14 April 2020

Macro Research

Weekly update 16/2020

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

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

- Highlights
- The world around us
- The Norwegian economy
- Market charts & comments

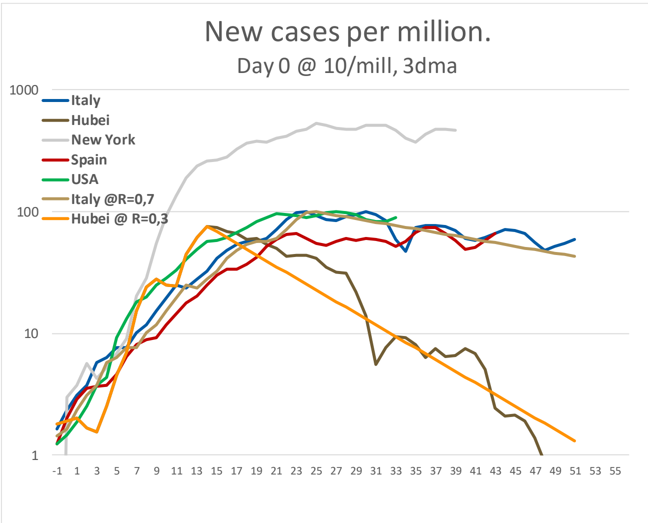
The headlines are linked to the relevant section in the report
The elements on the the page "In this report" are linked
A top right [K] button will bring you back to the content page

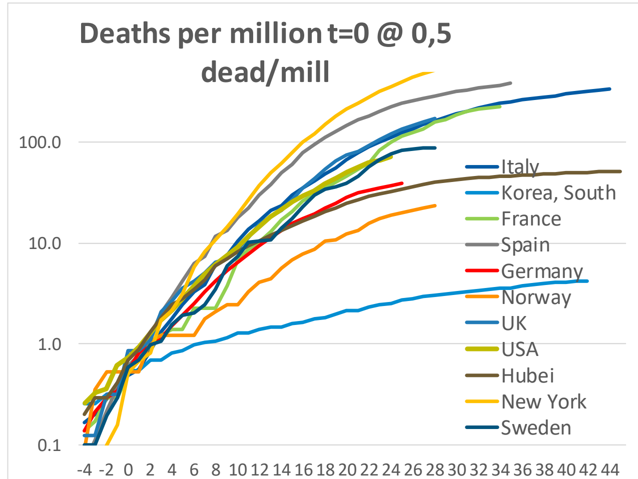
Last week – the main takes

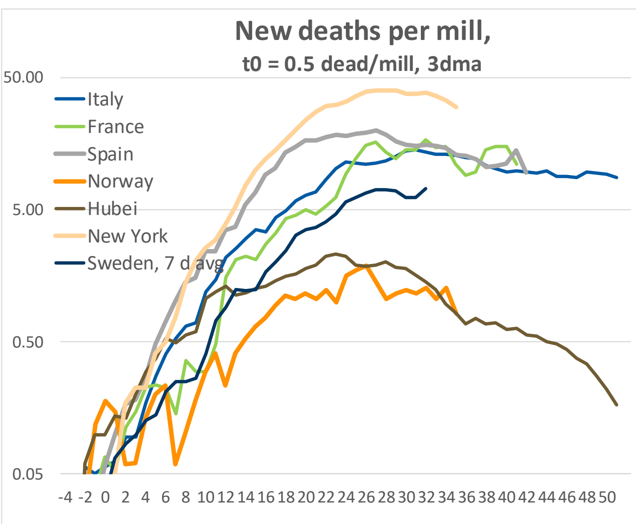
- The debate about when and how to **ease corona related restrictions** has emerged everywhere the case/death rates have peaked, which has happened all places where harsh restrictions have been in place for 3 – 4 weeks – which btw was the expected lead time. The problem is that the room for manoeuvre is rather limited. The corona virus reproduction rate has been reduced from some 2.5 – 3.5 to approx 0.7 under 'lockdowns'. If just some 1/5th of this decline is reversed, the 'R' returns to above 1 again, which will create large, new outbreaks if not curtailed. Even Norway, which has low level of infections, can probably not afford to let the 'R' up to much above 1.1. Thus we may experience restrictions taken up and down the coming quarters. The only hope seems to that some medication will be successful (before a vaccine arrives) – and there are rumours all the time but still no fact
- **The unprecedented depth of the economic setback** is becoming more and more visible in both Europe and in the US. Production is down 15 – 30% (our first mid March call was -25% in Norway, SSB now says 15%, so far). Weekly unemployment data, and some few other real economy trackers confirm the damage being done. Registered unemployment in the US is up 13pp, as in Norway. Other countries may report lower figures depending on the governments' measures (to pay companies to keep employees at the job, or pay them if they are temporary laid off).
- **The IMF slashed it's global growth forecast** to -3% in 2020, which probably is close to consensus. The fund does not expect a full recovery in 2021 (A 5.8% growth rate is expected, 9% would have been needed to bring 2021 up the pre corona 3% growth path). IMF expect Norway to take a serious hit vs our neighbours, we assume due to our oil exposure. Oil investments will no doubt subtract far more from Norwegian growth than we assumed 2 months ago. And there may be some housing challenges as well, in addition to a likely substantial decline in non-oil business investments
- **China** reported a 10% GDP decline q/q in Q1, as expected, and the annual growth rate fell to -6.8%. Industrial production recovered far better than expected - and higher than indicated by several activity measures - in March, by 32%! The production level is just 5% below the pre corona trend growth path. However, retail trade grew just 1%, and remains 17-18% below trend. Auto sales did not recover. Investments rose 6% but remains 20% below trend. Earlier strong March credit and foreign trade data had been published. In total, if we do not put too much emphasis on the (incredible..) industrial production number, the Chinese recovery is so far quite modest. The PBoC cut several of its signal rates last week, and this morning, by 10 – 20 bps. It has so far cut 30 bps since February
- Besides a further increase in **Norwegian** unemployment last week, **homebuilders** reported more than a 40% decline in new home sales in March vs. February. We assume the first half of March was close to normal. It so, the second half of the month was not, for good reasons. The average sales level at 14' was the lowest ever (data from 2010), signalling housing starts at the same level as at the bottom of the 1988 – 1993 housing and banking crisis.
- **Most stock markets** rose further and the S&P500 had the best two weeks' return since 1939. Still bond yields are rock bottom low. The extremely aggressive central banks' QE is most likely the main culprit, not a dismal growth outlook among bond investors

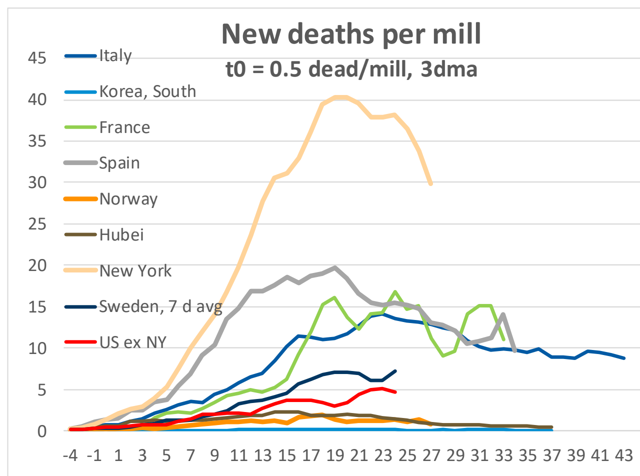
Cases, death levels are flattening, flows are slowing

We now know that the spreading stabilizes after two/three weeks of lockdown









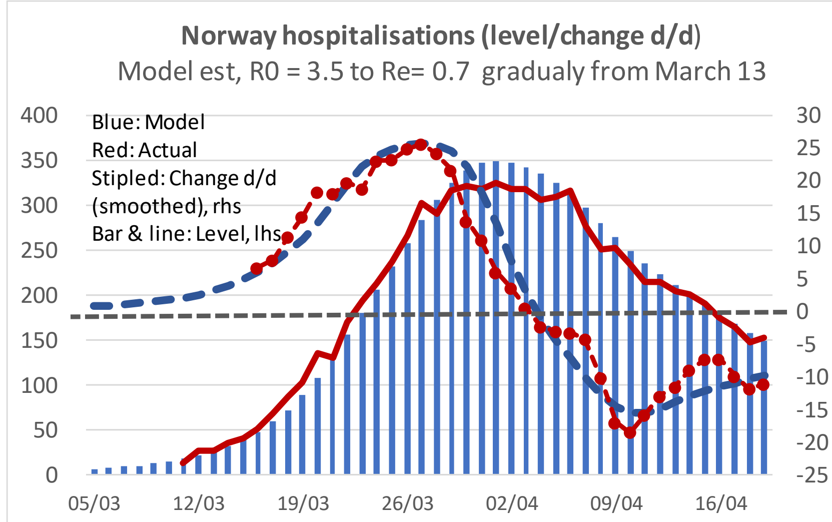
- The virus outbreak ran out of control in many countries, overwhelming the health system
  - » Spain, Italy and New York are still struggling hard but the number of deaths per day is now declining all three places, as almost everywhere (but not in Sweden).
    - New cases peaked ahead of the decline in deaths, as has the number of hospitalised patients
  - » Norway has brought the virus under control, at least for now – and well before it created a serious problems in the health system. On the other hand, herd immunity is not building in Norway (see also next page)

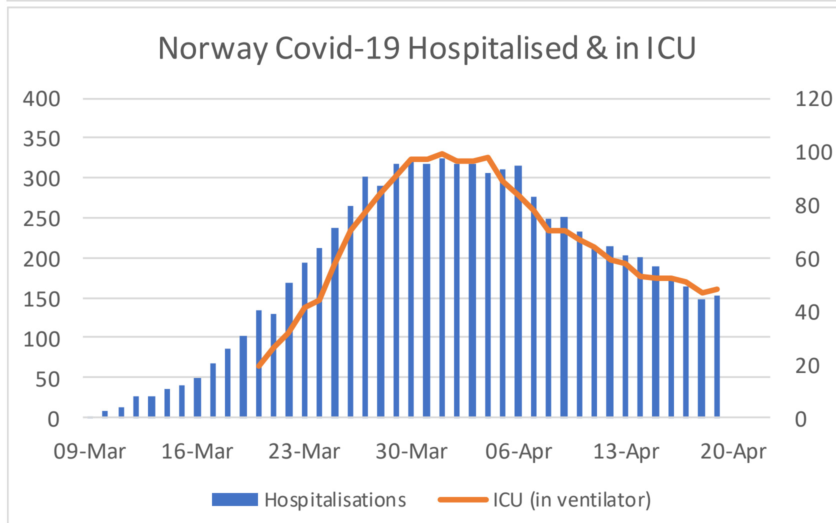
Sources: Johns Hopkins, SB1 Markets

Norway: The numbers of hospitalised patients & in intensive care are falling

Just 153 Covid-19 patients are hospitalised, down from 325 at the peak, 48 in ventilators

- FHI has confirmed a Norwegian effective reproduction ratio ‘Re’ at well below 1, now at slightly below 0.7, from approx 2.5 on the onset of the outbreak (or their model now says 3.1)
- The number of patients being treated in ventilators has fallen to 48, down 50%. The max ICU (intensive care units) capacity may be close to 1,000. Thus the capacity utilisation has been low, and it is now declining rapidly
  - » Most of the fatalities take place outside hospitals and IUCs, among the oldest and sickest, living in nursing homes: So far, just 20% of deaths have taken place after being treated in ventilators
- Today kindergardens open, and next week schools for the youngest kids (grade 1-4), and some few others from April 27
- Some shops have announced reopening, and social distancing is most likely now being reduced somewhat.
- The path forward is uncertain: The Government is verbally arguing for a ‘supress and keep down’ strategy, while at the same time some restrictions are lifted, which no doubt will lift the ‘R’ number somewhat. We have put an ‘R’ at 1.1 from next week into our models but given the very low starting point

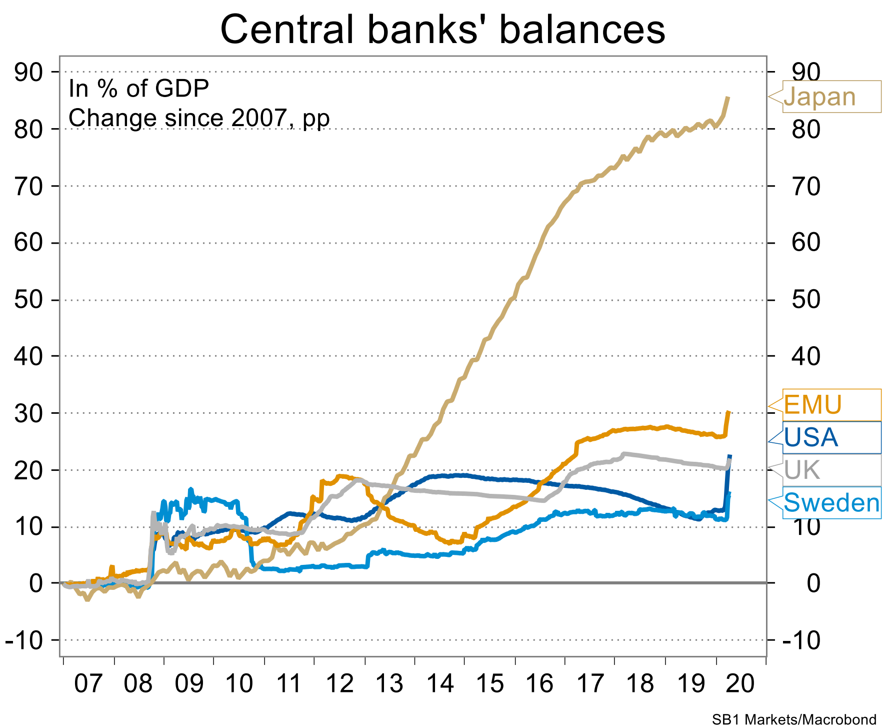


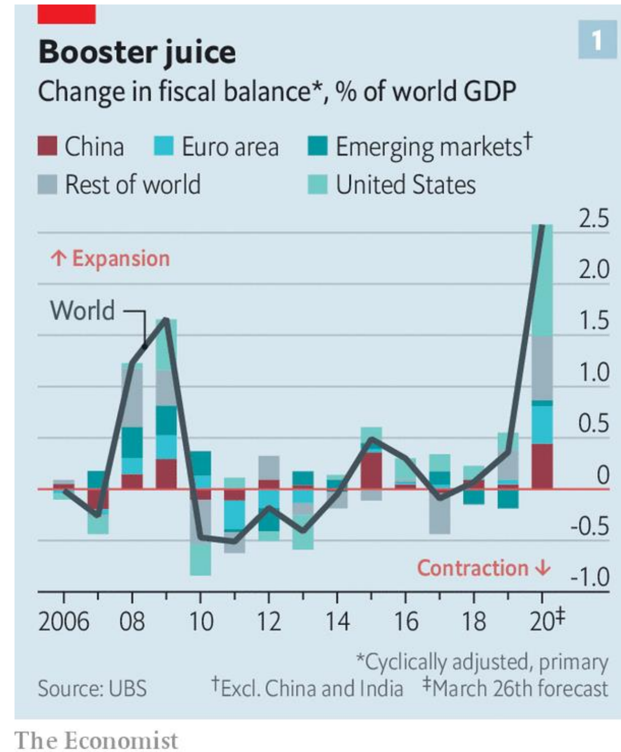


Sources: SB1M, Helsedirektoratet, SB1M calculations

QE is ramped up aggressively, 9% of GDP in 3 weeks in the US!

ECB has pledged 7% of GDP QE, 4% delivered. Huge fiscal packages, everywhere

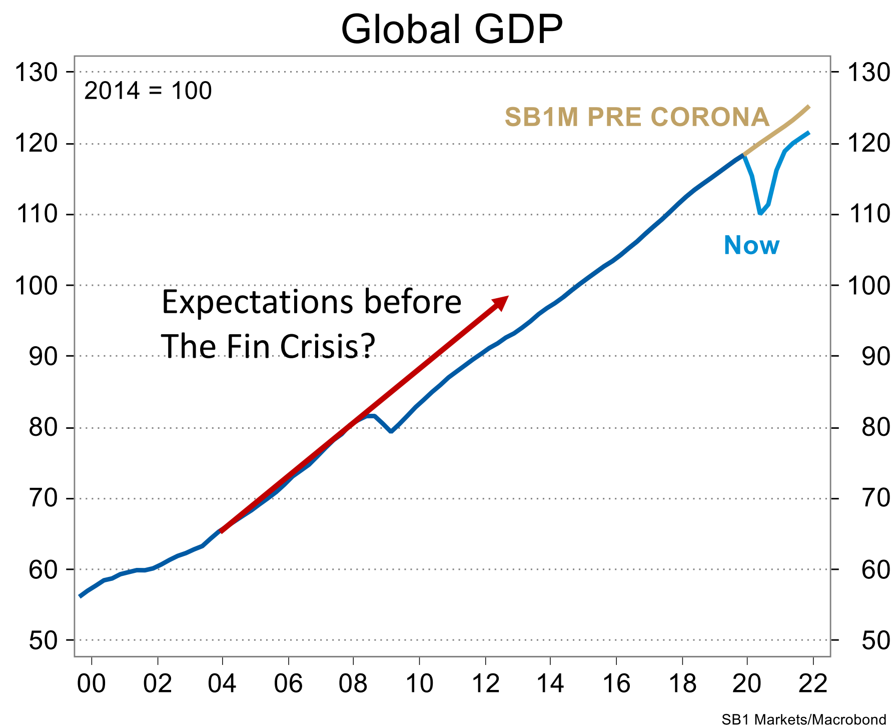


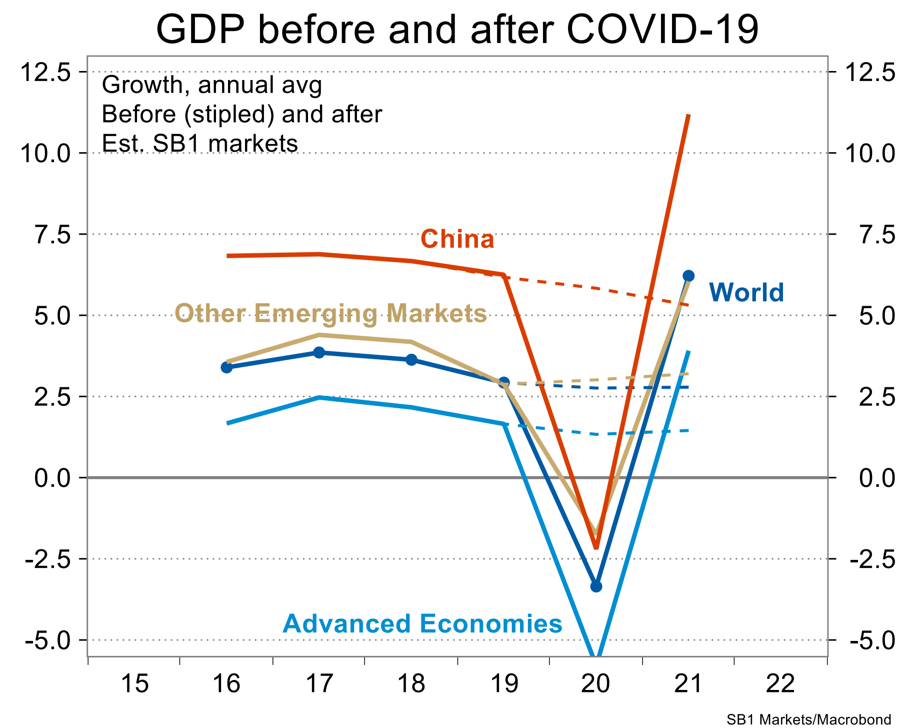


- It's hard to keep track of all the measures now decided (some important actions commented on the next 3 pages). Most places, it is a mix
  - **Outright public spending**, first like income transfers to households, then a second wave with transfers to the business sector. Further measures will be decided, if needed. The total cost will depend of the length/depth of the 'lockdown' and whether or not the economy 'automatically' recovers after the lockdown. So far, UBS (via Economist) has counted a 2.5% of global GDP fiscal stimulus, cyclically adjusted, implying that the actual stimulus may be some 1.5 pp higher, at 4% of GDP. Public debt will increase accordingly
  - **Loans and guarantees from the government**, mostly to the business sector. More than half of the 10% of GDP US support package (and almost the half of the Norwegian measures) are loans/bond buying or guarantees. An unknown part of these will in the end be lost (and must be counted as money spent, not lent)
  - **Monetary policy measures**. 23 out of 27 of the most important central banks have cut their interest rates (they who have not are at zero or below), the DM average is now zero. Several banks have engage in heavy quantitative easing (QE) again, and have promised to do more – the Fed without limit, it seems. Both government bonds, corporate bonds and direct loans are on the menus. <u>In the end, banks are able to stabilise financial markets so they do not make too much extra harm on the real economy</u>

Global GDP sharply down, and much more than during the Financial Crisis

That’s a done deal now. The question is when, and how rapid the output gap will be closed





- The decline in the global GDP level will no doubt be much larger than during the Financial crisis. The economic cost, is decided also by the length of the downturn
- We expect a decline in GDP at some 25% per month of closedown lasting 2 months, distributed over Q1, Q2 and Q3 for different countries/regions, then a gradual recovery, starting in Q3 for the global economy
- We still think the aggregated loss of output, vs expectations ahead of the downturn, will not be larger this time, than the loss vs. expectations that occurred during the financial crisis. The need for reallocation of resources is not necessarily larger this time

SpareBank 1 MARKETS

Q1 GDP down 10% but industrial production up 32% in March!

The decline in GDP was as expected (-10 to -12%), while industrial production was much stronger

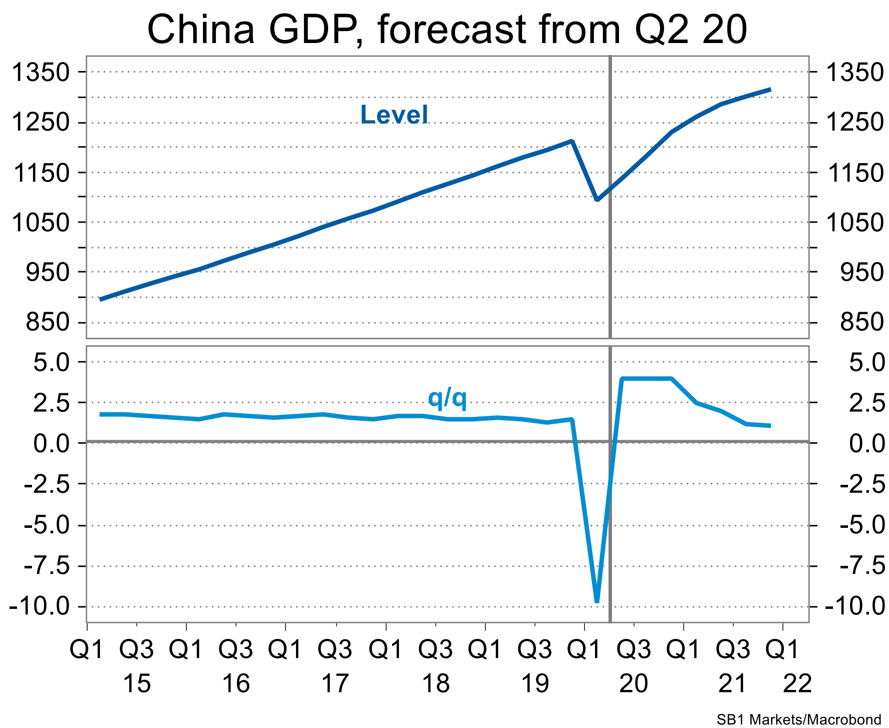
- The official message: *In the first quarter of 2020, faced with the severe test of the covid-19 outbreak, under the strong leadership of the Central Committee of the Communist Party of China (CPC) with comrade Xi Jinping as the core, all regions and departments strictly implemented the decisions and arrangements made by the CPC Central Committee and the State Council, and the whole nation coordinated efforts to advance both the prevention and control of the epidemic and the economic and social development. As a result, the situation of epidemic control and prevention continued to improve with a basic interruption in epidemic transmission at home. The resumption of work and production accelerated, with fundamental industries and major products vital to national economy and people's livelihood growing steadily. People's basic livelihood was well guaranteed and the national economic and social development witnessed overall stability.*
- **GDP** fell 9.8% q/q, as we assumed almost two months ago (and which was the consensus now). GDP fell 6.8% y/y, from +6%. We expect GDP to increase by at least 4% q/q in Q2
- **Industrial production** rose 32% m/m, and was down just 1.1% y/y, expected down approx 7%!
- **Retail sales** rose 1% m/m in March has was much lower than expected. Sales are some 17.5% below the pre corona trend path
- **Investments** rose 6% in March but remains 20% below the pre corona trend path. Housing starts & sales are just 5% below trend

From last week's report

- Both **exports and imports** were much stronger than expected in March, and both are not far below trend levels
- **Credit growth** was strong in March, and exports rose almost to a normal levels (following the 40% decline in Feb), as did imports, at least in volume terms, following a 10% decline in Feb.

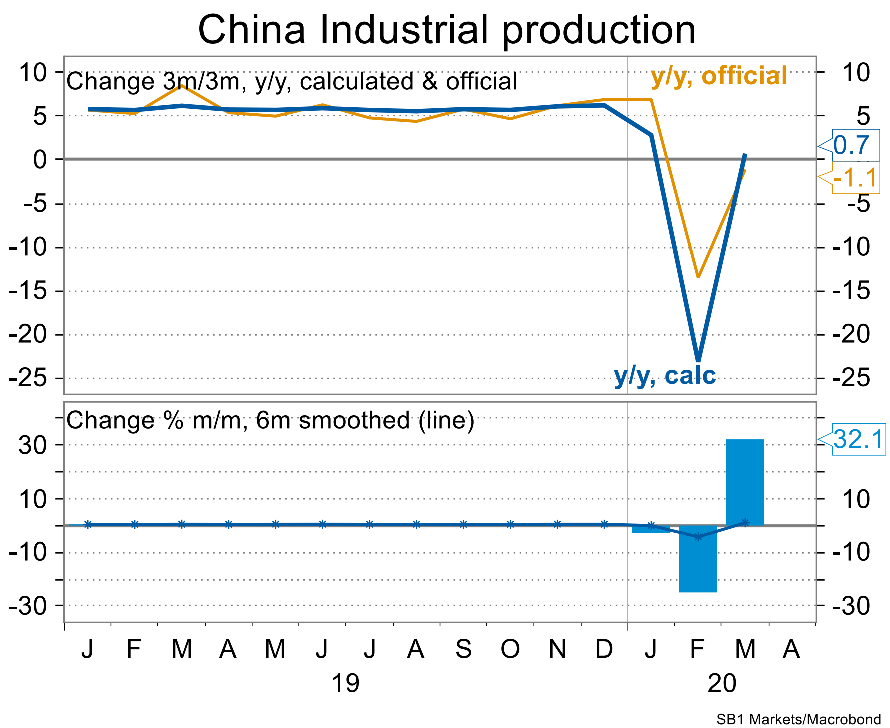
GDP down 9.8% q/q in Q1, spot on expectations

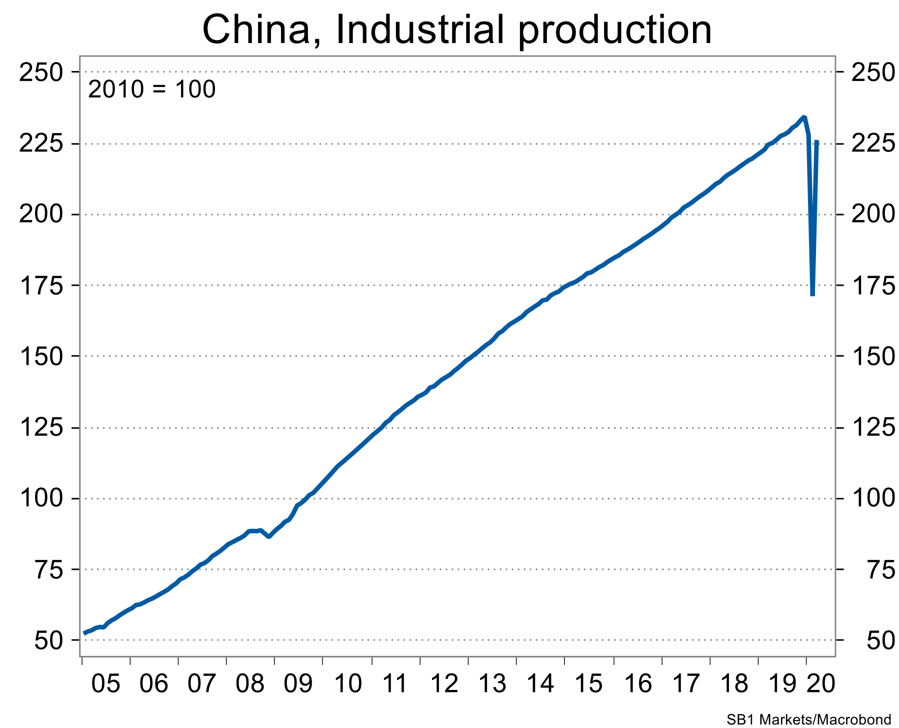
We expect GDP to recover gradually the coming quarters but the global corona setback will be felt…



Give me a V! Industrial production just 5% below pre corona trend

An incredible recovery in industrial production in March, up 32%, after falling 27% in Jan/Feb

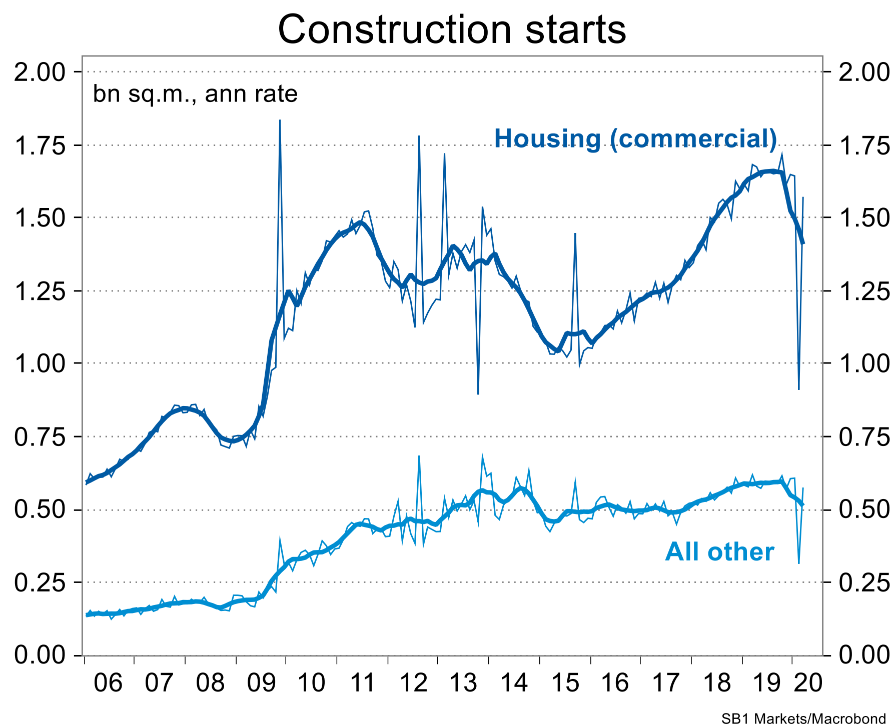


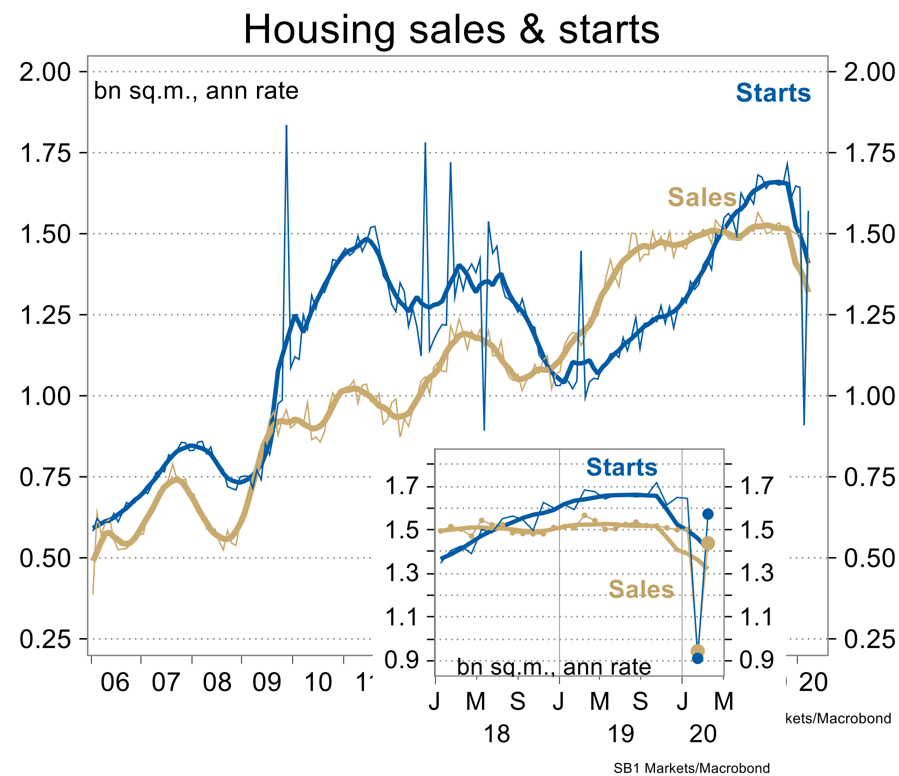


- Production was down 1.1% y/y (official data, ours close to, at +0.7%), expected down 7%, which we thought was an optimistic estimate. Production in March was just 3.5% below the December level. ‘Normally’ (trend wise), it should have been up 1.5%. The gap is just 5%, which of course is remarkable
- In addition, these official production numbers do not fit well with other short term indicators of activity in the Chinese economy, like coal consumption, night light in industrial parks. Even the manufacturing PMIs, which rose to just above 50, did not signal any extreme lift in production. So we take the official data with a grain of salt. Still its hard to believe that the authorities have just made up these data to cheat us

Both construction activity, new home sales almost normal levels in March

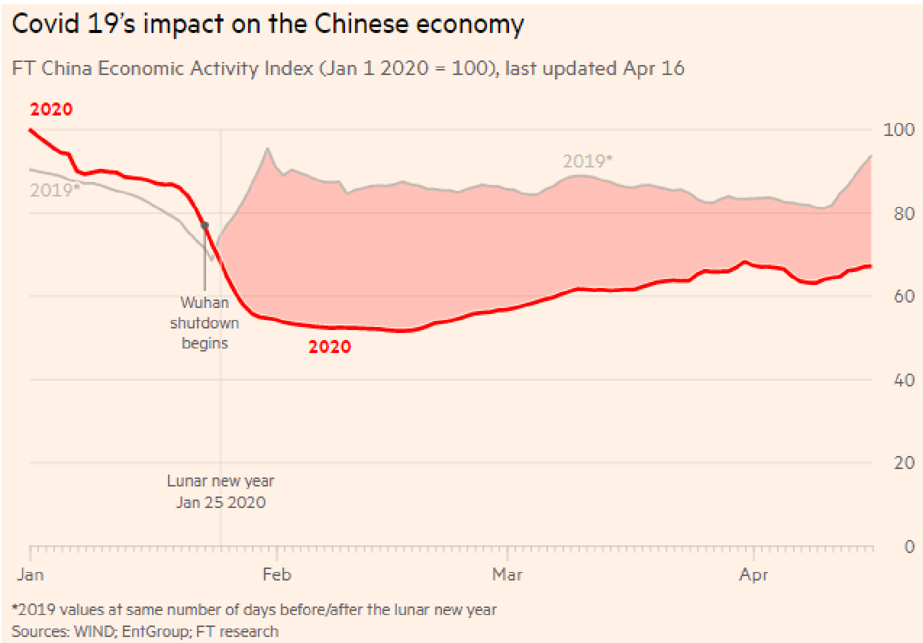
… following the 40 – 50% collapse in February. March just some 5% below Dec levels!!





The Chinese economy is still far below a normal activity level

Daily activity data signal a just a slow recovery in most sectors

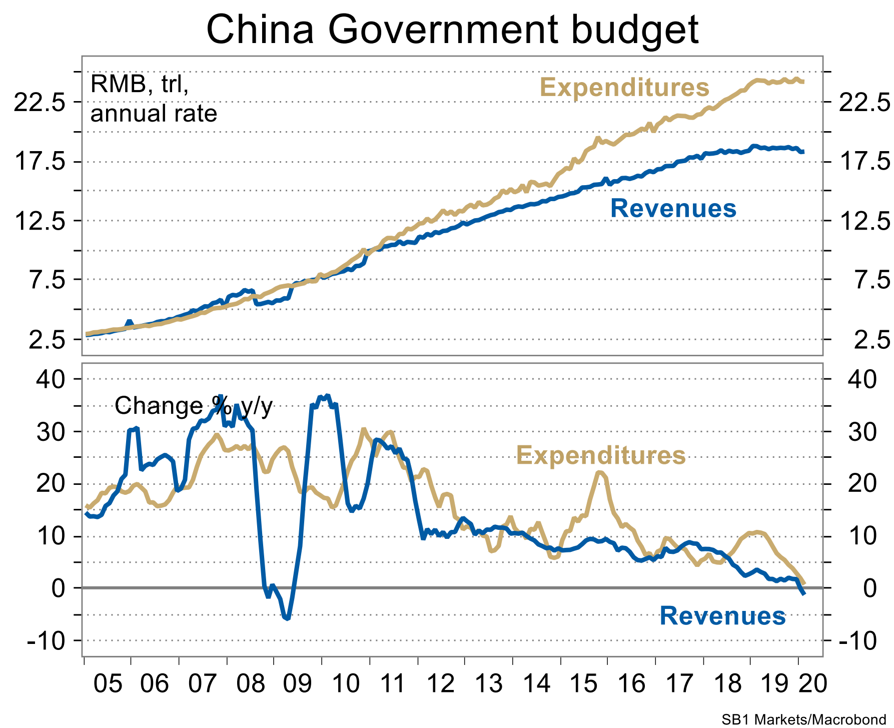


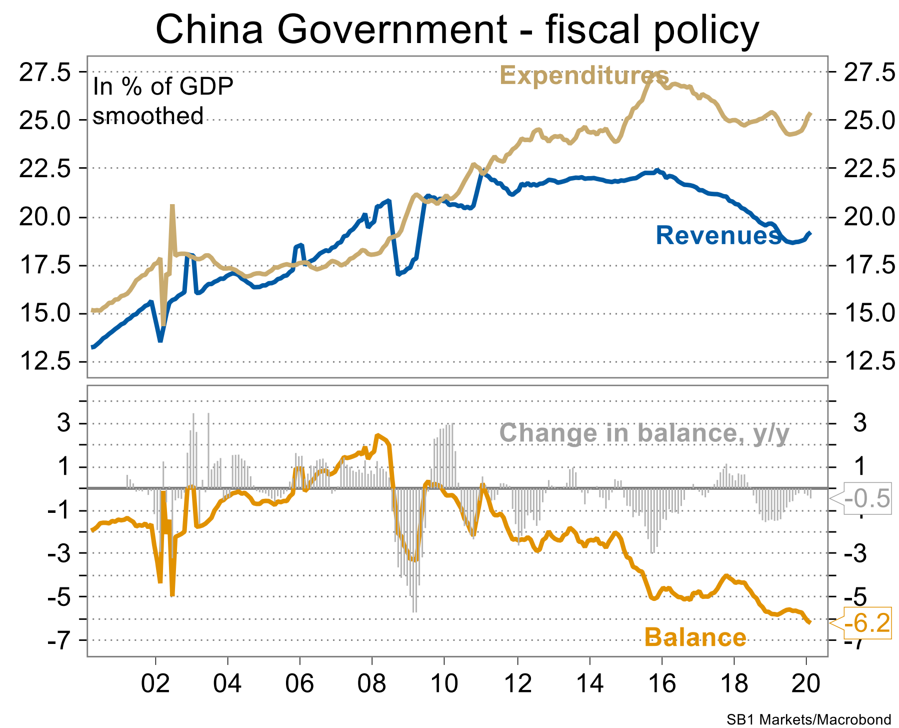
- Coal consumption for electricity production has not increased vs. the 2020 level since early March – and it is 20% below. It 'should' have been at least 5% above
- Road congestion is still on the way up to a normal level but public transport is still far below, people do not want to be too close to others?
- Retailers report then customers are reluctant to go shopping, even if they now are allowed to, and most shops have reopened

Source: Financial times

No fiscal stimulus (yet), and both spending and revenues flat past year

Thus, the budget balance has been close to stable last year. Still, the budget deficit is large, at 6.2%

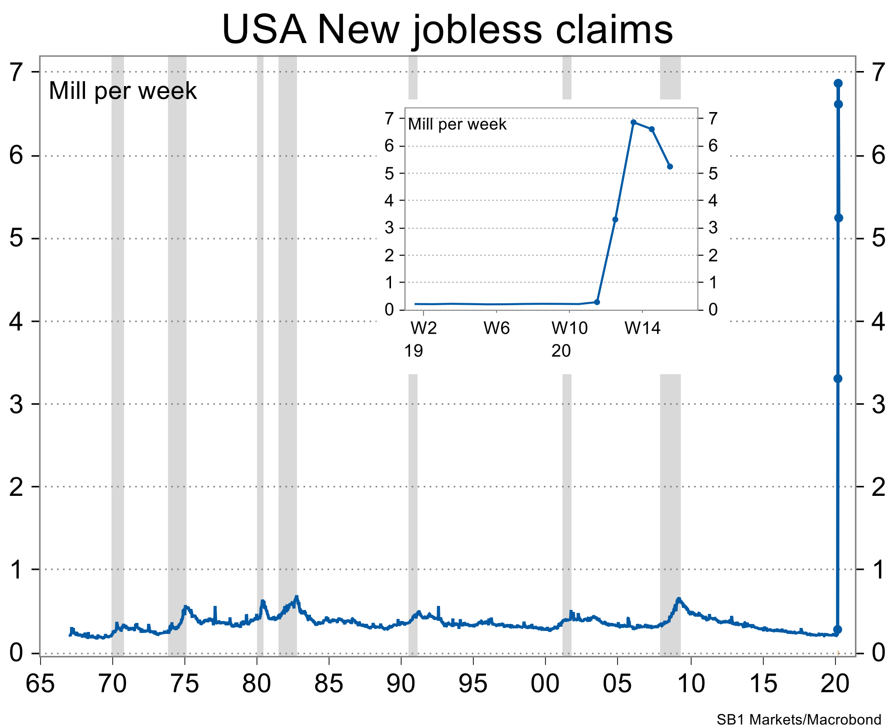


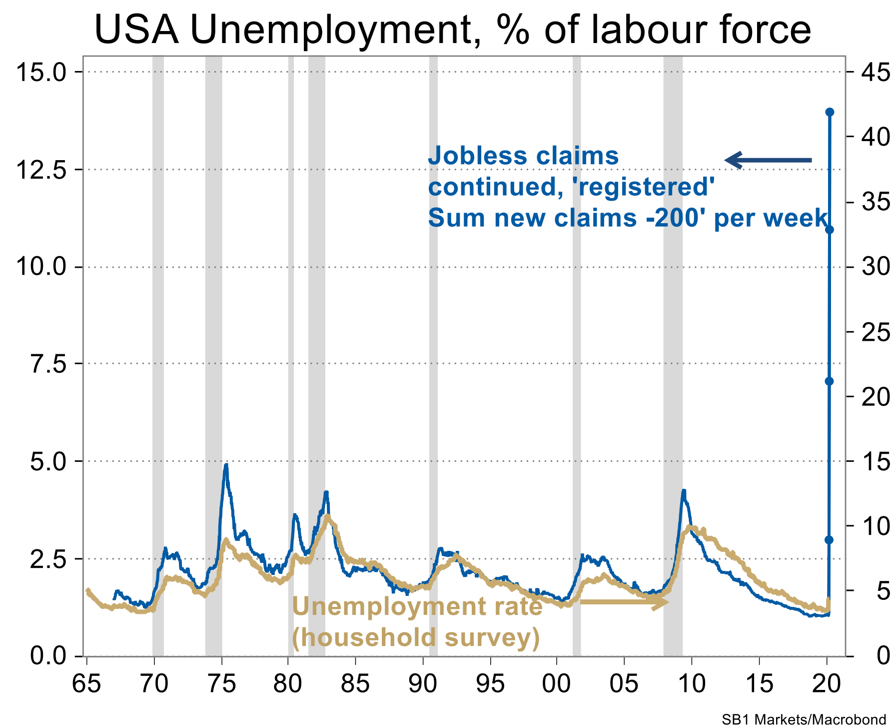


- **Spending** programs decided – but are not easy to reveal in aggregated spending numbers, nominal expenditures were flat y/y in February and have been shrinking vs. GDP (until the huge drop in GDP in Q1).
- **Revenues** are marginally down y/y, at least partly due to tax cuts – and revenues have declined vs. GDP, until Q1.
- **The budget balance** is deep into red, at -6.2% of GDP. Over the past year, the budget balance has weakened just marginally – and fiscal policy has been close to neutral.

