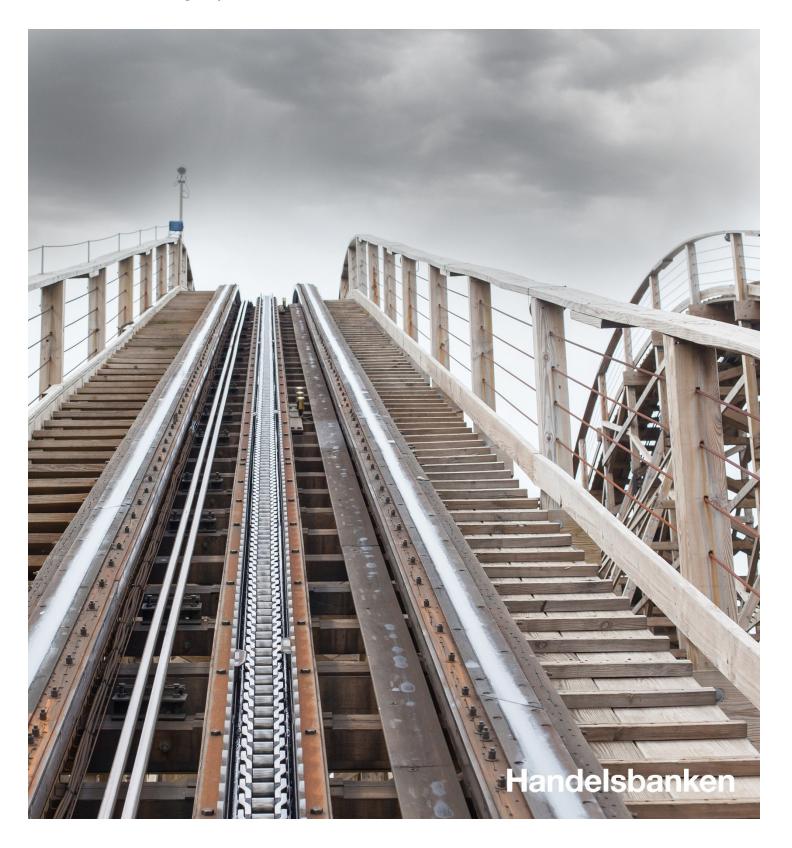
Global Macro Forecast

August 26, 2020

The Corona Rollercoaster

- Onwards and upwards after a historic fall
- Decline in global interest rates behind the stock market rally
- It's a long way back to normal for the labour market



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Executive summary

- Onwards and upwards after a historic fall
- Decline in global interest rates behind the stock market rally
- It's a long way back to normal for the labour market

Global backdrop:

A rollercoaster ride for the global economy

The most intensive phase of the COVID-19 pandemic now seems to be in the past, and the world has begun to open up once again. The Nordic countries adopted different approaches to managing the pandemic, but all of their economies have weathered the storm better than the rest of the EU's. After a historic collapse during the first half of the year, economic activity is now starting to rise again. However, companies' recruitment plans generally remain on hold, given that there is still substantial uncertainty surrounding how the economy will perform. Moreover, inflation looks like it will be below targets in the coming years. Nonetheless, the rapid stock market recovery signals that investors have a positive view of the long-term prospects, buoyed by central banks' generous stimulus measures.

UK: A recession unlike any other

The United Kingdom has fallen into a recession, the severity of which has not been seen in three centuries. While the COVID-19 crisis was the instigator of this downturn, the economic crisis has spread well beyond being primarily a health pandemic. Recovery now depends on how extensively and quickly global supply chains are reoriented, how rapidly consumer confidence recovers, itself dependent upon how unemployment rises, and the extent to which any asset price corrections have an impact on consumer confidence and the broader economy.

Sweden: Recovery under way, unemployment still rising

The decline in the Swedish economy is now behind us, and we expect growth in Q3. However, the uncertainty surrounding COVID-19 and the accompanying restrictions will continue to subdue demand next year. It will be a while before companies start recruiting again, and we foresee an increase in unemployment this autumn. Nevertheless, house prices look set to chug along, buoyed by low interest rates.

Norway: Not as bad as feared, but a long recovery awaits

The mainland economy is currently recovering from a historically sharp contraction. The rebound has begun faster than initially feared, but the economy remains a long way below the pre-crisis trend. Although our baseline expectation is that Norges Bank will refrain from tightening policy before year-end 2022, the booming housing market poses a dilemma, so the risk of a rate hike has increased.

Denmark: Living with COVID-19

Following a record contraction caused by COVID-19, the economy has rebounded earlier and faster than initially feared. We have raised our GDP forecast, but still expect the economy to shrink by about 4 percent this year. However, the 'easy' part of the rebound is probably behind us, and we expect that the road to a full recovery will be bumpy and drawn out as the virus lingers.

Finland: Return to growth

The Finnish economy has fared better-than-expected during the COVID-19 pandemic. The GDP has plunged less than in many other countries. Containment measures have effectively prevented the spread of the virus. Retail trade has fared well during the crisis, while the service sector has suffered a bigger blow. Although the damage to the economy so far seems to be moderate, the economic outlook contains risks. That main risk is the renewed COVID-19 outbreak and its impact on the domestic economy and Finland's key export markets. We forecast the Finnish GDP to shrink by 3.5 percent in 2020, grow by 2.0 percent in 2021 and 1.5 percent in 2022.

The Netherlands: Fiscal policy to shield jobs as GDP falls

The Netherlands has been hit hard by the pandemic, although not nearly as hard as many other countries in the eurozone. Ample fiscal space and proactive measures to mitigate the effects on the labour market are expected to put the country in a relatively good position during the coming recovery. Stimulus measures are, however, likely to increase public debt more than during the 2008-09 financial crisis.

Global background

A rollercoaster ride for the global economy

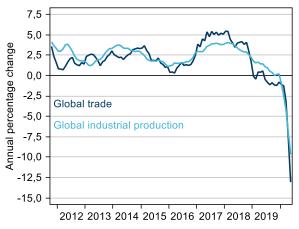
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Huge disparities in the global economy

The COVID-19 pandemic hit suddenly and strongly. Quarantine and social-distancing restrictions, as well as outright shutdowns, have been imposed across the globe, drastically changing everyday life for individuals and companies. The service sector was particularly hard hit, as households limited their movements and, in many cases, were forced to stay at home. The manufacturing sector was also impaired bν disruptions in .vlagus manufacturers were forced to cease production. An anaemic transport sector, which in the US accounts for almost two thirds of the oil demand, combined with disagreements within OPEC and Russia, led to a tumble in oil prices. Looking back, we now recognise this as a historic collapse. Global trade has fallen by around 17 percent year to date, and unemployment has risen dramatically.

While the whole world has felt the impact of the pandemic, there are differences in how countries have been economically affected, reflecting not only how the crisis has been managed nationally, but also countries' respective structures (e.g. demographics and business frameworks). The Nordic countries' economies have weathered the storm better than those of the rest of the EU and the US. We explore this topic further in a separate theme article ("Sweden hit just as badly as other Nordic countries").

Global trade on a slide



Source: Macrobond

There have also been huge disparities in the financial markets, from historic downturns to rapid recoveries. In the US, the stock exchange (S&P 500) has completely recovered from its plunge in March. The upturn in the US goes hand in hand with declining expected real interest rates, following the Fed's more softly-softly approach. In the theme article "The Great Divide: Stock markets and the economy", we examine the reasons why the stock exchange and GDP have diverged, and we touch on the importance of the equity premium and interest rate expectations. We argue that the appropriateness of the equity market fall to date should be judged on whether the policy support will continue to be sufficient, and whether the long-term growth potential of earnings has been permanently impaired by the pandemic. Current market pricing seems to reflect a degree of optimism on both counts.

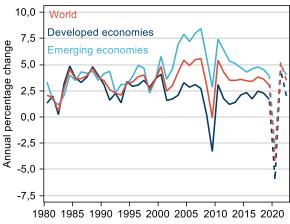
US stock markets has recovered



Economy moving up a gear

Global growth will reach a low of -4.3 percent, this year, according to our forecast. Growth should start to show an uptick from the second half of the year, buoyed by stimulus measures from fiscal and monetary policy, and we expect a global growth of 5.2 percent for 2021 and 3.5 percent for 2022.

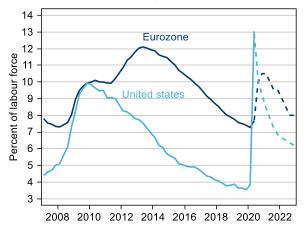
Global growth starts to recover from record-lows



Sources: Handelsbanken and Macrobond

While we forecast relatively strong growth for the coming years, it will be a long time before the global economy recovers from this year's downturn in production. The economic collapse has led to a dramatic deterioration of the labour market, and a large number of those jobs are unlikely to come back, owing to shifts in consumer behaviour. Moreover, high unemployment burdens consumption growth, and uncertainty about future economic growth will likely contribute to companies being hesitant about new recruitments and investments.

Dramatic rise in unemployment



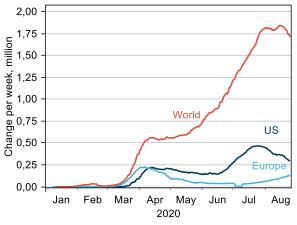
Sources: Macrobond and Handelsbanken

Infection rates and restrictions: critical factors

In our view, economic growth remains highly dependent on the ongoing spread of the coronavirus, and how long the restrictions imposed to slow it remain in place.

China, the epicentre of the pandemic's outbreak, was the first to relax its strict restrictions. It has managed to do so without recording a large upturn in infections. Equally, at present, China appears to be one of few countries with a V-shaped economic recovery and its GDP has returned to where it was before the COVID-19 outbreak.

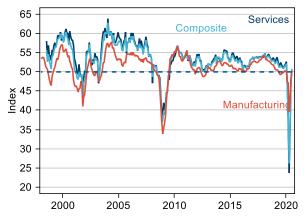
The spread of infection is leveling off globally



Source: Macrobond

From a global perspective, growth in the number of confirmed COVID-19 infections has plateaued. Consequently, many countries have begun to reopen their economies. This is evident from economic indicators, with PMI and other metrics showing that the global economy is now back in the growth zone. However, this is not a uniform situation globally, and the infection rate has, for example, risen in certain parts of Europe recently, such as in Spain and France.

Global PMI

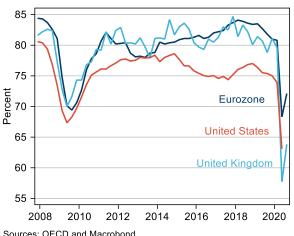


Note: The 50-level is the dividing line between growth and contraction Source: Macrobond

Companies ready, but concerns remain

For companies in the west, future prospects are looking less bleak now, and it seems that the major fiscal stimulus in many countries, such as furloughing support, reductions to employers' contributions and the option of postponing tax payments, have succeeded in preventing a tidal wave of company bankruptcies. Moreover, we find that there is a lot of evidence to suggest that many countries are ready to boost production when demand from businesses and households returns. Households have gradually started to return to normal activity, with Google data, for example, showing that people are out and about on the streets more often. However, demand remains subdued, and the capacity utilisation is low.

The capacity utilisation at an all-time low in Q2



There are still concerns that COVID-19 infection rates could rise during the autumn if restrictions are lifted too hastily. This means that many countries will probably continue to limit the spread of the virus by

promoting working from home, limiting travel with public transport and preventing large gatherings.

We assume the infection rate globally will decline, although we assume substantial local outbreaks will continue. Thus, we expect to see more local restrictions being imposed, rather than entire countries being locked down.

While unemployment has risen overall globally, an analysis by the IMF on the US has shown that employment in high-technology states, where working from home is achieved more simply, is less sensitive to changes in people's movements in society. For low-technology states it becomes much more of a balancing act between reducing the spread of the virus and reducing the negative effects on the labour market.

According to WHO, the objective is to vaccinate 20 percent of countries' populations before the end of 2021

The hunt for a COVID-19 vaccine is ongoing, although success does not appear likely anytime soon, with no phase III clinical tests having taken place so far. While Russia, for example, has released plans for mass vaccinations as early as the autumn, it seems highly unlikely to us that a safe, launch-ready vaccine could be ready for launch globally before the new year. A total of 75 countries have signed up to the COVAX facility so far, with the aim of producing a COVID-19 vaccine for rapid, equitable, global distribution. The objective is to vaccinate the most vulnerable 20 percent of each country's population before the end of 2021, according to the WHO. The world will probably have to become accustomed to having some social restrictions in place for the coming years, taking the shine off the recovery we expect after the spring's huge downturn.

