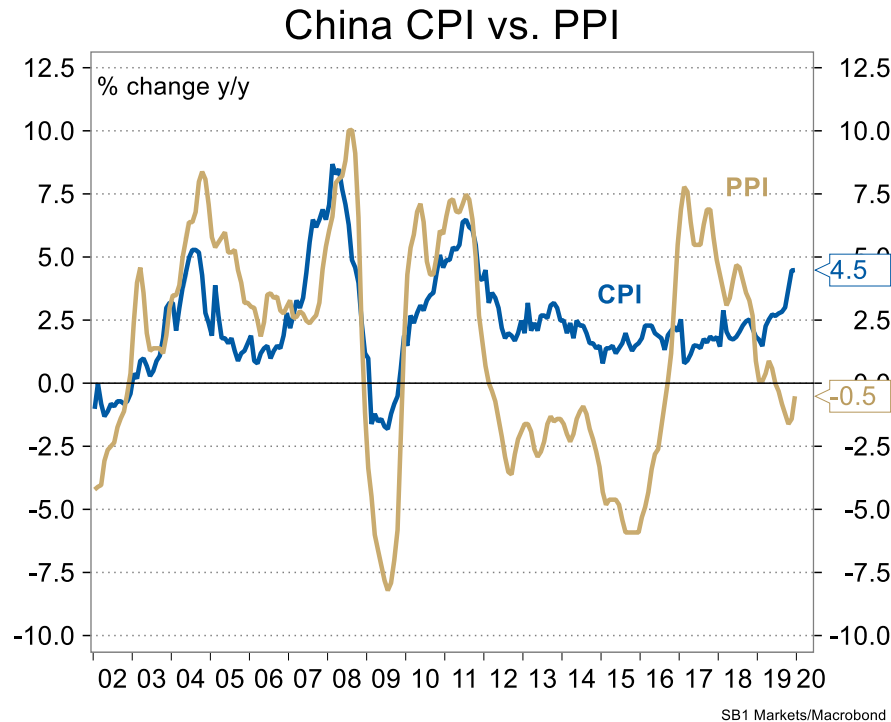
China CPI



- Headline inflation was unchanged at 4.5% in Dec, expected up 0.2 pp. Total inflation is fuelled by accelerating food prices
 - » Food prices eased for the first time in a year in Dec, down 1.2% m/m and the annual rate ticked down to 17%. A steep increase in pork meat prices (up 97% y/y!) due to a massive swine fever, has sent food prices up. We have not seen any reports that the conditions in China have improved, but China is now accelerating imports of pork meat
- Core inflation (x food & energy) slowed further to 1.4%, trending slowly down. CPI ex food turned up in Dec, to 1.3%
- High CPI growth due to this supply shock is not any argument for a tighter monetary policy, rather the opposite. Higher total inflation is dampening real consumption growth. Moreover, the decline in PPI may signal a slowdown in the Chinese economy, check next slide

China producer prices are falling, not a signal of strength

The decline in PPI eased to 0.5% y/y in Dec, supported by oil, raw materials. Food prices are soaring

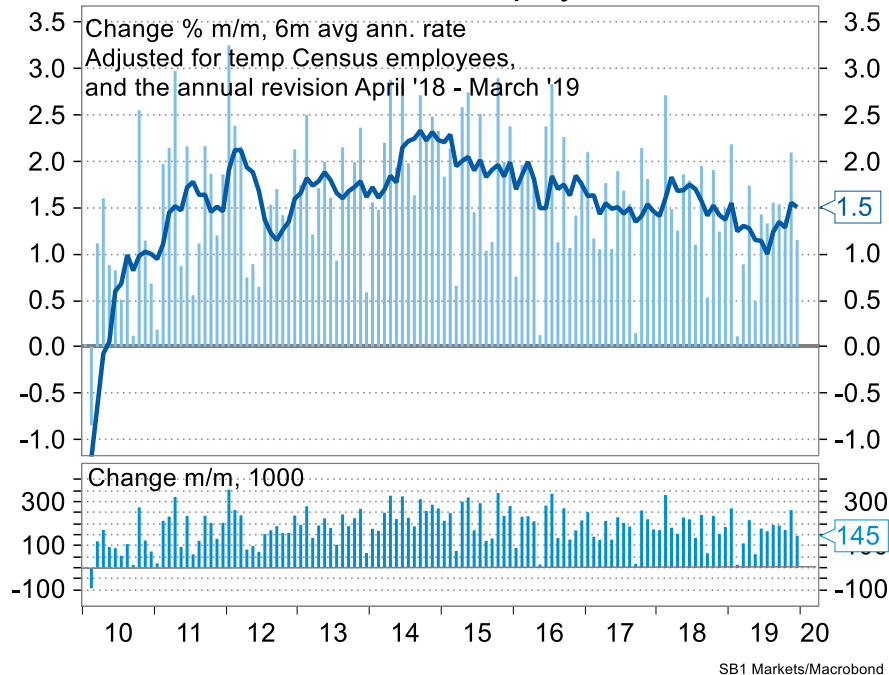


- The decline in PPI is so far not serious compared to previous periods with falling produced prices. From 2012 to 2016 prices fell by 3% per year in average, lowering the price level by more than 13%. Even that did not kill the Chinese economy. Now prices have fallen just around 1%!
- Pork meat prices are doubled due to the swine flue, driving total consumer price inflation up (meat constitute a very minor part of the PPI and does not influence PPI by much). The slowdown in Dec probably reflects more/cheaper imports of pork meat

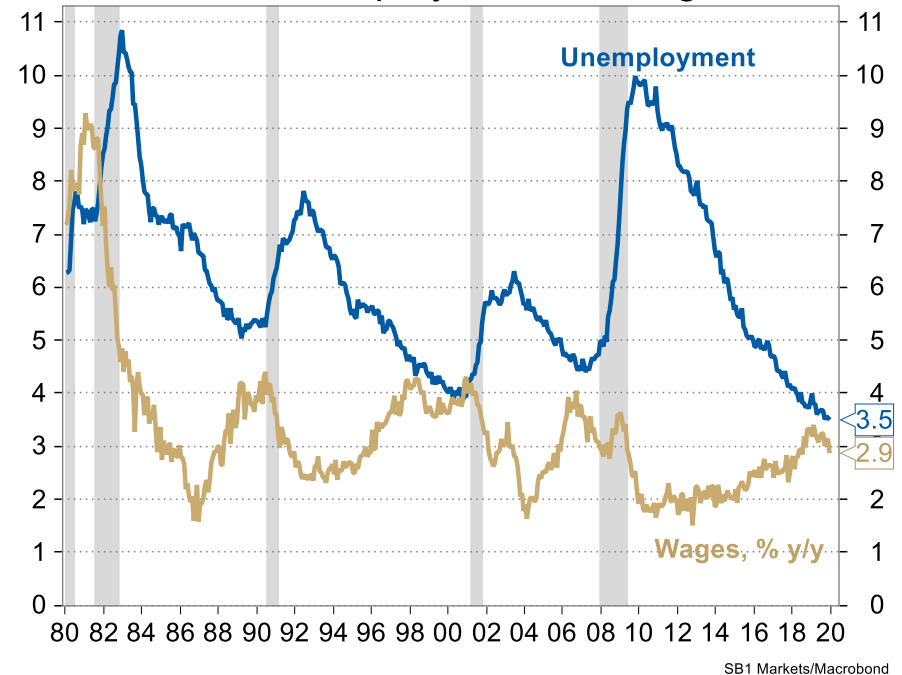
Solid employment growth in Dec but wage growth slows

Employment rose 145', a tad weaker than expected. Unemployment unch, wage growth down 0.2 pp

USA Nonfarm payrolls



USA Unemployment vs. wages

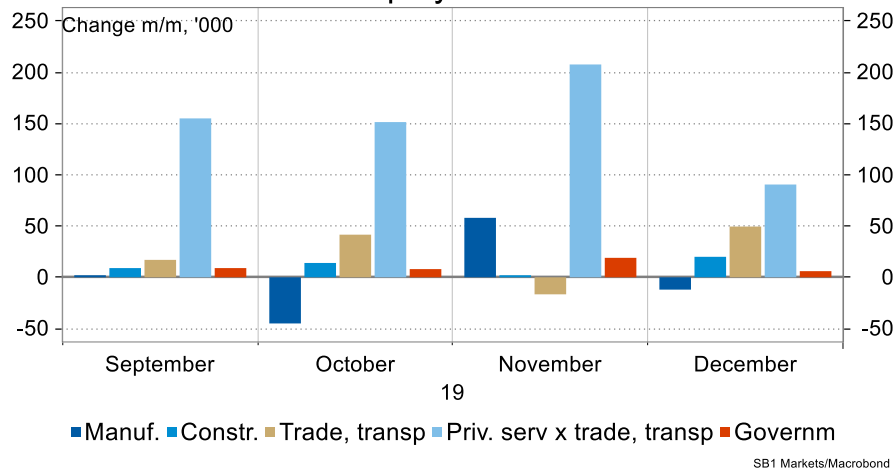


- **Employment** rose by 145' in December, a solid print following the November spike, and just 15' lower than expected. Thus, employment growth accelerated in H2, the 6 m avg at a 1.5% pace, from 1% in July
- **Unemployment** was unchanged at 3.5%, the lowest in 50 years. Both the participation rate and the employment rate were unchanged. Participation is heading slightly upwards but too little to suggest that the supply side is now responding
- **Wages** rose just 0.1% m/m, 0.2 pp below expectations. The annual rate edged down 0.2 pp to 2.9%, even as companies are reporting close to record high difficulties attracting labour and very high compensation plans. However, wage growth is not low vs productivity
- Overall, these data confirms that the labour market remains strong

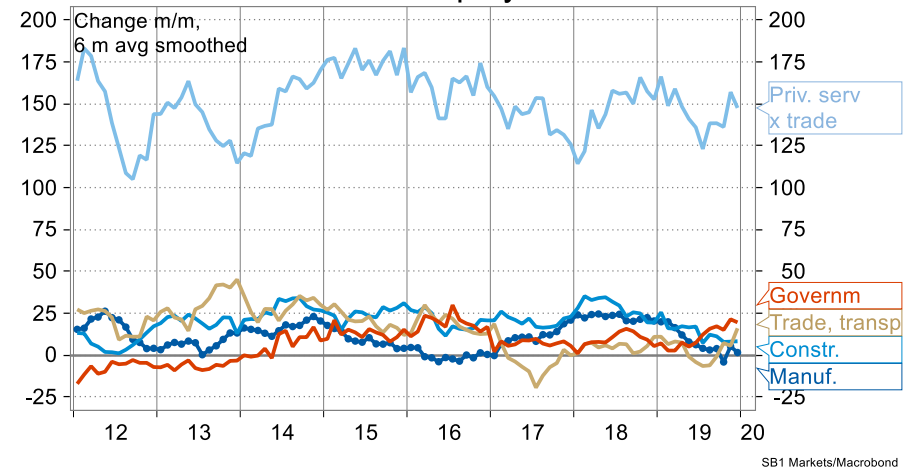
Employment is increasing all most sectors, manufacturing has stalled

Employment accelerates in private services, trade, and government

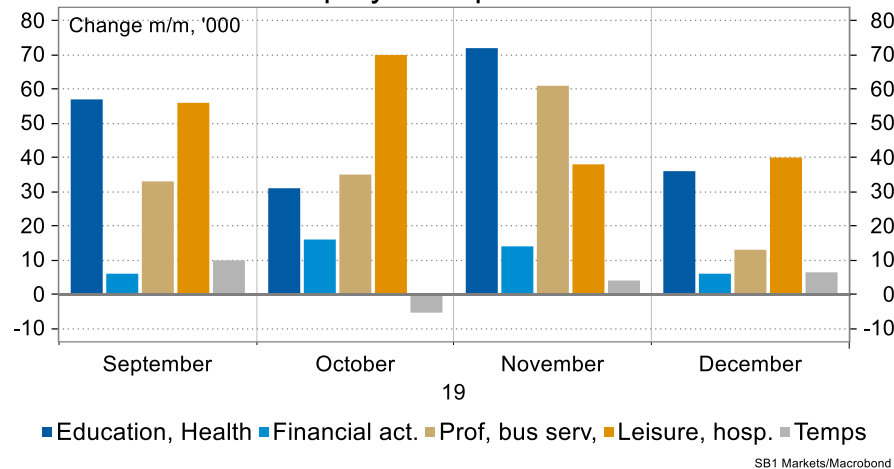
USA Employment sectors



USA Employment



USA Employment private services

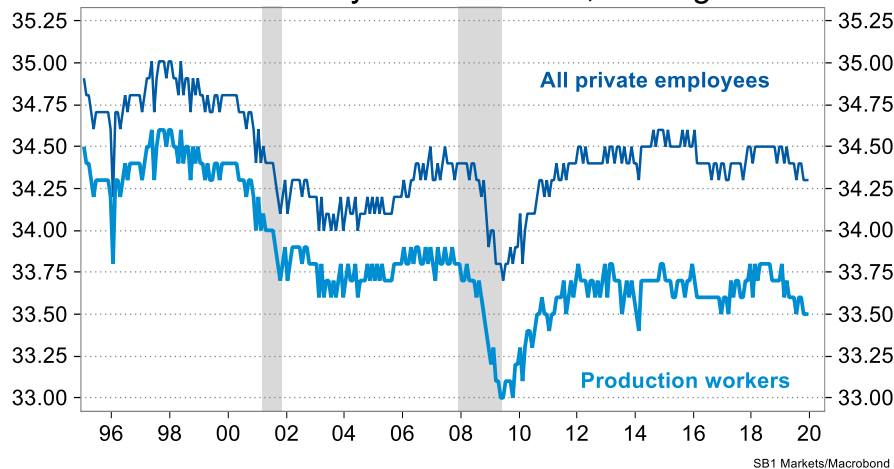


- **In December:** Private services empl. rose modestly, following a spike the prior month. Employment in manufacturing fell marginally. Trade and construction increased, and government unchanged
- **Recent months:** Employment growth has stagnated in manufacturing. Trade and transport have been gaining pace, as has government employment. Construction is rising modestly
- **Big picture:** Manufacturing, construction both peaked in H1 2018. Private services x trade empl. recovered last year. Trade has been soft since 2016, picking up recently
- The annual revision is not yet included in these sectoral data

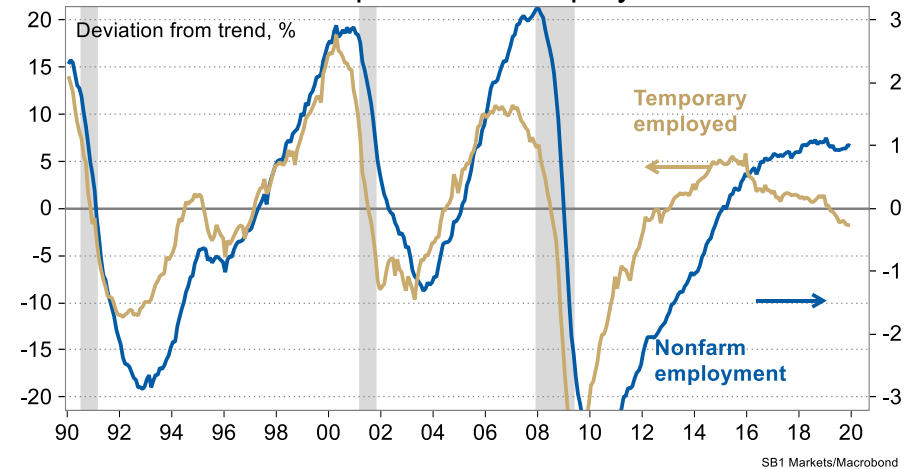
Weekly avg hours are trending down, normally a 'first response'

Demand for temps has been slowing too, usually not a good sign, but not by more recent months

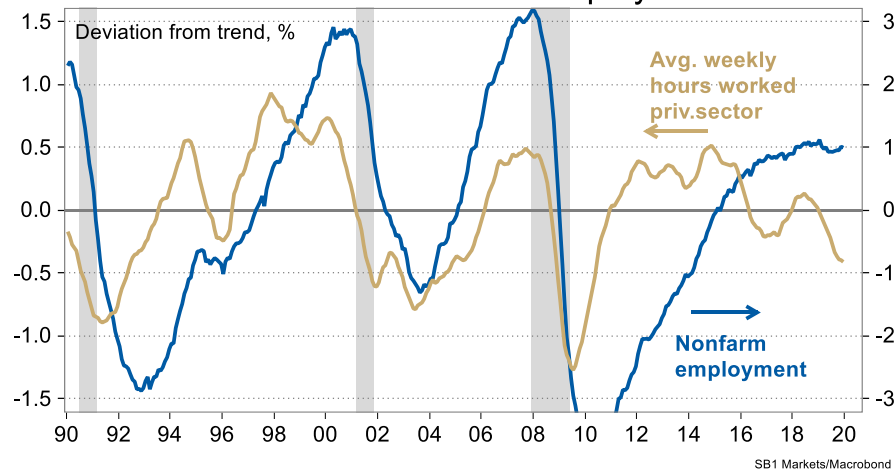
USA Weekly hours worked, average



USA Temps vs total employment



USA Hours worked vs. employment

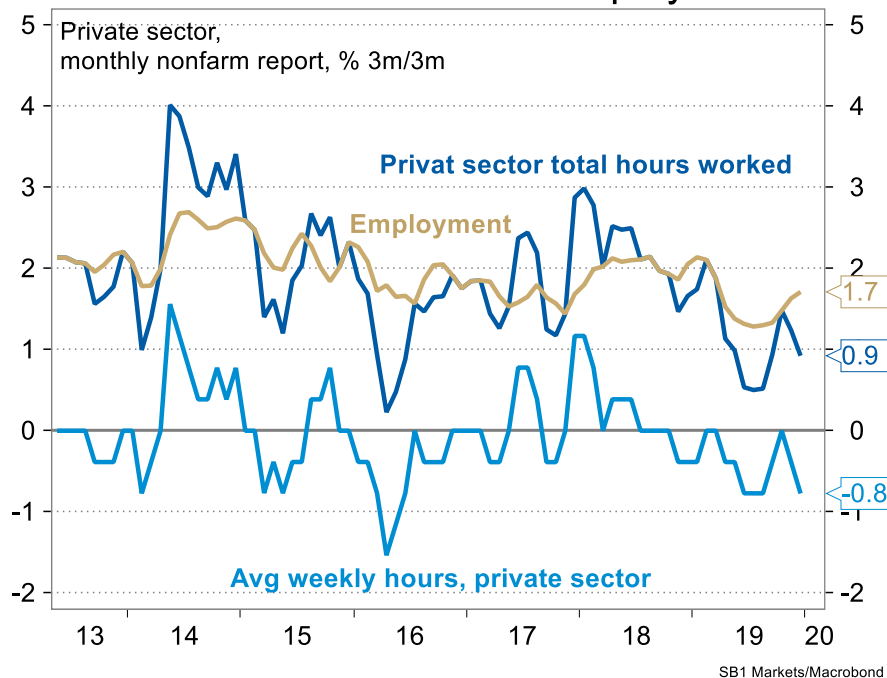


- Average weekly hours worked (in the private sector) has been trending down, an argument in favour of the weaker-demand-for-labour-story. Hours were unch in Dec, after a downward revision of Nov, and are down 0.8% measured 3m/3m
- In addition: Employers are still reporting aggressive hiring plans and unprecedented problems filling positions, and the number of unfilled vacancies is very high
- The number of temporary employed is waning, usually a leading indicator for future slower total employment growth

Avg hours worked are slowing, total hours increasing

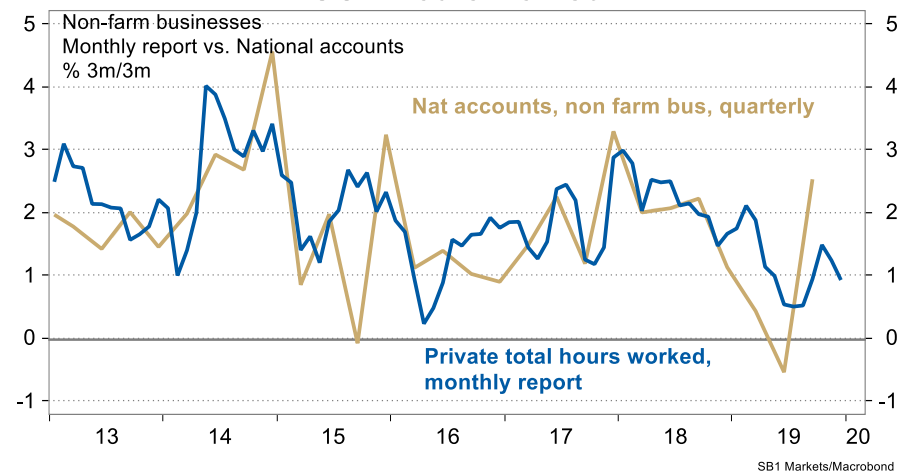
Growth in disp. income has turned up, and corp. profits are under pressure (low productivity growth)

USA Hours worked vs. employment

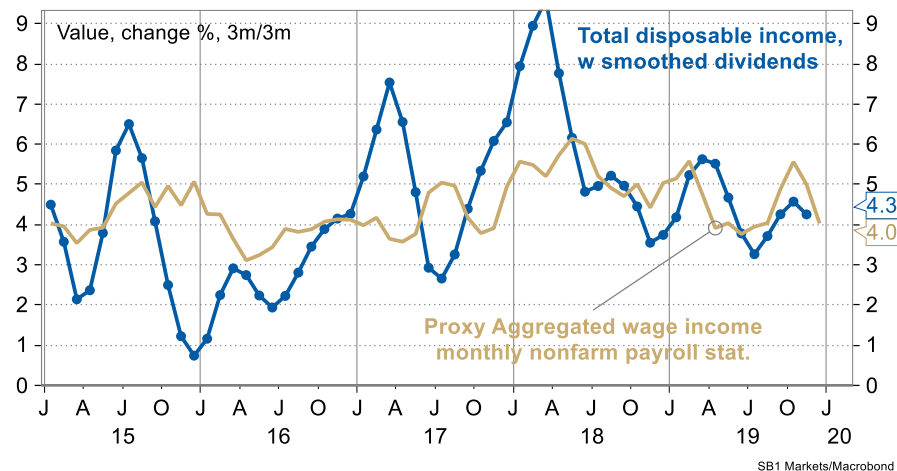


- Underlying growth in total hours worked in the private sector ticked down to 0.9% in December but has gained pace recent months. Average weekly hours are declining by 0.8%
- Growth in total wage income has picked up the most recent months, although slowing to 4.3% in December
- Given present estimates for Q4 GDP growth, a 1% growth in hours worked implies a modest productivity growth

USA Hours worked

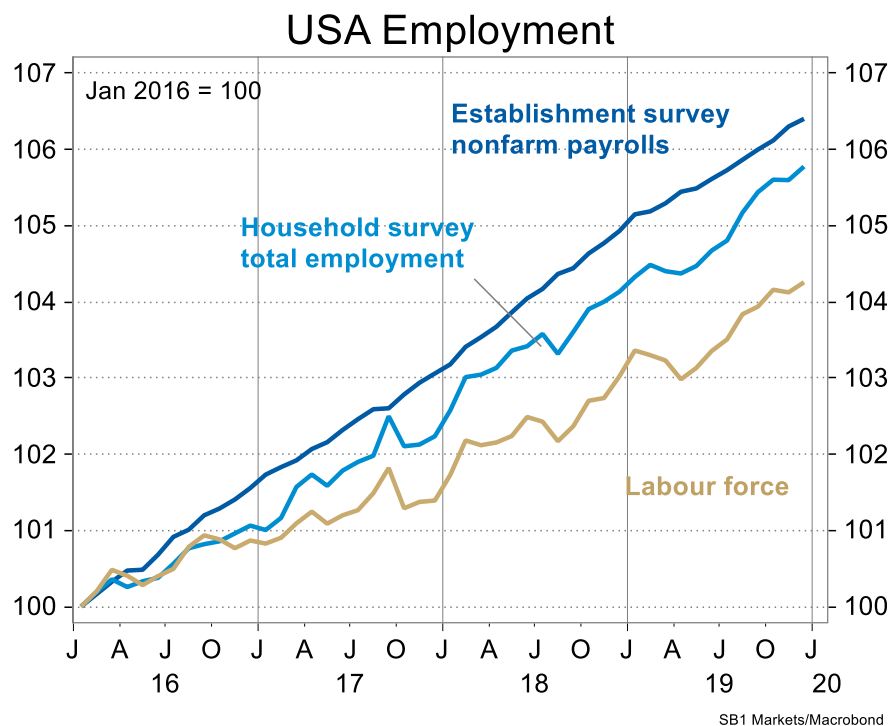


USA Household Income



The household survey has been reporting strong growth in employment too

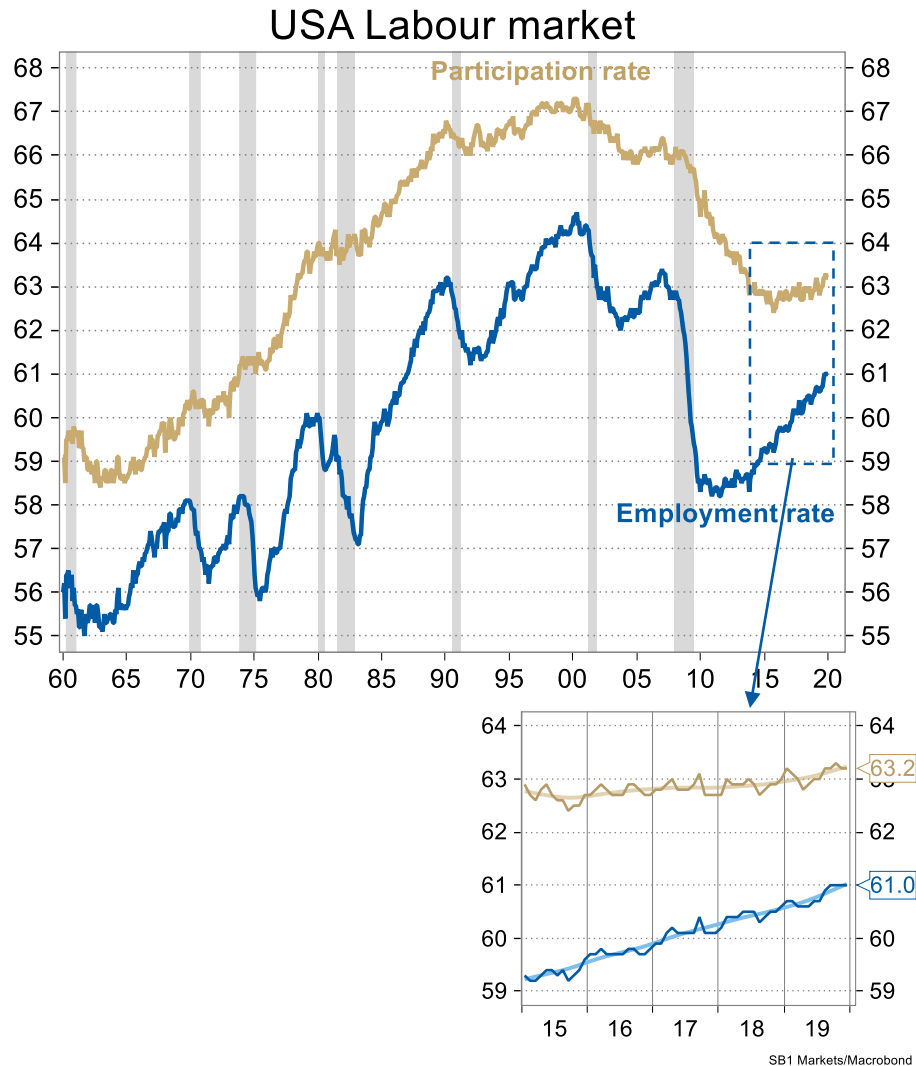
The survey reported higher growth than nonfarm in Dec and an acceleration the prior months



- The household Labour Force Survey (LFS/'AKU') reported slower growth in employment than payrolls in early 2019. Since the summer, LFS employment growth increased more than the payrolls report
 - » Total employment grew by 267' in Dec according to the LFS ('AKU'), while employment defined as in the payroll report rose by just 1' (vs nonfarm up 145')
- The labour force rose 209' in December. The participation rate was unchanged at 63.2%, as was the employment rate, at 61.0%
- The monthly household LFS survey employment data are much more volatile than nonfarm payrolls data, and are close to useless from month to month

Participation trending too slowly up, creating a tight labour market

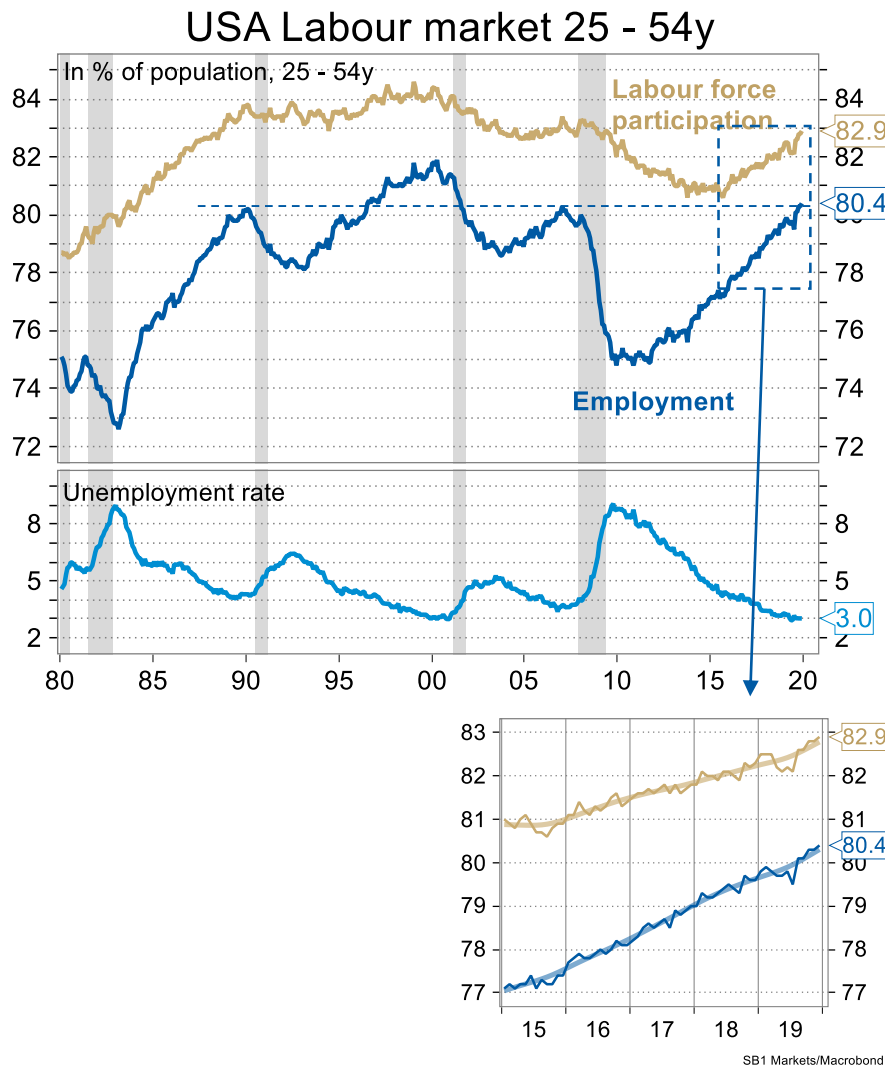
The participation rate may be heading slowly up, the level is low. Employment rate faster up



- The employment rate was flat at 61.0% in December too, but is trending steeply upwards. The level is well below the pre-financial crisis levels
 - » For the core age group, employment is back to a normal level (*see next page*). Youngsters (their employment rate is down) and the oldies (there are more of them, and fewer of them are working) have contributed on the downside on the overall employment and participation rates recent years
- The participation rate was unchanged at 63.2%. The trend is very slowly upwards and clearly less steep than the employment rate – that's why the unemployment rate is still trending down
- Participation & employment rates do not signal any weakness on the demand side of the labour market but rather a tightening labour market, due to a meagre supply side (participation) response

The core employment rate (25-54 y) is back at the pre-financial crisis level

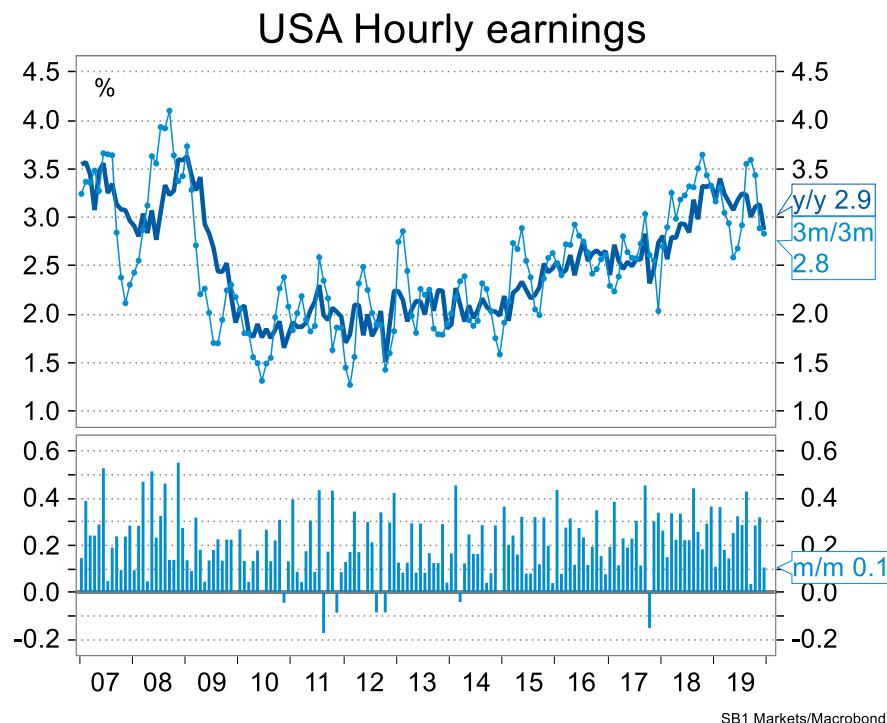
Is this the most relevant employment rate? Most likely. The trend is up and level not low anymore1



- While the total employment rate (over 16 y) is well below the pre-financial crisis level (more than -2 pp), the core age group (25-54y) employment rate is back at the 1990 & 2007 peak levels – but it is still 1.6 pp below the ATH in 2000
 - » The core employment/unemployment rate most likely gives the most relevant measure of the tightness of the labour market
- In December, the 'core' participation rate inched up to 82.9 and employment to 80.4%
 - » The 'core' unemployment rate was unchanged at 3%
- The good news is that the participation rate still is inching up, implying that there may still be some reserves left
- However, given employers' unprecedented reported lack of labour, the increase in participation is far from impressive, check here

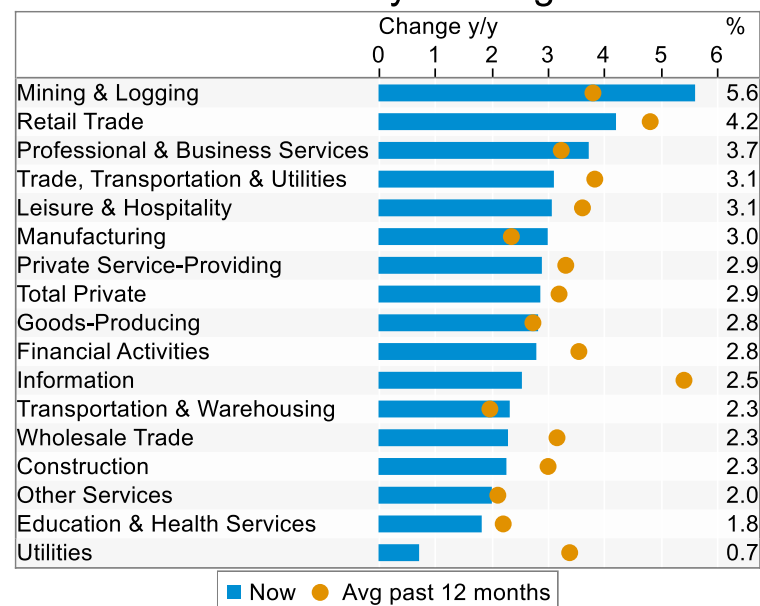
Wage growth is subsiding, December below f'casts

Wages rose just 0.1% in Dec, and the annual rate fell to 2.9%, both 0.2 pp weaker than expected



- Wage inflation is not high vs historical standards but it is not low vs. underlying CPI inflation, and not vs productivity growth, see three pages further out
- Small companies (NFIB) are reporting the highest wage compensation plans since 1990

USA Hourly earnings

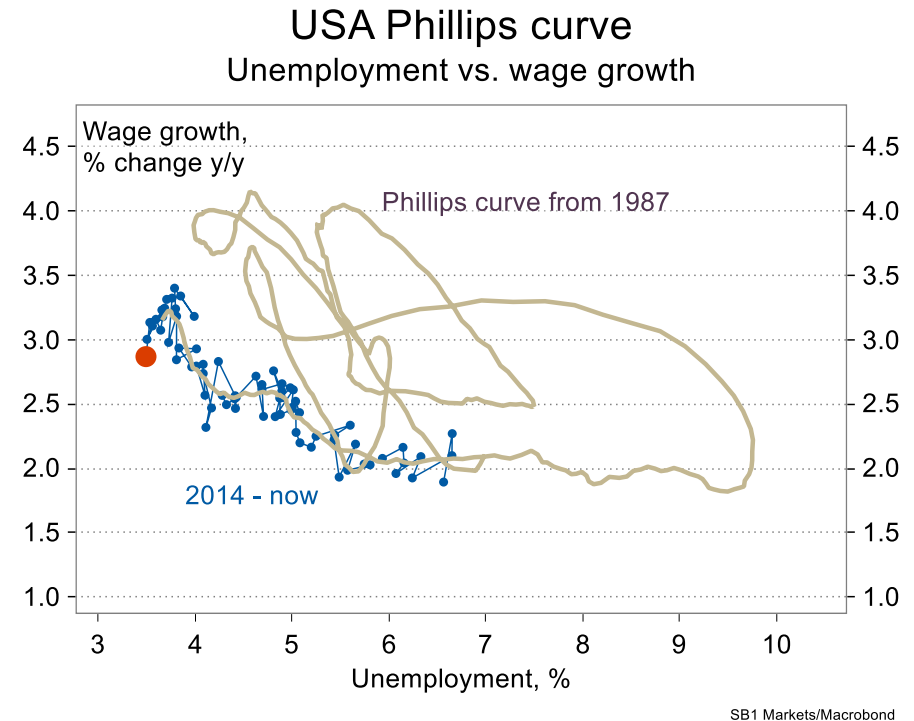
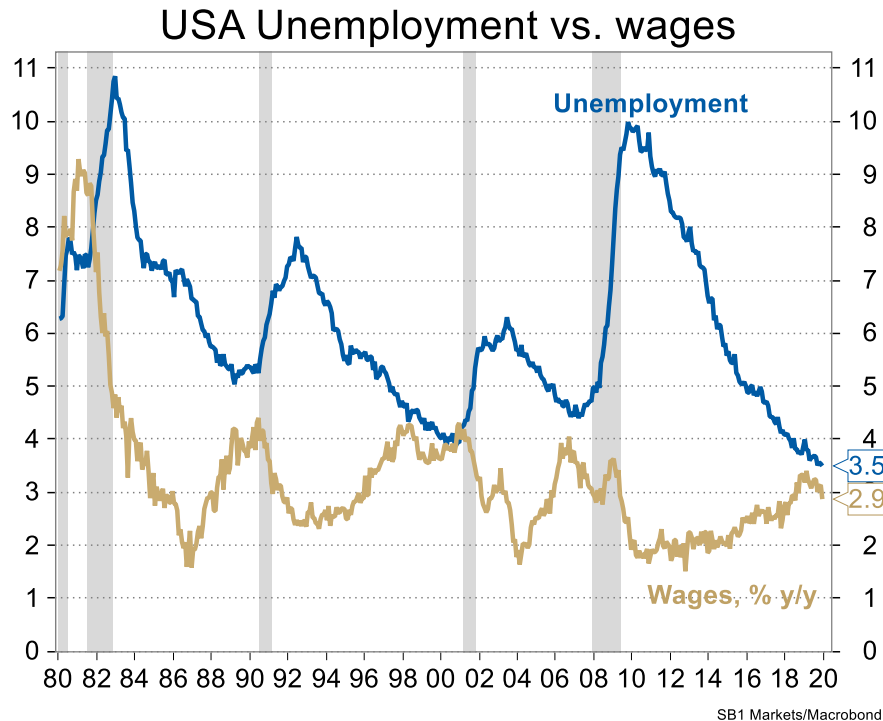


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- Wage growth rose 0.1% m/m, 0.2 pp less than expected. The annual rate fell 0.2 pp to 2.9%, the lowest since mid-2018. Consensus expected an unchanged pace, at 3.1%. Underlying growth has eased to 2.8% (3m/3m)
- All indicators are pointing to a tight labour market, hence, the setback now is rather strange
- Annual wage inflation is decelerating vs. the past 12m average in 11 out of 17 sectors, accelerating in just 2! Wages are still increasing the most in information activities – and retail trade as advanced on the ranking, to the 2nd place!

Wage inflation lower than 'usual' vs. the unemployment rate

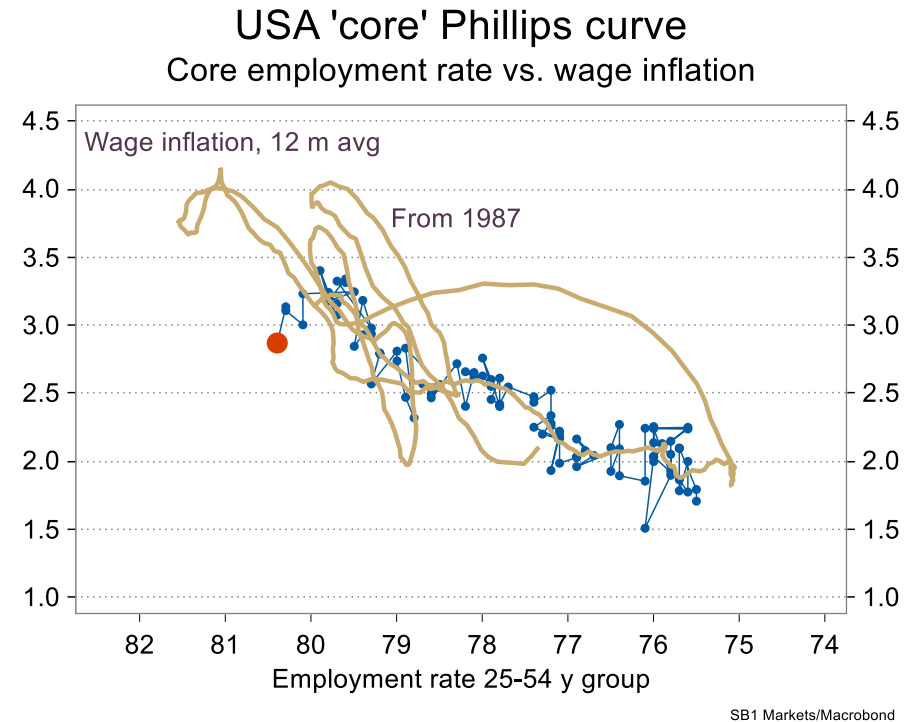
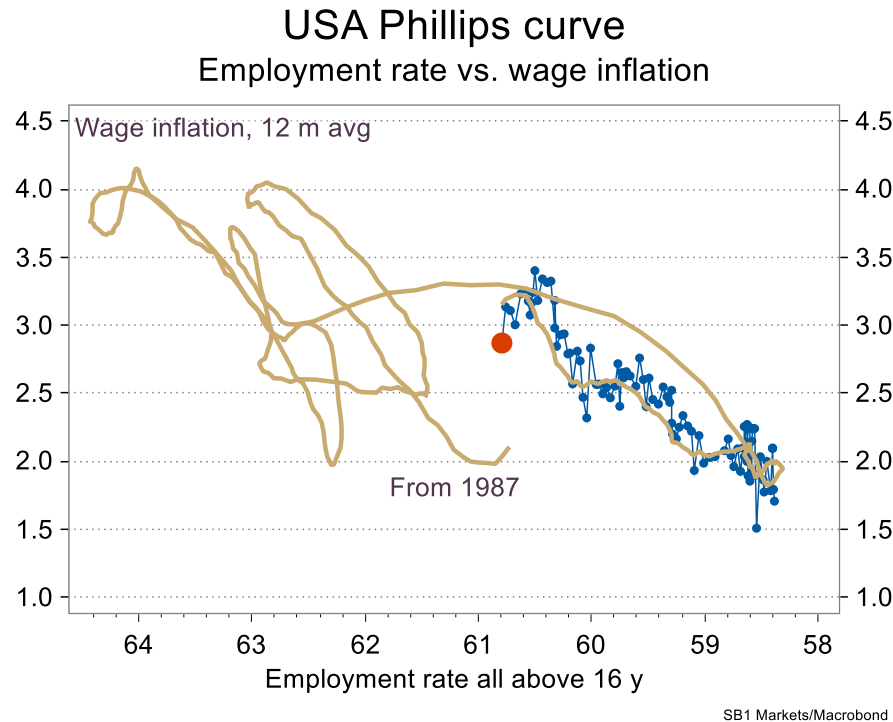
Even if the Phillips curve is flatter than before it is definitely not flat



- However, we would not have guessed told in early 2019 that the unemployment rate should decline to 3.5% from almost 4%, and that wage inflation should decrease to 2.9%, from almost 3.5%
- On the other hand, if we calculate the Phillips curve using the employment rate, or the core (25-55y) employment rate, the Phillips curve is either far to the 'right' (and not to the 'left' as at the chart above) or just pretty normal, check the next slide

Two alternative Phillips curves – wage inflation vs. employment rates

Wage inflation is lower than normal vs the core employment rate now, but not total empl.

