# SpareBank MARKETS

## **Macro Weekly**

Week 46/2021

#### Harald Magnus Andreassen

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

#### **Tina Norden**

Phone : (+47) 24 13 37 48 Mobile : (+47) 93 22 62 24 E-mail : tina.norden@sb1markets.no

#### **SpareBank 1 Markets**

Phone: (+47) 24 14 74 00Visit address: Olav Vs gate 5, 0161 OsloPost address: PO Box 1398 Vika, 0114 Oslo



15 November 2021



# Highlights

The world around us

The Norwegian economy

Market charts & comments



# Last week

#### The virus story is around

- A majority of countries are still reporting more cases but in sum growth slowed further last week too
- Hospitalisation have increased somewhat is most countries and now even in the US but outside Eastern Europe, far from any health crisis (yet). UK reports a small decline in no. of hospitalised persons, following a substantial increase
- Mobility is stabile at high levels in the West, and as the virus is on the retreat in most countries in the Asia, mobility is normalising here too, which should ease supply chains problems stemming from this part of the world. However China has some challenges with its zero tolerance policy

#### The economy, part I

- The global economy
  - » Auto sales rose some 4% in October with contributions from most corner of the world, except the Euro Area. Global sales are still 19% below the 2019 average level. Norway and Turkey are the only countries above. China is down just 1%. US is down 23%, EMU 33%. And at the bottom, Brazil with -43%
- China
  - » October data were better than expected but the <u>slowdown is confirmed</u>, led by a sharp decline in new construction starts. Industrial production grew 0.4% m/m but past 4 months growth has averaged ¼%, down from the 'normal' ½%. Production of steel and cement is down by 20 25%. Activity services rose 0.7% but remains 1% below the June level, very likely due to the fight against the virus . Retail sales fell sharply in real terms m/m in Oct, reversing the Sept gain. Since last Nov, sales have been growth at just a 2% growth pace, far below the 6% pre-pandemic growth path. Even so, Oct nominal y/y sales were better than expected. Investments rose steadily at 0.2%, a much lower rate than before the pandemic. These data are not consistent with the steep decline in construction starts in October, both residential and commercial and in new home sales, all down 20 25% from the ATHs in 2020 or early 2021. The setback in construction is now for real, for obvious reasons –and it is not yet stabilised which anyway may become impossible if housing market 'investors' change their mind on the housing market outlook. Still, the downside is reduced following the recent decline! House prices have been falling the 2 3 months, so far at a modest 1 2% pace
  - » Credit growth accelerated in October as local governments borrowed more on the bond market, perhaps they had to due to lower revenue from land sales. CPI inflation accelerated 0.8 pp due to higher energy prices but is just up to 1.5% y/y, and core inflation is almost stable at 1.3%. Food prices are down y/y. Producer prices are soaring but they are not closely correlated to the Chinese CPI



# Last week: The economy, part II

#### • USA

- Another CPI shock: Prices rose 0.2 0.4 pp more than expected in October. The headline CPI accelerated to 6.2%, the core to 4.6%, the highest in 3 decades. Energy and used auto prices, and some other reopening impacts explain much of the extraordinary high inflation rates but more goods- and services are now also contributing. Most measures indicate a broadening of inflation. More SMBs plan to hike prices (and wages) than ever before, data from 1975 (and 1985). The PPI did not accelerate more than expected but confirm a tough price environment. However, crude material prices are easing, and we still believe this commodity/freight rate price cycle will not last that long. The unexpected CPI print lifted the yield curve, as break-even inflation rose, but real rates fell further, and to ATL! The stock marked took a break but rapidly recovered, of course
- » The vacancy rate fell 0.2 pp to 6.6% in September –unch. from the initial Aug est, and the level is very high. The mismatch at the labour market is somewhat reduced but remains extremely tight, explaining way wage inflation has accelerated (confirmed by Atlanta Fed's median wage tracker in Oct), and why more businesses than ever plan to lift wages further. 'Nobody' complains about low sales or hard competition these days, just about labour supply and inflation (which the companies create themselves)
- » University of Michigan's consumer sentiment survey fell further in early November. The level is the lowest in a decade. It is impossible to explain the bad mood by the normal economic factors, even if inflation & inflation expectations are included. The pandemic is an obvious explanation, but has it become worse now? Or is it politics, it is only republican voters that feel the economy has totally broken. BTW, Europeans are much more upbeat than normal
- UK
  - » **GDP** grew less than expected in Q3, still up 5.1% (1.3% not annualised). Q3 GDP was 2.1% below the Q4-19 level, among the laggards in the rich part of the world after suffering more than the most during the pandemic. In September, GDP was just 0.6% below the pre-pandemic level, and hotels and restaurants operate at 4% above the pre-pandemic level!
- Norway
  - » The new government's supplement budget kept the budget balance unchanged, equalling 2.6% of the Oil fund's value. Some taxes were hiked, others lowered (less), and some expenditures increased.
  - » Unfilled vacancies remained at 3.2% of employment in Q3, among the highest on record. All sectors report more unfilled positions than they normally do
  - » Core CPI fell 0.3 pp to 0.9% y/y in October. Most prices were lower than we assumed. Most sectors are reporting annual inflation at less than 2%, and a stronger NOK/lower import prices is not the whole story. Electricity prices fell m/m, and headline inflation fell 0.6 pp to 3.5%. The future market still assumes a steep decline in electricity prices



#### The Calendar: US retail sales, housing & manuf. Norwegian GDP, investment surveys

Time	Count.	Indicator	Period	Forecast	Prior
	ay Nov		i chou	rorecuse	
09:30	-	CPI ΥοΥ	Oct	2.7%	2.5%
09:30	SW	CPIF Excl. Energy YoY	Oct	1.6%	1.5%
11:00	EC	Trade Balance SA	Sep	11.5b	11.1b
14:30	US	Empire Manufacturing	Nov	21.1	19.8
Tuesd	ay Nov	16			
06:30	NO	Consumer Confidence	4Q		10.9
08:00	UK	Average Weekly Earnings	Sep	5.6%	7.2%
08:00	UK	Unemployment, LFS/ILO	Sep	4.4%	4.5%
08:00	UK	Employment. MoM, '000	Sep	180k	235k
11:00	EC	Employment QoQ	3Q P		0.7%
11:00	EC	GDP SA QoQ, rev	3Q P	2.2%	2.2%
14:30	US	Retail Sales Advance MoM	Oct	1.1%	0.7%
14:30	US	Retail Sales Control Group	Oct	0.8%	0.8%
15:15	US	Manufacturing (SIC) Production	Oct	0.9%	-0.7%
16:00	US	Business Inventories	Sep	0.6%	0.6%
16:00	US	NAHB Housing Market Index	Nov	80	80
Wedn	esday N	Nov 17			
08:00	UK	CPI YoY	Oct	3.9%	3.1%
08:00	UK	CPI Core YoY	Oct	3.1%	2.9%
08:00	UK	PPI Output NSA YoY	Oct	7.3%	6.7%
11:00	EC	CPI ΥοΥ	Oct F	4.1%	3.4%
14:30	US	Building Permits	Oct	1630k	1589k
14:30		Housing Starts	Oct	1580k	1555k
-	day Nov	<u>/ 18</u>			
06:00	SW	House prices, HOX	Oct		12.50%
08:00	NO	Population growth	Q3		
08:00	NO	Oil sector investments YoY	2022	-10.0%	-4.0%
08:00	NO	Manufacturing investments	2022		
09:30	SW	Unemployment Rate SA, LFS	Oct	8.4%	8.8%
10:00		Norges Bank expectation surv.	Q4		
14:30		Philadelphia Fed Business	Nov	24	23.8
14:30	US	Initial Jobless Claims	Nov-13	260k	267k
16:00	US	Leading Index	Oct	0.8%	0.2%
Friday	Nov 19				
08:00		GDP Mainland MoM	Sep	0.4%(0.3)	1.1%
08:00	NO	GDP Mainland QoQ	3Q	2.6%(2.5)	1.4%
08:00		GDP MoM	Sep	(1%)	2.0%
08:00	NO	Consumprion of goods	Sep		

#### • USA

- » **Retail sales** is still going strong but consumption of goods will have to come back to a normal level, one day. But that probably not happened in October
- » The housing market is strong but lack of building materials and high prices have dampened housing starts. Lumber prices are now almost normalised, and given the 20% surge in 2<sup>nd</sup> hand prices, new home construction should be more than profitable (at least for land owners...)
- October manufacturing production is expected to recover the Sept decline.
   Production is just back the pre-pandemic level. Data are challenging to interpret as capacity/supply constraints are so dominant. The first November manufacturing (and construction) surveys should report decent growth

#### • EMU

» Revised and more detailed Q3 GDP data (or the final Oct HICP) will very likely not rock the boat

#### • UK

» Wage inflation is high measure y/y but recent actual changes m/m recent months have not been that aggressive. Employment/unemployment data are still influenced by the furlough schemes

#### • Sweden

» **Core inflation** remains well below the inflation target – and that is important for the Riksbank. A double digit **house price** inflation is not, of course

#### • Norway

- » In August, huge mackerel catches lifted Mainland (incl. North Sea fisheries, not oil & gas) GDP substantially, and in September the sign will change, and GDP will barely grow at all . However, employment growth is still strong, and the economy is recovering, whatever Sept GDP number that might turn up. We expect a 2.5% growth in Q3 (q/q, 10.4% annualised)
- » Oil and gas investments have been stronger so far in 2021 than the investment survey has signalled. Next year investments will probably decline before recovering sharply in 2023 – 24 as oil companies will exploit the temporary tax cuts
- » **Consumer confidence** probably rose in Q4, at least as measured Finans Norge's survey (which have been lagging the monthly Opinion survey substantially, FN at average, Opinion 1.3 st.dev above!)

#### The virus won't back down...

Covid-19

#### A majority of countries are still reporting more cases

- <u>23 countries were reporting more cases</u> the last week, down from 27 one week ago, and growth is still slowing somewhat. Eastern Europe is still the epi-centre, but nearby Austria join the party last week
- Still, just 15 countries reported fewer cases, like the previous week



SB1 Markets/Macrobond

#### COVID-19, New Cases

Slovenia Austria Slovakia Lithuania Czech Rep Estonia Latvia Netherl	-500 0	14 days (7 d 500 1000	pace) 0 1500 2000	Now -1 2124 1512 1474	& previo 00 -50	us week 0 50	last week 28	Slovenia
Austria Slovakia Lithuania Czech Rep Estonia Latvia Netherl				2124 1512			L	Slovenia
Austria Slovakia Lithuania Czech Rep Estonia Latvia Netherl				1512			20	
Slovakia Lithuania Czech Rep Estonia Latvia Netherl							57	Austria
∟ithuania Czech Rep Estonia ∟atvia Netherl								Slovakia
Czech Rep Estonia ∟atvia Netherl				1474				
Estonia _atvia Netherl				1205	_			Lithuania
_atvia Netherl			*			-		Czech Rep
Netherl			*	1189 1056				Estonia Latvia
	_		*					
			sle	987				Netherl
Hungary			*	980				Hungary
reland	_		*	973			21	Ireland
Greece				895		•		Greece
Bulgaria	_			763				Bulgaria
Serbia				749				Serbia
Belgium			• *	734				Belgium
Denmark		• *	-	716				Denmark
JK		•	*	708				UK
celand				570				Iceland
Germany	_			561				Germany
Poland		• *		521		•		Poland
Romania			e	473	•			Romania
Turkey		*		443		•		Turkey
Russia				381			-1	
Norway	_		*	377			<u> </u>	Norway Switzerl
Switzerl			*	371				
JSA -		*		332				USA
France		• *		196				France
Kosovo		*		173				Kosovo
Portugal	_	•	*	164				Portugal
Thailand		*		159		-		Thailand
taly		● * *		158				Italy
Finland	_			146				Finland
Vietnam		*		111		•		Vietnam
Sweden		• *		92		1		Sweden
Canada		*		90				Canada
Brazil		*		66	•		6	Brazil
Spain		• *		61				Spain
srael			*	59	•			Israel
South K				59				South K
New Zeal.				45				New Zeal.
Mexico		*		31				Mexico
ndia South Africa		• *		11	•			India South Africa
South Africa		*		5 2			-1	
Japan		*					-75	Japan
ndonesia		*		2		<b></b>	-34	Indonesia
	-500 0	500 100	0 1500 2000	-1	00 -50	0 50		
	🗧 1 w	eek ago	Now	<ul> <li>Max sinc</li> </ul>	e 06-21 🊦	% prev w	veek	
	Cha	ange last we	ek 米 Max	% last we	ek			



