

SpareBank MARKETS



Macro Research

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Weekly update 12/2020

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SpareBank
MARKETS

Highlights

The world around us

The Norwegian economy

Market charts & comments

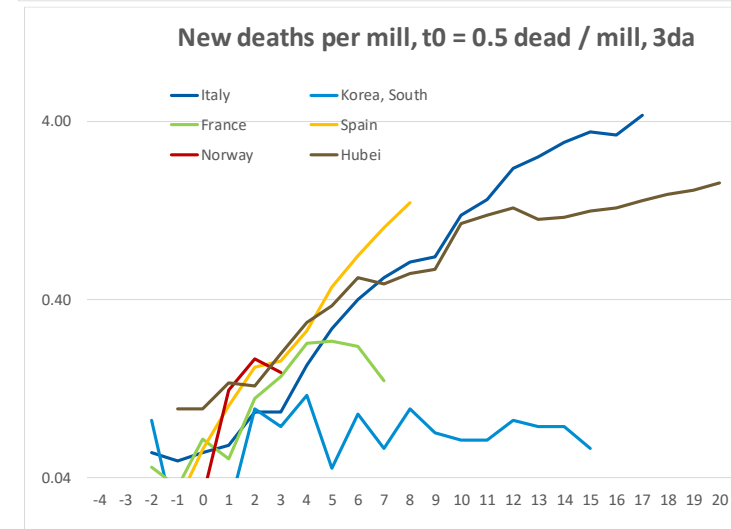
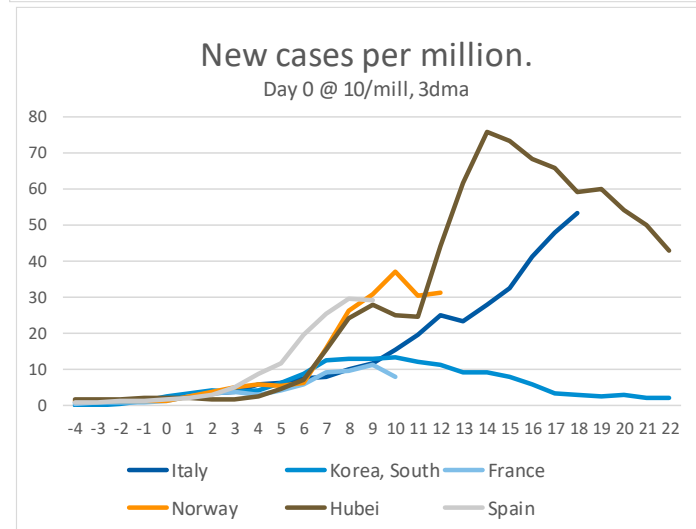
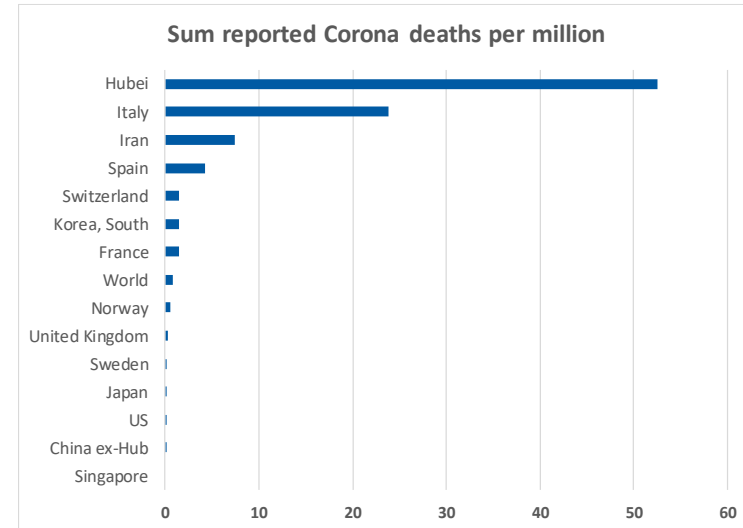
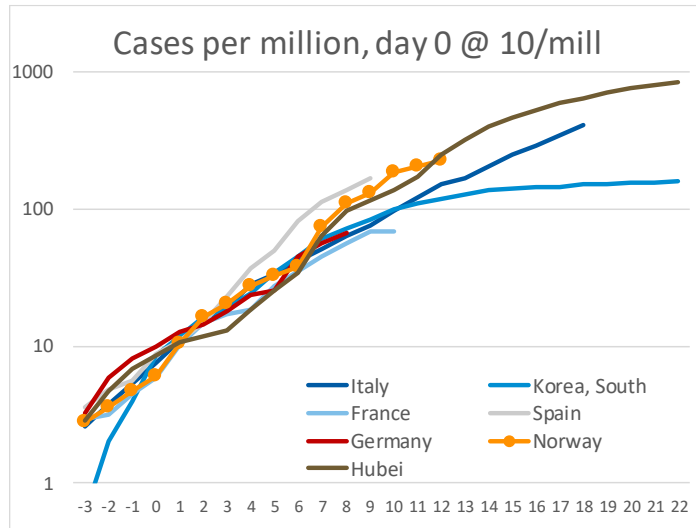
*The headlines are linked to the relevant section in the report
The elements on the the page "In this report" are linked
A top right  button will bring you back to the content page*

Last week – the main (corona) takes

- **The coronavirus** is still spreading fast in more countries and more countries are being 'closed down', like Norway, Denmark and Spain since Thursday last week. In most other countries, activity is reduced voluntarily, and home working has become a norm in many countries. The list of measures to mitigate the impacts of the reduced activity is impressive and it is getting longer by the hour write this report
 - » Sunday evening, the Norwegian Government stepped in, 48 hours after the first package was delivered, with a NOK 100 bn (3% of GDP) liquidity package. And by the way, the Fed cut interest rates to zero. Norges Bank should do the same today. Why wait?
- **Any good news on the virus front?** China, South Korea, Singapore and Taiwan have all brought the virus under control, and few cases are reported in rest of Asia x Iran, and in most other Emerging Markets
 - » The death rates vs total population are low, even in Hubei, and still low in Italy. We wonder if the number of infected people is much higher than reported, and that the 'real' death rate among these infected are much lower than the official death rates. The hospitals are now under severe pressure because the virus spreads extremely fast as nobody are immune – and the number of deaths spiked to a high level, much higher than during a much longer lasting flu season. In addition, if harsh measures are taken – and human to human contact is reduced to a minimum, the virus fades out, even in Italian towns
- **The Chinese economy was in dire straits in February** as much of the country was locked down (check this morning's fresh data in this report, GDP is underway for a 10% decline in Q2). However, the economy is gradually recovering in March and activity picks up without any new corona cases
- **The global economy** is no doubt in a recession. Even the (estimated) decline in just the Chinese GDP was sufficient to predict a decline in global GDP in Q1. Now we can add huge production cuts in many other countries, Norway included. We can probably add the US to the list
- We have not fully updated our **global GDP forecasts** but the new estimate is far below to the baseline 2% forecast we had one week ago, even if most emerging markets are not knocked down by the virus
- **Global corporate earnings** will take a hard beating, a 30 – 40% decline seems reasonable
- **The real question is however if the economy recovers** as soon as the virus is contained. The outlook is tilted towards the downside. The cycle was mature before corona hit; unemployment and profits were too low, and investments too high. Markets were priced for the good times to continue
- **Markets are now in complete disarray.** Following the remarkable recovery at Friday, risk prices are in free fall again early Monday. We have some few comments in the latter section of this report, based in Friday's prices

Our best corona charts: When will we see any impact of the Italian lock down?

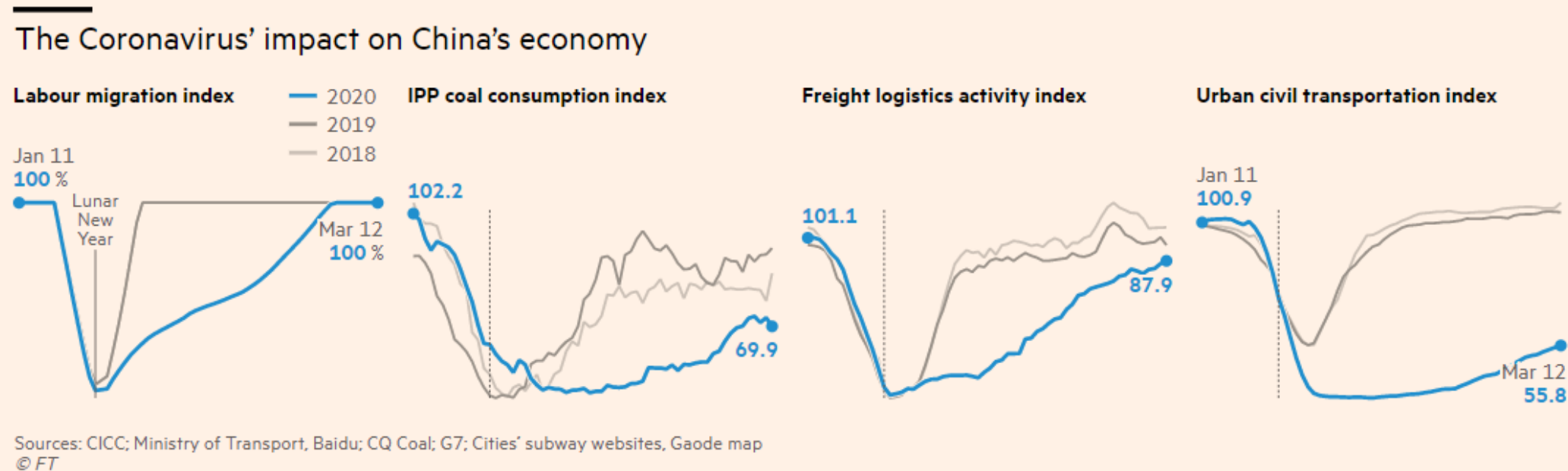
In a couple of weeks time? The number of new infected MUST be reduced now?



The case number are strikingly similar, even if testing methods seem to differ. Sources: Johns Hopkins, SB1 Markets

The Chinese economy is gaining speed, still not fully back

Daily activity data signal a recovery in most sectors



- Urban personal transport is still slow but it is rising slowly, while freight activity is almost back to a normal level
- Chinese February data are covered further out in this report

Fiscal and monetary responses so far

- **China:** Reserve requirement cuts for the 7th time since 2018 but interest rates not by much
- **US:** FOMC cut its signal rate by 100 bps to zero (0 – 0.25%) late Sunday, following the 50 bps cut on March 3. Several other stimulus measures were announced, including USD 700 bn in asset purchases (USD 500 bn of Treasuries and 200 bn of mortgage backed securities). Trump closed the US borders and on Friday proclaimed a national emergency, which will free up to USD 50 bn in financial resources. The Democrats and the White house reached a deal on the corona stimulus package, which goes to Senate for voting this week. The package includes funding for two weeks of paid sick leave and increased spending for Medicaid etc.
- **Eurozone:** ECB did not cut the signal rate, but offered more bank liquidity and expanded QE somewhat (EUR 120 bn by the end of the year)
- **Germany:** Signals that the ‘zero black’ (balanced budget) policy is abandoned for the time being. A huge liquidity support to the corporate via the state owned KfW bank is decided. Other countries are mulling fiscal measures
- **UK:** BoE has cut the signal rate by 50 bps. Some fiscal measures vs corona in the proposed budget, but the budget is anyway very expansionary
- **Sweden:** Riksbank still quite. Some measures to alleviate problems for exposed sectors (As in Denmark)
- **Norway:**
 - » Norges Bank cut the signal rate by 50 bp to 1% at an emergency meeting Friday, signals willingness to cut further **We expect a cut to zero today or at the latest during this week. There are no longer any arguments for waiting**
 - » At Friday, a limited fiscal package estimated to NOK 5 – 6 bn (0.2% of GDP) was proposed (in reality the sum may be much larger, due to the more business friendly temporary lay off mechanism, check next page)
 - » Sunday afternoon, a new lending/guarantee program was announced: Up to NOK 50 bn (1.7% of GDP) in guarantees for bank lending, mainly to SMEs
 - » In addition, the Government has reactivated The Government Bond Fund, administered by Folketrygdfondet. The fund will invest in Norwegian corporate bonds. The initial amount for this program is NOK 50 bn (out of a total market at some NOK 350 bn, a substantial support program)
 - » The amounts are substantial, and the government is strongly signaling that it would do ‘whatever it takes’. Norway has no fiscal constraints, given the 3 x GDP Oil fund. The funding program equals 1% of the fund’s value
- 12 out of 27 major countries have cut their policy rates. The rest will probably cut soon (if rates are not too low already). Still, the room for maneuver on rates is of course limited, given the low interest rate level

How badly may the Norwegian economy be hurt? Here are some guesstimates

The Mainland business sector will not go bankrupt. The Government shoulders the main cost

- We assume that production in the private sector is now reduced by approx 1/3rd (*Check our sector guesstimates next page*)
 - » Several sectors are still operating at close to normal (food production, transport & distribution, telecom, power supply, most of finance, most of other parts of the manufacturing sector. It is more mixed in the service industries; retail ex food/beverages are probably down more than 50%, professional services have moved to home offices (70% activity left?), full stop in restaurants & hotels, as in the airline industry and much other personal transport
 - Hotels and restaurants equal 2.7% of Market based Mainland GDP, airlines less than that
 - Tourism travel equals approx the same amount
- The valued added loss equals approx NOK 600 bn at an annual basis or NOK 50 bn per month (total production/sales loss is larger, but input goods and services must be deducted in order to prevent double counting). With these assumptions, market based GDP will decline by 2.6% per month. The same goes by and large for the public sector (hospitals and care institutions are more than fully operating, education not). So GDP will no doubt decline in 2020, even if the virus is contained after just some few weeks
- Businesses can lay off employees temporary, and pass the bill over to the government. If companies utilise this generous lay off mechanism by 80% (some slack is unavoidable but should be more reduced the longer the stoppage), the wage will be reduced by well above NOK more than 300 bn annualised, or by NOK 30 bn per month
- Thus, the net loss for the corporate sector is NOK 250 bn, equalling ½ of an ordinary annual result – or equalling NOK 20 bn pr month. The wage relief is essential for the corporate sector as the government shoulders the cost for those temporary laid off
- The booked equity in Mainland Norwegian companies equals some NOK 6.000 bn by end of 2019. Thus – again given our very uncertain assumptions – the Norwegian business sector will not be wiped out due to some few weeks' (or even months) loss of production (some figures next page)
- We have not included the oil and gas sector in these calculations. Production will most likely be kept up
- The low oil prices will make more than a dent in the sectors revenues and results, and in the Government's take – which imply a lower transfers to the oil fund (but not more than that). Thus no impact the Government's spending capacity
- Oil investments are already on the way down, and will no doubt decline faster, if the oil price remains low. However, the short term impact is limited

Some very preliminary estimates

A full year crisis calculus. Activity soon down to 70% of normal? GDP down 2½% per 'crisis' month

Mainland Norway market based sectors	Value added NOK bn, 2019	in %	Crisis prod. level	Change in		Operating result			
				Value add.	Wage cost	No crisis	Crisis	Diff	in %
GDP (value added)	1,853	100%	69%	-569	-322	493	252	-242	-49%
Primary	68	4%	95%	-3	-1	49	46	-3	-7%
Manufacturing	222	12%	65%	-78	-44	24	-7	-31	-130%
Water, electricity etc	105	6%	100%	0	0	42	42	0	0%
Construction	212	11%	70%	-64	-36	50	23	-28	-55%
Trade (retail, wholesale)	251	14%	35%	-163	-94	50	-16	-66	-132%
Transport (persons, goods)	93	5%	40%	-56	-36	7	-15	-22	-311%
Post, info, communication	147	8%	80%	-29	-15	27	13	-13	-50%
Hotel & restaurants	48	3%	5%	-45	-28	8	-9	-18	-209%
Finance	159	9%	90%	-16	-4	98	87	-12	-12%
Real estate, housing	242	13%	100%	0	0	87	87	0	0%
Busines services	243	13%	75%	-61	-36	37	13	-24	-65%
Culture, entertainment, arts	64	3%	15%	-54	-29	15	-10	-25	-169%

Figures for 'a full year crisis'

Figures are not adjusted for changes in cost of goods sold, which balances out, in macro but with different sectoral consequences

Workforce cut by 90% of cut in sales

Production taxes, subsidies unch in % of sales

- We have not adjusted for fixed costs as these costs are mainly revenues for other sectors in the economy (like rents, electricity, insurance etc. Cost of goods sold will be reduced by the same amount as sales, at least over time. (Some extra inventory cost will be accumulated - but again, that's other producers revenues, if paid). However, the sectoral differences may be substantial, due to differences in the cost & revenue structure
- If the shutdown continues, the impact will be larger, due to investment demand, income multiplier impact etc.
- The operating surpluses are used to pay interest rates, taxes, and reinvestments, not just dividends 😊

No problems for most employees. And the Government can stand it too

Households

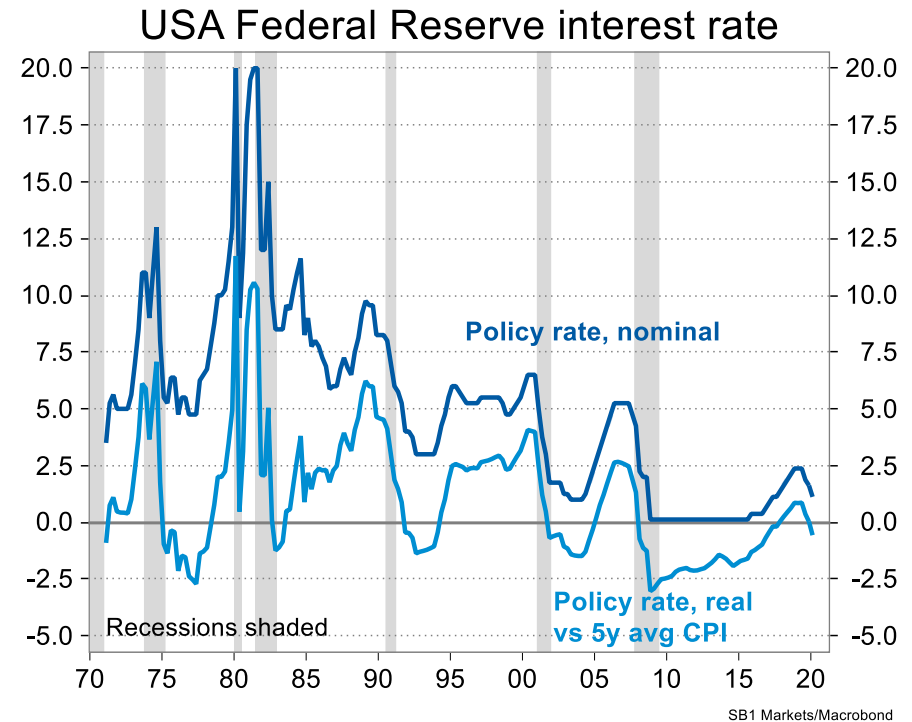
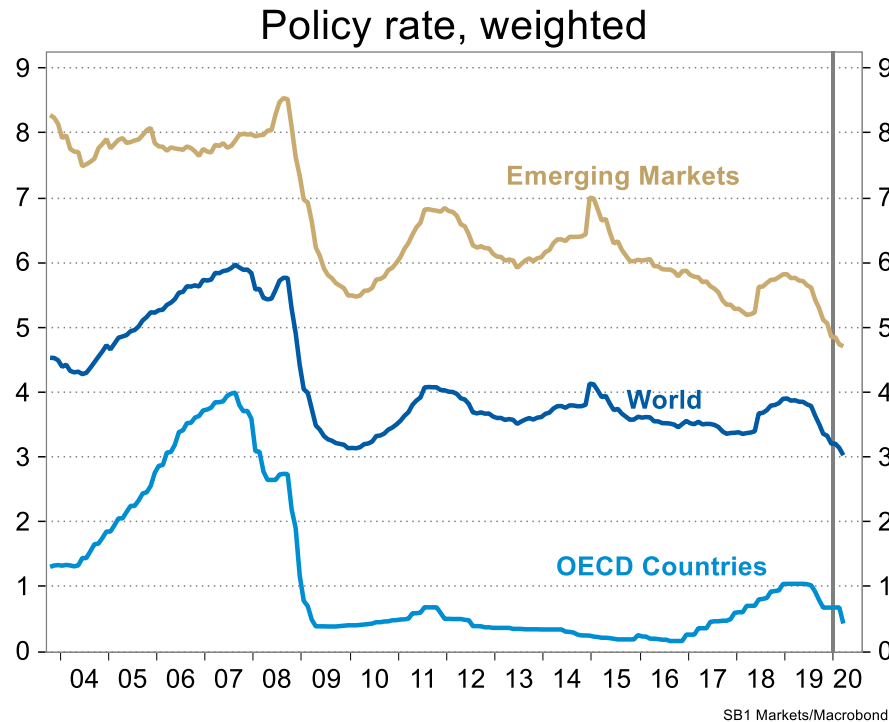
- Wage earners will be reasonably well compensated by a more generous temporary lay off model. We expect compensation rate (vs the ordinary wage income) to be lifted to some 90%, from the ordinary 62%
- Norges Bank will most likely cut the signal rate to zero today or one of the coming days. Interest rate on mortgages will be cut to below 2%, from slightly above 3%, the coming weeks
- Spending will be curbed coming weeks, savings will be increased and households balance sheet will be strengthened
- On the other hand, wage increases will be cut significantly vs original expectations, to well below 3%, still well above inflation
- **Self-employed** has a substantial challenge. No compensation so far suggested. But the liquidity support will probably be available

The Government

- The budget will probably take most of the cost of the loss of production, mainly due to a liberal compensation for temporary laid off employees. We estimate the cost to NOK 30 bn per month
- The NOK 100 bn liquidity support package will most likely incur some losses, but the losses should not be astronomical, if the virus stoppage is not extended to more sectors or remain for many months
- Mainland tax revenues will be reduced but mainly just from the corporate sector (households will be quite well compensated)
- The pre oil deficit at the budget will increase substantially, most likely to above the spending rule guideline (at 3% of the Oil fund's value), at NOK 285 bn, vs the budget estimate at NOK 243 bn.
- If the total cost (temp. unemployment support + losses on the 100 bn liquidity support) runs up to NOK 100 bn, it would equal 1% for the Oil fund's value. We think it is worth it if it reduces the risk for a long term crisis, after the virus fight is won
- Due to the decline in oil prices, the public sector oil revenues will be reduced.
 - » The only consequence is just that the transfer to the Oil fund will be lower than assumed. That's the smallest of all problems for any government these day

Limited room for lower rates

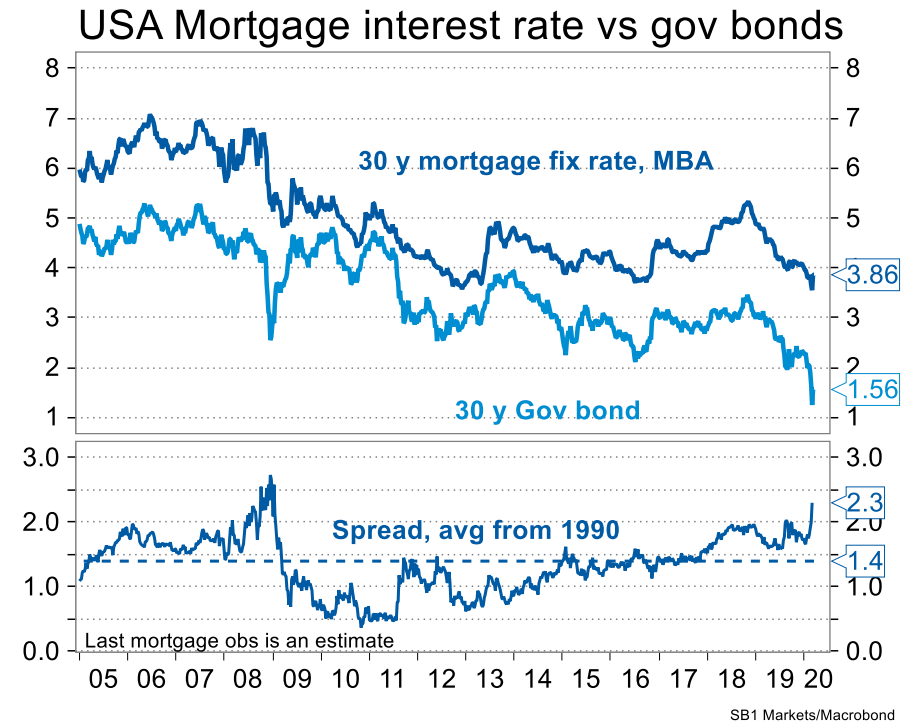
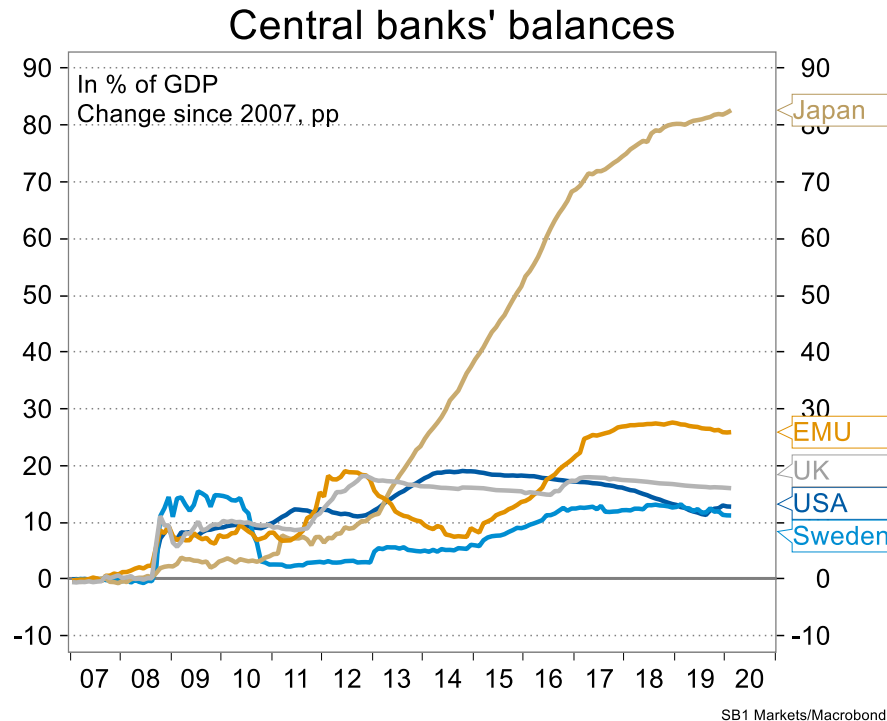
Rates have been cut in many countries but the potential is limited, from 0.7% in average (in Jan)



- During economic downturns rates are normally cut by some 4 – 6 pp, lowering the real interest rate to well below zero. Now, the average policy signal rate is at 0.4%. It will probably come down to zero, but that's more or less all folks
- But monetary policy is not totally impotent, flip to the next page

More QE is underway

ECB increased the QE program by 1% of GDP, the Fed more aggressively, by 3.5% of GDP

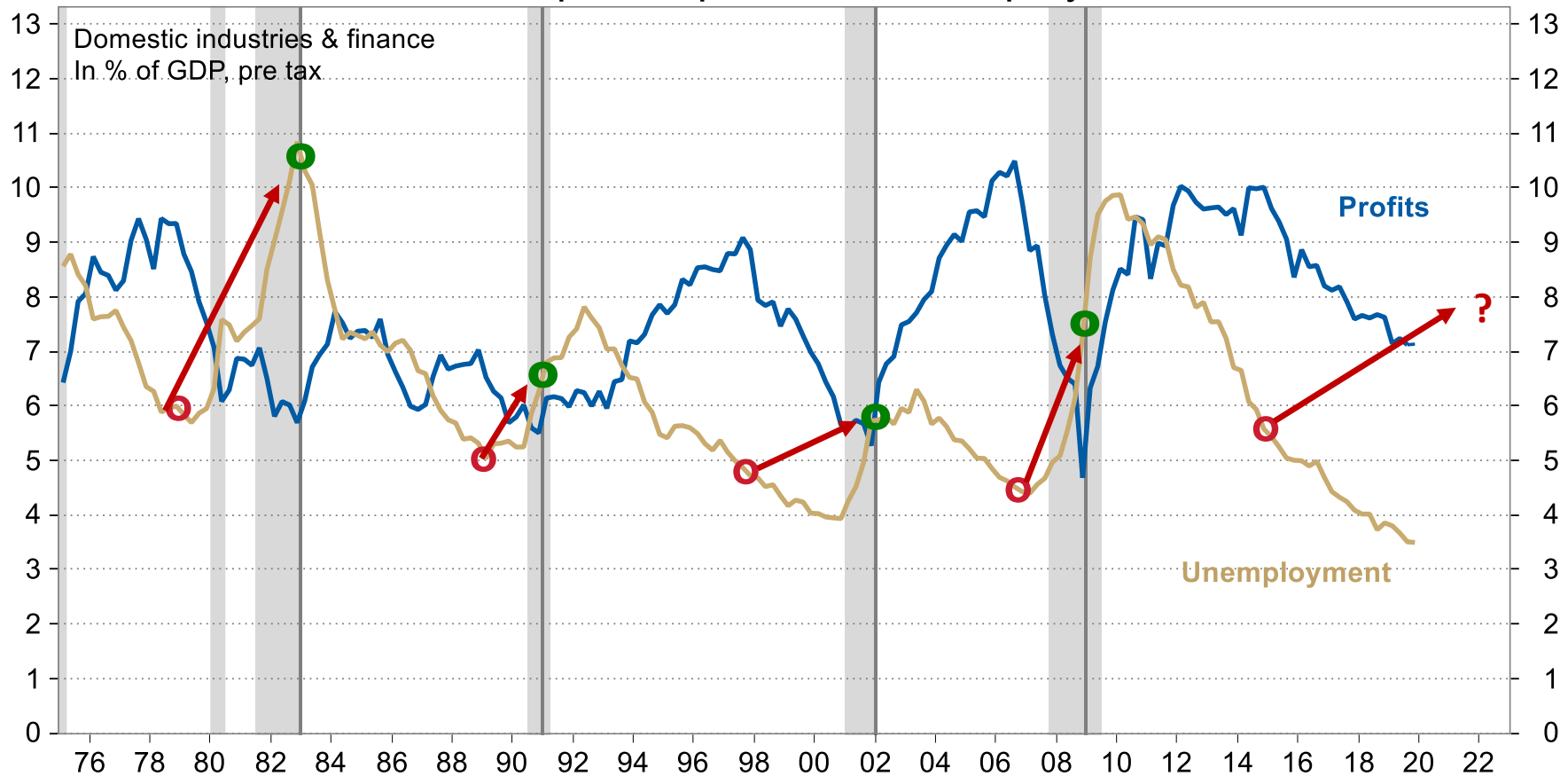


- In the Eurozone: Not a big thing yet, but it can be extended
- The Fed was under hard pressure to start buying mortgage bonds, as the spread to the 30 y gov bond yield had widened substantially. The asset purchases announced Sunday (of USD 500 bn in Treasuries, 200 bn in mortgage backed securities) equals some 3.5% of GDP

When will profits turn up? Usually after a recession, with much higher unempl.

Are the corporates f.... anyway (at least for a while)?

USA Corporate profits vs unemployment

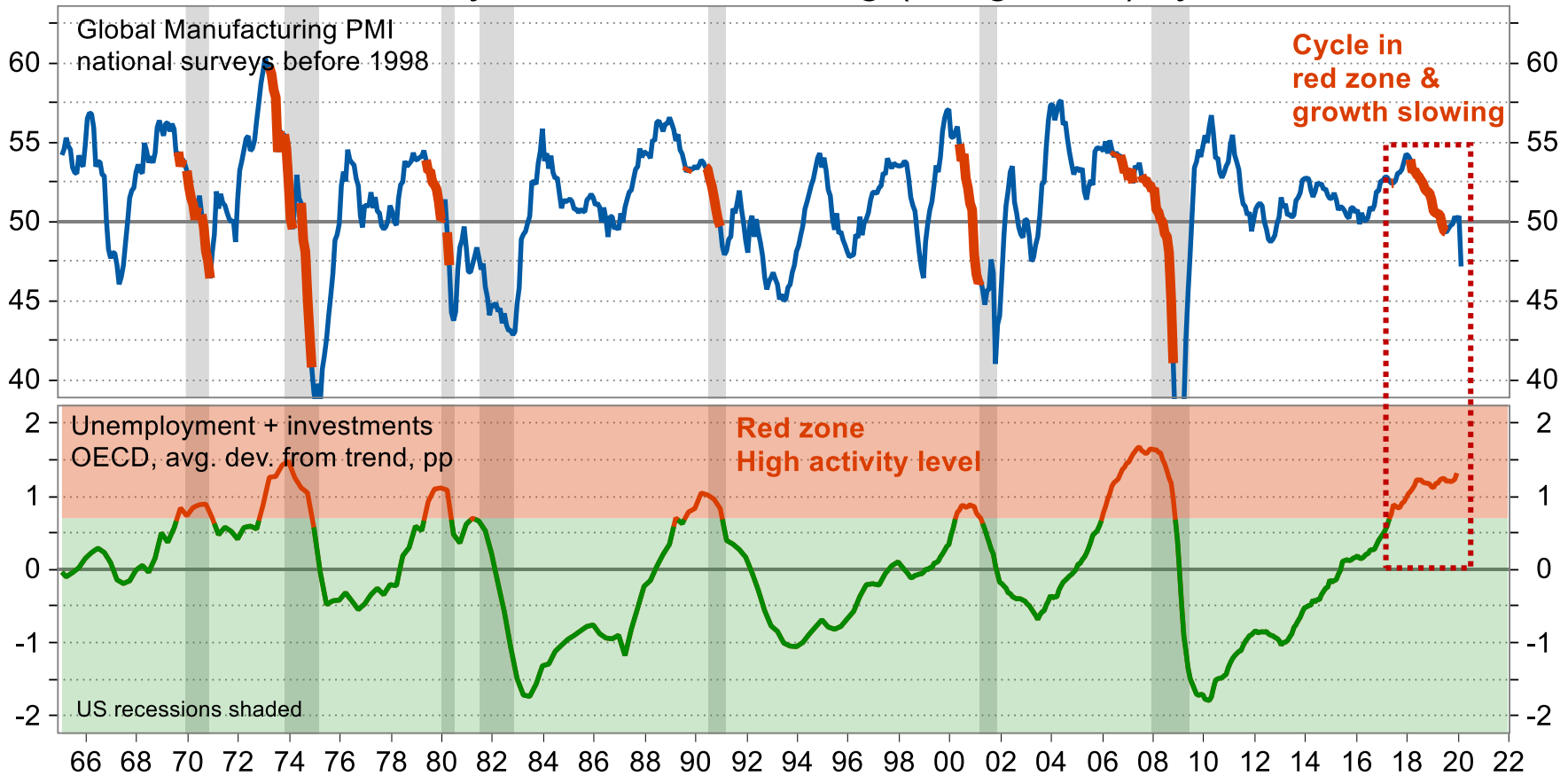


SB1 Markets/Macrobond

DANGER: A high activity level and a growth slowdown

Like now

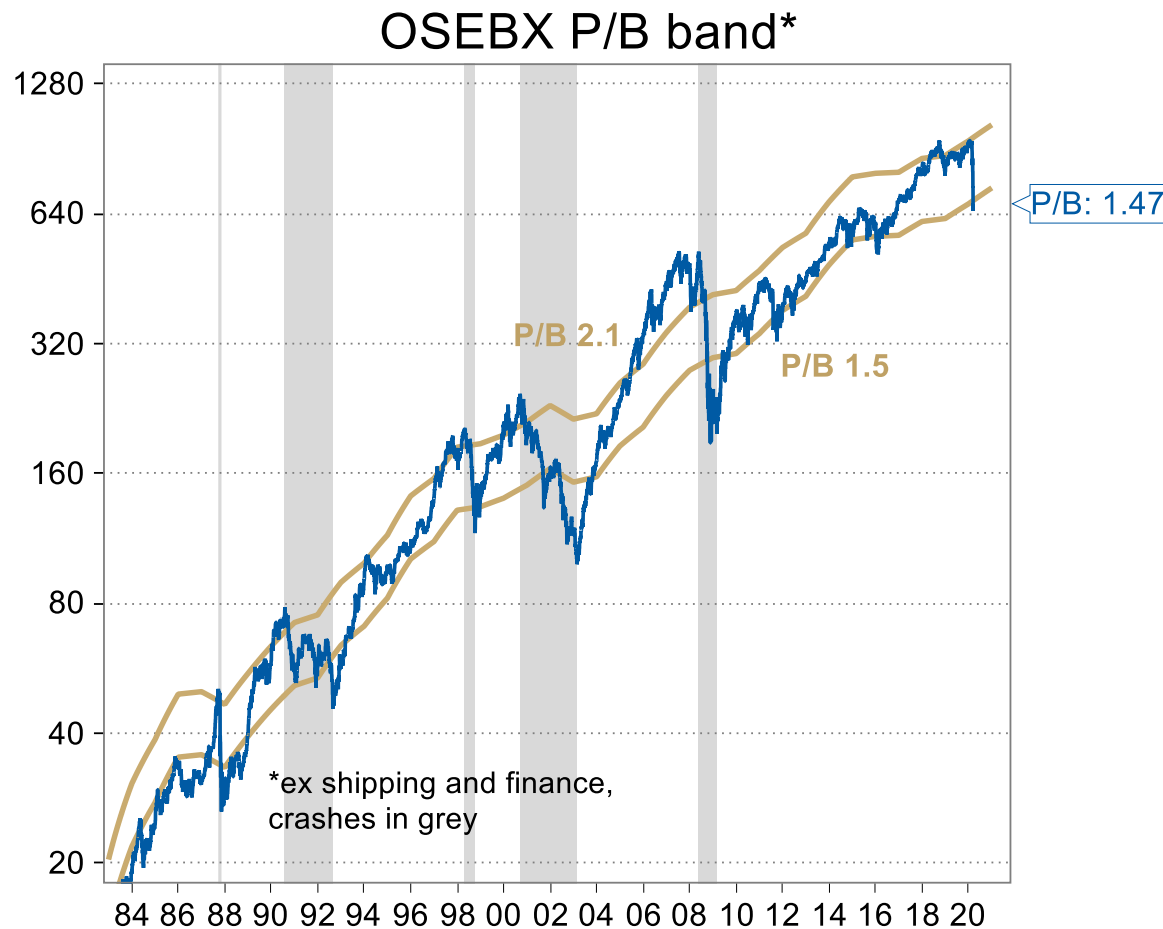
The many small & the few big (dangerous) cycles



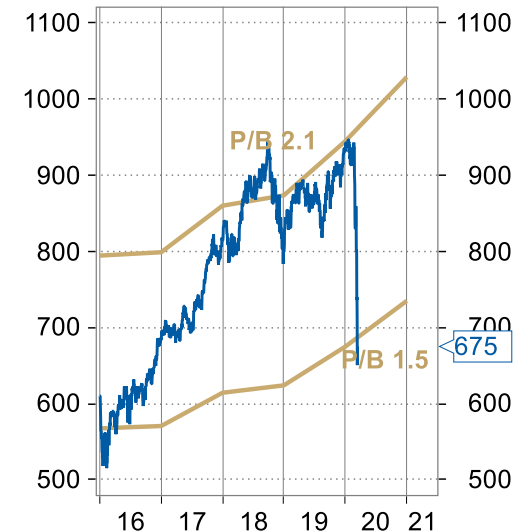
SB1 Markets/Macrobond

Oslo Stock Exchange: Was expensive. Ain't really cheap yet

But if you have a medium term horizon...



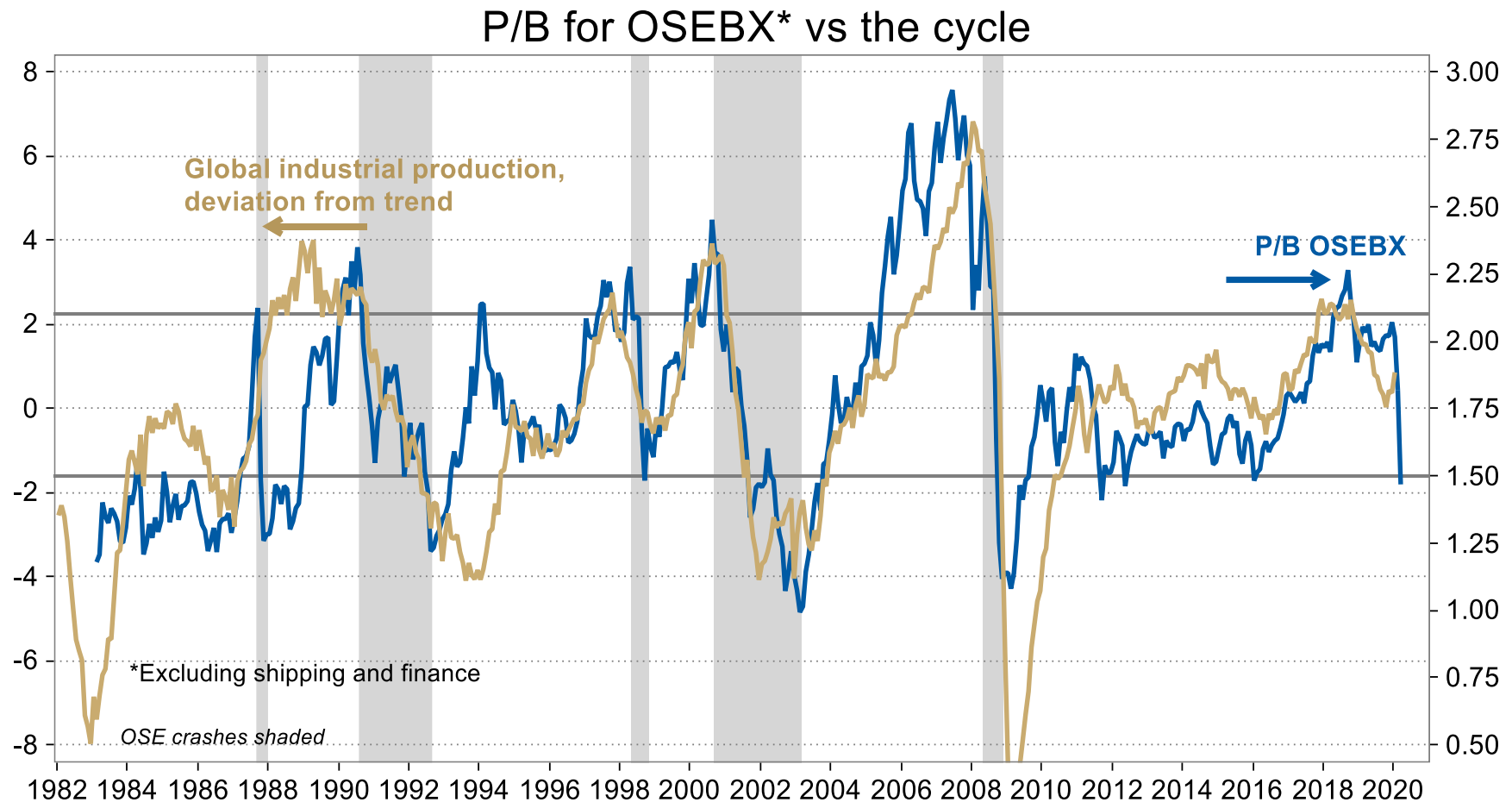
Source: Oslo Børs, Vital, Bloomberg, SB1 Markets, Macrobond.



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

The economy & the stock market: Some very common cycles

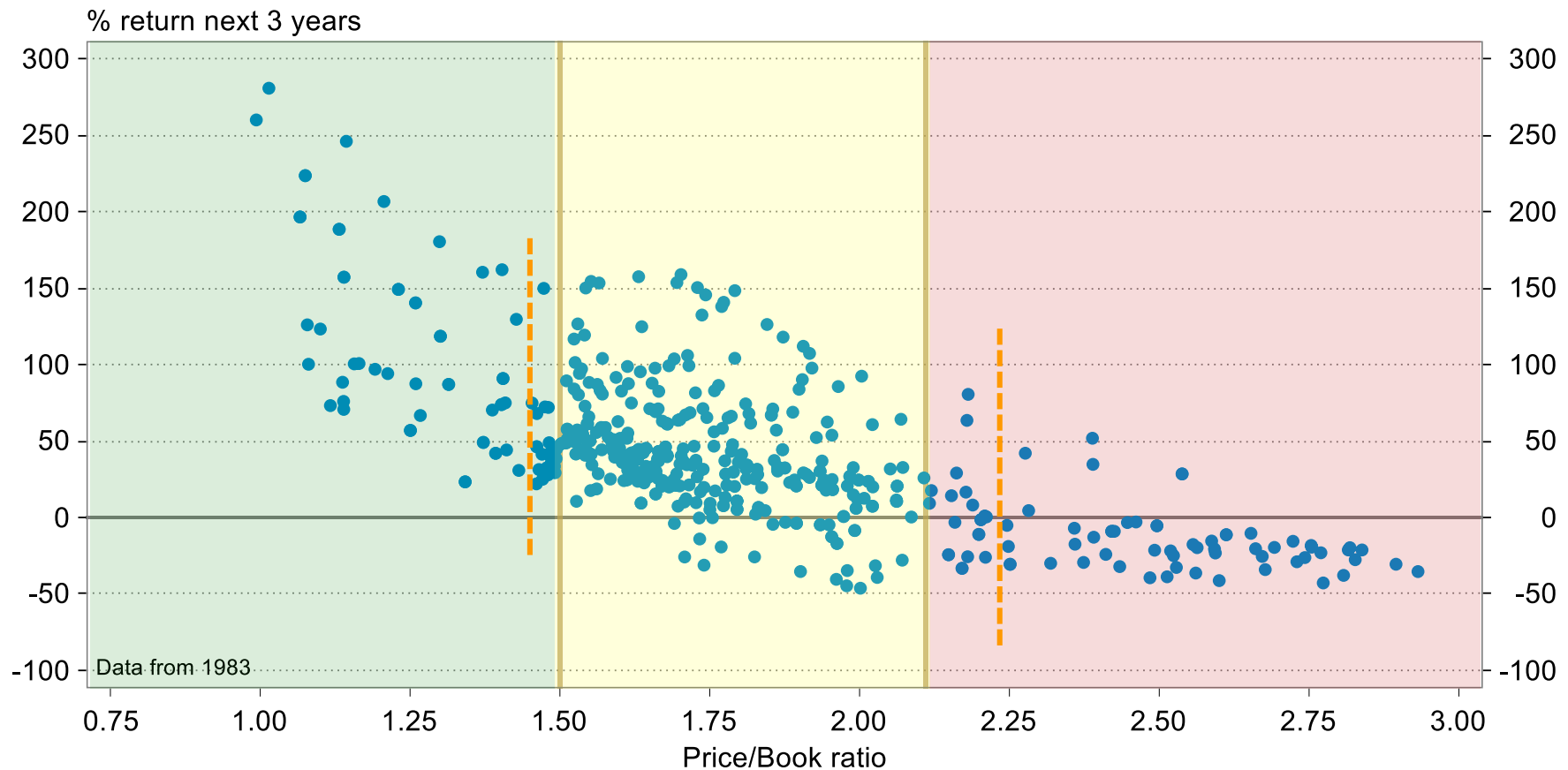
(Data on industrial production from January, will drop in Feb/March)



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

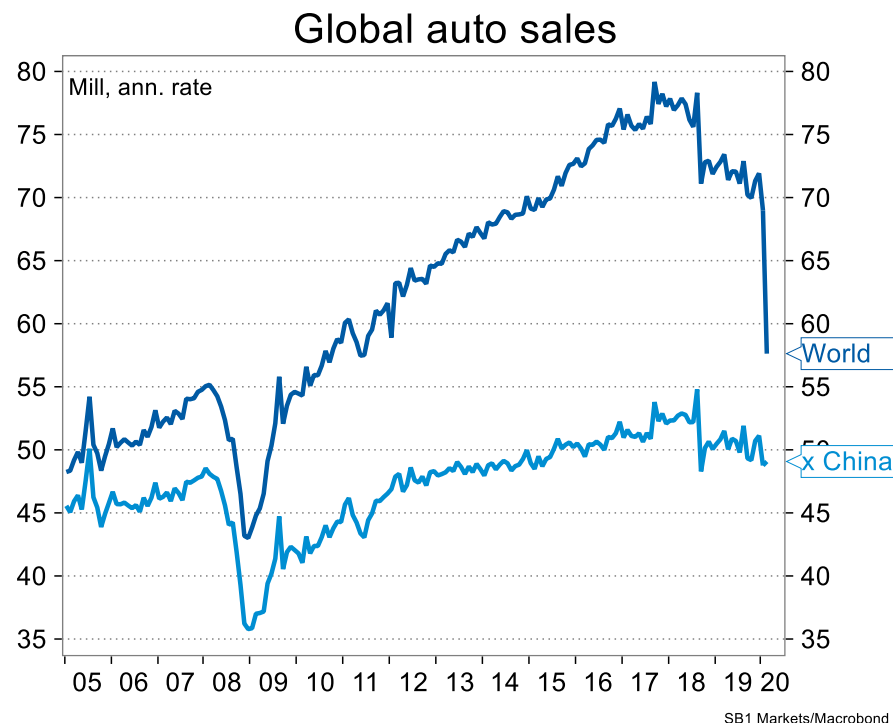
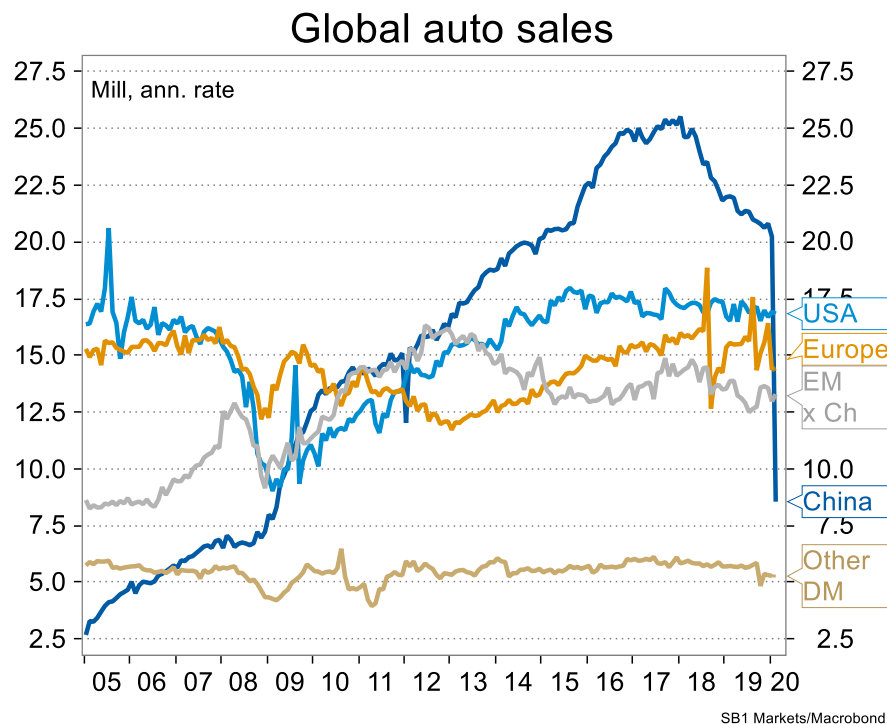
The basic trick when investing: Buy cheap!

OSEBX Return vs P/B



Chinese auto sales down just 58%, we feared more. ROW sales flat but low

Global sales at 10 y low. Next months, others will follow. The timing of the recovery is more uncertain



- Global sales fell by 16% m/m in February (our estimate) and are 21% y/y, due to the corona setback in China. Sales fell in some other countries, but rose in others, in sum close to flat. However, the x China level is low
 - » Chines sales fell less than production (-83%), and inventories must have been reduced. We expect sales to recover the coming months as the economy us slowly returning to normal activity level
- European sales are volatile, and have started the year at a low level, and the trend is not up. US sales rose marginally but are trending down. Japanese sales are still low
- Auto sales in EM ex. China rose in February but the level is not impressive, and the short term trend is flat, at best

Wait for the next shoe to drop: GDP will follow suit

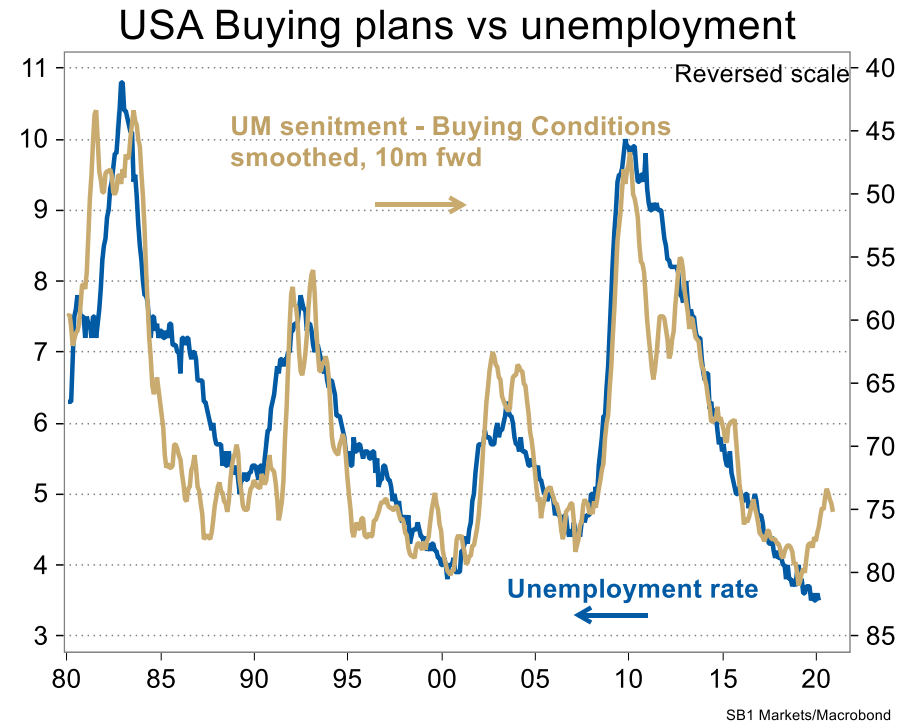
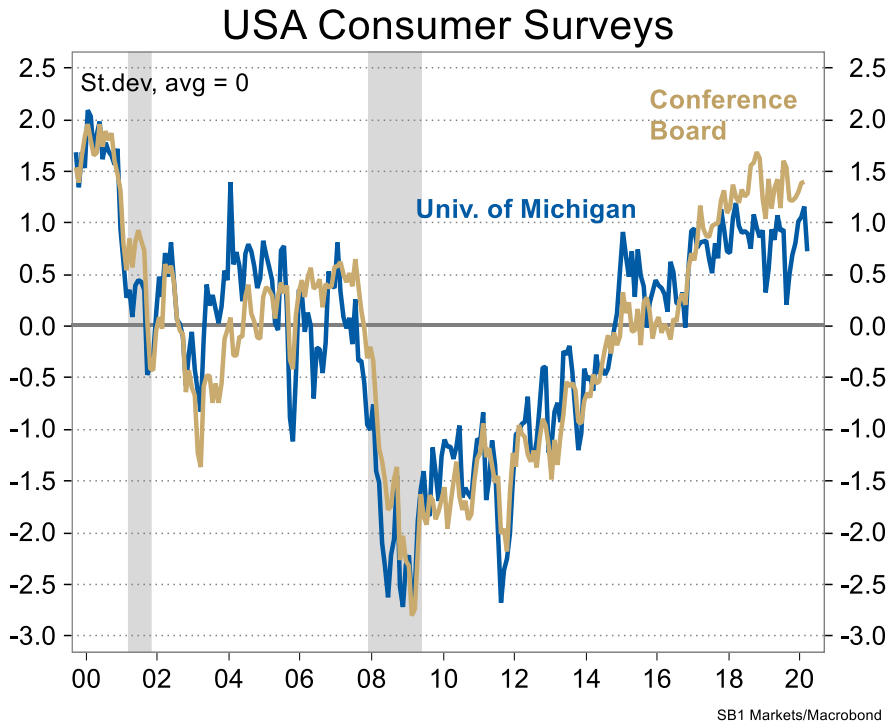
Industrial production and investments down 27% in Feb, retail sales just 15%. Q1 GDP down 10%?



- As they say in China: *In the first two months, despite the sudden outbreak of covid-19, under the strong guidance of CPC Central Committee with Comrade Xi Jinping at its core, all regions and departments coordinated efforts to advance both the prevention and control of the epidemic and the economic and social development, made an all-out effort to fight the battle against the epidemic, and scored significant achievements. Thanks to these policies and measures, the resumption of work and production accelerated, and the order of production and life was gradually restored. The national economy performed in an orderly manner and people's basic livelihood were effectively guaranteed.*
- **Industrial production and investments were approx as we assumed (but far weaker than 'official' consensus) but retail sales somewhat stronger, still sharply down, even in January**
- **Retail sales fell 10% in Jan and 5% i Feb, the mix was strange**
- **We have not recalculated our GDP forecast, but 10% q/q does not seem totally unrealistic, given a gradual recovery in March**
- **Credit growth** was OK in February, no corona impact

UoM consumer sentiment down in early March but far from out (yet)

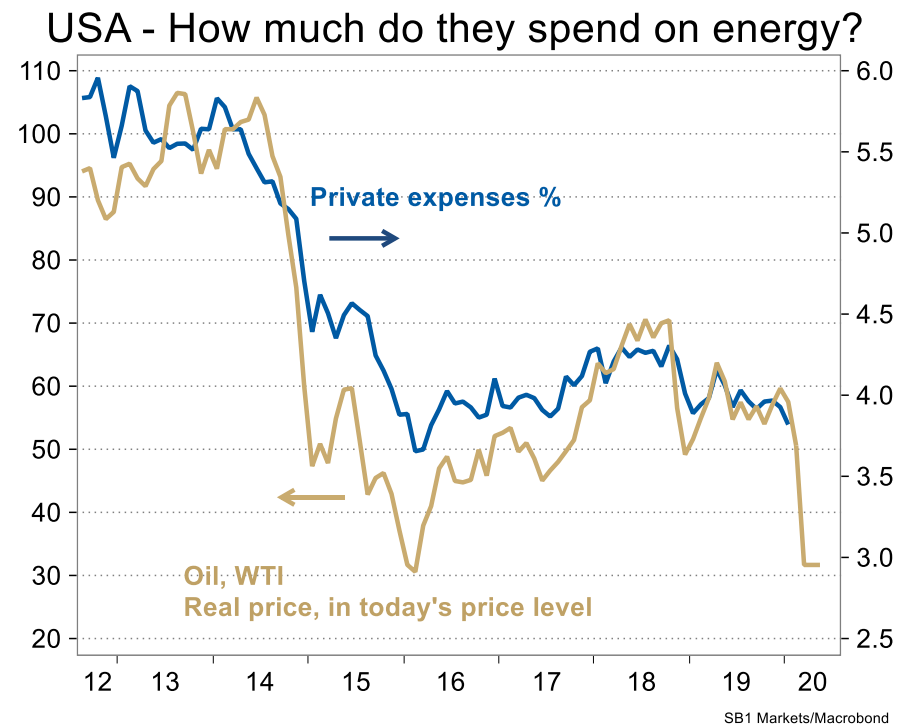
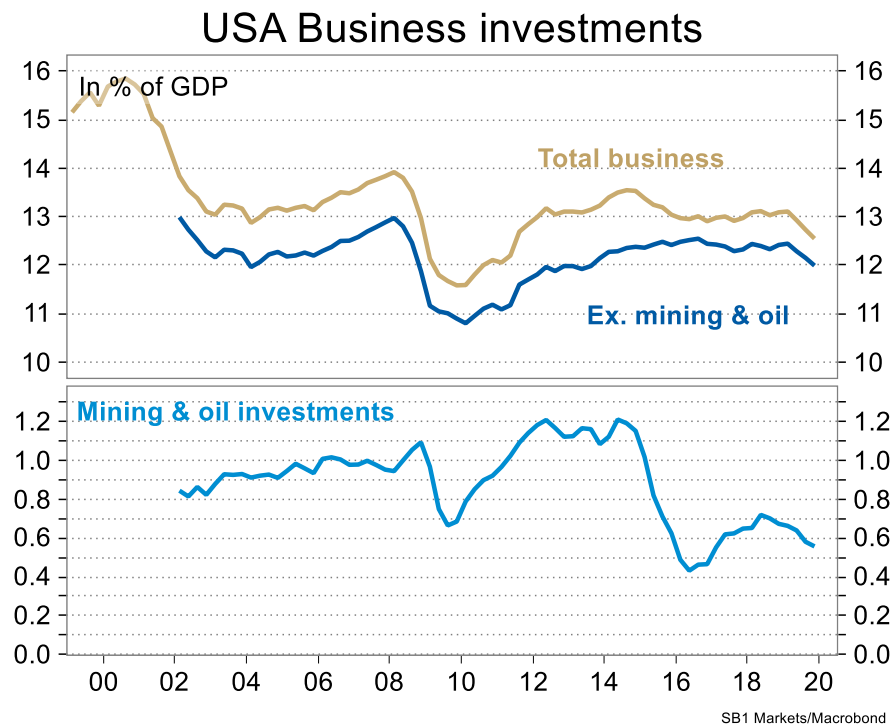
The level is still high and the decline was not large – but final March index probably much worse



- University of Michigan's consumer sentiment index fell to 95 in early March from 101 in February, expected down to 95.9
- Univ. of Michigan's consumer sentiment is marginally weaker than Conference Board's consumer confidence index but both are upbeat and do not confirm the slowdown in consumption which retail sales data indicate
- A small warning: Consumers are reporting that buying conditions are deteriorating somewhat but they are still quite strong

The oil price vs the US economy. Investments more down than consumption up?

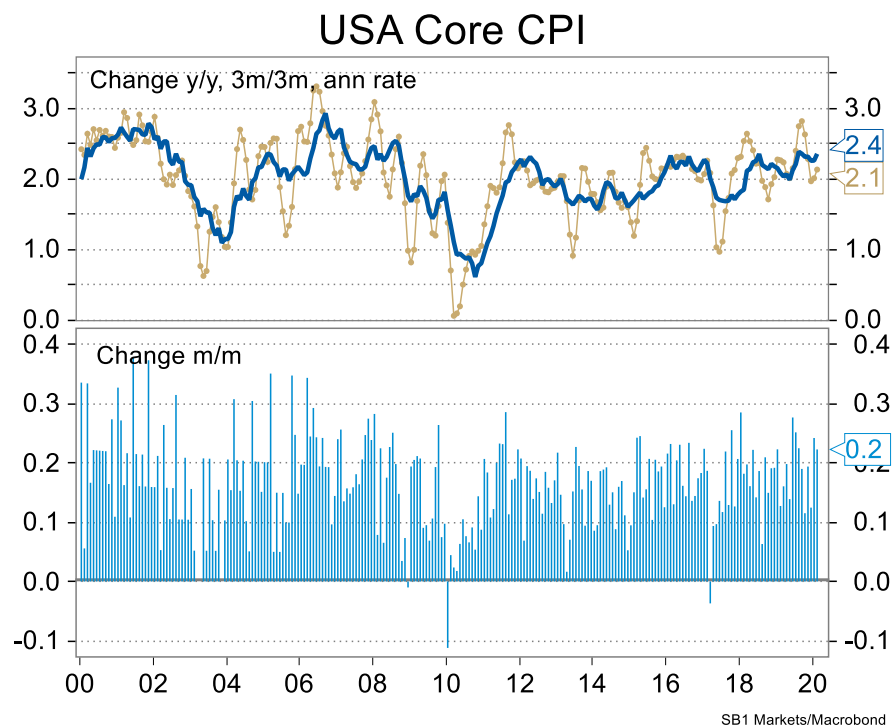
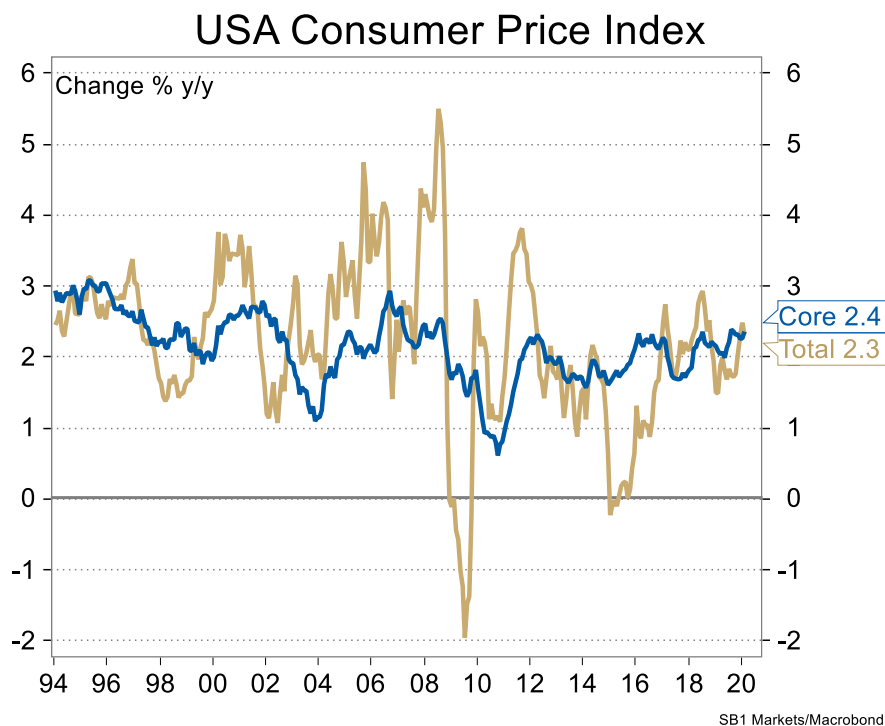
The US has a balanced trade in petroleum products. Will lower oil prices hurt the country?