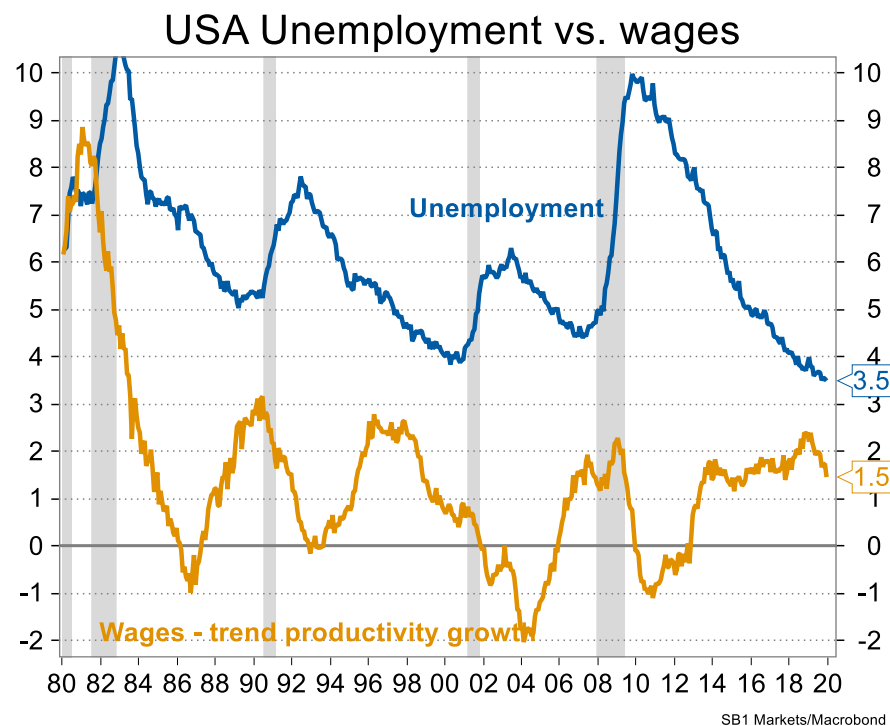
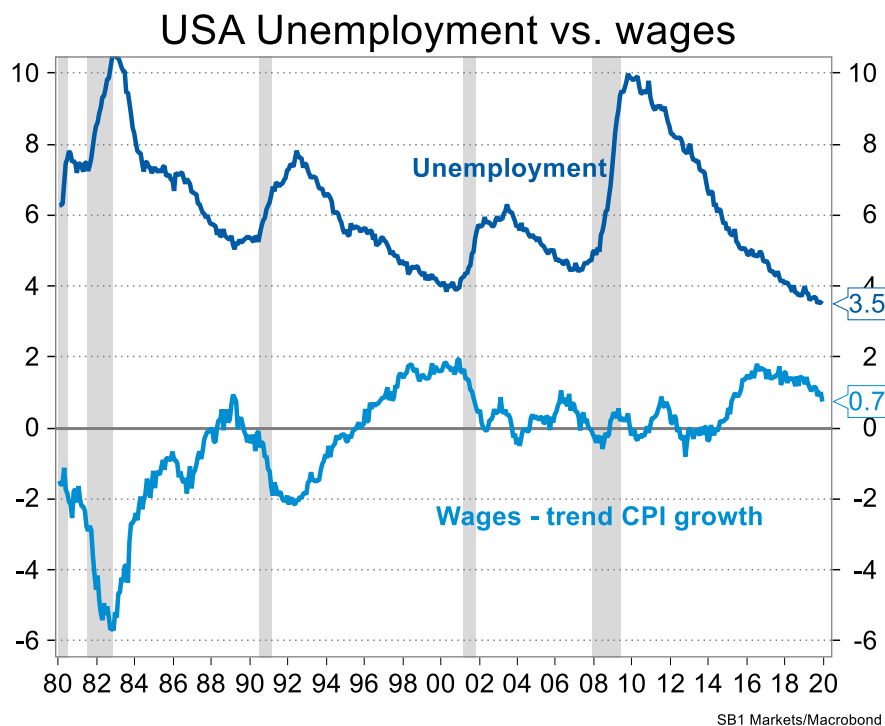


Wage inflation is

- 1) Too low vs. the unemployment rate (previous page)
- 2) Too low vs. the core employment rate (chart to the right)
- 3) Too high vs. the total employment rate, a least historically (chart to the left above)

Wage inflation is not low vs. prices or productivity

In fact, real wages are still increasing faster than normal, and more than normal vs. productivity

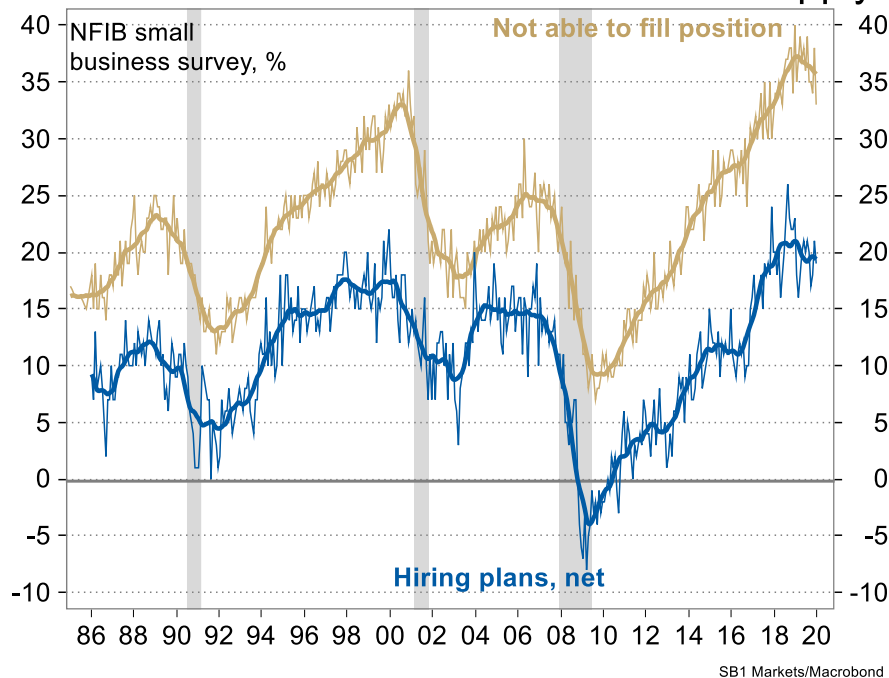


- The Wage inflation – Productivity growth gap, or labour cost per unit produced (ULC, unit labour cost, using the monthly wage data vs the underlying trend in productivity) fell to 1.5% in Dec, slowing from above 2% in early 2019, but higher than usual (avg since 1964 at 0.7%, or 0.6% since 2000)
- Another indication: The corporate profit share has fallen sharply the previous years because cost inflation (=wage inflation – productivity growth) has been higher than inflation, as normal when the labour market tightens
- Real wages have been increasing faster than normal too

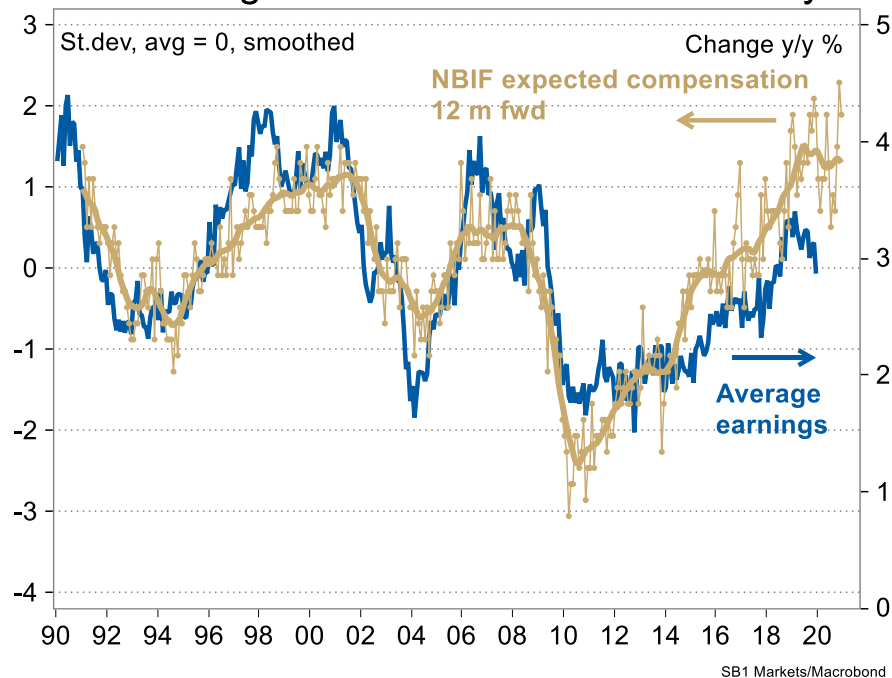
Small companies report record high wage increases, still tight labour markets

However, the share of businesses not able to fill positions have turned down from peak

USA Small businesses labour demand/supply



USA Wages - 'Small businesses' survey

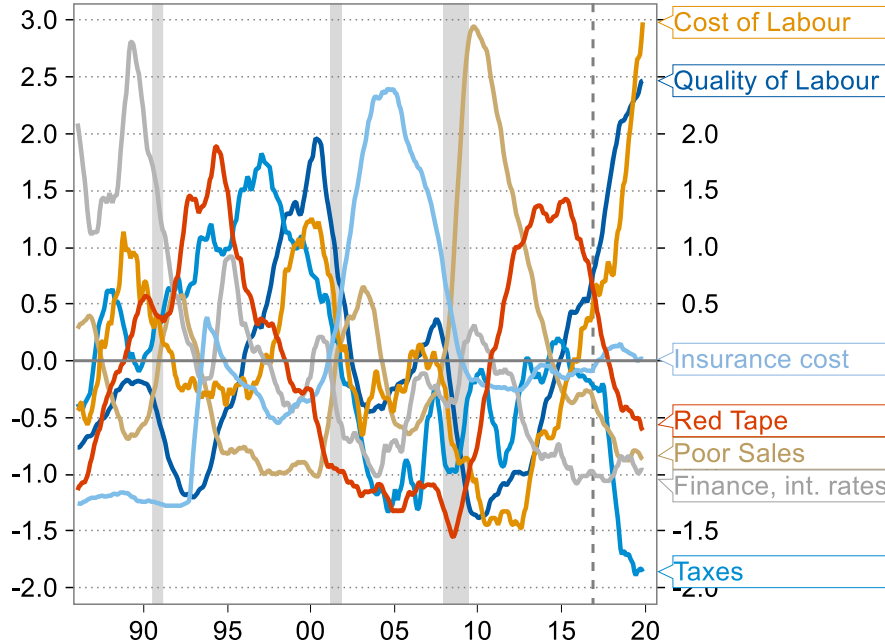


- SME companies are reporting aggressive hiring plans, although marginally less the past months. May be an early sign of demand weakness, or just difficulties attracting labour. The level is anyway very high
 - » Hiring plans are leading unemployment approx 8 months, unfilled vacancies by 6 months. As both have turned marginally down, it may be an indication that unemployment will turn up soon. On the other hand, these survey data confirms a tight labour market
- The share of companies reporting difficulties filling their vacancies have edged down since last spring. However, the level is still very high, and companies are also reporting unprecedented problems finding qualified labour (check next page)
- Compensation expectations are soaring and the level is the highest on record! Must be a sign of an acceleration in wage growth??

So, what's the problem?

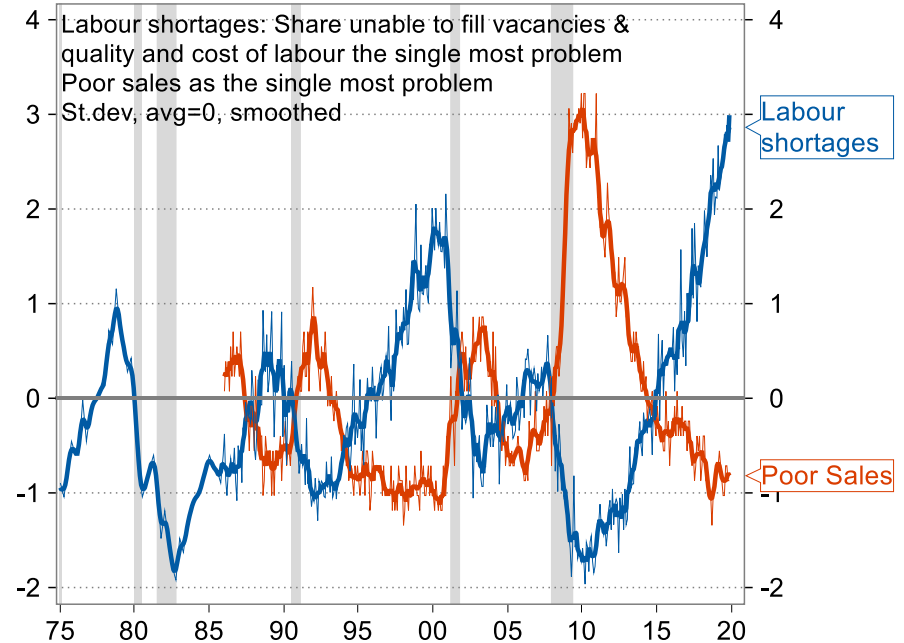
Availability of labour & cost. Not sales, not interest rates, not taxes. Says the SMEs

USA Small businesses Single most problem



SB1 Markets/Macrobond

USA Small businesses, what's the problem?

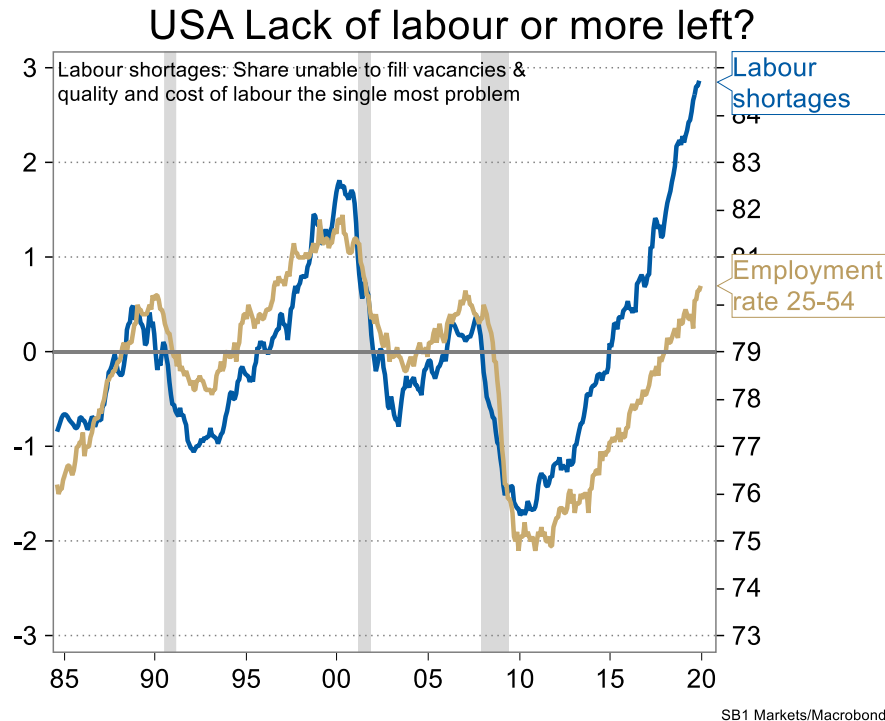


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- BTW, households are reporting that it is unusually easy to find a job. Confirms that the labour market is very tight

Lack of labour – or more left?

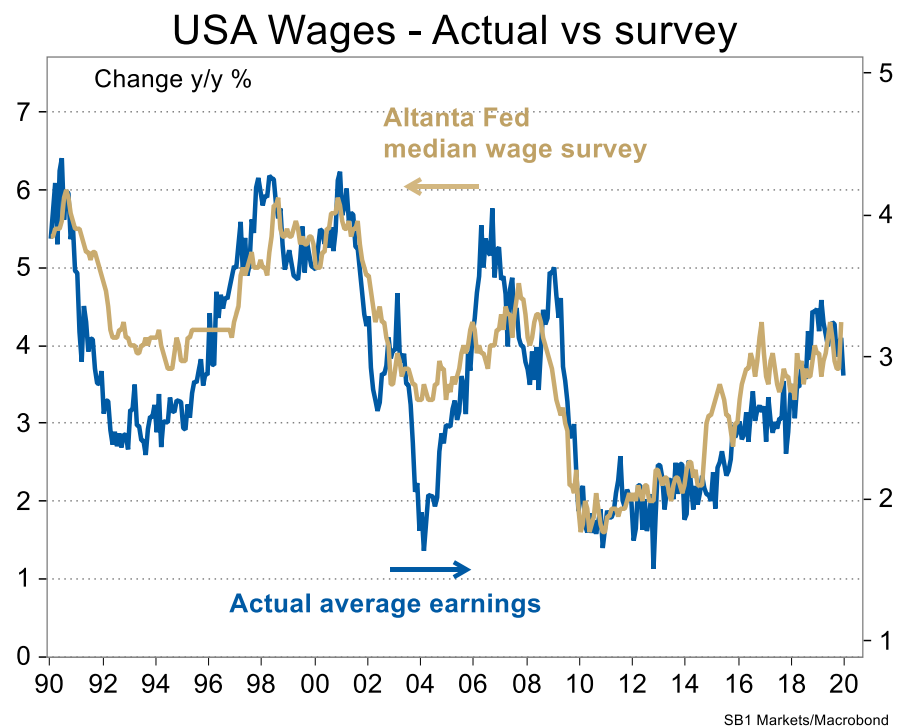
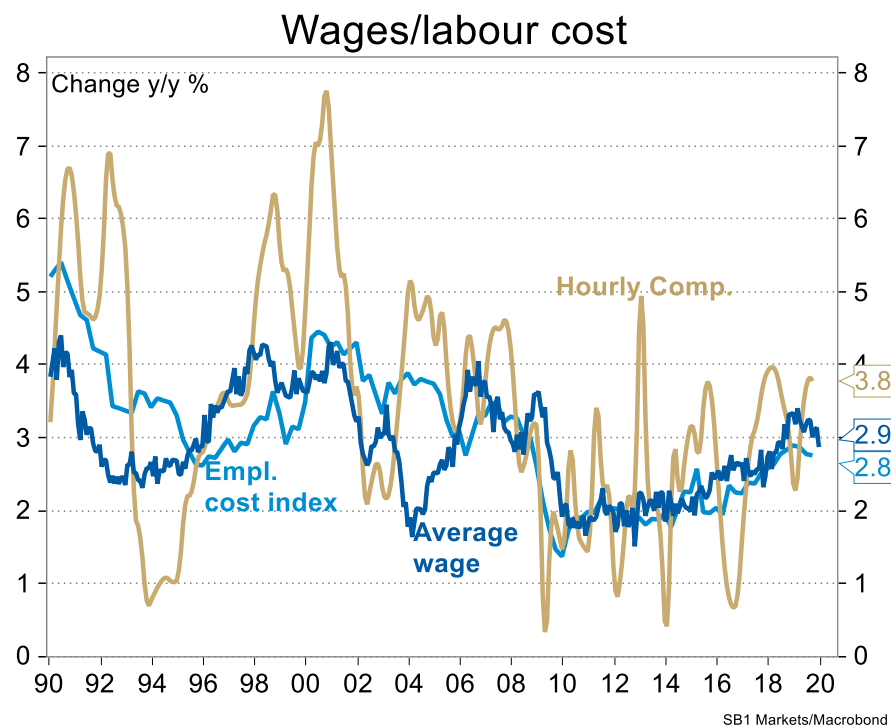
Why have not those at the side lines of the labour market turned up?



- The core age employment rate is at the peak levels seen in 1990 and 2007, but still clearly below the peak in 2000 – signalling that it is not impossible to imagine that the employment rate could increase further
- However, companies have never before reported problems finding labour like they do now. The number of unfilled vacancies is record high. Households are reporting that it is unusually easy to find a job
- Taken together, it seems rather unlikely that it should be easy to increase the employment rate sharply from the present level
- In addition, corporate profit rates are declining, as usual when the labour market is tight – confirming a mature cycle at the labour market

The long term view: Wage growth has been rising, according to all measures

Still, wage inflation has not accelerated in 2019

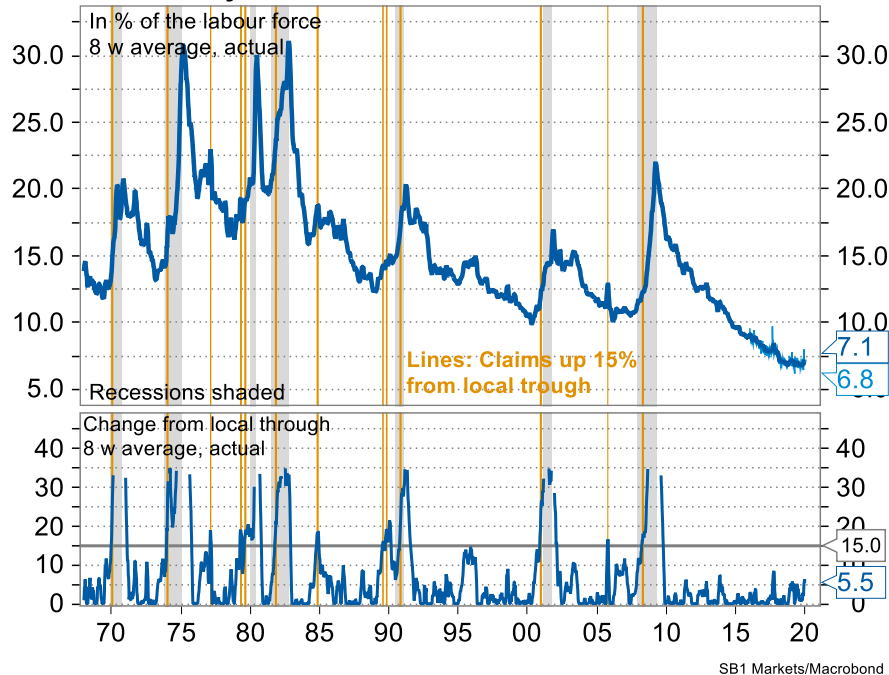


- In the monthly employment report, wage inflation came down to 2.9% y/y
- The Employment cost index ticked up to 3.0% q/q annualised in Q3, from 2.4% in Q2. The annual rate was flat at 2.8%, it peaked at 2.9% in Q1, but is trending up over the recent years
- Hourly compensation (from National Accounts) is the final assessment of all sorts of labour compensation. It is much more volatile than other labour cost measures. It rose 3.8% q/q in Q3 (smoothed) and by the same pace y/y, the highest since 2013
- Atlanta Fed's wage survey reports 4.3% median wage growth in Nov, signalling slightly higher average wage inflation

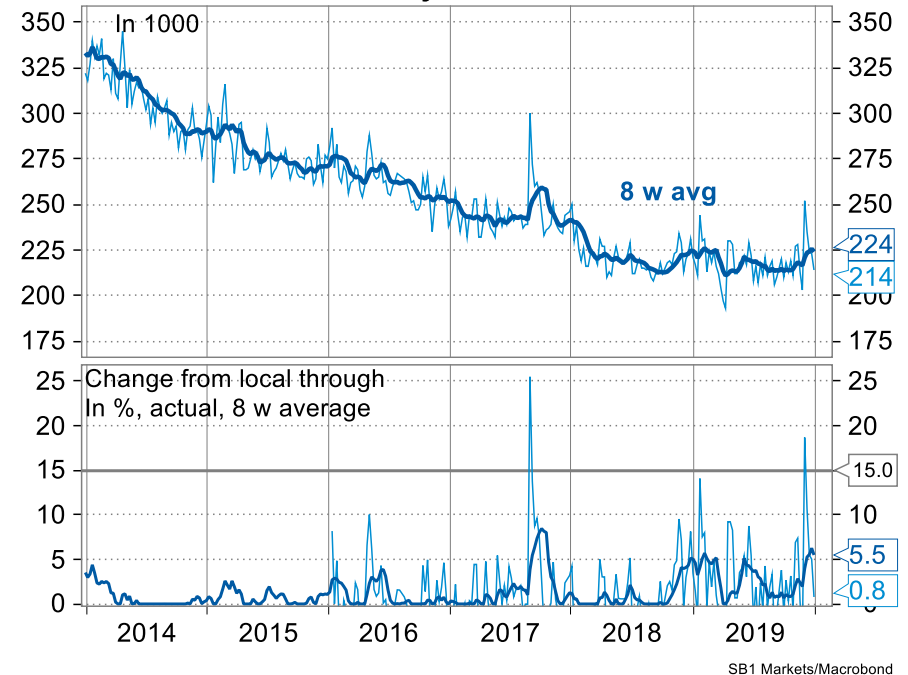
Jobless claims are coming back to a 'normal' low level

Most of the Thanksgiving jump is reversed and the pattern is equal to that of the previous years

New jobless claims vs. recessions



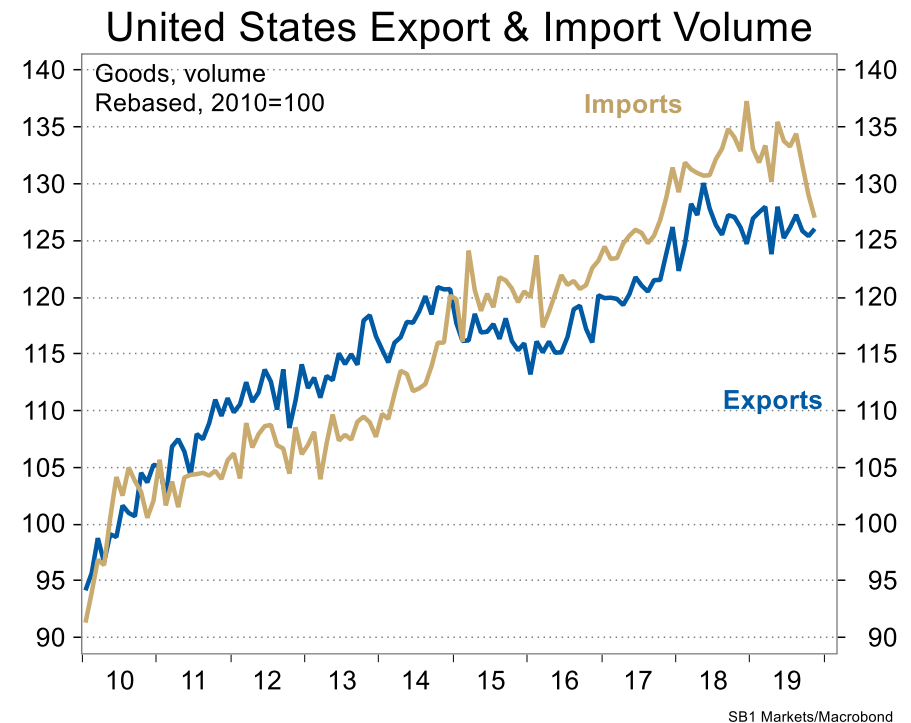
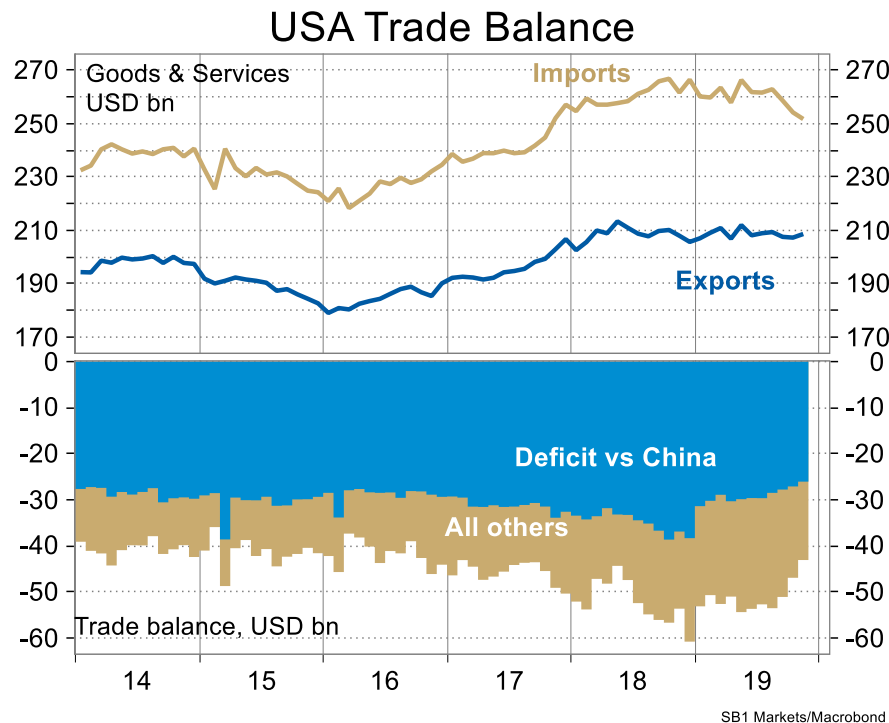
USA New jobless claims



- The past few weeks, jobless claims have been distorted by a later than usual Thanksgiving holiday. Now, claims have fallen down to a low level again
- 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 trade deficit at 3 year low as imports wane and exports remain flat

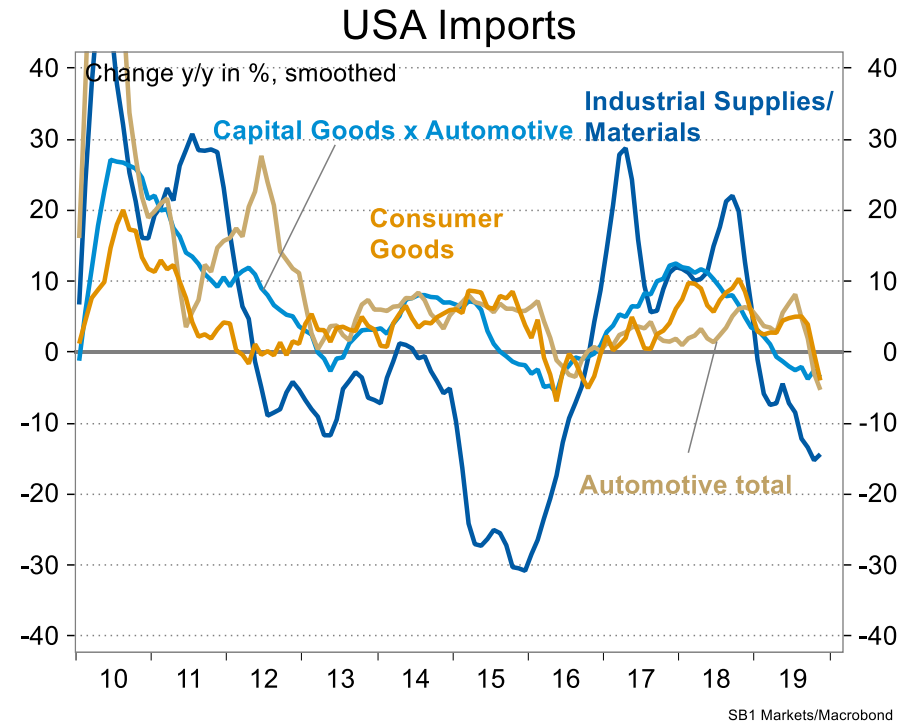
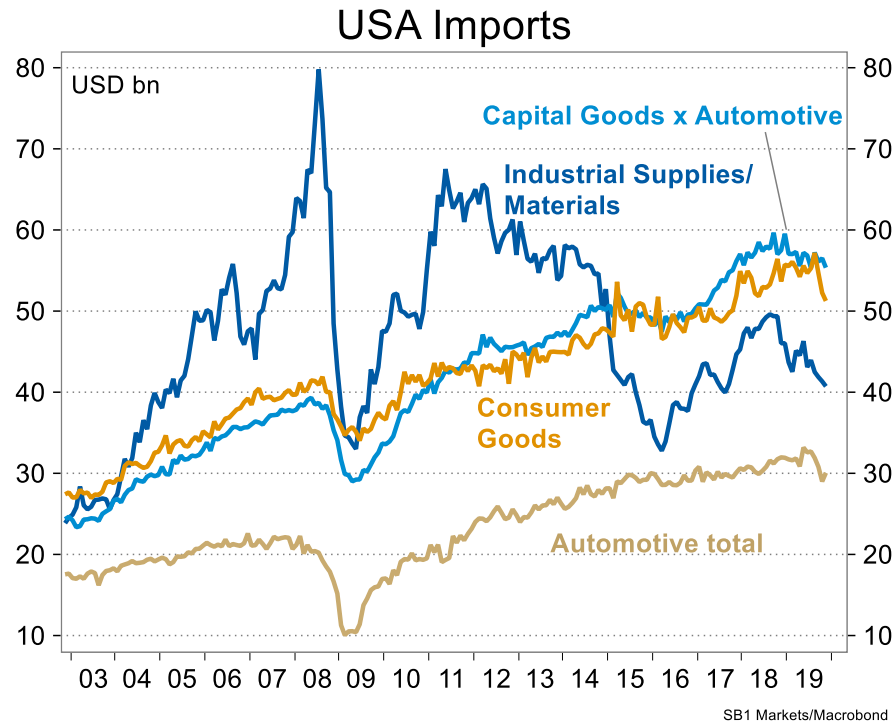
Imports down the past months; softening demand, China tariffs, higher net oil exports all to blame?



- The overall trade deficit of goods & services shrank to USD 43 bn in November, the lowest since late 2016. The deficit has declined rapidly the past months, probably due to both easing domestic demand, higher domestic oil production, and some tariff impacts
 - » Imports dropped 1.5% m/m in volume terms. Imports are down 4.6% y/y, the steepest decline since 2009! Domestic demand is no doubt a drag, check the next slide. However, the deficit to China is shrinking, whereas most others are trending out, indicating that the trade war has dampened imports. In addition, net petroleum exports have turned positive and explains 30-40% of the cut in the deficit since the summer – driven by higher shale oil production
 - » Export volumes rose 0.5% m/m in Nov. Exports have flattened out since mid-2018, the annual rate is now down by a marginal 0.7% pace
 - » Q4 is heading for a substantial positive net trade contribution to GDP growth
- The deficit vs. China is reduced substantially, no doubt due to the trade war. The deficit is still widening vs most trading partners

A broad imports slowdown, steepest decline in industrial materials

Capital goods have fallen the least, and less much than consumer goods recent months

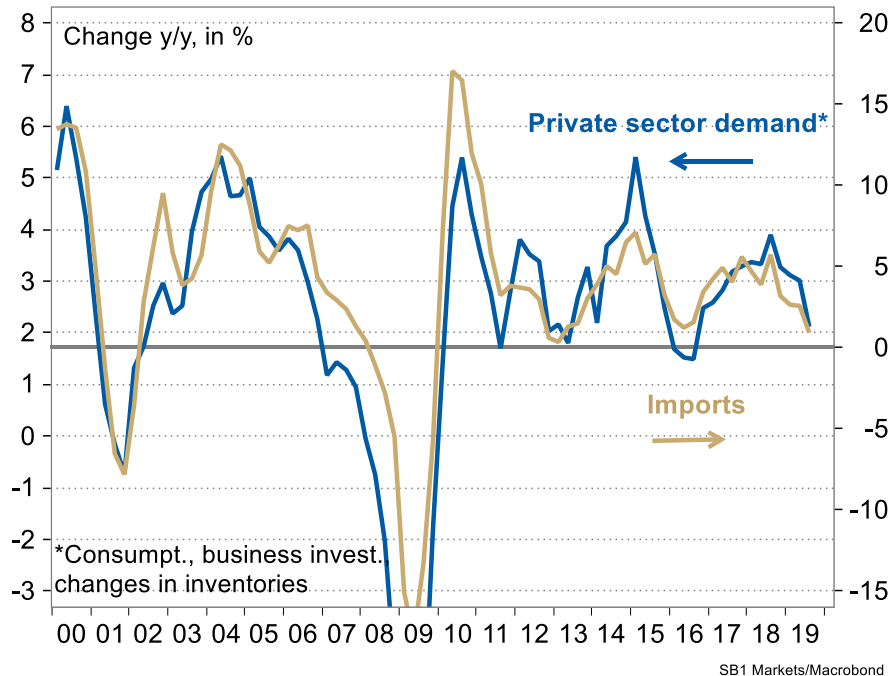


- Imports of industrial supplies and materials are more volatile than the other groups

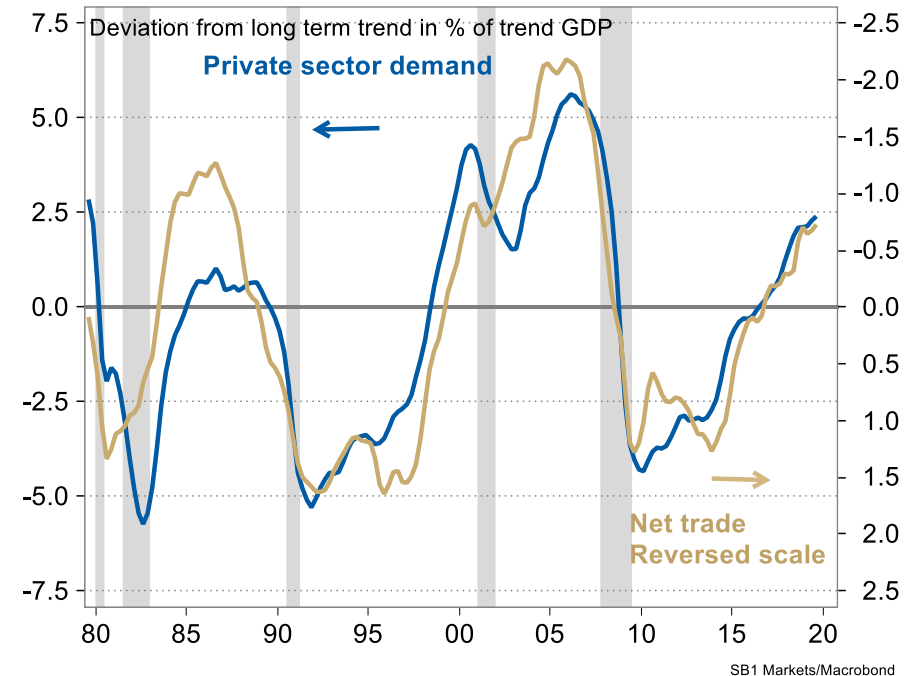
Imports are 'always' slowing along with softer private domestic demand

Import growth is decelerating as 'normal' when domestic business & consumer demand cool off

US domestic demand vs net trade



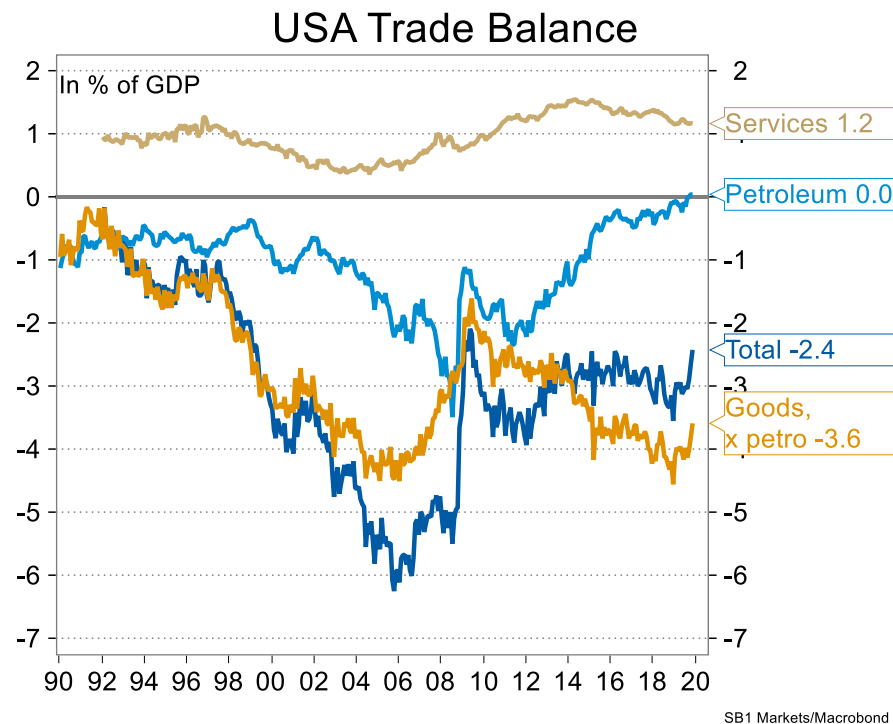
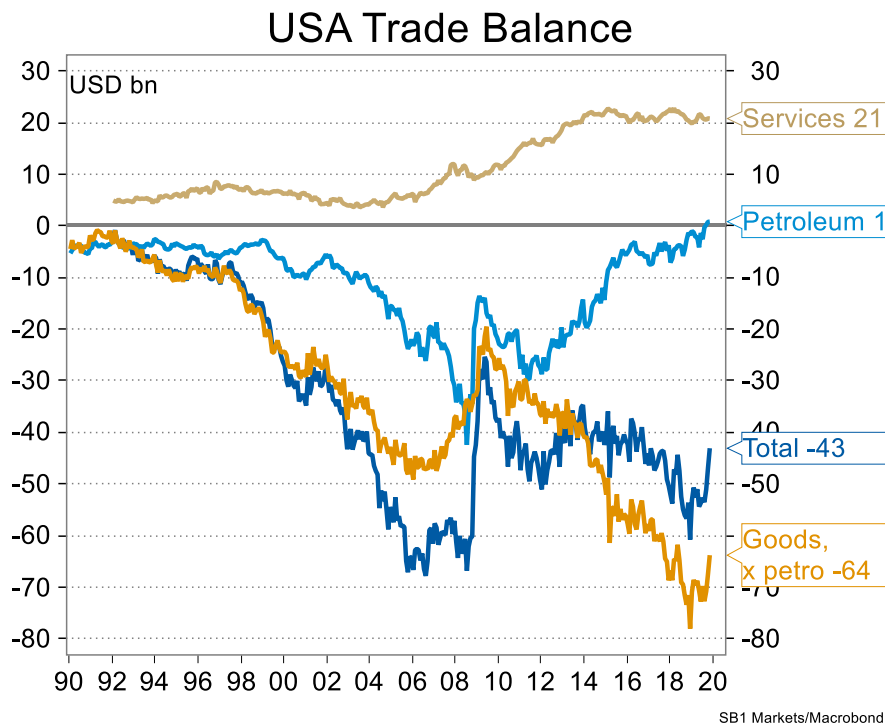
US Domestic demand vs net trade



- The trade war may of course have dampened US investments and consumption. However, imports have not been reduced due directly to the tariffs (just to China, but other deficits have increased), global uncertainties probably more important

Petroleum in surplus, still a massive deficit in other goods sectors

The goods deficit ex petroleum is shrinking but remains very high, even in % of GDP, at 3.6%



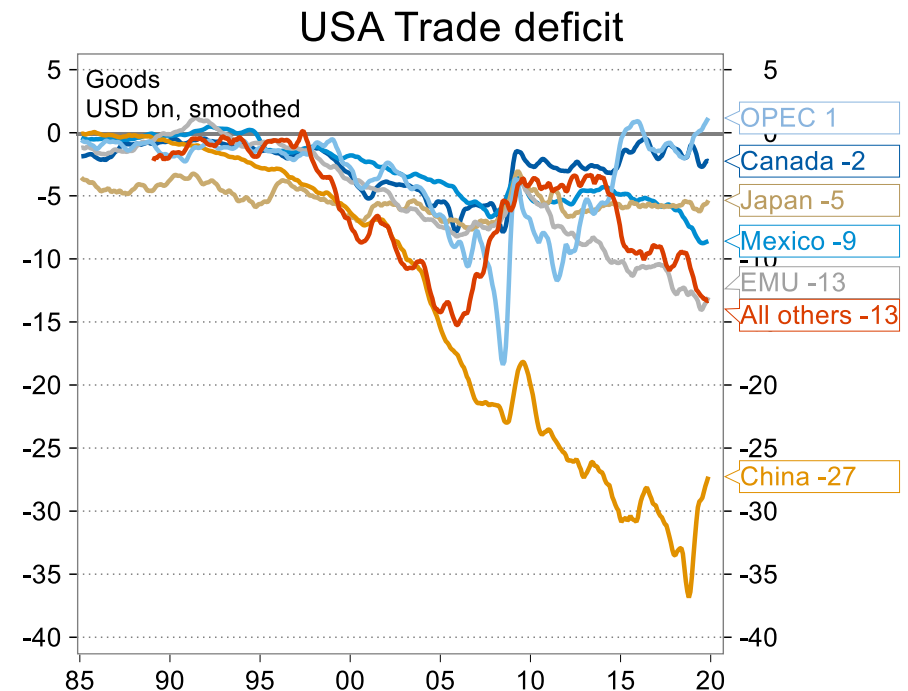
- In November, the goods x petro products deficit fell to USD -64 bn, or 3.6% of GDP. The deficit reached ATH in Dec '18, slowly shrinking since then. The total trade deficit, including petro, fell to 2.4% of GDP, from 3% in the summer
- The petroleum trade deficit has disappeared, from USD 30 bn/m in 2012 to +1% now
- The US is having a surplus in services at USD 21 bn, equalling 1.2 of GDP, trending very slowly down now