#### More hospitalisations in Europe, and the no. has flattened in the US

However, levels are still low outside Eastern Europe







#### UK may have turned the corner, again – some fewer hospital pasients

Most other countries are on the way up though, even perhaps the US





#### Norway: More new cases, more hospitalisations

Some are not vaccinated, and some vaccinated get the infection, and some get really sick



 However, we are miles from a serious health crisis – check at the bottom of the chart to the right 2 pages backwards <sup>(i)</sup>







150

140

130

120

EMU

India

50

40

30

S

0

Ν

Vietnam

Thailand Japan

Australia

New Zealand

Singapore

#### People in Europe/Nordics stay more home due to the temperature? US unch.

Mobility in Asia is on the way up, and some countries are back at pre-Delta levels





## Global retail sales have flattened, global trade is sliding down

Now Emerging Markets demand for goods is recovering, while rich countries are heading down



- Retail sales rose further in Sept up 4% vs. the pre-pandemic level
- Manufacturing production stagnated in Aug and Sept mostly due deep cuts in auto production. The level is some 4.5% above the pre-pandemic level
- Global foreign trade peaked in May and has fallen slightly thereafter. In Aug, trade volumes were flat. The level is still more than 5% above the pre-pandemic level



## DM demand for consumer goods have peaked, EMs are recovering from a low lev

The upside potential is large for Emerging Markets x China, and the recovery has started



- **Retail sales** in Emerging Markets x China were weak before the summer due to the setback in demand in India, and thereafter in other parts of Asia. Now a substantial recovery is very likely underway
- Manufacturing production is still drifting upwards, most places, but growth has been hampered by a deep decline in auto production. The manufacturing PMIs are down but not weak



## **Global airline traffic slowed last week – and US has flattened**

Last week was down 21% vs. the 2019 level, vs. 19% the previous weeks





# Global GDP gained speed in Q3 but not due to US & China

Strong growth in the EMU and very likely in India the main contributors



- We estimate a 1.2% (4.8% annualised) growth in Q3, up from 0.2% (1.0%) in Q2. GDP in India fell sharply in Q2 but very likely recovered sharply in Q3 (but no data yet). GDP grew more than 2% in the EMU (9.1% annualised)
- The global GDP is now 1.9% above the pre-pandemic level, but still 2.5 below the pre-pandemic trend growth path



## **GDP still below the pre-pandemic trend growth paths everywhere**

... and accumulated losses are substantial in several countries

				In %	of GE	)P			
	-25		20	-15	1	0	-5	0	
China									-1.7
Norway, ML									-1.9
USA									-2.1
Italy									-2.2
Belgium									-2.3
World, SB1M est									-2.6
France									-2.7
EMU									-3.1
South Korea									-3.4
Germany									-3.7
Canada									-4.9
UK									-5.4
Mexico									-5.7
Indonesia									-9.0
Spain									-9.8
Philippines									-23.9
	-25	· -	20	-15	1	0	-5	0	
							SB1 Ma	rkets/Ma	crobond

#### GDP Deviation vs. pre-pand. trend

SB1 Markets/Macrobond

• Sweden, and Norway Q3 data are our estimates

							-		
Accumulated losses vs pre									
	corona trend growth, % of GDP								
	-40	-35	-30	-25	-20	-15	-10	-5	0
China				_		_			-3.7
South Korea									-6.4
USA									-7.3
Norway, ML									-7.4
World, SB1M est									-7.5
Germany									-9.6
Belgium									-10.2
Canada									-10.5
EMU									-11.1
France									-12.2
Indonesia									-12.3
Italy									-12.5
Mexico									-13.1
UK									-16.5
Spain									-20.5
Philippines									-36.6
	-40	-35	-30	-25	-20	-15	-10	-5	0
SB1 Markets/Macrobon									

GDP - Losses vs. trend through Q3-21



## Inflation may be peaking now soon – at a high level

Energy prices the main culprit, but core inflation has turned up more places





## Unemployment on the way down everywhere, as unfilled vacancies soars

And unemployment is on par or lower than normal in 20 out of 23 countries!







- A large majority of countries report lower unemployment than the 2000 – 2019 average
  - » In both Norway & Sweden, <u>registered</u> unemployment is falling rapidly and is below average levels – even if the LFS rate is higher
- May these low unemployment rate partly explain the high **vacancy rates** that are popping up everywhere?



18

#### Auto sales up in October, still down 19% vs 2019 average

Sales grew by some 4%, following the 7% decline in Sept, several countries/regions contributed



- Sales rose in most regions in October but just marginally sales are still far below normal levels everywhere (except in China and Norway)
- Sales in China are down just 1% vs. the 2019 average and are at the same level as first reached in 2015 (and sales are down 20% from the 2017 peak!). Sales in other Emerging Markets rose to, but is down 21% vs. 2019 and the trend was down before the pandemic
- US sales rose but are still 23% down vs. 2019, sales in the Euro Area very likely fell, we estimate down 33% vs. 2019. In rich countries sales are almost as low as at the bottom during the financial crisis
- Norwegian sales are up 10%, the only rich country up vs. 2019 (and Turkey the only EM country)
- The recent decline in sales is of course not due to lack of demand but due to lack of supply, and the global auto industry has not been able to secure deliveries of semi-conductors. The upside is huge, as soon as components can be produced and delivered



# October 'officially' better than exp. but slowdown confirmed. Constr. in 'free fall'

Retail sales have almost flattened, construction is falling rapidly, growth in manuf. production halved



- **Industrial production** rose by just 0.4% in Oct, up from 0.1% in Sept. Measured y/y, growth accelerated 0.4 pp to 3.5%, <u>0,7 pp above expectations</u>. Production is still 2% <u>above</u> the pre-corona trend path. However, growth has slowed substantially, to 0.25% the past 4 months vs the normal 0.5%. Steel, cement, and autos are down 10 25% from local peaks, due to a mix of demand and supply factors. <u>Surveys are down but are signalling growth above the pace the past 4 months</u>
- Service sector production rose 0.7% in Oct but remains 1% below the June level which no doubt is due to the fight against the virus, which is not over yet. The level is still just 3% below the pre-pandemic growth path
- **Retail sales volumes fell by** 0.7% in volume terms (our est. as prices rose sharply m/m, due to energy) in Oct. The trend is weak, <u>from Nov last year at a 2% path</u>, at the best. Annual growth accelerated 0.4 pp to 3.5% <u>well above the expected</u> 2.8%. Auto sales are slowing, as elsewhere, but other sectors have also slowed in 2021
- Investments grew by 0.2% as the previous months. Prices are no doubt increasing

   and in volume terms, investents are falling. The (still useless) accumulated annual growth rate was 6.1% in Oct, down from 7.3%, <u>0.1 pp below expectations</u>.
   Housing and other construction starts, and new home sales fell sharply in Oct, and <u>are down 20 25% vs the recent peaks, a substantial setback</u>! New and existing house prices have fallen the past 2 3 months, but so far not dramatic
- Credit growth accelerated in Oct, as local governments tapped the bond market (due to lack of revenues from land sales?). The underlying credit impulse is still negative
- **Exports** rose further, while import continuing down in Oct, the latter signalling weaker domestic demand
- CPI inflation accelerated in Oct but remains low, at 1.5%. Core at 1.3%

In sum: China is no doubt slowing substantially. Some may be due to the virus, but NOT the large decline in construction and very likely not the slowdown in retail sales either. The main risk: construction activity which has fallen 20 - 25% already  $_{10}$ 



#### **Construction activity is falling further – and faster**

Both new home sales & starts down 6% m/m in Oct, Sept. revised down. Both down 25% vs H1



- New home sales have fallen 25% from early 2021, following the spectacular recovery after the pandemic last year. Sales are down more than 10% vs the pre-pandemic level which was record high until then. Aug/Sept was revised down
- Housing starts are also down 25% vs. the early 2021 level, following a downward revision, and the steep decline m/m in October. Starts have been running below sales most of 2021, signalling an inventory drawdown but they are now in line
- Non-residential construction fell 16% m/m in October, and starts are down 30% since last summer, and the level is 25% below the pre-p level in October (but less smoothed)
- In sum, construction starts are rapidly on the way down and the downside risk has of course increased due to the 'financial stress' in the real estate sector. The downside may still be substantial, even if authorities now tries to stabilise the market/funding for builders. IF home buyers starts looking upon housing as a risk/bad investment, the downside is large as a substantial share of housing demand has been for investment purposes, often without any rental income. Look up for demand for steel, check next page



#### **Construction & domestic demand for steel down, steel now more than 25%**

The reason may partly be the 'official' story on meeting 2030 CO2 targets but <u>demand</u> is down for real too?



- The authorities have decided that 2021 steel production should not exceed the 2020 level, and as H1-21 production was well above the 2020 level production must be cut in H2 (some 12%)
  - » Both production and demand (including inventories) are down 25% since early 2021
- We assume there are more reasons for the cut in steel production than the 2030 CO2-target, like local pollution, fear of overbuilding, and too rapid credit expansion, especially among heavily indebted real estate developers (read: Evergrande)
- Now demand for steel may be the most important reason for the decline in production, as construction activity is falling rapidly



#### House prices are falling – for the first time since 2015

Existing house started falling in August though but just by 0.1% - 0.2% per month



- Existing home price inflation has gradually slowed, and in August price decreased by 1.1%, by 2.4% in September and further by 2% in October (annualised). The annual rate has fallen to 2.0%, from 3%
- New home prices rose in August but fell in September, by 1.1% and by 1.8% in October (annualised)
- Credit policy was tightened last year and credit growth has slowed (= a negative credit impulse)
  - » The correlation to house prices is far from tight but there is 'something' there
- Now, the trouble for some real estate developers (and many more than Evergrande) may influence the overall housing market as
  well as it has become much harder/impossible for home builders to fund themselves on the market (at least abroad). The
  authorities are now very likely trying to help developers to fund themselves domestically



## Credit growth has slowed- and construction is rapidly on the way down

The two are dancing together but not that closely (and it varies who takes the lead too)



- ... still they are at least normally on the same floor
- The recent credit tightening may have had some impact on the property market – but basically the slowdown in construction started 'too early' this time
- The credit tightening signals some downside risk for construction, raw materials & steel
- However, there is always a risk when construction and debt levels are high, especially if many are buying property for investment/speculation purposes



# Still 6.6% unfilled vacancies, (voluntarily) quits surges to 3% & 'no' layoffs

The mismatch at the labour marked may have peaked but it is still extraordinary



- The no. of unfilled vacancies declined by 0.2 mill m/m in Sept, down to 10.4 mill, from an 0.2 mill upward revised 10.6 mill level in Aug. The print is the 3. highest ever. The vacancy rate was 6.6%, down 0.2 p. The highest print ever before the pandemic was 4.7%, and the rate was 4.5% just before the pandemic hit. The decline in vacancies September was rather broad (see next page) but all sectors report a higher vacancy rate than before the pandemic
  - » The SMBs (NFIB survey) reported marginally less trouble filling positions <u>October</u>. These two series are very closely correlated
- New hires decreased by 0.05' mill in September, to 6.4 mill, or to 4.4% of the no. of employed persons, still an unusual high level (and more than initially reported for August). No significant changes sector wise
- The rate of **voluntary quits** rose by 0.1 pp to 3.0% in Sept, another ATH, signalling a very strong labour market. As with unfilled vacancies, quits are closely correlated to wage inflation – for obvious reasons
- Layoffs fell to the lowest level ever in Sept, as few companies are closing down/reducing capacity
- In sum: The vacancy rate & the hiring rates are both down from the peak. The levels are still anyway extremely high, especially the unfilled vacancy rate and the quit rate is record high, all <u>confirming a extremely tight labour market</u>



## A huge mismatch at the labour market – but it is finally shrinking somewhat

At least, there are some fewer vacancies even if unemployment is falling rapidly; some positions filled



- The unemployment vacancy mix signals an unusual tight labour market
  - » There are still many more unfilled positions, than unemployed persons: 10.4 mill unfilled vacancies and just 7.4 mill unemployed workers. There are not more workers outside the labour force that want a job then it normally is
  - » Unemployment is falling faster than the no. of unfilled vacancies, and the gap between the two is widening
  - » The labour market has not 'been able' to fill more of the vacant positions with workers that say they are searching for work the U/V mix today still way above the pre-pandemic mix
- The unprecedented mismatch may of course be mostly due to temporary impacts of the pandemic; different sectors have reopened at a different pace, perhaps even geographically, and it will take time to match the job seekers and the vacant jobs etc. Since July, the 'Beveridge curve' has bent inward, a small decline in vacancies and a lower unemployment rate the mismatch is somewhat reduced (the arrow at the chart above). However, there is a risk that some of the mismatch will turn out to be permanent, due to changes in qualification requirements, work preferences etc.