'Just' 5.2 mill new unemployed last week, the sum up 22 mill past 4 weeks

23 mill persons are registered as unemployed, 13.9% of the work force. The "real" uempl. even higher



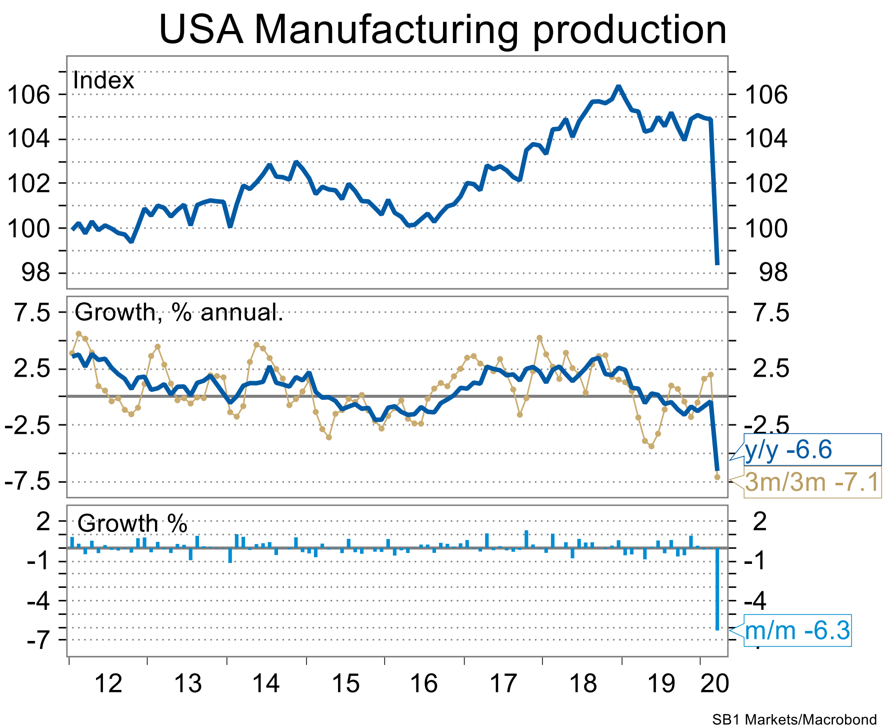


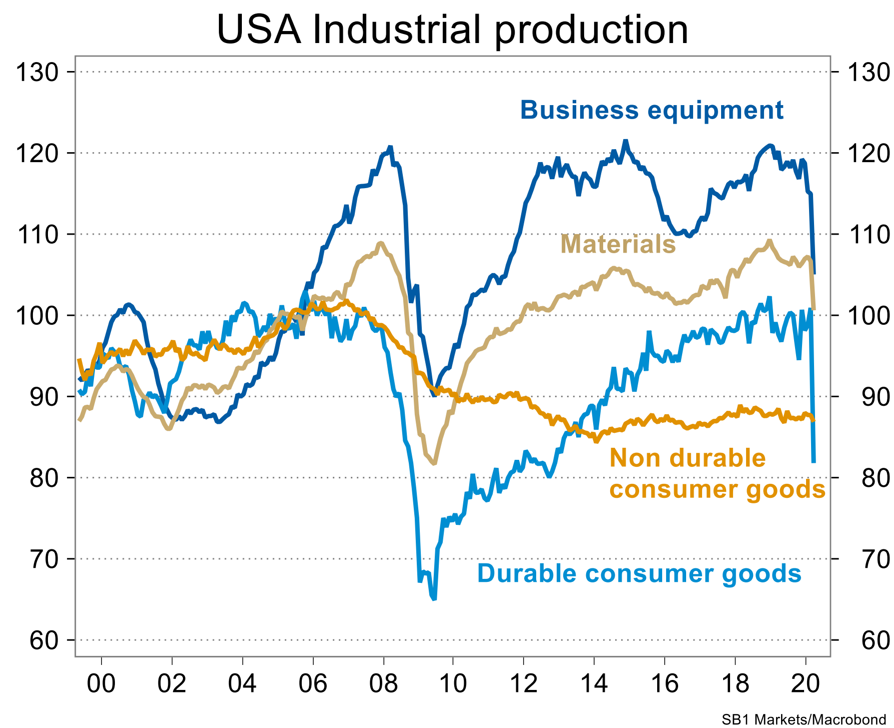
- The shock is totally unprecedented, and even if the inflow has slowed recent the two last weeks, it is still enormous, equalling 3%, per week!! Last week's new claims were marginally lower than expected (5.5 mill)
- We estimate continued claims have climbed to 23 million last week, from 1.8 mill 3 weeks ago (the figure will be published coming weeks as the new claims are processed), equalling 13.9% of the labour force, up from 1% 4 weeks ago!
  - » This 'registered' unemployment is usually some 1/3 of the official (labour force/household survey LFS/'AKU') unemployment rate but the relationship is not that stable. The official unemployment rate will probably rise to well above 10% in April, from 4.4% in March –and to even higher level in May)

SpareBank 1 MARKETS

Manufacturing production sharply down through March. Demand to blame??

Down 6%, expected 4%. The production level was probably down 15% by the end of March

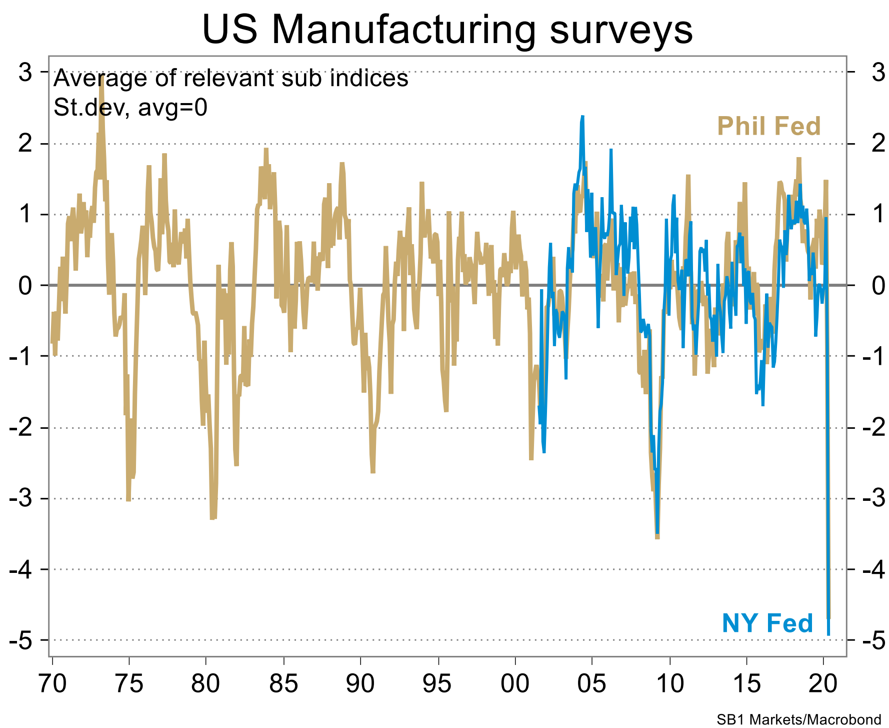


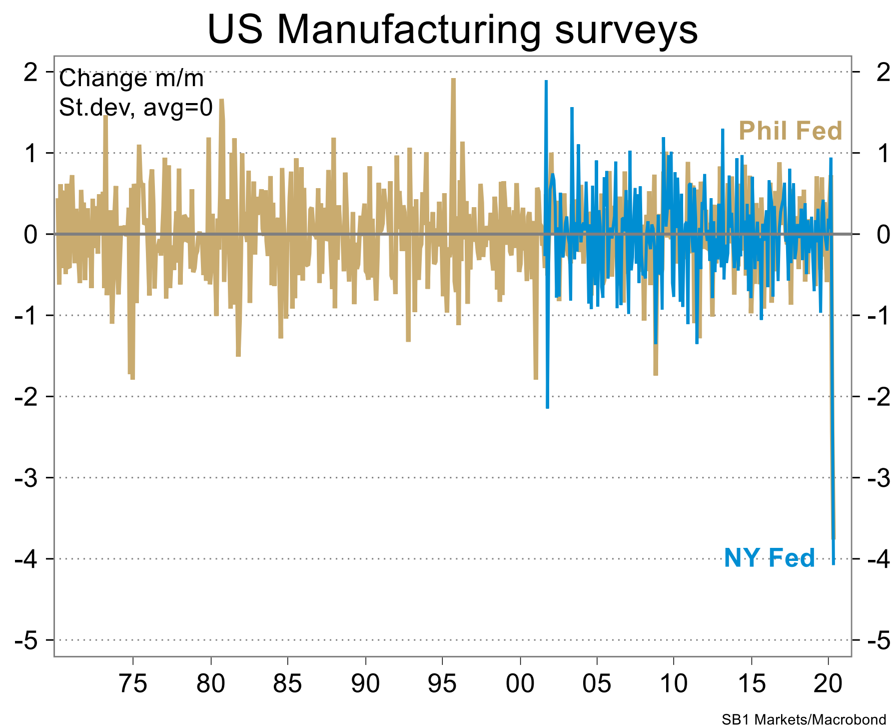


- We assume that production was more or less normal in the first part of March, say 1-2% down. If production was 'turned gradually off in the two last weeks of March, the level in week 4 was down 15% vs the February level. If so, production could easily decline by another 10% in April vs. March
- Non durable consumer goods (food, clothing etc) production was close to flat in March, materials fell 6%, while production of business equipment fell 8%, and more durable consumer goods fell 19% (autos included). This mix indicates that **demand is more to blame than supply** (the lockdowns' direct impact on production can not have been that harsh since some sectors are producing as normal)
- Both NY and Phil Fed manufacturing surveys fell sharply in April, signalling a further and steep decline in production

NY & Phil Fed surveys down 4 st.dev, twice as much than ever before

Both surveys are close to 5 standard dev. below average. It should happen just every 290.173 year

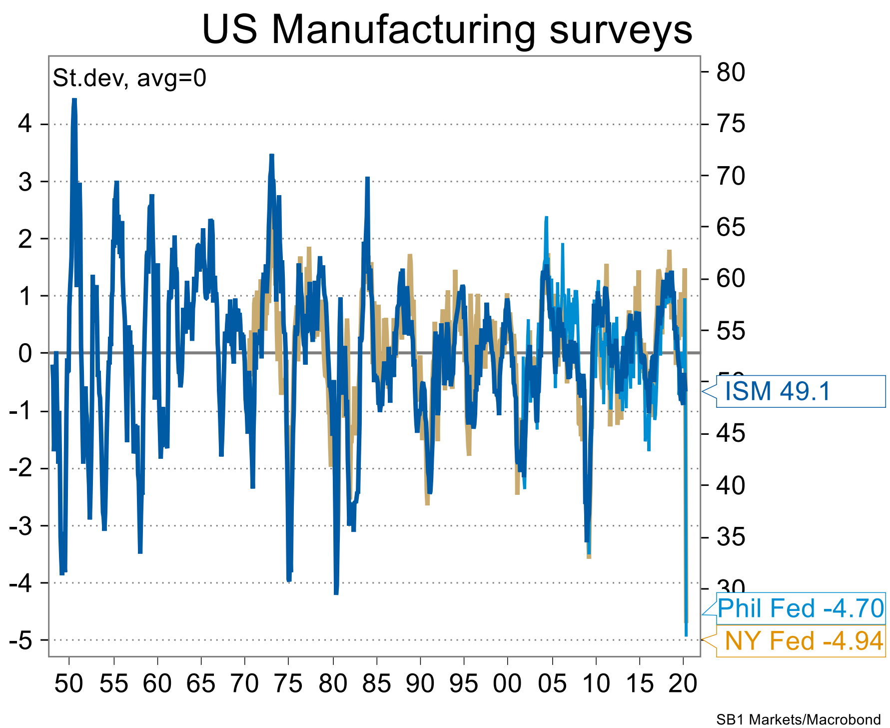




- NY Fed's manufacturing survey slipped 2 st.dev. in March, the steepest decline since October 2001. Phil Fed's index fell even more, by 2.5 st.dev., the largest decline ever noted. Both came in far below expectations
  - » Most components came down and order indices fell rapidly in March
- Given a normal distribution a '5 sigma' should happen in 1 of 3,488,555 times or once every 290.173 year for a monthly series. Thus, I don't think it is likely that I will ever see something like this again in my lifetime (I'm already 63)
- If you want to calibrate these regional surveys to Markit's PMI or the ISM, check next page

Where will the manufacturing ISM land?

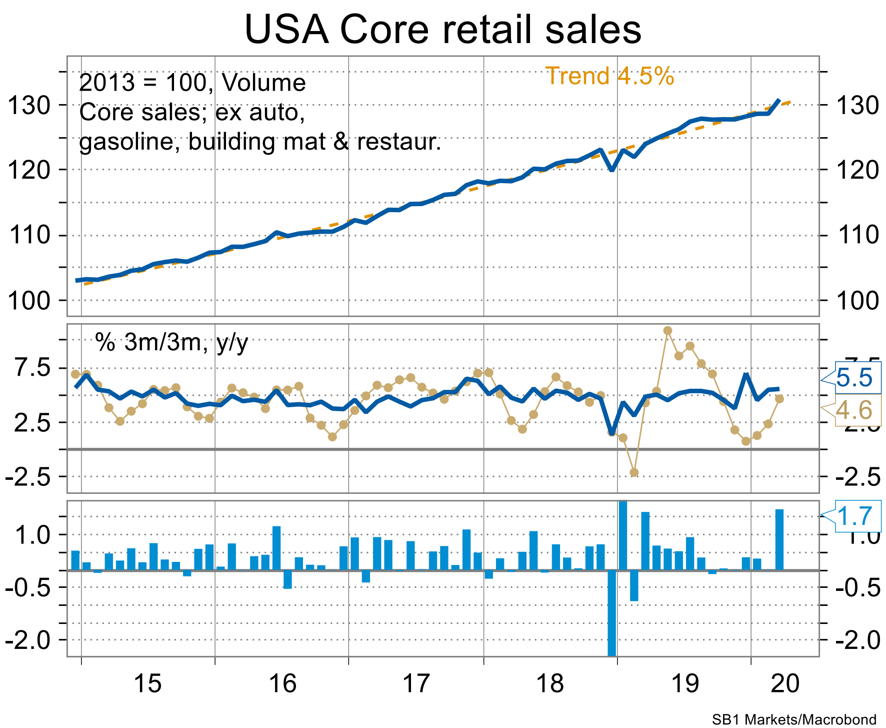
Probably at the lowest level ever? At below 30

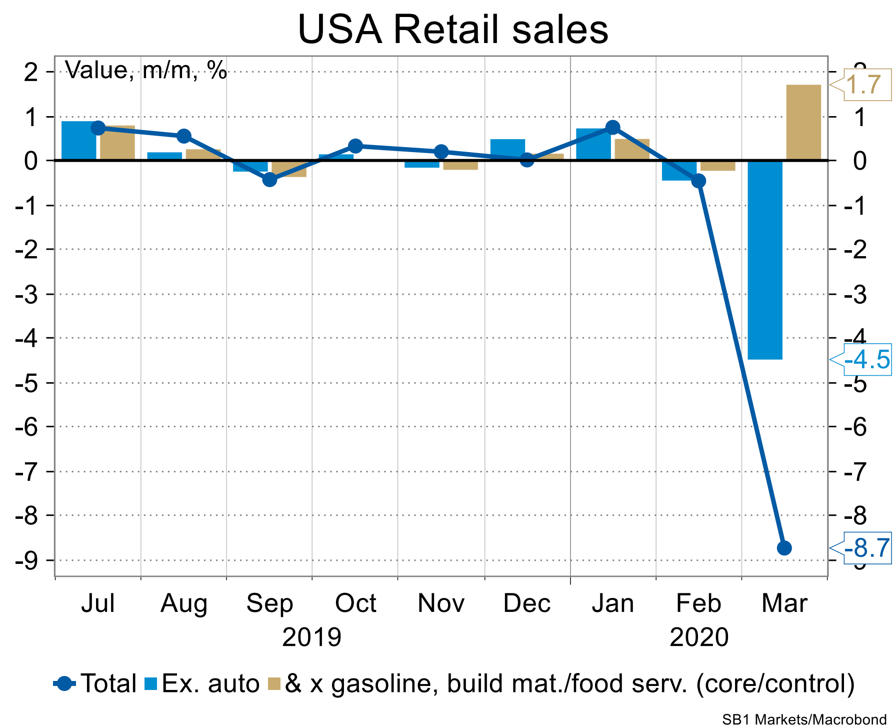


SpareBank 1 MARKETS

Huge retail sales ups & downs in March: From -50% (clothing) to +27% (groceries)

Total down 8.7%, the biggest decline ever – but core up 1.7%. Ex auto down 4.5%

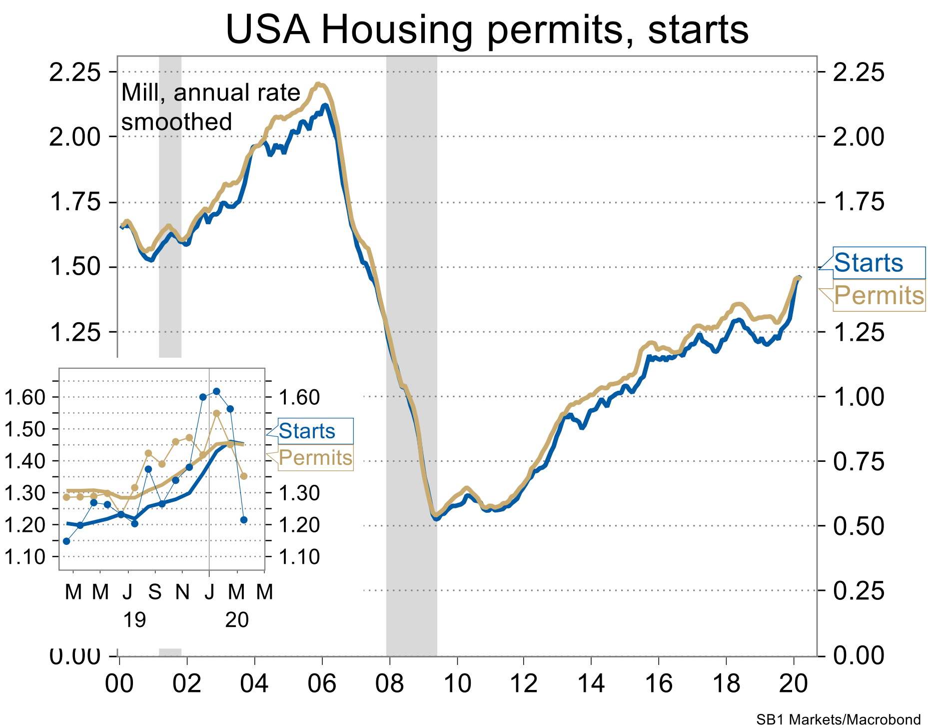


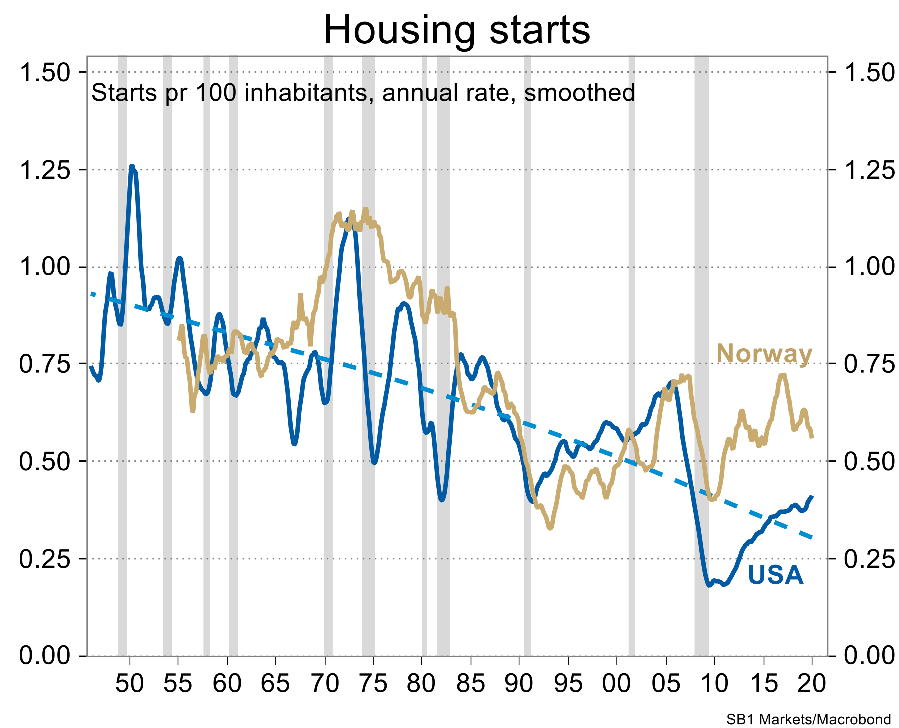


- Core retail sales (ex. auto, gas, building materials & restaurants; control group) rose 1.7% % m/m in March, expected down 2%. There were so many extreme outliers, and March was not 'one month' so do not put much emphasis on this months data
- Consumption will most likely be heavily impacted by Covid-19, at least in April and most likely in May as well. Never before has so may Americans lost their jobs (13%), and consumer sentiment has never fallen more.

Housing starts sharply down in March – much more to come

Both starts & permits down in March, from high levels. The homebuilders signal a 50% drop

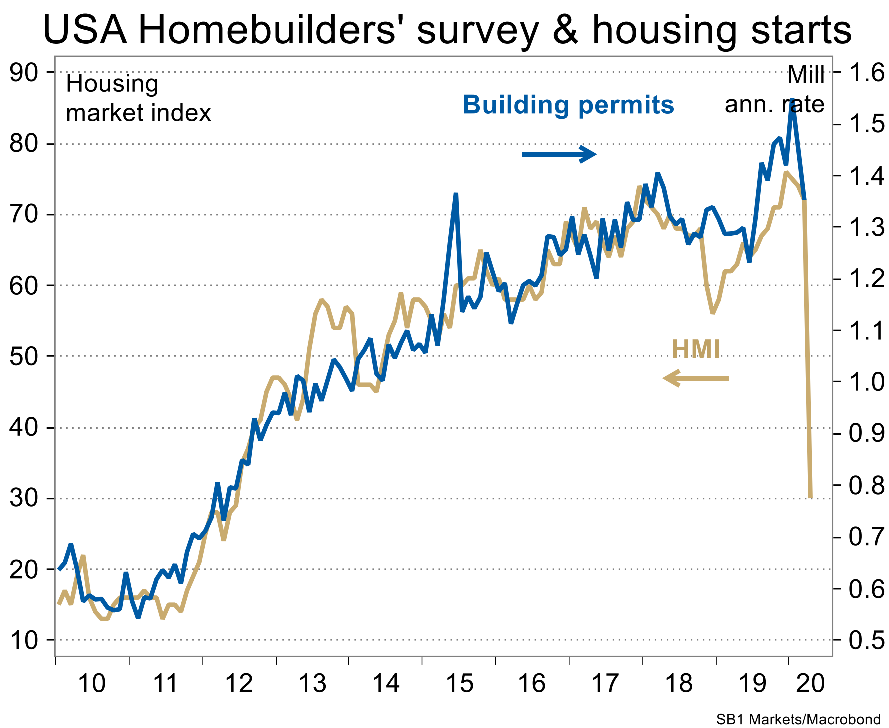


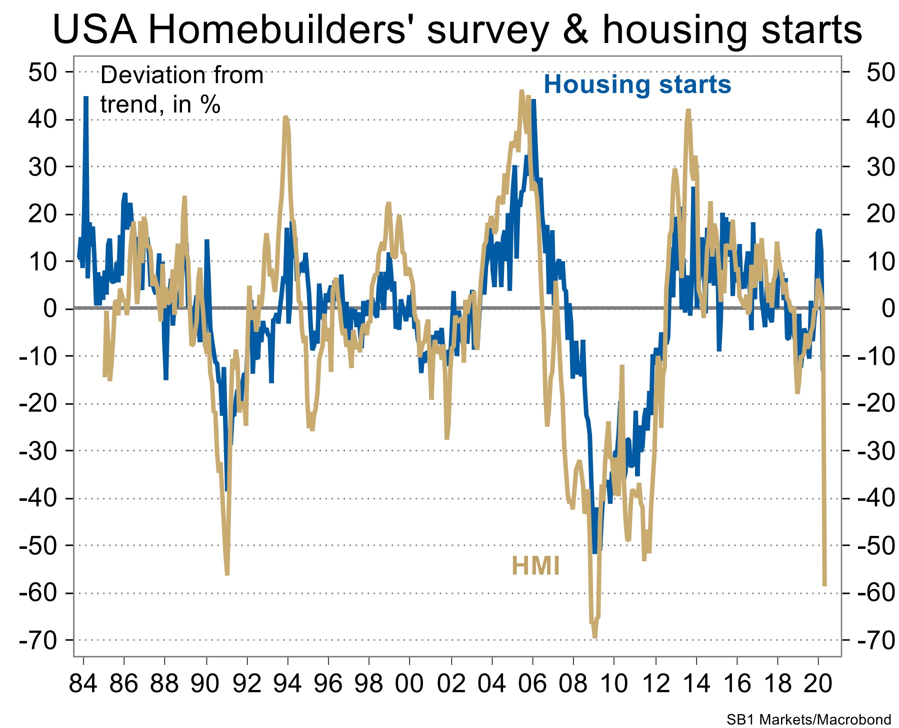


- Housing starts fell by 22% in March, surely much more in the 2nd half of the month, we guesstimate some 40%. However, building permits just fell by 6%, and permits are usually the most reliable indictor for the 'real' building activity
- The Homebuilders' housing market index fell more than ever in April (check 2 pages fwd), and signals a 50% decline in housing starts. The good news is that the downside anyway is much smaller than before the GFC, where housing starts fell by 1.6 mill units (or by 75%). In Dec, the level was 1.6 mill, and in March 1.2 mill. We cannot rule out a decline to 0.5 – 0.6 mill. If so, the decline will be 'just' 1 mill homes.

Homebuilders report a steep decline in sales & traffic of prospective buyers

The HMI fell to 30 from 72, the biggest decline ever, was expected down to 'just' 50



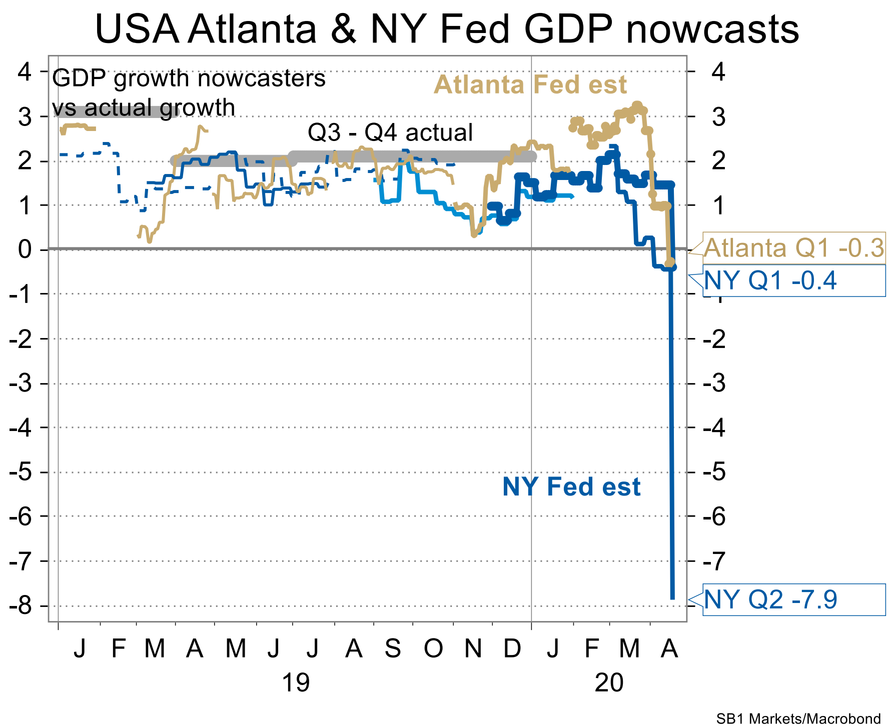


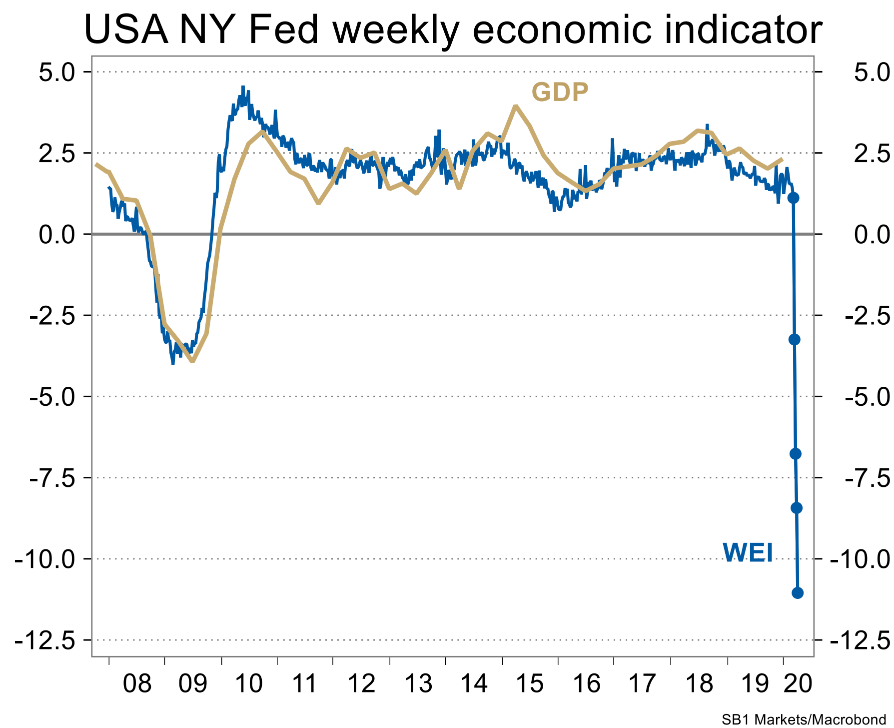
- The housing market index (HMI) peaked in December but the dramatic decline – by far the largest in one month – came in March. The HMS signals a 50% cut in housing starts
  - » All three sub indices in the HMI fell, expected sales fell the most as uncertainties stemming from the coronavirus reduced

HMI is a based on a sentiment survey of US homebuilders, in which the respondents rate housing market conditions at the present time and the next six months. The index ranges from 0 to 100. The index is closer correlated to the activity level, than to the growth rate.

Q1 GDP growth below zero. And Q2 will end up deep down in double digit

Still far too early pinpoint the decline in GDP in Q2 but calculated the American way, it will be huge!

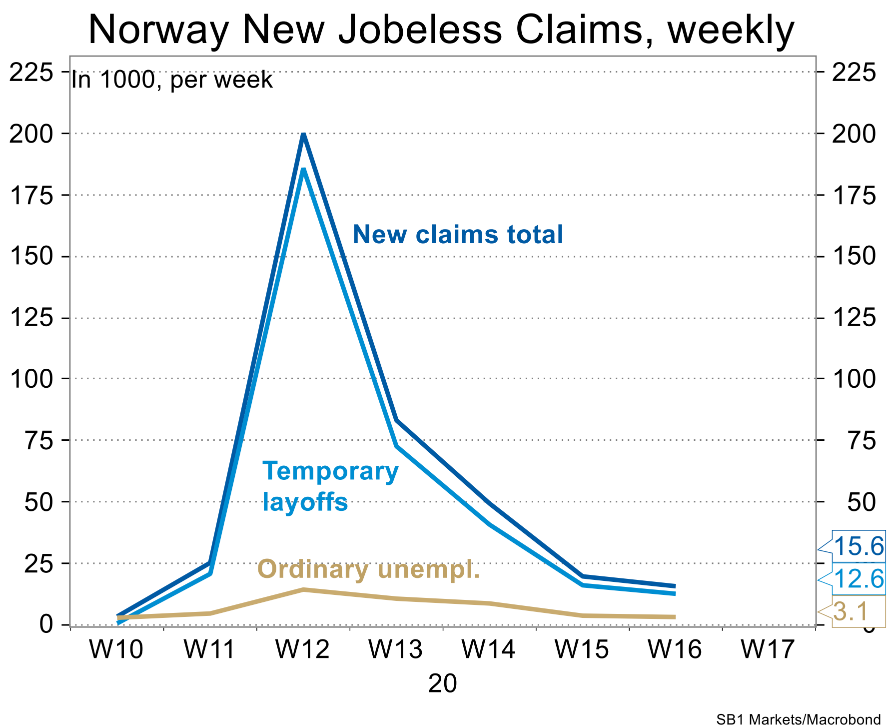


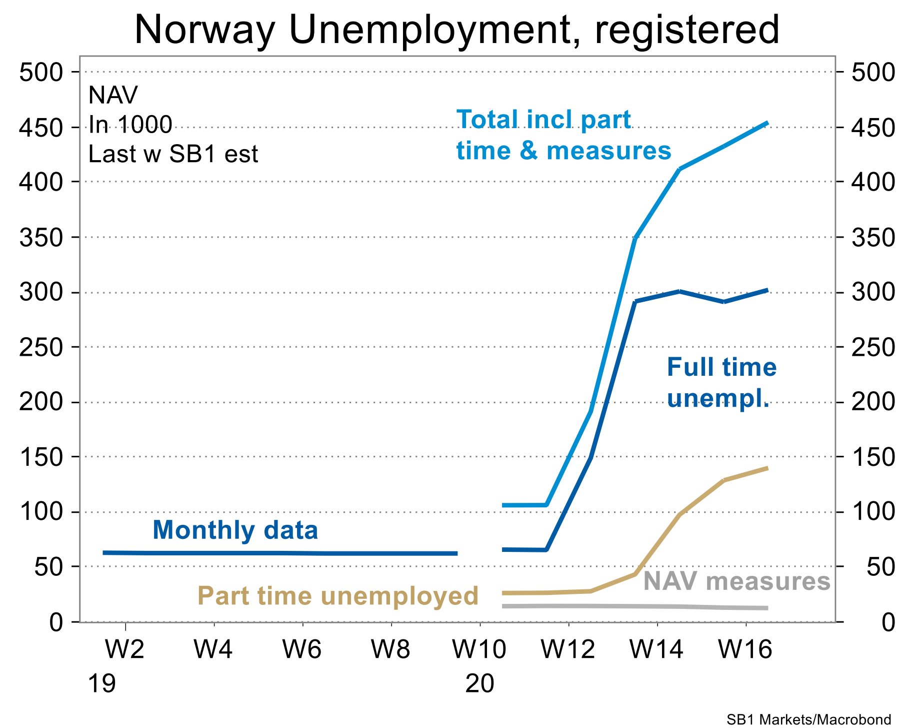


- Both Atlanta & NY Fed's nowcasters predict a minor decline in GDP in Q1
- NY Fed's nowcaster as well as its new Weekly Economic Indicator is starting to report an extreme 2Q, and private estimates are for a decline at 30% of more
  - » Remember that GDP growth rates in the US are reported in annualised rates, and a 40% decline equals 12%, not annualised. When quarterly actual changes are large, the annualised change (measured $(x/x_{-1})^4$) is 'misleading', GDP did not fall 40%

Unemployment is still on the way up but at a slower pace

Easter may have influence new jobless claims but the trend is anyway down. Cont. claims further up

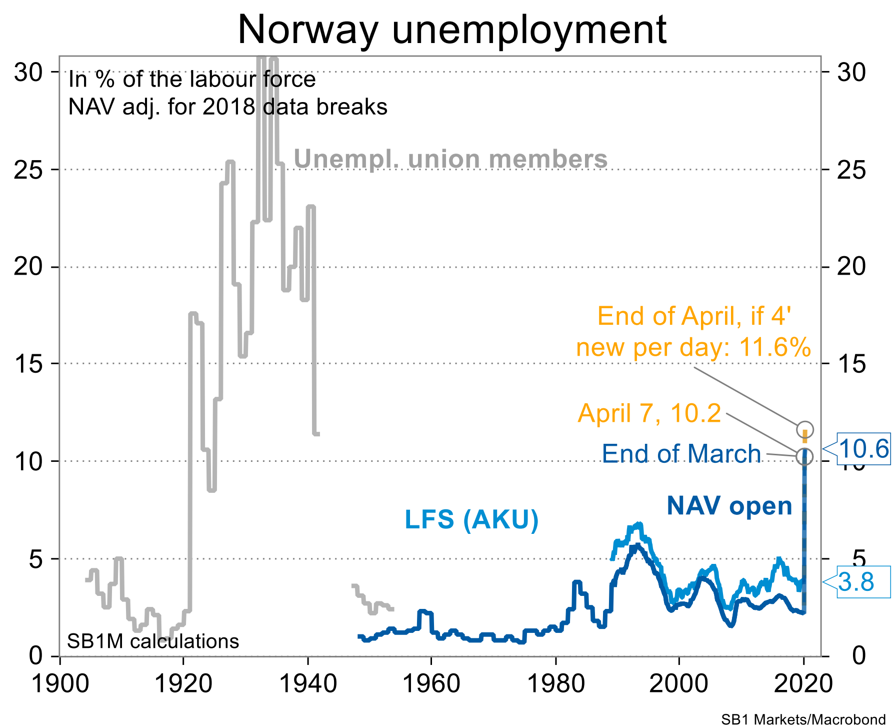


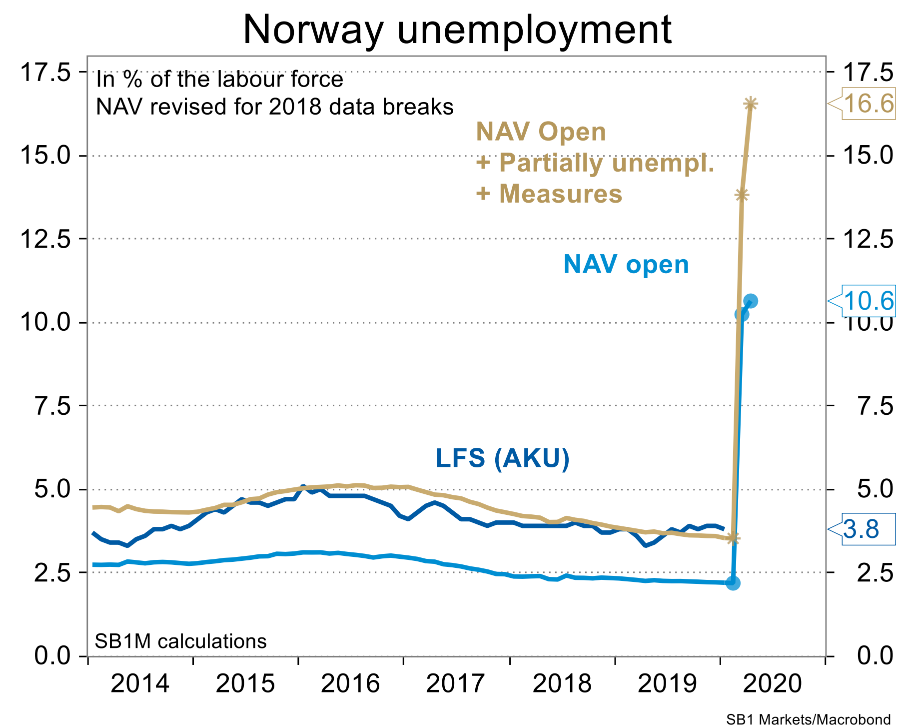


- Weekly new jobless claims fell further last week, to 16' vs the 'normal 3 – 4' per week. Given the long Norwegian Easter holiday, the inflow still is rather brisk. Most of the new claims (80 – 90%) are employees that are on temporary leave
- Total unemployment (full & part time) probably rose to close to 450' persons last week, equalling 16% of the labour force

NAV unemployment is approaching

Open unempl. soared to 300’ persons in March - and 412’ incl. partially unempl. and measures

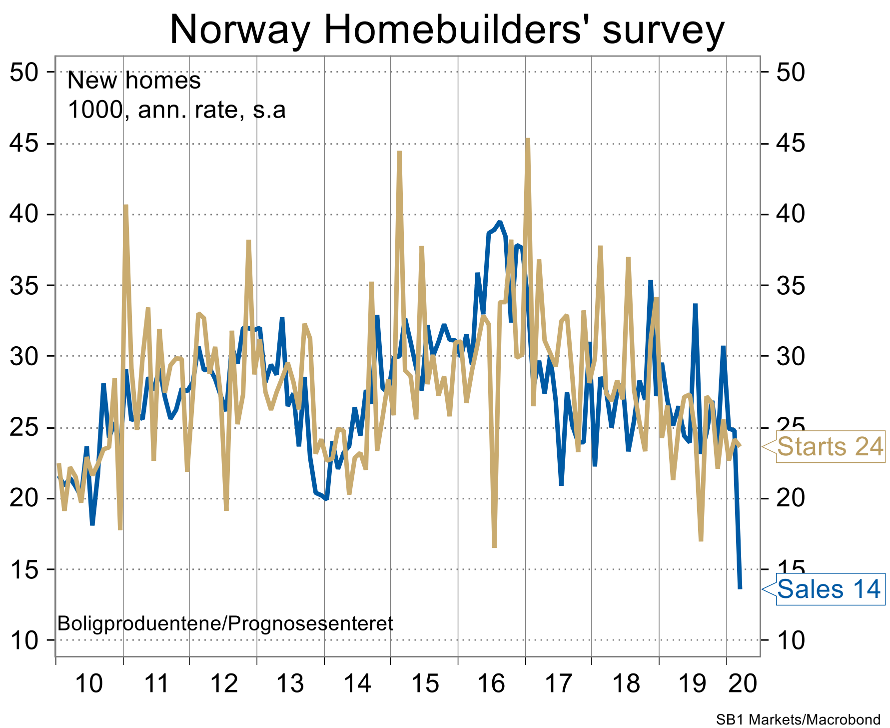


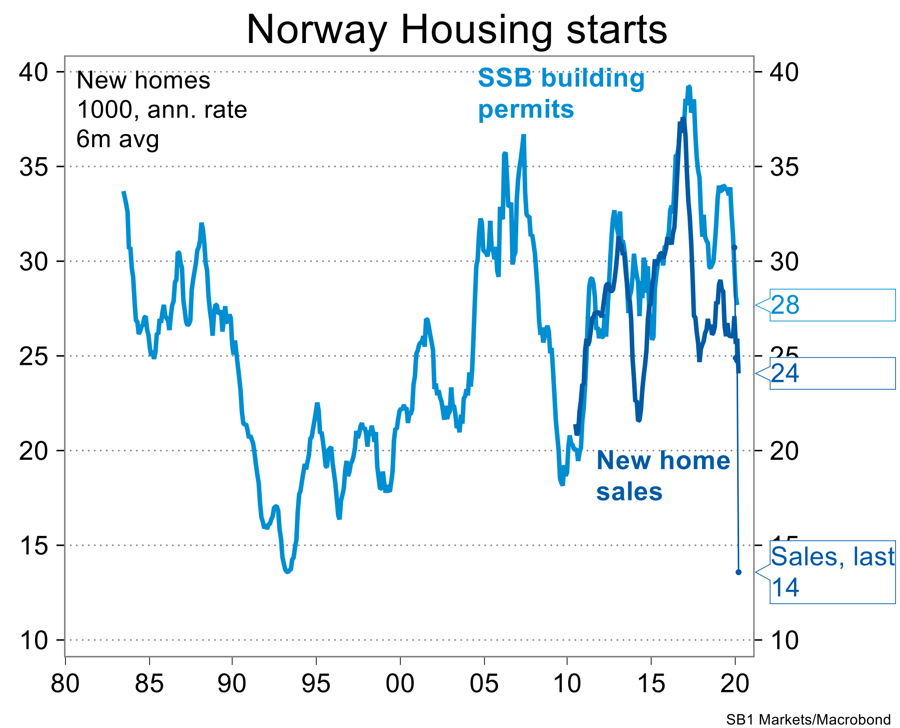


- NAV open unemployment soared by 240’ persons in March from February, to 300’. The open unemployment rate rose to 10.2%, something we have not seen since the 30’ies (if we adjust the union members’ unemployment rate to a total unemployment rate)
  - » The March outcome was actually somewhat lower than we estimated, as approx. 30’ changed status to partially unemployed from total unemployed
  - » Since March 30, when these data were collected, NAV has received almost 30 000 new unemployment registrations, thus, the unempl. rate is already approx. 1 pp higher, at above 11%
- Including government measures and partially unempl., the number of unempl. is 412’, equalling 14.3% of the labour force
- Unemployment will continue to climb the coming weeks, although the daily number of slowed to 8’ per day last week, from 15’ the prior week. We expect the open unemployment rate to climb to 14% in April and possibly towards 20%, the the ‘lockdown’ cont.