The deficit vs. China is narrowing, due to lower imports from China

The deficit vs OPEC has turned to a small surplus. Deficits vs Mexico, Canada, Eurozone heading out



SB1 Markets/Macrobond



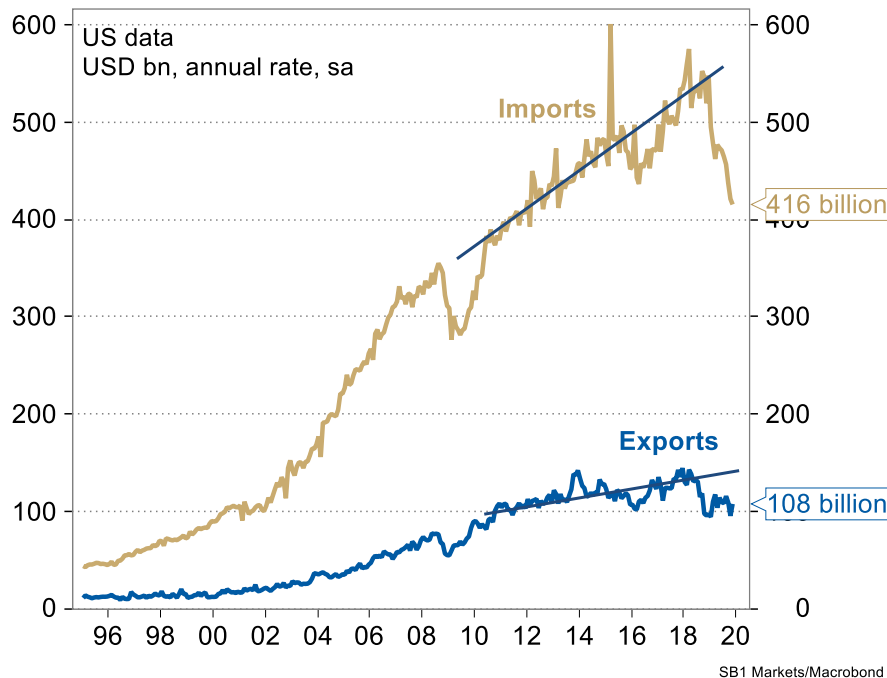
SB1 Markets/Macrobond

- The US deficit in goods (no services in these country stats) vs China equals just above 40% of the total deficit in goods
- The deficit vs Mexico has widened markedly the past 1 ½ year, vs EMU it trending out too (less so the past few months)
- The deficit vs Canada is widening too, recently, close to balance
- The US run a surplus vs OPEC countries, +USD 1 bn surplus in November!
- The deficits in goods vs most other countries have been widening sharply recent years, barring Japan

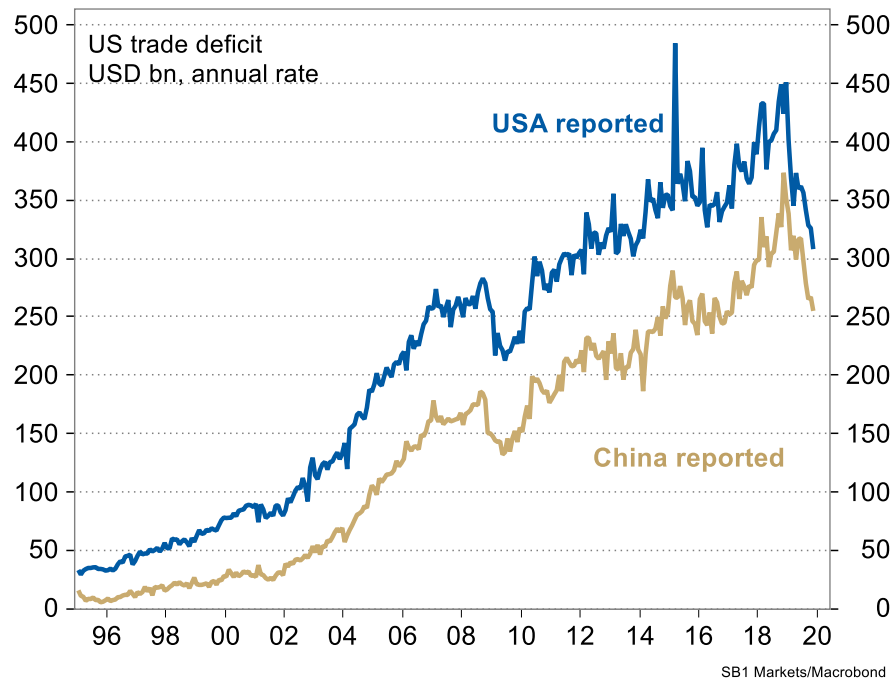
US imports from China have fallen more than exports to China (in USD)

Tariffs have hurt bilateral trade significantly, and China more than US most recently

USA Trade flows with China



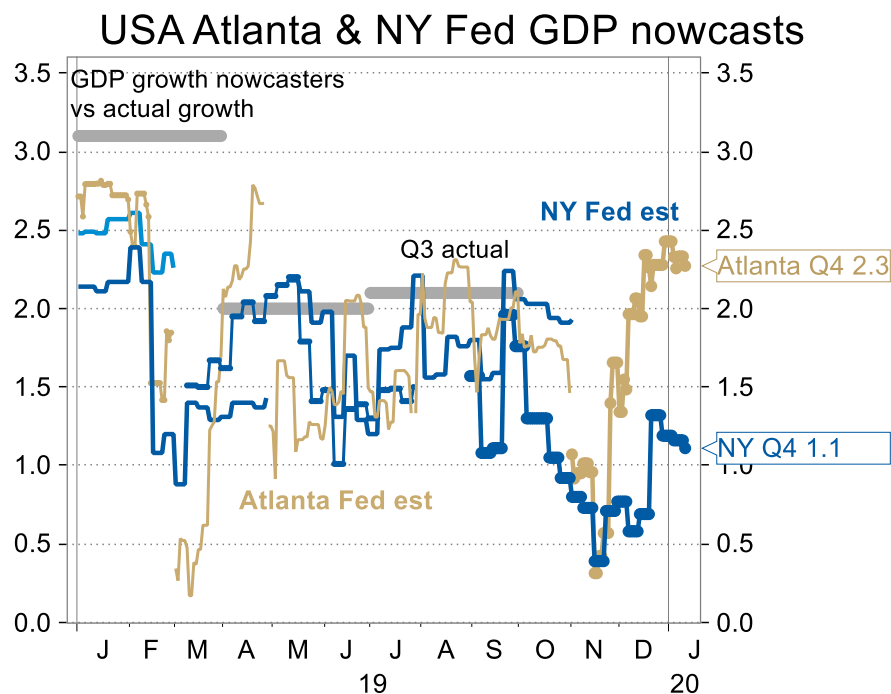
China US trade balance



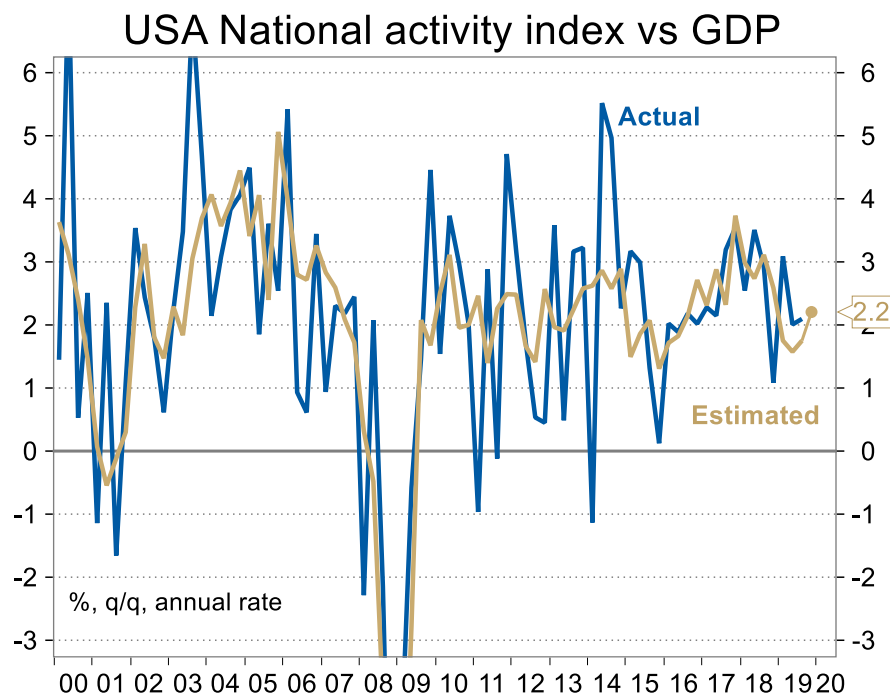
- According to US data, imports from China have fallen by 23%, and exports to China have fallen by 17% since January 2018, before the first tariffs were implemented. Measured in USD, the decline in imports from China is far larger the decline in exports – and the US deficit vs China has fallen by some USD 149 bn from the 2018 peak, to 308 bn now
- China reports a some USD 120 bn decline in the surplus, from the top. China has always reported a smaller surplus vs. US, than the US figure for deficit vs. China. The discrepancy has been stable over time and is very likely due to exports reported FOB and imports CIF included. (Their respective bilateral export/import data are also very similar, no fake news here)

Nowcasters signal 1.1 – 2.3% Q4 GDP growth, Nat. Act. Index at 2.2%

NY Fed's model is still well below Atlanta Fed's nowcaster, National Activity Index spiked in Nov



SB1 Markets/Macrobond

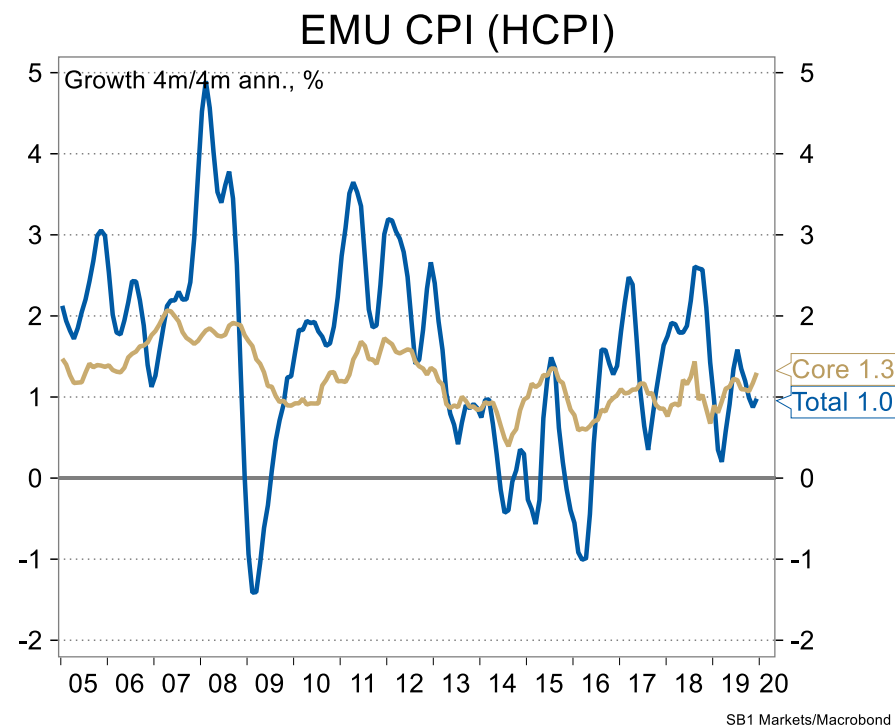
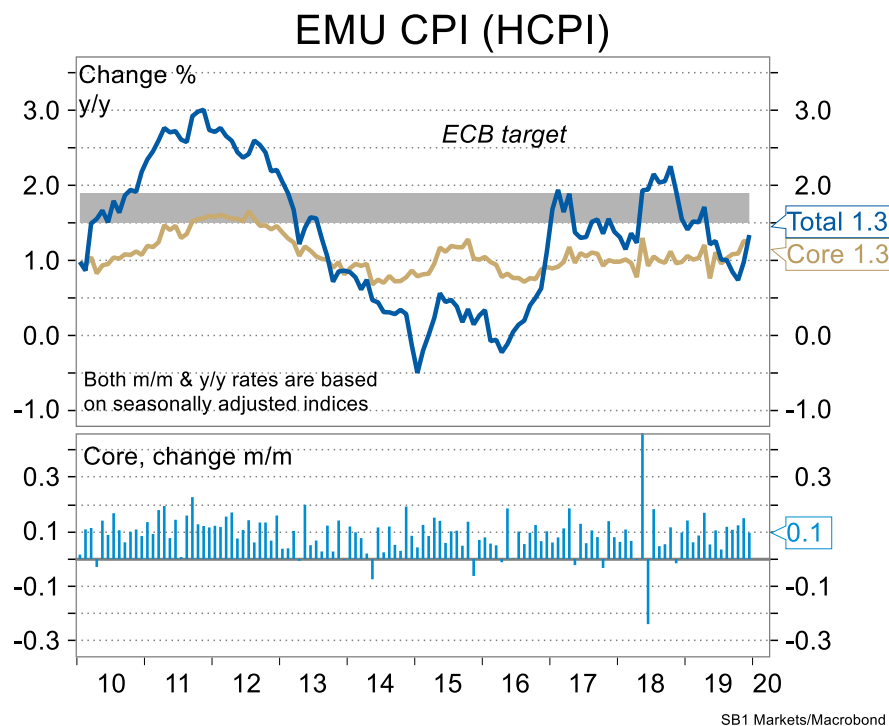


SB1 Markets/Macrobond

- The National Activity Index rose sharply in November and now signals 2.2% growth in Q4, up from 0.3% based on the October print

Core CPI inflations steady at 1.3% in Dec, underlying growth inches up

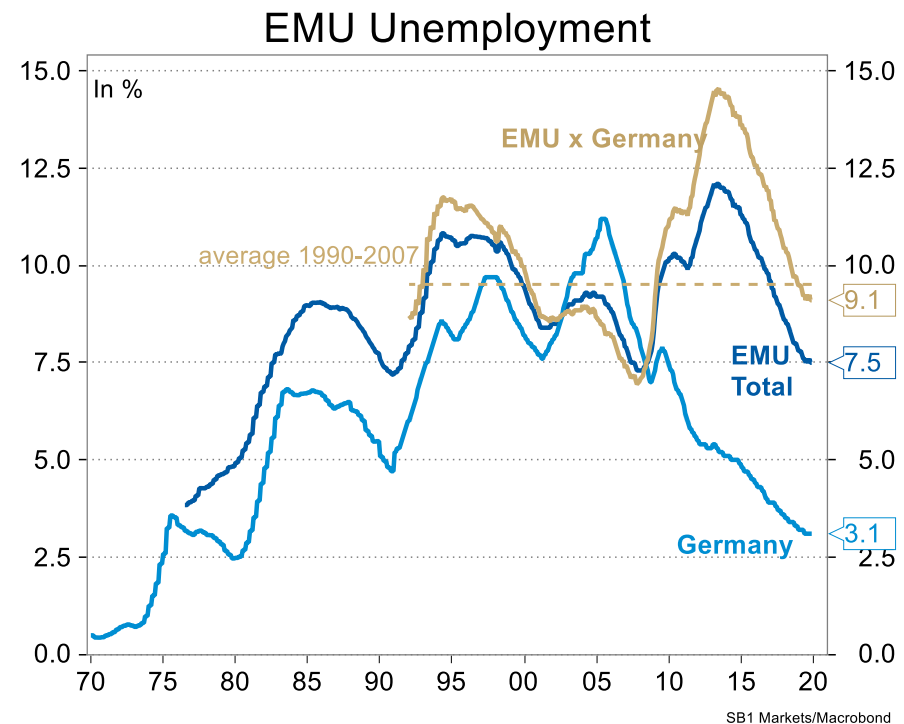
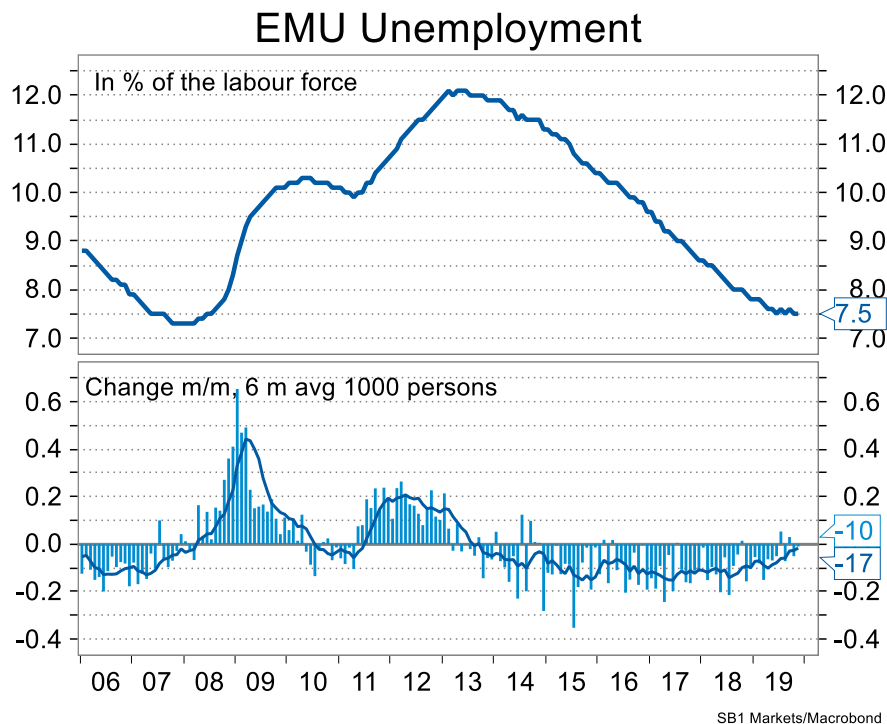
Core CPI up 0.1% m/m, we doubt any upturn will be persistent. Total inflation is rebounding



- Core CPI rose 0.1% m/m in Dec and the annual rate held steady at 1.3%, as expected. Underlying growth (measured 4m/4m at the chart above) has turned up to 1.3%. Yet, is too early to call any inflation upturn, and there are few other signs of an inflation uptick and underlying growth is flat at 1%, we doubt the upward trend is persistent
- Total CPI growth accelerated 0.3 to 1.3%. The oil price decline in the spring has sent total inflation down from above 1.5%, this effect is now changing sign

Unemployment flattening out amid growth slowdown

Unemployment fell just marginally in Nov, stabilized at 7.5% the past 6 months

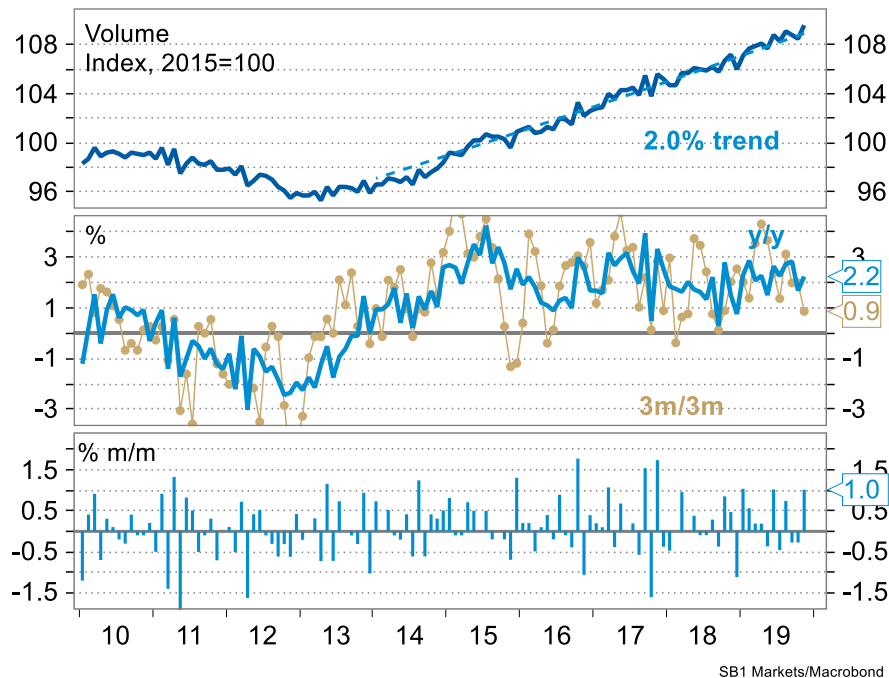


- The unemployment rate was unchanged at 7.5% in Nov. The number of unemployed fell by just 10' and the 6 m average decline has eased to just 17', from 100' one year
- Unemployment in total EMU is well below the 1990-2007 avg, and it has fallen below the average in EMU ex Germany
 - » In Germany, the unemployment rate has been flat at 3.1% since May, the lowest irate in almost 40 years. Other EMU have flattened out too

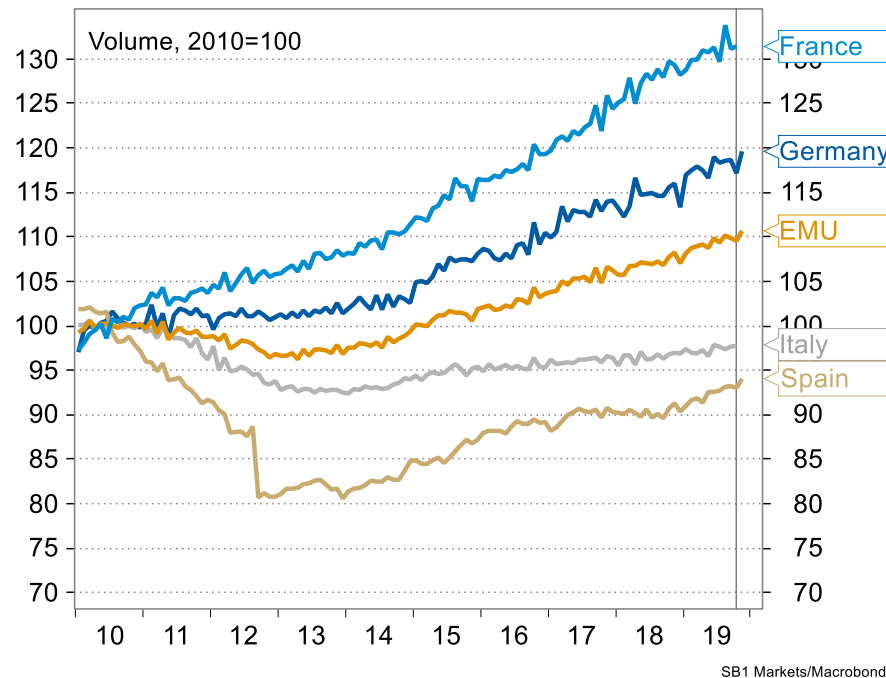
Retail sales bounced back in Nov, thanks to a German lift – trend still OK

Sales spiked 1% m/m and the 2% trend is well intact, suggesting a moderate Q4 growth contribution

EMU Retail sales



EMU Retail sales

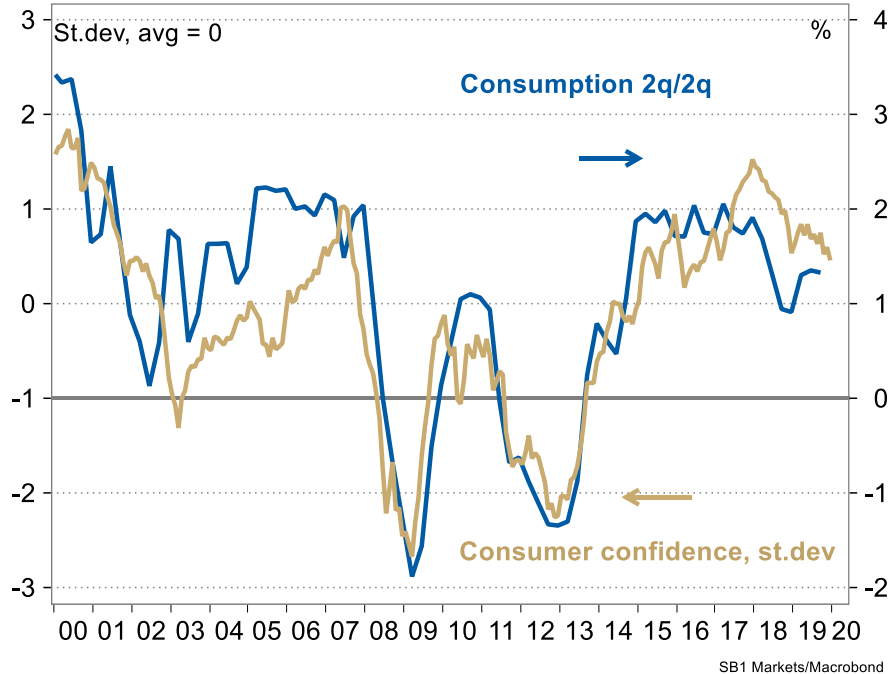


- Retail sales volume rose by 1% m/m in November, 0.4 pp better than expected, and Oct was revised up to -0.3% from -0.6%. The upswing came after two months of slight decline. Sales are up at a stable 2.2% annual speed
 - » Germany reported 2.1% jump, more than reversing the Oct drop (which was smaller than first reported). Sales are trending up, in spite of the soft patch the German economy is on. In France, sales are growing steadily (no Nov data), and Spain is heading up. Italy marginally up, too
- Solid consumption growth adds to signs of a resilient service sector amid the manufacturing dip. Regardless, an acceleration from the current growth path is unlikely, as employment growth and thus, total wages, are slowing somewhat

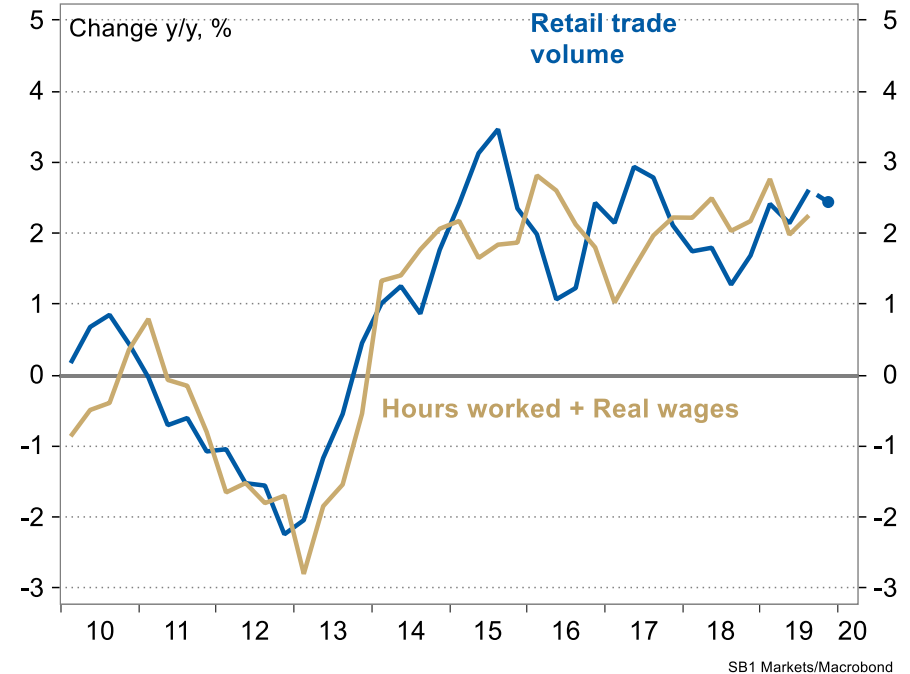
Consumer confidence, income do not signal any acceleration

The upside is probably limited, total disposable income growth is not increasing

EMU Consumer confidence vs consumption



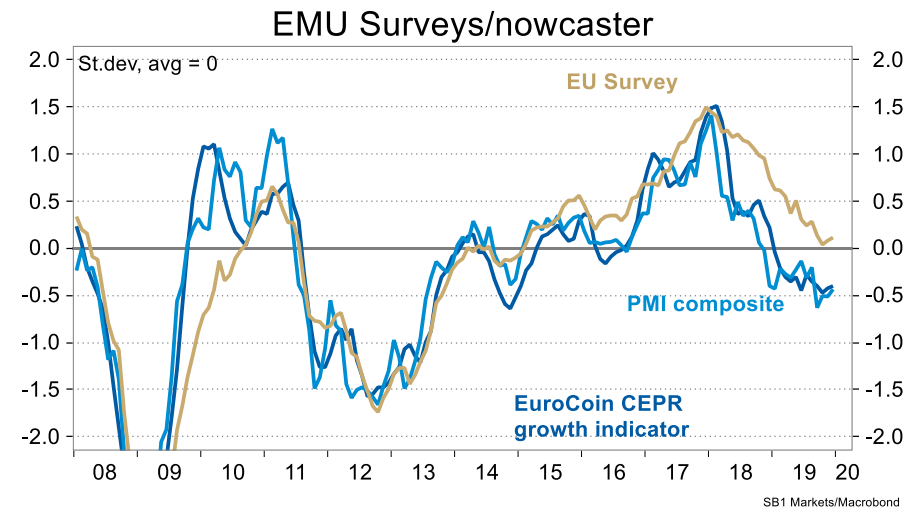
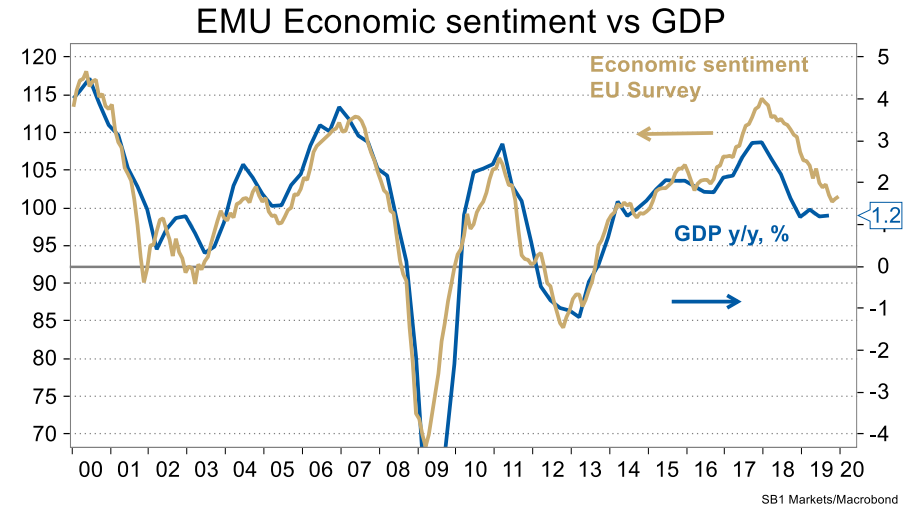
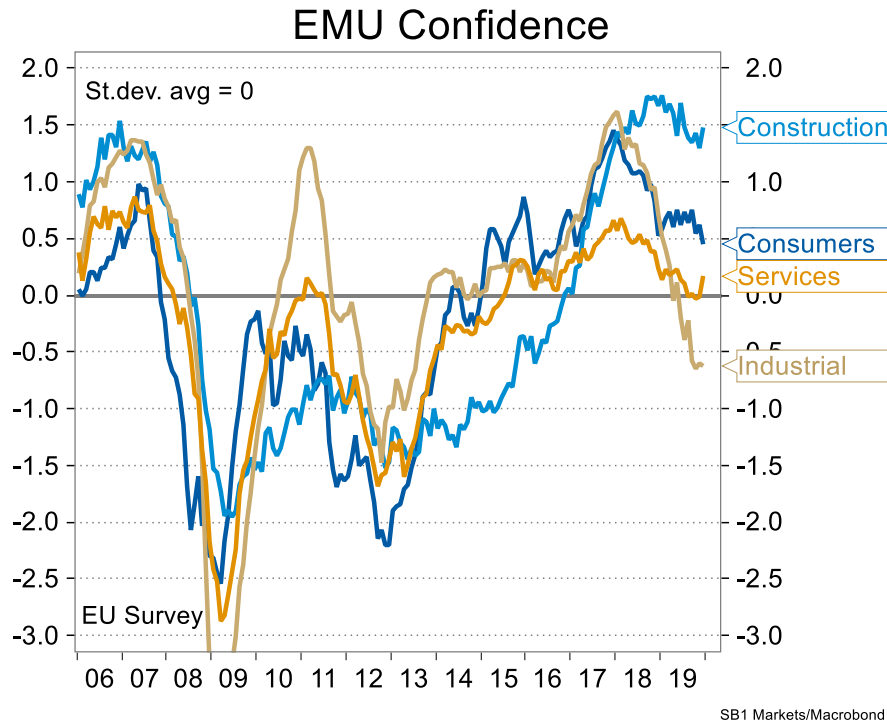
EMU Real Wages vs Retail trade



- Consumer confidence have been sliding just very slowly down recent months, the level is still rather high
- Real wages + hours worked, a good proxy of total disposable income has flattened out the past couple of years slowed somewhat the past quarters (barring a slight upturn in Q3). Total income is expanding at a slower speed than sales

EU economic sentiment stabilized along with other surveys?

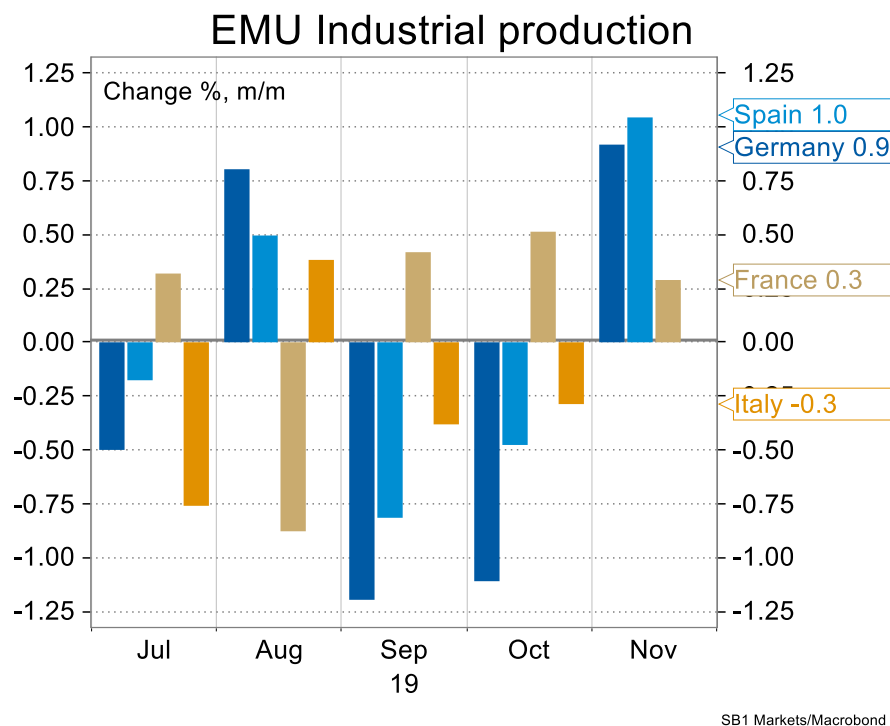
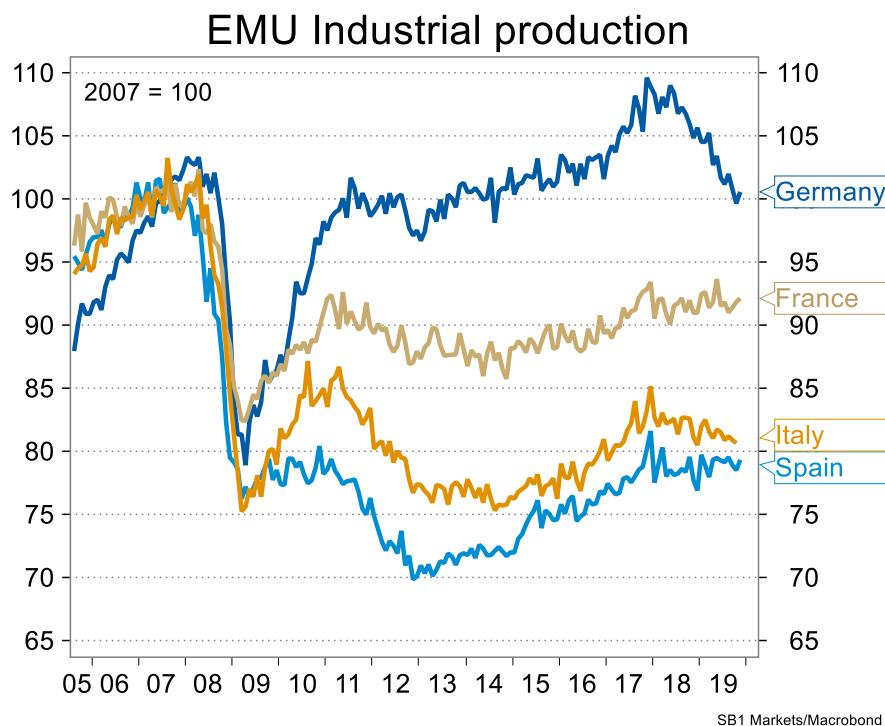
The ECI inched up for the 2nd month in Dec and consumer confidence inched down



- Total sentiment inched up to 101.5 in Dec, marginally above the average level. However, this survey has been far too optimistic vs growth the past two years. The small upturn the past two months adds to signs of a stabilization
 - » The survey is usually lagging the PMI and CERP. The CEPR index rose marginally in Dec, signalling some 0.6% GDP growth
- The ECI confirms the sector outlook which others are reporting; manufacturing still weak but may be bottoming out. Services picked up in Dec, at a decent level. Construction still elevated. Consumers are still quite upbeat, although the CCI is trending down

Industrial production probably up in November but trend still weak

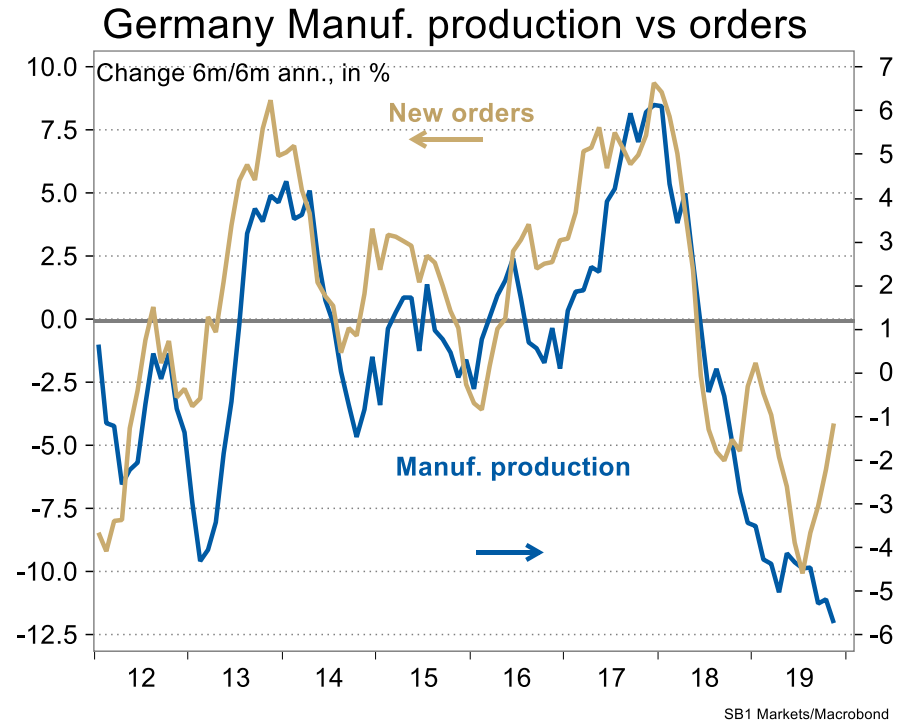
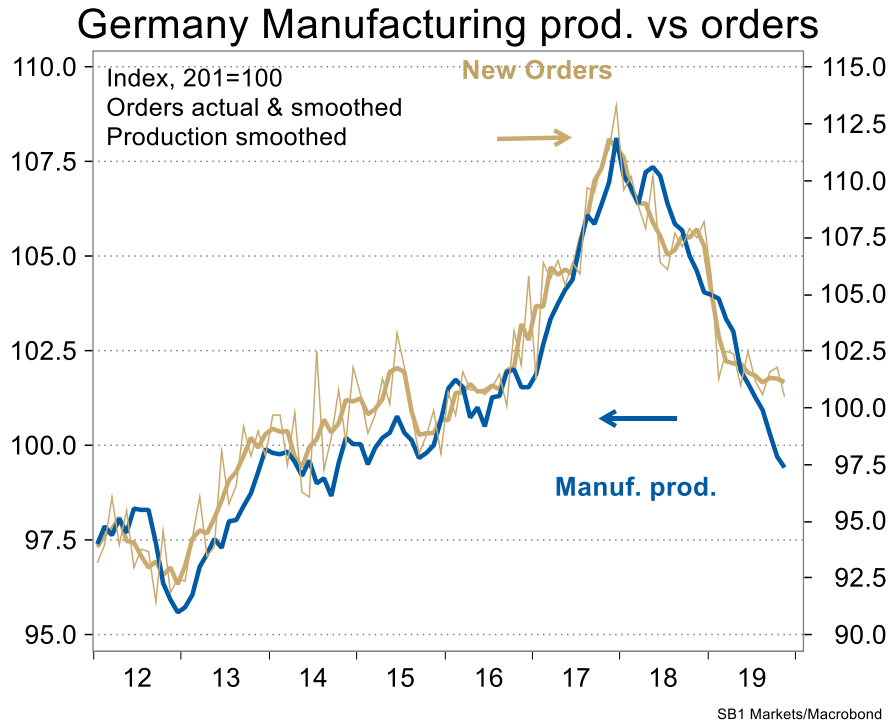
Production turned up in Germany, Spain and France, we estimate +0.5% m/m in total Eurozone



- EMU industrial production (ex construction) rose by 0.5% in November, according to our estimate, thus, reversing the October decline. Production is trending down but may stabilize in Q4 (if zero growth in Dec, the Q4 speed will be -0.1%)
 - » Production rebounded softly in Germany, after two months of steep decline. The trend is straight down and the 'hard data' do not signal a recovery. In Spain, production jumped, and France rose moderately. Netherland and Ireland (very volatile) declined
 - » Other major countries are so far holding up better than Germany but not are shining. Germany is down 8% from the 2018 peak. France has stagnated, Italy slides down slowly, while Spain is still heading very modestly up?
- Manufacturing PMI has stabilized at a low level, does not signal any fast recovery, but the contraction may have bottomed

Manufacturing orders keep declining – at a slower pace

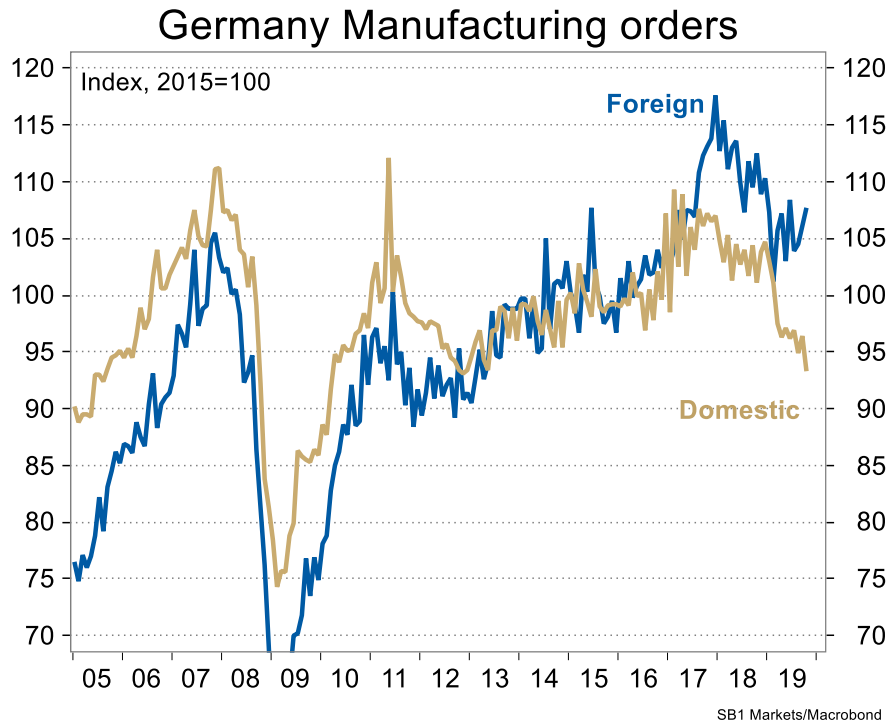
Orders point to a stabilization in production, even as November was a disappointment