Inflation fails to hit targets

Pressure from low demand and high unemployment in large parts of the world is contributing to keep a lid on wage inflation, and we expect inflation to be below target in the eurozone and the US for the coming years. We expect some cost-push inflationary pressures because of the direct effects of the pandemic, as well as indirect effects via stimulus packages, but not enough to cause a serious dent in headline inflation measures.

Gradual phase-out of crisis politics

Major fiscal policy initiatives were launched all over the world this spring. They have mainly involved aid for companies to survive this period of severe, unexpected low demand, with the aim of preventing mass unemployment. These support measures are now coming to an end, although some countries will probably extend them into the autumn. We also expect governments to launch new measures, aimed at boosting demand during the recovery phase. However, the phase-out of crisis support still risks hitting vulnerable groups hard, above all in the various forms of social restrictions that will remain in place. At the same time, there is a limit to how long countries can afford to maintain these crisis policies, if they also want to leave headroom for new stimulus measures at some point in the future. Public debt has increased substantially over large parts of the world, and is likely to continue rising during the recovery period, when more measures will be launched. All in all, we expected a continuation of the expansionary fiscal policy, although not to the same extent we have seen this far.

Still major risks in forecasts

There is still a large degree of uncertainty surrounding forecasts, given the unusual shock to the economy. However, since our previous forecast in April, the fog has lifted somewhat, and we now have a clearer view – above all, of the scale of the drop in GDP during the first half of the year. At the same time, we deem the risk of a second wave of the pandemic during the autumn as having decreased, as many countries have been able to open up again without any major problems, and because the spread of the coronavirus is no longer believed to be dependent on the weather. The risk of a major setback in the recovery remains, but we argue that it has decreased accordingly.

In our view, the risk of a major setback in the recovery has decreased

The pace at which the world's economies will return to normal is immensely difficult to predict, and there will be differences from country to country. The more that unemployment rises, and the longer that household behaviour deviates from the norm, the greater the risk will be of higher unemployment in the longer term.

A crisis can either reinforce or break long-term trends. In this case, digitalisation has been

accelerated by an increase in working from home, digital meetings and increased e-commerce. Companies that are advanced in digital technology, and are able to manage the crisis better, should be well-equipped for the future. This could stimulate productivity growth. On the other hand, the pandemic has highlighted the downside of global value chains, and it is fuelling a wave of antiglobalisation sentiment that had already been growing for some time. This could potentially subdue productivity growth and increase companies' marginal costs.

Structural change in the wake of the pandemic?

The political tensions between the US and China have increased in recent months, manifesting in exchanges of tense statements, the closure of consulates and accusations of espionage. As such, we believe the risk of a breakdown in their trade agreement has increased. At the same time, the US is moving ever closer to its presidential election, which could cause some disruptions in the financial markets on its own.

Globally, tensions have also risen in domestic politics. The coronavirus crisis has affected low-wage jobs to a high extent – where many in the service sector have been hit hard – while it seems as though consumption among those with high-wage jobs has decreased. The recent upturn in asset prices further exacerbates these income discrepancies. Alongside this, massive protests against police brutality and racism have taken place in the US linked to the Black Lives Matter movement. Increased income gaps risk adding to the splintering of society and, by extension, hurting long-term growth.

Growing income disparities, as service sector jobs disappear and asset prices rise

Some dormant political risks remain in the eurozone, particularly in Italy and Spain, where weak political coalitions risk losing confidence, leading to new elections. As economic aspects of the pandemic start to become the focus, rather than the health aspects, we expect renewed pressure from

ideological fringe groups, risking a restart of conflicts with the EU in Italy, and a political stalemate in Spain, at a time when decisive measures are of the utmost importance.

The terms applying to trade between the EU and the UK from next year, after the Brexit transition period, still remain obscure. We no longer deem it likely that the trade negotiations will be postponed, but even if no free trade agreement is reached, we believe that several smaller trade agreements will be in place. The effect on GDP from whether or not a free trade agreement is in place by the end of the year has therefore decreased, in our view.

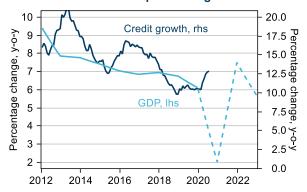
Full speed ahead for China's recovery

China was the first country to impose a lockdown, and is now also leading the recovery. Several metrics of economic activity show that China's economy is back to its pre-crisis performance. Activity fell in March, and statistics in recent months have surprised to the upside relative to expectations. Global demand has fallen, but many of the goods that are in particular demand during the pandemic are produced in China. This includes, for example, personal protective equipment (PPE), medical equipment, electronics and home office products. For this reason, exports have decreased less than we previously foresaw.

In the longer term, changed expectations of international value chains mean, however, that foreign companies will likely become less dependent on China. In the meantime, the Chinese government will probably do all it can to uphold growth. This is partly to decrease the risk of dissenting voices, and partly because it will be important for President Xi to enhance his public status in order to ensure reelection in October 2022. The Chinese Communist Party celebrates the 100-year anniversary of its founding next year, and the party's successes are expected to be celebrated.

The most important instrument for maintaining activity in the domestic Chinese economy is the granting of credit. Fiscal policy measures will also be needed, in the form of increased direct expenditure in the state budget, such as pushing through infrastructure investments earlier. An increase in the Chinese budget deficit can therefore be expected, but we believe China's deficit will remain fairly comfortable, at least by western standards.

Chinese stimulus underpins GDP growth



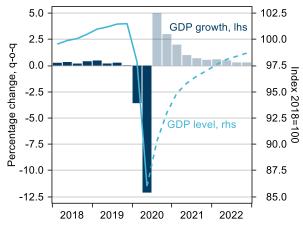
Sources: Macrobond and Handelsbanken

Overall, the Chinese economy still appears to be better equipped to handle a global recession than the majority of other countries. However, for this year, we expect growth of only 2 percent, which is well below the long-term trend. We expect stronger growth next year, because the recovery should help to accelerate improvements across the rest of the world.

Eurozone - after the collapse

The eurozone was hit hard by COVID-19, particularly France, Italy and Spain. More than half of the eurozone member states imposed complete lockdowns for huge sections of the first half of the year. Total PMI fell more in the eurozone than in either China or the US, driven by the service sector. While furlough programmes have mitigated much of the effect of the number of people unemployed, GDP fell at a record pace in the second quarter. In the eurozone as a whole, quarter-on-quarter GDP growth was -12.1 percent, which, when combined with the GDP downturn during the first quarter, has taken GDP to 15 percent below where it was at the end of 2019.

Output in the eurozone won't fully recover



Sources: Macrobond and Handelsbanken

The decline has not been felt equally by all member states, with France, Italy and Spain affected more

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than countries such as Germany and the Netherlands. There will probably be differences, too, in how the countries recover. This partly comes down to the direct effects of the pandemic, which differ from country to country, and partly the differing availability of fiscal policy measures in the respective countries to alleviate the damage caused by the crisis. Germany, in particular, has laid out ambitious fiscal stimulus packages, but more hard-hit countries such as Italy and Spain lack the fiscal headroom to announce similar measures.

The agreed EU recovery fund is a welcome supplement to the fiscal stimulus tools, and represents an important political victory within the EU, but we argue that it will probably not have any material effect on the recovery. Almost half of the total amount of EUR 750bn is composed of loans, which will probably not be taken out in full. In addition, the plan for the grants is weighted more towards the future, and these will likely have a limited effect over the next two years.

Just as is the case in the rest of the world, the recovery is highly dependent on the ongoing spread of the coronavirus and the duration of restrictions. Parts of the service sector have started to exhibit some signs of recovery, although tourism in parts of southern Europe during the holiday period will likely be much smaller than in previous years. In addition, industrial production is largely being held back, due to low global demand. We foresee a relatively cautious recovery during the second half of the year. Overall, this results in GDP growth of -9.4 percent this year, followed by 4.6 percent next year.

Throughout the eurozone, governments have implemented substantial measures to limit job losses, predominantly short-time work schemes, and this implies we expect to see less of an effect on headline unemployment compared to GDP, with eurozone unemployment rising to 8.9 percent this year, and further to 9.9 percent the year after, as we expect uneven extensions of these schemes across member states.

Three months of increased employment in the US After the longest expansion in the history of the US

After the longest expansion in the history of the US, GDP fell by 9.5 percent in the second quarter this year, compared with the first quarter (equivalent to 32.9 percent extrapolated as an annual figure.). There was a broad downturn in economic activity, with a severe decline in household consumption and in investment. Although restrictions have gradually been lifted, such as the removal of the shelter-in-place order in late April, the economic damage has been enormous. In just two months, unemployment rocketed from a 50-year low to a 90-year high.

Around 25 million Americans lost their jobs, and unemployment climbed from 3.5 percent in February to 14.7 percent in April.

The actions taken by the Federal Reserve have stabilised the financial markets and lowered interest rates, in turn strengthening the stock market. This benefits both companies and households. In addition, there have been gigantic fiscal stimulus packages, entailing tax relief for small companies and specific sectors, extended unemployment support and direct payments to households. The measures have contributed to household savings rising to 23 percent of disposable income, compared with 8 percent before the crisis. These increased savings indicate that consumption has potential to rise once the economy opens up, although households will probably hope to maintain a larger degree of buffer savings in these times of financial, political and medical uncertainty. There is also reason to believe that the wealth gap has grown, and that not all are able to benefit from increased savings.

Biden in a good position to challenge Trump

Before the pandemic, low unemployment and a strong stock market were Trump's 'trump' cards. At the moment, however, the US labour market is bleeding and the health deficit is growing, thereby making the presidential election more uncertain.

Biden's policy agenda is centred on large investments in healthcare, the environment, infrastructure and education. Biden wants to establish a new public health insurance option, which would be available to all working-age Americans. The labour market is vital to both candidates' platforms, with the main differences being in public expenditure and tax policy.

Biden aims to finance his economic proposal by reversing parts of Trump's tax reform, introduced in 2017. He plans to raise the corporate income tax rate from 21 percent to 28 percent, as well as raising income tax and payroll tax for individuals earning above USD 400,000 per year. This is expected to generate income of close to USD 4tn in 2021-30. Trump is still advocating a reduced payroll tax, and an extension of the tax reform from 2017 until 2025. The estimated cost related to Trump's reform is USD 1.5tn for 2021-30.

On trade policy, both have taken a fairly critical stance against China, but they differ in approach. Trump is threatening to impose tariffs, whereas Biden would rather see an international coalition of allies put pressure on China.

The outcome of the election is extremely uncertain and it remains to be seen whether the Republicans will keep their majority in the Senate. In the case of a democratic sweep, there is an implicit expectation that this would cause more turmoil on financial markets, as tax increases, extended regulations and larger public debt are not viewed positively by stock markets. That said, Biden's lower tariffs, reforms and infrastructure investments could lead to long-term economic growth.

Biden has come out on top in national opinion polls during the year; however, the election is not decided by the popular vote, but by electoral college votes from each state.

Economic activity has started to rise, and household consumption increased by just over 5 percent between May and June. This is still well below the pre-crisis level, but it is a step in the right direction. The PMI also indicates increased activity in both the service and manufacturing sectors. The labour market has improved as well, with three months of increased employment, whereby unemployment fell to 10.2 percent in July. However, there are still 13 million fewer people in employment than in February.

We expect US GDP to rebound swiftly in the third quarter this year, and to continue growing thereafter, albeit at a slower pace. This means that the labour market will continue to improve. However, COVID-19 is not yet under control, contributing to ongoing economic uncertainty, so we expect the recovery to be a long process. We forecast unemployment to have decreased to 6.2 percent at the end of 2022, i.e. still higher than in February this year.

Central banks' purchasing support continues

The ECB has been able to provide significant monetary stimulus without cutting interest rates any further. Through long-term refinancing operations (LTRO), the ECB has opened the door to lending a further EUR 1bn to banks at favourable terms. The bank also launched a purchase support programme in response to the pandemic situation (PEPP), which effectively did away with restrictions on the amount of government bonds that the bank can purchase during this time.