Homebuilders reports a sharp decline in new home sales in March

Sales fell 44% to March from February, to 14’ (ann rate), the lowest ever (but data just since 2020)





- Sales were probably not that slow in the first two weeks of March, and we assume the second half of the month, explains the downturn. If so, not many homes were sold in the 2nd part of the month. We doubt April was much better
  - » The 14’ sales pace in March is the lowest in the Homebuilders’ survey 10 y history, and – face value – signals the housing starts qual to the bottom following the Norwegian housing and bank crisis 30 years ago
- Two bad weeks does not make a housing recession. Not two months either, not even two quarters. However, there a good reasons to take care. The downside is substantial
  - » Housing starts have retreated from the 50+ year peak in 2017 but at close to 30’ at an annual rate, the level remains at a rather high level, both vs Norwegian standards and even more compared to most other countries (with Australia, Canada and Sweden, of course)
  - » Population growth has slowed to a trickle, no real hourly wage income growth over the past years.
  - » Debt inflation has been well above income growth until one year ago, and the debt level is high

The Calendar

In focus: April PMIs, other surveys & weekly unemployment data

Time	Country	Indicator	Period	Forecast	Prior
Monday Apr 20					
14:30	US	Chicago Fed National Activity Index		-1.81	0.16
Tuesday Apr 21					
09:30	SW	Unemployment Rate, LFS	Mar	7.80%	7.6%
14:00	NO	Registered Unemployment, Weekly	Apr-14		10.4%
10:30	UK	Average Weekly Earnings YoY	Feb	3%	3.1%
10:30	UK	ILO Unemployment Rate	Feb	3.90%	3.9%
11:00	GE	ZEW Survey Expectations	Apr		-49.5
16:00	US	Existing Home Sales	Mar	5.38	5.77m
Wednesday Apr 22					
10:30	UK	CPI Core YoY	Mar	1.50%	1.7%
16:00	EC	Consumer Confidence	Apr A	-19.6	-11.6
Thursday Apr 23					
02:30	JN	PMI Composite	Apr P	--	36.2
08:00	NO	SSB Industrial Confidence Survey	Q1	-10	0.7
08:00	NO	Unemployment Rate, LFS	Feb	4.0%	3.8%
09:00	SW	Consumer Confidence	Apr		92.4
09:00	SW	Manufacturing Confidence s.a.	Apr		89.6
10:00	EC	Manufacturing PMI	Apr P	39	44.5
10:00	EC	Services PMI	Apr P	25	26.4
10:00	EC	Composite PMI	Apr P	26	29.7
10:00	NO	Norges Bank Lending Survey	Q1		
10:30	UK	Composite PMI	Apr P	32	36
12:00	UK	CBI Trends Total Orders	Apr	-50	-29
14:30	US	Initial Jobless Claims	Apr-18	4.5	5.245
14:30	US	Continuing Claims	Apr-11	--	--
15:45	US	Markit Manufacturing PMI	Apr P	38	48.5
15:45	US	Markit Services PMI	Apr P	31.3	39.8
15:45	US	Markit Composite PMI	Apr P	--	40.9
16:00	US	New Home Sales	Mar	650k	765k
Friday Apr 24					
01:30	JN	CPI Core YoY	Mar	0.60%	0.6%
06:30	JN	All Industry Activity Index MoM	Feb	-0.50%	0.8%
08:00	NO	Housing Starts , '000 ann rate	Mar	25	28
10:00	GE	IFO Expectations	Apr	75	79.7
14:30	US	Durable Goods Orders	Mar P	-12%	1.2%
14:30	US	Capital Goods Orders Core	Mar P	-5%	-0.9%
16:00	US	U. of Mich. Consumer Sentiment	Apr F	67.6	71

- **Preliminary PMIs**
  - **EMU, Japan, UK & US** will publish April flash PMIs. We know they will be extremely grim, especially in the service sector but manufacturing is following suit. The first regional US manufacturing April surveys fell more than ever. However, as the PMIs are growth indicators, they will not stay at extremely far below the 50 line for too long. If activity just stabilises from one month to the next, the index is at 50, even if the activity level may be 25% below normal. Still, April was weaker than March, and the PMIs will remain at low levels, but it is not given that the speed of decline was larger to April from March, than to March from February, especially in the service sector! Several other business surveys will be published too, both from US and EMU.
- **US**
  - **Jobless claims** are soaring, last week by another 5.2 million, the sum is up 22 mill over the past 4 weeks, equalling 13.3% of the labour force. The real number for continued claims is probably 23 mill, or 13.9% of the labour force
  - **Durable orders** no doubt fell sharply in March, but as the figure is both 'before and after corona' it is not than informative. The same goes for March new home sales, and the National Activity index
- **Norway**
  - We expect **registered unemployment** to climb further this week, probably to above 11% of the labour force on the open unemployment rate (and 16% in total), although the daily number of new registrations is gradually slowing
  - The February Labour Force Survey (AKU) will most likely not show any material Covid-19 impact. The increase in open, registered unemployment is almost entirely due to the huge increase in temporary layoffs. Those who are furloughed are not counted as unemployed before after 3 months
  - **Norges Bank's Q1 lending survey** may give some hints on banks' lending plans & standards

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

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 Chinese PMIs down. <u>The virus will now hurt the world economy badly</u>. A temporary setback in Q1 (primarily China) and partly in Q2 (other countries) which was our main case is now far too optimistic. **Global growth will fall into a recession (GDP growth below 2%). Growth has slowed to 3% from 4%, our baseline is now -3% y/y in 2020 (from 2.8% before corona), the uncertainties are extreme**	**Global composite PMI** tumbled to 39.4 in March, the lowest level since the financial crisis. The world ex China index fell even more, to 37.6, as the Chinese PMIs rose following the economic standstill in February. The service industry noted the sharpest contraction since the PMIs were first released in '98
China	Growth had slowed just marginally, and inched up through 2019. Now, all bets are off, as Covid-19 has 'killed' the economy in Q1. As the outbreak is now coming under control, we expect a partial recovery in Q2 and Q3, but not fully up to the Q4 2019 level. The annual growth will be closer to -2%, from 6%, even if the activity level increases sharply. 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, which is not unlikely. **We expect more policy measures to ensure a recovery in during 2020**	<u>GDP fell as expected by 10% q/q, and is more than 11% below trend. Industrial production surprised sharply on the upside, rose 32%, just 5% below trend. Retail sales and investments not that brisk, both 17 – 20% below pre corona trend</u>
USA	Before Covid-19 hit, we thought growth would must likely not accelerate in '20, from the 2% speed in '19. Unemployment is low but will now rise rapidly, as in other countries. Profits are 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 some support from the collapse in interest rates but corona may hamper activity Price inflation close to target. The Fed has cut to zero, the stock marked has fallen sharply – and the economy can easily enter a recession. **Risks, <u>except for corona impacts</u>: Policy uncertainty/trade/business investments &debt, not household demand or debt**	<u>Jobless claims are increasing at an unprecedented speed, 23 mill (13% of labour force) past 3 weeks! Weak housing data, manufacturing production fell more than expected and manufacturing surveys was the worst on record</u>
EMU	Corona will no doubt slash the Eurozone economic expansion. 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 was tight, and labour cost infl. is back to a normal level. Investment ratios were above trend. Credit growth was flattening out, as corporate demand slows. Household savings were high, still consumption had kept up well. Policy: ECB does not have much ammunition left, particularly after a huge ramp up of QE. Fiscal policy debate has turned, and huge stimulus are decided. **Recession everywhere**	<u>The Eurozone PMIs fell even more than first reported, as we expected, and Italy was a complete disaster, with a services PMI at 17, no surprise</u>
Norway	Growth has been above trend, 2020 will be slashed by the corona shutdown. Unemployment is now increasing at an extreme speed, when temporary laid offs are added. Oil investments will decline through 2020 and faster than expected before the oil price setback. Mainland business inv. are not low, will slow substantially. Housing starts are falling. Growth in households' debt has slowed to below income growth. **Risks, other than corona: Debt, housing. A harsh global setback. Our base case is some 4% - 5% drop in Mainl. GDP in 2020, the IMF says 7%**	<u>Unemployment is soaring to levels we have not since the Great Depression, now at 16%. More to come. Homebuilder have lost their customers</u>

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

In this report

Global data, corona

- Corona deaths is falling most places, the 'R' has been well below 1. Restrictions are eased
- Norway has won the first corona battle, but will it win the war?
- Global GDP sharply down, and much more than during the Financial Crisis
- Global retail sales and industrial production collapsed in February an March

China

- Q1 GDP down 10% q/q in Q1, -6.8% y/y, close to expectations
- Industrial production up an incredible 32% in March, -1.1% y/y, well above expectations
- Retail sales did not recover, up just 1% in March, remains 17.5% below pre corona trend
- Investment rose in March but remain 20% below pre corona trend
- No fiscal stimulus yet, both revenues, spending flat y/y
- PBoC cut its main signal rates by 10 – 20 bps last week and this morning

US

- A 4th week of extreme incrase in new jobless claim, sum up 23 mill. 14% are registered as unemployed
- Manufacturing production sharply down through March. Demand to blame??
- April manufacturing surveys report once in 290.173 years downturn
- Huge retail sales ups & downs in March: From -50% (clothing) to +27% (groceries). Total -8%
- Housing starts sharply down and homebuilders report much more to come. But it will not kill the economy
- Beige book: Economic activity contracted sharply and abruptly across all regions
- LEI. WEI & other nowcasters agrees; it's really bad

EMU

- Core CPI inflation at 1.1% total inflation subsides. More to come
- Ahead of the storm, stable industrial production, in February

Norway

- NAV unemployment on the way up (cont), now at 16%
- Home builders report a sharp decline in new home sales, to the lowest level ever (even for the March *average*)
- No surplus at the trade balance, Mainland exports & imports down, measured in f/x

Highlights

The world around us

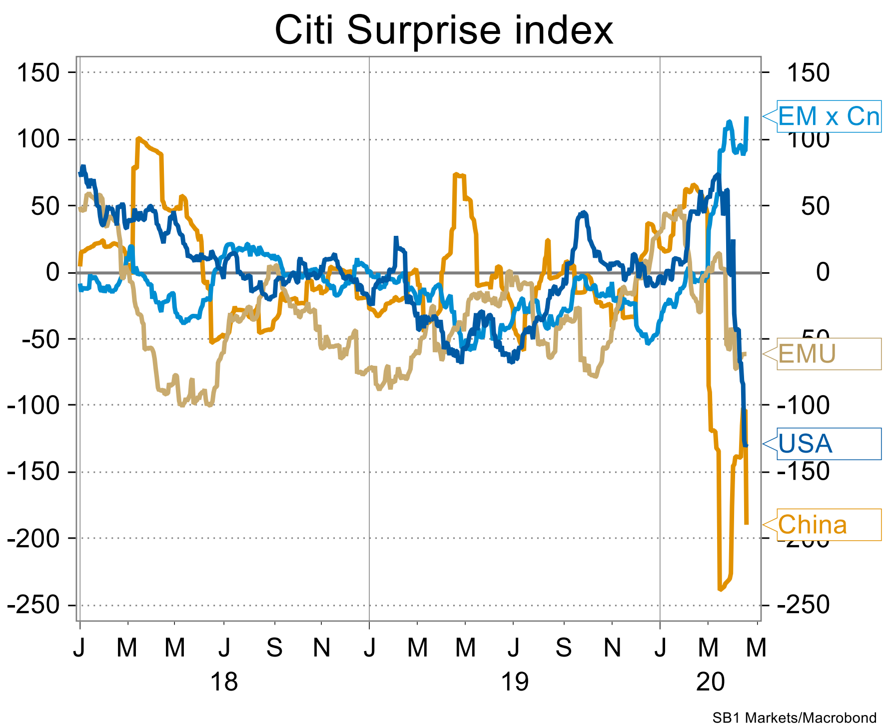
The Norwegian economy

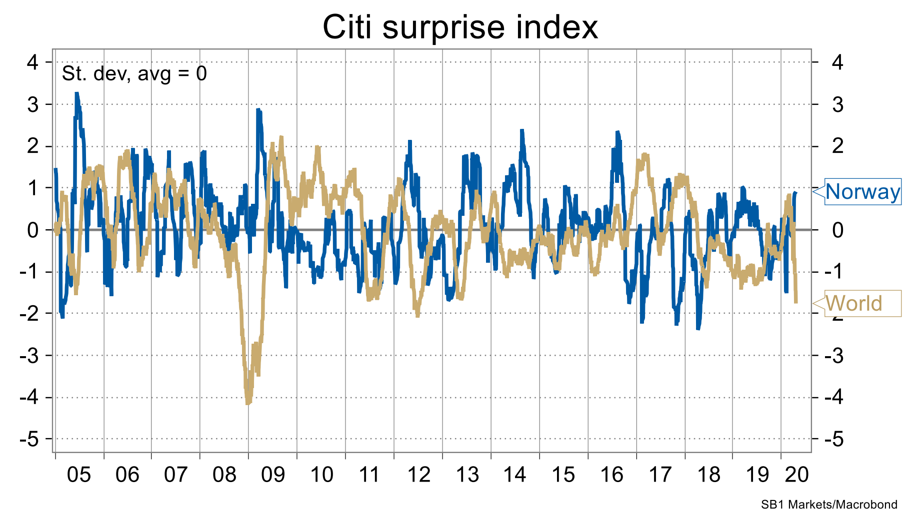
Market charts & comments

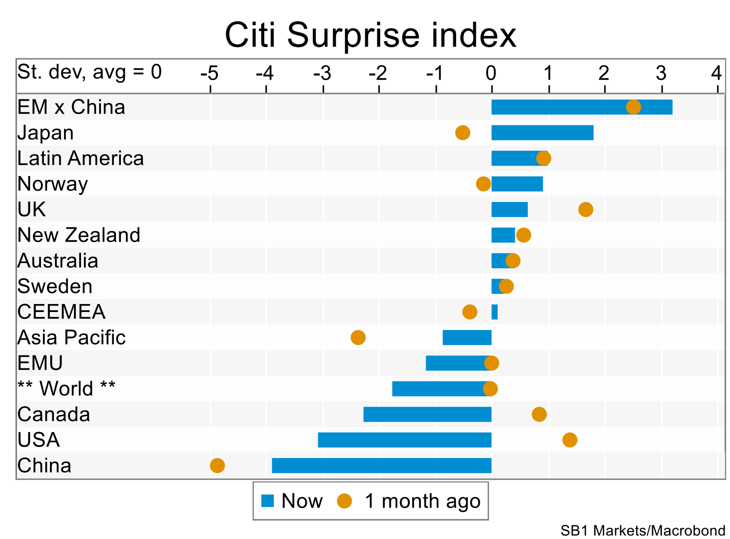
SpareBank 1 MARKETS

Global macro data flows are diving, as expectations are not slashed fast enough

Emerging markets x China is still reporting better data than expected





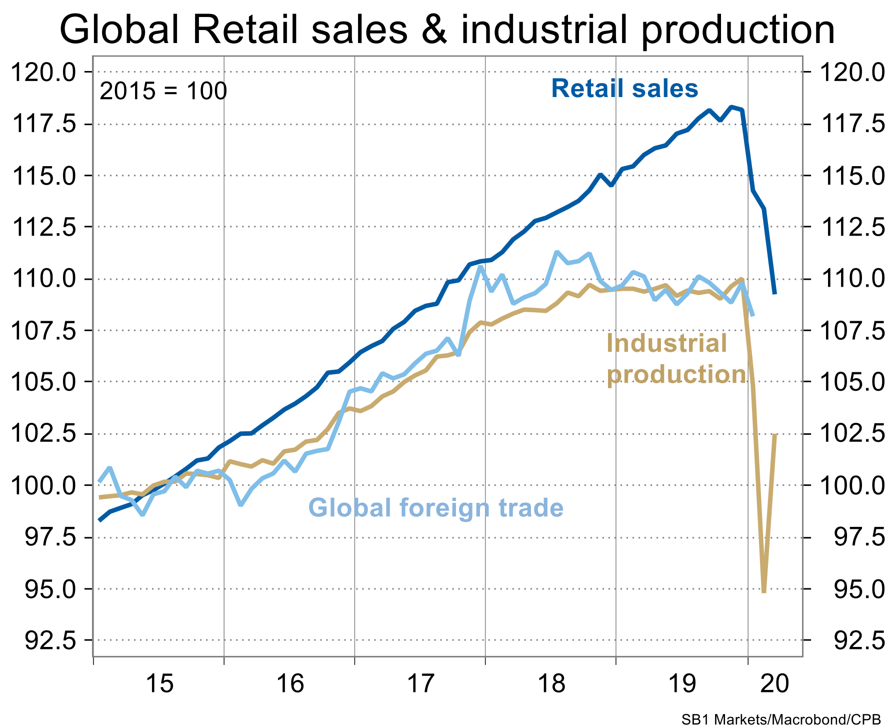


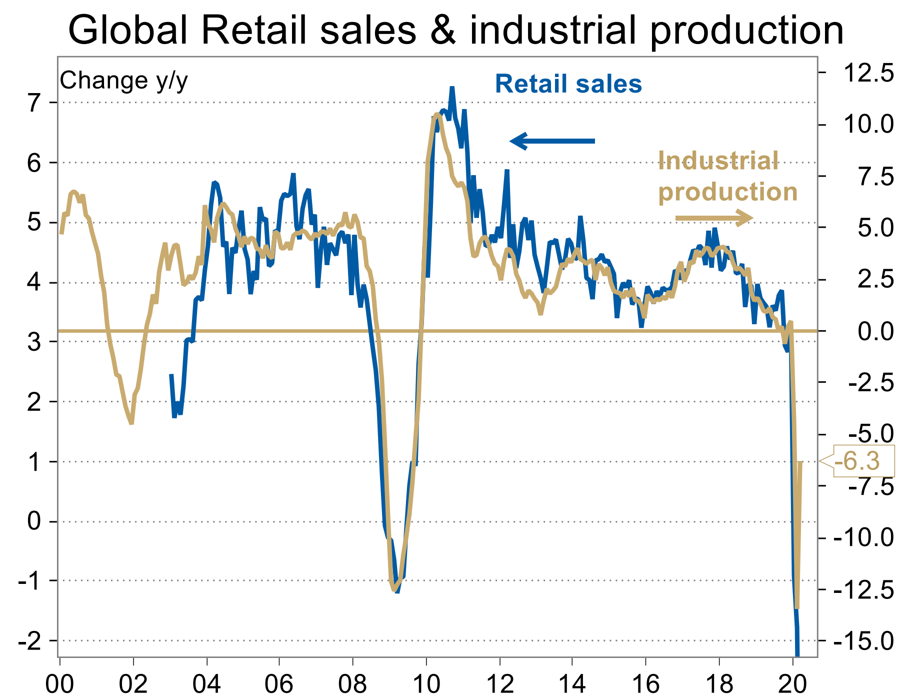
- Since February, the global surprise index has fallen sharply as data are starting to reflect the economic impacts of the corona crisis
- So far Chinese and US data has surprised most at the downside, the Euro zone less so (we are not sure why)
- Norwegian data are more upbeat vs expectations, <u>for no good reason</u>, given PMI & recent unemployment data

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

China tanked global manufacturing in February, lifts it sharply in March

It’s an early call but we estimate a 8% lift in global production in March, China up 32%, others -6%?





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

- **Global industrial production** fell by 10% in February, due the huge decline in China. Just some few have reported March data but as China reported a 32% recovery, well above expectations, global production must have recovered to, as the first half of March was more or less normal in the rest of the world. Our very preliminary estimate is +8% in March. However, we expect global production to fall sharply again in April as the whole month was ‘lost’ in both Europe and in US, as in some Emerging economies. Then, we a looking for a modest recovery in May
- **Retail sales** dropped 3% m/m in January (a strange pre corona decline in China) and another 0.8% in February, Chinese retail sales recovered marginally in March. In the rest of the world sales must have fallen substantially, and we assume a 4% decline in global sales
- **Global foreign trade** fell by 1.5% in January, Covid-19 will no doubt hit global trade hard, as the export orders PMIs confirm

Q1 GDP down 10% but industrial production up 32% in March!

The decline in GDP was as expected (-10 to -12%), while industrial production was much stronger

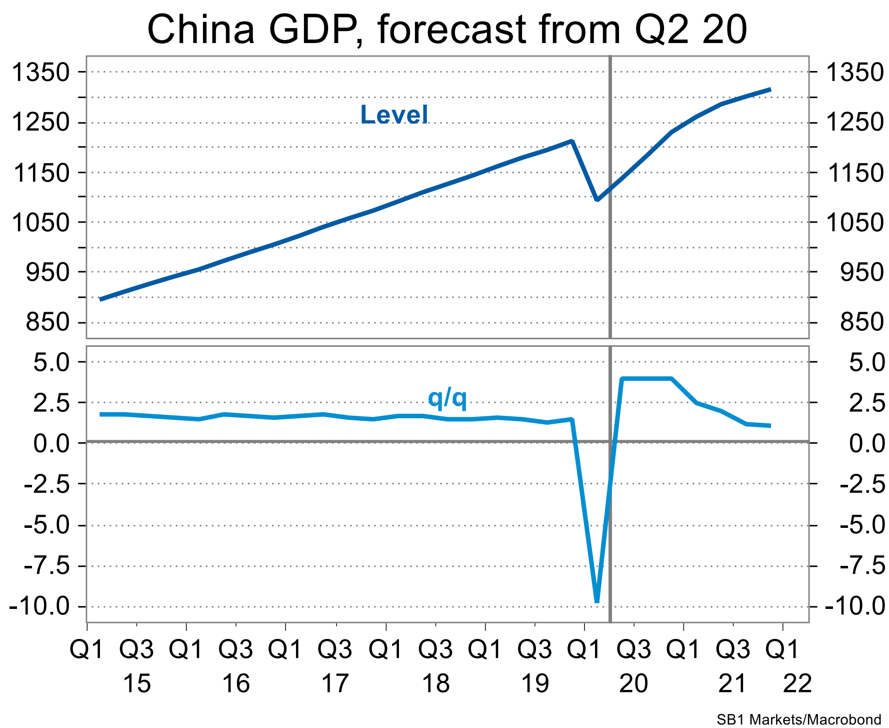
- The official message: *In the first quarter of 2020, faced with the severe test of the covid-19 outbreak, under the strong leadership of the Central Committee of the Communist Party of China (CPC) with comrade Xi Jinping as the core, all regions and departments strictly implemented the decisions and arrangements made by the CPC Central Committee and the State Council, and the whole nation coordinated efforts to advance both the prevention and control of the epidemic and the economic and social development. As a result, the situation of epidemic control and prevention continued to improve with a basic interruption in epidemic transmission at home. The resumption of work and production accelerated, with fundamental industries and major products vital to national economy and people's livelihood growing steadily. People's basic livelihood was well guaranteed and the national economic and social development witnessed overall stability.*
- **GDP** fell 9.8% q/q, as we assumed almost two months ago (and which was the consensus now). GDP fell 6.8% y/y, from +6%. We expect GDP to increase by at least 4% q/q in Q2
- **Industrial production** rose 32% m/m, and was down just 1.1% y/y, expected down approx 7%!
- **Retail sales** rose 1% m/m in March has was much lower than expected. Sales are some 17.5% below the pre corona trend path
- **Investments** rose 6% in March but remains 20% below the pre corona trend path. Housing starts & sales are just 5% below trend

From last week's report

- Both **exports and imports** were much stronger than expected in March, and both are not far below trend levels
- **Credit growth** was strong in March, and exports rose almost to a normal levels (following the 40% decline in Feb), as did imports, at least in volume terms, following a 10% decline in Feb.

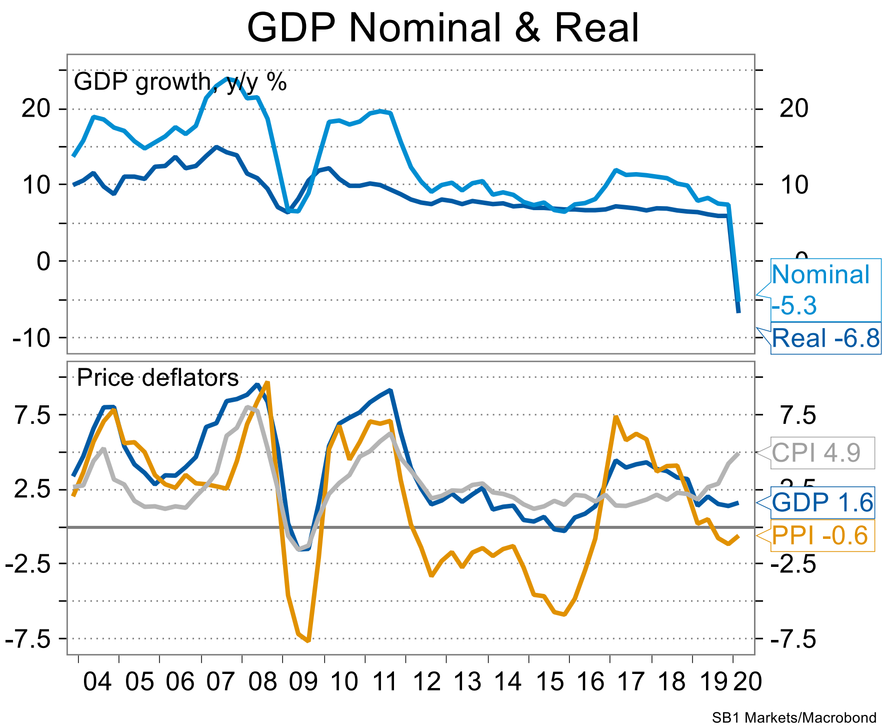
GDP down 9.8% q/q in Q1, spot on expectations

We expect GDP to recover gradually the coming quarters but the global corona setback will be felt…



GDP price deflator marginally up, to 1.6% y/y

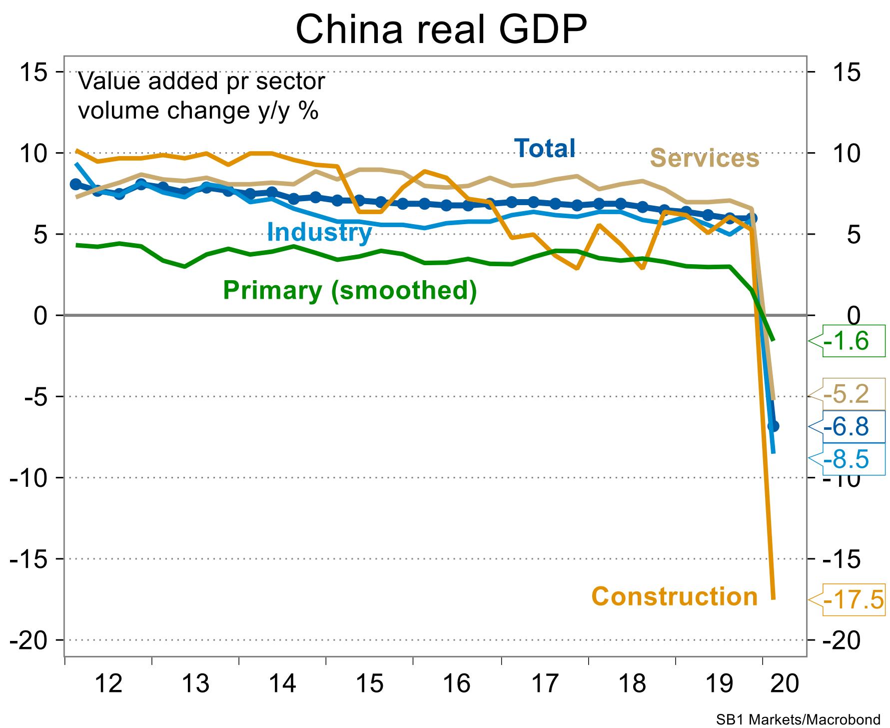
Nominal GDP fell by 5.3% y/y

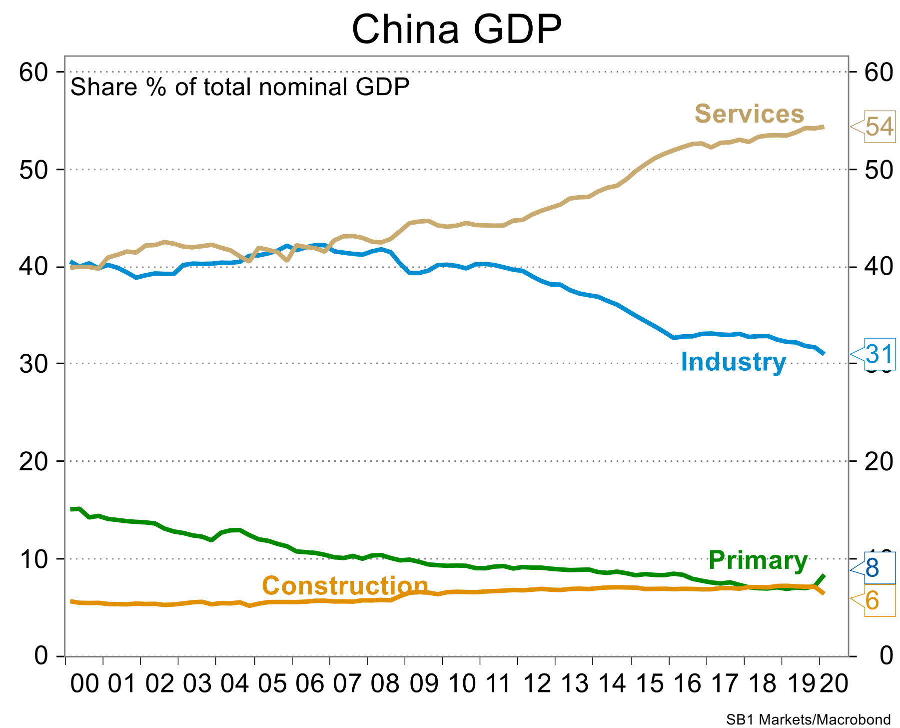


- Manufacturing producer prices (PPI) are down 0.6% y/y, down from +5.9% 2 years ago. CPI up 4.9% in Q1 in average, entirely due to soaring pork meat prices caused by the serious swine fever outbreak

Construction down 18% y/y in Q1, industry % and services 5%

Even primary production fell in Q1. The steady rise of services as share of GDP continues

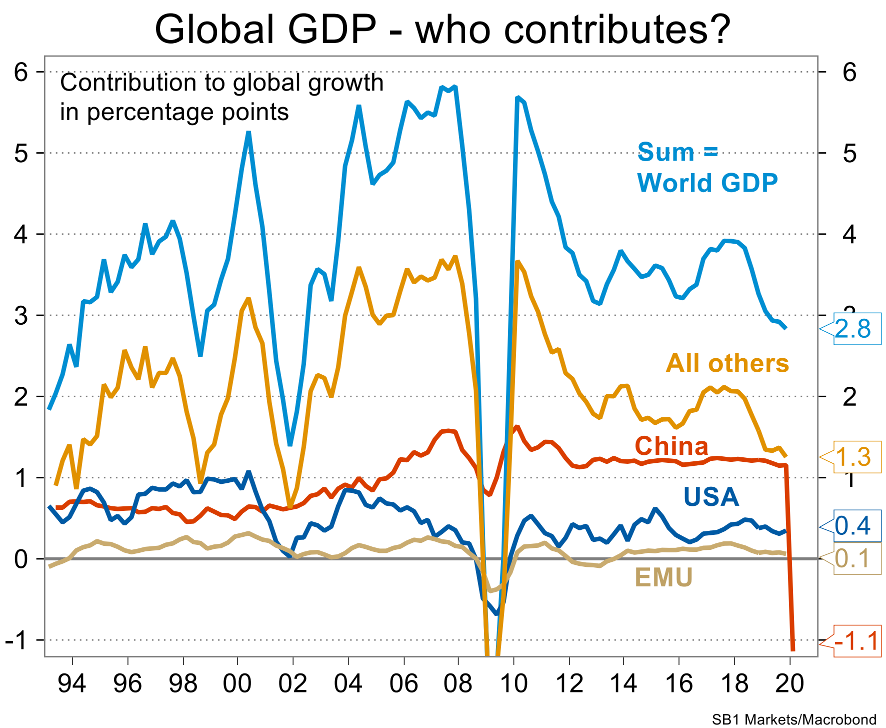




Value added per sector (= sales – cost of purchases from other sectors)

What a Chinese blow to the global economy!

Financial Times got it right – they were just 6 months too early ☺




Chinese economy

Slowing Chinese growth delivers blow to global economy

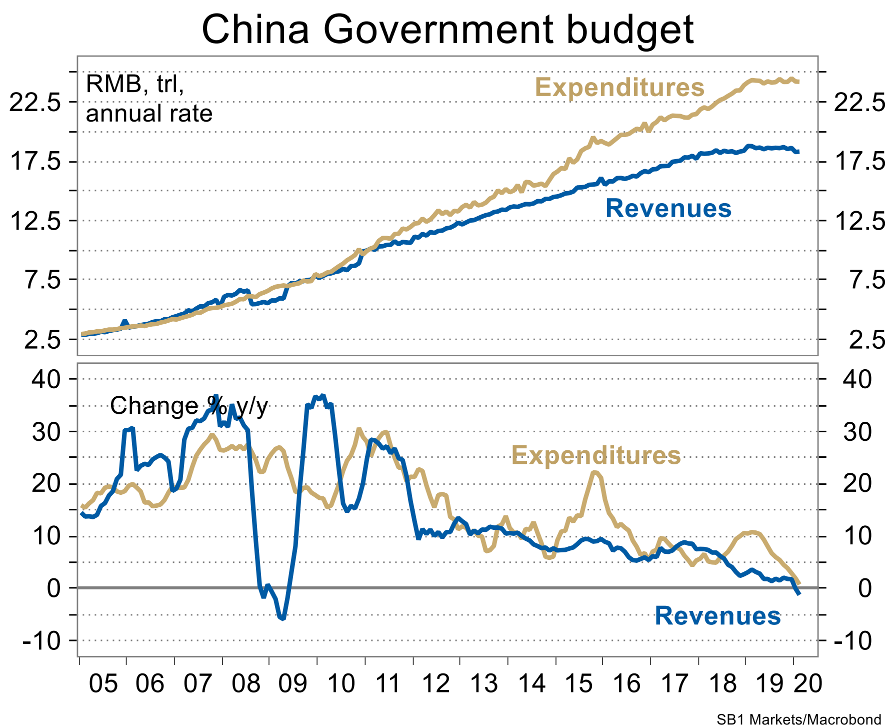
Expansion of 6% is worst in three decades due to trade war with US and cooling investment

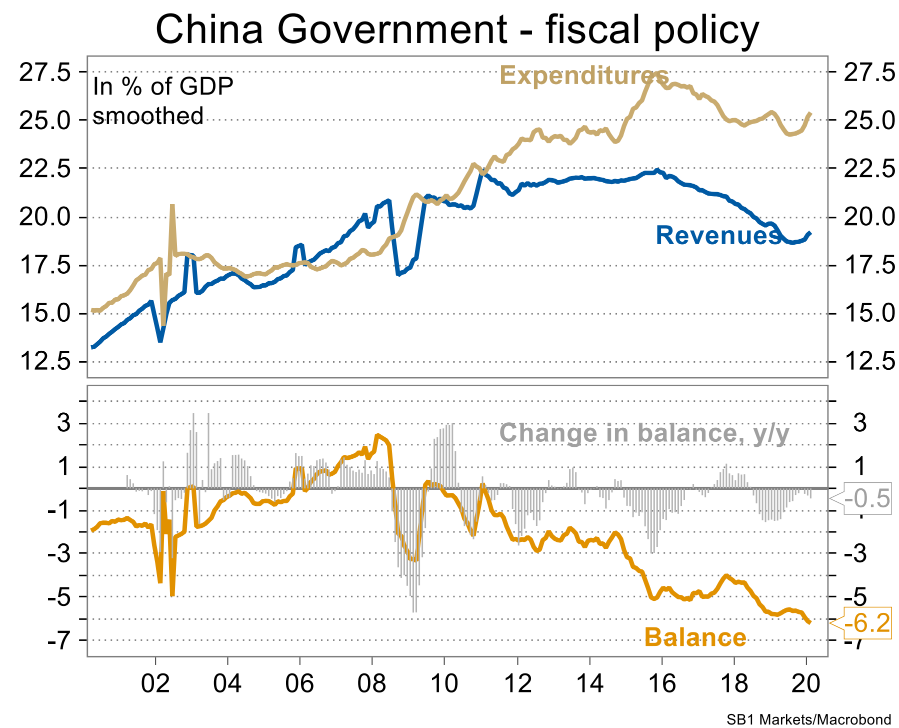
- European auto stocks in reverse while China's growth disappoints
- Chinese local government funds run out of projects to back
- IMF slashes global growth forecast on trade war fears

Top, front page
Fin Times, Oct 18

No fiscal stimulus (yet), and both spending and revenues flat past year

Thus, the budget balance has been close to stable last year. Still, the budget deficit is large, at 6.2%

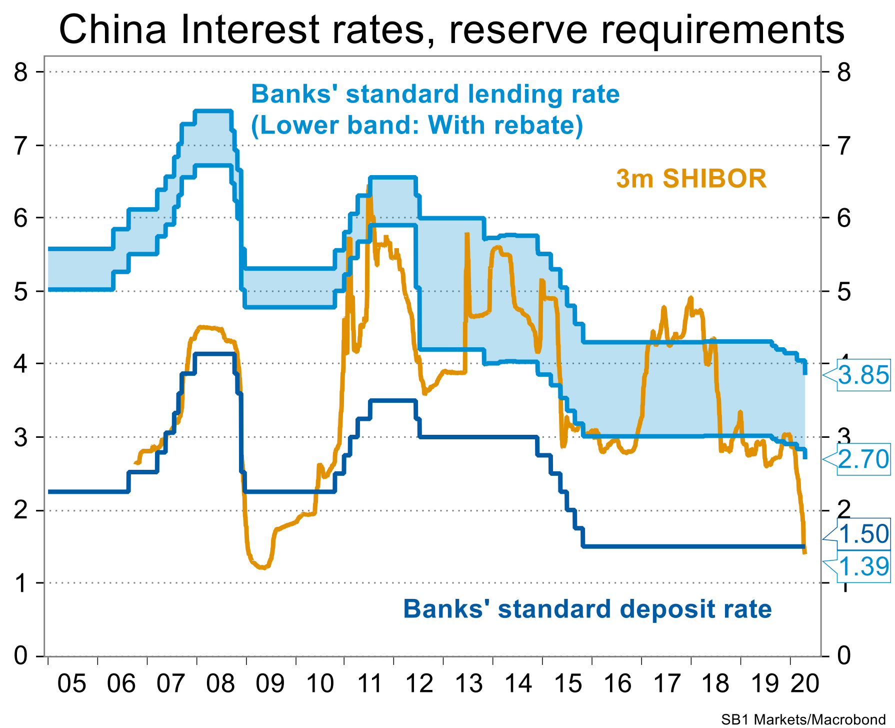


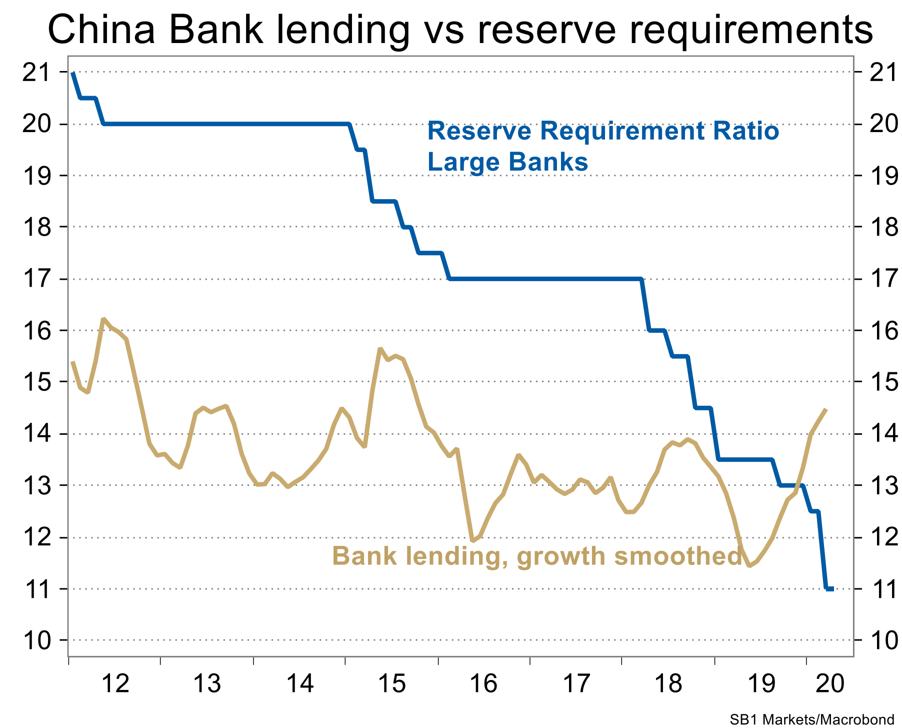


- **Spending** programs decided – but are not easy to reveal in aggregated spending numbers, nominal expenditures were flat y/y in February and have been shrinking vs. GDP (until the huge drop in GDP in Q1).
- **Revenues** are marginally down y/y, at least partly due to tax cuts – and revenues have declined vs. GDP, until Q1.
- **The budget balance** is deep into red, at -6.2% of GDP. Over the past year, the budget balance has weakened just marginally – and fiscal policy has been close to neutral.

PBoC cut cuts interest rates once more – by 10 – 20 bps

The central bank is slowly turning more expansionary but the steps are not aggressive

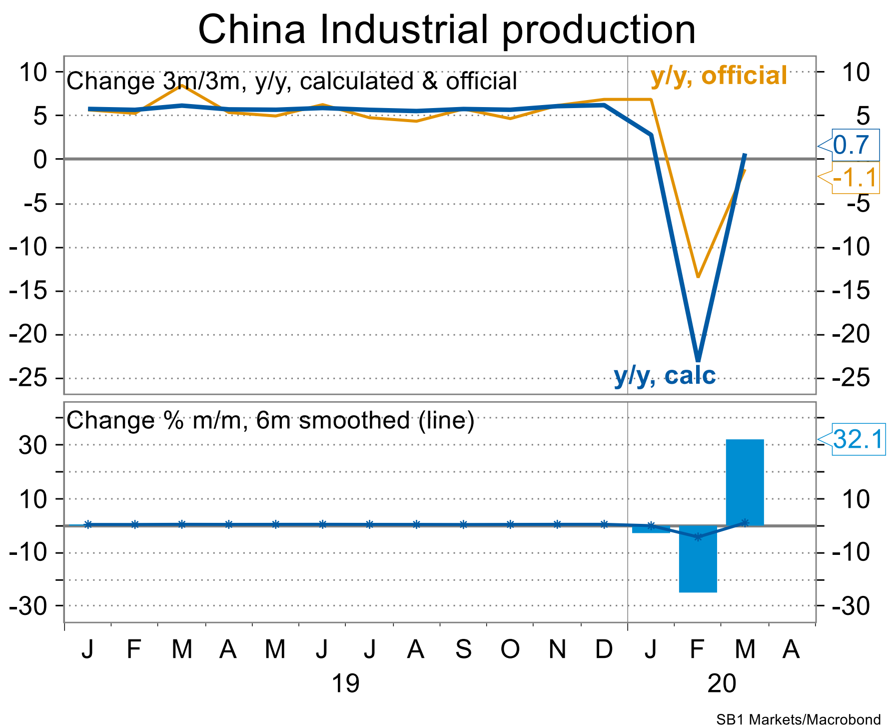


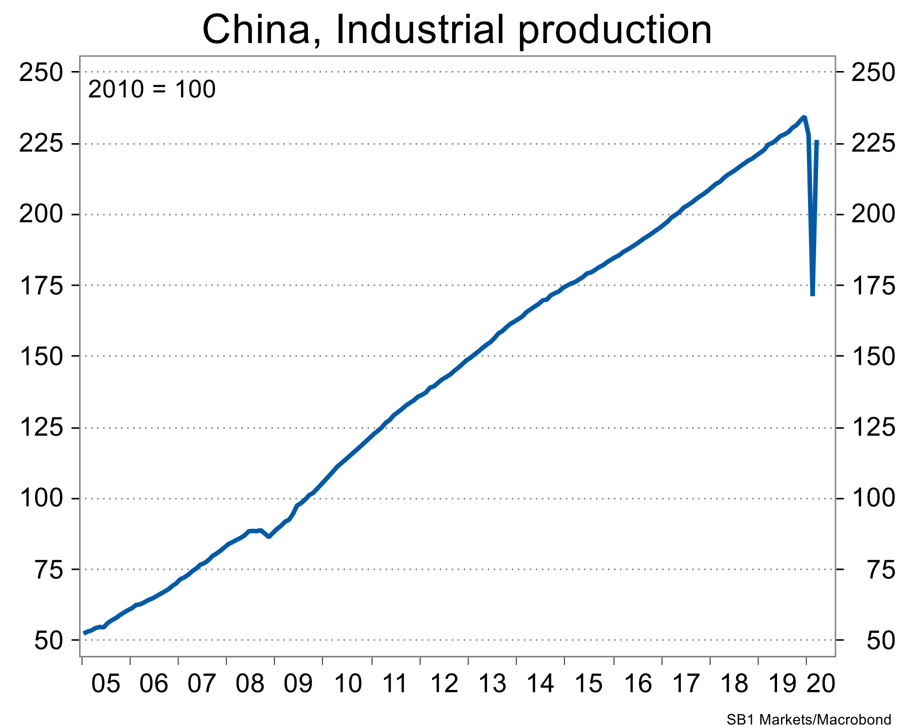


- The central bank cut the signal lending rates by 10 – 20 bps during last week and this morning. The aggregate cuts so far has been some 50 bps since last summer (of which 30 bps since the corona outbreake! The reserve requirements are have been cut too
- The authorities may roll out more monetary easing 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. Credit growth is already accelerating

Give me a V! Industrial production just 5% below pre corona trend

An incredible recovery in industrial production in March, up 32%, after falling 27% in Jan/Feb





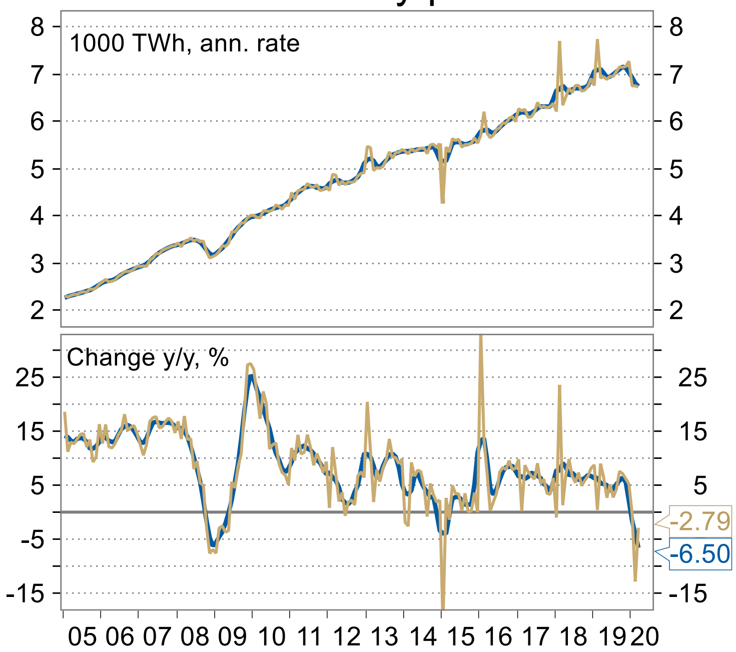
- Production was down 1.1% y/y (official data, ours close to, at +0.7%), expected down 7%, which we thought was an optimistic estimate. Production in March was just 3.5% below the December level. 'Normally' (trend wise), it should have been up 1.5%. The gap is just 5%, which of course is remarkable
- In addition, these official production numbers do not fit well with other short term indicators of activity in the Chinese economy, like coal consumption, night light in industrial parks. Even the manufacturing PMIs, which rose to just above 50, did not signal any extreme lift in production. So we take the official data with a grain of salt. Still its hard to believe that the authorities have just made up these data to cheat us

SpareBank 1 MARKETS

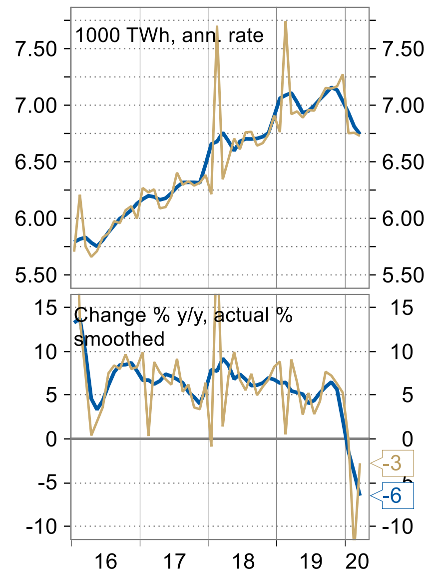
Official electricity production data are somewhat… strange?