- Total manufacturing orders fell by 1.3% m/m in Nov, expected up 0.2%. Orders have been declining rapidly the past year, along with production. Now, the manufacturing contraction may be bottoming out, at least that is what the underlying growth of orders is signalling. Measured 6m/6m, the downward speed has slowed from 4% to 1%
- Orders and production are usually quite well correlated, production should soon stabilize
- Domestic orders are tumbling, while foreign orders have stabilized, check next slide

Domestic orders are plummeting, foreign orders are recovering

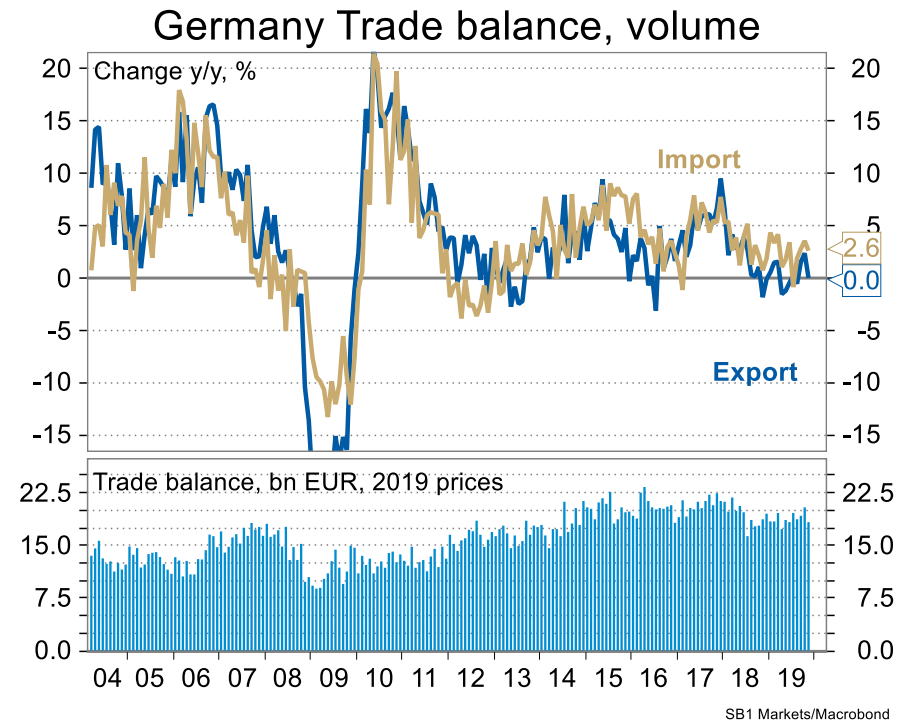
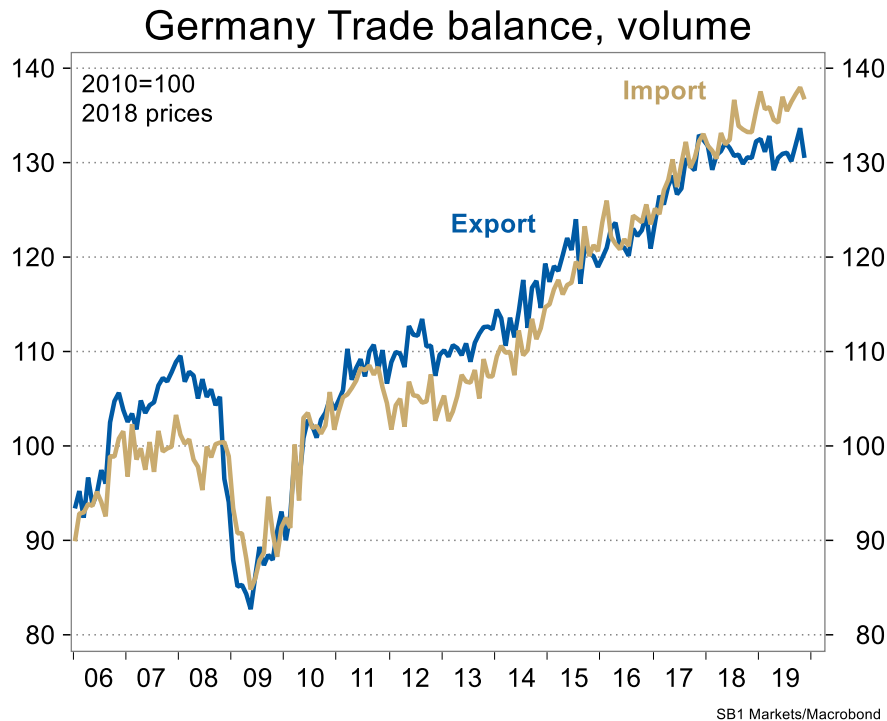
Orders from within Germany are falling steeply, export orders have stabilized, with actual exports



- Soft domestic demand is a reflection of both a mature German growth cycle, challenging adjustments to auto emission standards and also impacts from uncertainties regarding the future global trade regime
- Export orders from within EU are turning up, orders from other countries are sliding down

Exports down in Nov, trending flat, imports trending up

No German 'collapse'; Exports have flattened out but are not declining. Imports heading up

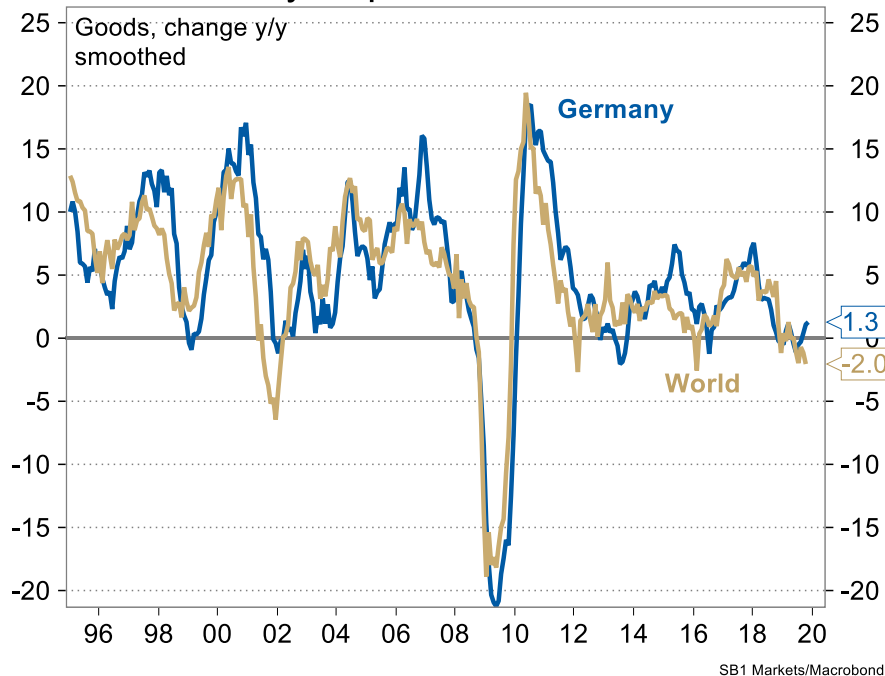


- Export volumes dropped by 2.4% m/m in November, reversing the prior 2 months' increase. Still, exports probably rose strongly in Q4 and the trend is not worse than flat. Measured y/y, exports have stalled
 - » Manufacturing production is 'weaker' than exports, down 4% y/y. However, manufacturing production is usually expanding a tad slower than exports and the current decline is not that much larger than 'usual' vs exports
- Import volumes fell by 0.9%, trending up, and the annual rate is + 2.6%. No collapse in domestic demand! So far in Q4, imports have increased slightly more than exports, thus, the net trade contribution to Q4 GDP growth is off to a negative print
- The German trade surplus is slowly shrinking, equalling approx. 6% of GDP, from 8% in 2016

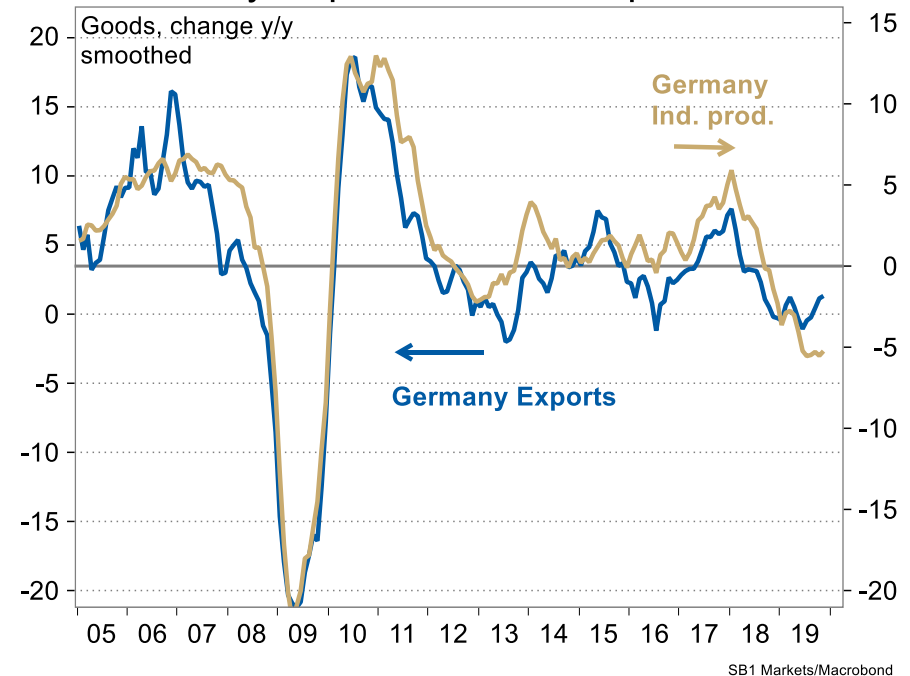
Guess what, German foreign trade is very closely correlated to...

.. global trade. The past year, both have been softening amid trade uncertainties and a mature cycle

Germany Exports vs Global Trade



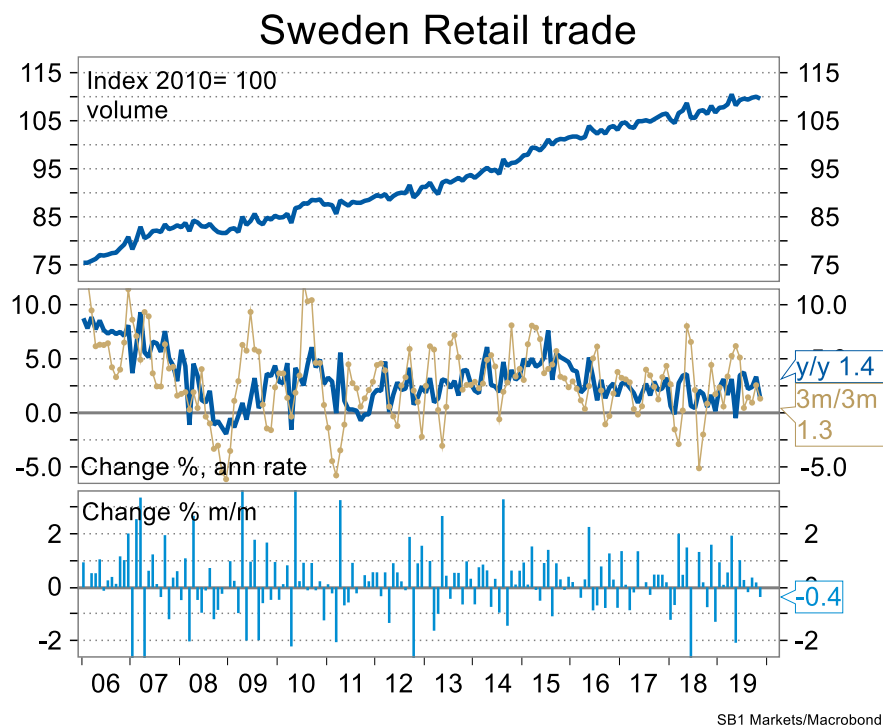
Germany Exports vs Manuf. production



- Both German foreign trade (and thus global trade) is highly correlated to German industrial production, though with production growing at a slower pace. In addition, production is a tad more volatile than exports
- In sum, the current decline in production is slightly harsher than 'normal' vs exports, not more than we have seen several times before
- The reason is that domestic demand weakens in line with global demand (or some inventories are emptied or imports have taken a larger market share). Given signs of an easing manufacturing downturn from PMIs/other surveys, some hope??

Retail sales slow, slowly?

Sales fell 0.4% m/m in Nov, the underlying pace cooled to 1.3%. Risks are tilted to the downside



- Retail sales volume fell 0.4% m/m in Nov, weaker than expected. Sales are up 1.3% measured 3m/3m annualized and the speed so far in Q4 is rather modest. Still, the growth path is not far below the trend growth since 2015 is intact. Retail sales growth has been substantially stronger than in Norway, which we find strange...
- Given the recent in the Swedish economy, increasing unemployment and soft consumer confidence, the consumption outlook is not upbeat. However, we do not expect a rapid setback either

Highlights

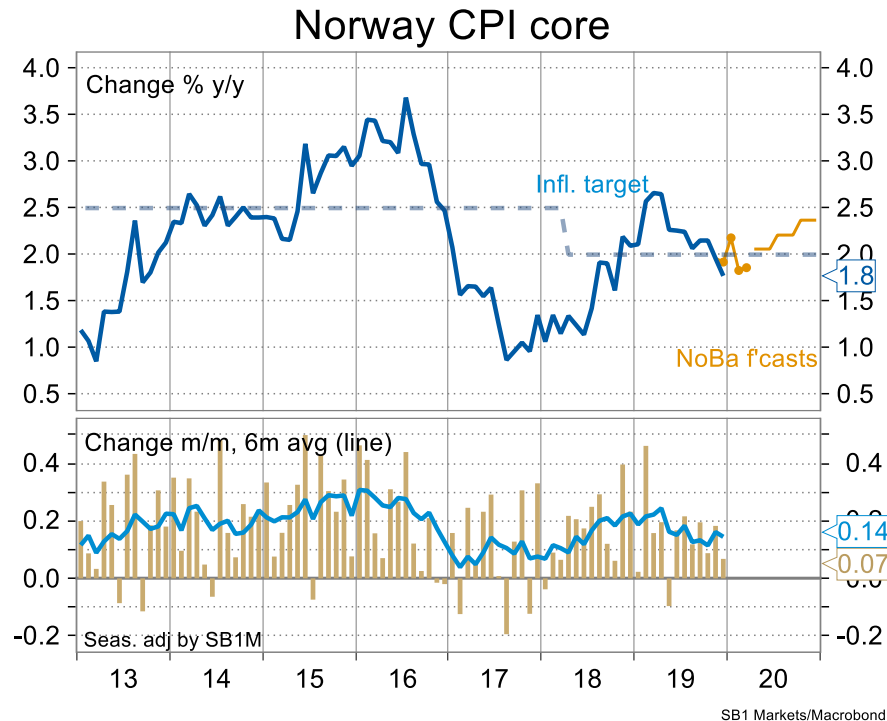
The world around us

The Norwegian economy

Market charts & comments

Core inflation ticked down to 1.8% in Dec, just below expectations

Core CPI inflation has softened since early 2019, bottoming now? Total inflation slowed to 1.4%



- CPI-ATE (ex. energy and taxes) rose by 1.8% y/y in December, down from 2.0% the prior month. Core inflation came in 0.2 pp below consensus' f'cast and 0.1 pp below ours and Norges Bank's estimates
 - » CPI-ATE rose 0.1% m/m (seas adj), below the 6 m avg
 - » No major surprises this month; airline ticket prices and furnishing dragged monthly inflation down
 - » Imported goods are up just 0.6% y/y, the NOK depreciating points to somewhat higher imported inflation. Domestic goods & serv. up 2.4%, due to wage inflation above 3%, slow productivity growth and capacity to increase prices, as demand is not weak
- Total CPI growth slowed to 1.4%, from 1.6%, 0.2 pp lower than expected. Annual inflation is dragged down by electricity prices, which are down 10% y/y
- **Implications**
 - » Core inflation is close to the price target, and our inflation model suggests an uptick to above the target the coming months. Norges Bank's f'casts are well within reach. We anyway expect the Bank to keep interest rates on hold for a while
 - » No significant market reaction, NOK depreciated some 0.2% following the report but soon recovered the marginal loss

Marginally lower inflation than expected in Dec – no big outliers

Airline tickets, furnishing and recreation prices came in slightly below our f'cast

Dec-19	Weight	Change m/m, seas. adj			Change y/y			Contribution, pp		
		Out- come	SB1M f'cast	Dev. pp	Last month	Out- come	SB1M f'cast	m/m	y/y	Dev. vs f'cast
CPI ATE	%									
Food, non alc bev	12.5	0.2	0.2	0.0	-0.1	0.3	0.3	0.02	0.04	0.00
Alcohol, tobacco	3.9	0.2	0.2	-0.0	2.8	2.6	2.6	0.01	0.10	-0.00
Clothing, footwear	4.9	0.0	0.1	-0.1	0.6	0.6	0.6	0.00	0.03	-0.00
Housing x. energy	20.1	0.3	0.2	0.1	1.9	2.0	1.9	0.05	0.40	0.02
Furnishing	6.6	-0.3	0.3	-0.5	3.0	1.8	2.3	-0.02	0.12	-0.03
Health	3.2	-0.2	0.3	-0.4	3.4	3.0	3.5	-0.01	0.10	-0.01
Transp. ex. gas, airl. tick	12.0	0.2	0.2	0.0	1.9	1.7	1.7	0.02	0.21	0.00
Airline tickets	1.2	-2.7	0.2	-2.9	5.5	3.0	6.6	-0.03	0.03	-0.03
Communication	2.2	0.1	0.3	-0.2	6.0	6.2	6.4	0.00	0.14	-0.00
Recreation, culture	11.9	-0.1	0.2	-0.3	2.2	1.9	2.0	-0.01	0.22	-0.03
Education	0.5	-	-	-	3.5	3.5	3.5		0.02	0.00
Restaurants, hotels	6.2	0.0	0.2	-0.1	2.6	2.3	2.4	0.00	0.14	-0.01
Other	8.8	0.1	0.2	-0.1	1.7	1.6	1.7	0.01	0.14	-0.01
CPI-ATE	94	0.1	0.2	-0.1	2.0	1.8	1.9			
<i>Norges Bank est.</i>			0.2		2.0		1.9			
Imported	33	0.0	0.1	-0.1	0.8	0.6	0.7	0.00	0.19	-0.04
Domestic	61	0.1	0.2	-0.1	2.6	2.4	2.1	0.06	1.48	-0.06
Energy, housing	4	-3.4	-2.5	-0.9	-4.1	-10.4	-9.2	-0.13	-0.40	-0.03
Energy, transport	4	-1.9	0.0	-1.9	-1.7	2.4	4.4	-0.07	0.09	-0.07
CPI Total	101	0.0	0.1	-0.1	1.6	1.4	1.5	0.00	1.38	-0.07

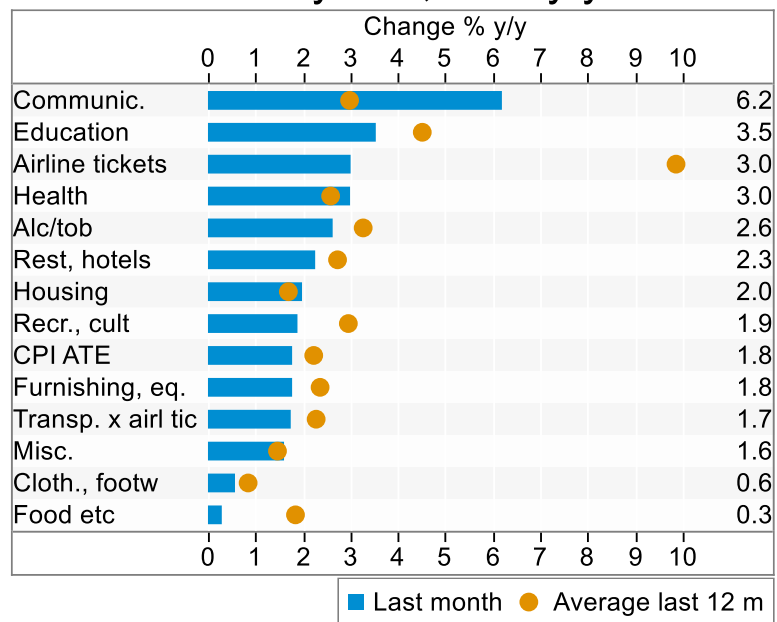
- Prices on furnishing fell 0.3% m/m, we expected a 0.3% increase
- Airline ticket prices are ridiculously volatile. This time prices came down 2.7% m/m, we expected a marginal increase
- Prices on recreation and culture were a tad weaker than we projected
- CPI-ATE increased by 0.1% m/m and 1.8% y/y, 0.1 pp below our f'cast, and 0.2 pp below consensus' f'cast on the annual rate**
- In spite the weak NOK, imported prices are increasing much less than domestic, up just 0.6% y/y vs domestic at 2.4%
- Electricity prices are down 10.4% y/y, dragging headline inflation down by 0.4 pp
- Total inflation slowed to 1.4%, our f'cast was 1.5%

Monthly changes are seasonally adjusted by SB1 Markets. The weighted sum of the components does not necessarily sum exactly up to the total. Norges Bank m/m s.a. estimate is implied, calculated by us. Sources: SSB, Norges Bank, SB1 Markets calculations

Housing and recreation/culture prices are boosting core annual inflation

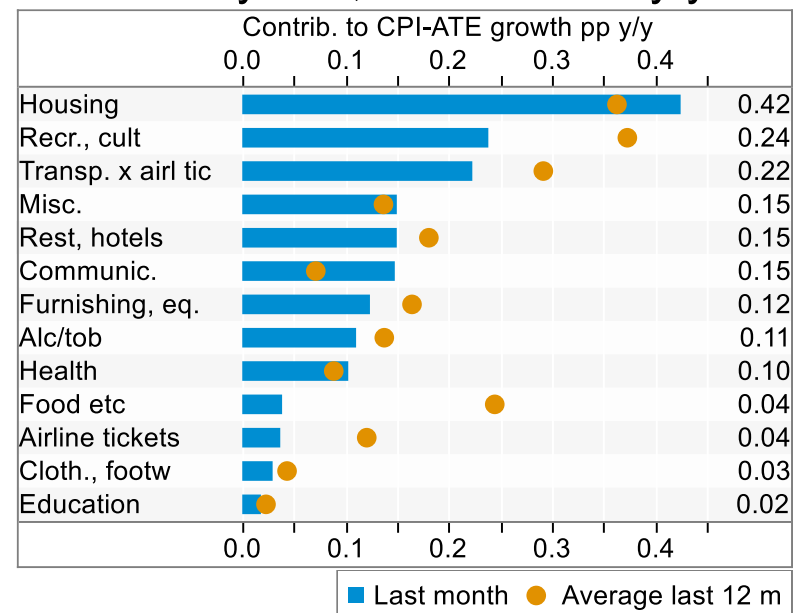
Prices are increasing in all sectors but slowing in 10 of 14

Norway CPI, core y/y



SB1 Markets/Macrobond

Norway CPI, core contrib. y/y

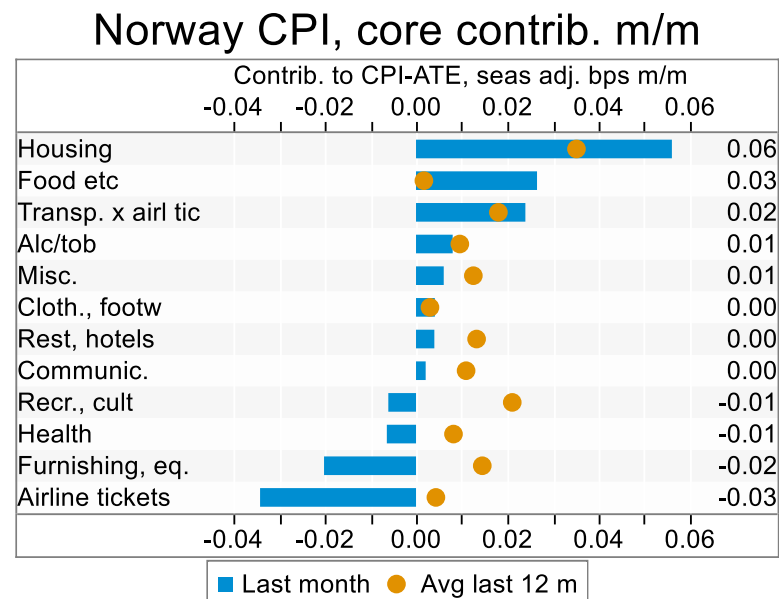
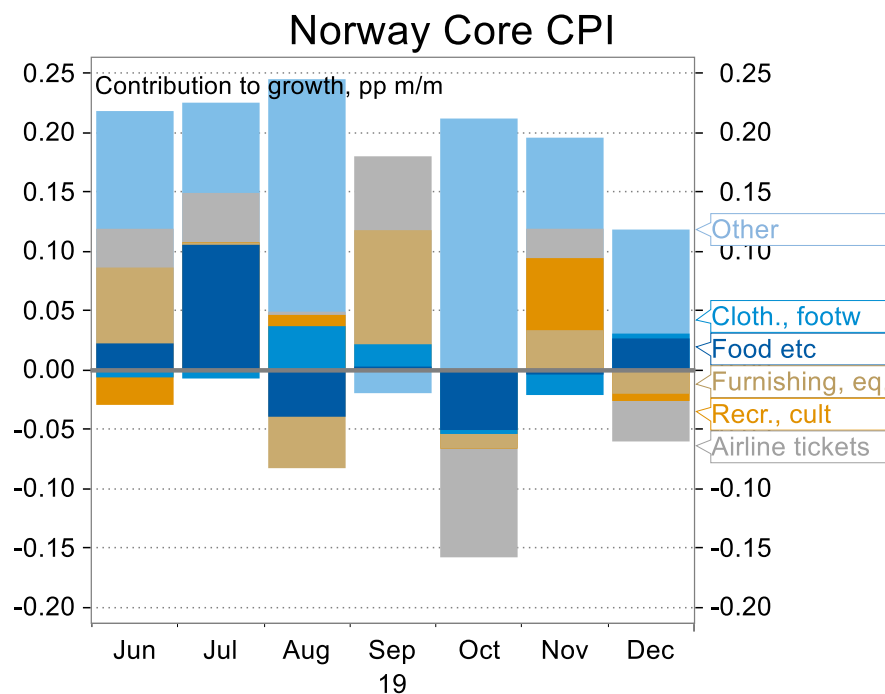


SB1 Markets/Macrobond

- Housing (rent etc) are lifting annual inflation by 0.4 pp, by far the biggest contribution

Housing, food and transport lifted prices in December

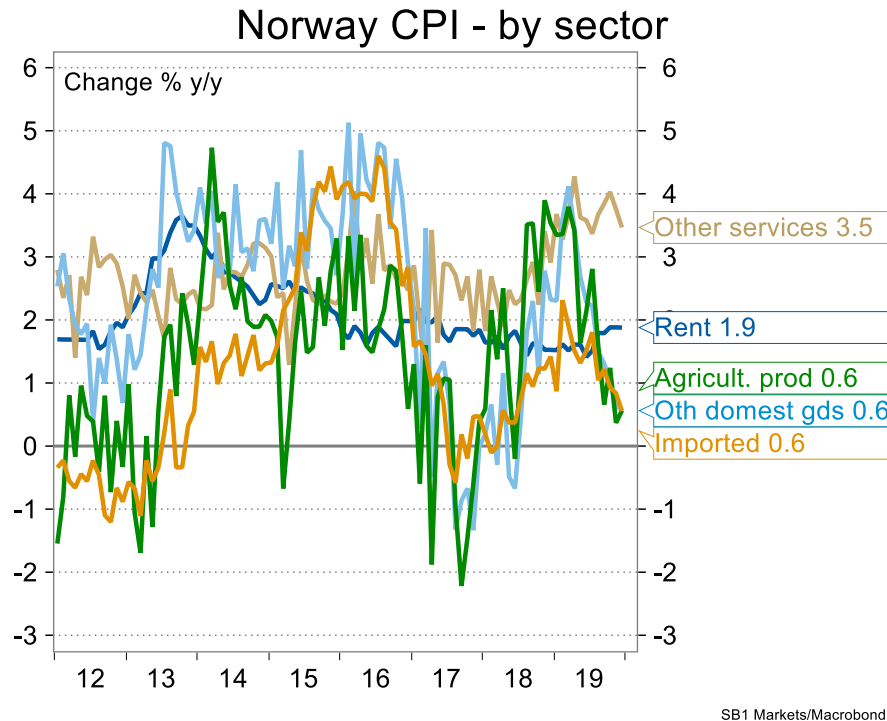
.. While lower prices on airline tickets and furnishing contributed on the downside



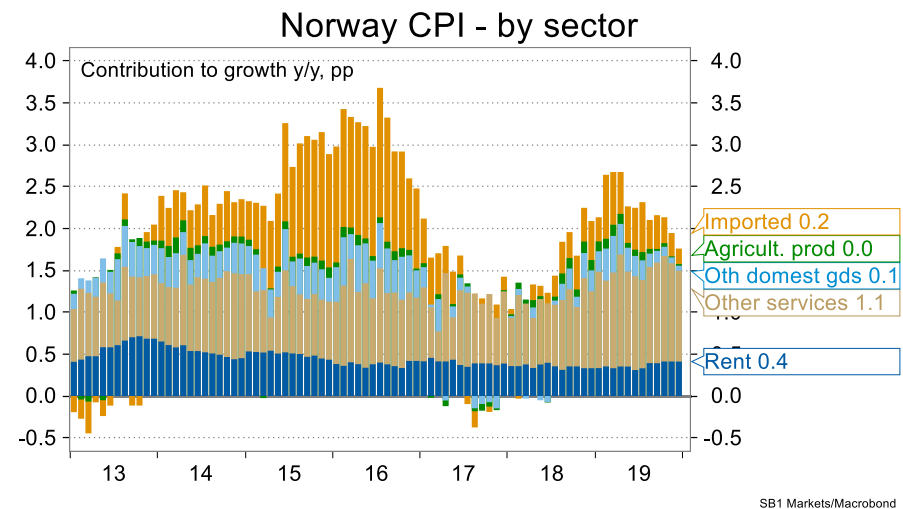
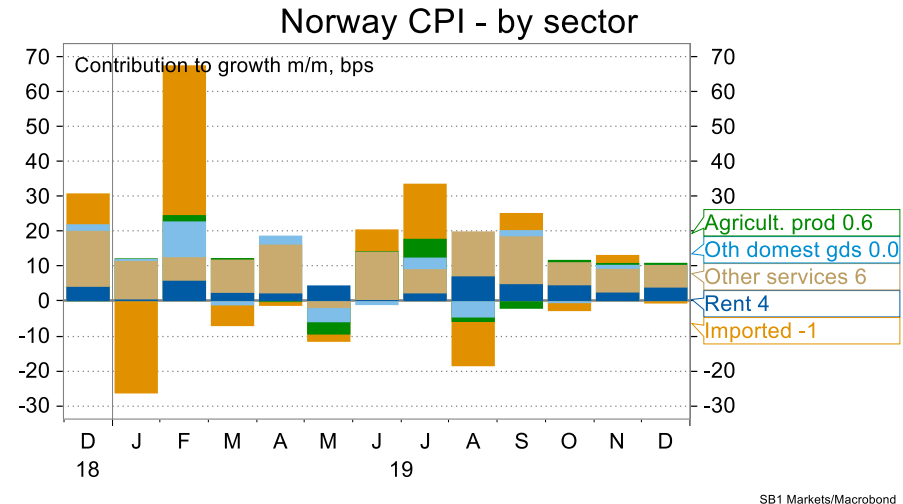
- Prices rose m/m in 8 sectors in Dec, declined in 4

Imported inflation slows, domestic services has soared, now at 3.5%

Domestic services (culture, travelling etc) are boosting inflation, while domestic goods are slowing



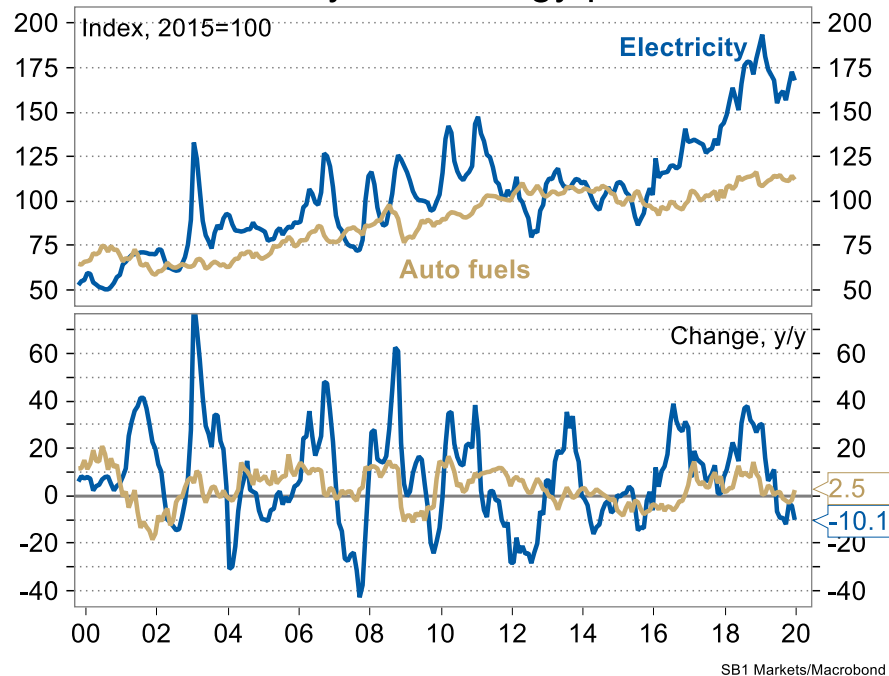
- Price growth in services is up 3.5% y/y, after accelerating through 2018. Other domestic goods and imported goods are slowing rapidly. Rent inflation is picking up, to 1.9% y/y
- The NOK depreciation through H2 2019 has not yet lifted import prices, our model suggests an upturn but a much more modest impact through the 2014-2016



The negative impact from electricity prices has more to go?

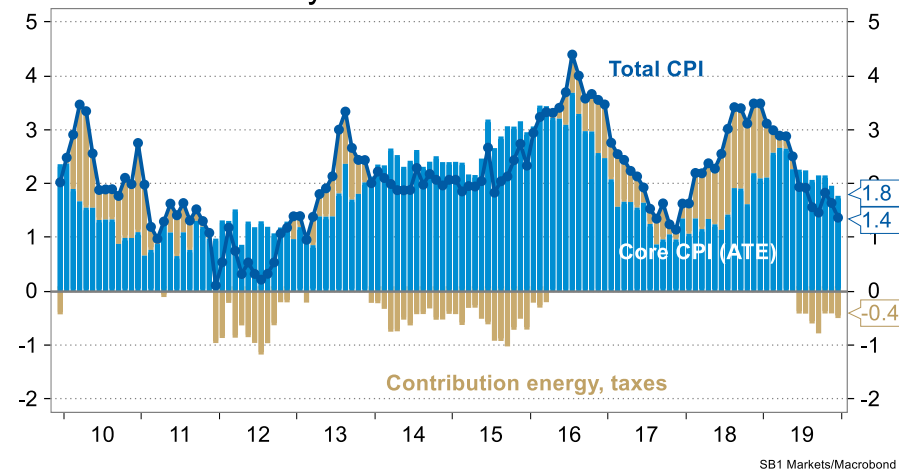
Electricity prices are not the way down again – and future prices have fallen further

Norway CPI Energy prices

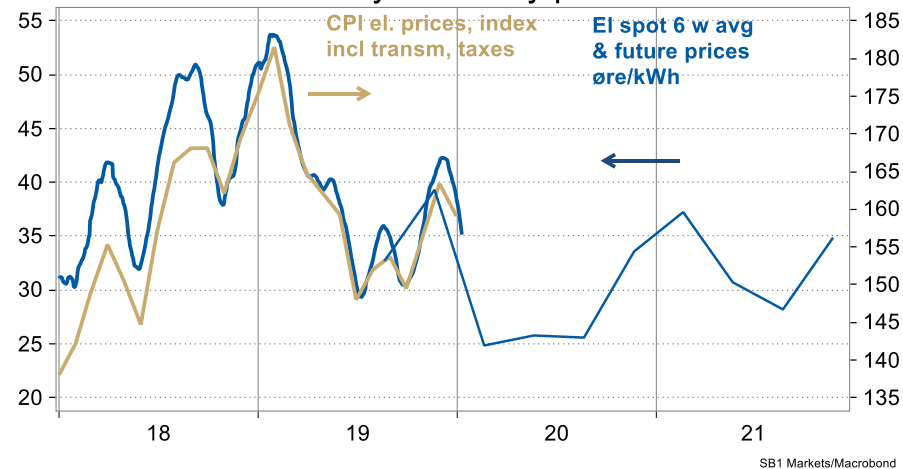


- In 2017/18 the surge in electricity prices lifted the headline CPI, reducing real disposable income significantly. This effect was put in reverse in 2019, as electricity prices fell sharply. Prices rose (as usual) during the autumn, but is now falling again (much rain/snow, mild weather)
 - » The forward prices have fallen too, signalling a further downside drag on overall CPI inflation (but not larger than today)
- Auto fuel prices are close to neutral vs. headline CPI

Norway Headline & core inflation



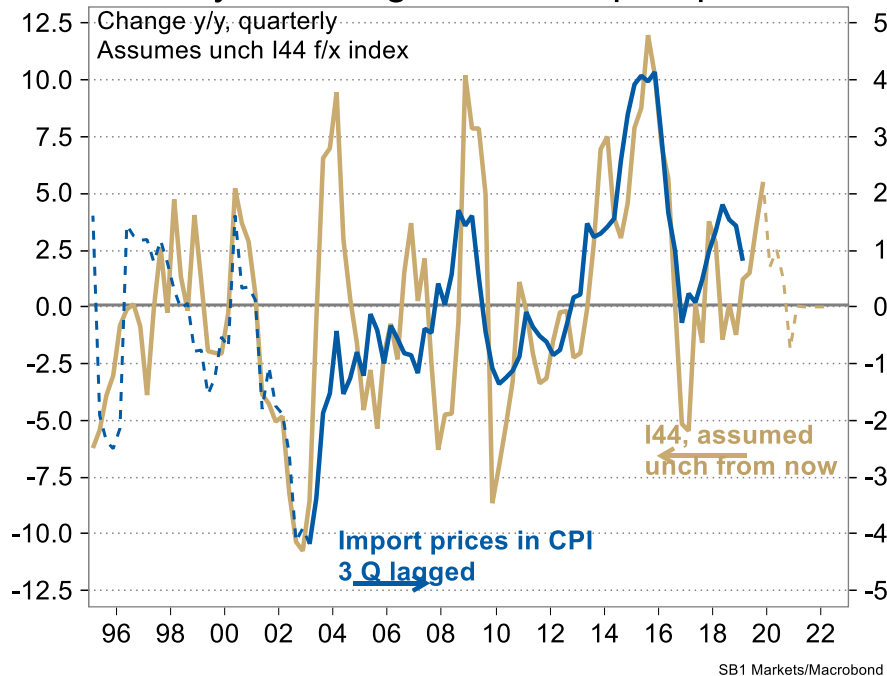
Norway electricity prices



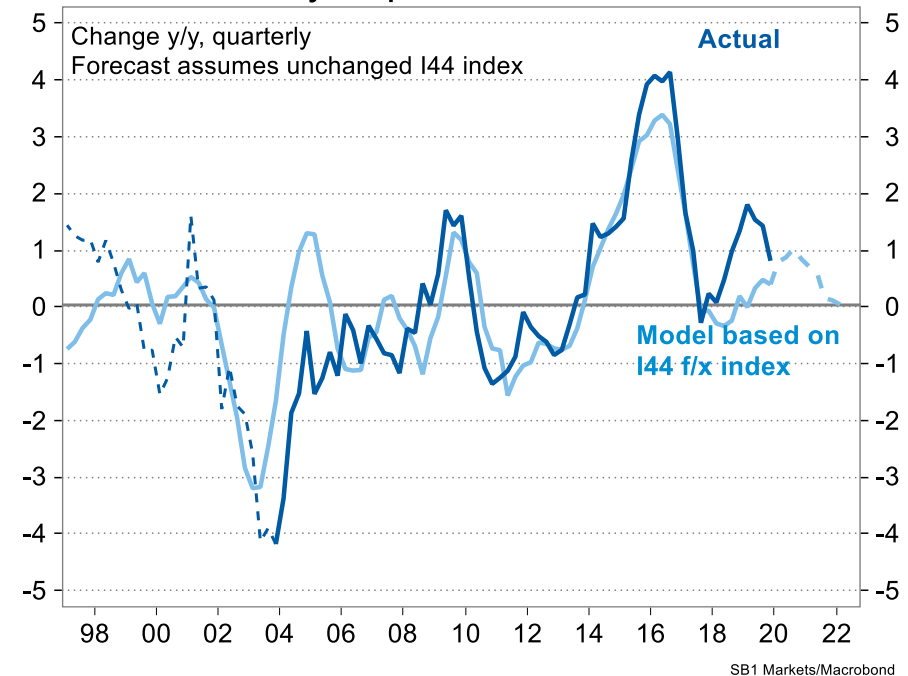
We expect a slightly larger impact from the weak NOK

The model indicates imported inflation up to 2% the coming months, vs 1% now

Norway Exchange rate & import prices



Norway Import CPI, f/x-model

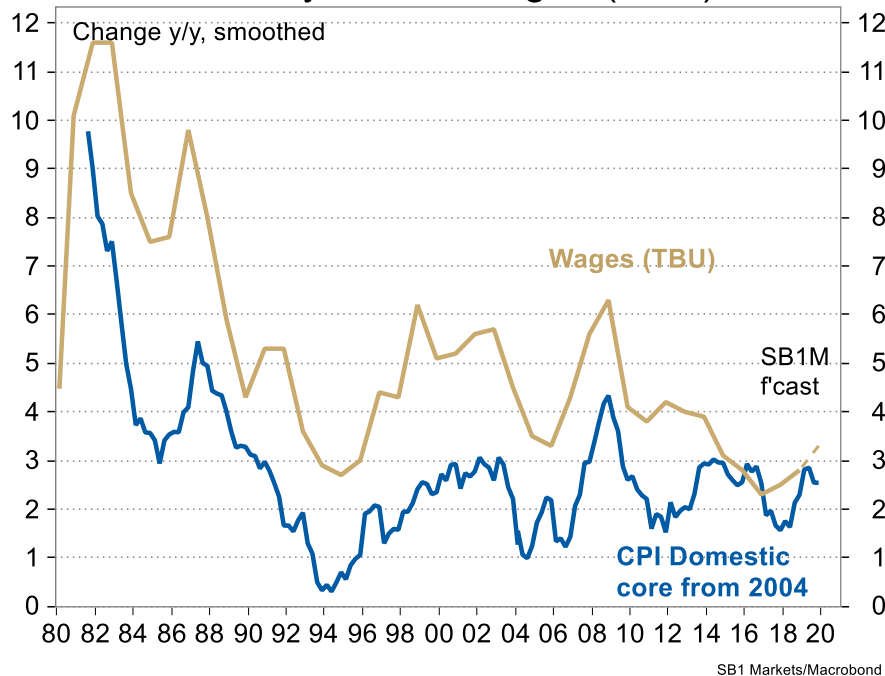


- In general, retail demand is so weak that it does not seem likely that the retailers are able to push up their margins like they have before. It does not seem likely that prices are accelerating abroad