## A tight labour market may well lead to substantially higher wage inflation

The correlation to changes in Atlanta Fed median wage index is very close

USA



- More companies than ever before (data from 1986 though) reported in October that they have lifted compensation and that they plan to do so the over next months as well
- The correlation vs changes in actual wage growth some months later (6 12 months) is pretty strong
- The correlation between unfilled vacancies and actual wage growth is even tighter, with the same lag
- We do not know FOMC's wage forecasts but we assume they are rather upbeat, as the bank expect inflation to remain above target the coming 3 years. However, the Bank could impossibly have factored in a wage growth <u>anything close to</u> <u>what companies now signals or even less what the current tightness of the labour market may imply</u>



## Headline inflation up to 6.2% in October, 0.4 pp above expectations

It may still be transitory but more prices are rising faster. For how long can Fed tread the water?



- Headline CPI rose 0.9% m/m in October, 0.4 pp more than expected, and up from 0.4% in Sept. The annual rate accelerated 0.8 pp to 6.2%, the highest print in 30 years
- Energy prices rose 4.8% m/m, and are up 30% y/y and has lifted the overall index by 1.8 pp y/y. Auto prices rose in Oct, and explains 1.2 pp of the annual rate
- However, price inflation broadened further in October. Cleveland Fed's **trimmed median CPI** is accelerated 0.8 pp to 6.0% (6 m pace), another ATH (with data from 1983). More prices (72%) are up more than 2% y/y than since 1990.
- Surveys signal a further increase in prices the coming months. The SMB (NIFB) survey report that *more companies than ever* (data from 1975) are planning to increase prices the coming months
- The **Federal Reserve** has some challenging months ahead. If the labour market participation rate does not increase significantly in November, the FOMC should adopt the market's view: Rates will be hiked in H1, and further in H2





#### Core inflation sharply up too

Prices +0.6% m/m in Oct, 0.2 – 0.3 pp more than expected. The annual rate climbed 0.6 pp to 4.6%!



- Core prices climbed rapidly m/m April June but slowed to an 0.2% average pace from July through September. <u>In October, another 'killer' month</u>
  - » Used and new autos rose sharply again, as did hotel prices. However most groups reported more than 0.2% price increases in October and just 1 (public transport/airline tickets) report a decline m/m





## There are still some possible (and not unreasonable) excuses...

But price increase have become more wide-spread and CPI trimmed mean has exploded



- The Cleveland Fed trimmed median CPI is up at 6% pace over the past six months, the highest print (by far) in the 40 years this series have been calculated. Dallas Fed's trimmed mean PCE was up 3.1% in Sept, the highest since the before the financial crisis
- In the CPI, almost all of the initial lift in core CPI was due to prices of good & services that often fluctuate, with rapid price increases followed by deep price cuts these prices are flexible, and represent some 10% of the core CPI. These prices are up 15%, with a substantial contribution from 2<sup>nd</sup> hand auto prices. However, these prices are flexible both ways, and the cycles are normally short lived
- The sticky components (90 % of the core CPI) are up 3.1% y/y, the highest levels since 2009 but as prices last year, the 2 y average is still at 2.4%, a 'normal' level
- So, more warnings signs for the Federal Reserve



... However, core <u>consumer</u> prices have been rising earlier and more than normal vs. PPI prices



- Crude goods prices are leading intermediate goods prices by 4 months, and consumer prices by 12 months and <u>crude</u> prices have clearly peaked (see chart to the right). However, intermediate prices have not yet yielded by much – and they will push finished goods prices up the coming months
- Some more comfort: Prices at the <u>consumer level</u> have responded <u>earlier and more than normally</u> vs the PPI core consumer goods index. That is very likely due to the unprecedented (and very likely not permanent) hike in 2<sup>nd</sup> hand cars which <u>are not a part of the PPI index</u>. Thus the <u>upside risk for the core goods component of the PCE may be limited</u> <u>the coming months</u>

M

SpareBank



## It's the supply side!

At the same time, the Federal Reserve is conduction the most expansionary monetary policy in hist.



- ... at least in nominal terms (the Fed funds at zero, huge QE programs, until now
- And guess what, more SMBs than ever plan to lift their selling prices than ever before, data from 1974



#### Households should have been quite happy by now

The pandemic the only reasonable explanation for the bad mood? Or politics??



- Our simple model explaining the current situation part of UM's sentiment survey has worked pretty well, explaining all important ups and downs by standard economic indicators
  - » Unemployment, inflation w/expectations, growth (ISM), the stock & housing markets, all contributing significantly with the right signs. The deviation in the early phase of the pandemic is due to the unusual short lags vs. the economy
- However, given the normal drivers, the UM sentiment should have been close to record strong by now even if both actual and expected
  inflation is far above normal the other drives more than compensate for that
  - » Can it just be as simple as the pandemic?? However, the pandemic can not be deemed worse now, than say 6 or 12 months ago
  - » ... Or politics?? The difference between voters have never been larger and republicans have never ever been so negative vs. the current situation in the economy as now (at least, that's what they are asked about)



## GDP down 3.0% in Q3 (0.8% not annualised), private demand down

GDP 2.8% below the weak Q4-19 level as the country struggles with the virus



#### The vacancy rate unchanged in Q3, at a high level

A small increase in the no. of vacant positions, the rate unchanged at 3.2%



• Lack of access to foreign workers may partly explain a high number of unfilled vacancies. The no. foreign workers on short-term stay is down approx. 20', equalling 0.8 pp of the no. of employees. If all came back, and found a job, the vacancy rate would have been 2.4% - still slightly above average



## Normally, a tighter labour market implies higher wage inflation

Even in the 'organised' Norwegian labour market







# Core inflation surprisingly down to 0.9%, headline down to 3.5%

Core inflation remains far below target but Norges Bank has not been an inflation nutter past 10 years



- **CPI-ATE** (ex. energy and taxes) inflation slowed 0.2 pp to 0.9% in Oct; in line with Norges Bank's f'cast, but well below consensus (1.2%) and our estimate (1.3%)
  - » Prices fell 0.1% m/m (seas adj), after rising 0.2% in Sept
  - » Core inflation is running above 2% in just <u>3 sectors</u>, and is below 2% in <u>10 sectors</u>
  - » Prices on imported goods fell 0.2% in Oct, and the annual rate is just 0.3% - as the NOK has strengthened substantially
- Total inflation declined 0.6 pp to 3.5%, below our 3.9%. Electricity prices fell more than we assumed (and the core was lower as well). Electricity prices are still up 77% y/y, a 2.% drag on household disposable income. If the future market is right, el. prices will collapse the coming months
- The outlook
  - » Core inflation have probably bottomed. Strong growth at home and some impact from higher inflation abroad will contribute at the upside (even if the impact of the latter is not impressive, historically). A somewhat strong NOK will counterweigh higher prices abroad
  - » The steep rise in electricity prices reduces households' real disposable income but given the still rich aggregate savings rate, consumption is probably not that exposed


## Norges Bank has not been an inflation nutter (since 2010, at least)

Actual inflation has not been correlated to interest rates



• Now, the Bank assumes the signal rate will be hiked gradually to approx 1.75%, while core inflation is expected to drift slowly up from the present level towards the 2% target in 2024



#### US surprises at the upside, most other still at the downside

The global surprise index has stabilised



- EMU and China still surprises are on the downside, but less last week too
- Emerging Markets x China flipped sign, to the negative last week, after more than one year at the positive side. However, actual data from EM x China are not that bad, and the PMIs are recovering
- Norway has surprised sharply on the downside, according to Citi



#### Citi Surprise index





# Highlights

The world around us

The Norwegian economy

Market charts & comments



40

#### Auto sales up in October, still down 19% vs 2019 average

Sales grew by some 4%, following the 7% decline in Sept, several countries/regions contributed



- Sales rose in most regions in October but just marginally sales are still far below normal levels everywhere (except in China and Norway)
- Sales in China are down just 1% vs. the 2019 average and are at the same level as first reached in 2015 (and sales are down 20% from the 2017 peak!). Sales in other Emerging Markets rose to, but is down 21% vs. 2019 and the trend was down before the pandemic
- US sales rose but are still 23% down vs. 2019, sales in the Euro Area very likely fell, we estimate down 33% vs. 2019. In rich countries sales are almost as low as at the bottom during the financial crisis
- Norwegian sales are up 10%, the only rich country up vs. 2019 (and Turkey the only EM country)
- The recent decline in sales is of course not due to lack of demand but due to lack of supply, and the global auto industry has not been able to secure deliveries of semi-conductors. The upside is huge, as soon as components can be produced and delivered



#### DM sales: Sharp cuts in sales almost everywhere recently

... but in sum up in October. Sales in Japan has been badly hit by (we assume) the pandemic





#### EM: Indian sales recovered in October, small gains several other places too

... from low levels





#### Auto production down everywhere, now Japan is at the bottom

Production in Germany was revised sharply up in September had rose 40% m/m in October





# October 'officially' better than exp. but slowdown confirmed. Constr. in 'free fall'

Retail sales have almost flattened, construction is falling rapidly, growth in manuf. production halved



- **Industrial production** rose by just 0.4% in Oct, up from 0.1% in Sept. Measured y/y, growth accelerated 0.4 pp to 3.5%, <u>0,7 pp above expectations</u>. Production is still 2% <u>above</u> the pre-corona trend path. However, growth has slowed substantially, to 0.25% the past 4 months vs the normal 0.5%. Steel, cement, and autos are down 10 25% from local peaks, due to a mix of demand and supply factors. <u>Surveys are down but are signalling growth above the pace the past 4 months</u>
- Service sector production rose 0.7% in Oct but remains 1% below the June level which no doubt is due to the fight against the virus, which is not over yet. The level is still just 3% below the pre-pandemic growth path
- **Retail sales volumes fell by** 0.7% in volume terms (our est. as prices rose sharply m/m, due to energy) in Oct. The trend is weak, <u>from Nov last year at a 2% path</u>, at the best. Annual growth accelerated 0.4 pp to 3.5% <u>well above the expected</u> 2.8%. Auto sales are slowing, as elsewhere, but other sectors have also slowed in 2021
- Investments grew by 0.2% as the previous months. Prices are no doubt increasing

   and in volume terms, investents are falling. The (still useless) accumulated annual growth rate was 6.1% in Oct, down from 7.3%, <u>0.1 pp below expectations</u>.
   Housing and other construction starts, and new home sales fell sharply in Oct, and <u>are down 20 25% vs the recent peaks, a substantial setback</u>! New and existing house prices have fallen the past 2 3 months, but so far not dramatic
- Credit growth accelerated in Oct, as local governments tapped the bond market (due to lack of revenues from land sales?). The underlying credit impulse is still negative
- **Exports** rose further, while import continuing down in Oct, the latter signalling weaker domestic demand
- CPI inflation accelerated in Oct but remains low, at 1.5%. Core at 1.3%

In sum: China is no doubt slowing substantially. Some may be due to the virus, but NOT the large decline in construction and very likely not the slowdown in retail sales either. The main risk: construction activity which has fallen 20 - 25% already  $_{AA}$ 



# Industrial production up 0.4% in October, up from 0.1% in Sept

Official y/y growth rate up 0.4 pp to 3.5%, expected down to 2.8%. Level still 2% above p-p trend



- Production growth has slowed from the normal 0.5% per month to some 0.25% in average the past 4 months. Sharp
  production cuts in steel and cement, and now aluminium and autos (all down 10 20% from recent peaks) have
  contributed to the slow monthly growth
- Production is 11.4% above the Dec '19 level and 2% above a reasonable pre-corona growth path. Not that bad
- Both supply and demand factors may be limiting factors the coming months supply side probably most important short term but construction poses a substantial risk on the demand side. Business surveys signal somewhat slower growth but above the 3% annualised pace the recent months



## Steel, cement further down in October, aluminium not

Steel down almost 25%, cement almost 20% - in line with nosediving construction starts



- The authorities have decided that 2021 steel production should not exceed the 2020 level, and as H1-21 production was well above the 2020 level production must be cut in H2 (some 12%)
  - » Both production and demand (including inventories) are down more than 20%, alongside the decline in construction stars! We assume there are more reasons for the cut in steel production than the 2030 CO2-target, like local pollution, fear of overbuilding, and too rapid credit expansion, especially among heavily indebted real estate developers (read: Evergrande). <u>Check the long term charts here</u>
  - » Cement production has fallen sharply too. Other partly 'construction related' sectors like copper and plate glass have kept up far better
  - » Auto are yielding too, due to lack of components as in the rest of the world
  - » Growth in still strong in electronics, furniture and metal products



# **Electricity production still trending upwards**

Transport activity may have slowed somewhat – partly Covid related (data just through Sept)



 Seaport traffic is not terrific either, somewhat strange given the surging exports <u>but imports have slowed markedly</u> recent months!