Given daily coal consumption figures, production should have been far lower

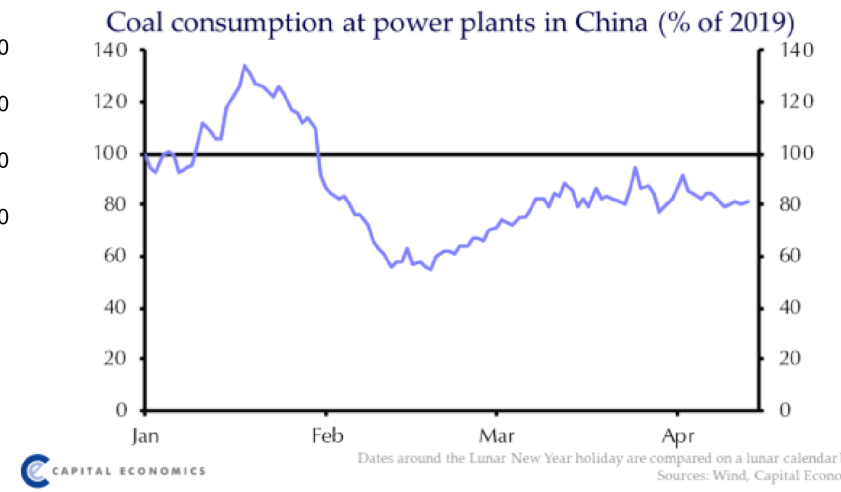
China Electricity production



SB1 Markets/Macrobond



SB1 Markets/Macrobond

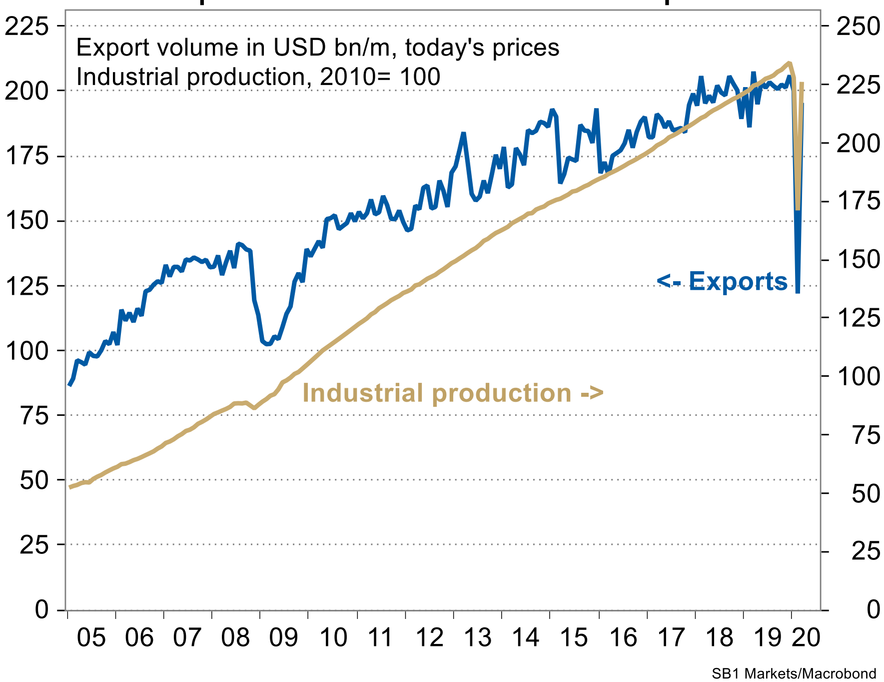


- Coal consumption at large power plants are down approx. 20% vs the 2019 level. Electricity production is just down some 6%. Which data point is the most relevant?

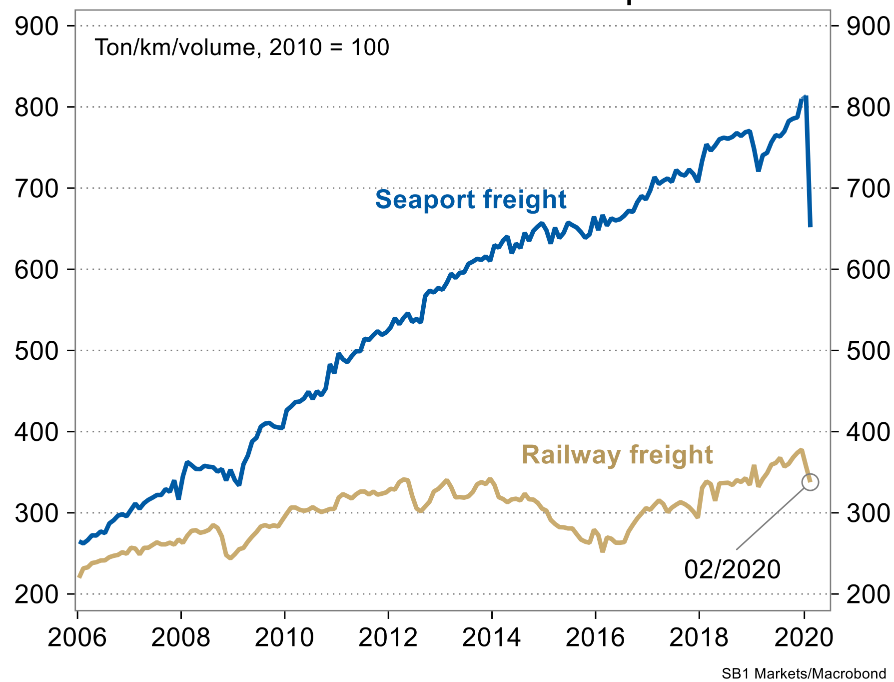
Seaport activity was low in February, railway transport was not that weak

These are February data, exports fell 40% and imports 10%. Both recovered sharply in March

China Export volume vs industrial production

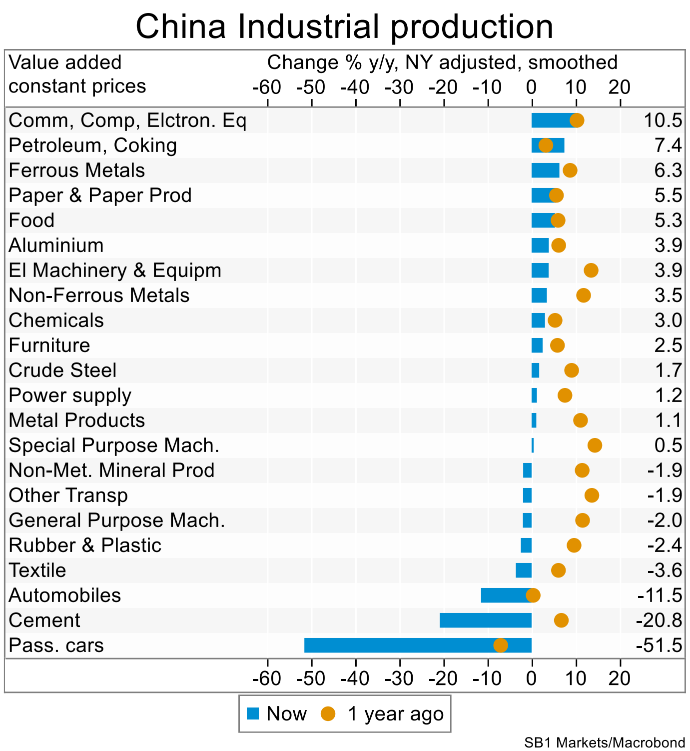


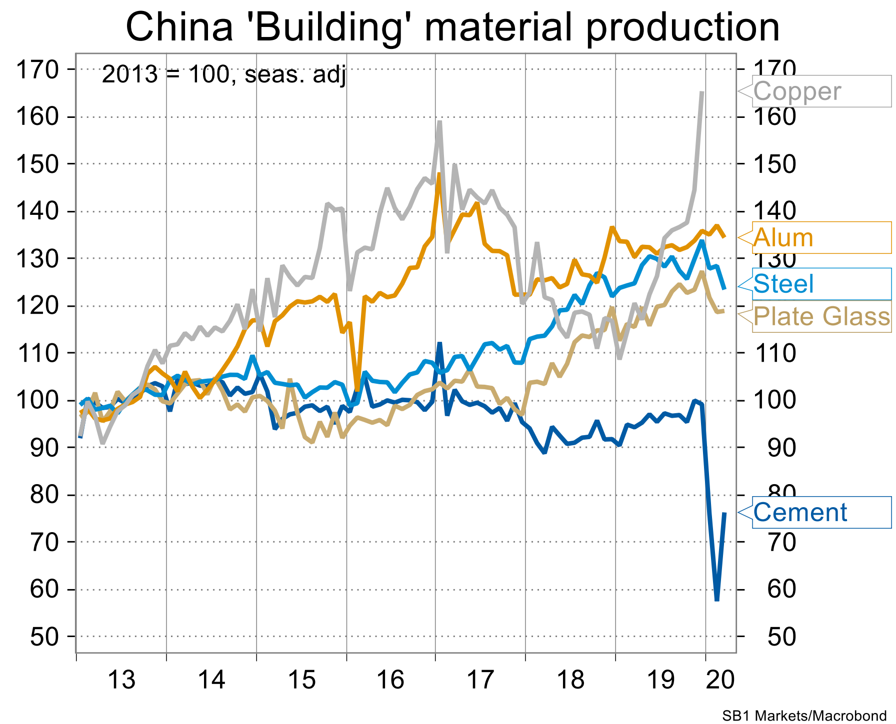
China Trade and transport



Manufacturing sector data all over the place

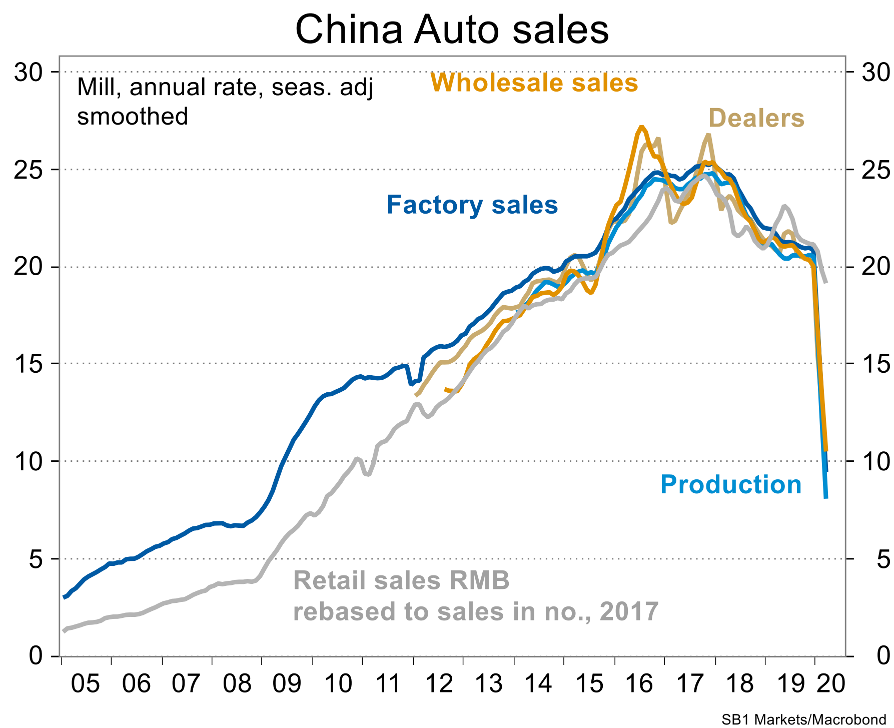
Cement production recovered just partially in March. Many sectors have not had 'corona trouble'

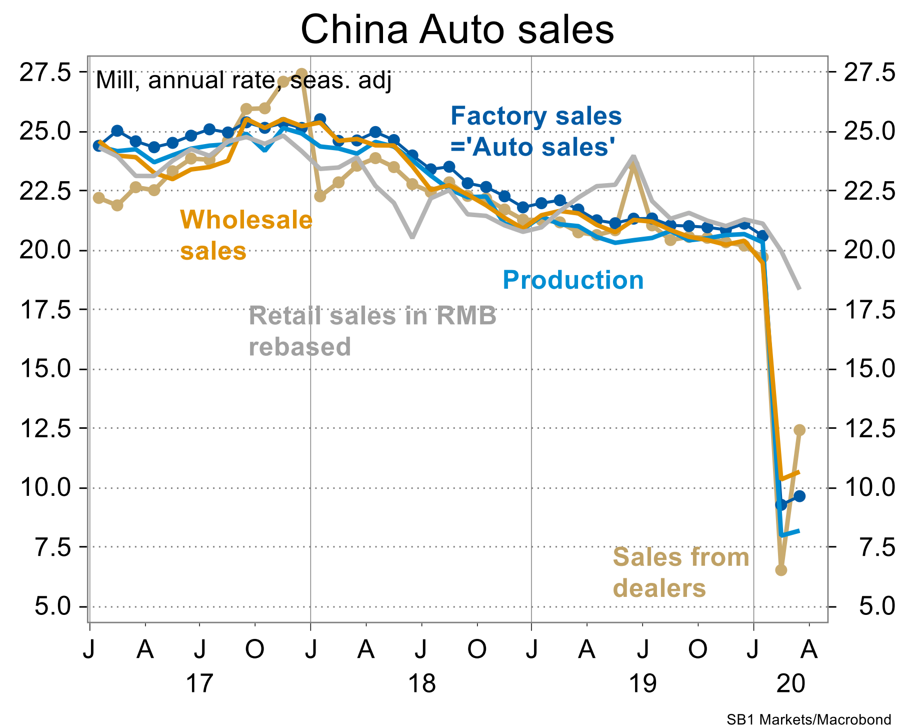




SpareBank 1 MARKETS

Auto production did not recover at all

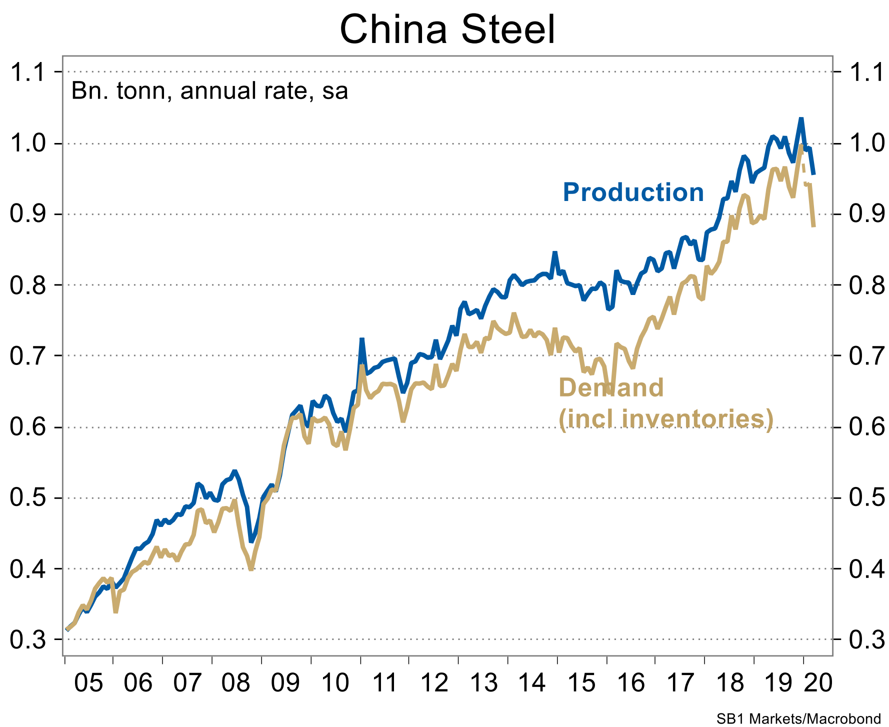




- Production: Production in factories in China, in number of units, down 60% vs the December level
- Factory sales: Deliveries from factories in China or imported cars, in units, the most common used data series for Chinese auto sales
- Wholesale sales: Sales from wholesalers, in units, not published
- 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 repored

Steel production further down in March, level just 5% vs trend

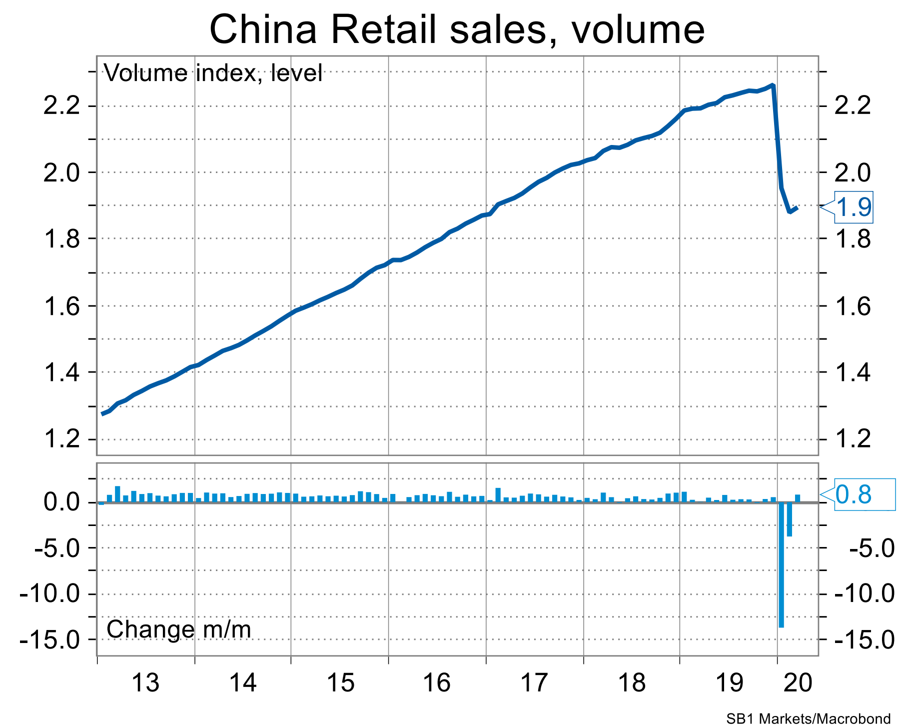
Demand is down 10%, and fell further in March



- Demand includes changes in inventories

Retail sales up just 0.8% in March, 17.5 below the pre corona trend path

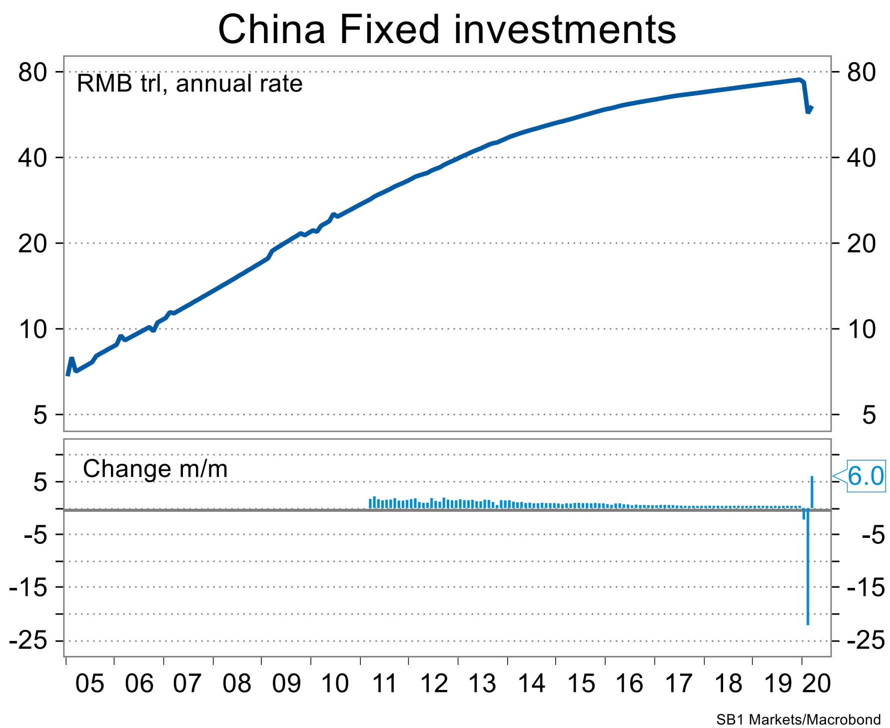
Sales volume plunged 14% in Jan/Feb, according to our estimate. Annual drop at 13%



- The official value growth rate fell to 15.8%, expected down 10%, which we thought was rather optimistic. Still, the 0.8% lift m/m was less than we assumed – and we expect April data to be clearly better.
- Retail sales are now 16% from the Dec level, some 17.5% below the pre corona trend - which of course is a depression like decline. So, no narrow V here

Nominal investments up 6% in March, still 20% below the pre corona trend

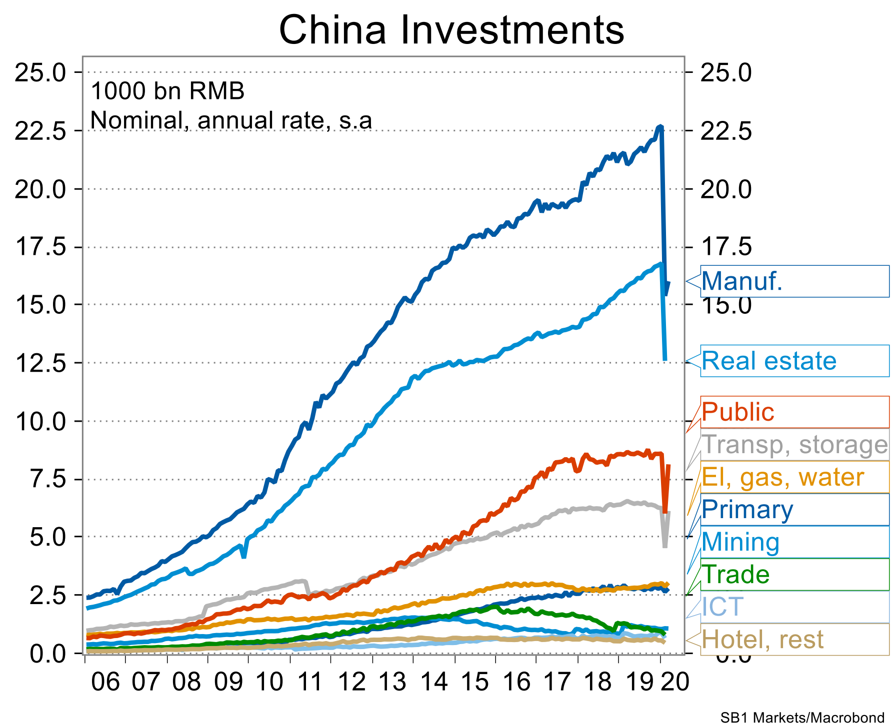
No narrow V here either – and the level remains depressional low

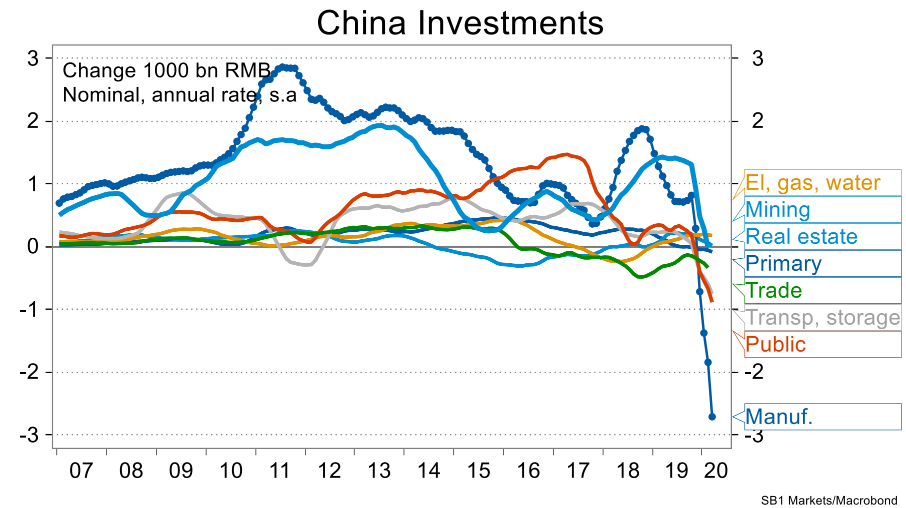


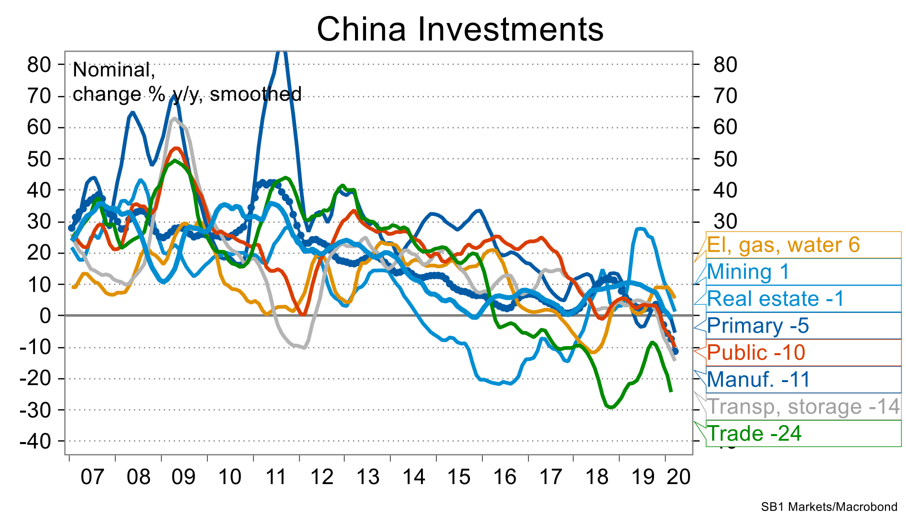
- Urban investments dropped by 16.5% y/y ytd in March, from -24% in Feb, according to the official data, expected down just 15% (according to Bloomberg consensus)
  - » Investments rose by 6% in March following a 22% drop in February, revised up from -27%
- In real terms, investments are down 22%

Manufacturing investments straight down

Manufacturing investments remained low, better recovery in public investments, transport





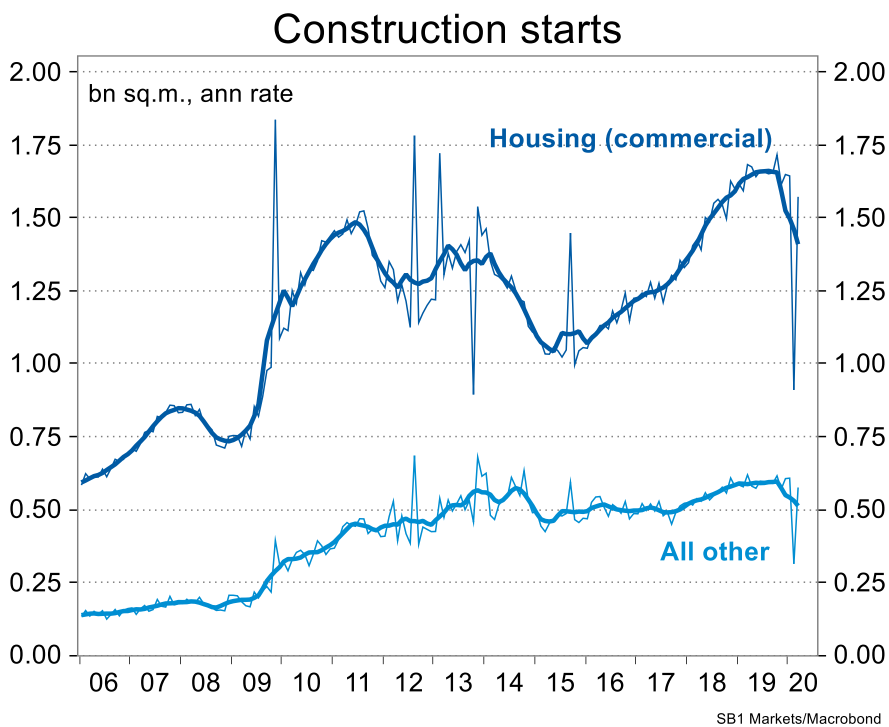


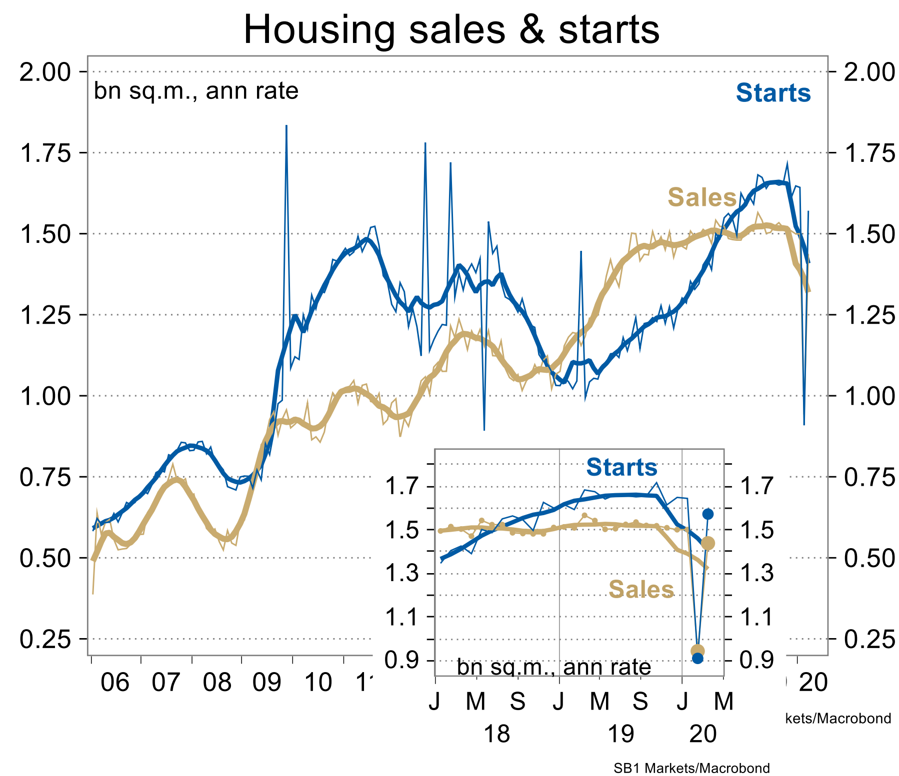
- Real estate investments are not yet reported, along with several other sectors
- Investments in trade (retail/whole sale) is been falling sharply for 3 years. A clear sign of overcapacity in the sector

Not all sectors have reported data for the last month

Both construction activity, new home sales almost normal levels in March

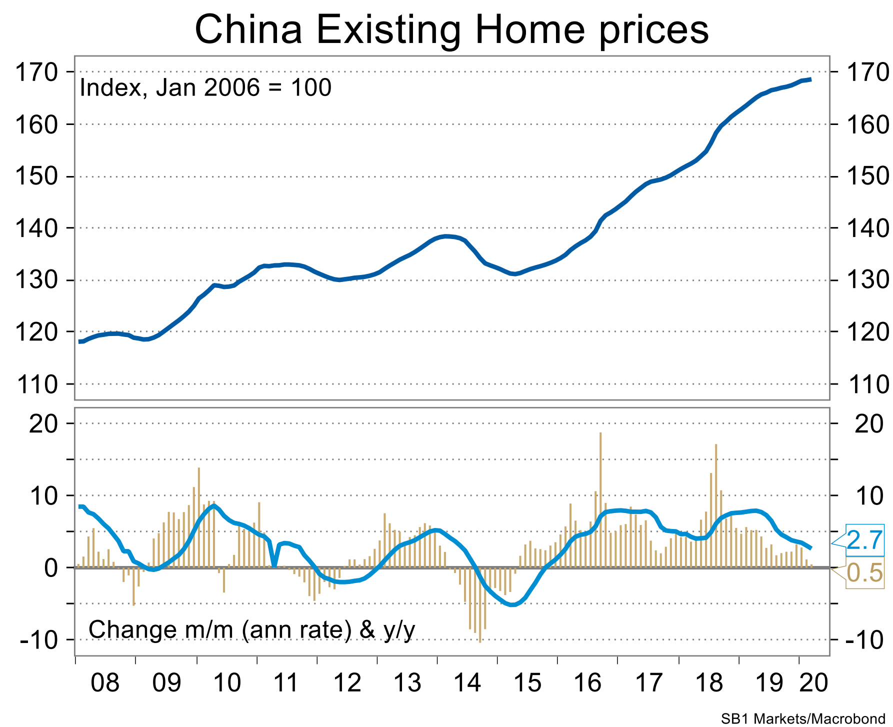
… following the 40 – 50% collapse in February. March just some 5% below Dec levels!!

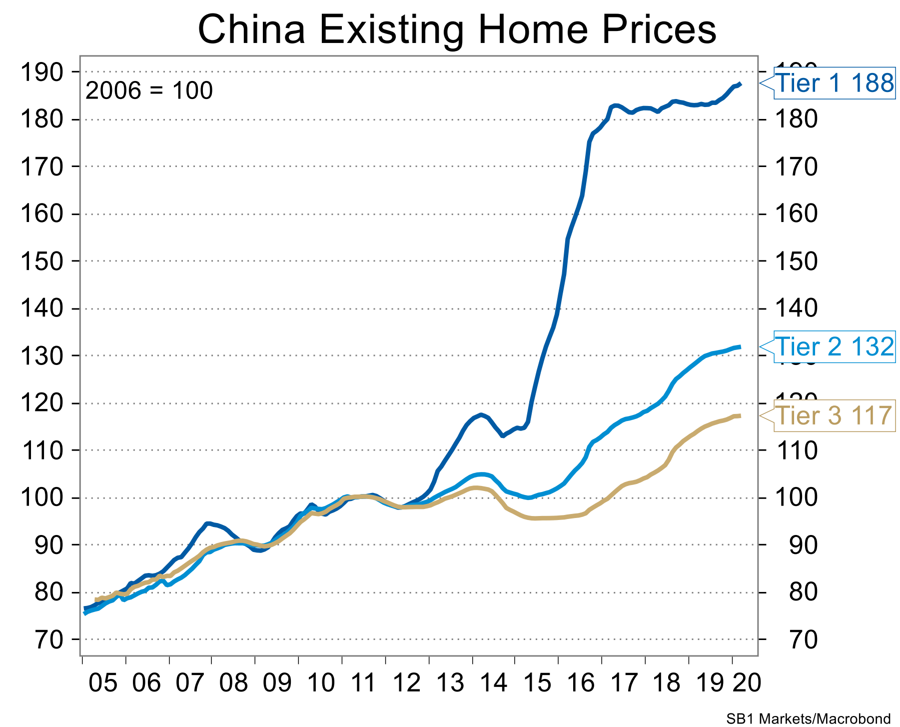




House price inflation has slowed but prices rose in both February and March

No corona shock to be seen, prices marginally up in March too – and prices are up 2.7% y/y

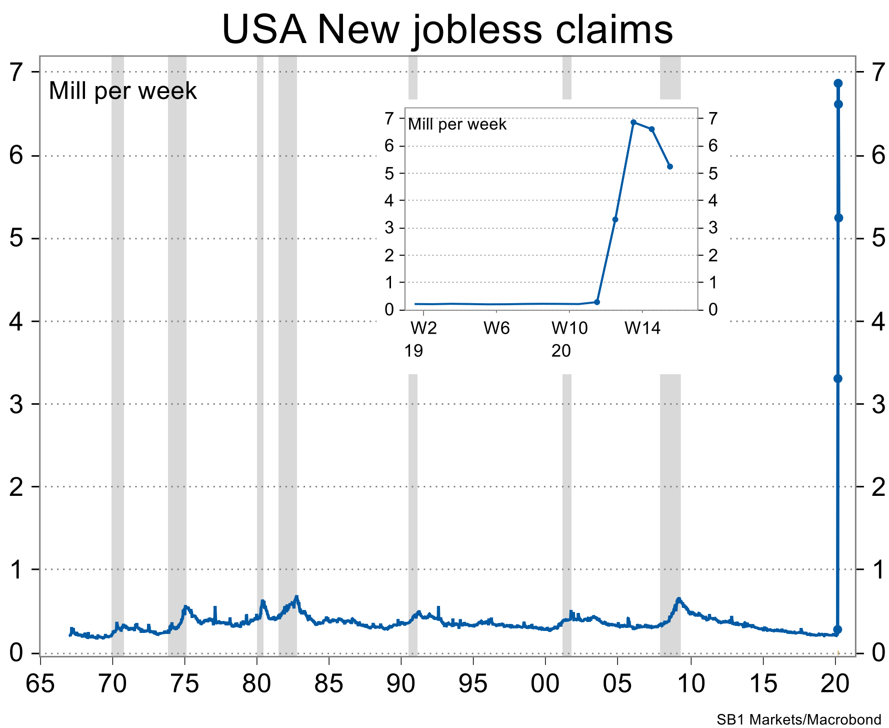


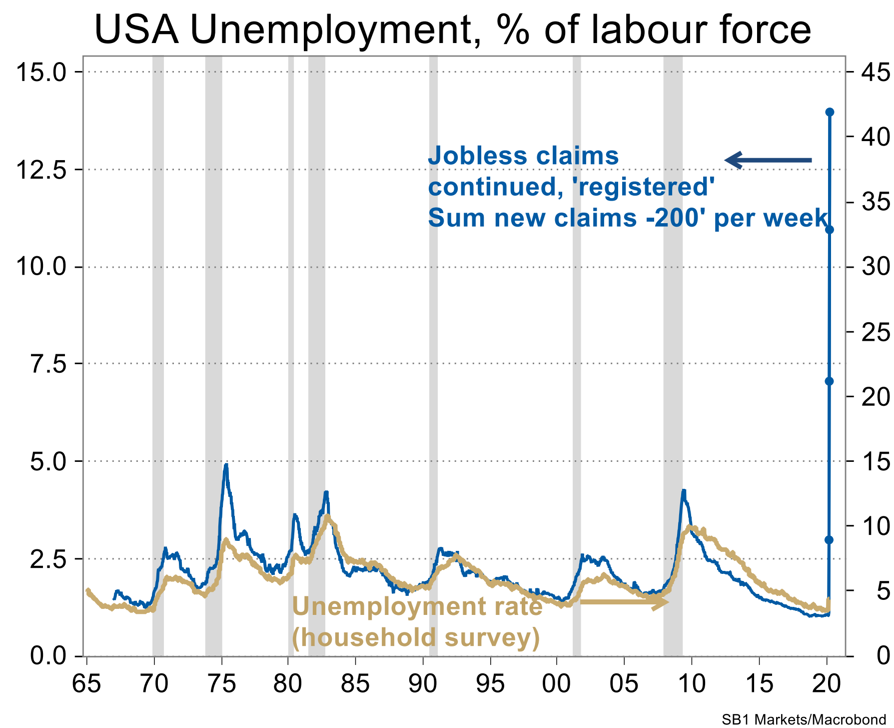


SpareBank 1 MARKETS

'Just' 5.2 mill new unemployed last week, the sum up 22 mill past 4 weeks

23 mill persons are registered as unemployed, 13.9% of the work force. The "real" uempl. even higher



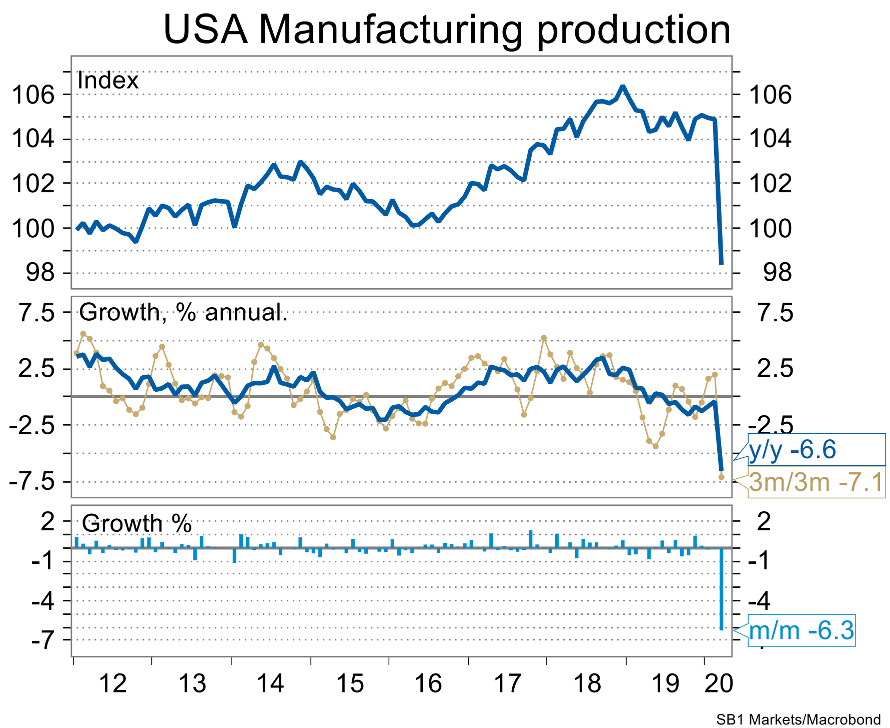


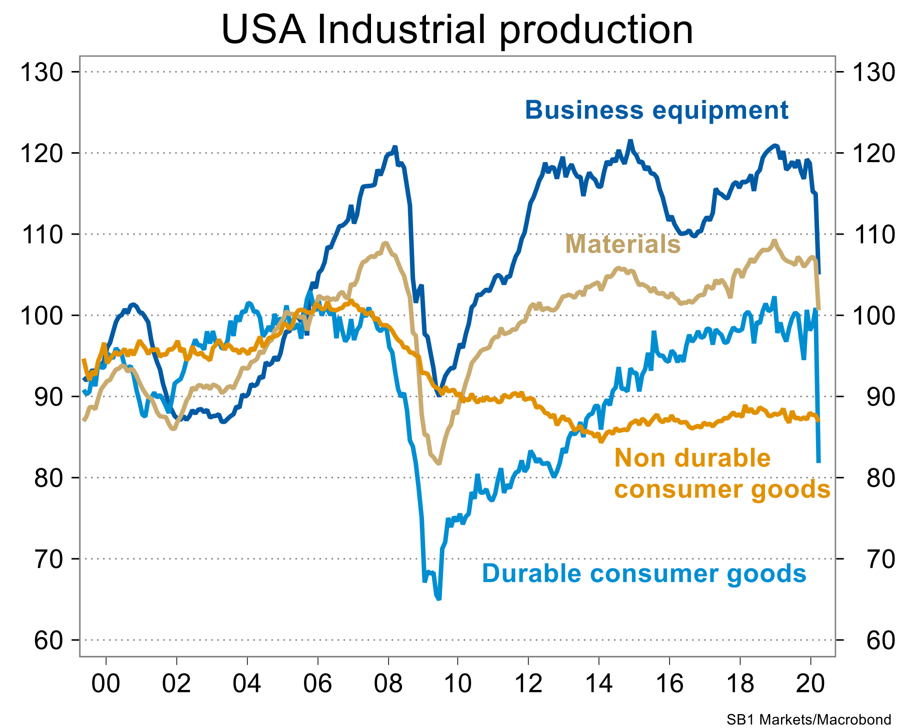
- The shock is totally unprecedented, and even if the inflow has slowed recent the two last weeks, it is still enormous, equalling 3%, per week!! Last week's new claims were marginally lower than expected (5.5 mill)
- We estimate <u>continued</u> claims have climbed to 23 million last week, from 1.8 mill 3 weeks ago (the figure will be published coming weeks as the new claims are processed), equalling 13.9% of the labour force, up from 1% 4 weeks ago!
  - » This 'registered' unemployment is usually some 1/3 of the official (labour force/household survey LFS/'AKU') unemployment rate but the relationship is not that stable. The official unemployment rate will probably rise to well above 10% in April, from 4.4% in March –and to even higher level in May)

SpareBank 1 MARKETS

Manufacturing production sharply down through March. Demand to blame??