- No doubt, if oil prices remain at the present level, oil investments will be cut. However the level is not that high as investments now constitutes less than 0.6% of GDP. During the 2014 – 2016 downturn, investments by 0.8 pp to 0.4% of GDP from 1.2% of GDP
- On the consumer side, the recent decline in oil prices implies a reduction in the energy bill equalling some 1% of disposable income (or 0.7% of GDP). In addition, businesses ex. oil will also benefit from lower oil prices
- Bottom line: The recent oil price decline will most likely not deliver at blow to the US economy (but part of it reflects a likely downturn in the US economy)

Core inflation inched up to 2.4% in February

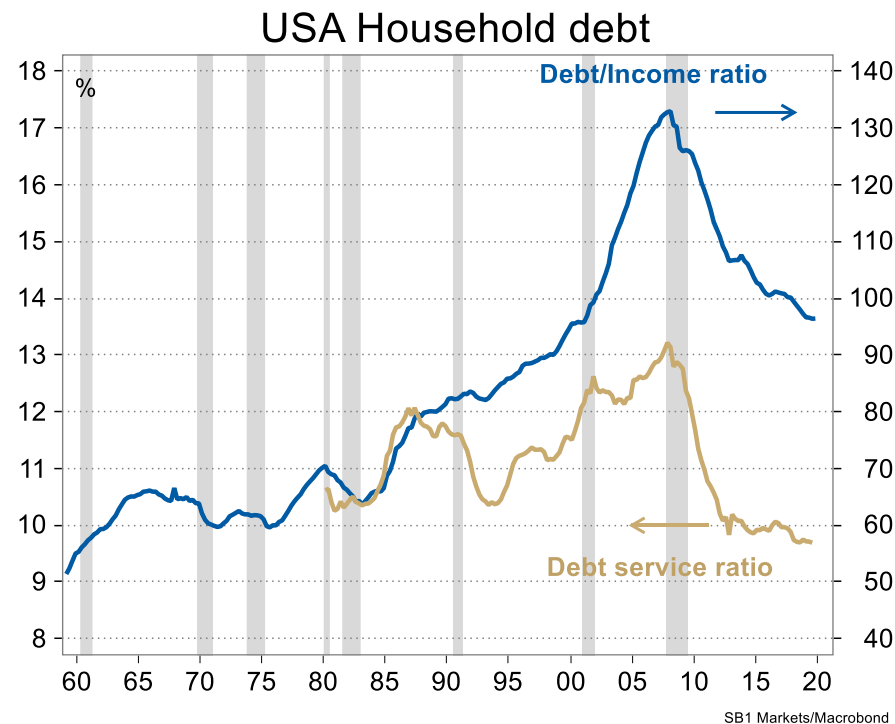
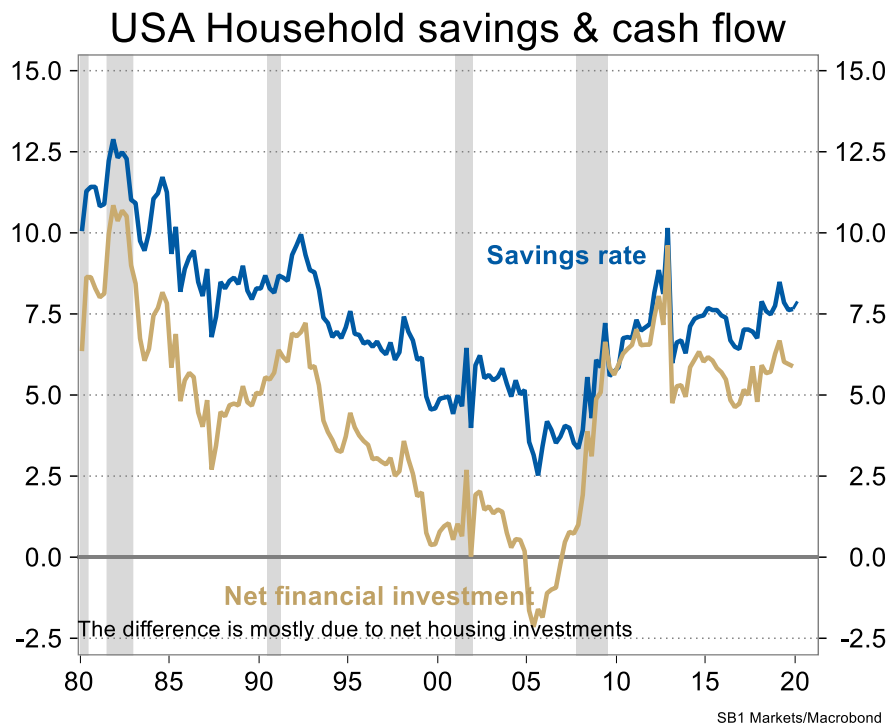
Core CPI rose 0.2% m/m, as expected. Total inflation down to 2.3%, will slow rapidly



- Core CPI increased by 0.2% m/m in Feb, as expected. The annual rate up one tick to 2.4%, expected flat at 2.3%. Inflation is back at the mid-2019 local peak level, however, the underlying speed is well below, at 2.1%. Fed's inflation model indicates that inflation is peaking now and producer prices do not suggest any uplift. But it is not 'too' low, at least according to the core CPI index
 - » Fed preferred price measure, the core PCE (the consumption deflator) is up 'just' 1.6% in January, below Fed's 2% price target
- Headline inflation fell 0.2 pp to 2.3%, 0.1 pp above expectations. Prices rose 0.1% m/m. Total CPI inflation has been brought up by slowly rising energy prices, this will turn the coming months as energy prices have dropped

Some good news; Households' savings are high and the cash flow is strong

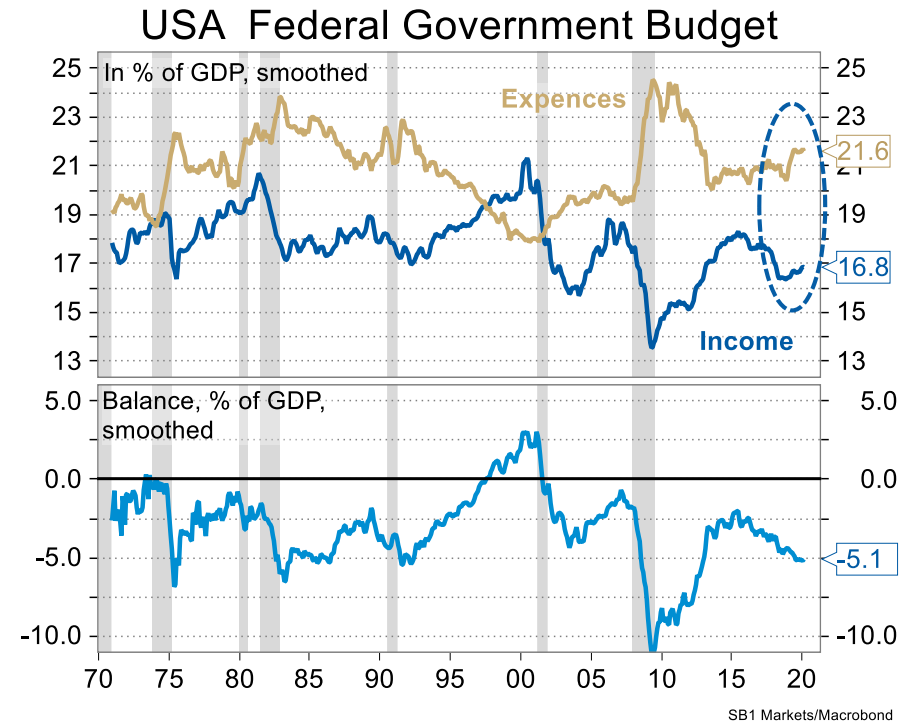
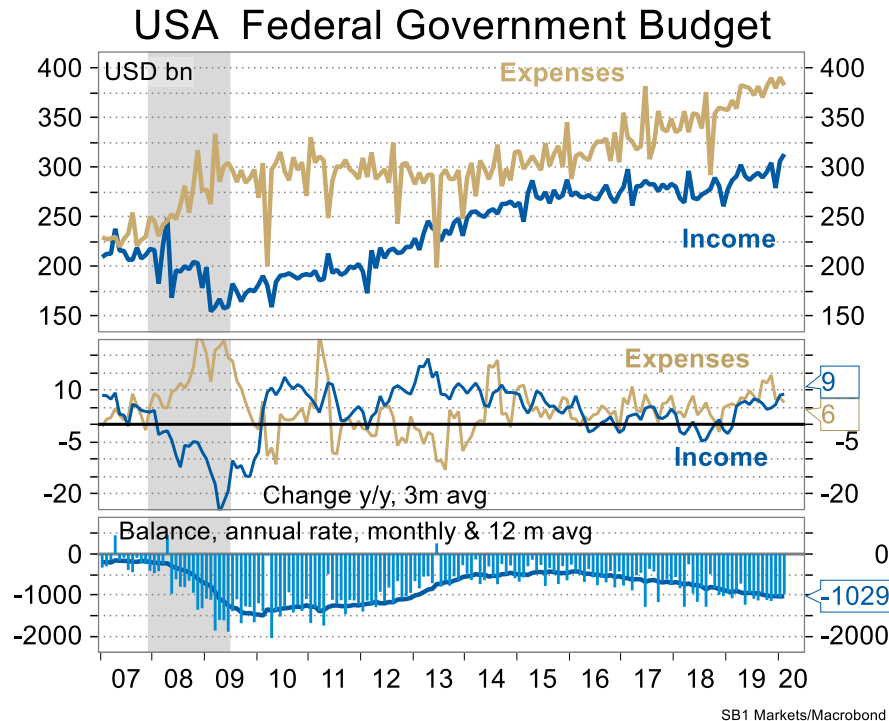
Households are saving – and paying down debt (relative to income), debt service cost record low



- The savings rate may have fallen marginally in 2019 but is trending up over the past year. The level is quite high (at least after a higher tax dodging estimate was added...)
- Households were running a cash surplus at 5.9% in Q4, marginally lower than in Q3. The level is quite high
 - » Cash balance (net financial investments) = Savings – net (of depreciation) investments in fixed real capital (mostly housing)
 - » The savings was 7.7% of disp. income in Q4
- Households' debt ratio is much lower than 10 years ago and is still sliding down, almost back to the level in y 2000. Households have never before (data from 1980) spent less of their income serving debt!
 - » There have been few signs of financial stress, at least barring student loans

The federal budget deficit steady the past few months

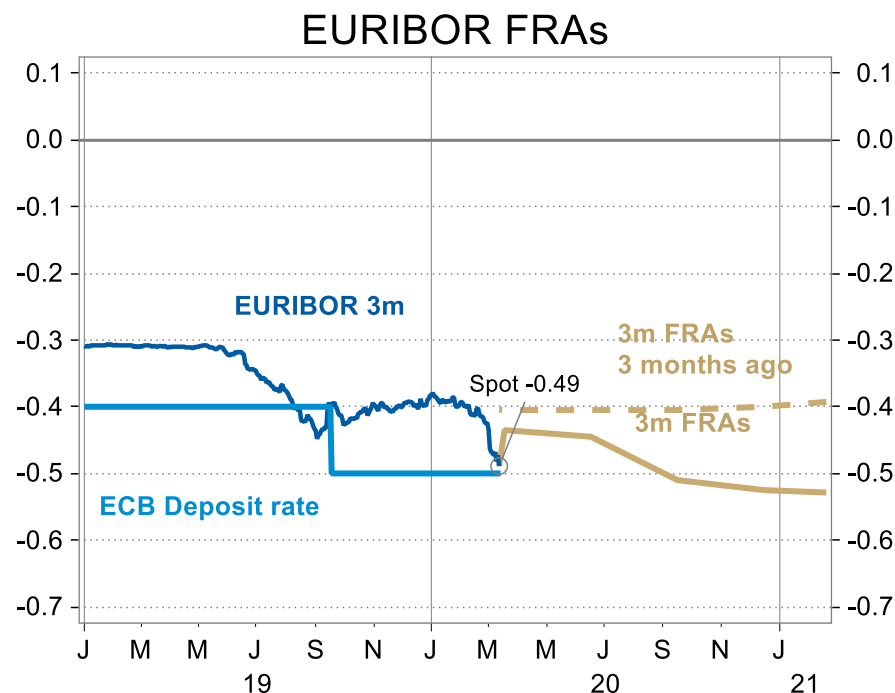
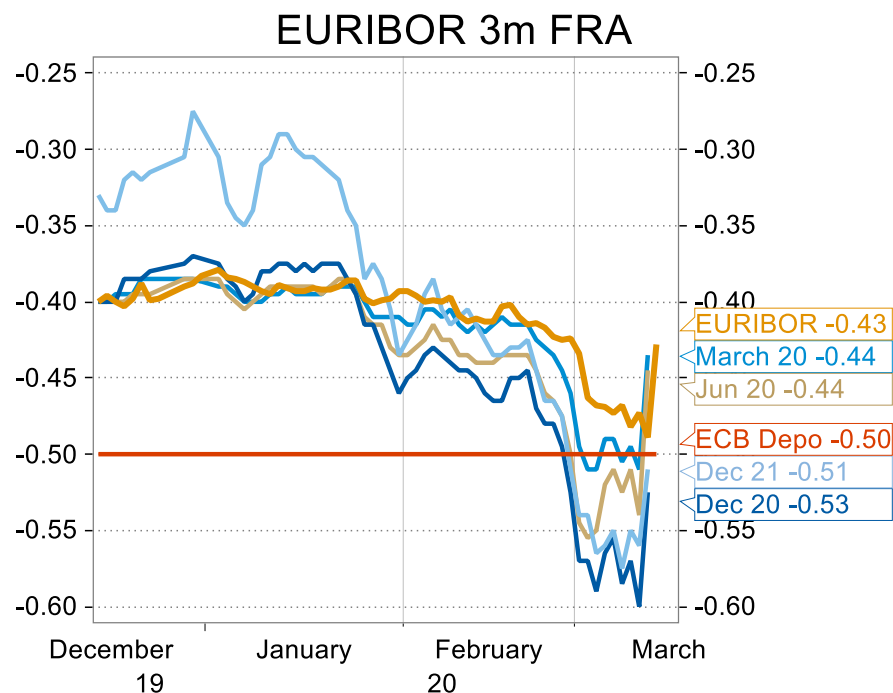
The federal deficit has widened to 5.1% of GDP, and the total public sector deficit at 7.6% of GDP



- The budget deficit fell marginally to USD 986 bn (seas. adj) in February, while the 12 m avg inched down to 1.029 bn. The deficit has been steady the past months, after rising steadily from USD 400 bn in 2016. The deficit equals 5.1% of GDP. Including local government etc, the US ran a full employment, peacetime deficit at 7.6% in Q4, totally unprecedented! (before any measures related to Covid-19 have been introduced)
 - Federal spending is up 6% y/y (3m smoothed), income up 9% y/y (but expenditures have increased more than receipts since 2016)
- In % of GDP, federal spending equals 21.6%, way above a normal level (except for during recessions). Regrettably, federal income equals just 16.8% of GDP, much lower than normal in a blooming economy (well, until corona really hits) – of course because taxes have been cut
 - The 2020 budget is marginally expansionary and the deficit will not increase much from here
- Trump has proposed a new budget with huge cuts in expenditures (outside defence) and to balance the budget 2030 but the likelihood for that to pass Congress is zero. Now, expenses will probably be lifted as fiscal measures to stimulate the economy amid the virus outbreak

The ECB adds to bank stimulus and increases QE but kept interest rates on hold

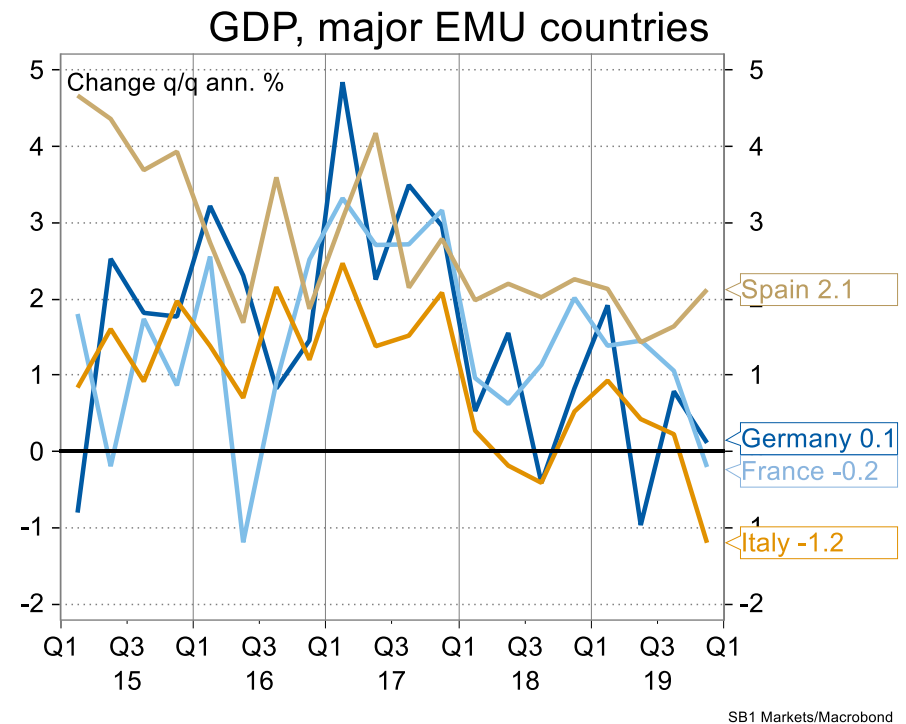
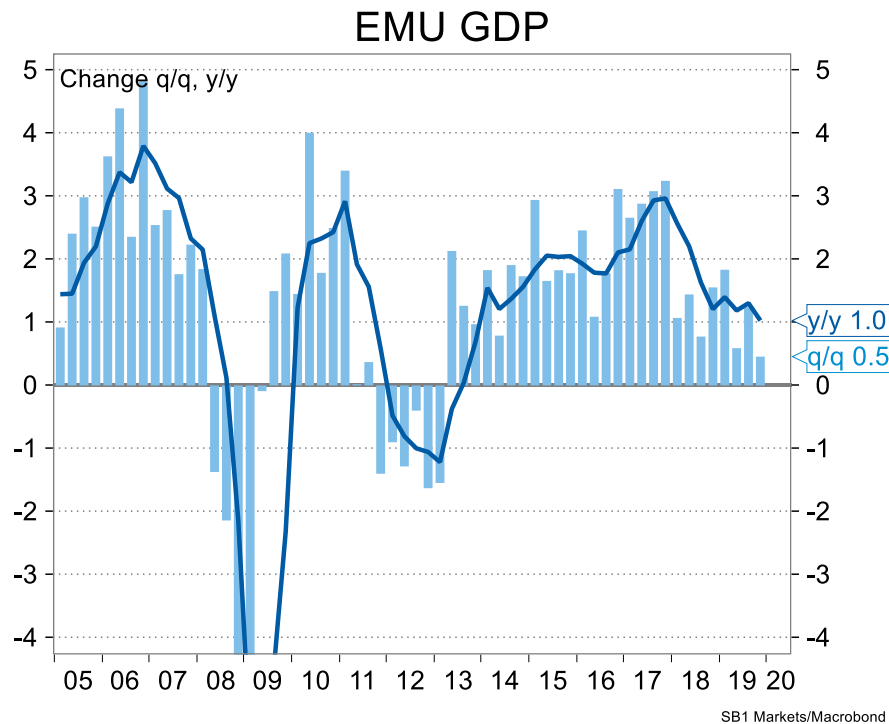
ECB surprised markets by keeping rates unchanged, as a 10 bps cut was fully expected



- The ECB surprisingly held the deposit rate unchanged at -0.5%, markets were pricing a 10 bps cut. Lagarde stated that the announced stimulus package to support liquidity will be a more efficient response to negative shock which the coronavirus outbreak represents
 - The TLTRO (longer term refinancing operations) were stepped up to ensure favorable financing conditions for businesses. Interest rates on loans to banks will be equal to the deposit rate of -0.5% and from June 2020, the TLTRO III operations will allow interest rates down to -0.75%
 - QE is to be increased by EUR 120 bn by the end of the year, on top of the existing 20 bn of purchases per month, a quite aggressive step – but no more than 1% of GDP vs. the approx. 20% of GDP bond holding already bought
 - The ECB stressed the importance of an ambitious fiscal response in order to stimulate investments and consumption
- European stock markets slid down and interest rates spiked. Markets are still pricing a 10 bps cut by the end of 2020

GDP growth nudged up marginally in Q4, details rather weak

GDP rose 0.1% q/q, or 0.5% annualized (from 0.2% in the previous estimate)

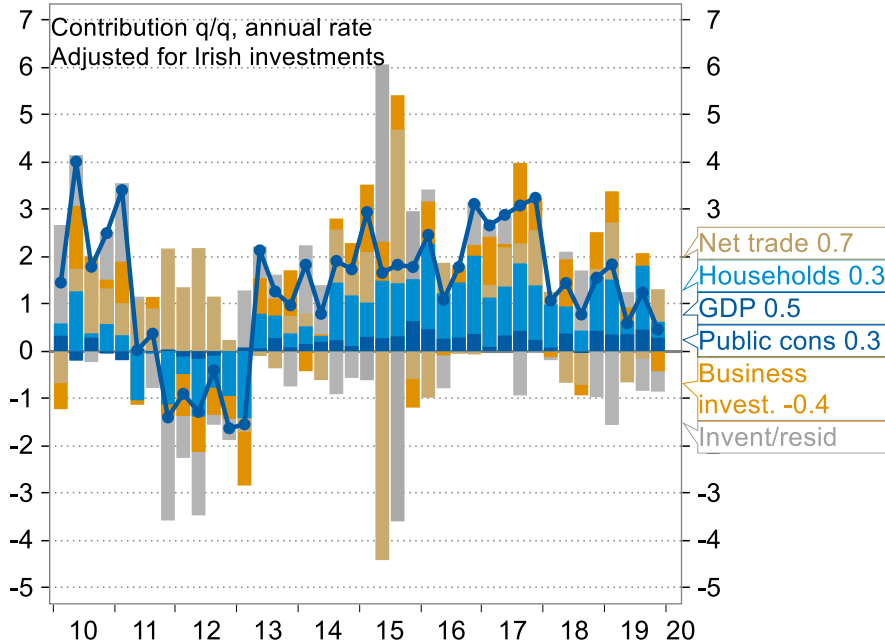


- GDP rose 0.5% q/q annualized in Q4 in the 3rd estimate, a marginal uptick from the previous est. Q4 was anyway the softest quarter since the euro crisis
- Household demand and public demand were the major demand contributors. Net trade rose to, offset by inventories Declining business investments dragged growth down

Business investments dropped in Q4 and household demand slowed

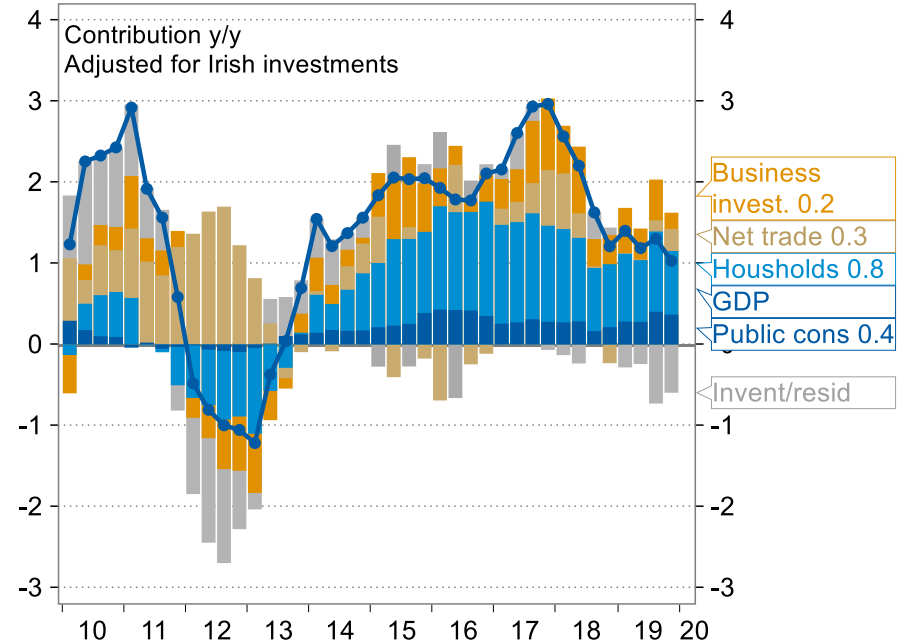
Still, household demand (consumption + housing) was the major growth contributor in '19, as usual

EMU Demand contribution to growth



SB1 Markets/Macrobond

EMU Demand contribution to growth



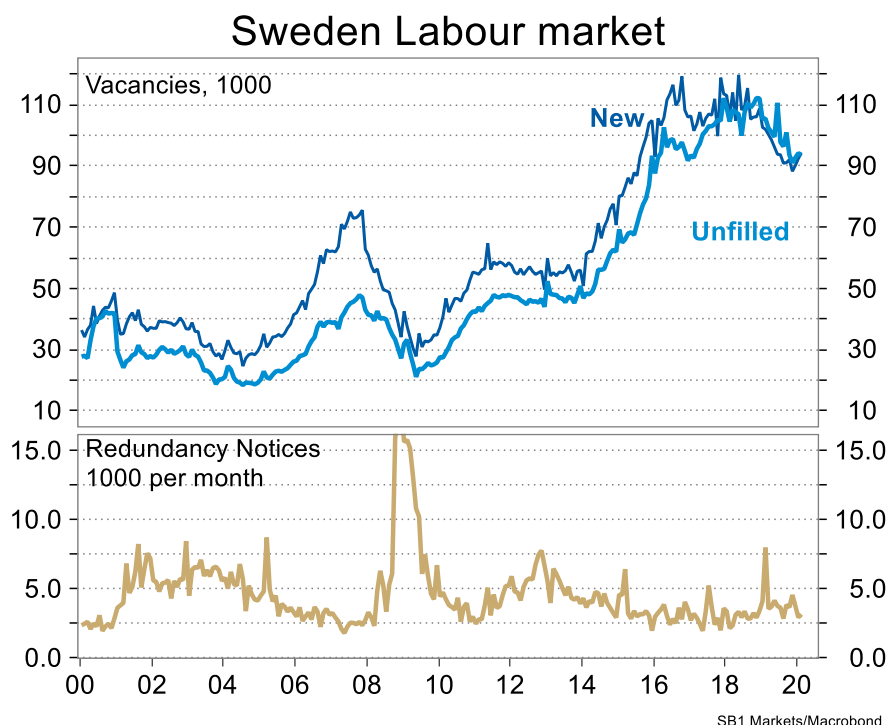
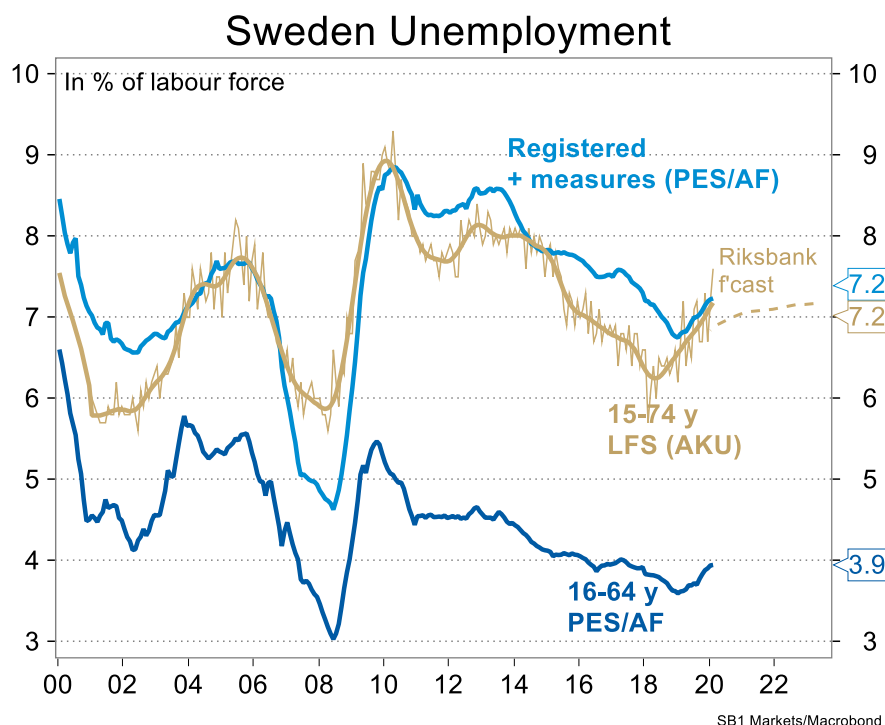
SB1 Markets/Macrobond

- Private consumption & housing investments lifted q/q growth by a modest 0.3% annualized
- Investments dampened growth by 0.4 pp, following a small lift in Q3. Investments are still up y/y but growth has slowed
- Net trade increased in Q4 and are still adding to annual growth. Inventories have dampened growth the past 4 quarters, which is good news. At some point, inventories are small enough

On the charts above, and on the next page we have adjusted total EMU investments and net trade data for anomalies in Irish national accounts. Huge, and highly volatile imports of immaterial goods, at times just as large as GDP itself (equalling 1% of EMU GDP!), and parallel lifts in investments in such goods creates trouble for European (!) National Accounts. These transactions are not 'real' activity, just due to accounting adjustments within some huge global software companies. Hence, we adjust EMU data by applying modified data, supplied by the Irish Statistical Office

Unemployment climbs, employment growth is ebbing, participation still rising

LFS unemployment (smoothed) rate rose to 7.2% in Feb, registered unempl. unchanged at 3.9%

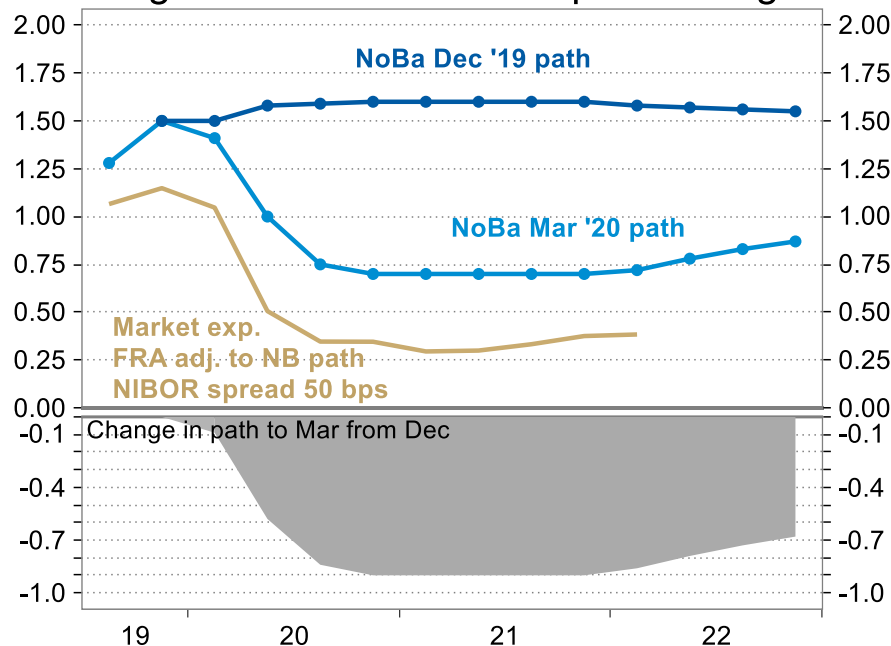


- LFS unemployment inched up to 7.2% in February%, measured by the smoothed rate. Unemployment has increased steadily from 6.3% in early 2018. The unadjusted, volatile rate, which zig-zags almost every month, spiked to 7.6%
- The PES/AF registered unemployment rate, which is less volatile than LFS data, confirms an upswing. Open unemployment was unchanged at 3.9% in February, following a 0.1 pp downward revision of January. % in January, up 0.4 pp from the bottom. Both new and unfilled vacancies have fallen from the peak, but edged up in February
- The labour market is no doubt weakening but the increase in unemployment is almost entirely due to higher labour force participation rates. The employment rate has just flattened, it is not declining

Norges Bank delivered a 50 bps emergency cut and signals that more will come

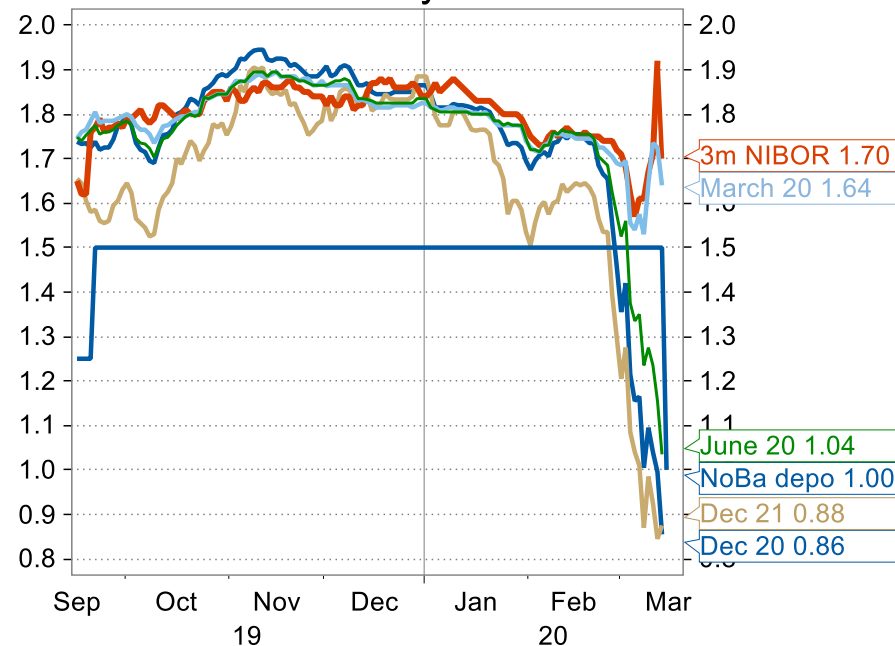
The 50 bps cut was broadly expected but not before the scheduled meeting this week

Norges Bank Interest rate path changes



Norges Bank, SB1 Markets/Macrobond

Norway 3m FRA

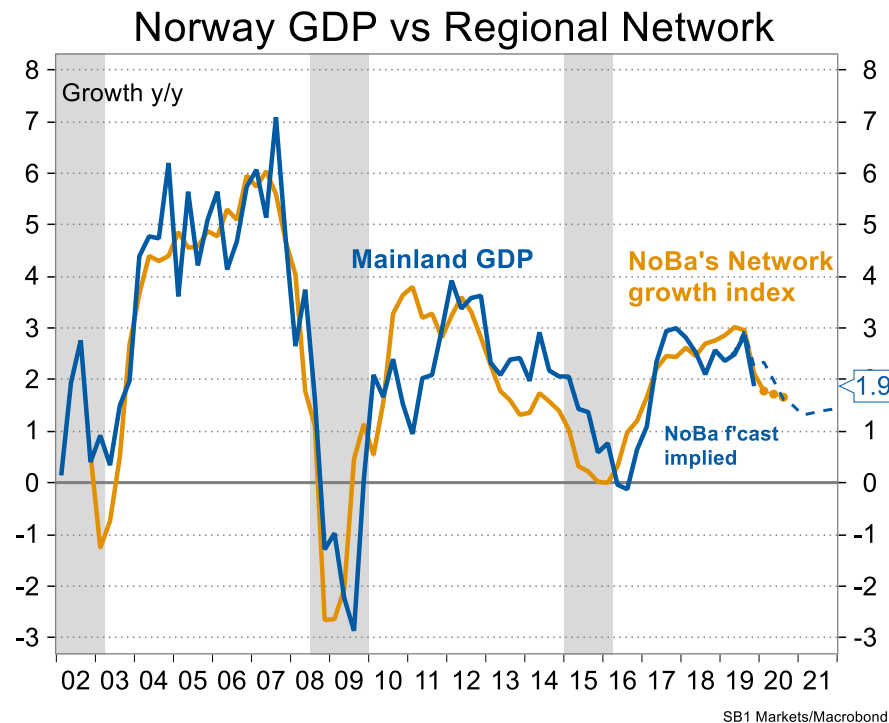


SB1 Markets/Macrobond

- Norges Bank announced a 50 bps interest rate cut to 1.0% Friday, the first intermeeting since the financial crisis. The interest rate path was nudged down by up to 90 bps, implying another 25 bps cut in the summer (prob. June)
 - A short Monetary Policy report was published with some few projections. The assessments were based on data until March 11, which was before Norway was put in complete 'lockdown'. Thus, these projections are already outdated and anyway highly uncertain, we expect downward revisions, from the 0.4% 2020 GDP growth forecast. Another 50 bps cut by the summer is highly likely, and probably before June
 - In addition to the interest rate cut, the Bank will provide liquidity by offering 3 month F-loans to an interest rate equal to the deposit rate. Moreover, the countercyclical capital buffer for banks will be reduced to 1%, from 2.5%
- 3m NIBOR at 1.7% implies a money market spread far above 70 bps. We assume the current FRA-path is some 35 bps below NoBa's path in late 2020, given expectations of a shrinking spread, say to 50 bps. Hence, markets expect another 50 bps cut by June

Norges Bank's Q1 Network reports a moderate slowdown – before corona hit

Businesses expected 1.7% growth in Feb, a mini-survey suggest corona will have substantial impacts



The Network's reported growth pace is slightly lower than NoBa's y/y f'casts, whereas expectations on the coming 6 months are on par with NoBa's f'cast. Compared to NoBa's q/q f'casts, which we prefer, the Network is more upbeat

Summary of the Q1 Regional Network report

• Growth

- » Norges Bank's Regional Network reports 1.8% growth the past 3 months, 0.1 pp weaker than they expected in the Q4 survey (and 0.3 pp below NoBa's Q1 f'cast)
- » Businesses continues to expect growth to slowly drift down, to a 1.7% pace the coming 6 months. This was a somewhat milder slowdown than we projected (our f'cast was 1.5%)
- » However, the Q1 survey was conducted until Feb 14, hence, before the coronavirus started spreading rapidly in Europe and Norway. In a phone survey conducted in early March, more than 1/3 of the businesses (81 interviewed, we assume some 25% of the Network) noted that they had revised down their growth outlook, and many were already affected. Several businesses had implemented temporary hiring stops and some were planning for possible layoffs

• Capacity utilisation/investments

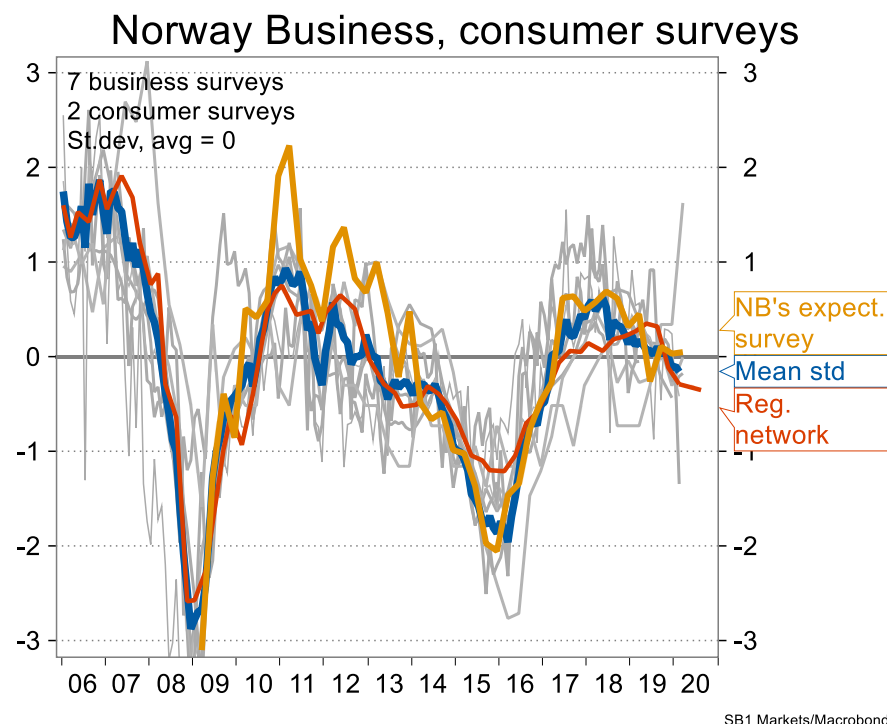
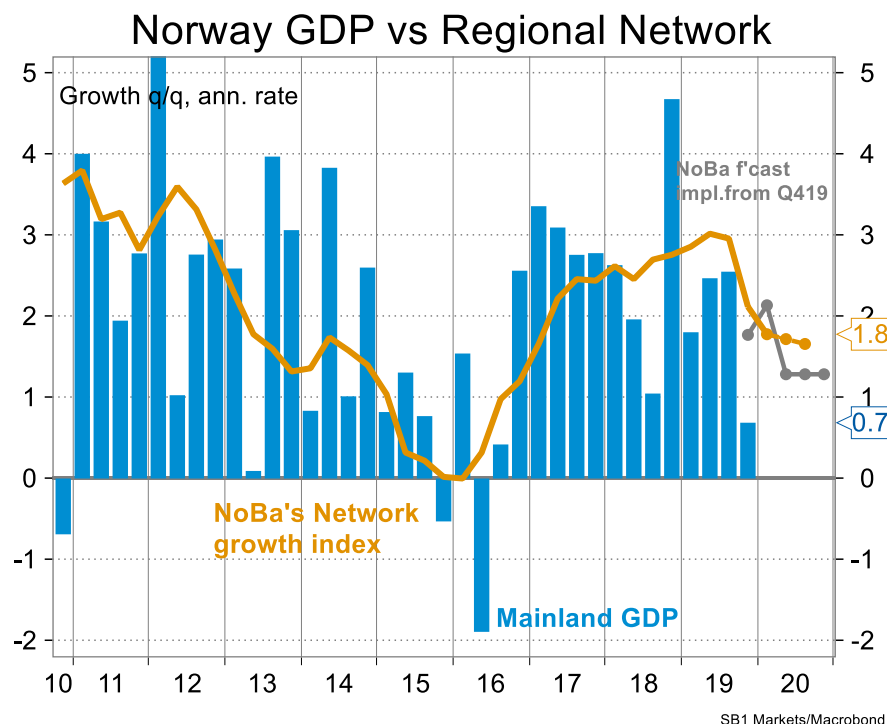
- » The Network reports unchanged capacity constraints. The share of businesses reporting labour shortages increased but remains unusually low vs the unemployment rate
- » Businesses expect softer employment growth, down to just 1%, vs 1.7% in Q3 (still far above population growth, though)
- » 2020 wage expectations at 3.2%, up from 3.1% in '19

• Implications

- » Norges Bank did not put any weight on the Network as it did not address the impacts of the coronavirus. The phone survey confirms that the Norwegian will be heavily impacted by the virus outbreak. Additional interest rate cuts following the 50 bps on Friday are likely the coming weeks/months, we expect another 50 bps

Growth peaked in 2019, will ease to 1.7%, according to the Network

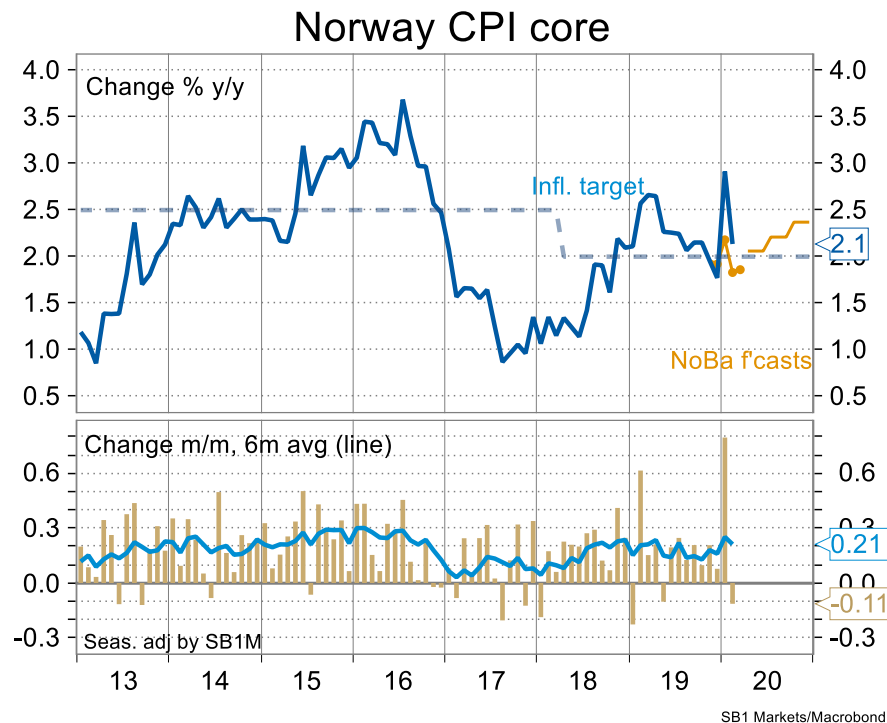
The Network signals 1.7% GDP growth in Q2/Q3, above NoBa's quarterly f'cast of a 1.3% speed



- Norges Bank's Network estimates economic activity to expand by a 1.7% speed the coming 6 months, which is still above Norges Bank's q/q f'cast (implicitly, our f'cast). The bank expects 1.3% growth in Q2 and Q3 (from a too high
- The Network is now marginally weaker than the avg of other Norwegian economic surveys. All surveys have softened, confirming that the growth peak is now behind us. Consumer confidence surveys are still not weak but are highly likely to drop on corona fears. SSB's manufacturing survey and the Financial News Index are more downbeat than the Network

Core inflation down to 2.1% in Feb, reversing most of the Jan spike

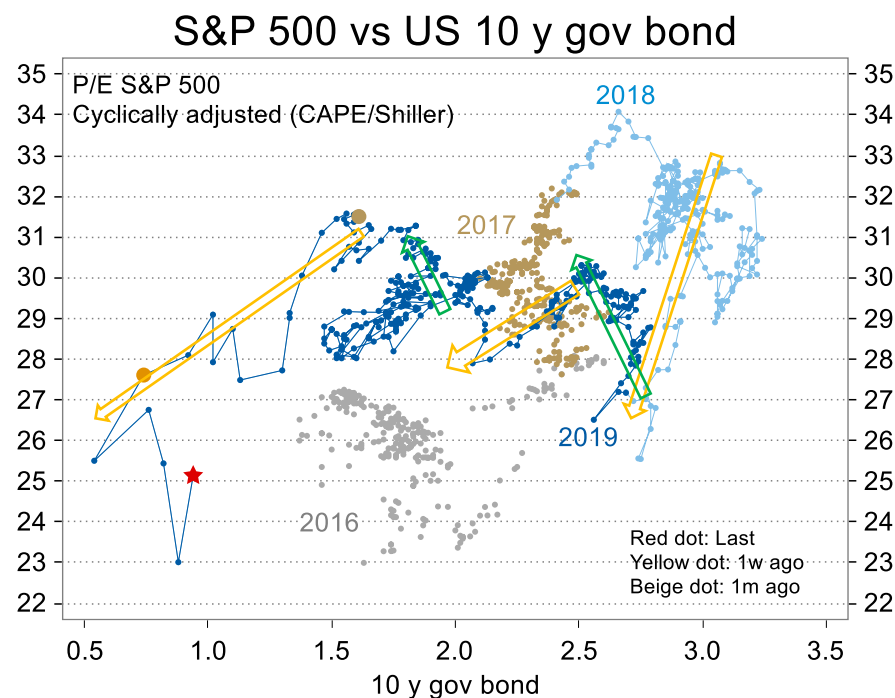
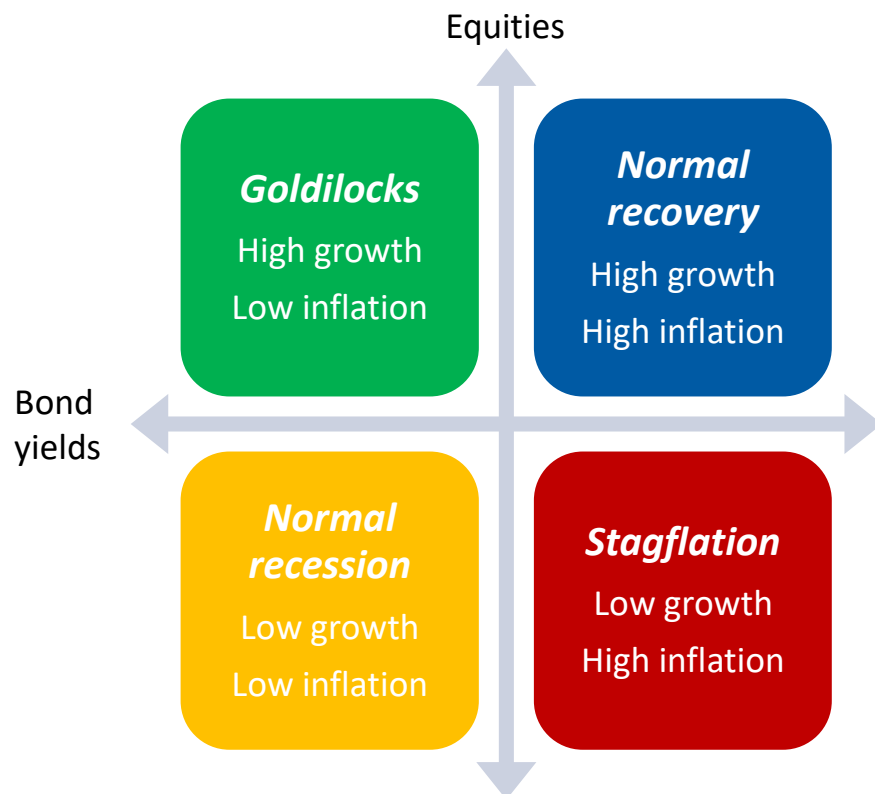
Core CPI retreated 0.1% m/m and the annual rate fell 0.8 pp, still 0.3 pp above NoBa's f'cast



- CPI-ATE (ex. energy and taxes) rose 2.1% y/y in February, 0.2 pp lower than we and consensus expected. Hence, most of the January inflation surprise (to 2.9%) was reversed, but inflation remains 0.3 pp above NoBa's f'cast
 - » CPI-ATE fell 0.1% m/m seasonally adjusted
 - » Prices on clothing & footwear and transport x airline tickets dropped in Feb, food & recreation prices climbed
 - » Inflation on imported goods fell back down to 0.7% y/y. Still, given the very weak NOK, an increase in imported inflation is expected
- Total CPI growth fell to 1.1%. Total inflation is dragged down by electricity prices, which are falling by 28% y/y
- **Implications**
 - » Impacts of the coronavirus are all that matters to Norges Bank (as other central banks) now, and inflation is anyway close to the target. Norges Bank revised up its 2020 core inflation f'cast by 0.2 pp to 2.4%, due to higher inflation than projected in Jan/Feb and expectations of higher imported inflation

Markets straight on the way to the recession corner

Well, last week, markets turned towards the 'stagflation' scenario, we assume just temporarily

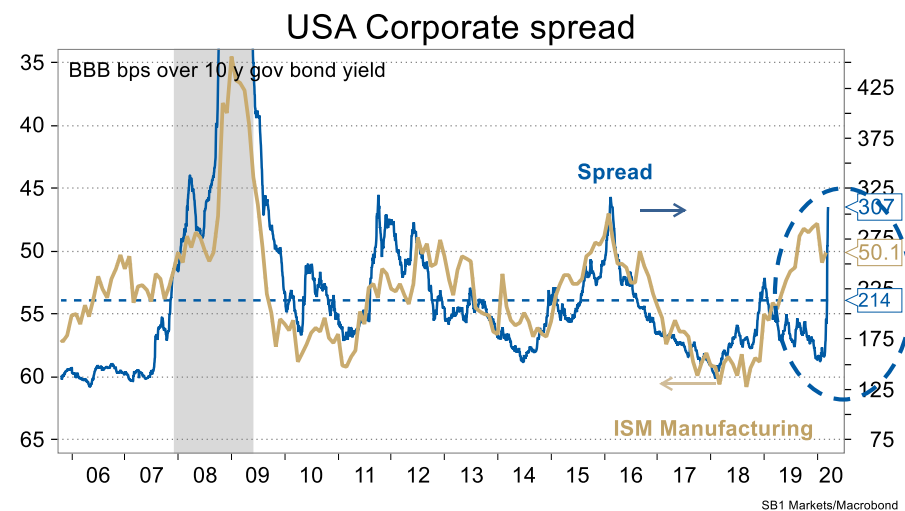
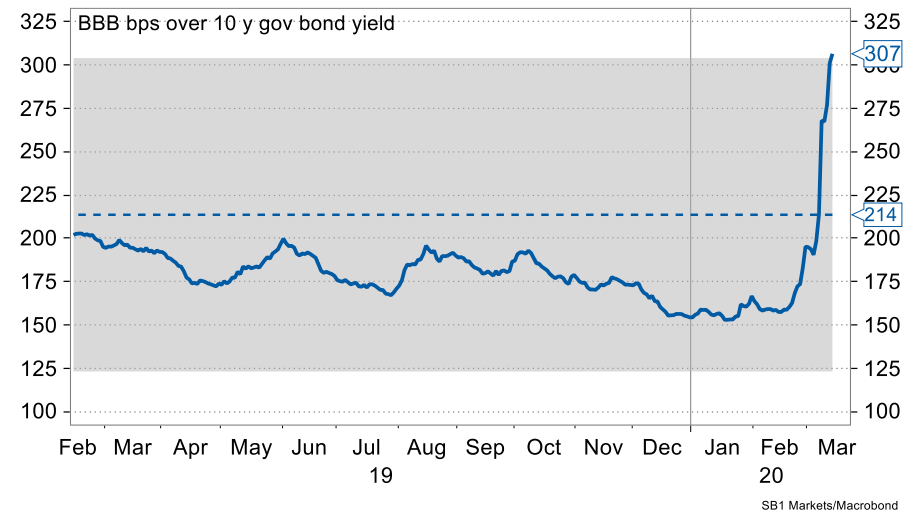
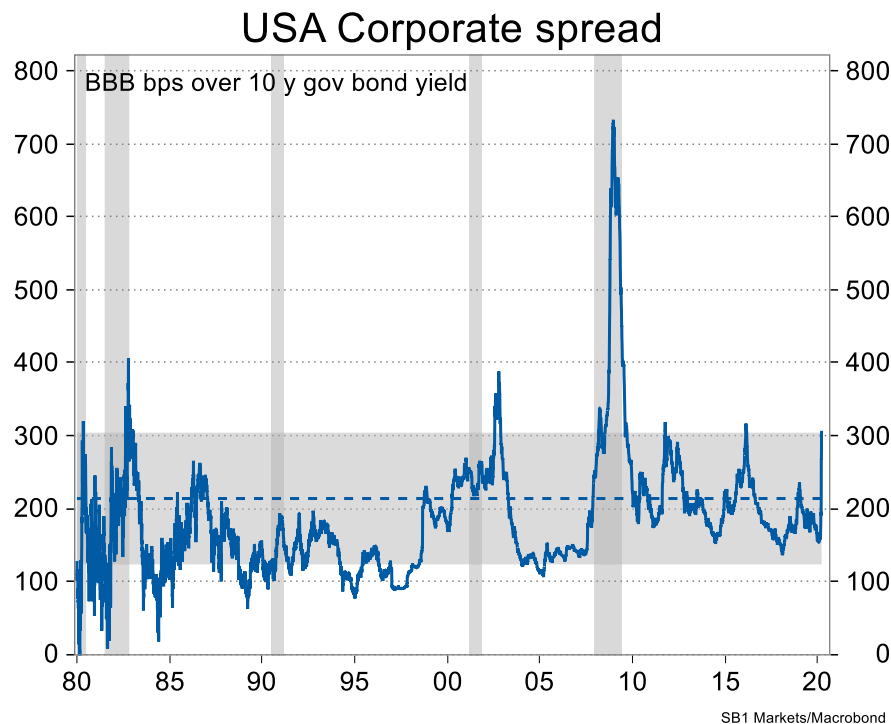


SB1 Markets/Macrobond

- 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 has accelerated the past two weeks as Covid-19 spread rapidly outside China. Last week, bond yields turned up while stocks stumbled, we doubt this will last
- We expect markets to move closer to the recession corner the coming weeks, should the coronavirus not calm down substantially. Bond yields are very low and the downside is limited, unless the world economy should move into a severe recession (which it might)

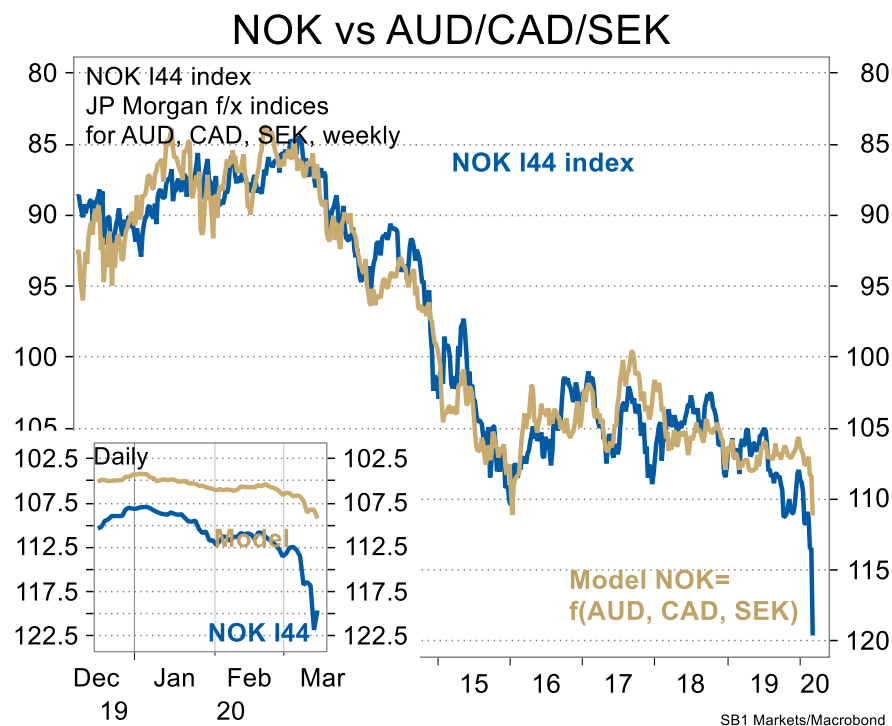
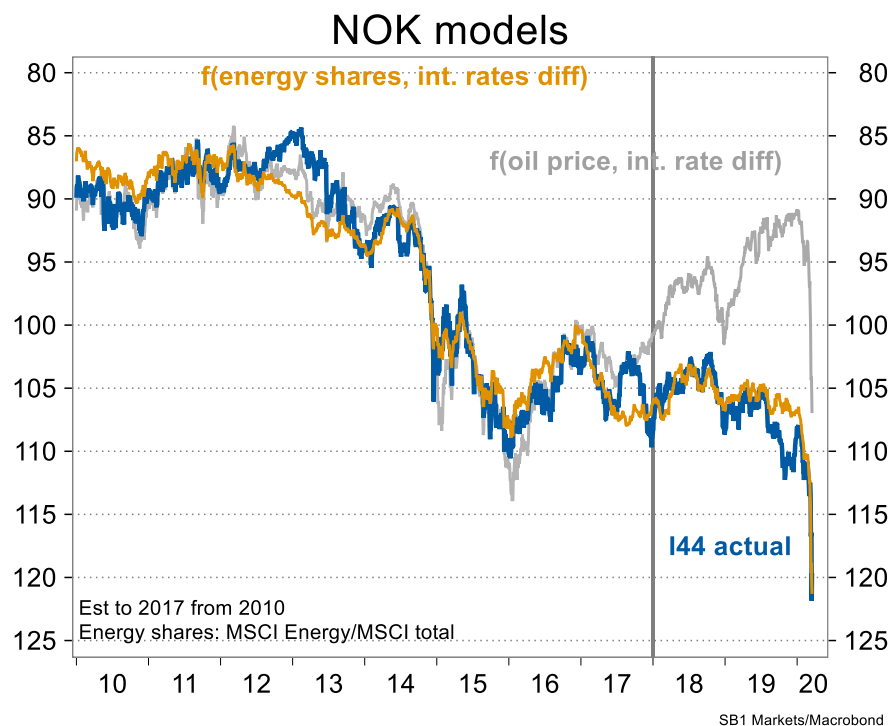
Credit spreads straight up but still low compared to 2008

Spreads are soaring on the corona pandemic



NOK marginally 'too strong' vs energy shares, far below supercycle currencies

NOK is 8% too weak vs the 'supercycle' model but 1.4% 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 [$\text{NOK} = f(\text{AUD}, \text{CAD}, \text{SEK})$, with just a marginal contribution from SEK]. The EM x CNY currency aggregate is also quite closely correlated to NOK
 - The oil company share has model slipped along with the NOK since early January, and tumbled the past week, as the oil price drop sent oil company stock prices rapidly down. The NOK is now marginally 'too strong' vs the oil price model
 - Both AUD and CAD are sensitive to oil/energy prices and – together with the SEK – global growth outlook. The past week, the NOK depreciated much more than the SEK and CAD, but equal to AUD

The Calendar

In focus: Mostly corona.. And Fed and PBoC monetary policy decisions (and no longer Norges Bank)

Time	Country	Indicator	Period	Forecast	Prior
Monday Mar 16					
08:00	NO	Trade Balance NOK	Feb	--	21.2b
13:30	US	NY Fed Empire Manufacturing Survey	Mar	6.1	12.9
Tuesday Mar 17					
05:30	JN	Industrial Production MoM	Jan F	--	0.8%
10:30	UK	Average Weekly Earnings YoY	Jan	--	2.9%
10:30	UK	ILO Unemployment Rate	Jan	--	3.8%
11:00	EC	Labour Costs YoY	4Q	--	2.6%
11:00	GE	ZEW Survey Expectations	Mar	--	8.7
13:30	US	Retail Sales Advance MoM	Feb	0.2%	0.3%
13:30	US	Retail Sales Core	Feb	0.4%	0.0%
14:15	US	Manufacturing Production	Feb	--	-0.1%
15:00	US	JOLTS Job Openings	Jan	--	6423
15:00	US	NAHB Housing Market Index	Mar	75	74
Wednesday Mar 18					
11:00	EC	CPI Core YoY	Feb F	--	1.2%
13:30	US	Building Permits	Feb	1490k	1551k
13:30	US	Housing Starts	Feb	1490k	1567k
19:00	US	FOMC Rate Decision	Mar-18	0.75-1%	1-1.25%
Thursday Mar 19					
00:30	JN	CPI Ex Fresh Food, Energy YoY	Feb	--	0.8%
05:30	JN	All Industry Activity Index MoM	Jan	--	0.0%
06:00	SW	House Prices, Valueguard	Feb		
13:30	US	Current Account Balance	4Q	--	-\$124.1b
13:30	US	Philadelphia Fed Business Outlook	Mar	12.5	36.7
13:30	US	Initial Jobless Claims	Mar-14	--	--
15:00	US	Leading Index	Feb	0.1%	0.8%
	JN	BOJ Policy Balance Rate	Mar-19	--	-0.1%
Friday Mar 20					
02:30	CH	1-Year Loan Prime Rate	Mar	4.00%	4.05%
02:30	CH	5-Year Loan Prime Rate	Mar	4.70%	4.75%
15:00	US	Existing Home Sales	Feb	5.55m	5.46m

• China

- » **The Peoples' Bank of China** has slowly turned more expansionary, additional 5 bps cuts are expected this week to boost activity

• US

- » **The Fed** is expected to deliver another interest rate cut, as the FOMC usually does at the meeting after an 'emergency' cut. Markets are pricing a high probability of a 100 bps cut, down to 0-0.25%
- » **Retail sales** are slowly cooling. We doubt the coronavirus had much impacts on February sales, however, March data are likely to be affected
- » **Manufacturing production** has stabilized, the PMI/ISM suggests a decline in March, as the virus outbreak caused supply chain disruptions. The first **March regional manufacturing surveys** will provide more information on these impacts
- » **Housing starts** are soaring and **home sales** are climbing, falling interest rates may boost demand but this effect will probably be offset by rising uncertainties and potentially a drag on economic growth

• Eurozone

- » **Labour cost inflation** has stalled at approx. 2.5% but the cost pressure is not low, as productivity growth has vanished
- » **The German ZEW survey** will drop as Covid-19 hits sentiment

Our main views

	Main scenario	Recent key data points
Global growth cycle	The cycle was maturing, 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. <u>The virus may now hurt the world economy badly.</u> 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 of a global growth recession (GDP growth below 2%) is substantial. Growth has slowed to 3% from 4%. We have revised our 2.8% 2020 growth forecast down to 2% and will revise it substantially down	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	Before Covid-19 hit, we thought growth would 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. Then corona hit. The Fed has cut to zero, the stock market has fallen sharply – and the economy can easily enter a recession. Risks, except for corona impacts: Policy uncertainty/trade/business investments & debt, not household demand or debt	<u>Fed cut to zero and supplied more liquidity. Trump closed the US borders to Europeans. Core CPI inflation rose marginally to 2.4%, producer price inflation do not signal an upturn. The public sector deficit rose to 7.6% GDP. Consumer sentiment weakened in early March, still at a rather high level</u>
EMU	Will corona slow the EMU economy further? No doubt. We expect a sizeable impact in Q1 mostly in Italy and Spain, and more in other countries in Q2. Before corona, the manufacturing downturn was easing and the consumer side had 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 (which is now ramped up). Fiscal policy debate has turned, stimulus is like. Italy is in recession, and the risk is increasing elsewhere	<u>ECB did not deliver the expected interest rate cut, instead, TLTRO and QE will be ramped up. Industrial production picked up in January but activity later in Q1 will be hampered by corona.</u>
Norway	Growth has been above trend, will slow substantially in 2020, Q1 and even more Q2 will be heavily impacted by the corona shutdown. Unempl. has flattened out and will increase, and extremely if temporary laid offs are added. Oil investments will decline through 2020. Mainland business inv. are not low, will slow substantially. Housing starts are falling. Growth in households' debt has slowed to close to income growth. Risks, other than corona: Debt, housing. A harsh global setback	<u>Norges Bank cut 50 bps on Friday, the Bank was expected to wait until the March 19 meeting. Another cut is likely the coming days</u>

In this report

Global

- Our best corona charts: When will we see any impact of the Italian lock down?
- Corona: Monetary and fiscal responses so far
- How badly may the Norwegian economy be hurt? Here are some guesstimates
- Global macro data dragged down by China PMI collapse, others still upbeat
- Chinese auto sales down 'just' 58%, we feared more. ROW sales flat but low

USA

- Core inflation inched up to 2.4% in February
- Producer prices do not signal an uplift in consumer price inflation
- US households have been deleveraging, corporates are more exposed
- The public sector deficit widened to 7.6% of GDP in Q4
- Small businesses' optimism steady in Feb – wait for the corona impact
- UoM consumer sentiment down in early March but far from out (yet)
- New jobless claims steady at a very low level, no weakness spotted
- Nowcasters mixed, signals 1.6 to 3.1% growth in Q1

China

- PBoC announced another cut in banks' reserve requirements, by 50-100 bps
- Industrial production down 5% in Jan, 27 % in Feb. The YTD rate -13.5%
- Retail sales collapsed in January & February
- Nominal investments down 27%
- Credit growth steady amid the economic standstill, supported by easing policies?
- Total inflation remains high at 5.2%,

EMU

- The ECB adds to bank stimulus and increases QE but kept interest rates on hold
- GDP growth nudged up marginally in Q4, details rather weak
- Industrial production bounced back up in January, trend still down
- German exports have flattened out, imports still trending up

Sweden

- Unemployment climbs and employment growth is ebbing, while participation rises
- Core inflation unch at 1.6%, total inflation drops

Norway

- Norges Bank delivered a 50 bps emergency cut and signals 25 bps more in June
- Norges Bank's Q1 Network reports a moderate slowdown – before corona hit
- Core inflation down to 2.1% in Feb, reversing most of the Jan spike
- New home sales and starts stabilized after steep declines

Highlights

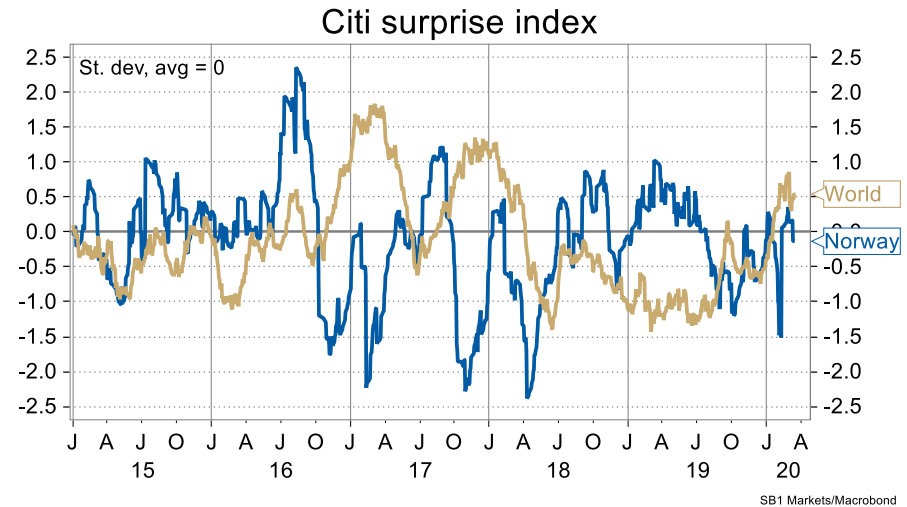
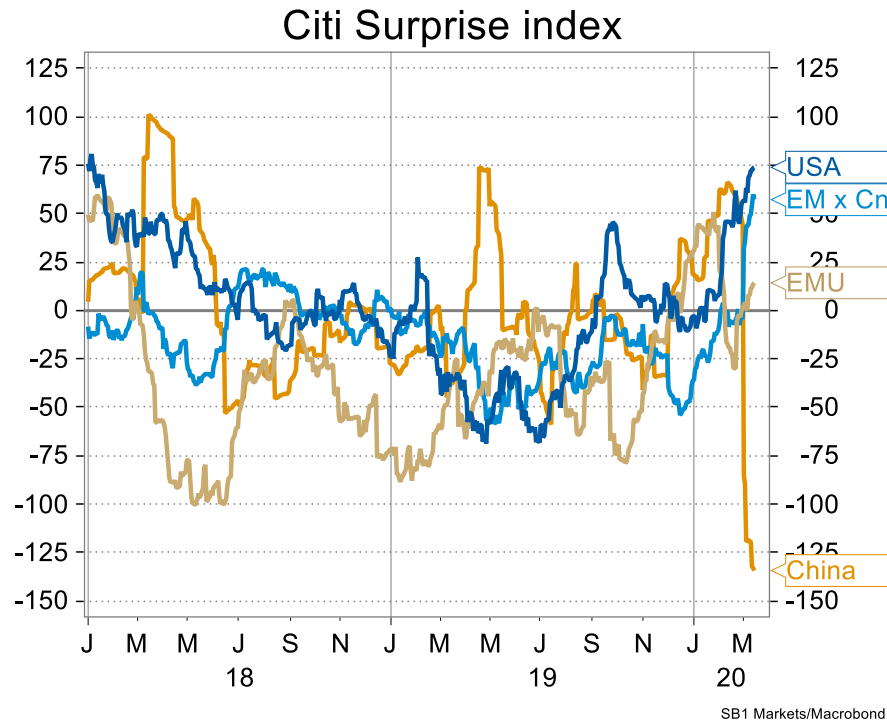
The world around us

The Norwegian economy

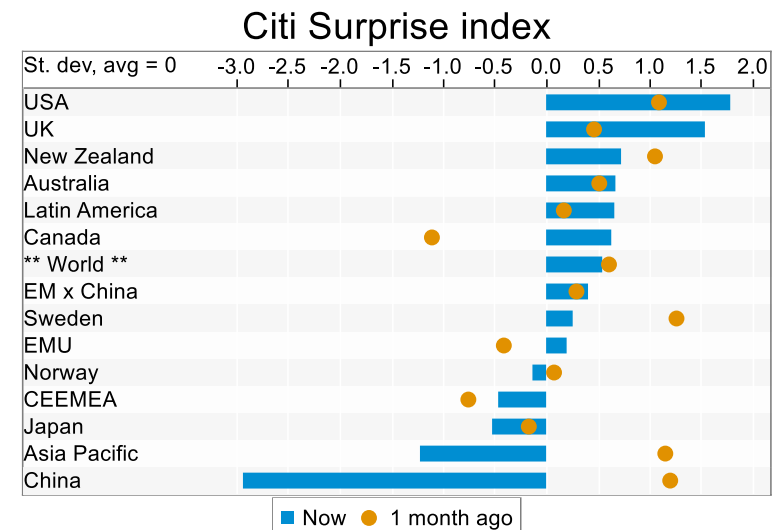
Market charts & comments

Global macro data dragged down by China PMI collapse, other data 'irrelevant'

US and European data flows are not yet reflecting any coronavirus impacts (but they will, soon!)

