Global Research

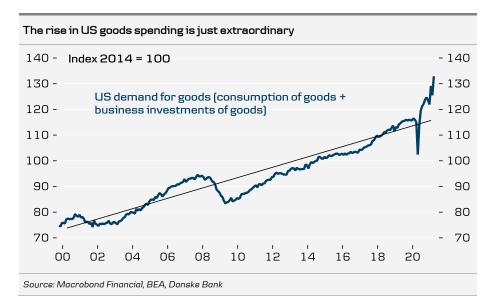
Global manufacturing heading for a hot (inflation) summer

- A significant overheating is taking place in global manufacturing. A massive demand for goods have triggered shortages of production inputs, elevated freight rates, long delivery times and a sharp increase in commodity prices.
- We see few signs that the overheating will end soon. US stimulus is feeding strong demand for some time, savings are high and European goods consumption is now getting a new lift from the reopening of retail stores. On top of this manufacturing inventories are depleted and capacity-increasing investments will themselves require more resources in the short term. In additions central banks are not removing the punch bowl soon as employment is still far behind pre-covid levels.
- Eventually goods demand and commodity price inflation should ease when we start to spend more on services and the supply of goods and materials increases on the back of new investments. But until then we expect the overheating to continue into the summer and a pass-through to core consumer prices is increasingly likely.

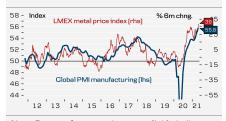
This paper is the first in a series on the outlook for inflation. In future papers we will dive into how high inflation could get in coming quarters and whether the lift to inflation will become permanent.

Overheating in goods sectors evident across commodities

Hardly a day passes without new stories of shortages across the production chains. While microchips have gotten most attention, the scarcity is showing up in a wide range of industrial metals, and different components for production. Many of them stuck in container ships waiting outside congested ports or just not being produced at fast enough to meet demand. Even lumber prices have more than tripled and food prices have leapt higher as well.



Global manufacturing has seen very strong recovery



Note: Past performance is not a reliable indicator of current or future results. Source: Macrobond Financial

Lumber prices rise vertically – example of demand exceeding supply



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Chief Analyst Allan von Mehren alvo@danskebank.dk

Chief Analyst Mikael Olai Milhøj milh@danskebank.dk

Senior Analyst Aila Mihr amihr@danskebank.dk

Analyst Bjørn Tangaa Silleman bjsi@danskebank.dk

Analyst Antti Oskari Ilvonen antti.ilvonen@danskebank.dk

Chief Analyst Jakob Ekholdt Christensen jakc@danskebank.dk Comments from survey participants in the recent *US ISM manufacturing survey* for April illustrates the situation well:

- "The current electronics/semiconductor shortage is having tremendous impacts on lead times and pricing".
- "In 35 years of purchasing, I've never seen everything like these extended lead times and rising prices".
- "Steel prices are crazy high. The normal checks on the domestic steel mills are not functioning".

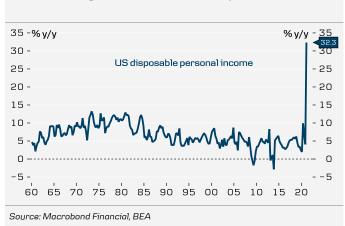
Similar reports are frequent in Europe as well.

The commodity market that has been least affected so far is the oil market, where prices so far remain well behaved. Oil demand is held in check by less travelling and on the supply side, spare capacity is still ample among OPEC+ countries. The risk is probably to the upside for oil prices, though, as travelling should pick up in H2 when vaccinations in US and Europe are done.

What is going on?