Similar to the financial crisis, the Fed seems to be the central bank willing to go the furthest to combat the effects of the pandemic, with a quick return to zero rates and extremely aggressive bond purchases. Despite better-than-expected data during the summer, the Fed has noted that more stimulus measures may be needed. In the near future, the conclusion from the Fed's policy review

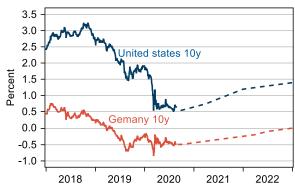
will be released. One possible outcome is that the Fed will aim for average inflation, with the consequence that low historical inflation will be counterbalanced through above-target inflation for a period. Regardless of the conclusions, it is apparent that the Fed – just like after the financial crisis – will be very cautious about reversing stimulus measures. As before, we expect the key rate to remain at the current level for the entirety of our forecast horizon.

Interest rate and currency markets

The major measures introduced by central banks in general, and the Fed in particular, have continued to the volatility on financial markets. The limit measures have contributed to credit spreads being pushed down nearly to where they were before the pandemic. In the eurozone, it is worth noting that the ECB's action, followed by the decision on the EU joint recovery fund, has reduced the gap between the southern and the northern countries' government yields. For example, Italy's government yield is about 1.5 percentage points lower than the peaks after the outbreak. Relative to Germany, Spain's 10-year government yield has also returned to where it was before the crisis.

Although data have trended more positively than anticipated, long yields have stayed relatively still or, as is the case in the US, moved downwards during the summer. The downturn in US long yields is driven by falling real interest rates, which probably reflects expectations of continued expansionary monetary policy from the Fed. The conclusion of our theme article about the stock market is that low interest rate expectations in combination with a relatively unaffected view of long-term growth in earnings are the main reasons for the upturn of the market since its March low. This also means that a major upswing in interest rates is a threat to stock markets and risk assets. However, our expectation is that resilient central banks will counteract a significant upturn in long yields.

Gradual rising government bond yields



Sources: Macrobond and Handelsbanken

On currency markets, the main theme during the summer has been the fall of the dollar. This is also tied to the view that the Fed is seemingly the central bank prepared to go the furthest to combat the crisis. The Fed's major interest rate cuts also mean that the dollar has gone from being a high-yield currency to one of several zero-rate currencies. Furthermore, the dollar tends to appreciate most in times of financial and economic stress, when the need for the US currency is most palpable. Better data, and a positive risk appetite, have resulted in these flows reversing.

The dollar has fallen faster and further than we previously expected. We believe that the driving forces behind the depreciation of the dollar remain in effect, and we foresee EURUSD of around 1.20 for our entire forecast horizon.

Theme article: The equity market

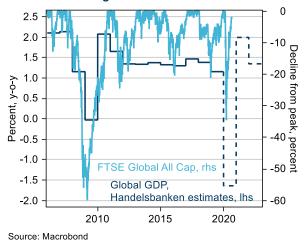
The Great Divide: Stock markets and the economy

The swift rebound in equity prices over the past few months has taken many by surprise, given the bleak economic outlook. Earnings expectations have been lowered markedly for many companies, while aggressive policy stimulus has been a consistent source of support during the equity market rally, through lower interest rates and increased availability of liquidity. We argue that the current pricing of equity markets is based on assumptions that continued policy support will be sufficient to avoid mass bankruptcies, and that earnings growth has not been structurally damaged. It has less to do with an overly optimistic view on the more immediate growth prospects.

The stock market is not the economy

Global equity markets have rallied by almost 50 percent since the bottom in late f March. This rally has occurred while the global economy has been in the midst of its deepest recession in modern times. This apparent disconnect between financial markets and the real economy has left many commentators dumbfounded. Although history shows that equity markets occasionally go through spells of exuberance, the relationship between stock prices macroeconomic performance is not straightforward. Most major equity indices are not a perfect reflection of the domestic economy. For example, 38 percent of the S&P 500 index is made up of companies belonging to the ICT sector, while the sector direct contribution to US GDP was less than 10 percent in 2017¹.

Global GDP and global stock markets



Generally, pricing of stocks is a complex interplay between expectations of economic performance, relative valuations and uncertainty. In this article, we highlight some mechanisms that could help explain the divergence between the macroeconomy and stock markets during the pandemic.

Earnings expected to plummet this year

The fundamental analysis of most investments comes down to comparing the net present value (NPV) of the investment to the initial outlay required. The equation below shows the NPV calculation in an equity context. As an investor in a stock, the holder will profit from dividends dispersed by the company over its lifetime. To find the value of these future dividend payments, cash flows are discounted to present value. The investor will have to make assumptions about the trajectory of dividend payments from the company and apply her own required return to the formula. The resulting NPV can then be compared to the market price of the stock.

$$NPV_t = \sum_{t=0}^{t=\infty} \frac{Dividend_t}{(1+discount\ rate)^t}$$

Over time, dividend payments are likely to be closely related to the company's earnings. The discount rate is normally thought to be the sum of some long-term, risk-free market interest rate and the equity premium. The equity premium is simply the investor's required excess return above the market interest rate to compensate for the risk of holding the stock.

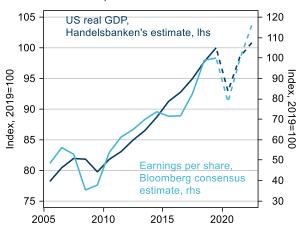
The unprecedented fall in economic activity during the pandemic has likely had an effect on all elements of the NPV calculation. Analysts regularly submit their estimates for company earnings over the coming years. As of now, analyst estimates are only available through 2022. These estimates can be aggregated at the index level. In this article, we will use the S&P 500 to illustrate some general points.

The relationship between economic growth and earnings is not 1:1, but the trends are generally similar. Analysts expect that the drop in earnings this year will be substantial and roughly in line with our estimate for US GDP. Earnings are expected to

¹ According to The Brookings Institution

rebound somewhat quicker in 2021 and 2022 than our forecast for GDP, but the discrepancy is not outside the norm. Overall, the expected trajectory for company earnings within the S&P 500 index is telling a similar story to our estimate for US GDP growth over the coming years.

US GDP and EPS, actuals and forecasts



Sources: Macrobond, Bloomberg and Handelsbanken

Central banks support asset valuations

Central banks globally have reacted swiftly and forcefully to the current economic crisis. Interest rates have generally been slashed to respective lower bounds, and several central banks have relaunched, extended and strengthened asset purchase programmes (QE) during the current crisis. Together with a weakening outlook for growth and inflation, central bank actions have led to a marked fall in long-term interest rates. Lower long-term interest rates support equity valuations directly by lowering the discount rate. This effect has been substantial throughout the pandemic. In addition to contributing to lower interest rates, the QE programmes have supported equity valuations through the portfolio rebalancing effect. By purchasing bonds in the market, the central banks remove these papers from circulation and leave investors with increased cash balances, and the question of how to invest these balances. With historically low interest rates, equity investments become more tempting for investors. The recent QE programmes have led to an historical expansion of central bank balance sheets. Even though equity markets have rallied over the past few months, the combined value of the global equity and bond markets is still lower than at any point during the QE era from 2009, compared to the amount of central bank liquidity.

Value of global financial assets and liquidity



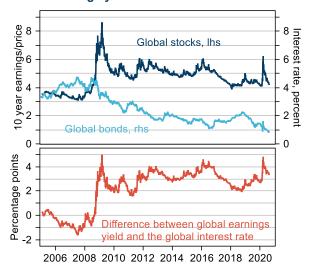
Note: Global financial assets=Market cap of actively traded primary equity securities globally + market value of Bloomberg Barclay's global aggregate bond index. Global liquidity=Total balance sheet size of Fed, ECB, BoJ and BoC

Sources: Macrobond, Bloomberg, Handelsbanken

Elevated uncertainty lifts the equity premium

The NPV equation assumes that companies survive into the very distant future, making stocks ultra-long duration assets. From time to time, events shake that assumption. During the early stages of the pandemic, investors feared that the economic crisis could lead to a string of bankruptcies, leaving the equity of the afflicted companies worthless. As central banks intervened forcefully and a number of fiscal support mechanisms came into place, the likelihood of mass bankruptcies was reduced.

Global earnings yield and interest rates



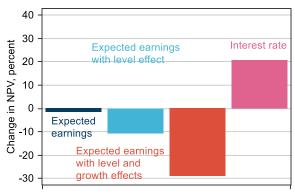
Source: Macrobond

However, the survival of many companies hinges on a rebound in economic activity that remains uncertain. Increased uncertainty about the long-term survival of firms and elevated uncertainty about the future outlook for earnings means that the equity premium is still higher than normal, even though stock market valuations have partially recovered. The difference between global earnings yields and global interest rates has come down over the past few months, but remains above historical averages.

Competing forces at play

As the discussion has shown, the pandemic has created forces that clearly depress equity valuations, but also support equity prices. While lower expected earnings and increased uncertainty reduces the NPV of firms, lower interest rates and a rapidly growing supply of liquidity work in the opposite direction. Abstracting from the value of the equity premium, we can use the NPV formula to gain insight into how some of these forces have affected the value of the US stock market, represented by the S&P 500. In the following calculations, we assume an equity premium of 5 percentage points, which is close to most historical calculations².

Change in the NPV calculations



Note: Changes in NPV calculations on S&P 500 from just prior to the market disruptions (20.02.2020) caused by corona until market close on 20.08.2020

Sources: Macrobond, Handelsbanken

The chart above shows the isolated effects on NPV of lower earnings expectations and the change in 30-year government bond yields from just prior to the market disruptions caused by the pandemic until today. Assuming that earnings fall as estimated by equity analysts in 2020-2022, but then fully recover by 2023 (dark blue column), results in rather small reductions in NPV, since most of the value of firms comes from their long-term earnings. If we instead assume that earnings remain 10 percent lower than expected prior to the pandemic from 2023 (light blue column), the effect on NPV increases markedly. However, the negative effect of lower earnings only clearly dominates the positive effect of lower interest rates (pink column) if we assume that earnings not only never reach the pre-pandemic expected levels, but that the long-term growth rate is permanently lower than before the pandemic (red column). The

chart illustrates a reduction of long-term earnings growth by 1 percentage point.

It is all about survival and the long term

Since the start of the financial turmoil following the COVID-19 pandemic, the S&P 500 recovered in part due to stellar performance of the IT sector. Whether the rebound is appropriate given the economic outlook depends more on the long-term survival of the companies comprising the index, and the long-term growth trajectory of earnings. As we have seen from the NPV calculations, isolated shortterm revisions to the earnings outlook do not move the needle much from a fundamental point of view. Analyst estimates suggest that short-term earnings expectations have been downgraded substantially and follow a similar pattern as our GDP forecasts for the coming years. However, these downgrades are compensated by the fall in long-term interest rates in our NPV calculations.

The sharp fall in the S&P 500 during February and March and the subsequent rebound, should be viewed through the lens of the equity premium. The sharp downgrade in earnings expectations left investors uncertain about the long-term survival of many companies. The aggressive policy action from central banks and politicians has, to some degree, eased those fears. The appropriateness of the equity market developments to date should be judged on whether the policy support will continue to be sufficient to avoid mass bankruptcies, whether the long-term growth potential of earnings has been permanently impaired by the pandemic and whether there will be a significant rise in interest rates. Current market pricing therefore seems to reflect a degree of optimism on all of these aspects.

² We also assume a baseline long-term growth rate of earnings per share at 3.5 percent per year

Theme article: The Nordic region and COVID-19

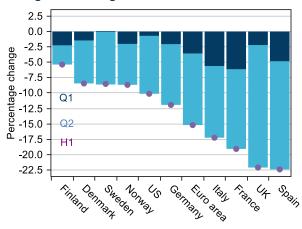
Sweden hit just as badly as other Nordic countries

The Nordic economies have come to a standstill in the wake of the coronavirus pandemic. However, the GDP figures are not quite as ominously red as those reported elsewhere in the EU, where stricter quarantine rules were imposed. The Finnish economy has so far managed the crisis best, while the damage suffered by the Swedish economy is in line with that of the other Nordic countries, despite adopting a gentler lockdown strategy involving fewer restrictions. The retail sector in Sweden has performed less well than that of its Nordic neighbours, and the lockdown of the global economy has had a devastating impact on Sweden's highly cyclical industrial sector. Denmark, on the other hand, has benefitted from a strong performance by the pharmaceutical sector, while in Finland, the long lead times for industrial order deliveries have kept the decline in industrial production less than in other countries.