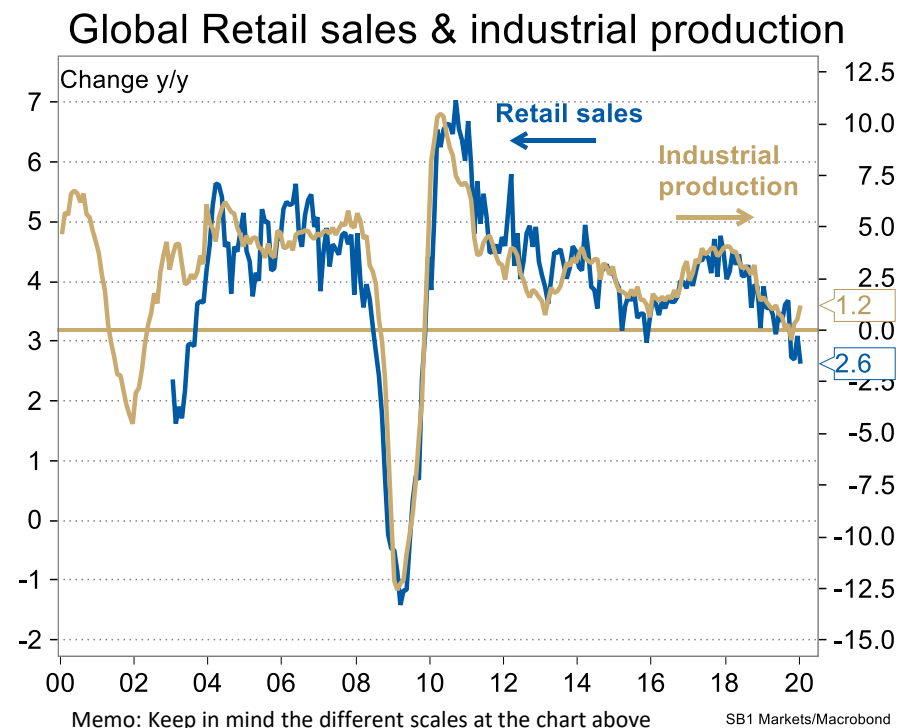
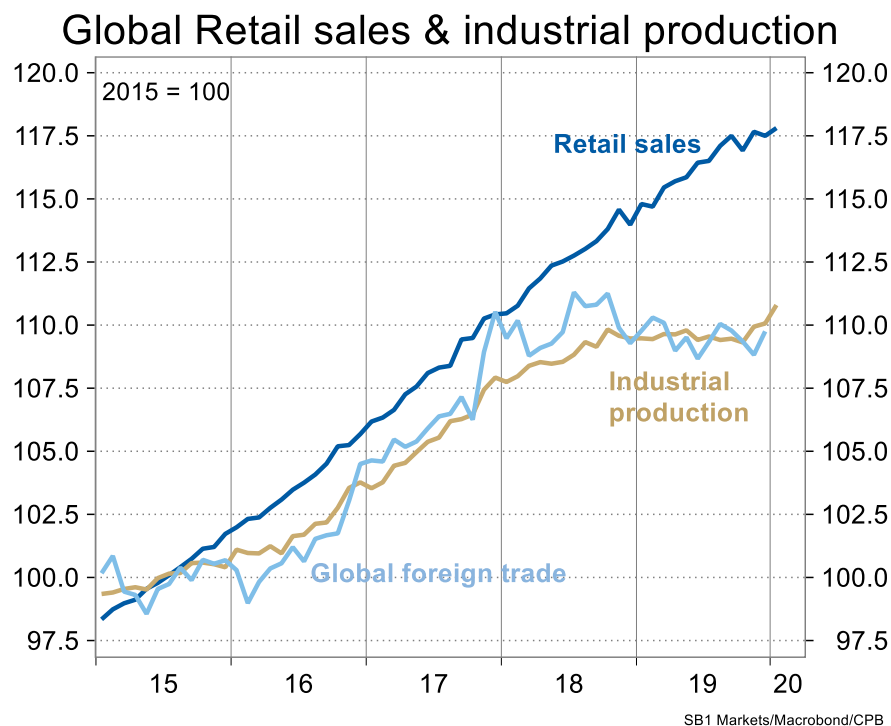


- Global macro data have in sum been better than expected since early January. The past few weeks, the steep (corona) drop in the Chinese PMIs, plus some others, like Japan, have sent the global index down. Global macro data flows will no doubt be heavily impacted by the virus outbreak the coming weeks and months, as February/March data are published
- The US surprise index is now the most upbeat
- EMU figures above expectations, following some weeks of softer data
- Emerging markets x China are soaring, partly helped by strong Indian PMIs
- Norwegian data are marginally downbeat vs expectations



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

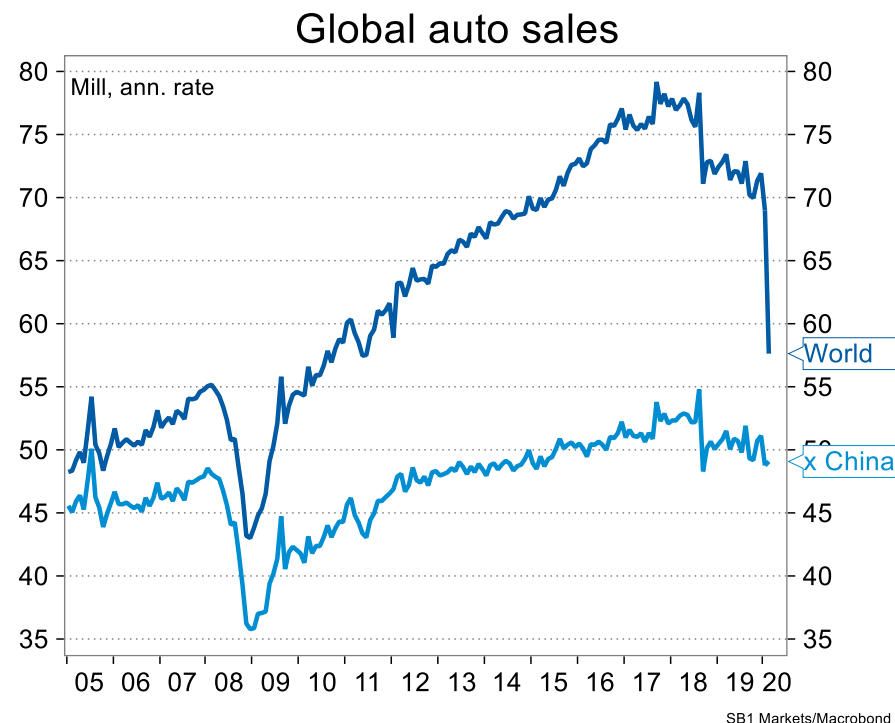
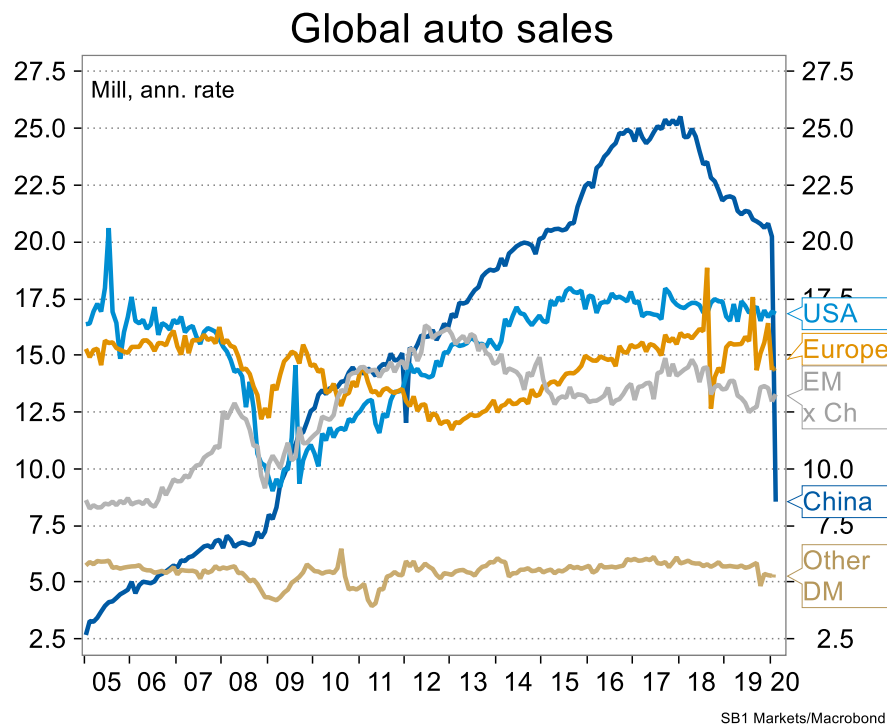
As of Jan/Dec, global trade had stabilized, industrial production and retail sales recovered marginally



- **Global industrial production** rose in January. Production will drop in steeply in February and even more in March. The global manufacturing PMI slipped to 47.2 in February, indicating a rapid decline in global production
- **Retail sales rose in January 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 will no doubt hit global trade hard in February/March

Chinese auto sales down just 58%, we feared more. ROW sales flat but low

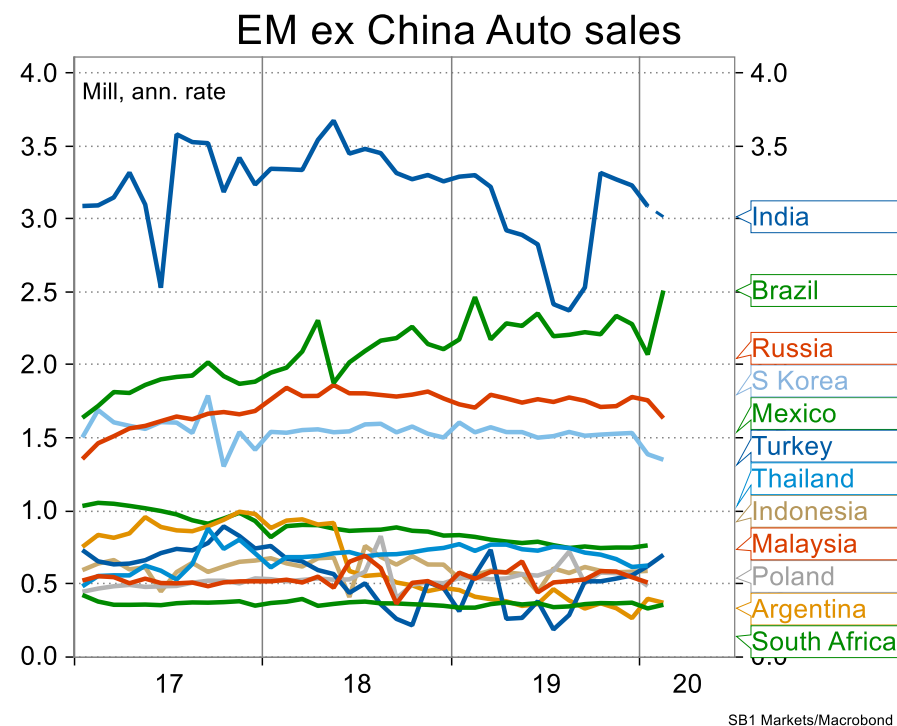
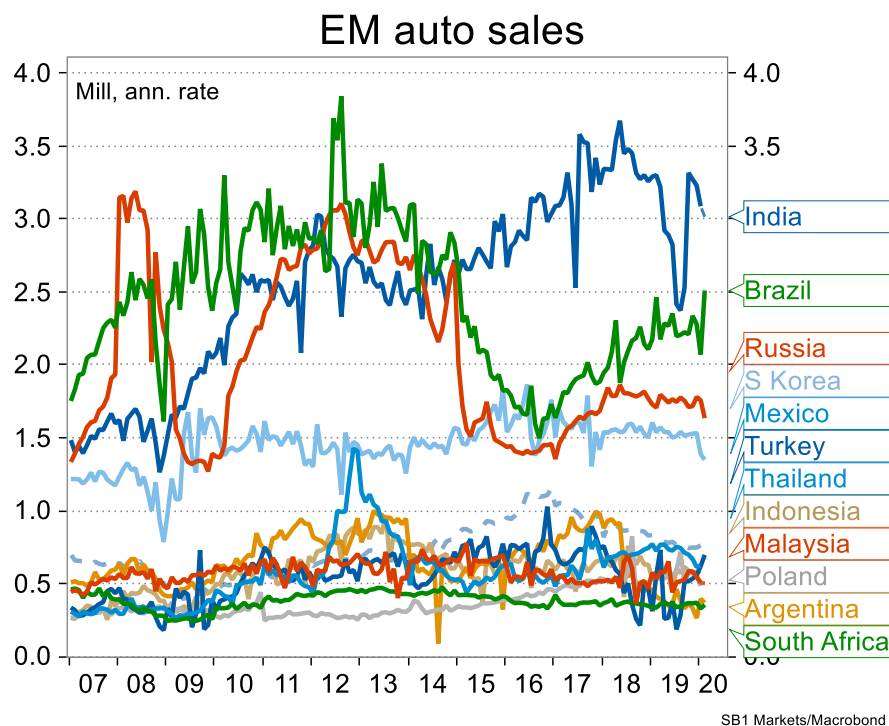
Global sales at 10 y low. Next months, others will follow. The timing of the recovery is more uncertain



- Global sales fell by 16% m/m in February (our estimate) and are 21% y/y, due to the corona setback in China. Sales fell in some other countries, but rose in others, in sum close to flat. However, the x China level is low
 - » Chines sales fell less than production (-83%), and inventories must have been reduced. We expect sales to recover the coming months as the economy us slowly returning to normal activity level
- European sales are volatile, and have started the year at a low level, and the trend is not up. US sales rose marginally but are trending down. Japanese sales are still low
- Auto sales in EM ex. China rose in February but the level is not impressive, and the short term trend is flat, at best

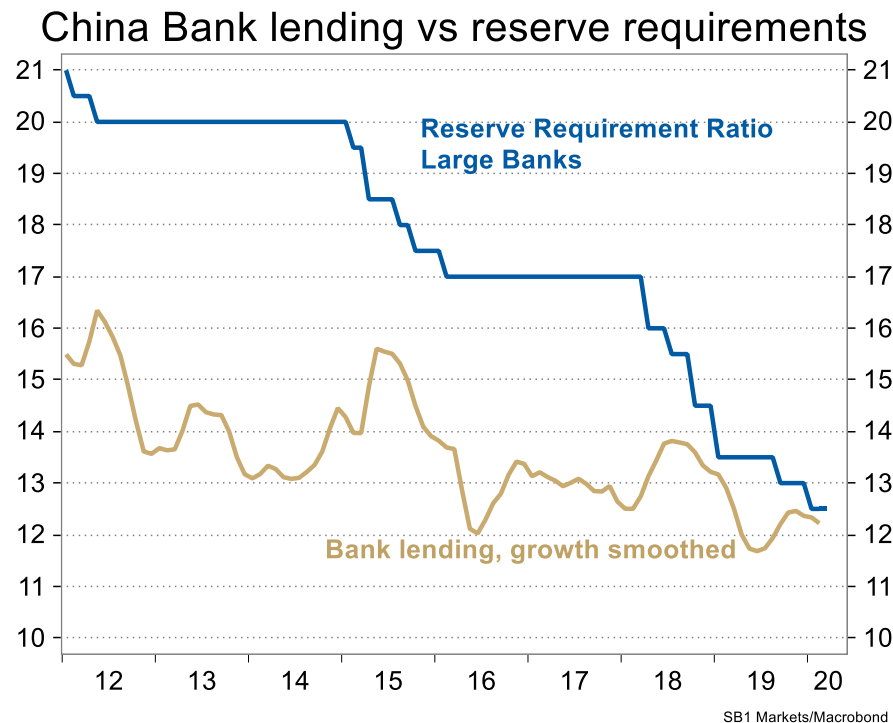
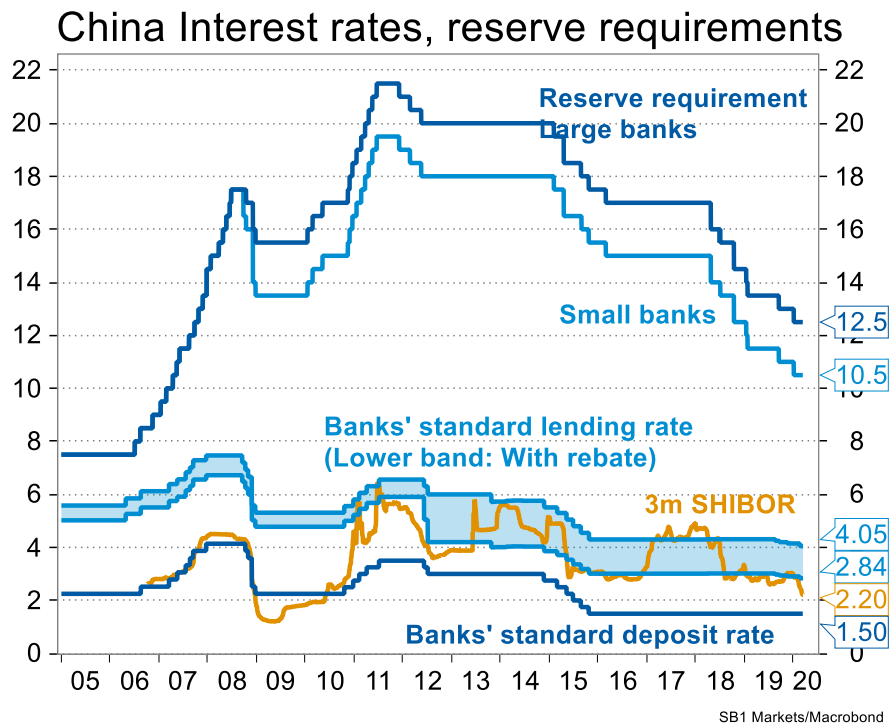
Mixed in Emerging Markets; Brazil & Turkey up, Russia & South Korea

South Korea will probably report a far bigger decline in sales in March



PBoC announced another cut in banks' reserve requirements, by 50-100 bps

The PBoC is slowly turning more expansionary – more interest rate cuts are expected this week



- On Friday, the PBoC cut the banks' reserve requirements for the 2nd time this year (and the 7th since 2018). The cut is to release USD 79 bn in cash, to help offset the growth disruptions from the coronavirus outbreak
- In February, the PBoC cut the benchmark rate, the 1 year loan prime rate, by 10 bps, to 4.05%. The 5 year loan rate was lowered by 5 bps, to 4.75% last Monday, a medium term lending rate was cut 10 bps
- The authorities will probably roll out more monetary easing as well as securing liquidity in the banking system and by encoring banks to support cash constrained companies with liquidity too (which they are already doing). However, the PBoC will have to balance the need for short term stimulus with it's long term challenges of an elevated growth in debt

Wait for the next shoe to drop: GDP will follow suit

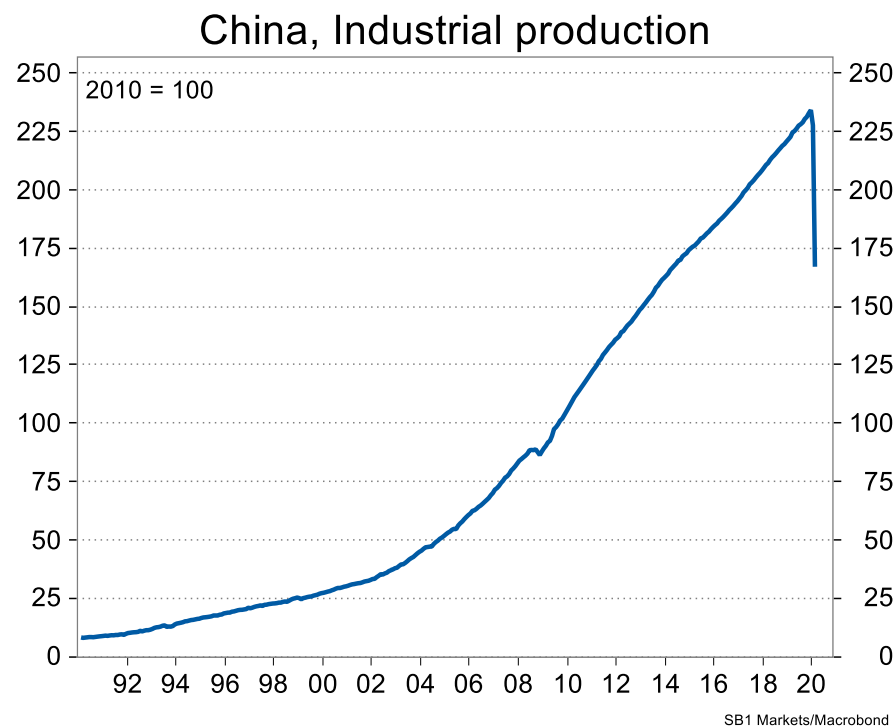
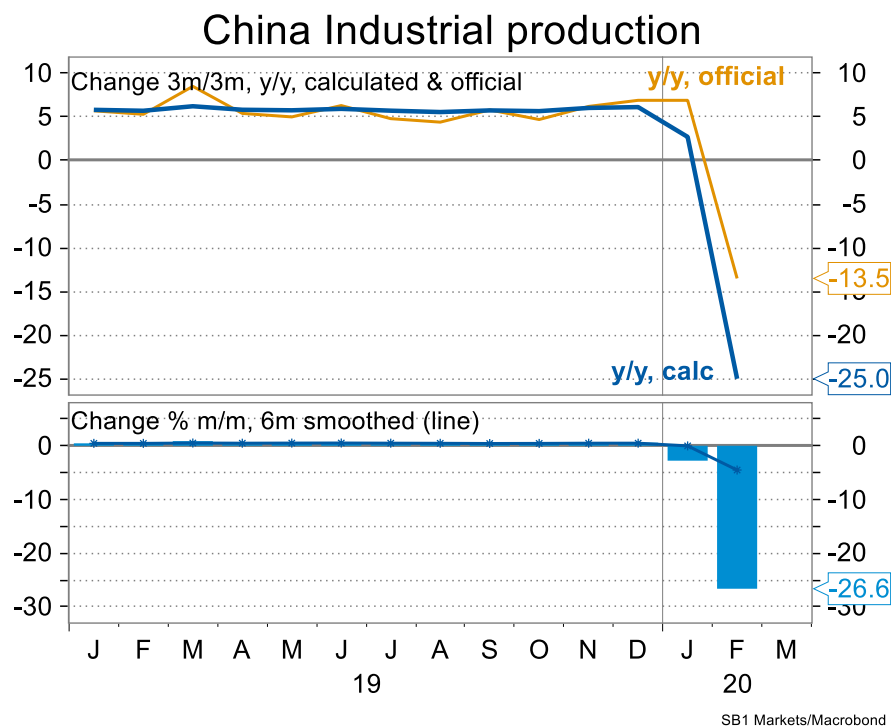
Industrial production and investments down 27% in Feb, retail sales just 15%. Q1 GDP down 10%?



- As they say in China: *In the first two months, despite the sudden outbreak of covid-19, under the strong guidance of CPC Central Committee with Comrade Xi Jinping at its core, all regions and departments coordinated efforts to advance both the prevention and control of the epidemic and the economic and social development, made an all-out effort to fight the battle against the epidemic, and scored significant achievements. Thanks to these policies and measures, the resumption of work and production accelerated, and the order of production and life was gradually restored. The national economy performed in an orderly manner and people's basic livelihood were effectively guaranteed.*
- **Industrial production and investments were approx as we assumed (but far weaker than 'official' consensus) but retail sales somewhat stronger, still sharply down, even in January**
- **Retail sales fell 10% in Jan and 5% i Feb, the mix was strange**
- **We have not recalculated our GDP forecast, but 10% q/q does not seem totally unrealistic, given a gradual recovery in March**
- **Credit growth** was OK in February, no corona impact

Industrial production down 5% in Jan, 27 % in Feb. The YTD rate -13.5%

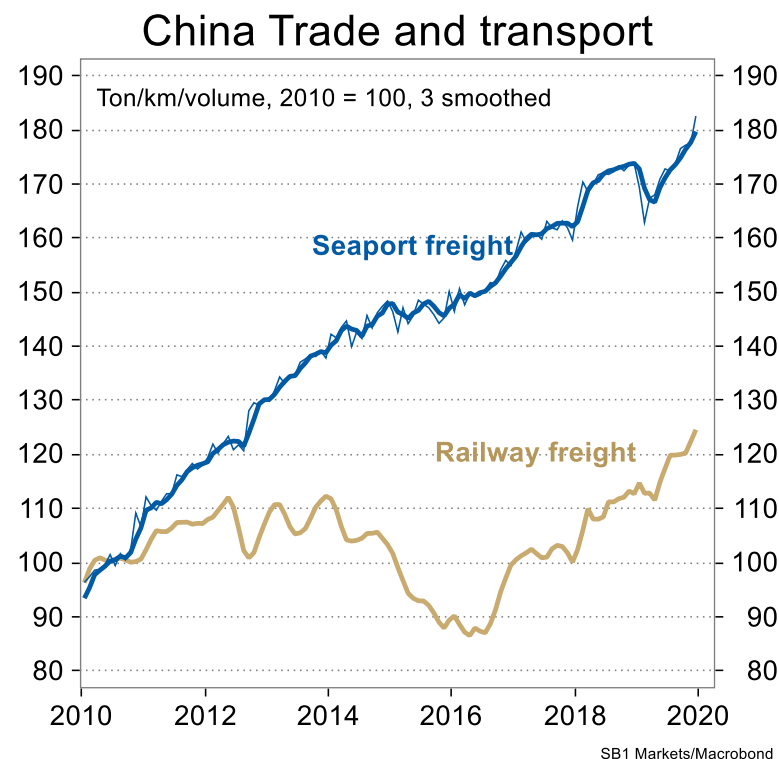
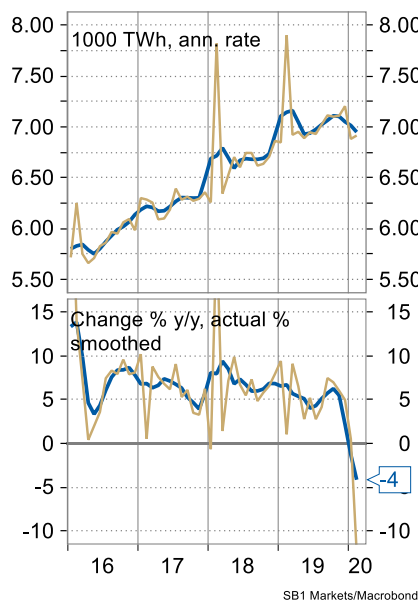
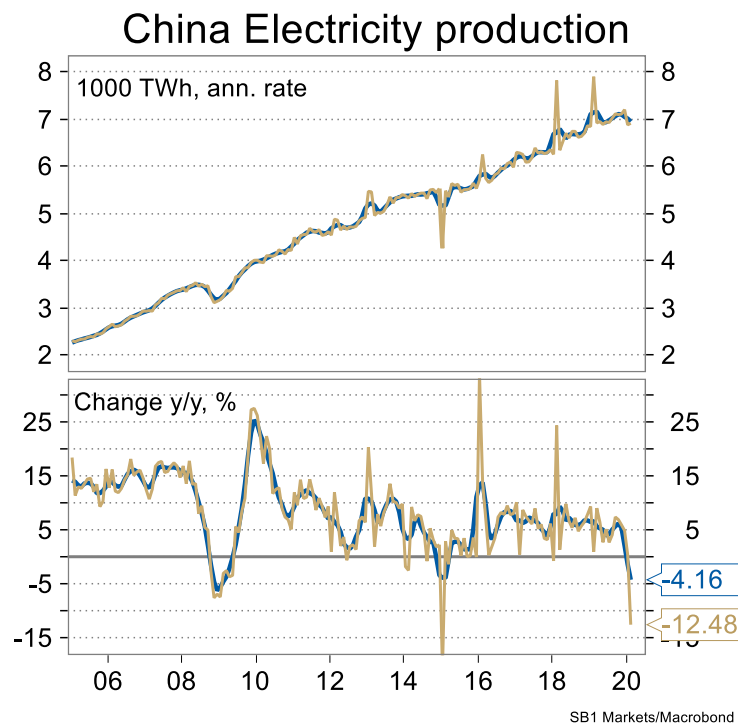
For reasons we do not understand, production was expected down 3% YTD



- Nobody could seriously have expected production to decline by just 3% y/y in Jan/Feb (say +6% in Jan and -12% in Feb)
 - » Production in Feb was up 3% y/y in Jan and down 25% y/y in Feb, according to our calculations
 - » The official y/y growth rate is anyway 'useless', far too volatile as it is not adjusted for holidays or working days
- Production fell by 3% m/m in Jan, as some factories were closed down late in the month. In Feb, production fell by 27%
 - » If we assume a 15% m/m increase in production in March, production is down by 16% in Q1, which is too far away from our 10% q/q GDP decline est (and usually, the manufacturing sector is more volatile than the service sector, including public services)
- The Chinese manufacturing PMIs fell sharply in February, as we expected (we have not tried to recalibrate the chart to the right)

Official electricity production data are somewhat... strange?

Given daily coal consumption figures, we more than a 15% y/y drop in el. production in February

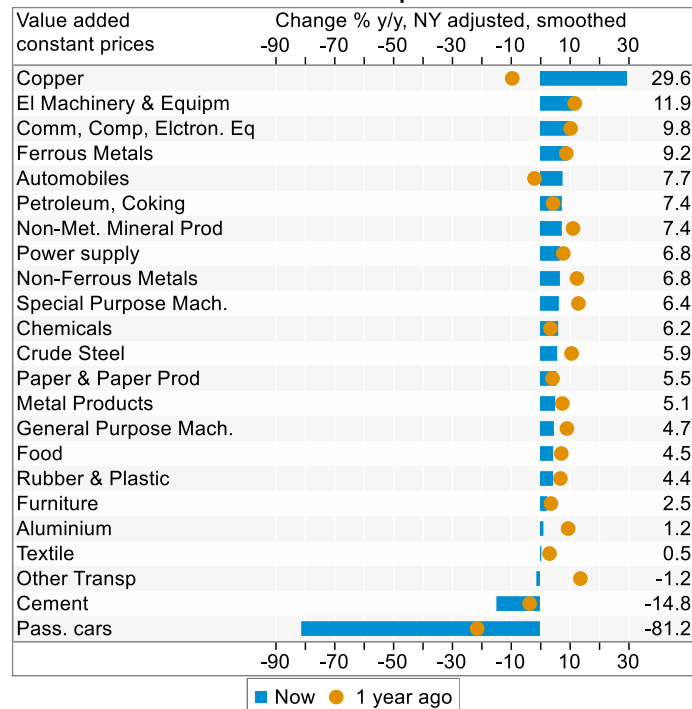


- Transport activity (seaports & railway) has recovered sharply recent months, following a setback earlier in 2019
- Transport data are not updated

Manufacturing sector data not updated/irrelevant

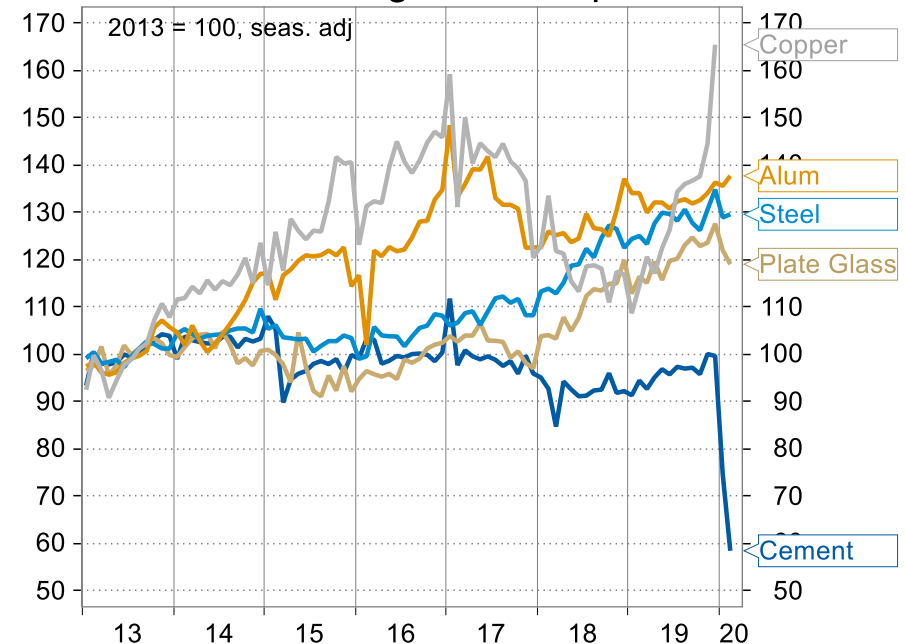
Cement prod. fell 40% m/m, autos 80%. The other are reporting 'normal growth. Somewhat strange

China Industrial production



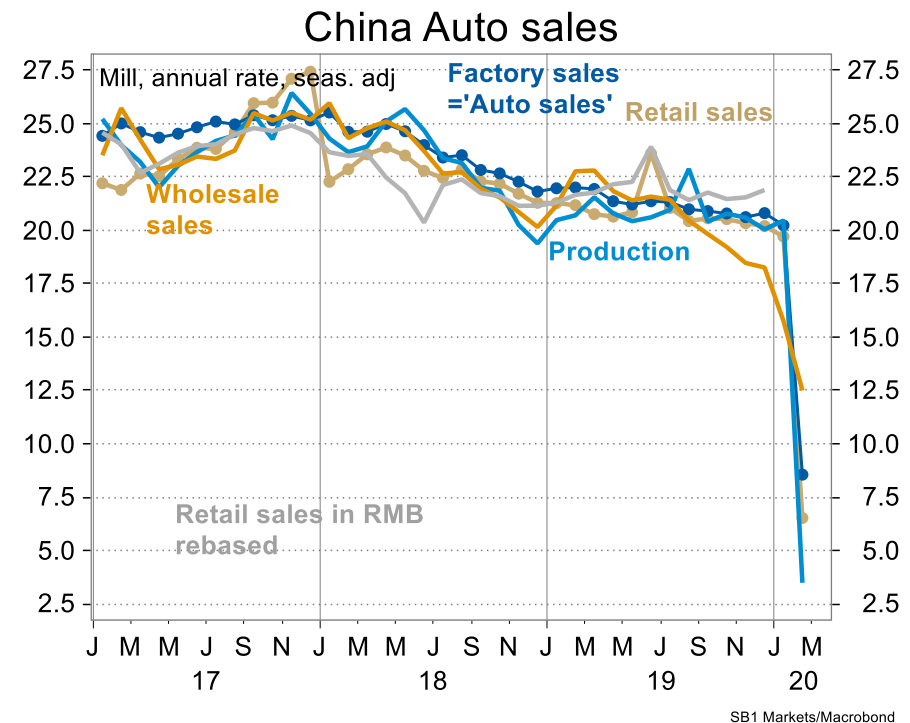
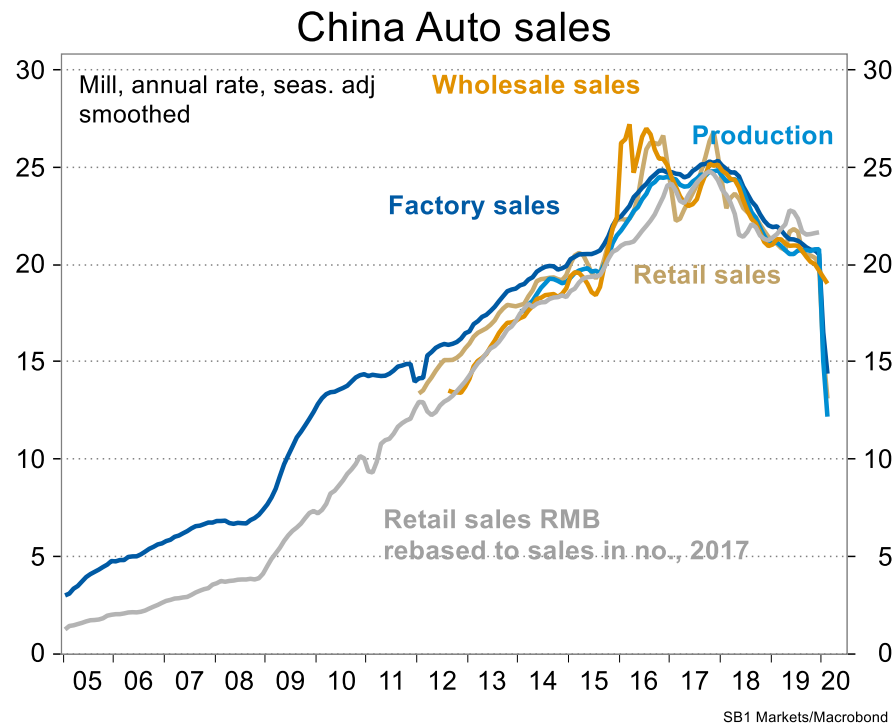
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China 'Building' material production



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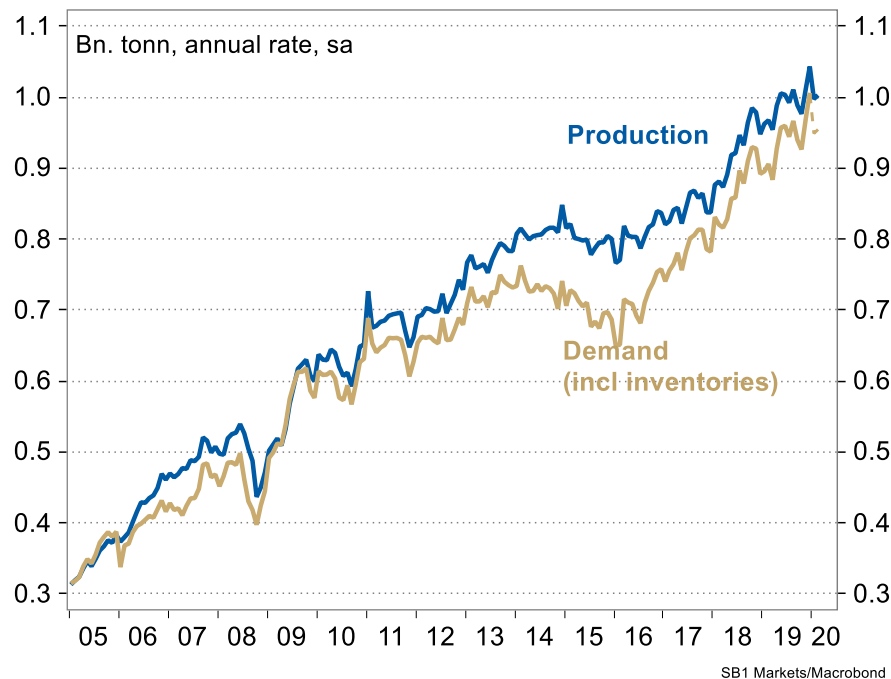
Auto production and sales data are bad – and reasonable



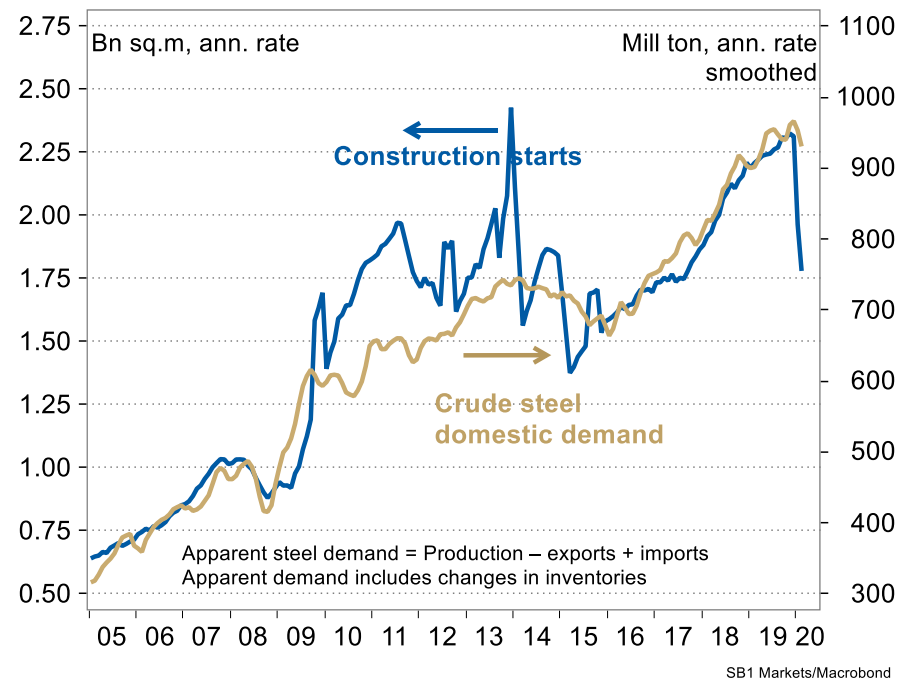
- Production: Production in factories in China, in number of units. Down 80%
- Factory sales: Deliveries from factories in China or imported cars, in units, the most common used data series for Chinese auto sales. Down 58%
- Wholesale sales: Sales from wholesalers, in units, not published
- Retail sales: Sales from retailers, in units, not published. This measure is the closest to definitions of auto sales in other countries (sales from retailers in the US, first time registrations in most other countries.)
- Retail sales RMB: Value of sales from retailers, in renminbi, not reported

Steel production (and demand) just marginally down? Does not seem likely

China Steel



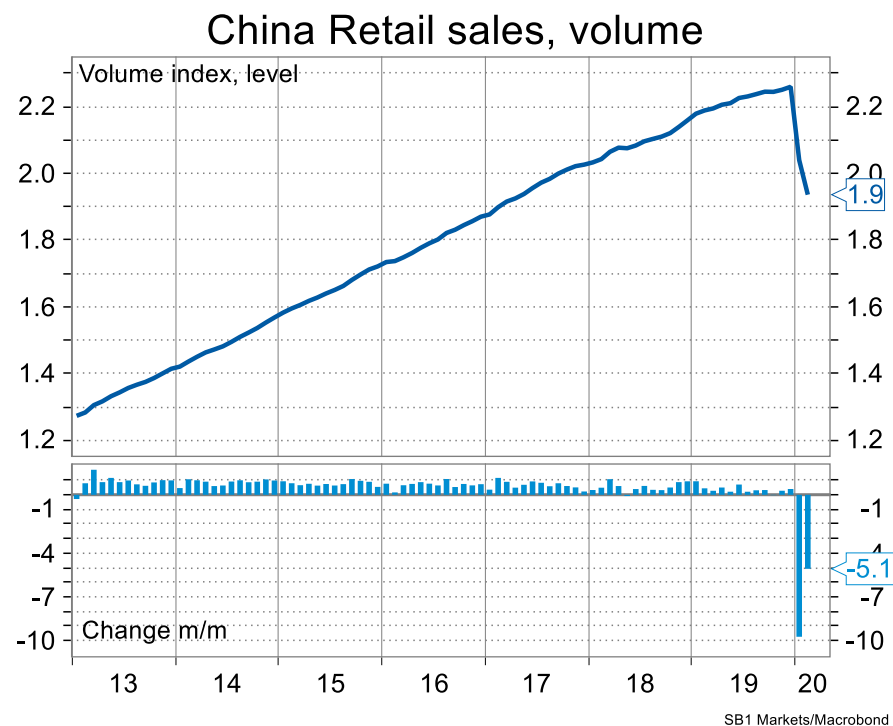
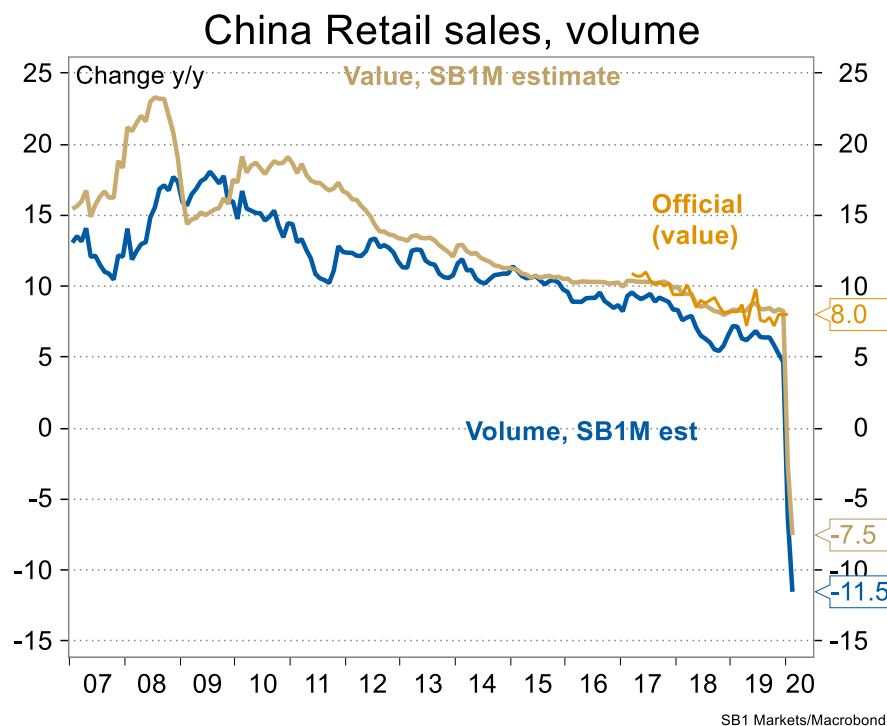
China Construction vs steel



- Housing starts down some 20% m/m

Retail sales collapsed in January & February

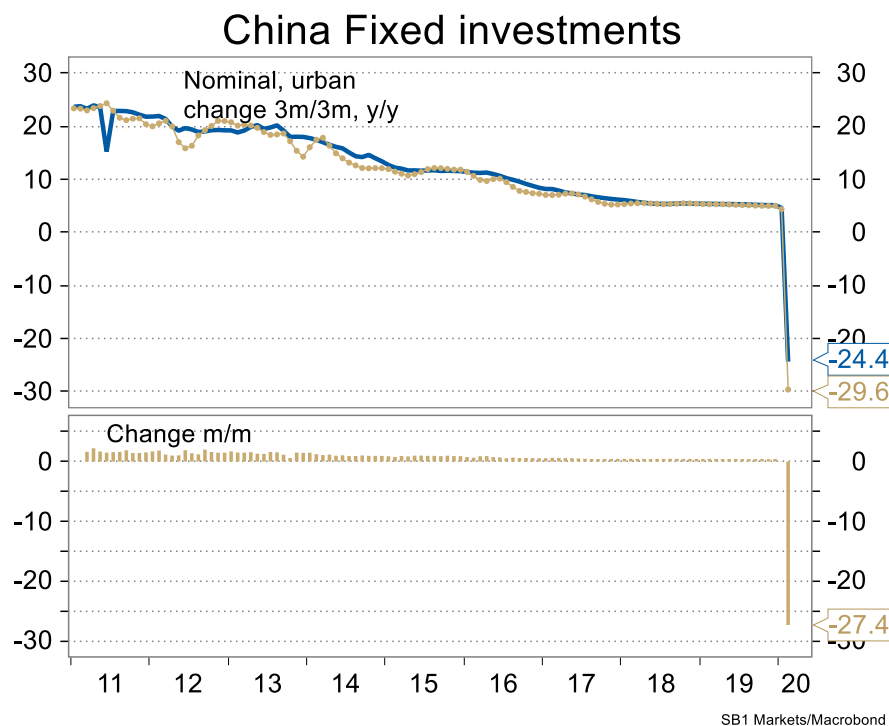
Sales volume plunged 14% in Jan/Feb, according to our estimate. Annual drop at 11.5%



- The official value growth rate held steady at 8% in January, which of course cannot be correct. Our far more accurate value growth estimate (based on monthly seas adj. data) yields a 2.7% drop y/y in January and down to a 7.5% decline in February, totally unprecedented
- We estimate a 9.7% m/m drop in sales volume in January and another 5.1% slip in February. The annual rate dropped to 11.5 in February. Thus, the volume level came down 14% from December. Inflation has accelerated due to the high pork meat prices (and, thus, accelerating inflation on food). Total inflation is running at 5.4%, retail inflation 4.5%
- The coronavirus outbreak and the following lockdown no doubt curbed consumption in January & February, which was not surprising. We are surprised by the steep drop in January, as the shutdown was implemented in early February. However, January data are anyway always highly volatile due to the New Year Holiday. Signs of the speed of recovery will be more interesting now

Nominal investments down 27% in February

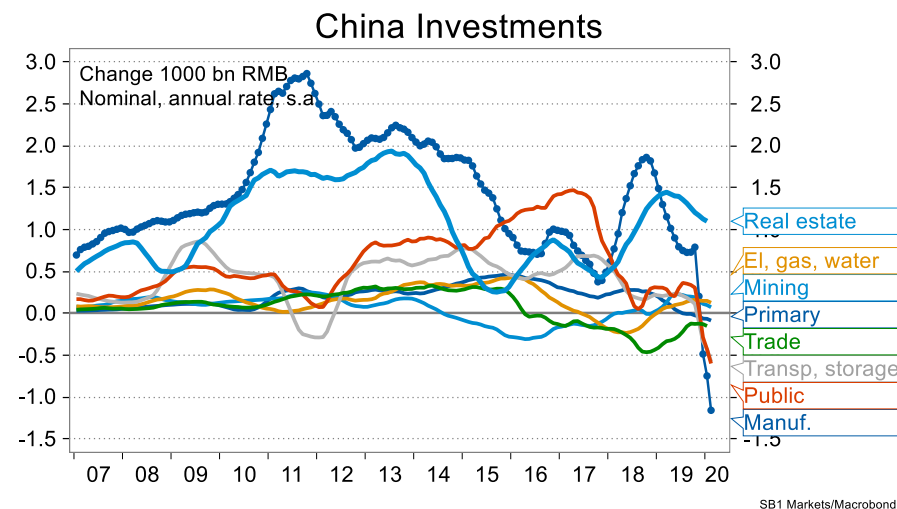
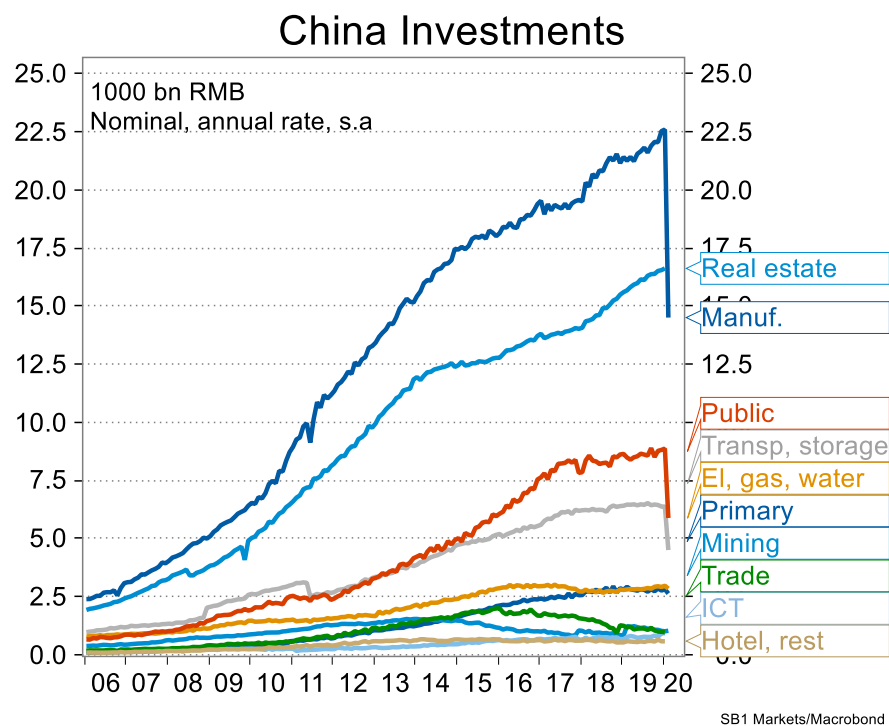
By far the steepest investments drop on record, led by manufacturing, public and transport sectors



- Urban investments dropped by 24.5% y/y ytd in February (from +5.4% in January), according to the official data, expected down just 2.0% (according to Bloomberg consensus)
- Our (usually less volatile) calculation, the blue line at the chart above, yields a 24.4% y/y decline in Feb. Investments plummeted by 27.4% m/m, following a stagnation in January
- Manufacturing investments collapsed – as well as public and transport investments – and no doubt several other sectors such as retail and hotel/restaurants (we are missing February data on some sectors)

Manufacturing investments straight down

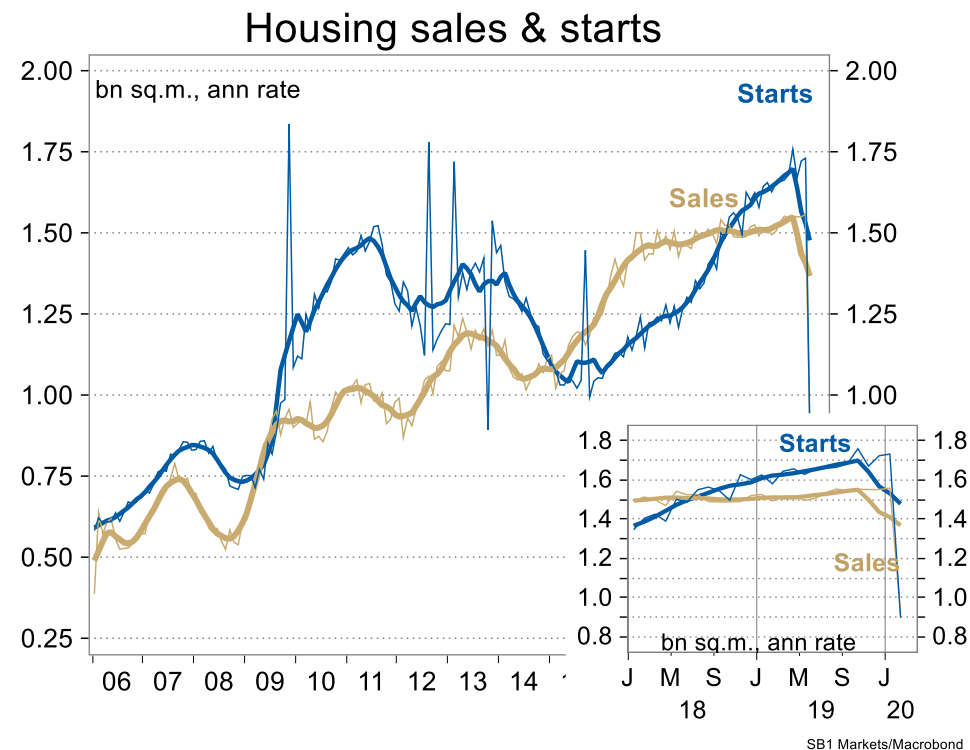
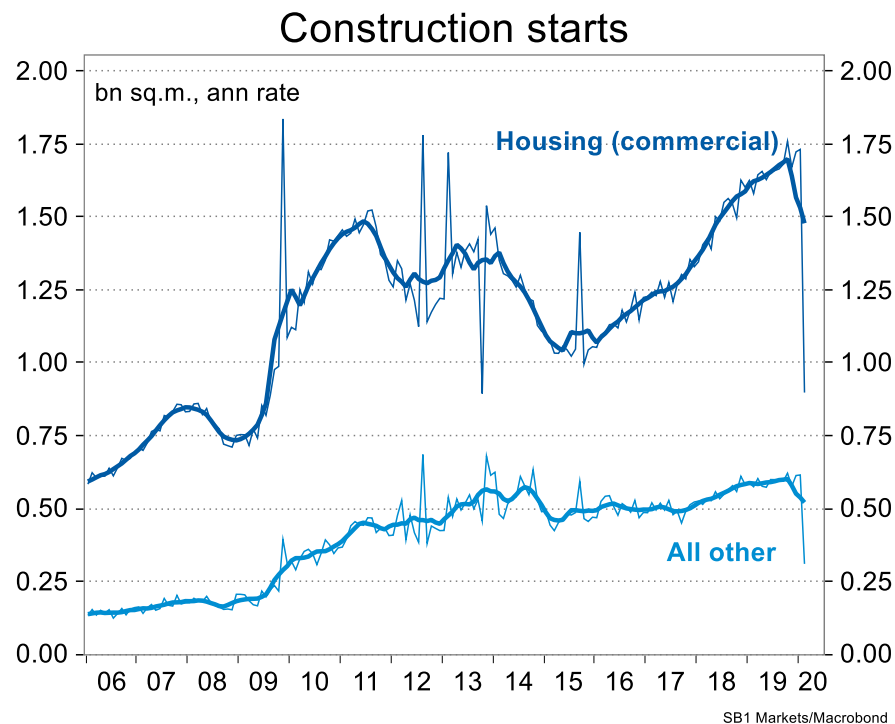
Manufacturing investments, transport and public all dropped 30% y/y



- Not all sectors have reported February figures, hotel/restaurants and retail no doubt fell rapidly

New home starts steeply down too

New home starts down 43% y/y, other construction -46%

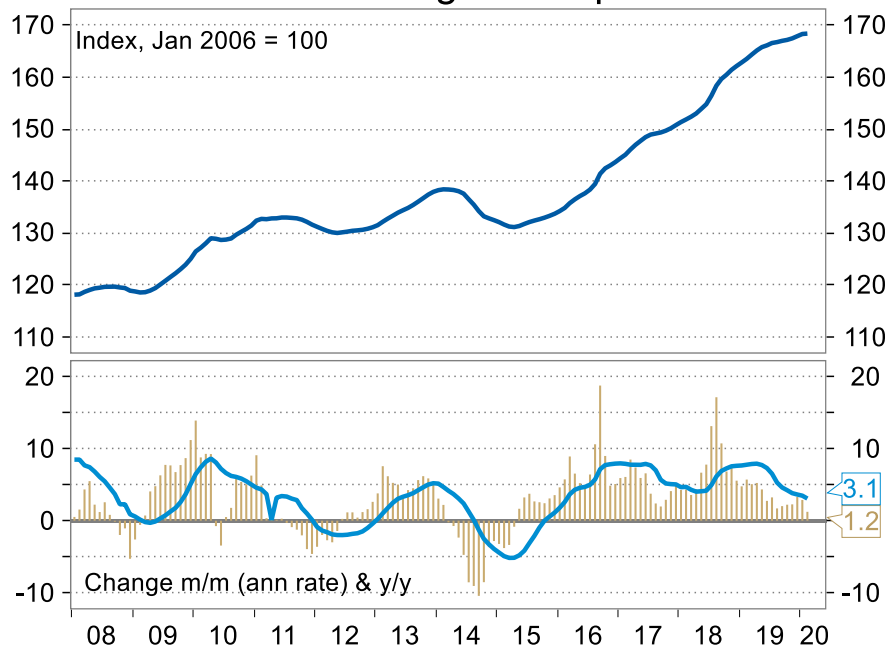


- Both housing starts and sales fell rapidly in February, starts to the lowest level since one month in 2013

House price inflation slowed in February, but prices still rose. They say

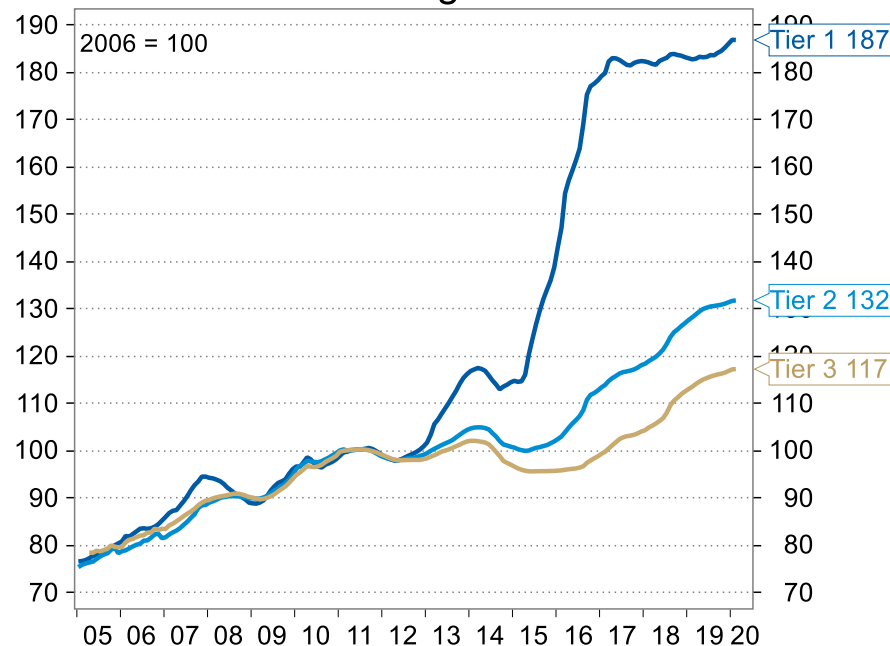
Prices up 0.1% y/y, down from 0.3% in Dec and Jan

China Existing Home prices



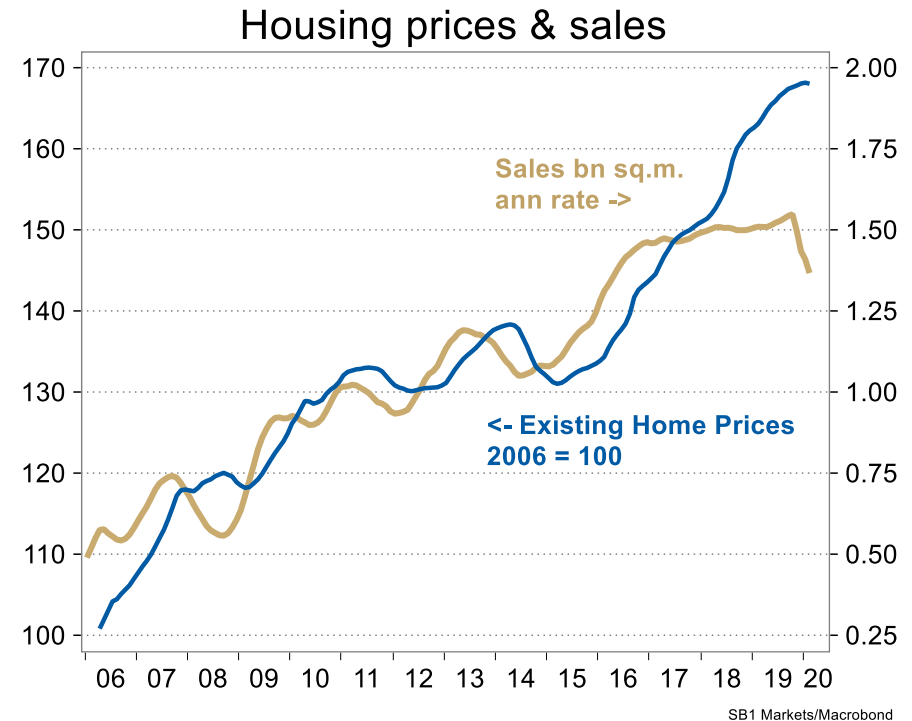
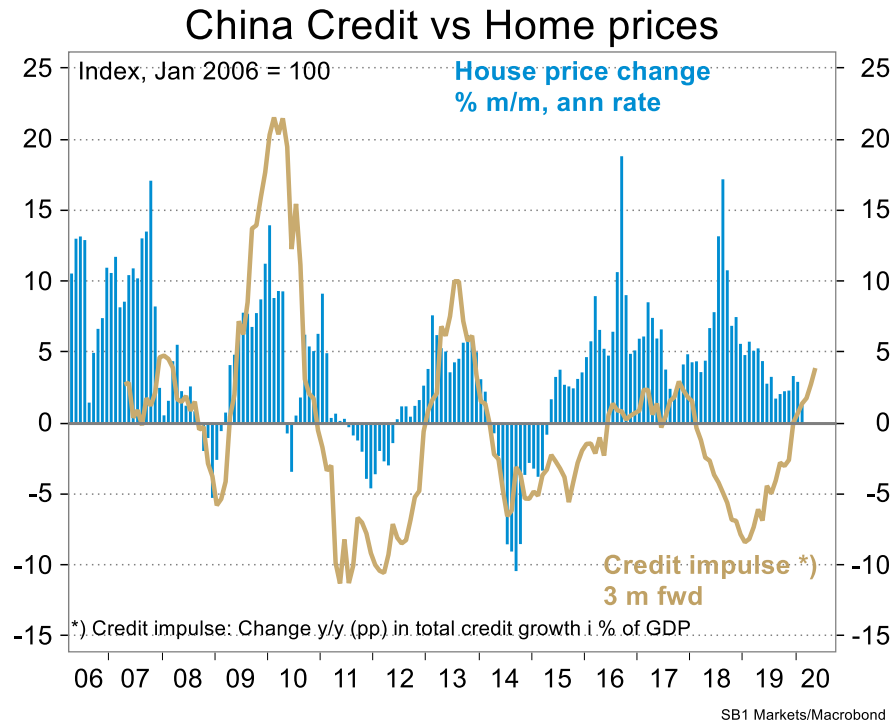
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China Existing Home Prices



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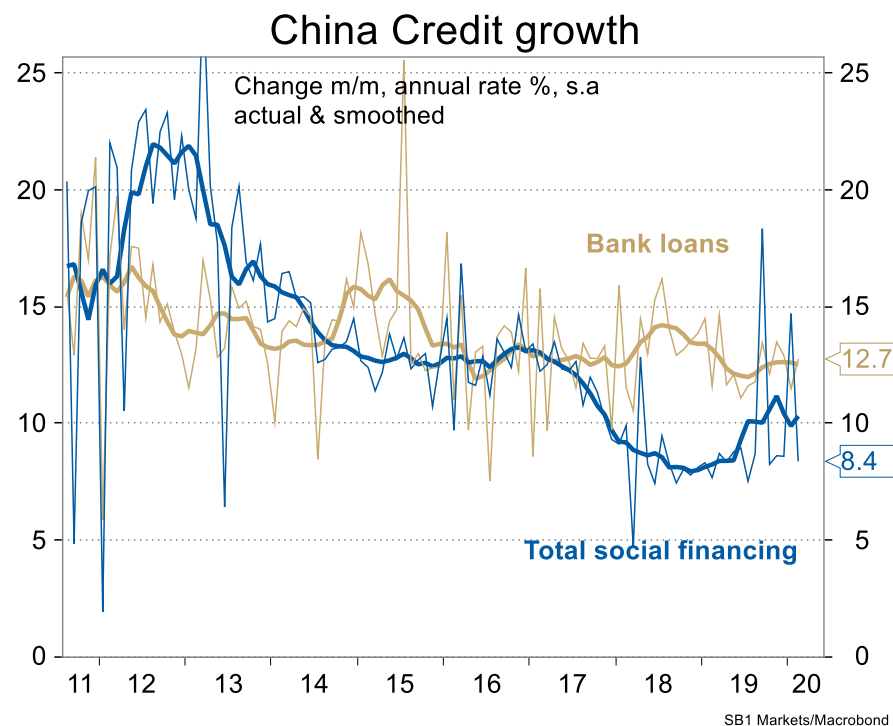
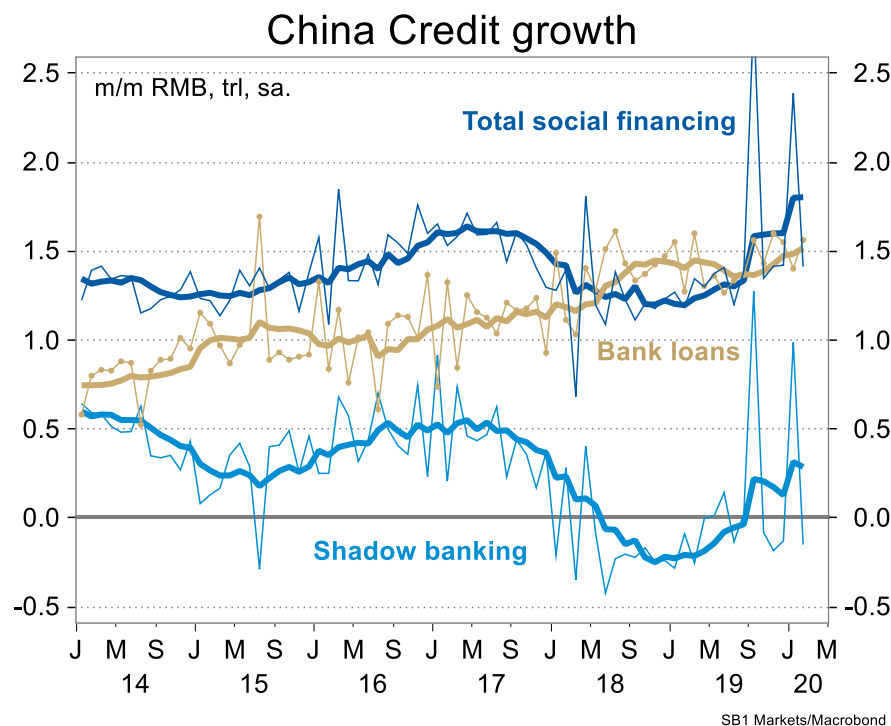
Credit impulse positive, but other things are also important these days



- Through 2018, house prices kept up surprisingly well, given the negative credit impulse
 - » That has been the case with new homes sales too – and sales are still trending slowly up
- Now, the authorities are pushing the credit accelerator – and they may succeed, as many times before, and the credit impulse has turned marginally positive. At least if we look away from the (hopefully) temporary COVID-19 impacts
- New home sales fell sharply in Feb but far less than indicated by daily activity data

Credit growth steady amid the economic standstill, supported by easing policies?