#### Retail sales down in October, and the trend is not impressive at all!!

Real sales fell 0.7% in Oct, following the 0.6% lift in Sept. The nominal y/y rate 4.9%, 1.4 pp above exp



- Nominal retail sales were up 4.9 y/y in Oct, up from 4.4% in Sept, and <u>above market expectations</u> at 3.5%. (These annual growth rates are close to useless due to the base effects)
- In nominal terms sales rose by 0.4% m/m in Sept, but due to the lift in energy prices, we estimate a 0.7 % decline in volume terms
  - » <u>Since last November the underlying volume growth rate has been less than 2%.</u> Before the pandemic growth equalled some 6% p.a, and <u>the slowdown is dramatic</u>. The fight against the virus may explain some of the slowdown, <u>but it is probably more than that</u>
- <u>Sales volumes are 6% below the pre-pandemic trend path and underlying growth is very low</u>



#### Investments on a new, and a much slower growth path

Monthly growth at 0.2% in Oct – and level is 7% below pre-Covid trend!!



- Measured YTD, nominal urban investments rose 6.1% in October (still a silly number, due to the setback last spring/summer), down from 7.3% in September, <u>0.1 pp lower than expected</u>
- Growth m/m was just 0.2% in nominal terms in September, but the history was not revised down (it would have been for the 6<sup>th</sup> month in row). Growth was gradually slowing before the pandemic, to some 0.4% per month. Now growth is far slower, just above 0.1% per month so far in 2021! As inflation has picked up, investments must be falling in real terms! We now even estimate a real decline y/y in October
- The **investment level** is 7% below the pre-pandemic growth trajectory and the gap is off course not closing now. The only positive twist: The level is above the Dec-19 level. The correlation to construction starts is not obvious. Check next page



#### **Construction activity is falling further – and faster**

Both new home sales & starts down 6% m/m in Oct, Sept. revised down. Both down 25% vs H1



- New home sales have fallen 25% from early 2021, following the spectacular recovery after the pandemic last year. Sales are down more than 10% vs the pre-pandemic level which was record high until then. Aug/Sept was revised down
- Housing starts are also down 25% vs. the early 2021 level, following a downward revision, and the steep decline m/m in October. Starts have been running below sales most of 2021, signalling an inventory drawdown but they are now in line
- Non-residential construction fell 16% m/m in October, and starts are down 30% since last summer, and the level is 25% below the pre-p level in October (but less smoothed)
- In sum, construction starts are rapidly on the way down and the downside risk has of course increased due to the 'financial stress' in the real estate sector. The downside may still be substantial, even if authorities now tries to stabilise the market/funding for builders. IF home buyers starts looking upon housing as a risk/bad investment, the downside is large as a substantial share of housing demand has been for investment purposes, often without any rental income. Look up for demand for steel, check next page



#### Construction & domestic demand for steel down, steel now more than 25%

The reason may partly be the 'official' story on meeting 2030 CO2 targets but demand is down for real too?



- The authorities have decided that 2021 steel production should not exceed the 2020 level, and as H1-21 production was well above the 2020 level production must be cut in H2 (some 12%)
  - » Both production and demand (including inventories) are down 25% since early 2021
- We assume there are more reasons for the cut in steel production than the 2030 CO2-target, like local pollution, fear of overbuilding, and too rapid credit expansion, especially among heavily indebted real estate developers (read: Evergrande)
- Now demand for steel may be the most important reason for the decline in production, as construction activity is falling rapidly



#### House prices are falling – for the first time since 2015

Existing house started falling in August though but just by 0.1% - 0.2% per month



- Existing home price inflation has gradually slowed, and in August price decreased by 1.1%, by 2.4% in September and further by 2% in October (annualised). The annual rate has fallen to 2.0%, from 3%
- New home prices rose in August but fell in September, by 1.1% and by 1.8% in October (annualised)
- Credit policy was tightened last year and credit growth has slowed (= a negative credit impulse)
  - » The correlation to house prices is far from tight but there is 'something' there
- Now, the trouble for some real estate developers (and many more than Evergrande) may influence the overall housing market as
  well as it has become much harder/impossible for home builders to fund themselves on the market (at least abroad). The
  authorities are now very likely trying to help developers to fund themselves domestically



## Credit growth has slowed- and construction is rapidly on the way down

The two are dancing together but not that closely (and it varies who takes the lead too)



- ... still they are at least normally on the same floor
- The recent credit tightening may have had some impact on the property market – but basically the slowdown in construction started 'too early' this time
- The credit tightening signals some downside risk for construction, raw materials & steel
- However, there is always a risk when construction and debt levels are high, especially if many are buying property for investment/speculation purposes



#### More credit in October, the 'best' since January

Local governments tapped the bond market – because they were told to, or had to?



- Total credit grew at a 10.7% rate in Oct (m/m, seas. adj. annualised), up from 8.7% in Sept. Smoothed, the underlying rate is at some 9%. The underlying growth rate is still above the trend growth in nominal GDP (say 5.5% real growth, 2% price inflation). The annual rate accelerated to 9.7% from 9.6% in Sept.
- » Total credit rose by RMB 1.4 trl, expected 1.6 trl (not seas. adj. Seas. adj. the 'core' total social credit (total ex central gov bonds & corporate equites) grew by 2.4 trl, up from 2.0 trl in Sept, the highest since January. No credit supply chock following the Evergrande drama, at least not yet
- » Bank loans rose by RMB 1.6 trl, s.a, or at a 10.7% annualised pace marginally less than expected. Growth has gradually slowed since early 2020. Loans are up 11.9% y/y
- » Shadow banking credit rose by RMB 0.8 trl, sharply up from Sept. Of this, local governments took on 0.6 trl in bond funding, possibly to compensate for less sales of land to builders or in order to fund building projects, with or without being told so by the central government
- Since early 2020, credit growth has slowed, the credit impulse has turned negative, like it usually does every 4<sup>th</sup> year or so. The ramifications may be felt in many markets
- The slowdown has been by purpose, as authorities have tightened, especially vs. credit supply <u>outside</u> banks, and vs the construction sector. They have succeeded, perhaps more than they wanted for, witnessing the huge funding challenges for home builders following the breakdown of China Evergrande. The authorities are now trying to secure funding to viable developers, in order to prevent a sudden halt in the construction sector. They may succeed or not.

# Credit growth turned south, just as asked for by the authorities

As they usually do, every 4<sup>th</sup> year or so. Until the growth is curbed too much. Like now??



- Over the past year, total credit has expanded by RMB 25 trl, equalling almost 23% of annual GDP, down from RMB 30 trl at the peak in 2020
- Banks supplied RMB 20 trl of the y/y increase
- Local governments have accelerated their credit growth, now up 3.7 trl y/y
- Growth in other credit via the shadow credit market x local gov bonds has slowed to less than RMB 1 trl from 5 trl, a dramatic slowdown (like many times before) and is up just 1% y/y
- Total credit growth accelerated 0.1 pp to 9.7% y/y, still above nominal GDP growth before the pandemic, and above our estimate of 5.5% potential GDP growth + a 2% rate of inflation



## The credit impulse is falling deeper into negative territory, still not record low

The slowdown in credit supply is substantial and well felt in parts of the Chinese economy



- A positive credit impulse implies that the credit growth/GDP ratio is increasing (the 2<sup>nd</sup> derivative of credit vs the GDP level)
  - » A negative credit impulse indicates credit tightening (or weaker demand) and has been associated with slowdowns in the Chinese economy, which have had impacts at other markets
- The credit impulse (here measured as the 12 m change in the 12 m credit growth/GDP ratio) bottomed in late 2018, turned positive one year later, peaked last autumn, fell into negative territory in May, and is now at -6.4%
- Are authorities worried that they have tightened too much, in sum? Probably not too much, yet. Reserve requirements for banks are cut, but not any policy rate.

GDP is smoothed in the calculations in the charts above



#### Credit impulse vs. PMI, metals prices

Correlations are not tight but a tighter Chinese credit market tends to lead Chinese PMIs...



- ... by some few months
- And tightening leads global metal prices (here the LME metal index) by almost a year in average. The correlation was weak before the Financial crisis but somewhat higher the past 15 years (chart to the right above)



## Chinese CPI still kept in check by falling food prices. Auto fuel at the upside

... but not much more. Core inflation at 1.3%



- Total annual CPI growth accelerated to 1.5% in October, from 0.7% in Sept
- The core CPI (x energy, food) gained 0.1 pp to 1.3%, following a 0.1% lift m/m
- Auto fuel prices are up 30% y/y. (Household energy prices u just some few per cent
- Food prices rose marginally mm, and are still down 2.4% y/y, due to the normalisation of pork prices even if vegetable prices rose sharply
- Inflation is low. Monetary policy will not respond to actual inflation data if inflation is not really high or low, the real economy and the credit market is more important



#### Pork prices are coming back to a normal level

.. And the negative contribution to headline CPI will now fade





#### PPI shot up 2.6% m/m, lifting the annual growth rate to ATH 13.5%



- The rise in PPI in the last few months can largely be contributed to an increase in commodities prices, and in September it was especially coal, metals and petro prices driving the PPI upwards
  - » Consumer goods are up 1% (one), durable consumer goods are down 0.1% y/y. The correlation between PPI and CPI in China is normally not impressive. However, vs the US CPI, check the next page
- Profits in privately owned industrial enterprises fell by 50% in February '20. Profits rose to a normal level in April/May '20
   – if we label the profit level in 2019 and early 2020 as normal at 5% of GDP and now it has climbed to 5.7%
- Profits in state owned enterprises profits are now around 1.8% of GDP

## The Chinese PPI is even more important for the US CPI than for the Chinese CPI

... as food prices are important in the Chinese CPI but not in the Chinese PPI (nor in the US CPI)



• However, the current Chinese PPI inflation does not signal an even higher US CPI inflation than the current rate

Ν

**SpareBank** 



# Still 6.6% unfilled vacancies, (voluntarily) quits surges to 3% & 'no' layoffs

The mismatch at the labour marked may have peaked but it is still extraordinary



- The no. of unfilled vacancies declined by 0.2 mill m/m in Sept, down to 10.4 mill, from an 0.2 mill upward revised 10.6 mill level in Aug. The print is the 3. highest ever. The vacancy rate was 6.6%, down 0.2 p. The highest print ever before the pandemic was 4.7%, and the rate was 4.5% just before the pandemic hit. The decline in vacancies September was rather broad (see next page) but all sectors report a higher vacancy rate than before the pandemic
  - » The SMBs (NFIB survey) reported marginally less trouble filling positions <u>October</u>. These two series are very closely correlated
- New hires decreased by 0.05' mill in September, to 6.4 mill, or to 4.4% of the no. of employed persons, still an unusual high level (and more than initially reported for August). No significant changes sector wise
- The rate of **voluntary quits** rose by 0.1 pp to 3.0% in Sept, another ATH, signalling a very strong labour market. As with unfilled vacancies, quits are closely correlated to wage inflation – for obvious reasons
- Layoffs fell to the lowest level ever in Sept, as few companies are closing down/reducing capacity
- In sum: The vacancy rate & the hiring rates are both down from the peak. The levels are still anyway extremely high, especially the unfilled vacancy rate and the quit rate is record high, all <u>confirming a extremely tight labour market</u>



### All sectors are reporting more vacancies than before the pandemic

But 12 out of 15 sectors reported fewer vacancies in September (like in August)

USA



A positive sign, even if levels still are very high, and some slack may be explained by the Delta outbreak than dampened activity at least in the hospitality sector



## A huge mismatch at the labour market – but it is finally shrinking somewhat

At least, there are some fewer vacancies even if unemployment is falling rapidly; some positions filled



- The unemployment vacancy mix signals an unusual tight labour market
  - » There are still <u>many more unfilled positions, than unemployed persons</u>: 10.4 mill unfilled vacancies and just 7.4 mill unemployed workers. There are <u>not</u> more workers outside the labour force that want a job then it normally is
  - » Unemployment is falling faster than the no. of unfilled vacancies, and the gap between the two is widening
  - » The labour market has not 'been able' to fill more of the vacant positions with workers that say they are searching for work the U/V mix today still way above the pre-pandemic mix
- The unprecedented mismatch may of course be mostly due to temporary impacts of the pandemic; different sectors have reopened at a different pace, perhaps even geographically, and it will take time to match the job seekers and the vacant jobs etc. Since July, the 'Beveridge curve' has bent inward, a small decline in vacancies and a lower unemployment rate the mismatch is somewhat reduced (the arrow at the chart above). However, there is a risk that some of the mismatch will turn out to be permanent, due to changes in qualification requirements, work preferences etc.



