SpareBank MARKETS

Macro Research

Weekly update 11/2020

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9 March, 2020



Highlights

The world around us

The Norwegian economy

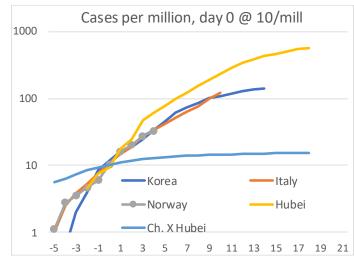
Market charts & comments

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



Last week – the main corona takes. And some oily & other slippery implications

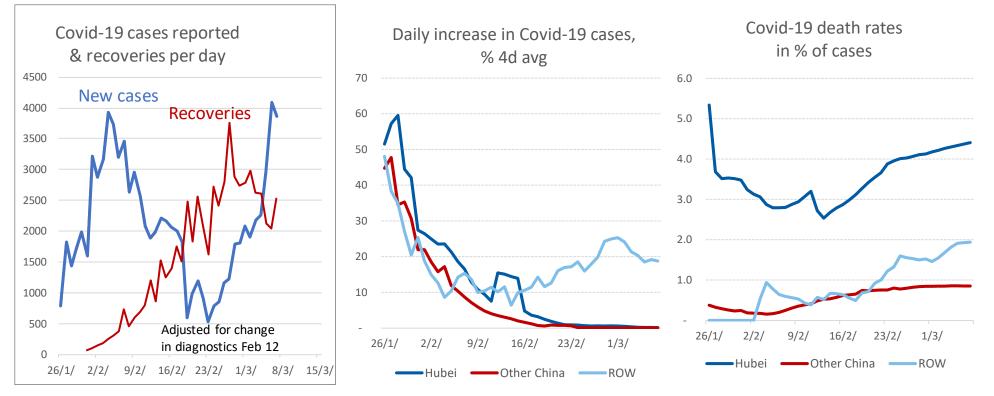
- The coronavirus is spreading fast in several countries ex China, particularly in Italy, and the global growth rate ex China is now 19% per day
 - » The goods news is that the growth rate in **China has fallen close to zero**, and that 70% of those infected have recovered, and that the **growth** rate in **South Korea is high but clearly declining** after harsh (regional) measures have been implemented
 - » However, new cases are still increasing at the same rapid pace in Italy (24% d/d), as in Norway. Norway is on the same track as Italy and South Korea per inhabitant, just six days behind Italy. And none of us are that far below the early Hubei curve, and are far above other Cn. regions
 - » Yesterday, Italy 'closed down' the Northern region, so far until April 3. In implies substantial restrictions in activity for 17 mill Italians, 29% of the total population and more of its economic activity. It is still unclear how much production will be reduced but it will be substantial, and Italy is no doubt in a recession in H1
 - » No doubt, there is a substantial risk for further local/regional outbreaks to turn up. These outbreaks will most likely be met with tough measures, that probably will be successful. However, regional economic cost will be substantial and will create uncertainty both in the real economy and markets world wide. Travel and tourism is already badly hit. The risk for a recession is increasing, for a mature economic cycle
- **Chinese PMIs** fell +20 p to below 30 in February, confirming a sudden halt in activity due to the measures taken to contain corona (which seems to have been remarkably successful)
 - » Daily Chinese data suggest that <u>activity is slowly gaining speed</u>, but that production is well below normal levels in early March too. Lack of labour is a huge problems, as most domestic transport services are not up and running which prevents migrant workers from returning to work from the Chinese new year holiday (which ended 4 weeks ago...)
- Chinese February exports fell 40% m/m, imports just 10%. Domestic demand has no doubt fallen more than 10% in Feb, and inventories must have been build up, implying lower imports the coming months. Exports could recover faster, from a low level
- A new oil price war! At Friday Russia was not willing to join Opec in further production cut to compensate for a decline in oil demand in Q1 (and very likely in Q2 too) and in order to keep the oil price up. As a response to the Russian decision, Saudi Arabia has offered substantial price discounts to buyers. During the weekend, the oil prices fell USD 15 to USD 33/b, the second biggest daily decline ever (since the Gulf was in '91). Lower oil prices will be a welcome (income) stimulus to the world economy, if not for oil producer (and their currencies). The oil price is not far too low for US shale production to increase further, over time
- NOK did not welcome the Saudi decision, for good reasons. It is now trading at 10.84 vs the EUR, the lowest levels ever, down 5% (and no, its not a devaluation). A Norges Bank cut next week is a done deal, by 50 bps, at least? At least if not a miracle turns up before next Thursday
- Stock markets and bond yields have collapsed last night and this morning, some 5%, the USD 10y treasury fallen another 25 bps to 0,51 bps, all time low, of course





The coronavirus is still spreading fast outside China but not faster

However, no of new cases in ROW is high, and has reached 26.000



Source: Johns Hopkins University, WHO, SB1M calc. Data just partly adjusted for change in diagnostics

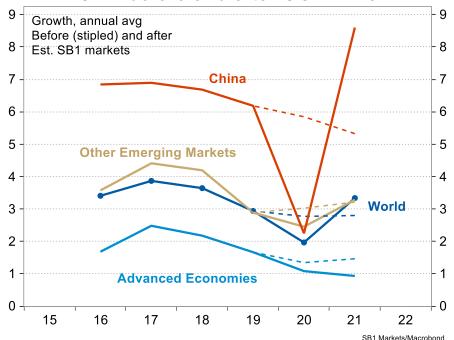
- The growth rate of new cases is close to zero in China, both inside and outside the Hubei province. Outside China, the growth rate is at 18% per day, and it has slowed somewhat due to a far lower growth rate in South Korea. However, growth remains high in Italy.
- The number of new recoveries has been increasing sharply in China, and is well above the no of new cases there. The number of recoveries now equals more than half the no of those who have been diagnosed as infected
- The death rate, calculated as deaths/cases in Hubei is at 4.3%, and still on the way up, but slowly. It seems likely that the no of cases has been underreported, as the death rate in other parts of China is much lower, and still below 1%. However, there are more deaths in other parts of the world, now at 2%. Most researchers estimate a 1% death rate vs a <u>real</u> no of cases



The coronavirus vs. the Chinese & global GDP. More policy stimulus ahead?

It's getting more complicated, Q1 is 'lost', a Q2 recovery still most likely. But...

- The downside risk has no doubt increased substantially over the past weeks as both South Korea and Italy have reported a rapid rise in new cases. Others will most likely follow suit. Last night's turmoil at financial markets signals more the downside risks in the world economy too
- First, the good news: Covid-19 is most likely brought under control in China. Economic activity will probably mostly return to a normal level during the coming weeks (but some sectors, like travel will probably take a much longer hit, and supply chains must be reestablished, and some will be rebuild, outside China)
- The bad news: Harsh measures were needed to win over Covid-19: We assume GDP fell by some <u>10% q/q in Q1 (which is not an</u> <u>aggressive estimate, given a lot of daily activity data), taking the</u> annual growth rate down to -4%, from +6 in Q4
 - » <u>IF</u> activity recovers to almost a normal level during Q2, annual GDP growth in 2020 will be reduced by almost 4 pp to just above 2%!
- With the just the Chinese hit, global GDP will decline q/q in Q1, and the annual growth will be cut by almost 0.7pp!
- Then, the ugly. Italy, South Korea were both hard hit past two weeks, and there are new cases in many other countries
 - » Then, it will not just be substantial supply side challenges (due to China) but 'real' impacts on production/demand in several other countries as well. Both total consumption and business investments may be significantly hurt, at least regionally
 - » The economic impact is impossible to quantify, but we have cut our x China global 2020 forecasts by 0.2 0.3 pp, which does not seem to be on the pessimistic side this morning
- Adding up: Global GDP growth could easily come down to 2% or below in 2020 vs our pre corona below consensus 2.8% forecast, which is equal to a 'normal' global growth recession
 - $\,$ > If so, global corporate earnings will decline by some 5 10% in this scenario, from zero growth last year
- A recovery in the global GDP growth rate is most likely in 2021, of corona is contained even before a vaccine is ready



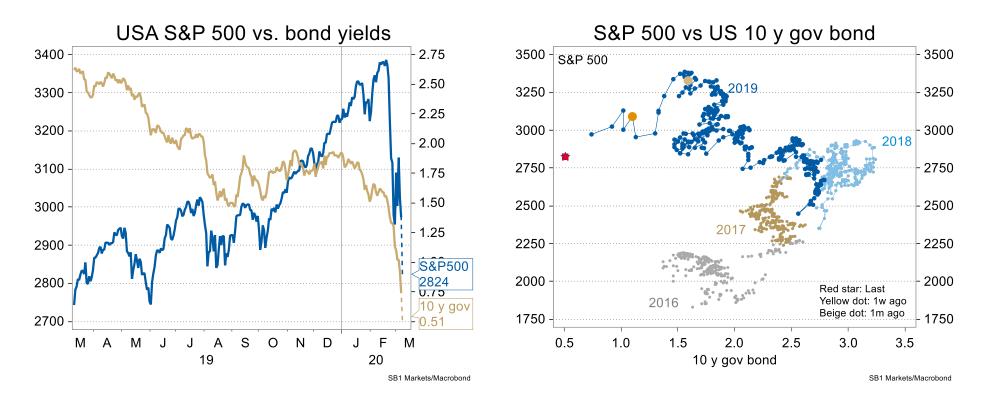
GDP before and after COVID-19

- The real problem: Global growth was anyway on the way down, due to a maturing cycle with too low unemployment, a profit (share) squeeze, and somewhat too high investments. The virus might of course be a good 'excuse' for a more pronounced downturn than we had forecasted in our (below consensus) base case. The risk has obviously tilted to the downside
- <u>Central banks is now cutting rates</u>, at least that's the hammer they got (plus securing bank liquidity), even if the initial problem is more of a supply side contraction, not demand shortfall. <u>Serious sector</u> <u>specific problems should rather be addressed by fiscal measures</u>



Stock markets, bond yields sharply down last night/this morning

Stock markets down some 5% from Friday (but futures in the US are halted)



- The US stock market is back to last summer's level, while bond yields are at the lowest levels on record. Both inflation expectations and real rates have plunged
- (As an illustration, we have indicated at 5% drop at the S&P 500 at the charts above)



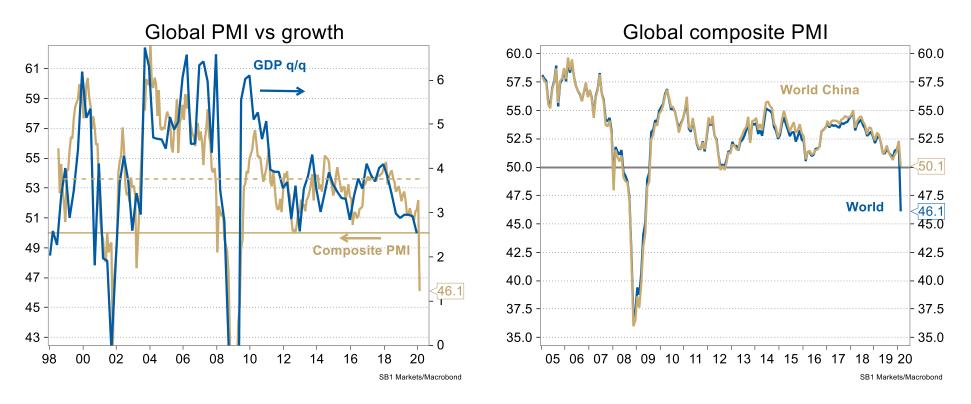
Last week – the other main takes

- Global composite PMI plunged 6.1 p in February, marginally more than we expected. The level is by far the weakest since the financial crisis. However, the global PMI ex China fell by just 2.2 to 50.1, and the manufacturing index ex China fell just 0,1p. Markit's composite China PMI collapsed to 27.5, the lowest on record. The US PMI from Markit slipped to 49.6, services fell more than manufacturing, but not more than the preliminary estimate (no shock in 2. half of Feb). Strangely, the 'services' ISM climbed to 57.2, the highest in a year. Manufacturing ISM ticked down 0.8 p to 50.1. The impacts from corona are still rather modest but businesses are reporting supply chain issues and delayed deliveries. Eurozone PMI continued to increase modestly and the manufacturing contraction is easing substantially. Japanese PMIs slipped, no doubt due to corona
- US auto sales fell marginally in Feb, trending down. Eurozone sales were flat, at a low level. Norwegian auto sales remains weak, no signs of recovery. Sales in China may have fallen some 80-90%, and global auto sales will take a hit never seen before.
- The Fed delivered a 50 bps emergency cut on Tuesday. The cut was widely expected but it came somewhat earlier than most assumed. Fed has always (7 times since 1998) followed up an inter-meeting cut by a further cut at the next ordinary meeting, and markets are expecting another 50 bps next week (and another 25 bps, down to 0 25 bps by the end of the year. On the real side of the economy, neither surveys nor actual data signals any weakness by the end of February, rather the opposite. The Beige Book continued to report modest to moderate growth and increasing capacity constraints. Just some sectors, like tourism and to some extent manufacturing (due to supply chain delays), were experiencing some negative effects of the virus outbreak. The nonfarm payrolls report once again came in above expectations, employment rose 273' (expected 160'). Unemployment inched back down to 3.5% and wage growth to 3.0%. New jobless claims is still very low. Productivity growth revised down marginally to a 1.2% q/q pace, trending slowly up. Labour compensation revised down, ULC inflation down to 1.7%, from 2.4%. The trade deficit is heading in, due to sagging US imports.
- Eurozone retail sales increased in January yet failed to recover from the Dec plunge. Sales growth has softened the past few months, particularly in Germany. Core inflation inched up to 1.2% in Feb, trending marginally upwards. Unemployment is flattening out at 7.4%, the lowest since before the financial crisis
- BI's Financial News index signals an abrupt slowdown in Norwegian GDP growth, at least the index fell sharply in late February. Norwegian house prices rose somewhat more than expected in February, up 0.5% seasonally adjusted. Price inflation is slowly accelerating, to a 4.1% underlying pace. Most cities/regions are contributing, Oslo in the lead. New listings spiked in Feb but was offset by strong sales, and the inventory of unsold homes came down marginally (although still elevated). In total, short term dynamics signals some 0.5% growth the coming months. Households' savings climbed to 9.1% of disp. Income and the cash flow is positive (not when deducting net pension savings). Manufacturing production has flattened out, oil related production is slowing and other sectors are declining. Mainland GDP rose just 0.2% m/m in January, Q1 is off to a weak start – Norges Bank will probably have to revise down its GDP projection



Global PMI plunged in February amid coronavirus distortions

Global PMI slipped 6.1 p, the steepest drop since 2001, ex China down 'just 2.2 p

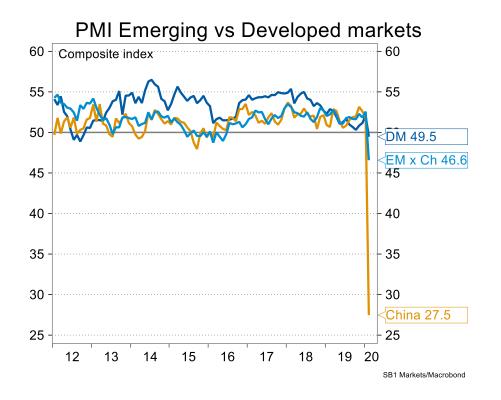


- Global composite PMI fell to 46.1 in February, 0.6 p worse than we f'casted. This is the weakest level since the financial crisis and the steepest
 monthly drop since the dotcom bubble burst in 2001. Face value, the PMI points to some 2 pp slowdown in global GDP growth in Q1, to just some
 1% q/q annualized rate. However, we expect a substantial decline in global GDP in Q1, by some 6% (check this slide for more)
 - » We expect a comeback in Q2 as China (hopefully) recovers, but annual 2020 growth will anyway be substantially reduced
- The good news: The collapse of the China PMIs sent the world PMI steeply down. Barring China, PMI fell by 2.2 p to 50.1 (still the lowest since '12)
- We already know that the global economy will suffer badly in Q1, the PMIs later this spring will reveal more about the pace of recovery



14 down, 9 up in February; Emerging Markets x China hit harder than Developed

12 countries/regions still above the 50 line, 12 below



- The Chinese composite PMI collapsed in Feb, to 27.5, the weakest on record. Other EMs no doubt suffered from the impacts of the coronavirus as well; Hong Kong and Singapore more than any others
- Developed Markets fell too, to the lowest level since the 2012 euro crisis. The PMI was dragged down by Japan and Australia

Deviation from 50 & change last month -25 -20 -15 -10 -30 -5 India Ireland Sweden USA (ISM) UK France Spain Euro Area Russia Brazil Italy Germany ** World x China ** USA (Markit) ** Developed Markets ** Australia Japan South Africa Egypt ** World ** Singapore ** Emerging Markets** China (CFLP) China (Markit) Hong Kong -10 -30 -25 -20 -15 -5 0 5 10 SB1 Markets/Macrobond

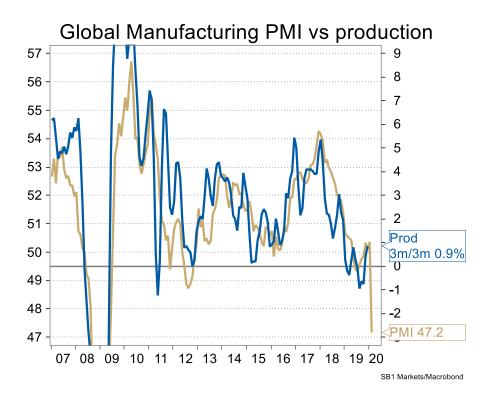
Composite PMI



PMI Manufacturing

China alone took the global manuf. PMI down

The manuf. PMI fell 3.2 p, just du to China. Other EMs up. DM marginally down



- PMI fell 3.2 p to 47.2 in February, the lowest level since the financial crisis. The PMI was dragged down by a 'collapse' in Chinese PMIs due to the coronavirus outbreak. PMI points to some 3% drop in global manufacturing production (measured 3m/3m), vs the +0.9% speed in December,
 - » 22 (from 28) countries/region PMIs rose in February, and 21 fell (from 11)
 - » 23 (from 20) of 43 countries/regions are below the 50 line
 - » Developed Markets fell 0.3 p, Emerging Markets slipped 6.4 p, due to China, x Cn up!
 - » The Norwegian PMI rose 1.2 p and is now among the most upbeat

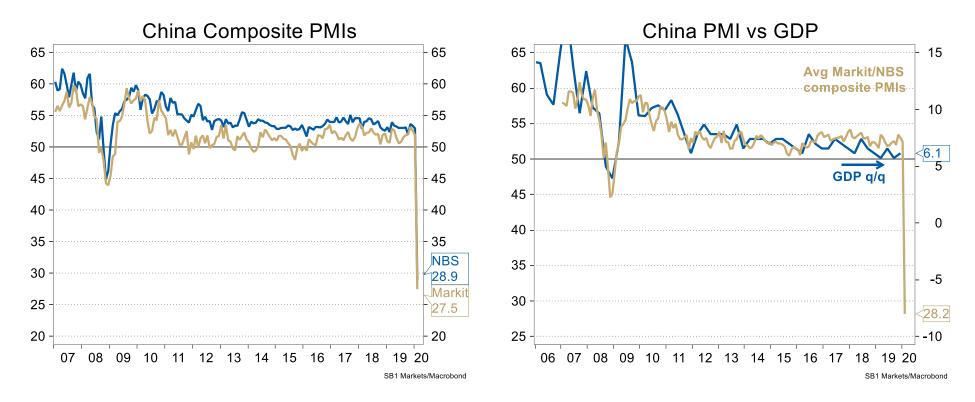
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SB1 Markets/Macrobond



Both composite PMIs plunged to ATLs

The avg of PMI surveys signals a steep decline in GDP in Q1. Perhaps close to our 10% estimate

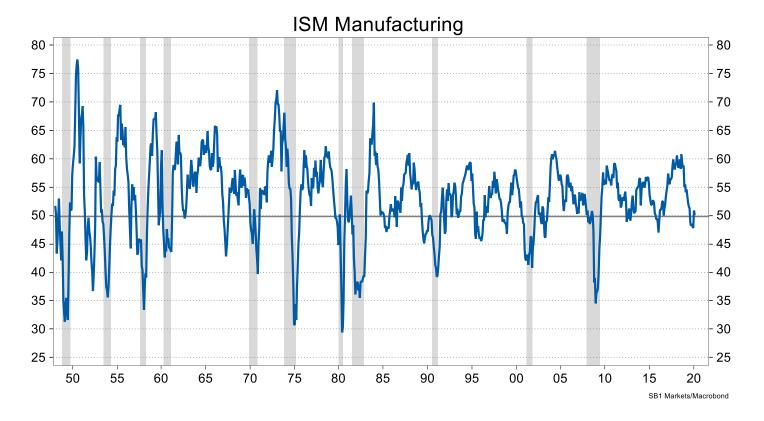


- Both composite PMIs fell an unprecedented 24 p, the NBS' 'official' composite PMI (CFLP) slipped 28.9, Markit's composite PMI to 27.5. Any calibration vs growth is impossible
- The PMIs the coming months will be more useful, as 'everyone' expects an economic blow in Q1. The March/April/May PMIs will give indications on the timing and pace of the recovery



Manufacturing ISM fell modestly in February, some corona impacts

The ISM declined by 0.8 p to 50.1, 0.3 p below expectations

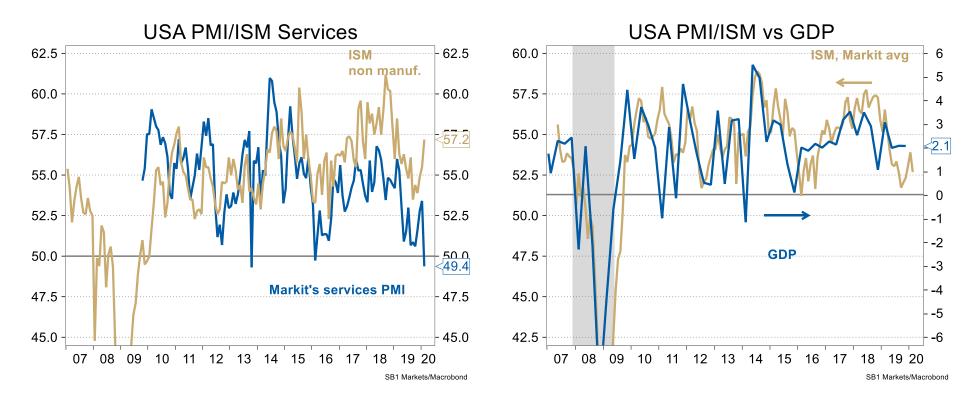


- Manufacturing ISM fell 0.8 p in February, to 50.1,
 - » In the ISM survey, 14 out of 18 sectors reported growth (from 8 in January) and 3 (from 8) sectors reported a contraction, not a weak mix
 - » Both export and domestic orders weakened somewhat, no obvious virus impacts. However, businesses reported a steep decline in imports and a rise in delivery times, no doubt due to supply chain distortions (chiefly from China). The rise in the delivery times index boosted the total ISM, without any actual demand uplift
- The manufacturing ISM remains above the 'recession warning' levels, and by itself of course not a motivation for Fed's intermeeting cut



The non-manufacturing ISM is soaring!!

What a gap; 'services' ISM climbed 1.7 p in Feb, Markit's down 4 p

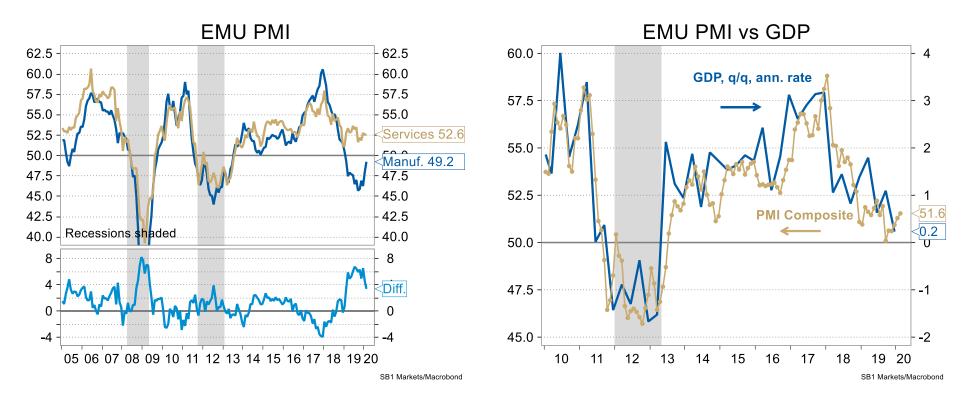


- Non-manuf. ISM rose to 57.2 in Feb, the highest level in a year and well above expectations
 - $\, \ast \,$ 16 of 18 non-manuf. sectors reported growth , and just 2 reported a decrease in activity
- On the other hand, Markit's service sector PMI slipped 4.0 p in February.
- The two surveys are not closely correlated on a monthly basis but the gap in February is strange
- The avg of the composite PMI/ISM ticked down in Feb and is pointing to a slowdown to 1% GDP growth, from 2.1%



Eurozone PMI climbs further, not corona infested (but March might be)

Composite PMI ticked up to 51.6, the 5th month of a slow recovery

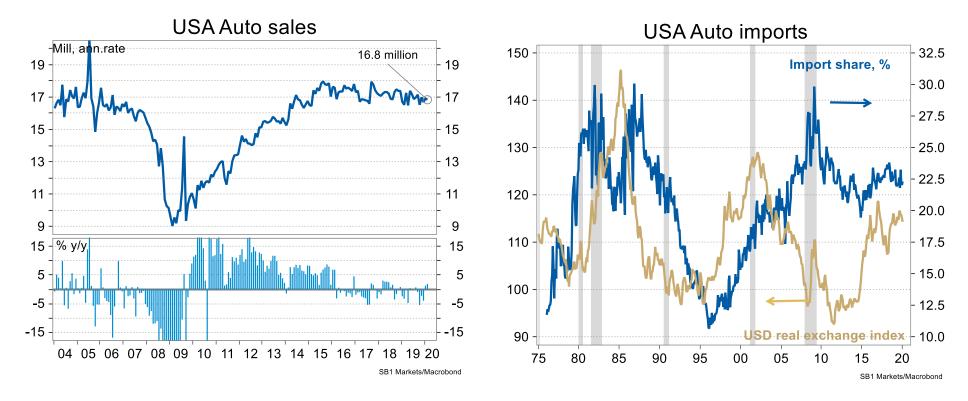


- The final EMU composite PMI edged up 0.4 p in February, unchanged from the first estimate. The PMI has climbed 1.5 p since September, and signals a modest pickup in GDP growth in Q1, to 0.6-0.7% (annualized)
 - » The impacts from the coronavirus was rather muted, even as businesses within tourism and travel reported a slowdown, as well as some supply chain disruption. A larger drag is likely in March, as the virus is spreading fast in many countries
- Is the Eurozone economy about to rebound? Well, both PMI and other EMU surveys are improving, suggesting a modest growth uptick, and manufacturing is moving closer to stabilization. However, that was before corona, which may hit some sectors hard. Consumer confidence is still strong and consumption is increasing modestly



Auto sales weakened marginally in Feb, trending slowly down

Sales slowed to 16.8 mill, in line with expectations



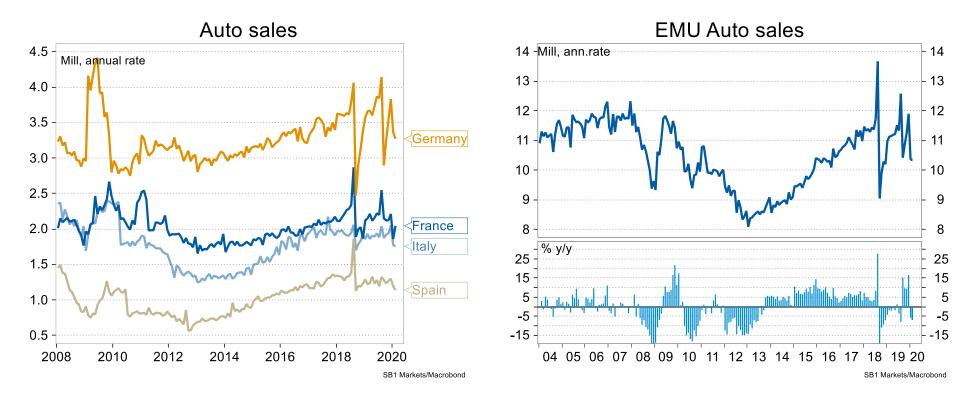
- Sales are trending slowly down, from the local peak in 2015 (!)
- The import share has stabilised following a small decline from early 2018.
 At 22% the import share is above the long term average but it has been far higher several times before.

EMU



Auto sales probably flat in Feb, following the Jan drop – the level is low

Regulations have probably destabilised sales but Jan & Feb were not good

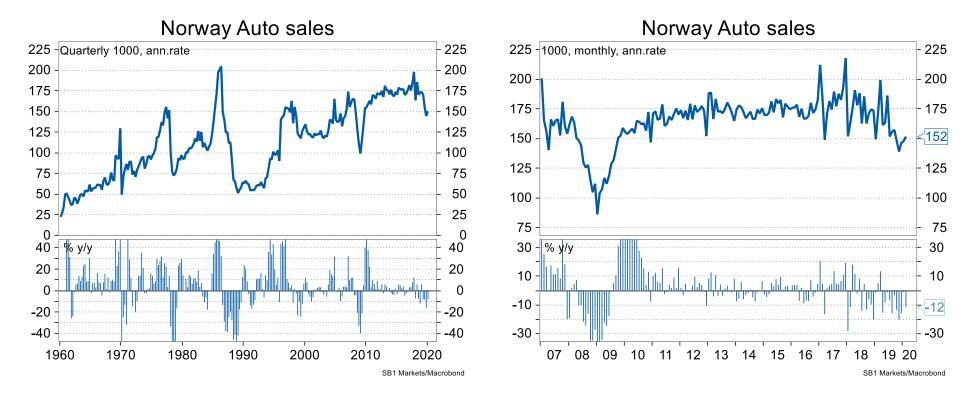


- Sales in the major markets were in sum unch to Feb from Jan, following the 13% m/m drop last month. Sales in the EMU at 10.4 mill (annual rate, our preliminary est) is well below a normal level. Sales have been heavily influenced by new EU regulations, and it not possible to be sure what the 'real' underlying trend in demand is
 - » From Jan, new EU emission regulation was 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. High sales in December indicates that inventories for high emission cars were cleared
- 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



Slow auto sales remained weak in February, there must be a demand issue

Sales have not recovered in Jan/Feb. Are there still some delivery problems, or is demand waning?