Down 6%, expected 4%. The production level was probably down 15% by the end of March



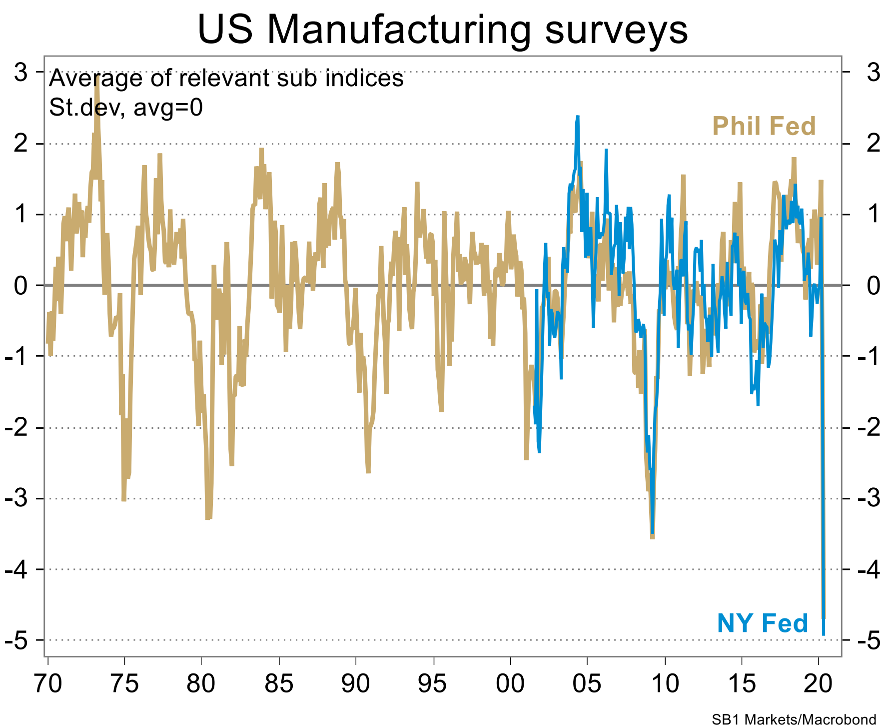


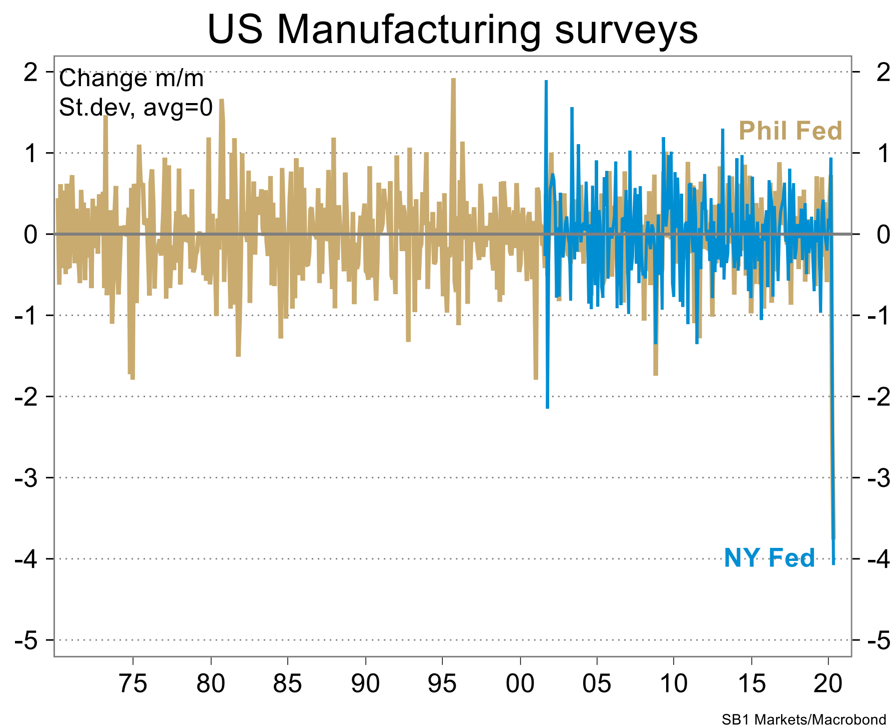
- We assume that production was more or less normal in the first part of March, say 1-2% down. If production was 'turned gradually off in the two last weeks of March, the level in week 4 was down 15% vs the February level. If so, production could easily decline by another 10% in April vs. March
- Non durable consumer goods (food, clothing etc) production was close to flat in March, materials fell 6%, while production of business equipment fell 8%, and more durable consumer goods fell 19% (autos included). This mix indicates that **demand is more to blame than supply** (the lockdowns' direct impact on production can not have been that harsh since some sectors are producing as normal)
- Both NY and Phil Fed manufacturing surveys fell sharply in April, signalling a further and steep decline in production

SpareBank 1 MARKETS

NY & Phil Fed surveys down 4 st.dev, twice as much than ever before

Both surveys are close to 5 standard dev. below average. It should happen just every 290.173 year

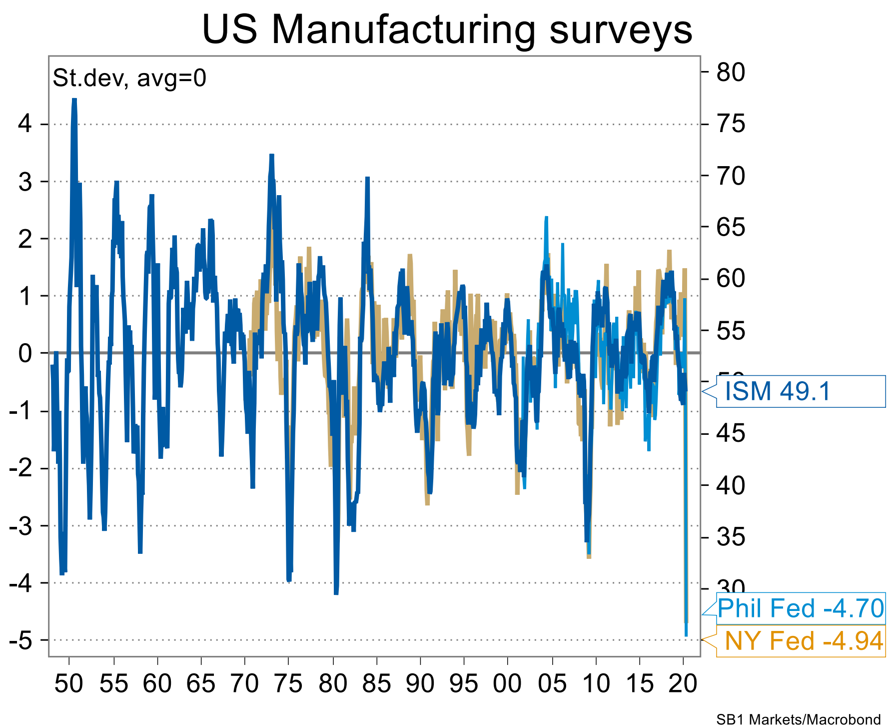




- NY Fed's manufacturing survey slipped 2 st.dev. in March, the steepest decline since October 2001. Phil Fed's index fell even more, by 2.5 st.dev., the largest decline ever noted. Both came in far below expectations
  - » Most components came down and order indices fell rapidly in March
- Given a normal distribution a '5 sigma' should happen in 1 of 3,488,555 times or once every 290.173 year for a monthly series. Thus, I don't think it is likely that I will ever see something like this again in my lifetime (I'm already 63)
- If you want to calibrate these regional surveys to Markit's PMI or the ISM, check next page

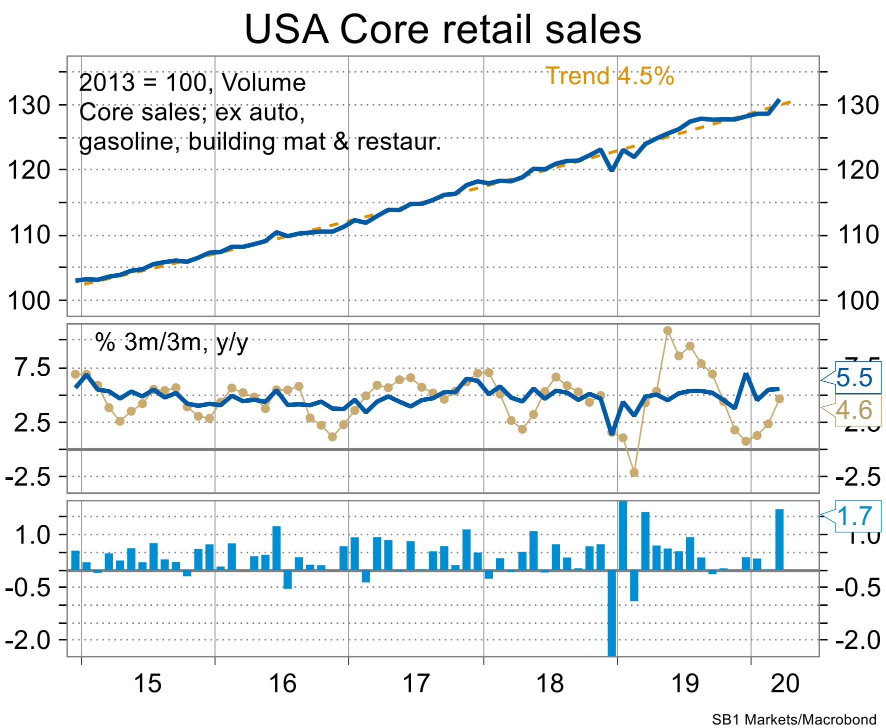
Where will the manufacturing ISM land?

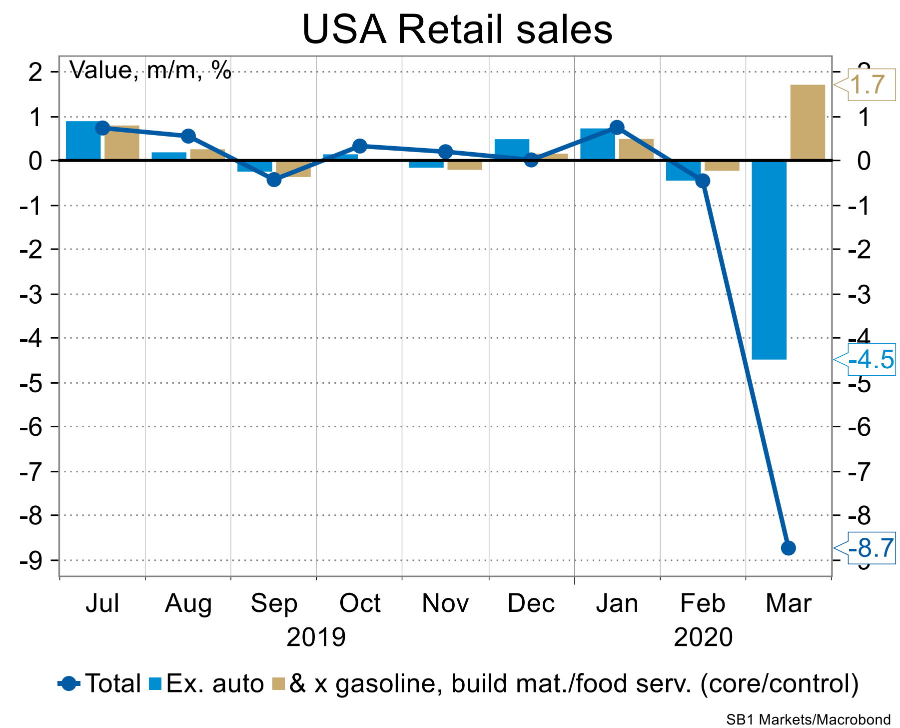
Probably at the lowest level ever? At below 30



Huge retail sales ups & downs in March: From -50% (clothing) to +27% (groceries)

Total down 8.7%, the biggest decline ever – but core up 1.7%. Ex auto down 4.5%



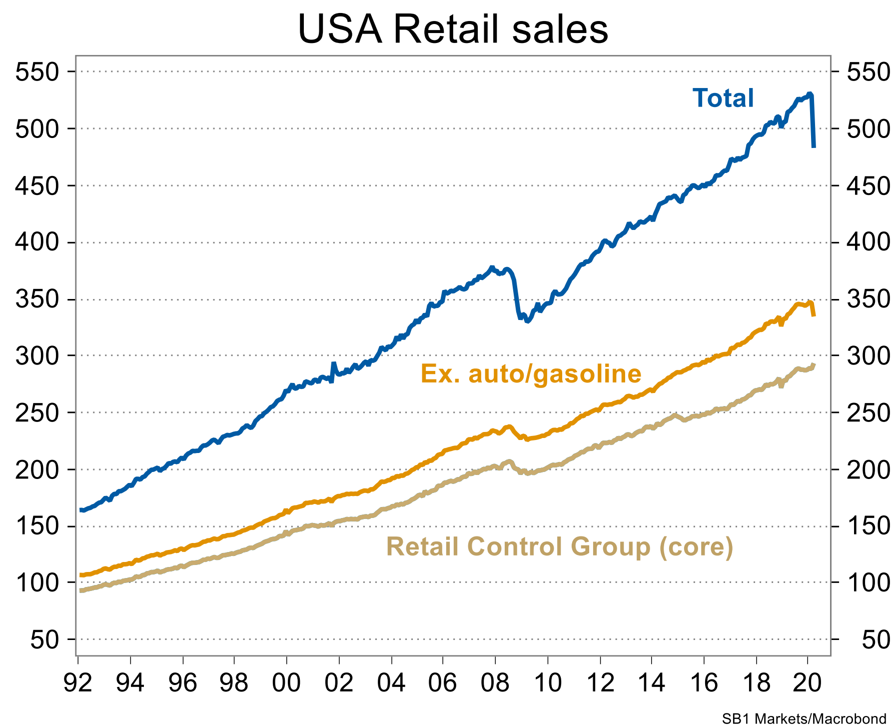


- Core retail sales (ex. auto, gas, building materials & restaurants; control group) rose 1.7% % m/m in March, expected down 2%. There were so many extreme outliers, and March was not 'one month' so do not put much emphasis on this months data
- Consumption will most likely be heavily impacted by Covid-19, at least in April and most likely in May as well. Never before has so may Americans lost their jobs (13%), and consumer sentiment has never fallen more.

The larges decline in headline retail sales ever

Auto sales fell sharply (sales data out 2 weeks ago)

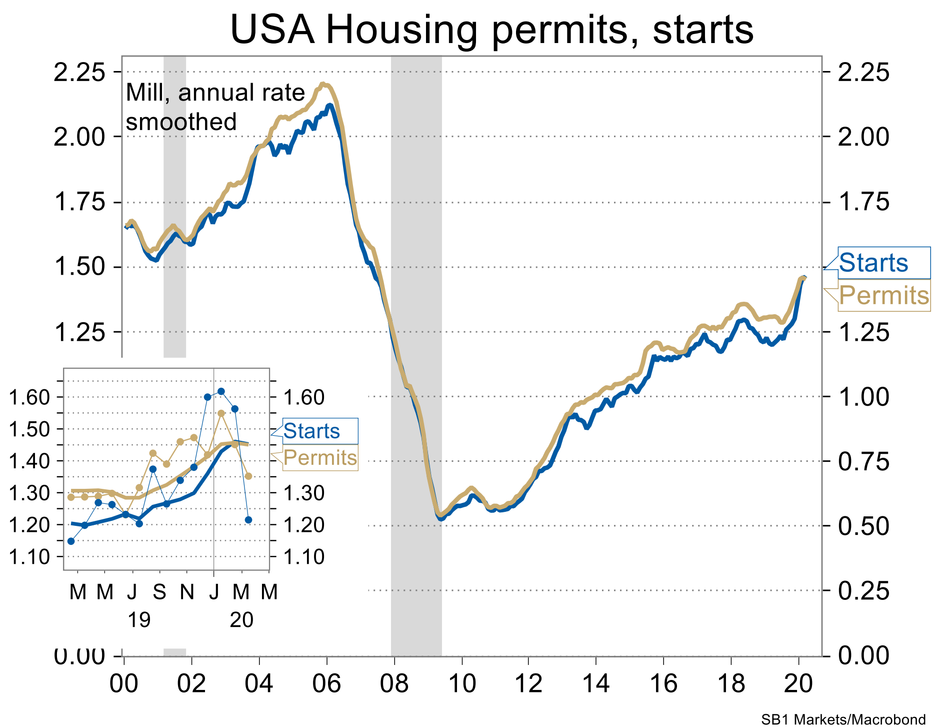
Retail & food services, total	**-8.7**
Total (excl. motor vehicle & parts)	-4.5
Total (excl. gasoline stations)	-8.0
Total (excl. motor vehicle & parts & gasoline stations)	-3.1
Retail	-6.2
Motor vehicle & parts dealers	**-25.6**
Auto & other motor veh. dealers	-27.1
Furniture & home furn. stores	**-26.8**
Electronics & appliance stores	**-15.1**
Building material & garden eq. & supplies dealers	**1.3**
Food & beverage stores	**25.6**
Grocery stores	26.9
Health & personal care stores	**4.3**
Gasoline stations	**-17.2**
Clothing & clothing accessories stores	**-50.5**
Sporting goods, hobby, musical instrument, & book stores	**-23.3**
General merchandise stores	**6.4**
Department stores	-19.7
Miscellaneous store retailers	**-14.3**
Nonstore retailers	**3.1**
Food services & drinking places	**-26.5**

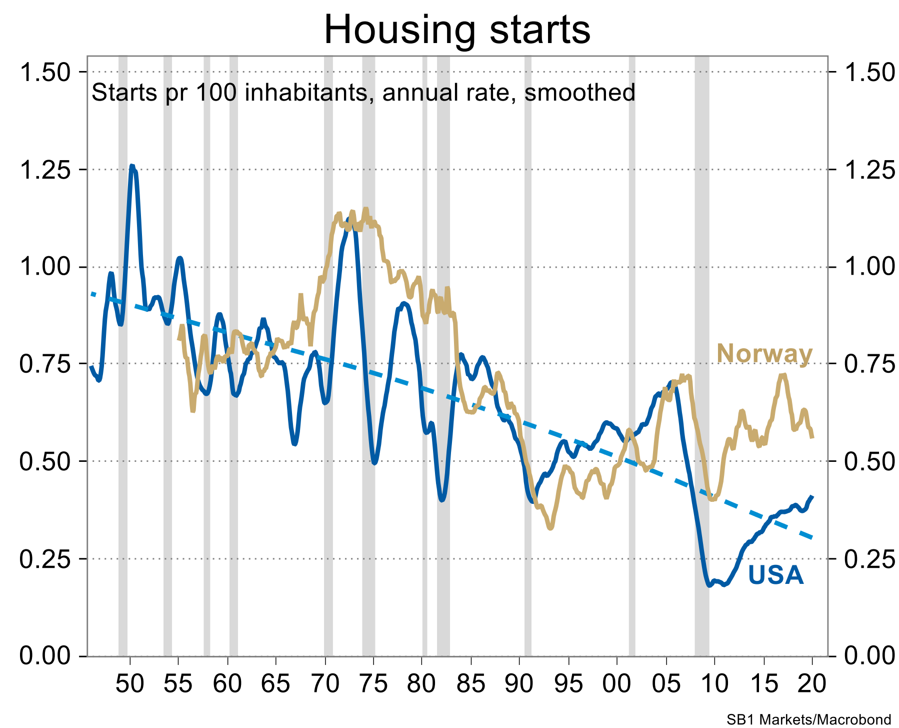


- Grocery stores up 27%, restaurants down 27%
- Clothing -51%
- Sports -23%
- Electronics -15%
- Nonstore (net) just up 3%

Housing starts sharply down in March – much more to come

Both starts & permits down in March, from high levels. The homebuilders signal a 50% drop

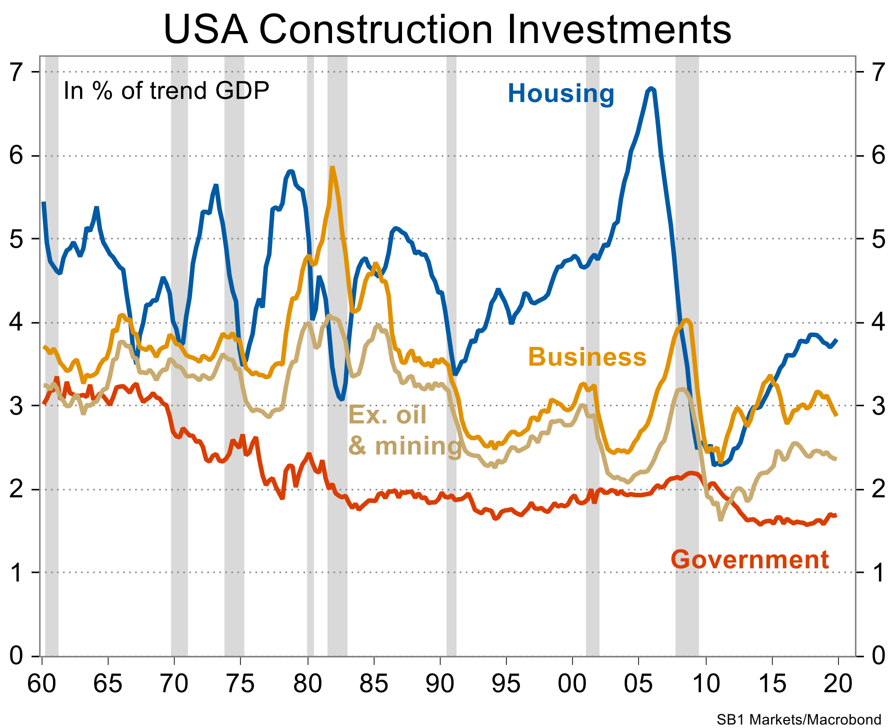




- Housing starts fell by 22% in March, surely much more in the 2nd half of the month, we guesstimate some 40%. However, building permits just fell by 6%, and permits are usually the most reliable indictor for the 'real' building activity
- The Homebuilders' housing market index fell more than ever in April (check 2 pages fwd), and signals a 50% decline in housing starts. The good news is that the downside anyway is much smaller than before the GFC, where housing starts fell by 1.6 mill units (or by 75%). In Dec, the level was 1.6 mill, and in March 1.2 mill. We cannot rule out a decline to 0.5 – 0.6 mill. If so, the decline will be 'just' 1 mill homes.

If housing crashes, it will not be like last time – it's physically impossible

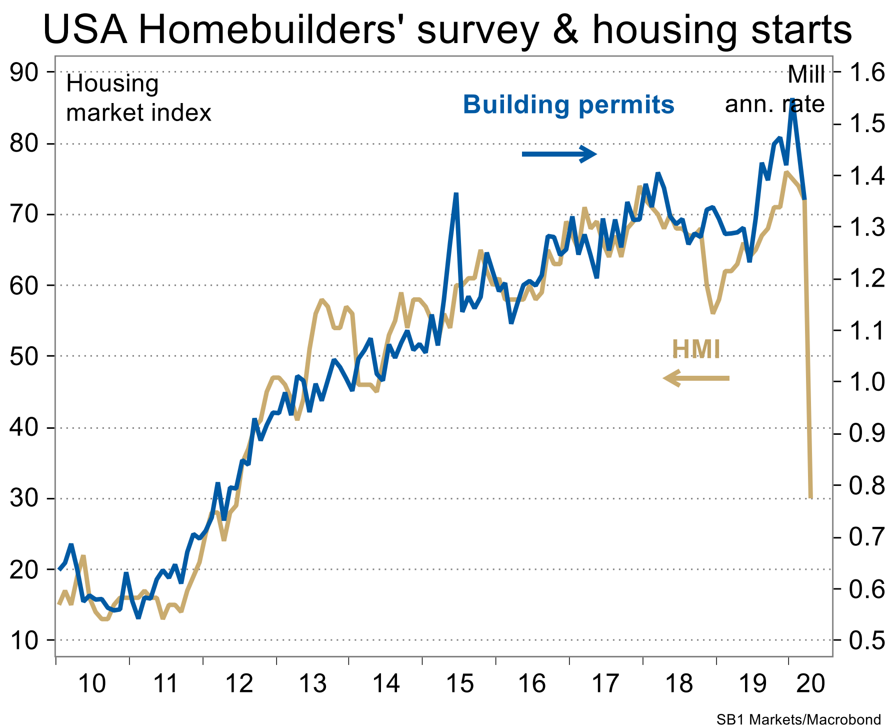
Housing investments are at a much lower level. Business construction investm. not that high either

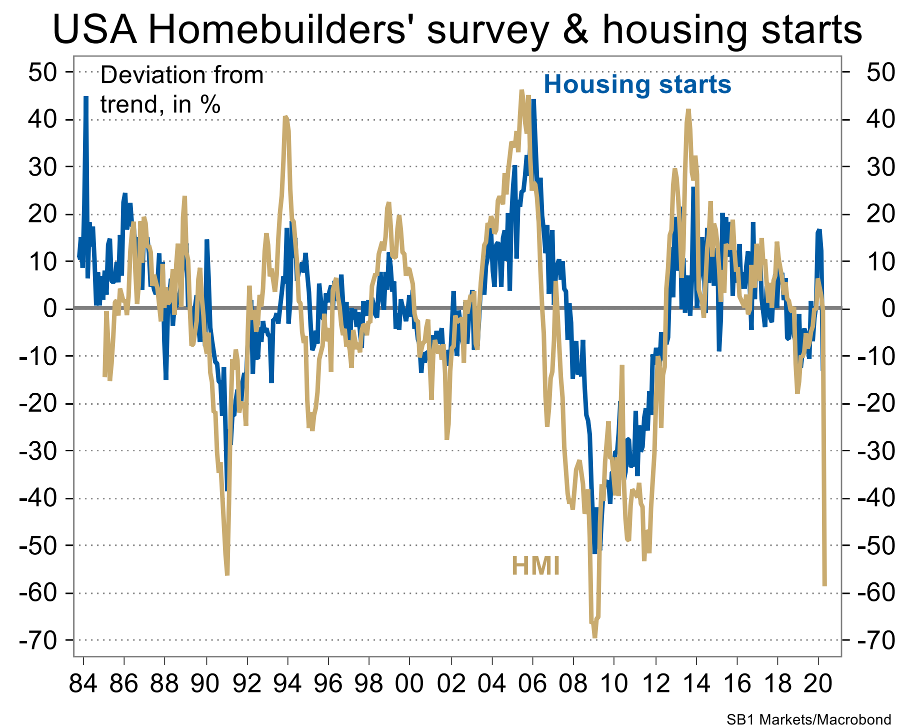


- The housing investment/GDP ratio fell to 3.3% in 2010 from 6.8% in late 2005 – a 4.5 pp drop
- In Q4, housing investments equalled 3.8% of GDP. We think a 2 pp decline must be a worst-case scenario this time, down to far below any earlier throughs
  - » The unprecedented decline in housing debt supports this view
  - » If you are a worried person, please not check the Norwegian figures (but you can get an idea by looking at the previous page…)
- Business construction investments will no doubt take a hit now, but the downside must be far less than the 1.7 pp vs GDP decline during the GFC

Homebuilders report a steep decline in sales & traffic of prospective buyers

The HMI fell to 30 from 72, the biggest decline ever, was expected down to 'just' 50





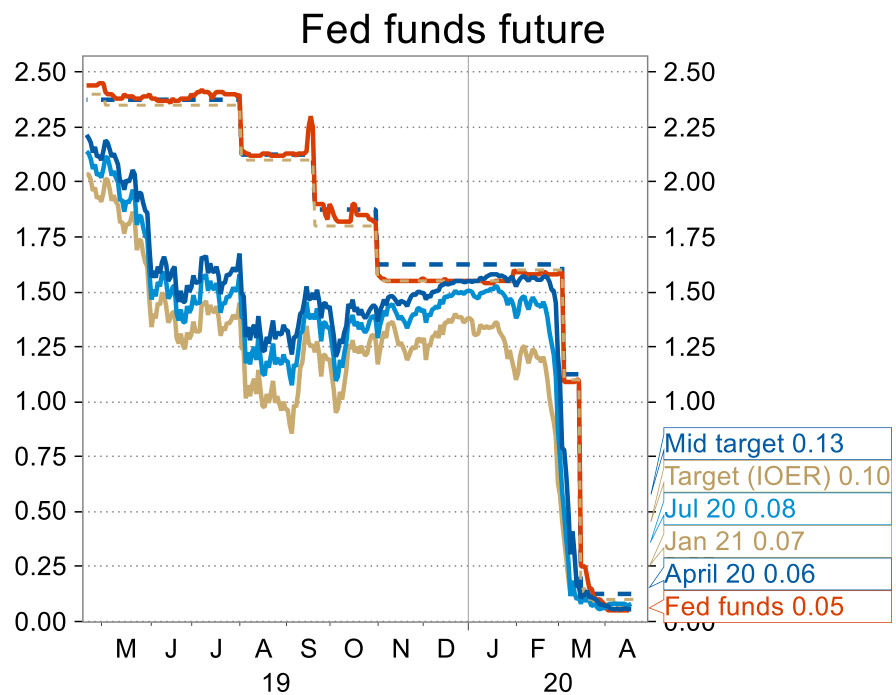
- The housing market index (HMI) peaked in December but the dramatic decline – by far the largest in one month – came in March. The HMS signals a 50% cut in housing starts
  - » All three sub indices in the HMI fell, expected sales fell the most as uncertainties stemming from the coronavirus reduced

HMI is a based on a sentiment survey of US homebuilders, in which the respondents rate housing market conditions at the present time and the next six months. The index ranges from 0 to 100. The index is closer correlated to the activity level, than to the growth rate.

Beige book: Economic activity contracted sharply and abruptly across all regions

So the Fed' network unsurprisingly said last week. Leisure, hospitality, non essential retail hardest hit

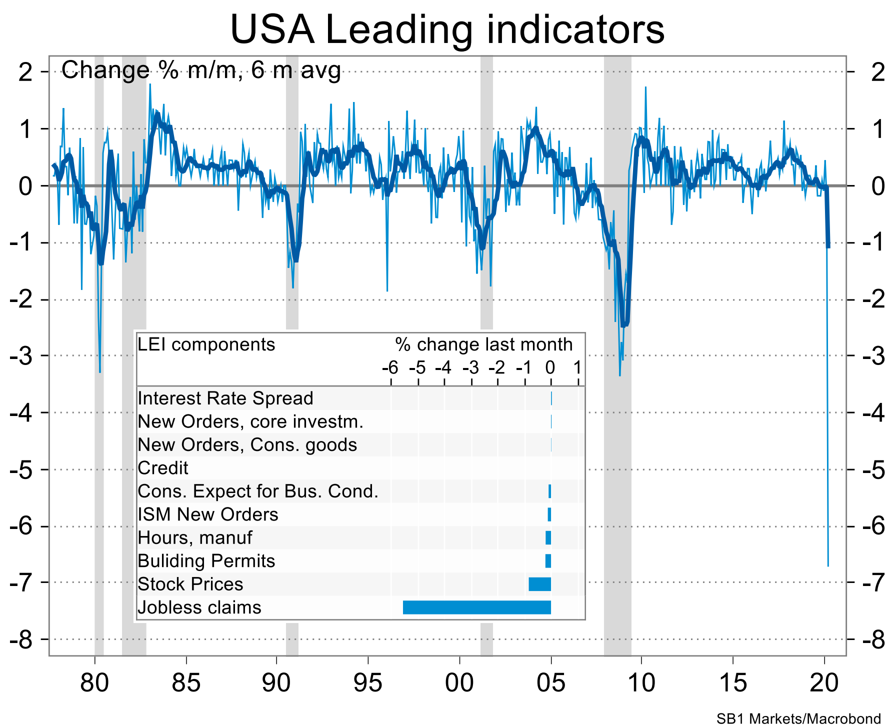
- All districts report highly uncertain outlooks, with huge decline in employment, and more cuts were expected
- Mixed reports from the manufacturing sector, which also was reflected in production data in March. Auto production shut down. The oil sector cuts investment
- Credit demand is still high, because both companies and households need to compensate for revenue shortfalls
- Prices are under pressure – due to weak demand. In some sectors, supply chain disruptions lead to sharp price increases, like in transport
- **In total, the Beige book confirms the economic disaster we are witnessing so many places as a result of the inevitable fight against the corona virus**
- **The Federal reserve has cut the interest rate to close to zero, and will probably not go below. Instead, the bank has supported the marked with unprecedented amounts of liquidity – which financial markets have embraced vigorously**

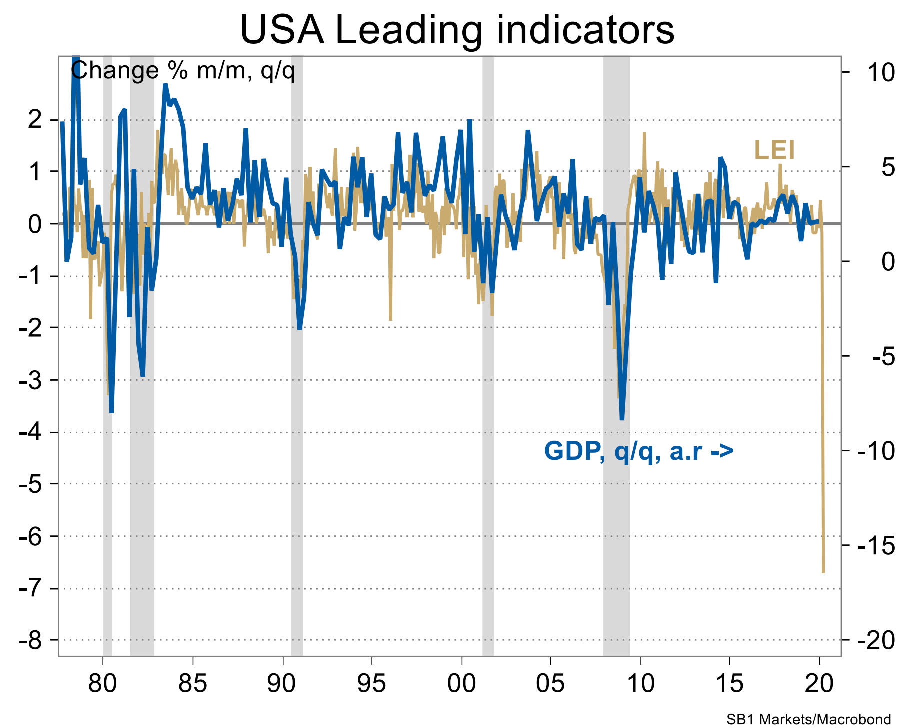


SB1 Markets/Macrobond

Leading indicators fell off the cliff, helped by jobless claims

The March LEI signals a 15% GDP contraction. April was probably not better…

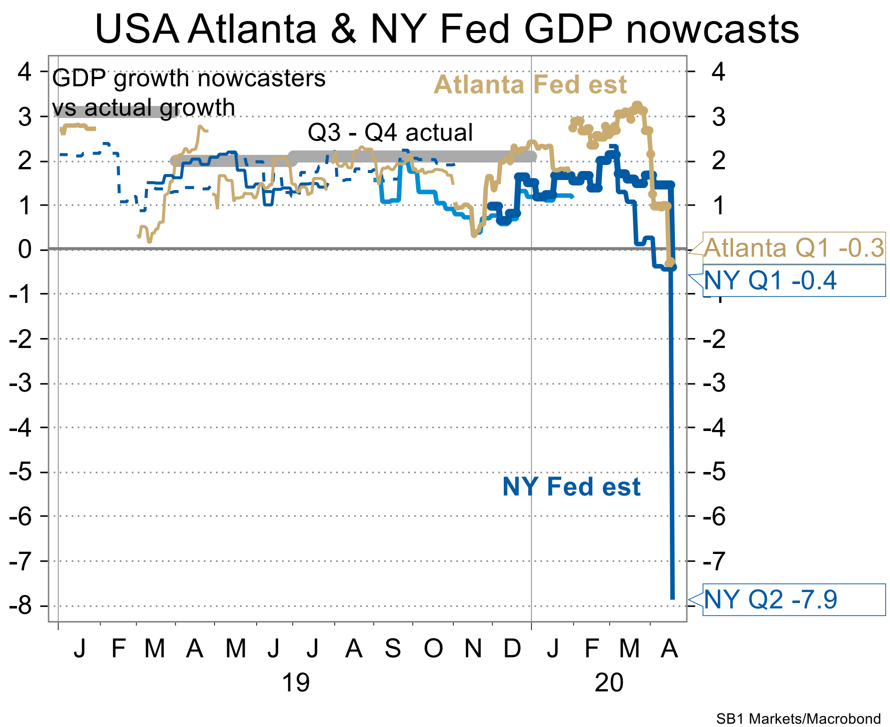


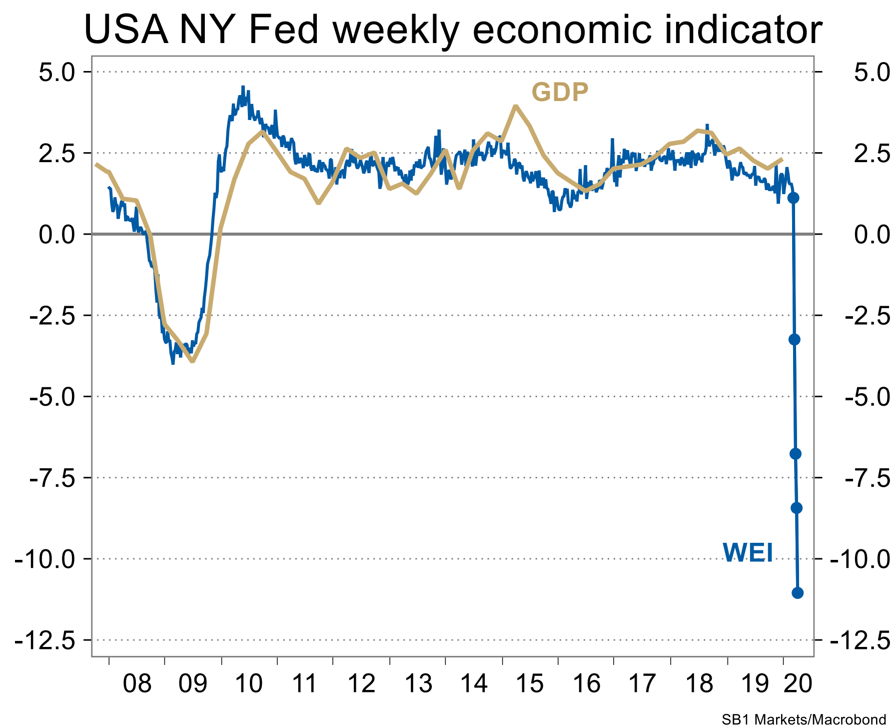


Conference Board's Leading Index (LEI) is a composite index based on ten already published leading indicators that are judged to be leading the overall cycle

Q1 GDP growth below zero. And Q2 will end up deep down in double digit

Still far too early pinpoint the decline in GDP in Q2 but calculated the American way, it will be huge!

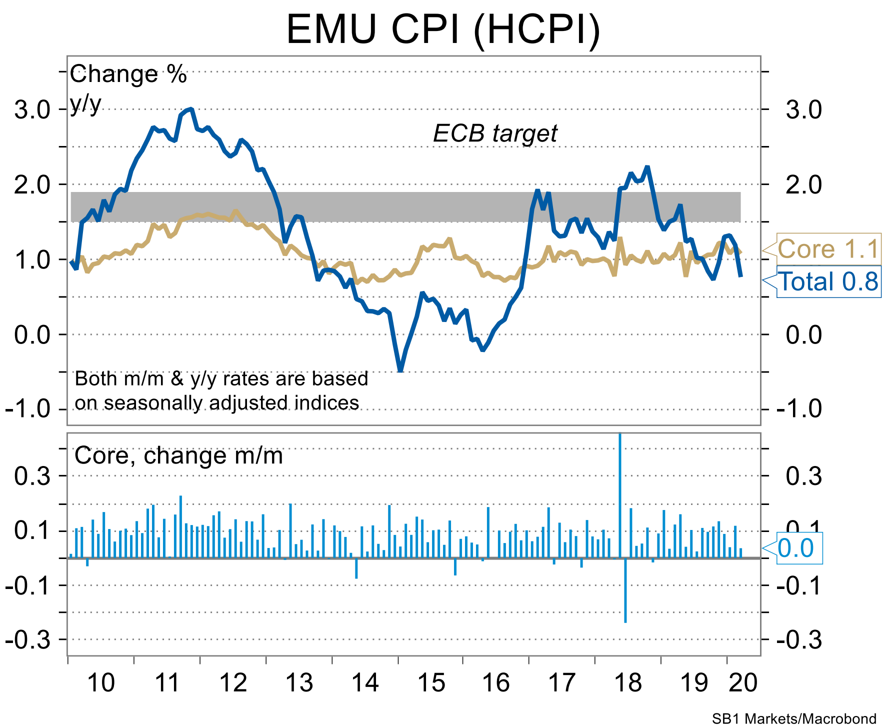


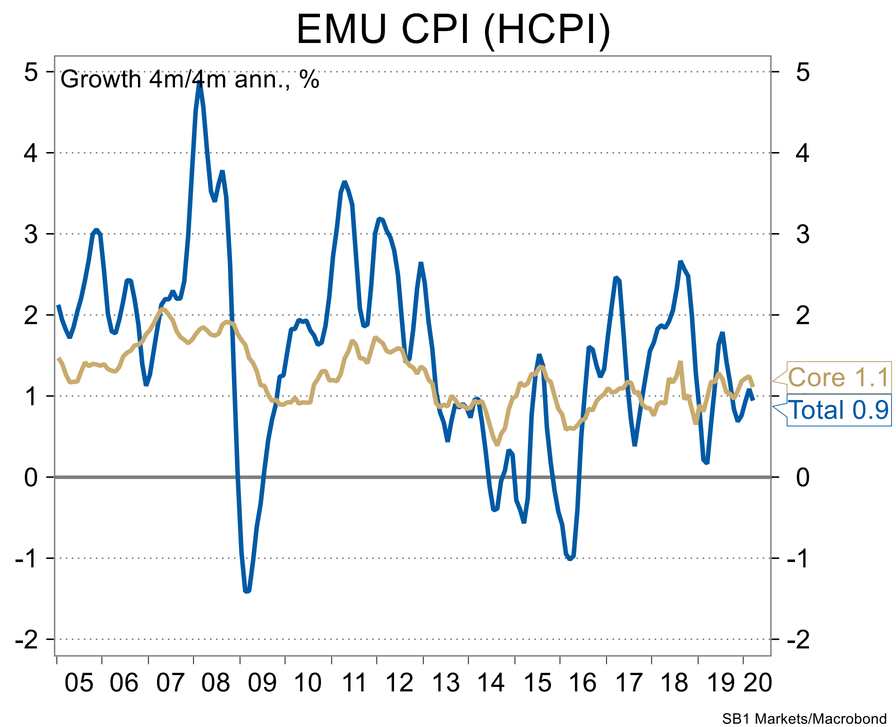


- Both Atlanta & NY Fed's nowcasters predict a minor decline in GDP in Q1
- NY Fed's nowcaster as well as its new Weekly Economic Indicator is starting to report an extreme 2Q, and private estimates are for a decline at 30% of more
  - » Remember that GDP growth rates in the US are reported in annualised rates, and a 40% decline equals 12%, not annualised. When quarterly actual changes are large, the annualised change (measured $(x/x_{-1})^4$) is 'misleading', GDP did not fall 40%

Core CPI inflation at 1.1% total inflation subsides. More to come

Core CPI was flat m/m and the annual rate ticked down 0.1 pp, total inflation down 0.4 pp to 0.8%

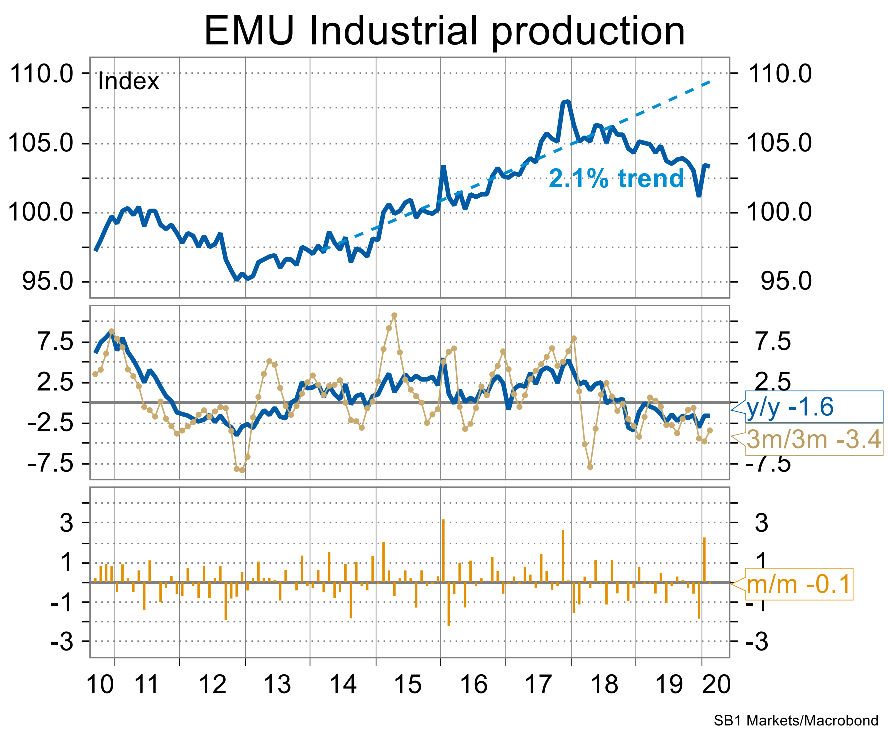


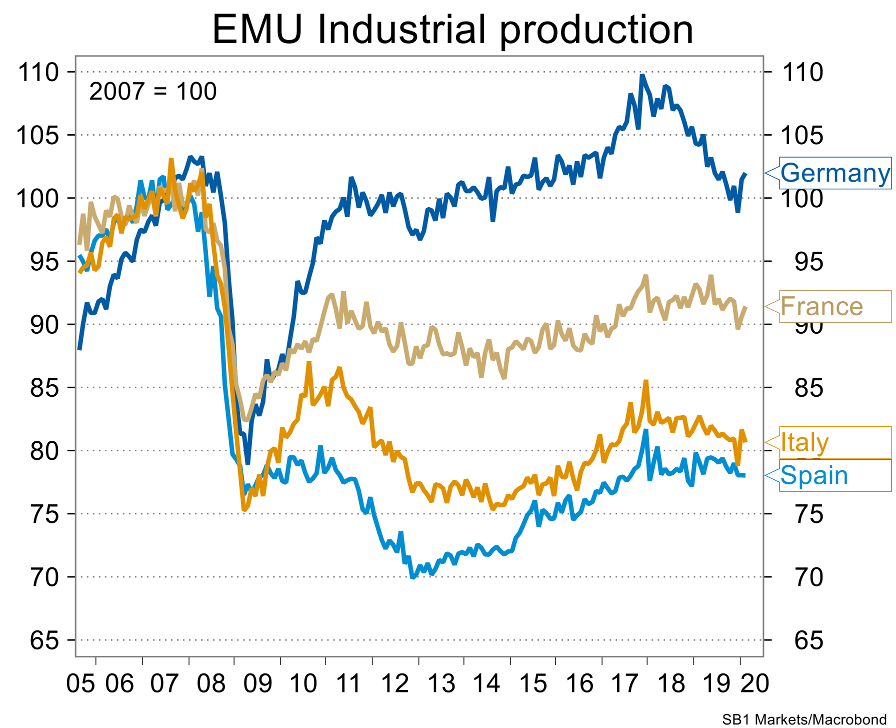


SpareBank 1 MARKETS

Ahead of the storm, stable industrial production, in February

Germany, France reported higher production, Spain flat and Italy a minor decline.

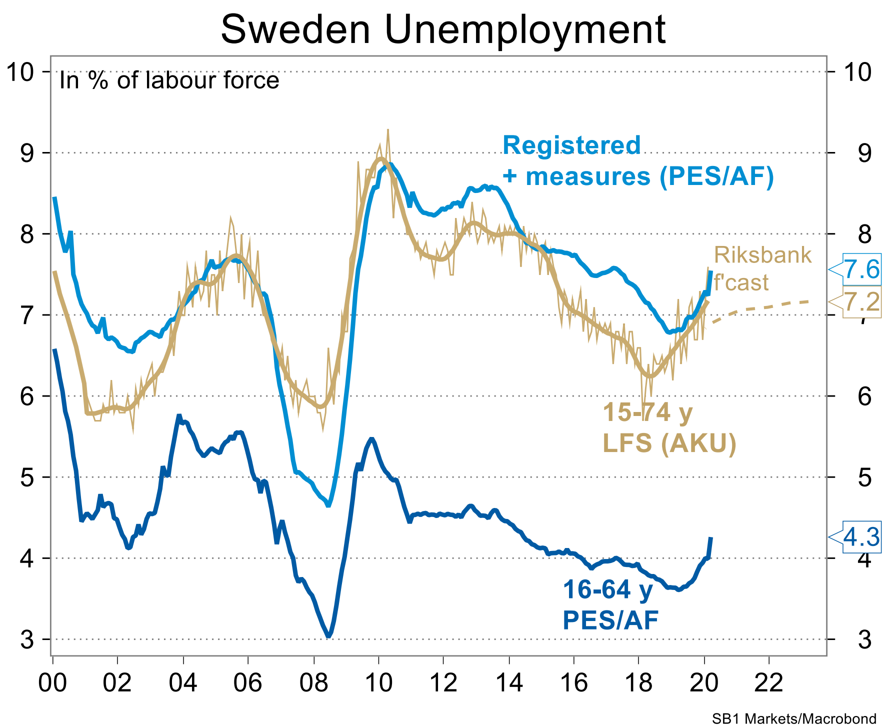


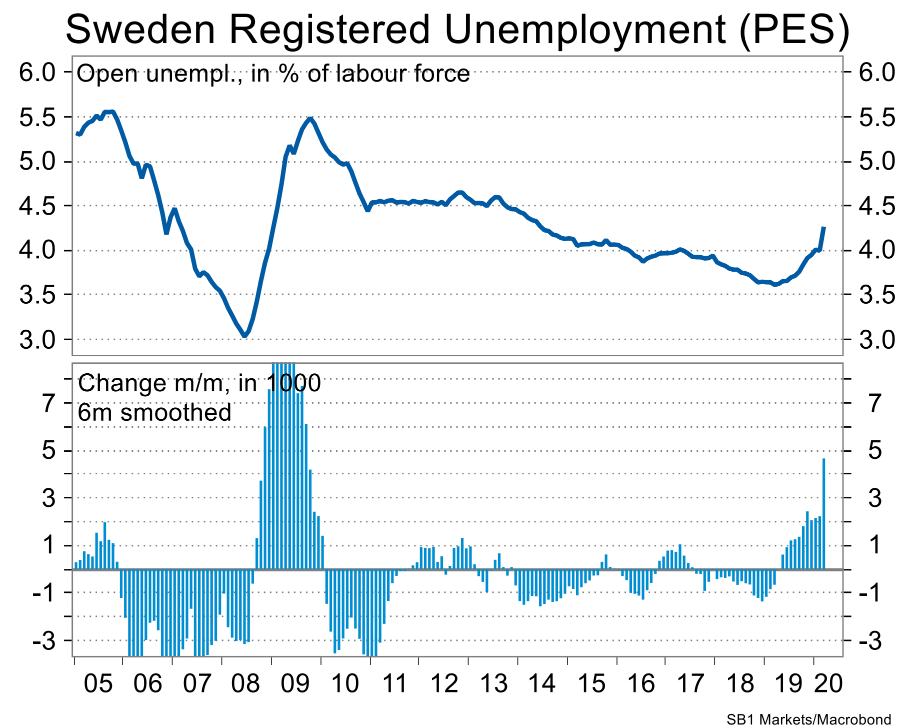


- Production most likely fell sharply March, even if the PMIs or other March manufacturing surveys were not disastrous. The latter part of the month must have been weak in large part of EMU

An unusual uptick in unemployment, still unusually small, these days

PES/AF open unemployment rose by 0.2 p to 4.3% in March. More to come but less than elsewhere?