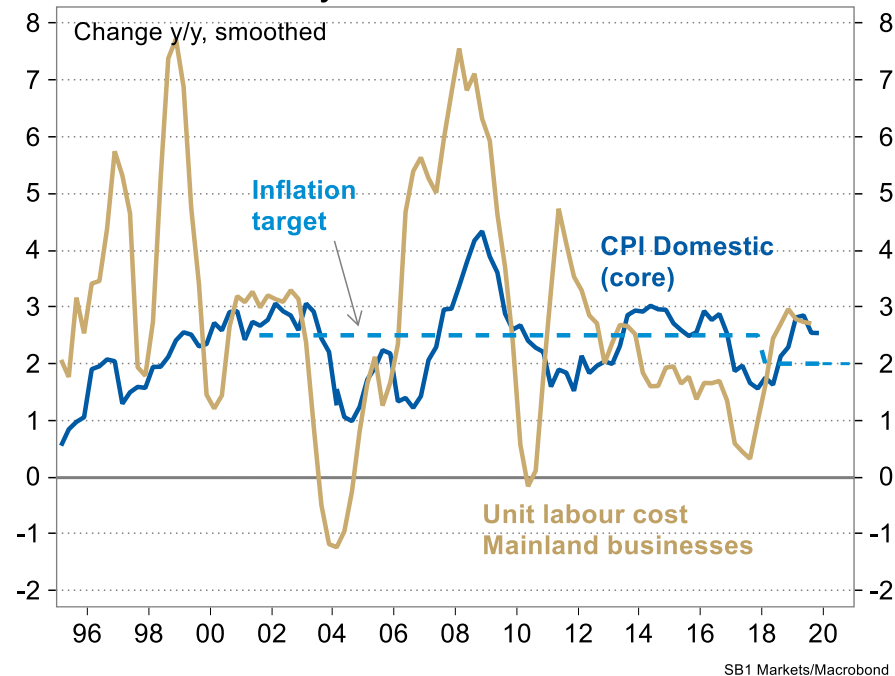
Domestic costs: Wage inflation turning up, cost inflation above infl. target

Wage inflation is on the way up. Unit labour cost up some 2.7% y/y in Q3

Norway CPI vs wages (TBU)



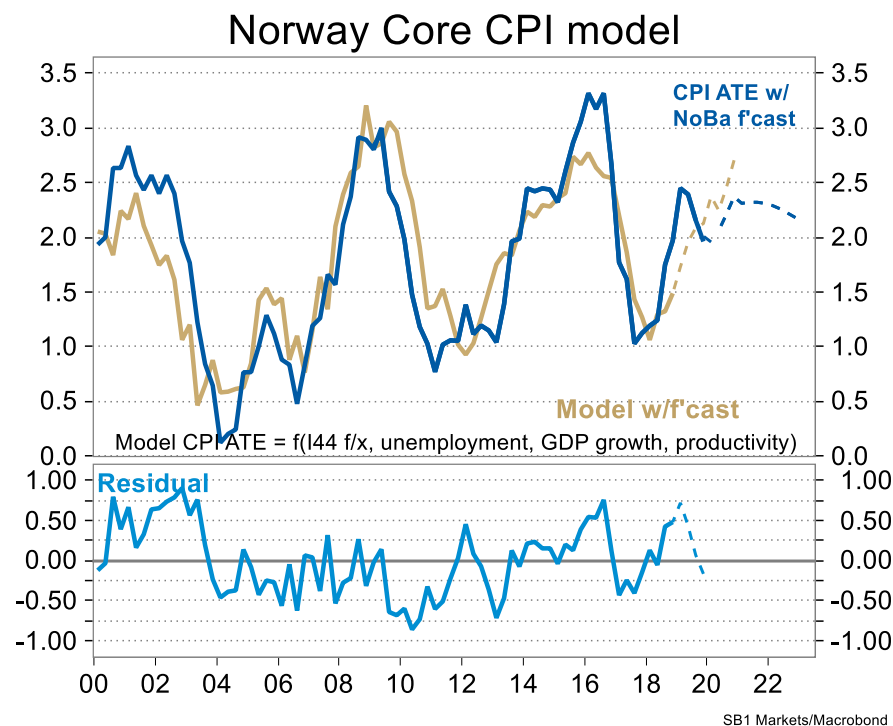
Norway CPI vs labour costs



- Wage inflation is increasing and is now approaching 3%, will probably edge up to 3.2% in 2019
- Productivity growth remains meagre
- (Underlying) Unit labour costs inflation up to 2.7% y/y in Q3 (smoothed), a marginal slowdown from Q2 and unchanged from one year ago – and from below 1% in 2017

The outlook: Core CPI inflation set to increase moderately the coming year

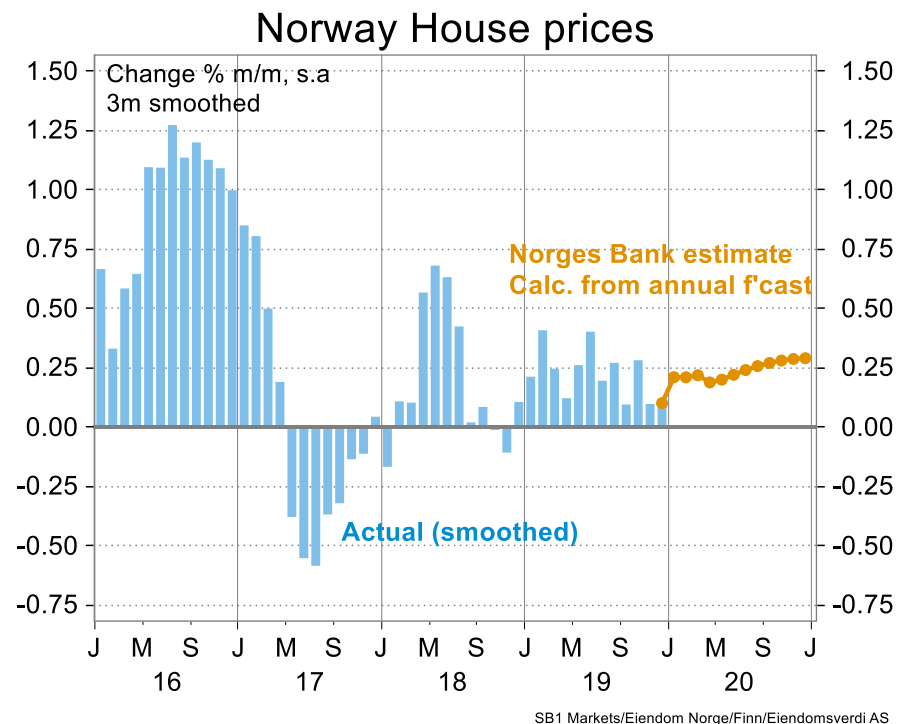
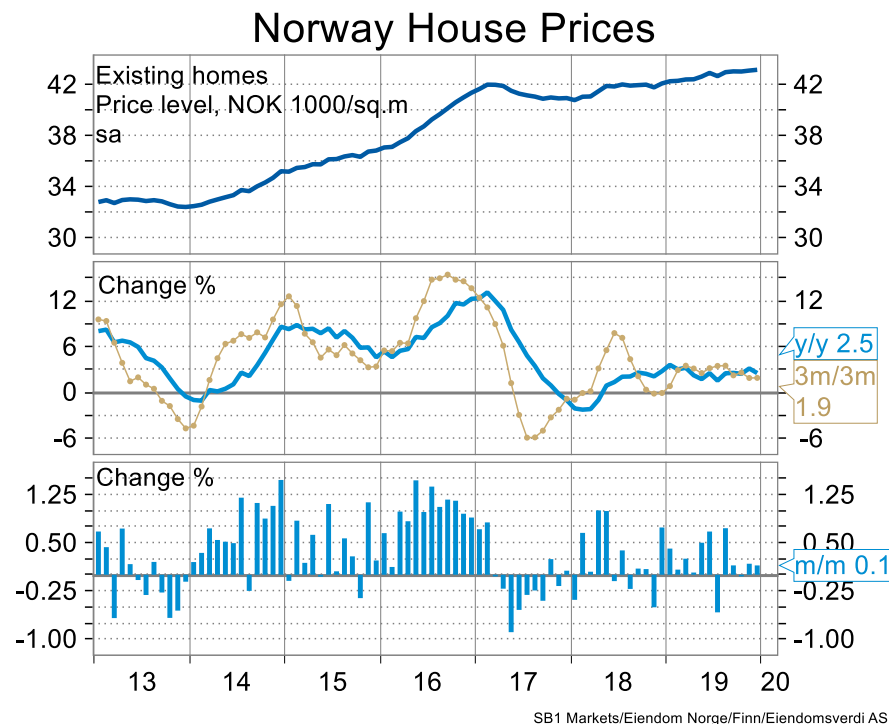
Actual inflation close to the model forecast now – it suggest some 0.3 pp increase through 2020



- Core CPI growth slowed to 2.0% in Q4, just 0.1 pp below the model f'cast
- The model, which includes unemployment, GDP and the NOK, signal a modest uptick in inflation the coming year, up to 2.4% in Q1 2020 and to 2.7% in Q4 2020
- Norges Bank expects core CPI to be running at 2.2% in 2020 (December Monetary Policy report), down from 2.3% in 2019

House prices keep rising moderately, in a well balanced market

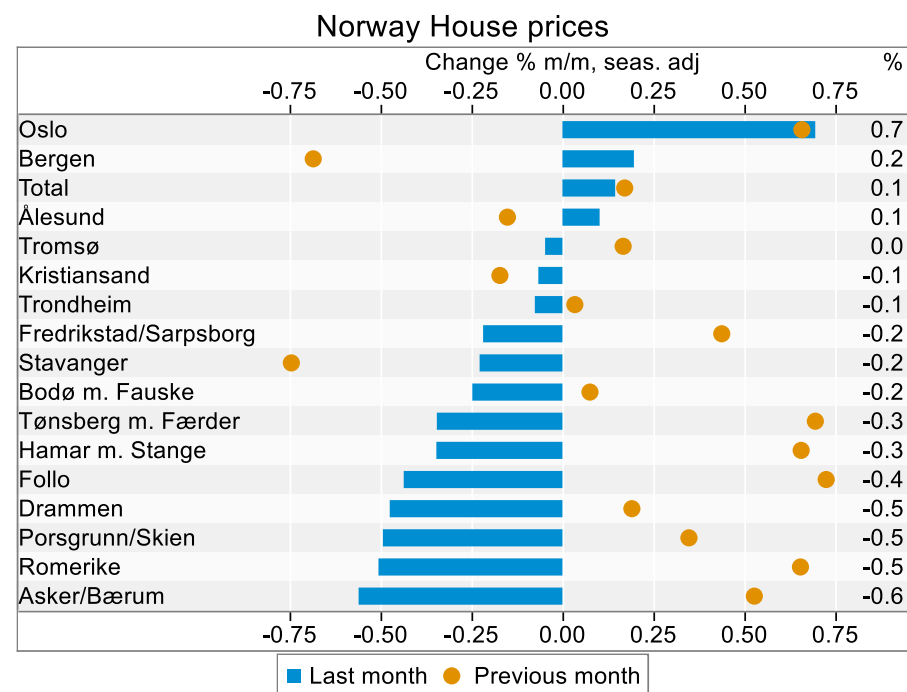
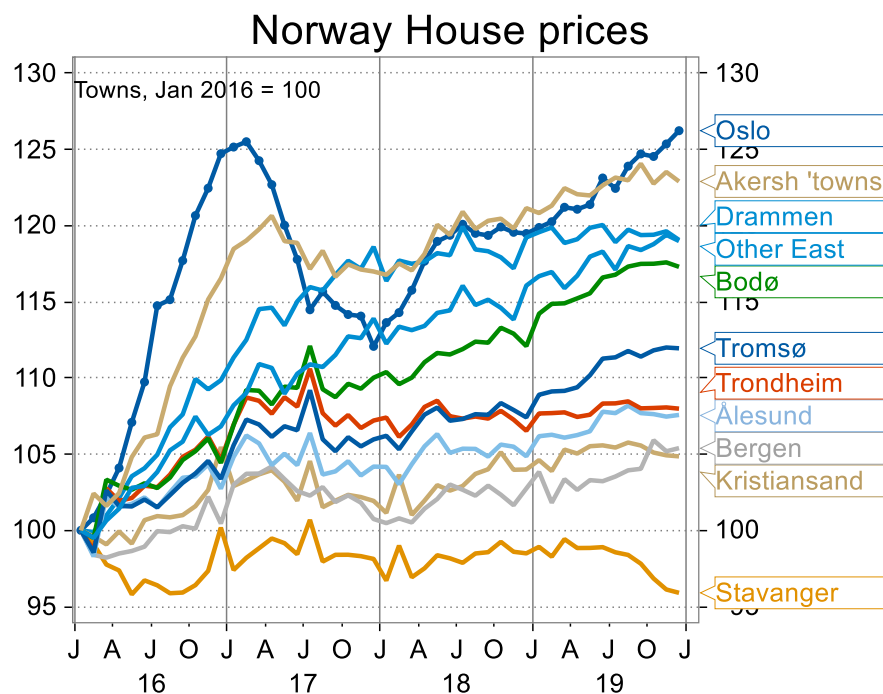
Prices rose 0.1% m/m in Dec, underlying growth flat at 1.9%. Supply down from peak, still high



- **House prices** rose 0.1% m/m (seas. adj), as we expected. Prices fell 0.8% not s.a. Growth has been modest the past 6 months, the avg is just 0.1%. Still, measured 3m/3m growth was unch at 1.9%, a tad lower than in mid-2019. Norges Bank's implicit f'cast amounts to slightly higher growth the coming months
 - » Mixed within the regions; Prices are soaring in Oslo and in Bergen most recently. In Stavanger, prices are falling steeply
- **The number of unsold homes** kept unchanged in Dec, at an elevated level. However, the inventory has probably peaked, along with a downturn in the number of new listings (from a very high level). The number of transactions has flattened at a high level
- **Short term dynamics signal a price acceleration the coming months, but our take is anyway that the risks are tilted to the downside, as rates are hiked, and credit growth is slowing. And we may not have seen the full impacts of the interest rate hikes and the debt registry**

Prices declined in most cities in Dec but Oslo spiked 0.7%

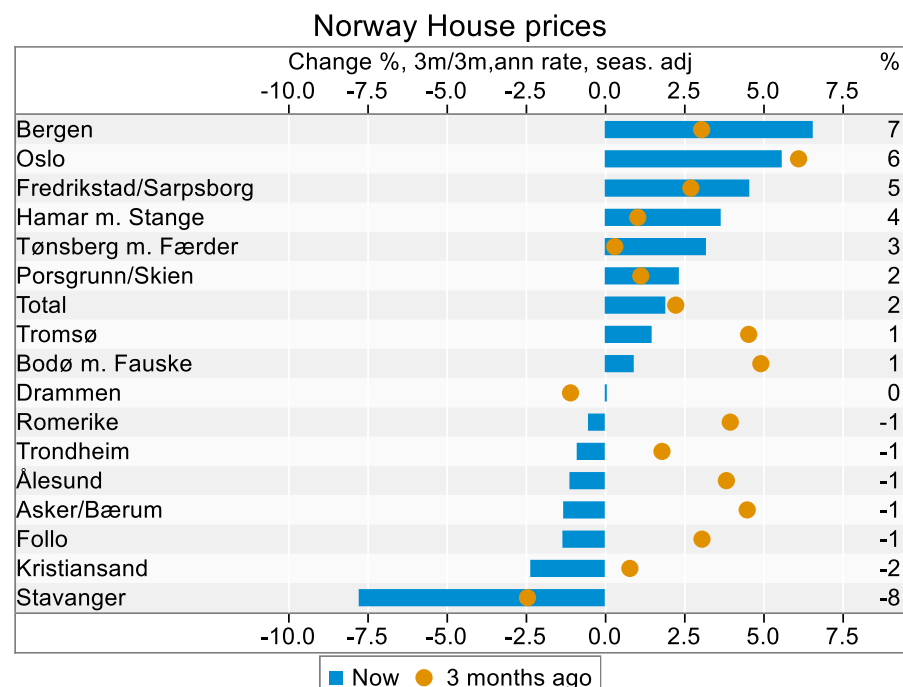
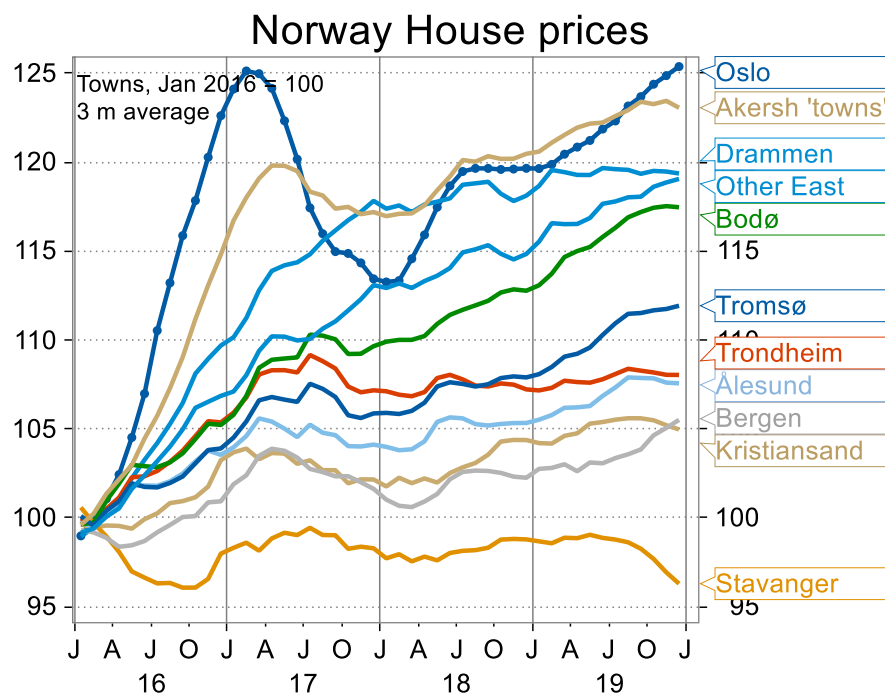
Prices are zig-zagging on a monthly basis, mostly just noise



- The monthly data are too volatile, check the much more 'relevant' 3 month averages next page

Mixed recent months; Oslo prices are soaring, Stavanger tumbling

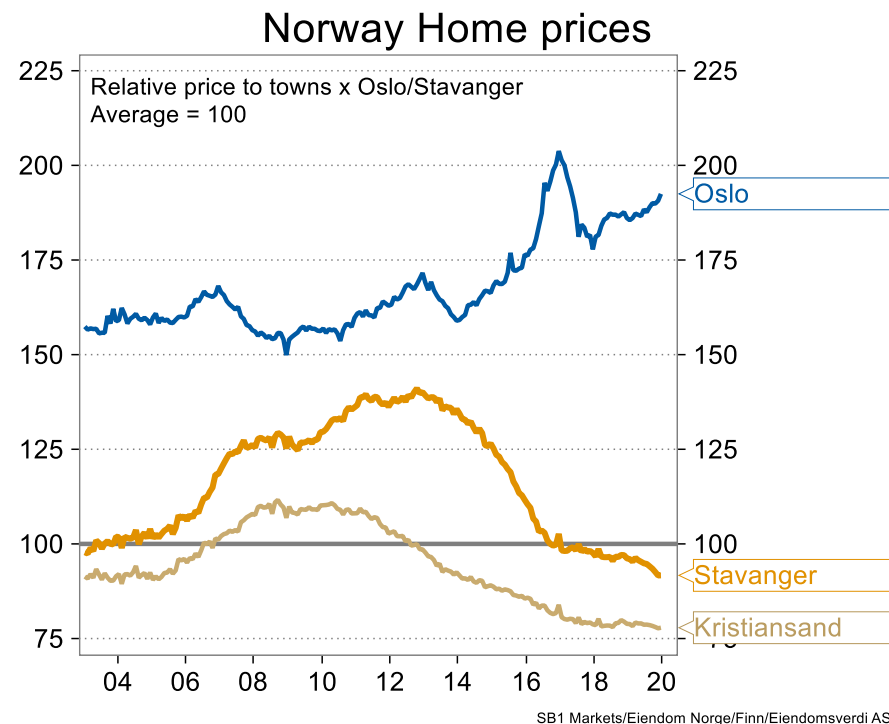
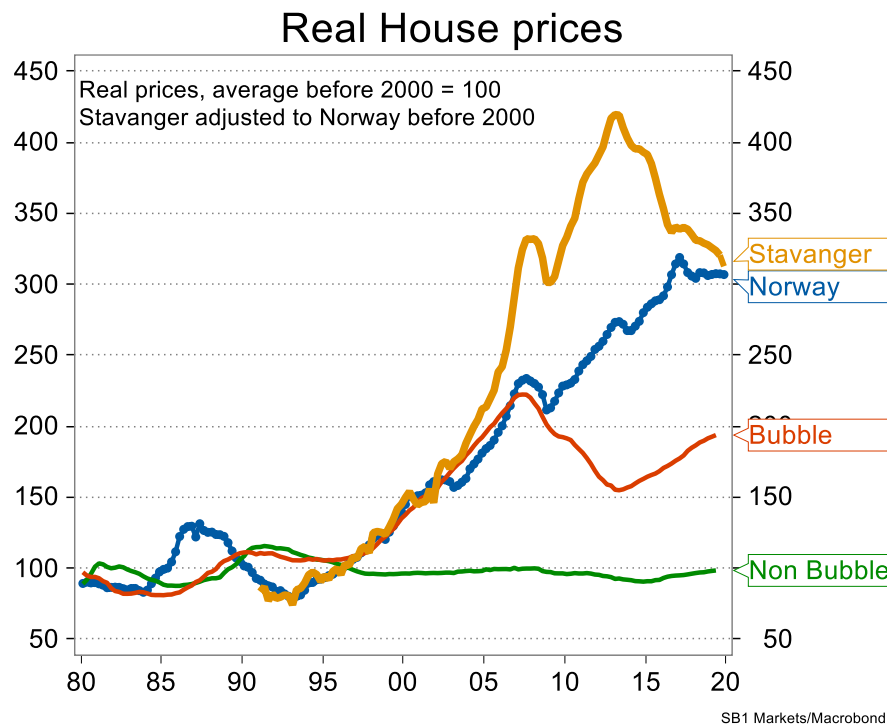
Prices are accelerating in Bergen. In Drammen, Kr.sand, Trondheim, Ålesund, prices are flattening



- Measured 3m/3m, prices are now rising in 8 of 16 cities and declining in 7 (flat in 1, Drammen). Oslo prices are up 7% annualized, Bergen accelerating to 6%, and Fredrikstad, Hamar, Tønsberg all gaining pace. Stavanger prices are down 8% and the speed down is accelerating! Kristiansand, Asker/Bærum, Follo have been declining modestly the past months.
 - Compared to 3 months ago, prices are accelerating in 5 cities, slowing but still increasing in 3 regions, and falling in 6 (of which 5 were increasing 3 months ago)
- Prices in most cities are now above the local 2017 peak levels
 - In December, Oslo prices beat the (very high) 2017 peak. Bergen is just above the peak level, too. Stavanger is 13% below the 2013 peak. Housing starts are reduced by some 50% since, but still many homes are built, we assume because 2.hand prices are still high enough to make new construction profitable

The Stavanger bubble has burst?

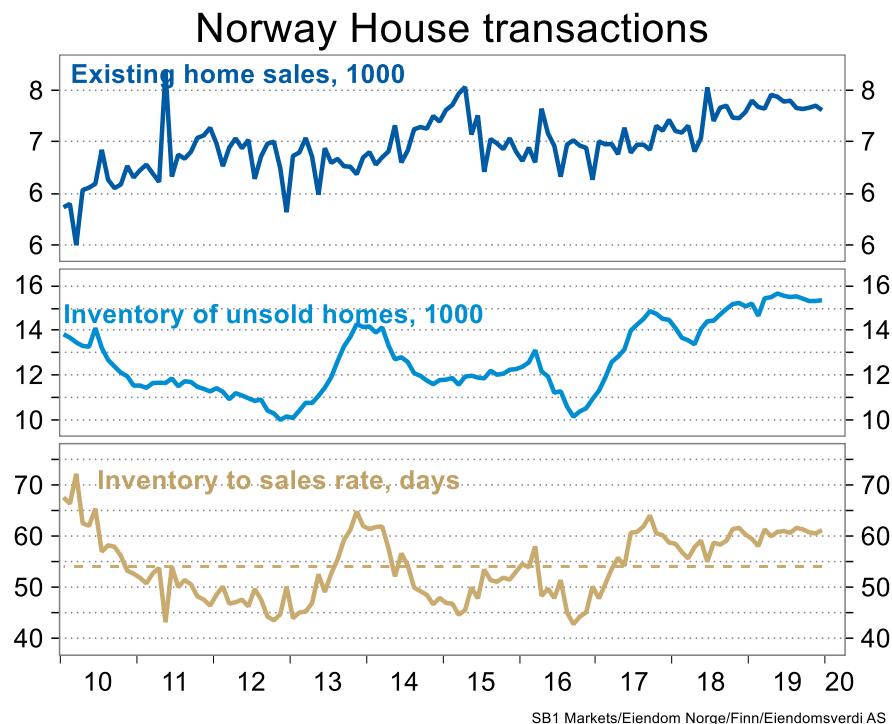
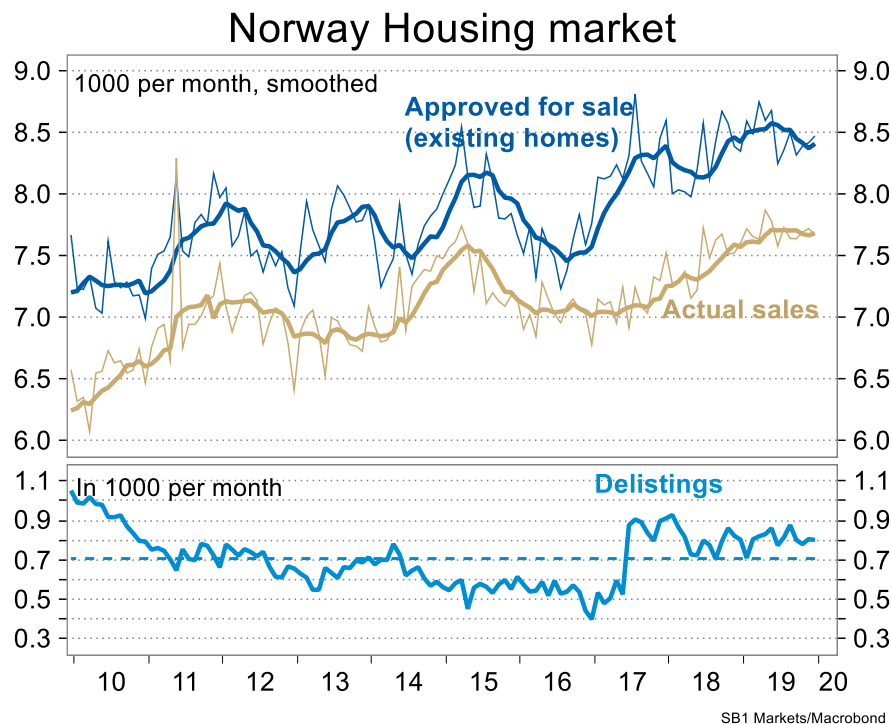
Real prices down 25%, a “normal” setback when house prices fall



- Stavanger real prices back to the 2007-level. Prices are below the national average (prices are between the levels in Bodø and Hamar)
- Housing starts in Stavanger/Rogaland have fallen but are still above the past 25 years' average, indicating that prices are sufficiently high to support the market with new homes
- That could be case in other parts of the country too, even if real prices fell back to the 2007 level?

The inventory of unsold homes has peaked, remains elevated

New listings have turned down from a high level, while the number of sales have flattened out

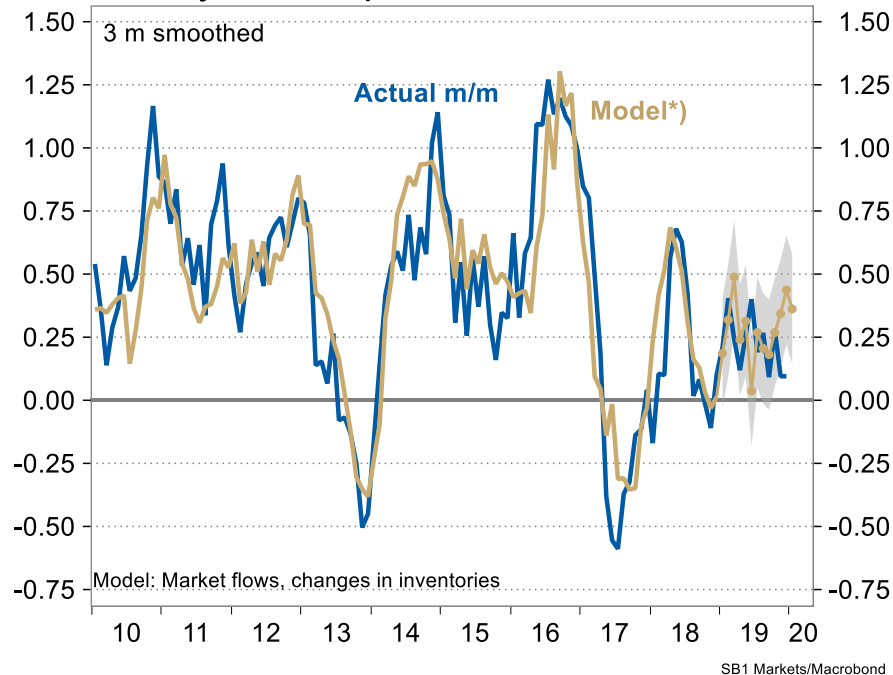


- **New listings of existing homes** have turned down from the peak in early summer. Still, the level is very high and will most likely remain elevated for some time, partly because many newly built homes are being completed
- **The number of sales** has stabilized since the spring. Until some months ago, demand was not sufficient to absorb the high supply of homes and the number of homes for sale (inventory) was soaring. Since the spring, the inventory has been reduced modestly. The slowdown is chiefly due to a lower inventory in Oslo, and the overall inventory rose marginally in Dec
 - » The inventory to sales ratio (turnaround) is quite high, at 61 days, vs avg at 54. The number of delistings (implicit) is somewhat higher than normal (but so are sales and inventory too)
- The flow balance on the housing market indicates somewhat higher price growth the coming months, check next page

Market flows signal somewhat higher price growth, other factors do not

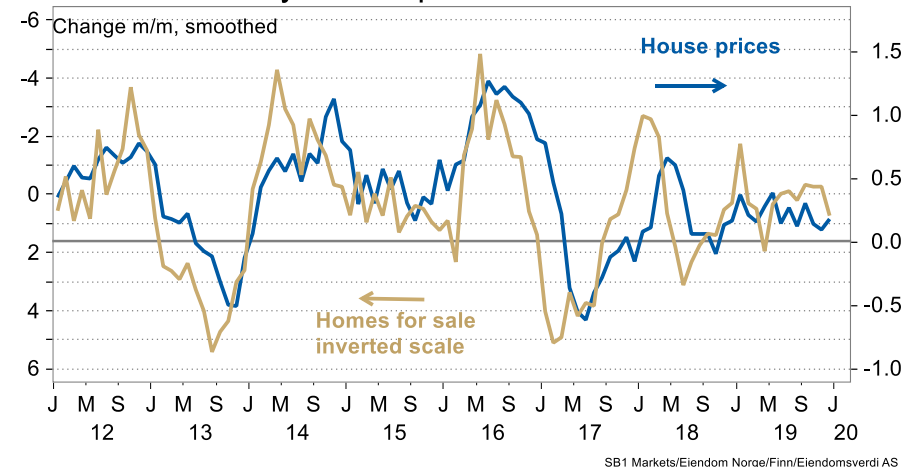
The inventory has turned south, suggesting higher growth. But interest rates have been hiked...

Norway House prices - short term model

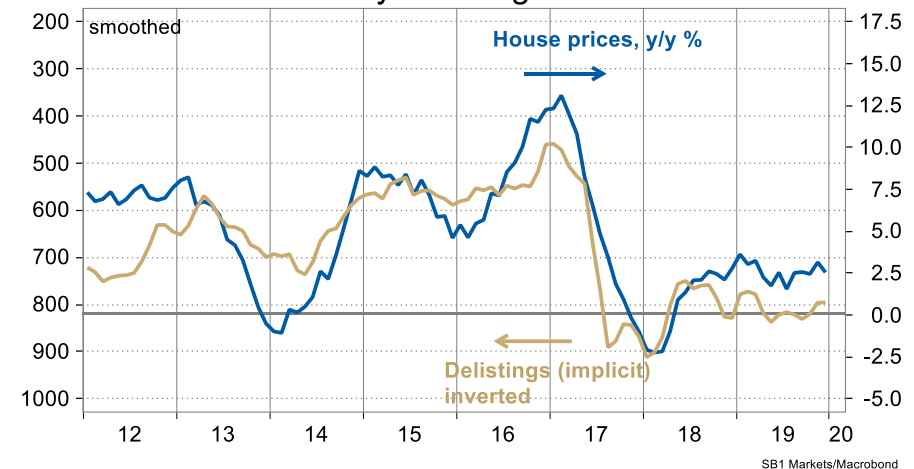


- The supply of new homes for sales and the inventory suggest some 0.4% m/m growth the coming months, higher than the recent price inflation
- On the other hand; other factors indicates lower growth; interest rates have been increased and credit growth is now slowing
- *This is not a long term price model, just a short term price model based on flows of (existing) houses approved for sale and actual sales*

Norway House prices vs. inventories

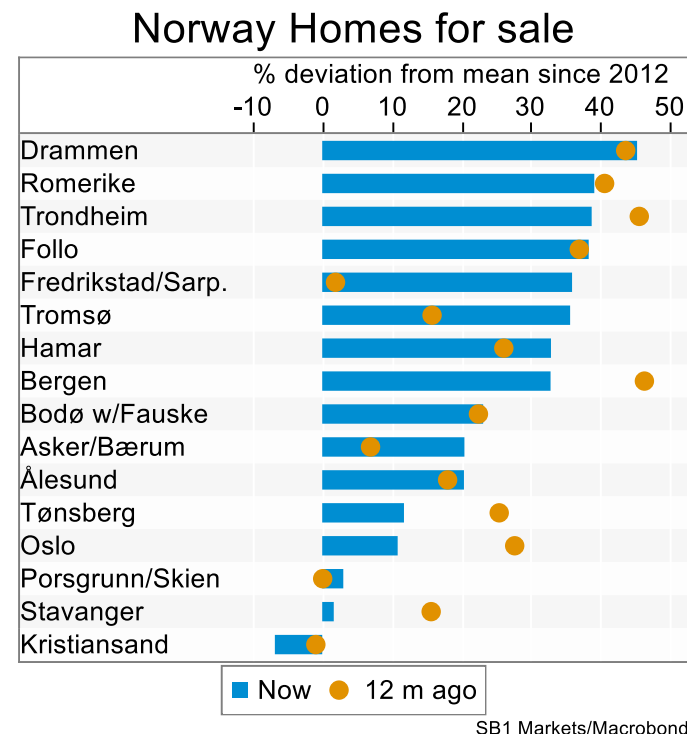
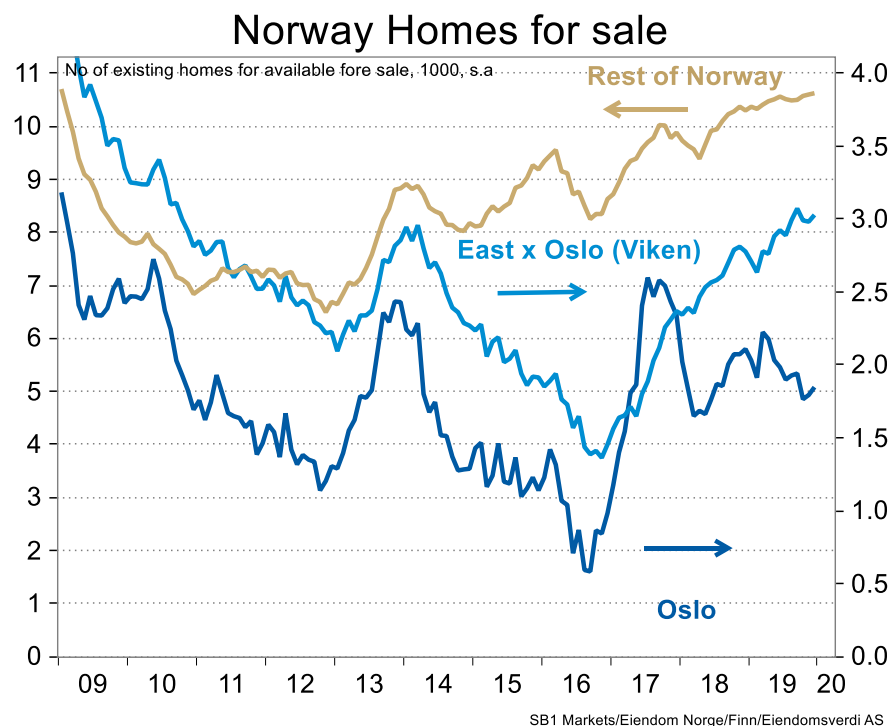


Norway Housing market



The number of homes for sale is higher than 'normal' everywhere

... Expect Kristiansand, and the inventory in Stavanger is close to the average since 2012

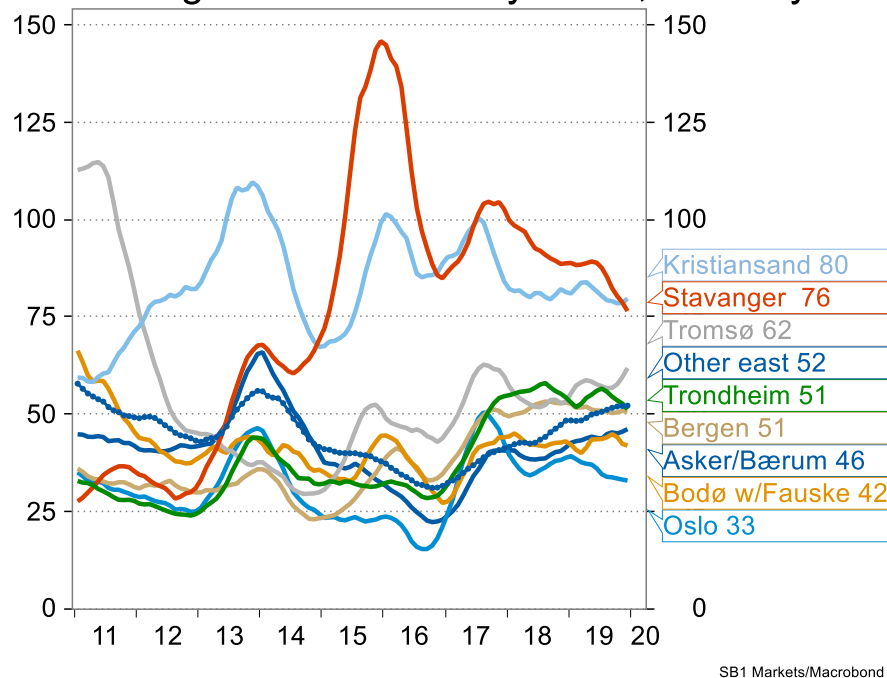


- The number of homes for sale have been increasing rapidly in most regions, except for Oslo since early last year
- The inventory is increasing sharply in Viken (Akershus, Buskerud, Østfold; or East x Oslo), as well in other parts of the
- Norway outside Oslo & Viken is still reporting a larger inventory of existing homes for sale, the highest since 2009. The inventory in Viken has increased rapidly too, but has fallen marginally recent months
- The Oslo inventory has been reduced by almost 20% since the spring, yet it is still larger than the average since 2012
- Inventories are reduced in Stavanger too, chiefly due to a lower number of new listings, not thriving demand!