Lowest decline in GDP in Finland

Provisional GDP figures for the first six months of 2020 indicate that, in terms of economic performance, the Nordic countries have so far managed the coronavirus crisis better than countries such as the UK and France, which introduced stricter quarantine rules. Finland deserves particular mention, reporting a significantly lower decline in GDP than that of its Nordic neighbours. The Swedish economy appears to have suffered almost as badly as the Danish and Norwegian economies, despite adopting a gentler lockdown strategy involving fewer restrictions.

GDP growth during the first half of 2020



Sources: Macrobond and Handelsbanken (Q2 forecast for Norway)

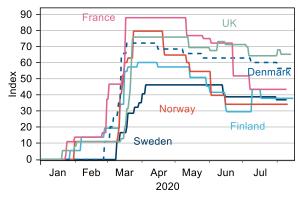
Restrictions holding back economic growth

The amount of damage suffered by the Nordic economies as a result of the coronavirus pandemic depends on several factors. The most obvious of these concerns the restrictions introduced to prevent the spread of the virus. Denmark, Finland and Norway introduced extensive isolation measures during March and April. Schools, restaurants and many shops were closed. Unlike the situation in

many countries in the eurozone, the manufacturing and construction industries were largely able to continue as normal. Output was also supported by the fact that working from home is considerably more common in the Nordic countries than it is in the rest of the EU.

Sweden took a gentler approach to lockdown, with restrictions largely based on recommendations, such as those regarding working from home, and the assumption that the measures would remain in place for some time. Teaching for children under the age of 16 has continued as usual in Swedish schools, while restaurants and businesses have been able to stay open, provided they ensure customers respect social distancing.

Sweden took a gentler approach to lockdown



Note: The index consists of nine components that describe different types of restrictions, such as school closures and travel bans,

to curb the spread of COVID-19.

Sources: Macrobond and Oxford COVID-19 government response tracker

However, behaviour is influenced by far more than formal restrictions. Restaurant visits and consumption in other service sectors plummeted in Sweden, despite the fact that restaurants and businesses were allowed to remain open. Google data indicates that mobility in public spaces fell

rapidly during March in all Nordic countries, after it became clear that the virus was spreading and after various measures were introduced to reduce the spread. However, it is also clear that mobility in Sweden initially fell slightly less than in other Nordic countries. In an international comparison, the trends for the Nordic countries have been broadly the same. The decline was considerably greater during March-May in the UK and France, both of which introduced stricter quarantine rules.

Reduced mobility in public environments

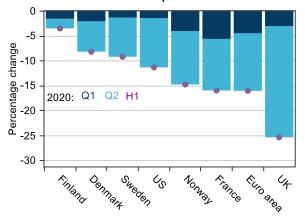


Note: Deviation from normal movement pattern. Average of the sub-index Retail & Recreation, Grocery & Pharmacy, Transit Stations and Workplace: Sources: Macrobond and Google.

Consumption plummeted, despite buoyant retail

Consumption fell sharply in all Nordic countries during the first quarter of 2020, but the decline was still less pronounced than that observed in many other European economies. It is also clear that the decline in consumption during the first quarter was significantly lower in Finland and Sweden, compared to Norway, where restrictions were introduced far more quickly. Monthly data and indicators suggest that consumption continued to fall in April, but that there has since been a recovery.

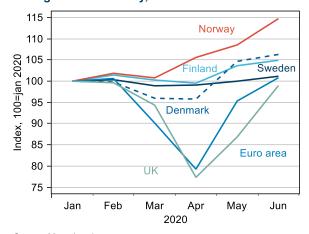
Smaller decline in consumption in Finland



Note: Q2 forecast for Finland, Denmark, Norway, Sweden, euro area. Sources: Macrobond and Handelsbanken.

In all Nordic countries, the decline in consumption has been most acute in the consumption of services. In Sweden, the performance of the retail sector has remained more or less unchanged throughout the coronavirus pandemic. However, in Norway, Finland and Denmark, growth in the retail sector has been higher than normal, with households forced to cut back on the consumption of services and holiday trips abroad. The closed border between Sweden and Norway has also contributed to increased retail trade in Norway but lower trade in Sweden, as Norwegians 'direct purchases in Sweden usually exceed Swedes' purchases in Norway.

Strong retail in Norway, Finland and Denmark



Source: Macrobond

In UK and many other EU countries, growth in the retail sector plummeted during March and April, as shops were closed and people were not allowed to leave home. Since other EU countries began easing their rules on quarantine, the retail sector has witnessed a V-shaped recovery in the eurozone and is now at a higher level than it was before the start of the coronavirus pandemic.

Figures for the second quarter are yet to be published. Our forecast is that Norway experienced a greater decline in consumption than Denmark and Sweden during the first six months of the year. In Finland, it appears that the decline in consumption has been far less than that experienced in the other Nordic countries.

Sweden's gentler lockdown strategy has probably helped subdue the decline in the consumption of services during March and April. At the same time, the retail sector has performed less well than elsewhere in the Nordic region, with the result that the decline in consumption has been slightly more than in Finland and Denmark. The monthly data for April and May also suggest that consumption will recover faster in Norway than in Sweden, after Norway started easing its restrictions in April while the consumption of services in Sweden was probably held back by the high rate at which the virus spread during the spring.

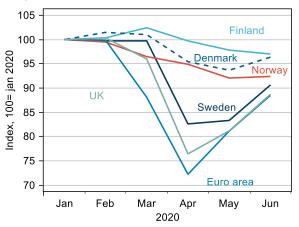
Sweden badly affected by global decline in industrial production

Historically, Sweden and Finland have been affected more by fluctuations in the global economy than Denmark and Norway. This is due to sectoral differences. Finland and Sweden both have an export mix that is highly dependent on the business cycle of the industrial sector, which is far more cyclical. Norway's dependence on international markets is more closely linked to oil prices. Oil prices fell sharply in March, but have bounced back somewhat since May. Investments linked to the oil industry have also fallen sharply, which is the main reason for the decline in industrial output in Norway. Denmark, meanwhile, is dependent on the pharmaceuticals and food industries, which are usually less sensitive to the fluctuations of the economic cycle, and which have performed remarkably well during the coronavirus crisis.

The lockdown of the global economy has had a devastating effect on global trade and global industrial output. Sales of cars and lorries plummeted during March and April. This has had a devastating effect on Sweden's automotive industry. Sweden's industrial output fell by more than 15 percent in April, and a significant proportion of industrial workers were furloughed during the spring. There has since been a slight recovery, but industrial output in June was still almost 10 percent lower than it was in January. In Finland industrial output fell less than 3 percent in the first half of 2020. The long lead times for industrial order deliveries have kept the decline in Finnish industrial production less than in

other countries this year. For example metal industry has increased output so far in 2020.

Larger decline in industrial production in Sweden



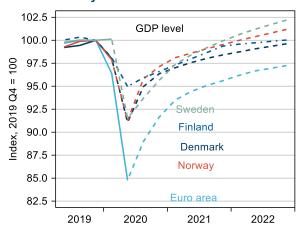
Source: Macrobond

Subdued recovery

As restrictions have gradually been lifted, there has been a burst of economic activity in the Nordic economies. Meanwhile, unemployment has dropped somewhat in Norway, as many of those temporarily laid off have returned to their previous jobs. In Finland, Denmark and Sweden, furlough scheme has tempered the increase in unemployment. This means that it will take time before companies start taking on new staff, and we therefore expect unemployment to continue rising during the autumn, as the recovery will mainly result in an increase in working hours for those furloughed.

The monetary policy arsenal has been more or less exhausted in all the Nordic countries, as well as in the eurozone. However, public debt in Sweden, Norway and Denmark is very low by international standards. The Nordic countries thus have better opportunities than many other countries to pursue an expansionary fiscal policy over an extended period, in an attempt to accelerate the recovery and prevent the crisis having permanent effects on production. A buoyant property market, coupled with a high level of household savings, create a platform for a relatively strong recovery in all Nordic countries.

Muted recovery



Sources: Macrobond and Handelsbanken.

However, a weak labour market, coupled with continued restrictions involving social distancing, will hamper the recovery. It is therefore our view that the recovery will be subdued in all Nordic countries. Low oil prices and a reduction in oil-sector investments are also expected to damage the Norwegian economy throughout the forecast period.

Forecasts

Our home markets

Even though the whole world has been hit hard by the pandemic, there are differences in how our home markets have been affected economically. The Nordic countries and the Netherlands have fared better economically than the rest of the EU and the UK. An important explanation for this is that the Nordic countries and the Netherlands did not impose as strict shutdown measures as the UK and many other EU countries. Also, differences in business structure have great significance. For example, the downturn in the world economy has hit Sweden's cyclically sensitive industrial sector hard. Denmark, on the other hand, has benefitted from the strong performance of the pharmaceutical industry during the pandemic.

United Kingdom

	2019	2020p	2021p	2022p
GDP	1.3	-8.0	5.1	2.7
Unemployment*	3.8	6.0	6.5	5.5
Inflation	1.8	1.2	1.5	2.0
Policy rate, percent**	0.75	0.1	0.1	0.1
Exchange rate, EUR/GBP**	0.85	0.87	0.92	0.85

Sources: ONS, Macrobond and Handelsbanken

Sweden

	2019	2020p	2021p	2022p
GDP*	1.2	-4.6	3.7	2.7
GDP, actual	1.2	-4.3	3.8	2.7
Household consumption*	1.2	-5.0	4.7	2.8
Fixed investment*	-1.2	-7.8	2.5	4.1
Net exports, GDP contribution*	1.0	0.5	0.1	0.1
Unemployment**	6.8	8.8	9.4	8.4
Inflation, CPIF	1.7	0.5	1.3	1.3
Policy rate, percent***	0.0	0.0	0.0	0.0
Exchange rate, EUR/SEK***	10.43	10.35	10.20	10.00

Sources: Macrobond and Handelsbanken

Norway

	2019	2020p	2021p	2022p
GDP. mainland	2.4	-4.0	3.5	1.8
Household consumption	1.6	-5.9	6.1	2.0
Petroleum investments	12.9	-3.0	-10.0	-5.0
Unemployment*	2.3	5.2	3.4	3.1
Inflation. CPIATE	2.2	3.1	2.3	1.8
Policy rate. percent**	1.50	0.00	0.00	0.00
Exchange rate. EUR/NOK**	9.86	10.50	10.30	10.20

Sources: Macrobond and Handelsbanken

Finland

	2019	2020p	2021p	2022p
GDP	1.1	-3,5	2,0	1,5
Household consumption	0.9	-2,0	1,5	1,5
Fixed investments	-1.0	-3.4	1.6	1,5
Net exports, GDP contribution	2.1	-1,3	0,3	0,3
Unemployment*	6.7	8,2	8,3	7,9
Inflation	1.0	0,5	1,1	1,4
General govt balance**	-1.1	-8,5	-3,3	-2,4
EMU debt**	59.2	69,2	70,1	70,4

Sources: Macrobond and Handelsbanken

Denmark

	2019	2020p	2021p	2022p
GDP	2.3	-4.2	2.8	1.5
Household consumption*	2.2	-3.8	3.2	1.6
Government consumption	1.2	0.8	1.9	1.0
Fixed investments	2.4	-7.7	0.7	1.6
Exports	1.8	-5.0	2.6	3.5
Imports	0.1	-5.7	2.3	3.2
Unemployment, LFS**	5.0	6.3	7.0	6.3
Inflation	0.8	0.5	1.1	0.9
Policy rate (dep. rate), percent***	-0.75	-0.60	-0.60	-0.60

Sources: Macrobond and Handelsbanken

Netherlands

	2019	2020p	2021p	2022p
GDP	1.6	-5.3	3.6	2.2
Unemployment*	3.4	4.7	5.6	5.0
Inflation, HICP	2.7	0.9	1.6	1.4

Sources: Macrobond and Handelsbanken

^{*} Percent of the labour force **At year-end

^{*}Calendar adjusted **Percent of the labour force ***At year-end

^{*}Percent of the labour force **At year-end

^{*}Percent of the labour force **Percent of GDP

^{*}Incl. NPISH **Percent of the labour force ***At year-end

^{*} Percent of the labour force

United Kingdom

A recession unlike any other

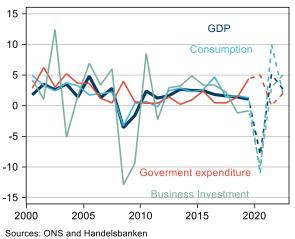
The United Kingdom has fallen into a recession, the severity of which has not been seen in three centuries. While the COVID-19 crisis was the instigator of this downturn, the economic crisis has spread well beyond being primarily a health pandemic. Recovery now depends on how extensively and quickly global supply chains are re-oriented, how rapidly consumer confidence recovers, itself dependent upon how far unemployment rises, and the extent to which any asset price corrections have an impact on consumer confidence and the broader economy.