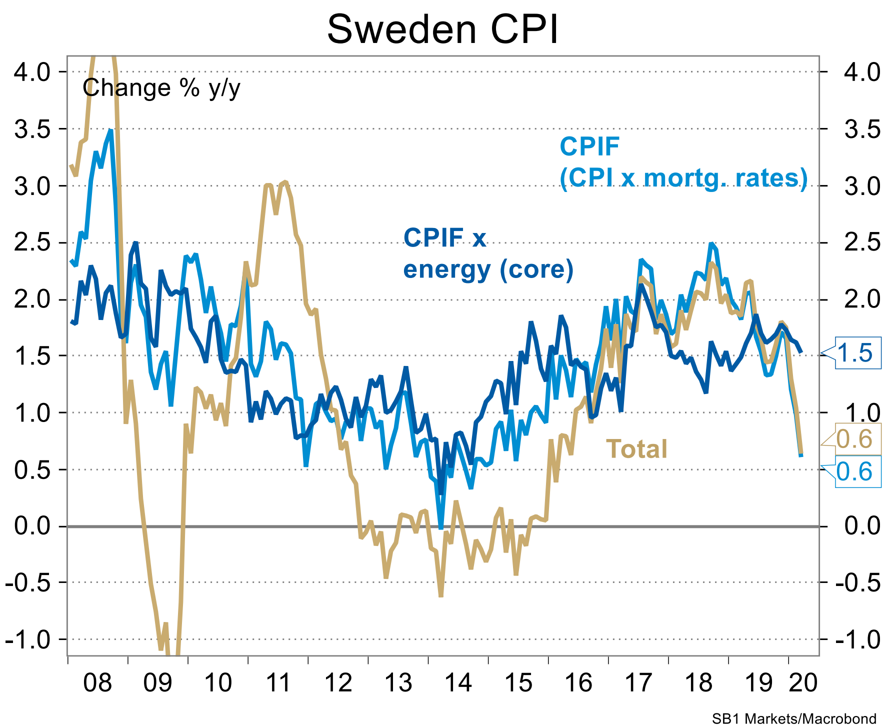


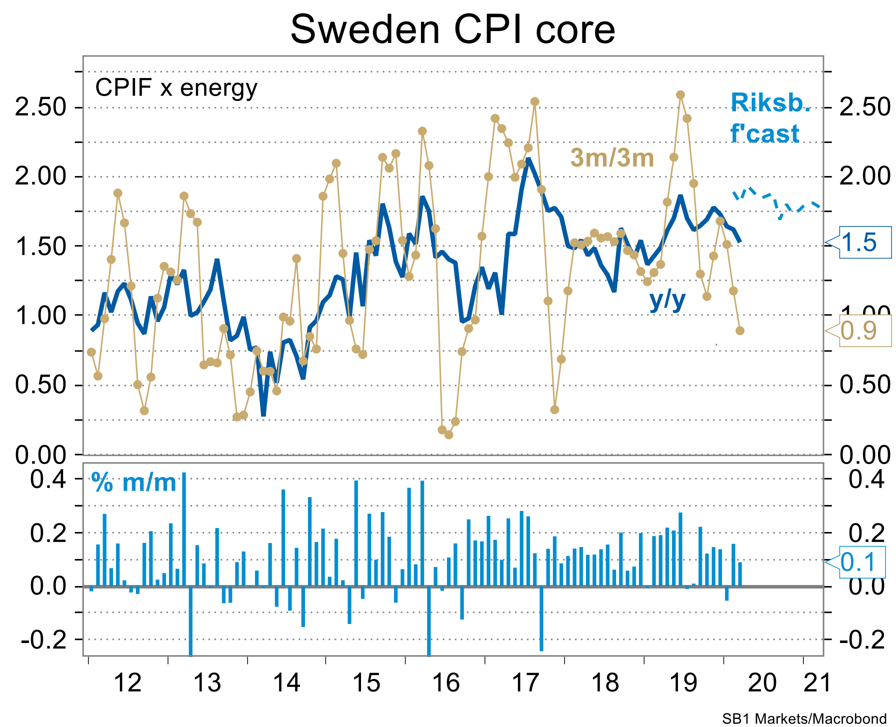


- The rise in unemployment was significant but far from dramatic, as signalled by the weekly unemployment data
- The PES/AF registered unemployment rate, which is less volatile than LFS data, confirms an upswing. Open unemployment was unchanged at 3.9% in February, following a 0.1 pp downward revision 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

Core inflation slowly down, well below the Riksbank's forecast

Core CPIF inflation down 0.1 pp to 1.6% in Feb, while total infl. fell 0.5 pp to 0.6%, on energy prices

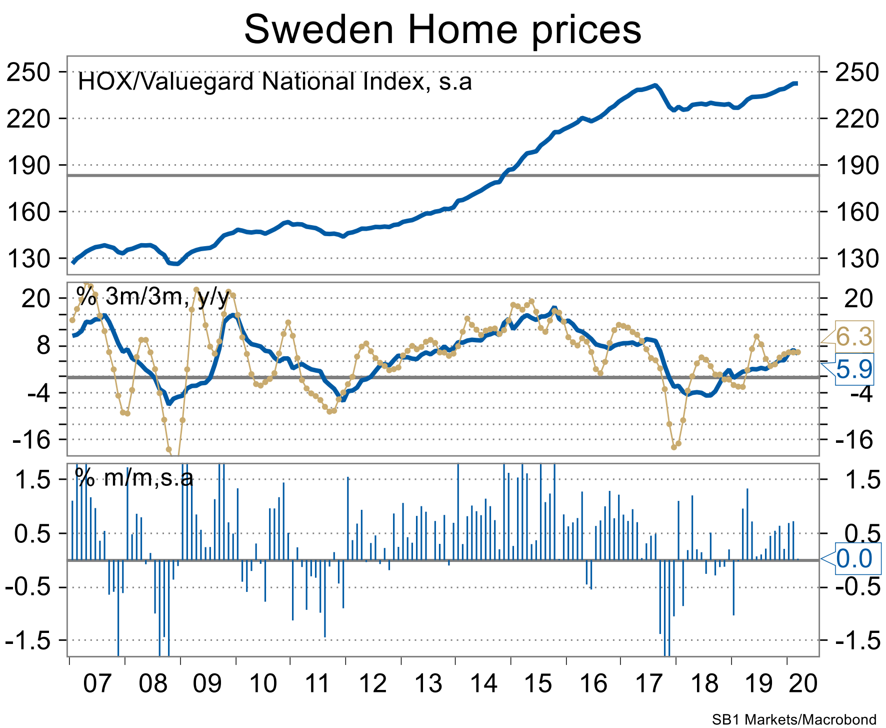


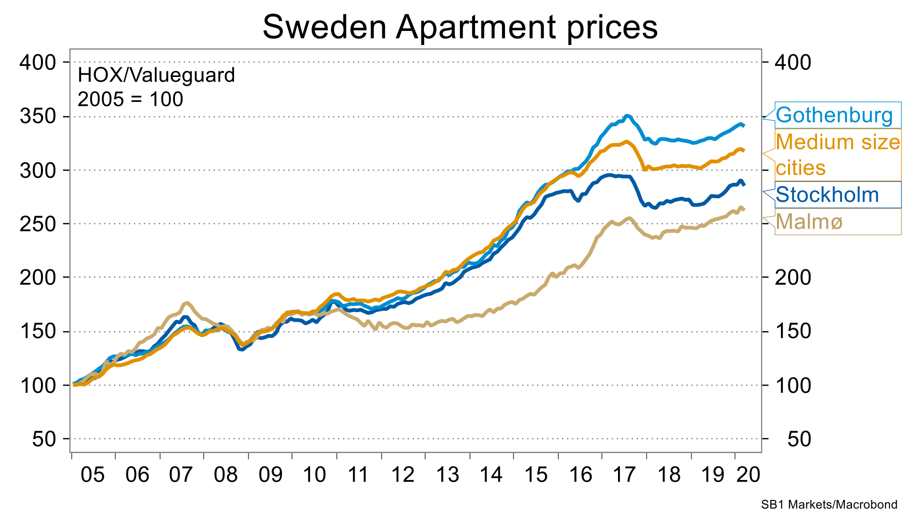


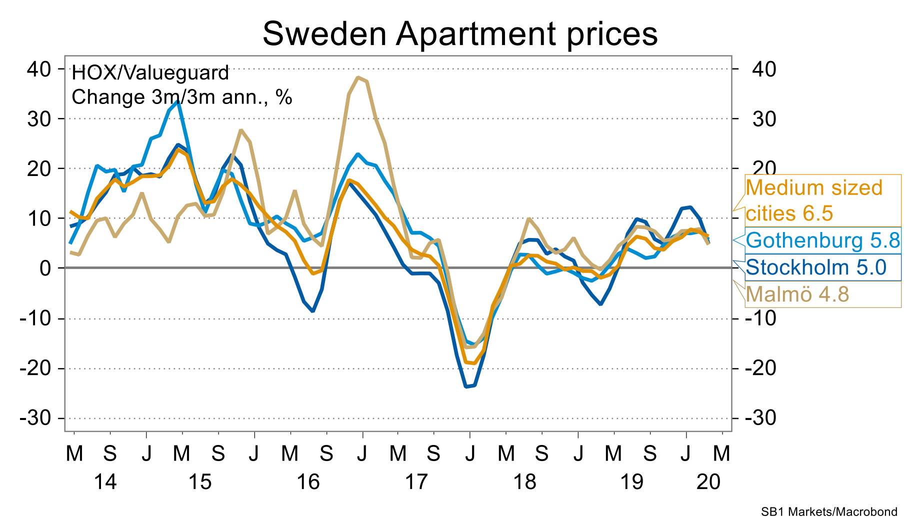
- Core inflation has been declining slowly recent months, before the corona crisis. Price pressures will probably now abate further. Total inflation has fallen sharply, to 0.6% from almost 2% last autumn

House prices flattened in March, probably some corona impact

Prices rose sharply in both January and February, and prices rose 6.3% in Q1 (and 5.9% y/y)



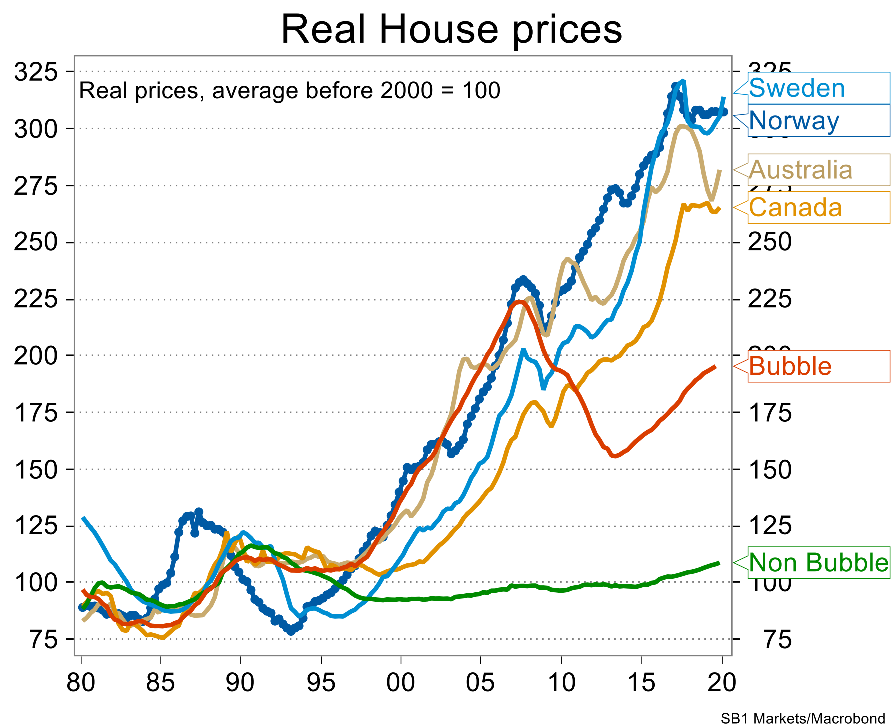


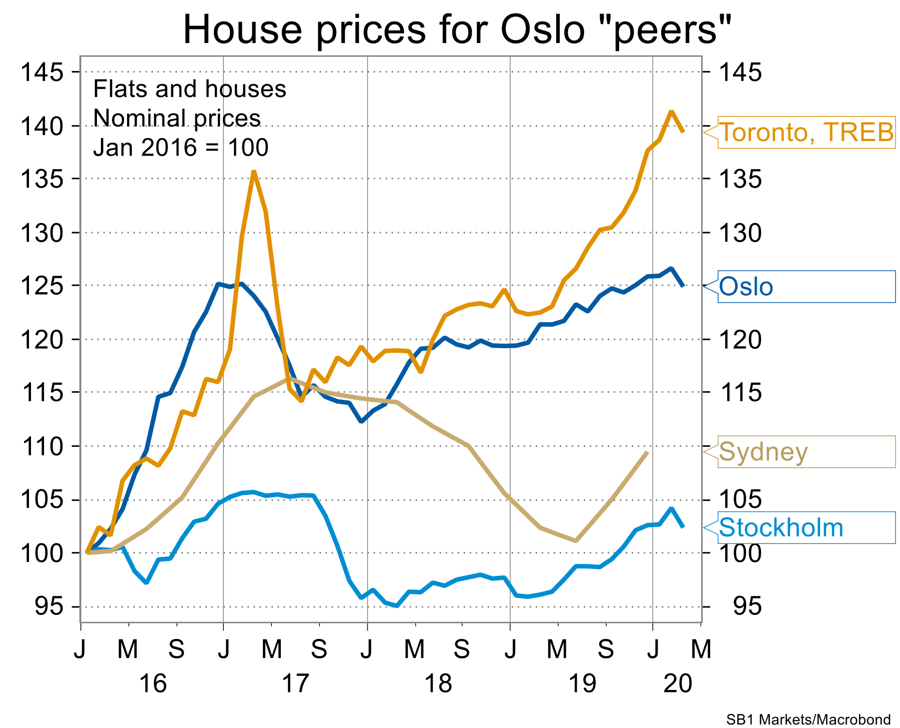


- Prices fell in all the major cities, while the national average was unchanged
- Recent months, Stockholm prices have been increasing at the fastest pace, but they are still at the lowest, vs the 2017 peak level
- The national price level is now marginally above the 2017 peak level, whereas real prices are still significantly lower than at that peak

Supercycle home prices on the way up again (for now)

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





- Price growth have picked up among the supercycle guys the past months. Oslo and Stockholm prices are increasing, Toronto soaring, and Sydney has sharply gained pace since last summer (interest rates have been cut, and lending standards eased)
  - Still, household credit growth is slowing in all these countries, and unemployment rates have flattened out (and unemployment is increasing in Sweden and Australia), the upside on the housing market must be limited
  - New housing market/debt regulations (foreigner buying restrictions, LTV/LTI/mandatory amortisation) – and in Canada higher interest rates – probably created 'some turbulence' in 2017 and 2018, prices slowed or decline in all countries
- **The corona crisis is likely to hamper demand and drag prices down in the short term**, but the impacts are uncertain. Activity in the housing market will no doubt be reduced, both sales and the number of new listed homes will decline rapidly

Highlights

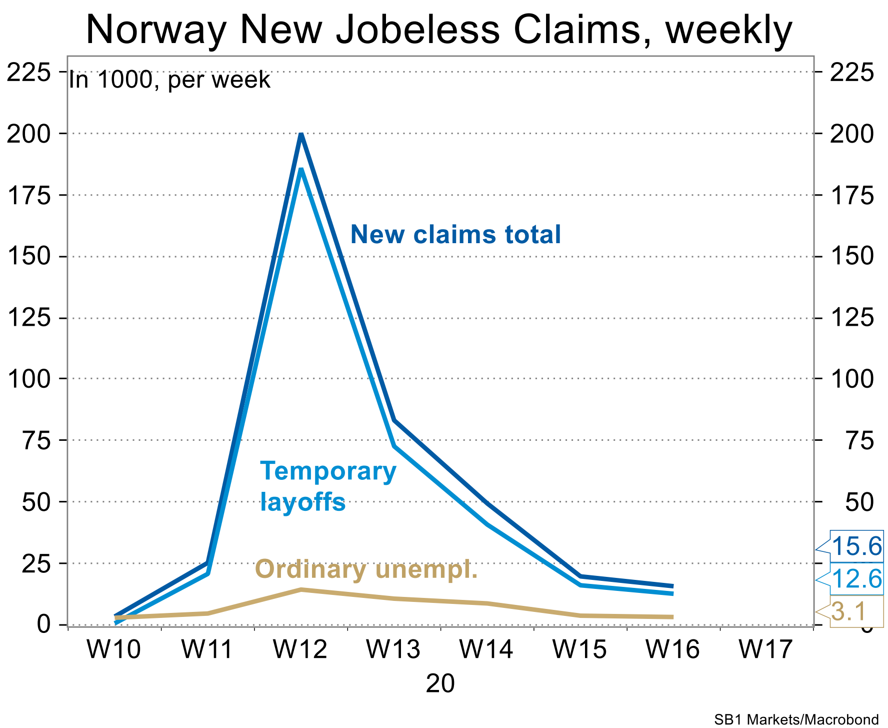
The world around us

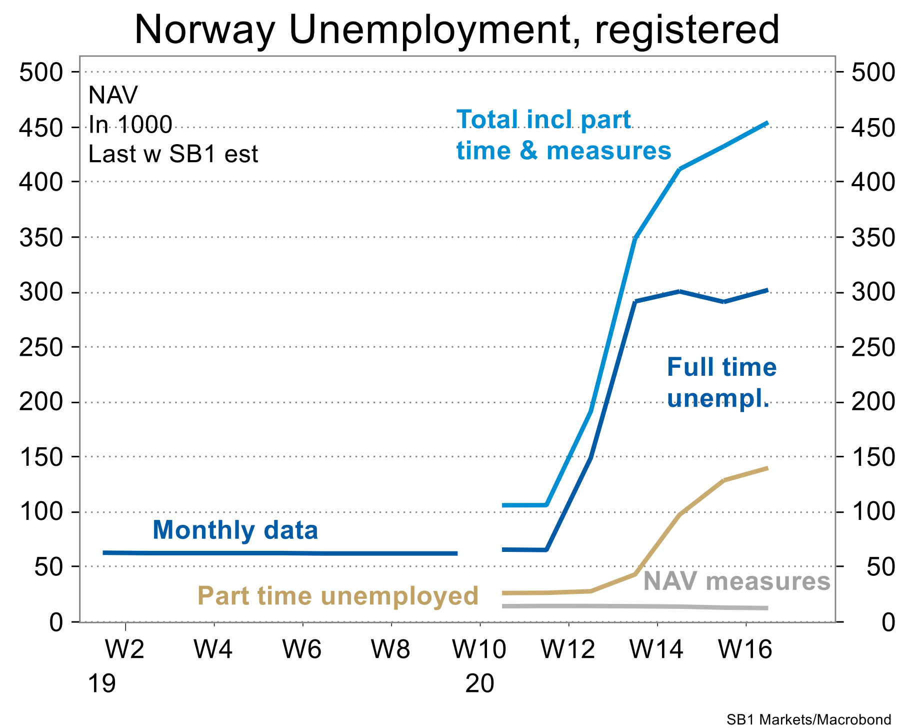
The Norwegian economy

Market charts & comments

Unemployment is still on the way up but at a slower pace

Easter may have influence new jobless claims but the trend is anyway down. Cont. claims further up

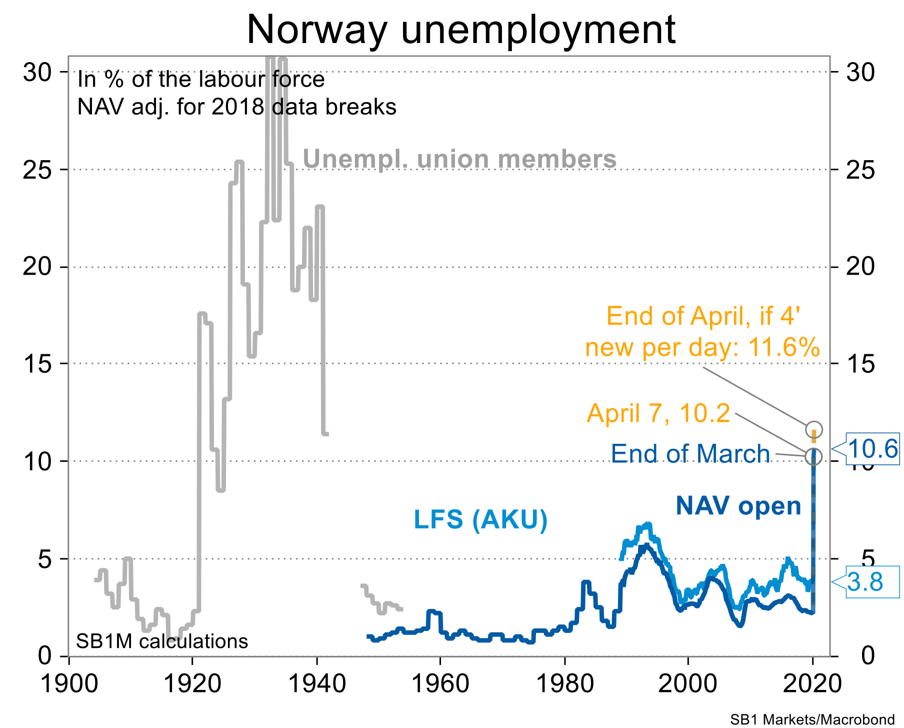


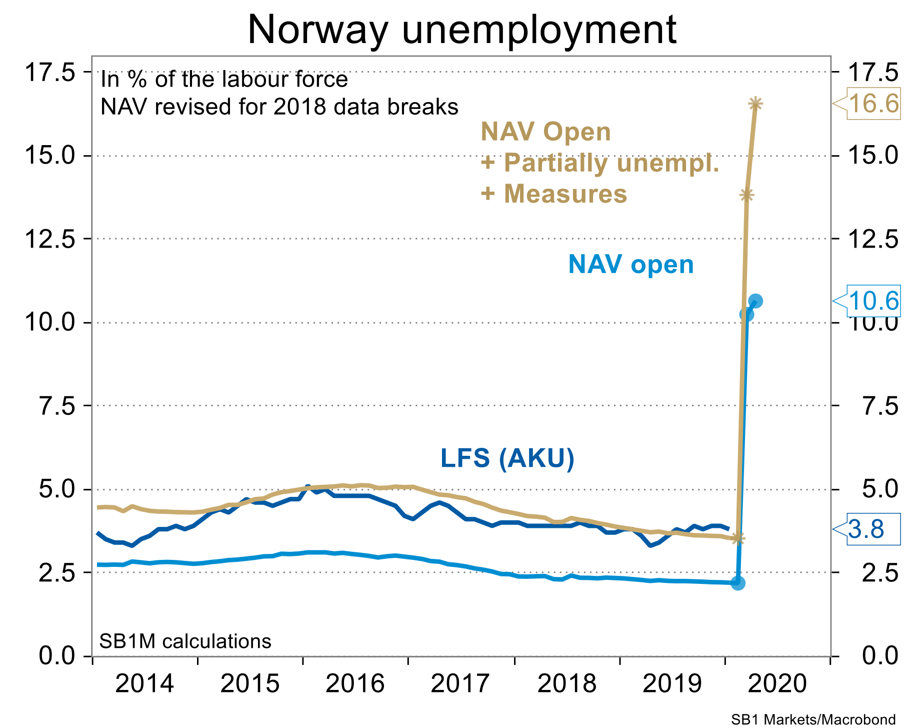


- Weekly new jobless claims fell further last week, to 16' vs the 'normal 3 – 4' per week. Given the long Norwegian Easter holiday, the inflow still is rather brisk. Most of the new claims (80 – 90%) are employees that are on temporary leave
- Total unemployment (full & part time) probably rose to close to 450' persons last week, equalling 16% of the labour force

NAV unemployment is approaching

Open unempl. soared to 300' persons in March - and 412' incl. partially unempl. and measures

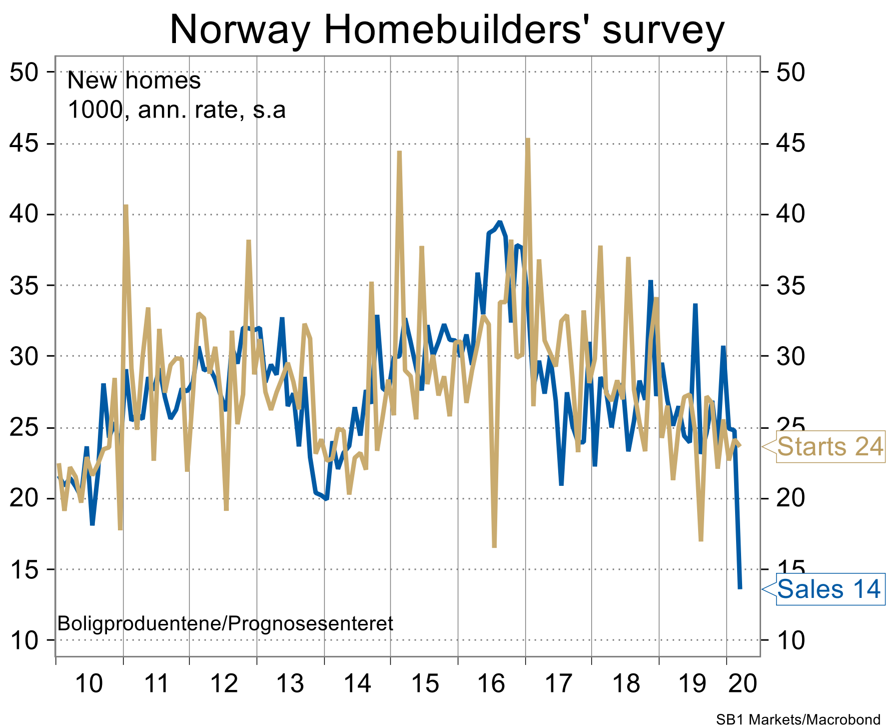


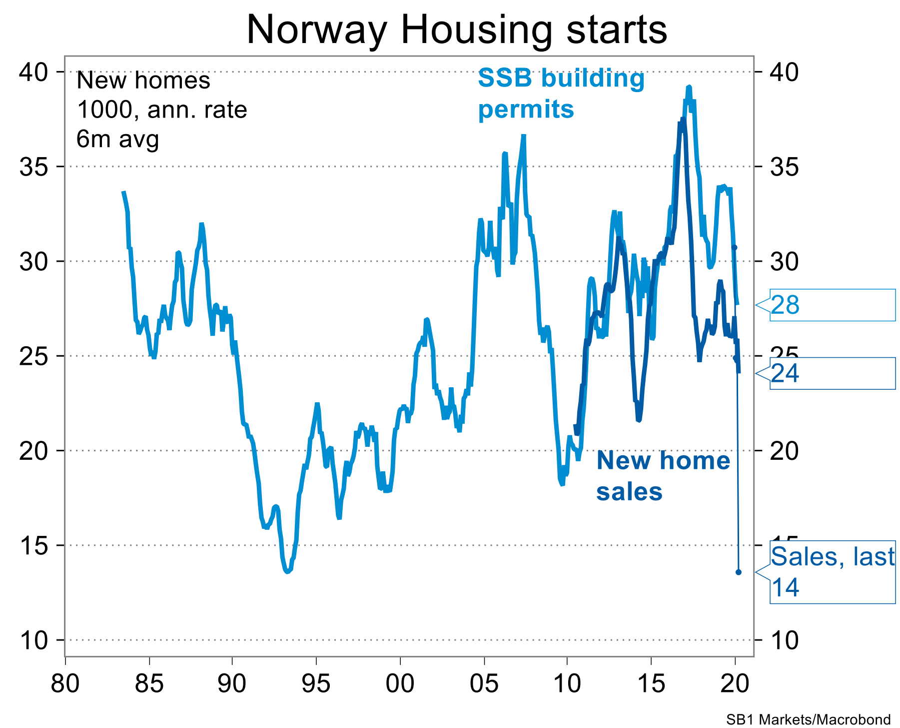


- NAV open unemployment soared by 240' persons in March from February, to 300'. The open unemployment rate rose to 10.2%, something we have not seen since the 30'ies (if we adjust the union members' unemployment rate to a total unemployment rate)
  - » The March outcome was actually somewhat lower than we estimated, as approx. 30' changed status to partially unemployed from total unemployed
  - » Since March 30, when these data were collected, NAV has received almost 30 000 new unemployment registrations, thus, the unempl. rate is already approx. 1 pp higher, at above 11%
- Including government measures and partially unempl., the number of unempl. is 412', equalling 14.3% of the labour force
- Unemployment will continue to climb the coming weeks, although the daily number of slowed to 8' per day last week, from 15' the prior week. We expect the open unemployment rate to climb to 14% in April and possibly towards 20%, the the 'lockdown' cont.

Homebuilders reports a sharp decline in new home sales in March

Sales fell 44% to March from February, to 14’ (ann rate), the lowest ever (but data just since 2020)

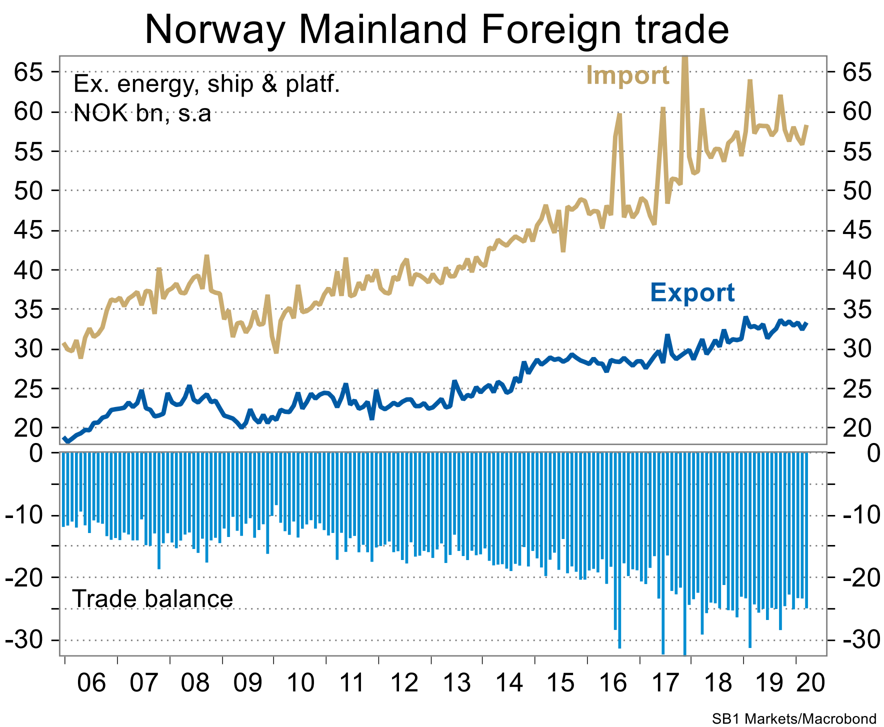


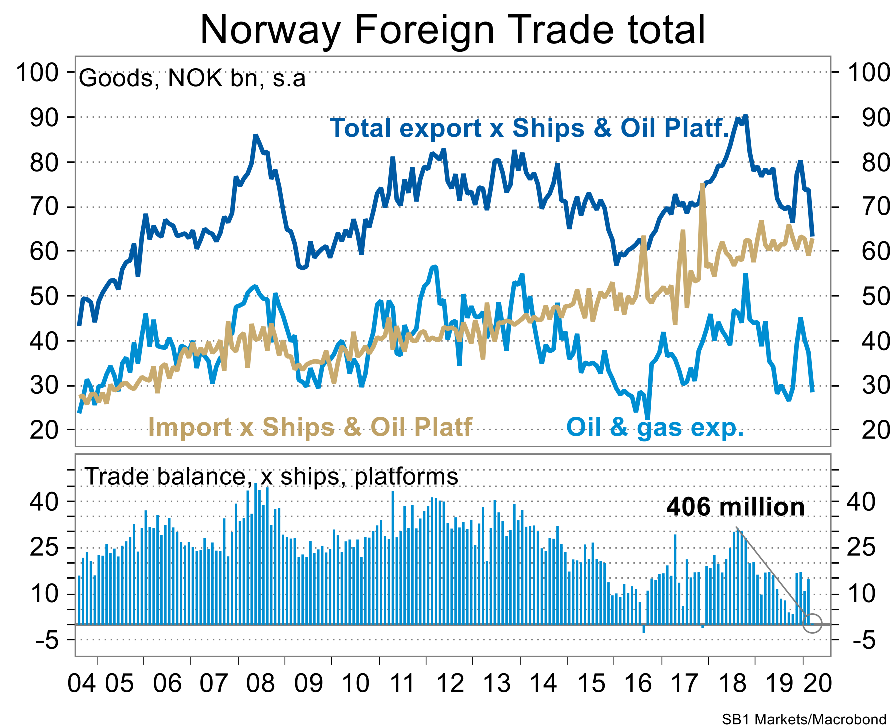


- Sales were probably not that slow in the first two weeks of March, and we assume the second half of the month, explains the downturn. If so, not many homes were sold in the 2nd part of the month. We doubt April was much better
  - The 14’ sales pace in March is the lowest in the Homebuilders’ survey 10 y history, and – face value – signals the housing starts qual to the bottom following the Norwegian housing and bank crisis 30 years ago
- Two bad weeks does not make a housing recession. Not two months either, not even two quarters. However, there a good reasons to take care. The downside is substantial
  - Housing starts have retreated from the 50+ year peak in 2017 but at close to 30’ at an annual rate, the level remains at a rather high level, both vs Norwegian standards and even more compared to most other countries (with Australia, Canada and Sweden, of course)
  - Population growth has slowed to a trickle, no real hourly wage income growth over the past years.
  - Debt inflation has been well above income growth until one year ago, and the debt level is high

Mainland exports and imports kept well up in March, at least in a weak NOK

Both legs rose, imports the most and the Mainland deficit rose marginally, to NOK 25 bn

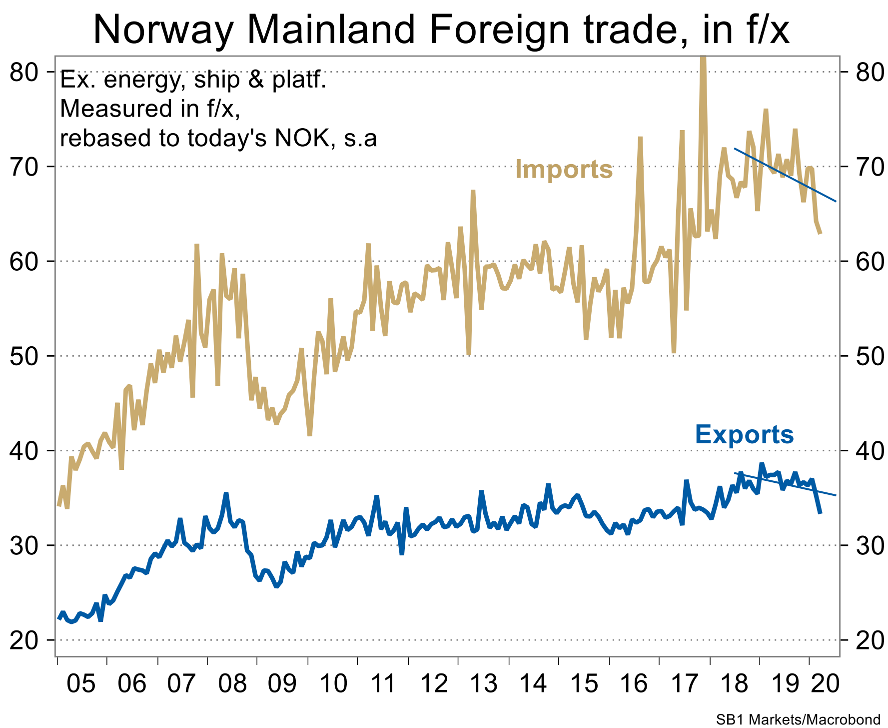


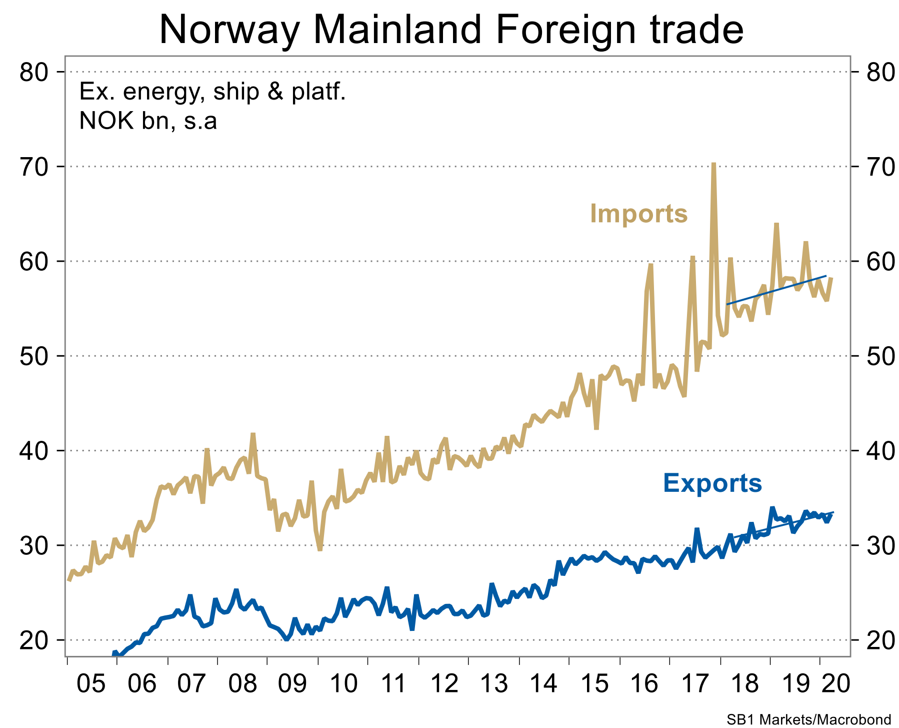


- Oil & gas exports fell by NOK 12 bn to 26 bn March, for good (price) reasons, down. The overall trade surplus fell almost to zero. Just two months have been weaker over the past decades, in 2016 and 2017 where the oil price also were very low

In f/x, both exports and imports are heading down

The NOK depreciation has lifted trade values in NOK, but not in f/x

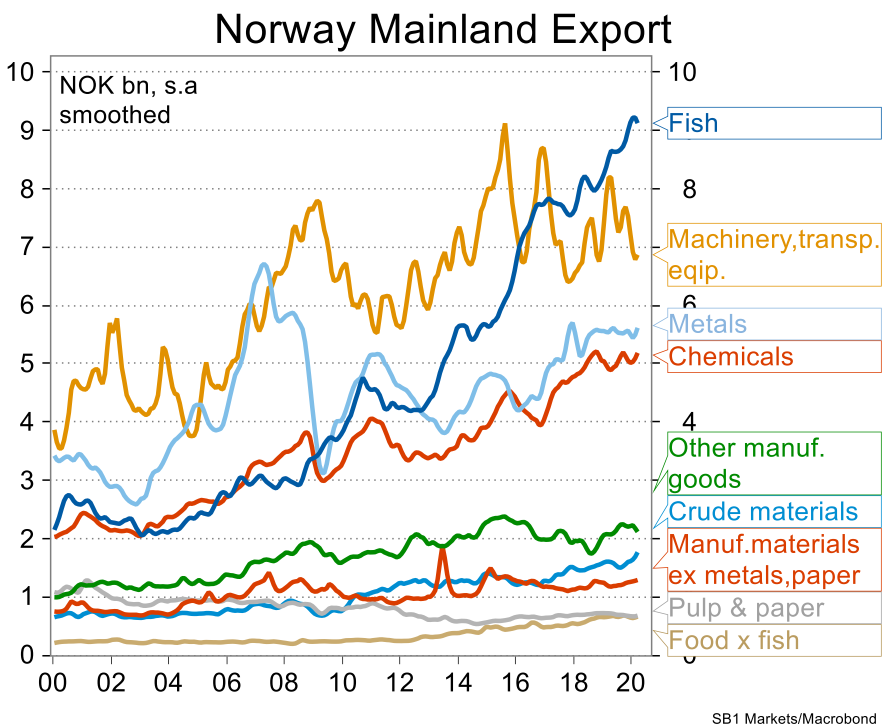


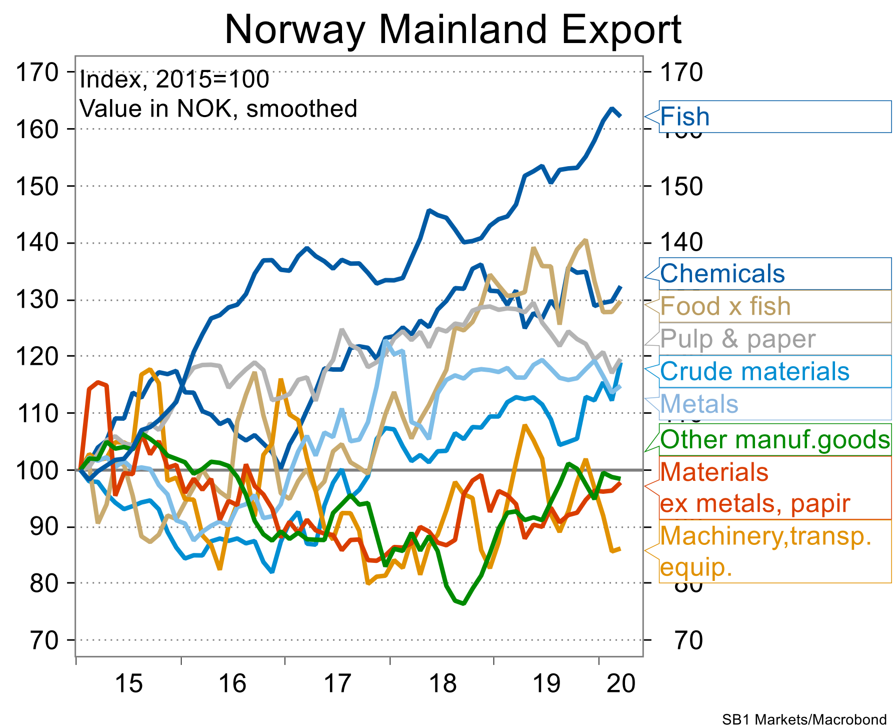


- At the chart to the left, trade values are rebased to today's NOK I-44 index. To the right, trade figures in NOK

Exports of fish are soaring, machinery & transport equipm. down

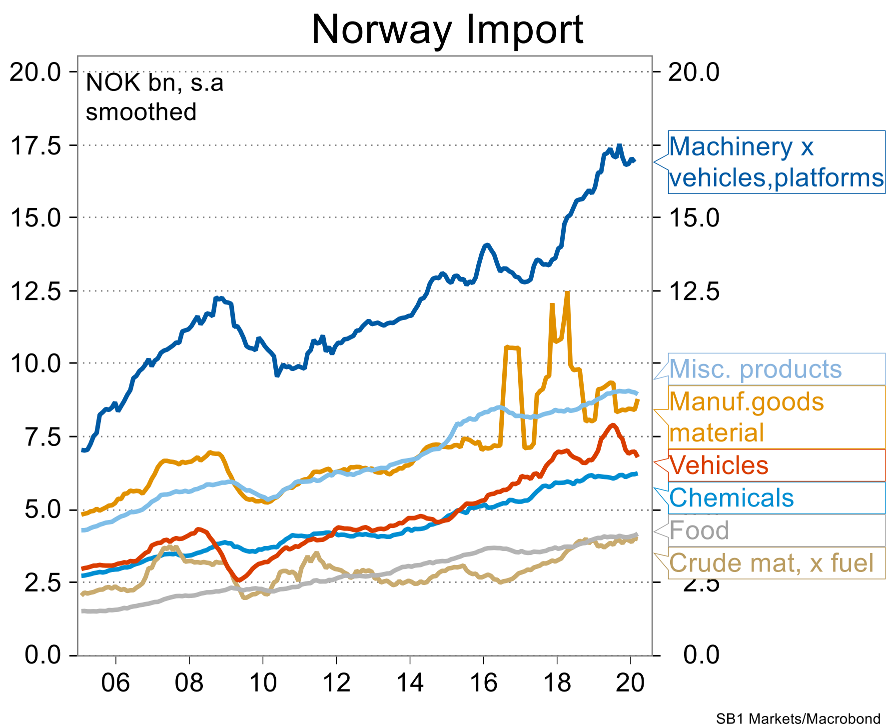
Except from fish and manufacturing goods, most other sectors have been slowing

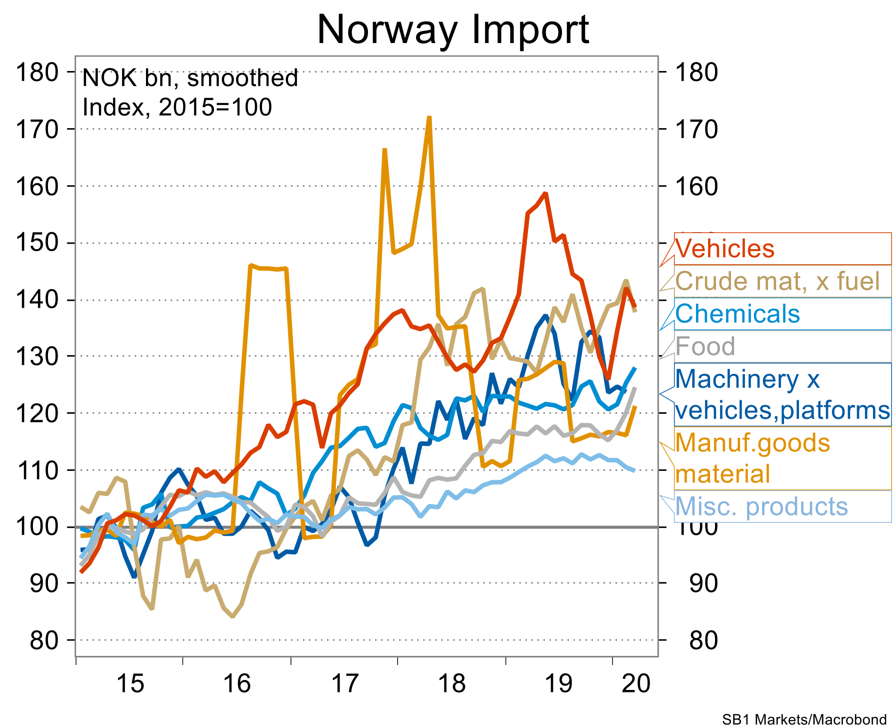




- Fish exports have been soaring both in value and volume recent years
- Exports of machinery and transport equipment (of which much is related to oil activities abroad) have fallen rapidly the past months, these are highly volatile. Exports of chemicals, metals and food x fish have flattened out the past year. Crude materials picking up. Manufacturing materials ex metals & paper are heading slowly up