Inventories are on the way up

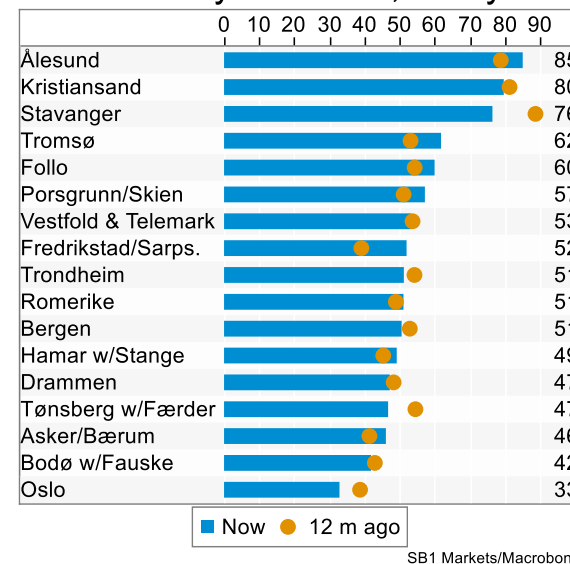
... and more than sales, most places

Existing homes Inventory/sales, # of days

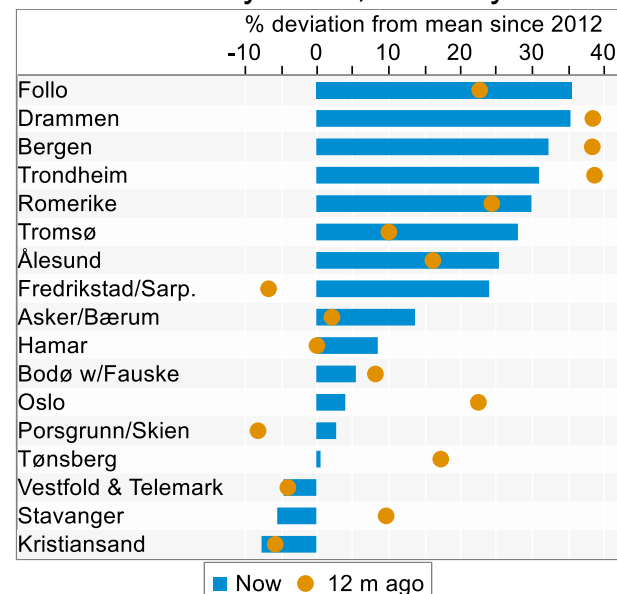


- The inventory/sales ratios are still high in Kristiansand and in Stavanger but they are declining. Ålesund has the highest inventory vs sales
- In Oslo, the inventory/sales ratio is declining, from a normal, low level
- In the rest of the country, the ratio is on the way up, and it is higher than normal

Inventory vs. sales, # days

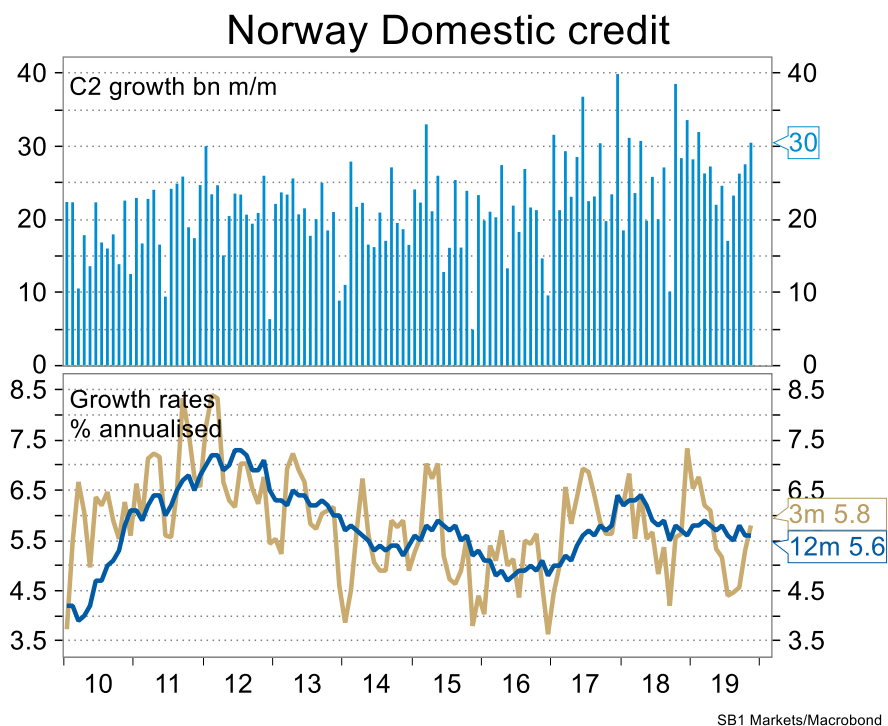
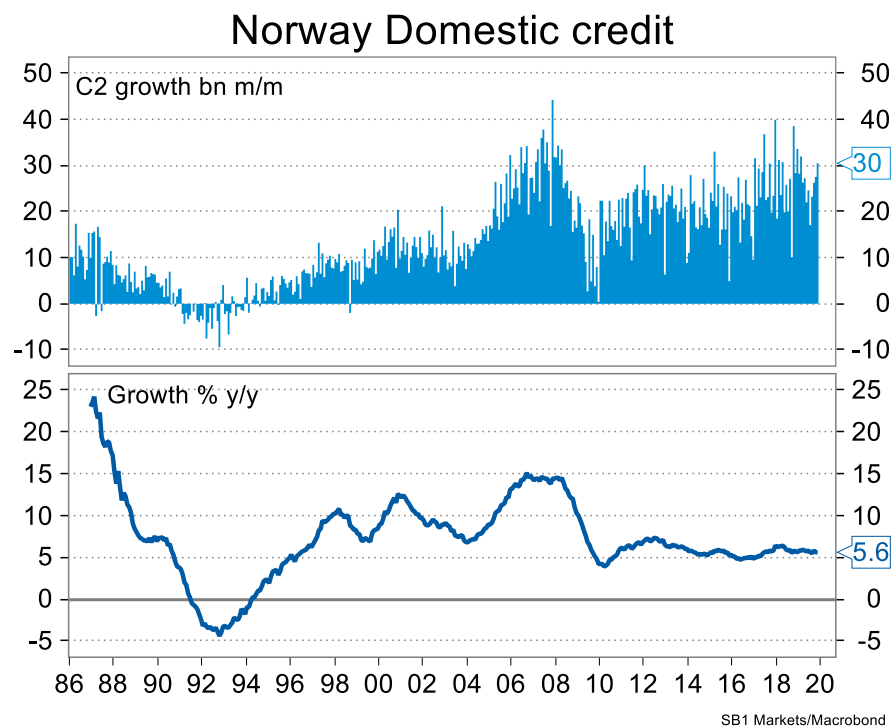


Inventory/sales, # of days



Credit growth is slowly cooling, driven by households

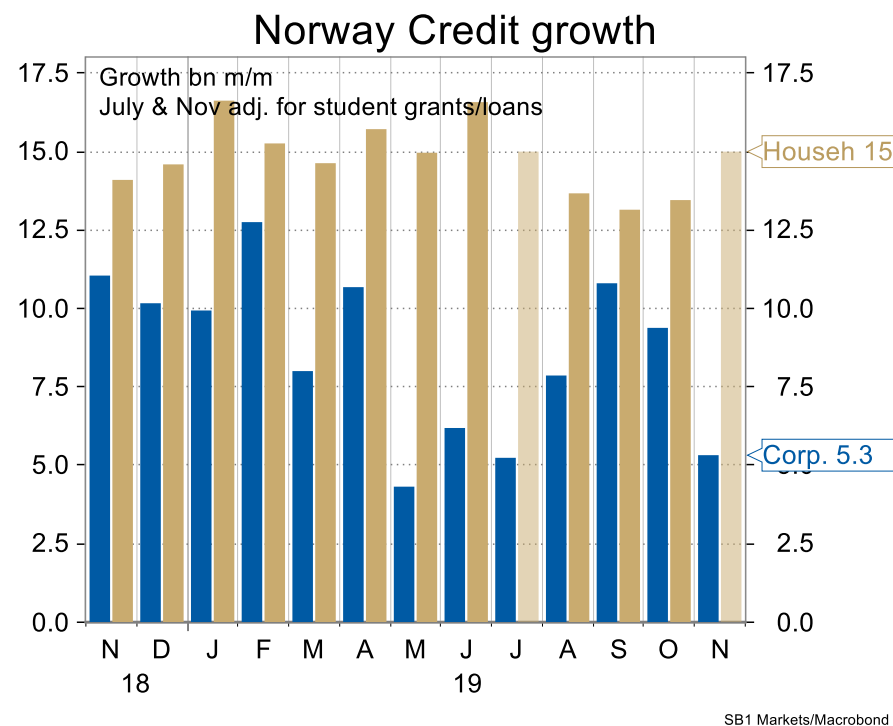
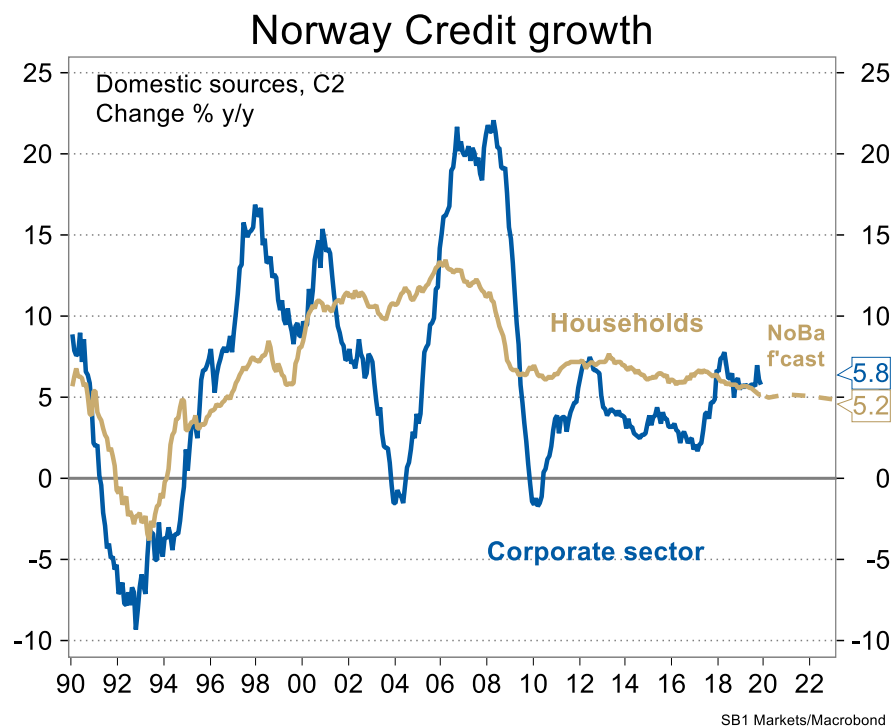
Total credit growth steady at 5.6% y/y in Nov, with some help from a change in student loan conversion timing



- Total domestic debt (C2) rose by NOK 30 bn m/m in November. The annual rate was unchanged at 5.6%, we expected a 0.1 pp downtick. Credit growth is heading slowly down, dragged down by households
- Household credit growth increased somewhat in November, even after adjusting for a change in the timing of student loan/grant conversions. The annual rate has decelerated to 5.2% down from 5.7-5.8% in early 2019. The interest rate hikes have probably dampened mortgage demand, along with slower growth in consumer credit loans following tighter regulations, and the debt registries
- Corporate credit growth slowed this month but has gained some pace recent months. Annual rate at 5.8%
- Local governments are increasing their debt at an unsustainable pace, close to 8%

Household credit growth the slowest since 1997, finally below income growth

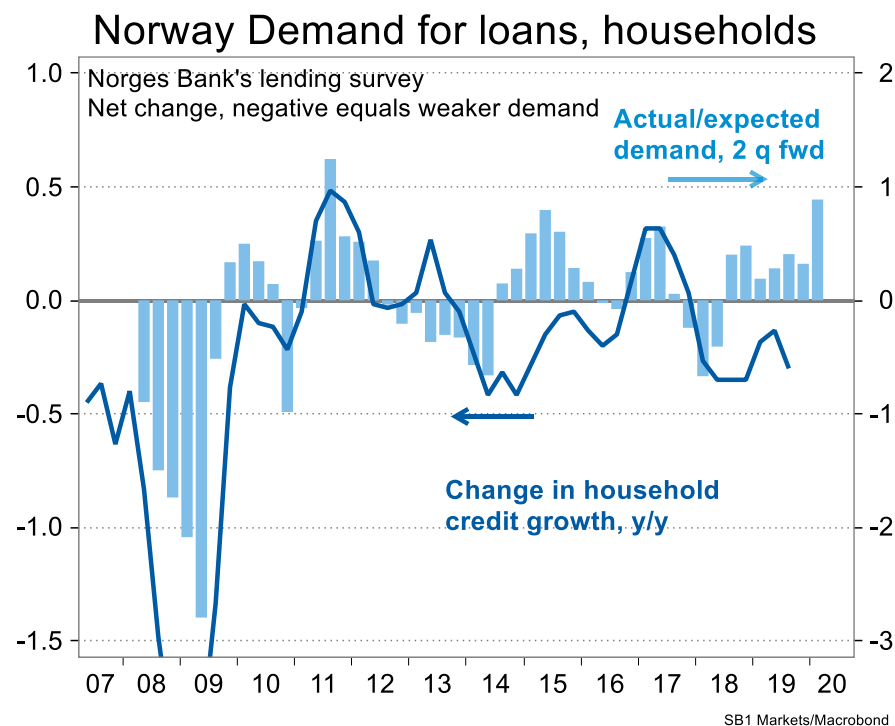
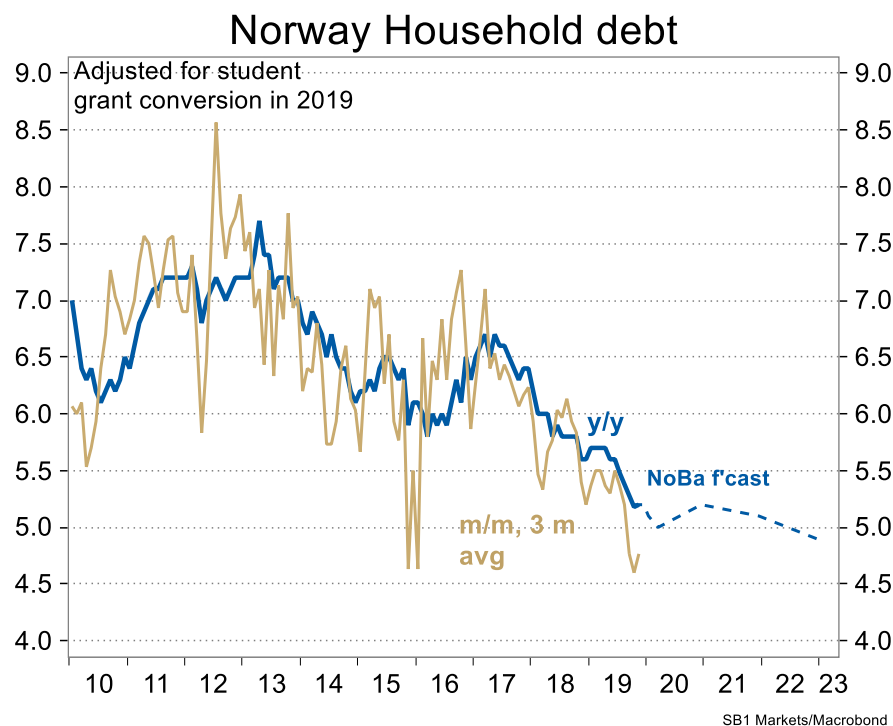
No weakness in corporate credit, growth has been steady the past year



- Households' credit increased by NOK 15 bn m/m in November, up from 13 bn in October. However, credit has been slowing visibly since the summer. The y/y rate was unchanged at 5.2%. (We have adjusted for a change in the timing of conversion of student loans to grants. The unadjusted rate ticked up 0.2 pp to 5.2%)
- Household credit growth has been trending slowly down since 2017. The slowdown in H2 2019 may be due to the interest rates hikes or recently due to tighter consumer credit regulation/the new debt registers
 - » In Q2, consumer credit fell marginally, and the decline may have accelerated in H2 (no data yet). If so, consumer credit may explain a NOK 1 bn/m decline in the monthly growth rate which have fallen by NOK 2 bn/m since the summer, to approx NOK 13 bn/m (until the small acceleration in Nov)
- Corporate credit (in C2, domestic lending) rose by 5.3 bn m/m in Nov. The annual rate edged down to 5.8%, from 6.1% the prior month. Underlying growth is marginally lower, at least over the past 6 months

Underlying growth down, below income growth

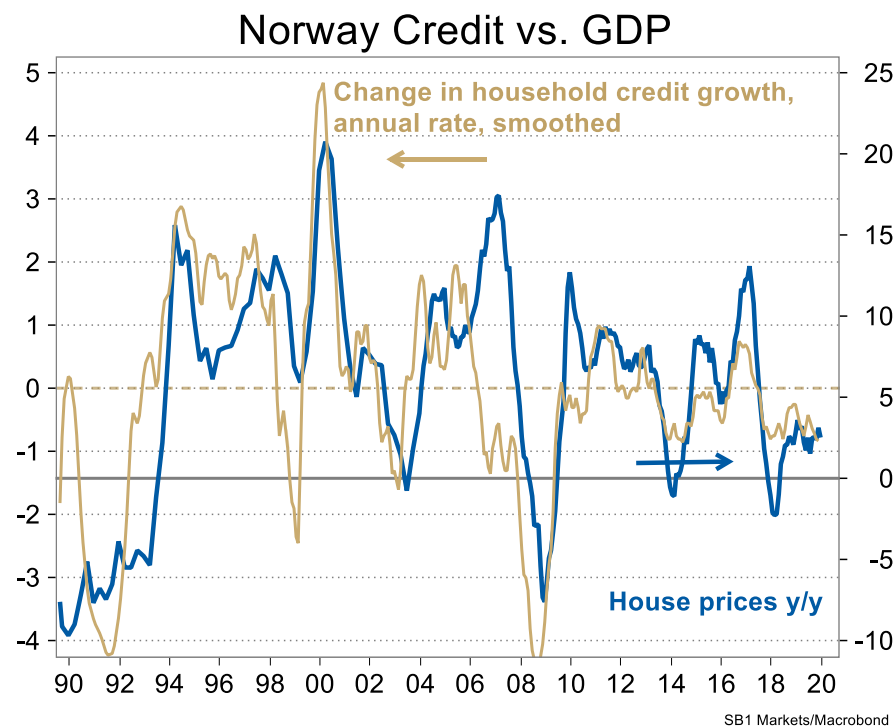
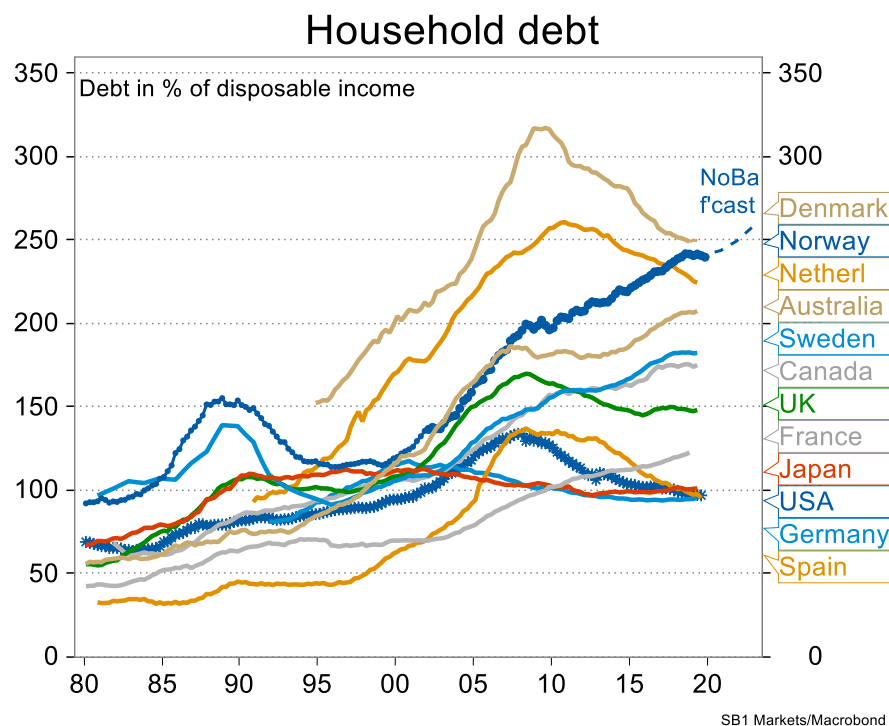
Growth is slowing visibly, even as banks were expecting higher demand in Q3



- In the longer term, household credit growth is slowing, from above 7% in 2012-2013 to just above 5% now. The underlying growth rate has slowed the past months, but turned marginally up in Dec but still at 4.7%
 - » Household income growth has turned up, to 6.5% in Q3. Thus, the deb/income ratio has fallen marginally – but remain at a very high level
- Surprisingly, banks in NoBa's Q3 lending survey reported higher household loan demand and they even expected an uplift in Q4. Strange, if not the whole slowdown recent months is due to a faster contraction in consumer credit. The Q4 lending survey will be released later this week

Finally, the debt/income ratio has flattened!

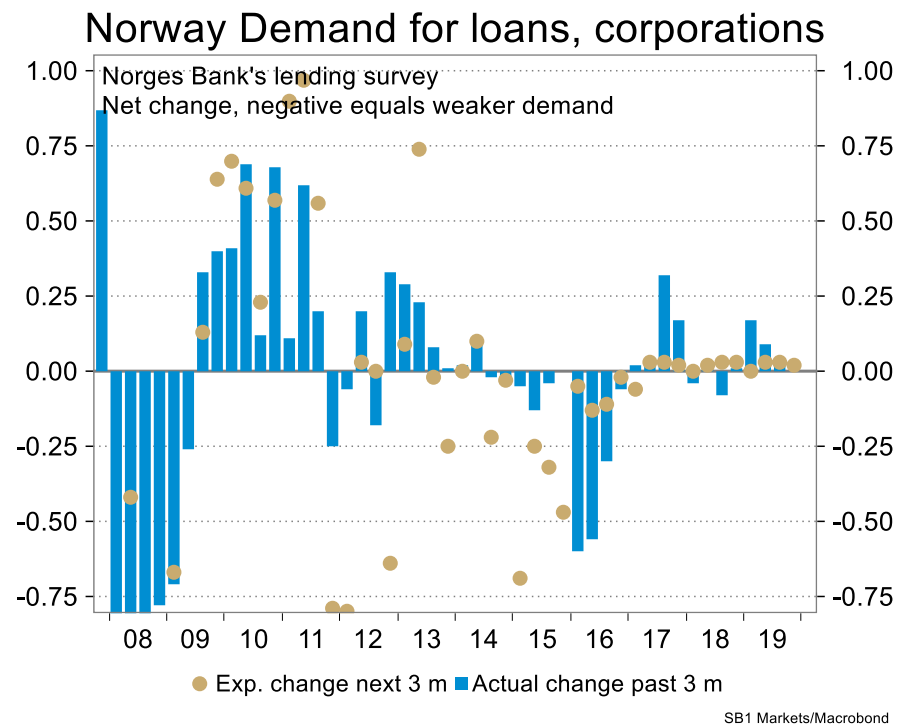
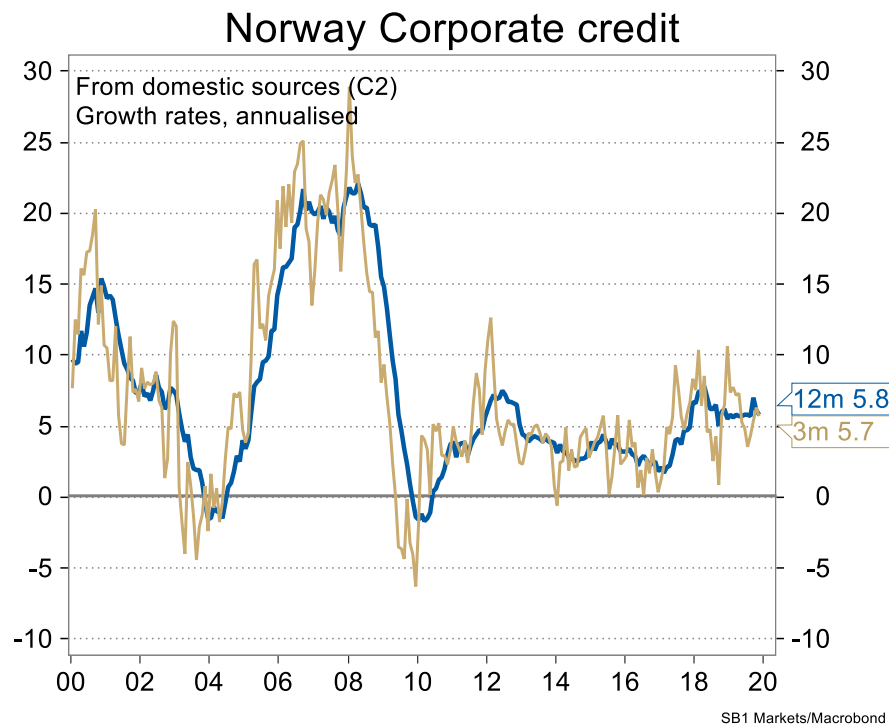
However, the level may still be a problem...



- Household debt is now growing faster than household disposable income, for the first time in 30 years (barring some small turbulence in 2008/09)
- Norges Bank expects a 5.2% household credit growth rate trough 2020. As the Bank expects slower income growth, the debt ratio will start increasing again. May the bank be too optimistic vs credit growth in 2020?
- A slow retreat will be healthy in the long run, and if it is gradual, not too harmful, even not for the housing market
 - » Changes in credit growth is usually correlated to economic growth and asset markets – including the housing market

Corporate credit growth quite stable (barring the Sept/Oct zig-zag)

Underlying growth has picked up, but these monthly data are volatile, the annual rate is steady

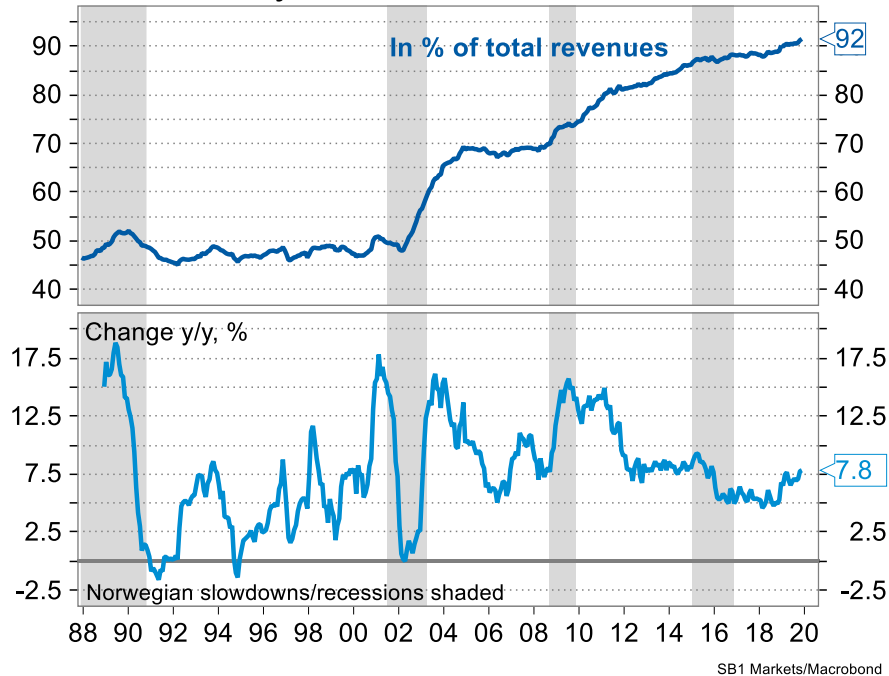


- In November, the annual rate edged down to 5.8%, from 6.1% in Oct. The annual rate has been steady at just below 6% the past months, from 7-8% growth rates in early 2017
- The underlying growth rate (3m) came down to 5.7%, turning up since the summer
 - » Corporate credit growth is more volatile than household credit and underlying pace has been zig-zagging the past two years

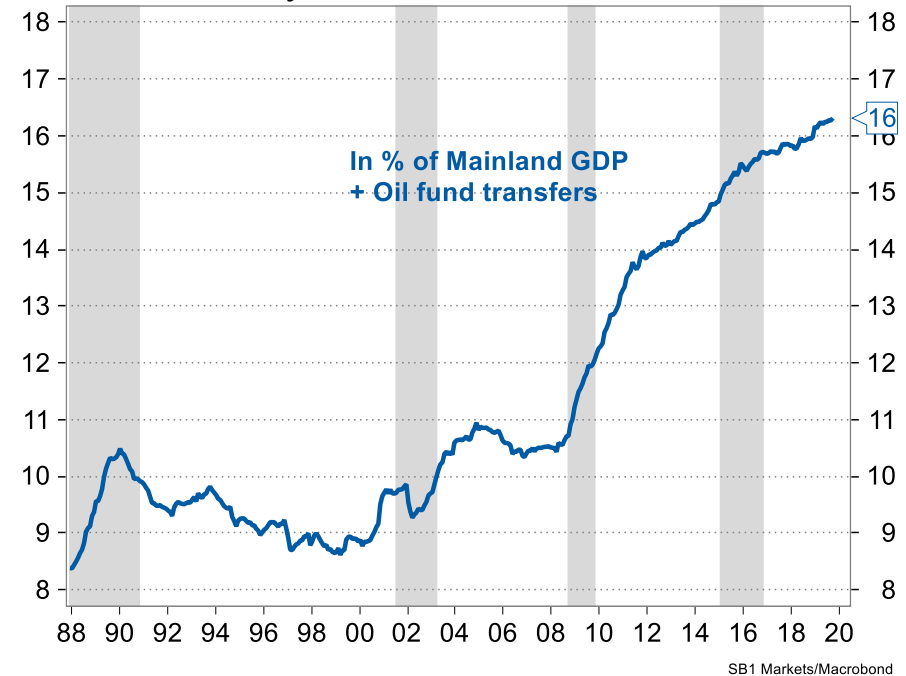
Local government debt is accelerating

Local government debt is increasing by 7.8% y/y and equals 92% of their income

Norway Local Government debt



Norway Local Government debt

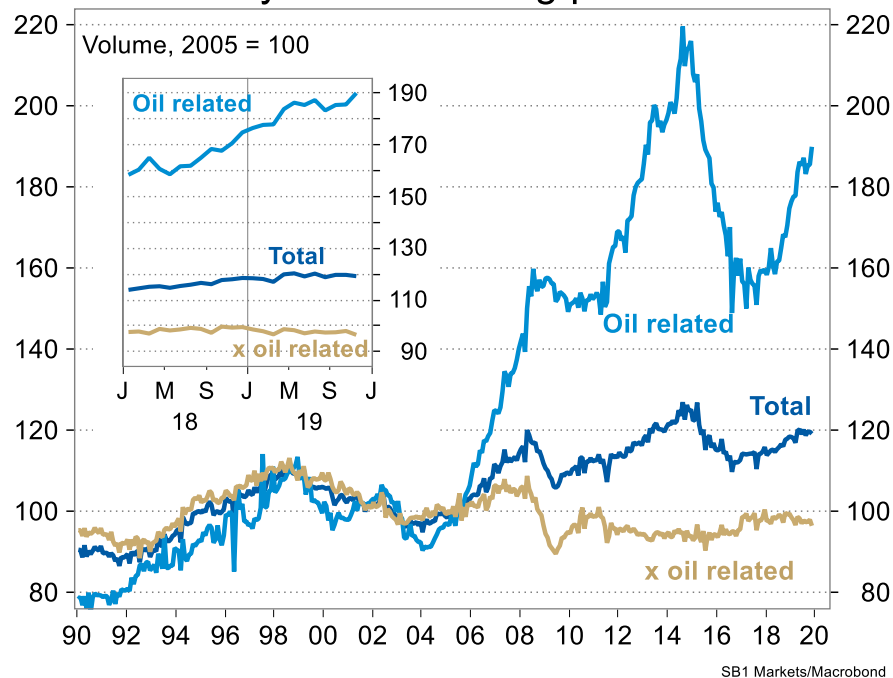


- The debt acceleration is partly due to strong growth in local government investments. Investments are up 7.5% y/y (4 q smoothed). Low interest rates have no doubt boosted credit growth, too

Manufacturing production down in November, even if oil related is still booming

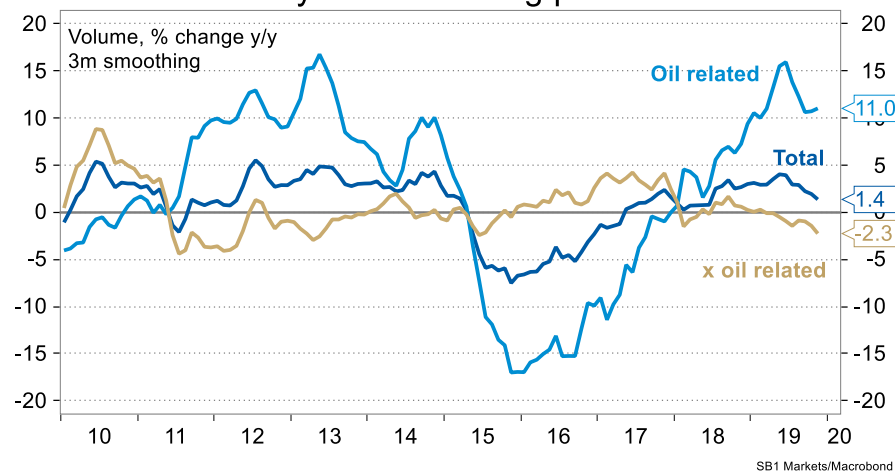
Total production down 0.4%, we expected unch. Non-oil related production down 1.5%

Norway Manufacturing production

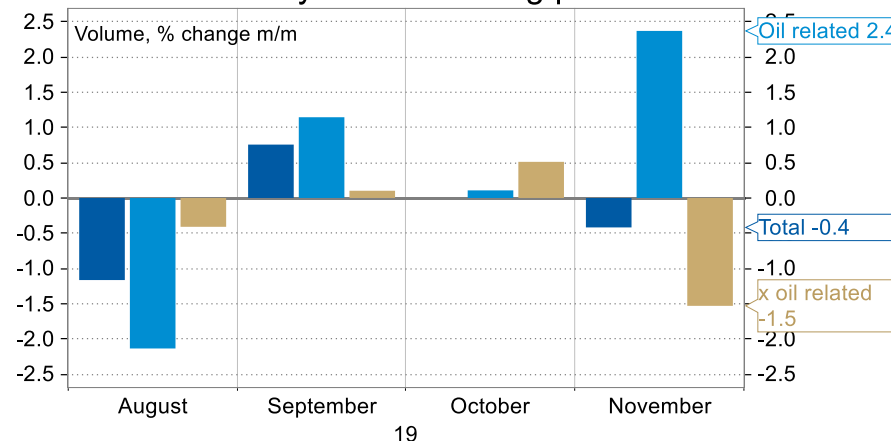


- Total manuf. production has been flat since the spring – even if oil related production has increased further. Production in other sectors are declining
- Production in oil related sectors are probably close to peak, as oil investments are most likely peaking in Q4
- We have no reason to expect any recovery in non oil related sectors. Production is trending down, has been flat the past couple of years (and the past 25 years!)
- Surveys (ex. the strong PMI) have softened and point to a slowdown, to some 2% growth

Norway Manufacturing production



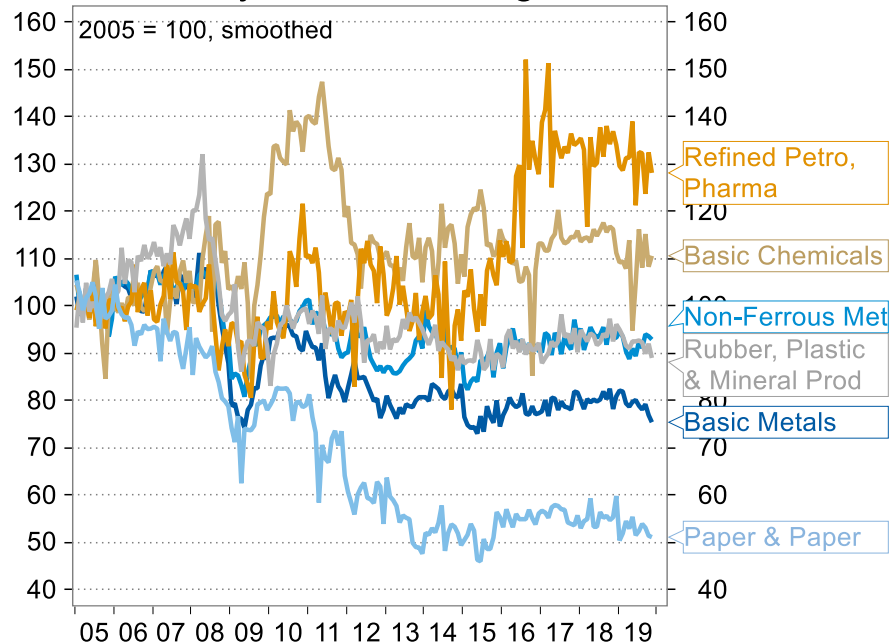
Norway Manufacturing production



Production of ships & platforms is soaring, other sectors not impressive

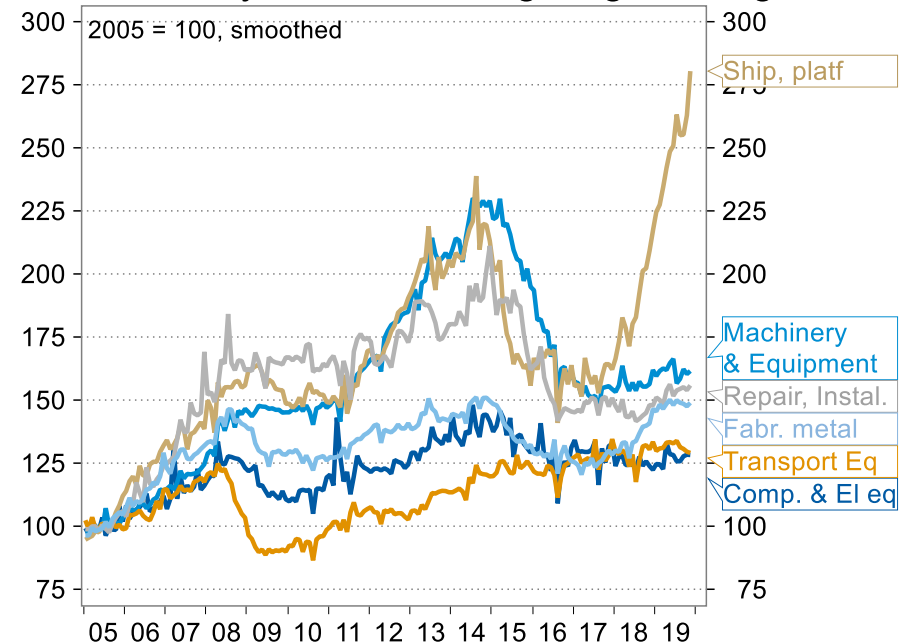
Most engineering sectors have softened, and production of ships/platforms will soon peak?

Norway Manufacturing commodities



SB1 Markets/Macrobond

Norway Manufacturing Engineering+

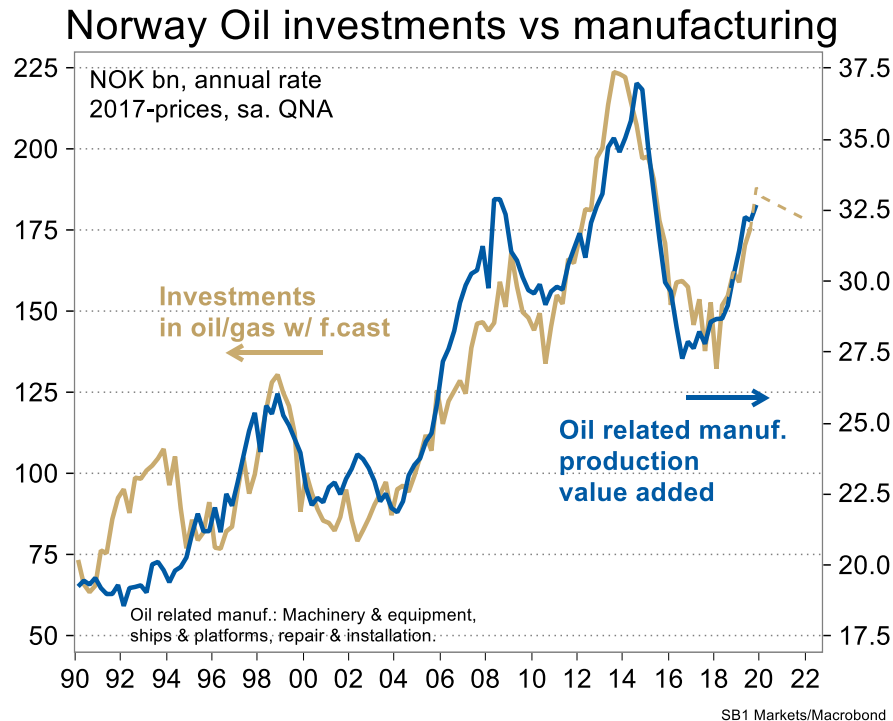


SB1 Markets/Macrobond

- It's almost as we do not believe it, production of ships and platforms is more than 20% higher than at the 2014 peak, in volume terms! However, overall petro related manufacturing and support activities are down some 15% from the peak
- Engineering sectors: Most partly oil-related sectors are trending up but most have lost some steam recent months, particularly machinery & equipment production
- Commodities: Basic chemicals and non-ferrous metals have turned up but none are impressive, even refined petroleum and pharmaceuticals are heading down recently. Basic metals is trending sharply down

How large is the upside in oil related industries? Probably little after Q4

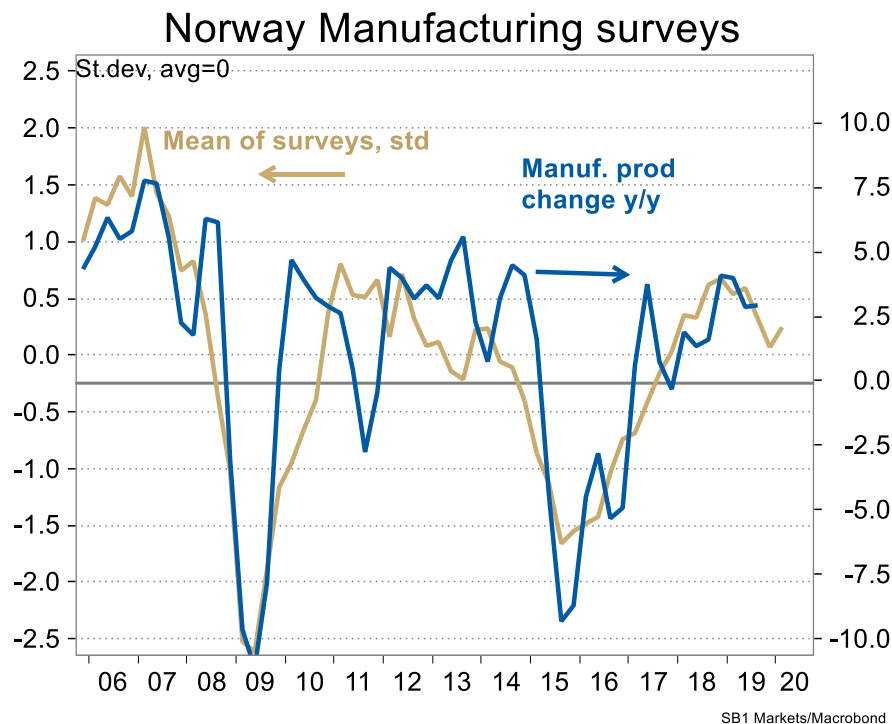
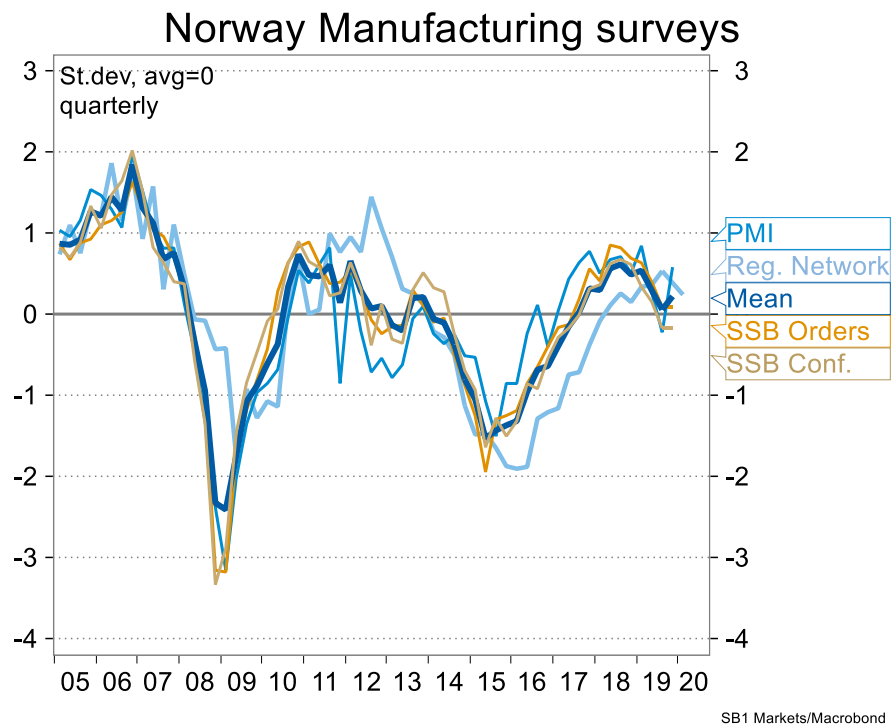
Q4 oil investments will probably be higher than our 2020 & 2021 estimates



- Production in oil related industries have soared since late 2017, closely correlated to the increase in oil investments, as reported in the National accounts
- Oil investments are probably peaking now, we expect strong growth in Q4 but not much thereafter
 - » We f'cast a 8% lift in Q4. If so, the estimated 2020 level will be 2% below the Q4 (annualised) level.
 - » If Norwegian manufacturers do not gain market shares from foreign competitors – oil related production is now close to the peak
 - » Neither Norges Bank's regional survey nor SR-bank's regional survey signal a decline in the activity – but no doubt slower growth
- A modification: Non-oil related shipbuilding have become more important recent years due to the decline in oil investments. An upside potential, of course, also given the weak NOK
- However, some extra negative news for the manufacturing production: Both manufacturing and power supply investments are expected sharply down in 2020

Manufacturing surveys signal a slowdown but no setback

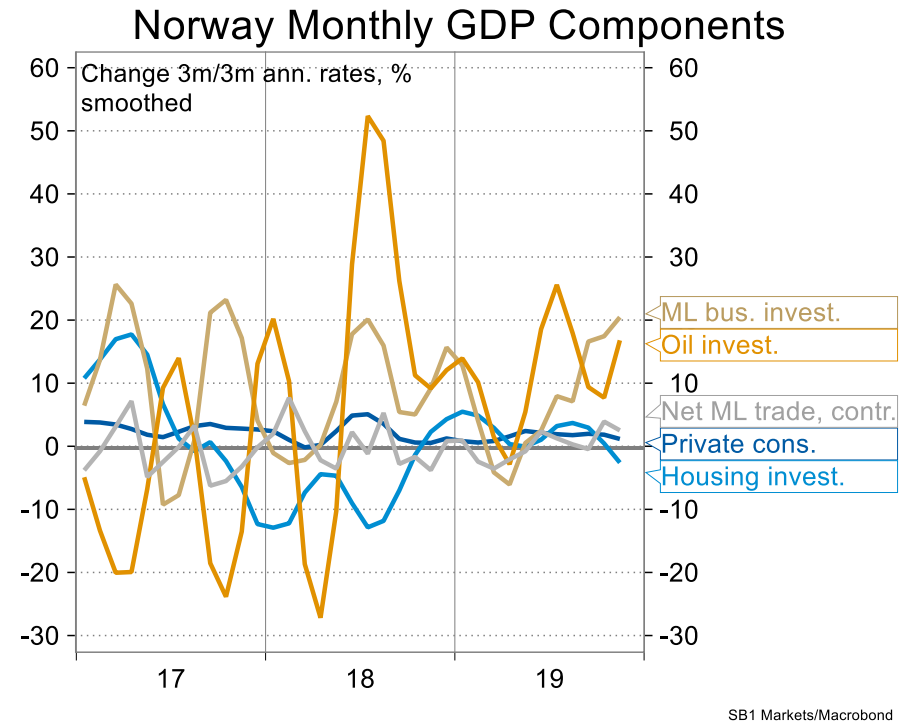
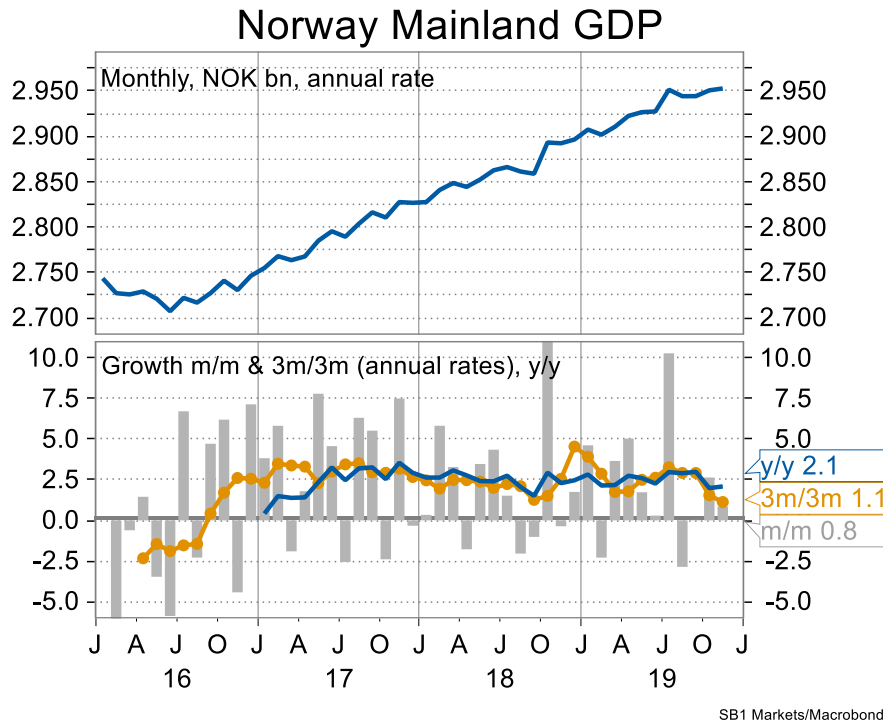
All manuf. surveys x Reg. Network have softened, SSB's confidence survey the most downbeat



- In sum, the surveys suggest that the growth peak is behind us, signalling 1 – 2% growth
- SSB's industrial confidence survey points to a downturn to zero growth. The PMI is the most volatile of surveys, the level as been kept up surprisingly well recent months
- Norges Bank's Q4 Regional Network signalled slower growth in the manufacturing sector

GDP growth up 1.1% 3m/3m annualized, Q4 will not be impressive

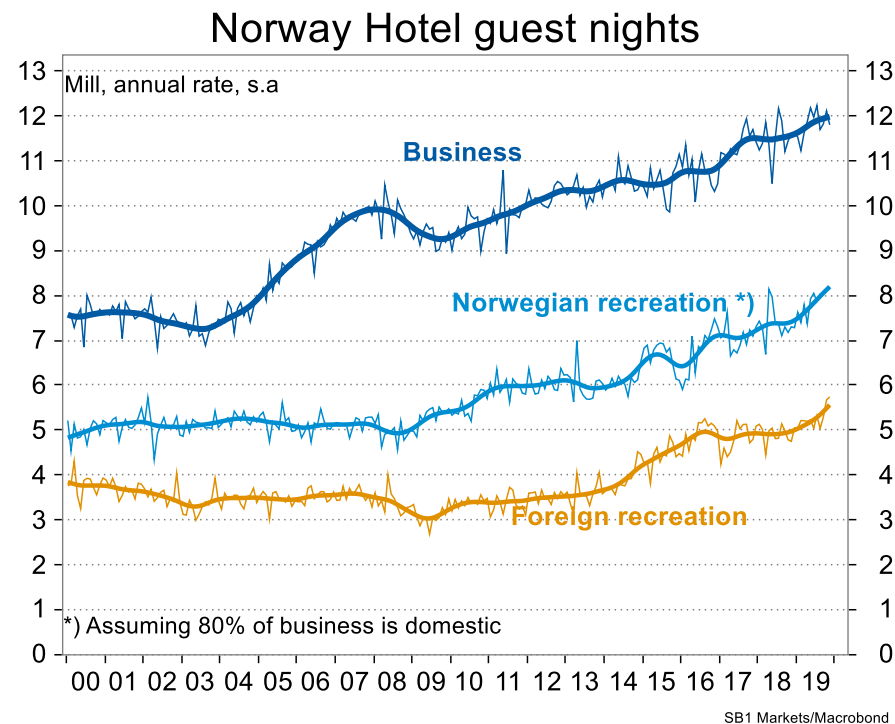
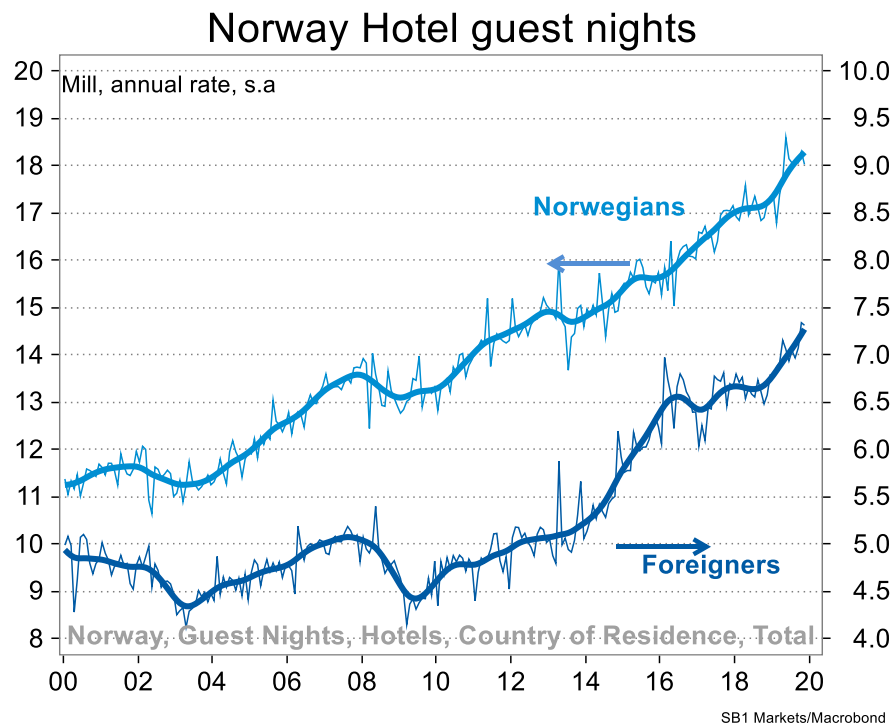
Mainland GDP rose just 0.1% in Nov, a tad weaker than expected. Speed so far in Q4 is 0.7% (ann.)