A macroeconomic triple shock

The UK finds itself in the midst of a perfect storm. Its status as a global trading nation has left it more susceptible than most to the fragilities of global supply chains. As an economy in which services and consumer spending are particularly critical, the COVID-19 pandemic and subsequent lockdown has had a disastrous effect. As a country with high levels of home ownership and widespread financial wealth, any correction in asset values has the potential to affect consumer confidence significantly.

After contending with these challenges, businesses and economy will have to deal with uncertainty around Brexit and coping with a rapidly growing stock of debt. We live in interesting times.

UK GDP by component



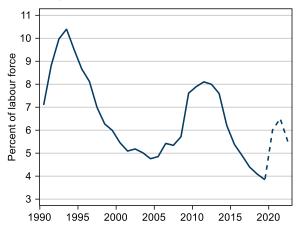
There are three basic questions when looking at the forecast for the United Kingdom: the depth of the recession; the length of the recession; and the scale of the recovery. The scale of the downturn has now been determined: consumer spending effectively stopped across a wide range of sectors, falling by close to 30 percent in the second quarter, while business investment suffered a reversal similar to that in the global financial crisis, with only government spending remaining positive. The result is that the economy shrank by 20.4 percent in the

second quarter of 2020. The key question is now the path of recovery.

Our forecast is for a reasonable immediate recovery, leading to growth of 5.1 percent in 2021, but a slow second phase of the recovery meaning overall GDP does not rapidly regain 2019 levels. This forecast is based on a reasonable recovery in consumer spending. However, COVID-19 has not been defeated. While it is very unlikely to lead to a fullscale lock down of the type that we have just experienced, certainly any recurrence will entail some restrictions on full economic activity. Consumer caution is an inevitable response to such a situation. Moreover, the full scale of the economic damage brought on by the reaction to the first wave of COVID-19 has not yet been fully assessed. As unemployment climbs in the wake of business restructuring and failures, consumer confidence is certain to be affected.

UK unemployment reached a 45-year low of 3.8 percent in December 2019 and it remains officially near that low point. Our forecast is for unemployment to rise significantly as the government's furlough programme is wound down. The good news is that the structural changes to the UK employment market, as demonstrated in the global financial crisis of 2007-09, should mean unemployment peaks below 9 percent, with employers seeking innovative ways to keep workers employed at least part time post furlough, and employees being flexible enough to accept what is on offer. The bad news is that a more than doubling of unemployment in the short term is going to have a negative impact on broader consumer confidence.

Unemployment



Sources: Macrobond and Handelsbanken.

Asset prices

Looking at the last COVID-19 challenge, a broader reversal of UK asset prices could yet have a significant negative effect on overall consumer sentiment and GDP. The widespread popularity of home ownership, almost two-thirds of homes in the UK are owner occupied, has resulted in housing being the single biggest store of wealth for many families in the United Kingdom. Residential home valuations reached an all-time high in January 2020³, underpinned by broader monetary issues; so long as interest rates remain at today's ultra-low levels, even higher unemployment is very unlikely to force people to sell and hence valuations look to be sustainable.

In contrast to housing, financial assets have already shown a much greater propensity to correct over-valuations, with the FTSE down 18 percent from its most recent peak in February 2020. While this does affect pension savings, the strength of the link between declines in long-term pension values and broader consumer confidence looks set to be test-ed. It is, however, notable that these pension savings are largely concentrated in the top quarter of the population⁴.

Brexit

The actual state of the Brexit negotiations is subject to considerable and ongoing speculation. The good news is that it has become apparent that there are only two main issues to be settled: the level playing field and fishing. The UK has not traditionally lent state aid to businesses, so a settlement should be possible. As for fishing, any settlement is going to require a new approach not based on historic catch quotas, which disadvantaged British fishermen. The details of what such an approach might entail are now under active consideration. Ultimately, a good

deal of trust has been built up in reaching agreement in the other 10 portfolios that constitute the EU-UK trade agreement, leaving us cautiously optimistic that an eventual overall agreement will be found. This agreement may not be as comprehensive as many people might have hoped, but nor will it be as severe as once feared.

The economic impact of even a limited deal is likely to be positive for the UK in 2021. The current account deficit widened to GBP 21.1 billion in Q1 2020, or 3.8 percent of GDP. Looking forward, and assuming a limited deal, we expect the current account to stay around present levels. The result is sterling will not be testing any of its limits against the dollar or euro. Our central forecast being GBP/USD rises to 1.34 by mid-2021, while EUR/GBP will be 0.90. More importantly, business investment in the UK, both from domestic and international firms, will rapidly recover. The global financial crisis saw quarterly business investment rebound ~8 percent. Given the present global economic context, a more subdued but still strong rebound of 5 percent could be expected in 2021.

Government finances

The COVID-19 crisis has added to government debt with astonishing speed. The total stock of debt is set to rise from GBP 1.8tn in 2019/20 to GBP 2.5tn by 2022/23. The challenge is there is little appetite politically or publicly for a renewed period of "austerity" (even redirecting spending within a fixed budget to meet changing priorities is extremely challenging). At the same time, tax rates as a percentage of GDP are at the upper limit of their long-established norms. The credibility of the repayment plan, likely to be set out in the chancellor's budget this November, is the key to the sustainability of low interest rates.

In our April global economic forecast, we expected UK interest rates to be maintained at 0.1 percent for the foreseeable future: we maintain this view. We do not expect the Bank of England to lower interest rates to negative. A number of options remain, ranging from purchasing corporate bonds, through yield-curve control and the well-trodden path of further QE. In the short term, these forms of be monetary stimulus will be sufficient.

³ UK Land Registry; House Price Index

⁴ ONS: Total wealth in Great Britain: April 2016 to March 2018.

Sweden

Recovery under way, unemployment still rising

The decline in the Swedish economy is now behind us, and we expect growth in Q3. However, the uncertainty surrounding COVID-19 and the accompanying restrictions will continue to subdue demand next year. It will be a while before companies start recruiting again, and we foresee an increase in unemployment this autumn. Nevertheless, house prices look set to chug along, buoyed by low interest rates.

Historic slide in the first six months...

Although the year opened with surprisingly strong export figures, the decline in the first six months was a historic one. According to Statistics Sweden's GDP indicator, GDP fell by 8.6 percent from Q1 to Q2, driven by the drop in both domestic demand and external trade. So far, the data suggest that Swedish GDP will not outperform the GDP figures of our Nordic neighbours, despite less stringent restrictions (see theme article "Sweden hit just as badly as other Nordic countries"). We now expect GDP to fall by 4.6 percent this year.

... but we've raised our full-year GDP forecast

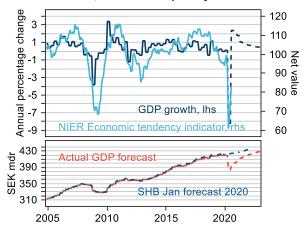
Since our forecast in April, we have raised our 2020 GDP growth forecast, mainly due to stronger-thananticipated growth in Q1, and also because the subsequent decline looks to have been slightly less than we expected at that time. At the same time, we have been surprised by both the resilience of the housing market and the stock market recovery in the spring (see theme article).

A fragile, gradual recovery has begun

Looking ahead, there is still great uncertainty. Admittedly, our forecast that the recovery in Sweden would start in the early summer appears to have been correct. Since June, we have seen signs of an increase in the low levels of household consumption, export order inflow, industrial production and forward-looking indicators. However, the uncertainty will continue to subdue both domestic and global demand, contributing to a protracted recovery.

The fact that other countries have begun opening up will contribute to a Q3 boost in Swedish growth. The fact that the most intense phase of infection is behind us and household activity is gradually returning to normal means that we also foresee an upswing in household consumption. Different sectors will continue to be affected to differing extents by behaviour changes caused by the pandemic. To date, transport and tourism have been hit particularly hard, while the IT, communications and construction sectors have performed relatively strongly.

GDP to recover, but not completely



Sources: Macrobond and Handelsbanken.

Recession will continue for the next few years

Next year, we expect the GDP recovery to continue, as Sweden returns to the production levels seen in late 2019. However, the recession will continue, and the crisis has created a permanent drop in production.

Labour market situation remains serious

Unemployment has risen quickly, reaching 9.2 percent in July. The abrupt drop in demand in many employment-intensive service segments has hit young people, who often have temporary employment contracts, particularly hard. At the same time, furloughing has eased the drop in employment for permanent employees in both industry and the service sector. Therefore, the number of hours worked has decreased much more than employment has.

Although the recovery has now begun and redundancy figures have dropped, we expect unemployment to continue rising in the second half of the year. To a great extent, companies will be able to meet increasing demand by gradually returning furloughed employees to full-time work.

Furloughs have dampened the fall in employment



Source: Macrobond

According to Statistics Sweden, 270 000 workers were furloughed, full- and part-time, in May. The number of furloughed workers has since decreased, while the number of hours worked has risen. In our assessment, the great majority of furloughed employees will gradually return to full-time work. Inevitably, some people will be made redundant, and it will be a long time before companies will be able to increase their headcounts. Thus, employment will continue to decrease in the second half of the year, and we expect the unemployment rate to peak at around 10 percent at the end of 2020. It will be many years before the figure returns to pre-crisis levels.

House prices will resist unemployment turmoil

The housing market has shown surprising resilience. Although we know that supply is limited, and that mortgage rates are likely to remain low for a long time, we had expected a weaker trend in both prices and the number of house sales in the past few months. Among households, concern about unemployment and the Swedish economy is much greater than normal. Nevertheless, the number of apartment sales has rocketed during the summer, while prices on detached houses and second homes performed particularly have strongly. explanation could be that the crisis has largely affected low-income earners, who mostly do not own their homes. In addition, the rise in the stock market has contributed to the fact that wealth has not decreased. Our current assessment is that residential property prices, which have recovered after the initial slide, will maintain a slightly increasing trend during the second half of the year.

More stimulus measures, but crisis policies are being phased out

In the first half of the year, the government and the Riksbank implemented substantial measures to mitigate the damage to the economy. The focus has been on helping companies to survive the pandemic, subdue the rise in unemployment, and reduce the risk of another financial crisis, rather than stimulating demand. In the future, we expect the focus to shift towards more general demand stimulus measures to support the recovery.

In many other countries, the gradual phasing-out of governments' emergency support is a matter of cost. In Sweden, it is probably more because many forms of support have been utilised too little, the recovery has begun, and long-term support to companies may restrict structural change. Public finances are strong. Next year, we expect the government to implement stimulus measures in the form of more money for welfare, income tax cuts, and public investments of around 1.5 percent of GDP.

Are a zero repo rate the new normal?

The labour market parties within manufacturing industry postponed this spring's major round of collective bargaining to the autumn, which will result in the wage growth rate sinking to basement level. In April, wages grew by only 1.4 percent y-o-y. In the coming months, wages are expected to increase even more slowly until a new agreement is in place towards year-end. It is our view that the new agreement will result in a lower rate of wage growth than in the 2017 negotiations, as a result of the deep recession.

The pandemic has had a major impact on many prices, such as soaring car rental prices and falling hotel room prices. However, fears that shortages of goods and reduced global trade would push up inflation have not materialised. Underlying inflationary pressure has been low. At the same time, the Swedish krona has appreciated versus both the dollar and the euro, which is restraining import prices. In our assessment, fundamental factors such as Sweden's relatively strong government finances and growth potential will help the krona to continue strengthening to 10.00 EUR/SEK at the end of 2022. The appreciation of the krona, the economic downturn, and subdued wage increases point to underlying inflationary pressure remaining low over the next few years. Overall, we expect the inflation rate (CPIF excluding energy) to be around 1.0 to 1.5 percent over the coming years, with inflation expectations probably dropping back.