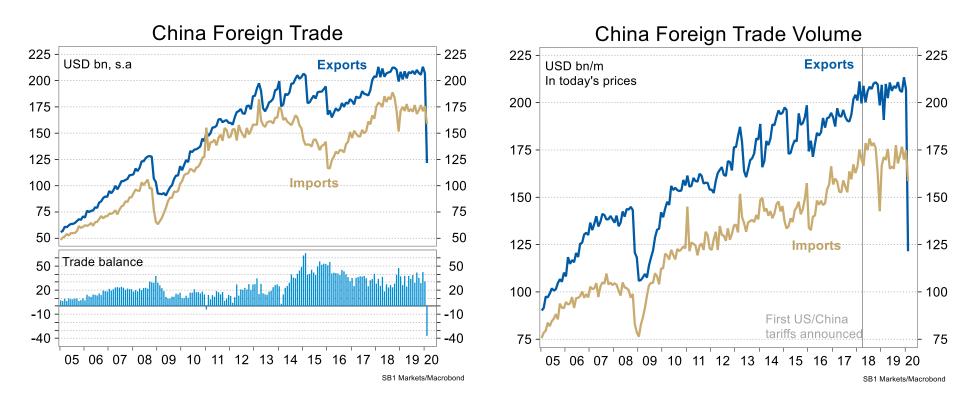
- From January 2020, the new EU emission regulation were implemented; the maximum average emission of the new vehicle fleet for each producer will be 95g of CO₂/km. If these levels are not reached, producers will be fined. There was no obvious impact on sales numbers (like postponed sales of low emission sales last autumn would turn up in 2020)
- Expiring auto leases of hard to sell gas/diesel cars may have led to too large 2. hand inventories among dealers, keeping new car sales down
- However, as sales have been declining rapidly since the summer, the simple explanation may be that demand is waning



China

Exports down some 40% in February, imports 10%

Exports down from ATH in December, imports from a decent level

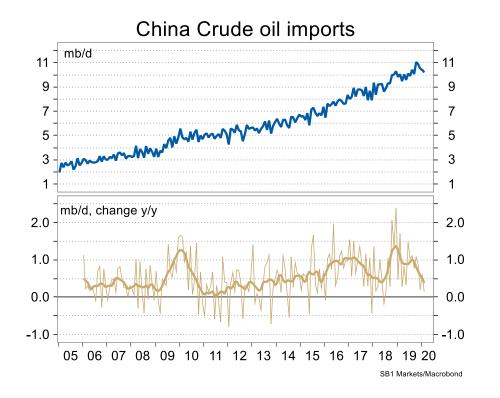


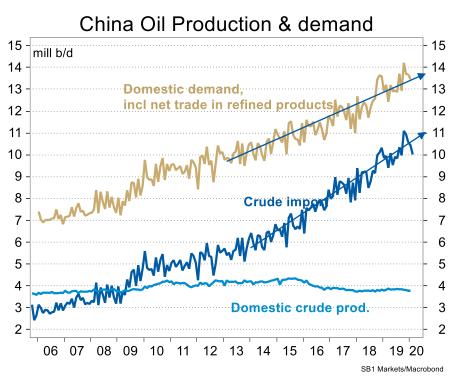
- China announced aggregated Jan/Feb trade figures (monthly data will be published later). Exports fell 17% in the two first months of 2020, and imports 4%, the latter less than expected. Imports were boosted by import of medical devices etc (but the amount can not be that large)
- We assume that January trade figures were or less on par with December's strong data, as restrictions on activity started in the last days of January (and in earnest after the lunar new year holiday ended Feb 8). If so, exports fell 40% m/m, and imports by 10% in February, and almost by the same y/y.
- The decline in exports are both due to the shutdown of a large proportion of the manufacturing and transportation capacity through February. Imports were still received (the ships were underway), and inventories must have been sharply build up, as domestic demand must have fallen more than 10% in February alone. The trade balance suddenly changed sign amid the 'collapse' in exports, to a deficit at almost USD 40 bn in February
- Before the coronavirus hit, exports were record high, and import volumes were not weak either (on a long term trend). Exports to the US had fallen sharply, but more exports to other regions compensated for trade war impacts



Oil imports slightly down in Jan/Feb, still up y/y

Inventories are probably built, as domestic demand must have fallen in February



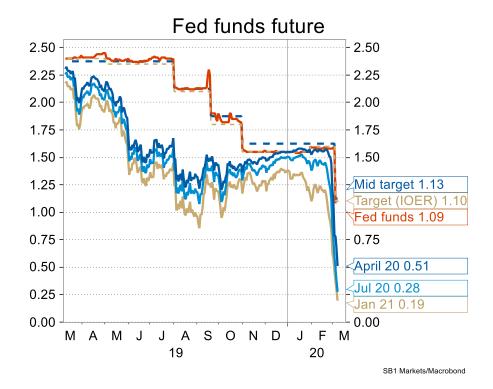


USA



Fed cut 50 bps and the market expects more than 80 bps more this year

Fed will probably deliver another 50 bps cut next week, as usual after intermeeting cuts



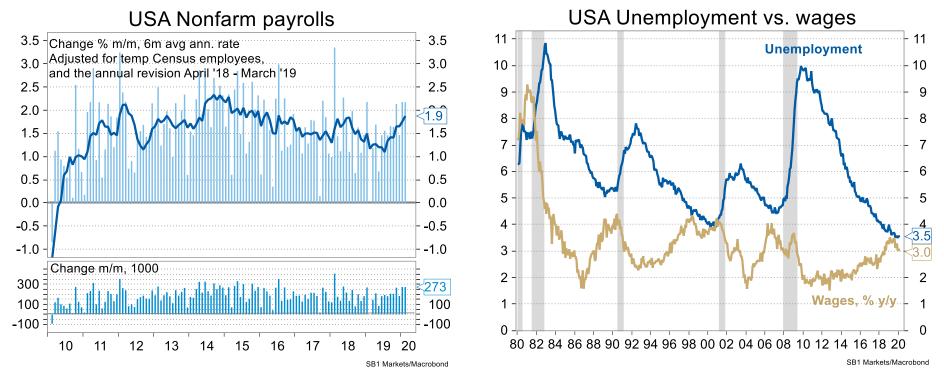
- The Fed delivered an 'emergency cut' of 50 bps on Tuesday, to 1-1.25%. The cut was widely expected following Powell's message last Friday, however, the cut came somewhat faster than expected. The US economy was strong, but a precautionary cut ahead of possible coronavirus challenges was appropriate. The decision was unanimous
- Since 1998, Fed has conducted 7 'emergency' intermeeting cuts. Each time, at the first regular FOMC meeting, the signal rate has been cut further, usually by the same size.

 Fed fund futures have plunged, all over the curve. The market is pricing another 50 bps cut at the March meeting next week with a very high probability, and than additional 25 bps (given 50 bps next week), probably before or at the July meeting. It is far to early to be sure what the Fed will actually do. If more bad Covid-19 new are out by next week, a 50 bps cut seems most likely



Ol' news but still: Employment growth is accelerating, far above expect. in Feb

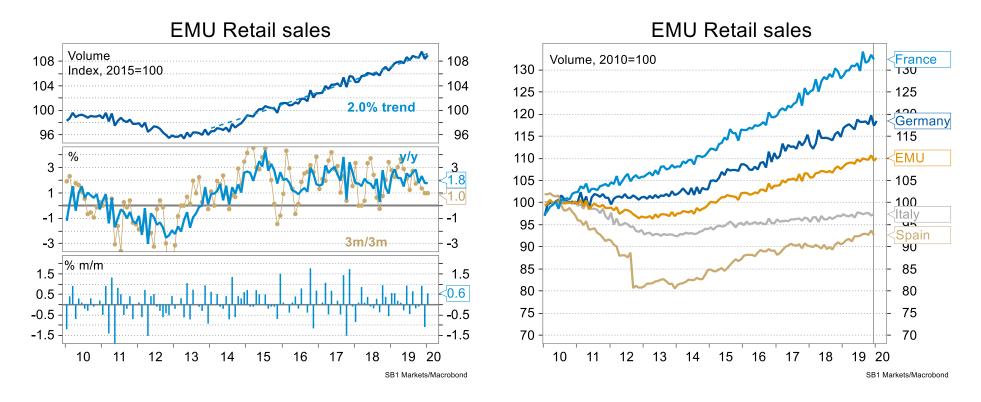
Employment up 273', 110' above expectations. Unempl. inched down to 3.5%, wage growth to 3.0%



- Employment rose by 273' in February and January revised up by 48', in sum 160' higher than 'expected'. Thus, employment growth is accelerating, the 6 m avg up to a 1.9% pace, from 1% in early 2019 and the highest growth since 2016
- **Unemployment** inched down to 3.5%, as expected. The participation rate was unchanged, heading slightly upwards but too little to suggest that the supply side is now really responding to a really tight labour market
- Wages rose 0.3% m/m, as expected. The annual rate ticked down 0.1 pp to 3.0%, sliding down since mid-2019. Wage inflation has slowed in most sectors, even as businesses report record labour constraints. Still, wage growth is not that low vs productivity, CPI
- These data confirm that the labour market remains was strong in February, and by itself of course not the reason for the emergency cut last week

Retail sales picked up in January but past months not that impressive

Sales have flattened and underlying growth has slowed to 1%



Retail sales volume rose 0.6% m/m in January, as expected, failing to fully recover from the December plunge. Sales have
more or less stagnated since Aug/Sept and the underlying growth (measured 3m/3m) has slowed to 1%

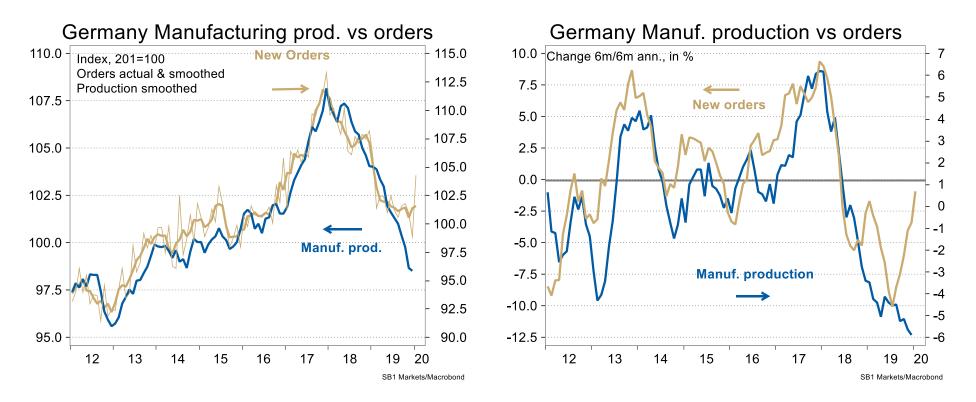
» Sales in Germany have softened, France and Spain still trending up, Italy marginally too

• We expect continued moderate growth in sales the coming months, and we have no other indications that consumption is yielding now, after growing steadily amid the manufacturing contraction. Consumer confidence picked up in Feb and the level is high, and employment is still growing, total wage growth is steady



Manufacturing orders rebounded in Jan, production to follow?

Orders spiked 5.5%, the steepest monthly rise since '14 – 'unfortunately' driven by foreign demand

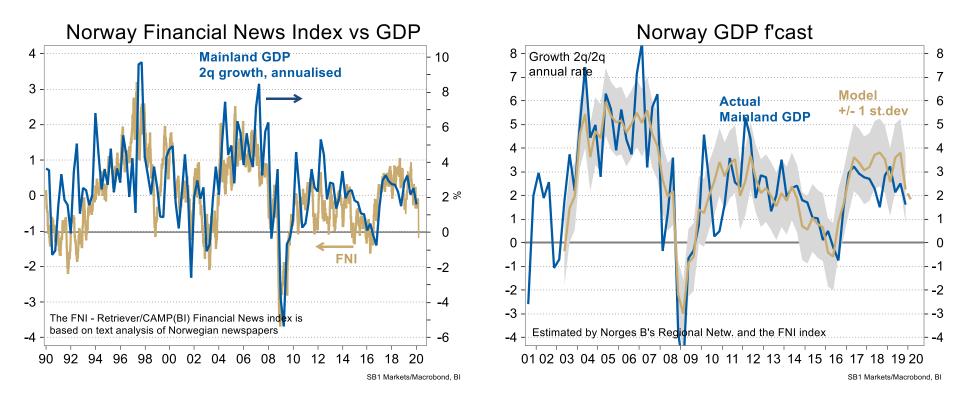


- Total manufacturing orders jumped 5.5% m/m in January, miles above expectations. This is the steepest monthly increase since 2014. The decline in orders has been easing since early autumn, and are now close to a stabilization
- Manufacturing production has so far shown no signs of bottoming out, even as both orders and PMIs point to a substantial moderating contraction. The orders upturn was merely driven by a lift in foreign demand, which is likely to be heavily impacted by the coronavirus outbreak the coming few months (at least in Feb/March). Regardless, the upbeat orders data offer some comfort as to the recovery when corona eventually calms



The Financial News Index plunged on the coronavirus in late February

Steep decline in the last week of Feb, the last FNI observation signals zero GDP growth



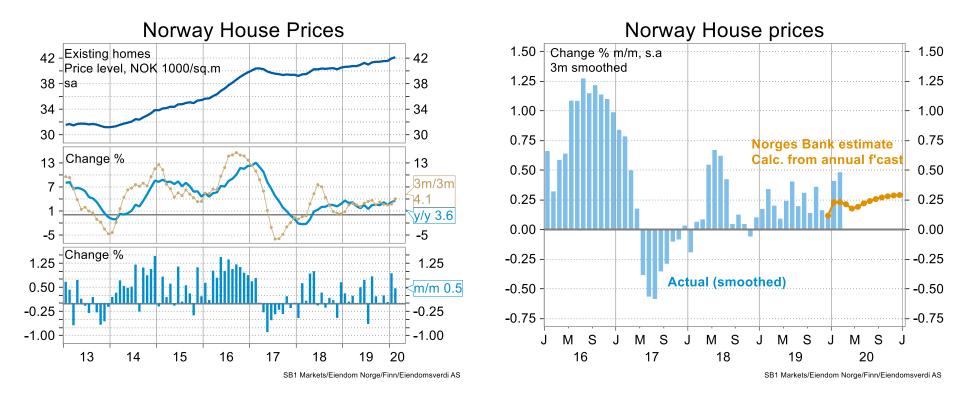
- The FNI tracks media reports on the economy. In late February, the Covid-19 outbreak sent the index steeply down, to the lowest level since 2016
- The average level in Jan/Feb signals a 1.5% GDP growth
- In Nov/Dec, Norges Bank's regional network signalled a 1.9% growth in H1. We expect a further cut in the outlook in the upcoming Network survey, even if of corona has not been measured (the survey was probably concluded Feb 20), if not an additional mini telephone survey has been conducted

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)



House prices rose more than expected in February, are accelerating somewhat

Prices rose 0.5% s.a in Feb and are up 3,6% y/y. All cities ex Stavanger and Kristiansand up m/m

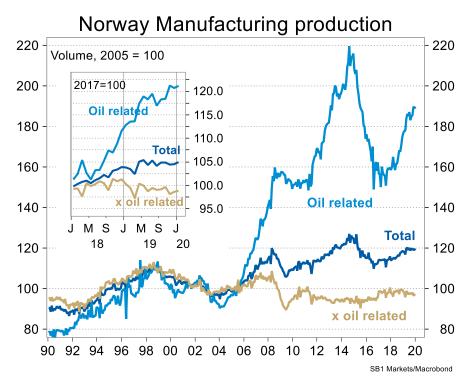


- **House prices** rose 0.5% m/m (seasonally adjusted, 0.9% unadj.) in February, we expected 0.2%. Underlying growth edged up to 4.1%, the fastest speed since 2018. Annual growth at 3.6% and slowly climbing. Prices are growing faster than Norges Bank assumed in Dec
 - Prices increased in all cities ex Stavanger and Kristiansand in Feb, and underlying growth has accelerated in 12 of 16 cities/regions. Stavanger prices flat/slowly down since » early 2019, all others are increasing. Oslo prices in the lead, up 7% 3m/3m, and Kristiansand has accelerated recent months
- The number of unsold homes edged down in February, the level is very high (barring Oslo, in which the inventory has fallen). Both new listings (of ٠ existing homes) and sales rose sharply in Feb, we doubt any upward trend will persist, but the levels are anyway elevated
- Short term dynamics signal somewhat higher growth the coming months, in Norway total. However, risks are tilted to the downside the coming months/quarters, as credit growth is now ebbing. And we may not have seen the full impacts of the rate hikes and debt registry

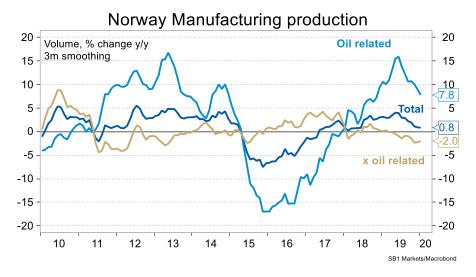


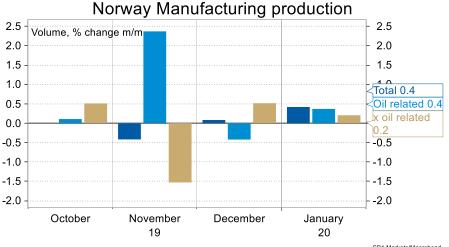
Manufacturing production rose moderately in January, trend flat

Total production up 0.4% m/m in Jan, and underlying growth has vanished, due to ex oil related



- Total manuf. production has been flat since the spring even if oil related production has increased. Production in other sectors is declining, like manufacturing production in most developed countries
 - » Production rose 0.4% m/m in January, a tad more than we expected. In oil related sectors, production is up 7.8% y/y –but is now slowing. Others sectors are sliding down, by 2% y/y
 - » We expect a further slowdown in oil related sectors and we have no reason to expect any recovery in non oil related sectors. Production is trending down, just like manufacturing production among our trading partners
- Surveys have softened and are pointing towards zero growth, at best



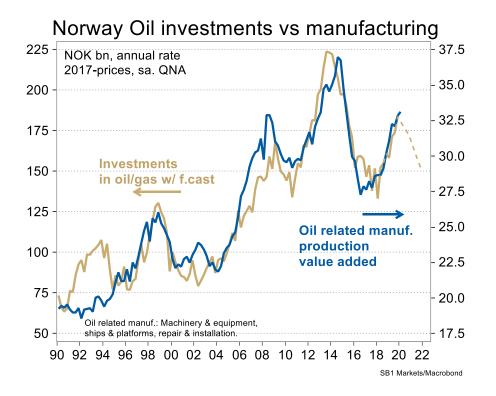


SB1 Markets/Macrobond



Oil related production probably at peak

Oil investments are peaking and are set to decline this year and the next, so will production?



- 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
 - » If Norwegian manufacturers do not gain market shares from foreign competitors – oil related production is now at peak
 - Neither Norges Bank's regional survey nor SR-bank's regional survey signalled a decline in manufacturing activity in the Q4 surveys – but slower growth
- An important modification: Are oil related industries able to take market shares at other markets – or establish new markets – to compensate for lack of growth in deliveries to the oil sector? Most companies are trying to turn to renewables and shipbuilders are turning to non-oil related shipbuilding. A very weak NOK will help them get along
- However, some extra negative news for manufacturing production: Manufacturing investments are expected sharply down this year, and some of the deliveries are from Norwegian manufacturers



The Calendar

In focus: China January/February data, ECB meeting, Norwegian CPI inflation, Norges Bank's Network

Time	Country	Indicator	Period	Forecast	Prior		
TBA	СН	Aggregate Credit, CNY	Feb	1585.8b	5070.0b		
Monday Mar 9							
08:00	GE	Trade Balance	Jan	15.0b	15.2b		
08:00	GE	Industrial Production MoM	Jan	2.0%	-3.5%		
Tuesday Mar 10							
02:30	СН	CPI YoY	Feb	5.2%	5.4%		
08:00	GE	Labor Costs QoQ	4Q		0.9%		
08:00	NO	CPI Underlying MoM	Feb	0.6%	0.4%		
08:00	NO	CPI Underlying YoY	Feb	2.3%	2.9%		
08:45	FR	Manufacturing Production MoM	Jan	1.7%	-2.6%		
10:00	NO	NoBa Regional Network: Output Next 6M	Feb	(0.75)	0.96		
11:00	EC	Employment QoQ	4Q F		0.3%		
11:00	US	NFIB Small Business Optimism	Feb	102.8	104.3		
11:00	EC	GDP QoQ, details	4Q F	0.1%	0.1%		
Wedn	esday Ma	r 11					
06:00	SW	Unemployment Rate, Registered	Feb		4.1%		
10:30	UK	Manufacturing Production MoM	Jan	0.3%	0.3%		
13:30	US	CPI Ex Food and Energy MoM	Feb	0.2%	0.2%		
13:30	US	CPI Ex Food and Energy YoY	Feb	2.3%	2.3%		
19:00	US	Monthly Budget Statement	Feb	-\$238.5b	-\$32.6b		
Thursd	lay Mar 1	2					
08:00	NO	SSB Economic Outlook	Q1				
09:30	SW	CPIF Excl. Energy YoY	Feb	1.6%	1.6%		
11:00	EC	Industrial Production MoM	Jan	1.5%	-2.1%		
13:30	US	PPI Ex Food and Energy MoM	Feb	0.2%	0.5%		
13:30	US	PPI Ex Food and Energy YoY	Feb	1.7%	1.7%		
13:30	US	Initial Jobless Claims	Mar-07	218k	216k		
13:45	EC	ECB Deposit Rate	Mar-12	-0.6%	-0.5%		
17:00	US	Flow of Funds	4Q		\$574b		
Friday	Mar 13						
09:30	SW	Unemployment Rate, LFS	Feb	7.0%	7.1%		
15:00	US	UoM Consumer Sentiment	Mar P	95	101		
Monda	ay Mar 16	i					
00:50	JN	Core Machine Orders MoM	Jan		-12.5%		
02:30	СН	New Home Prices MoM	Jan&Feb		0.3%		
03:00	СН	Investments YoY	Jan&Feb	-2.0%	5.4%		

China

- » **Credit growth** has been accelerating softly, a substantial decline is expected in February, of course due to impacts of the coronavirus, as banks/businesses closed down and uncertainties spiked
- » **Investments** most likely slowed rapidly as well, after growing steadily the past couple of years. March data will be more useful for examining the timing and pace of recovery, not these February data

• US

- » **Core CPI inflation** has slowed marginally, still above the 2% target. **Producer prices** spiked in January, particularly at early production stages, may be a sign of uptick in final prices. Total inflation will be dragged down by the oil price
- » Household savings are rather high and debt ratios are falling, the cash flow is strong. Businesses' debt ratio is high and increasing

Eurozone

- » Markets are pricing a 10 bps ECB interest rate cut at the March meeting (and a high probability of another this year, as markets also expects another 50 bps cut from Fed next week). We are not so sure, and data have not indicated any substantial economic impacts in the EU so far. ECB has usually been far less forward looking than the Fed
- » We expect a rebound in **industrial production** in January following the Dec plunge. PMIs/other surveys signal that the downturn will ease

Norway

- » Norges Bank's Regional Network is likely to continue to signal a cool off the coming months, we expect a 1.5% message, down from 1.9% in Q4. The corona setback in some sectors came 'too late' to have any impact. The Bank have probably conducted an extra mini survey by phone, at least it will ahead of the March 19 meeting
- » **Core CPI inflation** jumped surprisingly to 2.9% in January. We f'cast a partial reversal, to an annual rate of 2.3%, still above NoBa's expected path



Our main views

	Main scenario	Recent key data points
Global growth cycle	The cycle was maturing, in the real economy, markets and growth has been slowing for almost 2 years. The trade conflict no doubt contributed. Unemployment is low, wage inflation is not low vs. productivity. Investment are not low anymore. 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 had turned up until the coronavirus shock, which knocked the Feb Chinese PMIs down. The virus may now hurt the world economy badly. A temporary setback in Q1 (primarily China) and partly in Q2 (other countries) which has been our main case so far now seems to be on the optimistic side. The risk or a global growth recession (GDP growth below 2%) is substantial, in fact our last week's f'cast was 2%. Growth has slowed to 3% from 4% . We have revised our 2.8% 2020 growth forecast down to 2% - with an increasing risk for a deeper slowdown	Global composite PMI plunged to 46.1 in Feb, a 6.1 p drop, and the weakest level since the FC. Not that bad barring China, ex China global PMI fell 'just' 2.2 p to 50.1. Both services and manufacturing weakened rapidly, services the most.
China	Growth had slowed just marginally, and inched up through 2019. <u>Now, all bets are off, as Covid-19 has 'killed' the economy in Q1, we assume by 10% q/q, resulting in a -6% y/y growth, from +6% in Q4 . As the outbreak is now coming under control, we expect a substantial recovery in Q2, but not fully up to the Q4 2019 level. The annual growth will be closer to 2%, from 6%, even if the activity level returns to the original growth path during H2. Before corona, we expected a 'controlled' slowdown, as over the previous years. There may be other downside risks now, if more companies should decide to reduce the supply chain risk vs China. We expect more policy measures to ensure a short term recovery in 2020</u>	Chinese PMIs fell like a rock, for good reason, to the weakest levels ever. Markit's composite PMI slipped to 27.5, NBS/CLFP to 28.9. Services PMIs dropped more steeply than manufacturing.
USA	Growth will most likely not accelerate in '20, from the 2% speed in '19. Unemployment is low, profits under pressure, corporate debt is high. Business investments are above trend, now yielding. Households' debt burden is sharply reduced, and the savings rate is 'high', but consumption is now slowing. The housing market is booming, and may get additional support from the collapse in interest rates. Price inflation close to target, the Fed can focus at the real economy – but now that includes possible corona impacts. The Fed cut 50 bps last week and markets expect more than 80 bps in additional cuts this year, the first 50 bps next week. Risks, except for corona: Policy uncertainty/trade/business investments &debt, not household demand or debt	Fed cut 50 bps. Mixed composite PMI/ISM; Markit's PMI fell 3.7 p, the 'composite' ISM rose 1.3 p, due to upbeat non-manufacturing survey. In avg, the ISM/PMI signals softer GDP growth. Employment growth is accelerating, unempl. low, wage growth still easing. Fed's Beige Book reports steady growth, limited corona impacts
EMU	Will corona slow the EMU economy further? No doubt. We expect some impact in both Q1 and Q2. Before corona, the manufacturing downturn was easing and the consumer side has been resilient. The labour market is tight, and labour cost infl. is back to a normal level. Investment ratios are above trend. Credit growth may be flattening out, as corporate demand slows. 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. Italy is in recession, and the risk is increasing elsewhere	The PMIs continued to recover in February, no substantial corona impacts so far. Manufacturing PMI edged up, the downturn is no doubt easing (until corona potentially hits). Growth in retail sales slowing recently. Core CPI up 1.2%. Unemployment is flattening out, at a low level
Norway	Growth has been above trend, will slow substantially in 2020 (and did so in Q4). Unempl. has flattened out. Wage inflation is above 3%. Oil investments will decline through 2020. Mainland business inv. are not low, will slow substantially in '20. Housing starts are falling. Core inflation is still close to target (at least until the Jan jump). Growth in households' debt has slowed to close to income growth. Risks: Debt, housing. A harsh global setback	House prices rose 0.5% s.a in Feb and are slowlyaccelerating. Household's savings rate isincreasing and at a rather high level.Manufacturing production flat, will slow. Q1Maind. CDD example is off to a sufficient of function



In this report

Global	 <u>Coronavirus contagion is slowing down in China, but is 'exploding' abroad</u> <u>Global macro data dragged down by China PMI collapse, others mostly upbeat</u> <u>Global PMI plunged in February amid coronavirus distortions</u> <u>Both Chinese composite PMIs plunged to ATLs</u> <u>Manufacturing ISM fell modestly in February</u> <u>Non-manufacturing ISM is soaring!</u> <u>Eurozone PMI climbs further, not corona infested (but March might be)</u> 	EMU	 <u>Retail sales picked up in January but there are some signs of sluggishness</u> <u>Core CPI inflation heading marginally up, at 1.2% in February</u> <u>Unemployment rate is flattening out</u> <u>German Manufacturing orders rebounded in Jan, production to follow?</u>
China	 <u>US, Eurozone and Norwegian auto sales</u> <u>Exports fell 40% in February, and imports by just 10% but more to come</u> 	Japan	• What a VAT hit: GDP down 7.1% in Q4!
	 Fed cut 50 bps and the market expects more than 70 bps more this year Employment growth is accelerating, far above expectations in Eab 	Sweden	 Manufacturing production and orders have peaked
USA	 expectations in Feb Wage growth eased marginally to 3.0%, as expected Jobless claims steady at a very low level, no weakness spotted Q4 productivity growth revised down marginally, labour costs more Fed's Beige Book reports steady growth, a few sectors hit by Covid-19 The trade deficit is shrinking as imports are waning, exports trending flat Nowcasters suggest above 2% growth in Q1, Activity index at 1.7% 	Norway	 <u>The Financial News Index plunged on the coronavirus in late February</u> <u>House prices rose more than expected in February, accelerating somewhat</u> <u>Manufacturing production rose moderately in January, trend flat</u> <u>GDP growth up just 0.6% annualized in January, a broad slowdown</u>



Highlights

The world around us

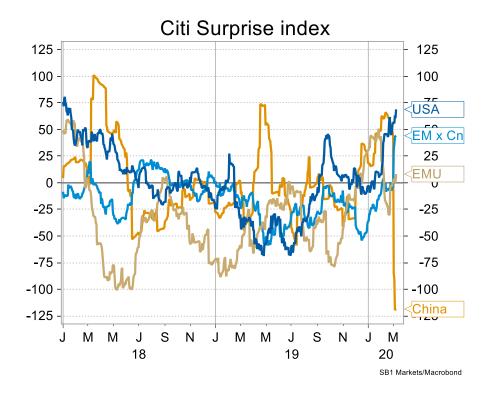
The Norwegian economy

Market charts & comments



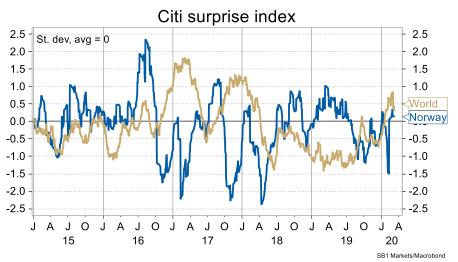
Global macro data dragged down by China PMI collapse, others mostly upbeat

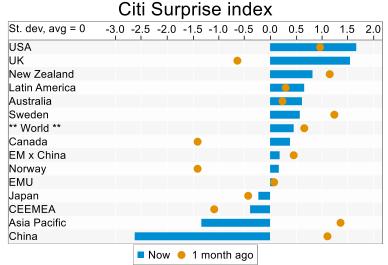
Most upbeat US data flows in 2 years, China positive too, EM x China and Eurozone neutral