- Mainland GDP increased by just 0.1% m/m in Nov (equalling a 0.8% annualized rate), we expected 0.2%, consensus 0.3%. The monthly data are too volatile to give us any useful signals. Underlying (3m/3m, annualised) growth slowed to 1.1%, down from 2.5 – 3%.
 - » Norges Bank's Q4 f'cast (from the Dec MPR) is 1.8% q/q annualized, GDP will have to increase by 0.8% (10% annualized) m/m in Dec. We expect a 1.2% growth pace in Q4 (0.3% not annualized)
- On the demand side: Private consumption is growing modestly, at a steady pace. Mainl. business investments have been increasing strongly, probably peaking now. Oil investments soared in Oct, after a slowdown in Q3 – and we expect strong growth in Q4 (and a sharp slowdown thereafter). Housing investments are most likely cooling now. Mainland net trade slightly positive

Strong growth in hotel guest nights – but not much more than capacity growth

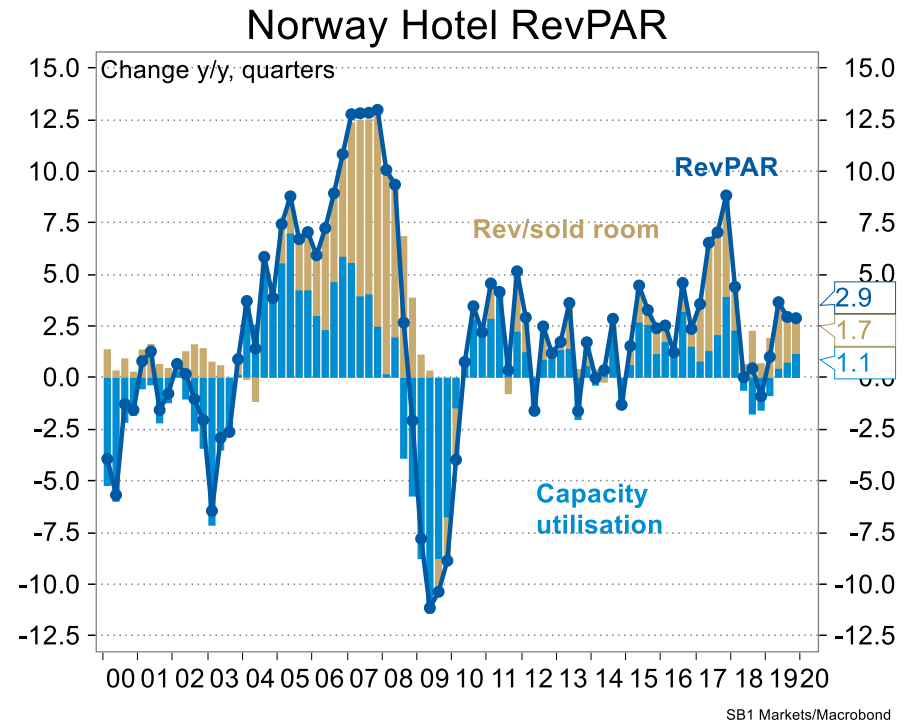
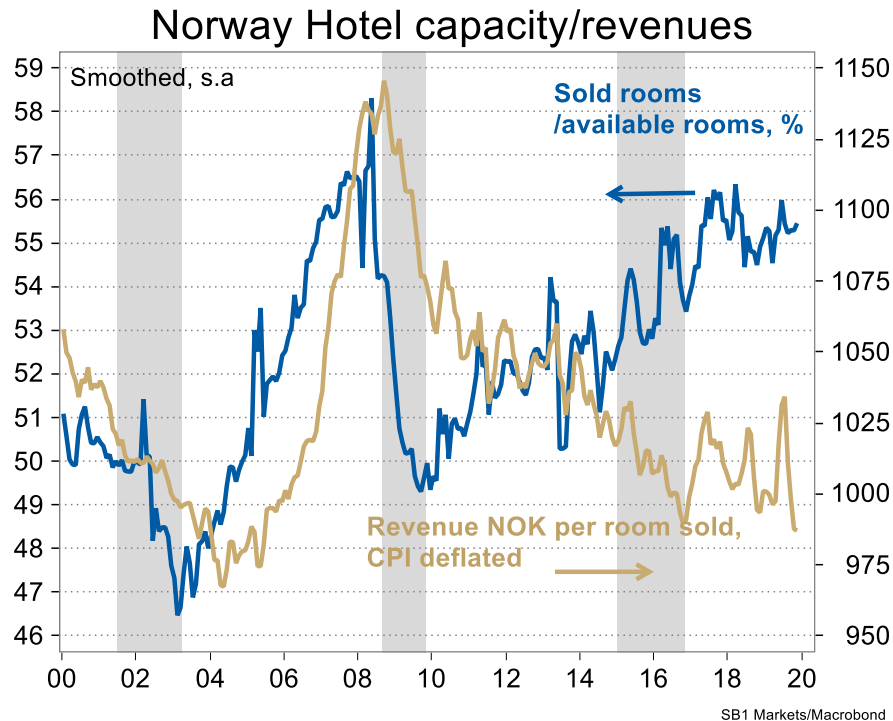
Guest nights trending up 8% y/y! Both foreign & domestic demand up, recreation more than business



- Overall growth in guest nights some 7-8% recent months. Both Norwegian and foreign bookings are growing at the same speed, and both have accelerated through 2019. A weak NOK is no doubt supportive for both groups
- Recreation guest nights are up 10 – 12% y/y, 'business demand' 4%
- Capacity growth is close to growth in demand, utilisation by and large flat since 2016 (but slightly up y/y now). Pricing power not impressive, room prices are up 2%, well below wage growth. Real room prices (deflated by CPI) has fallen by more than 10% over the past 10 years – but has been close to flat since 2015

Capacity utilisation & real room prices flat since 2015/16

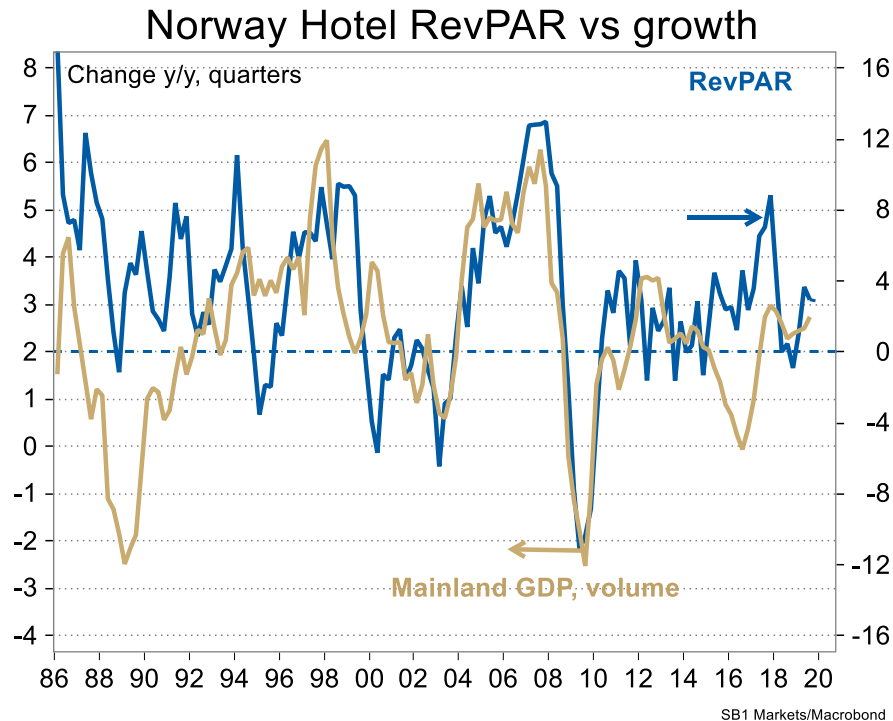
Revenue/available room (RevPAR) up by 3% y/y in H2



- Capacity utilisation has flattened recent years – because so many new hotels have been built! Utilisation is more or less unchanged from early 2016 – but rose almost 1% y/y in H2. The level is high, vs. an historical average, at 56 vs. 51.5 (a 9% difference!)
- Still, pricing power is not impressive. Real room prices are down 13% past 10 years, and even more vs. wages (down 27%).
- Nominal room prices have been increasing by some 2.5% past 3 years, in line with CPI inflation, but less than wage inflation. Now, prices are up less than 2% y/y (and down y/y in Nov)

Hotels: Have fared much better than normal vs GDP growth since 2014

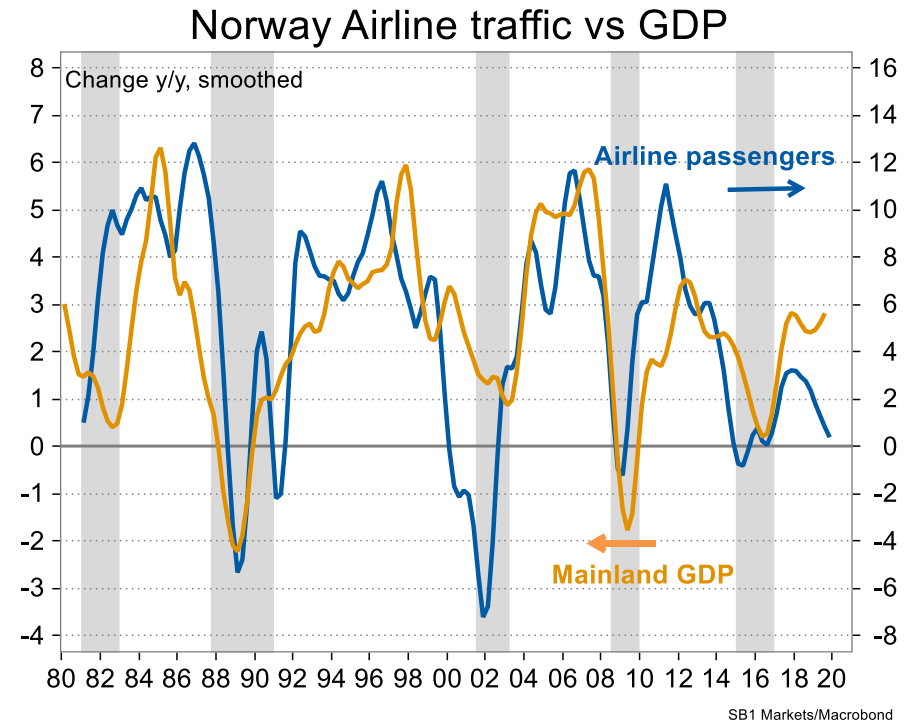
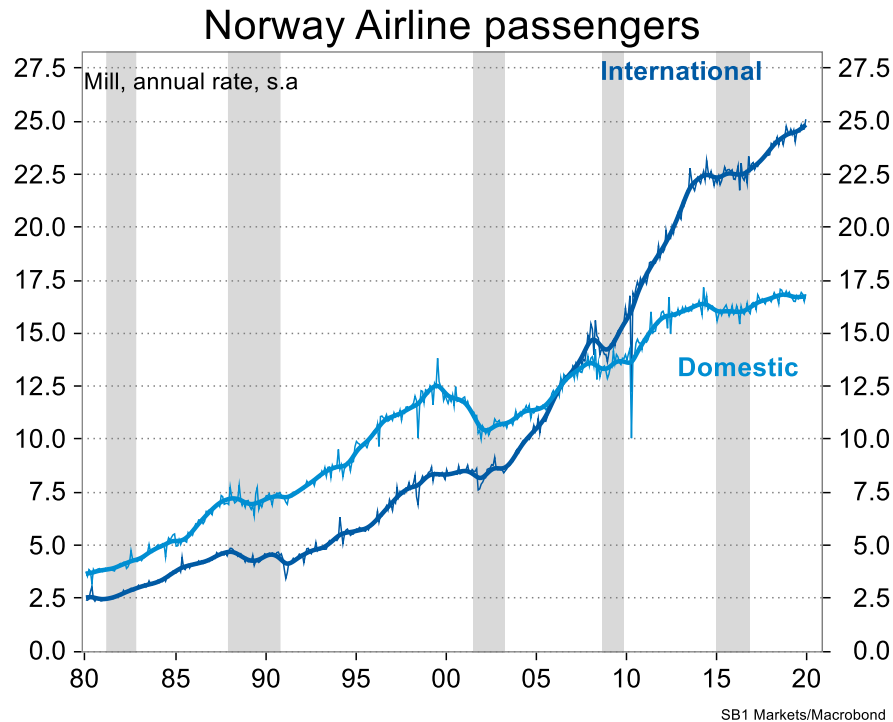
Very likely because the NOK has depreciated sharply – and the foreigners' came



- ..while the Norwegians stayed at home
- Now, the gap has almost 'closed', as capacity growth have been brisk
- The outlook:
 - » The NOK depreciation in 2019 may now give some extra support
 - » Slow growth in Norwegian household real income should keep their demand in check
 - » Norwegian businesses cannot expand their hotel usage at the same speed as over the previous quarters. Employment growth is slowing
 - » Supply of new hotels is still strong, limited upside on prices?

Domestic air traffic is flattening, international traffic is still growing (slowly)

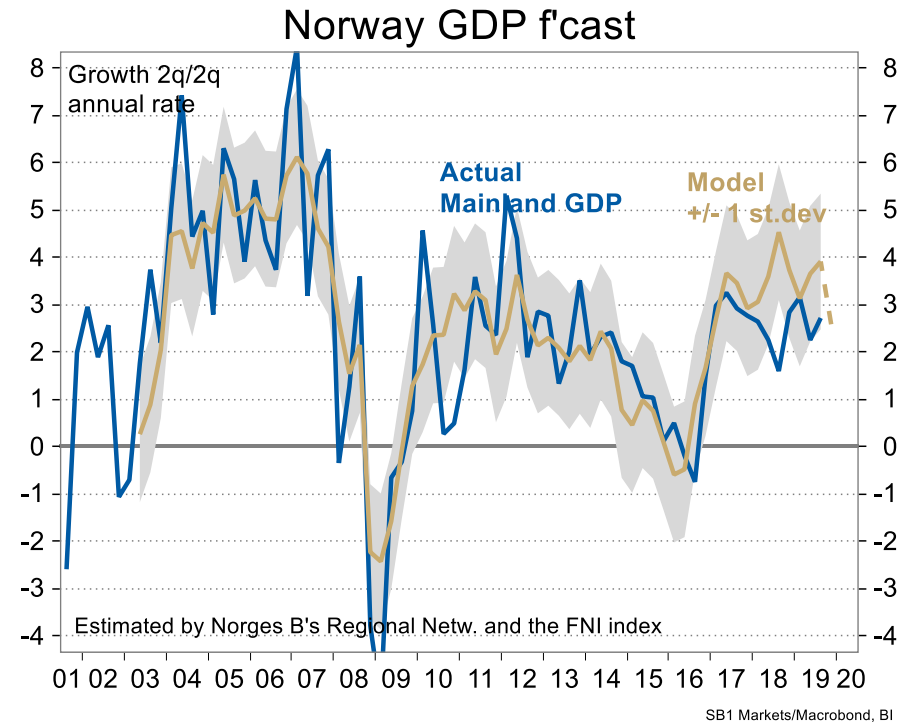
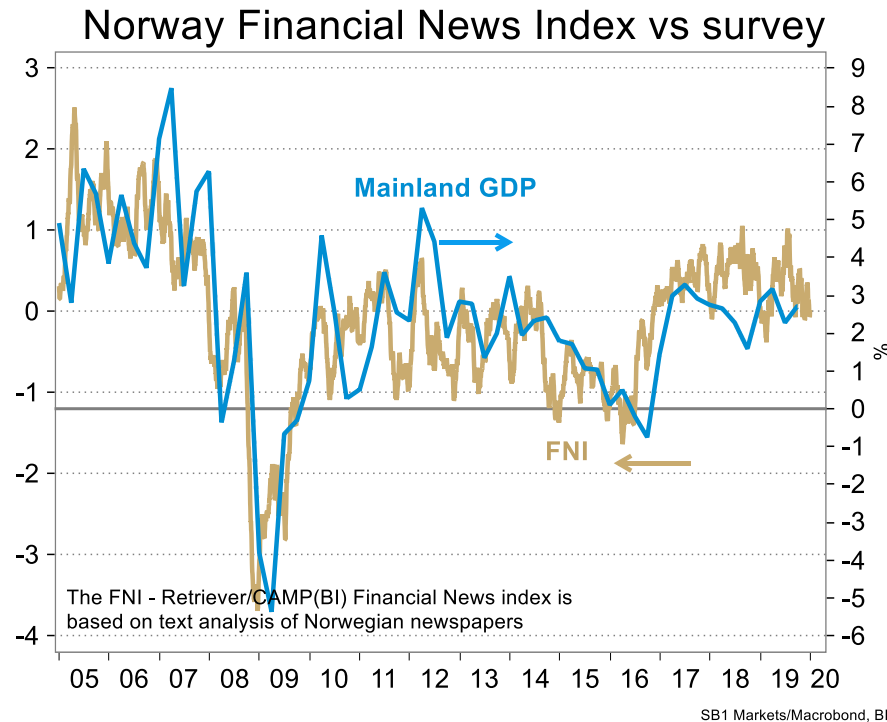
Passenger traffic up some 1% y/y, domestic marginally down, international +2%



- Growth in air passenger traffic is much slower than normal, and much lower than normal vs. Mainland GDP growth.
 - » Are some feeling some shame??

The Financial News Index steady the past 2 months, trending down

The FNI signals some 2½ % GDP growth, however, has been too upbeat vs GDP growth the past years



- The FNI tracks media reports on the economy. Trade tension, market turmoil, and a few softer key macro indicators created more negative news flow in financial media earlier in 2019. The index has stabilized in November & December, probably due to easing trade/Brexit concerns
- The index signals approx 2.5% GDP growth, probably too optimistic (as it has been the past 2 years). The direction may be more accurate, pointing to a modest slowdown now. The Regional Network points to 1.9% growth

Financial News Index is based on an analysis of text in Norwegian newspapers covering the economy, tracking 'economic' words and assessments. The index follows the cycle well but is rather volatile, short term. The FNI is published by Retriever/CAMP(BI)

Highlights

The world around us

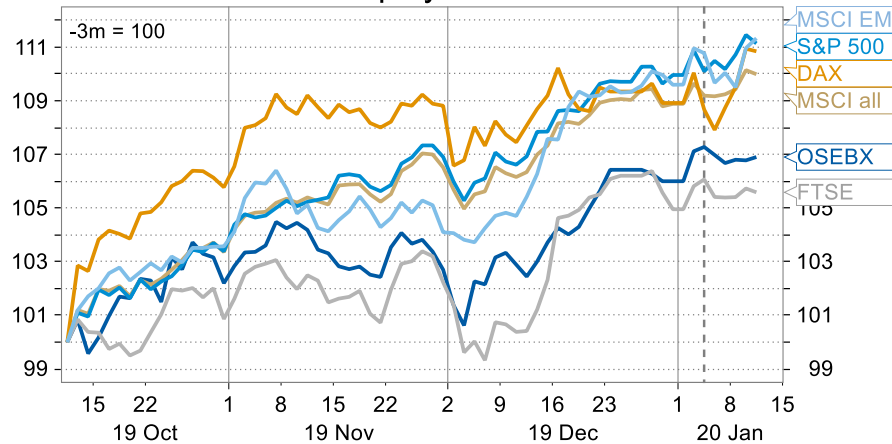
The Norwegian economy

Market charts & comments

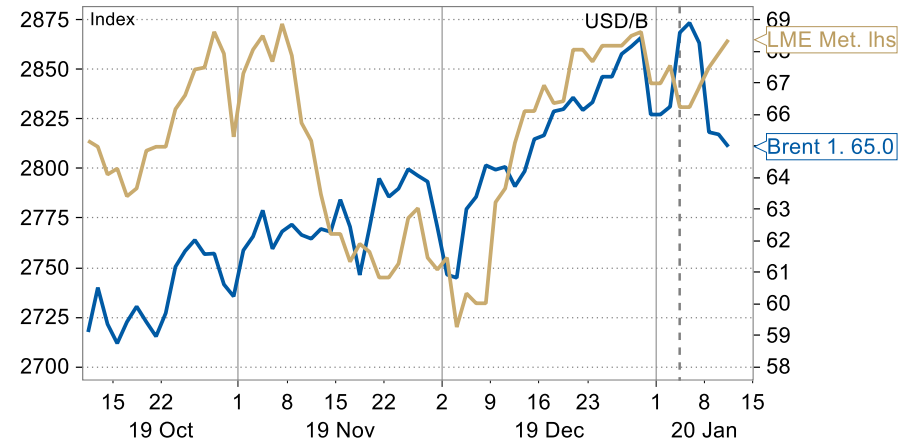
Risk markets shake off geopolitical tension

Stocks and bond yields rebounded and the oil prices retreated as fears of a US/Iran escalation eased

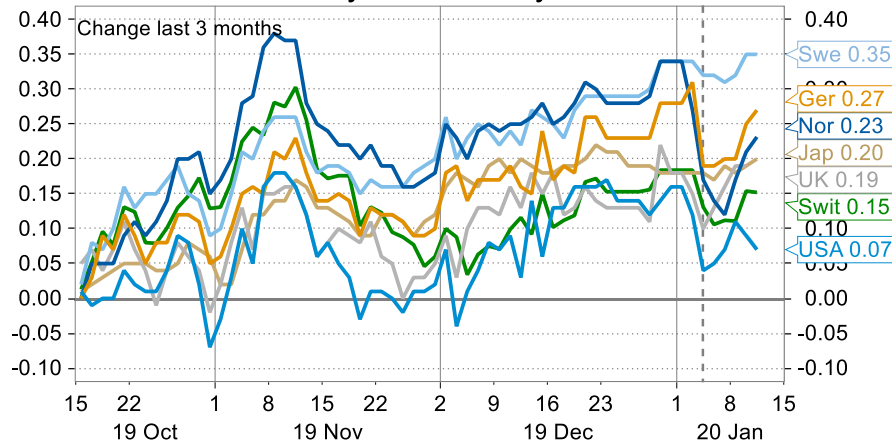
Equity Indices



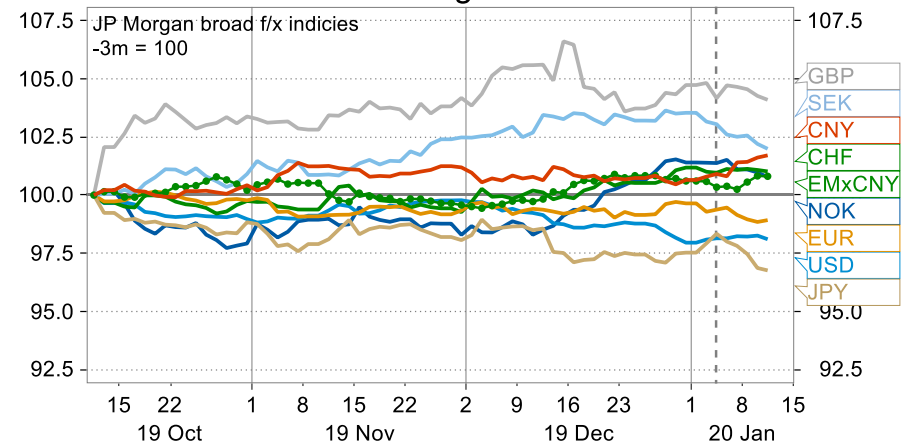
Oil vs. metals



10 y Gov bond yield



Exchange rates



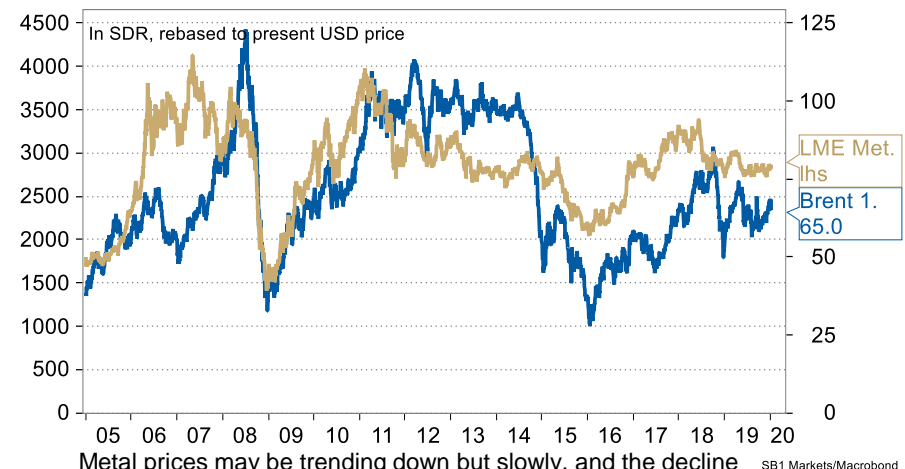
In the long run: US stocks at ATH, bond yields not that far above ATL

Raw material prices have not followed equities up

Equity Indices

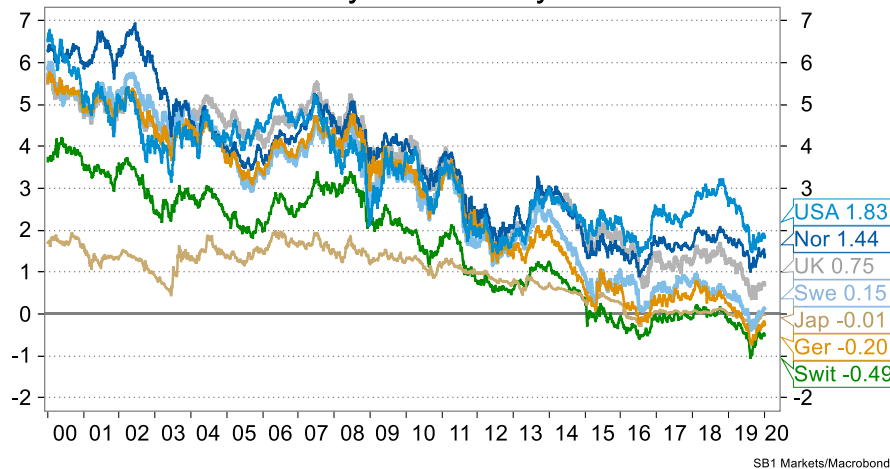


Oil vs. metals

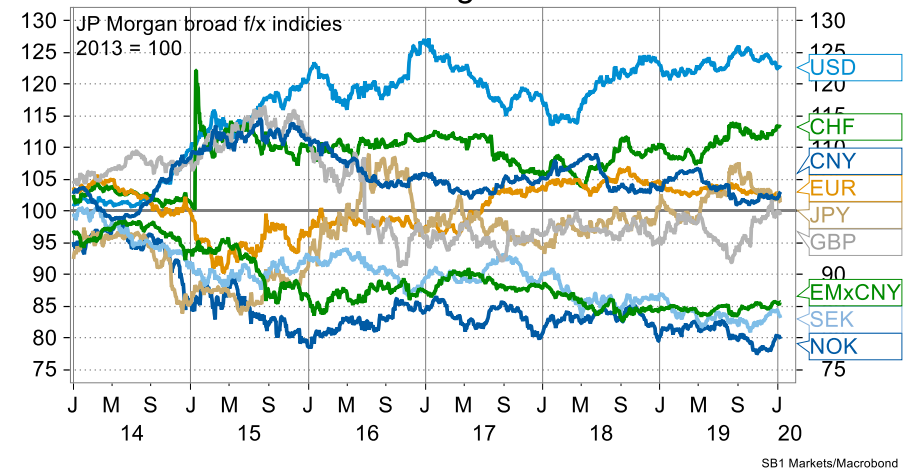


Metal prices may be trending down but slowly, and the decline from the local June 2018 peak is not large. Oil prices quite stable too

10 y Gov bond yield



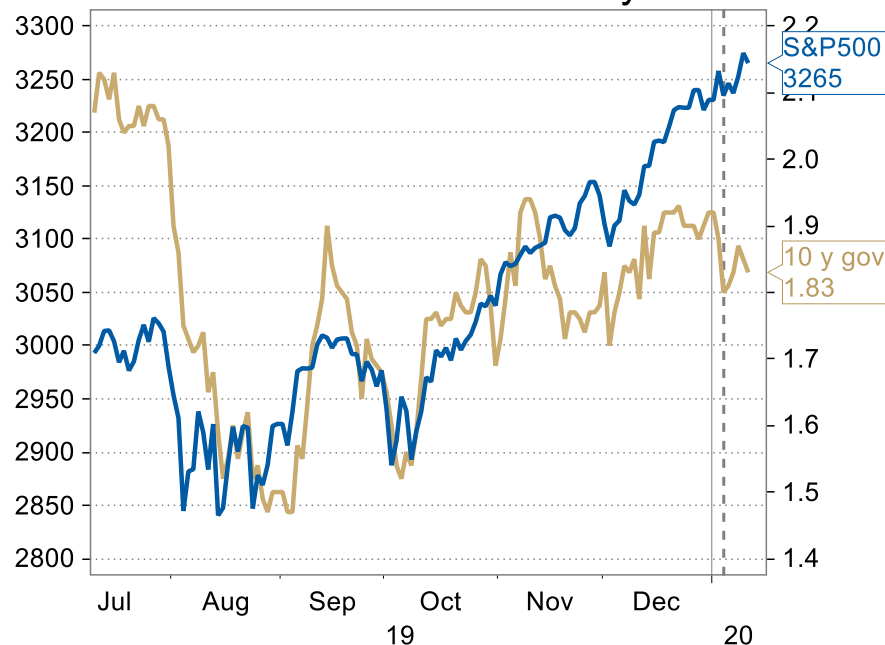
Exchange rates



US: A stock market and bond yields comeback as geopolitical concerns ease

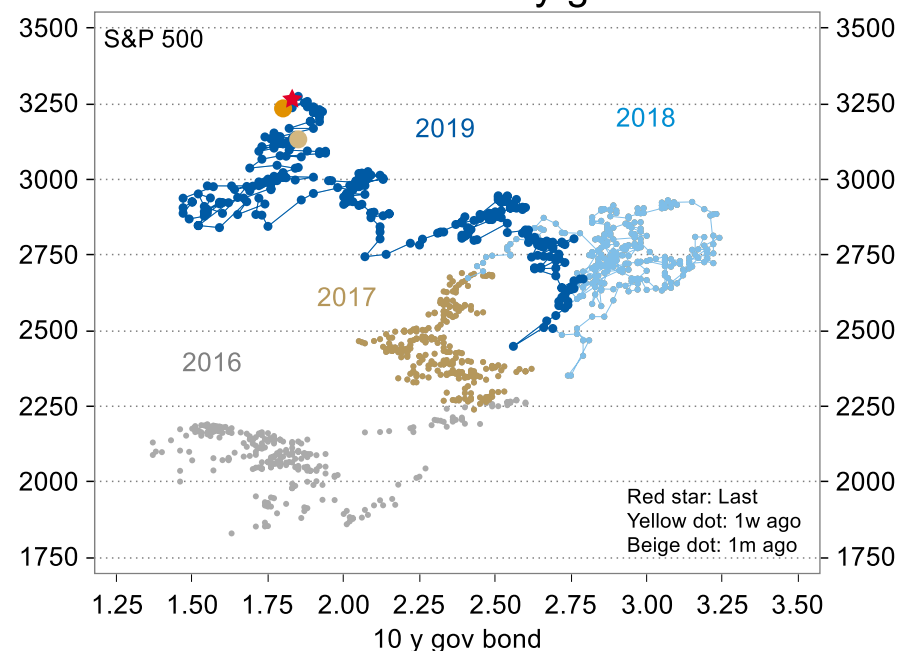
The US 10 y gov up 3 bps last week, S&P rose 0.9%

USA S&P 500 vs. bond yields



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S&P 500 vs US 10 y gov bond

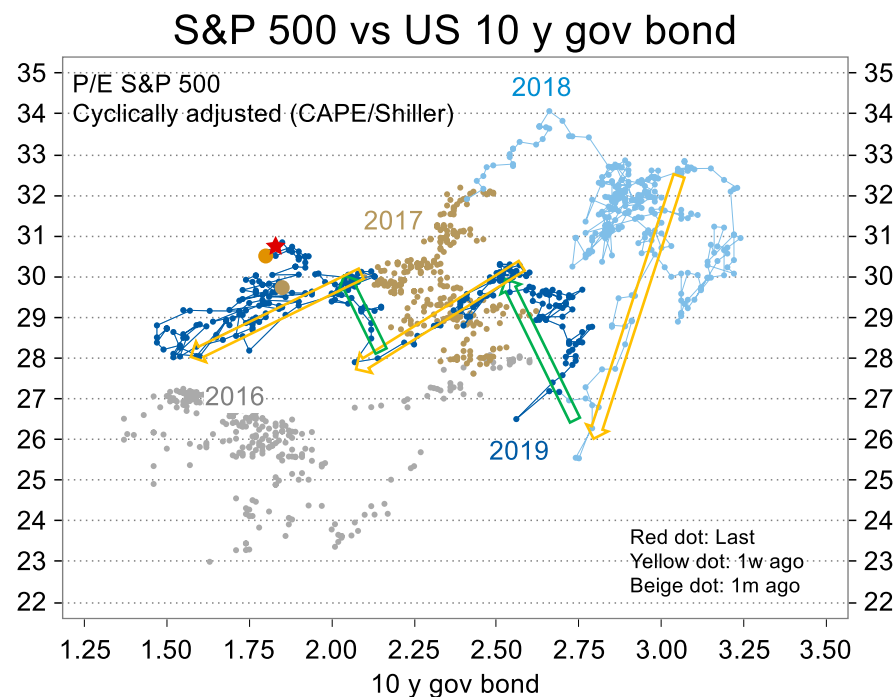
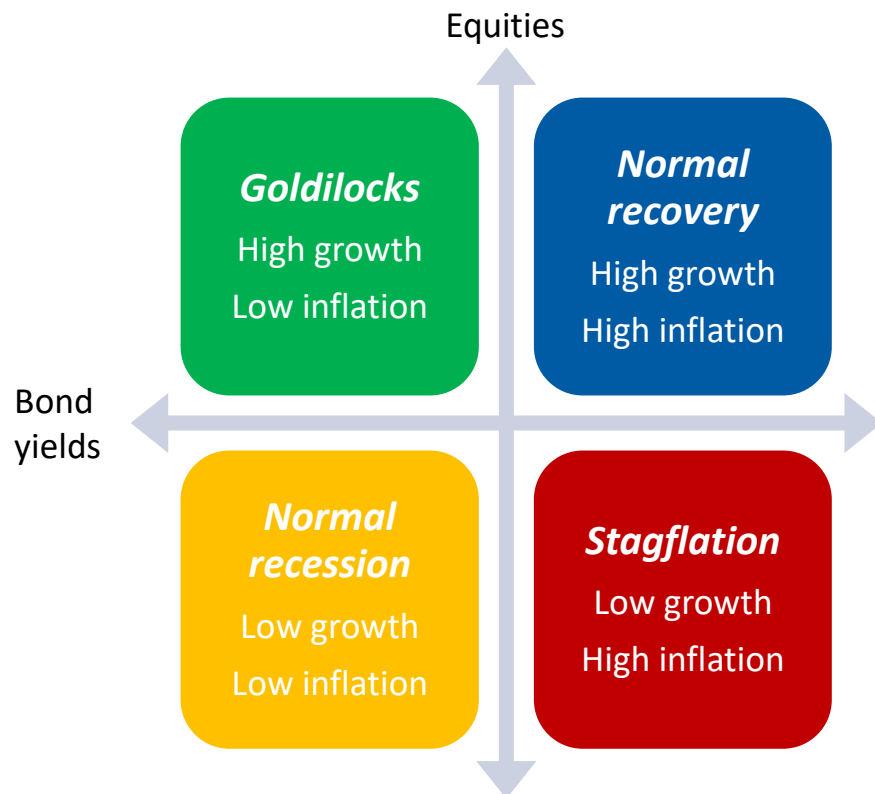


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- The stock market response to the US/Iran escalation after the US air strike was rather modest – and markets swiftly shook off concerns of a further escalation. The Iranian attack on US military facilities turned out to have done minimal damage and Trump's comments were more modest than expected. Moreover, China's announcement of the US visit to sign the phase 1 trade deal probably brightened the mood, too
- Bond yields recovered too, however, the US 10 y bond yield is still 7bps lower than in late December, before the US attack in Iran

US markets mostly moving in the normal recovery direction since Aug

2019 was a 'Goldilocks', due to the Fed? A step towards 'normal recovery' the past month

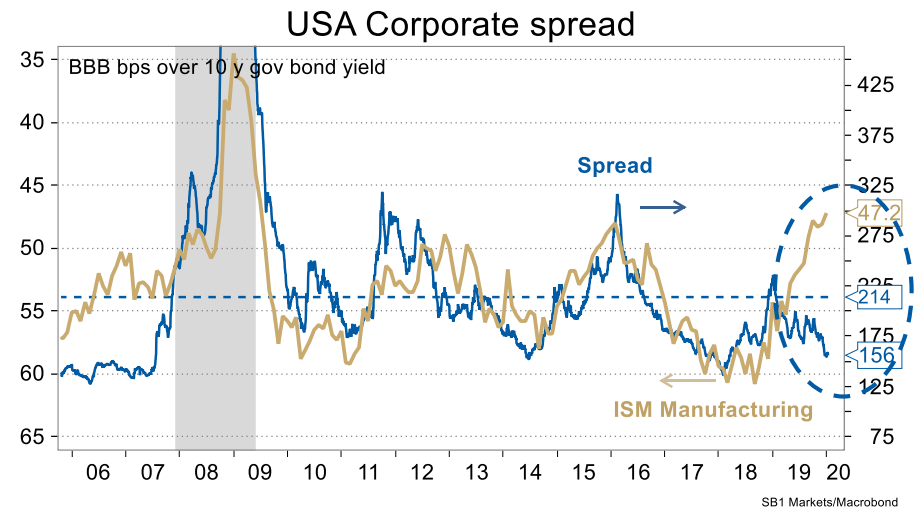
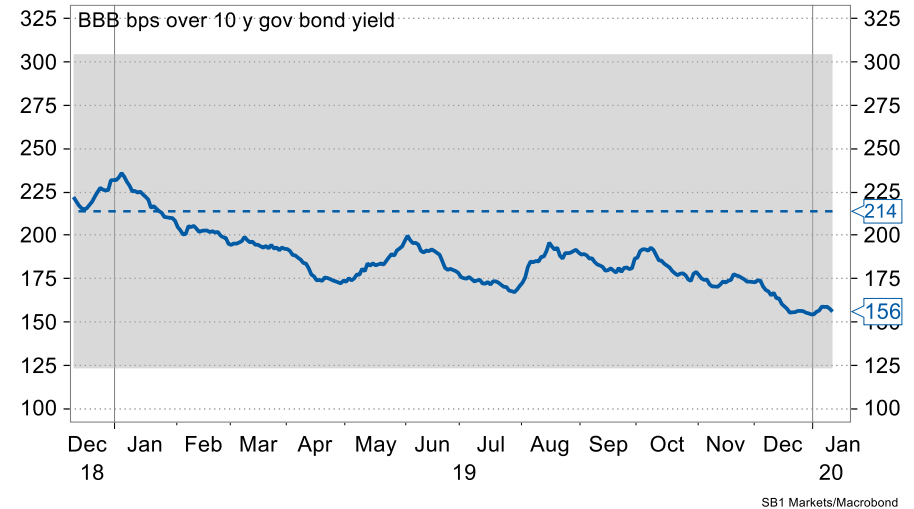
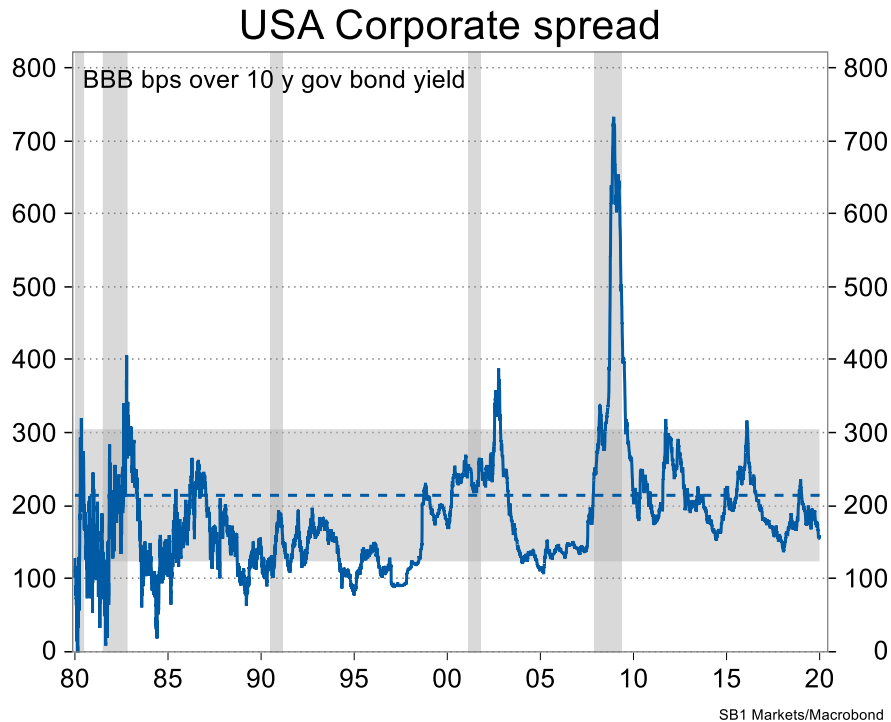


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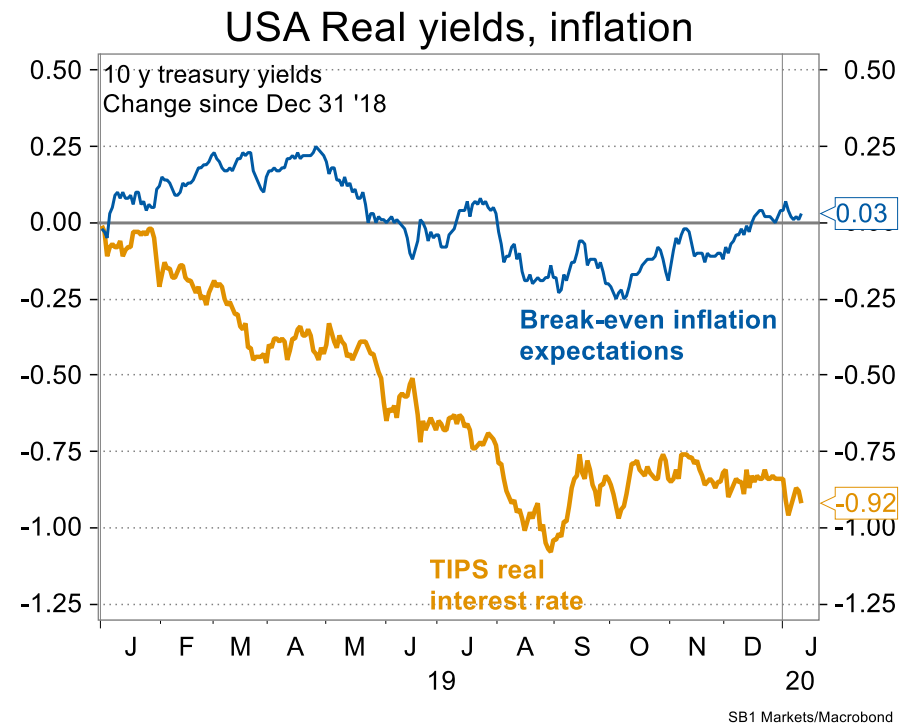
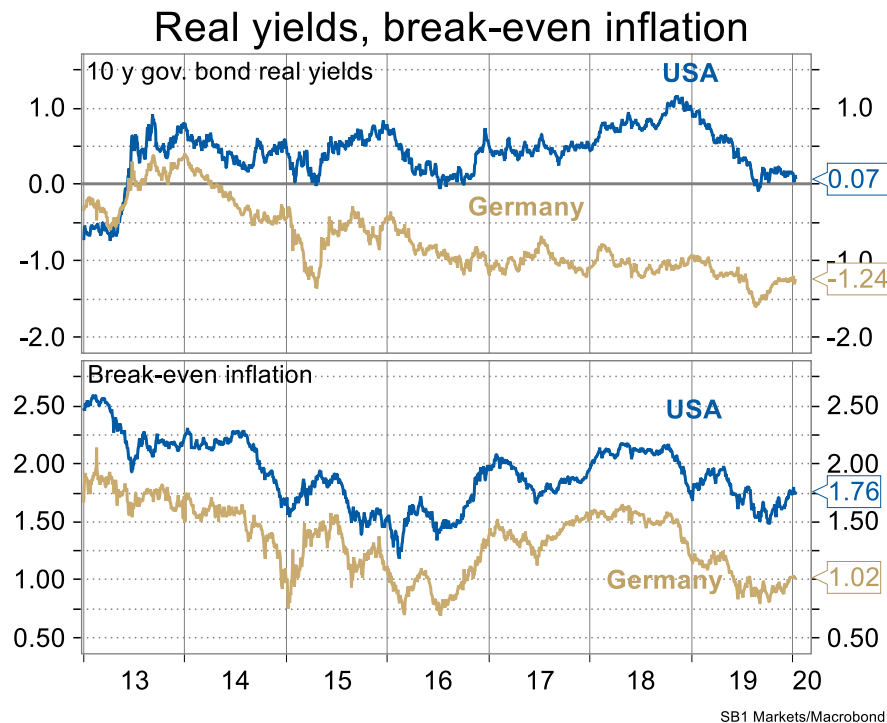
- Recent months, markets have been zig-zagging along with news on the trade war, most of the time along the 'normal recession/recovery' axis. The past week, stock markets rose 'more' than bond yields (but last month yields slightly down, equities up, a 'mild Goldilocks')
- Earlier in 2019, stock markets increased while bond yields retreated. We do not think a long term Goldilocks scenario is likely. Should yields decline substantially, it will be due to really weak economic news, which will not be good news for the equity markets. We are not that worried for the 'Stagflation' corner either; a take off in inflation without strong growth seems unlikely. Thus, the normal recession/recovery axis is the most likely – growth will be the main driver for both markets, not inflation.