The Riksbank is also likely to shift its focus, from crisis measures to the inflation target. This will probably involve more of a verbal shift than any actual changes in policy. We expect the current QE plans to remain in place until mid-2021, and the repo rate to remain at zero percent for the foreseeable future.

Norway

Not as bad as feared, but a long recovery awaits

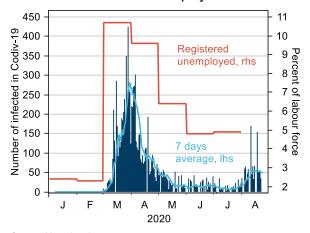
The mainland economy is currently recovering from a historically sharp contraction. The rebound has begun faster than initially feared, but the economy remains a long way below the pre-crisis trend. Although our baseline expectation is that Norges Bank will refrain from tightening policy before year-end 2022, the booming housing market poses a dilemma, so the risk of a rate hike has increased.

Recovering from the trough

The stringent measures taken to supress the pandemic have dealt a historic blow to the economy. However, the measures succeeded in lowering the COVID-19 reproduction number to well below 1, enabling the authorities to start gradually reopening the economy.

Mainland GDP growth probably started to rebound in late April/early May (although that was not enough to prevent a deep contraction in Q2 as a whole). Labour market data show that unemployment - albeit still high by historical standards - has fallen sharply as more temporarily laid off employees have returned to work. Movement of people has also, to a large extent, recovered from the slump. Extended income security for those without work, as well as deep rate cuts from Norges Bank - to zero percent effective from May has given an additional boost to domestic spending. The retail sector, in particular, has benefitted from a stellar increase in spending over the past few months. This must also be seen in the context of closed borders. As direct purchases abroad by Norwegian residents normally exceeds spending in Norway by non-residents, a 'reversal' of said flows has offered a one-time boost to domestic consumption.

Number of infected and unemployment



Source: Macrobond

Overall, the slump was severe, but the rebound has begun faster than we and others feared during the initial phase of the crisis. Having said that, the economy as a whole is still far from recovered and it will probably take years before the unemployment rate returns to normal. The service sector is still well below pre-crisis levels, even though growth has returned to positive territory. In addition, the manufacturing sector is struggling due to low global demand and falling oil investments. More importantly, further reopening of the economy has been put on hold or even partly reversed in some parts of the country, as the rate of new infections has increased again. Events in recent weeks indicate that the road ahead will be more bumpy than experienced during the initial stage of the recovery. Fundamentally, a medical solution to the crisis still seems some way off. Thus, the GDP outlook depends on further infection control - domestic as well as abroad.

Norges Bank faces a dilemma

Against this backdrop, the prospect of Norges Bank raising its policy rate seems distant. However, the housing market is booming, having recovered quickly from the initial decline. In the past few months, activity, prices and demand for household debt have increased sharply. Norges Bank is clearly worried about financial imbalances. Although our base case remains that Norges Bank will take no action during our entire forecast horizon, the risk of a policy rate hike before the end of 2022 has increased. We also note that core inflation is currently well above Norges Bank's forecasts. This may be simply because the peak was reached earlier than expected. However, until there is further proof in that regard, the risk of tightening has increased marginally, we believe. At this point, our forecasts for EURNOK remain largely unchanged. Fundamentals for the NOK have strengthened, but the EUR has also appreciated broadly. We still expect the EURNOK to hover around 10.50 for the next 3-6 months before gradually declining to 10.20 in 2022.

Finland

Return to growth

The Finnish economy has fared better-than-expected during the COVID-19 pandemic, with GDP falling less than in many other countries. Containment measures have effectively prevented the spread of the virus. Retail trade has fared well during the crisis, while the service sector has suffered a bigger blow. Although the damage to the economy so far seems to be moderate, the economic outlook contains risks. That main risk is the renewed COVID-19 outbreak and its impact on the domestic economy and Finland's key export markets. We forecast the Finnish GDP to shrink by 3.5 percent in 2020, grow by 2.0 percent in 2021 and 1.5 percent in 2022.

Restrictive measures kept the virus in check

The anti-coronavirus measures that came into force in mid-March effectively limited the spread of viral infections in Finland. Economic activity dived in the spring, but returned to growth in June. Many Finns were able to switch to remote work, and remote work became more widespread than anywhere else in Europe. The layoff system also curbed the rise in unemployment. State support measures have also helped companies. Preliminary figures indicate, the GDP declined only by 3.2 percent in Q2 from the previous quarter. The long lead times for industrial order deliveries have kept the decline in Finnish industrial production less than in other countries this year.

We forecast that the Finnish economy will contract by 3.5 per cent in 2020 and recover by 2 percent in 2021 and grow by 1.5 percent in 2022. Economic growth will rely on domestic demand and a gradual recovery in exports in 2021-2022. The main risk to the Finnish economy is the uncertain outlook for export markets due to the corona pandemic. We forecast that the unemployment rate will increase to 8.2 percent in 2020 and to 8.3 percent in 2021 and then decline to 7.9 percent in 2022.

Retail trade up - services down

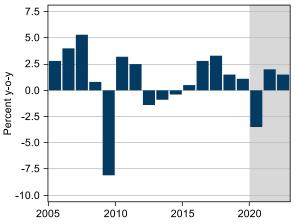
The corona pandemic has, in particular, reduced consumption of tourism, accommodation and restaurant services and leisure services. In contrast, retail trade has fared relatively well during the coronavirus pandemic. Retail trade, which accounts for 40 percent of household consumption, will grow robustly in 2020.

Strengthening consumer confidence, low inflation and wage increases will support household purchasing power and consumption. Confident households will also underpin the housing market, which has remained rather stable during the pandemic. A spike in unemployment and growing fearfulness among households are the main risks to the consumption outlook.

Cloudy outlook for exports

The plunge in the global economy and weak demand in the main export markets will weigh on Finnish exports in 2020. On the positive side, economic activity has begun to pick up in Finland's main export markets due to the lifting of exceptional measures. The recovery in exports of raw materials and intermediate goods requires that industrial production begins to recover in the main export markets. Exports of services, excluding tourism, are shrinking less than exports of goods. IT services and business services will suffer less from the corona crisis than other sectors.

GDP growth and forecast for Finland



Sources: Macrobond and Handelsbanken

Modest investment outlook

The uncertain economic outlook has halted many investment projects and the sharp downturn in the global economy will continue to curb companies' investment intentions this year. Next year, investment is forecast to recover in the wake of global economic growth. Investment in machinery and equipment is expected to increase, but investment in construction will remain at a rather sluggish level. Public sector stimulus measures will accelerate the growth of public investment in 2020 and 2021. The stimulus will also mean that public sector debt will rise to new highs in the forecast period.

Denmark

Living with COVID-19

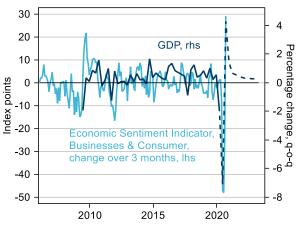
Following a record contraction caused by COVID-19, the economy has rebounded earlier and faster than initially feared. We have raised our GDP forecast, but still expect the economy to shrink by about 4 percent this year. However, the 'easy' part of the rebound is probably behind us and we expect that the road to a full recovery will be bumpy and drawn out as the virus lingers.

Record contraction, quick rebound

As expected, COVID-19 and the lockdowns introduced to contain its spread led to a historic drop in GDP. According to Statistics Denmark's GDP indicator, the economy contracted by a record 7.4 percent q-o-q in Q2. This took the total economic setback in the first half of 2020 to more than 9 percent, wiping out four years of economic growth in a matter of months.

However, the recession was also historically short, as the virus was contained relatively quickly, allowing restrictions to be lifted earlier than previously feared. Thus, the economy began bottoming out in April and the subsequent rebound has been stronger than expected. Pent-up demand, excess savings and substitution from travel and entertainment have led to a sharp rebound in retail and car sales. Business and consumer confidence indicators have risen from their troughs and exports are increasing again, although they remain below pre-crisis levels. Furthermore, generous aid packages and wage compensation schemes cushioned the blow to companies and the labour market, which led to a stabilisation in unemployment after an initial marked increase.

Record deep dive followed by swift rebound



Sources: Macrobond and Handelsbanken

The upshot is that Denmark in tandem with its Nordic peers appear to have fared better than many other countries (see Theme article). Incoming data suggest an economic trajectory that is closer to the best-case scenario we presented in our Global Macro Forecast in April, for which uncertainty was

unusually high. Consequently, we have lifted our GDP forecast for this year to around -4 percent, compared to our previous baseline scenario of around -7 percent.

Rebound phase coming to an end?

While GDP growth is set for a strong reading in Q3, uncertainty over the future trend remains elevated. Recent virus outbreaks domestically and abroad, and the fact that a medical solution still appears some way off, make it clear that we will probably have to live with the virus for some time yet, posing the risk of enhanced negative behavioural effects on consumption and, especially, investments. Private consumption should be underpinned by solid household balance sheets at the onset of the crisis and the release of the so called 'vacation money' during the fall. However, this will likely be countered by an expected rise in unemployment over the coming months as wage compensation schemes are phased out, with a gradual improvement beginning in 2021.

It is also hard to see how the export-reliant economy could remain on a sound footing when fresh waves of COVID-19 infections are sapping rebound momentum in the global economy. Reignited US-China tensions will also most likely hamper global trade and we expect the Danish export sector will struggle with weak order books for a considerable period.

The upshot is that we expect the recovery process to slow down and become bumpier during the second half of 2020, with no full recovery of output lost due to the virus outbreak until late 2022. While the current flare-up of coronavirus in Denmark is not yet a cause for major concern, more widespread outbreaks could stall the recovery further, or even send it into reverse, depending on the severity of the outbreak and the extent of the government's response. The Danish government does seem to be keen to avoid renewed nationwide lockdowns, which should limit the hit to the economy from an eventual second wave, but the risk of tighter restrictions sapping economic growth have risen recently.

The Netherlands

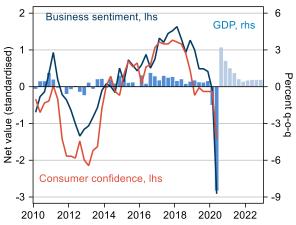
Fiscal policy to shield jobs as GDP falls

The Netherlands has been hit hard by the pandemic, although not nearly as hard as many other countries. Ample fiscal space and proactive measures to mitigate the effects on the labour market are expected to put the country in a relatively good position during the coming recovery. Stimulus measures are, however, likely to increase public debt more than during the 2008-09 financial crisis.

Recession despite less stringent shutdowns

Although the Netherlands has not been as badly affected as some other European countries, the pandemic has still taken a toll. The Netherlands chose not to go as far as many other countries during the spring in terms of closing down its economy. Instead, it has aimed to create a "one-and-a-half-metres" economy in which herd immunity can be developed. Nonetheless, delayed negative effects on the labour market and on businesses are expected when the fiscal policy measures currently in place are phased out, which is expected to happen in October.

Bottom hit during the second quarter



Sources: Macrobond and Handelsbanken

In the past, the Dutch economy has grown faster than the eurozone average, and it is one of few countries to have considerable fiscal space. However, the country's openness and dependence on global demand and trade mean that the economic effects of the pandemic will add to last year's global slowdown. As in the rest of the world, the service sector has been the hardest hit, although subdued global demand this year will likely also burden the manufacturing sector.

Fiscal policy eases impact on labour market

The pandemic has struck the labour market significantly. The standard measure of unemployment does not show the total effect, as many companies are more likely to reduce working hours than to lay off staff. This is possible due to the state's contribution to labour costs, and with the

liquidity measures for companies which, via the ECB and the state's own programmes, fulfil any requirements for credit. The stimulus packages announced so far may need to be expanded at the end of the year. We foresee both a steep budget deficit and an increase in public debt of almost 40 percent as a proportion of GDP. This is a much greater increase than during the most recent financial crisis. In our view, this will be surmountable, not only because the Netherlands has the fiscal space, but also because the EU has declared that the rules of the Stability Pact can be effectively ignored during the pandemic. Established political agreements, such as pension and climate agreements, are also expected to increase public expenditure from next year onwards. A push to improve households' purchasing power through tax cuts is bound to have a limited effect on consumption, given job concerns as well as high levels of debt. In addition, we expect to see a downturn in investments, and anticipate that global trade will remain subdued. The orientation of fiscal policy measures towards the labour market lead us to foresee the pandemic having a much greater impact on GDP growth than on unemployment.