- Global macro data have in sum been better than excepted since early January, and increased until last week, when the steep (corona) drop in the Chinese PMIs, plus some others, like Japan, sent the global index down. It will probably decline further
- The US surprise index is heading straight and is now the most upbeat. Housing, producer prices, CCI and the LEI have lifted the index, in spite the soft PMI surprise
- EMU figures are close to expectations, following some weeks of softer data
- Emerging markets x China spiked last week, partly helped by strong Indian PMIs
- Norwegian data are marginally upbeat vs expectations, the surprising inflation jump caused a rapid rebound some weeks ago

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

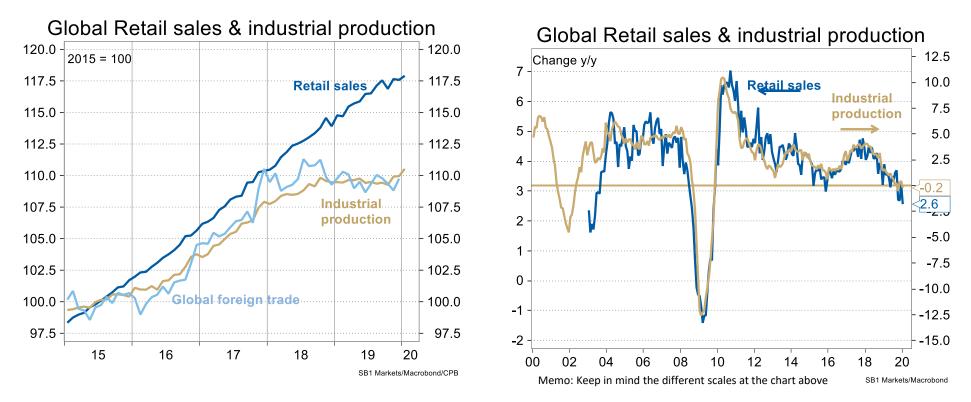






Global retail sales and industrial production will 'collapse' in Feb

Global trade has stabilized, industrial production recovering marginally, retail sales stalling

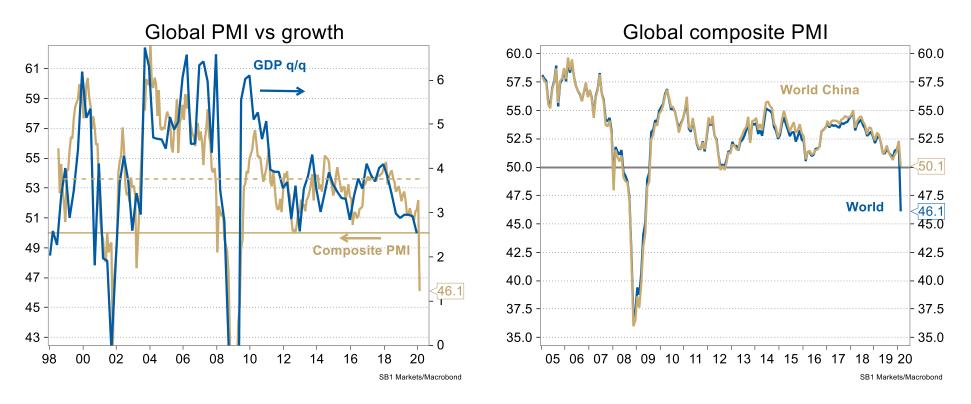


- **Global industrial production** rose in January. Production will drop in steeply in February. The global manufacturing PMI slipped to 47.2 in February, indicating a rapid decline in global production
- Retail sales rose too, but growth has slowed recently. The recent volatility is mostly due to the VAT hike in Japan, most other major countries were still heading up in Dec, although at a slower pace.
- Global foreign trade rebounded in December, up 0.9% m/m with our seasonal adjustment (0.3% unadjusted). Trade flows have
 flattened out since early 2019, and the annual rate is up 0.4% y/y. However, the coronavirus no doubt hit global trade hard in
 February/March, a steep drop is likely



Global PMI plunged in February amid coronavirus distortions

Global PMI slipped 6.1 p, the steepest drop since 2001, ex China down 'just 2.2 p

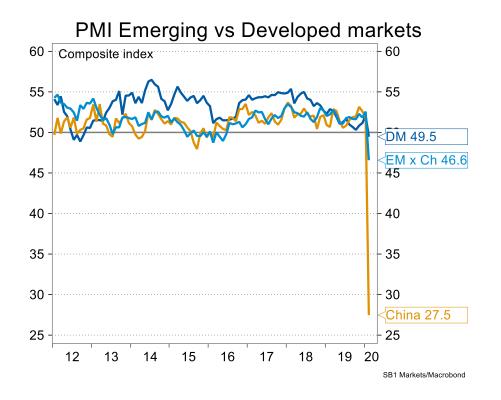


- Global composite PMI fell to 46.1 in February, 0.6 p worse than we f'casted. This is the weakest level since the financial crisis and the steepest
 monthly drop since the dotcom bubble burst in 2001. Face value, the PMI points to some 2 pp slowdown in global GDP growth in Q1, to just some
 1% q/q annualized rate. However, we expect a substantial decline in global GDP in Q1, by some 6% (check this slide for more)
 - » We expect a comeback in Q2 as China (hopefully) recovers, but annual 2020 growth will anyway be substantially reduced
- The good news: The collapse of the China PMIs sent the world PMI steeply down. Barring China, PMI fell by 2.2 p to 50.1 (still the lowest since '12)
- We already know that the global economy will suffer badly in Q1, the PMIs later this spring will reveal more about the pace of recovery



14 down, 9 up in February; Emerging Markets x China hit harder than Developed

12 countries/regions still above the 50 line, 12 below



- The Chinese composite PMI collapsed in Feb, to 27.5, the weakest on record. Other EMs no doubt suffered from the impacts of the coronavirus as well; Hong Kong and Singapore more than any others
- Developed Markets fell too, to the lowest level since the 2012 euro crisis. The PMI was dragged down by Japan and Australia

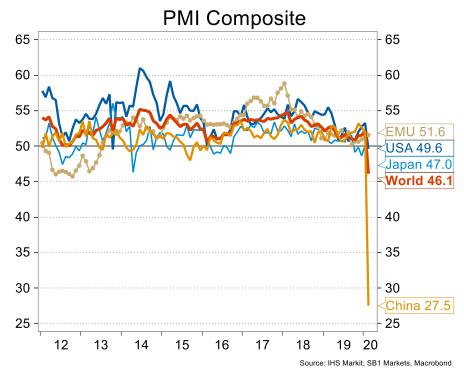
Deviation from 50 & change last month -25 -20 -15 -10 -30 -5 India Ireland Sweden USA (ISM) UK France Spain Euro Area Russia Brazil Italy Germany ** World x China ** USA (Markit) ** Developed Markets ** Australia Japan South Africa Egypt ** World ** Singapore ** Emerging Markets** China (CFLP) China (Markit) Hong Kong -10 -30 -25 -20 -15 -5 0 5 10 SB1 Markets/Macrobond

Composite PMI

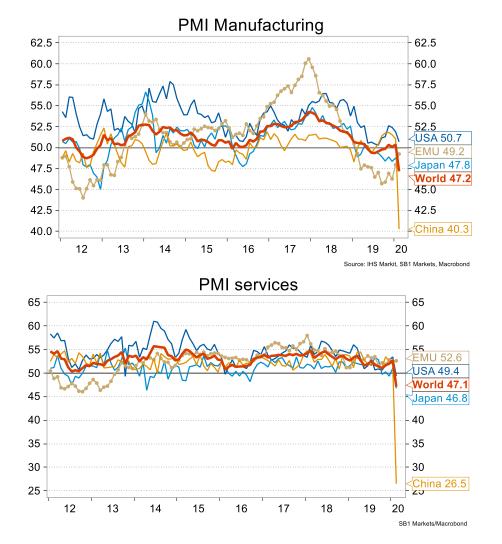


Coronavirus weighted most heavily on services (tourism, travel)

Manufacturing down 3.2 p, services 5.6 p. Both Japan and US weakened, Eurozone so far resistant



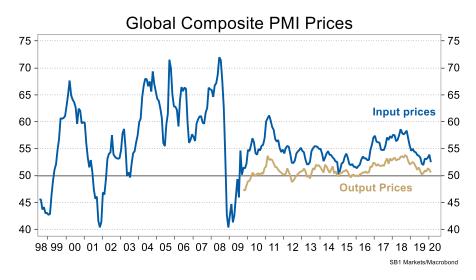
- The collapse of the Chinese PMI was not unexpected, in our view, even as consensus' f'casts were much higher than the final outcome
- Composite PMI fell steeply in Japan, no doubt due to Covid-19
- The US composite PMI (from Markit) fell steeply as well, to the lowest level since 2013. Services were hit hard, we assume on virus distortions (data will be useless in analysing other aspects for some time now)
- Eurozone PMI continued to climb modestly, March PMIs will probably be weaker as the virus is now spreading fast in many countries





New orders down the drain, price growth eased a tad

Global composite orders slipped in both sectors, steepest decline since 2009





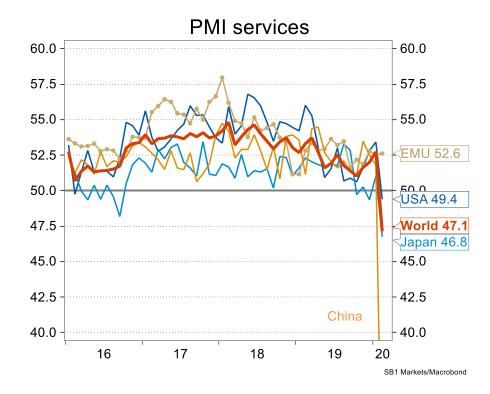


- The PMI manufacturing orders index dropped to 45.3, services to 46.8
- No substantial impact on prices yet, both input and output price inflation slowed slightly in February



Broad weakness in services, just 6 indices up, 14 down

Services did not just suffer in China; Japan, Australia, US all softened substantially



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Services PMI

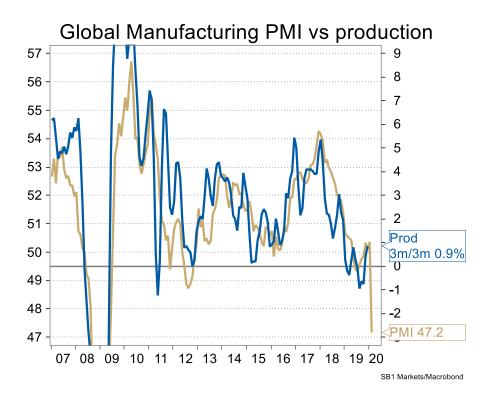
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PMI Manufacturing

China alone took the global manuf. PMI down

The manuf. PMI fell 3.2 p, just du to China. Other EMs up. DM marginally down



- PMI fell 3.2 p to 47.2 in February, the lowest level since the financial crisis. The PMI was dragged down by a 'collapse' in Chinese PMIs due to the coronavirus outbreak. PMI points to some 3% drop in global manufacturing production (measured 3m/3m), vs the +0.9% speed in December,
 - » 22 (from 28) countries/region PMIs rose in February, and 21 fell (from 11)
 - » 23 (from 20) of 43 countries/regions are below the 50 line
 - » Developed Markets fell 0.3 p, Emerging Markets slipped 6.4 p, due to China, x Cn up!
 - » The Norwegian PMI rose 1.2 p and is now among the most upbeat

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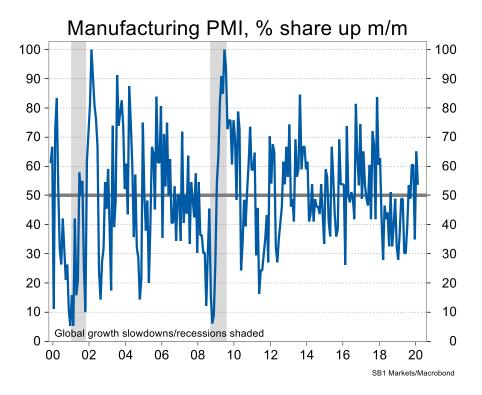
SB1 Markets/Macrobond



More than half of countries below the 50 line but 54% up m/m in February

No broad setback in the manufacturing sector

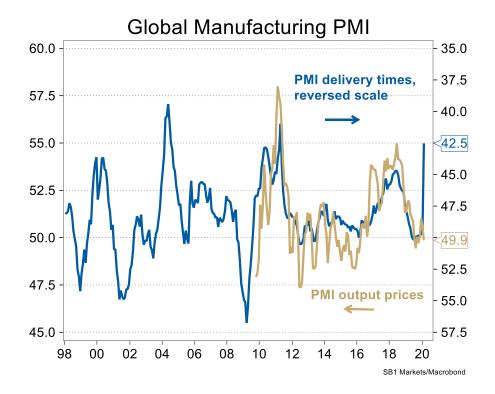


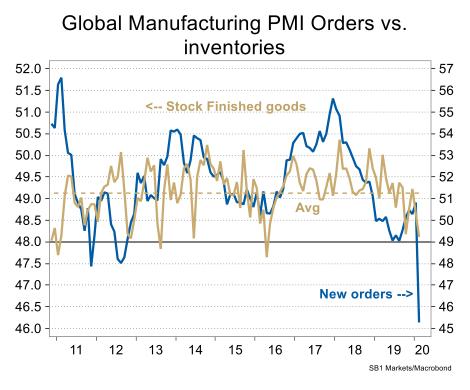




Global delivery times sharply up in February, for obvious reasons

...And inventories were reduced, while new manufacturing orders slipped

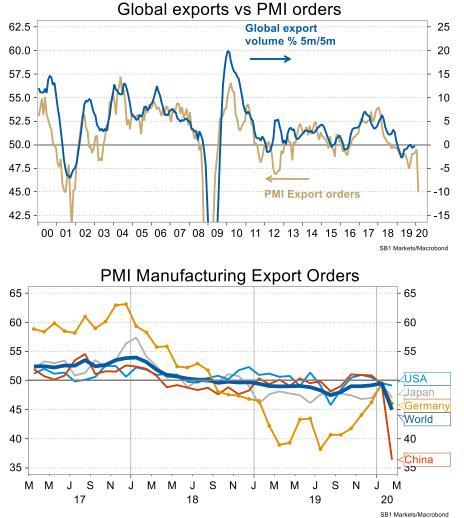




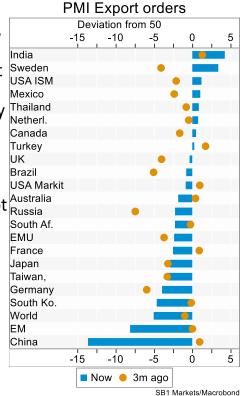


Global trade is no doubt hit hard by corona

Export orders PMI dropped to 45 in Feb, signalling some 10% decline in global exports in February



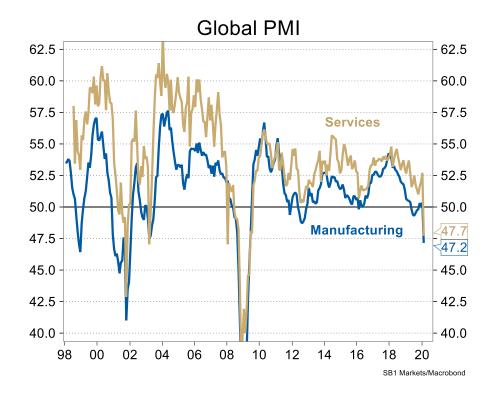
- Actual global export volumes had stabilized (data until December), the 5m/5m rate is down just -0.3%, vs 3% last spring. Trade flows will no doubt decline in January and more sharply in February, PMI suggest by some 10%
- 15 of 23 countries reported a decline in the export orders PMI in February
- Unsurprisingly, Chinese export orders fell like a rock, while both Japan and Germany reported a modest accelerating decline. US export orders just marginally weaker in Feb
- We expect a recovery when the spreading of Covid-19 eases globally, but it may not happen in March
 UK Brazil USA Ma Australi Russia South A





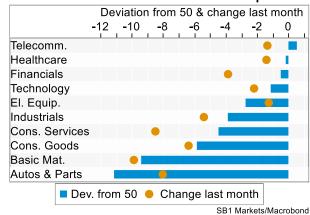
All sectors down in February, and just 1 remained above the 20 line

Setback in all sectors, though mostly directly due to setback within China



Global PMI Sectors - output 57.5 57.5 55.0 55.0 52.5 52.5 50.0 inancials Technology 47.5 47.5 Industrials 45.0 <u>45 N</u> Cons. Goods 42.5 42.5 Basic Mat. 40.0 Autos & Parts 37.5 37.5 17 16 18 19 20 SB1 Markets/Macrobond

Global PMI Sectors - output

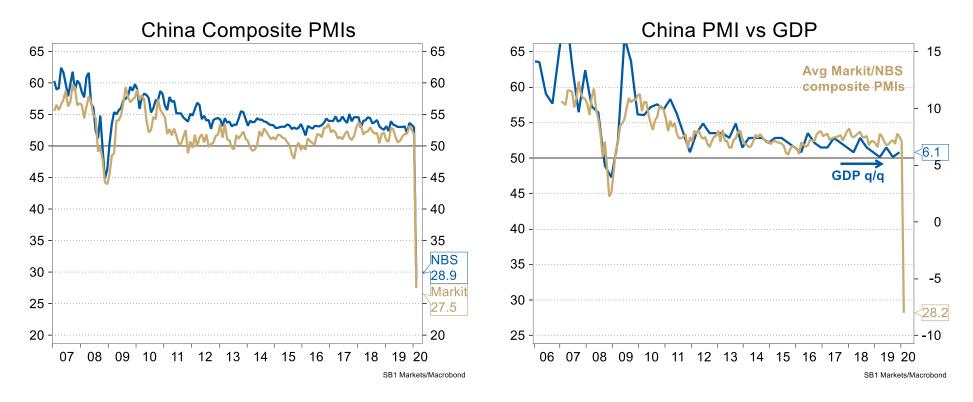


- The global service sector PMI fell more than the manufacturing PMI. The manufacturing survey was unchanged outside China, but services were down more broadly
- The auto industry reported the 2nd steepest decline and is still we weakest sector. Basic metals sharply down
- Consumer goods are slowing, not too promising, normally a leading index



Both composite PMIs plunged to ATLs

The avg of PMI surveys signals a steep decline in GDP in Q1. Perhaps close to our 10% estimate

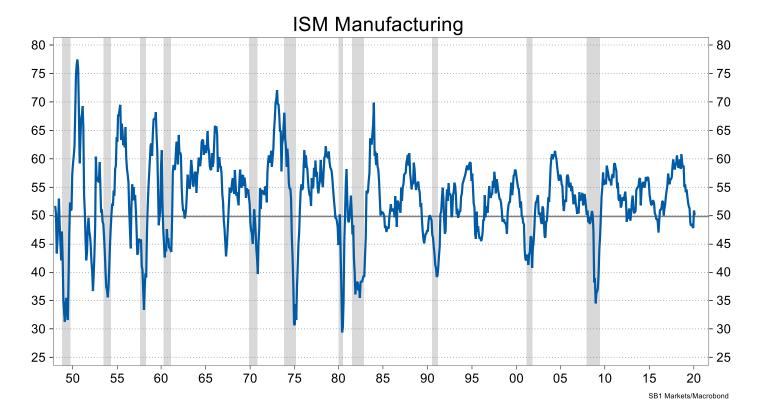


- Both composite PMIs fell an unprecedented 24 p, the NBS' 'official' composite PMI (CFLP) slipped 28.9, Markit's composite PMI to 27.5. Any calibration vs growth is impossible
- The PMIs the coming months will be more useful, as 'everyone' expects an economic blow in Q1. The March/April/May PMIs will give indications on the timing and pace of the recovery



Manufacturing ISM fell modestly in February, some corona impacts

The ISM declined by 0.8 p to 50.1, 0.3 p below expectations

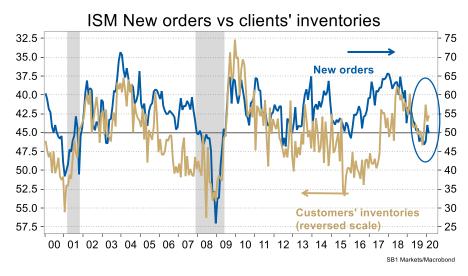


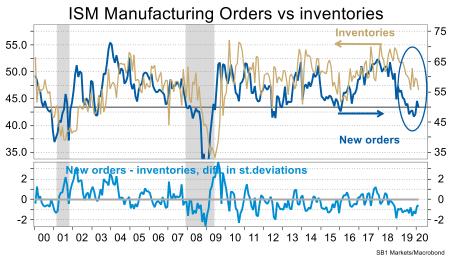
- Manufacturing ISM fell 0.8 p in February, to 50.1,
 - » In the ISM survey, 14 out of 18 sectors reported growth (from 8 in January) and 3 (from 8) sectors reported a contraction, not a weak mix
 - » Both export and domestic orders weakened somewhat, no obvious virus impacts. However, businesses reported a steep decline in imports and a rise in delivery times, no doubt due to supply chain distortions (chiefly from China). The rise in the delivery times index boosted the total ISM, without any actual demand uplift
- The manufacturing ISM remains above the 'recession warning' levels, and by itself of course not a motivation for Fed's intermeeting cut



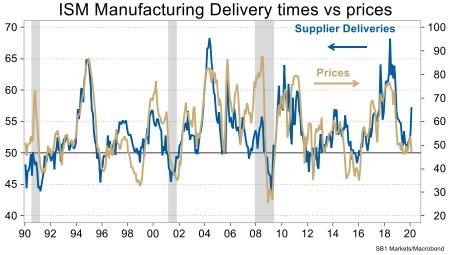
Businesses report stalling orders, reduced inventories

Delivery times spiked in February, no doubt due to supply chain issues due to corona/China







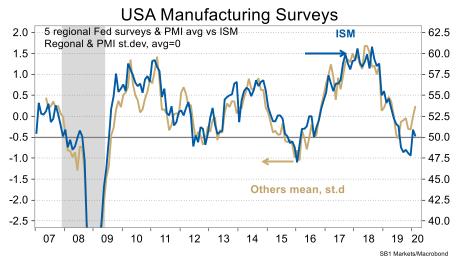


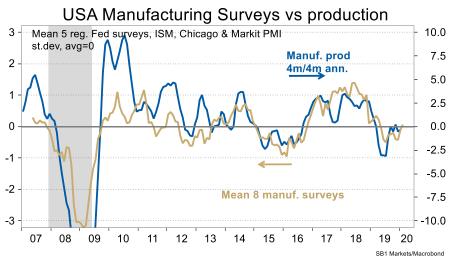
ISM and Markit's manuf. PMI down in Feb – while the regional surveys improved

The avg of surveys point to a stabilisation in the manufacturing sector (for now..)



- Markit's manuf. PMI fell 1.2 p in February, 0.1 p more than the first report
- The regional Fed surveys were mostly more upbeat in February; 4 rose steeply, 1 straight down
- The past two years, the manufacturing ISM was much <u>stronger</u> than Markit's PMI. However, <u>Markit has been</u> <u>closer to the ball vs actual production recent years</u>



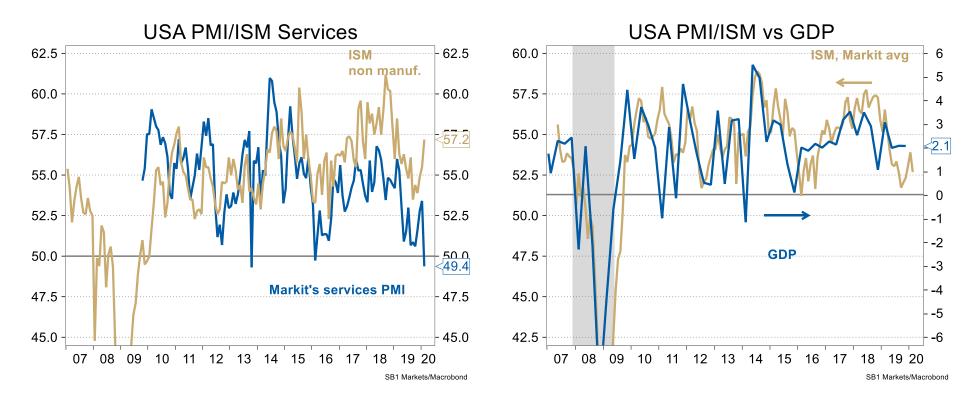






The non-manufacturing ISM is soaring!!

What a gap; 'services' ISM climbed 1.7 p in Feb, Markit's down 4 p

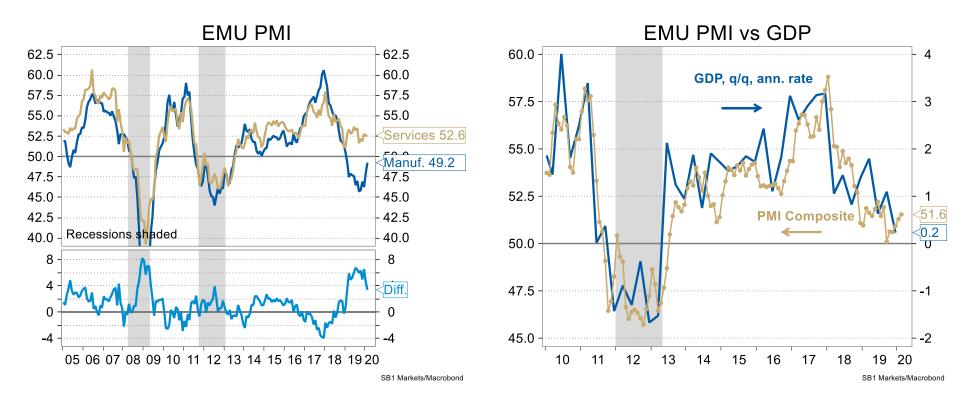


- Non-manuf. ISM rose to 57.2 in Feb, the highest level in a year and well above expectations
 - $\, \ast \,$ 16 of 18 non-manuf. sectors reported growth , and just 2 reported a decrease in activity
- On the other hand, Markit's service sector PMI slipped 4.0 p in February.
- The two surveys are not closely correlated on a monthly basis but the gap in February is strange
- The avg of the composite PMI/ISM ticked down in Feb and is pointing to a slowdown to 1% GDP growth, from 2.1%



Eurozone PMI climbs further, not corona infested (but March might be)

Composite PMI ticked up to 51.6, the 5th month of a slow recovery

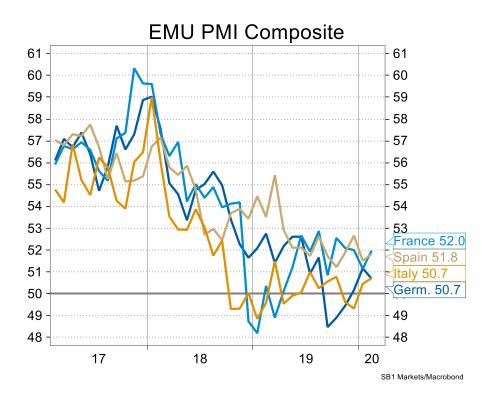


- The final EMU composite PMI edged up 0.4 p in February, unchanged from the first estimate. The PMI has climbed 1.5 p since September, and signals a modest pickup in GDP growth in Q1, to 0.6-0.7% (annualized)
 - » The impacts from the coronavirus was rather muted, even as businesses within tourism and travel reported a slowdown, as well as some supply chain disruption. A larger drag is likely in March, as the virus is spreading fast in many countries
- Is the Eurozone economy about to rebound? Well, both PMI and other EMU surveys are improving, suggesting a modest growth uptick, and manufacturing is moving closer to stabilization. However, that was before corona, which may hit some sectors hard. Consumer confidence is still strong and consumption is increasing modestly

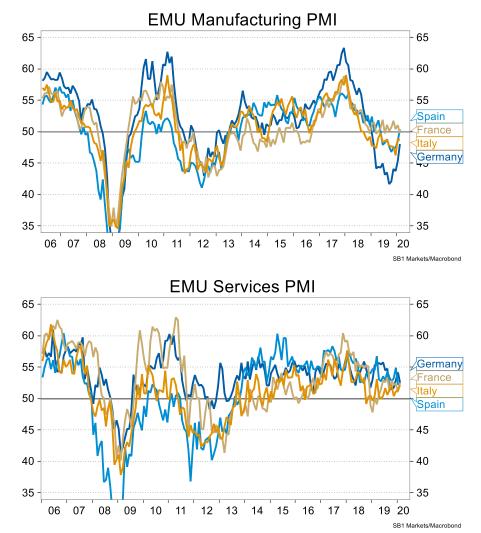


All 4 major economies are reporting expanding activity

German manufacturing still the drag but the downturn is easing. Services are expanding moderately



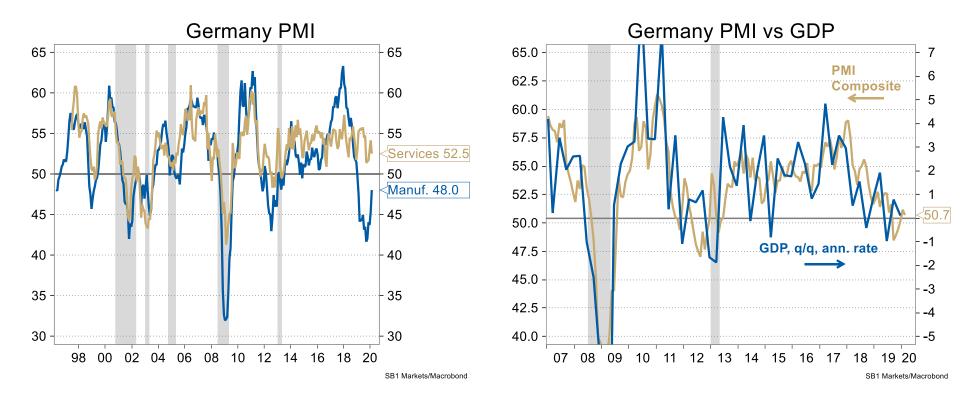
- Spain and France are reporting decent growth rates in the total economy, Germany is in recovery mode, but slowed somewhat in February. Italy still struggles but businesses are now reporting growth
- Composite orders are increasing modestly (unchanged in February) and manufacturing orders close to stabilization, the manuf. order PMI up to 49.4 in Feb





The manufacturing decline is easing, composite PMI still signals muted growth

Composite PMI a tad down to 50.7, a spike in the manuf. PMI offset by softer growth in services