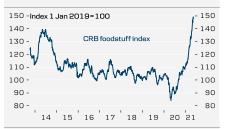
Why do we see these shortages and rapidly rising commodity prices? We see both stronger demand as well supply side disruptions playing a role. On the demand side, three factors are in play:

- 1. Significant monetary and fiscal easing not least in the US. The policy response in 2020 on the back of the COVID-19 outbreak was very forceful. Further US stimulus in 2021 has been significant leading to a 32% jump in disposable incomes in Q1 compared to Q1 in 2020 (and it is not due to a base effect).
- 2. Strong shift to goods demand. At the same time consumers have spent a lot of money on goods during the pandemic while spending on travelling, eating out etc. was restrictred. Not least electronics and tools/materials for Do-It-Yourself work have boomed. This has been most evident in the US but also seen in many other countries.
- **3.** Sharp rise in investments in equipment for working from home. As the pandemic led to a large share of the labour force working from home, business demand for lap tops, office chairs, head sets, communication equipment etc. increased a lot and led to a surge in demand for microchips.



US fiscal easing towards consumers is inprecedented

Even foodstuffs are leaping higher



Note: Past performance is not a reliable indicator of current or future results. It is not possible to invest directly in an index. Source: Macrobond Financial, Bloomberg

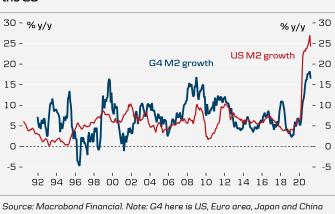
Metal prices continue higher – oil price increases more muted



Source: Macrobond Financial

Delivery times and freight rates at extreme levels





Monetary policy also historically accommodative - driven by the US

The main chart on page 1 shows a proxy of US demand for both consumer goods and investment equipment. On top of the increase in these areas, the **construction sector has also been booming** in most countries. Stimulus led to a sharp drop in mortgage rates and higher household savings provided more money for down payments when buying homes. The demand for summer houses also saw a big boost in many countries.

So in summary, the massive demand for goods is fuelling a significant need for metals, electrical components like micro chips, plastic for wrapping, and lumber for construction, DIY work, furniture production and pulp used to produce the boxes in which all the goods are transported.

As a large part of the goods consumed in US and Europe are produced or assembled in Asia, not least China, the demand for container freight has gone through the roof.

Supply side disruptions have added to the challenges

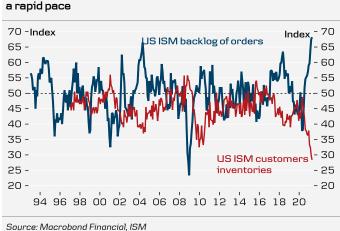
On top of strong demand, disruptions on the supply side have also played a role in the price increases and shortages. One example has been a decline in copper exports from Chile and Peru as the COVID pandemic led to fewer workers available and distancing restrictions in the mines. In the iron ore market, supply has been reduced from the collapse of the Brumadinho dam in Brazil two years ago.

Labour supply shortages due to COVID have hit other industries as more people have been ill, quarantined or had to stay home to take care of children in lockdown. This has for example contributed to congestion in ports and hampered the ability to make crew changes on ships adding to the challenges in container freight.

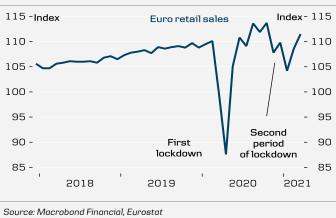
In the space of microchips, investments were hit due to uncertainty over the US-China trade war and new supply additions have mainly been in the advanced chips targeted at 5G and servers and less so in the less sophisticated chips needed in autos, computer monitors and consumer appliances. On top of this Chinese companies have been hoarding chips due to fear of being hit by US export restrictions. Investments in new capacity is now being planned but it takes years to build a new factory so there is no quick fix in this area.