Credit spreads are very low, well below an average level

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



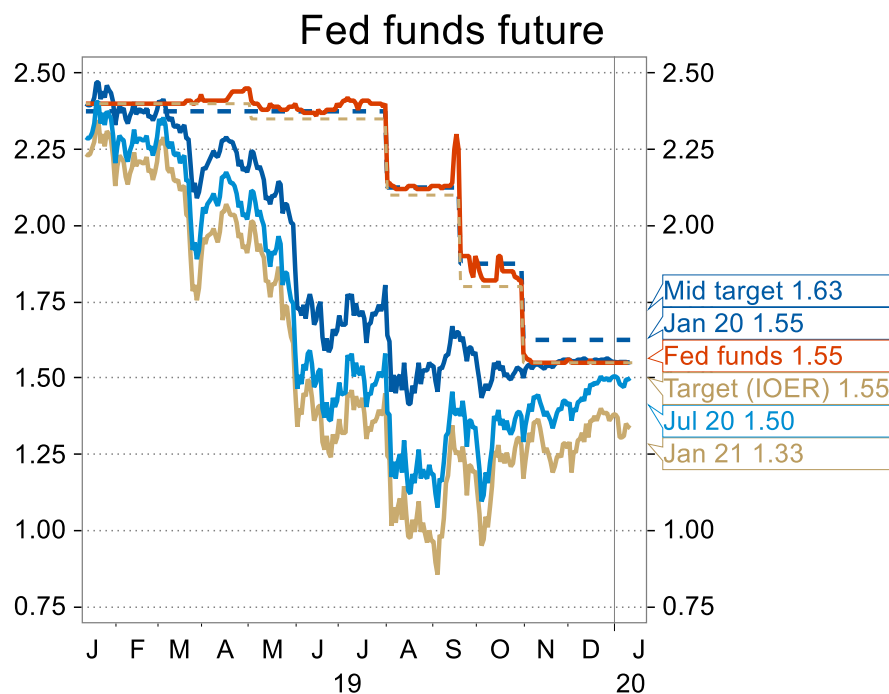
Higher inflation expectations recent months, real rates flat/down



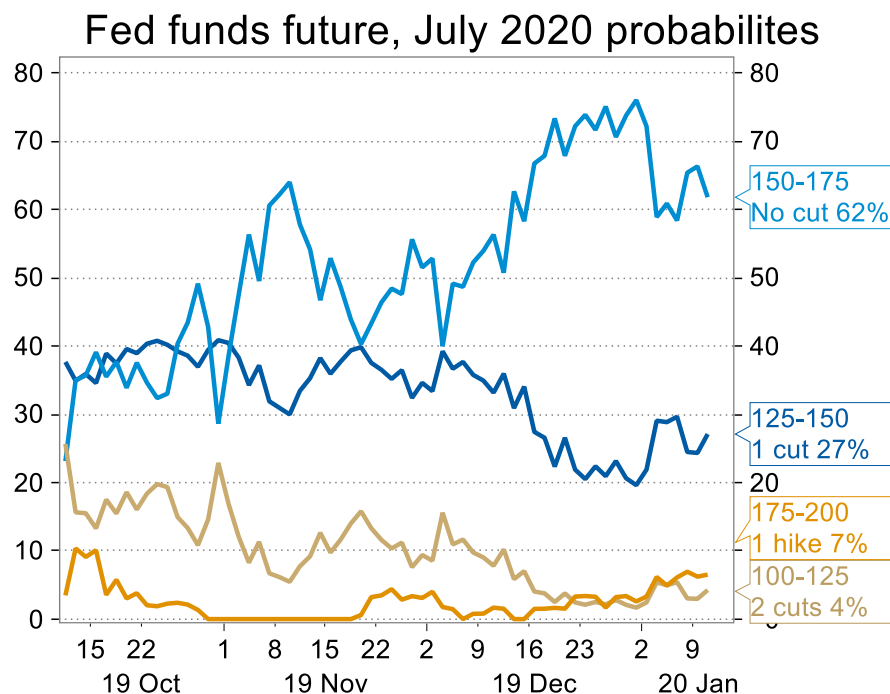
- Since November, inflation expectations have increased, while real rates have retreated slightly, at least in the US
- US 10y real rate at 0.07% is not far above the local bottom last august
- The 10 y German real rate at -1.24% is still ridiculously low, and the long term trend is still down. Inflation expectations at 1.02% is not that far off, although well below the ECB's price target at close to 2%

FRAs ticked up, expectations of a July 2020 cut just above 30%

Markets are almost fully pricing a 2020 cut (of 25 bps), from 3 expected cuts in September



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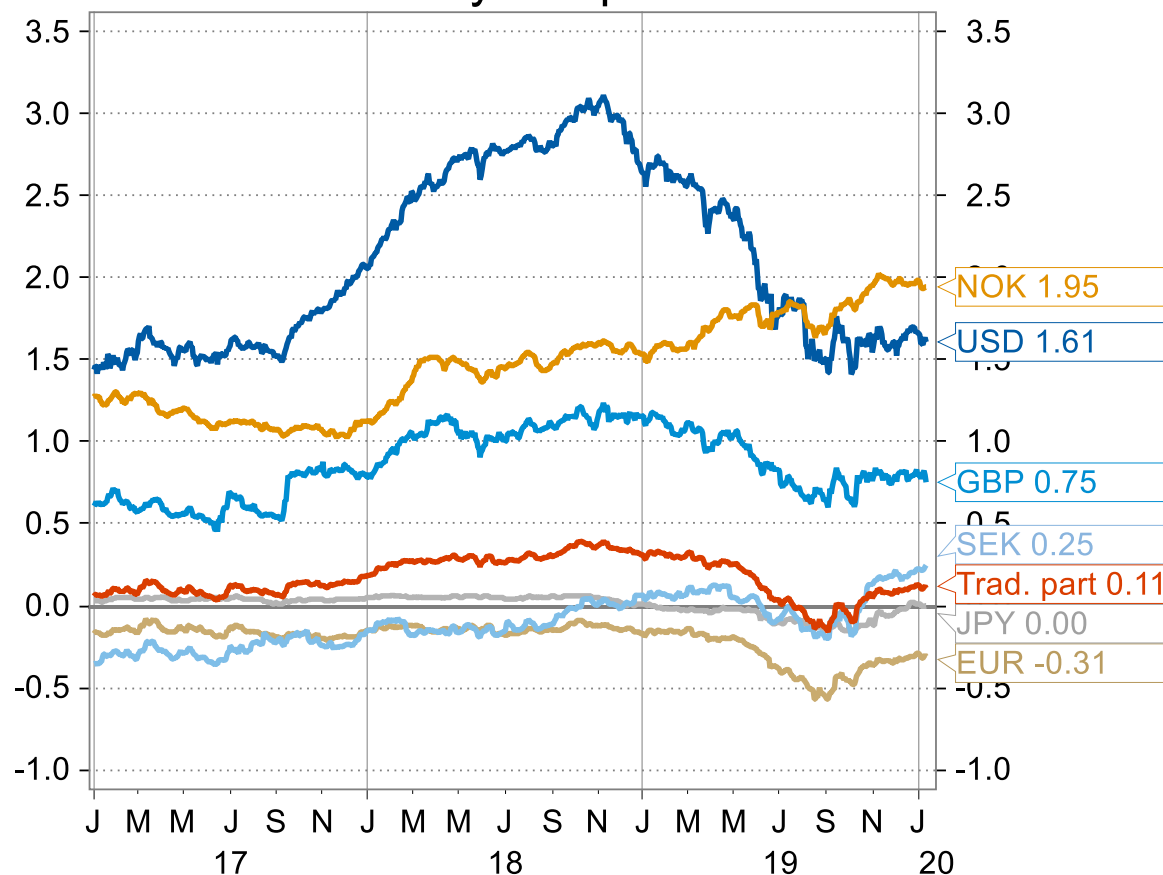
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- Fed Funds futures climbed steadily through December and dropped on the Iran/US tension. Last week, FRAs edged up along with other markets. Markets are still expecting a cut by the end of 2020 (by some 80% probability). Probabilities of a cut in H1 are still subdued, at some 30%
- The actual Fed funds (daily clearing) rate remains close to the target IOER (rate on bank's excess reserves at the Fed) at 1.55%, as the Fed has gained control on the short end of the curve. Spreads in the money market fell sharply last week

Short term rates have slowly turned up the past months but not further last week

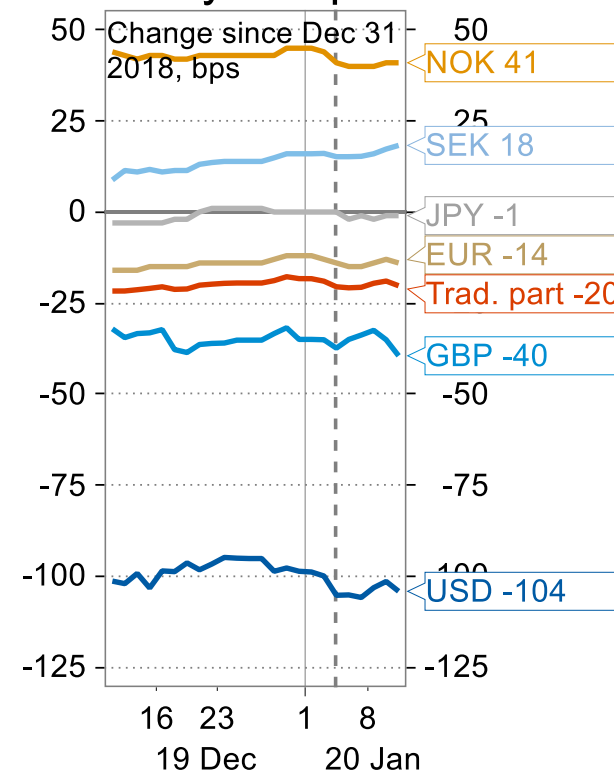
Up in Sweden, flat in EU & US. NOK 2 y swaps marginally down

2 y swap rates



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2 y swap rates

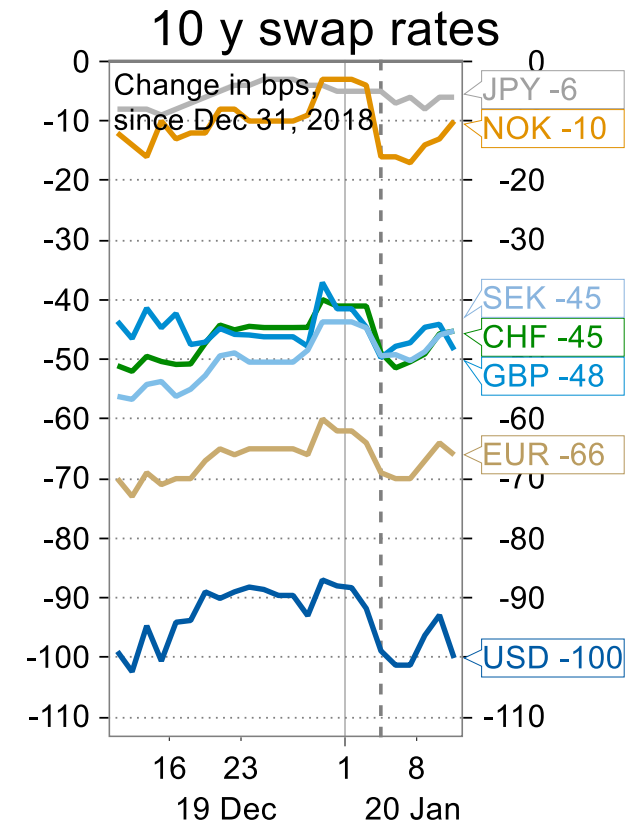
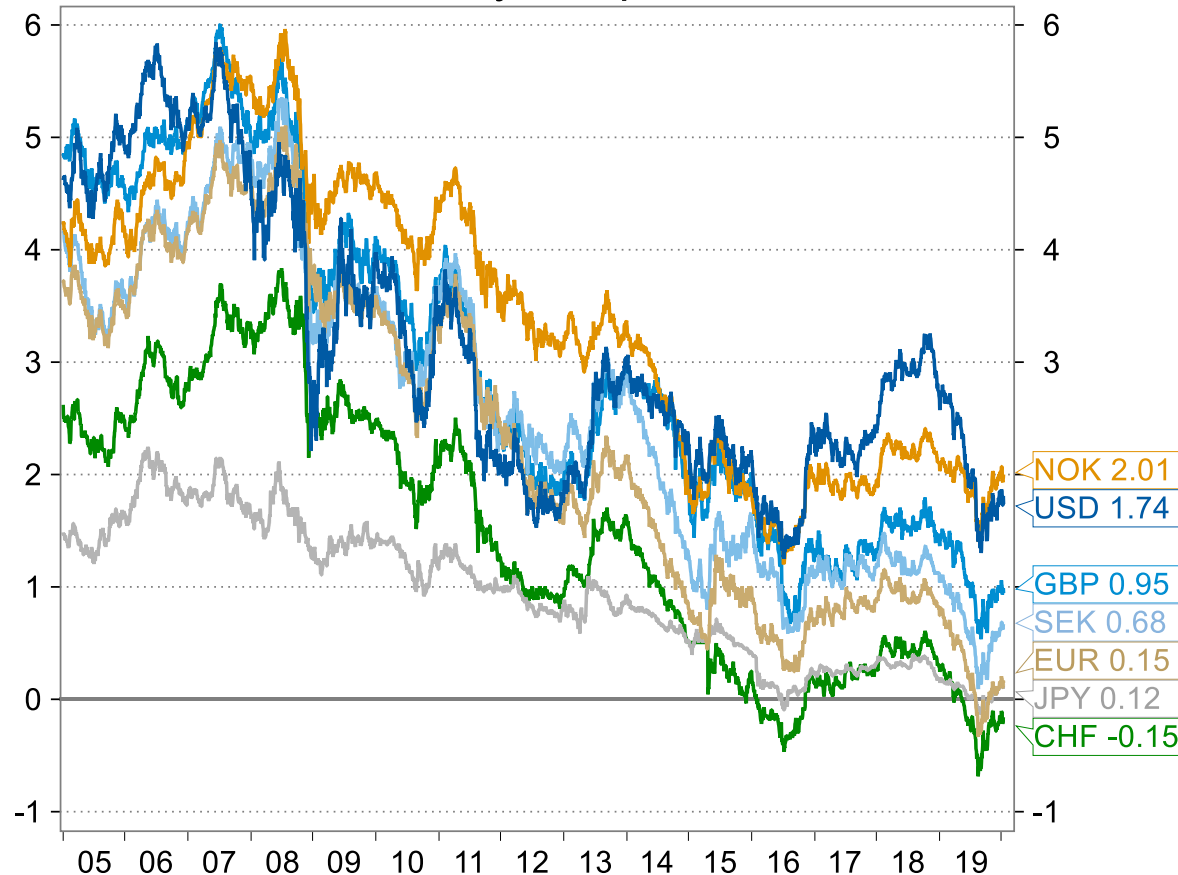


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Long term swap rates are climbing everywhere – mixed last week

10 y swap rates fell most places Friday (US wages?) but not in Norway. Most up last week, US down

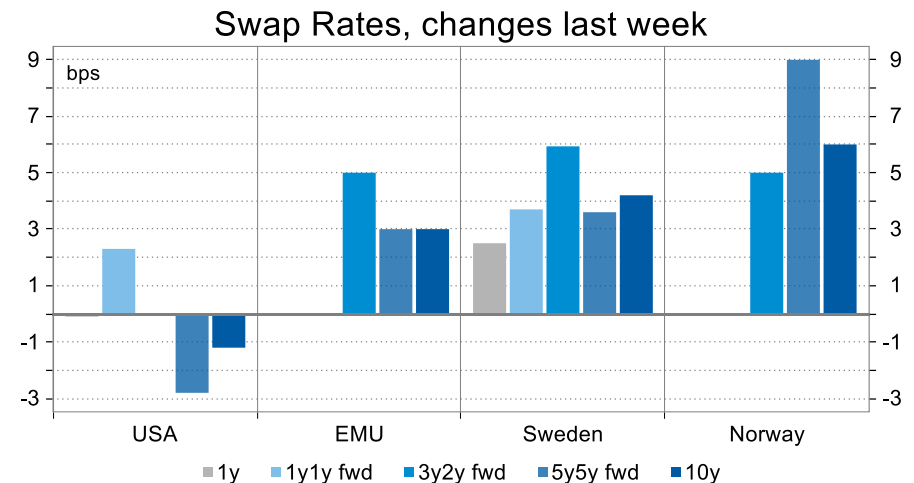
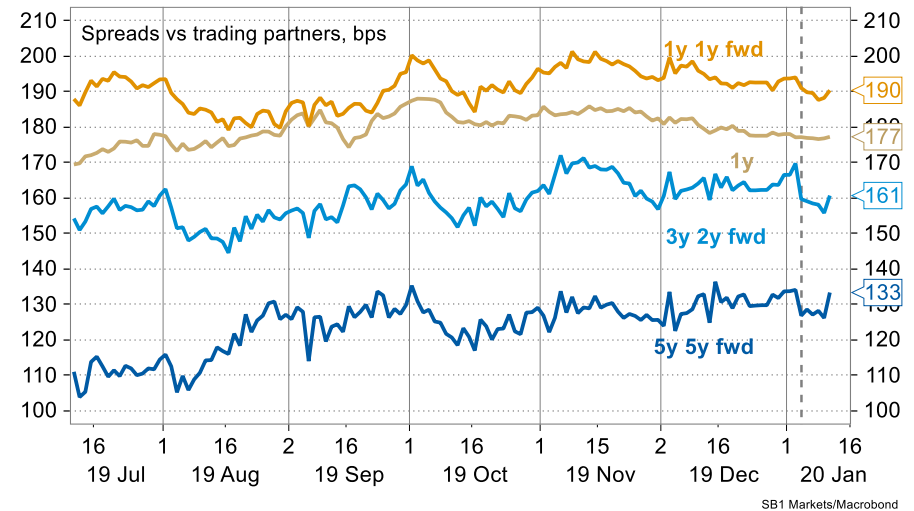
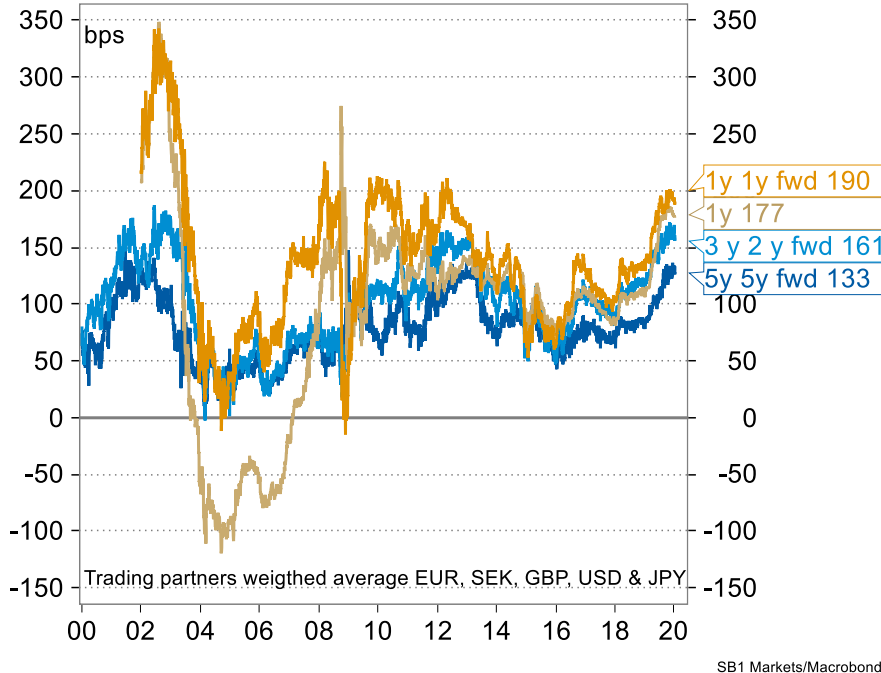
10 y swap rates



Swap spreads vs trading partners are shrinking, finally

Spreads are reduced all along the curve, as rates are increasing among trading partners, NOK flat

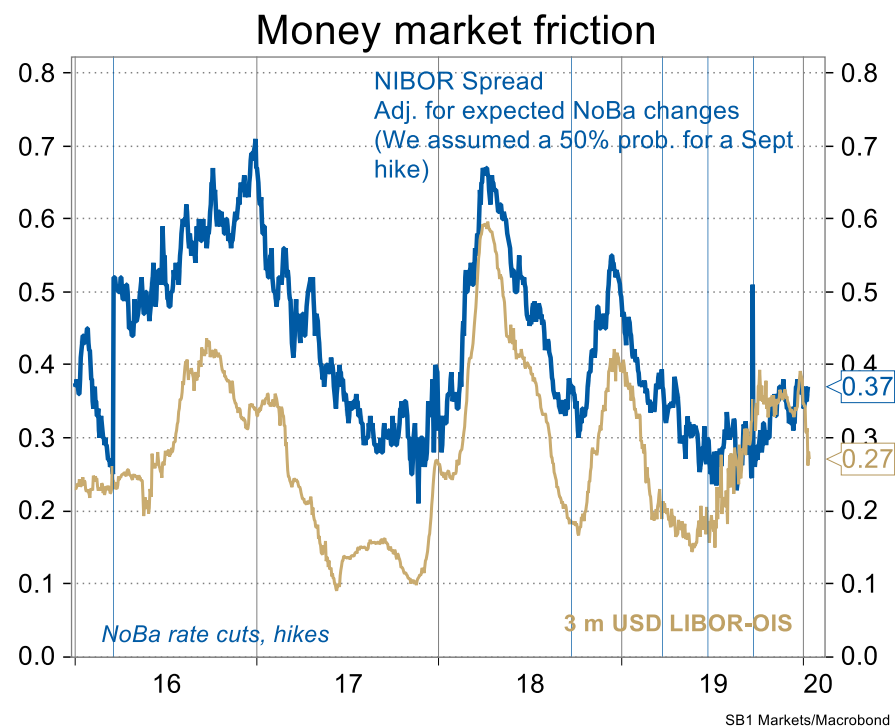
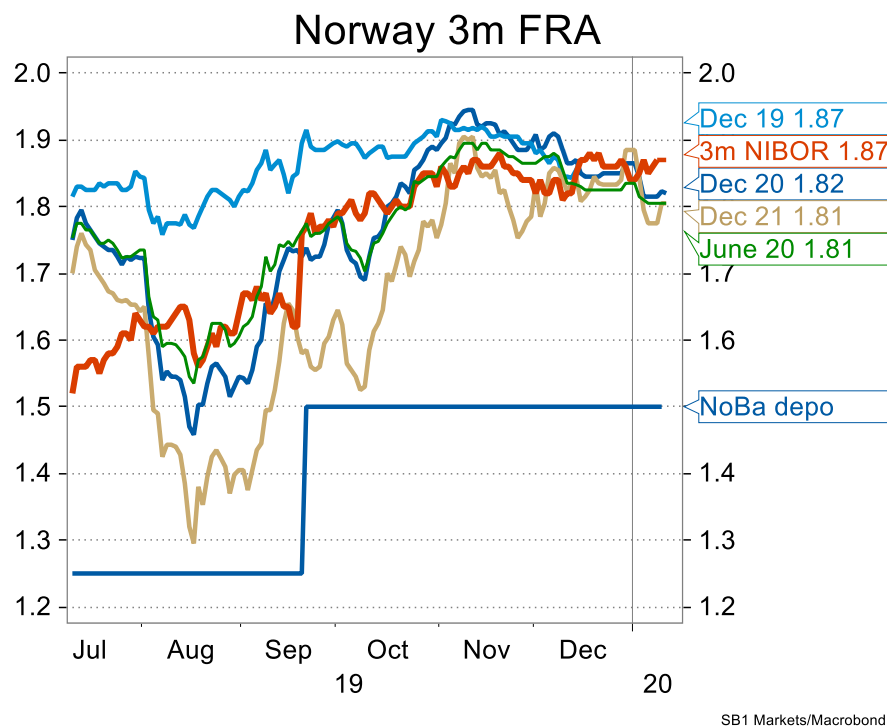
Norway vs trading partners, impl swap spreads



- Swap spreads between NOK rates and our trading partners have been widening rapidly in 2019, all over the curve. Since November, spreads have been trending in on the short end of the curve, spreads are down some 10 bps. At the long end of the curve, the spread has flattened but 'spiked' Friday, most like temporary
- While the short term spread has been well explained, we have been surprised by the wide spread in the long end of the curve. A 5y 5y fwd spread at 133 bps is still too wide, long term

The FRA curve is close to flat, just some few bps below NoBa's new path

Interest rate expectations remains subdued, no cut is priced the coming years (just 15% in '21)

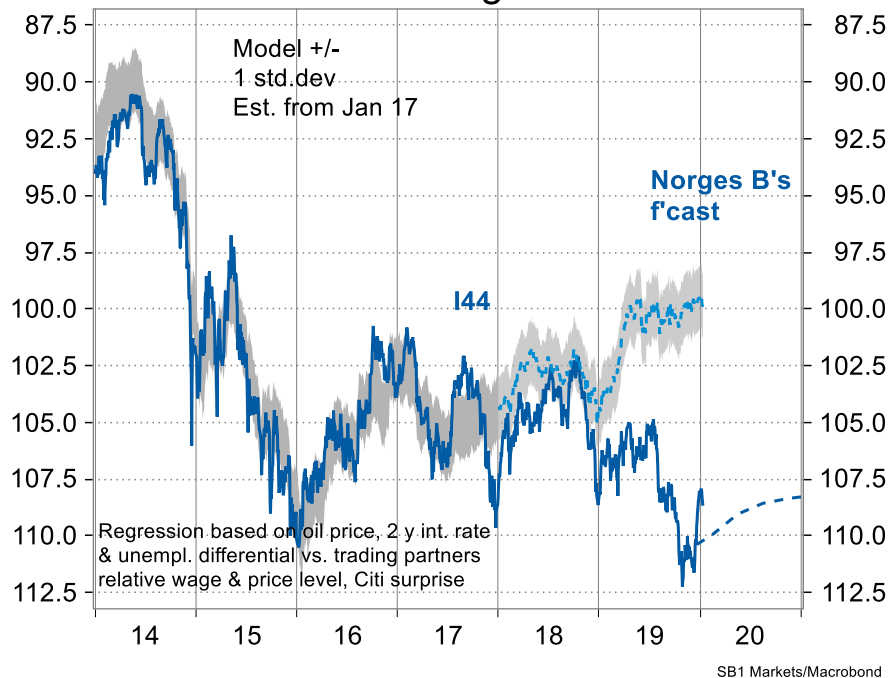


- The 3m NIBOR has stabilized (close to) 1.87% since before Christmas, equalling a 37 bps NIBOR spread
 - » In the December MPR, Norges Bank nudged down the money market spread forecast to 36 and 35 bps, from 40
 - » The US the LIBOR-OIS spread has fallen to 27 bps, from almost 40 before new years eve. Historically, the NIBOR spread has been significantly wider than the LIBOR-OIS spread. Thus, the current US spread is not a good argument for narrower NIBOR spread – but certainly not at argument for a higher spread
- Longer dated FRAs rates edged up through December, dropped on the US/Iran escalation and recovered mildly last week. The close to flat FRA curve still reflects expectations of an unchanged NoBa signal rate, with just some 15% probability of a 2021 cut

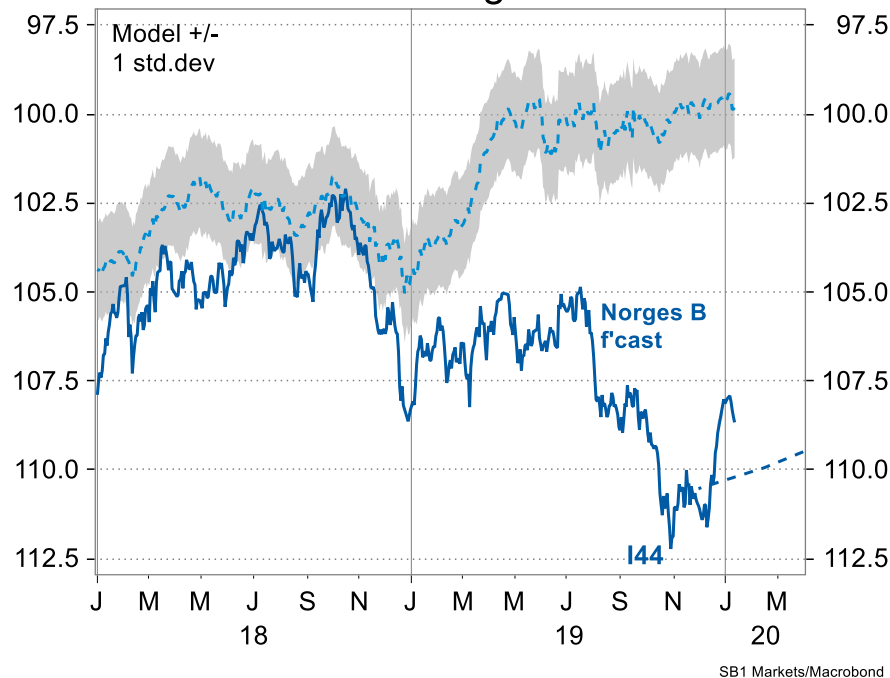
NOK up 3% since mid-December, marginally down last week, with the oil price

It is just that the NOK was too weak – or the season?

NOK I-44 exchange rate model



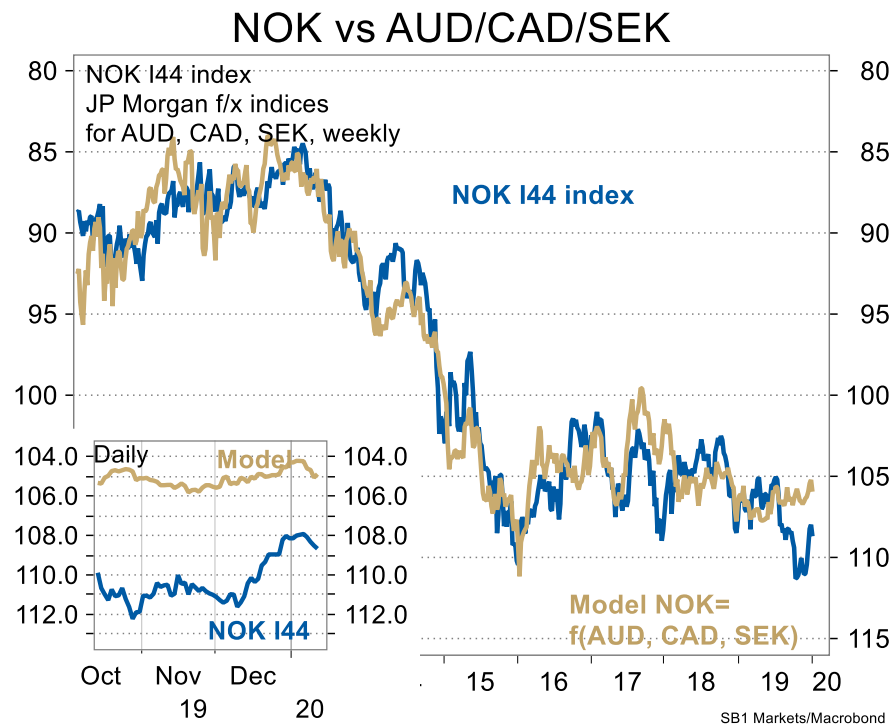
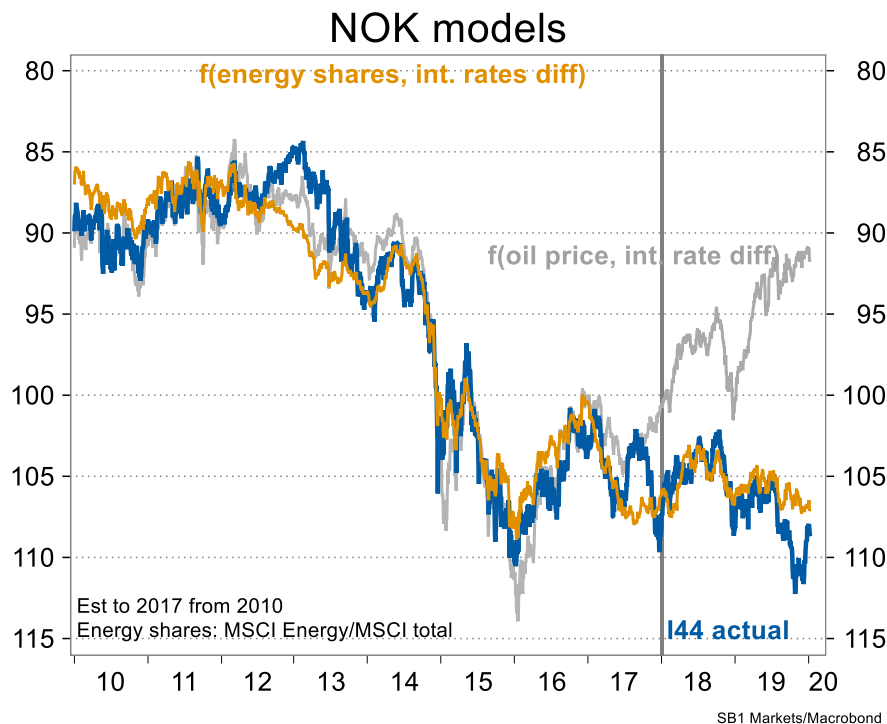
NOK I-44 exchange rate model



- NOK has strengthened by 4% from the late Oct ATL (and 3% from the local bottom at Dec 10) but retreated 0.7% last week, of which 0.4% could be explained by the decline in the oil price. The gap between the our 'old', standard model estimate and the actual I44 index narrowed to 'just 8.9%, from ATH at 12% in Oct/Dec!
 - » Reduced global uncertainties following the UK election and the US/China partial trade deal may have supported the NOK, but NOK did not follow the pound or global risk markets up during the autumn when markets discounted less risk for a hard Brexit and for an escalation of the trade war
 - » NOK has very often been temporary weak in Dec, perhaps due to thin f/x markets. This year, the NOK was already 'too' weak ahead of the Holidays
- Our 'new' models, based on the other super cyclical currencies or energy (oil) equities are far closer to the ball (check next page), and the NOK is just marginally 'too' weak vs these models now
- We stick to our **buy NOK** recommendation

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

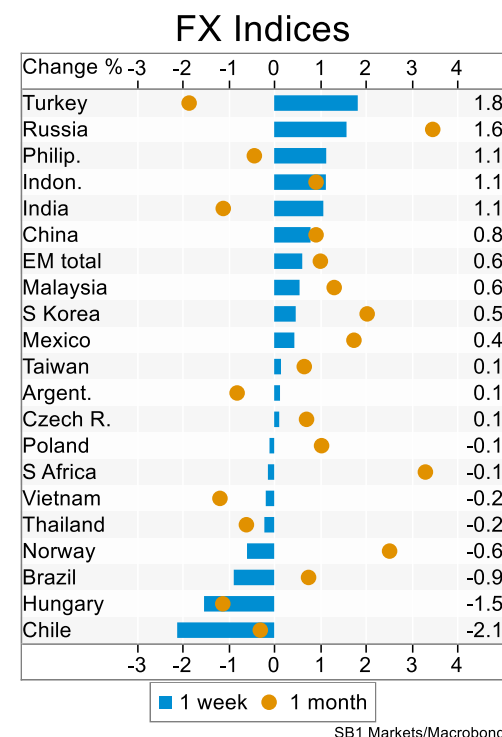
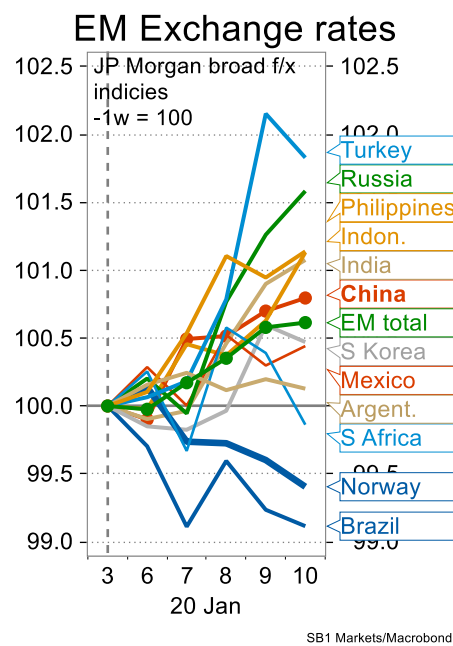
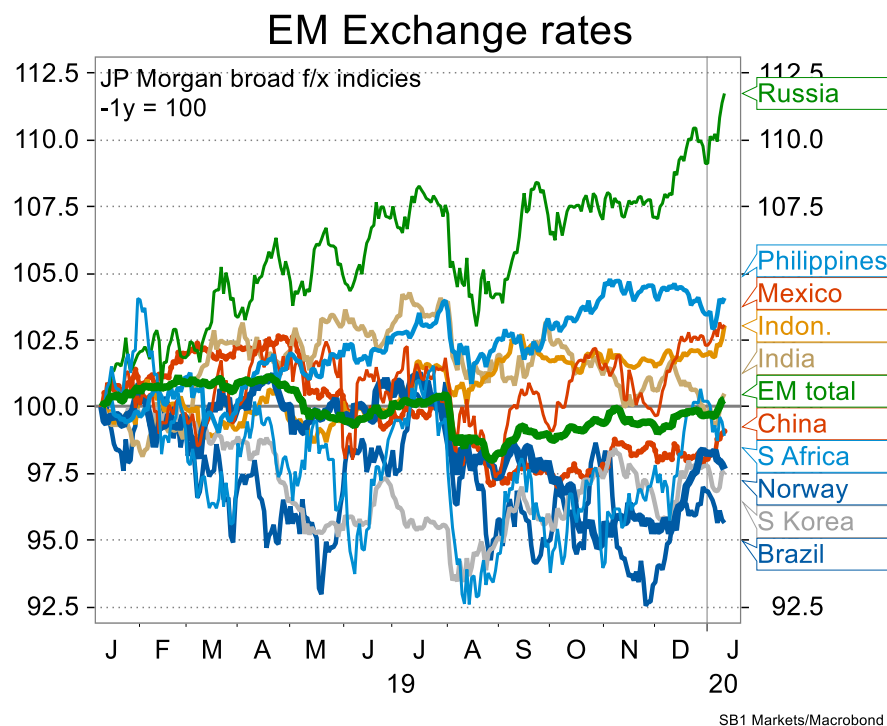
NOK is 2% too weak vs the other 'supercycle' currencies and just 1% below the oil stock price model!



- Our NOK model based on pricing of oil companies has 'explained' the weak NOK much better than our traditional model since 2017, as have our 'supercycle' currency model ($\text{NOK} = f(\text{AUD}, \text{CAD}, \text{SEK})$), with just a marginal contribution from SEK). The EM x CNY currency aggregate is also quite closely correlated to NOK)
- Both AUD and CAD are sensitive to oil/energy prices and – together with the SEK – global growth outlook
 - » CAD and SEK have been much stronger than the NOK since September, at least until late December. Both AUD, CAD and SEK depreciated more than NOK last week and the gap to NOK is reduced substantially

EM currencies strengthen as geopolitical tension ease, US/China set to sign deal

The CNY up almost 1% last week and the total EM average at the highest level since August M



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

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