## A tight labour market may well lead to substantially higher wage inflation

The correlation to changes in Atlanta Fed median wage index is very close



- More companies than ever before (data from 1986 though) reported in October that they have lifted compensation and that they plan to do so the over next months as well
- The correlation vs changes in actual wage growth some months later (6 12 months) is pretty strong
- The correlation between unfilled vacancies and actual wage growth is even tighter, with the same lag
- We do not know FOMC's wage forecasts but we assume they are rather upbeat, as the bank expect inflation to remain above target the coming 3 years. However, the Bank could impossibly have factored in a wage growth <u>anything close to</u> <u>what companies now signals or even less what the current tightness of the labour market may imply</u>



#### The median wage is at a steeper trajectory

All wage indictors are reporting a more rapid wage growth than before the pandemic



- Atlanta Fed' reported annual growth in the median wage at 4.1% in Oct (3 m smoothed), down from 4.2% in Sept
  - » The median wage growth has been accelerating since the spring, and the annual growth rate is 1 pp higher than over the past 10 years and it will probably accelerate further
- Wage inflation is gaining traction among part-time, low paid and low educated workers and not so for the better paid. This signals that reopening challenges, when low paid jobs have to be filled again, is pushing wages up in this segment



# Headline inflation up to 6.2% in October, 0.4 pp above expectations

It may still be transitory but more prices are rising faster. For how long can Fed tread the water?



- Headline CPI rose 0.9% m/m in October, 0.4 pp more than expected, and up from 0.4% in Sept. The annual rate accelerated 0.8 pp to 6.2%, the highest print in 30 years
- Energy prices rose 4.8% m/m, and are up 30% y/y and has lifted the overall index by 1.8 pp y/y. Auto prices rose in Oct, and explains 1.2 pp of the annual rate
- However, price inflation broadened further in October. Cleveland Fed's **trimmed median CPI** is accelerated 0.8 pp to 6.0% (6 m pace), another ATH (with data from 1983). More prices (72%) are up more than 2% y/y than since 1990.
- Surveys signal a further increase in prices the coming months. The SMB (NIFB) survey report that *more companies than ever* (data from 1975) are planning to increase prices the coming months
- The **Federal Reserve** has some challenging months ahead. If the labour market participation rate does not increase significantly in November, the FOMC should adopt the market's view: Rates will be hiked in H1, and further in H2





#### Core inflation sharply up too

Prices +0.6% m/m in Oct, 0.2 – 0.3 pp more than expected. The annual rate climbed 0.6 pp to 4.6%!



- Core prices climbed rapidly m/m April June but slowed to an 0.2% average pace from July through September. <u>In October, another 'killer' month</u>
  - » <u>Used and new autos rose sharply again, as did hotel prices. However most groups reported more than 0.2% price</u> increases in October and just 1 (public transport/airline tickets) report a decline m/m





## New & used auto prices up in October, hotel prices too – and many more

Just public transport (airline tickets) cheaper m/m & y/y



#### Most sectors report higher growth m/m in Oct than in average over the previous 6 months, and 10 of 14 sectors more than 0.2% growth. Just 1 sector reported a price decline: Public transport as airline traffic remain below par

- All sectors barring medical care report higher y/y inflation rate than over the 2 years before the pandemic. Even the 2y average rate is higher (to correct for dips in prices last autumn)
- A large majority of sectors report more then 2% growth y/y
- One day: A huge downside for used auto prices, some for new autos & furnishings



#### SB1 Markets/Macrobond

#### USA CPI (mostly) Core



SB1 Markets/Macrobond



# Transport & energy explain 3.2 pp of the 6.2 % lift in total CPI

... but now other sectors are accelerating rapidly



- Energy has lifted the headline CPI by 1.8 pp in the past year. If the oil price does not skyrocket from here, the contribution to the annual growth rate from energy will quickly fade to zero (see more here)
- As used car prices rose again in October but has flattened since the summer after an unprecedented 40%+ increase due to lack of new autos. Thus, the annual growth rate, and the contribution to total annual inflation, have already fallen substantially. More to come
- However, excluding the 3.2 pp contribution the headline CPI from energy & transport, "remaining" inflation is accelerating rapidly
- Housing x energy is contributing by 1.5 pp, the highest rate in many years. Rents are on the way up and still rather exposed (check 2 pages fwd) but a substantial contribution to housing also comes from household equipment & furnishings, and operations



# Are 2<sup>nd</sup> hand cars too expensive following the 40%+ lift?

No doubt at all. The downside is substantial as soon as new car production recovers



- Used auto cars may have been somewhat low before the pandemic
  - » Prices for new autos are <u>up 12% since 1996</u>, quality adjusted, that is
  - » Until the recent price hikes in a very tight US auto market, **used auto** prices were down 10% the past 25 years (quality adjusted)
  - So it is impossible from these data to be sure if there is an equilibrium between new and used cars – and even less what it might be
  - » Still, the current used auto prices seem to be extremely stretched vs new autos as soon as the supply of new autos recovers
- New auto prices have also accelerated recent months and they are up 10% vs. the pre-pandemic level
- Should new and used auto prices return to the prepandemic level over the next year (a bit optimistic of course), the <u>total CPI annual growth rate will decline by</u> <u>almost 2.5 pp</u>



#### **US Inflation**

#### A tight rental market a possible inflation threat

A low vacancy rate, rental asking prices are up (according to most measures), house prices are up





- The official (Commerce dept) rental asking price has flattened recent months and rents fell m/m in Sept. The annual growth rate has fallen to 4y/y from 17%
   but the market rent level is still very high. Other rental surveys have reported smaller increases in rents vs the pre pandemic level. House prices are up almost 20% y/y
- The rental vacancy rate fell in Q3, and is very low. The homeowner vacancy rate is at a record low level but have flattened
- Rent inflation measured in the CPI has recovered to 3.0% from 2%, but that is still below the pre-pandemic rate at some 3.5%
- **Our model**, even assuming a <u>market slowdown</u> in rental asking price inflation and in house price inflation but adding a modest increase in mortgage rates, signals a sharp increase in rent inflation, as measured in the CPI, toward 4%, from the current 3% level. *Total CPI inflation will accelerate 0.3 pp per pp rent inflation climbs. The risk may be at the upside, due to the change in the market rent level*




#### The oil price moves the CPI as usual – but now there is something else too

CPI is up 2.5 pp more than explained by the oil price, which is mostly due to auto/airline ticket prices



- Oil price cycles have explained some 80% of the changes in CPI growth the past 30 years
  - » In our model we incorporate all indirect impacts from changes in the oil price as well as the impact from other factors that influenced inflation which correlates to the oil price
  - » If the oil price stabilises at the current level, the impact on the CPI will gradually fade the coming quarters
- From time to time, there are **substantial residuals**, like now: Headline inflation is 2.5% above the model forecast, and the CPI x energy index (which is close to the core CPI) has climbed by 2.5 pp too. Why?
  - » Auto prices (new and used) and airline ticket prices have lifted the CPI by 1.4 pp. Thus, more factors are contributing to the rise in inflation

# Inflation over the past 2 years: A market acceleration 11 sectors >2%, 2 below!

2 y avg core inflation 3.7%, up from a 2.1% average in 2017 – 2019 – and broadening, 72% up >2%



- Of the 13 main sectors, 11 are up more than 2% per year since Oct 2019, and 2 are below the 2% line
- Measured over the past 2 years vs the 2017-19 average, inflation has accelerated in 10 sectors, and slowed in 3 sectors
- Of 350 sub-sectors, 72% are up more than 2% over the 2 past years (from 70%), <u>normally signalling an inflation</u> <u>rate above 3%</u>







# There are still some possible (and not unreasonable) excuses...

But price increase have become more wide-spread and CPI trimmed mean has exploded



- The Cleveland Fed trimmed median CPI is up at 6% pace over the past six months, the highest print (by far) in the 40 years this series have been calculated. Dallas Fed's trimmed mean PCE was up 3.1% in Sept, the highest since the before the financial crisis
- In the CPI, almost all of the initial lift in core CPI was due to prices of good & services that often fluctuate, with rapid price increases followed by deep price cuts these prices are flexible, and represent some 10% of the core CPI. These prices are up 15%, with a substantial contribution from 2<sup>nd</sup> hand auto prices. However, these prices are flexible both ways, and the cycles are normally short lived
- The sticky components (90 % of the core CPI) are up 3.1% y/y, the highest levels since 2009 but as prices last year, the 2 y average is still at 2.4%, a 'normal' level
- So, more warnings signs for the Federal Reserve



# Another warning sign: An ATH share of SMBs say they plan to raise prices

... with data from 1974. And actual inflation is far from uncorrelated to these price plans



- More companies report they have increased their selling prices recent months than since 1980
- Even more spectacular, more companies than ever are **planning to hike** their prices the coming 3 months even more than in 1979, the previous ATH
- Actual inflation is far for uncorrelated with these messages from the companies, at least they a correlated to the momentum in inflation, like measured at the chart to the right (deviation from 10 y average CPI inflation)
- Other business surveys confirm that something special is happening, more companies than in decades are reporting higher input costs or output prices
  - » Atlanta Fed Business survey report a 3.3% expected growth in unit costs, up from 3.1% last month. Since 2013, the expectations have been stable at 1.75% 2.25%. Now we are off this chart as well



# PPI inflation further up in October, the highest y/y rates in 40 years

However, crude materials (ex energy) are finally easing, normally a positive sign



- The headline finished goods PPI rose 1.2% m/m in Oct, as energy prices contributed on the upside again. The annual rate was up 0.8 pp to 14.1% also the highest since 1982
- Core finished goods x food & energy PPI rose by 0.5%. The annual growth rate added 0.5 pp to 8.8%, the highest level since 1982
- **Crude material prices** may have peaked, the first positive sign, even if they rose again in October. In addition, core CPI goods prices have already climbed more than usual vs. PPI prices (due to 2<sup>nd</sup> hand auto prices), limiting the upside risk
- The 'official' total final demand PPI, including <u>services</u>, rose by 0.6%, <u>as expected</u>. The index is up 8.6% y/y, signalling a CPI growth above 6%. Just where we are now!