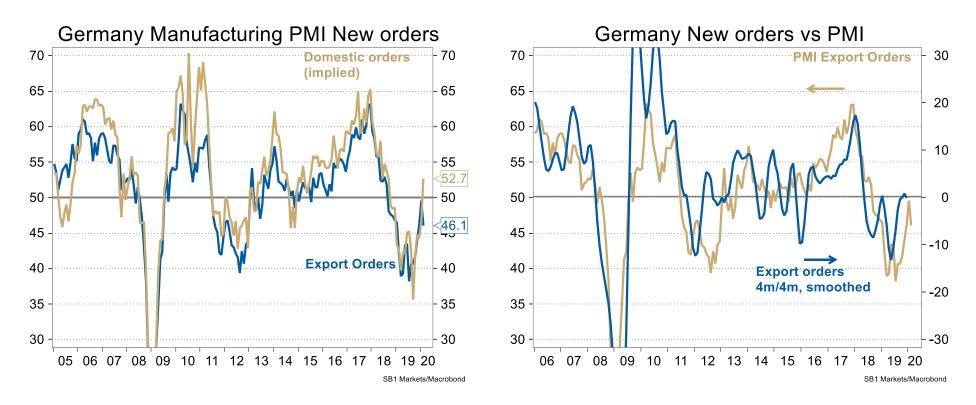


- The manufacturing PMI jumped 2.7 p in February (0.2 p above the first report), the highest monthly increase since 2013! Actual manuf. production is falling by 6.5% measured 6m/6m, the PMI indicates a rapidly easing contraction
- The services PMI edged down 1.6 p, 0.8 p weaker than first reported. Businesses reported a marked downturn in foreign demand, affected by the coronavirus. The level still indicates moderate growth in services
- The composite PMI at 50.7 does not indicate any recovery in German GDP from the subdued Q4



Domestic orders are recovering, export orders probably hit by Covid-19

Domestic (implicit) manufacturing orders expanded for the first time in 1 ½ years

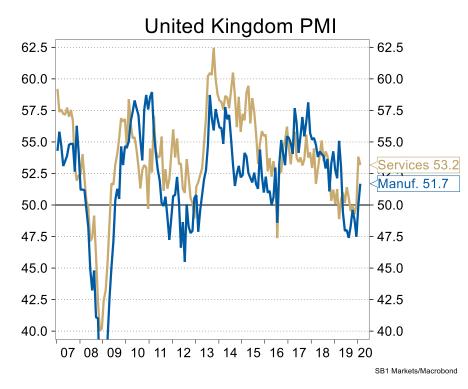


- In February, the total new orders PMI ticked up to 49.4, still implying a decline in total manufacturing orders, but the mildest one since Sept 2018. The upturn from the 38.2(!) bottom in Sept '19 is no doubt a step towards a recovery
- Domestic orders PMI (implicit) jumped to 52.7, reflecting the first increase in domestic orders in 1 ½ years! The upturn in domestic demand was partly offset by an accelerating decline in export orders. Businesses note that orders were hit by weaker demand from China and globally, as well as supply chain disruptions. A recovery is likely, at least in a couple months time. Actual orders have stabilized (but no Jan/Feb data)

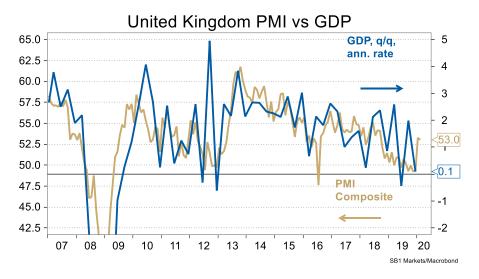


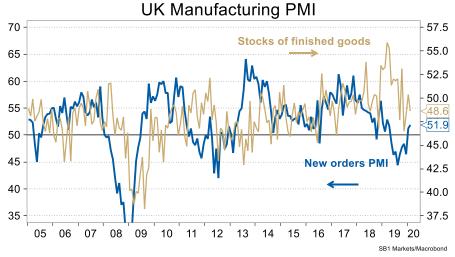
Composite PMI remain at a decent level, following 'Brexit recovery'

Manufacturing is recovering, services still strong. Composite PMI signals a GDP rebound in Q1



- Manuf. PMI rose 1.9 p in Feb, the second month of a rapid increase. The PMI signals a recovery in manufacturing, after struggling from Brexit uncertainties as well as inventory adjustments through 2019. New orders are rising, however, stocks will have to be drawn down eventually?
- Services PMI inched down 0.5 p, after soaring 3.9 p in Jan. Composite PMI inched down to 53, signals just above 1% GDP growth, vs the stagnation in Q4

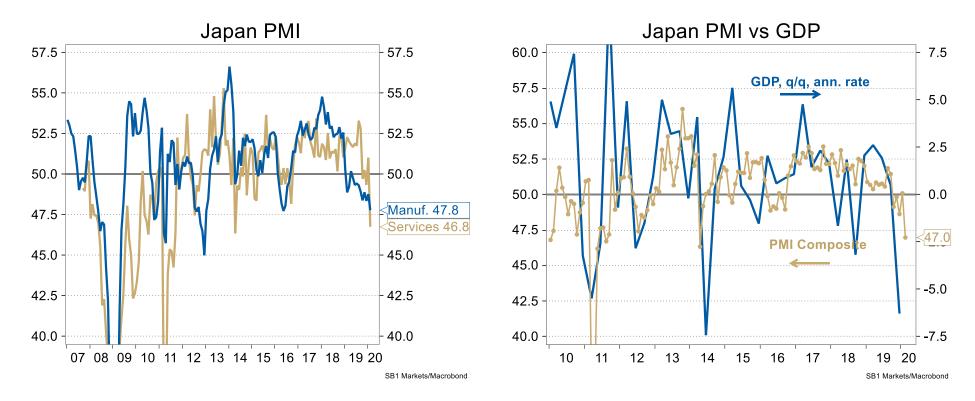






Japan PMIs hit by the coronavirus outbreak and persistent VAT impacts

Services PMI plunged 4.3 p in Feb to a 6 y low, as tourism suffered from corona impacts

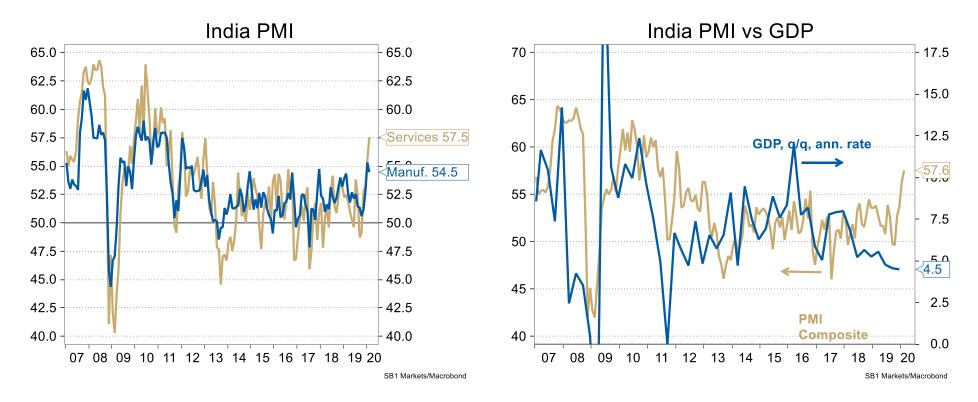


- Composite PMI slipped 2.9 p in February, to 47.0 (unchanged from the prelim. report), the lowest level since 2014, when the economy struggled with an increase in consumer taxes. The economy was it hard by the coronavirus outbreak, suggesting a continued decline in GDP into the first quarter of 2020
- Services noted the steepest decline in activity since 2014. The spread of corona hit tourism and travel. The
 manufacturing PMI edged down too, by 1 pp, weaker global demand due to corona and supply chain disruptions are
 likely explanations



Both PMIs are climbing, composite at 8 years high

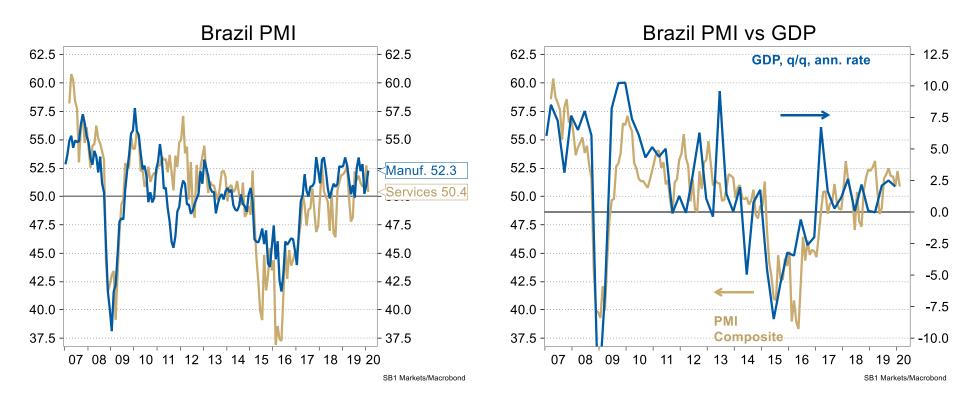
Composite PMI at 57.6 suggests much higher GDP growth rates, but the correlation is rather weak



• 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. Anyway, the direction of the PMIs is promising

Composite PMI signals stable GDP growth

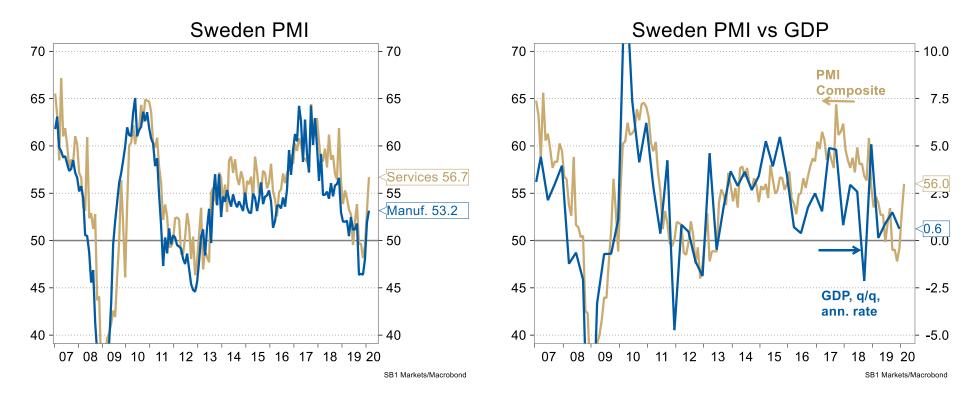
A rise in manufacturing offset by weaker growth in services in February



- GDP growth was up 2% in Q4, the 3nd quarter of recovery
- Disclaimer: The Brazilian PMI is rather volatile –and does not predict <u>quarterly</u> GDP particularly well but the growth cycle is well represented by the PMI

PMIs suggest a marked and broad recovery

Both PMIs climbed further in Feb, composite PMI suggest above 2.5% GDP growth. We doubt so

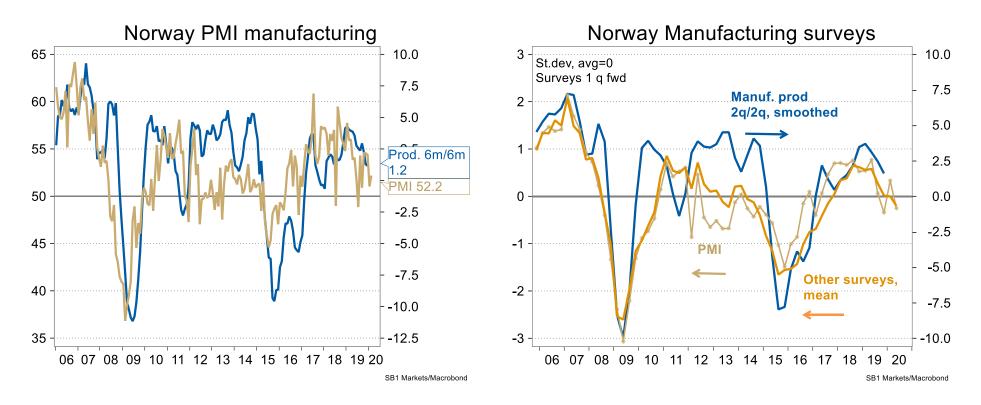


- Manufacturing PMI surprisingly soared 3.5 p in February, after a strong recovery the previous month. The PMI is the highest in more than a year. Both domestic and export orders are improving, no signs of any drop in global demand
- Services reported another month of acceleration too, the PMI jumped to 56.7. Composite PMI at 56 suggests a swift upturn in GDP growth from the soft Q4. However, the coronavirus outbreak may dampen growth here as well, if the spreading should accelerate



Manufacturing PMI inched up in Feb, still confirming a marked slowdown

PMI rose 1.2 p, but the level at 52.2 is not signalling any growth in production



• The PMI has turned down with other Norwegian manufacturing surveys the past few months. Taken together, manufacturing surveys signals a modest decline in manufacturing production in the first months of 2020

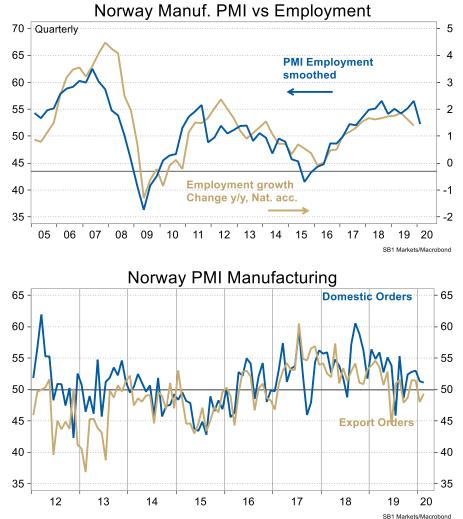


Orders and employment indices signal a soft downturn

Orders have softened and manufacturers are reporting slower employment growth, to some 1.5%



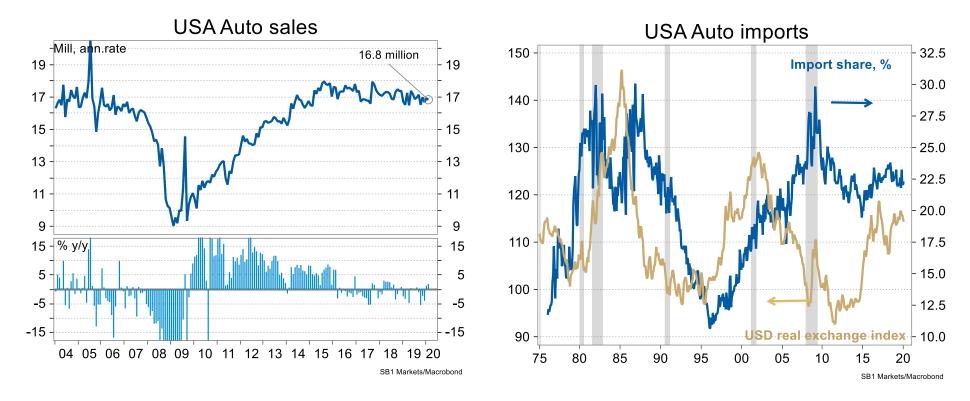
- The new orders index rose to 53.5 in February, not a weak level, although the direction is no doubt set. Businesses are reporting retreating exports orders, while domestic are growing modestly
- The PMI manufacturing employment index came in at 51.4 in Feb. This index is volatile, we have applied a 3m smoothed, quarterly rate at the chart above





Auto sales weakened marginally in Feb, trending slowly down

Sales slowed to 16.8 mill, in line with expectations



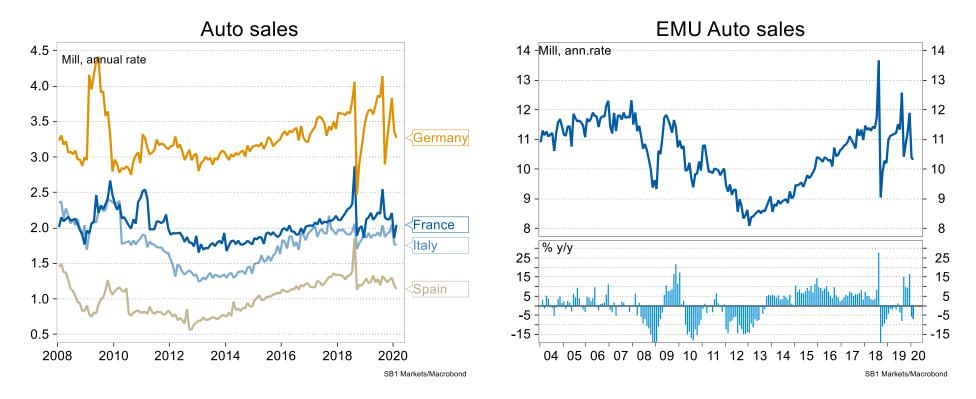
- Sales are trending slowly down, from the local peak in 2015 (!)
- The import share has stabilised following a small decline from early 2018.
 At 22% the import share is above the long term average but it has been far higher several times before.

EMU



Auto sales probably flat in Feb, following the Jan drop – the level is low

Regulations have probably destabilised sales but Jan & Feb were not good

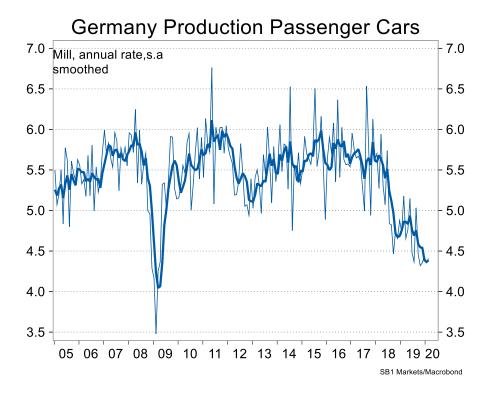


- Sales in the major markets were in sum unch to Feb from Jan, following the 13% m/m drop last month. Sales in the EMU at 10.4 mill (annual rate, our preliminary est) is well below a normal level. Sales have been heavily influenced by new EU regulations, and it not possible to be sure what the 'real' underlying trend in demand is
 - » From Jan, new EU emission regulation was 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. High sales in December indicates that inventories for high emission cars were cleared
- 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

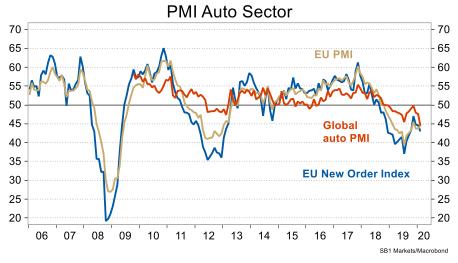


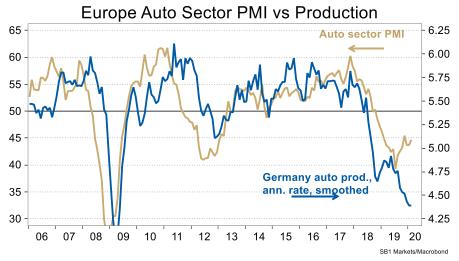
German auto production may have stabilised, at very low level

The EMU auto industry PMI rose in February, while the global index fell sharply (thanks to China)



- German auto production is down almost 25%, 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. The level at 44.5 is formally signalling a decline in production but is probably signalling higher production the coming months (the PMI is leading the production <u>level</u> by some months, and is not that closely correlated to growth in production)
- The global auto (total) PMI fell marginally to 3 p to 44.5 in January

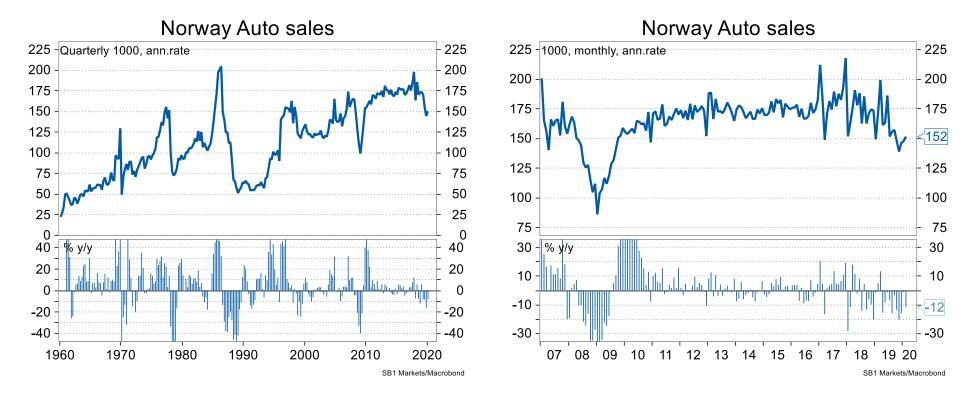






Slow auto sales remained weak in February, there must be a demand issue

Sales have not recovered in Jan/Feb. Are there still some delivery problems, or is demand waning?



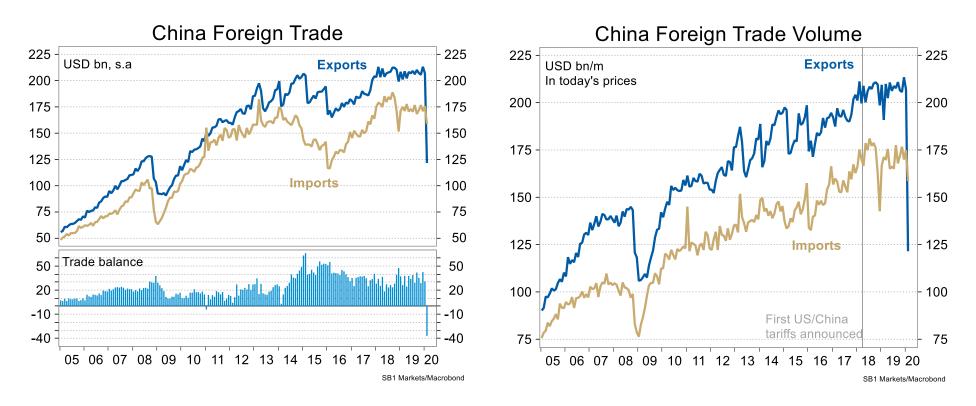
- From January 2020, the new EU emission regulation were implemented; the maximum average emission of the new vehicle fleet for each producer will be 95g of CO₂/km. If these levels are not reached, producers will be fined. There was no obvious impact on sales numbers (like postponed sales of low emission sales last autumn would turn up in 2020)
- Expiring auto leases of hard to sell gas/diesel cars may have led to too large 2. hand inventories among dealers, keeping new car sales down
- However, as sales have been declining rapidly since the summer, the simple explanation may be that demand is waning



China

Exports down some 40% in February, imports 10%

Exports down from ATH in December, imports from a decent level

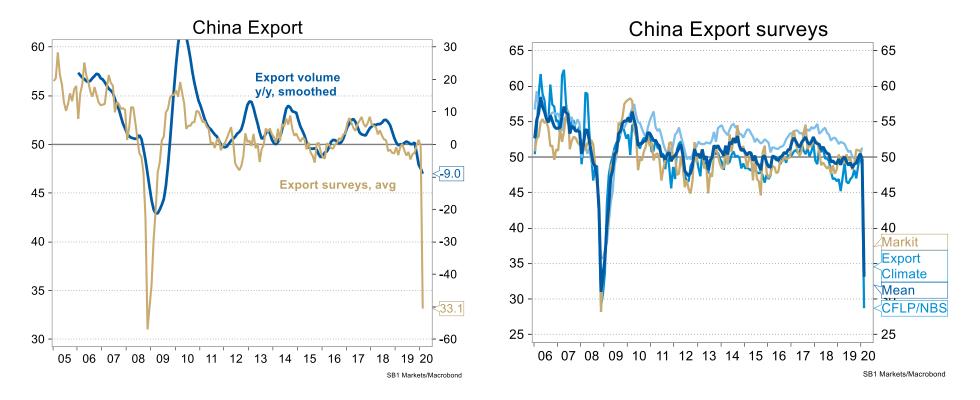


- China announced aggregated Jan/Feb trade figures (monthly data will be published later). Exports fell 17% in the two first months of 2020, and imports 4%, the latter less than expected. Imports were boosted by import of medical devices etc (but the amount can not be that large)
- We assume that January trade figures were or less on par with December's strong data, as restrictions on activity started in the last days of January (and in earnest after the lunar new year holiday ended Feb 8). If so, exports fell 40% m/m, and imports by 10% in February, and almost by the same y/y.
- The decline in exports are both due to the shutdown of a large proportion of the manufacturing and transportation capacity through February. Imports were still received (the ships were underway), and inventories must have been sharply build up, as domestic demand must have fallen more than 10% in February alone. The trade balance suddenly changed sign amid the 'collapse' in exports, to a deficit at almost USD 40 bn in February
- Before the coronavirus hit, exports were record high, and import volumes were not weak either (on a long term trend). Exports to the US had fallen sharply, but more exports to other regions compensated for trade war impacts



Export surveys were improving. No more!

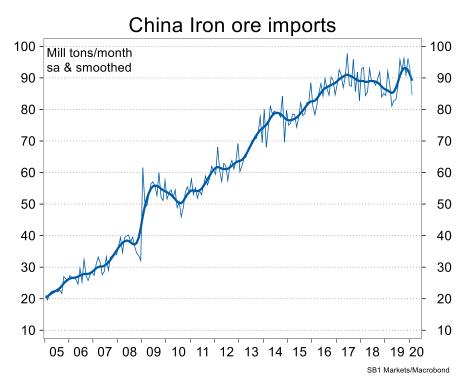
Export order/climate surveys sharply down in February, for good reasons



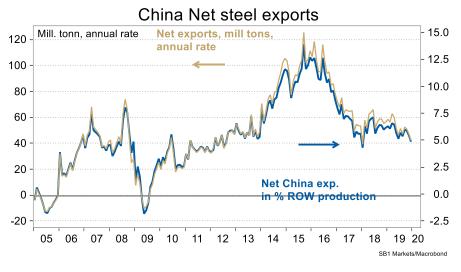
 The calibration is totally useless with survey data like February's, but they of course signal/comfirm this month's setback



Iron ore imports down in February, but not by much



- Iron ore imports fell some 8% m/m in February, according to Our calculation.
- (We have not updated the net trade and domestic demand figures at the charts on the right hand side)

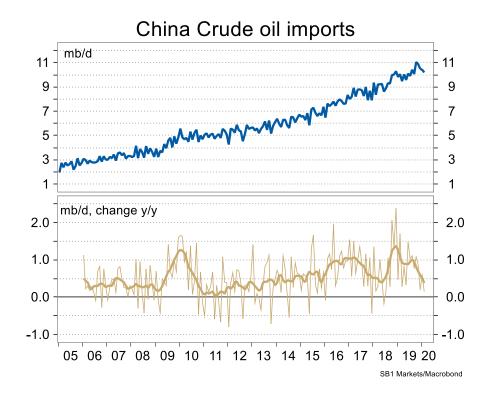


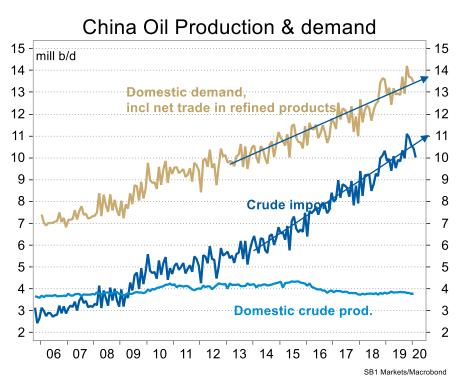




Oil imports slightly down in Jan/Feb, still up y/y

Inventories are probably built, as domestic demand must have fallen in February





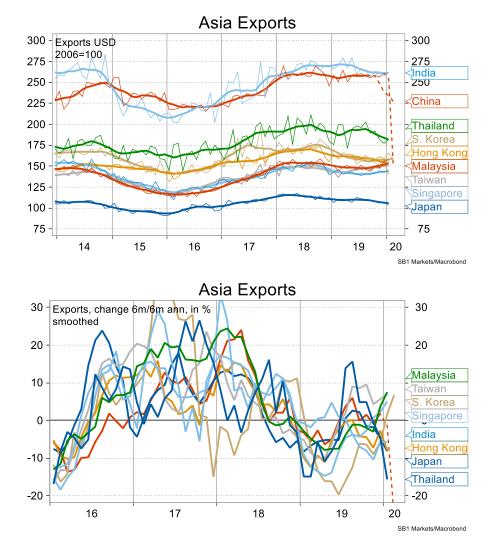


Taiwan, South Korea still strong in February. March probably a challenge

Thailand, India and Japan have been weak for a while

	Exports - Goods	
	USD, 1000 bn, annual rate	
	0 1 2 3 4 5	
China, Exports		4.85
China, Imports		3.62
USA, Imports		2.42
USA, Exports		1.63
Germany		1.49
Japan		0.67
Russia	-	0.47
Hong Kong		0.44
South Korea		0.40
Singapore		0.40
Taiwan	-	0.35
India		0.32
Malaysia		0.25
Thailand		0.24
Brazil		0.20
Norway		0.10
	SB1 Markets/Mac	robon

- Taken together: Exports have slowed in most countries but some signs of stabilisation recent months
- China is of course the world's biggest export country (55% larger than the US!) – and the 2nd biggest importer!
 - » China will probably take the pole position in imports too, in some few years time

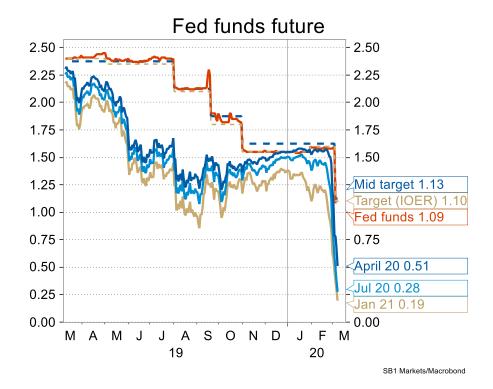


USA



Fed cut 50 bps and the market expects more than 80 bps more this year

Fed will probably deliver another 50 bps cut next week, as usual after intermeeting cuts



- The Fed delivered an 'emergency cut' of 50 bps on Tuesday, to 1-1.25%. The cut was widely expected following Powell's message last Friday, however, the cut came somewhat faster than expected. The US economy was strong, but a precautionary cut ahead of possible coronavirus challenges was appropriate. The decision was unanimous
- Since 1998, Fed has conducted 7 'emergency' intermeeting cuts. Each time, at the first regular FOMC meeting, the signal rate has been cut further, usually by the same size.