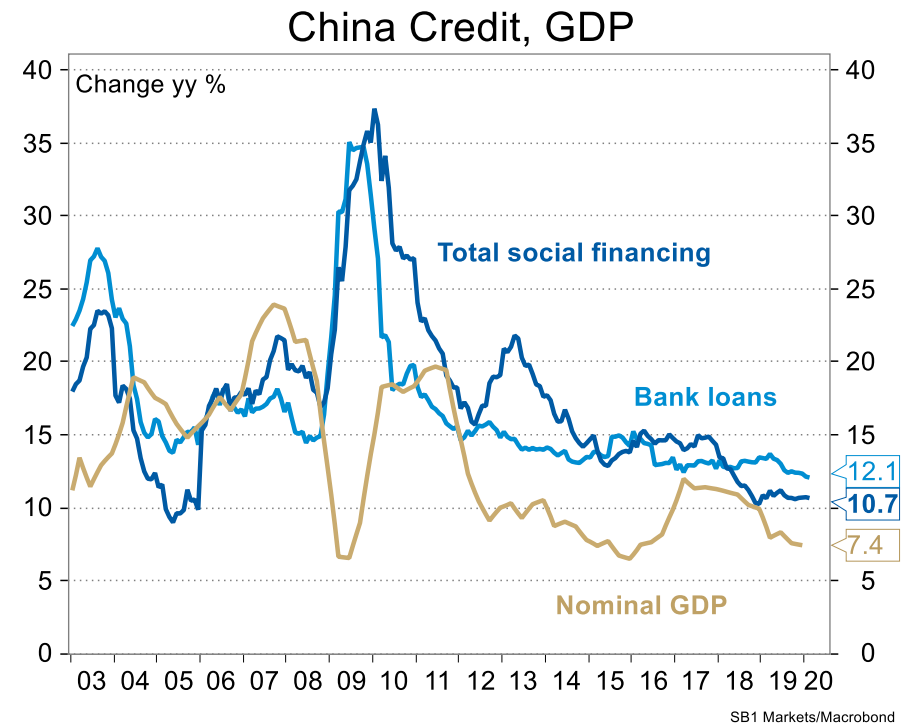
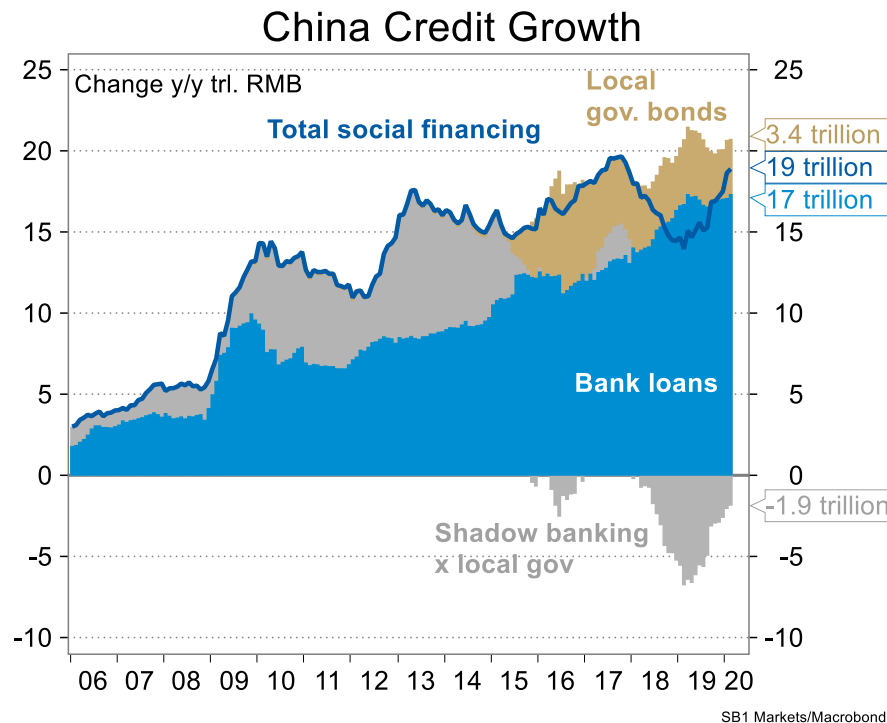
Neither bank lending nor shadow banking activity dried out in February, says the Peoples Bank



- Total credit increased by 8.4% m/m annualised in February, not far below a 'normal' pace – no signs of any collapse in credit. Bank lending accelerated and non-bank slowed, reversing the January changes. In 2003, during the SARS epidemic, total credit slowed rapidly for one month, chiefly in the shadow banking sector.
 - » Monetary stimulus measures (interest rate cuts, lending programs etc.) may have boosted lending this time, and credit lines to corporate clients are probably stretched
 - » Credit supply through the non-bank ('shadow') credit market is heading up again. Shadow banking has accounted for some 25% of total credit supply since 2000
- The underlying total credit growth has accelerated somewhat since early '19, the credit impulse (y/y) is modestly positive
- The PBoC is slowly adding more expansionary policies to boost activity amid the (corona) economic slump. On Friday, another cut in the banks reserve requirement was announced. However, there are good arguments against pushing the credit accelerator very hard. Credit growth is well above growth in nominal GDP, and high debt ratios are climbing – and construction activity remains very strong

Credit growth has accelerated over the past year

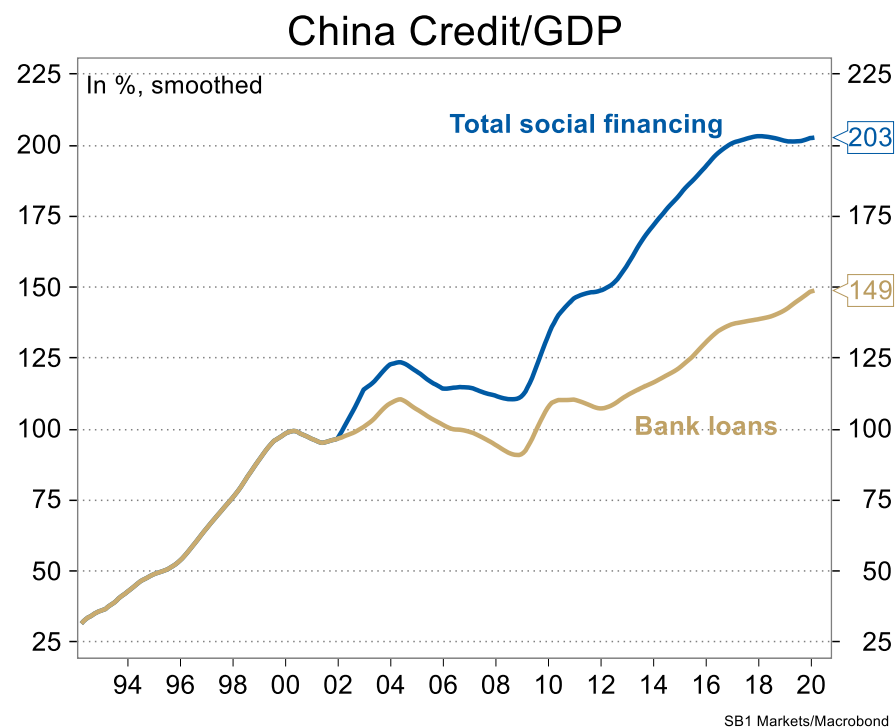
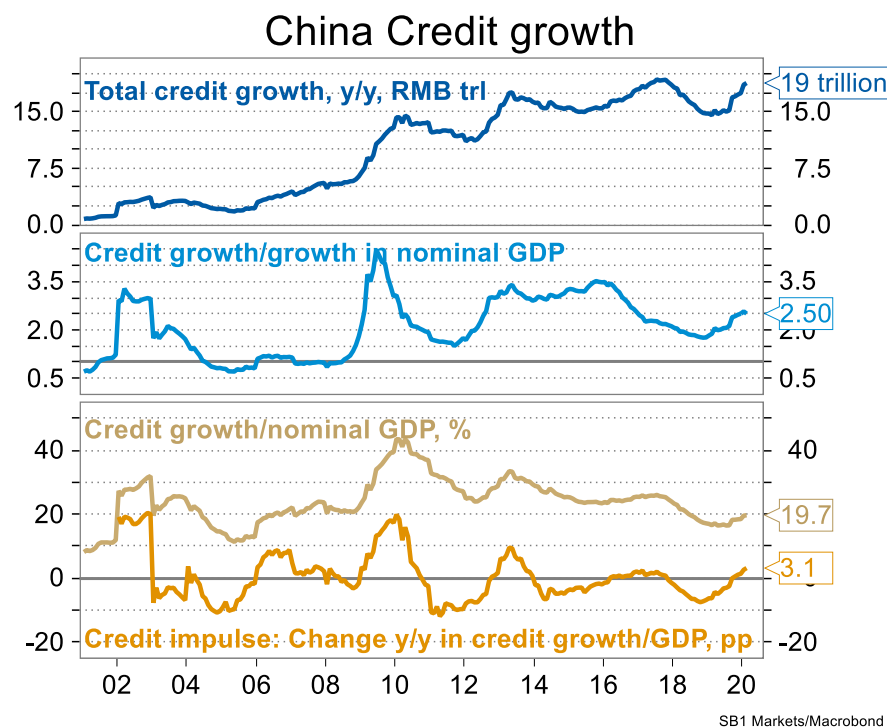
Bank lending has slowed y/y, the shadow banking market filled the void



- Over the past year, total credit has grown by CNY 19 trl, equalling close to 20% of GDP
- Banks supplied CNY 17 trl of the y/y increase, equalling almost all of the volume through last year
- Local governments increased their debt rapidly in Jan. Government bonds are up by RMB 3.4 trl over the past year
- Other credit – via the shadow credit market x local gov bonds is down 1.9 trl y/y
- Total credit growth at 10.7% is somewhat higher than growth in nominal GDP (7.4%), and debt/income is still on the way up

Credit impulse has turned positive

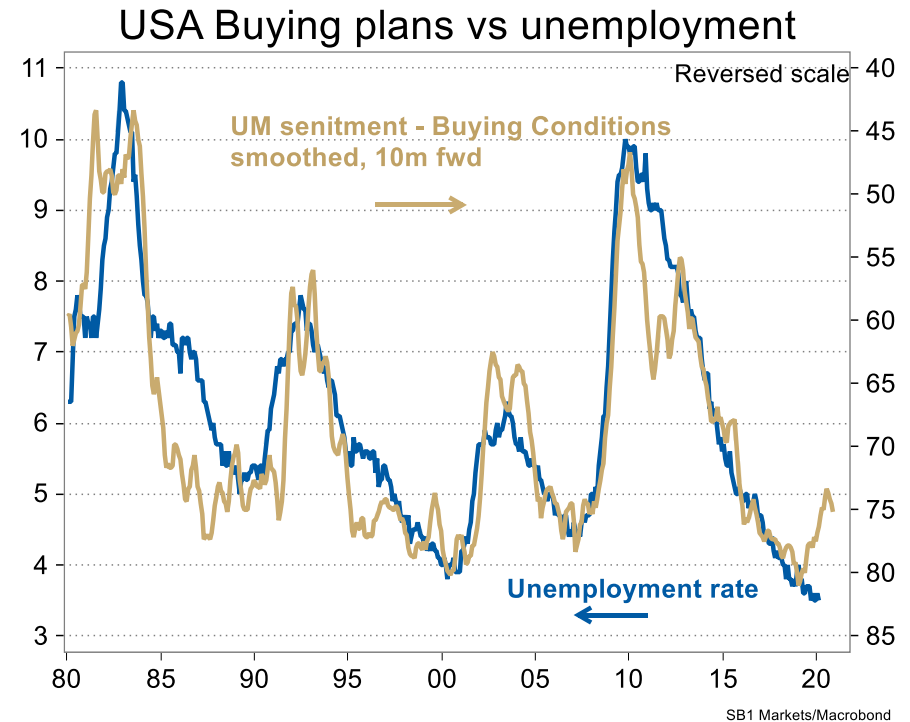
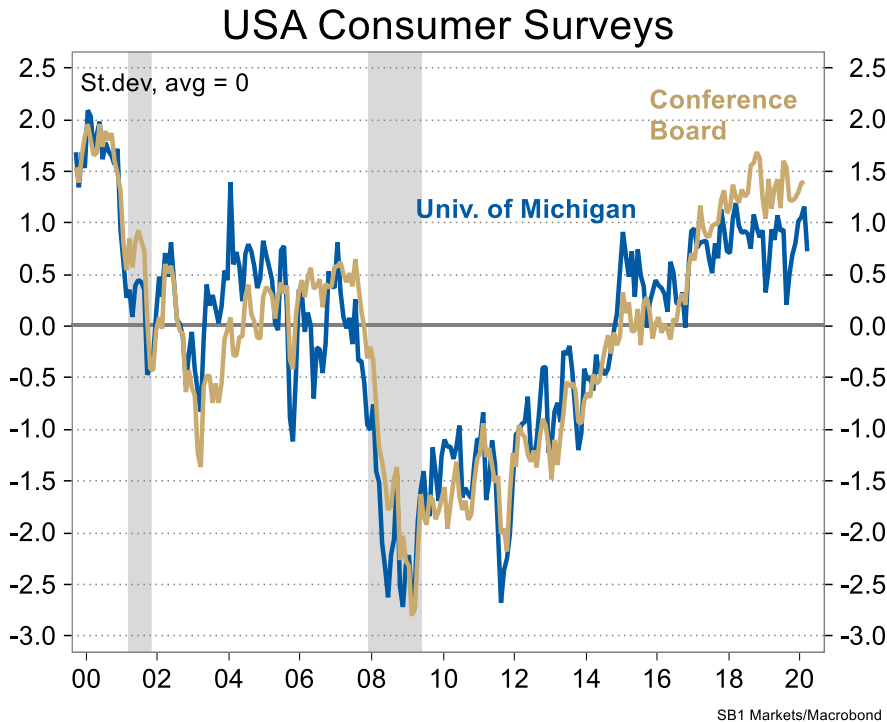
Credit growth in line with GDP growth (in per cent, that is)



- A positive credit impulse implies that the credit growth/GDP ratio is increasing (the 2nd derivative of credit vs the GDP level)
 - » A negative credit impulse indicates credit tightening (or weaker demand) and has been associated with slowdowns in the Chinese economy
 - » Now, the credit impulse has risen to marginal positive
- We are uncertain how far the authorities are willing or able to bring growth back up, even as stimulus is needed now to support the economy. The credit/income level has flattened but the level is disturbingly high. In addition, for every RMB GDP grows, credit increases 2.5 by RMBs, and each year growth in credit equals almost 20% of GDP. That's not sustainable in the long run, neither for lenders nor borrowers, as nominal GDP growth is well below 10%. The Government may succeed in increasing credit supply short term (if they dare to, vs long term risks) but the problem may turn out to be demand for credit

UoM consumer sentiment down in early March but far from out (yet)

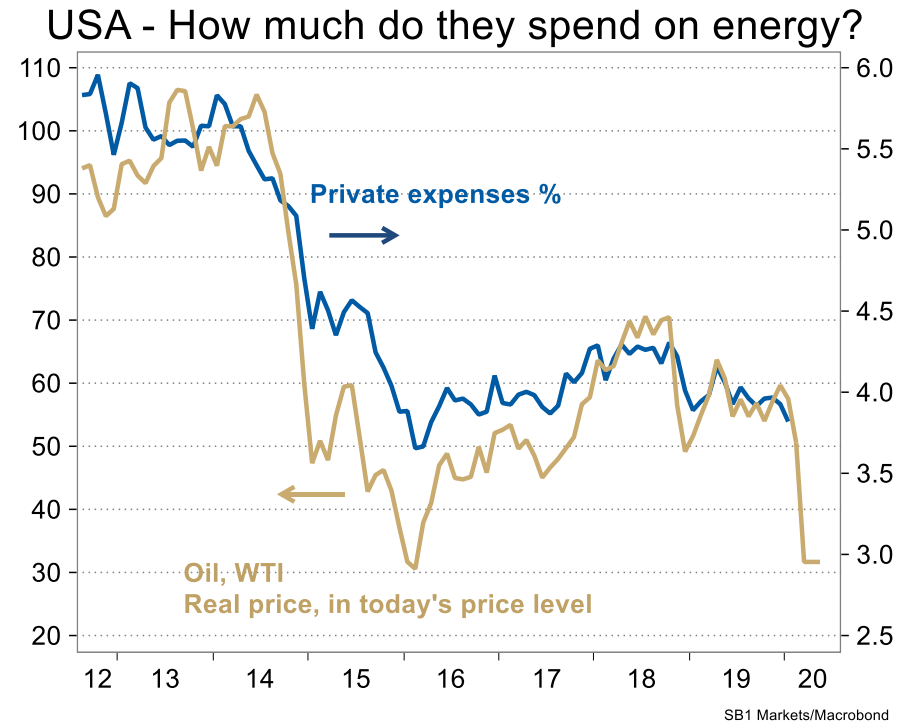
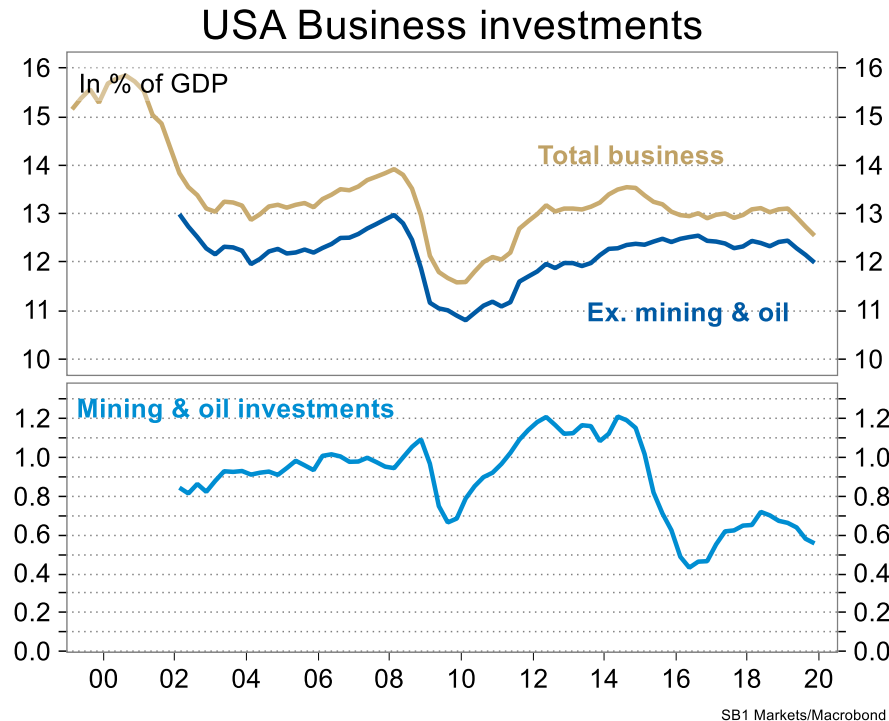
The level is still high and the decline was not large – but final March index probably much worse



- University of Michigan's consumer sentiment index fell to 95 in early March from 101 in February, expected down to 95.9
- Univ. of Michigan's consumer sentiment is marginally weaker than Conference Board's consumer confidence index but both are upbeat and do not confirm the slowdown in consumption which retail sales data indicate
- A small warning: Consumers are reporting that buying conditions are deteriorating somewhat but they are still quite strong

The oil price vs the US economy. Investments more down than consumption up?

The US has a balanced trade in petroleum products. Will lower oil prices hurt the country?

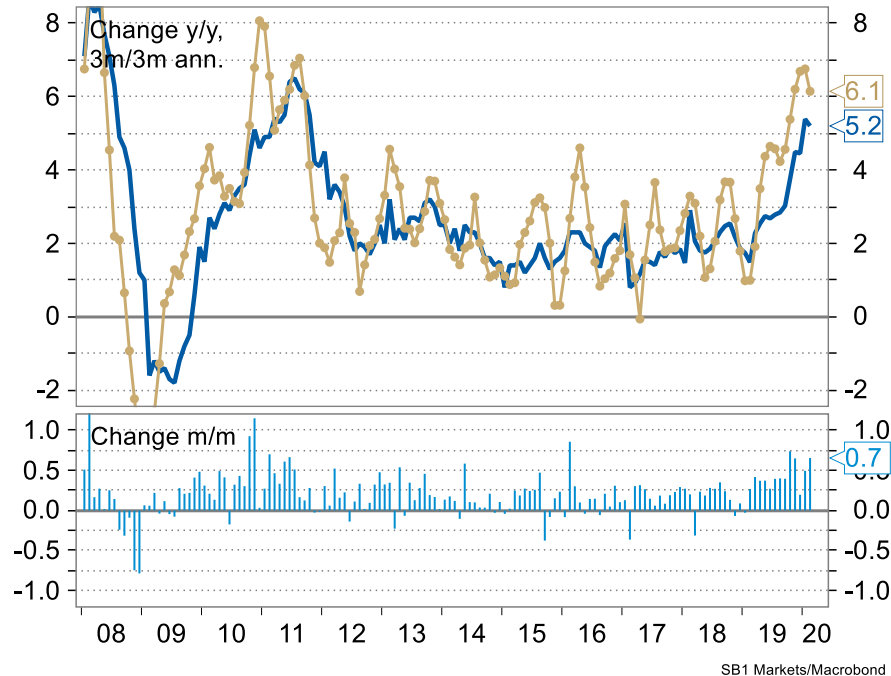


- No doubt, if oil prices remain at the present level, oil investments will be cut. However the level is not that high as investments now constitutes less than 0.6% of GDP. During the 2014 – 2016 downturn, investments by 0.8 pp to 0.4% of GDP from 1.2% of GDP
- On the consumer side, the recent decline in oil prices implies a reduction in the energy bill equalling some 1% of disposable income (or 0.7% of GDP). In addition, businesses ex. oil will also benefit from lower oil prices
- Bottom line: The recent oil price decline will most likely not deliver at blow to the US economy (but part of it reflects a likely downturn in the US economy)

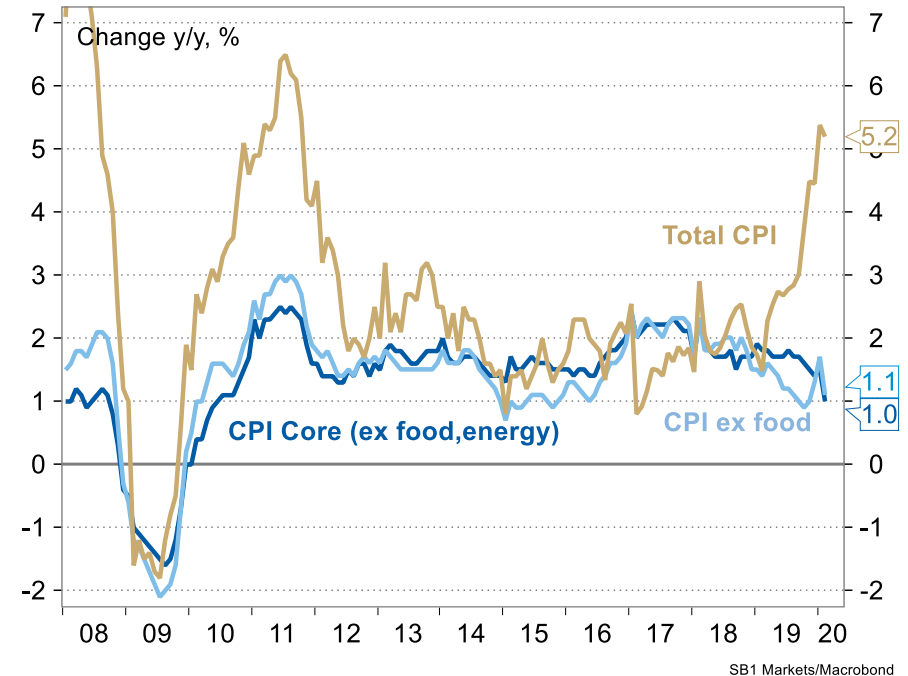
Total inflation remains high at 5.2%, lifted by soaring food prices in February

Food prices are up by 22% y/y, core inflation slowed 0.5 pp to 1%, the lowest in 10 years

China Total CPI



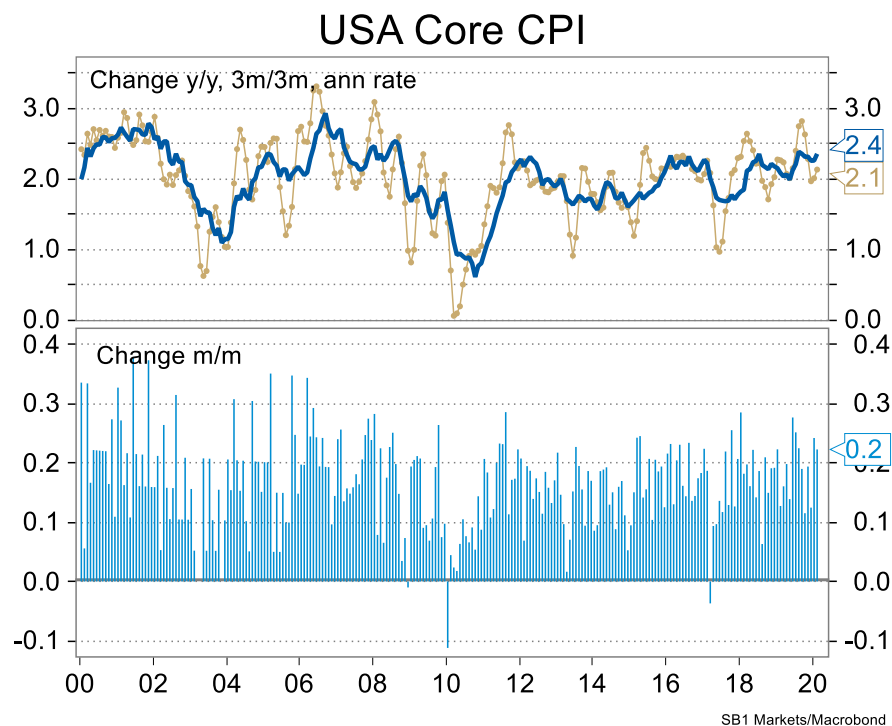
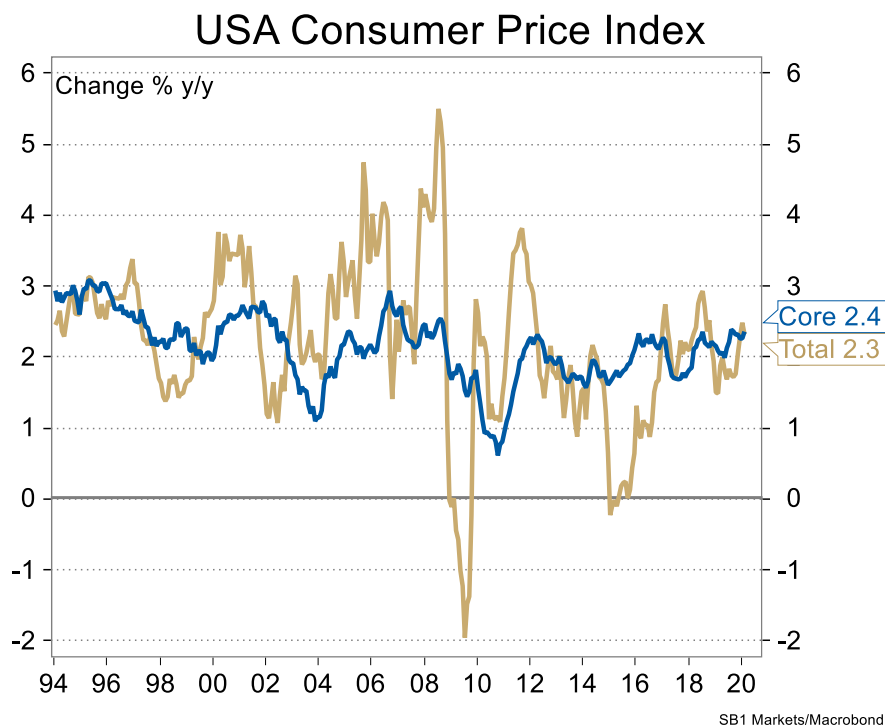
China CPI



- Headline inflation slowed 0.2 pp to 5.2% in Feb, as expected. Total inflation is fuelled by accelerating food prices
 - » Food prices are up 22% y/y, lifted by a further steep increase in pork meat prices (up 135% y/y!) The porks are attacked by a flu...
- Core inflation (x food & energy) edged down to 1% in Feb, the lowest since 2010, from 1.5%. The coronavirus outbreak hammered demand in Feb. CPI ex food rose 1.1%
- Higher total inflation has been dampening (real) consumption growth

Core inflation inched up to 2.4% in February

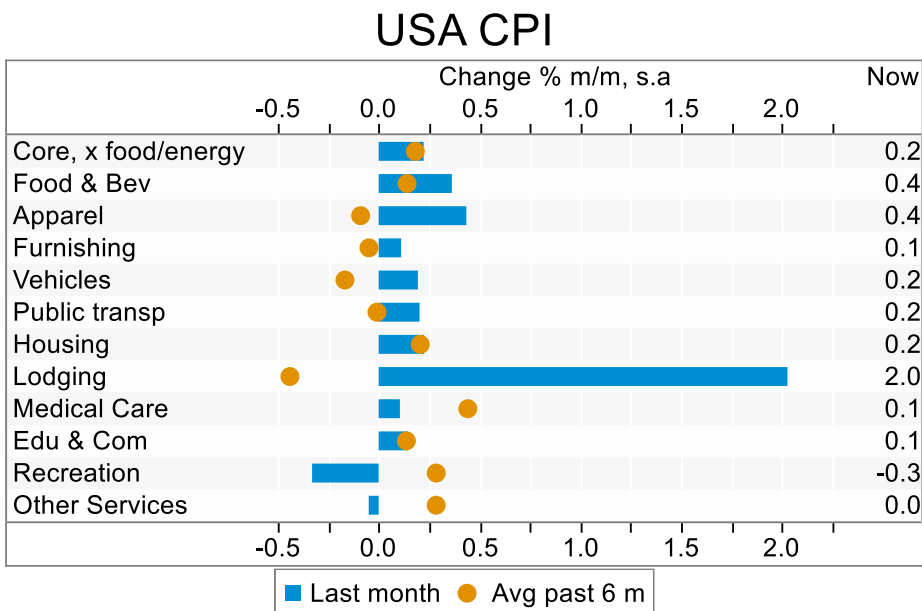
Core CPI rose 0.2% m/m, as expected. Total inflation down to 2.3%, will slow rapidly



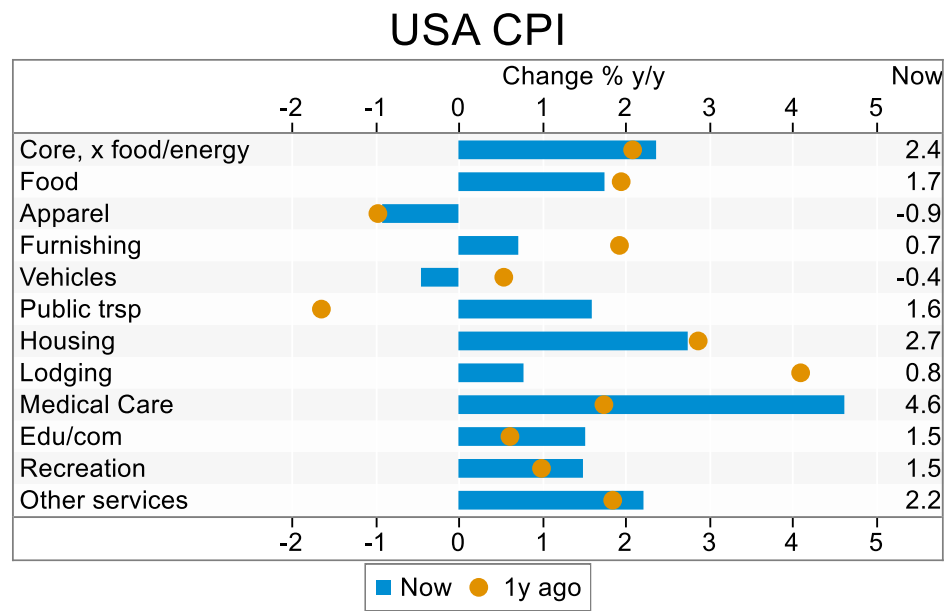
- Core CPI increased by 0.2% m/m in Feb, as expected. The annual rate up one tick to 2.4%, expected flat at 2.3%. Inflation is back at the mid-2019 local peak level, however, the underlying speed is well below, at 2.1%. Fed's inflation model indicates that inflation is peaking now and producer prices do not suggest any uplift. But it is not 'too' low, at least according to the core CPI index
 - Fed preferred price measure, the core PCE (the consumption deflator) is up 'just' 1.6% in January, below Fed's 2% price target
- Headline inflation fell 0.2 pp to 2.3%, 0.1 pp above expectations. Prices rose 0.1% m/m. Total CPI inflation has been brought up by slowly rising energy prices, this will turn the coming months as energy prices have dropped

Medical care, housing are boosting annual inflation

In February, prices on lodging jumped, just recreation and some services fell



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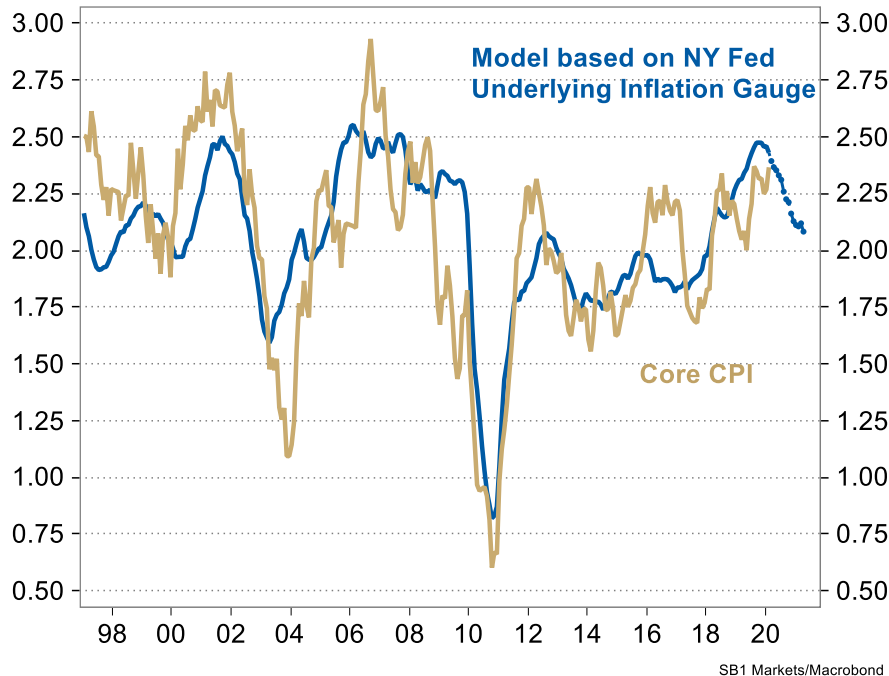
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- Prices are increasing faster than one year ago in 6 of 12 sectors, slowing or declining in 6 sectors
- Higher prices on medical care and housing (rents & services) are boosting annual inflation

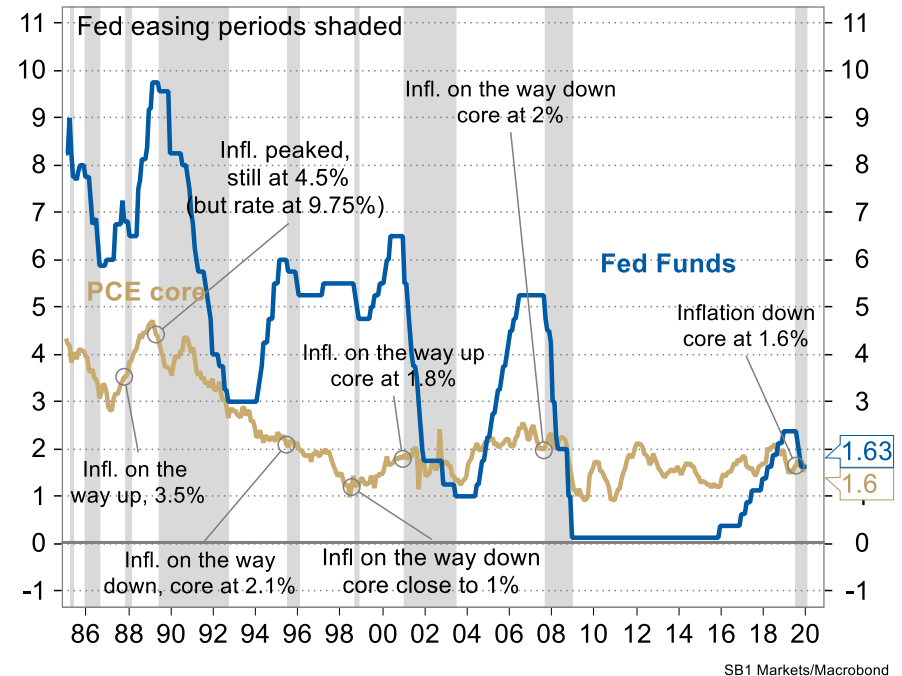
NY Fed's inflation model suggests that inflation is at peak

The model signals 2.5% inflation now – and a slowdown the coming months

USA Core CPI vs inflation 'model'



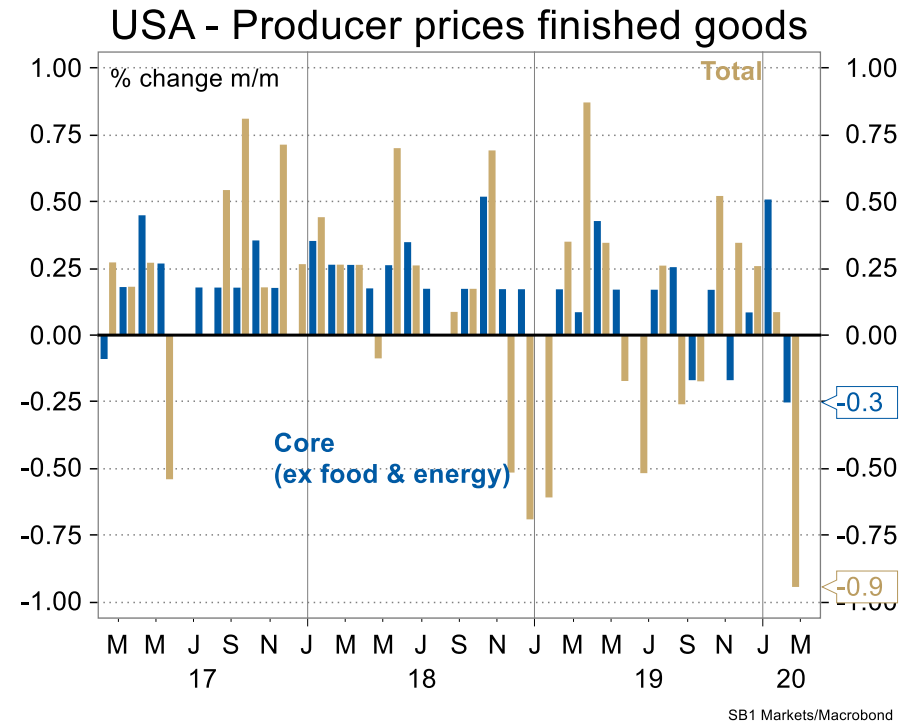
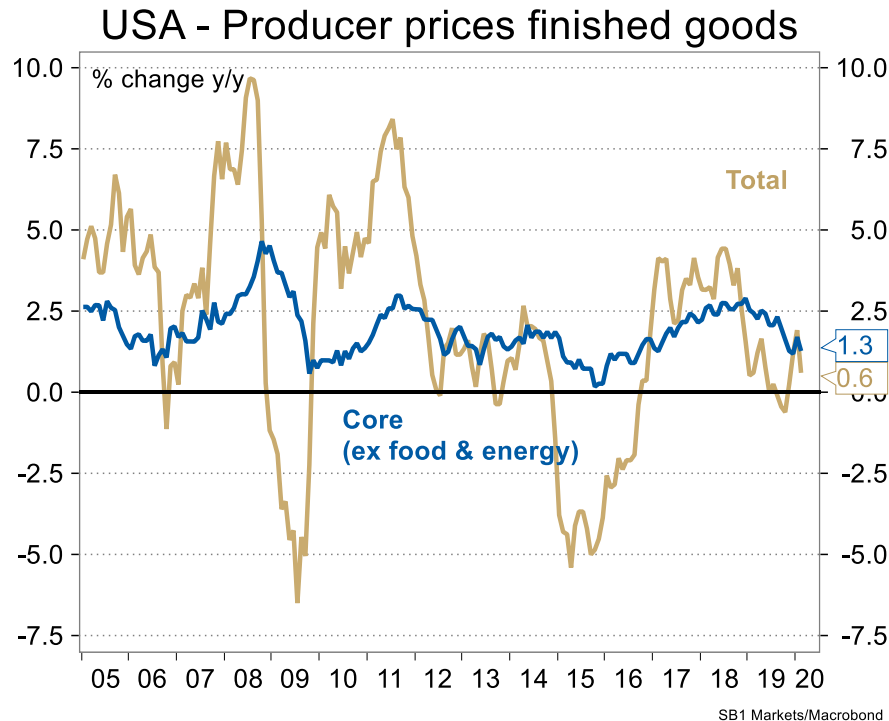
USA Fed Funds vs. PCE Inflation



- The NY Fed's Underlying Inflation Gauge model includes a wide range of macroeconomic and financial components in addition to some CPI components. The UIG model leads the actual inflation rate by some 15 – 20 months. The model now signals a slowdown to 2.1% by the end of the year
 - » The personal consumption expenditure price deflator (PCE deflator) is the Fed's preferred inflation measure, not the CPI. The core PCE (ex food, energy) was up 1.6% y/y in Jan, below Feds inflation target at 2%
- Fed's actual rate setting has not been well explained by actual inflation during the past two decades. Wage inflation is a far better indicator. PCE inflation below target has been one of the arguments for interest rate cuts. The economy, now with the impacts from the coronavirus and financial markets will anyway decide Feds action, more than inflation (as almost always, BTW)

Core producer price inflation fell and total PPI plunged in Feb

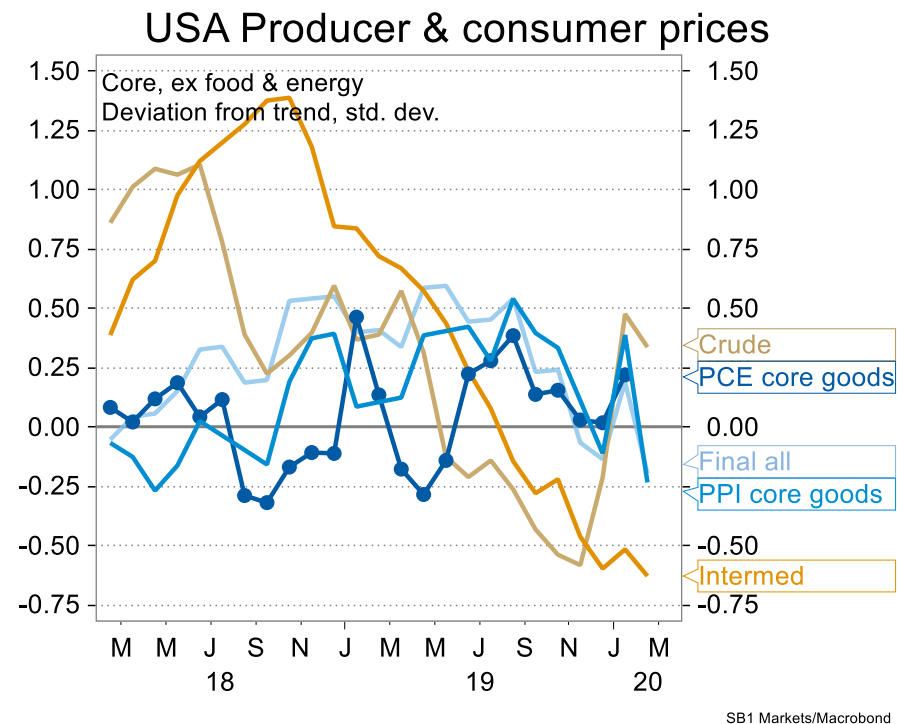
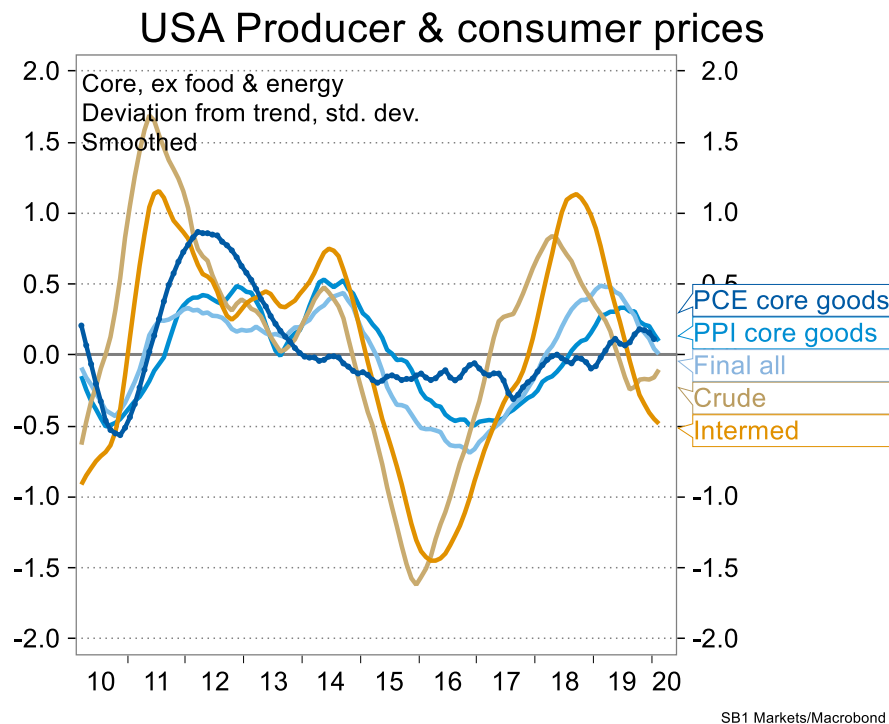
Total finished goods prices slipped 0.9% m/m on lower energy prices



- Core finished goods x food & energy PPI fell by 0.3% m/m in Feb, weaker than expected, after a surprising lift the prior month. The annual rate fell back down, to 1.3%. Core producer price inflation has slowed rapidly the past year
- Headline PPI slipped 0.9% m/m, a far steeper decline than expected (-0.1%). The drop in energy prices due to the coronavirus outbreak and prospects of sagging demand sent total producer prices sharply down. Another decline is likely in March
- Core producer price inflation do not signal any uptick in core consumer inflation

Producer prices do not signal an uplift in consumer price inflation

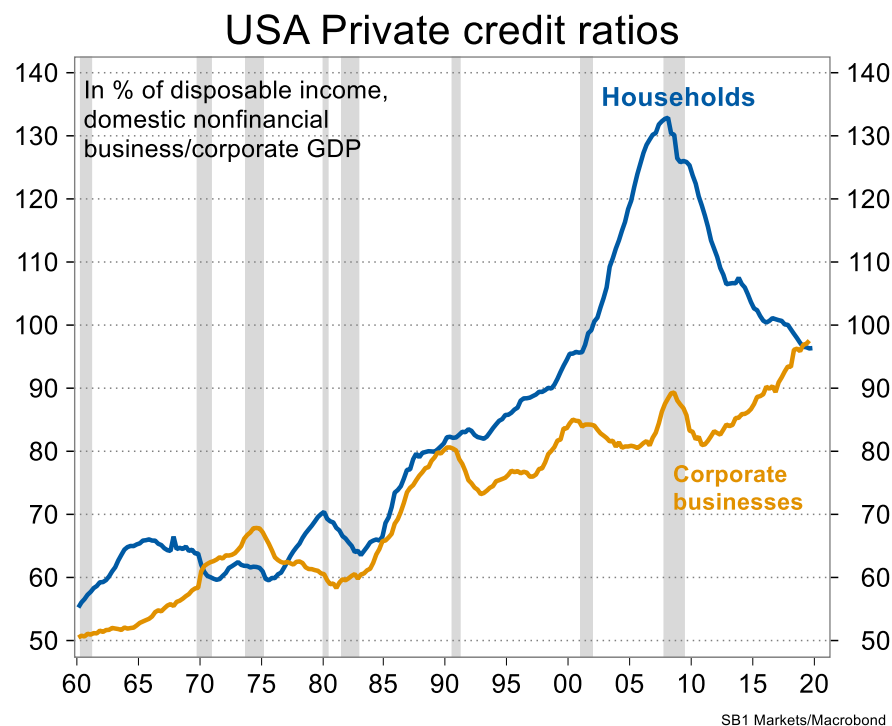
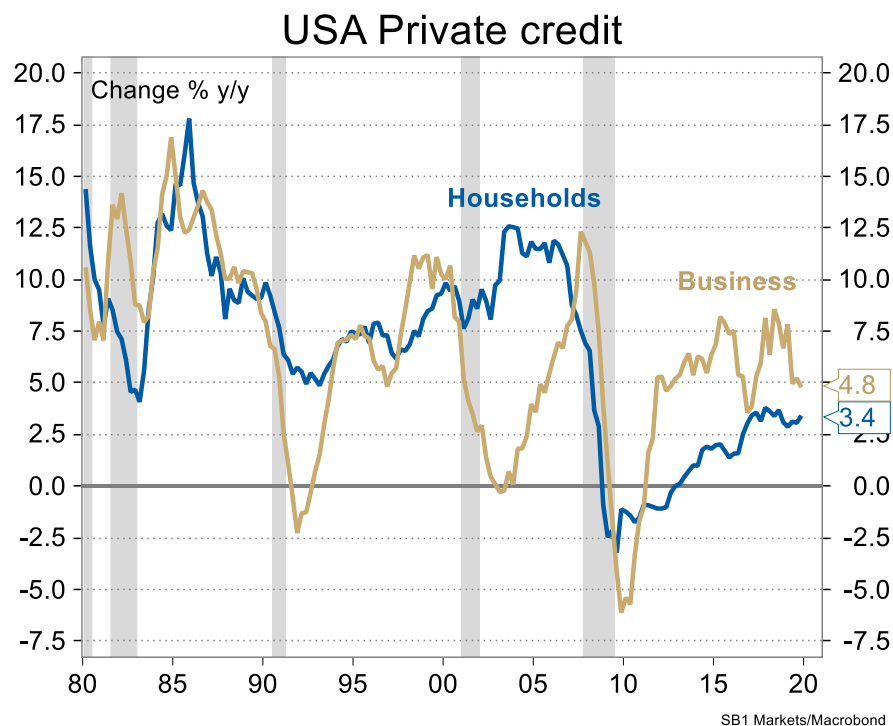
Still, crude PPI prices have turned up and may indicate an increase in prices at later production stages



- Crude PPI prices (ex food & energy) have turned up after a slowdown through most of 2019. Higher crude material prices may signal a lift in prices at later production stages; intermediate goods prices are still sliding straight down. Core consumer goods prices at the producer level dropped in February and do not signal any uptick in growth at the consumer level

Households have been deleveraging, corporates are more exposed

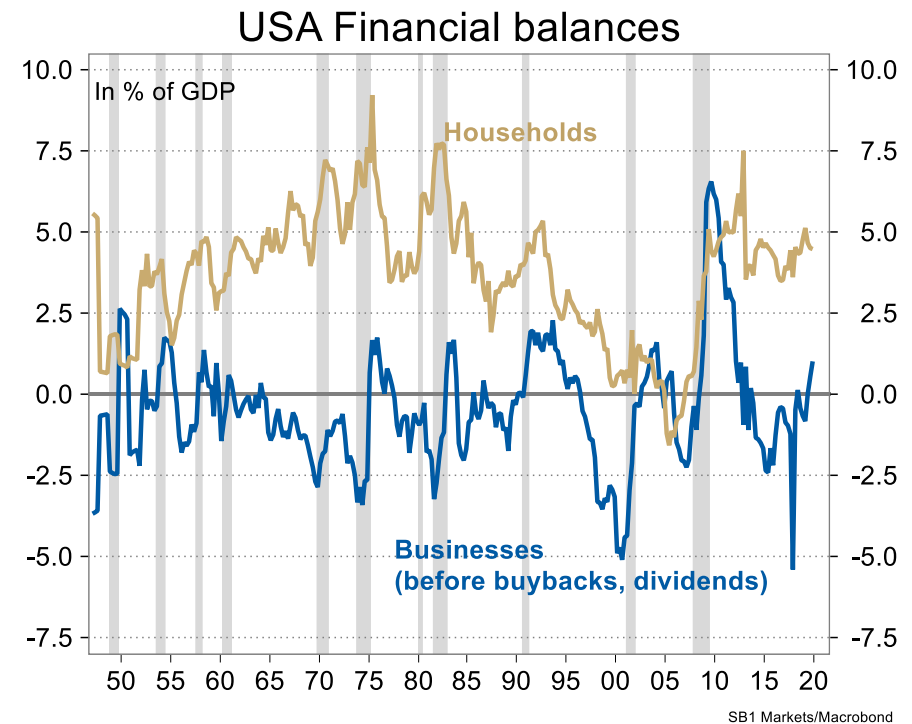
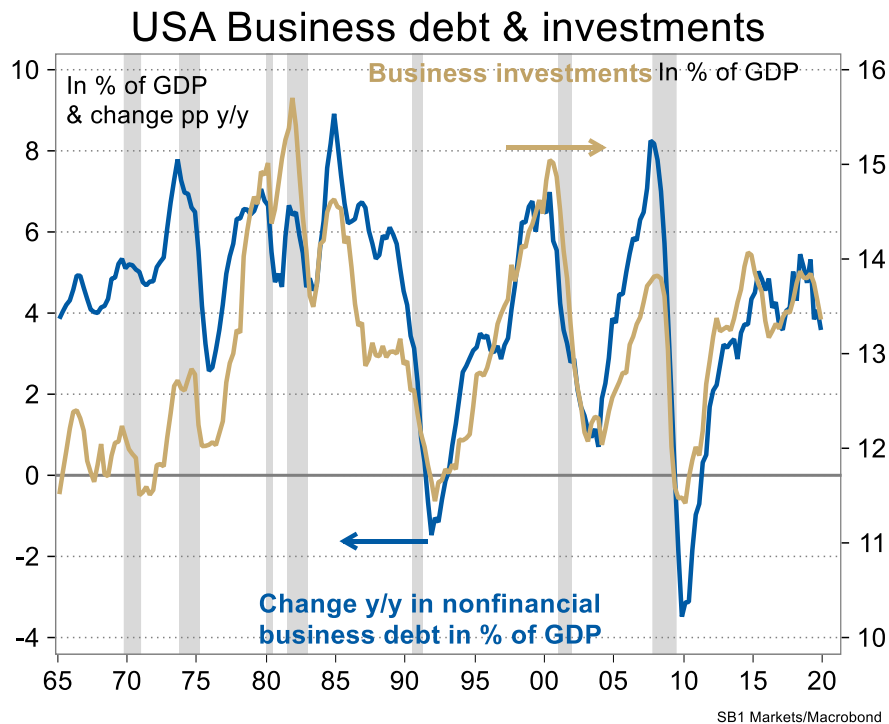
Household debt up 3.4% y/y, below income growth. Corp debt has slowed to 4.8%, still above GDP



- Household debt growth accelerated marginally in Q4, to an annual rate of 3.4%, thus, still slower than household income. The debt/income ratio has fallen to 96%, down from 133% in 2007! The largest deleveraging ever in the US. Even so, unemployment has fallen most of the time. Hence, the downside is now modest compared to the financial crisis
- Corporate credit growth is more volatile but growth has slowed somewhat, the past quarters to just below 5%, still faster than growth in corporate (or total) GDP. The debt/GDP ratio has increased sharply since the financial crisis, to record high levels. If not for equity buybacks the past 10 years the debt ratio would not have been 98% (vs corp GDP) but in the 50's, lowest since the 1950's, from 90% at local peak during the financial crisis (and it fell to close to 80% after the crisis)

Corporate credit and investments, usually hand in hand

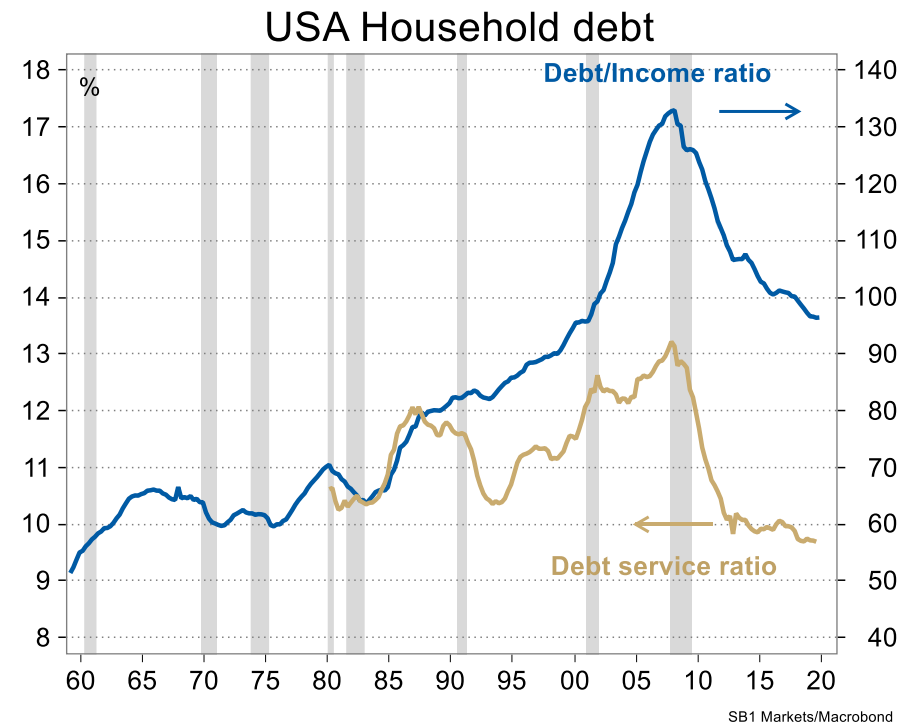
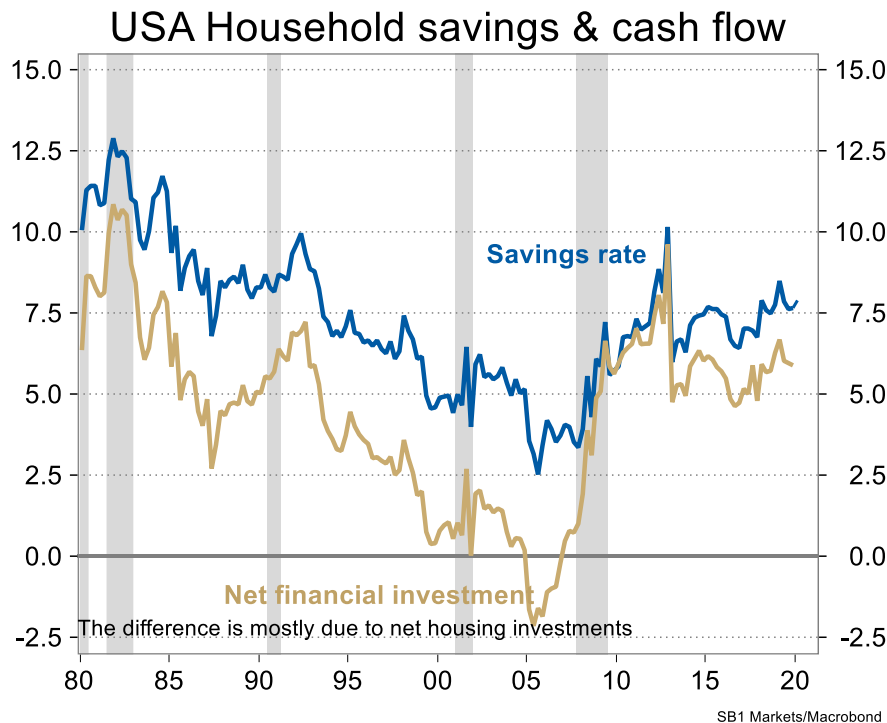
Now, corporate credit confirms a business investment slowdown



- Cash flow in the business sector is better than usually before recessions. Tax cuts have contributed
- Still, a substantial increase in corporate cash flow is far from unlikely, given the debt level. Especially if credit conditions should tighten

Some good news; Households' savings are high and the cash flow is strong

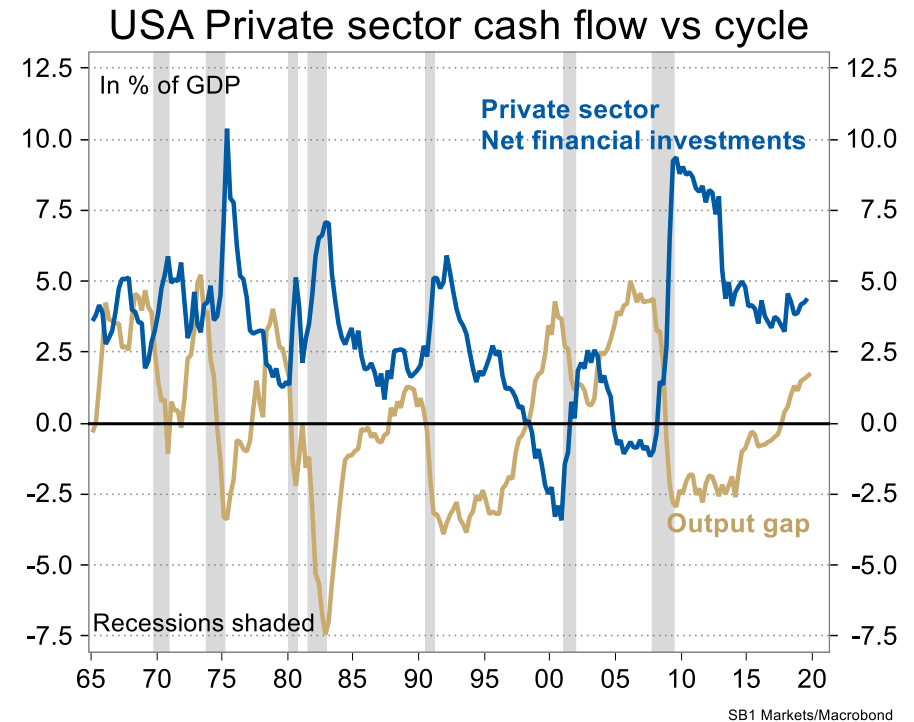
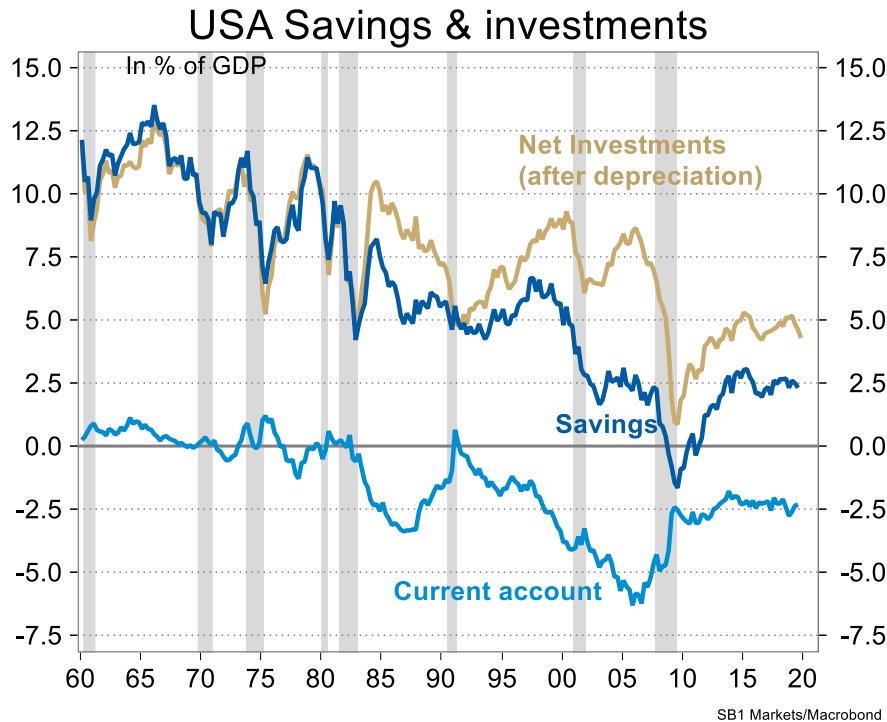
Households are saving – and paying down debt (relative to income), debt service cost record low



- The savings rate may have fallen marginally in 2019 but is trending up over the past year. The level is quite high (at least after a higher tax dodging estimate was added...)
- Households were running a cash surplus at 5.9% in Q4, marginally lower than in Q3. The level is quite high
 - » Cash balance (net financial investments) = Savings – net (of depreciation) investments in fixed real capital (mostly housing)
 - » The savings was 7.7% of disp. income in Q4
- Households' debt ratio is much lower than 10 years ago and is still sliding down, almost back to the level in y 2000. Households have never before (data from 1980) spent less of their income serving debt!
 - » There have been few signs of financial stress, at least barring student loans

Private sector savings at a high level, a reassuring sign

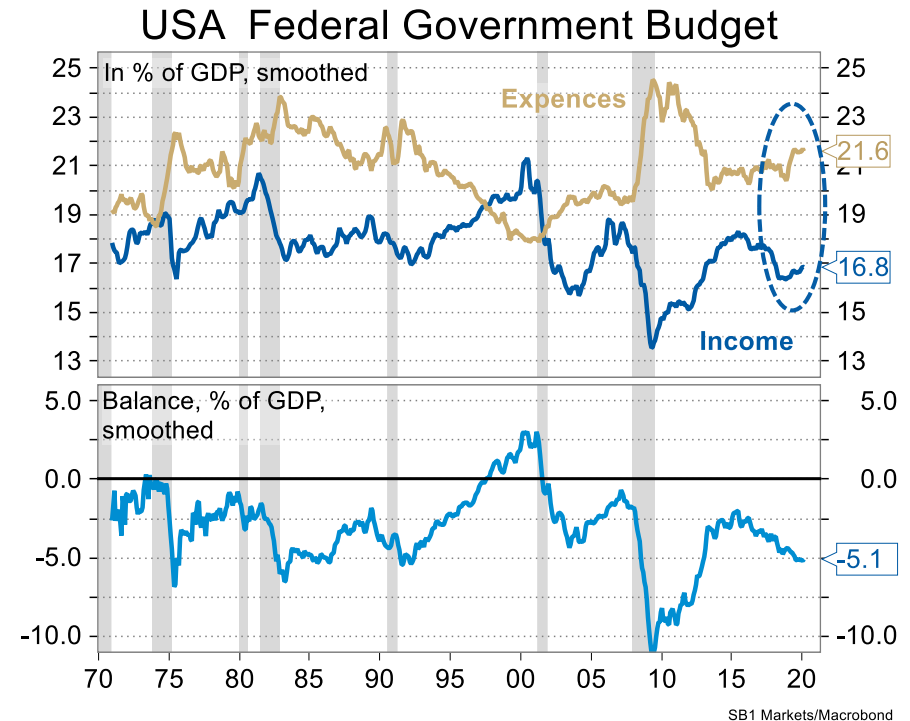
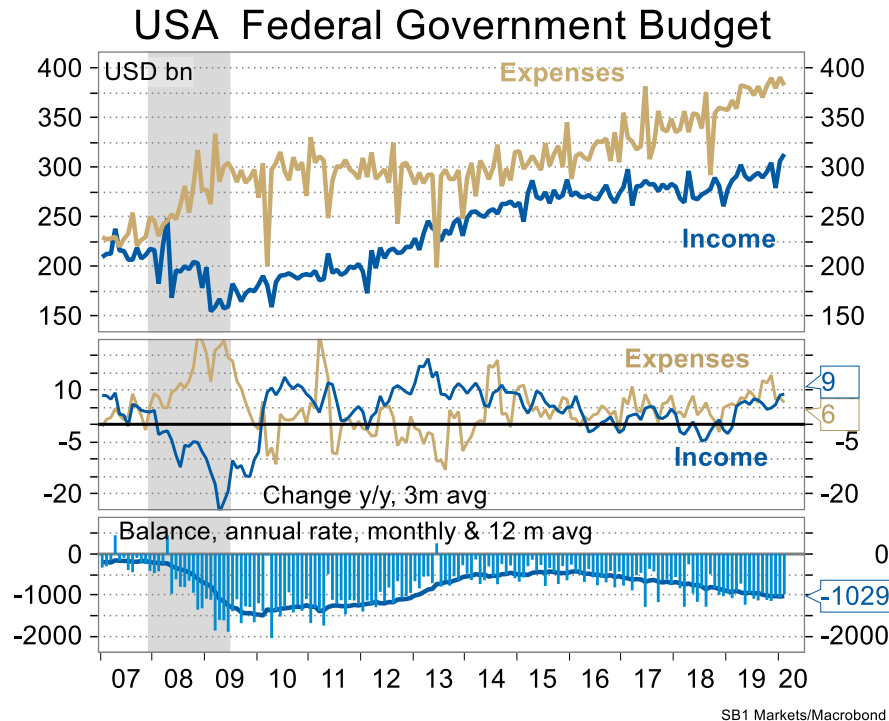
The public sector is deep in red but the private sector is running a substantial cash surplus



- Ahead of recession, private sector cash savings usually drops – and the inevitable normalisation ‘kills’ the economy