... However, core <u>consumer</u> prices have been rising earlier and more than normal vs. PPI prices



- Crude goods prices are leading intermediate goods prices by 4 months, and consumer prices by 12 months and <u>crude</u> prices have clearly peaked (see chart to the right). However, intermediate prices have not yet yielded by much – and they will push finished goods prices up the coming months
- Some more comfort: Prices at the <u>consumer level</u> have responded <u>earlier and more than normally</u> vs the PPI core consumer goods index. That is very likely due to the unprecedented (and very likely not permanent) hike in 2<sup>nd</sup> hand cars which <u>are not a part of the PPI index</u>. Thus the <u>upside risk for the core goods component of the PCE may be limited</u> <u>the coming months</u>

M

SpareBank



# Bottom line: Total PPI (services included) confirms 6% CPI growth

The 'new' total PPI rose 0.6% m/m in Oct, as expected (0.6%), and is up 8.6% y/y



- The correlation between the 'new' total PPI, which includes all sort of services in addition to goods is pretty close. The current 8%+ annual growth rate in the PPI signals some 6% y/y growth rate in the CPI index. Which seems to be a precise estimate
  - » Regrettable, the PPI does not lead the CPI



# Small businesses optimism inched down to an average level in October

USA

Small businesses cannot find workers and are raising compensation... and selling prices



- The NFIB optimism index fell 0.9 p to 98.2 in Oct, expected up to 99.3. The index is close to average, and far lower than the PMI/ISMs, and most
  other surveys
- The outlook for the next 6 months worsened substantially in Oct, to and is <u>2.4 st.dev below</u> par, close to all-time low, and well below the dark days of the Financial crisis. Lack of qualified labour, labour costs, inflation worries. 'Nobody' is complaining about current sales, though, and investment plans were revised sharply up to an above average level!
- Hiring plans are still very high, just somewhat down from the ATH level in Aug. However, the SMEs are not able to fill their vacancies. More companies report planned compensation increases than ever before (data out the previous week)
- The share of companies planning to lift prices rose further, to ATH (data from 1974). And they have usually done what they say



#### The SMBs want more workers and plans to invest more

Investment plans revised sharply up in October



• Other investment surveys are still more upbeat than the small business survey



#### **Record few companies complain about poor sales & competition from large companies**

Record many complain about cost/quality of labour. And inflation, of course



USA Small businesses Single most problem

- Thus, companies report they are constrained from the supply side, not from the demand side
- In addition, inflation now quoted as the most important problem for the SMBs
- These data are really incredible, at least vs. the current monetary policy stance. Check next page



# It's the supply side!

At the same time, the Federal Reserve is conduction the most expansionary monetary policy in hist.



- ... at least in nominal terms (the Fed funds at zero, huge QE programs, until now
- And guess what, more SMBs than ever plan to lift their selling prices than ever before, data from 1974



#### Budget deficit narrowed slightly in October – to 7% of GDP

Spending is more than 1.000 bn above the pre-pandemic level (5% of GDP), revenues far less



- Federal expenses fell to USD 497 bn in Oct (seas adj), equalling 26% of (monthly) GDP. Spending is some 5% of GDP higher than before the pandemic mostly due to income security spending, and transfers to states
- Federal income was close to unch at USD 357 bn, 19% of GDP and covering 72% of the expenses. Revenues are just up 2% of GPD mostly due to higher tax payments from households that earn much more than before the pandemic
- The actual deficit was at USD 165 bn in Oct, expected USD 179 bn. The seas. adj deficit equalled USD 135 bn or 7.2% of GDP. Over the past 12 months the Federal deficit has equalled 11.9% of GDP
- The infrastructure deal now decided will weaken the budget but not by much, even if the offsets are mostly small pies in the sky. The 10 year package equals no more than 2.5% of GDP (0.25% per year), and spending will ramped up over time, creating just a minor fiscal stimulus and nothing compared to the amounts spent during the pandemic



#### Income security spending is still running much higher than before

... even if extra unemployment benefits are terminated



- Both Income security and 'other spending' is far above the pre-pandemic level, by 4% and 3% resp. Health spending is up too
- We still deem most of this extra spending to be temporary and due to the stimulus packages, and other Covid related measures

USA



#### Both corporates and households pay more taxes than before the pandemic





#### 86



# New jobless claims still sliding down, continuing claims is trending fast down too

Another sign of a tighter labour market



- New jobless claims fell by 4' to 267' in week 44, expected 265', the 6th week in row below 300'
- Ordinary continuing claims rose by 59' to 2.2 mill in week 43 but the trend is sharply down, and the level is just 0.4 mill above the prepandemic level, confirming a tight labour market
- The **two temporary federal pandemic unemployment benefit programs** ended on September 6<sup>th</sup>, are now finally fully terminated, in total 12 mill have lost their Federal unemployment support. What are these millions doing now?? They are very likely among the 3.4 mill that have been employed since June. However, most of the employment growth came before most of the receivers of benefits lost them, and in those states who left the programs early has not reported faster employment growth than the others



#### Univ. of Mich. consumer sentiment nosedived in November!

All consumer surveys are down, and just Conference Board's is above par



- UM' sentiment survey fell to 66.8 in early November from 71.7, expected up to 72.5. The decline equals 0.4 st.dev, and the level is now -1.7 st.dev below avg, and the lowest level since 2011
  - » Both expectations and assessment of the current situation fell sharply
    - The current situation is 1.8 st.dev below average, and worse than during the first phase of the pandemic
    - Expectations are also far below par
- Besides <u>inflation</u>, there are not many indicators that the economy is in a bad shape, and definitely not in a worse shape than say some months ago or during the 2<sup>nd</sup> Covid wave in Dec/Jan
  - » Employment, unemployment, consumption, housing, the stock market have all moved in the right direction – check our model estimate 3 pages fwd

In addition

- » Inflation expectations have not risen much <u>recent months</u> but they are very likely one explanation for the drop in confidence – the two are clearly negatively correlated
- » ... and the Delta attack is now gradually brought under control, and the no. of hospitalised persons is down more than 60% since early September
- The 'problem' is that the UM survey often has been an early bird in the cycle, and that the survey may be 'right'



# Univ. of MI: Both the assessment of the current situation & expectations weak

Inflation expectations are elevated but that outlook has not worsened recent months



• The 12 m inflation f'cast rose one tenth to 4.8%, back to the July level, the highest level since 2008. The 5 y inflation expectation fell two tenths to 2.8%



#### The gap between consumer surveys is highly unusual

Almost always, when UM grounded before CB yielded, UM was right. And the recession started



- However, we think a <u>recession is rather unlikely</u> now but the incredible decline in the UM survey is a warning sign, also vs. the stock market
- The IBD/TIPP survey fell to 1.2 st.dev below in November, from 0.7 above the average in August. This survey is more volatile short term than the other surveys. University of Florida's survey fell to -1.5 st.dev in October
- Conference Board's confidence survey fell in both Aug and Sept, but recovered somewhat in October, and was at 0.7 st.dev above average, far stronger than the other surveys. The 'spread' between these surveys is among the largest ever







#### Households should have been quite happy by now

The pandemic the only reasonable explanation for the bad mood? Or politics??



- Our simple model explaining the current situation part of UM's sentiment survey has worked pretty well, explaining all important ups and downs by standard economic indicators
  - » Unemployment, inflation w/expectations, growth (ISM), the stock & housing markets, all contributing significantly with the right signs. The deviation in the early phase of the pandemic is due to the unusual short lags vs. the economy
- However, given the normal drivers, the UM sentiment should have been close to record strong by now even if both actual and expected
  inflation is far above normal the other drives more than compensate for that
  - » Can it just be as simple as the pandemic?? However, the pandemic can not be deemed worse now, than say 6 or 12 months ago
  - » ... Or politics?? The difference between voters have never been larger and republicans have never ever been so negative vs. the current situation in the economy as now (at least, that's what they are asked about)



#### ... but why are the Europeans so happy

The gap between consumer confidence in Europe and the US UM survey is unprecedented, by far



# Atlanta Fed's nowcaster suggests 8% growth in Q4!







# Manufacturing production down 0.2% in September, supply side trouble

Production is 3.2% below the Feb-20 level - with Germany the big laggard, down 11%



- Total production was down 0.2%, better than the -0.5% forecast. However, excluding Ireland (which reports crazy production figures, driven by tax adjustments in tech companies), production fell by 0.4% (as shown on the charts above)
- Production has been trending flat so far in 2021 in spite of record strong business surveys (and strong even without the delivery times sub index) and higher order inflow
- Production in Italy is 1% higher than in Feb-20, while production in the other big 3 is down
  - » Germany is the laggard, down 11%. From time to time, auto production is not what you wish you had...
  - » Belgium is up 19% (pharma), the Netherlands 2%



# **Orders are still coming in but are not effectuated – due to lack of supplies**

The auto industry has taken the hardest hit – down 29% vs the 2019 average





# ZEW expectations slightly up in November, expected further down

The current situation weakened in November too. In total: The economy is stabilising



- The **ZEW expectation** index climbed to 31.7 in November, from 22.3 in Oct, expected down to 20. The level is 0.2 st.dev above the average at 14 but far below the ATH at 84 in May
- Assessment of the current situation fell further in November but the levels is still above average (0.3 st.dev)



# GDP up 0.6% in Sept but history revised down 0.4%, level still below Feb-20

GDP grew 5.1% in Q3 (1.3%) expected 6.1% (1.5%). Q3 still 2.1% below the pre pandemic level



- GDP grew 0.5% m/m in Sept, 0.2 pp better than expected but the previous months were revised down, and Q3 was a tad weaker than expected, up by 5.1% (annualised pace). In September, GDP was 0.6% below the level in Feb-20. The Q3 average was 2.1% below Q4-19, well below the EMU outcome at -0.5%. US and Norway are some 1.5% above their resp.Q4-19 levels
- Service production was up 0.7% in September, while manufacturing production fell 0.1%. Services in total is back to the pre pandemic level
- Public demand has been the main growth engine through the pandemic. Household demand is now recovering but are still well below the pre-pandemic level. Business investments may have bottomed but remains well below par. Exports are down, but so are imports, and net trade is close to neutral



#### Education and hotels & restaurants are up 4 – 5% vs. Feb 20!

Transport & business services are still 6 – 9% below

UK





#### Public demand supports growth, exports a heavy drag

Business investments are lagging too. Houshold demand also on the weak side, but now heading up



- In Q3, household demand contributed the most to growth
- Exports are down more than 22% imports 'just' 12%



# A big boost from public sector demand, now households are recovering

Business investments still in the doldrums. Net exports volatile, just marginally down during the pan.



UK



# GDP down 3.0% in Q3 (0.8% not annualised), private demand down

GDP 2.8% below the weak Q4-19 level as the country struggles with the virus





# Total unemployment down 0.1 pp to 7.4% in Oct, vacancies up to another ATH!

Open unemployment has fallen to 3.5%, to below the pre-pandemic level



- Registered 'open' unemployment (PES/AF) has fallen rapidly since last June, and fell to 3.5% in Oct, and <u>below</u> the prepandemic level at 4.1%
- Incl. labour market measures, PES/AF unemployment is falling too. The rate fell by 0.1 pp to 7.4%, but the level is still 0.1 pp above the early 2020 level (but 0.7 pp above the local trough in mid-19)
- The LFS (AKU) unemployment was unch. at 8.8% in August (Sept data out this week) and the level is up 1.2 pp higher than in early 2020. (However, this survey is heavily revised, and we are not sure the Swedes have made data comparable)
- The number of new vacancies and unfilled vacancies rose further, up to another ATHs! Layoffs were down in September.



# Highlights

The world around us

The Norwegian economy

Market charts & comments

#### The vacancy rate unchanged in Q3, at a high level

A small increase in the no. of vacant positions, the rate unchanged at 3.2%



• Lack of access to foreign workers may partly explain a high number of unfilled vacancies. The no. foreign workers on short-term stay is down approx. 20', equalling 0.8 pp of the no. of employees. If all came back, and found a job, the vacancy rate would have been 2.4% - still slightly above average



# 'Some' mismatch: Why are not more the vacant positions filled

... when unemployment is not record low?