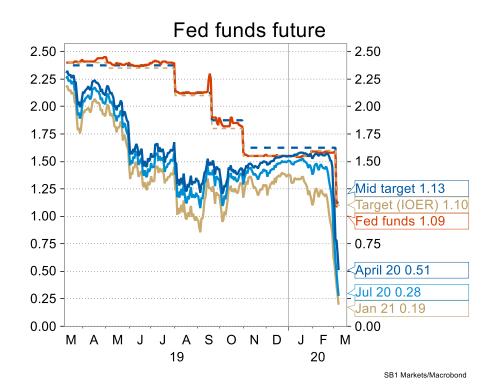
 Fed fund futures have plunged, all over the curve. The market is pricing another 50 bps cut at the March meeting next week with a very high probability, and than additional 25 bps (given 50 bps next week), probably before or at the July meeting. It is far to early to be sure what the Fed will actually do. If more bad Covid-19 new are out by next week, a 50 bps cut seems most likely



Fed's Beige Book reports steady growth, a few sectors hit by Covid-19. So far

Fed's 'regional network' continue to modest to moderate growth and rising capacity constraints

- Economic activity expanded at a 'modest to moderate' rate in February, according to the Beige Book, from just 'modest' in the prior report. Sector reports were somewhat mixed
- On the demand side
 - » Consumer spending picked up, in total, while auto sales were mixed across the country
 - » Home sales rose modestly
 - » Tourism and travel sectors were affected by the coronavirus
- On the supply side
 - » Manufacturing expanded in most regions but the <u>virus outbreak</u> <u>caused some supply chain delays</u>
- Labour market
 - » Employment continued rose at a moderate pace and businesses reported that hiring was constrained by widespread labour market tightness. Not a good time to slash interest rates, perhaps?!
 - » Still, wages continued to growth at a modest to moderate pace, however, many firms reported that the difficulties to attract labour led to upward pressure on wages
- Prices
 - » Still modest inflation and some sectors are still struggling with the tariffs on China
- In total, the Beige book signals steady growth in the US economy, with increasing capacity constraints. The coronavirus outbreak had already had some impacts and more is likely to come

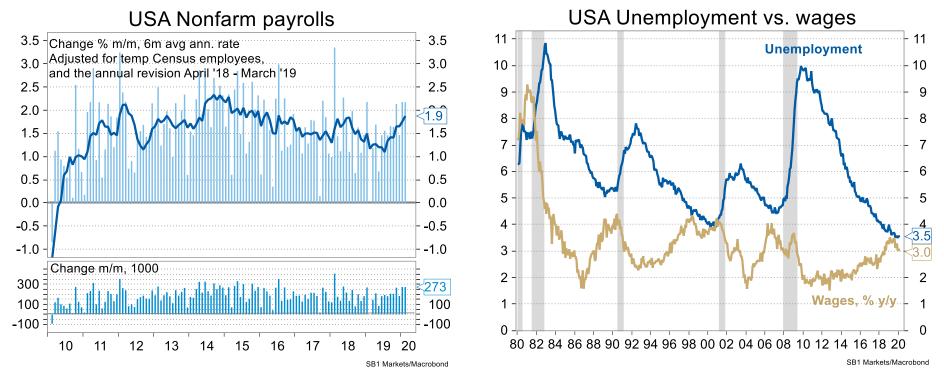


The Fed delivered a 50 bps 'emergency cut' last week and markets are pricing at least three more cuts (of 25 bps) this year



Ol' news but still: Employment growth is accelerating, far above expect. in Feb

Employment up 273', 110' above expectations. Unempl. inched down to 3.5%, wage growth to 3.0%



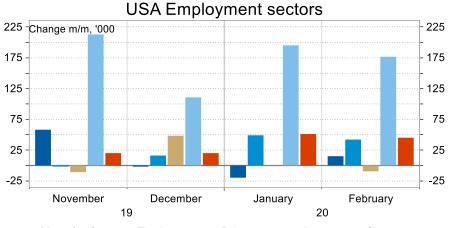
- Employment rose by 273' in February and January revised up by 48', in sum 160' higher than 'expected'. Thus, employment growth is accelerating, the 6 m avg up to a 1.9% pace, from 1% in early 2019 and the highest growth since 2016
- **Unemployment** inched down to 3.5%, as expected. The participation rate was unchanged, heading slightly upwards but too little to suggest that the supply side is now really responding to a really tight labour market
- Wages rose 0.3% m/m, as expected. The annual rate ticked down 0.1 pp to 3.0%, sliding down since mid-2019. Wage inflation has slowed in most sectors, even as businesses report record labour constraints. Still, wage growth is not that low vs productivity, CPI
- These data confirm that the labour market remains was strong in February, and by itself of course not the reason for the emergency cut last week



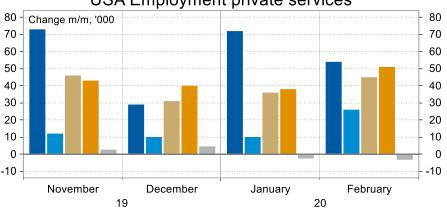
Employment is increasing in all sectors barring manufacturing

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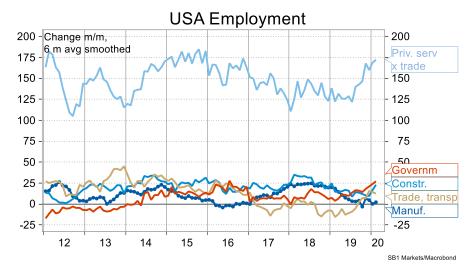
Employment accelerates in private services, government and construction



Manuf. Constr. Trade, transp Priv. serv x trade, transp Governme Governme



USA Employment private services

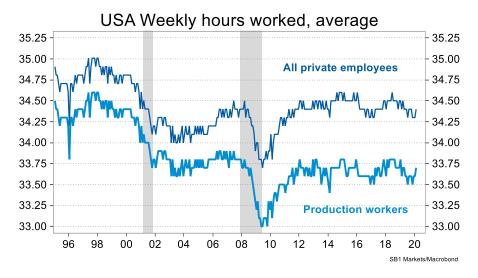


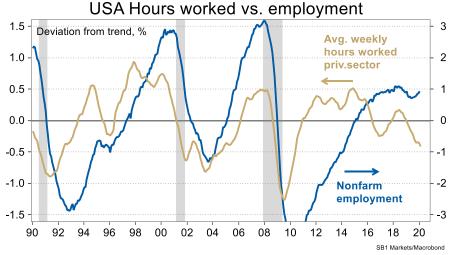
- In February: Employment in private services rose strongly, construction and government moderately. Manufacturing rose marginally, trade & transport fell slightly
- **Recent months:** Employment growth has stagnated in manufacturing, increasing in all other sectors. Private services, construction, trade & transport and government employment have been gaining pace
- **Big picture:** Manufacturing peaked in H1 2018, construction too. Private services x trade empl. have recovered rapidly, following a slowdown in 2016 and 2017. Trade is picking up, after declining in late 2018-early 2019

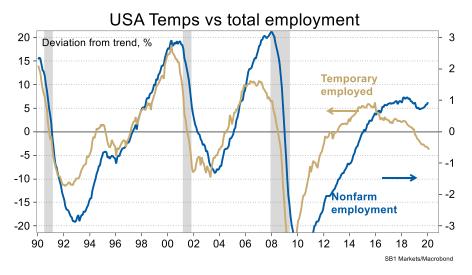
Education, Health = Financial act. = Prof, bus serv, = Leisure, hosp. = Temps SB1 Markets/Macrobond

Weekly avg hours up in Feb but trending down, normally a 'first response'

Demand for temps has been slowing too, and more rapidly after revisions, usually not a good sign





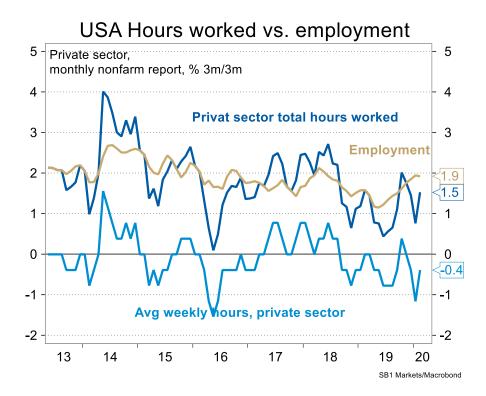


- Average weekly hours worked (in the private sector) is trending down, <u>an argument in favour of a weaker-</u> <u>demand-for-labour-story.</u> Hours were increased in February but are down 0.4% measured 3m/3m
- On the other hand: Employers are still reporting aggressive hiring plans and massive problems filling positions, and the number of unfilled vacancies is high
- The number of temporary employed is waning, usually a leading indicator for future slower total employment growth

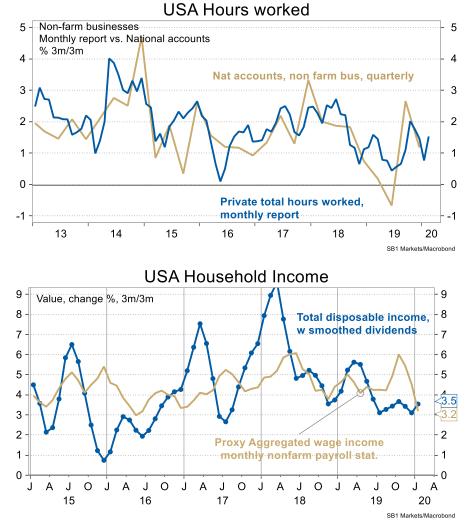


Avg hours worked are slowly declining, still moderate growth in total hours

Growth in disp. income is not low – and corporate profits are under pressure



- The underlying decline in avg weekly hours (measured 3m/3m) eased to 0.4% in February. Total hours are still increasing, at a 1.5% speed (in the private sector)
- Growth in total wage income is trending down, the proxy estimate down to 3.2%. However, productivity growth is still moderate (but is trending up), and corporate profits are under pressure, at least that has been the case until now

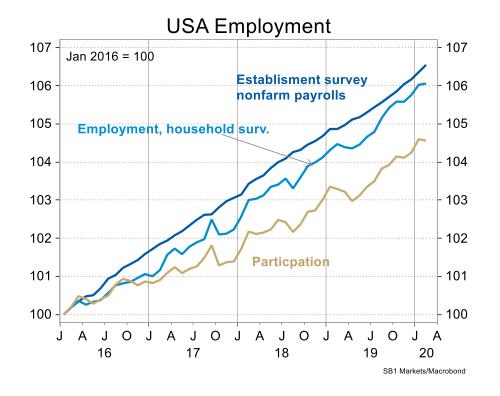


USA



The household survey is reporting accelerating growth in employment too

The LFS survey has been reporting a steeper increase in employment than the payrolls report

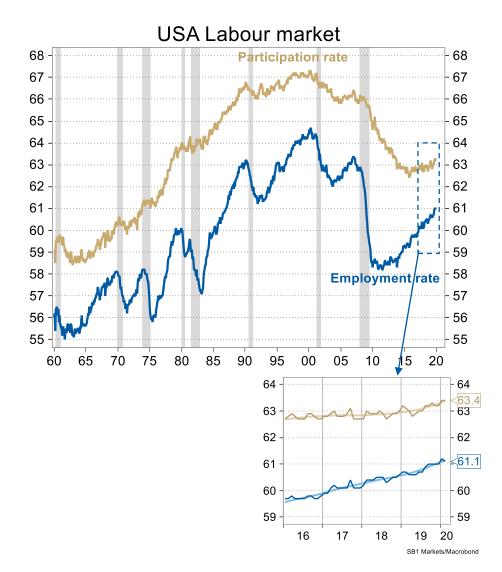


- The household Labour Force Survey (LFS/'AKU') reported slower growth in employment than payrolls in early 2019. Since last summer, LFS employment growth has increased faster than the nonfarm report
 - » Total employment, defined as in the nonfarm payroll report, fell by 153' in Feb, after soaring in Jan (nonfarm rose by 273')
 - » The smoothed, annual rate is 2.1% according to the LFS survey (defined as in the payrolls report) and by 1.4% according to the nonfarm payrolls report
- The labour force came down marginally in February, bringing unemployment rate down. The participation rate was unchanged at 63.4%, employment rate inched down to 61.1%
- 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. The employment increases faster

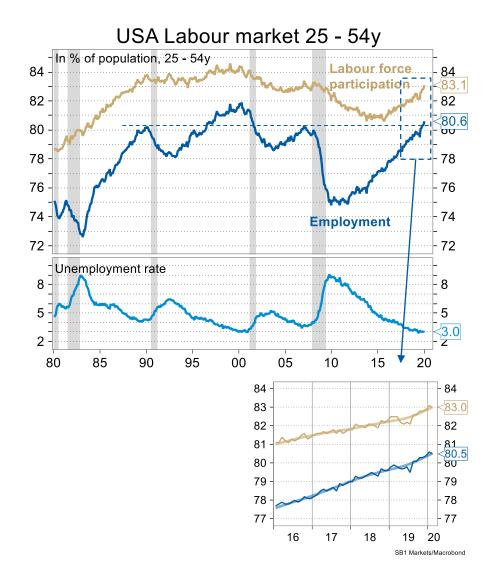


- The employment rate inched down 0.1 pp in February, trending up. The level is still well below the prefinancial crisis levels
 - For the core age group, employment is back to a normal level (see next page). Youngsters (their employment rate is down) and the oldies (there are more of them, and fewer of them are working) have contributed on the downside on the overall employment and participation rates recent years.
 Employment rates for the core age group is back to a normal high level
- The participation rate was unchanged at 63.4%. The trend is slowly upwards and clearly less steep than the employment rate that's why the unemployment rate is still trending down
 - » The gradual increase in the participation rate is surely one of the most positive signs from the US economy – the production potential is accelerating too, alongside the slowly increasing growth in productivity (<u>check here</u>)
- Participation & employment rates do not signal any weakness on the demand side of the labour market but rather a <u>tight labour market</u>, due to a still 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. Is there more to go?

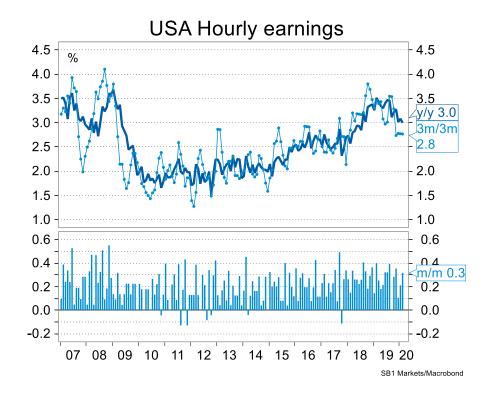


- While the total employment rate (over 16 y) is well below the pre-financial crisis level (by more than 2 pp), the core age group (25-54y) employment rate has been soaring and is now higher than at the 1990 & 2007 peak levels – but it is still 1.3 pp (1.6%) below the ATH in 2000
 - » The core employment/unemployment rate most likely gives the most relevant measure of the tightness of the labour market
- The 'core' participation was flat at 83.1% in Feb and the employment rate at 80.6%
 - » The 'core' unemployment rate was unch at 3.0%
- The good news is that the participation rate still is still heading up, implying that there <u>may still be some</u> <u>reserves left</u>
- However, given employers' unprecedented reported lack of labour, the increase in participation is far from impressive, <u>check here</u>



Wage growth eased marginally to 3.0%, as expected

Wages growth peaked at 3.5% in the summer, in spite widespread reports of labour constraints



- 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 most aggressive wage compensation plans since 1990

	Change y/y						%
	0	1	2	3	4	5	6
Mining & Logging							4.8
Financial Activities				-			3.9
Professional & Business Services	5						3.7
Retail Trade						•	3.7
Private Service-Providing							3.0
Goods-Producing							3.0
Total Private							3.0
Information						•	3.0
Leisure & Hospitality							3.0
Construction							3.0
Trade, Transportation & Utilities					•		2.9
Manufacturing							2.8
Wholesale Trade							2.6
Other Services							2.5
Transportation & Warehousing							2.5
Education & Health Services							1.7
Utilities				•			1.5
Now 🔶 Av	′g pa	st 12	mont	hs			
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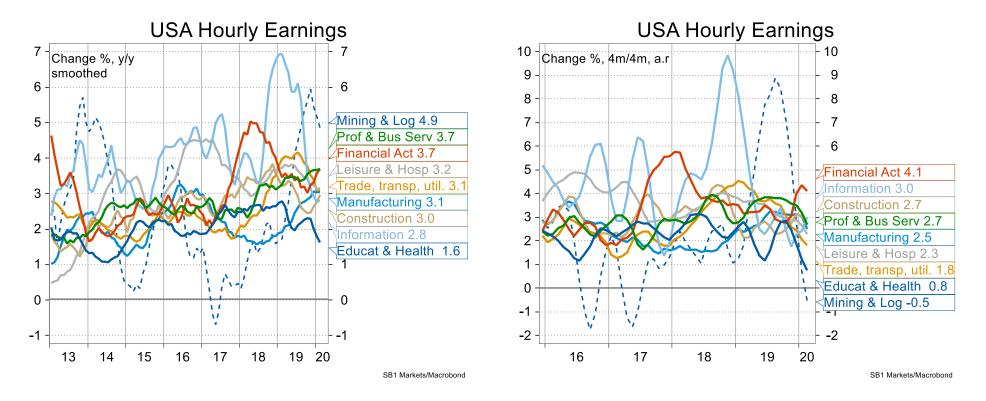
USA Hourly earnings

- Wages grew 0.3% m/m in February, as expected. The annual rate fell marginally to 3.0%. Wage growth peaked in mid-2019, at 3.5%, and has turned down since. Underlying growth steady at 2.8% (3m/3m), the 3rd month in a row
- All indicators are pointing to a tight labour market, hence, the slowdown in wage inflation in 2019 is rather strange
- Annual wage inflation is decelerating vs. the past 12m average in 10 out of 17 sectors, accelerating in just 6. Wages are now increasing at the fastest rate in mining & logging and finance, the least in utilities, education & health



Wage inflation has slowed in most sectors the past months

Underlying wage inflation has slowed in all sectors ex financial activities and information

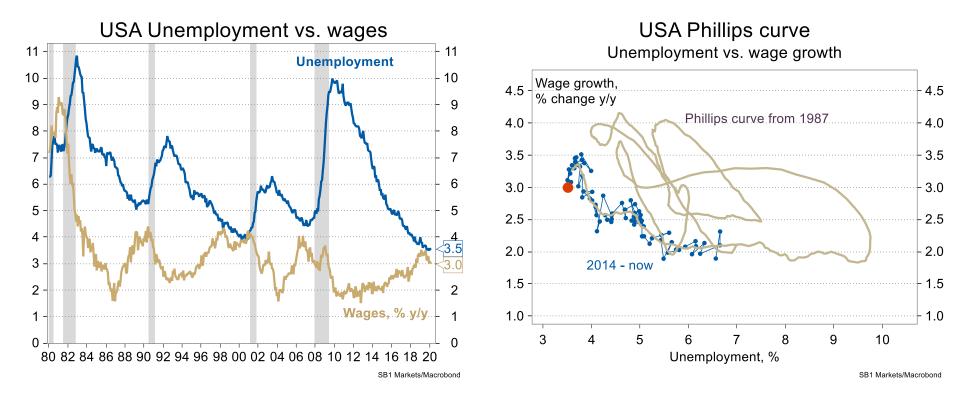


So far in 2019, wage growth has been slowing/flattening out in all sectors x manufacturing and, until last month, mining & lodging activities.



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

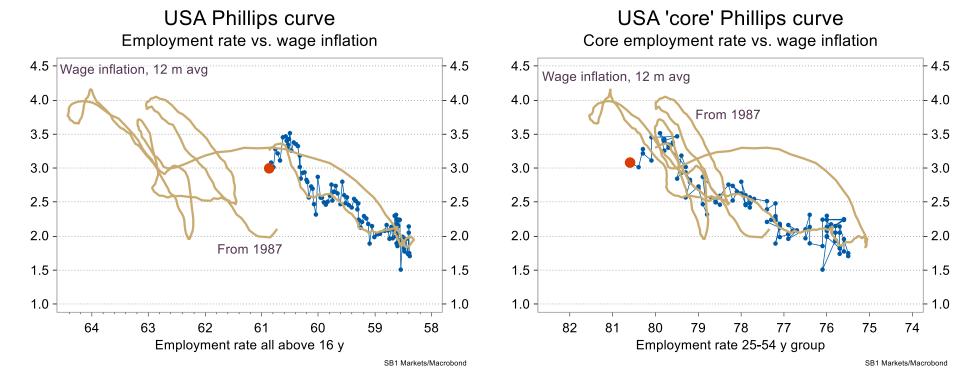
Even if the Phillips curve is flatter than before it is definitely not flat



- However, we would not have guessed told in early 2019 that the unemployment rate should decline to 3.5% and that wage inflation should decrease to 3.0%, from 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, but not vs total employment rate



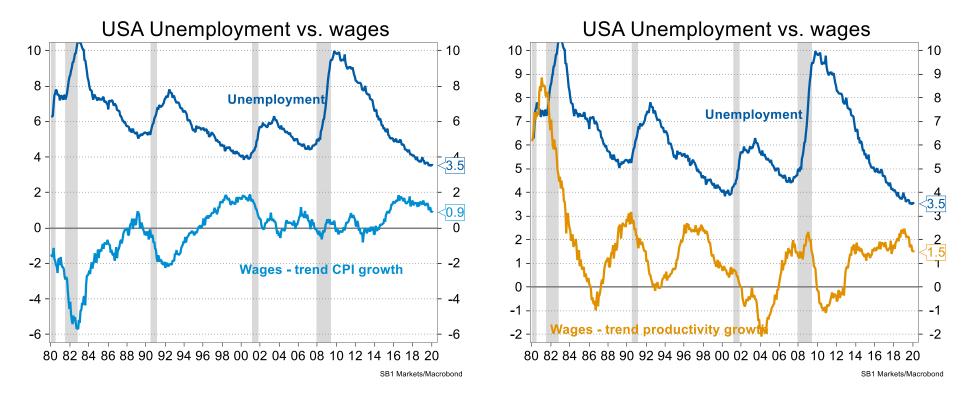
Wage inflation is

- 1) <u>Too low</u> vs. the unemployment rate (previous page)
- 2) <u>Too low vs. the core employment rate (chart to the right) but not by much and only recent five months</u>
- 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



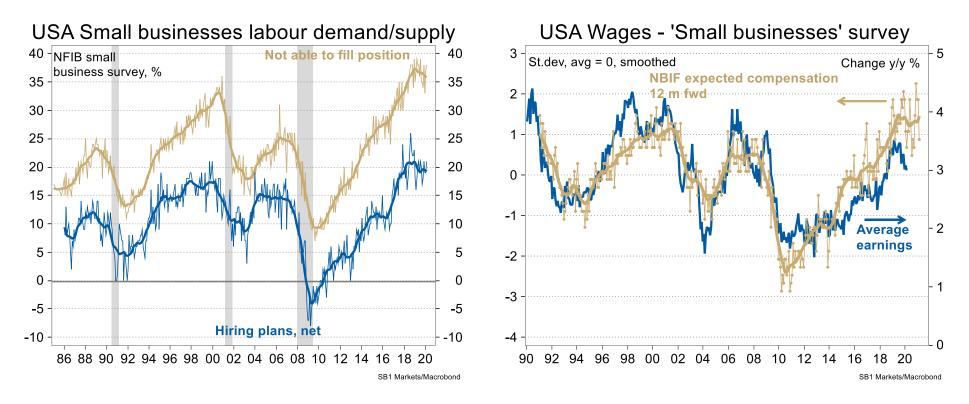
- The wage inflation productivity growth gap, or labour cost per unit produced (ULC, unit labour cost, using the monthly wage data vs the underlying trend in productivity) is 1.5%, slowing from above 2% in early 2019, but higher than usual (avg since 1964 at 0.7%, or 0.6% since 2000)
- Another indication: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



Small companies still report record tight labour markets and wage increases

USA

The share of businesses not able to fill positions have peaked but remained at a high level in Feb

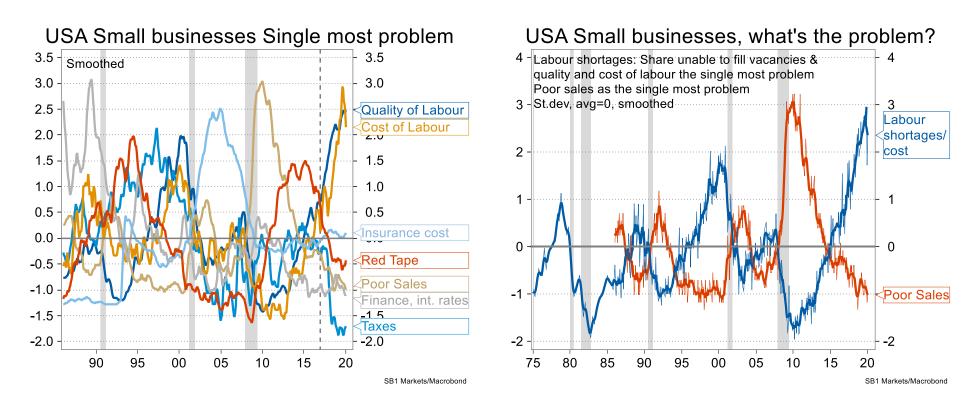


- SME companies are reporting aggressive hiring plans, although marginally less so than a year ago. That's may be an early sign of demand weakness, or, perhaps more likely, just difficulties attracting labour. The level is anyway very close to record high
 - » Hiring plans are leading unemployment approx. 8 months, unfilled vacancies by 6 months. As both have turned marginally down, it may be an indication that unemployment will turn slowly up soon. On the other hand, these survey data confirm an tight labour market
- The share of companies reporting difficulties filling their vacancies have inched down since last spring. The level is still very high, and companies are also reporting unprecedented problems finding qualified labour (check next page)
- <u>Compensation expectations have flattened out, at the highest level on record! Does not signal lower wage inflation</u>



So, what's the problem?

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

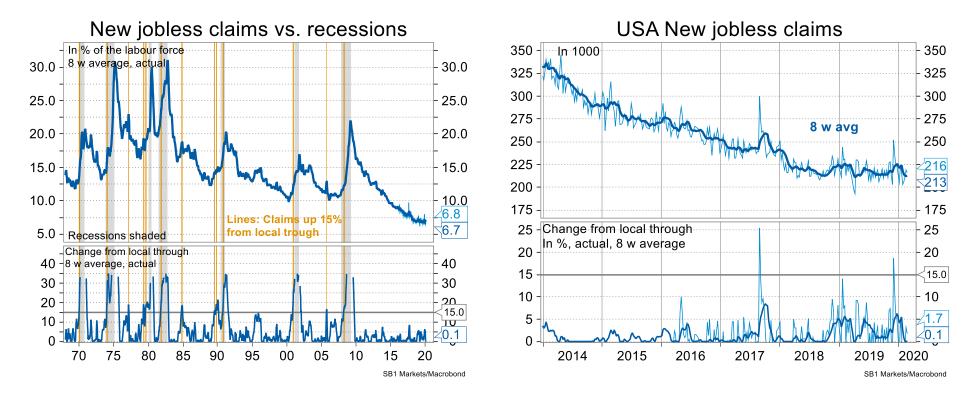


• BTW, households are reporting that it is unusually easy to find a job. Confirms that the labour market is very tight



New jobless claims steady at a very low level, no weakness spotted

Claims inched up to 216' last week. The 8 w average is sliding down, to 213', an extremely low no.

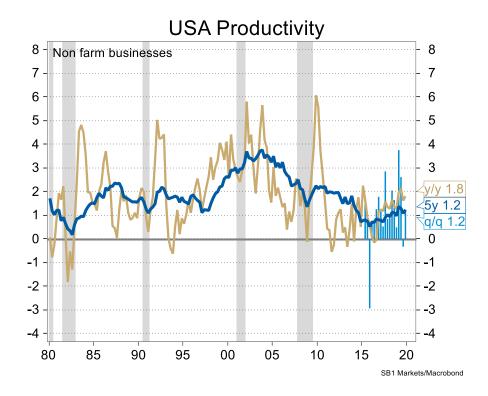


- Jobless claims have fallen down to very low levels again, after a temporary upturn in December. In Dec, jobless claims
 were distorted by a later than usual Thanksgiving holiday. Since then, claims have fallen down to very low levels,
 confirming that the upswing was not based on any underlying weakness
- A more than 15% increase in jobless claims (measured by the 8 week avg) is usually a good indication of a recession, and a yellow 'recession' warning line is to be drawn, check the chart to the left

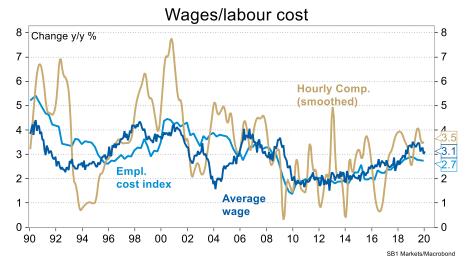


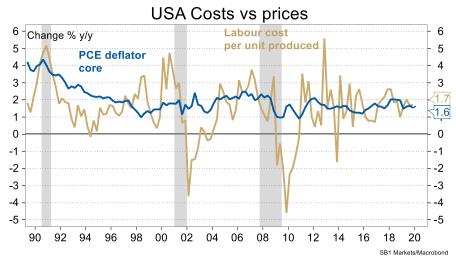
Q4 productivity growth revised down marginally, labour costs more

Productivity rose 1.2% q/q, growth is slowly increasing. Labour costs revised down, ULC to 1.7% y/y



- Productivity increased by 1.2% annualized in Q4, a 0.2 pp downward revision. The annual rate ticked up to 1.8%, trending slowly up. The 5 y average is inching up too, to 1.2%, still a modest growth rate
- At the same time, growth in labour compensation was revised down, bringing growth in unit labour costs down to 1.7%, vs 2.4% first reported. ULC rose just 0.9% q/q annualized, annual growth unchanged at 1.7% from Q3. Still, cost pressure is building up, taking its toll on corporate profits, the profit rate has fallen
- Underlying total wage inflation is well above 3%, and underlying productivity growth at some 1.5%. <u>Underlying ULC inflation is</u> probably not below 2%, like we have assumed for a while

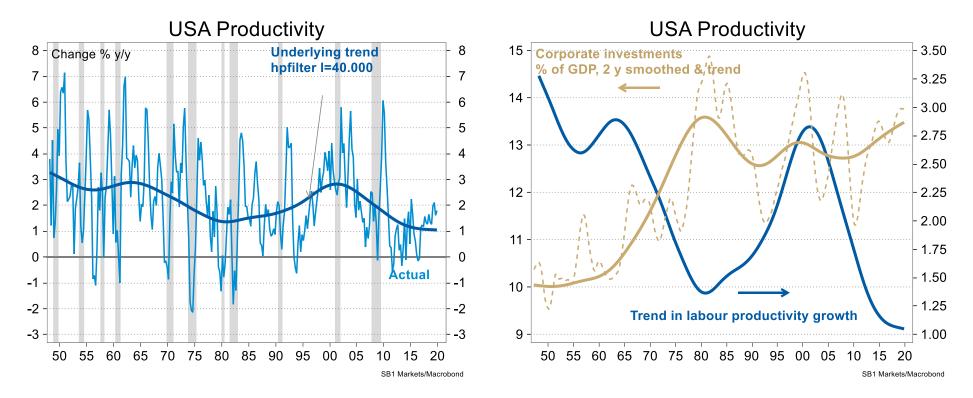






Where is the trend productivity growth? The most important figure...