The federal budget deficit steady the past few months

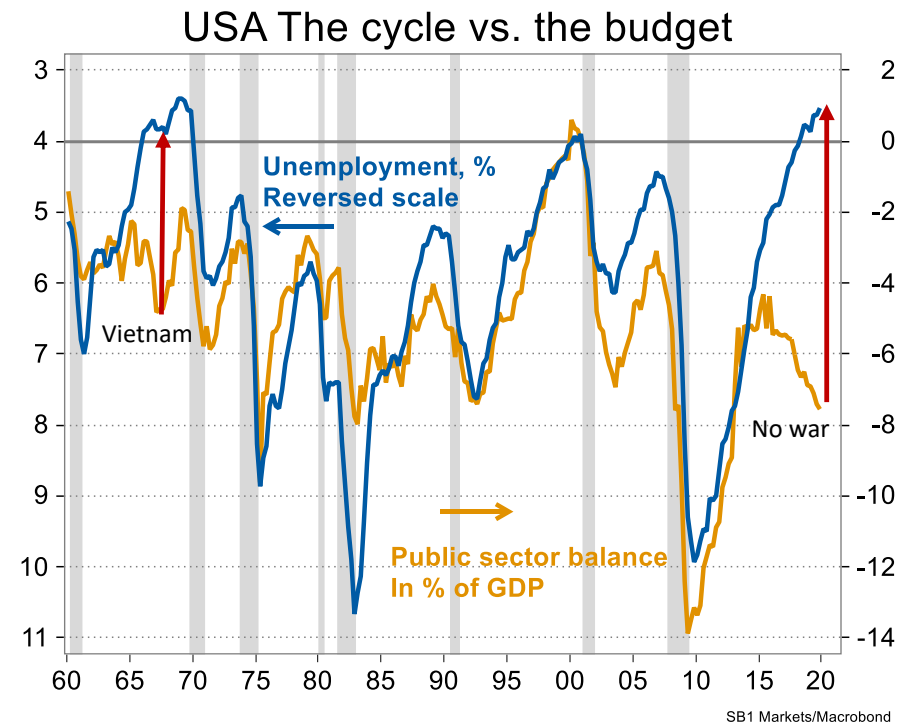
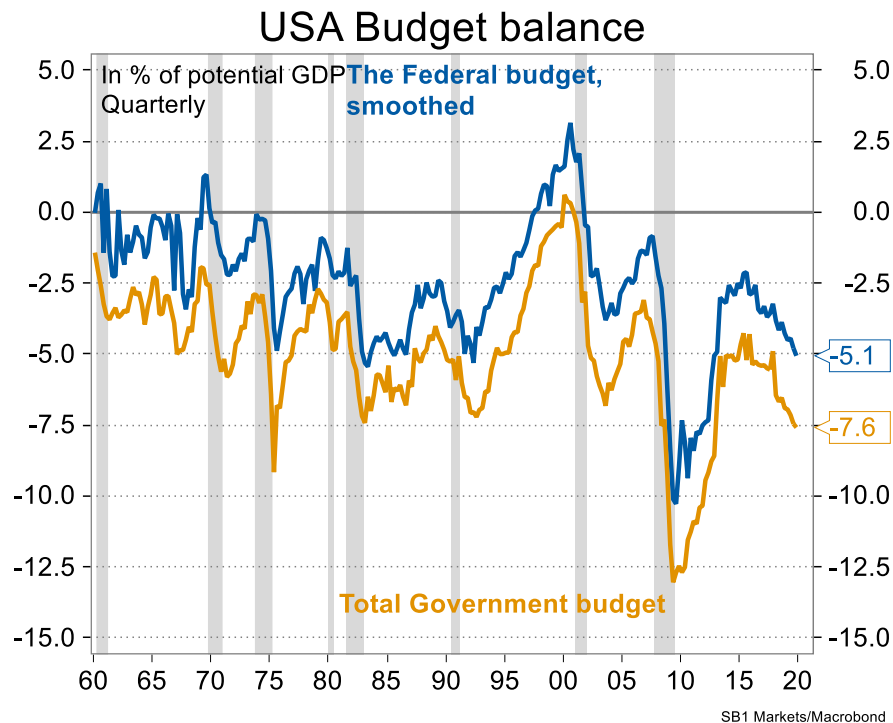
The federal deficit has widened to 5.1% of GDP, and the total public sector deficit at 7.6% of GDP



- The budget deficit fell marginally to USD 986 bn (seas. adj) in February, while the 12 m avg inched down to 1.029 bn. The deficit has been steady the past months, after rising steadily from USD 400 bn in 2016. The deficit equals 5.1% of GDP. Including local government etc, the US ran a full employment, peacetime deficit at 7.6% in Q4, totally unprecedented! (before any measures related to Covid-19 have been introduced)
 - » Federal spending is up 6% y/y (3m smoothed), income up 9% y/y (but expenditures have increased more than receipts since 2016)
- In % of GDP, federal spending equals 21.6%, way above a normal level (except for during recessions). Regrettably, federal income equals just 16.8% of GDP, much lower than normal in a blooming economy (well, until corona really hits) – of course because taxes have been cut
 - » The 2020 budget is marginally expansionary and the deficit will not increase much from here
- Trump has proposed a new budget with huge cuts in expenditures (outside defence) and to balance the budget 2030 but the likelihood for that to pass Congress is zero. Now, expenses will probably be lifted as fiscal measures to stimulate the economy amid the virus outbreak

The public sector deficit widened to 7.6% of GDP in Q4

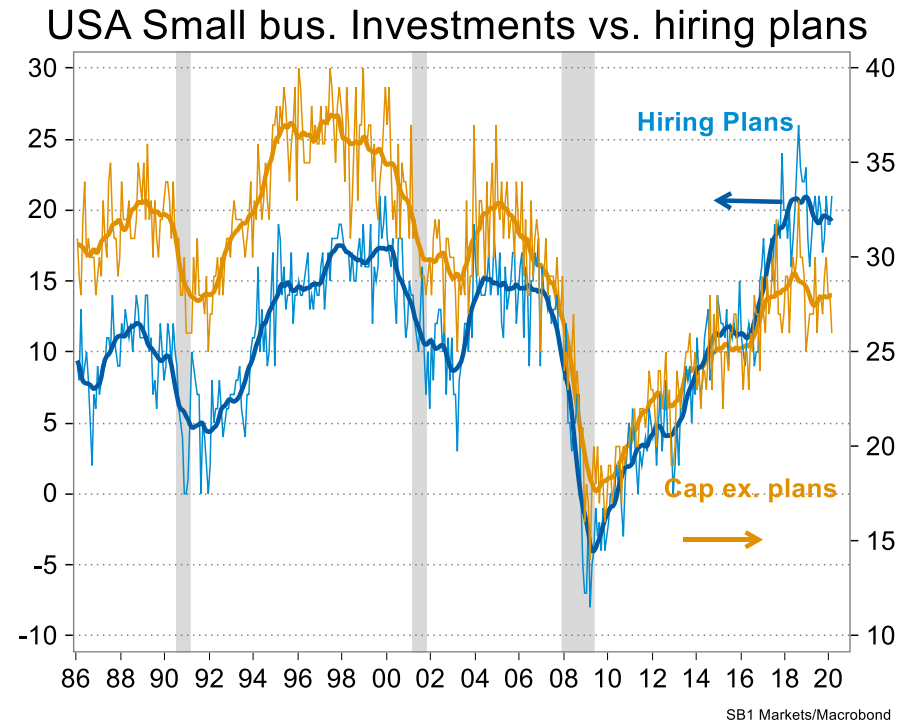
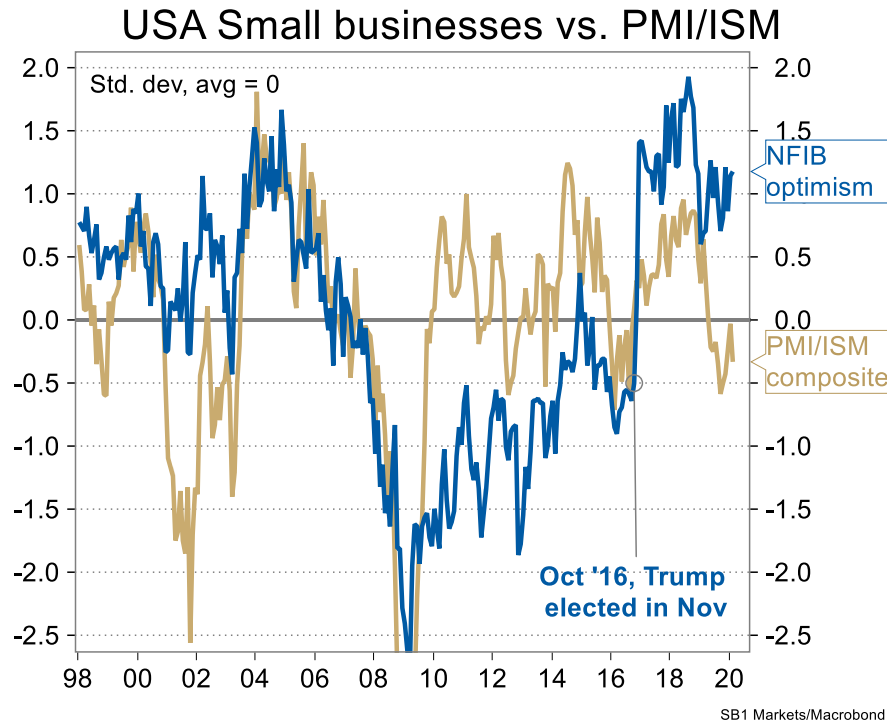
With an unemployment rate below 4%! We have NEVER seen anything like this before



- The deficit has never been anywhere close to the present level in peace time when unemployment is as low as now
 - » We have not seen anything like this in other countries either (except Greece in 2007, partly Japan)
 - » The deficit at 5% was large vs the unemployment rate in 1967 too, when the Vietnam war was fought. Now, the 'gap' vs the unemployment rate is twice as large as in 1967m without war. BTW, after 1967, inflation and a lot of other problems turned up
- The total public sector deficit is larger than the Federal Government's, as local gov. & social security are included

Small businesses' optimism steady in Feb – wait for the corona impact

NFIB optimism index remained high in February, corona fears might hit in March

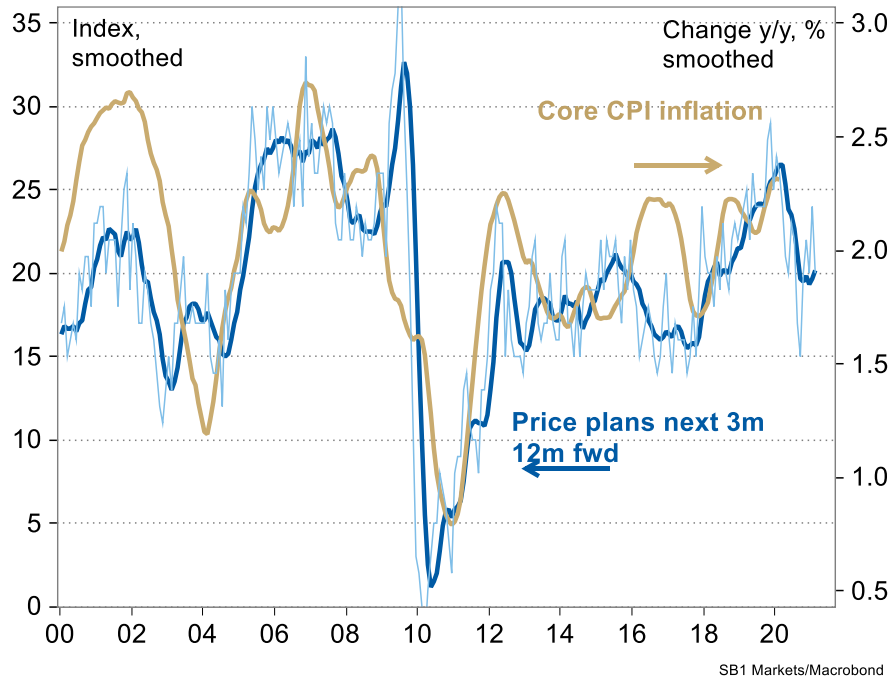


- The NFIB optimism index, measuring small businesses' expectations on business conditions, inched up to 104.5 in February. The index has stabilised and even inched up the past year, after dropping in late 2018
 - » The NFIB optimism index is 1.2 st.dev above the average since 1998. The avg of the surveys from the ISM/Markit PMI is below avg. The difference may be due to the SME's exposure to the domestic market, while larger companies in PMI/ISM have been more influence by trade war/global uncertainties, and most recently by the coronavirus outbreak
- Investment plans were nudged down in February, trending slowly up since early 2019. The level is not high, historically
- Hiring plans have peaked but they are still aggressive, and companies are still not able to fill vacant positions – and they plan record high wage compensation

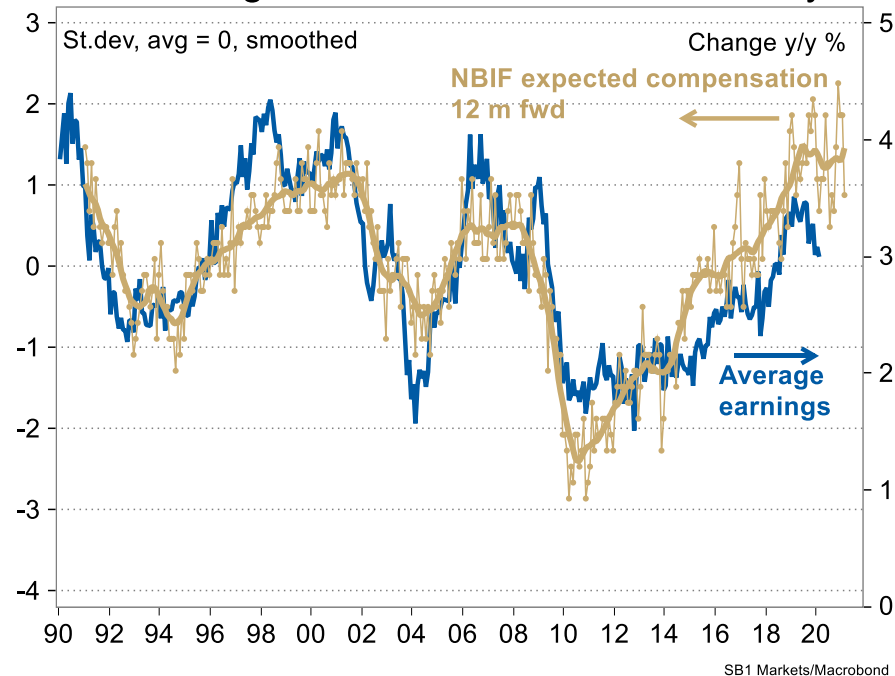
Wage growth plans still record high, price plans have stabilized

NFIB does not suggest higher consumer inflation – but higher wage inflation

USA Small Businesses Price Plans



USA Wages - 'Small businesses' survey

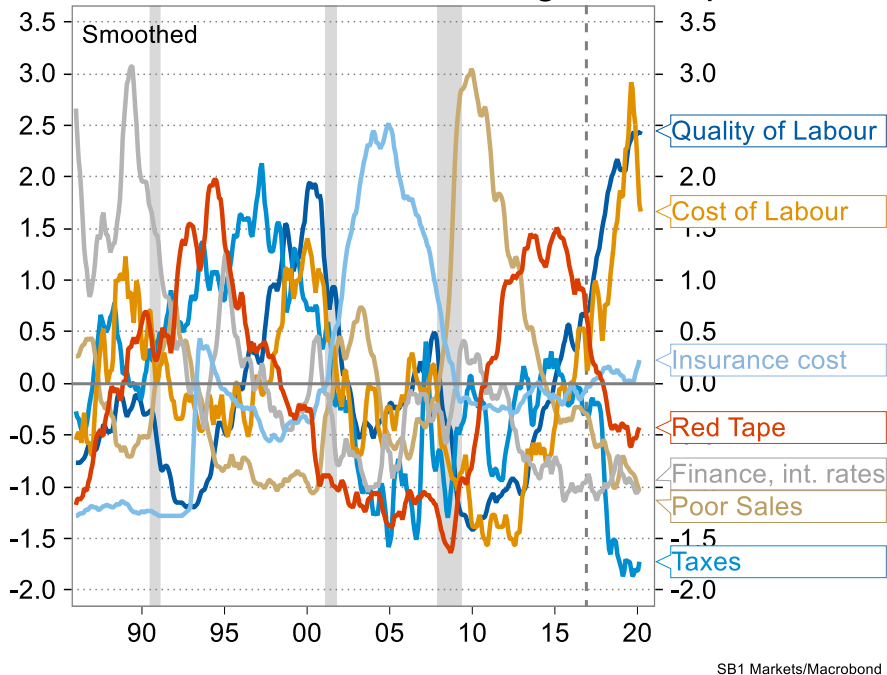


- 20% of small businesses reported that they are planning to hike prices, down from 29% in late 2018. The survey suggests that core consumer inflation has peaked. Demand must have slowed, even as optimism has stabilized
- Businesses are still reporting record aggressive plans to raise compensation, although trending flat over the past year. Hence, the survey does not confirm the slowdown in actual wage growth which has taken place over the past months, but it is probably not signaling any acceleration either

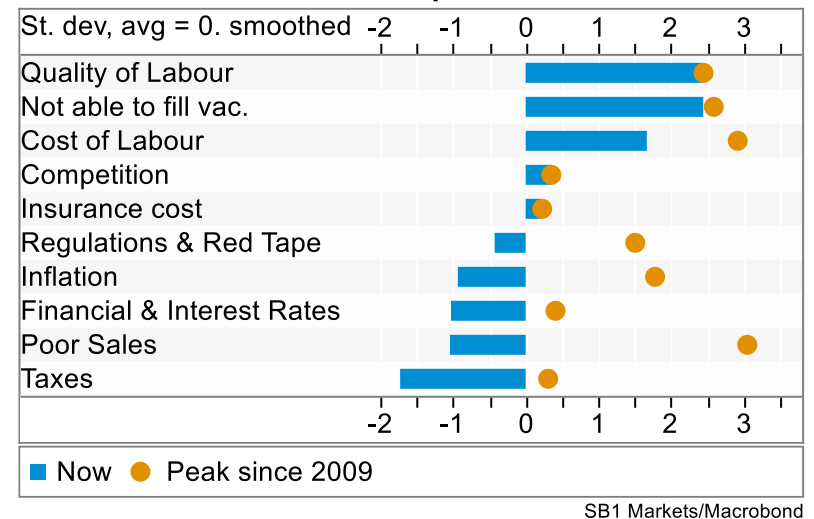
What's the problem? Quality, supply of labour, but cost of labour less so

Fewer SMEs are noting cost and availability of labour, early signs of a calming labour market?

USA Small businesses Single most problem



Small businesses (NFIB)
What's the problem?

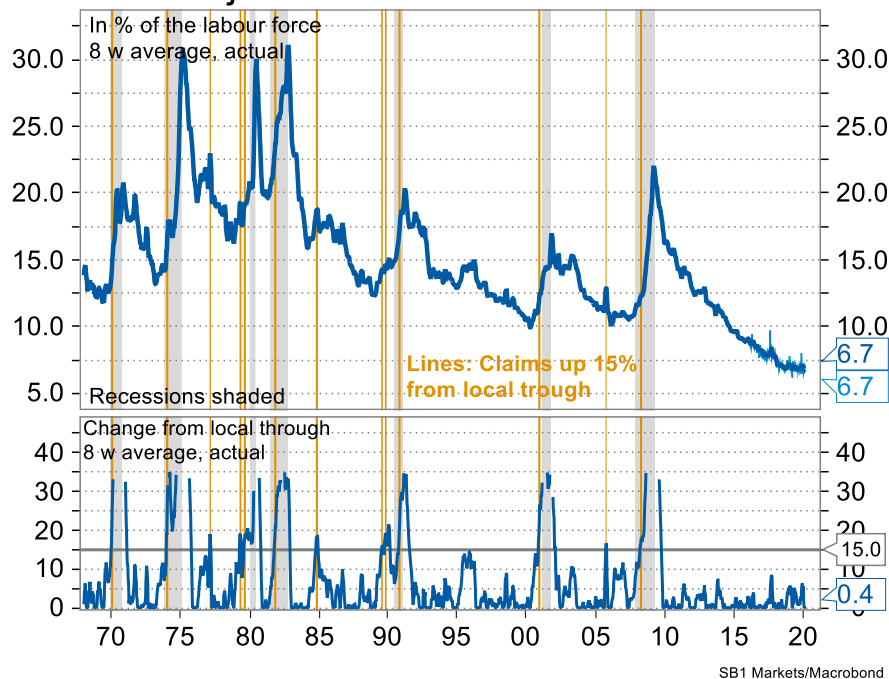


- Unusually few are complaining about finance/interest rates and about taxes, following last year's tax cuts
- Sales are not the problem either, almost 20 year since so few stated sales as the most important problem
- The share of businesses that have been noting problems with tight labour markets have been record high the past year; both the ability to fill vacancies', cost of labour and quality of labour have been reported as huge problems. However, in the past couple of months, fewer businesses reported cost of and 'not able to fill vacancies' as a problem, an early sign of weaker demand? Quality of labour remains record high

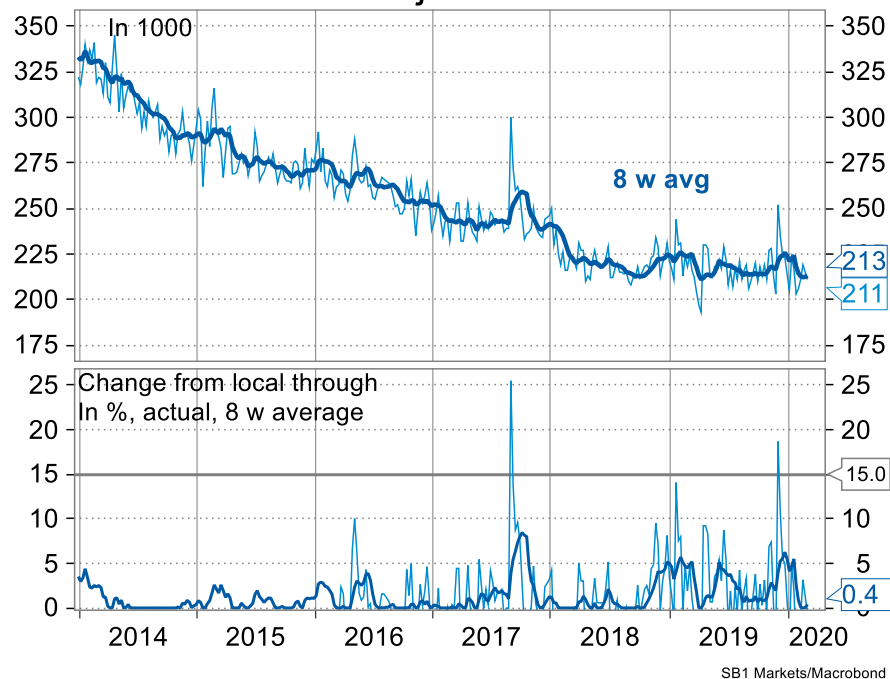
New jobless claims steady at a very low level, no weakness spotted

Claims fell to 211' last week. The 8 w average is sliding down, to 213', an extremely low number

New jobless claims vs. recessions



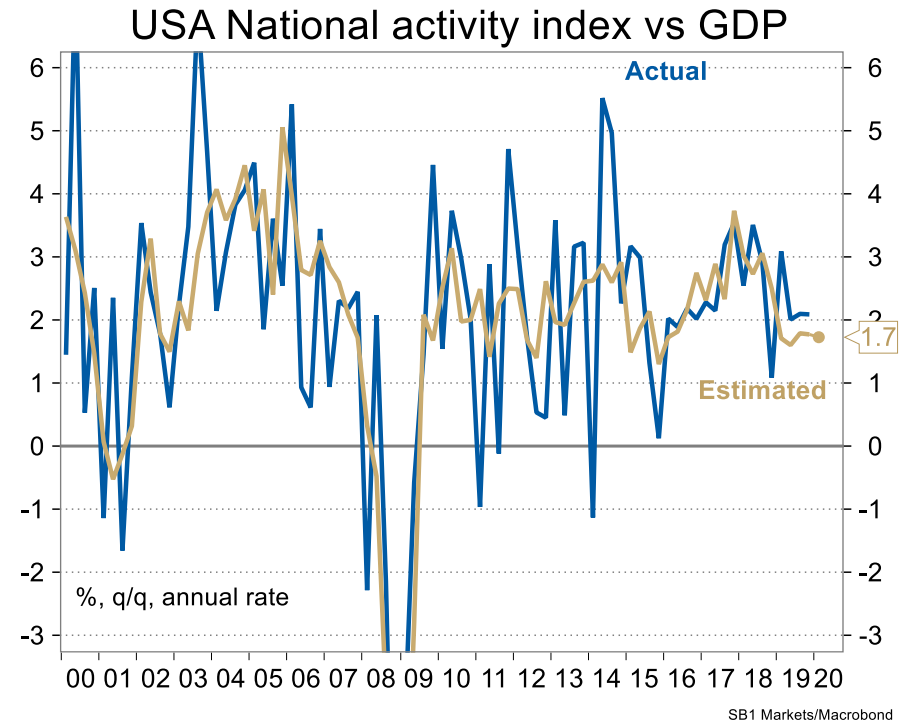
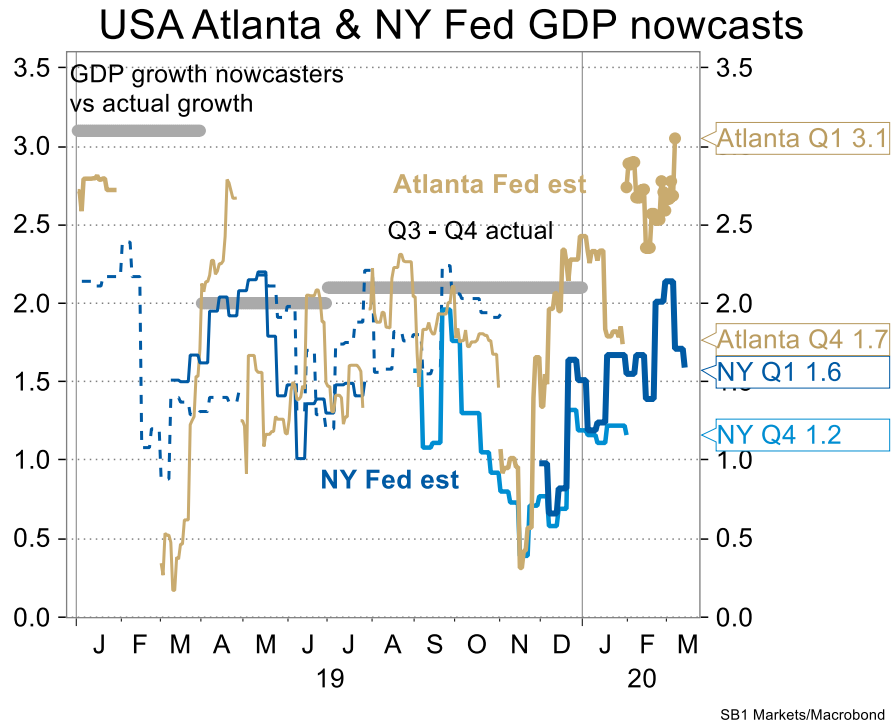
USA New jobless claims



- 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

Nowcasters mixed, signals 1.6 to 3.1% growth in Q1

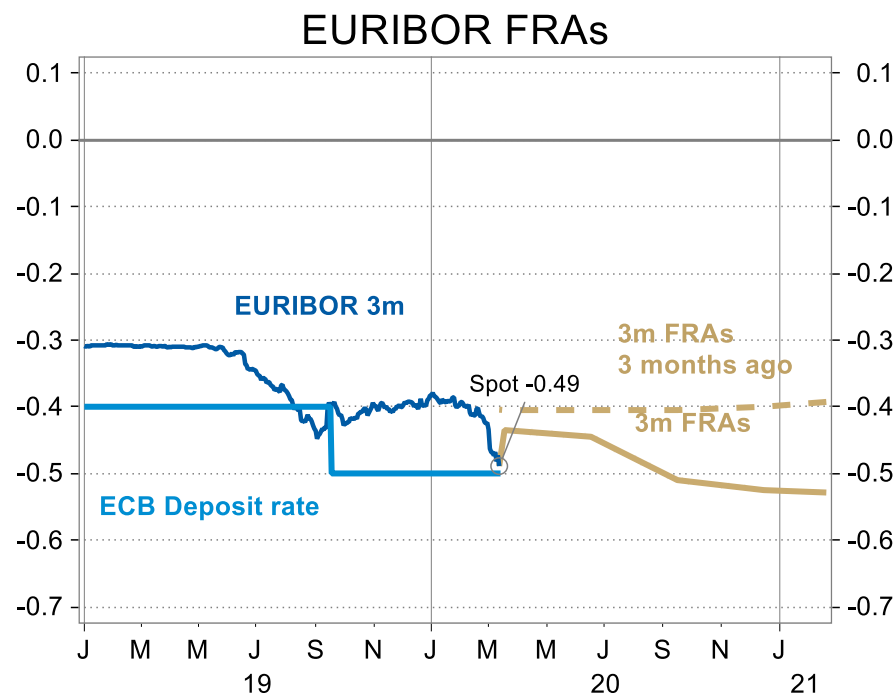
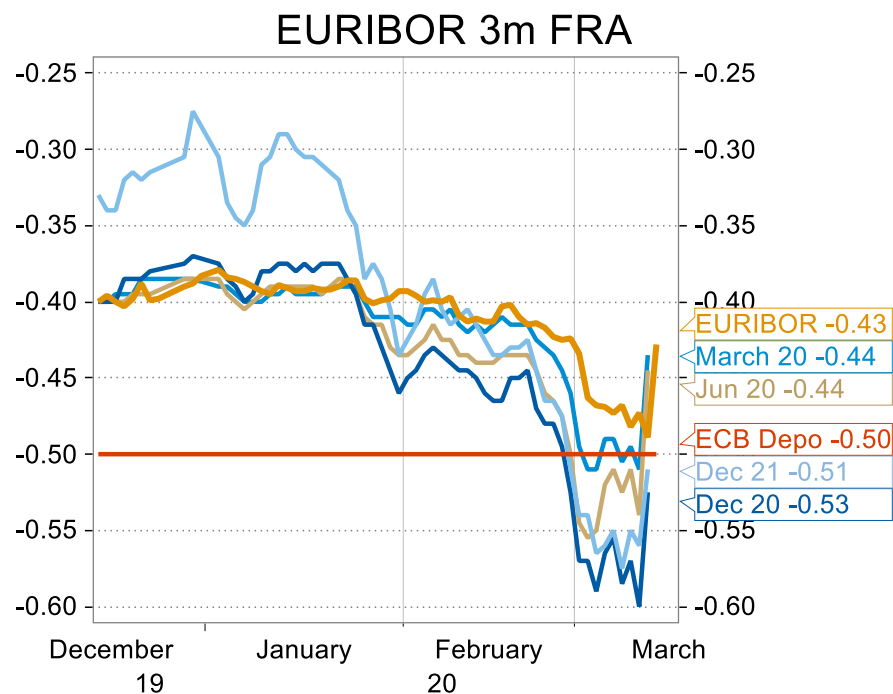
NY Fed's model says 1.6% growth, Atlanta 3.1%, National activity index signals 1.7% growth in Q1



- 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

The ECB adds to bank stimulus and increases QE but kept interest rates on hold

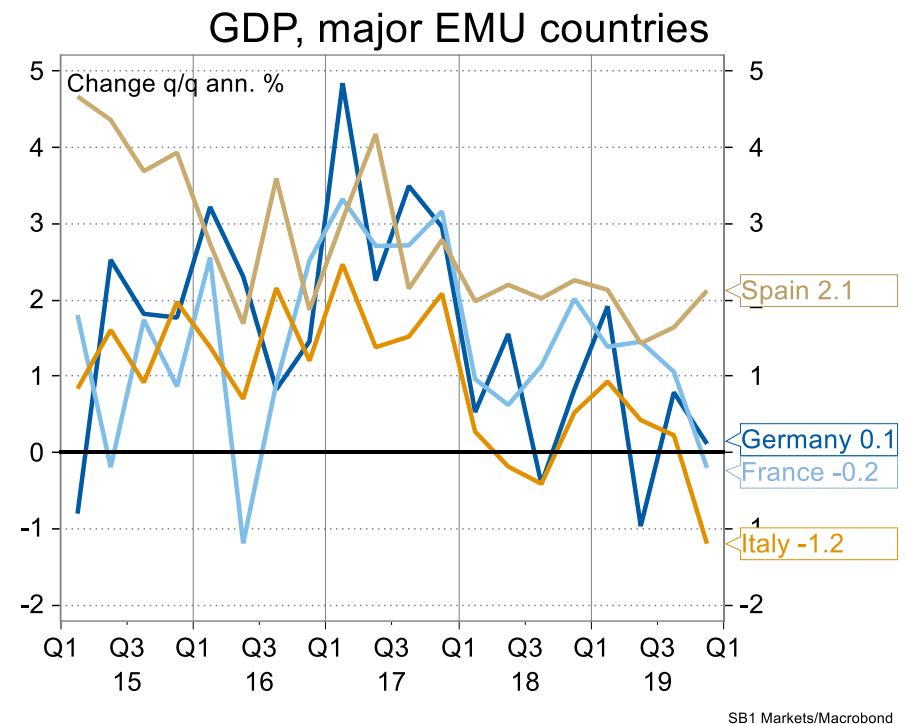
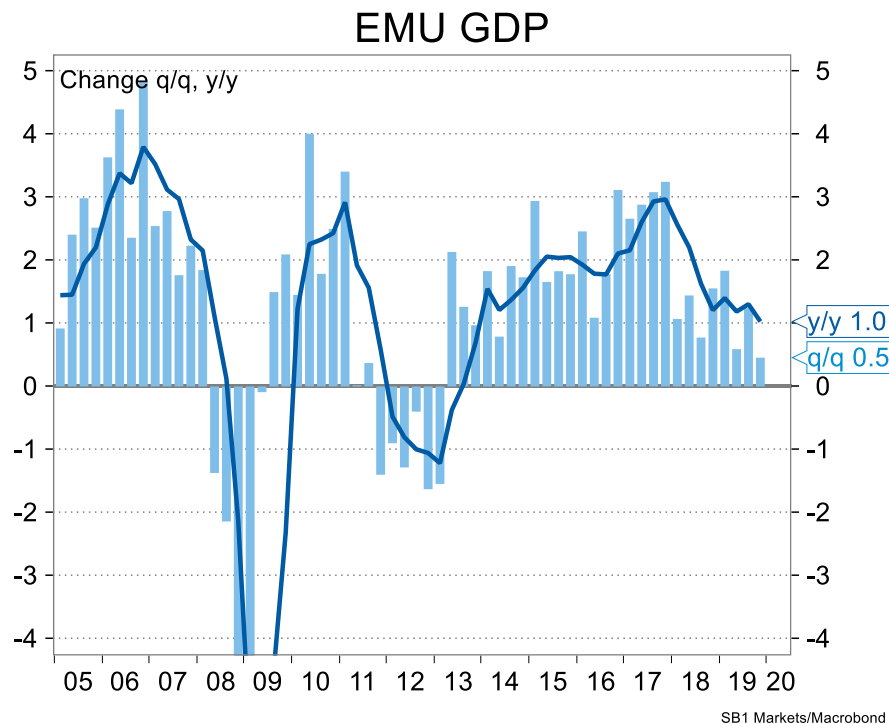
ECB surprised markets by keeping rates unchanged, as a 10 bps cut was fully expected



- The ECB surprisingly held the deposit rate unchanged at -0.5%, markets were pricing a 10 bps cut. Lagarde stated that the announced stimulus package to support liquidity will be a more efficient response to negative shock which the coronavirus outbreak represents
 - The TLTRO (longer term refinancing operations) were stepped up to ensure favorable financing conditions for businesses. Interest rates on loans to banks will be equal to the deposit rate of -0.5% and from June 2020, the TLTRO III operations will allow interest rates down to -0.75%
 - QE is to be increased by EUR 120 bn by the end of the year, on top of the existing 20 bn of purchases per month, a quite aggressive step – but no more than 1% of GDP vs. the approx. 20% of GDP bond holding already bought
 - The ECB stressed the importance of an ambitious fiscal response in order to stimulate investments and consumption
- European stock markets slid down and interest rates spiked. Markets are still pricing a 10 bps cut by the end of 2020

GDP growth nudged up marginally in Q4, details rather weak

GDP rose 0.1% q/q, or 0.5% annualized (from 0.2% in the previous estimate)

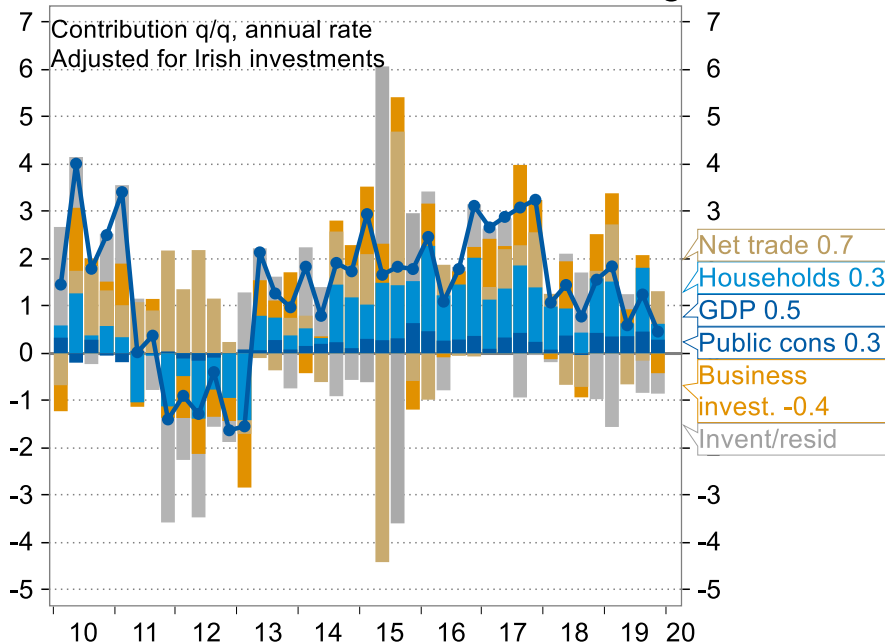


- GDP rose 0.5% q/q annualized in Q4 in the 3rd estimate, a marginal uptick from the previous est. Q4 was anyway the softest quarter since the euro crisis
- Household demand and public demand were the major demand contributors. Net trade rose to, offset by inventories Declining business investments dragged growth down

Business investments dropped in Q4 and household demand slowed

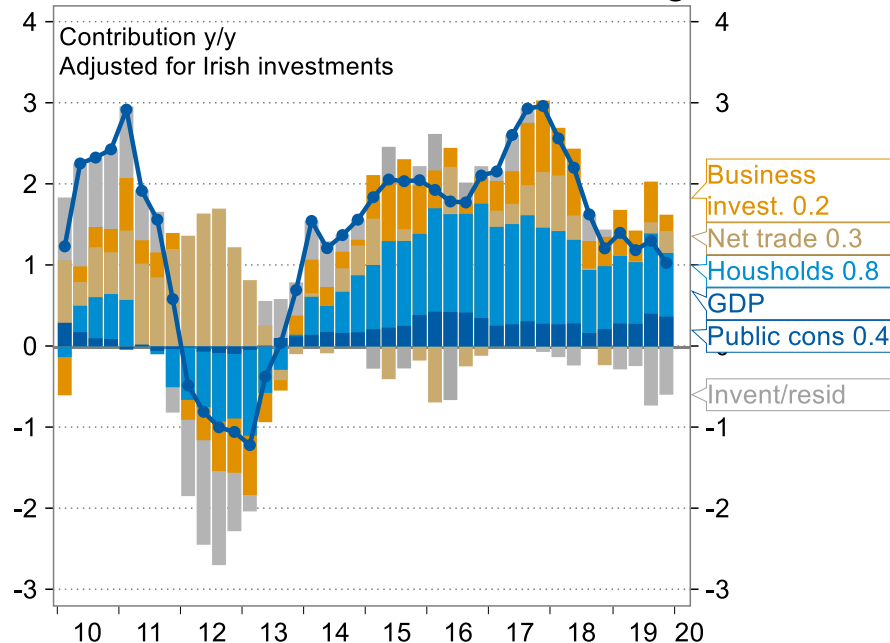
Still, household demand (consumption + housing) was the major growth contributor in '19, as usual

EMU Demand contribution to growth



SB1 Markets/Macrobond

EMU Demand contribution to growth



SB1 Markets/Macrobond

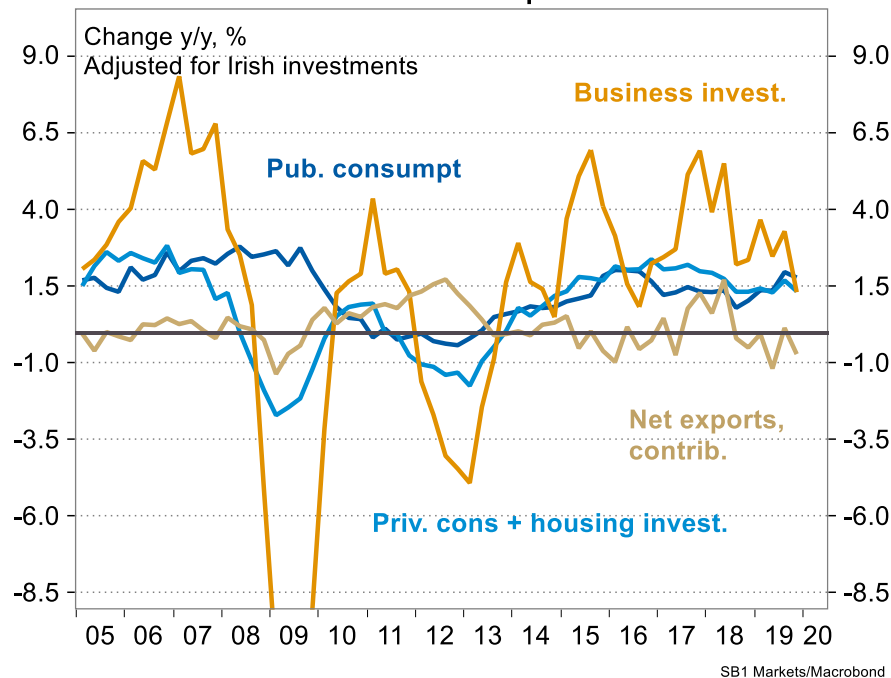
- Private consumption & housing investments lifted q/q growth by a modest 0.3% annualized
- Investments dampened growth by 0.4 pp, following a small lift in Q3. Investments are still up y/y but growth has slowed
- Net trade increased in Q4 and are still adding to annual growth. Inventories have dampened growth the past 4 quarters, which is good news. At some point, inventories are small enough

On the charts above, and on the next page we have adjusted total EMU investments and net trade data for anomalies in Irish national accounts. Huge, and highly volatile imports of immaterial goods, at times just as large as GDP itself (equalling 1% of EMU GDP!), and parallel lifts in investments in such goods creates trouble for European (!) National Accounts. These transactions are not 'real' activity, just due to accounting adjustments within some huge global software companies. Hence, we adjust EMU data by applying modified data, supplied by the Irish Statistical Office

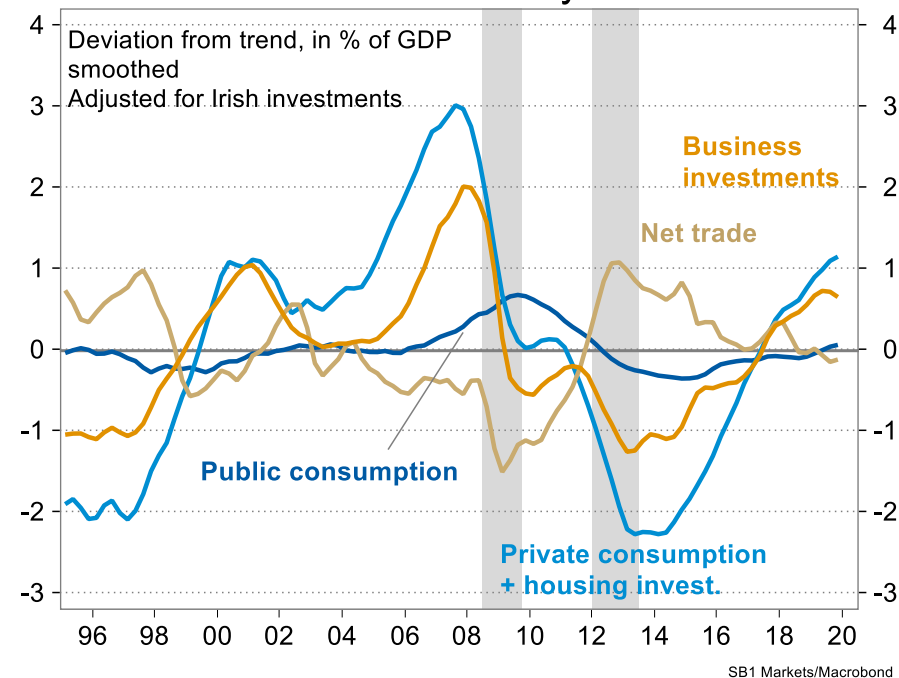
Household demand now the only game in the Euro zone town

Business investments have peaked and net trade is heading down

EMU GDP Components



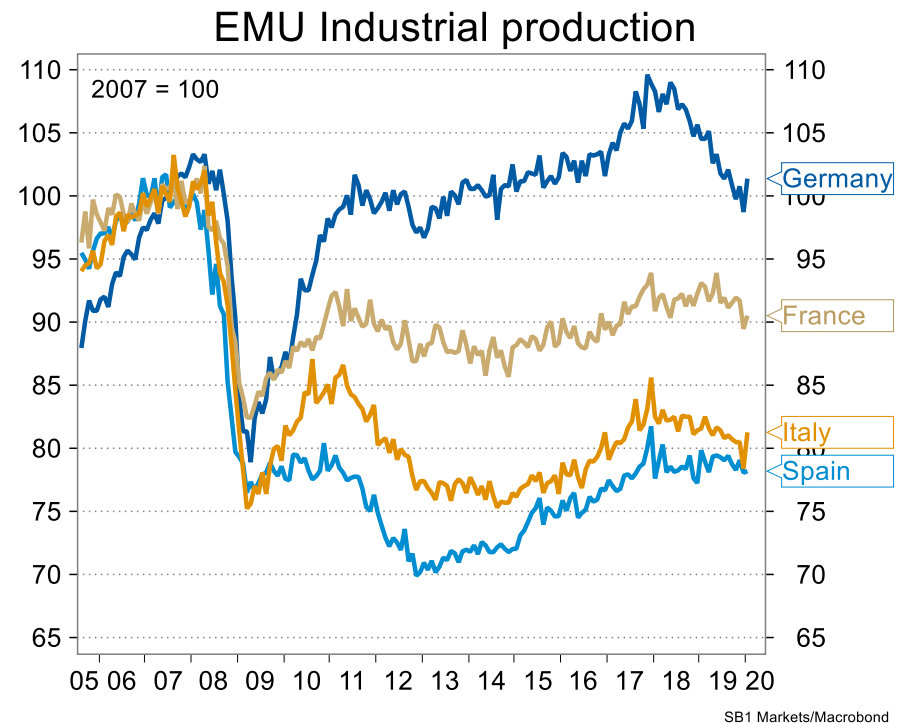
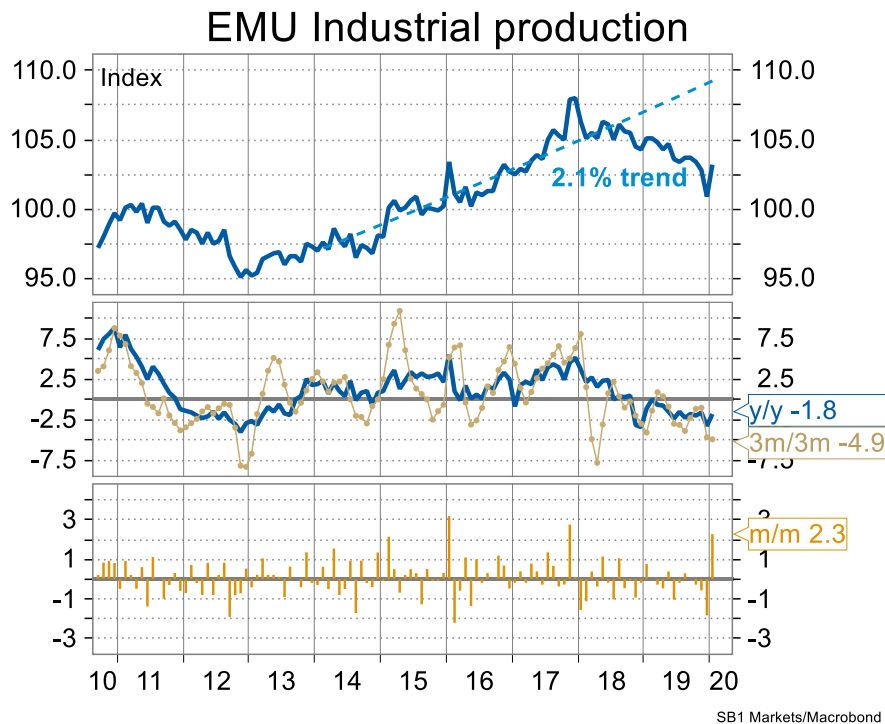
EMU Demand cycles



- Investments have been well above trend, an obvious downward risk the coming quarters

Industrial production bounced back up in January, trend still low

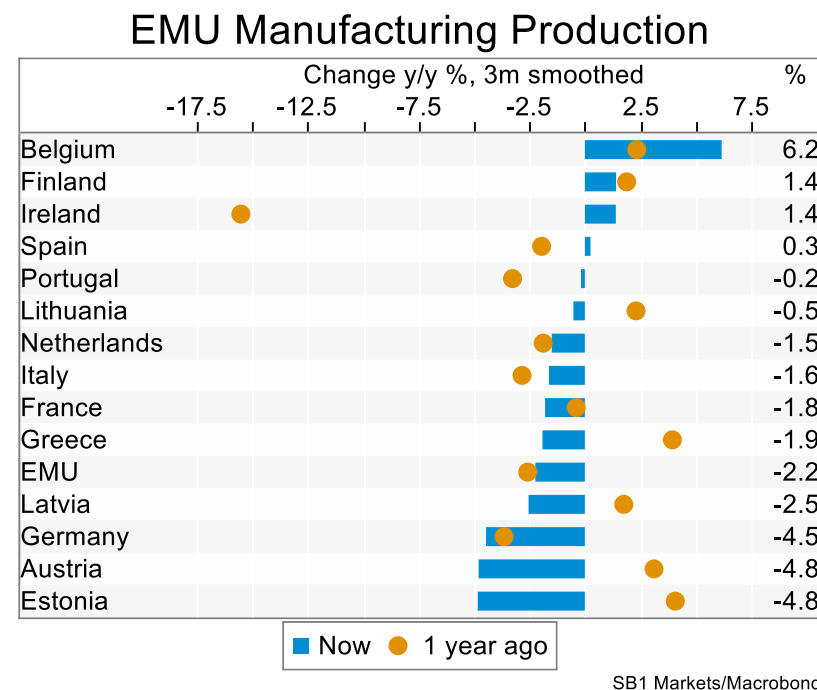
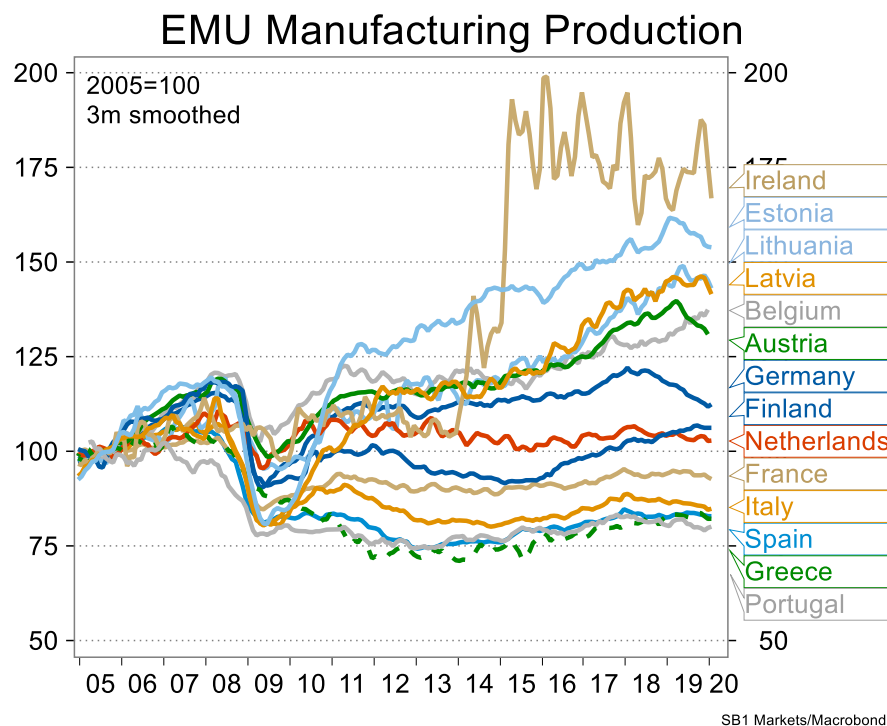
Germany, France and Italy reported a rebound in Jan – but the coming months are more important



- EMU industrial production (ex construction) rose 2.3% m/m in January, reversing the 2% December slip. However, production is still down 4.9% 3m/3m and the annual rate is -1.8%. February/March (and...?) figures will no doubt be heavily influenced by corona
- The manufacturing PMI has turned up and suggested a step towards recovery in February. However, activity will no doubt be heavily affected by the coronavirus outbreak and the countermeasures implemented in March, particularly in Italy

Production has been declining in most of the 'main' EMU countries

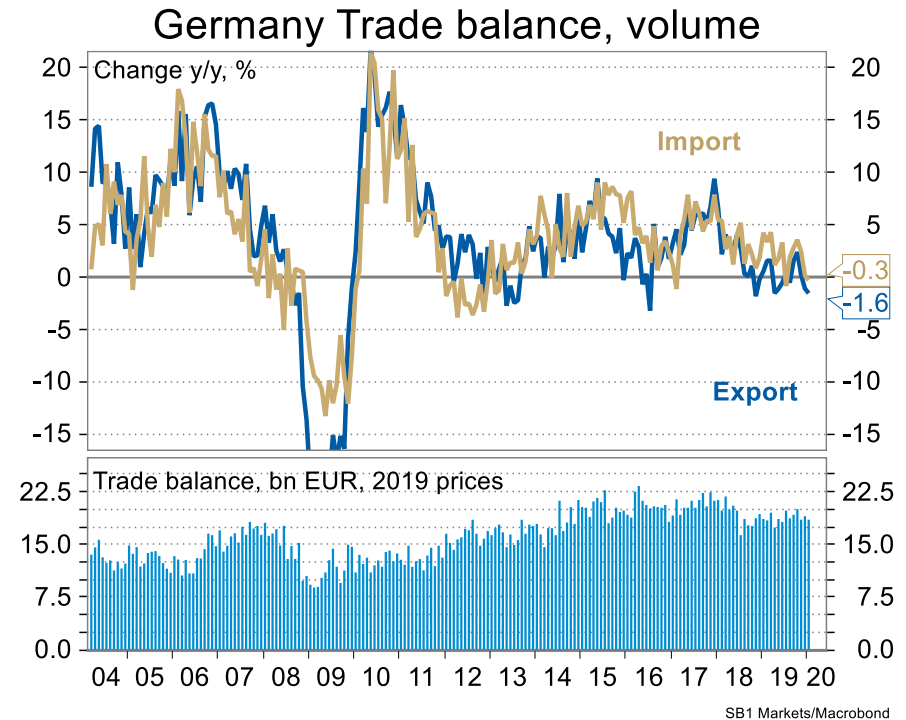
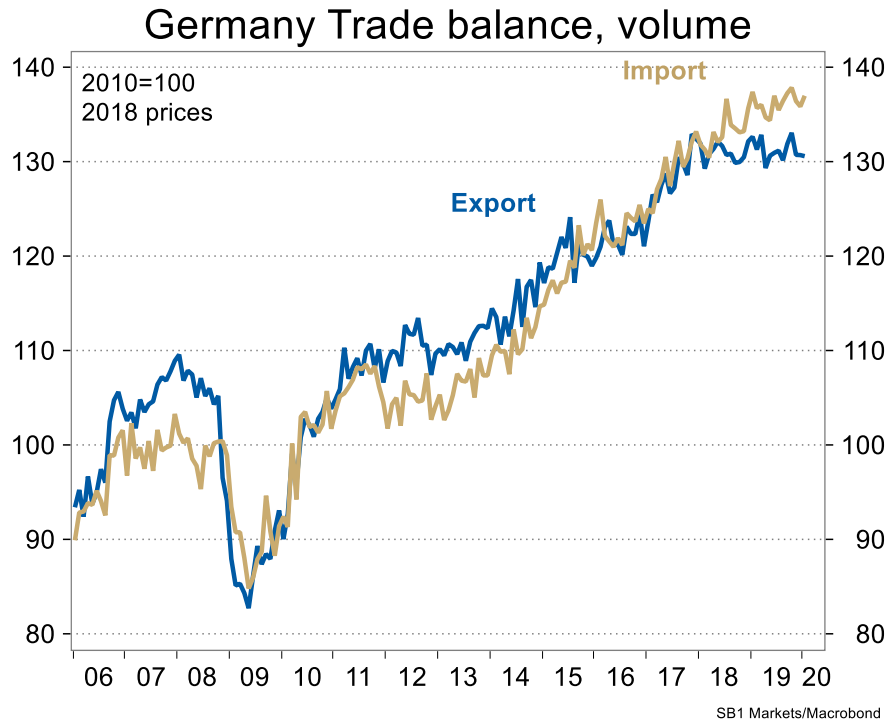
Production is expanding in just Belgium and Finland, while Spain and Portugal have stagnated



- Production is growing y/y in 3 of 14 countries (and data from Ireland are far too volatile), flattening out in 2 and declining in the other 9. Belgium and Finland are now at the top, while most Eastern European countries have slowed substantially the past months
- Germany has been reporting a far steeper decline than the other; however, both Estonia and Austria are struggling

Exports have flattened out, imports still trending up

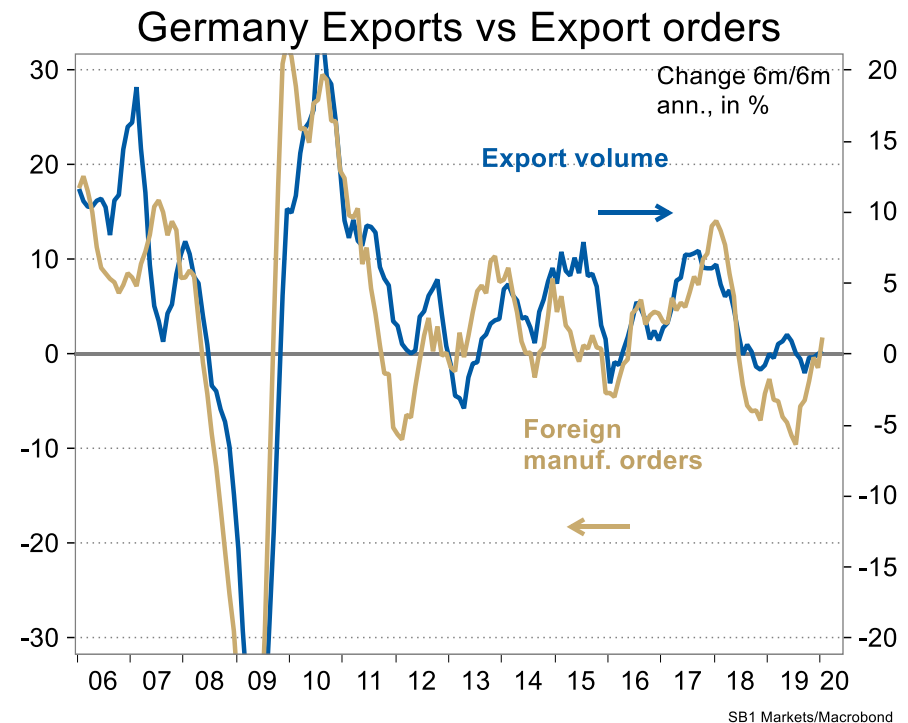
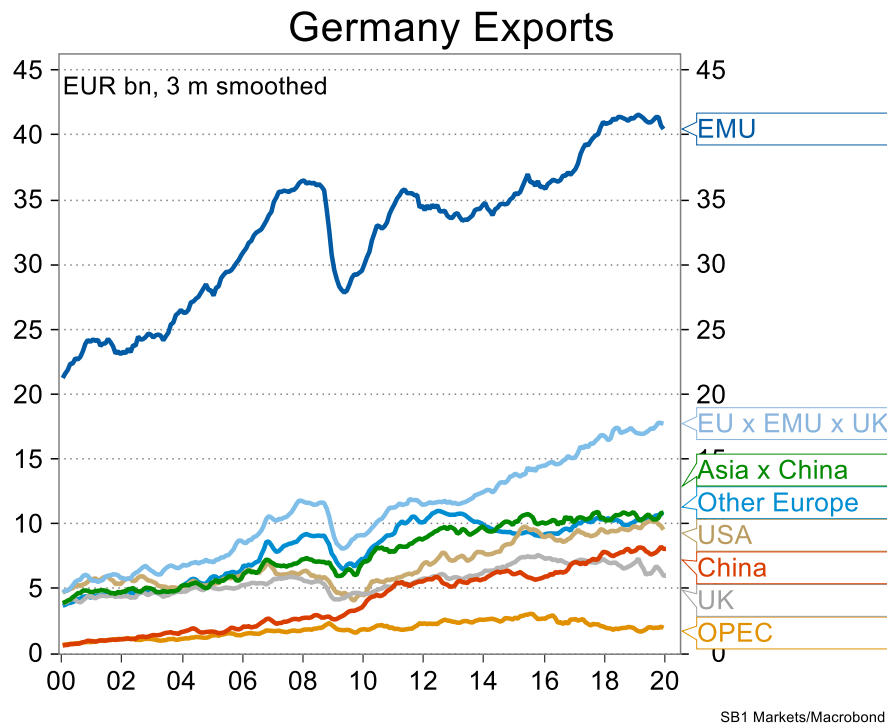
Where is the German 'collapse'? Not in exports, not in imports



- Export volumes were unchanged in January and are trending more or less flat since early 2018
 - » Manufacturing production has been falling more than exports, down 4% y/y. Production is a tad weaker than normal given exports, but not by much
 - » Global trade volumes have stabilized (until January, that is, Feb/March will no doubt be very weak) and do not signal weaker German exports
- Import volumes increased by 0.8% m/m in Feb and are still trending slowly up, indicating that domestic demand has not vanished
- The German trade surplus has come down from 2017 but has been close to stable since mid 2018, at some 5.5% of GDP

Exports have flattened out in several directions, UK down

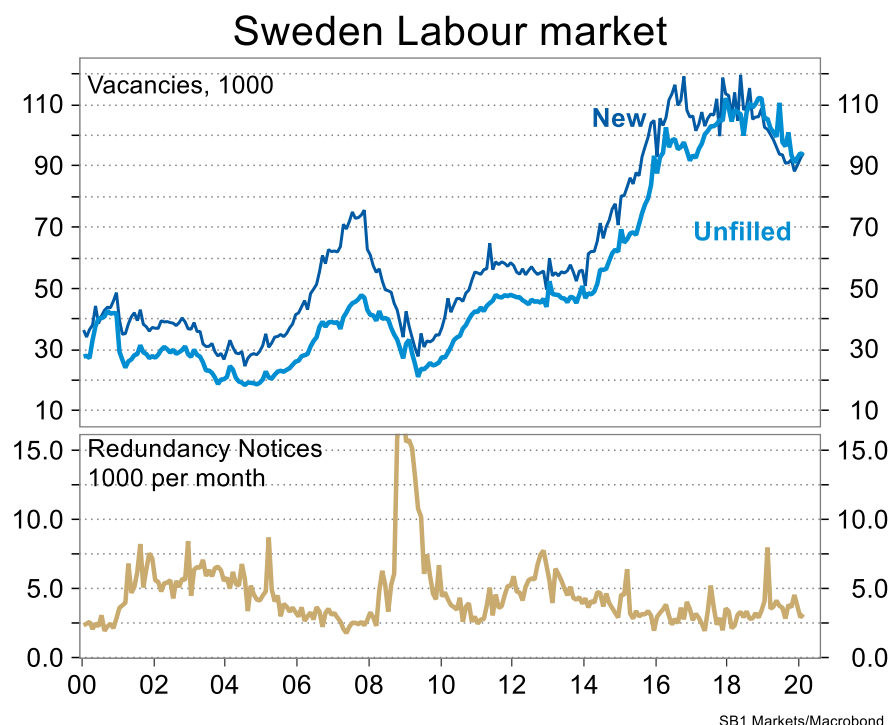
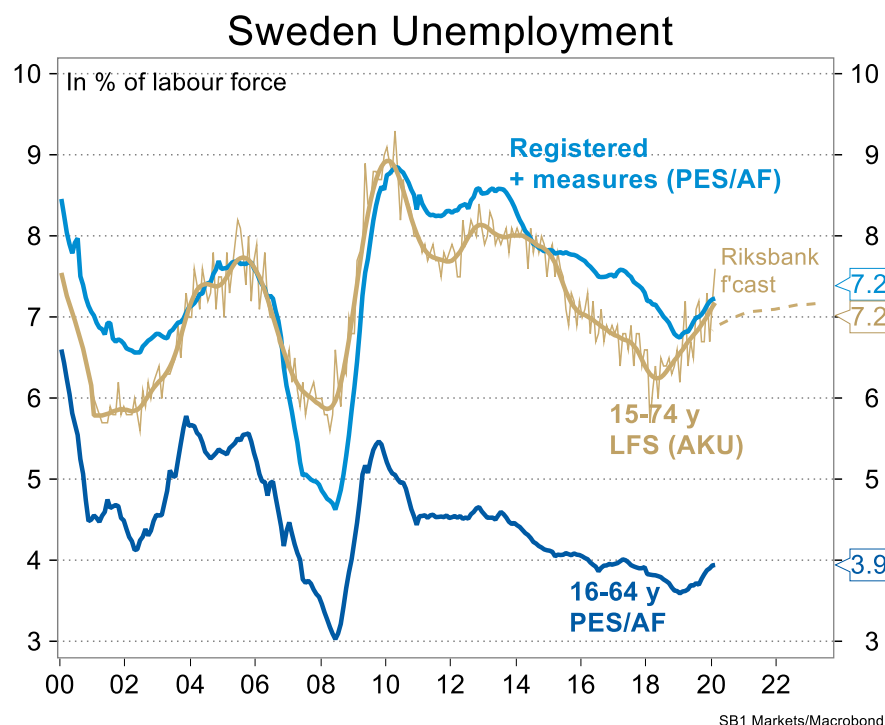
Foreign orders have bottomed out and do not signal weaker exports



- Most likely, exports have been softening over the past year due to a global retreat in business investments, triggered by trade war/Brexit uncertainties and probably also a 'normal' mature cycle, in Germany and elsewhere
 - » Exports to China are up 1.5% y/y but probably fell in February, as the coronavirus outbreak hampered Chinese imports, and will most likely continue to do so for some months
 - » Exports to UK have been hit hard by Brexit uncertainties and are down 15% y/y. Exports to the US have slowed recent months. Exports to other EMU partners have softened, while exports to Europe x EU are still heading up
 - » Germany's main export markets: The other EMU countries (37%), other EU countries x UK (15%), Asia x China (9%), Europe x EU (10%), USA (9%), China (7%), UK (6%)

Unemployment climbs, employment growth is ebbing, participation still rising

LFS unemployment (smoothed) rate rose to 7.2% in Feb, registered unempl. unchanged at 3.9%

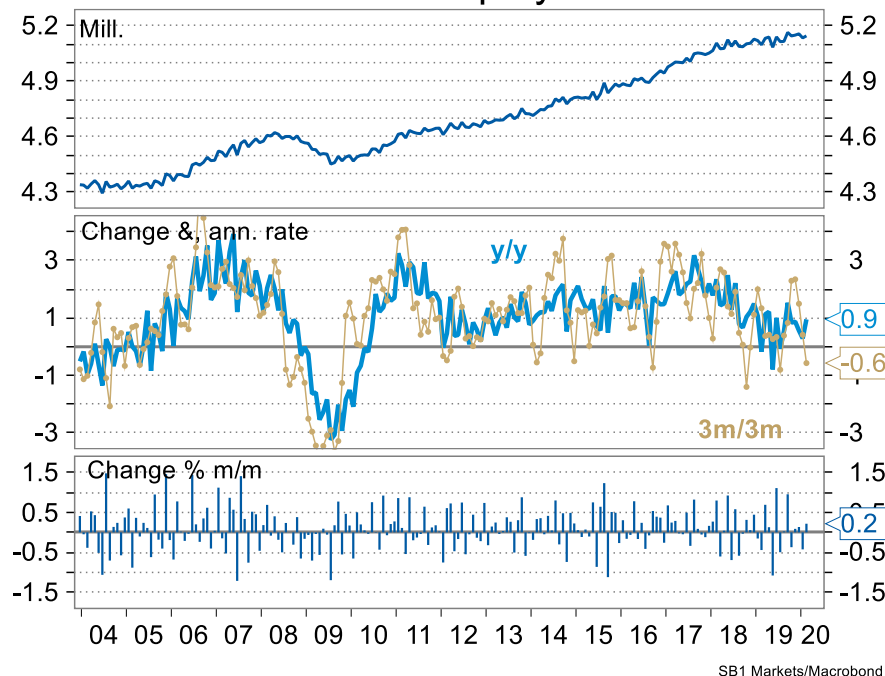


- LFS unemployment inched up to 7.2% in February%, measured by the smoothed rate. Unemployment has increased steadily from 6.3% in early 2018. The unadjusted, volatile rate, which zig-zags almost every month, spiked to 7.6%
- The PES/AF registered unemployment rate, which is less volatile than LFS data, confirms an upswing. Open unemployment was unchanged at 3.9% in February, following a 0.1 pp downward revision of January. % in January, up 0.4 pp from the bottom. Both new and unfilled vacancies have fallen from the peak, but edged up in February
- The labour market is no doubt weakening but the increase in unemployment is almost entirely due to higher labour force participation rates. The employment rate has just flattened, it is not declining