# More vacancies than normal everywhere but 10 of 20 sectors down in Q3

Agriculture and fisheries are reporting far more vacancies than normal (due to lack of foreigners)

#### Norway Vacancies Vacant jobs

Vacant jobs		
	0 3000 6000 9000	
Trade		9700
Residential Care	😑 🛧	9500
Admin. & Support Serv	• *	9200
Construction	• *	8200
Education	😑 🚖	7000
Health	🔶 🔶	6300
Information & Comm	• • •	6000
Prof., Scientific, Tech Serv	🔶 🔶	5800
Public Adm & Defence	• *	5400
Social Work	• *	5400
Hotels & restaurants	<b>→</b>	5100
Manufacturing		4700
Agriculture, Fishing	🔶 ★	3900
Transportation & Storage	<b>**</b>	3500
Financial & Insurance		1400
Arts, Entertainment & Recr	n 💶 🗩	1400
Personal Services		1400
Mining & Quarrying		1200
Power & Water Supply		600
Real Estate		600
Now 🔶 A	Avg 2015-19 ★ Previous Q	
SB1 Markets/Macrobond		

- The highest no. of vacancies are found in trade, residential care and admin. & supportive services, even if activity in this sectors still is very low
- The vacancy rate is the highest in agriculture/fisheries, information & communication, admin services, and hotels & restaurants

#### Vacancy rate, in % of labour force, s.a 8 9 56 7 2 3 4 Agricult., Fishing 8.2 Information & Comm. 5.6 Admin. & Support Serv 5.5 5.4 Hotels & Rest. Residential Care 4.5 Prof., Scientific Tech, Serv 3.7 Total 3.2 Construction 3.1 Arts, Entertainment, Recr. 3.0 Finance & Insurance 2.9 Public Admin. & Defence 2.7 Personal Services 2.7 Social Work 2.6 2.5 Education 2.5 Health 2.3 Transportation 2.2 Trade 2.2 Manufacturing Real Estate 2.1 Power & Water Supply 1.9 Mining & Quarrying 1.8

SB1 Markets/Macrobond



Norway Vacancy Rate

Markets/Macrobond



# Normally, a tighter labour market implies higher wage inflation

Even in the 'organised' Norwegian labour market







#### **Employment confirmed sharply up in Q3**

Payroll statistics report fewer no. of foreign workers on temporary stay -> more residents have job



• The no. of foreign workers fell further in Q3, and there are 30' fewer now than before the pandemic, equalling 1.1% of total no. of employees


## Core inflation surprisingly down to 0.9%, headline down to 3.5%

Core inflation remains far below target but Norges Bank has not been an inflation nutter past 10 years



- **CPI-ATE** (ex. energy and taxes) inflation slowed 0.2 pp to 0.9% in Oct; in line with Norges Bank's f'cast, but well below consensus (1.2%) and our estimate (1.3%)
  - » Prices fell 0.1% m/m (seas adj), after rising 0.2% in Sept
  - » Core inflation is running above 2% in just <u>3 sectors</u>, and is below 2% in <u>10 sectors</u>
  - » Prices on imported goods fell 0.2% in Oct, and the annual rate is just 0.3% - as the NOK has strengthened substantially
- Total inflation declined 0.6 pp to 3.5%, below our 3.9%. Electricity prices fell more than we assumed (and the core was lower as well). Electricity prices are still up 77% y/y, a 2.% drag on household disposable income. If the future market is right, el. prices will collapse the coming months
- The outlook
  - » Core inflation have probably bottomed. Strong growth at home and some impact from higher inflation abroad will contribute at the upside (even if the impact of the latter is not impressive, historically). A somewhat strong NOK will counterweigh higher prices abroad
  - » The steep rise in electricity prices reduces households' real disposable income but given the still rich aggregate savings rate, consumption is probably not that exposed



#### Norway vs ROW: Long term CPI 'regimes' have been correlated

But limited short term correlations, in the 'low inflation regime'



- Norwegian core CPI vs. trading partners' core is <u>close to</u> <u>uncorrelated</u> past 20 years. The headline CPIs have been somewhat better correlated, due to comovements in energy prices
- During the '70s early '80s Norwegian headline inflation was correlated to the global (G7) CPI cycle (and mostly lagging)





### A lot of red: Prices were lower than we assumed, broad based

Electricity prices rose further of course, but are not that high

		Change	m/m, se	eas. adj	j Change y/y		Contribution, pp								
Oct-21	Weight	Out-	SB1M	Dev.	Prev.	Out-	SB1M			Dev. vs		• <b>Food</b> prices up 0.1%, well below over forecast.			
CPI ATE	%	come	f'cast	рр	month	come	f'cast	m/m	y/y	f'cast		Prices are down 1.9% y/y! A broad decline			
Food, non alc bev	13.0	0.1	0.3	-0.2	-1.8	-1.9	-1.6	0.01	-0.25	-0.03	K /	<ul> <li>Clothing prices fell again and are down 1.2% y/y</li> </ul>			
Alcohol, tobacco	4.3	0.1	0.2	-0.1	1.1	0.9	1.1	0.00	0.04	-0.01		<ul> <li>Furniture/hardware/equipm prices fell too, and</li> </ul>			
Clothing, footwear	4.9	-0.5	0.3	-0.8	0.1	-1.2	0.4	-0.02	-0.06	-0.04	- /	annual rate has fallen to 1.1% (was +10%)			
Housing x. energy	20.5	0.2	0.2	0.0	1.4	1.6	1.5	0.03	0.32	0.00		<ul> <li>Transport ex. gas/airline tickets down 0.1% m/m</li> </ul>			
Furnishing	6.8	-0.5	0.2	-0.6	2.7	1.1	1.9	-0.03	0.07	-0.04	- /	y/y! Autos are up just 0.1% y/y!			
Health	3.2	0.1	0.2	-0.1	3.0	2.6	2.7	0.00	0.08	-0.00		<ul> <li>Airline ticket prices are volatile up 7% in Oct, stil</li> </ul>			
Transp. ex. gas, airl. tick	12.0	-0.1	0.5	-0.6	0.7	-0.1	0.7	-0.02	-0.01	-0.08		down 6% y/y. The price level is probably too lo			
Airline tickets	1.0	6.8	2.0	4.8	-15.9	-6.1	-12.2	0.07	-0.06	0.05		• Recreation prices down 0.1%% m/m, and up just			
Communication	2.5	-0.0	0.1	-0.1	0.8	0.6	0.6	-0.00	0.01	-0.00		1.8% y/y			
Recreation, culture	11.2	-0.1	0.3	-0.4	2.4	1.8	2.4	-0.01	0.20	-0.04		<ul> <li>Restaurant/hotel prices are up 4.3 y/y, down m/</li> </ul>			
Education	0.5	-	-	-	1.7	1.7	1.7		0.01	0.00					
Restaurants, hotels	5.9	-0.1	0.4	-0.5	4.6	4.3	4.8	-0.00	0.25	-0.03		• CPI-ATE up 0.9% y/y, in line with NoBa's f'cas			
Other	8.7	-0.2	0.2	-0.4	2.9	2.3	2.7	-0.01	0.20	-0.03		well below consensus/our estimate			
CPI-ATE	94	-0.0	0.3	-0.3	1.2	0.9	1.3			-0.30					
Norges Bank est.			-0.1		1.2		<b>0.9</b>					• Prices on <b>imported goods</b> fell by 0.2% m/m, are			
Imported	34	-0.2	0.2	-0.4	0.9	0.3	0.8	-0.08	0.09	-0.14		just 0.3% y/y – as the NOK has strengthened			
Domestic	60	0.1	0.3	-0.3	1.2	0.9	1.3	0.04	0.54	-0.16		<ul> <li>Prices on domestically produced goods &amp; service</li> </ul>			
Energy, housing	3.6	-9.8	-3.5	-6.3	106.6	77.4	98.3	-0.35	2.77	-0.22	$\sim$	were up 0.1%. The annual rate at 0.9% is very low			
Energy, transport	2.0	2.8	1.0	1.8	17.5	20.8	17.3	0.06	0.42	0.04	$\mathbf{i}$	according to Norwegian standards			
CPI Total	100	-0.2	0.2	-0.3	4.1	3.5	3.9	-0.17	3.53	-0.33		<ul> <li>Electricity prices fell less than we assumed, but a still up 77% last upon</li> </ul>			
Change m/m based on s	easond	ally adjus	ted data	a (calc b	y SB1M	)					_∖`	still up 77% last year			
Sum of parts does not ne	ecessar	ily add u	p to toto	als								• and <b>headline inflation</b> came in at 3.5%, down			
Norges Bank m/m s.a. es	timate	e is implie	d, calc b	y SB1M								from 4.1% in September			

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



#### Airline tickets, housing on the upside, many others at the downside in October



SB1 Markets/Macrobond

#### Norway CPI, change last month

С	PI ATE	E (co	re), c	hang	e m/n	n, sea	as adj	
-1	0	1	2	3	4	5	6	7
								6.8
								0.2
	- E.							0.1
	1.1							0.1
	- E							0.1
	1							0.1
								0.0
								-0.1
	1.1							-0.2
;								-0.4
								-0.5
								-0.5
-1	Ó	1	2	3	4	5	6	7
	-1	-1 0						

SB1 Markets/Macrobond

#### Norway CPI, core contrib. m/m





### **3** sectors report core inflation above 2%, 10 below!

Over the past year housing , restaurants/hotels & recreation/culture have done the heavy lifting



Norway CPI, core y/y

Foods prices are falling – cutting the core CPI by ¼ pp! ٠





#### Food prices are still trending down

Prices flat m/m, and are down 1.8% y/y!! Food prices slightly up abroad



- Food prices have fallen since March ٠
- Food prices have been kept in check among our ٠ European peers too, despite (moderate) lifts in agricultural commodities







### Food commodity prices: Very limited correlation to trading partners food prices

... And no stable correlation at all to Norwegian food prices (in the CPI)



- Try to find a close correlation on the chart above to the right – there are some, over short periods but no consistency at all
- Agricultural/food commodity prices are sharply up from mid 2020 but far from dramatic vs. previous hikes, and the level is not high. Since May, prices have fallen sharply. Guess you didn't know?







## Furnishing++ inflation has slowed to a trickle, y/y growth to 1.1% from 10%

NOK explains quite a lot







#### Have airline tickets bottomed?

Probably some upside as traffic recovers





## A broad decline in inflation – it is not just imported goods

Service inflation has slowed substantially, to 1.6% from close to 5%



- Domestic services inflation ex rents slowed sharply during the corona crisis, and not just only due to cheaper airline tickets, other non-labour-intensive services have contributed as well
  - » The disinflation may have come to an end as prices are edging upwards again
- **Rent inflation** has accelerated to 1.6% from 1% recent months, but is still lower the 1.7% 2% rate before corona
- **Other goods** than agricultural products are down 0.8% y/y, a bit surprising



### Imported goods prices: Soon on the way down??

Our total core CPI model is not calibrated for a huge decline in GDP, but the sign is probably correct



- The NOK steep depreciation in early 2020 no doubt drove imported inflation up last year. Closed borders/supply chain challenges due to Covid-19 may have contributed to the lift in import prices too, and more importantly: <u>the strong</u> growth in demand for some goods (like sport equipment/furniture) made it possible to increase prices. Now the NOK has recovered, and import price inflation is falling sharply even if some price inflation abroad has accelerated (core goods prices included)
- **Domestic inflation** will be kept in check due to moderate wage inflation for still a while and overall core inflation will be low the coming months



#### **Electricity prices down in October, still elevated**

However el. prices are 'just' 50% above a 'normal' level



- **Electricity prices** (in the CPI) fell 8% in October, and will very likely decline by a similar amount in November. Still prices are high. The discrepancy between the headline CPI and the core index (CPI-ATE and the core without just electricity prices, CPI-AEL) is 2.6 pp! **Gasoline prices** are just some few % above normal
- If the forward market is anything close to right on prices the coming months and quarters, the impact on household disposable income will be limited indeed. Prices are expected back to a normal level – or even below next summer. The aggregated loss over a year with higher prices than normal will be no more than some 1¼ - 1½ % of annual disposable income – due to an average lift in the electricity bill of 30%
- The risk: Market prices may be dead wrong vs. the actual outcome
- A tip: If you like the forward path, enter a fixed price contract!