It is, per definition, impossible to know in real time where the long term trend is



What is the underlying labour productivity growth now? We do not for sure know before well after the fact. We (always) have three alternatives:

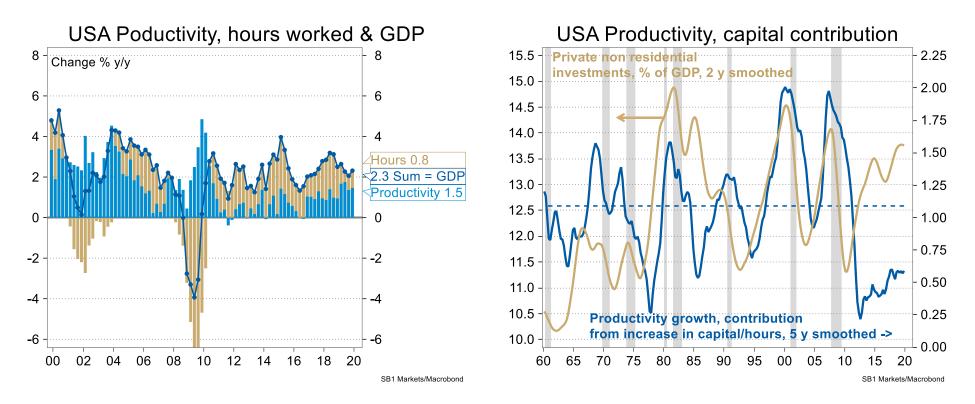
- 1) A normal short term impact due to a faster GDP-growth (hours worked is adjusted over time)
- 2) A medium term increase in productivity due to lack of labour and higher wages that incentivise companies to rationalise by utilising and investing in known technology, methods
- 3) A longer term in productivity growth due to a structural recovery, and implementation of new and more efficient technologies, possibly embedded in investments. However there is no close correlation between the smoothed investment ratio and trend in productivity growth

The good news: Growth in productivity has been slowly moving up since the bottom after the financial crisis recession



Total economy labour productivity growth inching up, hours worked slowing

Total factor productivity up 1.5% y/y in Q4, hours worked up 0.8%

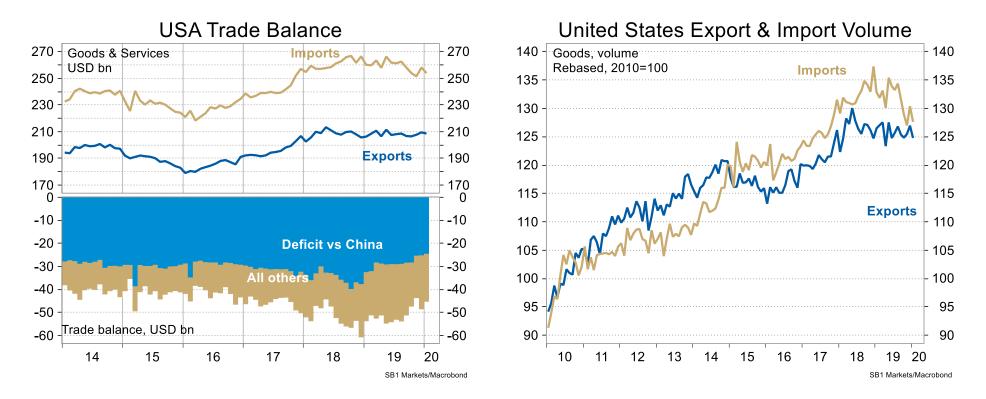


- Total economy 1.5% productivity growth + 0.8% hours worked = 2.0% growth in GDP y/y in Q4
 - » Growth in hours worked has been higher than likely over time (which is normal boom periods). Since late 2018, growth has been slowing. Sagging growth in hours worked is usually an early sign of weaker demand. In Q4, growth in hours rose marginally to 0.8%
 - » Productivity growth at 1.5% y/y is still not impressive
- A substantial decline in productivity growth since 2005 is due to a slowdown in capital deepening, leading to a much slower growth in capital/hours worked (the workers are not supplied with more capital to make them more productive). Growth in capital/hours worked remains low, even if business investments are quite high, which is rather strange, check next page too



The trade deficit is shrinking as imports are waning, exports down but slower

Imports are sagging, not just from China; softer domestic demand, dom. oil prod. part of the story

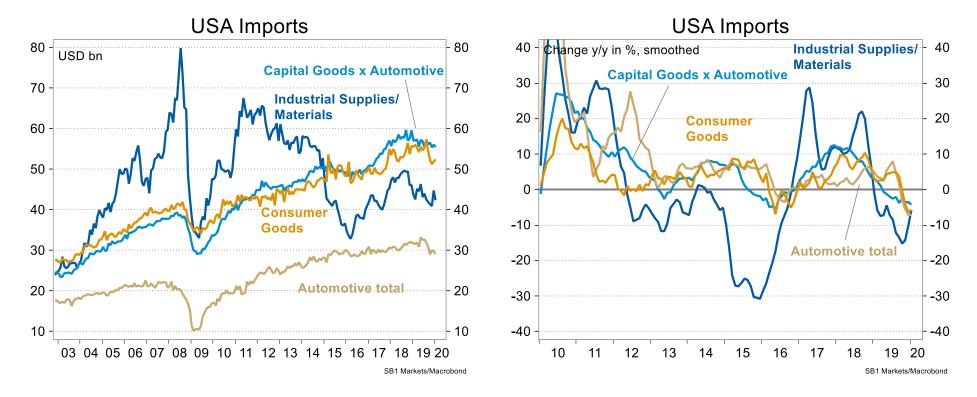


- The overall trade deficit of goods & services shrank to USD 43.3 bn in January. The deficit has declined rapidly since mid-2019, as imports have fallen, exports flattened out
 - Imports fell 2.1% m/m in volume terms. Imports are down 4% y/y. Domestic demand is dampening imports, and the deficit to China is shrinking, as the trade war/tariffs have reduced Chinese exports. In addition, net petroleum exports have turned positive and explains approx. 40% of the cut in the deficit since the summer driven by higher shale oil production
 - » Export volumes fell 1.7% m/m and are down 2% y/y. Exports have flattened out since mid-2018



A broad imports slowdown, industrial materials now recovering (not in Feb?)

Capital goods imports are sliding down – and consumer goods import have fallen sharply

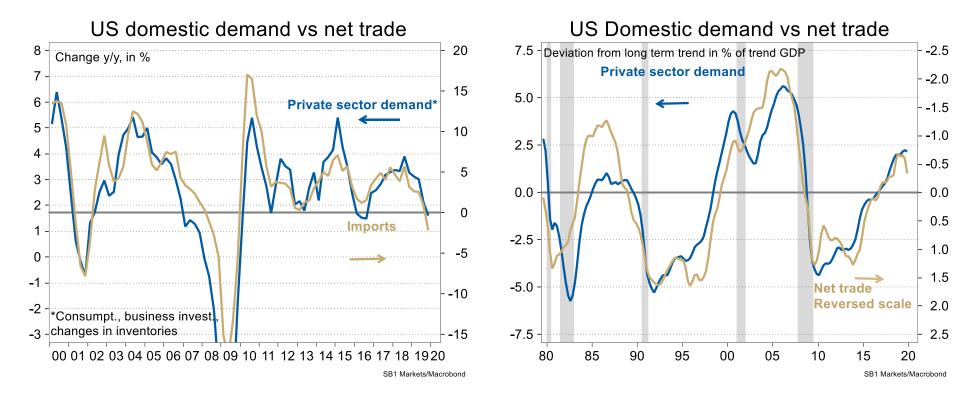


· Imports of industrial supplies and materials are more volatile than the other groups



Imports are always slowing along with softer private domestic demand

Now, imports have cooled somewhat 'more' than domestic demand, due to lower oil imports, China

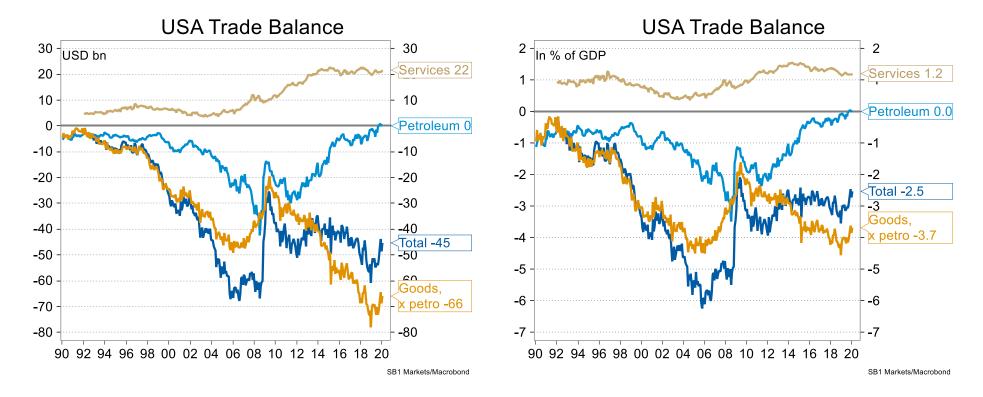


The trade war may of course have dampened US investments and consumption. However, imports have not been
reduced due directly to the tariffs (just to China, but other deficits have increased), global uncertainties probably more
important



US is no longer running a deficit in petroleum; massively in other goods sectors

The goods deficit ex petroleum is shrinking but remains very high, even in % of GDP, at 3.7%

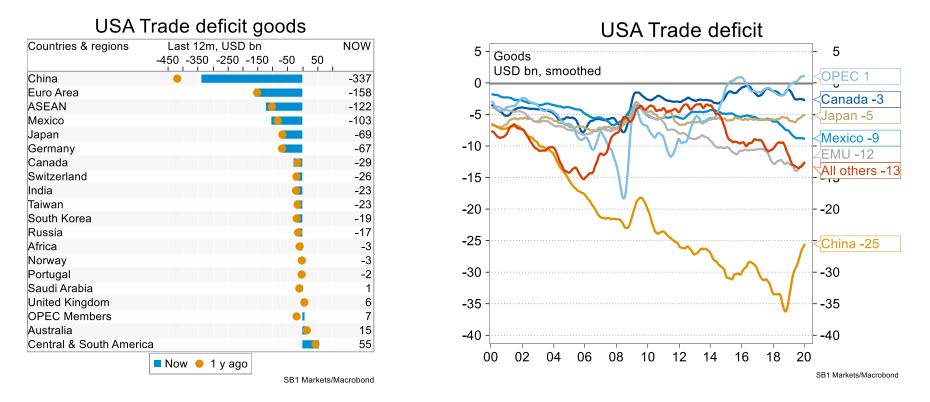


- In January, the goods x petro products deficit shrank to USD -66 bn, or 3.7% of GDP. The deficit reached ATH in Dec '18 and has been slowly shrinking since then. The total trade deficit, including petroleum (and services), is at 2.5% of GDP, from 3% last summer
- The petroleum trade deficit has disappeared, from USD 30 bn/m in 2012
- The US is having a <u>surplus</u> in services at USD 22 bn, equalling 1.2 of GDP, trending marginally down now



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

The deficit vs OPEC is turned to a small surplus, and deficits vs Eurozone, Japan are now shrinking

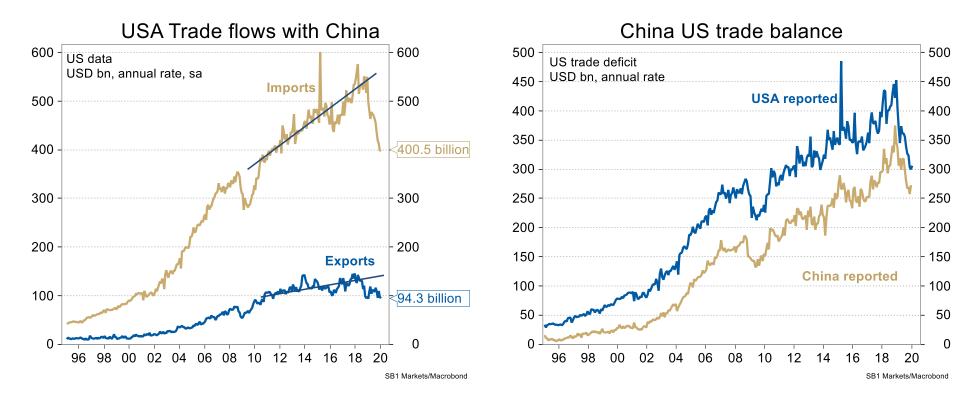


- The US deficit in goods (no services in these country stats) vs China equals 40% of the total deficit in goods
- The deficit vs Mexico has widened markedly the past 1 ½ year, Canada still heading out too (but flat recently, and close to balance). The deficit vs EMU it trending out but it has declined since mid-2019, and the deficit to Japan has been shrinking somewhat
- The US now runs a surplus vs OPEC countries, +USD 1 bn, due to higher domestic oil production (shale)



US imports from China have fallen more than exports to China

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

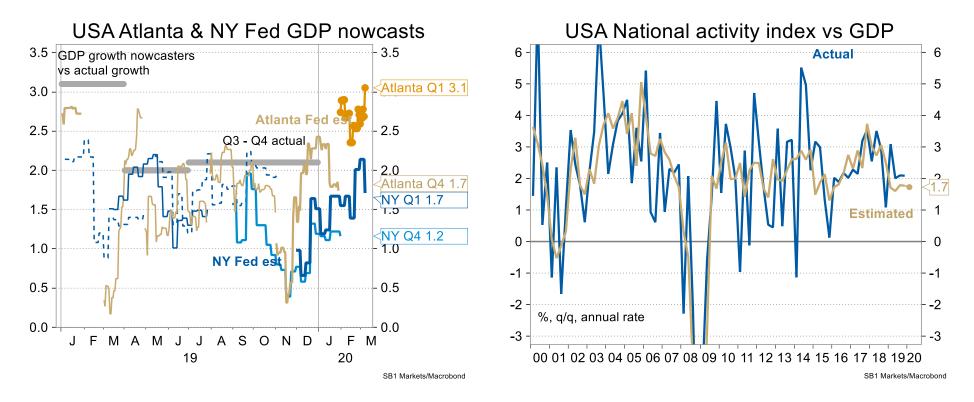


- According to US data, imports from China have fallen by 27%, and exports to China have fallen by 28% since January 2018, before the first tariffs were implemented. Measured in USD, the decline in imports from China is far larger the decline in exports and the US deficit vs China has fallen by some USD 150 bn from the 2018 peak, to 300 bn now
- <u>China reports a some USD 100 bn decline in the surplus</u>, 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 mixed – 1.7 to 3% growth in Q1

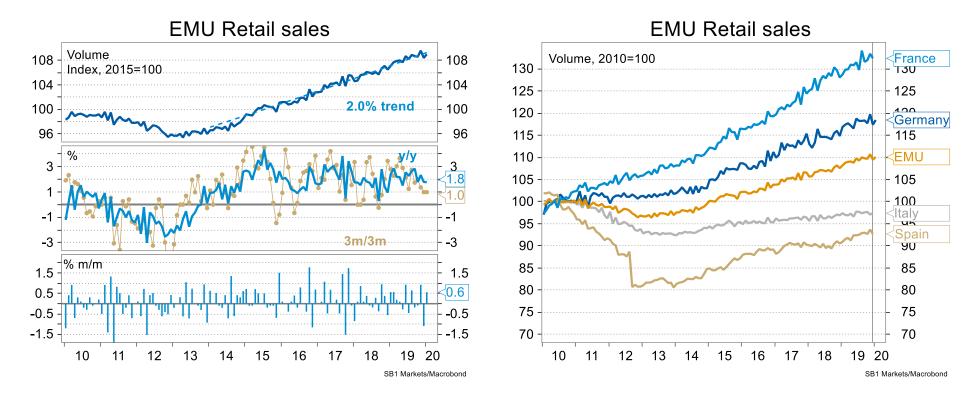
NY Fed's model says 1.7% growth, Atlanta 3,1%, National activity index signals 1.7% growth in Q1



- The National Activity Index improved marginally in January, signalling 1.7% GDP growth into Q1, slightly lower than the reported GDP growth at 2.1% in Q4
- None of these nowcasters have yet incorporated any data eventually impacted by the Covid-19 outbreak

Retail sales picked up in January but past months not that impressive

Sales have flattened and underlying growth has slowed to 1%



Retail sales volume rose 0.6% m/m in January, as expected, failing to fully recover from the December plunge. Sales have
more or less stagnated since Aug/Sept and the underlying growth (measured 3m/3m) has slowed to 1%

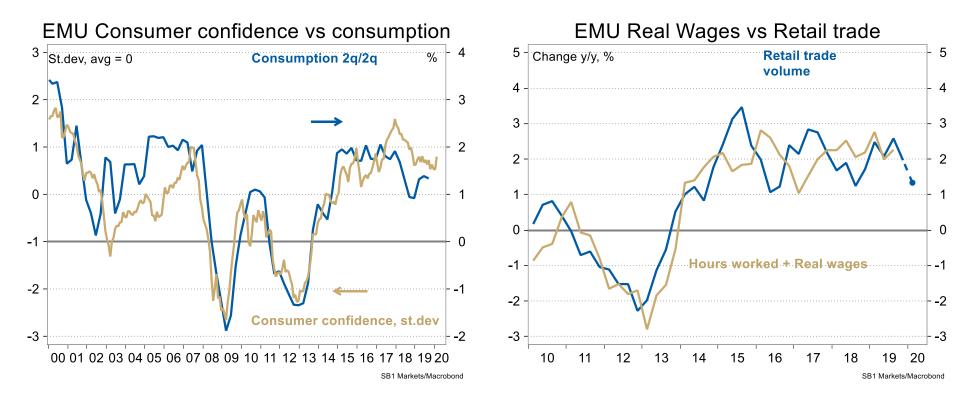
» Sales in Germany have softened, France and Spain still trending up, Italy marginally too

• We expect continued moderate growth in sales the coming months, and we have no other indications that consumption is yielding now, after growing steadily amid the manufacturing contraction. Consumer confidence picked up in Feb and the level is high, and employment is still growing, total wage growth is steady



Consumer confidence, income do not signal any setback

However, the upside is probably limited, total disposable income growth is not increasing

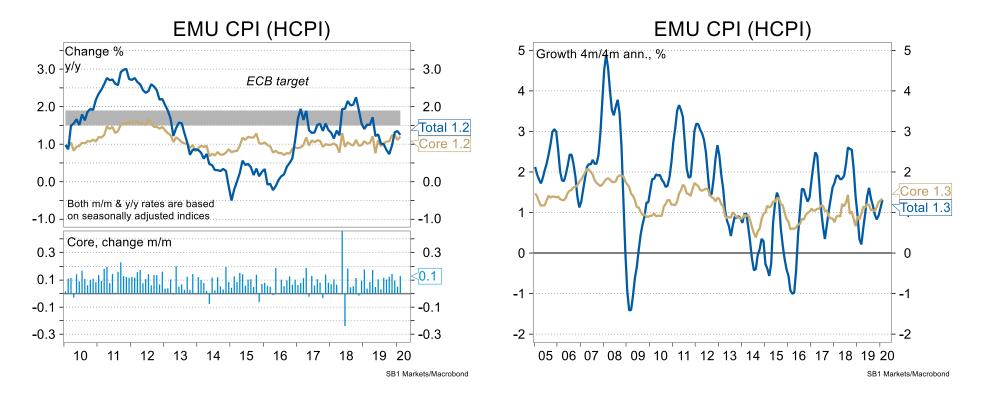


- Consumer confidence spiked in February, after a soft slowdown, and the level is rather high
- Real wages + hours worked, a good proxy of total disposable income has flattened out the past couple of years. Total income is now expanding at a higher speed than retail sales



Core CPI inflation heading marginally up, at 1.2% in February

Core CPI up 0.1% m/m and the annual rate inched up 0.1 pp, total inflation down to 1.2%

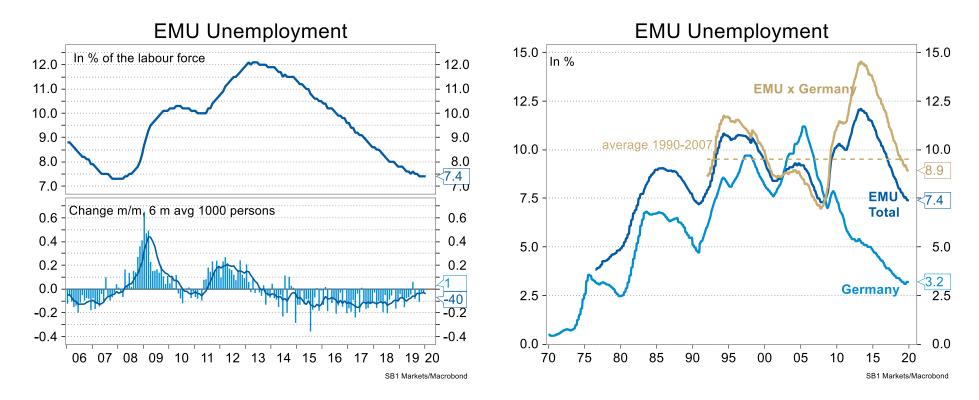


- Core CPI rose 0.1% m/m in February and the annual rate ticked up to 1.2%, as expected. Core inflation has increased
 marginally recent months, and the underlying growth (measured 4m/4m at the chart above) has turned up to 1.3%. We
 highly doubt inflation will accelerate substantially, after being completely flat for 3 years
- Total CPI growth down 0.1 pp to 1.2%. Energy prices sent total inflation up in the autumn/early winter, will now change sign again as the oil price has dropped



Unemployment rate is flattening out

The no of unemployed is declining just marginally, unempl. rate flat at 7.4%, lowest in 11 years

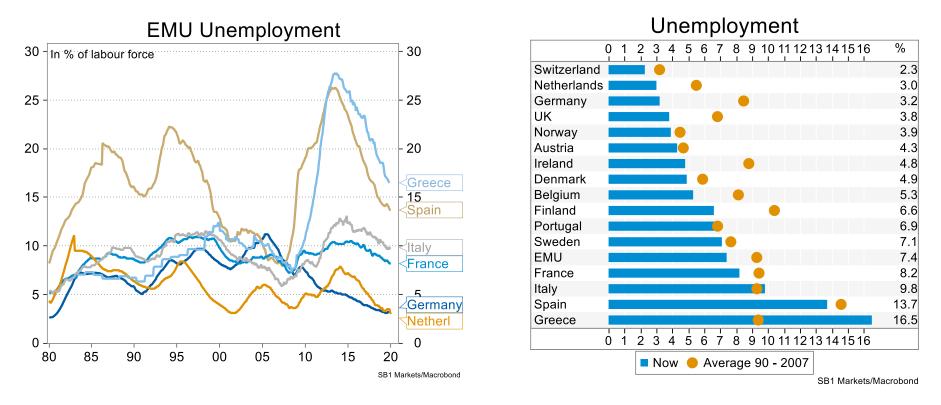


- The unemployment rate was unchanged at 7.4% in January as expected, for the 3rd straight month. The number of unemployed fell by just 1' and the 6 m average decline has eased to just 40'
- Unemployment in total EMU is well below the 1990-2007 avg, and it has fallen below the average in EMU ex Germany
 - » In Germany, the unemployment rate bottomed at 3.1% in the summer, the lowest rate 40 years, and has been flat at 3.2% since



Unemployment is still declining in many countries, flat in Germany, Italy

Unempl. is higher than 'normal' (avg 1990 – 2007) only in Greece (and marginally in Italy)

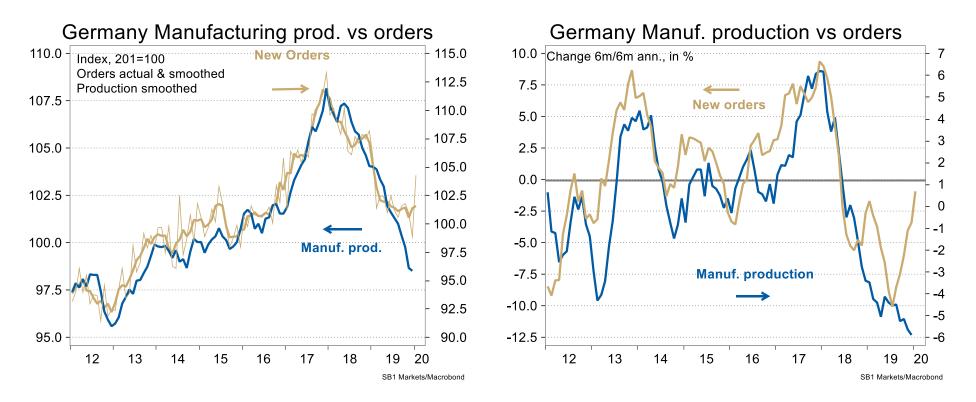


- Unemployment rates in Greece and Spain have fallen steeply since 2013, from awfully high levels. Unemployment is still very high in Greece, at 17%. Spain down to 14% from 26%, and still sliding down
- Unemployment in Germany and the Netherlands have fallen to very low levels, limited downside potential. Recent months, Germany has flattened out, Netherlands still declining. In France and Spain, unemployment rates are still heading down. Italy stabilized since the summer
- Employment rates are in general high but lower than before the GFC in Greece, Spain and France (but not in Italy)



Manufacturing orders rebounded in Jan, production to follow?

Orders spiked 5.5%, the steepest monthly rise since '14 – 'unfortunately' driven by foreign demand



- Total manufacturing orders jumped 5.5% m/m in January, miles above expectations. This is the steepest monthly increase since 2014. The decline in orders has been easing since early autumn, and are now close to a stabilization
- Manufacturing production has so far shown no signs of bottoming out, even as both orders and PMIs point to a substantial moderating contraction. The orders upturn was merely driven by a lift in foreign demand, which is likely to be heavily impacted by the coronavirus outbreak the coming few months (at least in Feb/March). Regardless, the upbeat orders data offer some comfort as to the recovery when corona eventually calms

Unfortunately, the orders spike was driven by foreign demand, not domestic

Export orders recovered sharply in January, corona will probably send Feb/March steeply down



- Domestic demand have stabilized recent months, after a steep downturn in H1 2019
- Export orders from both within and outside EU improved in January (but will no doubt drop in Feb/March, due to both China and other countries, export orders PMI straight down)

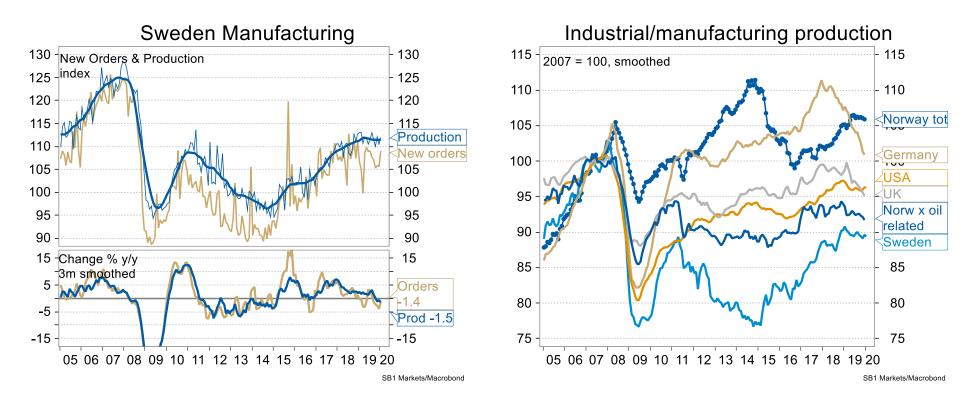






Manufacturing production and orders have peaked

However, the downturn is not dramatic, production down 1.5% y/y, orders 1.4%

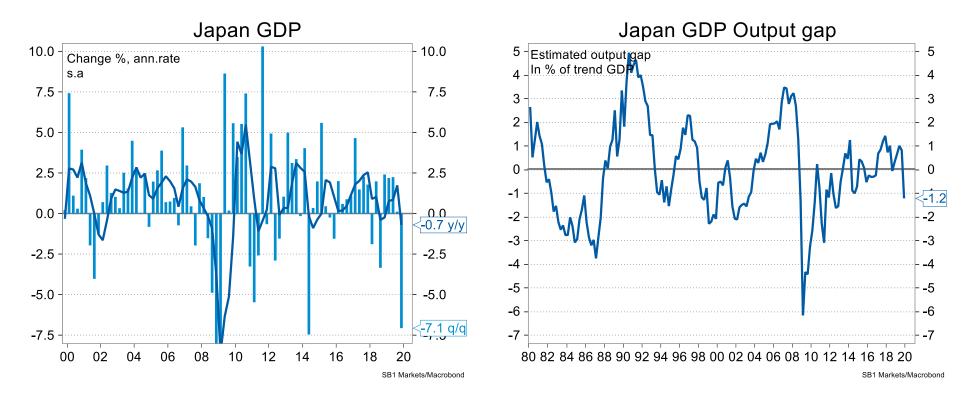


- Swedish manufacturing production has fallen by 1.4% y/y (smoothed) but the underlying pace has ticked up to +0.4%. The decline is modest, less than in 2011-2014
- Manuf. orders are down 1.4% y/y, after a spike in January. Orders do not signal any uptick in production
- The manufacturing PMI recovered swiftly in January and February, suggesting a manufacturing stabilization (but corona could potentially weight on Swedish manufacturers)



What a VAT hit: GDP down 7.1% in Q4!

GDP fell almost 1 pp more than the first estimate signalled



- Japanese GDP data are notoriously volatile and often substantially revised. This time, the Q4 GDP growth rate was
 revised down by 0.9 pp to -7.1% (annualised). The decline in GDP was due to a substantial decline in private
 consumption, (hopefully) due to the 2 pp hike in the VAT rate in October
- However, business investments fell sharply too, which they did not last the VAT rate was hiked
- In Q1, there will be some coronavirus issues...