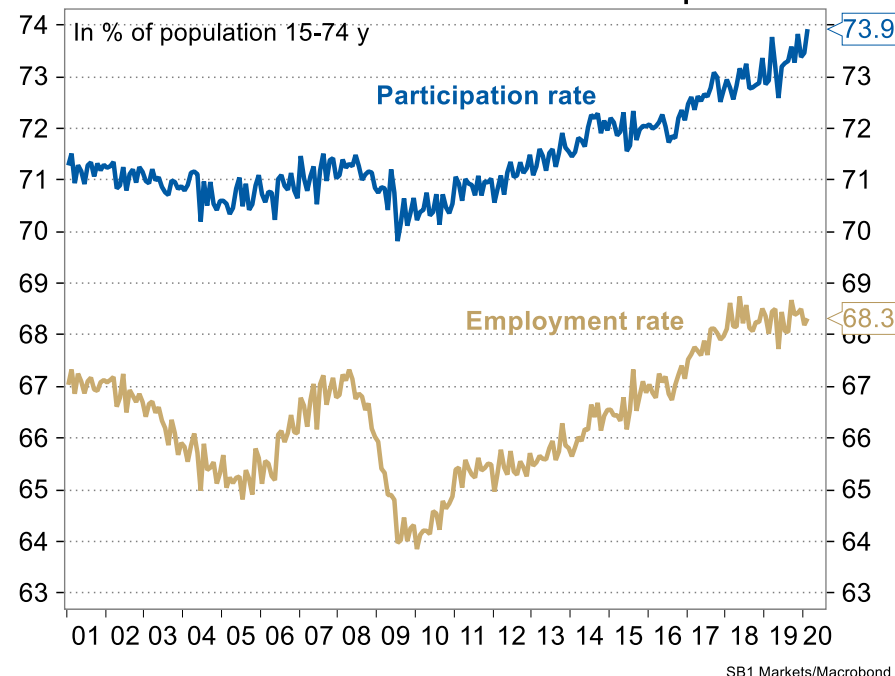
Employment is slowing, participation still heading up

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

Sweden Employment



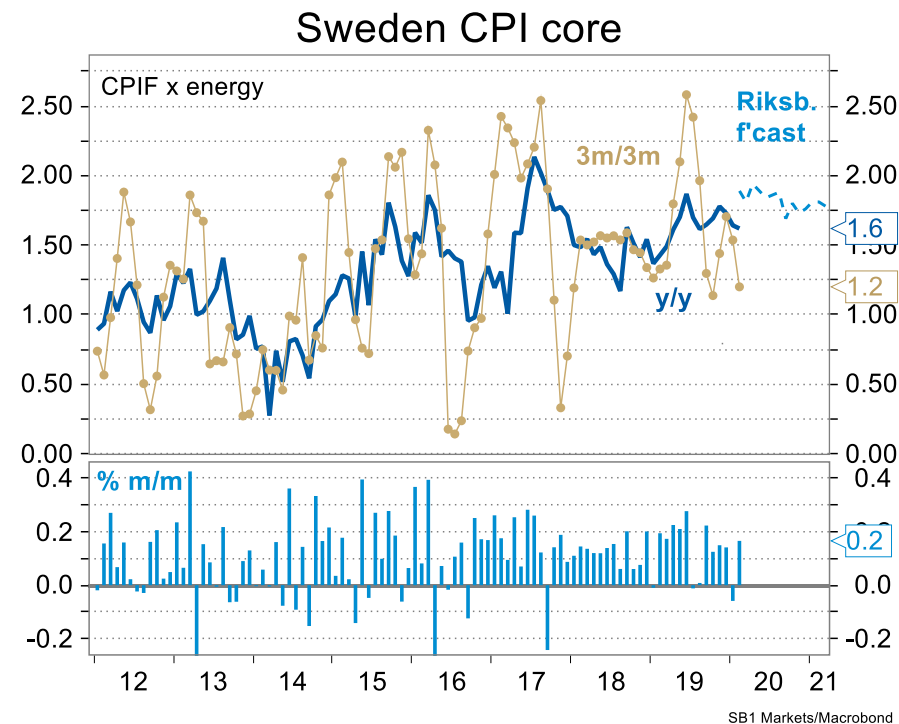
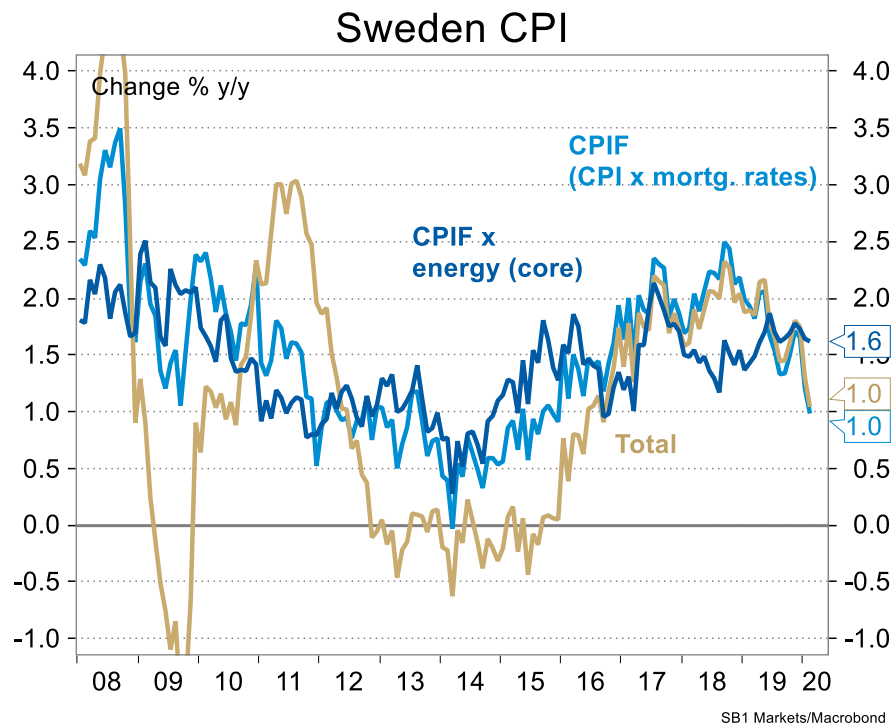
Sweden Labour Market Participation



- Employment rose 0.2% m/m in February and the underlying pace has slowed substantially, to a 0.6% decline. The annual rate is up 0.9%. The employment rate rose marginally to 68.3%, flattening out since early 2018
- Labour market participation rose to 73.9% in February and is still trending up, lifting the unemployment rate

Core inflation unchanged at 1.6%, while headline inflation drops to 1%

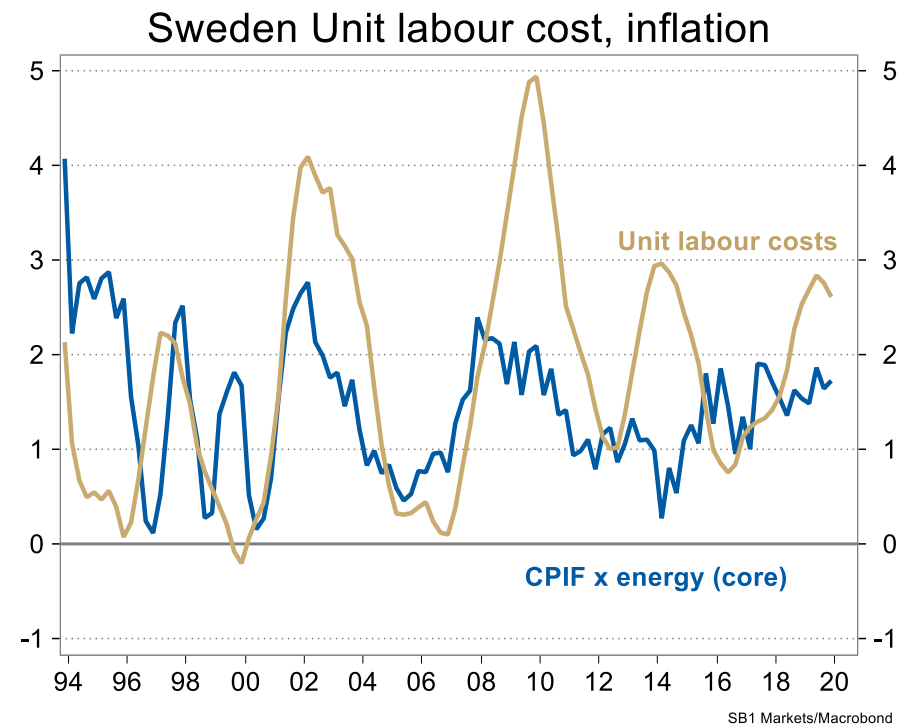
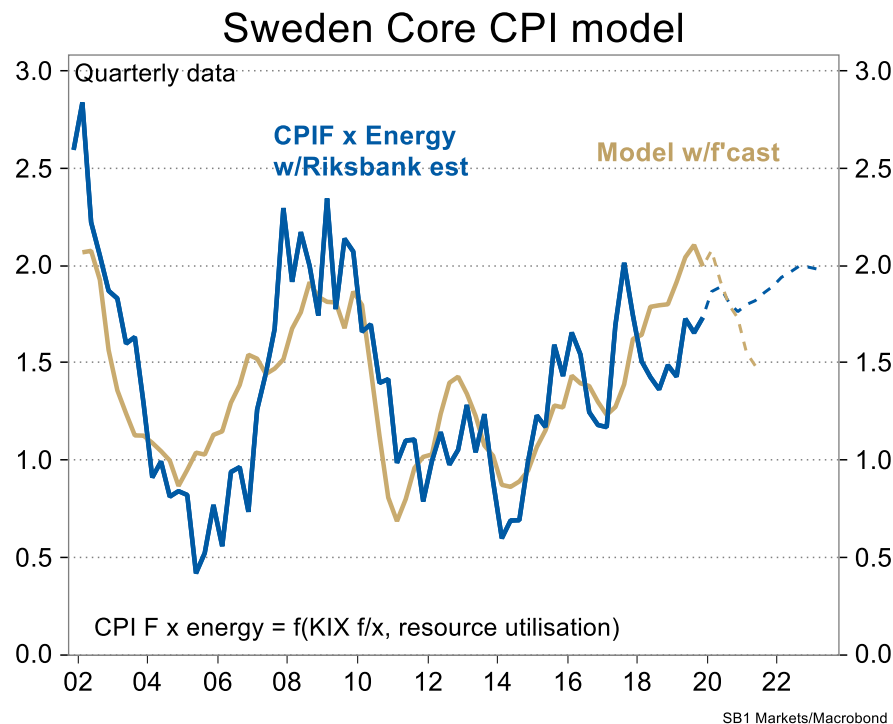
Core CPIF inflation steady at 1.6% in Feb, while total inflation slips on lower energy prices



- The 'real' core (CPIF ex energy) rose 0.2% m/m in February, January and the annual rate was unchanged at 1.6% as expected. Core inflation has turned slowly down since the summer and is 0.3 pp below the Riksbank's f'cast
 - » CPIF (ex mortgage rates) rose by 1.0% y/y, a 0.2 pp decline, dragged down by falling energy prices. Total inflation down to 1.0% too
 - » Our simple model suggests that inflation is peaking now, at a higher level, check the next slide for more
- The Riksbank plans to keep rates at 0 for a long time, the market is starting to price a 25 bps cut in late 2020

Our model says inflation at peak (at a higher level)

Lower capacity utilisation indicates an inflation slowdown, SEK and unit labour costs do not



- Our model includes SEK and the Riksbank's Resource Utilisation indicator, measuring deviation from potential GDP growth. The RU indicator turned steeply down in 2019, to just 0.2 pp above the average level. The inflation model suggests higher inflation now, at 2.1% in Q1 vs and a slowdown thereafter, to 1.7% in late 2020
 - » A weakening labour market and a softer economic surveys have pulled the RU indicator steeply down
- On the other hand, productivity growth is low (although increasing), up just some 1% (smoothed) and unit labour costs are up 2.6% y/y (with a heavy smoothing, these data are volatile). Hence, the cost pressure is not low at all

Highlights

The world around us

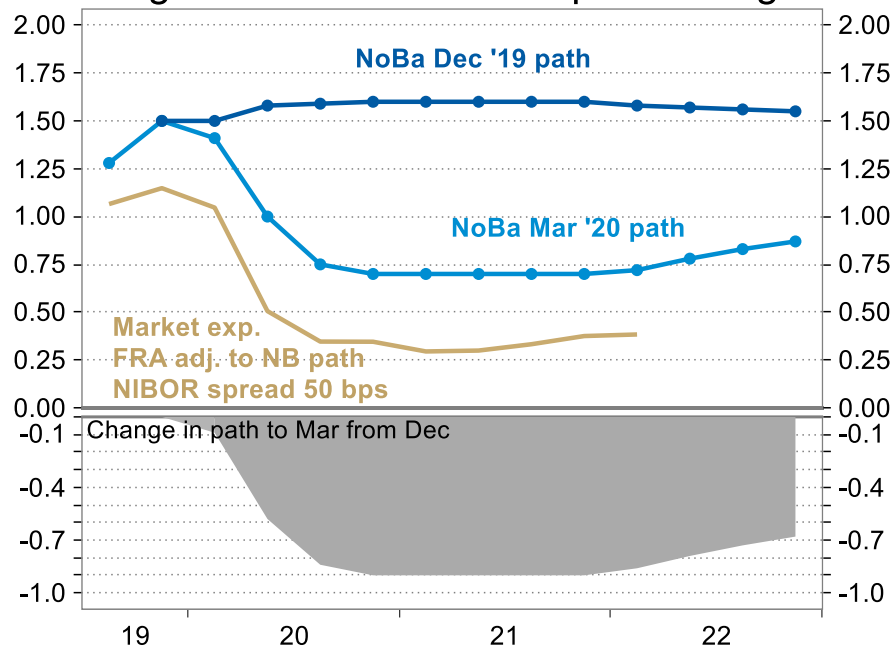
The Norwegian economy

Market charts & comments

Norges Bank delivered a 50 bps emergency cut and signals that more will come

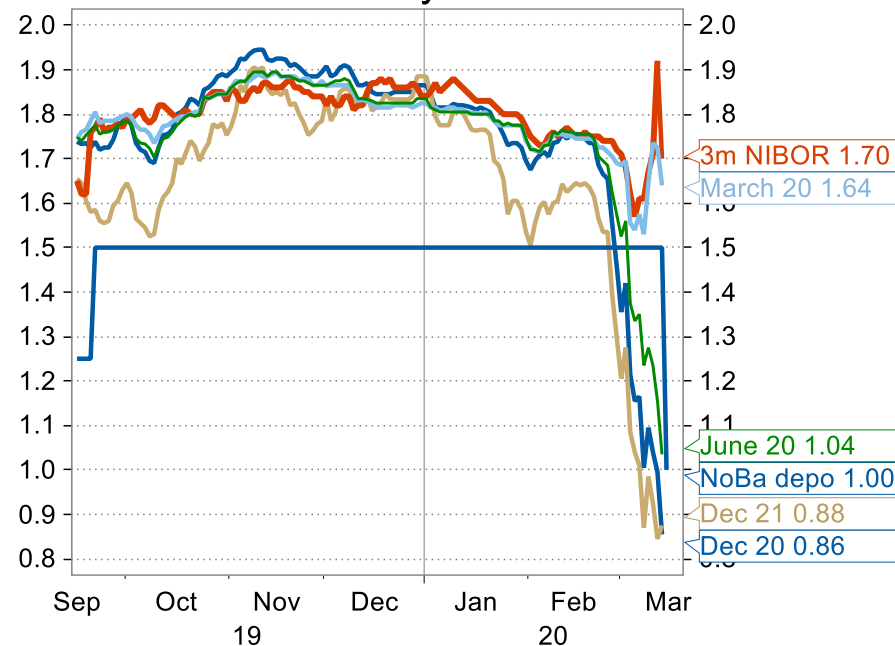
The 50 bps cut was broadly expected but not before the scheduled meeting this week

Norges Bank Interest rate path changes



Norges Bank, SB1 Markets/Macrobond

Norway 3m FRA

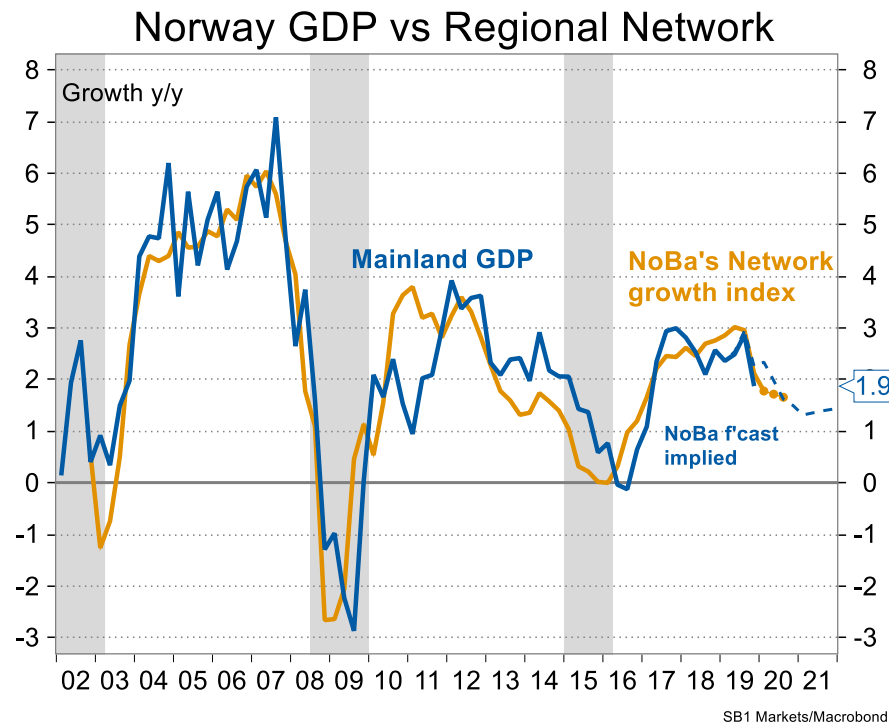


SB1 Markets/Macrobond

- Norges Bank announced a 50 bps interest rate cut to 1.0% Friday, the first intermeeting since the financial crisis. The interest rate path was nudged down by up to 90 bps, implying another 25 bps cut in the summer (prob. June)
 - A short Monetary Policy report was published with some few projections. The assessments were based on data until March 11, which was before Norway was put in complete 'lockdown'. Thus, these projections are already outdated and anyway highly uncertain, we expect downward revisions, from the 0.4% 2020 GDP growth forecast. Another 50 bps cut by the summer is highly likely, and probably before June
 - In addition to the interest rate cut, the Bank will provide liquidity by offering 3 month F-loans to an interest rate equal to the deposit rate. Moreover, the countercyclical capital buffer for banks will be reduced to 1%, from 2.5%
- 3m NIBOR at 1.7% implies a money market spread far above 70 bps. We assume the current FRA-path is some 35 bps below NoBa's path in late 2020, given expectations of a shrinking spread, say to 50 bps. Hence, markets expect another 50 bps cut by June

Norges Bank's Q1 Network reports a moderate slowdown – before corona hit

Businesses expected 1.7% growth in Feb, a mini-survey suggest corona will have substantial impacts



The Network's reported growth pace is slightly lower than NoBa's y/y f'casts, whereas expectations on the coming 6 months are on par with NoBa's f'cast. Compared to NoBa's q/q f'casts, which we prefer, the Network is more upbeat

Summary of the Q1 Regional Network report

• Growth

- » Norges Bank's Regional Network reports 1.8% growth the past 3 months, 0.1 pp weaker than they expected in the Q4 survey (and 0.3 pp below NoBa's Q1 f'cast)
- » Businesses continues to expect growth to slowly drift down, to a 1.7% pace the coming 6 months. This was a somewhat milder slowdown than we projected (our f'cast was 1.5%)
- » However, the Q1 survey was conducted until Feb 14, hence, before the coronavirus started spreading rapidly in Europe and Norway. In a phone survey conducted in early March, more than 1/3 of the businesses (81 interviewed, we assume some 25% of the Network) noted that they had revised down their growth outlook, and many were already affected. Several businesses had implemented temporary hiring stops and some were planning for possible layoffs

• Capacity utilisation/investments

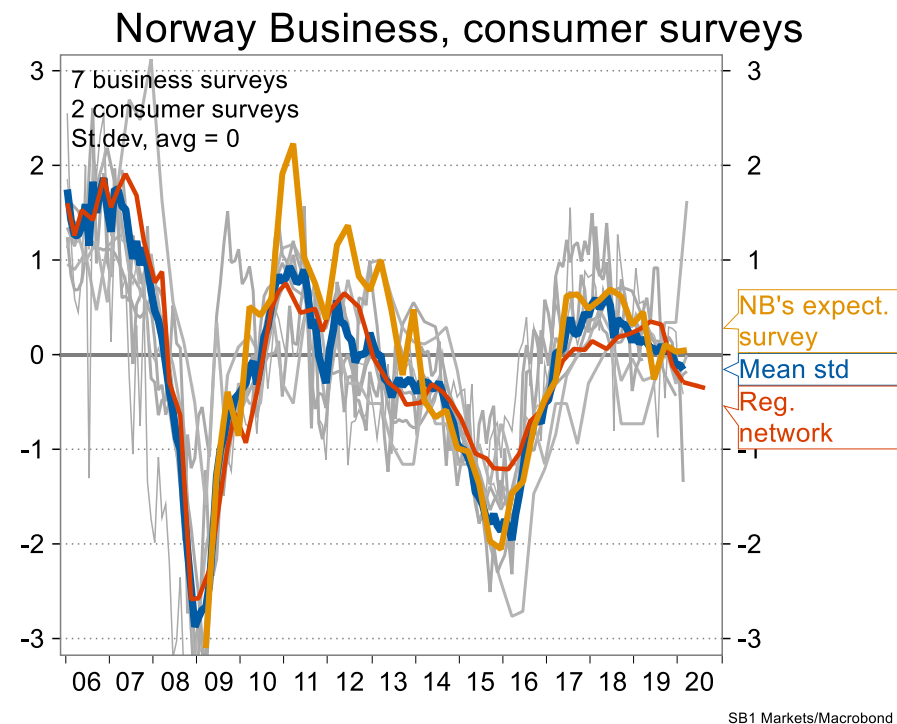
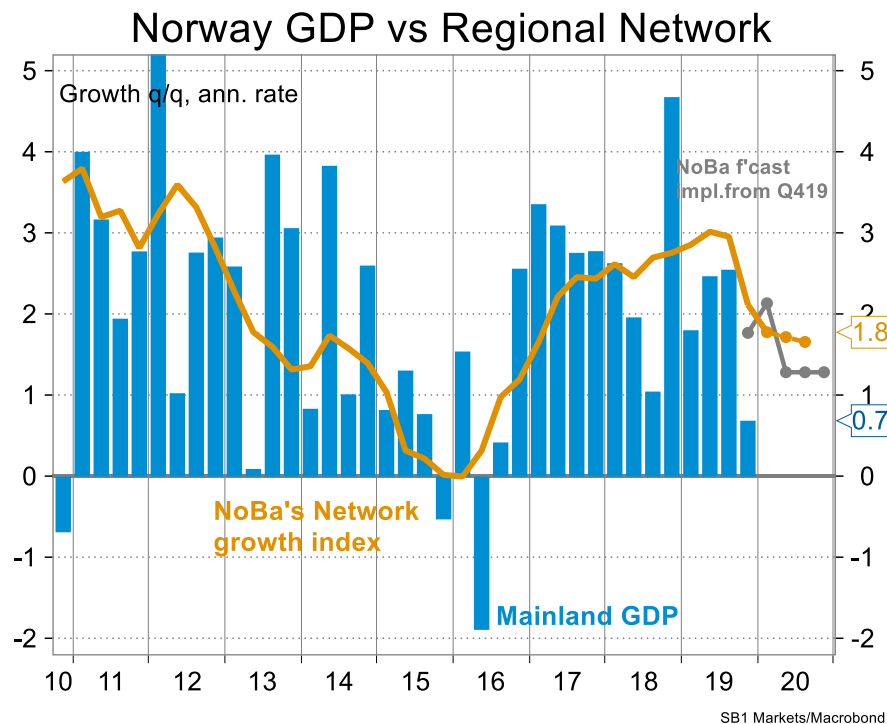
- » The Network reports unchanged capacity constraints. The share of businesses reporting labour shortages increased but remains unusually low vs the unemployment rate
- » Businesses expect softer employment growth, down to just 1%, vs 1.7% in Q3 (still far above population growth, though)
- » 2020 wage expectations at 3.2%, up from 3.1% in '19

• Implications

- » Norges Bank did not put any weight on the Network as it did not address the impacts of the coronavirus. The phone survey confirms that the Norwegian will be heavily impacted by the virus outbreak. Additional interest rate cuts following the 50 bps on Friday are likely the coming weeks/months, we expect another 50 bps

Growth peaked in 2019, will ease to 1.7%, according to the Network

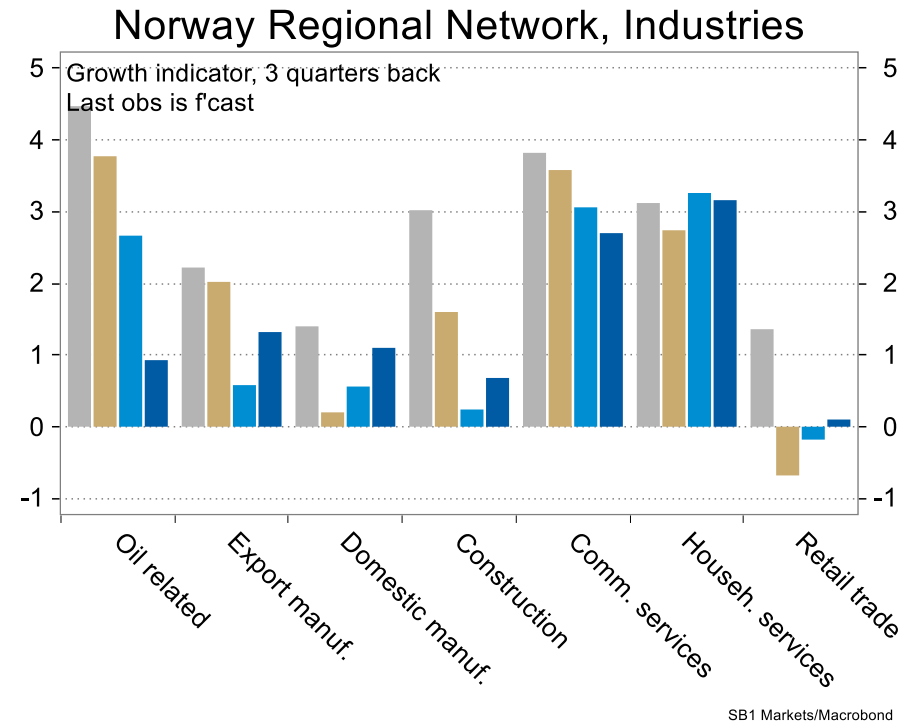
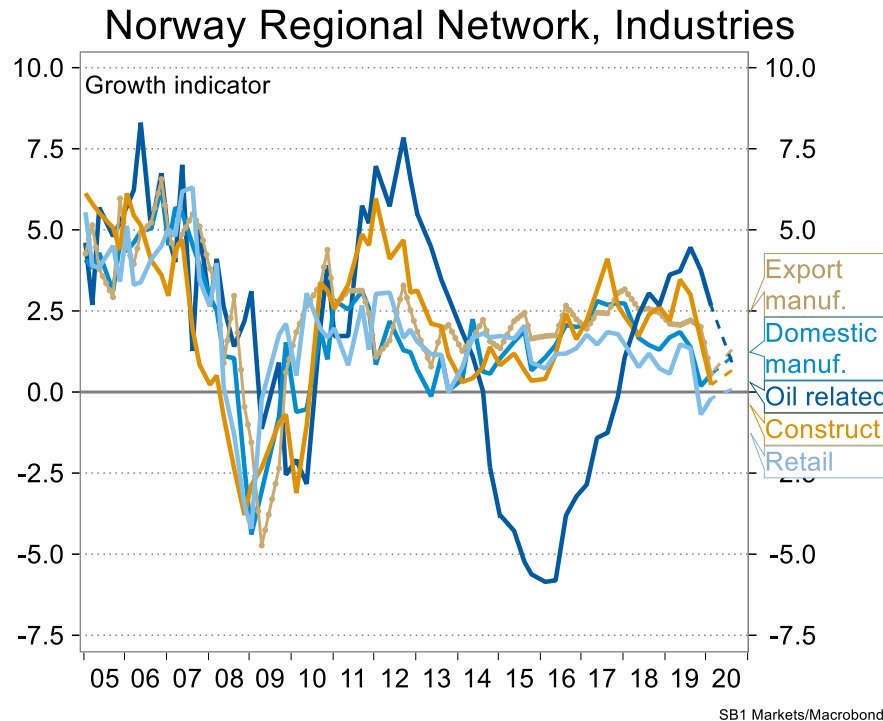
The Network signals 1.7% GDP growth in Q2/Q3, above NoBa's quarterly f'cast of a 1.3% speed



- Norges Bank's Network estimates economic activity to expand by a 1.7% speed the coming 6 months, which is still above Norges Bank's q/q f'cast (implicitly, our f'cast). The bank expects 1.3% growth in Q2 and Q3 (from a too high
- The Network is now marginally weaker than the avg of other Norwegian economic surveys. All surveys have softened, confirming that the growth peak is now behind us. Consumer confidence surveys are still not weak but are highly likely to drop on corona fears. SSB's manufacturing survey and the Financial News Index are more downbeat than the Network

A pronounced slowdown in construction, oil related industries and exports

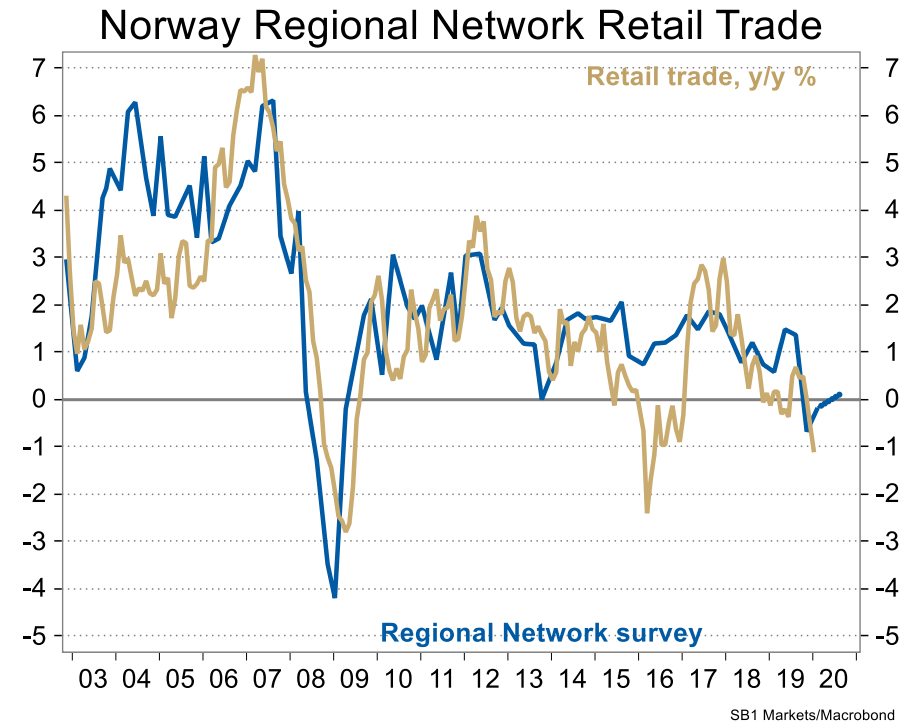
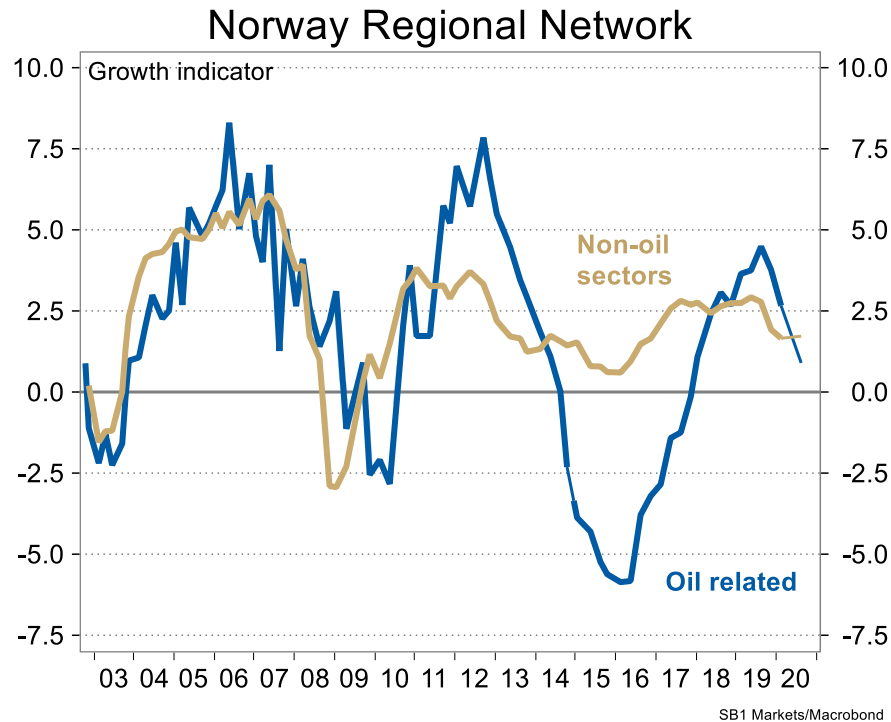
All major sectors are expecting subdued growth the coming months – and retail has stalled



- Oil related companies (manufacturers & service providers) confirm that growth has peaked. Growth slowed substantially the past 3 months and the companies expect a slowdown to just some 1% growth the coming 6 months (and it will probably turn to a decline through the year)
- Construction reports a marked growth downturn the past months but expects a stabilization. Weaker housing starts/sales are a drag
- Export oriented manuf. sectors experienced a slowdown and expect a modest growth uptick (keep in mind that there reports were conducted before corona hit in Europe). Domestic manufacturing gained some pace in Q1 and a moderate growth rate is expected
- Retail is reporting zero growth and no upturn is in sight (but not a steeper decline, either). Retailers are reporting that they have struggled with higher input prices due to the weak NOK and are unable to raise consumer prices due to high competition
 - Surprisingly, the Network notes an upturn in auto sales in early 2020, in spite actual sales data not indicating any recovery

Oil related businesses on a downward path

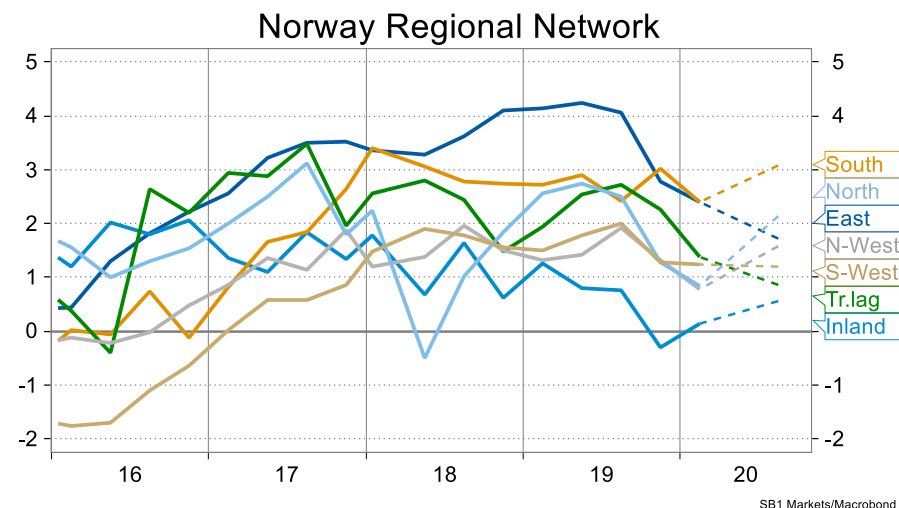
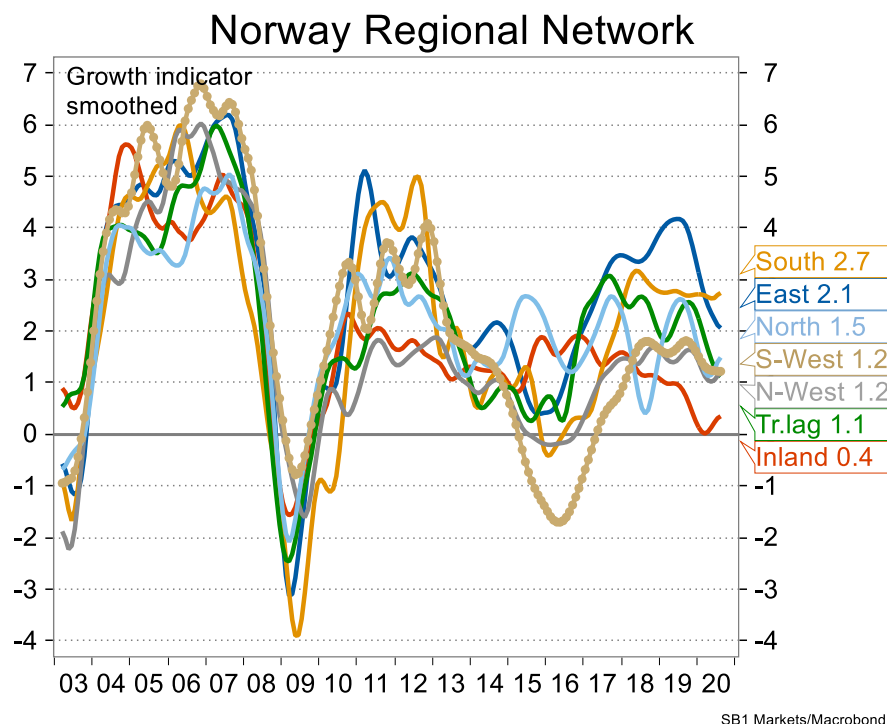
Growth in non-oil sectors has slowed somewhat and growth in oil services will soon subside



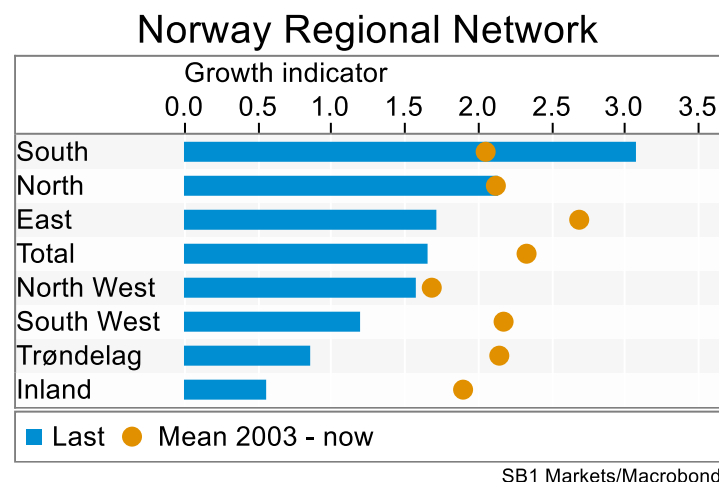
- Retail trade is now declining y/y, the network may now signal a stabilization (yet no growth!)

Growth sharply down in the East, North, Trøndelag. South still the winner

All regions but the South have noted a slowdown. South, North, N-West expect an uptick in Q2/Q3

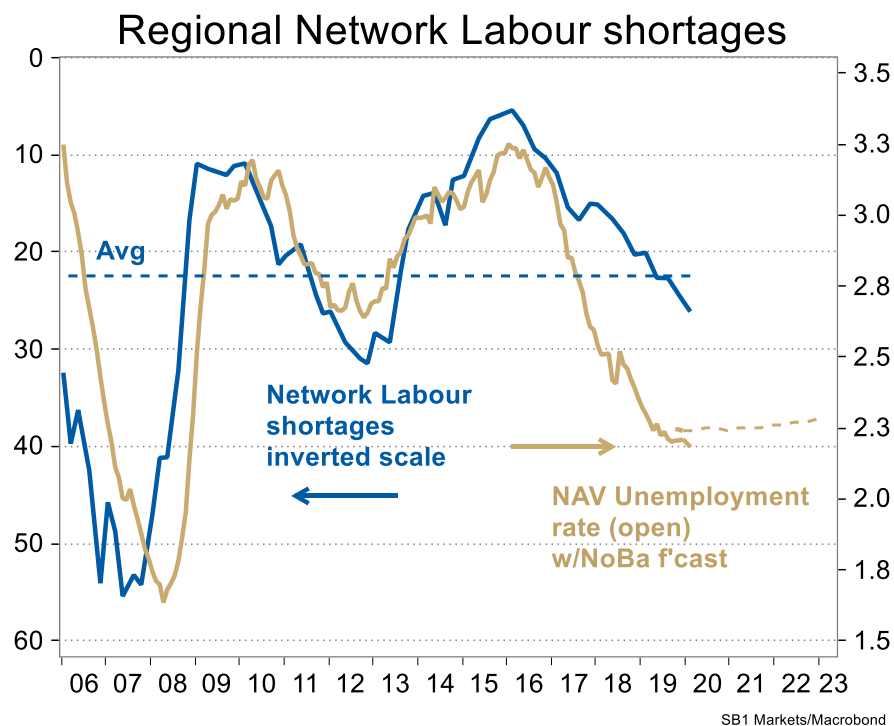
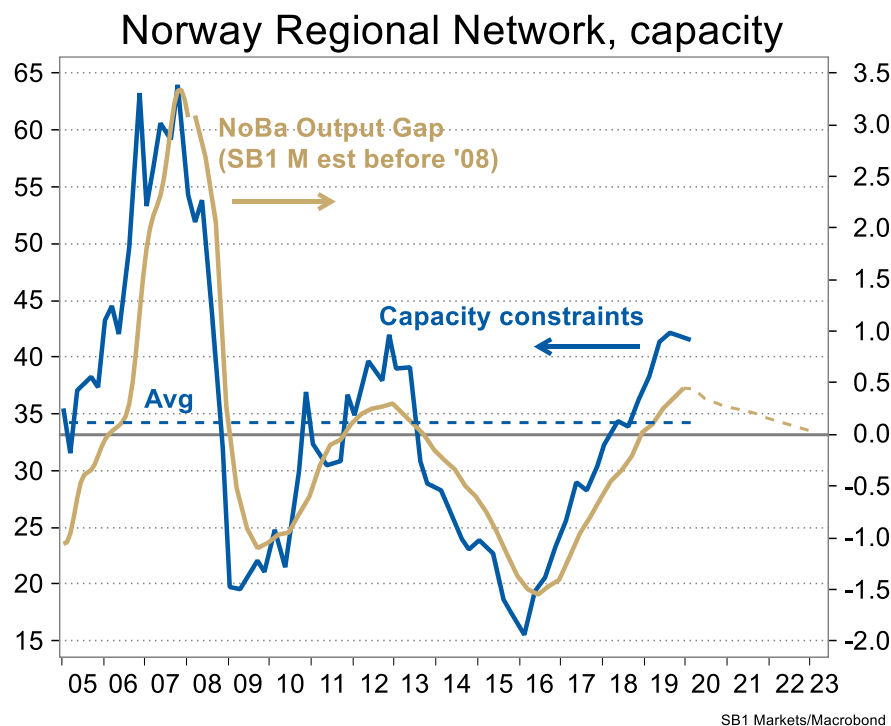


- Activity increased in most regions through 2017, 2018 and until mid-2019. Since then, growth has cooled in all regions except the South, which has been more or less steady. In the East, growth slowed rapidly and another downturn is expected. Trøndelag down, and the North, but an increase is now expected
- The two western 'oil' regions are reporting lower growth but do not expect another downturn the coming two quarters, in spite the slowdown in oil related industries



Capacity utilisation at peak, labour shortages still climbing

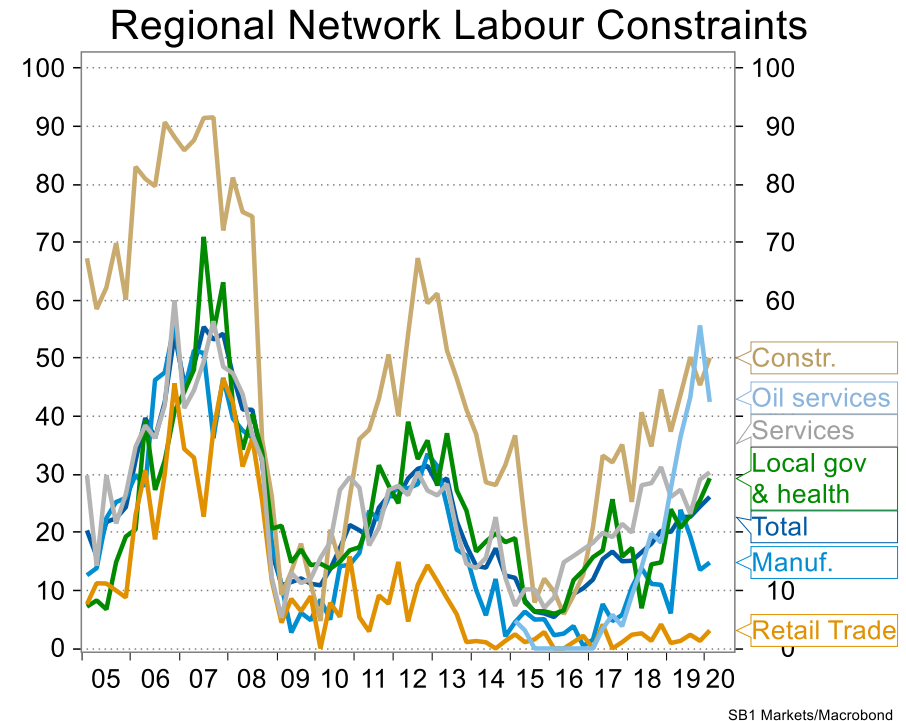
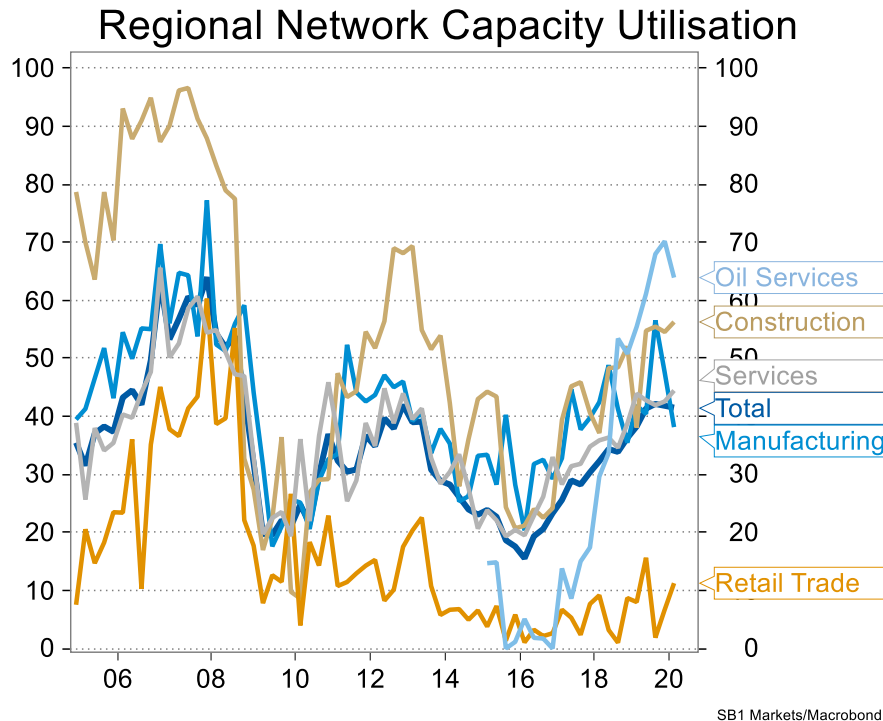
Capacity utilisation is far above the avg since '05 and at the 2012 peak level



- Capacity utilisation has been improving rapidly since 2016. The past 3 quarters, capacity constraints have flattened out, at the same level as the 2012 local peak – but still well below the 2007 level
- Labour supply constraints are slowly increasing, to slightly above average in Q1. Yet, the share of businesses noting difficulties remains far lower than usual given the unemployment rate at 2.2%! An indication that labour is still available
 - » Given that unemployment may be flattening out and the number of unfilled vacancies is edging down, labour shortages are not likely to increase much, from here, even as the level is lower than 'usual' vs unemployment

Capacity utilisation has been soaring in oil service industries & construction

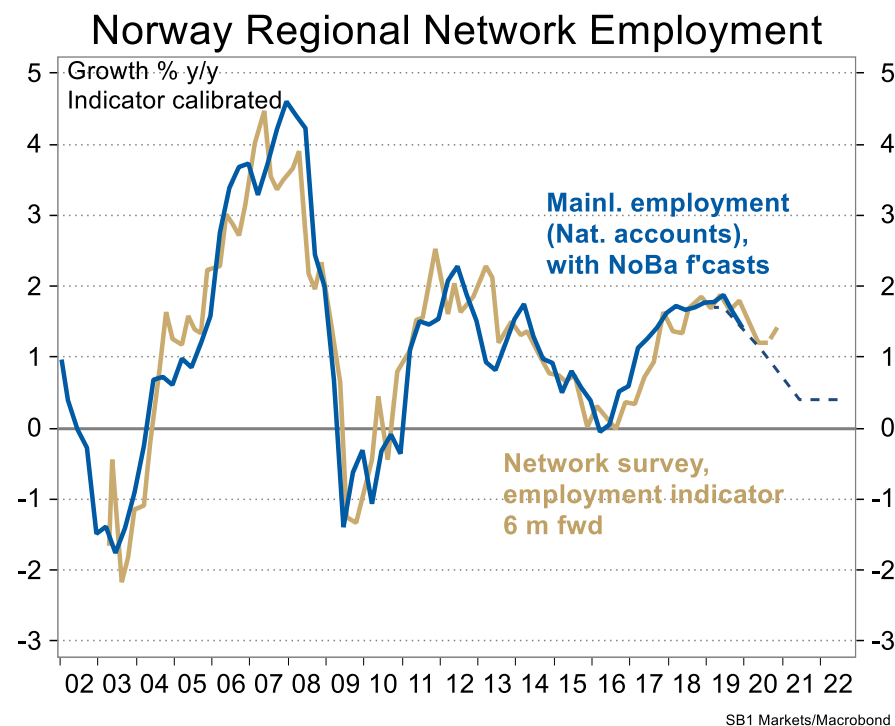
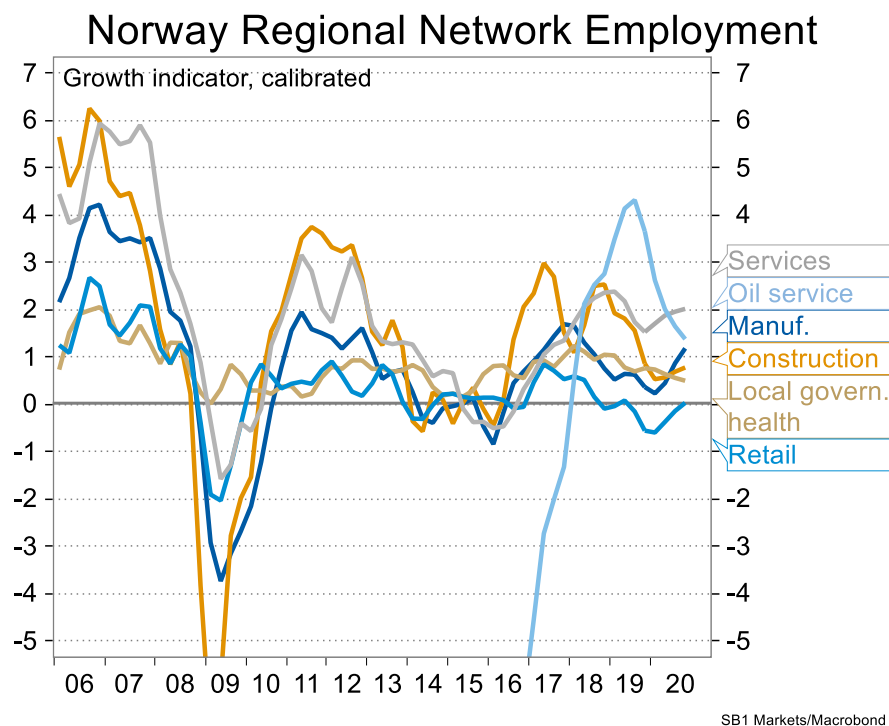
The peak is probably behind us and has slowed rapidly in manufacturing



- The share of oil-related businesses (not oil companies) reporting problems accommodating edged down to 64% in Q1. Labour constraints fell to 43%, from 56%, the labour market in oil related sectors has been very tight
- In construction, capacity utilisation and labour shortages have stabilized after rising rapidly through 2017 and 2018
- Retail trade is reporting very low capacity utilisation and does not have any problems attracting labour
- The share of manufacturers reporting full capacity utilisation fell to 38%, the second quarter of decline

The Network notes a modestly slowing employment growth

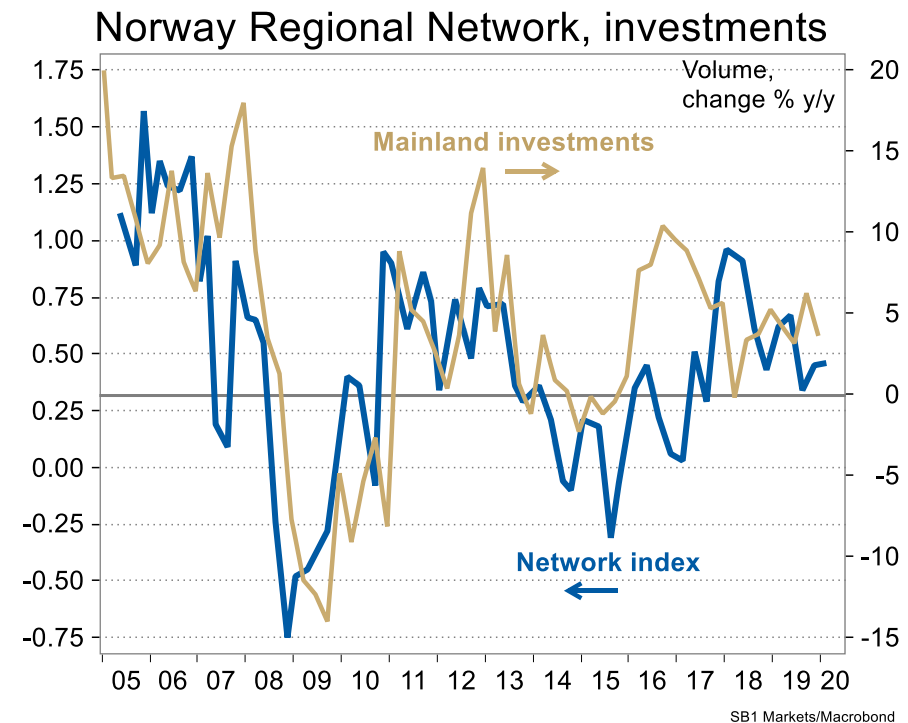
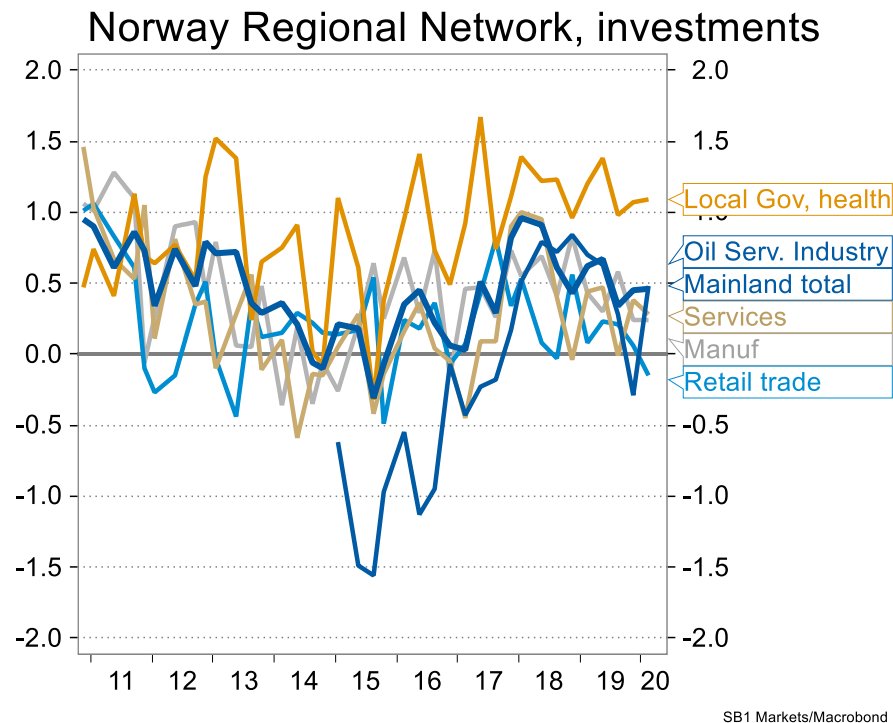
Employment growth weakens in oil services but is expected to pick up in manufacturing



- In total, the Network employment indicator reports a slowdown to just above 1% growth in employment. Surprisingly, businesses expect a small upturn the coming months, to some 1.4-1.5% growth
- The downturn is in line with Norges Bank's employment f'cast but more pronounced than other surveys. The Regional Network is the most updated and is anyway more accurate. The correlation to actual employment growth is rather strong
 - » In oil related services, employment growth is easing. Construction employment growth has turned down but now stabilized (downside risk?). Manufacturing is gaining some pace but the upside is probably rather limited. Retail still stagnating

The Network signals modest growth in business investments

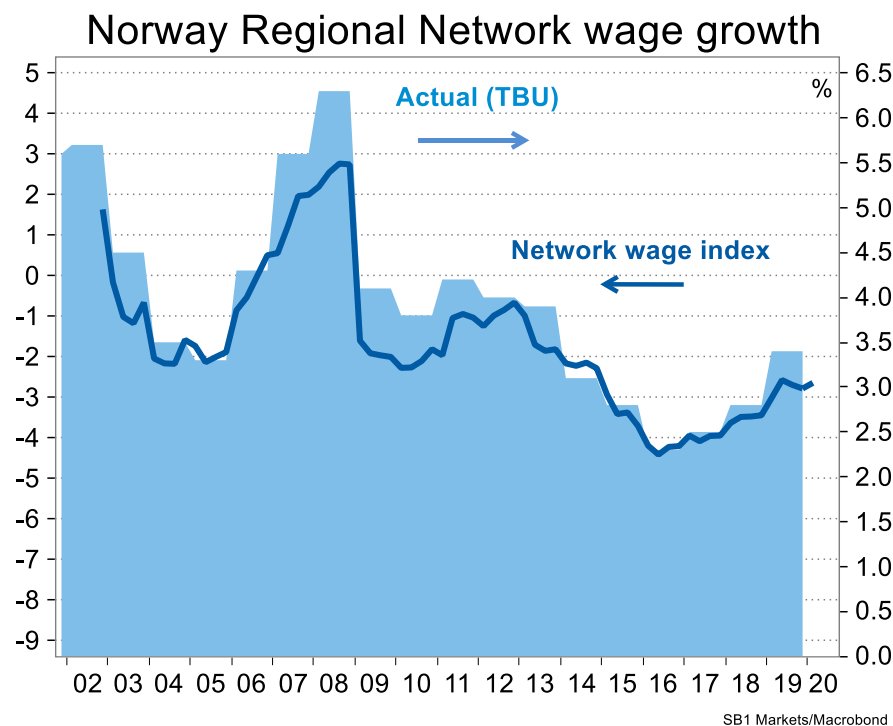
Investment plans were held unchanged (before corona), pointing to 2-2.5% growth



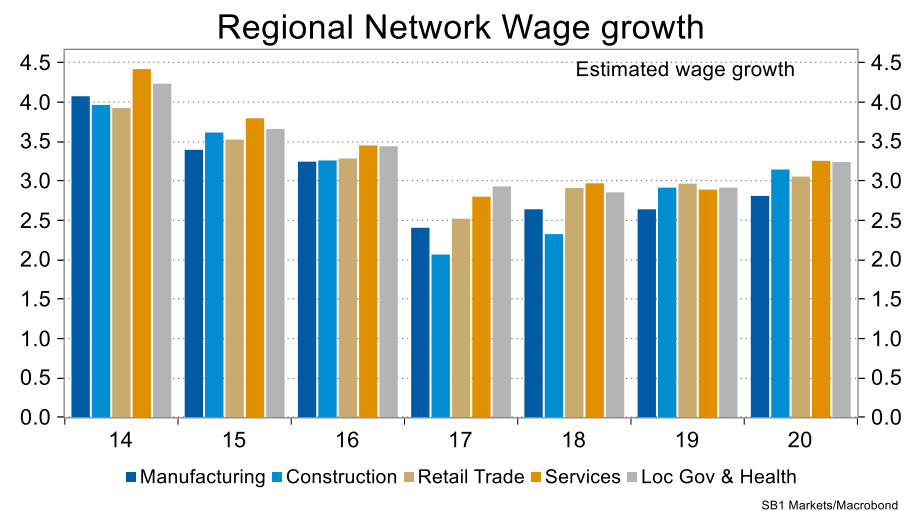
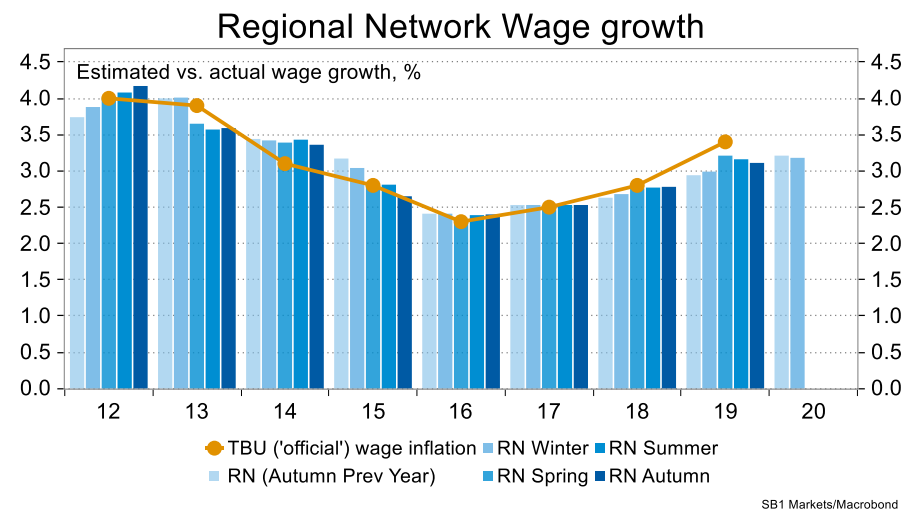
- Oil service/oil related manufacturing industries have been reducing their investment plans rapidly, however, they expect a rebound in Q2/Q3. Investments from the oil companies will decline through 2020 and probably be a drag on activity in oil services
- Non-oil related manufacturing have gradually lowered their investment plans the past year. SSBs investment survey reports a sharp decline in investments in 2020
- Investments in retail trade are falling, services still growing moderately. Local govt/health remains on the top
- Actual Mainland business investments rose 3.6% q/q in Q4 – we expect a substantial slowdown this year

The Network expects wage growth at 3.2% in 2020

Wage expectations are in line with NoBa's f'cast – and with the employees' organisations

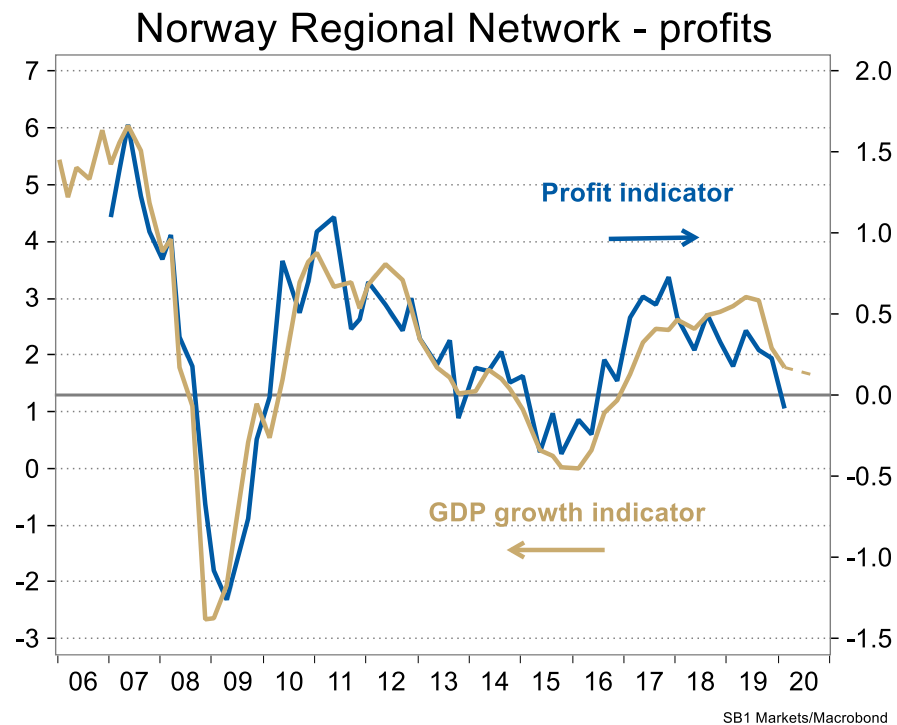


- The Network expects 3.2% wage growth, up from 3.1% in the previous report. Wage inflation is projected to increase somewhat in all sectors in 2019 vs 2018
- NoBa assumed wage growth at 3.2% in the Dec MPR



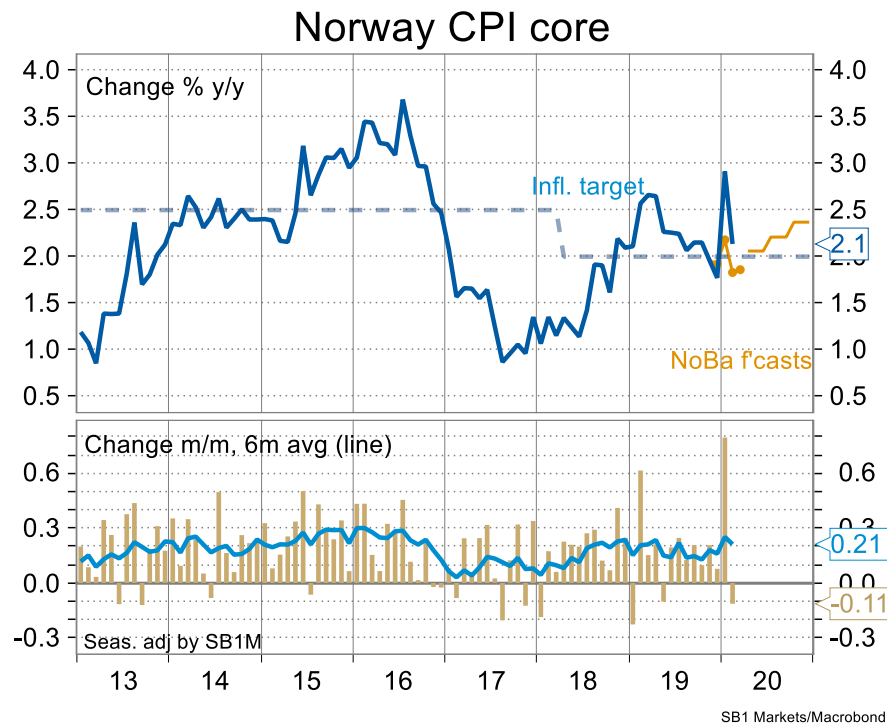
Businesses are noting stagnating profits

Businesses are reporting weaker profitability, down to 2016 level



Core inflation down to 2.1% in Feb, reversing most of the Jan spike

Core CPI retreated 0.1% m/m and the annual rate fell 0.8 pp, still 0.3 pp above NoBa's f'cast



- CPI-ATE (ex. energy and taxes) rose 2.1% y/y in February, 0.2 pp lower than we and consensus expected. Hence, most of the January inflation surprise (to 2.9%) was reversed, but inflation remains 0.3 pp above NoBa's f'cast
 - » CPI-ATE fell 0.1% m/m seasonally adjusted
 - » Prices on clothing & footwear and transport x airline tickets dropped in Feb, food & recreation prices climbed
 - » Inflation on imported goods fell back down to 0.7% y/y. Still, given the very weak NOK, an increase in imported inflation is expected
- Total CPI growth fell to 1.1%. Total inflation is dragged down by electricity prices, which are falling by 28% y/y
- **Implications**
 - » Impacts of the coronavirus are all that matters to Norges Bank (as other central banks) now, and inflation is anyway close to the target. Norges Bank revised up its 2020 core inflation f'cast by 0.2 pp to 2.4%, due to higher inflation than projected in Jan/Feb and expectations of higher imported inflation

No major outliers vs our f'cast in Feb

Prices on clothing and furnishing retreated the most in Feb, both domestic and imported inflation