Steep decline in GDP in 2020; recovery in 2021-22

We expect GDP to drop by 5.3 percent in 2020, which is slightly lower than we predicted in April. Growth is then expected to return steadily, to around 3.6 percent in 2021 and 2.2 percent in 2022. Growth in unemployment is also expected to be somewhat lower than we previously predicted, mainly due to the stimulus packages implemented since April, and we expect an average of 4.7 percent in 2020, rising to 5.6 percent in 2021, and then falling back to 5 percent the following year. We also expect low inflation this year, as a result of falling energy prices. We foresee a moderate increase thereafter.

Key ratios

Real GDP forecast

Annual average

	2019	2020p	2021p	2022p
Sweden*	1.2	-4.6 (-6.9)	3.7 (4.2)	2.7 (2.4)
Denmark	2.3	-4.2 (-6.6)	2.8 (3.7)	1.5 (1.7)
Finland	1.1	-3.5 (-10.0)	2.0 (5.0)	1.5 (1.5)
Norway, mainland economy	2.4	-4.0 (-5.8)	3.5 (3.6)	1.8 (1.8)
Eurozone	1.3	-9.4 (-8.0)	4.6 (3.7)	2.2 (1.4)
Netherlands	1.6	-5.3 (-7.4)	3.6 (3.3)	2.2 (2.1)
United Kingdom	1.3	-8.0 (-8.0)	5.1 (4.5)	2.7 (1.5)
United States*	2.2	-5.3 (-7.1)	4.0 (6.0)	2.5 (2.4)
China	6.1	2.0 (2.0)	7.5 (7.5)	5.7 (5.7)

^{*}Calendar adjusted

Inflation fo	recast

Annual average

	2019	2020p	2021p	2022p
Sweden, CPI	1.8	0.5 (0.4)	1.4 (1.3)	1.3 (1.4)
Sweden, CPIF	1.7	0.5 (0.3)	1.3 (1.3)	1.3 (1.3)
Denmark	0.8	0.5 (0.1)	1.1 (0.7)	0.9 (0.9)
Finland	1.0	0.5 (0.3)	1.1 (1.5)	1.4 (1.4)
Norway, CPI	2.2	1.6 (1.2)	3.0 (3.3)	1.8 (1.7)
Norway, CPIATE	2.2	3.1 (2.7)	2.3 (2.2)	1.8 (1.7)
Eurozone	1.2	0.2 (-0.1)	0.8 (0.5)	1.2 (1.2)
Netherlands	2.7	0.9 (0.2)	1.6 (1.2)	1.4 (1.6)
United Kingdom	1.8	1.2 (1.2)	1.5 (1.3)	2.0 (1.6)
United States, PCE Core	1.7	1.1 (0.8)	1.4 (1.3)	1.7 (1.9)

		~		
	2019	2020p	2021p	2022p
Sweden	6.8	8.8 (9.5)	9.4 (9.5)	8.4 (8.3)
Denmark	5.0	6.3 (6.7)	7.0 (7.6)	6.3 (6.4)
Finland	6.7	8.2 (9.5)	8.3 (8.0)	7.9 (7.5)
Norway	2.3	5.2 (6.5)	3.4 (4.1)	3.1 (3.9)
Eurozone	7.6	8.9 (11.9)	9.9 (10.8)	8.4 (9.0)
Netherlands	3.4	4.7 (7.0)	5.6 (5.9)	5.0 (5.0)
United Kingdom	3.8	6.0 (8.0)	6.5 (6.5)	5.5 (5.5)
United States	3.7	9.0 (11.0)	7.6 (9.0)	6.4 (8.0)

Source: Handelsbanken

In brackets: Global Macro Forecast April 29, 2020

^{*}Registered unemployment (NAV)