### Norges Bank has not been an inflation nutter (since 2010, at least)

Actual inflation has not been correlated to interest rates



• Now, the Bank assumes the signal rate will be hiked gradually to approx 1.75%, while core inflation is expected to drift slowly up from the present level towards the 2% target in 2024



### Lumber prices have peaked? Other high flying materials down too (but others up)

Lumber prices fell slightly in October, as we expected. Steel has peaked too



- Material prices 26.8% y/y, totally unprecedented!
- Lumber and steel, carpeting materials the main culprits, but plumbing material, electrical material is up 25% too
- Labour costs are flat up 2.6% y/y
- Including labour costs, the total building cost index is up by 13.5% all time high (at least with data from 1980)



## In the US, the lumber bubble has burst, prices almost back to an average level

#### ... at least in real terms



- Raw material cycles are normally short lived. This one will probably turn out to be a short one too
- Most likely, Norwegian lumber prices will follow suit



### Manufacturing production up in September, short term trend flattish

Production has been flat since April, both in oil related & others. The trend still weak in oil related



- Production rose 0.6% m/m in Sept
  - » Oil related manufacturing production climbed by 1.6%, other sectors were up 0.8%, mostly due to food production (which does not quite add up)
- Manufacturing surveys are signalling strong growth in activity, but actual production has been flat since April, and it is flat vs. the 2019 avg.
- However, production x oil related sectors is 4% above 2019 level, while oil related is down 8%!





SB1 Markets/Macrobond



### Surveys are signalling growth (like elsewhere)

... and production is not that impressive (like most most places)





## Almost all sectors up y/y, but most down m/m

#### Norway Manufacturing

	-					%
	Change %, y/y 3 m avg					
	-25	-15	-5	5	15	
Paper & prod.						17.9
Transport Eq		•				14.1
Ref Petro, Pharma				•		14.0
Basic Metals						8.1
Non-Ferrous Metals						6.7
Basic Chemicals						6.1
Wood & Wood Prod						5.9
Food, Bev & Tob				•		5.5
Fabricated Metal			•			5.5
Textiles, Clothing						5.3
Furniture etc					•	4.6
Computer & El Eq						4.4
Ships, Boats & Oil Platfo	orms		•			3.3
Repair, Installation						2.4
Rubber, Plastic & Min Pr	rod			•		1.8
Printing	(					1.4
Machinery & Equipm			•	•		1.3
	-25	-15	<b>-</b> 5	5	15	
	Now	🗕 6 m	ago			
1				SB1	Markets/M	acrobond

#### Norway Manufacturing

	Change %, m/m								
	-20	-15	-10	-5	0	5	10	15	
Rubber, Plastic & Min.									14
Wood & Products	•								14
Non-Ferrous Metals				•					4
Ships, Boats & Oil Platf									3
Machinery & Equipment									2
Transport Equipment									2
Fabricated Metal Prod									2
Printing, Reprod			•						1
Repair, Installation									1
Furniture & other									0
Food, Bev & Tob				•					0
Basic Metals									-1
Refined Petro, Pharma									-1
Basic Chemicals			•						-2
Paper & Products			•						-4
Computer & Electrical Ec	1								-4
Clothing, Leather									-4
	-20	-15	-10	-5	Ó	5	10	15	
Late	st 🥚	Pre	viou	s mo	nth				
					5	6B1 M	arkets/	Macro	obon

## **Engineering still hurt by lower oil sector investments**

#### Commodities mostly up

Norway



- Production of ships & platforms has been heading down so far in 2021
  - » Corona measures (lack of foreign labor, contacts with foreign vendors/customers), supply chain challenges probably explained parts of the recent drop but oil investments have recovered recently, according to National Accounts
  - » Commodities are on the way up, but were mixed in July/August



### Furniture & food production still well above the pre-Covid level

These sectors are probably exposed vs. a return to more normal spending habits





# Highlights

The world around us

The Norwegian economy

Market charts & comments

#### Markets



## Equities mixed after US inflation 'shock', yields up everywhere

#### Oil down, but metals up. And the NOK continues downwards











## The big picture: Risk is on – and bond yields are still probably drifting upwards

Equity markets, commodities are still on the move upwards. The CNY the strongest currency





#### Metal prices slightly up but iron ore further down. Oil marginally down







#### **European electricity, gas prices up last week – still far below recent peaks**



• Germen electricity future prices are still very high vs. Nordic prices



#### **Credit spreads marginally have probably bottomed – at very low levels**





SB1 Markets/Macrobond



#### Markets



Dow 0.3% in the week, the 10 y bond yield up 13 bp,







SB1 Markets/Macrobond 136

Ν

SpareBank



## Further into the 'Goldilocks corner'!

Wage/price inflation dynamics will in the end decide. And not the Fed...



- Usually, we have associated drifts towards the 'green corner' low inflation and solid growth at the same time as a <u>temporary</u> sweet spot for markets
  - » Interest rates have climbed 100 bp+, and stock valuations have kept up or climbed (like the Shiller PE). Still, we deem the current yield level to qualify for the "Goldilocks" corner (especially the real bond yield, check the chart on the previous page). Where to go from here?
- The inflation/growth mix will decide:
  - » If 'nothing' happens, we can stay in this Green quadrant. Raw material prices normalise, wage inflation is kept in check because the US labour supply finally returns to normal. Inflation turned out to be transitory, profits are OK, yields remain low. No construction crisis in China
  - » If the labour supply in the US does not yield, wage inflation will very likely accelerate
    - If companies are able to increase their selling prices, profits will be kept up, but higher inflation well very likely push the Fed to tighten monetary policy, which is challenging for high multiples. Move to the blue quadrant. However, after a while profits will anyway come under pressure. The stock market will be rewarded with lower profits & lower multiples (it will resemble the Red corner, before moving to the Yellow)
    - If companies are not able to increase their selling prices, inflation will be kept in check but profits will decline rapidly. A 2% lift in wages, cuts profits by well above 10%. That's the Yellow corner



#### Break-even inflation straight up, has not been higher in 23 years

Real rate further down, the 10 y TIPS rate down 6 bps to -1.15%, just marginally above ATL



	-	-	-			
	Yield	Change	Change	Min since		
		1w	1m	April-20		
USA nominal treasury	1.58	0.13	-0.01	0.52		
break-even inflation	2.73	0.19	0.24	1.06		
TIPS real rate	-1.15	-0.06	<b>-</b> 0.25	-1.19		
Germany nominal bund	-0.26	-0.02	-0.13	-0.65		
break-even inflation	1.92	0.08	0.04	0.40		
real rate	<b>-</b> 2.18	-0.10	-0.17	<b>-</b> 2.25		
			SB1 Markets/Macrobond			



- The **US 10 y break-even** (inflation expectation component) rose 19 bps to 2.73%. The 5 y rate at 3.11%, up from 2.88%
- In **Germany**, 10 y the break-even rose 8 bps to 1.92%, rather high in an German context. Real yields ended the week down 10 bps to -2.18% after reaching ATH at Tuesday at -2.25%!



#### Some special data points: Inflation expectations record high, real rates record low

... while growth expectations are not that bad at all. Something will have to yield?



• We very much doubt the present -1% real rate vs. growth expectations at +2% is a long term equilibrium

#### FRAs: Expectations sharply down up last week

Last week, the US CPI contributed to a broad change in interest rate outlook – in US & elsewhere



- UK: 5 hikes are before end of 2022 are back on the table
- US: The Fed is expected to start hiking between May and July next year, and 2 3 more hikes before next Christmas
- SEK rates are discounting more than one hike before end of net year



#### The market accepts it: Fed Fund future contracts shot up on the CPI surprise

A 80% prob. for one or more hikes at or before the July meeting (from 60% a week ago)



- A rate hike before end of 2022 is 'very' likely:
  - » Just 2% (!!) for unch.
  - » 1 hike 14%
  - » 2 hikes 29%
  - » 3 hikes 31%
  - » 4 hikes 18%
  - » 5 hikes 6%
- A rather unusual change in the interest rate outlook since mid September!







#### Up again – and in some countries more than the decline the previous week











#### An upward correction following the decline the previous week





SB1 Markets/Macrobond

10 year swap rates





#### Last week was volatile too, this time sharply up

US inflation pushed the short end of the short end up – in both US and UK





#### **NOK** swaps

#### Implied rates up on first half of the curve









SB1 Markets/Macrobond



#### Implied spreads marginally up last week













## 3 m NIBOR down 3 bps to 0.78%, the NIBOR spread down 5 bps to 38 bps



- The Dec 3m FRA contract also implies a 42 bps NIBOR spread (given a hike in Dec, and no hike before March)
- However, the Mar 3m FRA contract at 1.17% is rather high, as a 42 bps spread is assumed, if NoBa hikes by 25 bps in both Dec and March. <u>A</u> small probability for a hike between the quarterly, MPR meetings or for a 50 bps hike may be priced in – or it is just the expected NIBOR spread
- Norges Bank assumed a 35 bps spread in the Sept MPR (as in the June report), which we at that time thought was at the high end



#### The FRA curve up by up to 16 bps

The FRA curve is well above the NoBa interest rate path to mid 2023 from mid 2022



- The FRA curve is not discounting more than a 25 bps hike each quarter
- The FRA curve flattens from late 2023 at a level below NoBa's path



#### **FX Overview**

### CNY the f/x winner, SEK (our favourite) the loser

EUR down, USD up







F/x markets JP Morgan f/x % change Last Last broad indices week month 2 + 2 f/x crosses CNY 0.5 1.3 USD -0.3 0.1 GBP 0.0 -0.6 CHF -0.2 1.6 EUR -0.2 -0.5 JPY -0.3 -0.5 NOKEUR -0.5 -0.8 NOK -0.7 -1.2 CAD -0.8 -1.4 EURUSD -0.9 -0.9 -1.8 AUD -0.9 SEK -1.3 0.7 Last week last month

SB1 Markets/Macrobond



#### NOK down 0.7%, together with oil & our currency peers

While a higher interest spread supported the NOK



Following a positive NOK recommendation since July, we turned neutral last week

The status vs. the normal drivers:

- The NOK 1% below our model forecast (from 1% above)
- The NOK is 5% weaker than our AUD/CAD/SEK-model, our 'super-cycle peers', predicts (unch)
- NOK is far (9%) stronger than a model which includes global energy companies equity prices (vs the global stock market) (from +11)

At this and the following pages we have swapped Norges Bank's I44 index for JP Morgan's broad NOK index and rebased it to the current index value for the I44. The I44 has an earlier closing time than the 'official' closing time for fx crosses. There are no substantial difference between these two indices over time



Jul

#### NOK down, out model suggested close to unch

And the residual fell to zero to -1%





#### NOK down and a tad more than the oil price



- NOK is still correlating quite closely to the oil price but at a lower level than before 2018 and now the NOK is weak even vs the past 3 years' relationship
- A USD 10 drop in the oil price weakens the NOK by some 4%, as a partial effect. Within a broader model, the impact is smaller



## Both NOK and AUD down last week, NOK the most

XXX Even if AUD rates fell much more than NOK rates (and oil/iron ore prices were unch)



AUD vs NOK f/x

The two f/x indices are back to the 2011 parity (from which they never since have deviated much)



## A more volatile f/x week, the RUB & TRY yielded

The ruble was hit after Russia was accused of flexing military muscles vs Ukraine?



FX Indices, J.P. Morgan Change % -12.5 -7.5 -2.5 2.5

Change %	-12.5	-7.5	-2.5	2.	5
Brazil					2.5
Thailand					1.6
Chile					1.3
Philip.					0.8
Philippines					0.8
Indon.			•		0.6
S Korea					0.6
China					0.5
Taiwan					0.3
Vietnam				•	0.1
Mexico			•		-0.2
India					-0.2
Malaysia			•		-0.2
Czech R.					-0.3
S Africa			•		-0.5
Norway					-0.7
Argent.			•		-0.9
Poland			•		-1.1
Russia					-2.0
Turkey	•				-2.3
Hungary					-2.3
	-12.5	-7.5	-2.5	2.	
	<b>1</b> v	veek 🗕 1	month		
	L		SB1 Mai	kets/Ma	crobond

• However, in sum the EM f/x space was not weak, the Brazilian real appreciated further

#### 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. This message, and any attachment, contains confidential information and is intended only for the use of the individual it is addressed to, and not for publication or redistribution.

#### 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 Regulation (EU) No 596/2014 on market abuse (market abuse regulation) and associated rules, as implemented in the relevant jurisdictions.

#### 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**

The authors of this report do not (alone or jointly with related persons) own securities issued by the companies mentioned in this report. 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. Please refer to our webpage for an overview of all investment banking assignments carried out in the last 12 months: www.sb1markets.no. Note that assignments subject to confidentiality are excluded

#### 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.