Feb-20	Weight	Change m/m, seas. adj			Change y/y			Contribution, pp		
		Out-	SB1M	Dev.	Last	Out-	SB1M			Dev. vs
CPI ATE	%	come	f'cast	pp	month	come	f'cast	m/m	y/y	f'cast
Food, non alc bev	12.5	0.3	-0.1	0.4	2.1	1.9	1.2	0.03	0.23	0.05
Alcohol, tobacco	3.9	0.1	0.2	-0.1	3.0	2.4	2.6	0.00	0.09	-0.01
Clothing, footwear	4.9	-2.6	0.2	-2.8	4.2	-2.1	1.1	-0.13	-0.10	-0.13
Housing x. energy	20.1	0.2	0.2	0.0	2.0	1.9	1.9	0.03	0.38	0.00
Furnishing	6.6	-2.5	-2.0	-0.5	6.5	3.2	3.4	-0.16	0.21	-0.03
Health	3.2	0.1	0.3	-0.1	3.7	3.8	3.9	0.00	0.12	-0.00
Transp. ex. gas, airl. tick	12.0	-0.4	0.1	-0.5	2.7	1.1	1.9	-0.04	0.13	-0.06
Airline tickets	1.2	-1.0	-3.0	2.0	7.7	10.3	8.2	-0.01	0.12	0.02
Communication	2.2	0.2	0.3	-0.0	6.2	6.7	6.7	0.00	0.15	-0.00
Recreation, culture	11.9	0.5	0.0	0.5	2.7	2.6	2.2	0.06	0.31	0.06
Education	0.5	-	-	-	3.5	3.5	3.5		0.02	0.00
Restaurants, hotels	6.2	0.1	0.2	-0.0	2.0	2.0	2.0	0.01	0.12	-0.00
Other	8.8	0.2	-0.2	0.4	2.7	2.8	2.4	0.02	0.25	0.03
CPI-ATE	94	-0.1	-0.0	-0.1	2.9	2.1	2.3			
<i>Norges Bank est.</i>			0.2	0.3	2.2	1.8				
Imported	33	-0.4	-0.3	-0.1	2.7	0.7	0.9	-0.13	0.22	-0.02
Domestic	61	-0.1	0.0	-0.1	2.9	2.2	2.6	-0.06	1.33	-0.06
Energy, housing	4	-11.2	-8.5	-2.7	-22.7	-27.8	-24.8	-0.43	-1.08	-0.11
Energy, transport	4	-2.5	-2.0	-0.5	6.0	1.8	2.4	-0.09	0.07	-0.02
CPI Total	101	-0.4	-0.1	-0.4	1.8	0.9	1.1	-0.45	0.92	-0.40
Change m/m based on seasonally adjusted data										
Sum of parts does not necessarily add up to totals										
Norges Bank m/m s.a. estimate is implied, calc by SB1M										

- Clothing prices slipped 2.6% m/m, a steeper decline than expected

- Transport ex airline tickets came down more than expected in Feb

- Prices on recreation & culture increased more than expected

- **CPI-ATE up 2.1%, down from 2.9%**

- Imported prices fell by 0.4% m/ after soaring in January, annual rate back to 0.7%. Domestic prices retreated marginally, too

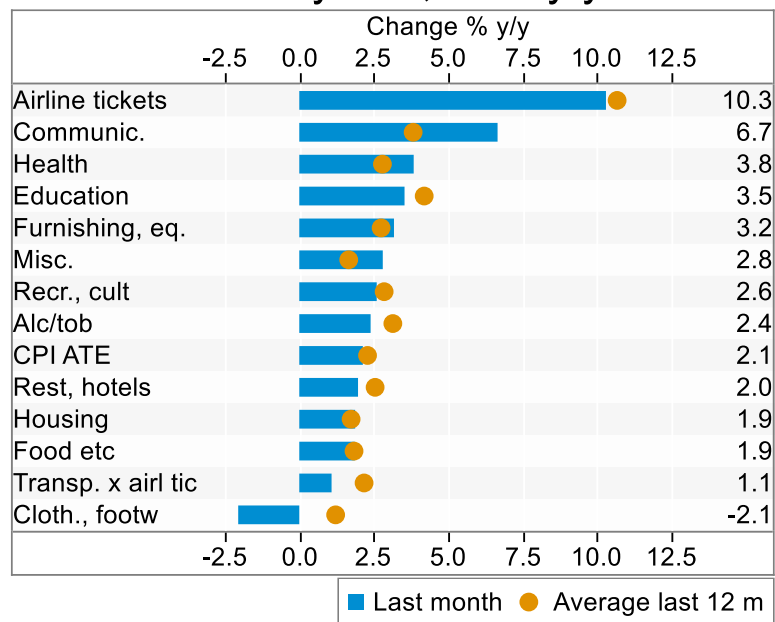
- Electricity prices fell again in February and are down 28% y/y, dragging total inflation down

- Total inflation slowed by 9 bps to 0.9%

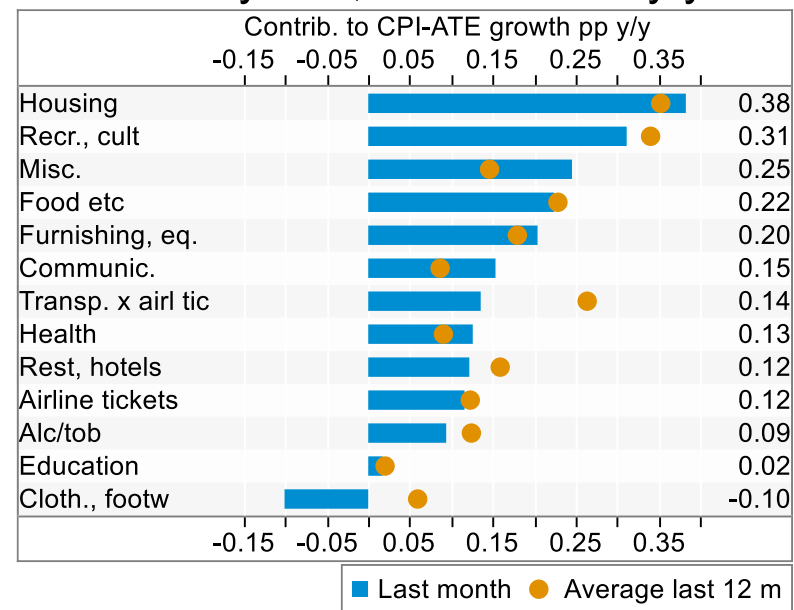
Housing and recreation/culture are lifting core annual inflation

Price growth slowed in 7 of 13 sectors in February, accelerated in just 4

Norway CPI, core y/y



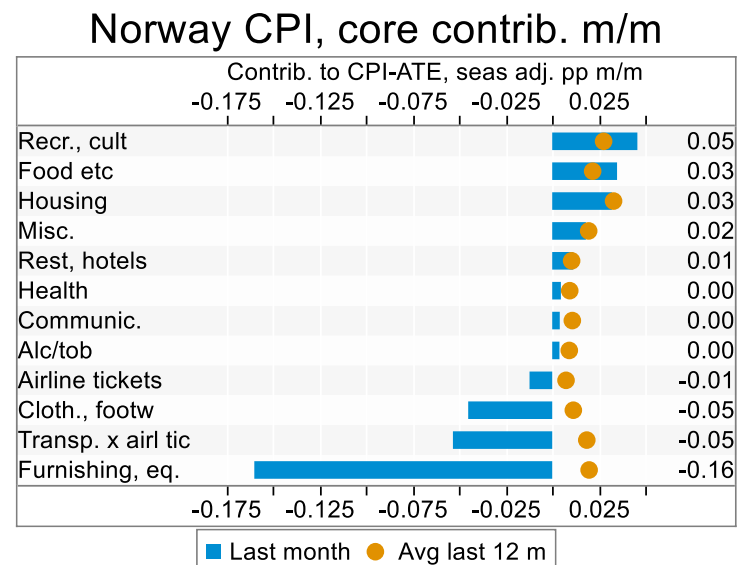
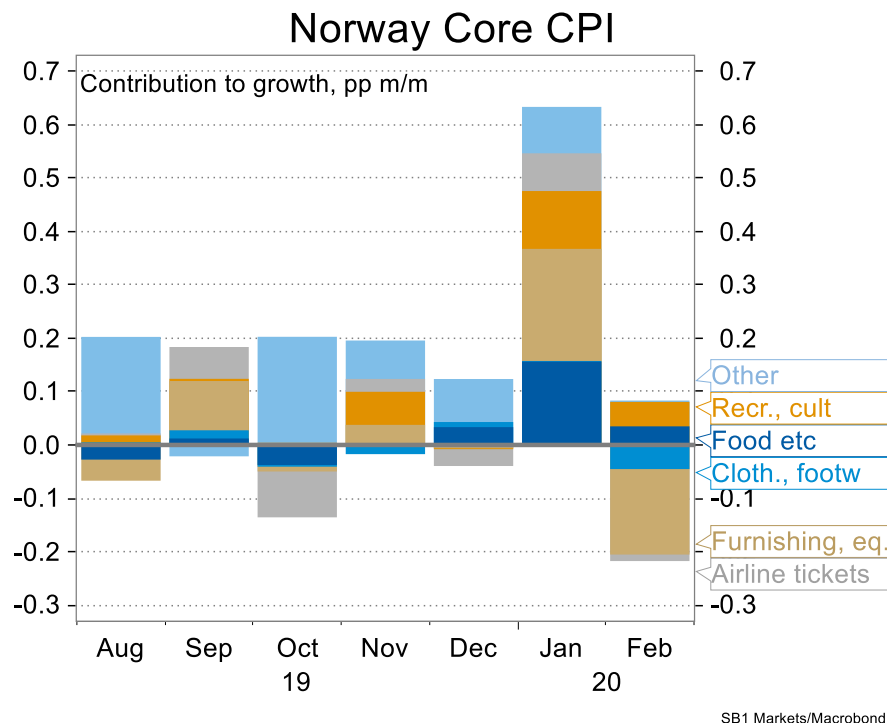
Norway CPI, core contrib. y/y



- Housing (mostly rent) are contributing by 0.4 pp to core annual inflation, followed by recreation & culture at 0.3 pp

Prices on furnishing&household equip. and clothing fell in February

Furnishing deducted 0.16 pp on monthly price growth, after soaring in January

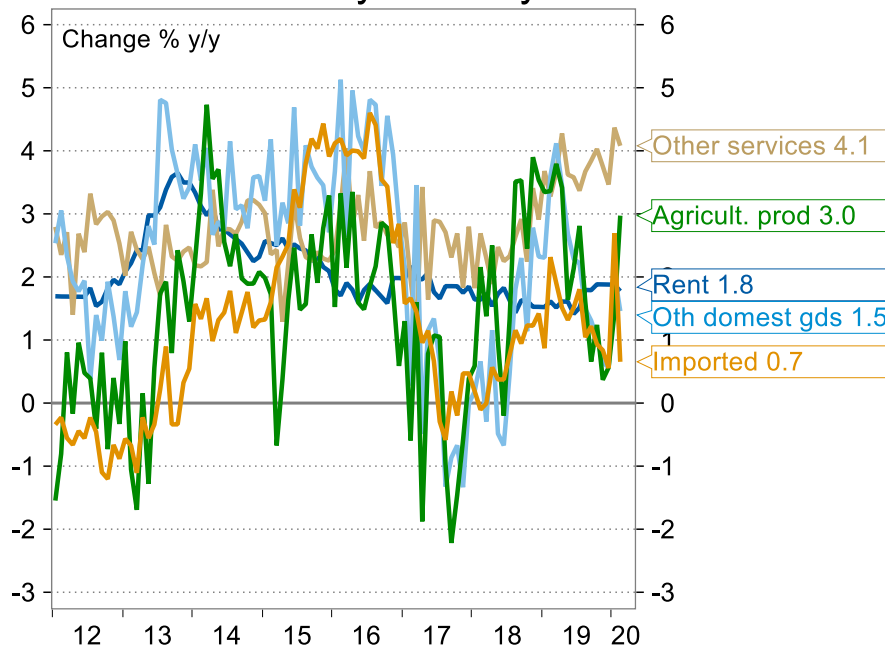


- Furnishing and household equipment prices fell 2.5% after soaring 3.6% m/m the prior month

Imported goods inflation fell back down below 1%, services are soaring

Price growth on services is climbing, as is domestic goods inflation. Imported inflation heading down

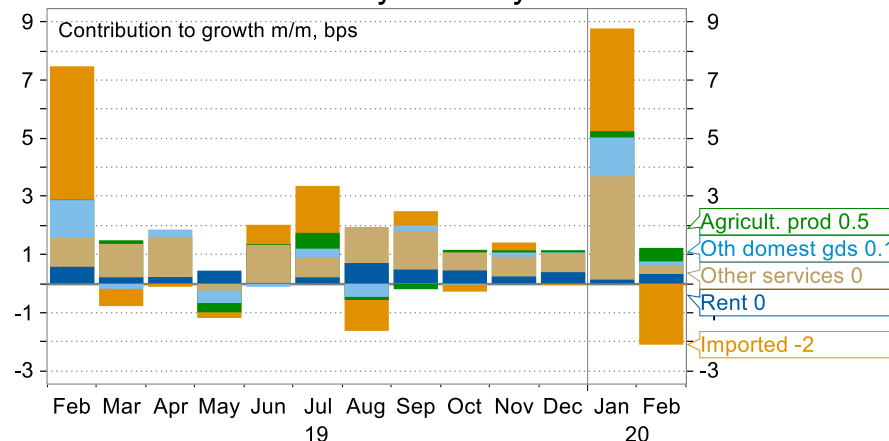
Norway CPI - by sector



SB1 Markets/Macrobond

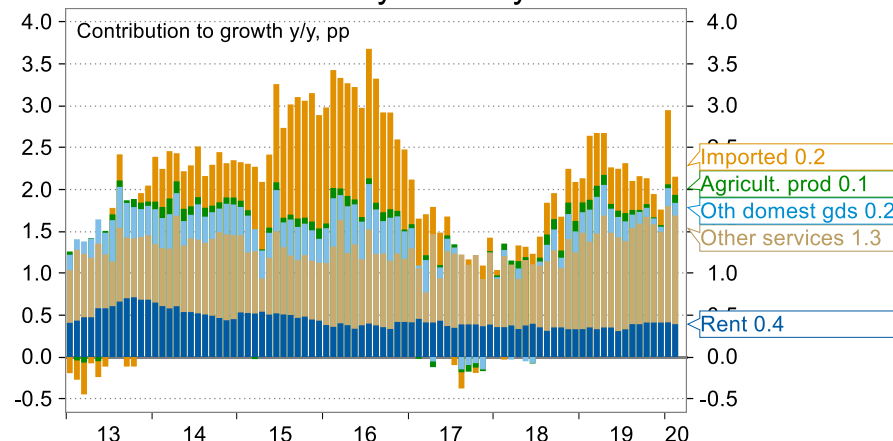
- Imported inflation retreated in February, fully reversing the January spike. Price growth is modest and trending down, however, the weak NOK is likely to lift prices somewhat the coming months
- Prices on domestically produced goods rose further in Feb and the annual rate remained higher than in the autumn/winter, at 1.5%. Domestic services x rent (restaurants, insurance etc) are up 4.1% and trending up, for now. Agriculture products steeply up

Norway CPI - by sector



SB1 Markets/Macrobond

Norway CPI - by sector

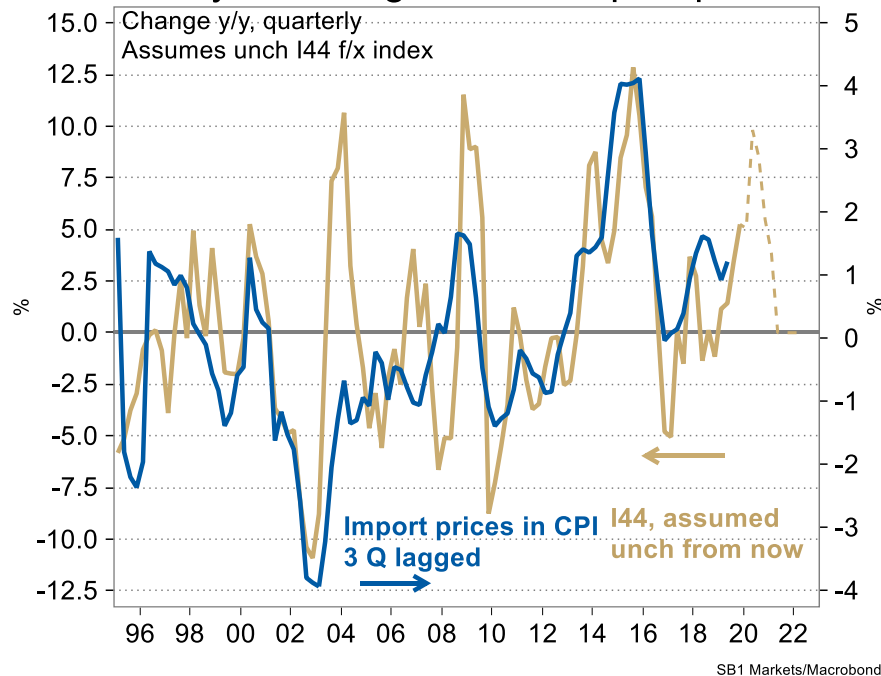


SB1 Markets/Macrobond

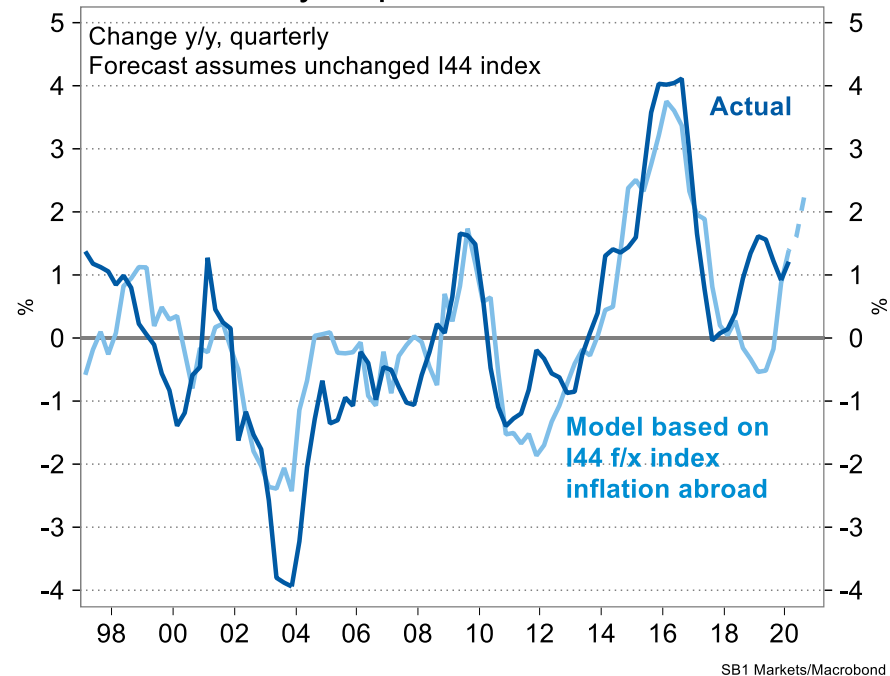
Imported prices: Upside risk on total inflation, if the NOK does not appreciate

Imported inflation is now close to what the model indicates but will shift up

Norway Exchange rate & import prices



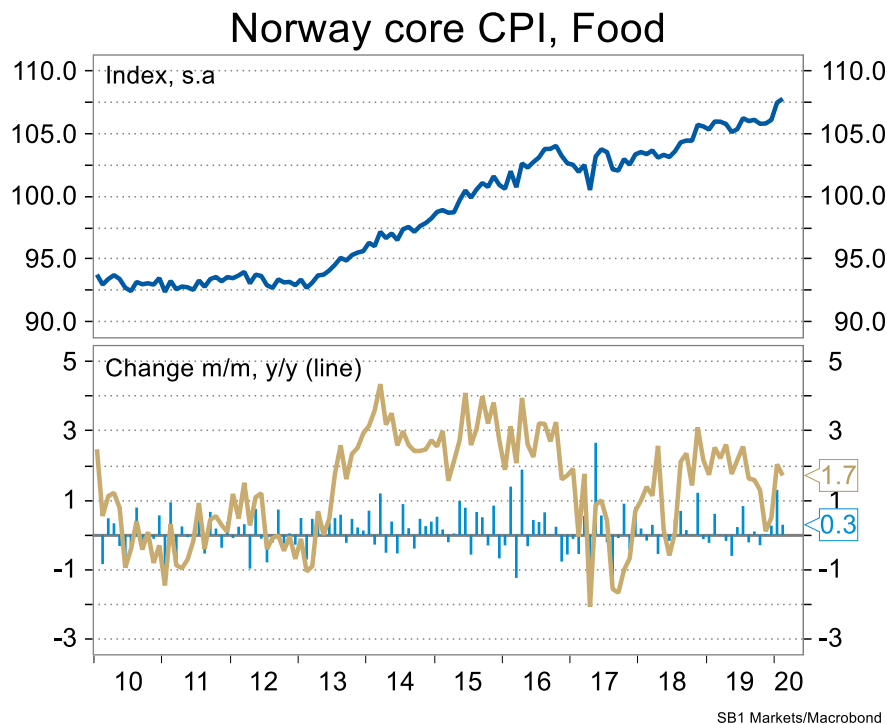
Norway Import CPI, f/x-model



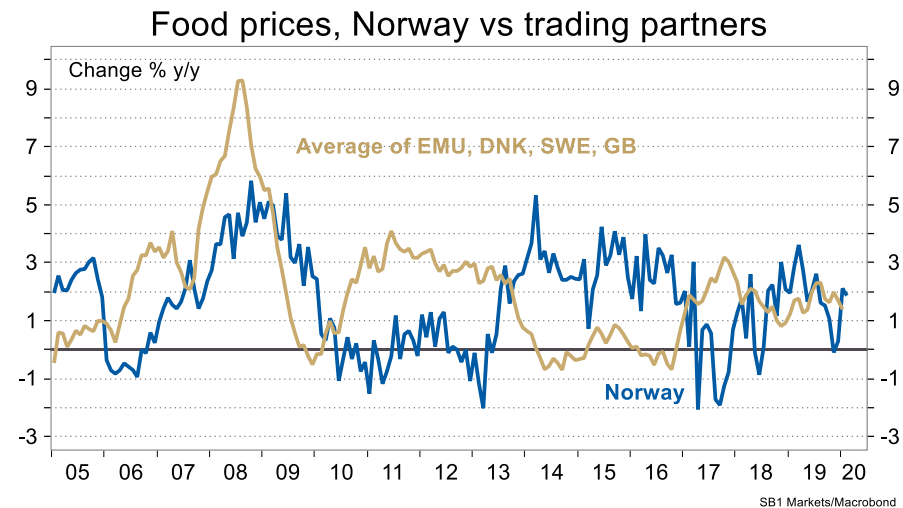
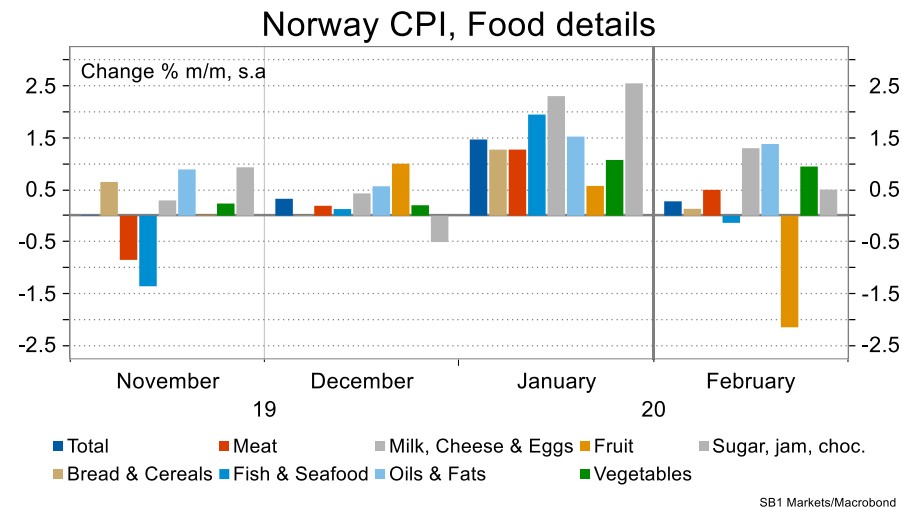
- Importers, particularly in retail sectors, have been reporting substantial difficulties passing on higher prices on imported goods due to the weak NOK on to consumer prices. Soft demand and tough competition are no doubt squeezing margins. Most likely, many businesses have sustained from adjusting prices substantially
- Imported goods inflation has been a tad higher than signalled by our model through 2019, now in line with the model f'cast. The model indicates an acceleration in imported goods inflation, given that the NOK remains at the current level

Food prices are picking up speed

Prices are up 1.7% y/y, weak NOK probably part of the story



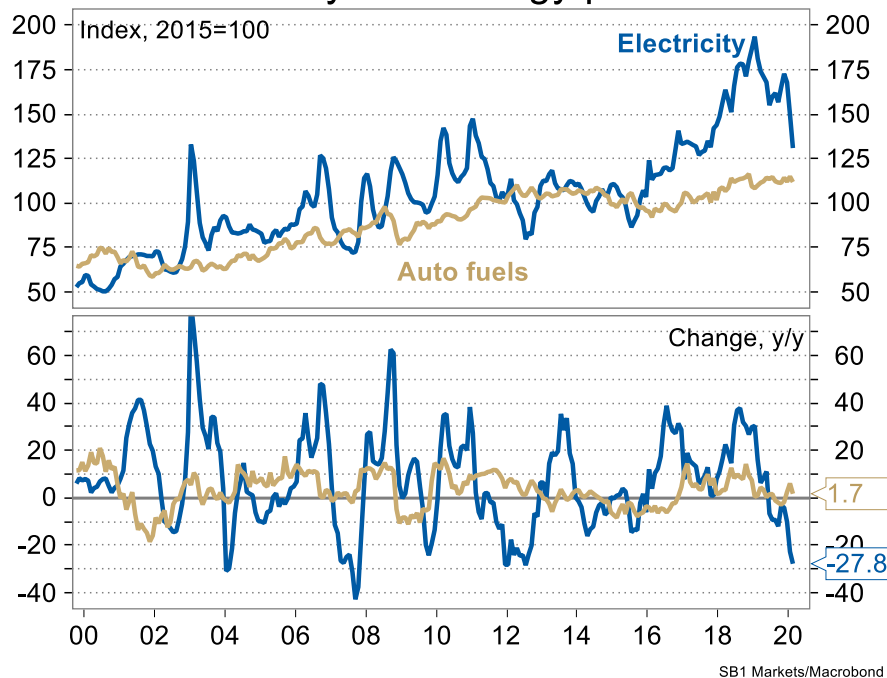
- Prices ticked up in Feb and the annual rate remained higher than the past few months. Prices increased in most food sectors, barring fruits, which dropped
- Food prices are now increasing at the same pace as in our neighbouring countries



Electricity prices are tumbling, bringing total inflation down

Electricity prices are deducting 1.2 pp of total inflation and will probably not recover any time soon

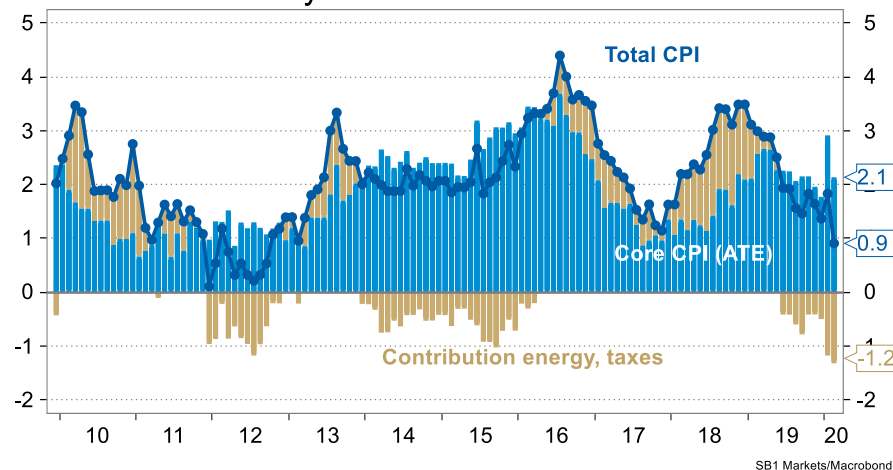
Norway CPI Energy prices



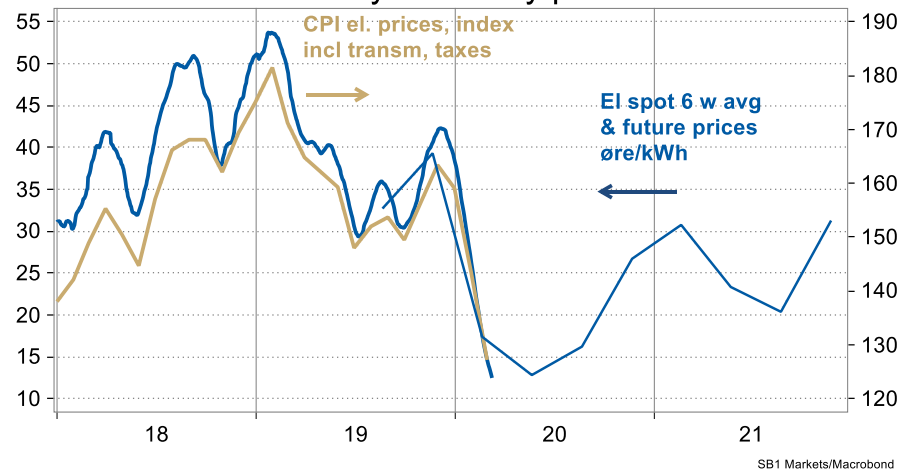
- In 2017/18 the surge in electricity prices lifted the headline CPI, reducing real disposable income significantly. This effect was put in reverse in 2019, as electricity prices fell sharply. Prices are now falling steeply again, down 28% y/y! (much rain/snow, mild weather)
 - » The forward prices have fallen too, signalling a further downside drag on overall CPI inflation the next months (but not larger than today)

- Auto fuel prices are lifting total inflation modestly

Norway Headline & core inflation



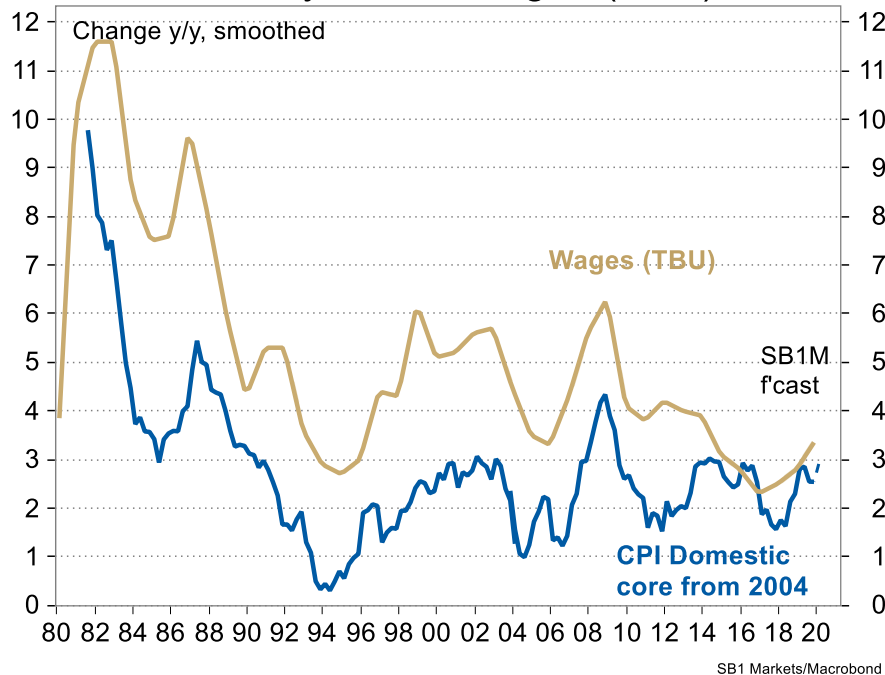
Norway electricity prices



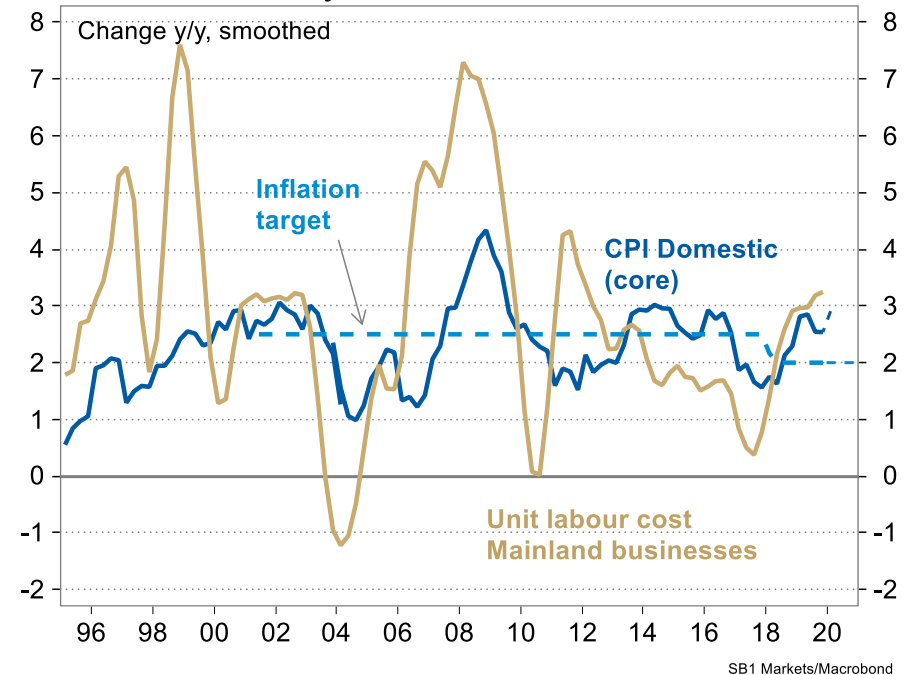
Domestic costs: Wage inflation is increasing, cost inflation above infl. target

Wage inflation has turned up. Unit labour cost up 3.2% y/y in Q4 (smoothed)

Norway CPI vs wages (TBU)



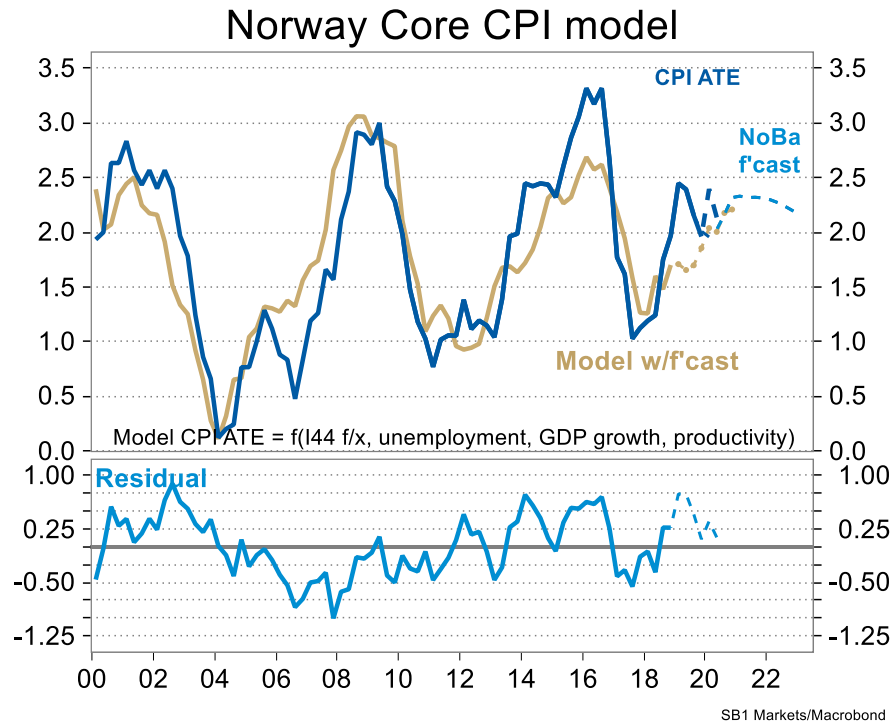
Norway CPI vs labour costs



- Wage inflation is increasing and has now probably approached 3%
- Productivity growth remains meagre, just 0.2% y/y in Q4
- (Underlying) Unit labour costs inflation is rising, to 3.2% y/y in Q4 (smoothed), from below 1% in 2017

The outlook: Core CPI inflation marginally above our model forecast

The model suggests 2.0% in Q1 (vs 2.1% now) and a small uptick to 2.2% by late 2020

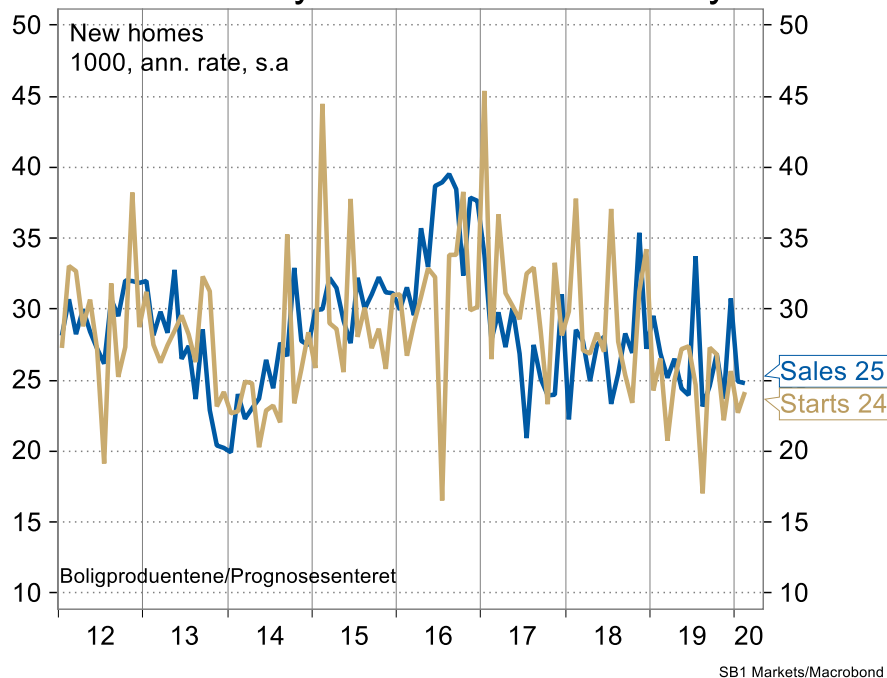


- Core CPI growth slowed to 2.0% in Q4, just 0.1 pp below the model f'cast. The jump to 2.9% in January is far steeper than the model suggested for Q1 (or later). In February, inflation fell back to 2.1%, not far above the model f'cast
- The model includes the GDP output gap and NOK I44 index
- Norges Bank expects core CPI to be running at 2.0% in Q1, a small upward revision this week is likely

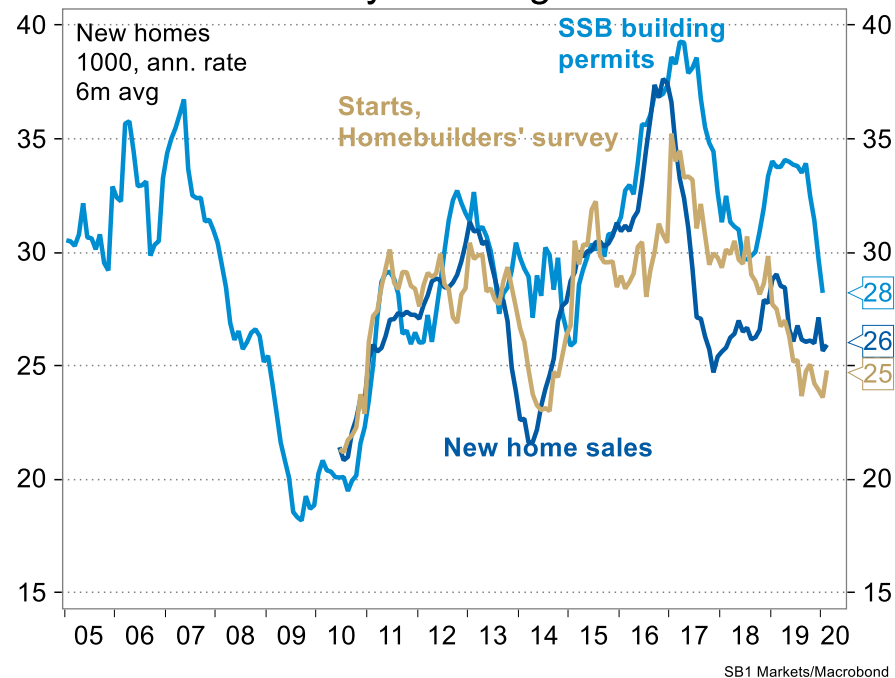
New home sales and starts stabilized after steep declines

The Homebuilders' report that sales and starts have stabilised at approx a 25' speed

Norway Homebuilders' survey



Norway Housing starts



- The Homebuilders' housing starts (seasonally adjusted) fell in January and rose marginally in February, to an annual rate of 24'. Nov. Starts have dropped since 2017 and more or less stabilized the past few months, at a much lower level than usual
 - » SSB confirms a downturn in housing starts (building permits), starts have fallen steeply since the autumn
- New home sales were steady at 25' in Feb. The 6m average level has been more or less steady since 2018, after a rapid decline in early 2017. Sales do not indicate a further drop in starts
- Total housing starts (in sq.m) are falling and signals a further decline in housing investments, from a high level

Highlights

The world around us

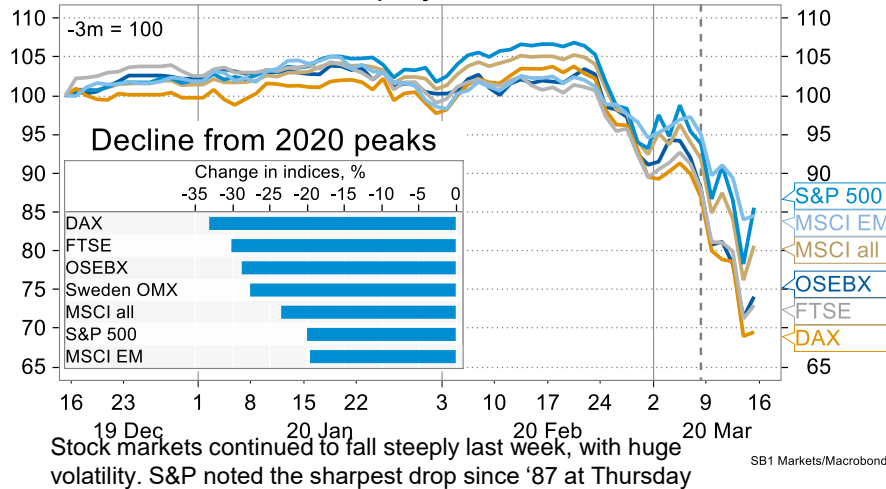
The Norwegian economy

Market charts & comments

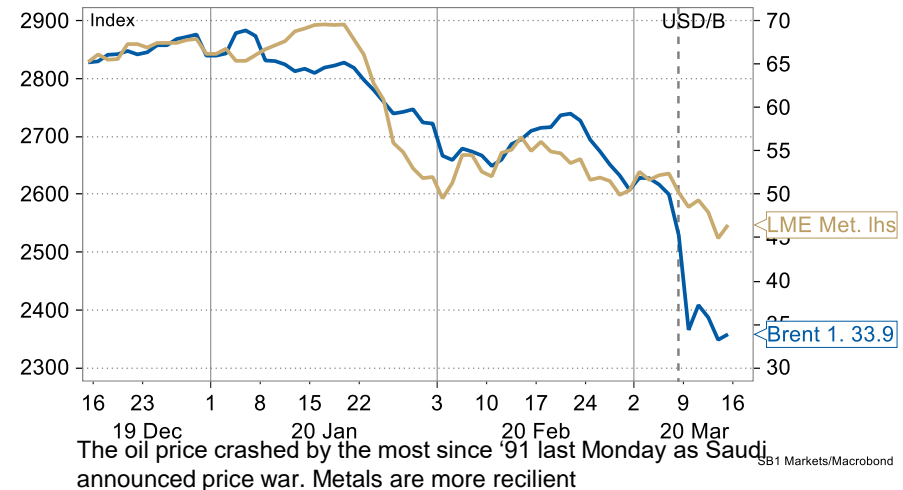
Stock markets crumble, bond yields turn up as stimulus measures are ramped up

US stocks rose 10% Friday but still fell 9% w/w, 15-20% in Europe. Oil price down to USD 34

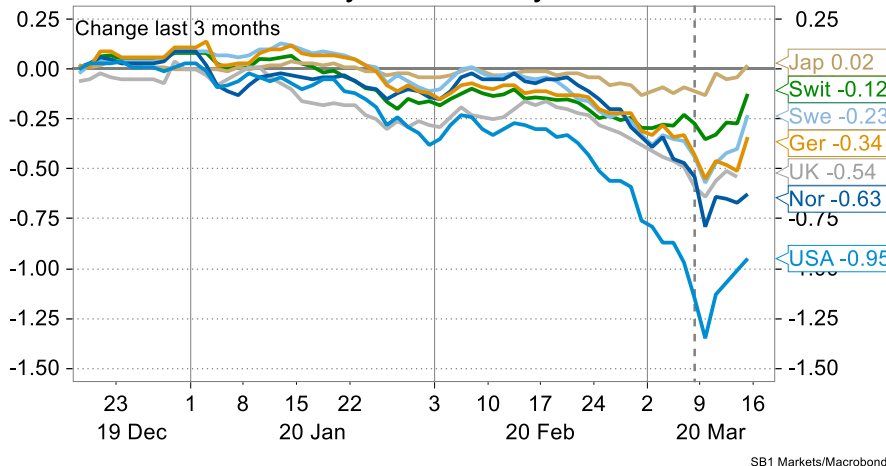
Equity Indices



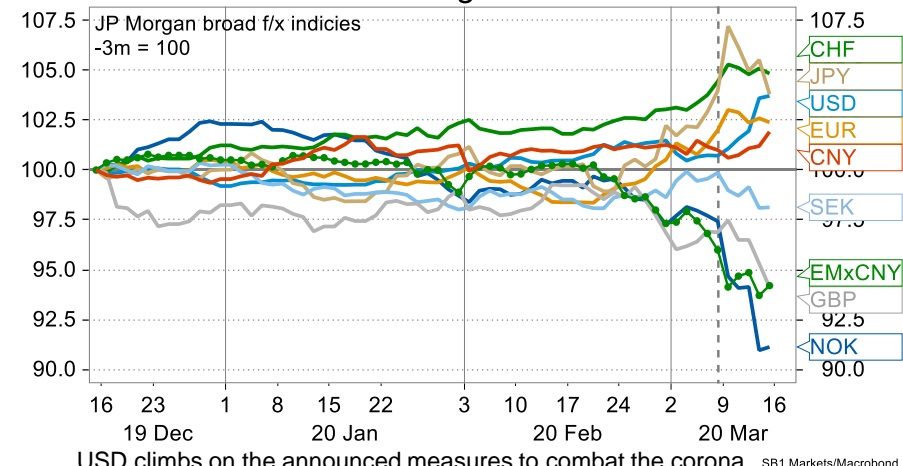
Oil vs. metals



10 y Gov bond yield



Exchange rates



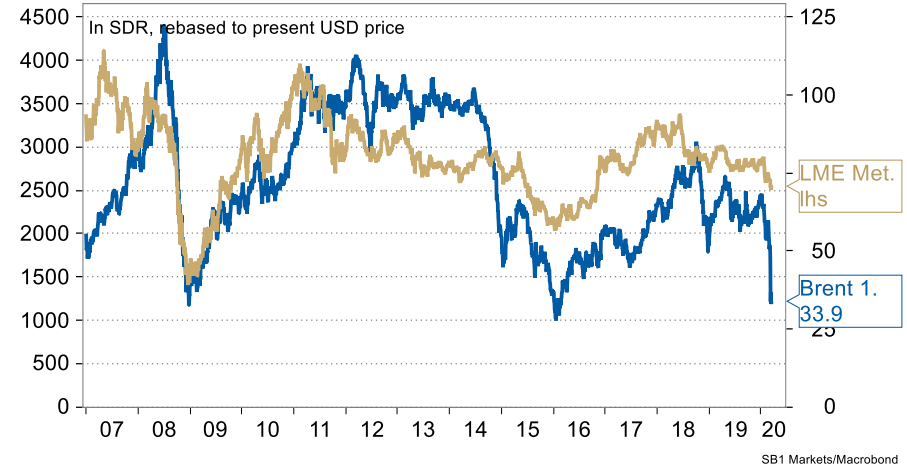
In the long run: Stocks have entered bear market

Stock markets down 20-30% and bond yields are at/close to ATLs. Oil lowest since 2016

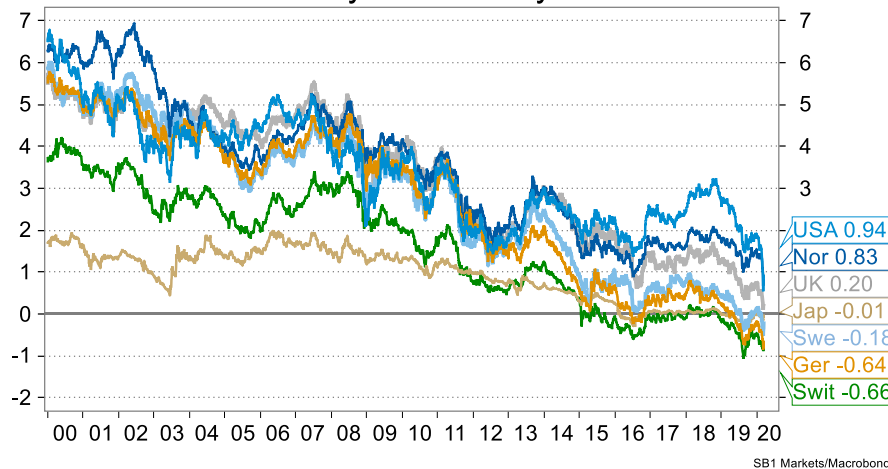
Equity Indices



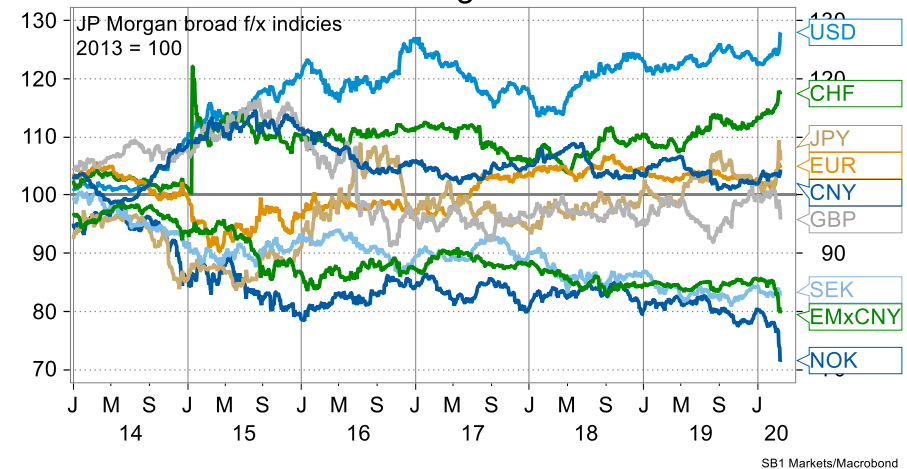
Oil vs. metals



10 y Gov bond yield

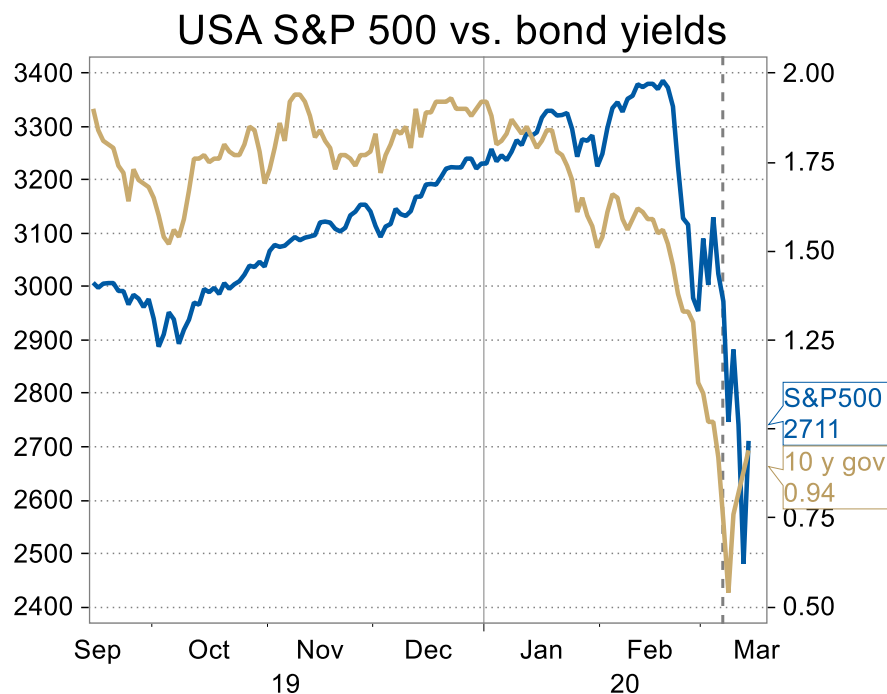


Exchange rates

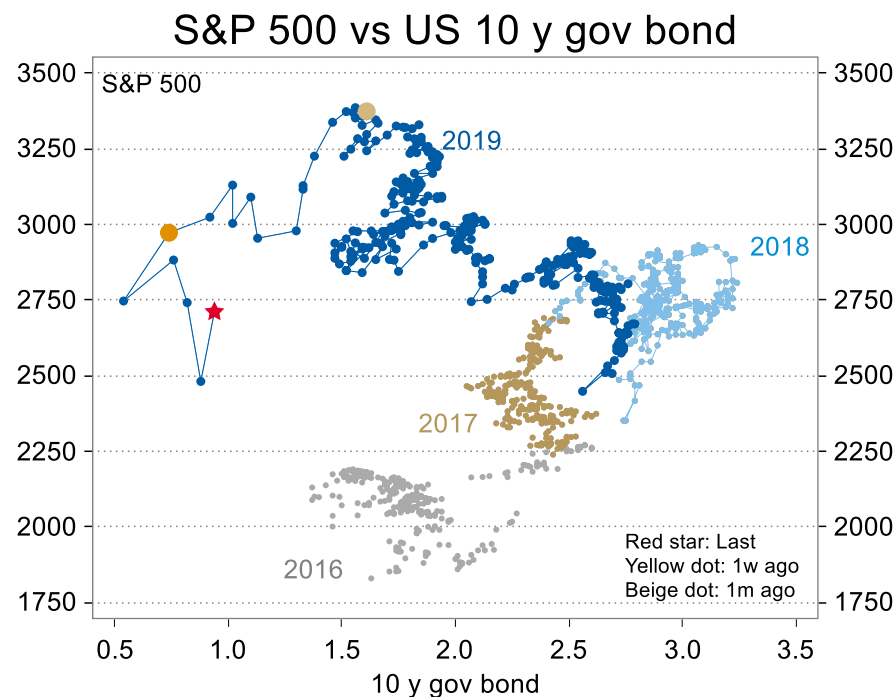


US stocks noted the steepest drop since '87 at Thursday, rebounding Friday

10 y gov bond yields inched up 2 bps w/w while S&P tumbled 8.8%



SB1 Markets/Macrobond

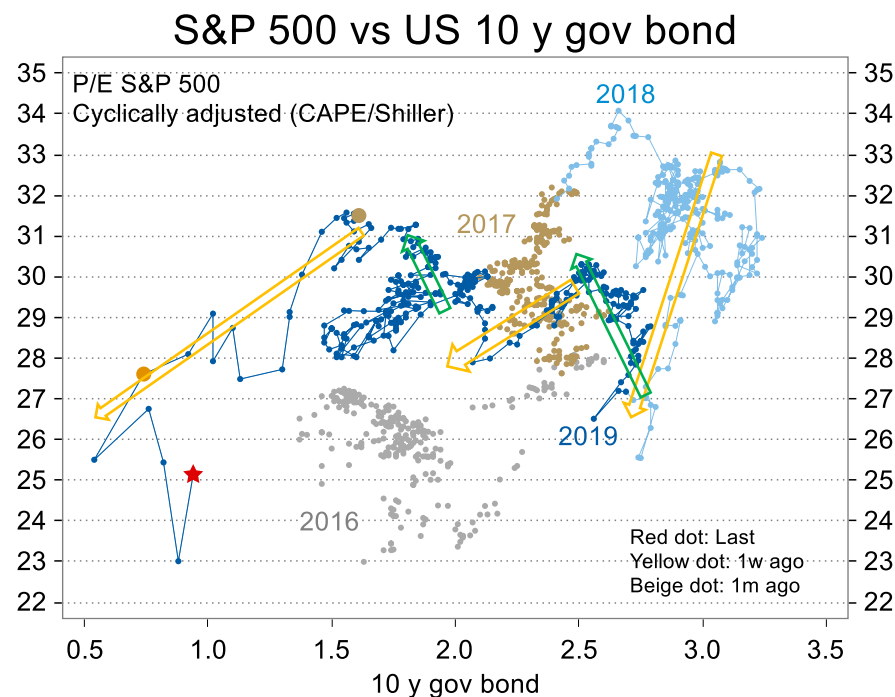
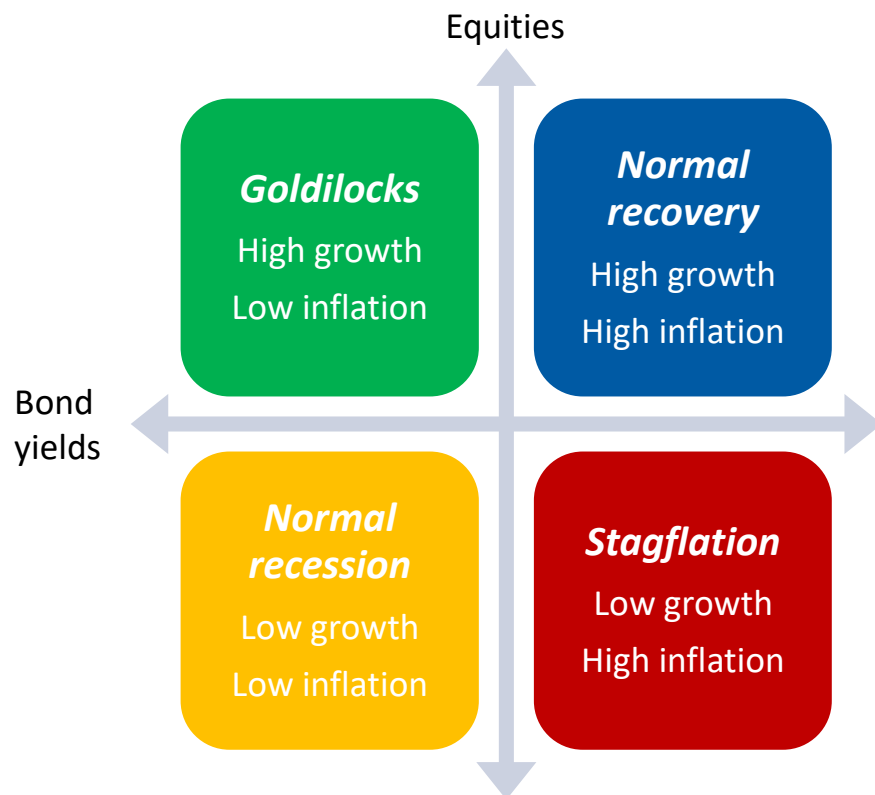


SB1 Markets/Macrobond

- The US stock market is back at the late 2018 levels (at least they were until the Friday bounce), following a 27% drop since mid-February. Stocks turned up Friday, on hopes of a massive fiscal stimulus package
- The 10 y gov bond yields turned up Tuesday and climbed 40 bps, after 'collapsing' the prior week. The real rate component explains the entire upward shift of the bond yield, on hopes of a White House fiscal stimulus package

Markets straight on the way to the recession corner

Well, last week, markets turned towards the 'stagflation' scenario, we assume just temporarily

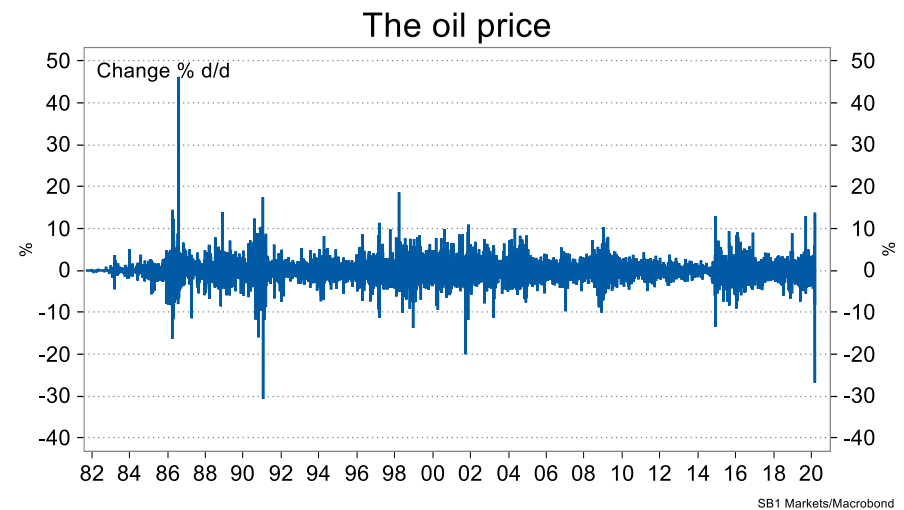
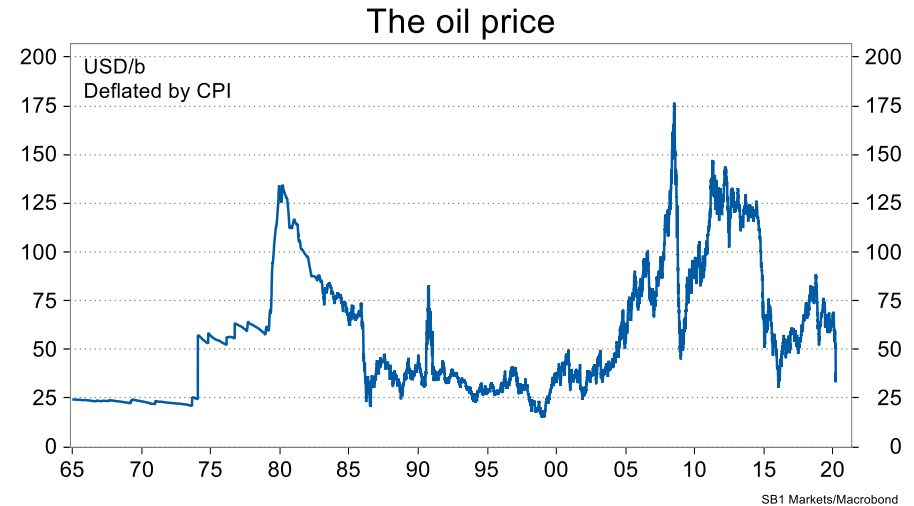
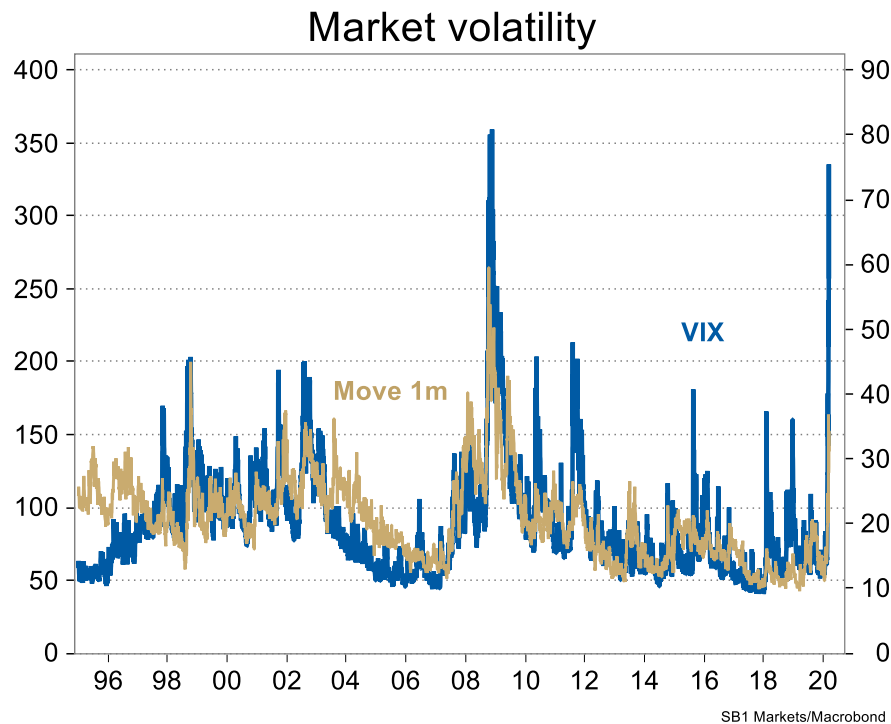


SB1 Markets/Macrobond

- 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 has accelerated the past two weeks as Covid-19 spread rapidly outside China. Last week, bond yields turned up while stocks stumbled, we doubt this will last
- We expect markets to move closer to the recession corner the coming weeks, should the coronavirus not calm down substantially. Bond yields are very low and the downside is limited, unless the world economy should move into a severe recession (which it might)

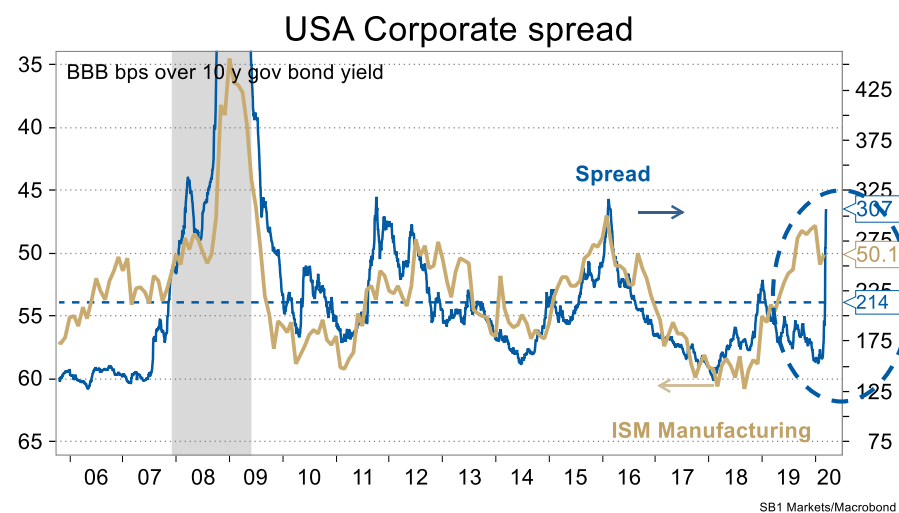
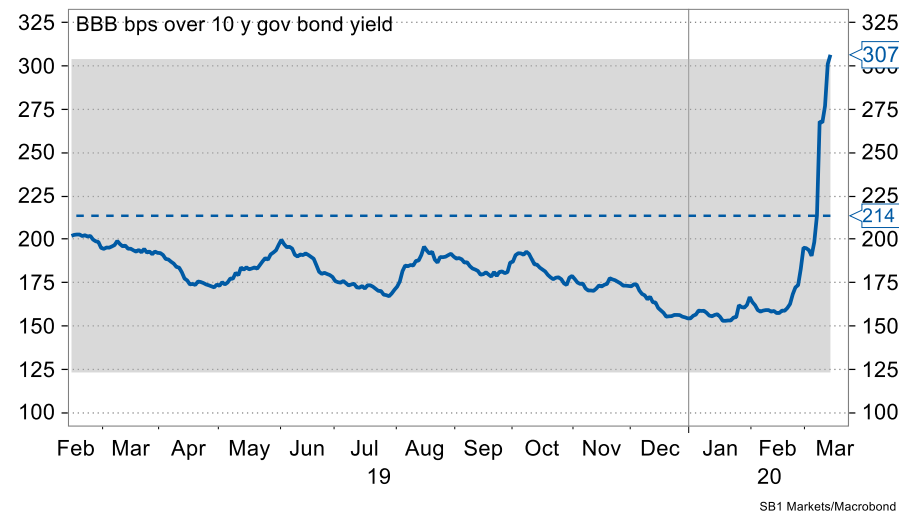
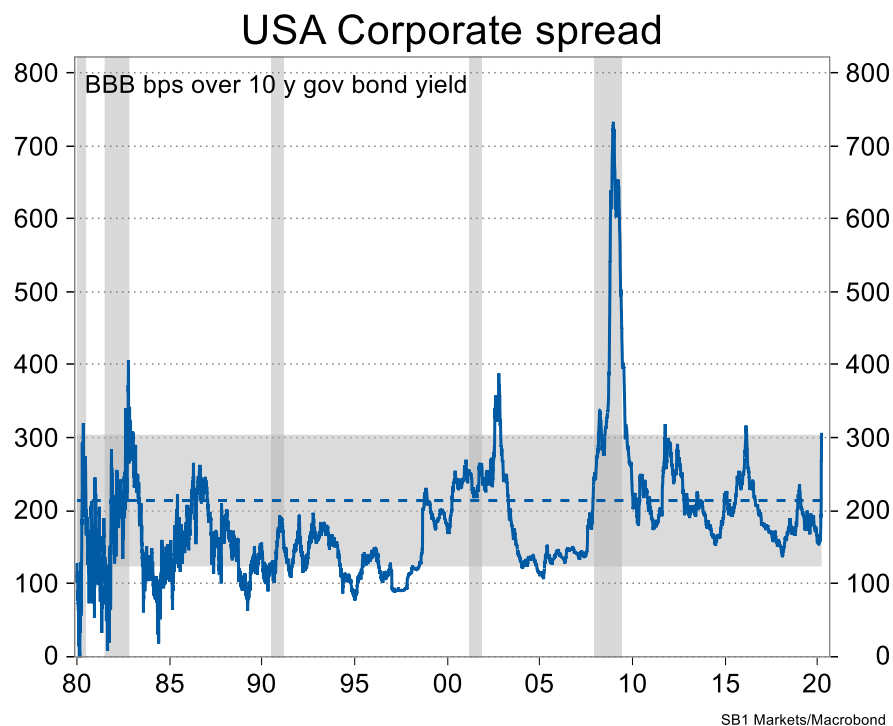
Volatility is back