Highlights

The world around us

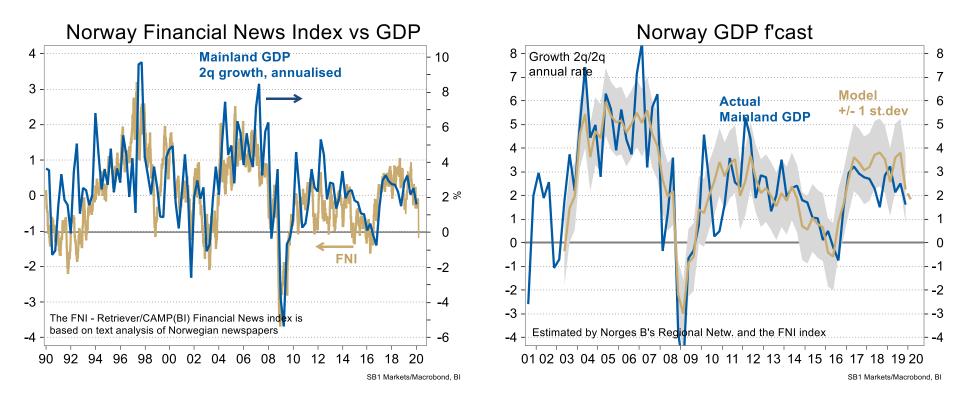
The Norwegian economy

Market charts & comments



The Financial News Index plunged on the coronavirus in late February

Steep decline in the last week of Feb, the last FNI observation signals zero GDP growth



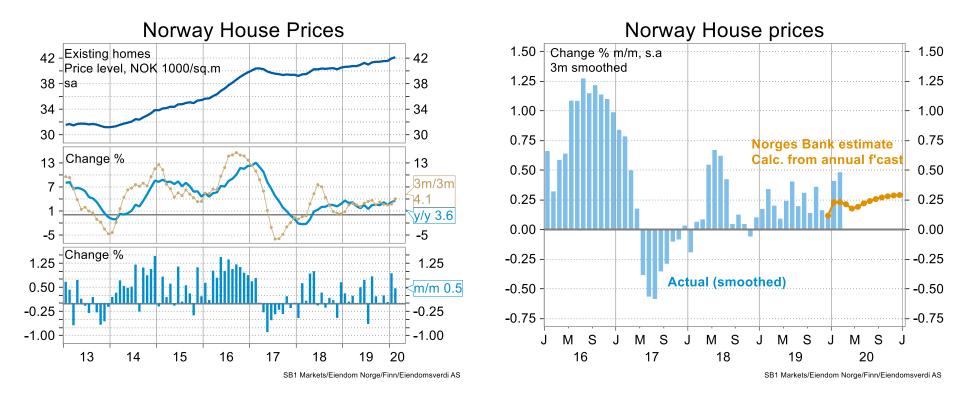
- The FNI tracks media reports on the economy. In late February, the Covid-19 outbreak sent the index steeply down, to the lowest level since 2016
- The average level in Jan/Feb signals a 1.5% GDP growth
- In Nov/Dec, Norges Bank's regional network signalled a 1.9% growth in H1. We expect a further cut in the outlook in the upcoming Network survey, even if of corona has not been measured (the survey was probably concluded Feb 20), if not an additional mini telephone survey has been conducted

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)



House prices rose more than expected in February, are accelerating somewhat

Prices rose 0.5% s.a in Feb and are up 3,6% y/y. All cities ex Stavanger and Kristiansand up m/m

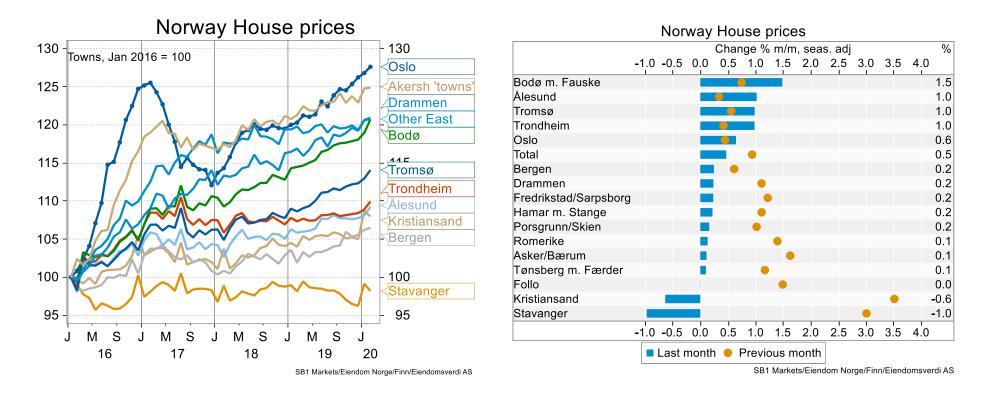


- **House prices** rose 0.5% m/m (seasonally adjusted, 0.9% unadj.) in February, we expected 0.2%. Underlying growth edged up to 4.1%, the fastest speed since 2018. Annual growth at 3.6% and slowly climbing. Prices are growing faster than Norges Bank assumed in Dec
 - Prices increased in all cities ex Stavanger and Kristiansand in Feb, and underlying growth has accelerated in 12 of 16 cities/regions. Stavanger prices flat/slowly down since » early 2019, all others are increasing. Oslo prices in the lead, up 7% 3m/3m, and Kristiansand has accelerated recent months
- The number of unsold homes edged down in February, the level is very high (barring Oslo, in which the inventory has fallen). Both new listings (of ٠ existing homes) and sales rose sharply in Feb, we doubt any upward trend will persist, but the levels are anyway elevated
- Short term dynamics signal somewhat higher growth the coming months, in Norway total. However, risks are tilted to the downside the coming months/quarters, as credit growth is now ebbing. And we may not have seen the full impacts of the rate hikes and debt registry



Prices rose m/m most places in February

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

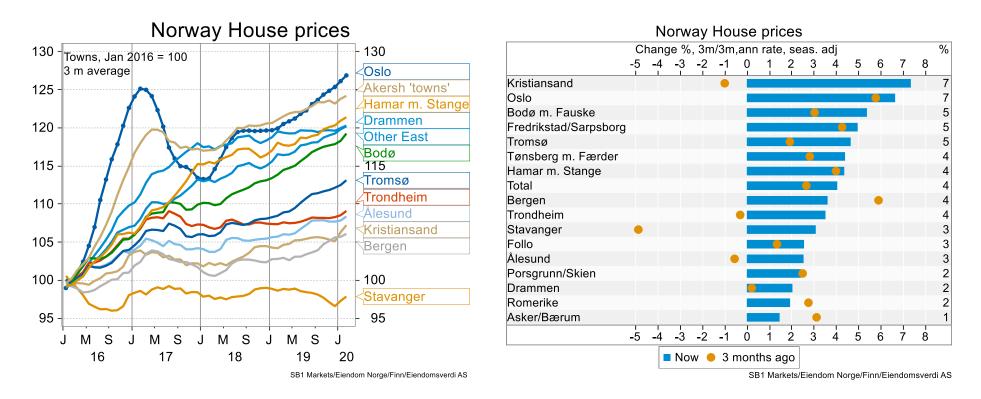


• The monthly data are too volatile, check the much more 'relevant' 3 month averages next page



Recent months; Oslo prices are soaring, Kristiansand, Bodø gaining speed

Prices are increasing in all towns ex Stavanger – and most have been accelerating somewhat

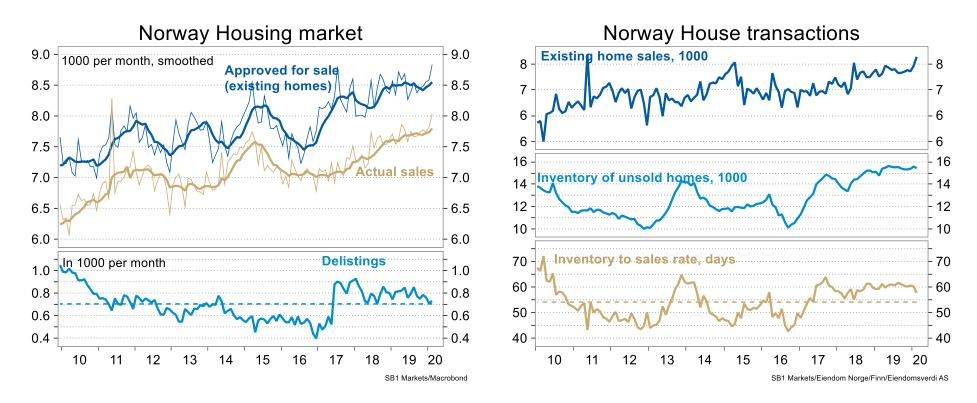


- Measured 3m/3m, prices are now rising in all cities (but declining in Stavanger, measured 6m/6m etc). Oslo prices are up 7% annualized, a modest acceleration from 3 months ago. Bergen is up a moderate 4%, Trondheim equally, and picking up speed recent months. Stavanger prices have improved in Jan/Feb, after a steep decline, trend slowly down since early 2019
 » Compared to 3 months ago, prices are accelerating in 12 cities and slowing but still increasing in 3 region
- Prices are above the local 2017 peak levels everywhere x Stavanger



Number of sales straight up in February, but the inventory remains high

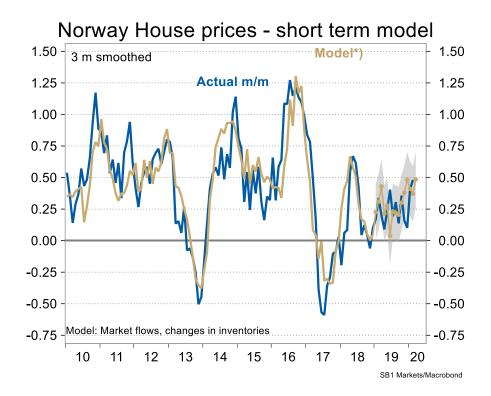
More new listings too but fewer delistings



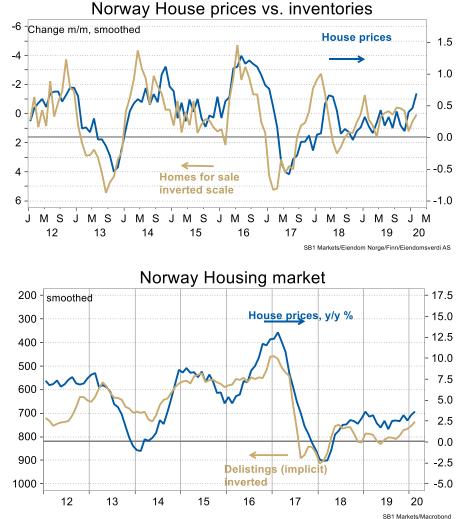
- New listings of existing homes have turned up recent months, and the level is high, partly because many newly built homes are being completed. Completions have most likely peaked now, suggesting a limited upside on new listings
- The number of sales spiked in Feb too, to all time high, offsetting the high number of new listings. Thus, the inventory of unsold homes fell marginally, after rising to a 10 y high in January. Inventories rose due to weak demand, but to elevated supply of new homes (and somewhat lower delistings, implicitly). The overall inventory is much higher than normal, even if the Oslo inventory has fallen to a normal level
 - » The inventory to sales ratio (turnaround) fell to 58 in February, from 61. The average is 54
- The housing market flow/balance indicates somewhat higher price growth the coming months, check next page

Market flows signal some 0.5% price growth – downside risk in the longer term

The inventory suggests price inflation to persist at the current rate. But credit growth is slowing



- The supply of new homes for sales and the inventory suggest 0.5% m/m growth the coming months, close to the 3m average pace
- On the other hand; other factors indicates lower growth; interest rates have been increased and credit growth is now cooling
- This is <u>not</u> a long term price model, just a short term price model based on flows of (existing) houses approved for sale and actual sales

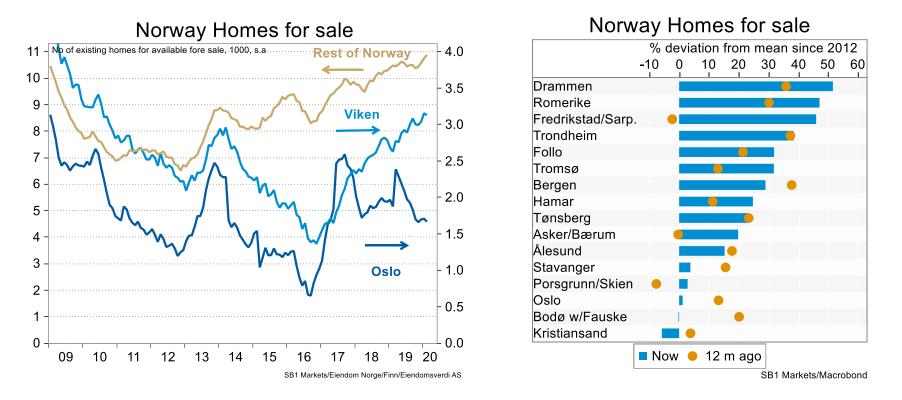






The number of homes for sale is increasing most places

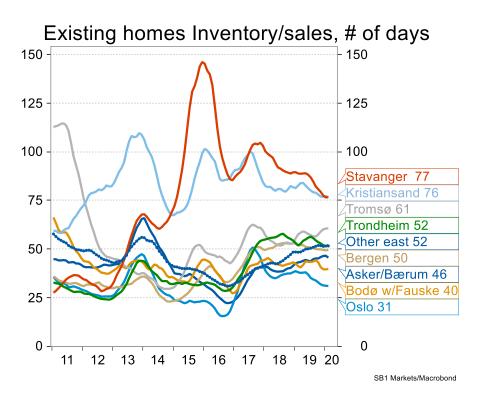
... Barring Oslo, in which the inventory remains much lower than at the 2017 levels (but not low!)



- The number of homes for sale have been increasing rapidly in most regions, except for Oslo since early last year
- The inventory has increased sharply in Viken (Akershus, Buskerud, Østfold; or East x Oslo)
- Norway outside Oslo & Viken is still reporting a larger inventory of existing homes for sale, the highest since 2009
- The Oslo inventory has been reduced by almost 20% since last spring, but 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 of homes are on the way up

... and more than sales, most places



- The inventory/sales ratios are still high in Kristiansand and in Stavanger but they are declining. Ålesund has the highest inventory vs sales (80 days)
- 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

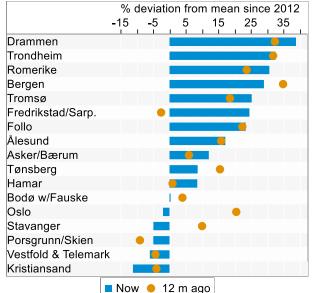
0	10	20	30	40	50	60	70	80	90)
Ålesund										80
Stavanger									٠	77
Kristiansand)	76
Tromsø										61
Follo										55
Porsgrunn/Skien										53
Vestfold & Telemark)				52
Fredrikstad/Sarps.										52
Trondheim										52
Romerike										52
Tønsberg w/Færder 🗧										51
Bergen										50
Hamar w/Stange				(49
Drammen										49
Asker/Bærum										46
Bodø w/Fauske										40
Oslo										31
N	ow	•	12 r	n ag	go					

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SpareBank

Inventory/sales, # of days

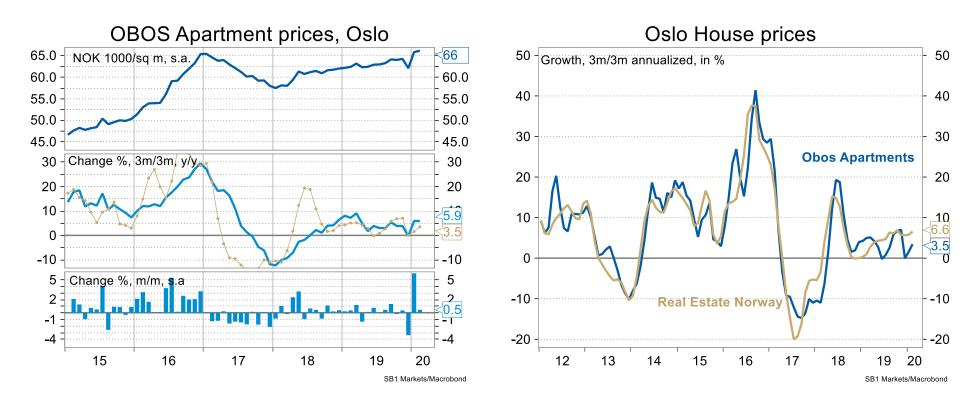


M



OBOS Oslo apartment prices up 0.5% in February, underlying growth up

OBOS prices confirm solid growth in Oslo prices

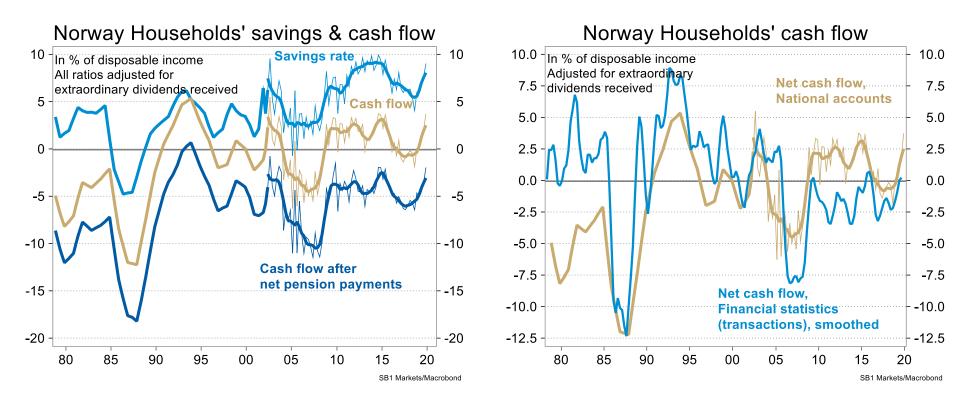


- OBOS Oslo co-op apartment prices rose 0.5% m/m seasonally adjusted in February, after soaring 6% in January. Underlying growth is up 3.6% and increasing – but still lower than Real Estate Norway's reported 6.6% speed. OBOS data are much less volatile than OBOS and, thus, more reliable from month to month
 - » Prices are now finally marginally higher than the (now local) ATH in Jan 2017



Households' savings are climbing, with growth in disposable income

The cash flow is strong, at least when including net pension savings

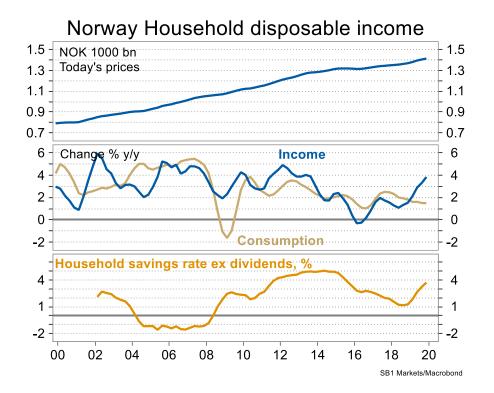


- The savings rate rose by 1.4 pp in Q4 from Q3, to 9.1% of disposable income, the highest since 2015, and not far below record high. Savings have turned up since late 2018, explaining the weak growth in consumption.
 - » The savings rate fell more than 3 pp from 2015-2018, funding some 1/2 of cons. growth. Now, almost the entire decline is reversed and consumption is softening
 - » Consumption rose just 0.1% q/q in value terms in Q4, while disposable income rose 2.1% q/q (and up 5.6% y/y). Disp. income adjusted for pension savings rose 1.3% q/q
- After deducting for still high housing investments, net financial investments equals 3.8% of total disposable income, it was negative in 2017-2018. When deducting net pension savings (which are not visible or at least not available for households), the cash flow is still into red, at -2.9%
- Financial accounts reported a negative cash flow (incl. pensions) at 0.2% of disp. income in Q3, reduced from -2.6% in mid-2018. The gap between the Financial Accounts and National accounts has been wide since 2010, as SSB has not been able to 'find' the households' money in banks, funds etc which the National accounts report they have saved. Now, the gap between the reports has closed somewhat



Income growth has accelerated, consumption slowed

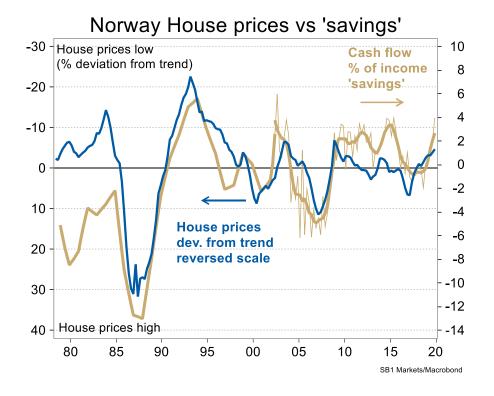
...And savings have increased – which reduces the risk for a sudden drop in consumption





House prices and savings are usually correlated

Now, house price inflation is below 'normal', and savings are increasing

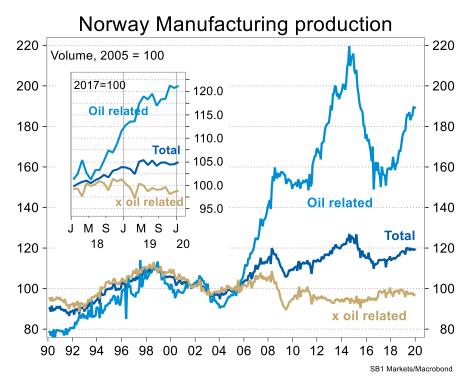


- House prices usually impacts
 - » The savings rate
 - You normally spend less and saves more when your net wealth falls – but that did not happen when house prices fell through 2017 (and the savings rate fell further)
 - » Housing investments
 - It is less profitable to build/buy a new home when house prices are low. Housing starts fall when house prices declines
- Now, house prices are slightly below the trend over the past decades, which may explain the lift in savings
- Consumption growth is low, but the upturn in the savings rate (without consumption waning) offers some comfort

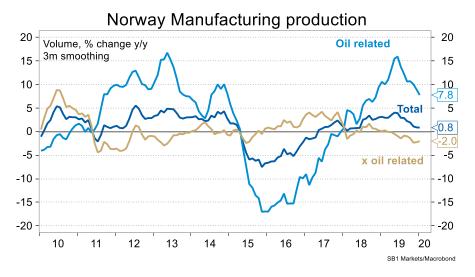


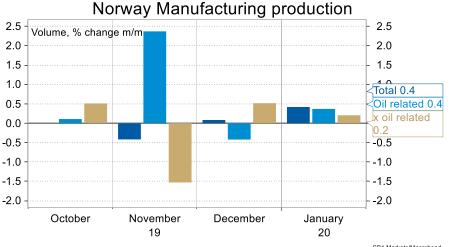
Manufacturing production rose moderately in January, trend flat

Total production up 0.4% m/m in Jan, and underlying growth has vanished, due to ex oil related



- Total manuf. production has been flat since the spring even if oil related production has increased. Production in other sectors is declining, like manufacturing production in most developed countries
 - » Production rose 0.4% m/m in January, a tad more than we expected. In oil related sectors, production is up 7.8% y/y –but is now slowing. Others sectors are sliding down, by 2% y/y
 - » We expect a further slowdown in oil related sectors and we have no reason to expect any recovery in non oil related sectors. Production is trending down, just like manufacturing production among our trading partners
- Surveys have softened and are pointing towards zero growth, at best

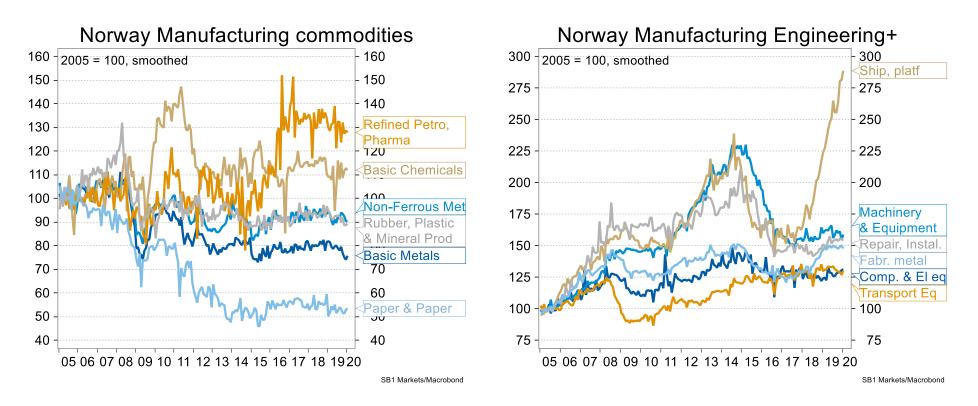






Production of ships & platforms is still soaring, other sectors not impressive

Engineering have softened – and production of ships/platforms will soon peak?



- 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 <u>down</u> some 15% from the peak
- Engineering sectors: Most partly oil-related sectors have lost some steam, particularly machinery & equipment production. Repair & installation has more or less flattened out
- Commodities: None are impressive, just basic chemicals and non-ferrous metals close to flat, others are trending down



8 of 17 sectors are increasing (4 faster), 7 are declining (5 accelerating)

Ships & platforms are up 31% y/y, other oil related up moderately. 9 of 17 sectors are declining y/y

Norwa	<i>x</i> y 1 v 1	unc	nuc	/tur	'''9				
	Change %, y/y 3 m avg							%	
	-10	0	10	20	30	40	50		
Ships, Boats & Oil Platfor	ms					•		30.9	
Computer & El Eq								5.5	
Repair, Installation			•					4.3	
Fabricated Metal			•					3.5	
Printing								2.3	
Furniture etc								1.7	
Textiles, Clothing			н. — — — — — — — — — — — — — — — — — — —					0.8	
Basic Chemicals	•							0.0	
Machinery & Equipm								-1.2	
Food, Bev & Tob								-1.8	
Transport Eq			•					-2.3	
Non-Ferrous Metals								- 2.7	
Ref Petro, Pharma								- 4.0	
Paper & Paper								-4.0	
Rubber, Plastic & Min Pro	d							-6.0	
Basic Metals								-6.7	
Wood & Wood Prod								-8.8	
	-10	ó	10	20	30	40	50		
	Now	6 6	n ago)					
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Norway Manufacturing

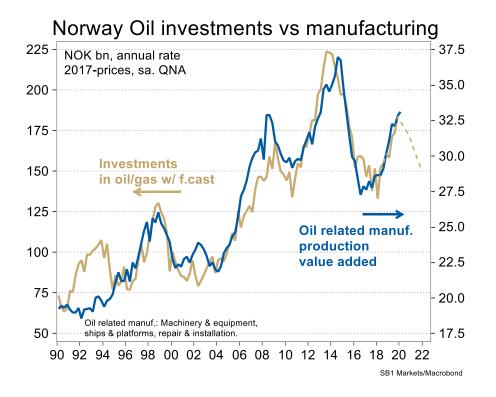
Norway Manufacturing Change %, 3m/3m annualised rate -30 -20 -10 0 10 20 30 40 50 60 Ships, Boats & Oil Platf Clothing, Leather Paper & Products Basic Chemicals Computer & El. Equip Furniture & other Printing, Reprod Transport Equipment Repair, Installation Fabricated Metal Prod Machinery & Equipment Basic Metals Rubber, Plastic & Min. Refined Petro, Pharma Non-Ferrous Metals Food, Bev & Tobacco Wood & Products -30 -20 -10 0 10 20 30 40 50 60 Now 😑 3 m ago SB1 Markets/Macrobond

- Ships/platforms production is up 31% y/y (smoothed)!
 - » Not that impressive in other oil related sectors; machinery is down 1.2% y/y, repair & installation up 4%
- Fabricated metals have been growing strongly, up 3.5% but slowing now, as is transport equipment
- Production of basic metals, wood products and plastic are falling sharply



Oil related production probably at peak

Oil investments are peaking and are set to decline this year and the next, so will production?

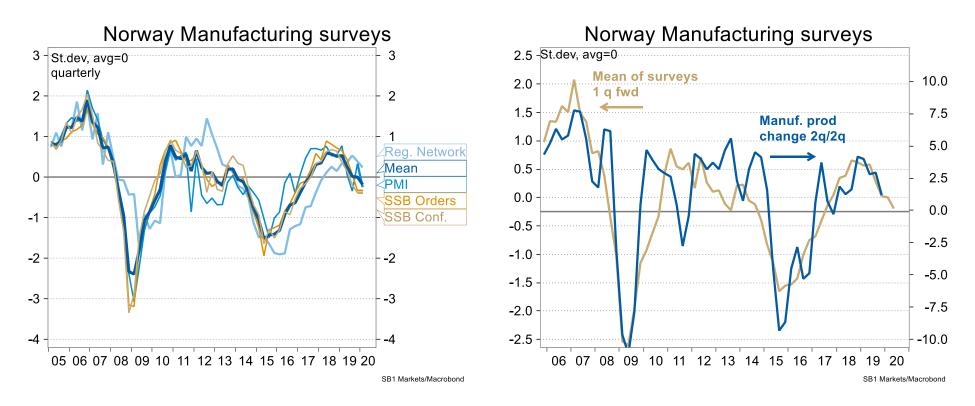


- Production in oil related industries have soared since late 2017, closely correlated to the increase in oil investments, as reported in the National accounts
- · Oil investments are probably peaking now
 - » If Norwegian manufacturers do not gain market shares from foreign competitors – oil related production is now at peak
 - Neither Norges Bank's regional survey nor SR-bank's regional survey signalled a decline in manufacturing activity in the Q4 surveys – but slower growth
- An important modification: Are oil related industries able to take market shares at other markets – or establish new markets – to compensate for lack of growth in deliveries to the oil sector? Most companies are trying to turn to renewables and shipbuilders are turning to non-oil related shipbuilding. A very weak NOK will help them get along
- However, some extra negative news for manufacturing production: Manufacturing investments are expected sharply down this year, and some of the deliveries are from Norwegian manufacturers



Manufacturing surveys signal a standstill

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

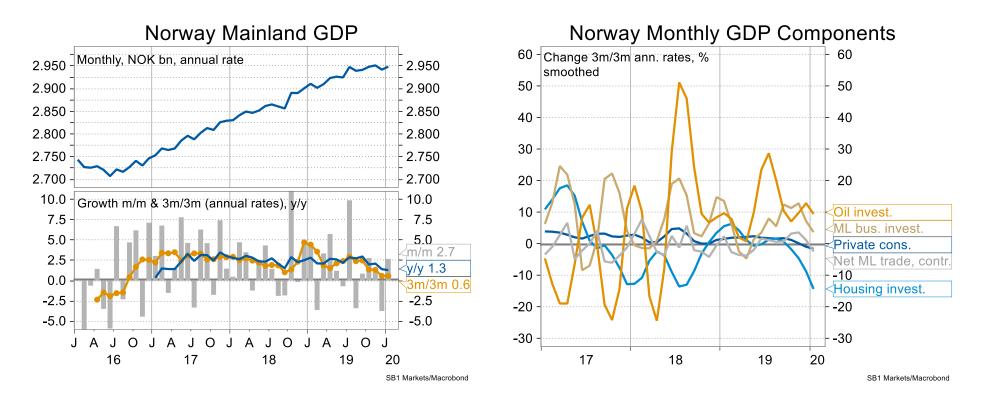


- In sum, the surveys suggest that production is set to stagnate the coming months/quarters
- SSB's industrial confidence survey points to a modest <u>decline</u> in production. The Q4 regional network was more upbeat, signalling just a slowdown (Q1 survey out this week)



GDP growth pace at 0.6% (annualised), broad slowdown in demand...