The overheating is set to continue into the summer

We see no immediate easing of the pressure in manufacturing. On the contrary there is a real risk that prices on many commodities can continue higher as excess demand will

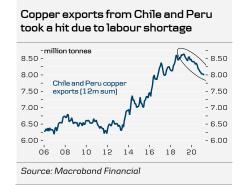


US backlog of orders at very high level while inventories fall at a rapid pace Euro retail sales recovering second round of lockdowns



Euro retail sales recovering as countries come out of the second round of lockdowns





probably be with us for a while and companies get more desperate to get hold of materials and is willing to pay up to make sure they can produce their goods. There is actually a risk,we could see more commodity prices rise like the profile of lumber prices (see front page) as demand becomes less price sensitive when the resources needed to produce are in deficit supply. A range of factors is in our view likely to keep demand high short term:

- 1. Inventories have been depleted, not least in the US, where the strength of goods demand has taken companies by surprise. Low inventories means that even if demand starts to cool, there is still a need to produce at a high level for restocking.
- 2. Backlog of orders is record high in the US. The ISM backlog of orders index is at the highest level since the series started in 1993 suggesting that even when new orders taper off, production will stay high for a while to fill the this backlog.
- **3. Stimulus effects continue for some time** While the biggest effects of the US stimulus checks is likely to be in the first months after being received, we expect demand for goods to stay at a high level for a while before tapering off.
- 4. Reopening of Europe should lift retail sales. As retail stores are opening, we should see more purchases of goods. During the lockdowns over the winter, sales took a hit in Europe but euro area retail sales recovered somewhat in March and could rise further in coming months. This would add to global demand for goods.
- 5. Capex getting a boost. Finally business investments are set to get a boost from the stretched capacity levels. This will require further ressources as inputs to produce the investment goods and keep demand for metals high.

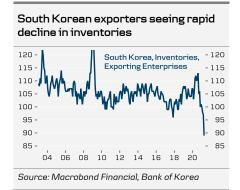
We do expect Chinese policy tightening and weaker infrastructure investments to be a drag on commodity demand this year. But it will not be able to outweigh the extraordinary stimulus and special factors seen in the US and the euro area. And both the US and euro area are planning infrastructure investments starting this autumn.

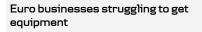
Clear upside risk to core inflation in the coming quarters

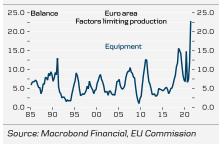
Our working assumption for inflation this year has been that as economies open up from the lockdowns more money will be spent on service consumption and less on goods consumption. We still believe this to be the case, but the effects of the US stimulus in Q1 has led to a bigger boost to goods spending than what we expected, which means we now have severe bottlenecks in manufacturing. As outlined above it means it will take longer to ease the pressure on commodity prices and that excess demand will be with us for longer. In addition, the Fed are sidelined for now due to a) still "a long way to go" on employment, b) seeing the rise in inflation as transitory and c) a move to "average inflation targeting" aiming for inflation to exceed 2% for some time after it has been below 2%.

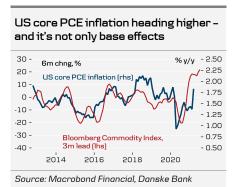
With commodity prices moving to higher levels than expected and also staying there for longer, the likelihood of the cost being passed on to consumers is going up. We see a clear risk of core goods inflation being pushed higher over the coming quarters – and more than just due to base effects from the drop in prices last year (the chart to the right uses 6-month changes in commodity prices which avoids base effects from last year). This is set to add to the current inflation scare in markets over the summer.

In a forthcoming paper we will look at different scenarios for commodity prices and what it will imply for inflation in the biggest economies. We will also look closer at what it means for inflation when supply is again able to meet demand and commodity potentially decline again. Finally, we will look at what is needed to make the inflation increase persistent.









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This research report has been prepared by Danske Bank A/S ('Danske Bank'). The authors of this research report is Allan von Mehren, Chief Analyst, Mikael Olai Milhøj, Chief Analyst, Aila Mihr, Senior Analyst, Bjørn Tangaa Sillemand, Analyst, Antti Oskari Ilvonen, Analyst and Jakob Ekholdt Christensen, Chief Analyst.

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