Imports of machinery equipment probably at peak, most others are stalling

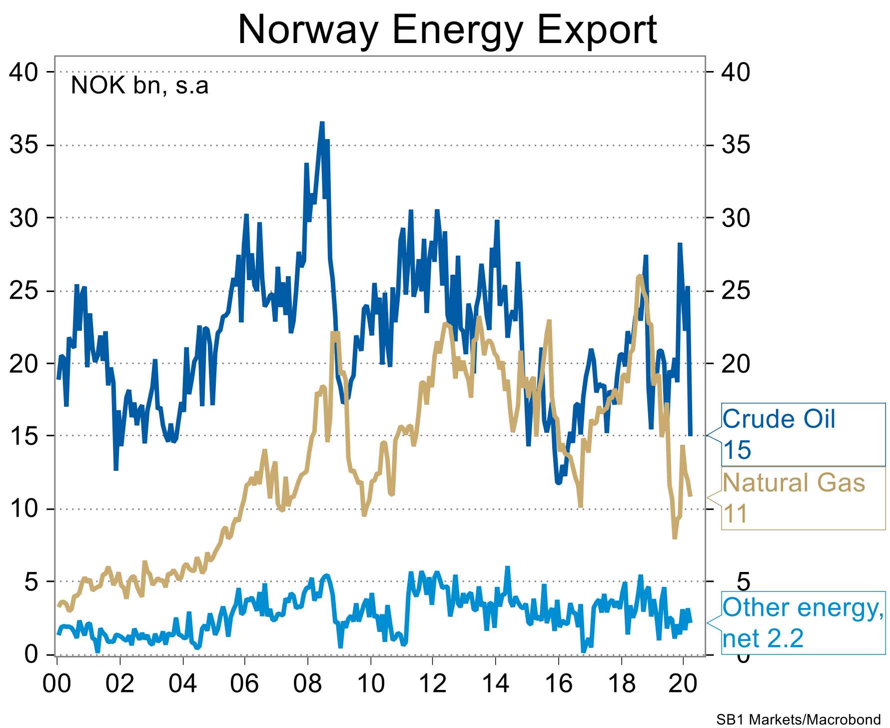


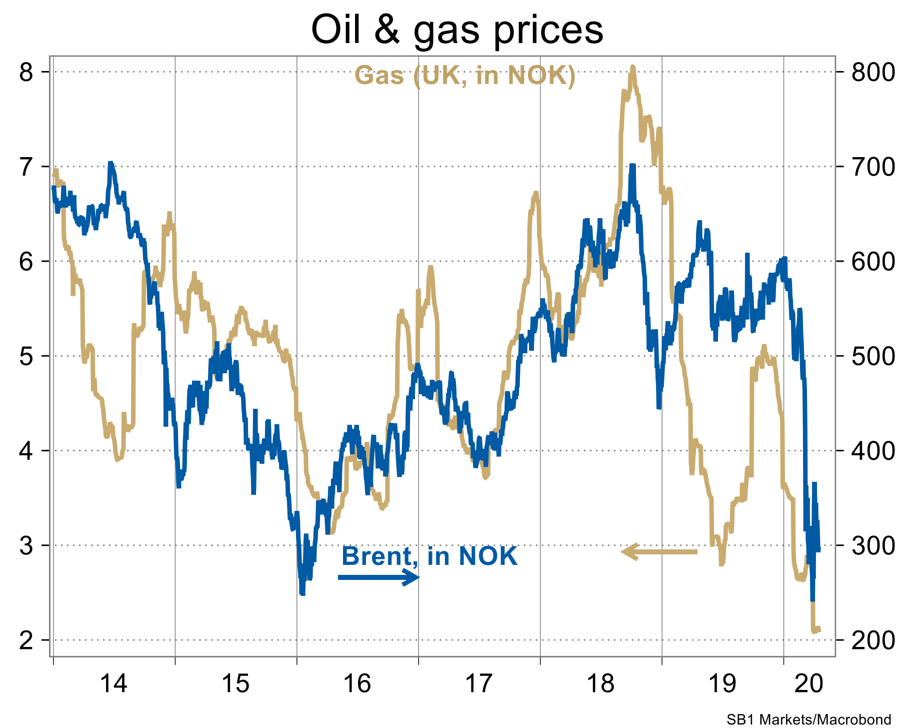


- Imports of crude materials are still expanding. Manufacturing materials have slowed the past couple of years but may now be trending up, these data are ridiculously volatile, due to some massive transactions of oil platforms, wind mills and combat airplanes
- Most other sectors have slowed or flattened out
- Vehicle imports slowed rapidly in H2 2019, along with auto sales. Since December, imports have picked up, both in tons and in NOK. A signal of a recovery in auto sales, which have slowed rapidly since last summer? Unfortunately, imports are not leading on sales, and it might as well be due to a larger share of electrical cars (which are heavier, and more expensive)

SpareBank 1 MARKETS

Oil & gas prices sharply down in March. As was Norwegian export values



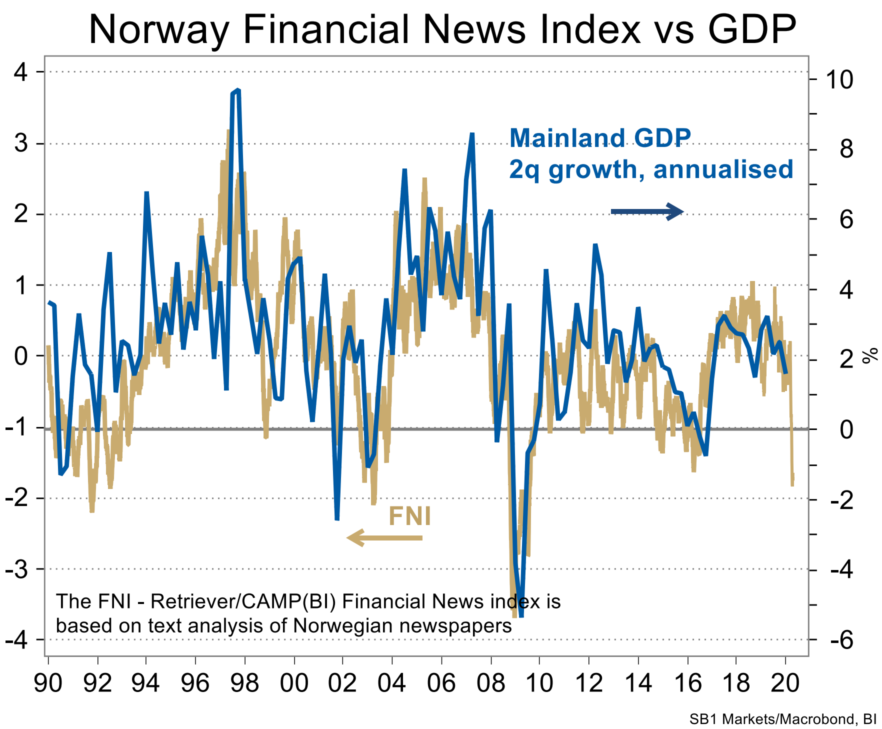


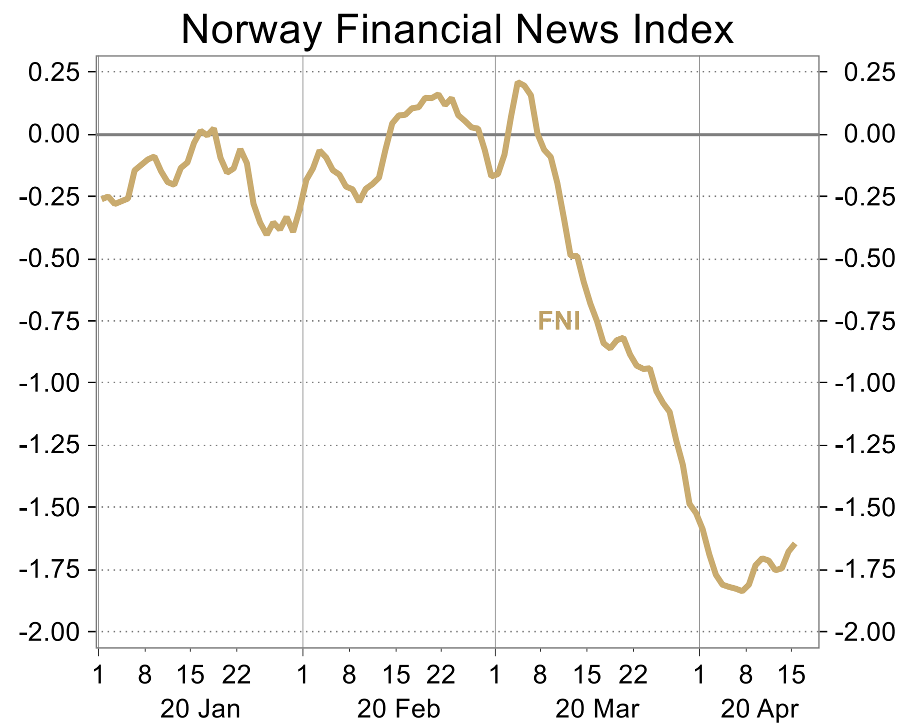
- **Crude oil** exports (in NOK bn) fell by NOK 11 bn to 15 bn in March
- **Gas** export values fell by NOK 1 bn NOK 11 bn

SpareBank 1 MARKETS

The Financial News Index has stabilised, at levels that are not that low. Strange

The FNI has fallen on Covid-19, we are surprised the decline has not been much steeper





- The FNI tracks media reports on the economy. March, the corona epidemic and the economic impacts sent the index steeply down, to the lowest level since 2016. Given the magnitude of the crisis and the economic impacts in Norway and globally, the index should have fallen much more. It is possible that this index is more useful vs 'normal' cycles in the economy, and not for shocks like this – which is not that surprising
- The level signals a moderate decline in GDP, we expect a much steeper decline

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

Highlights

The world around us

The Norwegian economy

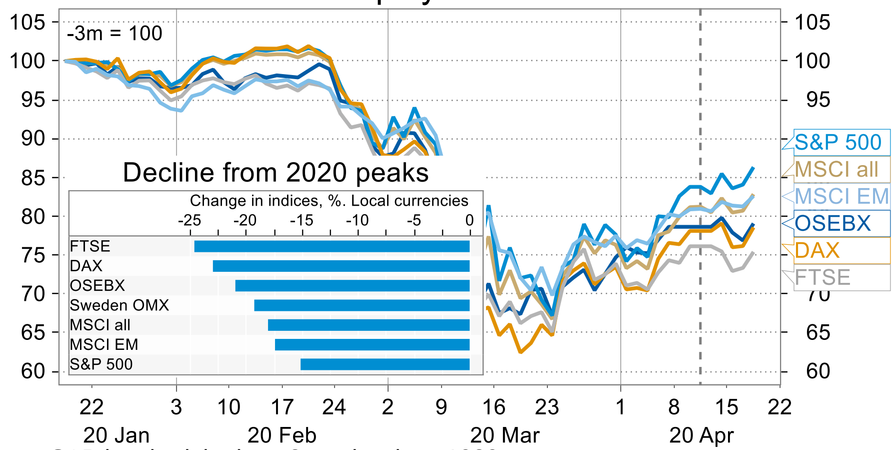
Market charts & comments

SpareBank 1 MARKETS

Most stock markets up, still bond yields down. Oil < 30 again but metals up

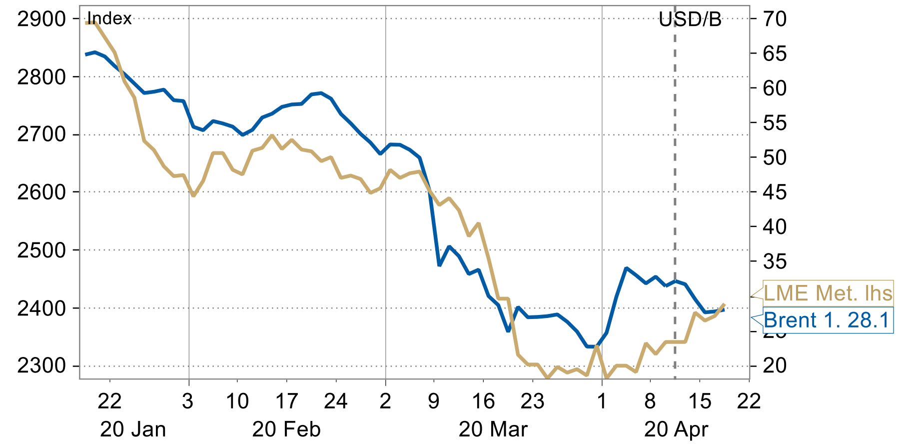
S&P up 12.1%, best since ‘74. Fed, EU, UK announced more stimulus packages. Oil flattish after cut deal

Equity Indices



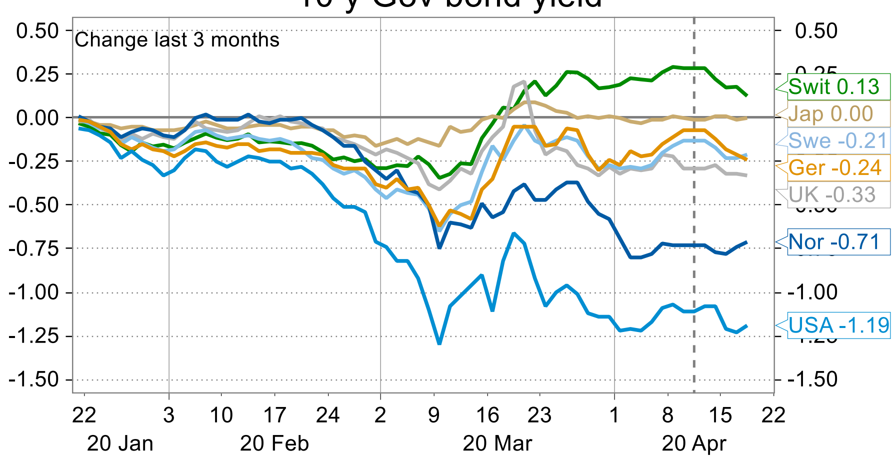
S&P has had the best 2 weeks since 1939

Oil vs. metals



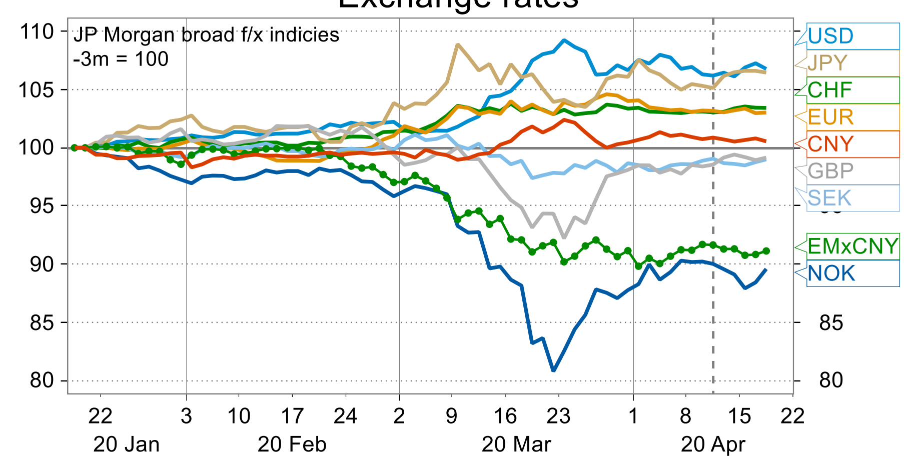
Well, the Opex+++ deal was not sufficient to keep the price above USD 30

10 y Gov bond yield



Bond yields down, has been trending flat in April

Exchange rates

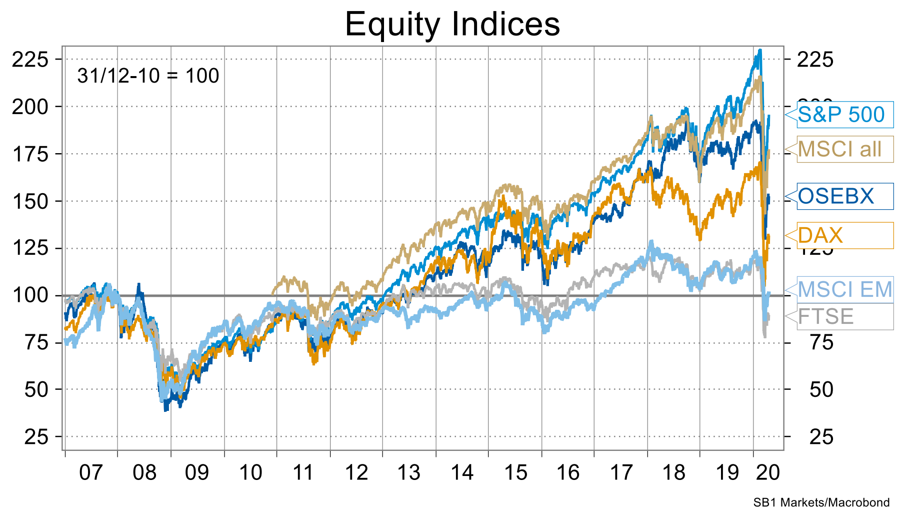


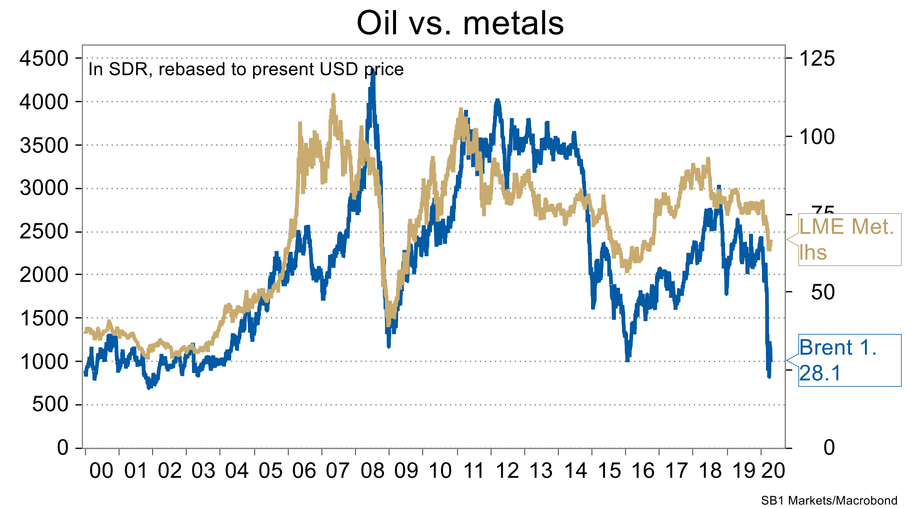
NOK marginally down

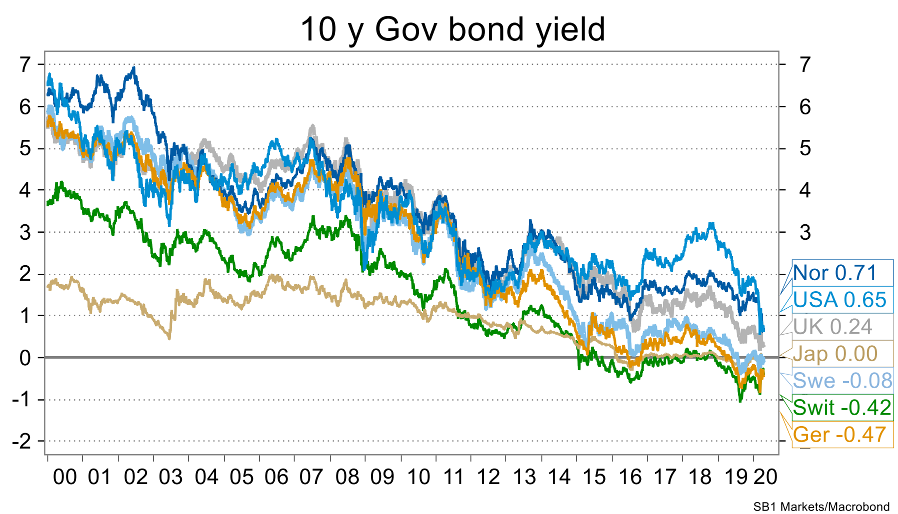
SpareBank 1 MARKETS

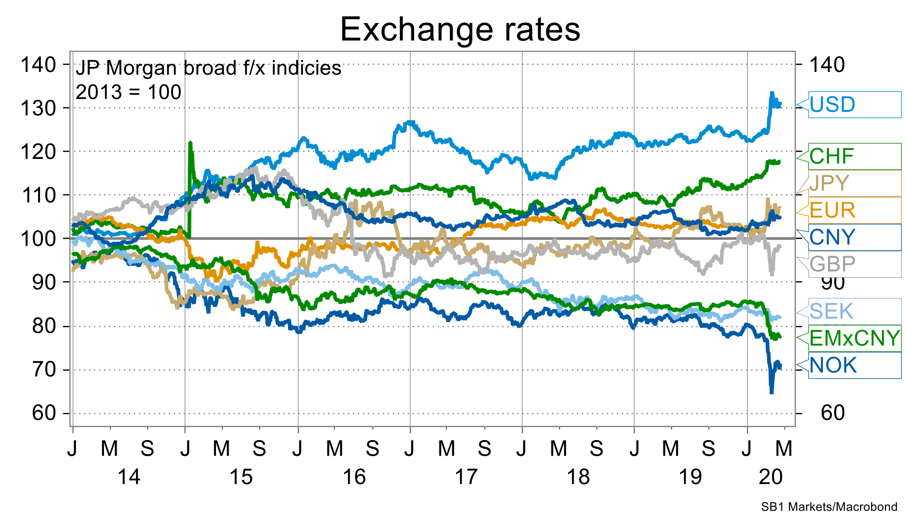
In the long run: Stock markets are looking like a 'V'

… because investors are looking for a 'V'-shaped corona recovery?



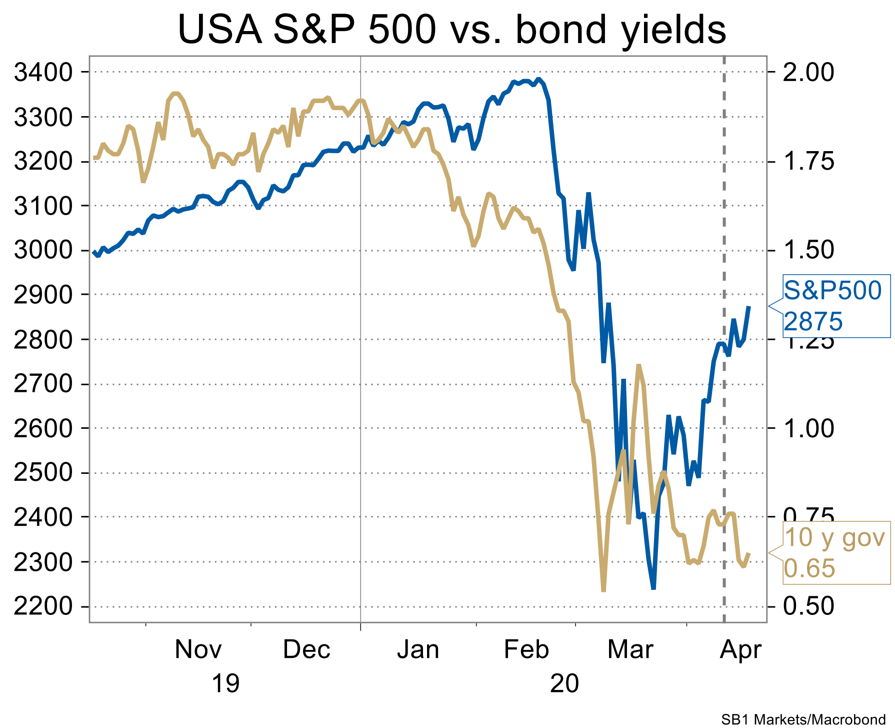


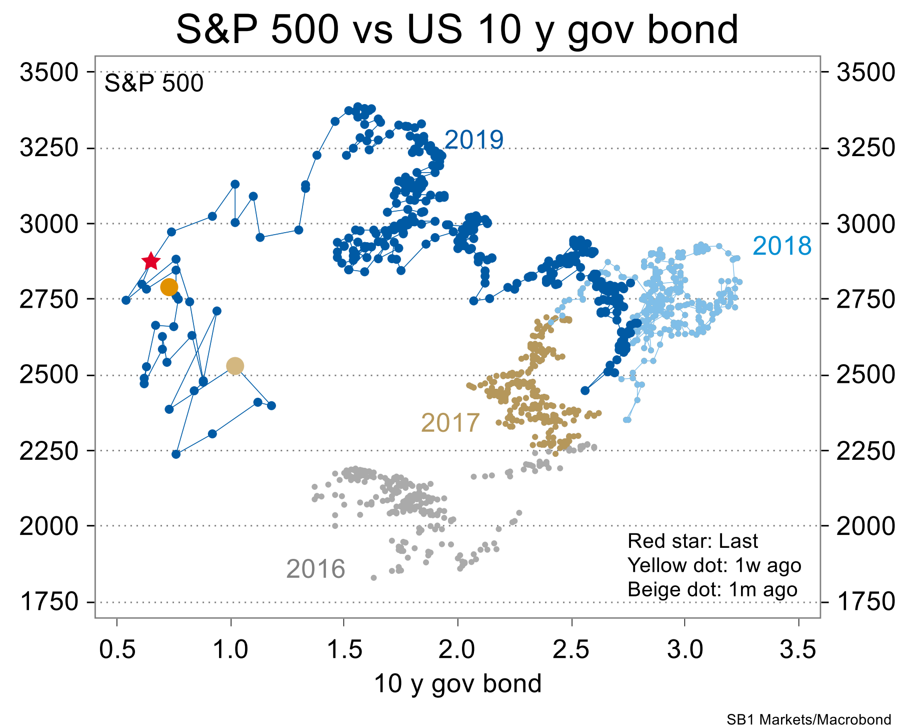




S&P further up the best 2 week run since 1939. Still, bond yields down

S&P up 3% last week (28% from the bottom, >½ of the corona decline!). Bond yields down 8 bps

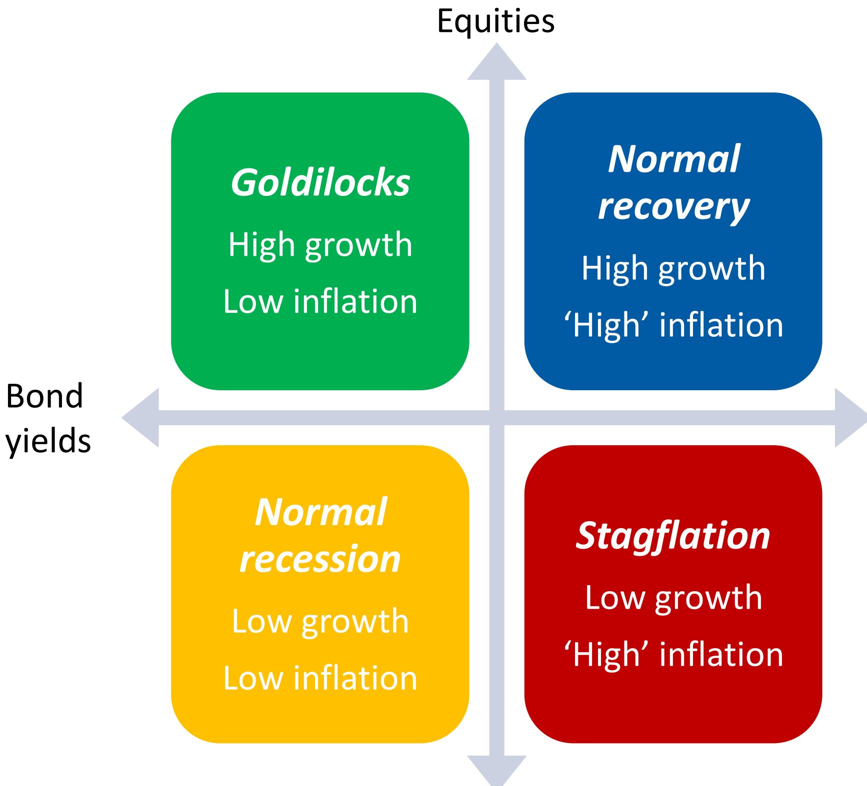


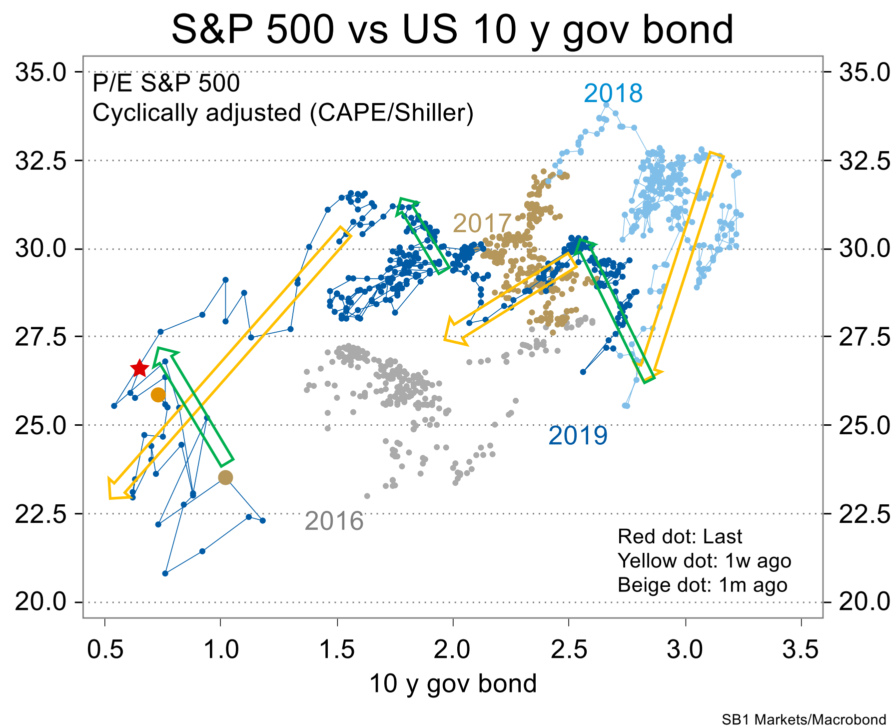


- The previous week was the since 1974 for S&P 500 - and including the uptick last week, the best 2 week period since 1939. Oops, you said 39?
- The main reason for the decline in yields is probably mostly due to the aggressive QE conducted by the Fed – and other central banks

Markets were on the way to the recession corner, for good reasons…

Now, stock markets have recovered >½ of the losses, yields are just slightly above the bottom levels

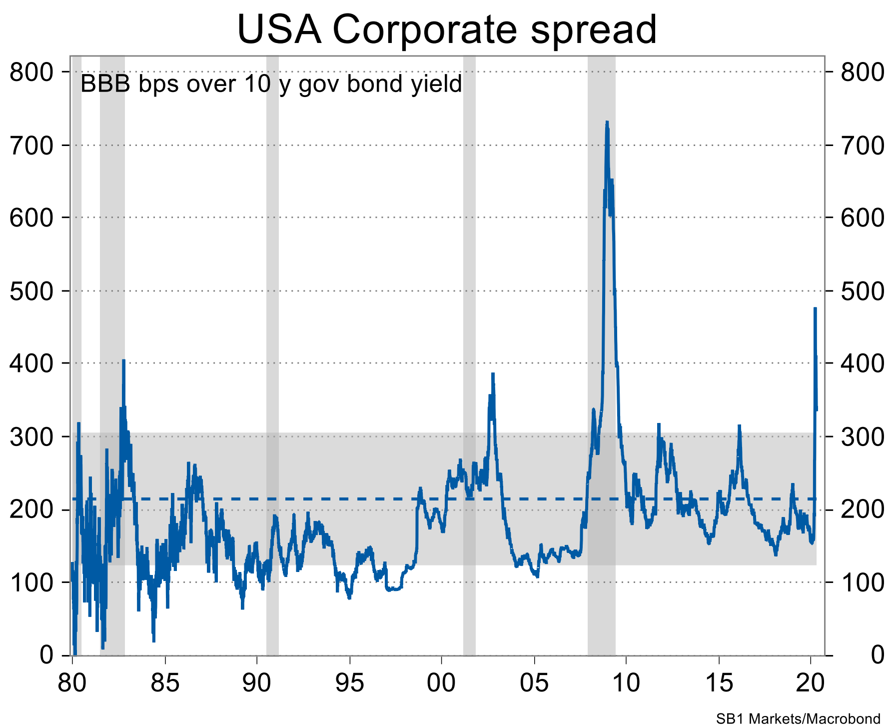


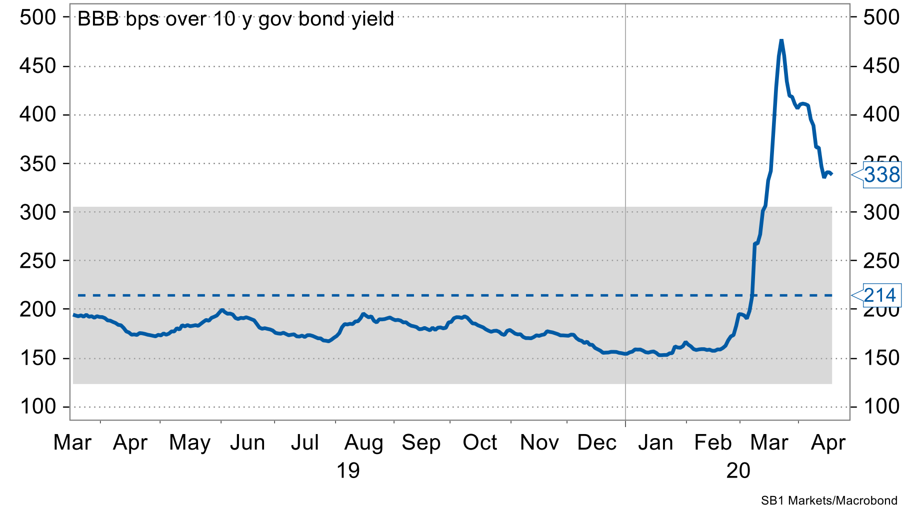


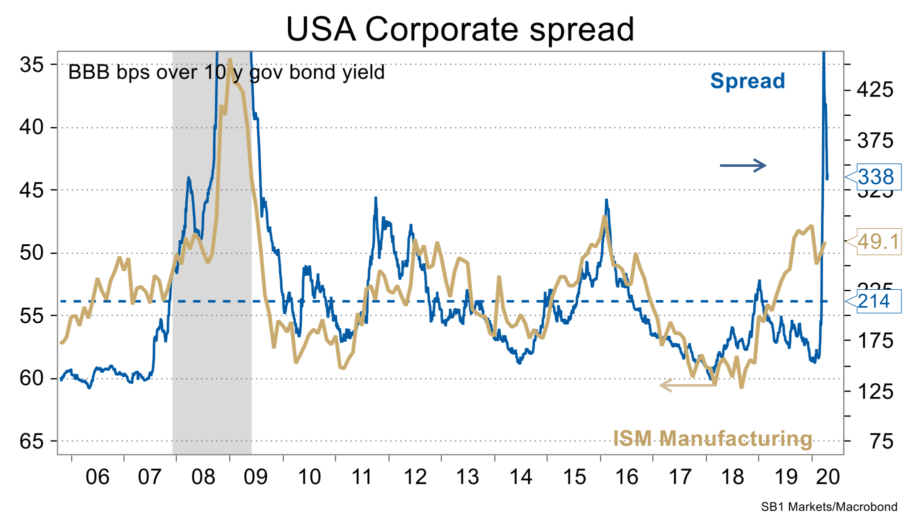
- For most of 2019, markets were zig-zagging along with news on the trade war, most of the time along the 'normal recession/recovery' axis. In mid-January, coronavirus outbreak sent markets steeply down, towards the 'normal recession' corner. The downturn accelerated in March as the Covid-19 pandemic is spreading and countries have been initiating lockdowns
- Draconic policy measures and peaking/declining death rates has contributed to the change in mood

Spreads have flattened following the huge (Fed inspired) narrowing

The US BBB spread has fallen by 140 bps bps, and is >50% on its way back to an average level



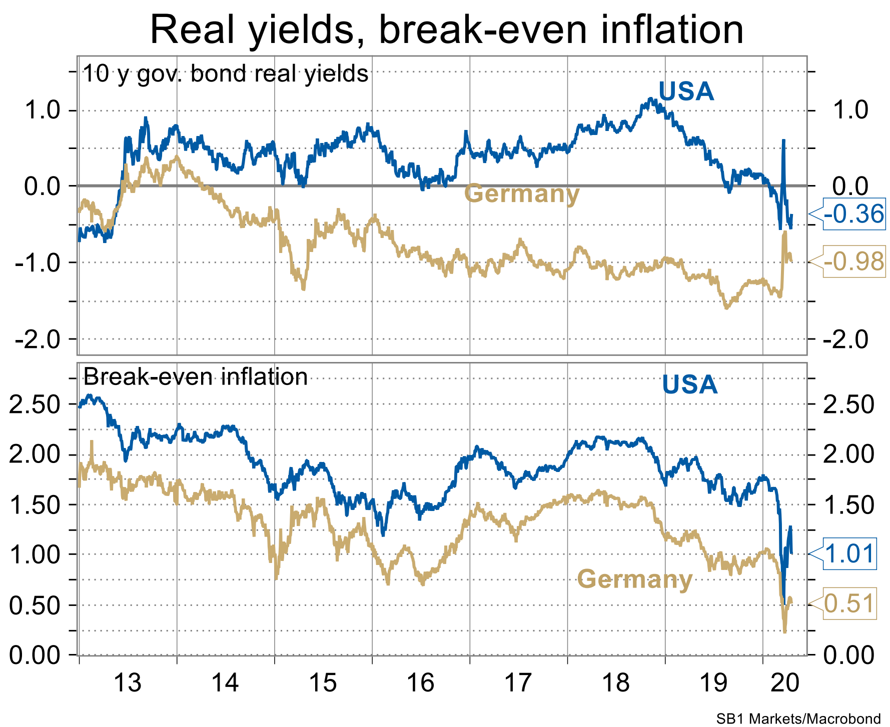


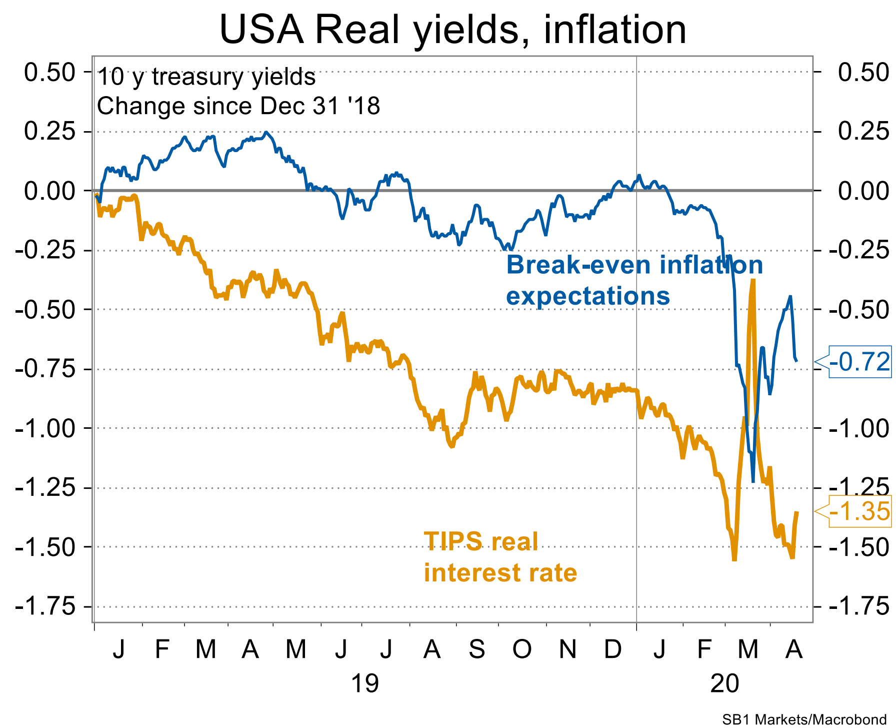


- Fed announced a set of new measures at before Easter, including more capacity to buy corporate bonds, including high yield bonds (for the first time ever) – and credit spreads fell sharply for all sorts of credits

US real rates down, to low levels; inflation expectations up but still low

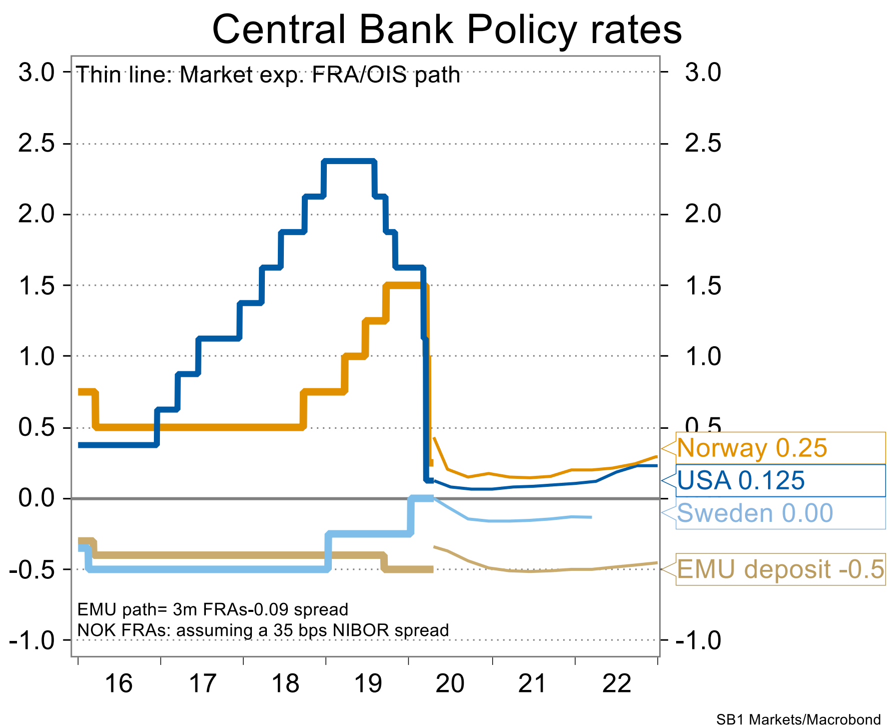
US real rates down to -0.50%, Germany still higher than pre corona, and not on growth expectations!