Even before oil investments slow (or Covid-19 hits activity)



- Mainland GDP increased by 0.2% m/m in January (equalling a 2.7% annualized rate), we expected 0.3%. The monthly data are too volatile to give us any useful signals. Underlying (3m/3m, annualised) growth is low, at 0.6%, down from 2.5 3% in mid-2019
 - » Norges Bank's f'casted (implicit) a 2.1% q/q annualized speed in Q1 back in Dec, will probably have to be revised down, even if growth should accelerate in Feb/March (but why should it?)
 - » Q4 Mainland GDP growth revised down marginally, to a 0.6% annualized pace, from 0.7%
- <u>On the demand side:</u> Private consumption has declined marginally recent months. Mainl. business investments have probably peaked, and are now slowing. Oil investments are still growing strongly (although less than in mid-19), but will most likely slow substantially the coming months/quarters. Housing investments are declining rapidly. Mainland net trade marginally negative



Highlights

The world around us

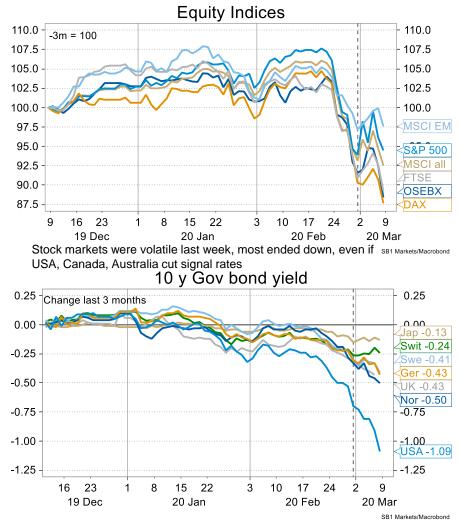
The Norwegian economy

Market charts & comments

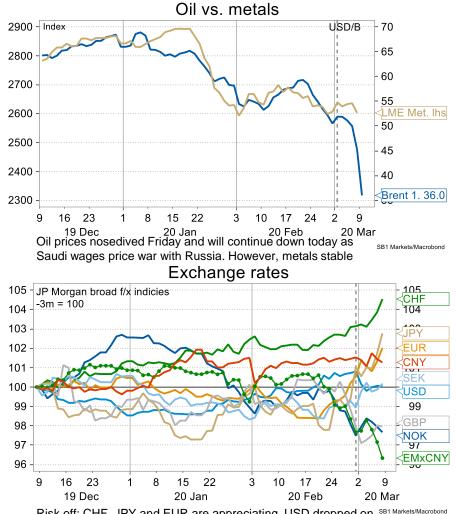
STOCK MARKETS DATA FROM FRIDAY; NOT MONDAY MORNING MARKETS

Stock markets mostly down, bond yields tumble amid stimulus hopes, oil crashes

Bond yields steeply down, at/close to ATLs, while stock markets wobbled, mostly ended down



The bond yield 'collapse' continued last week, USD 10 y gov down by more than 100 bps to 0.74%%, by far the lowest level ever. NOK, UK also steeply down, Germany moderate

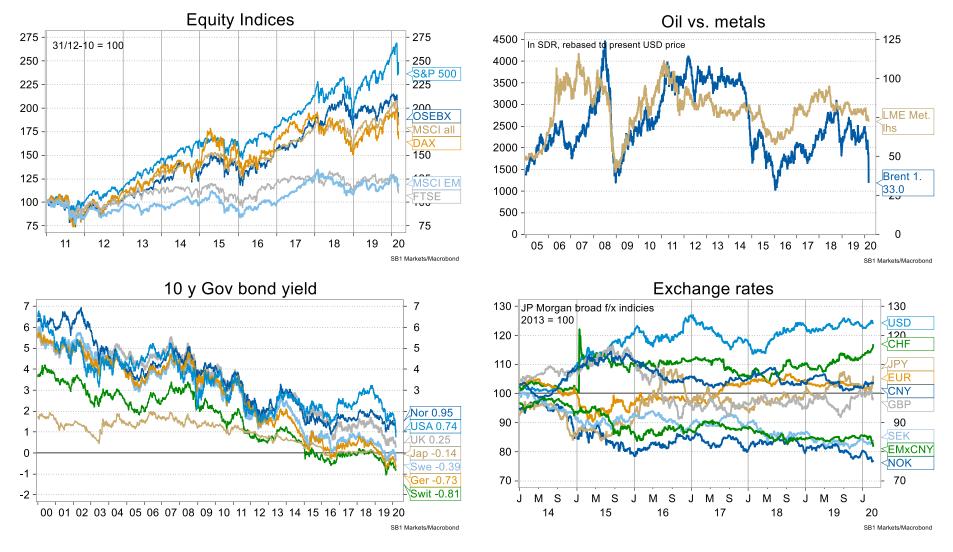


Risk off; CHF, JPY and EUR are appreciating, USD dropped on ^{SB1 Markets/Macrobonc} cut expectations, CNY steady. NOK marginally up, the weakest ever M



In the long run: The coronavirus setback now clearly visible from distance

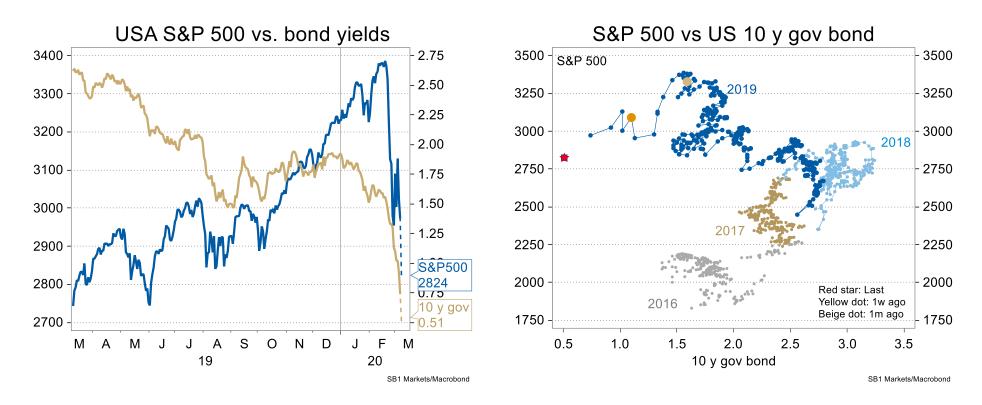
Stock markets down 10-15% and bond yields are at/close to ATLs. Oil lowest since 2016 this morning





Stock markets, bond yields sharply down last night/this morning

Stock markets down some 5% from Friday (but futures in the US are halted)

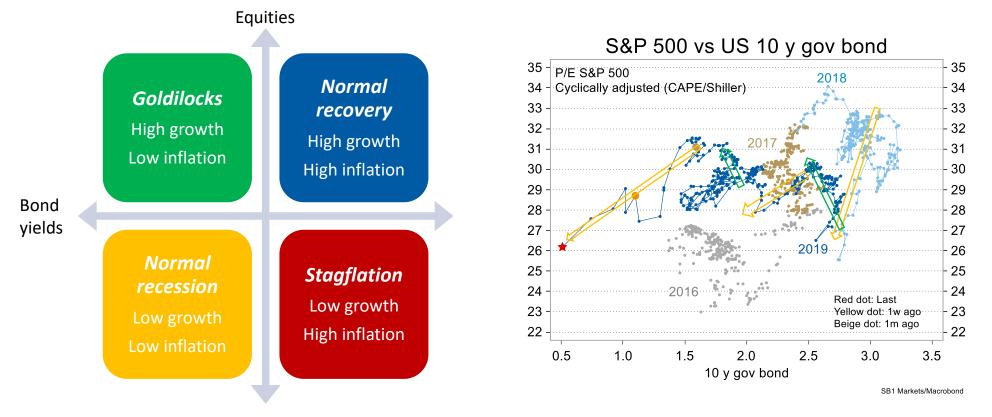


- The US stock market is back to last summer's level, while bond yields are at the lowest levels on record. Both inflation expectations and real rates have plunged
- (As an illustration, we have indicated at 5% drop at the S&P 500 at the charts above)



Markets straight on the way to the normal recession corner, big time last night

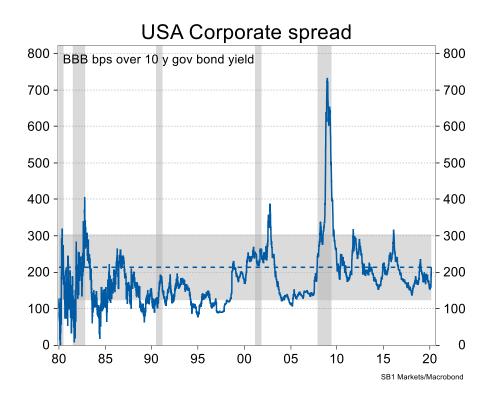
Stock markets, yields sharply down, US yields to all time low day by day

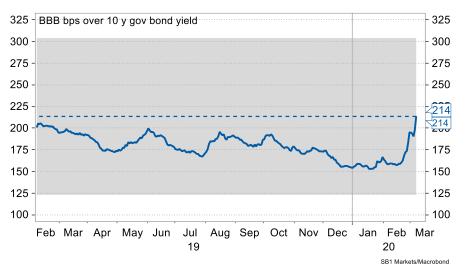


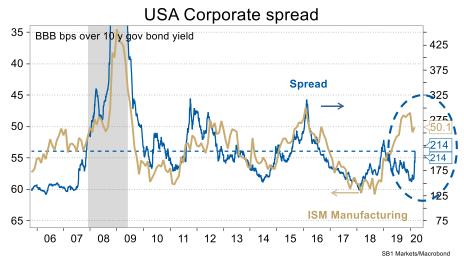
- For most of 2019, markets were zig-zagging along with news on the trade war, most of the time along the 'normal recession/recovery' axis. In mid-January, coronavirus outbreak sent markets steeply down, towards the 'normal recession' corner. The downturn later accelerated as Covid-19 spread rapidly outside China, bond yields fell to the lowest level ever. Since the previous Friday, stock markets have fallen sharply, as have bond yields
- Should the virus outbreak not calm the coming weeks, markets will probably move even closer to the recession corner. Bond yields are very low and the downside is limited, unless the world economy should move into a severe recession

Credit spreads straight up but still just at an average level

Spreads are still too low if growth is slowing as surveys are indicating (particularly if corona persists)









Real rates, inflation expectations down the drain in the US

US real rate tumbled another 29 bps last week, to -0.57 (!), Germany 'just' 2 bps, to -1.44%



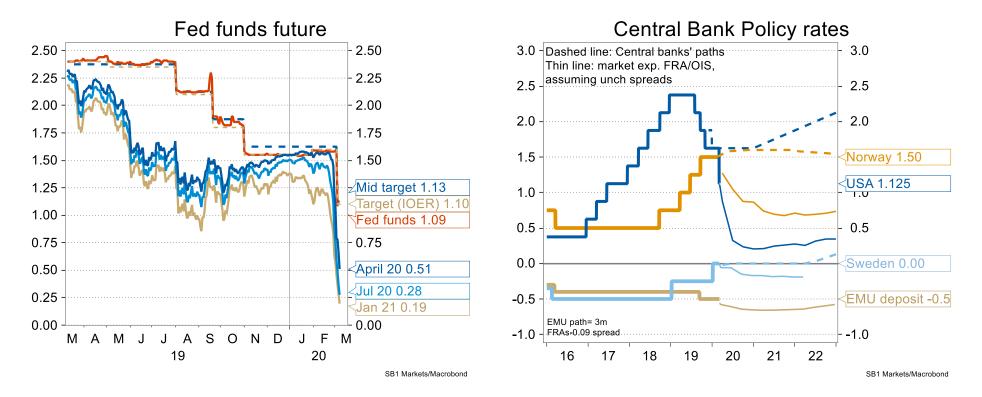
 US real rates are 'collapsing' on growth fears and expectations of monetary policy easing (which the Fed confirmed by cutting 50 bps last week). German real rates are sliding down too, albeit much slower than US. Lower oil prices due to demand concerns on the Covid-19 outbreak have sent inflation expectations steeply down since early January. Last week, the oil price decline calmed, and inflation expectations were steady, both in US and Germany

» US real rates at -0.48% are the lowest since 2013. Inflation expectations at 1.40% are the lowest since 2016 and well below the inflation target

» The 10 y German real rate fell to -1.61%, very low but still above the levels from last autumn. Inflation expectations steady at 0.83%, miles below the ECB's price target at close to 2%, and lower than actual core inflation the past couple of years

Fed cut 50 bps and the market expects more than 80 bps more this year

FOMC has always delivered another cut following intermeeting cuts, and will probably so now too

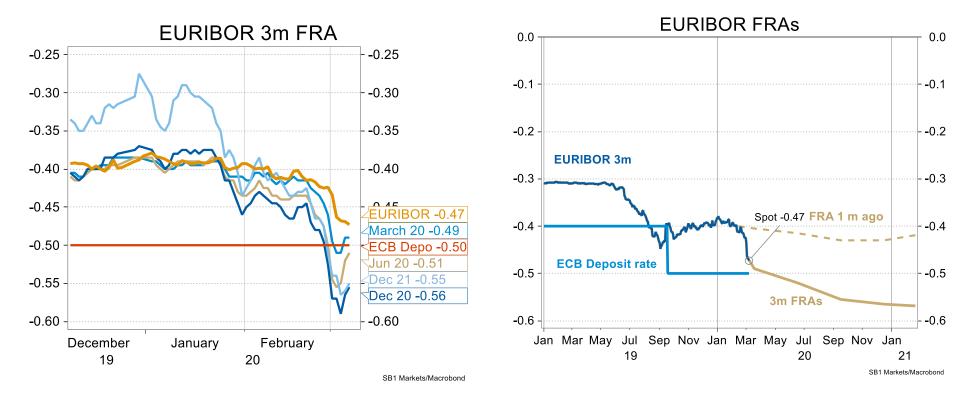


- The Fed delivered an 'emergency cut' of 50 bps on Tuesday, to 1-1.25%. The cut was widely expected following Powell's message last Friday, however, the cut came somewhat faster than expected. The US economy was strong, but a precautionary cut ahead of possible coronavirus challenges was appropriate, Powell said. The decision was unanimous
- Since 1998, Fed has conducted 7 'emergency' intermeeting cuts. Each time, at the first regular FOMC meeting, the signal rate has been cut further, usually by the same amount.
- Fed fund futures have plunged, all over the curve. The market is pricing another 50 bps cut at the March meeting next week with a very high probability , and than additional 25 bps cut (given 50 bps next week), probably before or at the July meeting. A further cut is now very likely, even if the economy is still strong. If more bad Covid-19 new are out by next week, a 50 bps cut seems most likely. Rate expectations have fallen everywhere



Markets are expecting the ECB to deliver a cut this week

EURIBOR FRAs straight down, markets are pricing a high probability of two (10 bps) cuts this year?

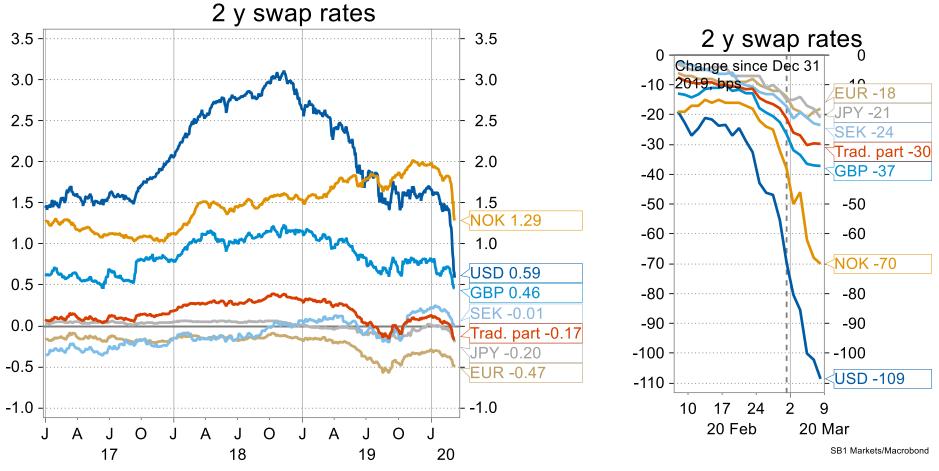


- FRAs fell steeply all over the curve in late February and until last week, together will global rates. Long term FRAs stabilized late last week. A 10 bps ECB cut at the meeting this week is expected by at least a 90% probability
- The curve is tilted downwards, markets are pricing a high probability of two cuts by the end of the year. After that, the curve is flat



US and NOK short term rates straight down, less elsewhere

The US 2 y swap rate dropped another 33 bps last week, EUR 'just' -5 bps, NOK -30 bps

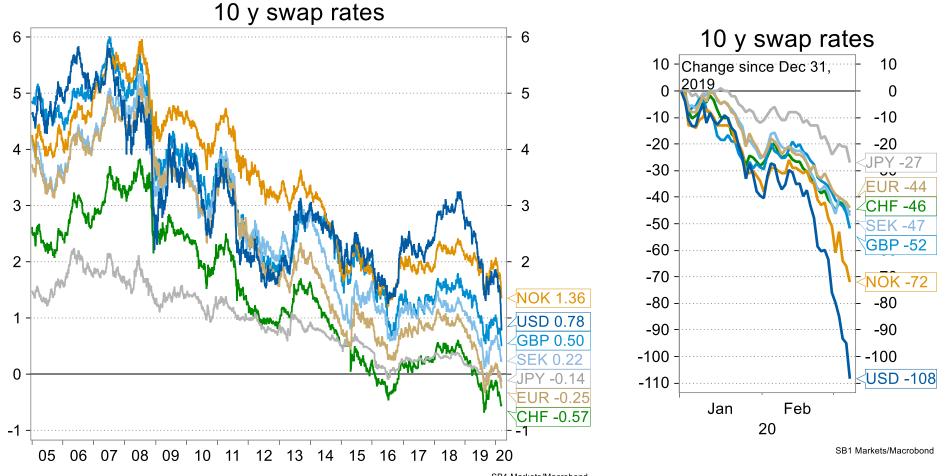


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Long term swap rates down the drain on corona angst and cut expectations

US and JPY 10 y swap rates have fallen to ATLs, others not far above

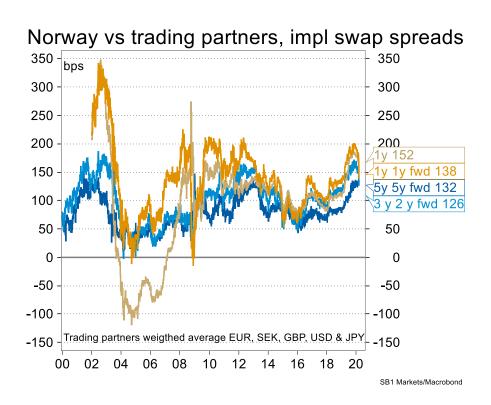




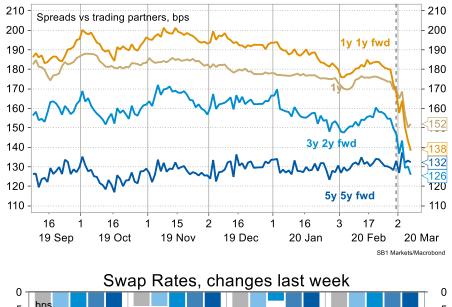
Markets

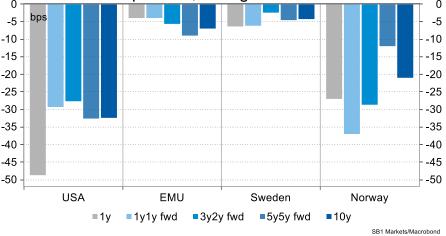
The NOK short end is collapsing, spreads sharply in

NOK short term rates have fallen more than EUR and SEK rates – but less than USD rates



- Swap spreads between NOK rates and our trading partners widened rapidly in most of 2019, all over the curve. Since Nov, spreads have trended down on the short end of the curve, and the decline accelerated sharply last week. Spreads are now at the lowest level since early '19.
- We have been surprised by the wide spread in the long end of the curve. A 5y 5y fwd spread at 132 bps is still far too wide, long term

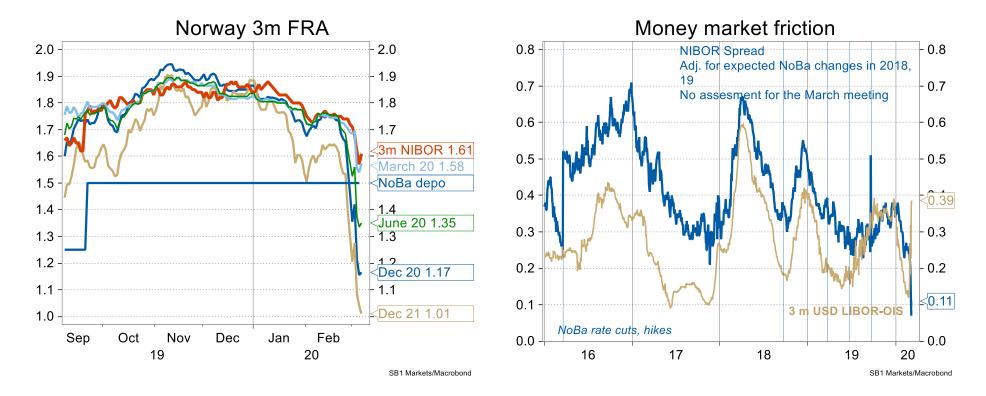






Norwegian FRAs collapsed, markets are fully pricing a 25 bps on March 19 (or 50 ?)

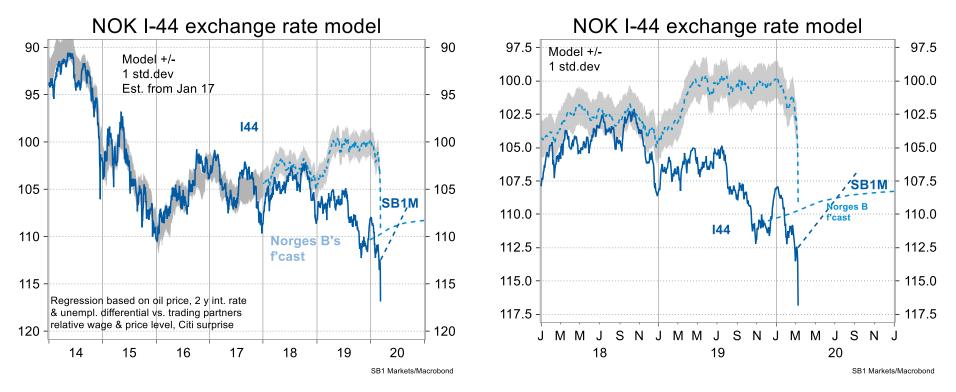
At least two cuts are expected by the end of the year. And that's was before the oil price collapse...



- The 3m NIBOR tumbled 10 bps last week, as markets fully priced in a 25 bps cut at the March 19 Norges Bank meeting (or even more?) The March FRA at 1.58 is down 20 bps past two weeks
 - » The US 3m LIBOR-OIS has turned has widened by almost 30 bps since the Fed cut, and the TED spread has widened even more, to 45 bps, the highest in 2 years. It seems unreasonable to assume that the NIBOR spread will not widen or may have already widened substantially, the latter implying that the market is not excluding the possibility for a 50 bps cut from Norges Bank next week. The March FRA at 1.58% a 45 bps spread = 1.13%, implying 50/50 for a 50 bps cut
- Longer dated NOK FRAs rates have fallen sharply. The <u>FRA curve is tilted steeply downwards and markets are fully pricing two 2020</u> <u>NoBa cut (of 25 bps) with some 50% probability of a third cut, even with moderat (=too low?) NIBOR spread estimates</u>

NOK sharply down to ATL with collapsing oil prices

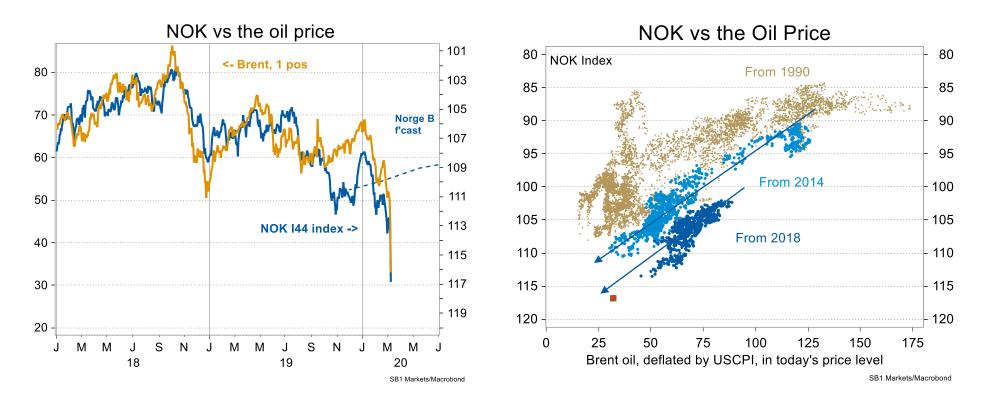
NOK down approx. 3% this morning (and since prev. Friday), our model suggests a 7.5% depreciation



- NOK fell at Friday but was still flat since the previous Friday, even as our 'old model' signalled a 2% decline.
- During the weekend, the Saudi price war sent the oil price and the NOK sharply down, the latter to ALT by a wide margin. The NOK is trading at 10.84 vs the EUR, we estimate a I44 index at close to 117, 3% down from Friday, by far the lowest level ever
- Both our 'new' models, based on the other super cyclical currencies (AUD, CAD, SEK) or energy (oil) equities explain the NOK much better than
 our standard model. The NOK was <u>6% too weak</u> vs other supercycles (however on par with the Australian AUD index!) <u>at Friday</u>, while NOK was
 <u>1% too strong</u> vs oil companies' stock prices, check next page (THESE ARE FRIDAY'S DATA)
- We stick to our **buy NOK** recommendation, in the long term, however, in the short term, there is still <u>downside risk if the oil price should plunge</u> even more as a result of the Saudi price war og the corona spread & recession takes hold. However, with some time horizon, BUY!!



Oil & NOK sharply down, in tandem – at a lower NOK level than usual

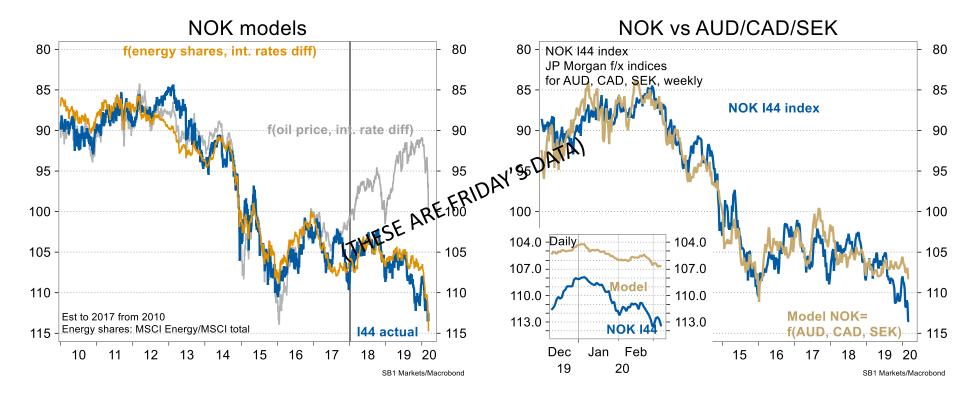


• The NOK has been much weaker vs the oil price than normal the past few years but it is still correlated to the changes in the oil price like it used to be

FRIDAY'S DATA AT THIS PAGE, NOK IS SHARPLY DOWN TODAY SpareBank

NOK stronger than the energy share model for the first time since late '18

NOK is still 4% too weak vs the 'supercycle' model but 0.9% above the oil stock price model



 Our NOK model based on pricing of oil companies has 'explained' the NOK much better than our traditional model since 2017, as have our 'supercycle' currency model [NOK=f(AUD, CAD, SEK), with just a marginal contribution from SEK]. The EM x CNY currency aggregate is also quite closely correlated to NOK

» The oil company share model slipped along with the NOK since early January, and tumbled last week, as oil company stock prices fell rapidly

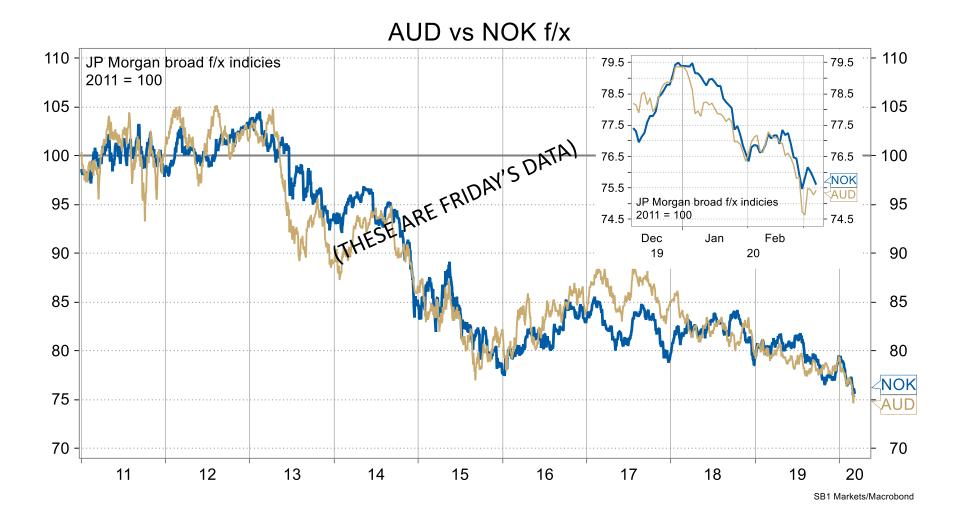
» Both AUD and CAD are sensitive to oil/energy prices and – together with the SEK – global growth outlook. The past two weeks, NOK has depreciated more than SEK but equal to CAD, and less than AUD

M



Down Under or Up North; 'no one' can spot the difference. <u>Since 2011</u>

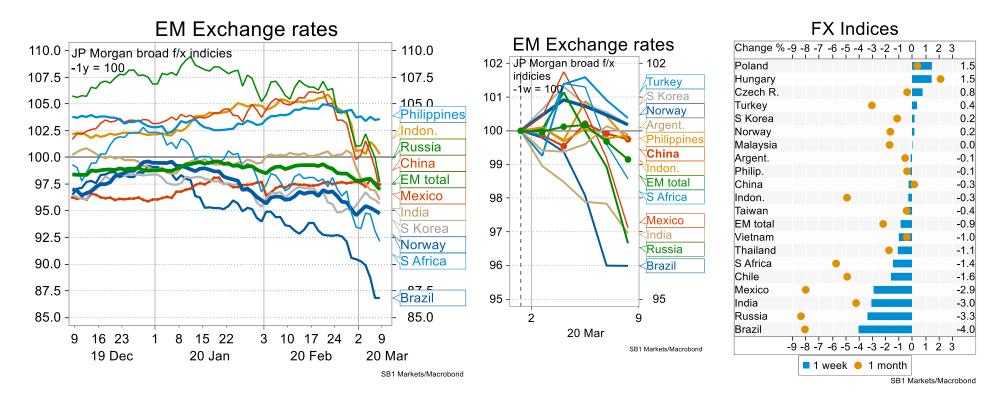
AUD/NOK are sensitive to expectations of Chinese/global demand, recently slashed by the corona





EM currencies depreciate as corona spreads globally, CNY steady

CNY has not weakened during the virus outbreak – and now all eyes are on the rest of the world



- Most EM (Emerging Markets) currencies have depreciated substantially on the coronavirus outbreak; Russia, Brazil, Mexico, and India more than others. South Korea, in which the virus has been spreading rapidly, has seen its currency fallen less than most others, and was stable last week (perhaps because the growth rates of new cases slowly slowed).
- The past month, NOK has weakened marginally less than the EM average



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