Move and VIX indices at the highest level since 2009 – and will remain high for some time



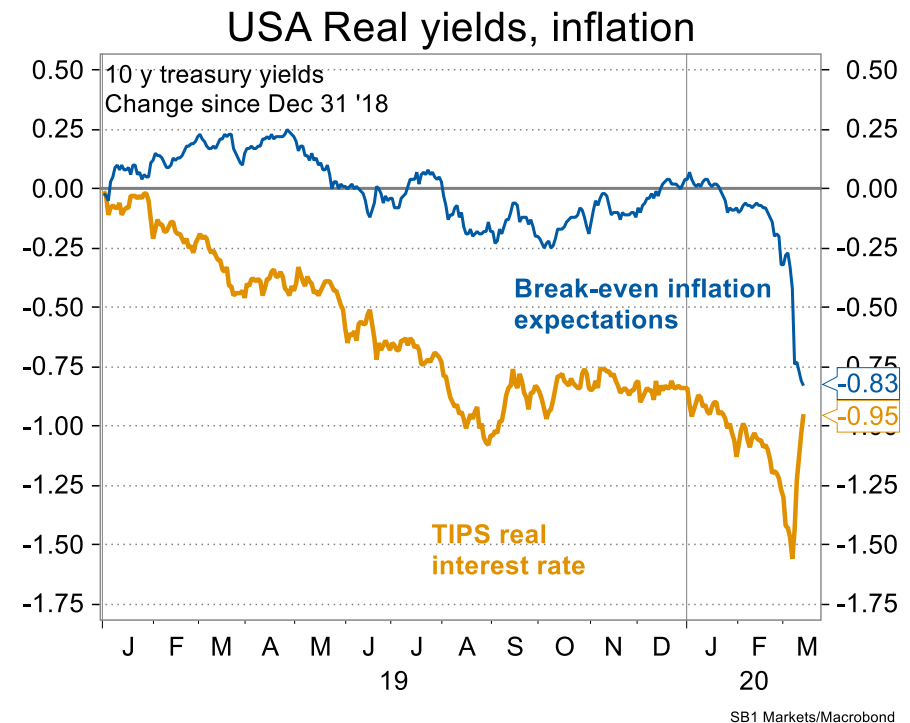
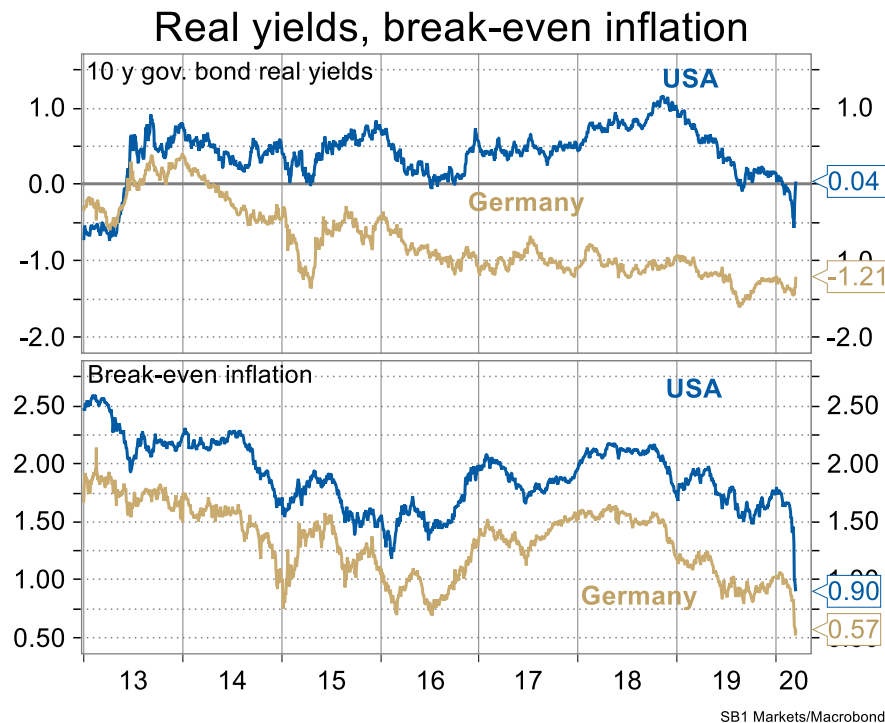
Credit spreads straight up but still low compared to 2008

Spreads are soaring on the corona pandemic



Real rates are rebounding, inflation expectations straight down

US real rate jumped 61 bps, German +23 bps on fiscal stimulus hopes. Lowest infl. exp. since 2009

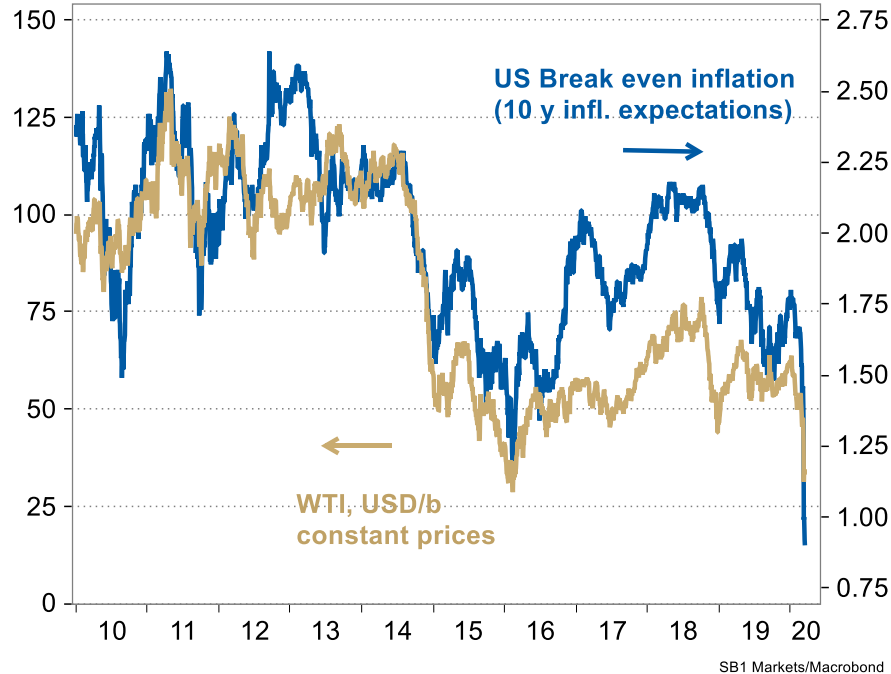


- US real rates turned steeply up last week, back to the late January level of 0.04%. The German real rate climbed too, to -1.21% (still extremely low!). Real rates were boosted by hopes of substantial fiscal stimulus packages combat the economic setback due to the corona outbreak. See more details on the policy responses on this slide
- Inflation expectations are 'collapsing' on the oil price drop. US inflation expectations are at the lowest level since the financial crisis, Germany the lowest on record

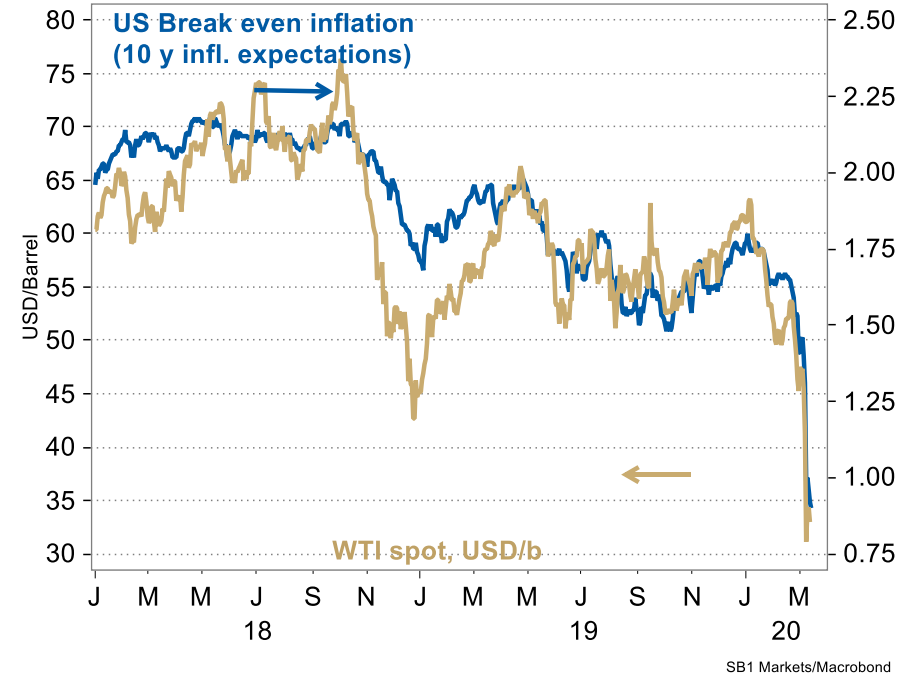
Inflation expectations closely correlated to the oil price

That seem to be the case now as well

USA Inflation expectations vs. the oil price



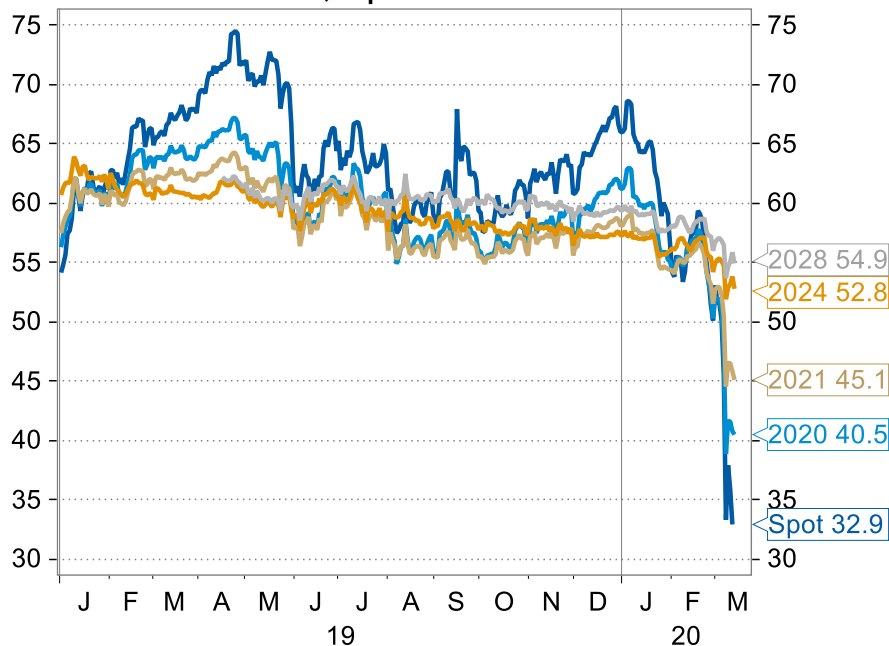
USA Inflation expectations vs. the oil price



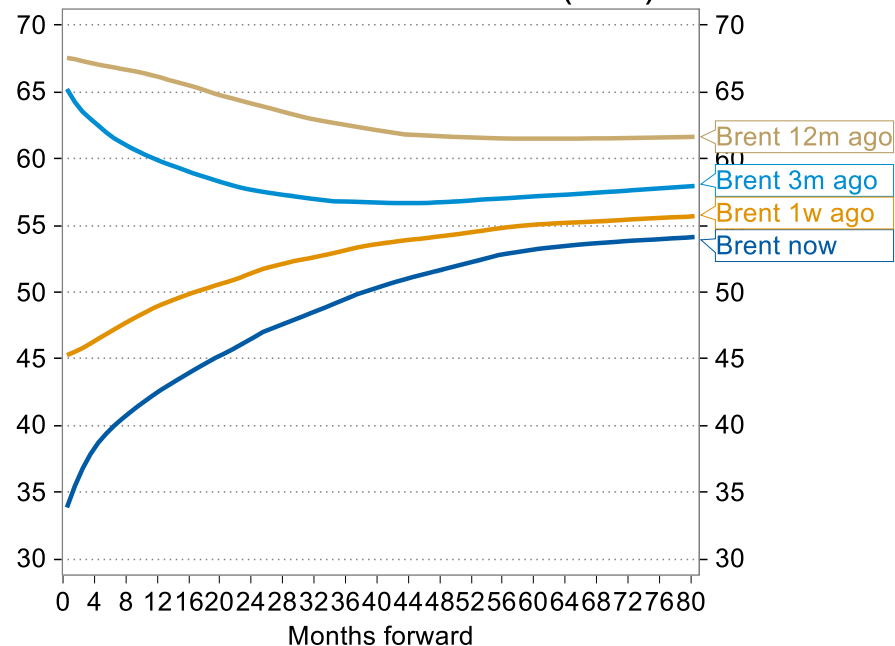
Oil prices: Longer dated contracts not beaten down that much

The whole price curve is down but not by that much in the long end (spot -30\$/b, the long end -5)

Brent oil, spot & Dec contracts



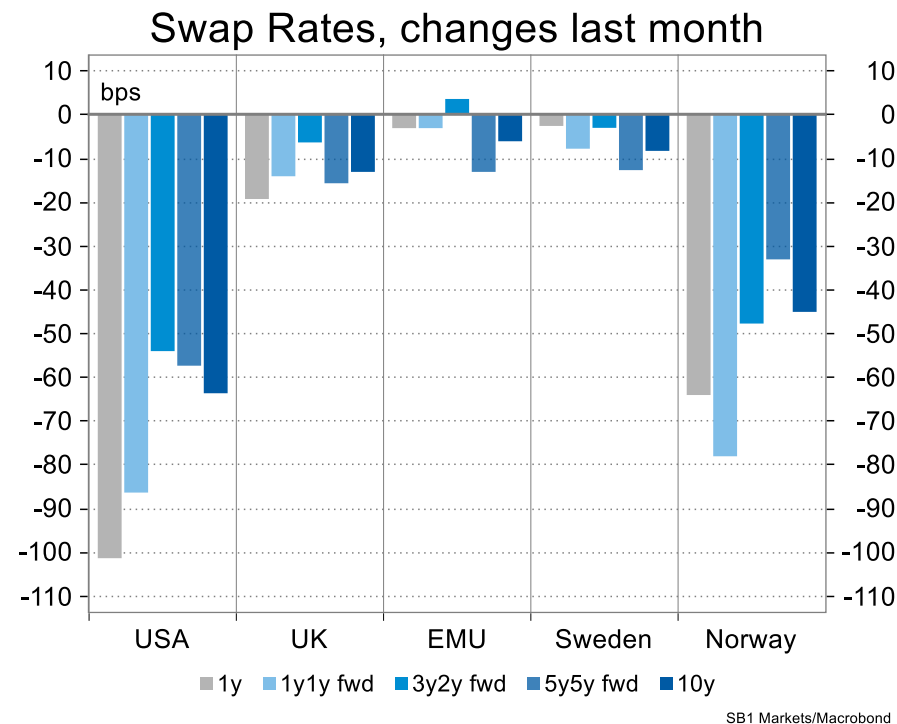
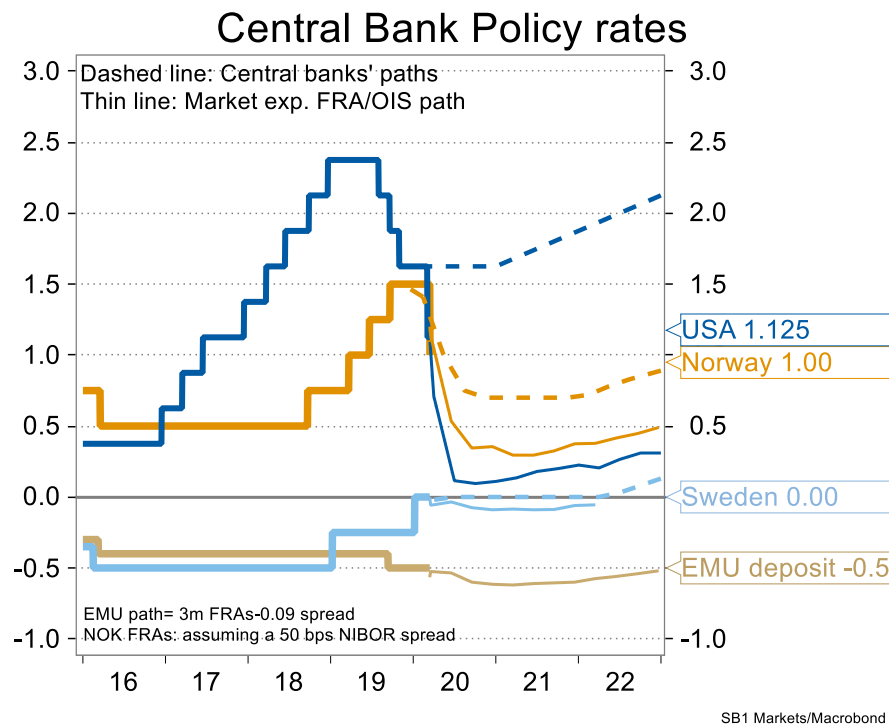
Brent oil futures (ICE)



- The first part of the price decline as the coronavirus spread was understandable and due to a decline in expected demand from China and thereafter elsewhere
- The decline over the past weekend was mostly due to a supply shock when Saudi Arabia and Russia engaged in a price and both promised to increase production amid a serious decline in demand for oil. Are they both fighting against US shale?

Interest rate expectations have been slashed

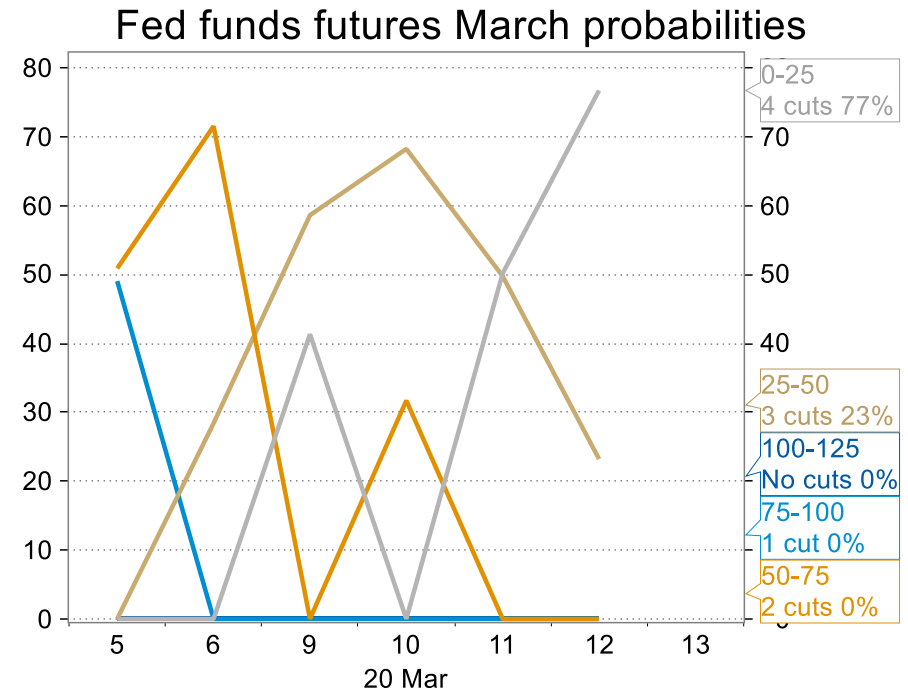
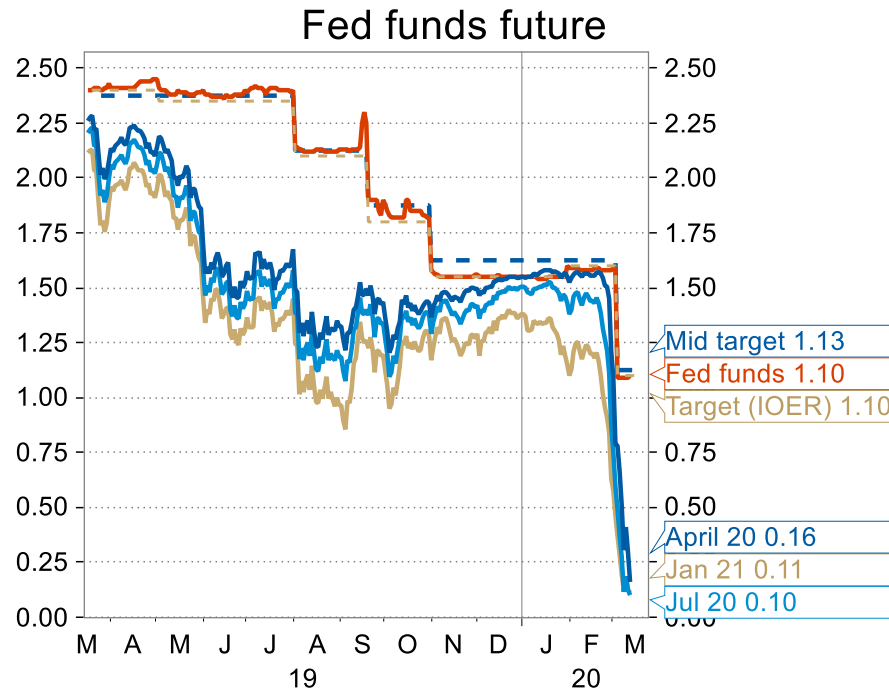
Fed, Bank of England and Norges Bank have delivered emergency cuts – the ECB kept rates on hold



- Markets are expecting more monetary policy stimulus from the Fed and Norges Bank, a 100 bps Fed cut is expected this Wednesday. An ECB cut is still priced in by a high probability, but not before H2 2020

Fed goes to zero at Wednesday, the market says

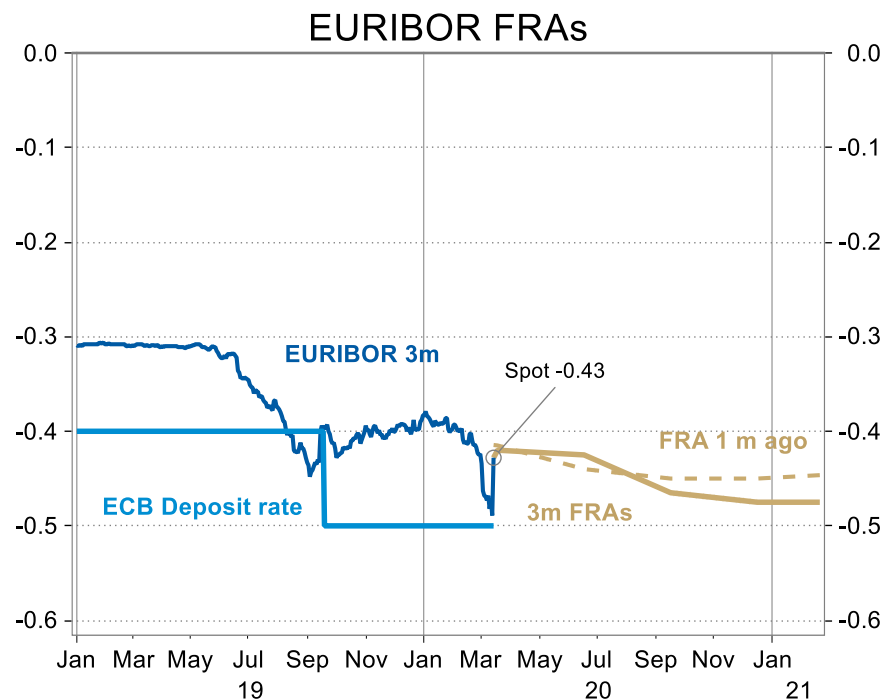
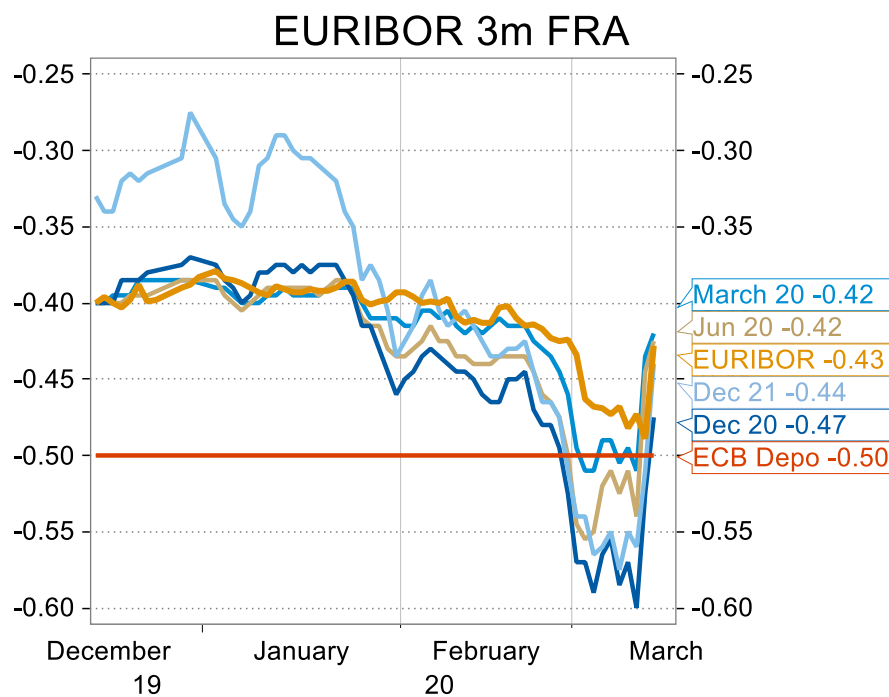
FOMC will probably cut the fed funds rate by 100 bps to 0-0.25%



- Fed delivered an emergency cut of 50 bps two weeks ago, to 1-1.25%. The cut was expected but came somewhat faster than expected
- Fed fund futures have plunged, all over the curve. The market is now pricing a high probability of a 100 bps cut this week, down to 0-0.25%
- 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 (but probably not this time)

EURIBOR FRAs soar on the ECB surprise, a H2 cut still expected by 60-70% prob.

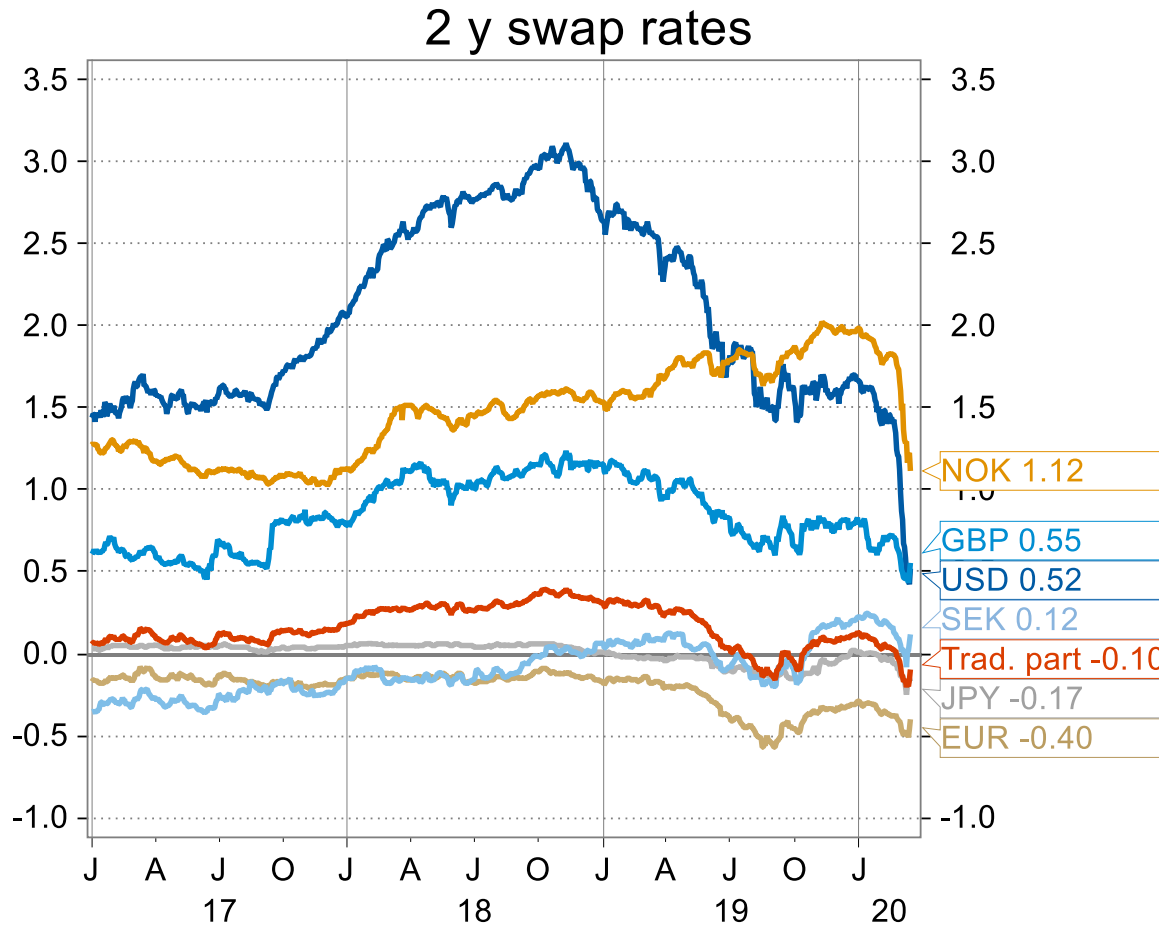
The ECB's surprising move to keep interest rates on hold sent FRAs steeply up last week



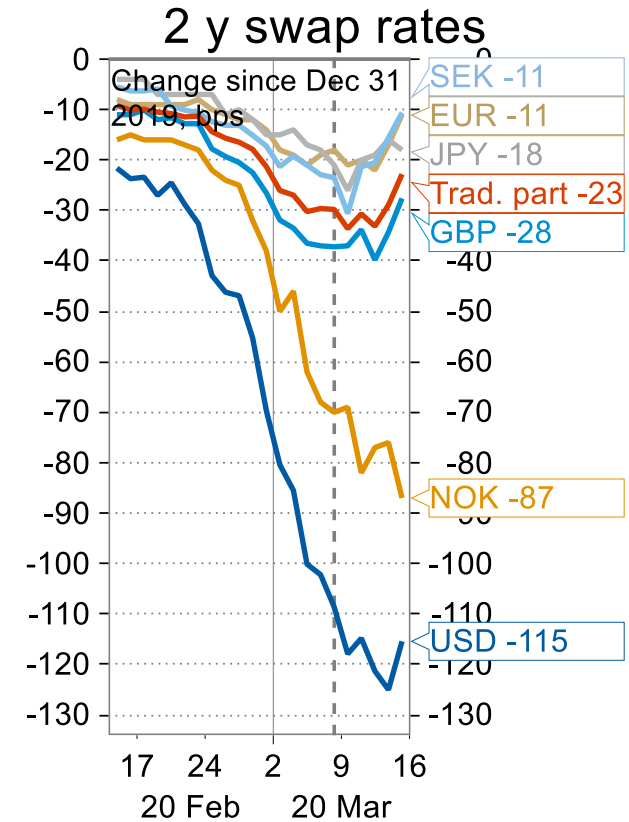
- FRAs jumped after the ECB announced the decision to not cut interest rates on Thursday. More on the ECB on this slide. The FRAs rose further Friday after Germany pledged to spend whatever is necessary in response to the corona pandemic
- Markets are no longer expecting an interest rate cut in H1, but the probability of a cut by the end of the year is still high

US and NOK short term rates edged up everywhere but the NOK

2 y swap rates climbed Thursday/Friday but NOK and USD ended the week down



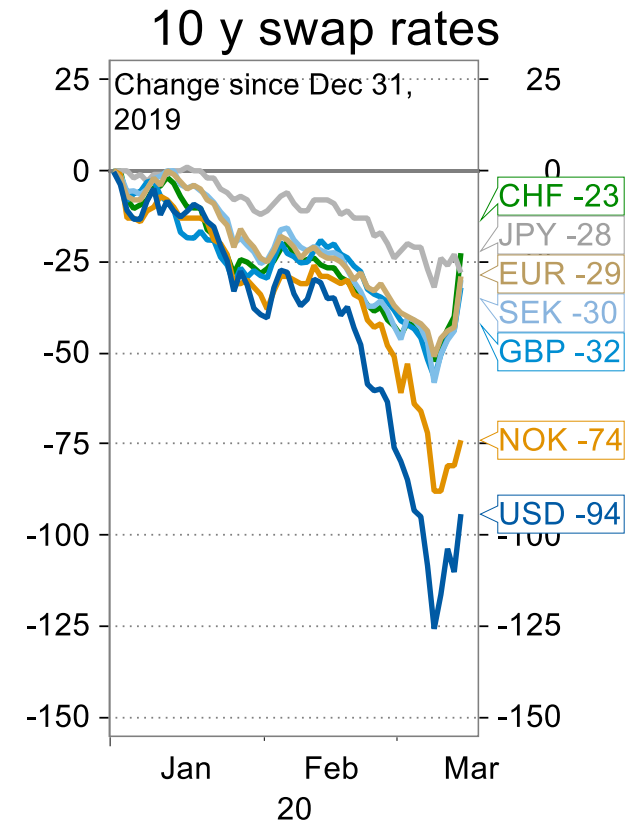
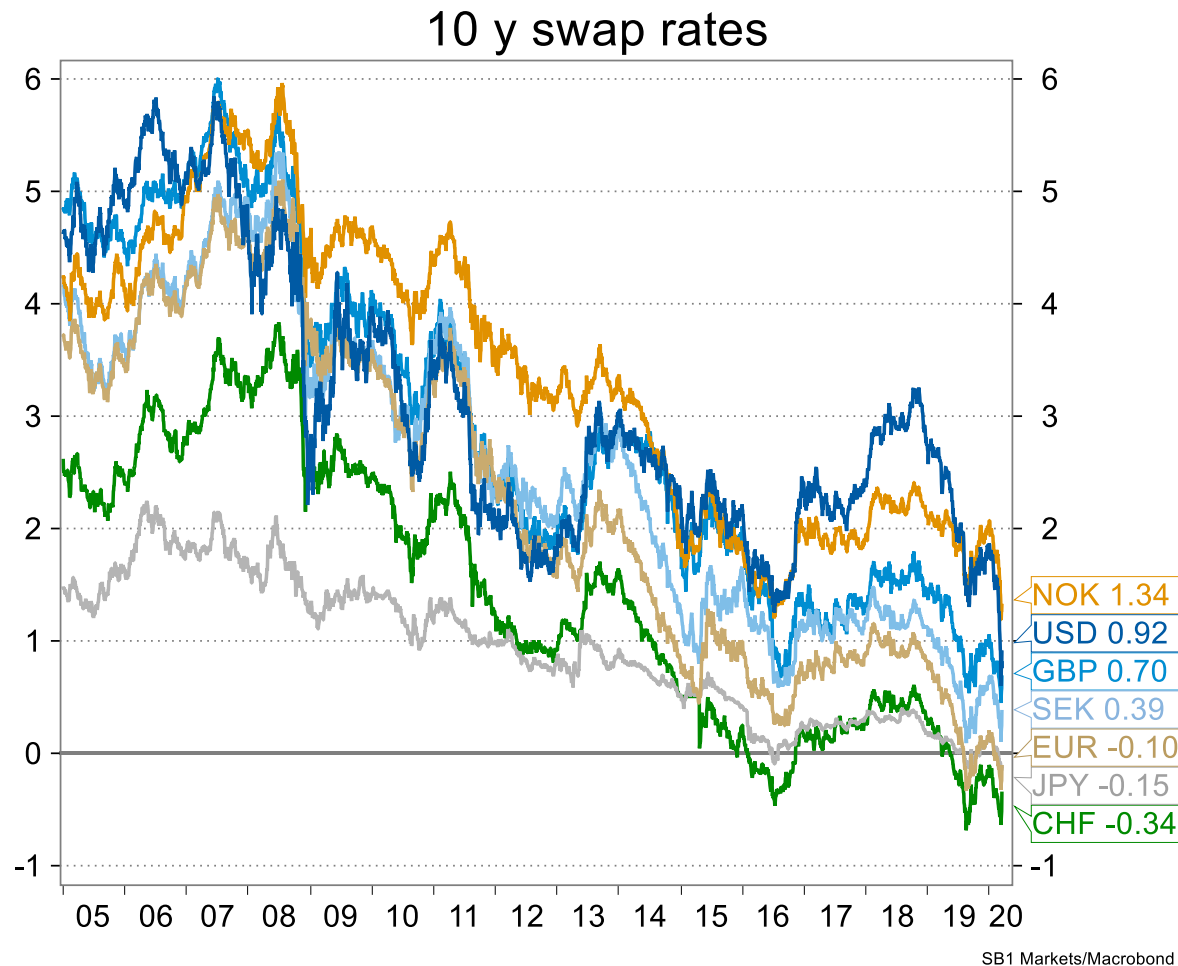
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Long term swap rates turn up as governments ramp up fiscal spending

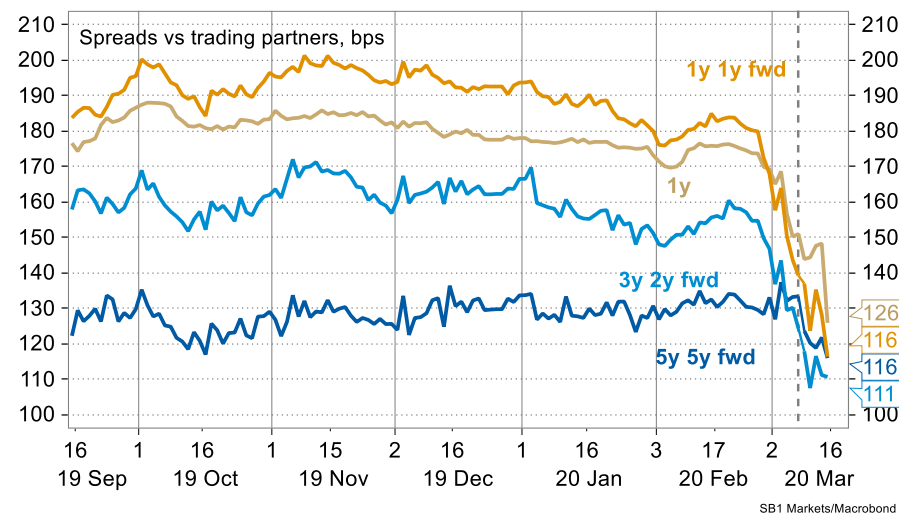
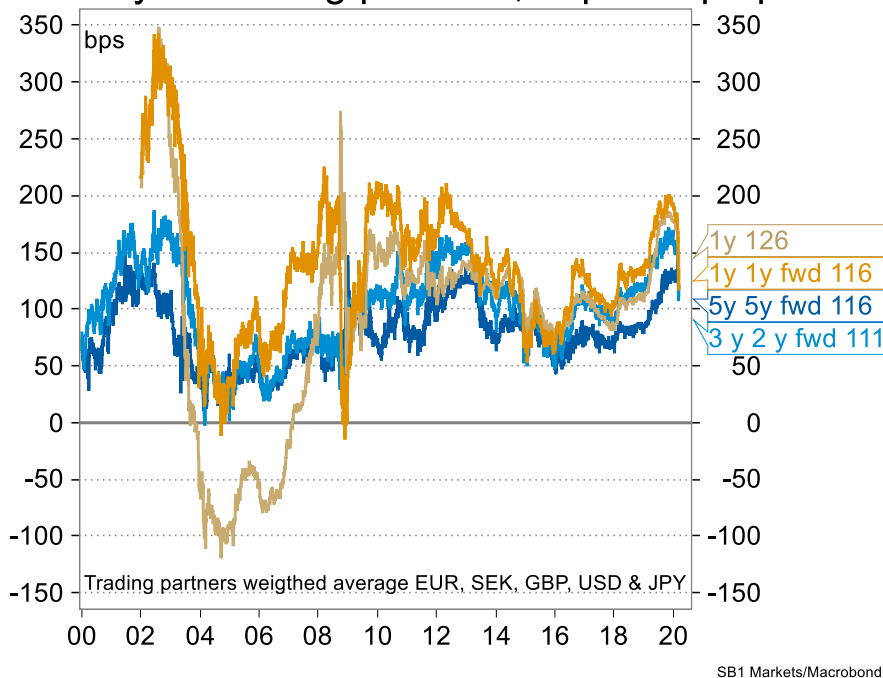
Or is another dislocation of markets – investors in need of cash had to sell gov. bonds?



The NOK short end is collapsing, spreads sharply in

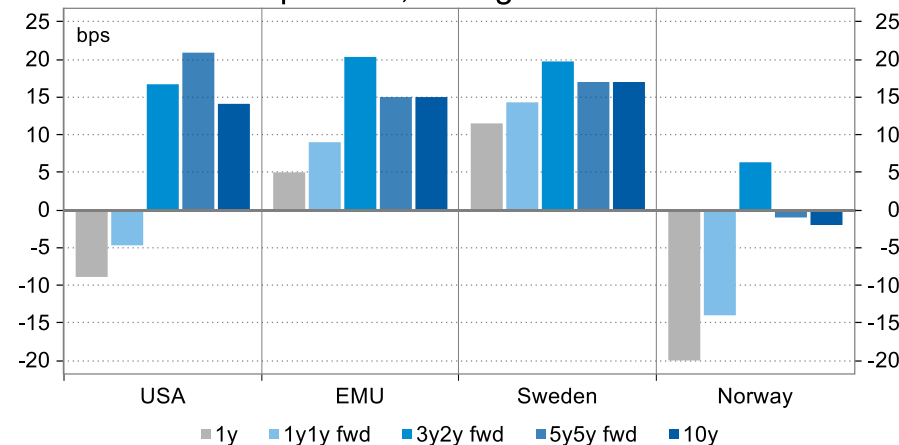
NOK short term rates have fallen much more than trading partners'

Norway vs trading partners, impl swap spreads



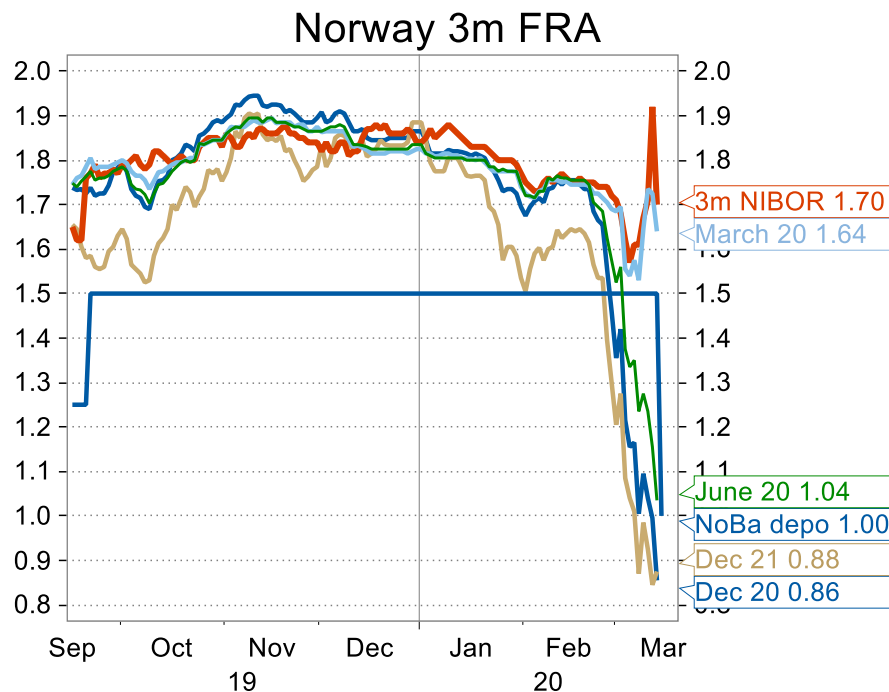
- Swap spreads between NOK rates and our trading partners widened rapidly in most of 2019, all over the curve. Since Nov, spreads have trended down on the short end of the curve, and the decline has accelerated sharply the past two weeks. Spreads are now at the lowest level since early 2018
- We have been surprised by the wide spread in the long end of the curve. A 5y 5y fwd spread at 111 bps is still wide, long term

Swap Rates, changes last week

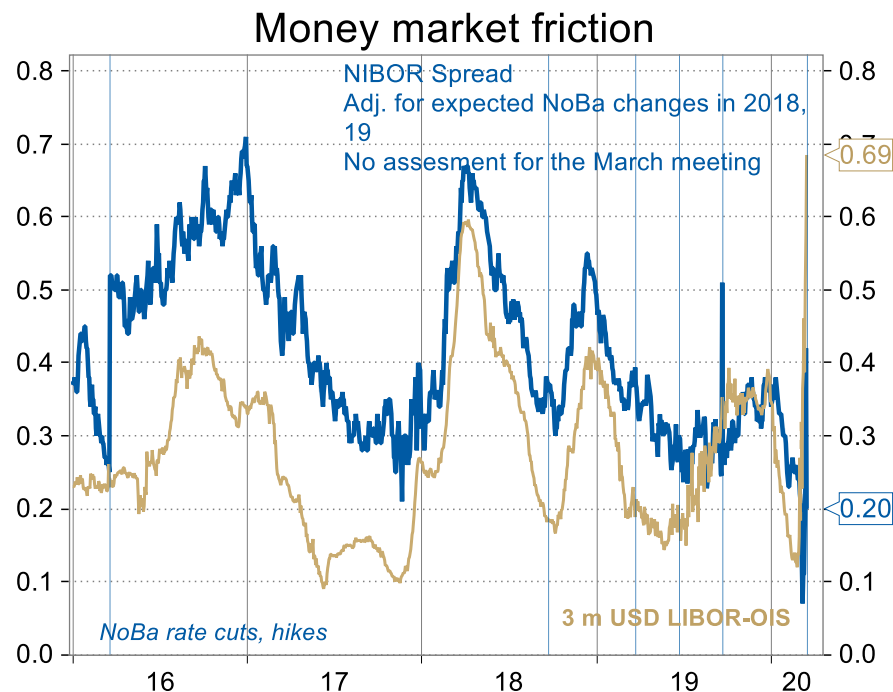


Norges Bank cut 50 bps and markets are expecting another 50 bps by the summer

The FRA-curve is tilted steeply downwards, implying 50-75 bps in cuts by the end of the year



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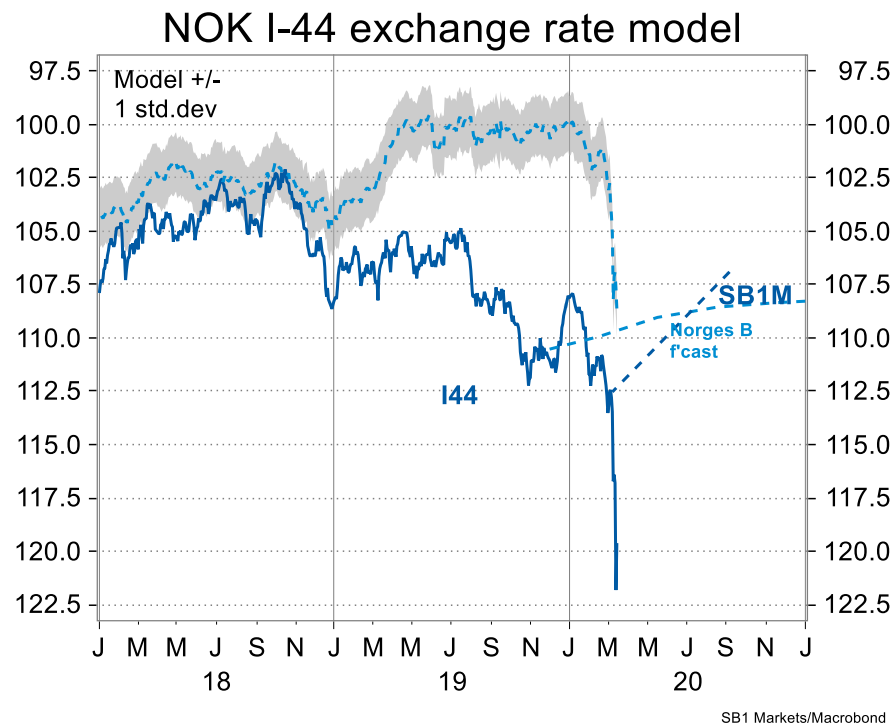
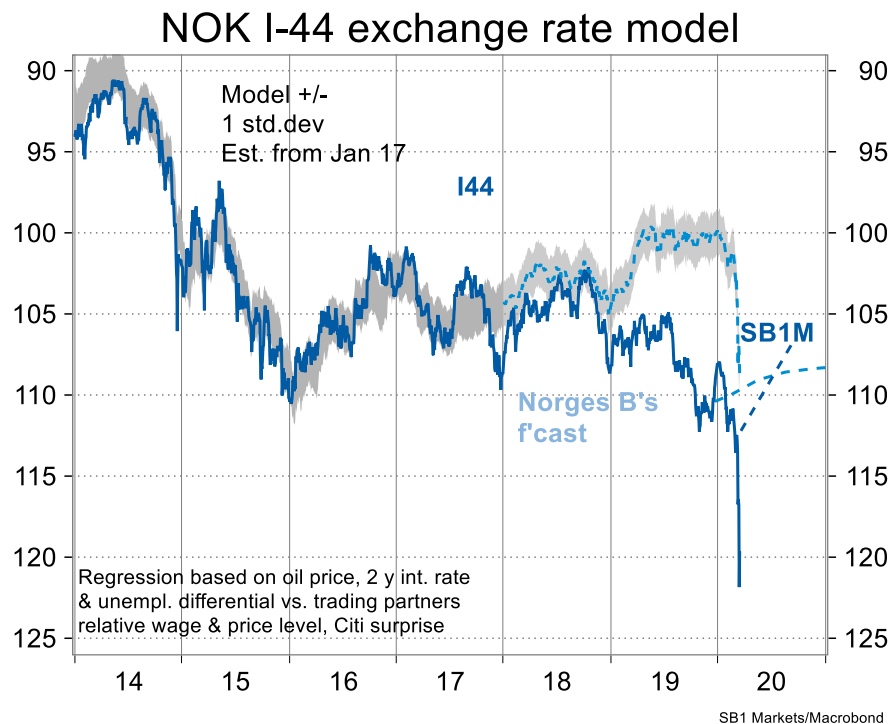


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- [Click here for more on Norges Bank's emergency cut](#)
- The 3m NIBOR fell to 1.70% on Friday, from 1.92 following the Norges Bank cut. Thus, the NIBOR spread has widened to far above 70 bps, from below 30 bps just some few weeks ago. The 3m NIBOR no doubt reflects expectations of further interest rate cuts, thus, the spread could easily have increased to 100 bps or above. Banks can now borrow unlimited amounts from Norges Bank, at the signal rate (restricted by securities deposited in the bank)
 - » The US 3m LIBOR-OIS has turned has widened by almost 60 bps since the Fed cut, and the TED spread has widened as well, signalling substantial stress in the US money market. The NIBOR spread is 'importing' this spread, via the USD/NOK interest rates swaps

NOK is in 'free fall', down another 5% last week. Further down Monday morning

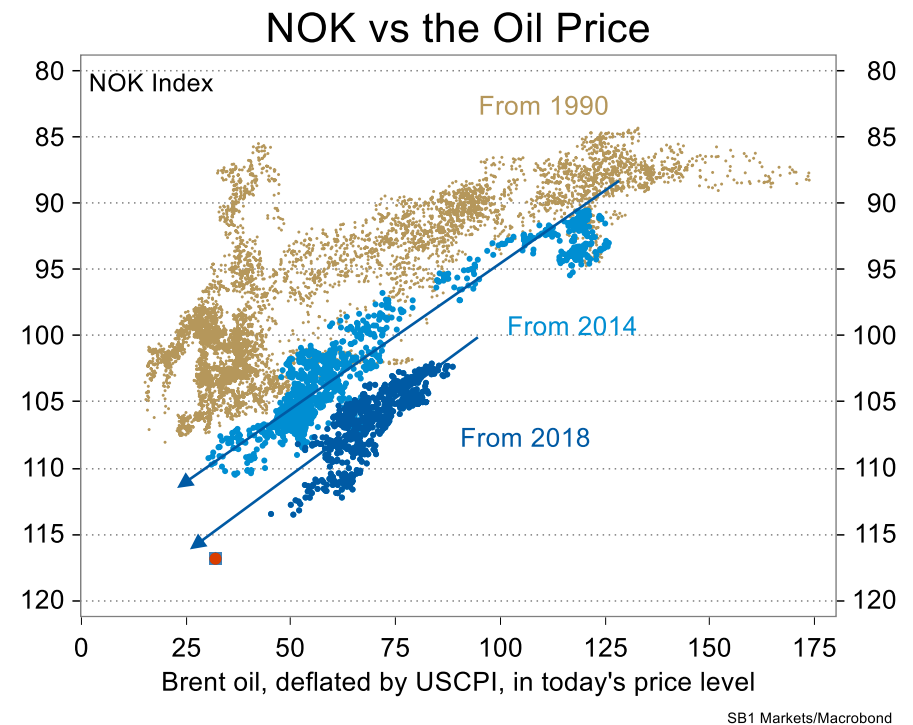
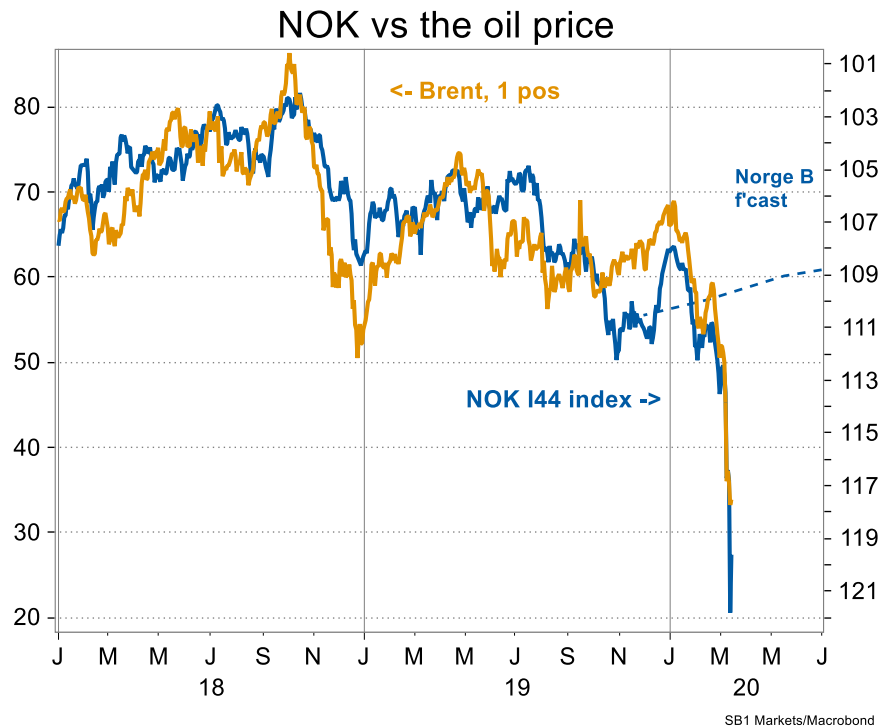
NOK dropped 5.4% last week, to a new ATL, the standard model signaled just a 3.4% depreciation



- NOK is 'collapsing' on the oil price dive and global uncertainties due to the corona pandemic. The NOK appreciated Friday after Norges Bank cut the interest rate (although it depreciated immediately following the decision) and added stimulus measures, and the government announced fiscal spending packages
- 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 7.6% too weak vs other supercycles (however still perfectly on par with the Australian AUD index!) on Friday while NOK was 1% too strong 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 some risk if the oil price should drop even more as a result of the Saudi/Russia price war – or a global recession takes hold. However, with some time horizon, BUY!!

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

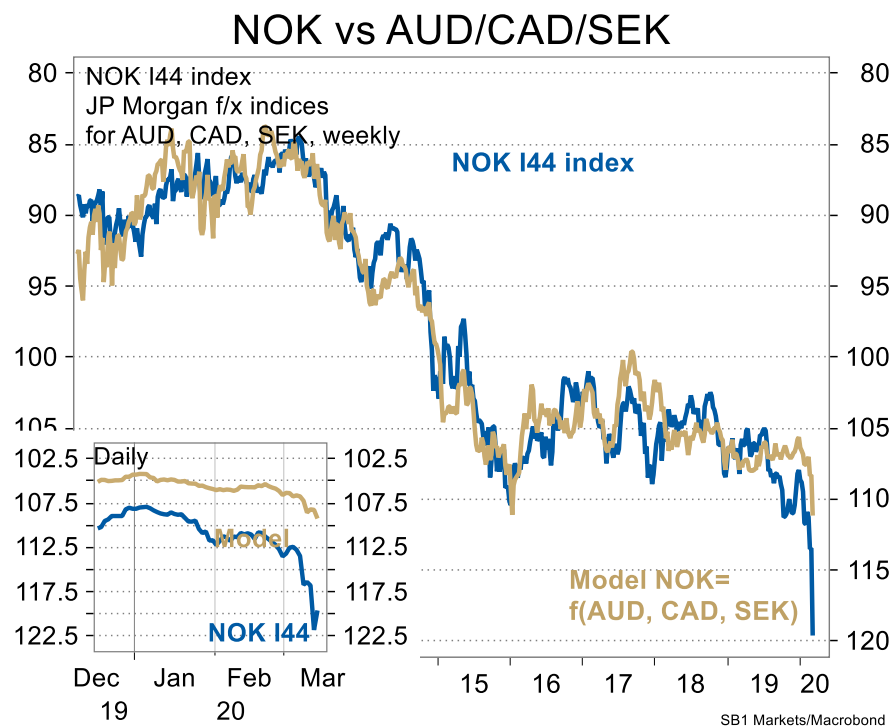
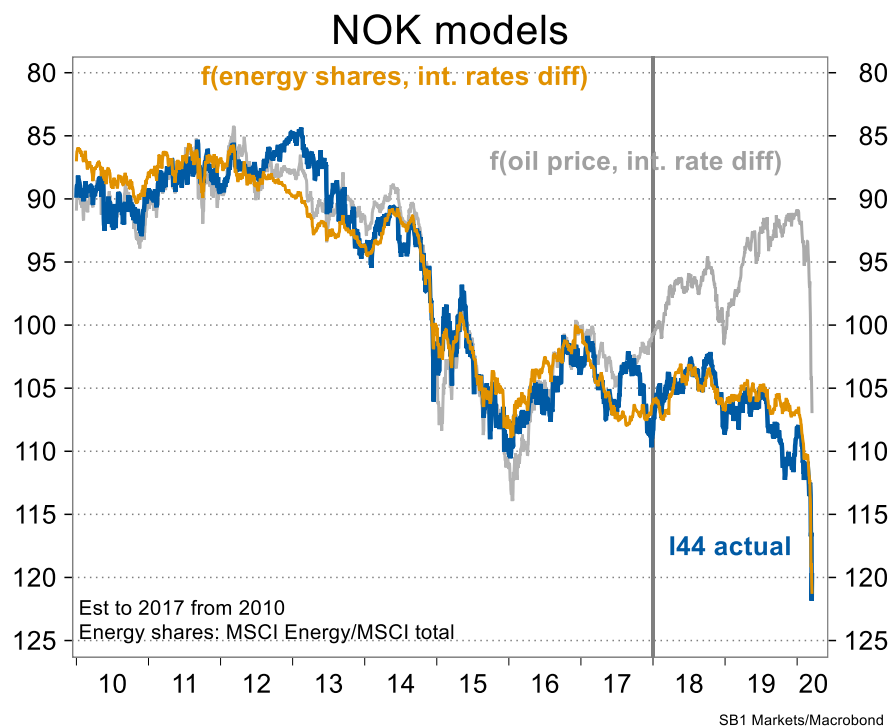
NOK depreciated 'more' than the oil price last week



- 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

NOK marginally 'too strong' vs energy shares, far below supercycle currencies

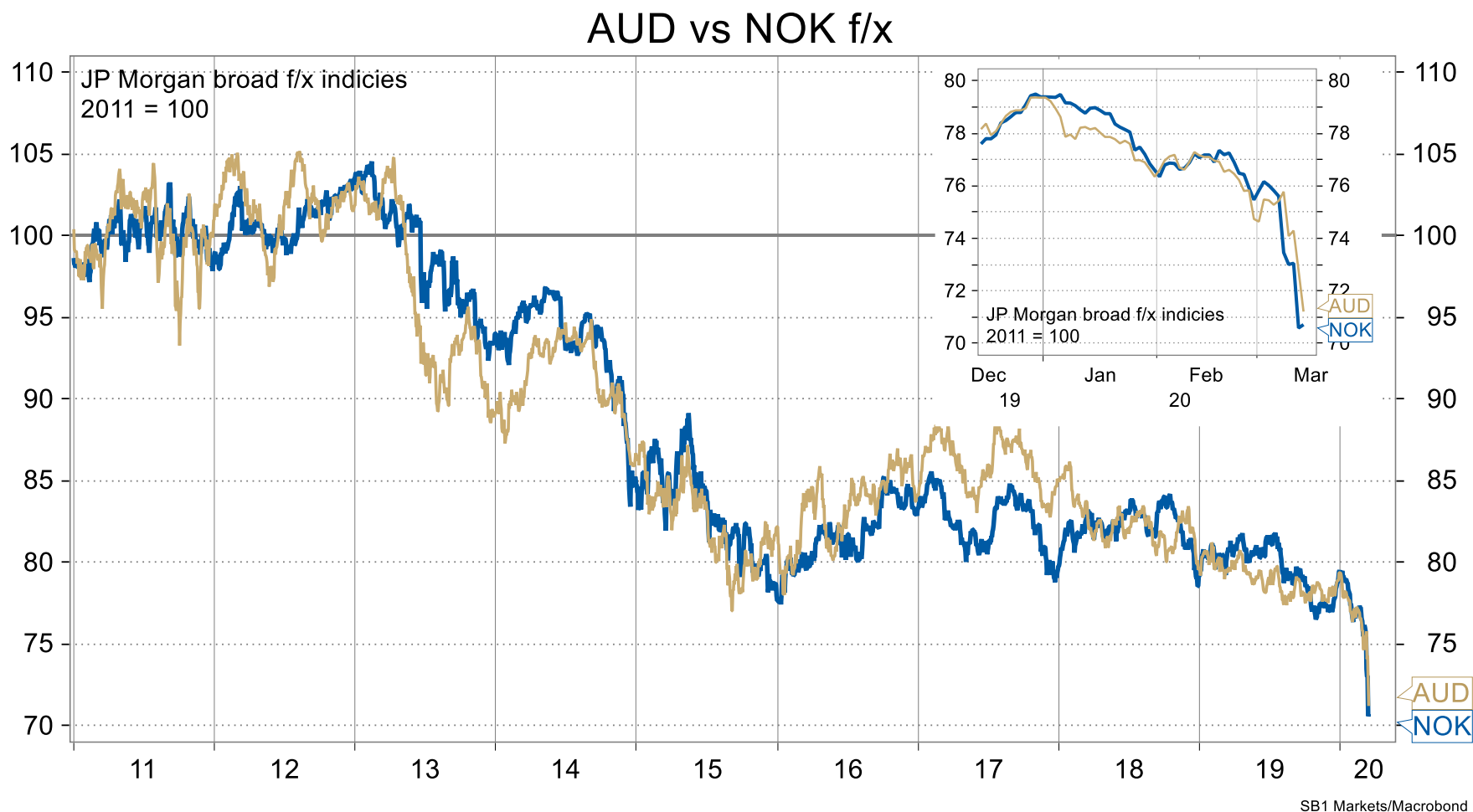
NOK is 8% too weak vs the 'supercycle' model but 1.4% above the oil stock price model



- 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 [$\text{NOK} = f(\text{AUD, CAD, SEK})$, with just a marginal contribution from SEK]. The EM x CNY currency aggregate is also quite closely correlated to NOK
 - » The oil company share has model slipped along with the NOK since early January, and tumbled the past week, as the oil price drop sent oil company stock prices rapidly down. The NOK is now marginally 'too strong' vs the oil price model
 - » Both AUD and CAD are sensitive to oil/energy prices and – together with the SEK – global growth outlook. The past week, the NOK depreciated much more than the SEK and CAD, but equal to AUD

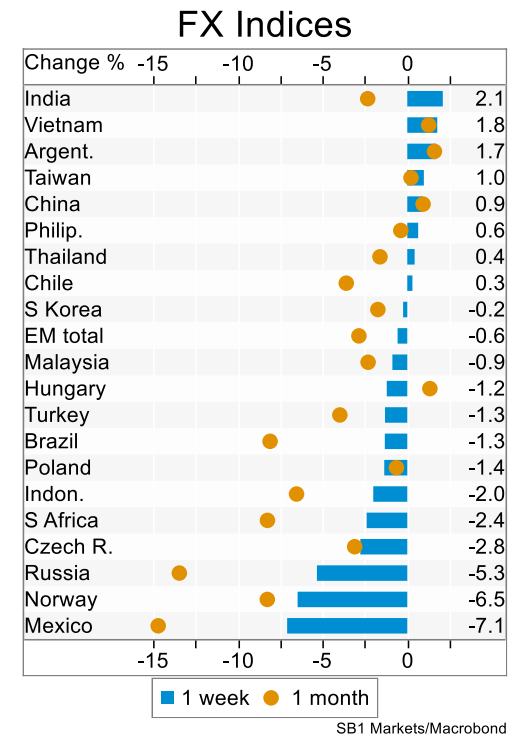
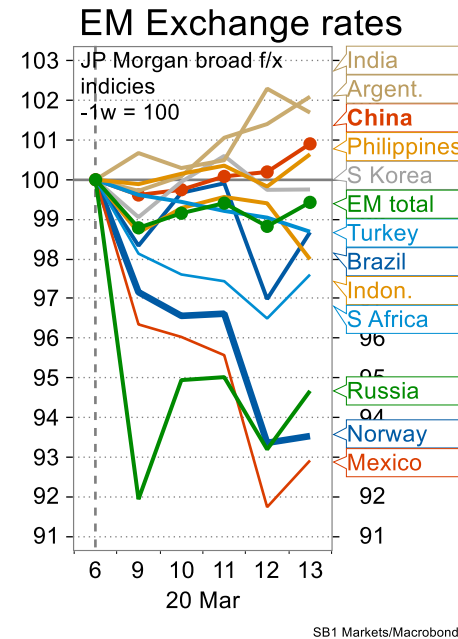
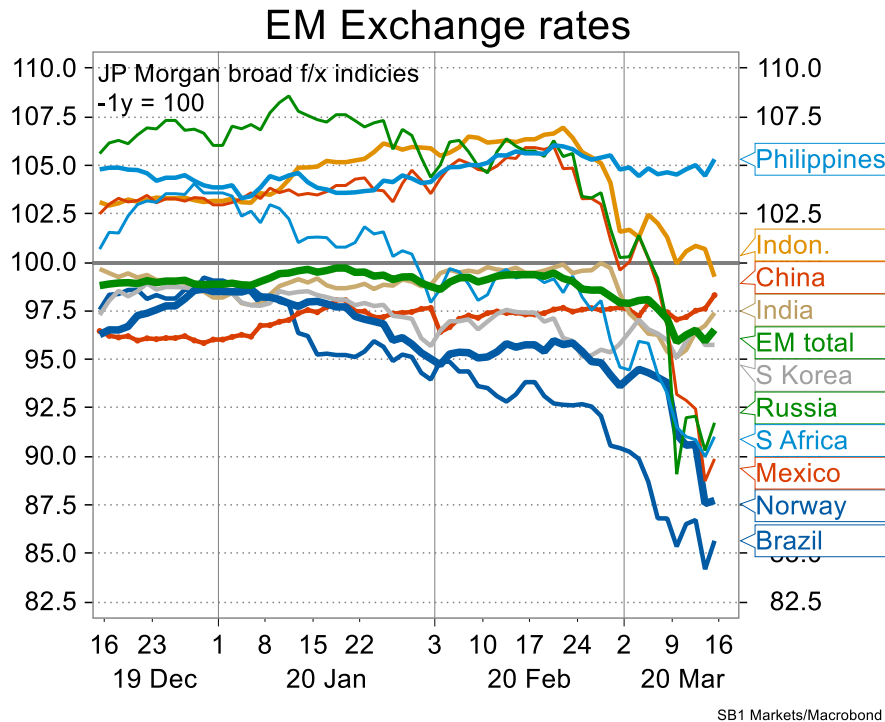
Down Under or Up North; 'no one' can spot the difference. Since 2011

AUD/NOK still hang together. They are both sensitive to global growth and energy/commodity prices



EM currencies depreciate rapidly amid corona turmoil, even if is not 'there'

CNY is slowly climbing, Mexico and Russian currencies drop even more steeply than the NOK



- Most EM (Emerging Markets) currencies have depreciated substantially on the coronavirus outbreak; Russia, Brazil, Mexico and South Africa the most
- The past month, NOK has weakened more than the EM average

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