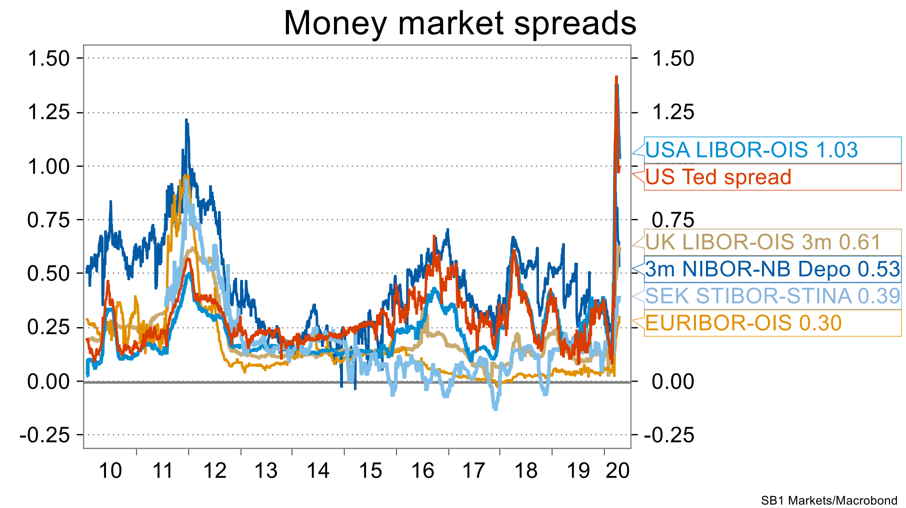


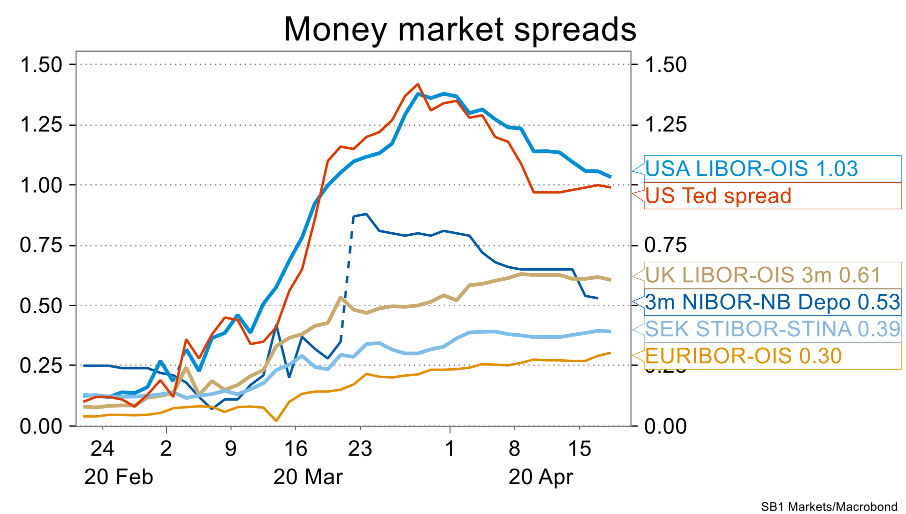


- US real rates have fallen back to a 'normal' level the 10y at -0.36%. Fed's massive stimulus of asset purchases, swap lines etc. must have helped. The German real rate at -0.98% is still 50 bps higher than before corona hit Europe. We highly doubt this reflects any improvement in growth expectations
- Inflation expectations are recovering after the 'collapse' but are still very low, particularly in Germany. Inflation exp. are usually moving in once again in tandem with the oil price

Central bank rates on hold, USD & NOK money market spreads are narrowing



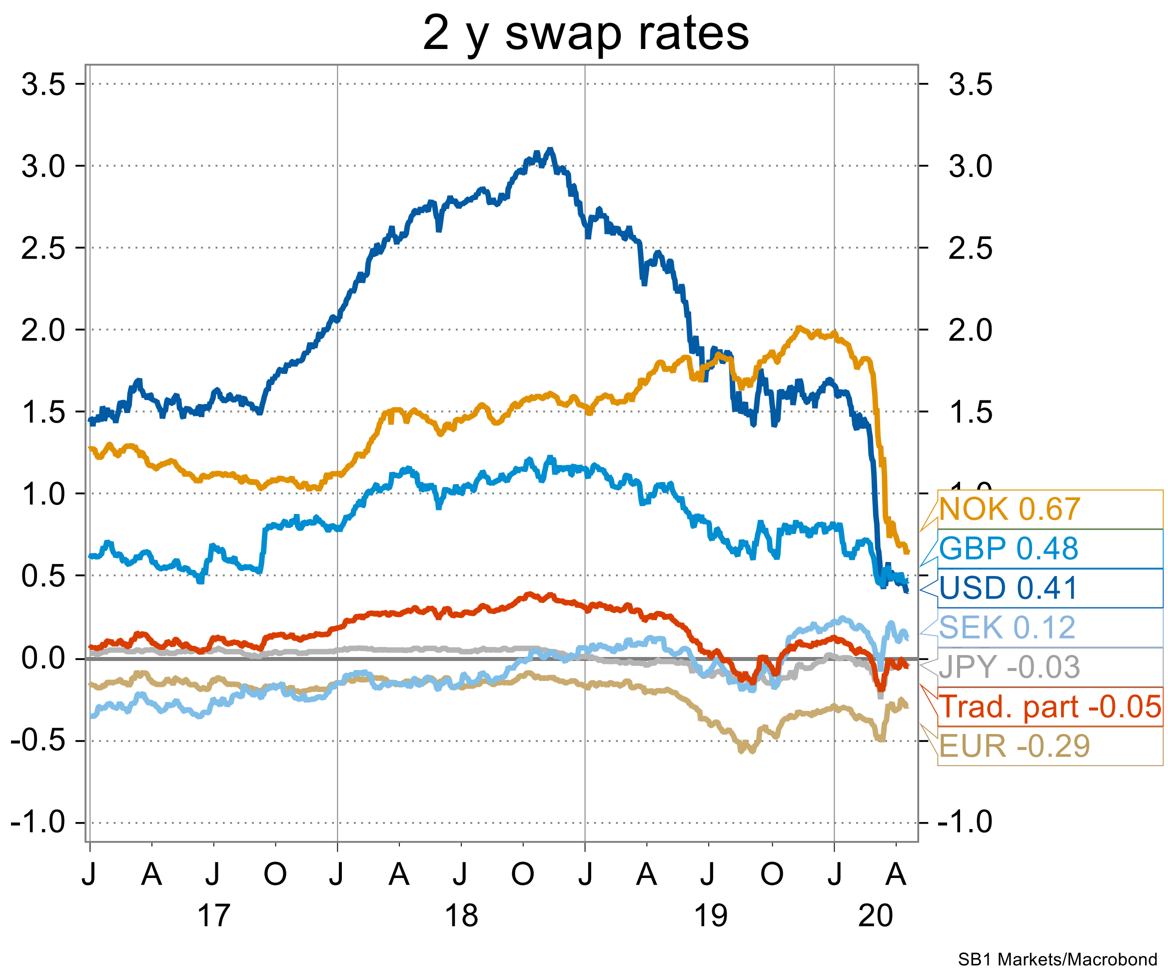


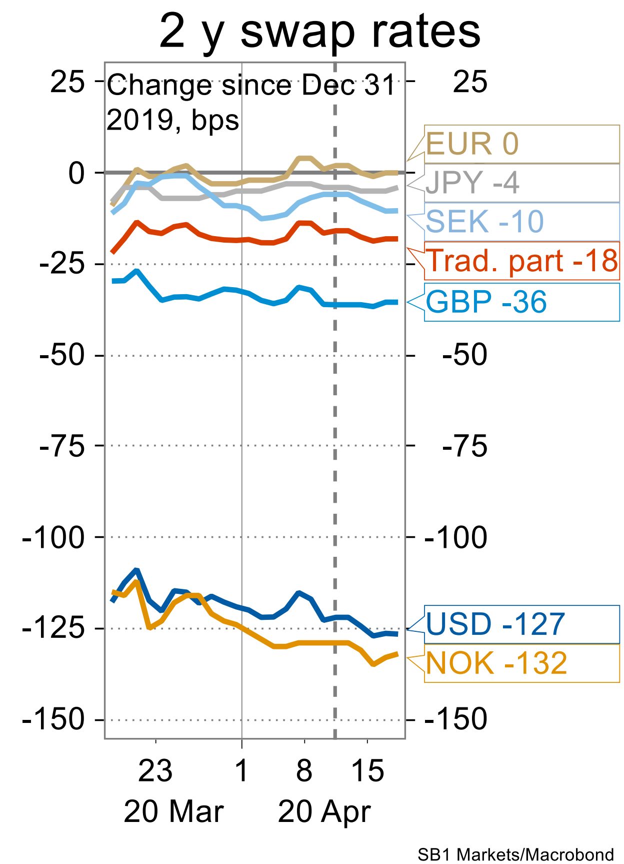


- However, spreads still low in Europe, compared to the US

Short term swap rates slightly down last week – have probably bottomed

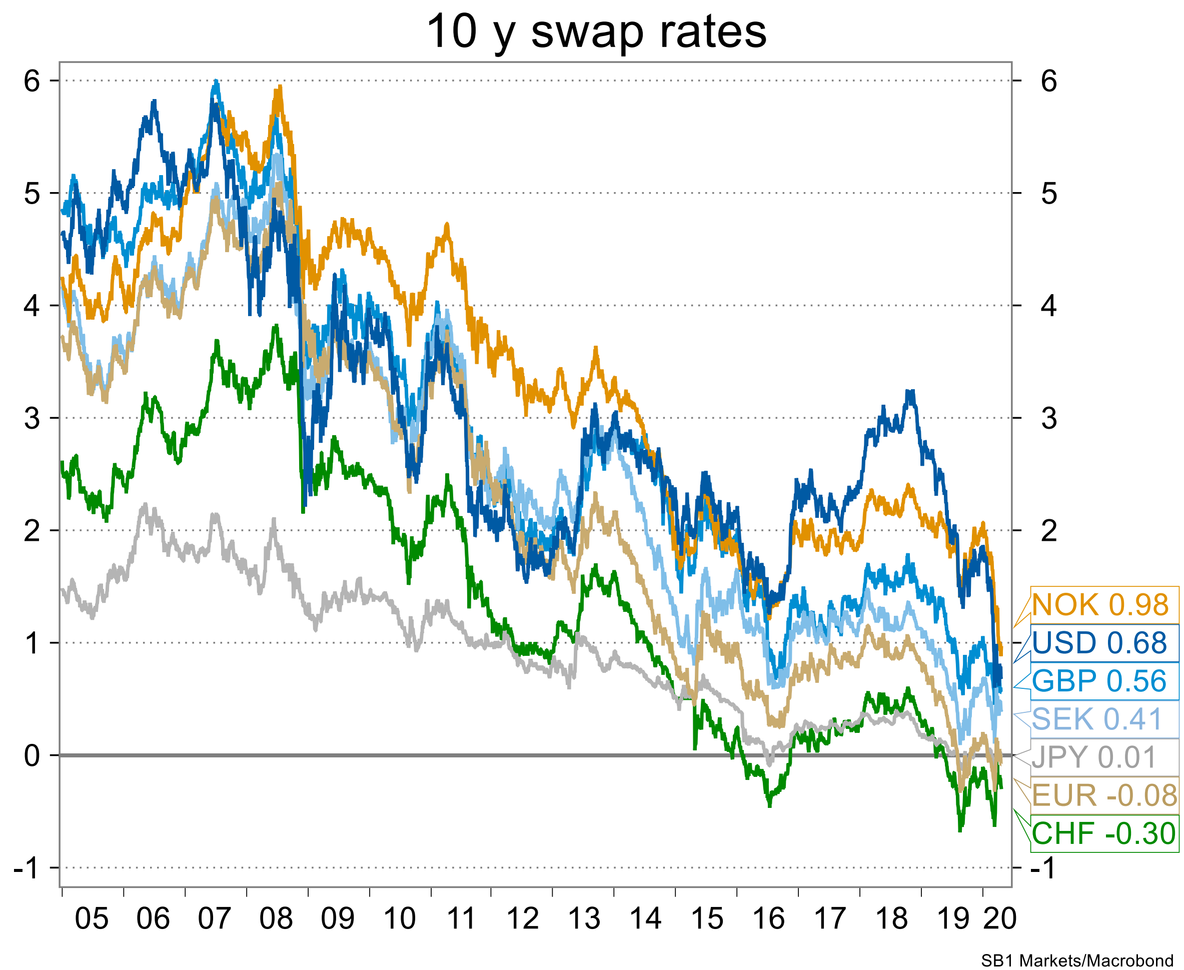
NOK and US rates have fallen much more than others through the corona crisis

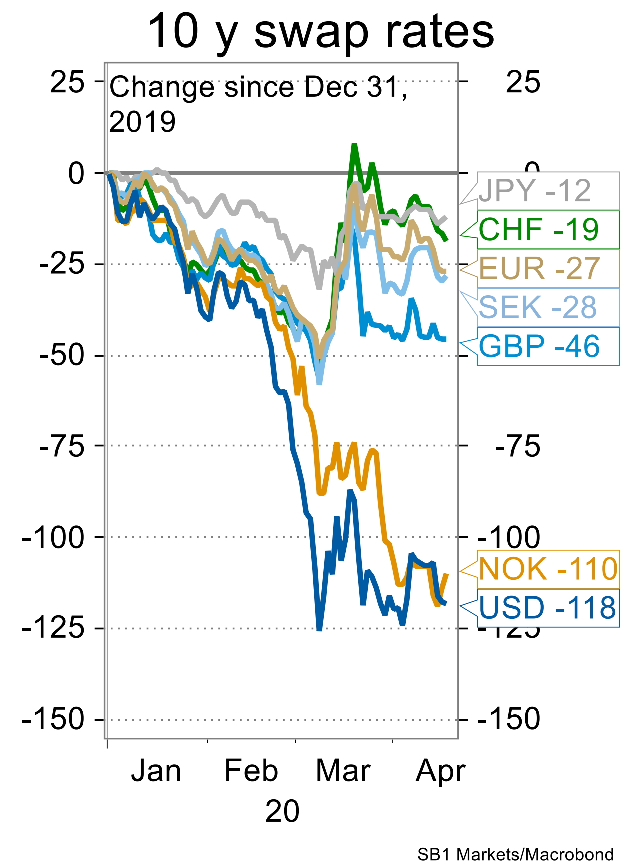




SpareBank 1 MARKETS

Long term swap rates slightly down last week



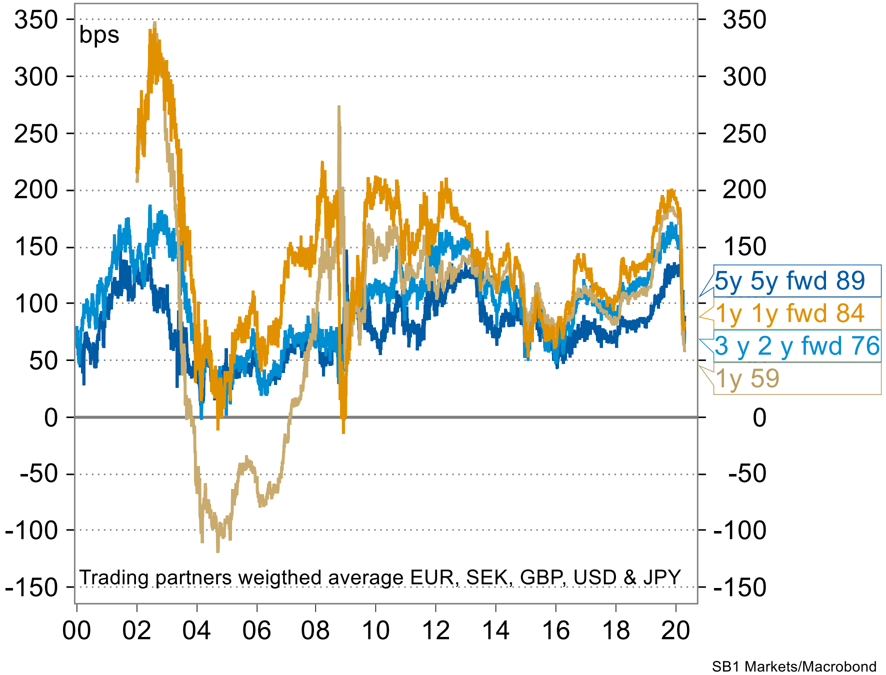


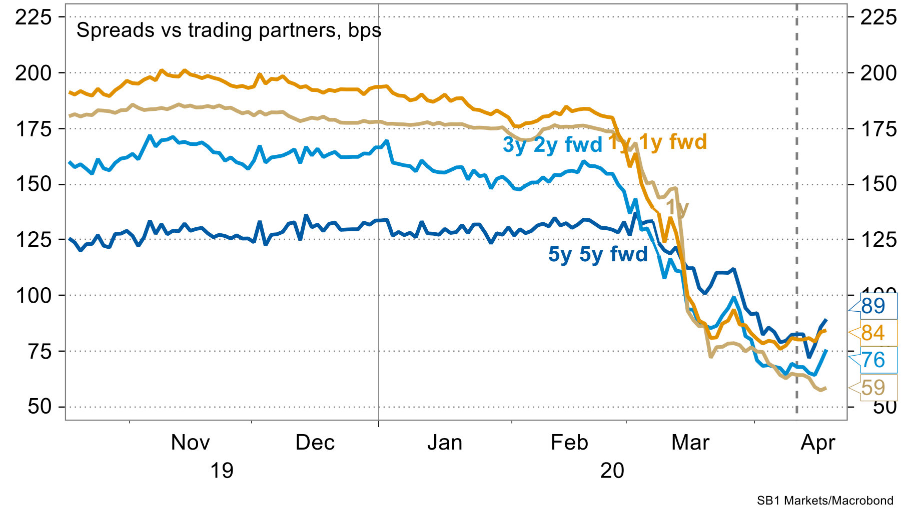
SpareBank 1 MARKETS

NOK swap spreads marginally out, after a huge decline

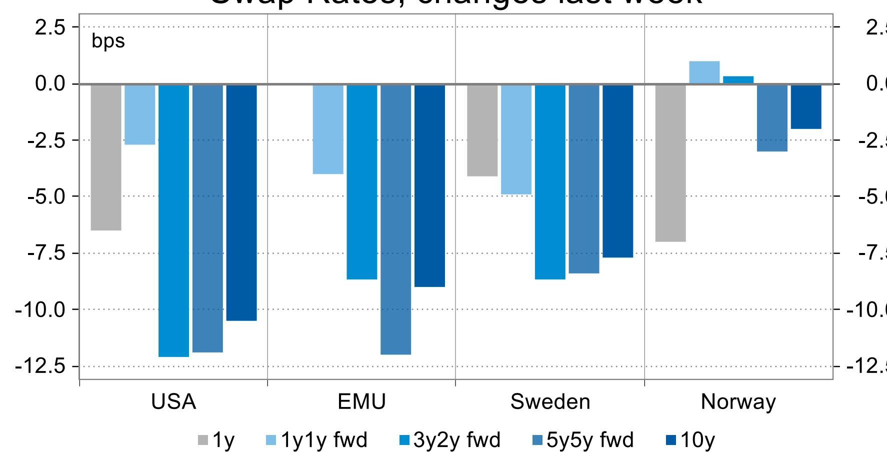
We think the upside risk for spreads are smaller than the potential for a decline

Norway vs trading partners, impl swap spreads





Swap Rates, changes last week

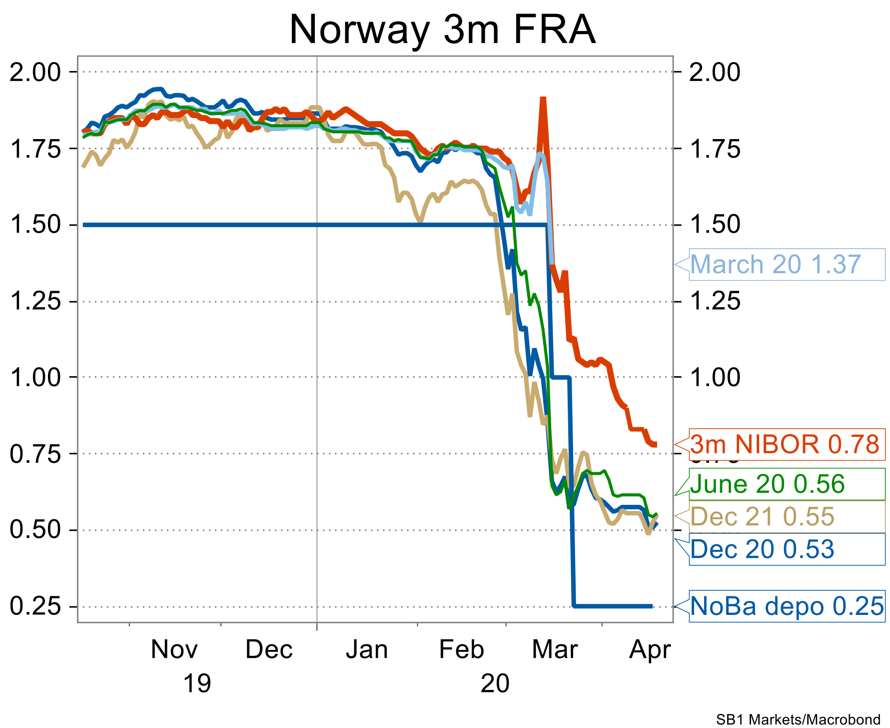


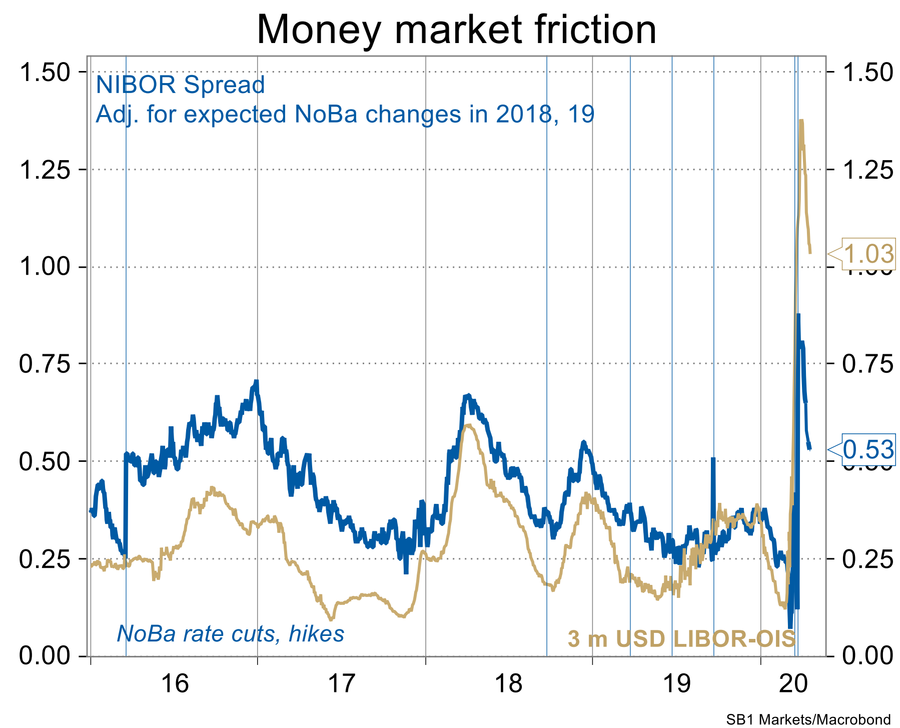
- Swap spreads between NOK rates and our trading partners widened rapidly in most of 2019, all over the curve. Since late February, spreads have been falling sharply, as NOK rates have declined more rapidly than others
- Spreads are still not that low and there is more downside risk, in our view

SpareBank 1 MARKETS

The NIBOR spreads are narrowing sharply, more to go

We now think the markets is more expecting a further narrowing of the spread than a 'last' NoBa cut

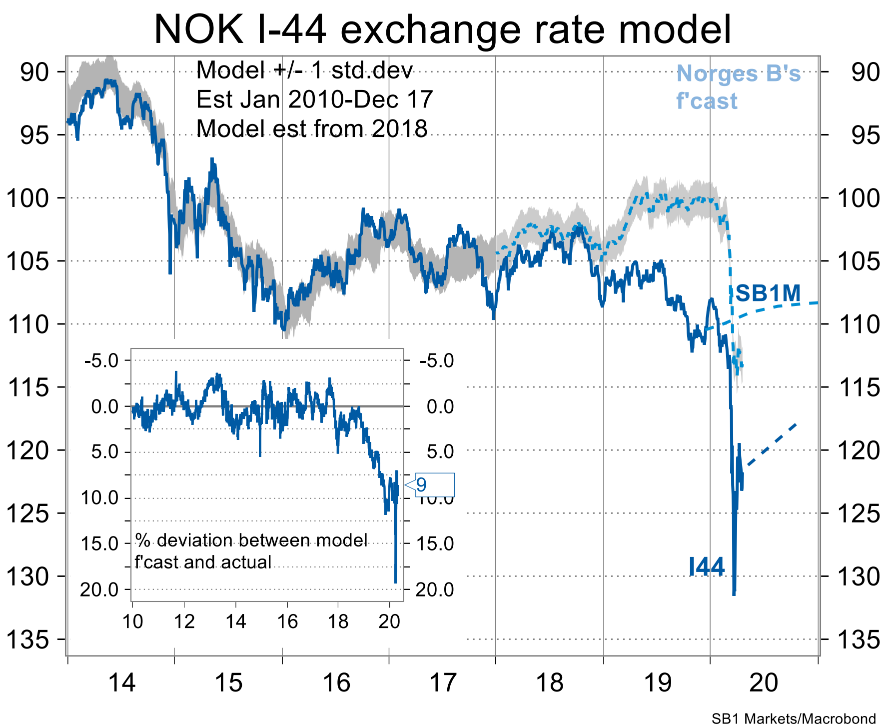


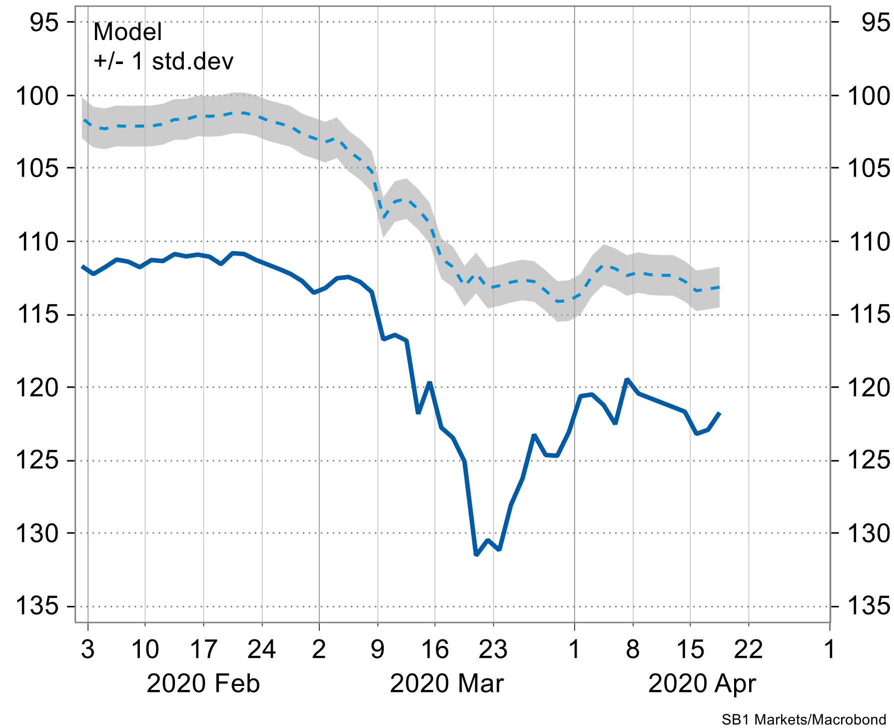


- The 3 NIBOR fell below 1% before Easter, and is now down to 0.79%. The NIBOR –NoBa spread has narrowed to 35 bps, down from above 80
- The LIBOR-OIS spread in the US is finally narrowing too, and we expect it to decline further – which the market also expects
- NOK 3m FRAs at 0.53 – 0.66% reflects a limited probability for a NoBa cut but mainly an expectation of a lower NIBOR spread

NOK has gained ground but is still rather weak

Still, the gap vs. our traditional model 'just' 8%, less than during the previous months

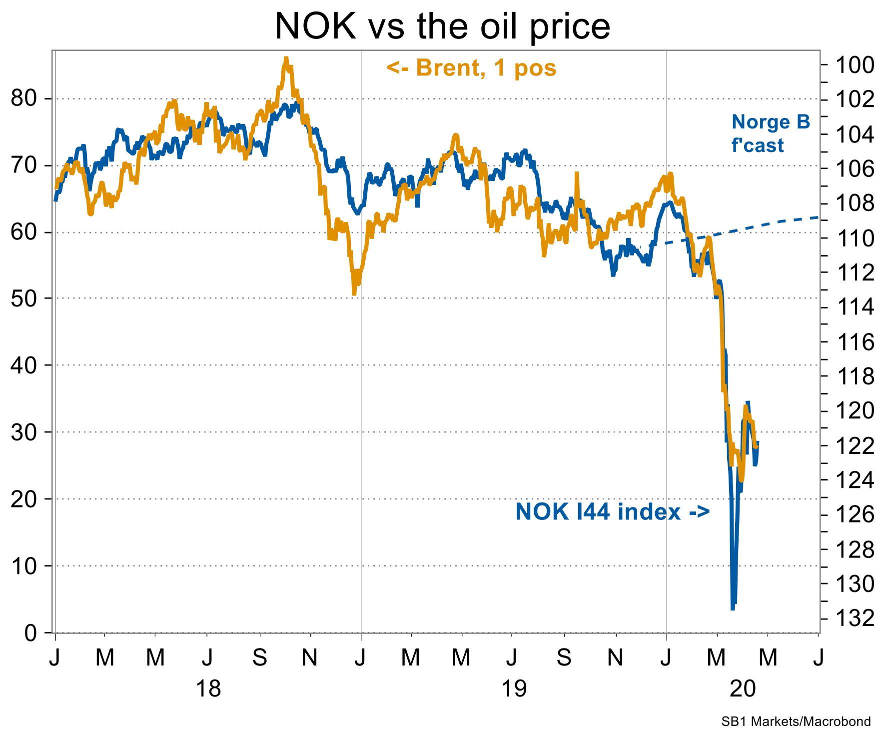


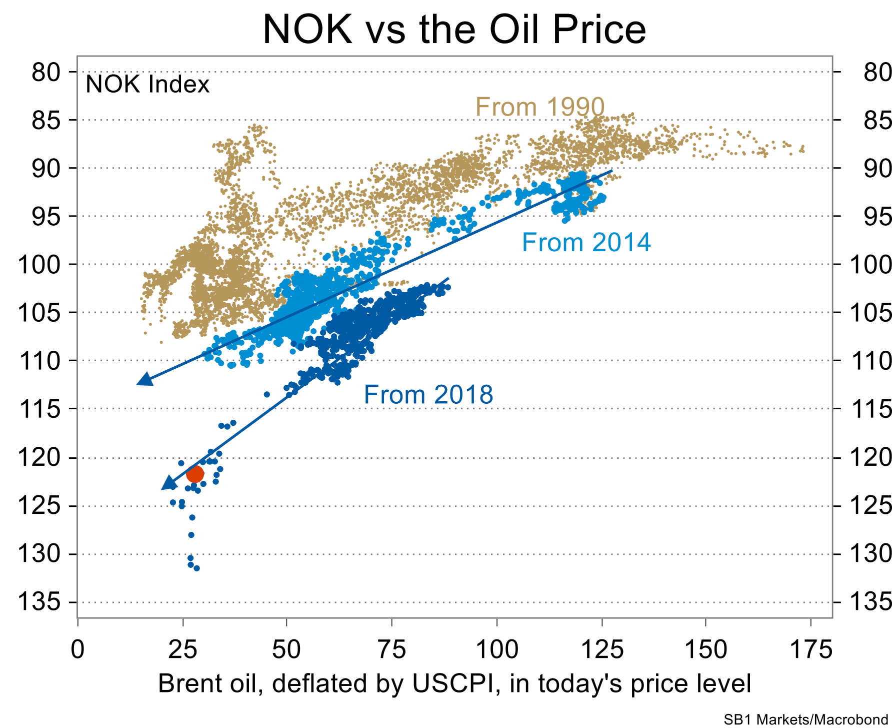


- The NOK collapsed in mid March, without any assistance from the usual suspects: not the oil price, energy equity prices, the interest rate spread or supercycle friends' currencies, even not the AUD.
- OK has recovered 8% from the bottom. Last week the NOK fell marginally, well explained by the decline in the oil price

The NOK is where the oil price is

… vs the short term relationship since 2018



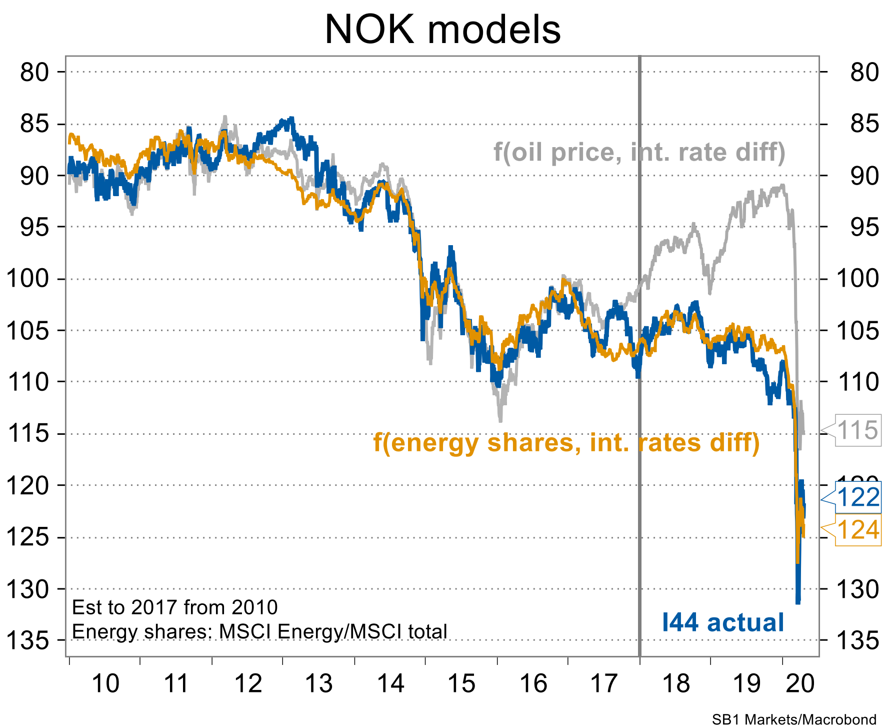


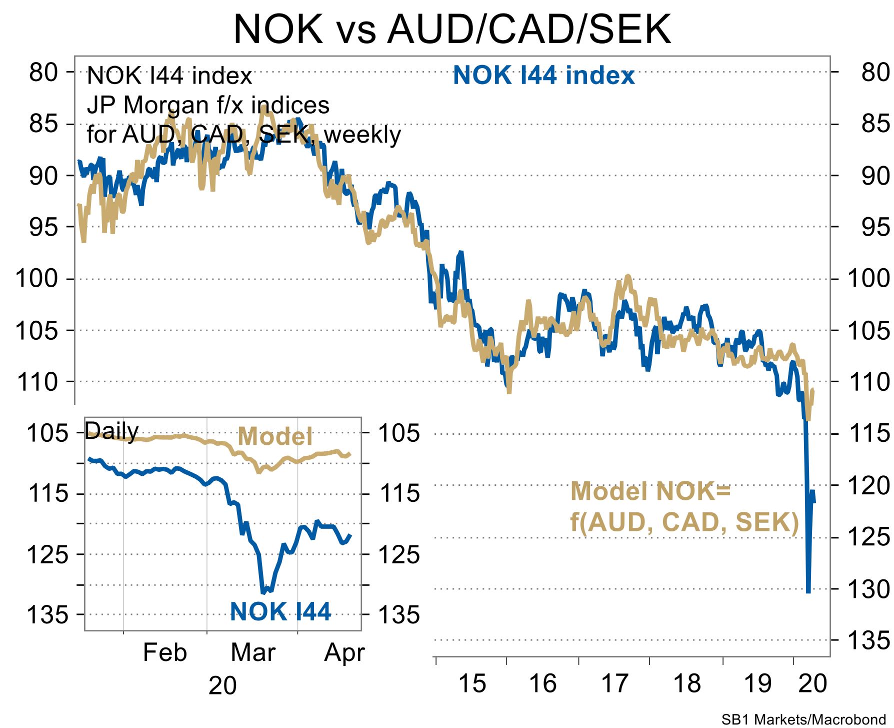
- The NOK has been much weaker vs the oil price than normal the past few years but it is still correlated to the changes in the oil price like it used to be

SpareBank 1 MARKETS

NOK still far too weak vs the supercycle model but not vs oil companies

NOK is more than 10% too weak vs the 'supercycle' model but in line with the 'oil equity' model

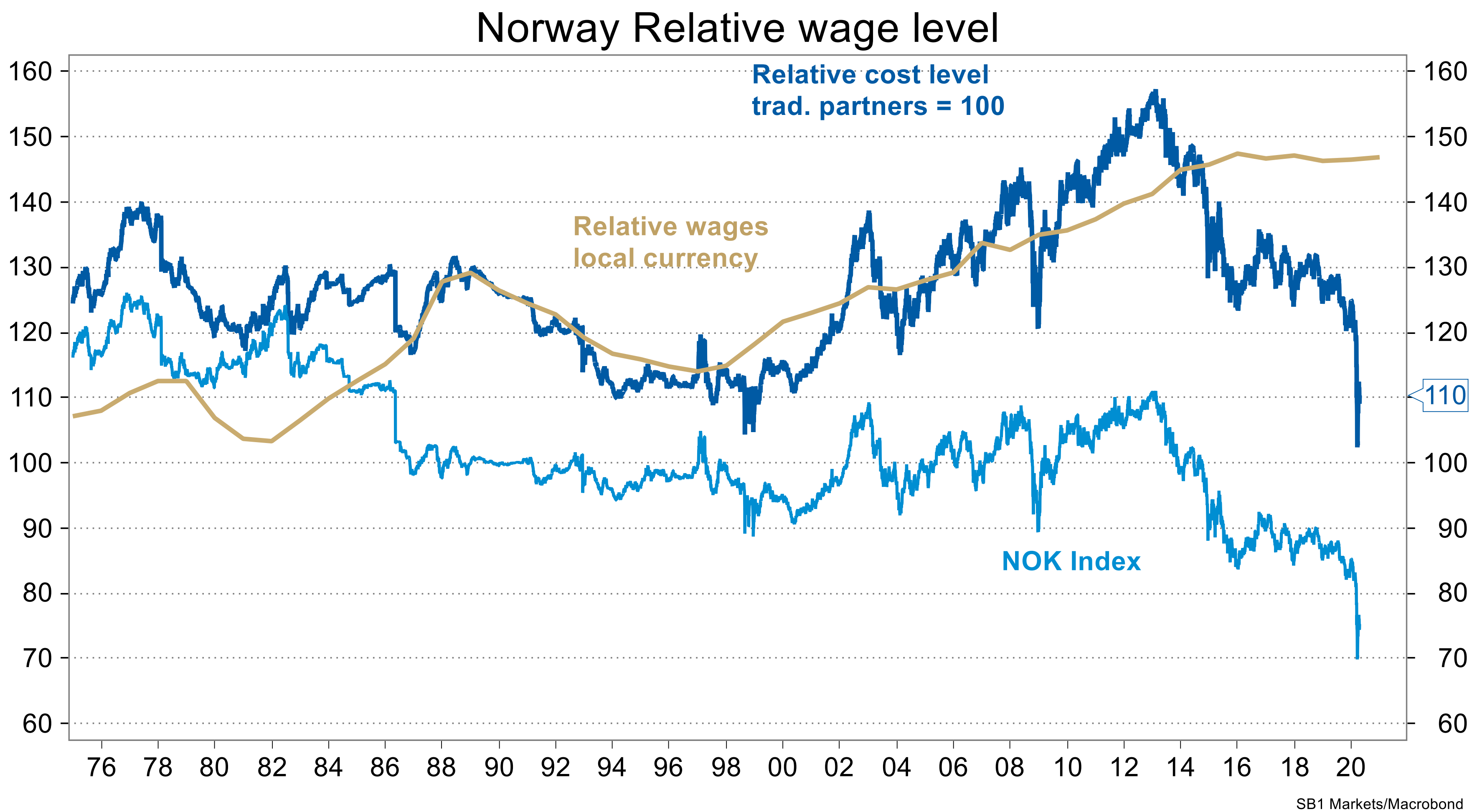




- Our NOK model based on pricing of oil companies has 'explained' the NOK much better than our traditional model since 2017, as have our 'supercycle' currency model [NOK=f(AUD, CAD, SEK), with just a marginal contribution from SEK]. The EM x CNY currency aggregate is also quite closely correlated to NOK
  - » The oil company share has model fallen along with the NOK since early January and both have been rebounding the past two weeks. The NOK is now marginally 'too strong' vs the oil price model. Thus, one argument in favour of a stronger NOK is wiped out, if energy stocks prices are not priced too cheap now
  - » Both AUD and CAD are sensitive to oil/energy prices and – together with the SEK – global growth outlook. During the Covid-19 crisis, the NOK has been much weaker than the SEK and CAD but close to the AUD

Get the fundamentals right: The Norwegian cost level is very low

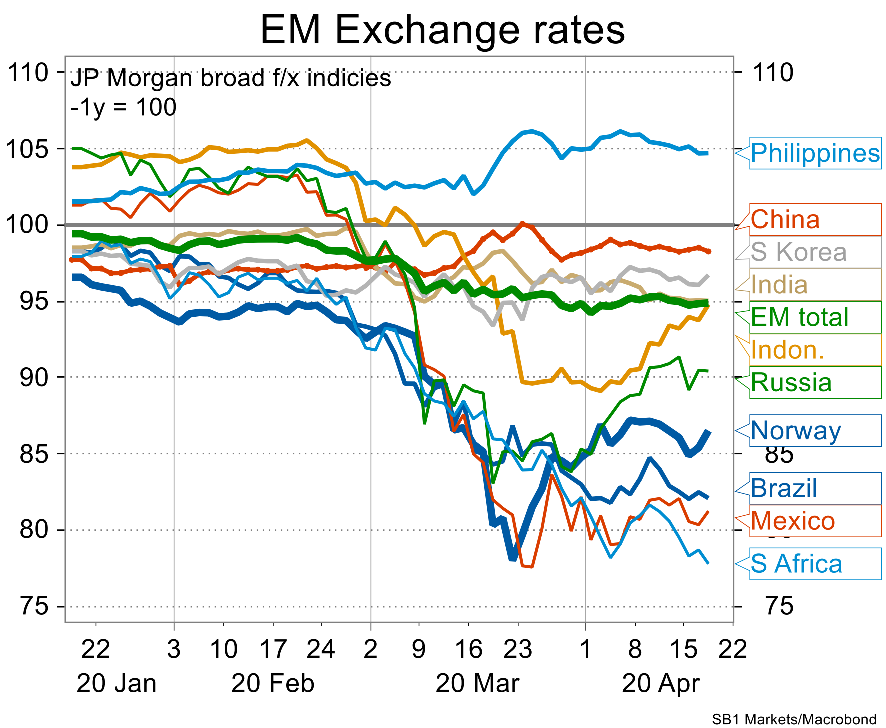
Even if the Oil fund can fund 1/4th of Mainland imports (if the real return remains at 3%, long term)

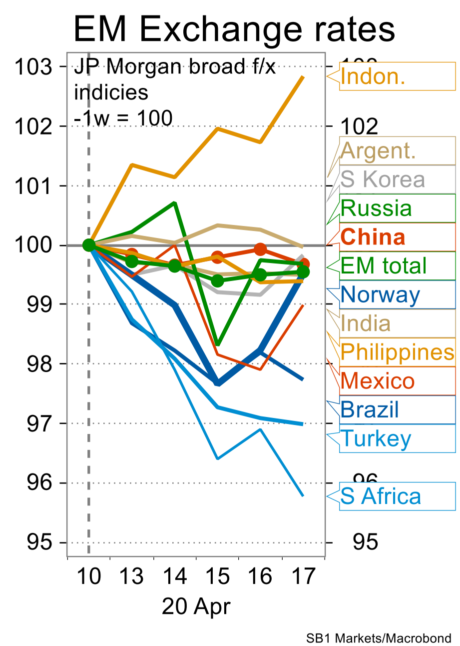


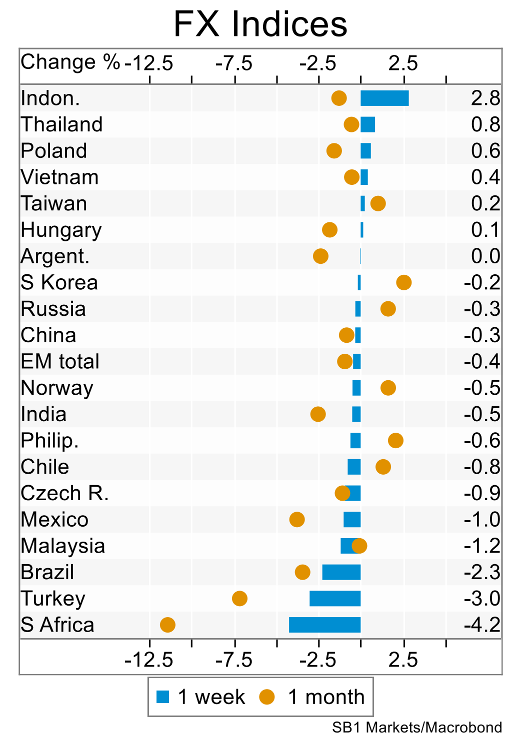
SpareBank 1 MARKETS

Emerging market currencies marginally down in average

The CNY has been unmoved by the corona crisis



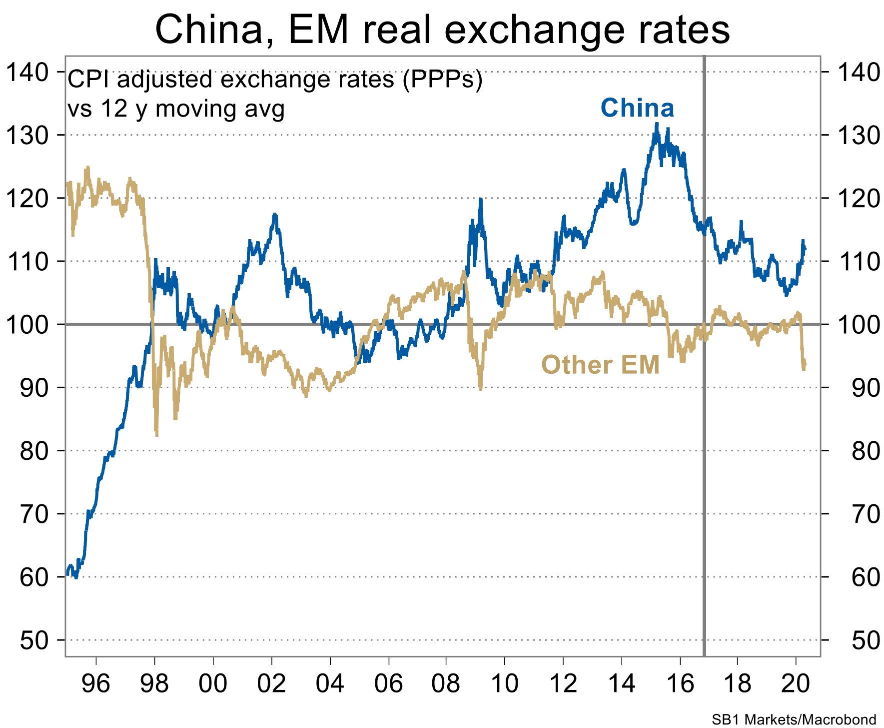


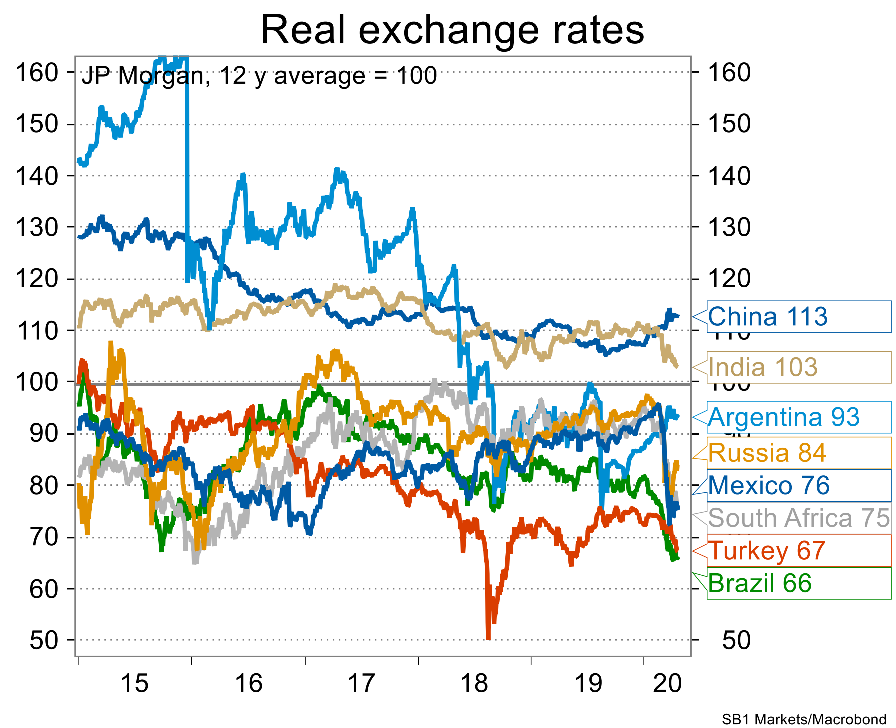


- Most EM (Emerging Markets) currencies depreciated substantially through March but has – in average – been flat in April

EM currencies ex China down 7%, almost all down, barring Argentina ☺

A 7% drop is not that dramatic, at least not given all stories about reversal of capital inflows





DISCLAIMER

DISCLAIMER

SpareBank 1 Markets AS ("SB1 Markets")

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

No investment recommendation

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

No personal recommendation

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

Research for the purposes of unbundling

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

Conflicts of interest

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

Accuracy of sources

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

Risk information

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

Limitation of liability

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

Limitation on distribution

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

DISCLAIMER

DISCLAIMER

SpareBank 1 Markets AS ("SB1 Markets")

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

No investment recommendation

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

No personal recommendation

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

Research for the purposes of unbundling

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

Conflicts of interest

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

Accuracy of sources

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

Risk information

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

Limitation of liability

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

Limitation on distribution

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