Interest rate forecast

End of year

United States	Policy rates	2019	2020p	2021p	2022p
Sweetin	United States	1.625	0.125 (0.125)	0.125 (0.125)	0.125 (0.125)
Demmark	Eurozone	-0.5	-0.50 (-0.50)	-0.50 (-0.50)	-0.50 (-0.50)
Institut Kingdom 0.75	Sweden	0.00	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
December 1,50	Denmark	-0.75	-0.60 (-0.60)	-0.60 (-0.60)	-0.60 (-0.60)
Internativates	United Kingdom	0.75	0.10 (0.10)	0.10 (0.10)	0.10 (0.10)
Dirtied States, LIDCR	Norway	1.50	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Sweden 1716CR 0.15 -0.05 (0.20) -0.05 (0.20) -0.10 (0.20) -0.25 (-0.20) -0.20 (-0.20) -0.20	Interbank rates	2019	2020p	2021p	2022p
Eurozone EURIBOR	United States, LIBOR	1.91	0.43 (0.43)	0.43 (0.43)	0.68 (0.68)
Demmark CIBOR 0.40	Sweden, STIBOR	0.15	-0.05 (0.20)	0.05 (0.20)	0.10 (0.20)
Nonexy NHBOR 1,94	Eurozone, EURIBOR	-0.38	-0.40 (-0.40)	-0.40 (-0.40)	-0.40 (-0.40)
Zyear govt. bond yield 2019 2020p 2021p 2022p 1.57 0.20 (0.30 0.35 (0.35) 0.50 (0.50	Denmark, CIBOR	-0.40	-0.20 (-0.20)	-0.25 (-0.20)	-0.25 (-0.20)
Diristed States	Norway, NIBOR	1.84	0.30 (0.50)	0.30 (0.50)	0.30 (0.50)
Eurozone (Gemany) 0.68 or 0.03 or 0.20 or 0.20 (-0.20) cro. 0.20 (-0.20) 0.06 (-0.60) cro. 0.20 (-0.20) Sweden 0.33 or 0.30 (-0.20) cro. 0.20 (-0.20) cro. 0.20 (-0.20) 0.20 (-0.20) cro. 0.50 (-0.55) 0.55 (-0.55) cro. 0.55 (-0.55) 0.43 (-0.55) cro. 0.55 (-0.55) cro. 0.55 (-0.55) cro. 0.55 (-0.55) cro. 0.50 (-0.55) cro.	2 year govt. bond yield	2019	2020p	2021p	2022p
Eurozone (Gemany) 0.68 or 0.03 or 0.20 or 0.20 (-0.20) cro. 0.20 (-0.20) 0.06 (-0.60) cro. 0.20 (-0.20) Sweden 0.33 or 0.30 (-0.20) cro. 0.20 (-0.20) cro. 0.20 (-0.20) 0.20 (-0.20) cro. 0.50 (-0.55) 0.55 (-0.55) cro. 0.55 (-0.55) 0.43 (-0.55) cro. 0.55 (-0.55) cro. 0.55 (-0.55) cro. 0.55 (-0.55) cro. 0.50 (-0.55) cro.	United States	1.57	0.20 (0.30)	0.35 (0.35)	0.50 (0.50)
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Dried Kingdom 0.52	Finland	-0.57	-0.63 (-0.55)	-0.53 (-0.55)	-0.43 (-0.55)
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United States 1.69 0.43 (0.65) 0.78 (0.95) 0.95 (1.13) Eurozone (Germany) -0.49 -0.58 (-0.45) -0.43 (0.40) -0.30 (0.30) Sweden -0.24 -0.05 (-0.05) .000 (0.00) .0.10 (-0.10) Dermark -0.48 -0.60 (0.30) -0.43 (0.20) -0.25 (-0.10) Finland -0.35 -0.45 (-0.32) -0.30 (-0.27) -0.12 (-0.17) United Kingdom 0.60 0.23 (0.23) 0.25 (0.25) .0.35 (0.35) Norway 1.38 0.35 (0.45) .0.45 (0.60) .0.60 (0.70) 10 year gort, bond yield 2019 2020p 2021p 2022p Urited States 1.92 0.65 (1.00) 1.20 (1.55) 1.40 (1.75) Eurozone (Germany) -0.19 -0.45 (-0.30) -0.25 (-0.20) 0.00 (0.00) Sweden 0.14 -0.05 (0.05) -0.15 (0.15) 0.40 (0.35) Dermark -0.17 -0.35 (-0.20) -0.15 (-0.10) 0.10 (0.10) Finland 0.05 -0.25 (-0.05) -0.05 (0.00) 0.15	_	1.34	0.15 (0.35)	0.20 (0.35)	
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Denmark -0.48 -0.60 (-0.30) -0.43 (-0.20) -0.25 (-0.10) Finland -0.35 -0.45 (-0.32) -0.30 (-0.27) -0.12 (-0.17) United Kingdorn 0.60 0.23 (0.23) 0.25 (0.25) 0.35 (0.35) Norway 1.38 0.35 (0.45) 0.45 (0.60) 0.600 (0.70) United States 1.92 0.65 (1.00) 1.20 (1.55) 1.40 (1.75) Eurozone (Germany) -0.19 -0.45 (-0.30) -0.25 (-0.20) 0.00 (0.00) Sweden 0.14 0.05 (0.05) 0.15 (0.15) 0.40 (0.35) Denmark -0.17 -0.35 (-0.20) -0.15 (-0.10) 0.10 (0.10) Finland 0.05 -0.25 (-0.05) -0.05 (0.00) 0.15 (0.15) United Kingdom 0.74 0.35 (0.35) 0.50 (0.00) 0.15 (0.15) Norway 1.55 0.65 (0.65) 0.80 (1.05) 1.00 (1.25) 2 year swap rate 2019 2020p 2021p 2021p United Kingdom 0.20 -0.15 (0.10) -0.15 (0.15) 0.20 (-0.15) <td></td> <td>-0.24</td> <td>-0.05 (-0.05)</td> <td>0.00 (0.00)</td> <td></td>		-0.24	-0.05 (-0.05)	0.00 (0.00)	
Finland	Denmark	-0.48		-0.43 (-0.20)	
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Norway 1.38 0.35 (0.45) 0.45 (0.60) 0.60 (0.70) 10 year govt. bond yield 2019 2020p 2021p 2022p United States 1.92 0.66 (1.00) 1.20 (1.55) 1.40 (1.75) Eurozone (Germany) -0.19 -0.45 (-0.30) -0.25 (-0.20) 0.00 (0.00) Sweden 0.14 0.05 (0.05) -0.15 (-0.15) 0.40 (0.35) Denmark -0.17 -0.35 (-0.20) -0.15 (-0.10) 0.10 (0.10) Finland 0.05 -0.25 (-0.05) -0.05 (0.00) 0.15 (0.15) United Kingdom 0.74 0.35 (0.35) 0.50 (0.50) 0.65 (0.65) Norway 1.55 0.65 (0.85) 0.80 (1.05) 1.00 (1.25) Year swap rate 2019 2020p 2021p 2022p United States 1.66 0.35 (0.45) 0.45 (0.45) 0.50 (0.50) Eurozone 0.29 -0.30 (-0.15) -0.20 (-0.15) -0.20 (-0.15) Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) <t< td=""><td>United Kingdom</td><td>0.60</td><td>0.23 (0.23)</td><td>0.25 (0.25)</td><td></td></t<>	United Kingdom	0.60	0.23 (0.23)	0.25 (0.25)	
Io year govt. bond yield 2019 2020p 2021p 2022p United States 1.92 0.56 (1.00) 1.20 (1.55) 1.40 (1.75) Eurozone (Germany) 0.19 0.45 (-0.30) -0.25 (-0.20) 0.00 (0.00) Sweden 0.14 0.05 (0.05) 0.15 (0.15) 0.40 (0.35) Denmark -0.17 -0.35 (-0.20) -0.15 (0.10) 0.10 (0.10) Finland 0.05 -0.25 (-0.05) -0.05 (0.00) 0.15 (0.15) United Kingdom 0.74 0.35 (0.35) 0.50 (0.50) 0.66 (0.65) Norway 1.55 0.65 (0.85) 0.80 (1.05) 1.00 (1.25) Luried States 1.66 0.35 (0.45) 0.45 (0.45) 0.50 (0.50) Eurozone -0.29 -0.30 (-0.15) -0.20 (-0.15) -0.20 (-0.15) Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) Denmark 0.17 -0.15 (0.45) 0.15 (0.45) 0.45 (0.45) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70)	_	1.38			
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Denmark -0.17 -0.35 (-0.20) -0.15 (-0.10) 0.10 (0.10) Finland 0.05 -0.25 (-0.05) -0.05 (0.00) 0.15 (0.15) United Kingdom 0.74 0.35 (0.35) 0.50 (0.50) 0.65 (0.65) Norway 1.55 0.65 (0.85) 0.80 (1.05) 1.00 (1.25) 2 year swap rate 2019 2020p 2021p 2022p United States 1.66 0.35 (0.45) 0.45 (0.45) 0.50 (0.50) Eurozone -0.29 -0.30 (-0.15) -0.20 (-0.15) -0.20 (-0.15) Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) Denmark -0.17 -0.15 (0.45) 0.05 (0.15) 0.00 (0.15) United Kingdom 0.80 0.15 (0.45) 0.15 (0.45) 0.15 (0.45) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) 5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.50) 0.83 (0.95) 0.95 (0.80) Eurozone <td>Eurozone (Germany)</td> <td>-0.19</td> <td>-0.45 (-0.30)</td> <td>-0.25 (-0.20)</td> <td>0.00 (0.00)</td>	Eurozone (Germany)	-0.19	-0.45 (-0.30)	-0.25 (-0.20)	0.00 (0.00)
Finland 0.05 -0.25 (-0.05) -0.05 (0.00) 0.15 (0.15) United Kingdom 0.74 0.35 (0.35) 0.50 (0.50) 0.66 (0.65) Norway 1.55 0.66 (0.85) 0.80 (1.05) 1.00 (1.25) 2 year swap rate 2019 2020p 2021p 2022p United States 1.66 0.35 (0.45) 0.45 (0.45) 0.50 (0.50) Eurozone -0.29 -0.30 (-0.15) -0.20 (-0.15) -0.20 (-0.15) Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) Denmark -0.17 -0.15 (0.15) -0.05 (0.15) 0.00 (0.15) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) 5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) United Kingdom	Sweden	0.14	0.05 (0.05)	0.15 (0.15)	0.40 (0.35)
United Kingdom 0.74 0.35 (0.35) 0.50 (0.50) 0.65 (0.65) Norway 1.55 0.65 (0.85) 0.80 (1.05) 1.00 (1.25) 2 year swap rate 2019 2020p 2021p 2022p United States 1.66 0.35 (0.45) 0.45 (0.45) 0.50 (0.51) Eurozone -0.29 -0.30 (-0.15) -0.20 (-0.15) -0.20 (-0.15) Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) Denmark -0.17 -0.15 (0.10) -0.05 (0.15) 0.00 (0.15) United Kingdom 0.80 0.15 (0.45) 0.15 (0.45) 0.15 (0.45) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) Norway 1.99 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) Norway	Denmark	-0.17	-0.35 (-0.20)	-0.15 (-0.10)	0.10 (0.10)
Norway 1.55 0.65 (0.85) 0.80 (1.05) 1.00 (1.25) 2 year swap rate 2019 2020p 2021p 2022p United States 1.66 0.35 (0.45) 0.45 (0.45) 0.50 (0.50) Eurozone -0.29 -0.30 (-0.15) -0.20 (-0.15) -0.20 (-0.15) Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) Denmark -0.17 -0.15 (0.10) -0.05 (0.15) 0.00 (0.15) United Kingdom 0.80 0.15 (0.45) 0.15 (0.45) 0.15 (0.45) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) 5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom	Finland	0.05	-0.25 (-0.05)	-0.05 (0.00)	0.15 (0.15)
2 year swap rate 2019 2020p 2021p 2022p United States 1.66 0.35 (0.45) 0.45 (0.45) 0.50 (0.50) Eurozone -0.29 -0.30 (-0.15) -0.20 (-0.15) -0.20 (-0.15) Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) Denmark -0.17 -0.15 (0.10) -0.05 (0.15) 0.00 (0.15) United Kingdom 0.80 0.15 (0.45) 0.15 (0.45) 0.15 (0.45) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) 5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25 (0.53) 0.33 (0.55) 0.40 (0.65) Norway	United Kingdom	0.74	0.35 (0.35)	0.50 (0.50)	0.65 (0.65)
United States 1.66 0.35 (0.45) 0.45 (0.45) 0.50 (0.50) Eurozone -0.29 -0.30 (-0.15) -0.20 (-0.15) -0.20 (-0.15) Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) Denmark -0.17 -0.15 (0.10) -0.05 (0.15) 0.00 (0.15) United Kingdom 0.80 0.15 (0.45) 0.15 (0.45) 0.15 (0.45) Norway 1.99 0.555 (0.65) 0.60 (0.65) 0.65 (0.70) Norway 1.99 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25 (0.23) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) United Kingdom	Norway	1.55	0.65 (0.85)	0.80 (1.05)	1.00 (1.25)
Eurozone -0.29 -0.30 (-0.15) -0.20 (-0.15) -0.20 (-0.15) Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) Denmark -0.17 -0.15 (0.10) -0.05 (0.15) 0.00 (0.15) United Kingdom 0.80 0.15 (0.45) 0.15 (0.45) 0.15 (0.45) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) 5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25(0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States	2 year swap rate	2019	2020p	2021p	2022p
Sweden 0.24 0.00 (0.20) 0.10 (0.20) 0.10 (0.20) Denmark -0.17 -0.15 (0.10) -0.05 (0.15) 0.00 (0.15) United Kingdom 0.80 0.15 (0.45) 0.15 (0.45) 0.15 (0.45) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) 5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25 (0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone	United States	1.66	0.35 (0.45)	0.45 (0.45)	0.50 (0.50)
Denmark -0.17 -0.15 (0.10) -0.05 (0.15) 0.00 (0.15) United Kingdom 0.80 0.15 (0.45) 0.15 (0.45) 0.15 (0.45) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) 5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25 (0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.66) 0.11 (0.16) 0.36 (0.36) Sweden	Eurozone	-0.29	-0.30 (-0.15)	-0.20 (-0.15)	-0.20 (-0.15)
United Kingdom 0.80 0.15 (0.45) 0.15 (0.45) 0.15 (0.45) Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) 5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25 (0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark <	Sweden	0.24	0.00 (0.20)	0.10 (0.20)	0.10 (0.20)
Norway 1.99 0.55 (0.65) 0.60 (0.65) 0.65 (0.70) 5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25 (0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom <	Denmark	-0.17	-0.15 (0.10)	-0.05 (0.15)	0.00 (0.15)
5 year swap rate 2019 2020p 2021p 2022p United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25 (0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	United Kingdom	0.80	0.15 (0.45)	0.15 (0.45)	0.15 (0.45)
United States 1.69 0.50 (0.70) 0.83 (0.95) 0.95 (1.08) Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25 (0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	Norway	1.99	0.55 (0.65)	0.60 (0.65)	0.65 (0.70)
Eurozone -0.13 -0.18 (0.00) -0.03 (0.05) 0.10 (0.15) Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25 (0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	5 year swap rate	2019	2020p	2021p	2022p
Sweden 0.39 0.15 (0.30) 0.20 (0.30) 0.30 (0.40) Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25(0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	United States	1.69	0.50 (0.70)	0.83 (0.95)	0.95 (1.08)
Denmark 0.01 -0.10 (0.10) 0.08 (0.15) 0.25 (0.20) United Kingdom 0.88 0.25(0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	Eurozone	-0.13	-0.18 (0.00)	-0.03 (0.05)	0.10 (0.15)
United Kingdom 0.88 0.25(0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	Sweden	0.39	0.15 (0.30)	0.20 (0.30)	0.30 (0.40)
United Kingdom 0.88 0.25(0.53) 0.33 (0.55) 0.40 (0.65) Norway 2.01 0.70 (0.70) 0.80 (0.85) 1.00 (0.95) 10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	Denmark	0.01	-0.10 (0.10)	0.08 (0.15)	0.25 (0.20)
10 year swap rate 2019 2020p 2021p 2022p United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	United Kingdom	0.88	0.25(0.53)	0.33 (0.55)	0.40 (0.65)
United States 1.86 0.65 (1.00) 1.20 (1.45) 1.40 (1.60) Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	Norway	2.01	0.70 (0.70)	0.80 (0.85)	1.00 (0.95)
Eurozone 0.19 -0.09 (0.06) 0.11 (0.16) 0.36 (0.36) Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	10 year swap rate	2019	2020p	2021p	2022p
Sweden 0.69 0.40 (0.35) 0.45 (0.40) 0.70 (0.60) Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)		1.86	0.65 (1.00)	1.20 (1.45)	1.40 (1.60)
Denmark 0.33 0.10 (0.30) 0.30 (0.35) 0.55 (0.45) United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	Eurozone	0.19	-0.09 (0.06)	0.11 (0.16)	0.36 (0.36)
United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	Sweden	0.69	0.40 (0.35)	0.45 (0.40)	0.70 (0.60)
United Kingdom 1.02 0.50 (0.55) 0.65 (0.70) 0.80 (0.85)	Denmark	0.33	0.10 (0.30)	0.30 (0.35)	0.55 (0.45)
	United Kingdom	1.02	0.50 (0.55)	0.65 (0.70)	0.80 (0.85)
		1.02	0.00 (0.00)	()	0.00 (0.00)

Source: Handelsbanken

In brackets: Global Macro Forecast April 29, 2020

Exchange rate forecast	End of year				
	2019	2020p	2021p	2022p	
EUR/SEK	10.43	10.35 (10.50)	10.20 (10.40)	10.00 (10.30)	
USD/SEK	9.32	8.63 (9.29)	8.50 (9.12)	8.33 (9.04)	
GBP/SEK	12.31	11.90 (11.93)	11.09 (11.30)	11.76 (11.20)	
NOK/SEK	1.06	0.99 (0.94)	0.99 (0.95)	0.98 (0.96)	
DKK/SEK	1.40	1.39 (1.41)	1.37 (1.39)	1.34 (1.38)	
CHF/SEK	9.61	9.58 (9.72)	9.36 (9.54)	9.17 (9.45)	
JPY/SEK	8.57	7.84 (8.30)	7.73 (8.15)	7.58 (7.93)	
CNY/SEK	1.34	1.23 (1.35)	1.23 (1.32)	1.26 (1.31)	
	2019	2020p	2021p	2022p	
EUR/USD	1.12	1.20 (1.13)	1.20 (1.14)	1.20 (1.14)	
USD/JPY	108.68	110.00 (112.00)	110.00 (112.00)	110.00 (114.00)	
EUR/GBP	0.848	0.870 (0.880)	0.920 (0.920)	0.850 (0.920)	
GBP/USD	1.32	1.38 (1.28)	1.30 (1.24)	1.41 (1.24)	
EUR/CHF	1.09	1.08 (1.08)	1.09 (1.09)	1.09 (1.09)	
USD/CNY	6.96	7.00 (6.90)	6.90 (6.90)	6.60 (6.90)	
	2019	2020p	2021p	2022p	
EUR/DKK	7.47	7.45 (7.46)	7.46 (7.46)	7.46 (7.46)	
SEK/DKK	0.72	0.72 (0.71)	0.73 (0.72)	0.75 (0.72)	
USD/DKK	6.67	6.20 (6.60)	6.22 (6.54)	6.22 (6.54)	
GBP/DKK	8.81	8.56 (8.48)	8.11 (8.11)	8.78 (8.11)	
CHF/DKK	6.88	6.89 (6.91)	6.84 (6.84)	6.84 (6.84)	
JPY/DKK	6.14	5.64 (5.89)	5.65 (5.84)	5.65 (5.74)	
	2019	2020p	2021p	2022p	
EUR/NOK	9.86	10.50 (11.15)	10.30 (10.90)	10.20 (10.70)	
SEK/NOK	0.95	1.01 (1.06)	1.01 (1.05)	1.02 (1.04)	
USD/NOK	8.81	8.75 (9.87)	8.58 (9.56)	8.50 (9.39)	
GBP/NOK	11.64	12.07 (12.67)	11.20 (11.85)	12.00 (11.63)	
CHF/NOK	9.09	9.72 (10.32)	9.45 (10.00)	9.36 (9.83)	
JPY/NOK	8.10	7.95 (8.81)	7.80 (8.54)	7.73 (8.23)	

Source: Handelsbanken

In brackets: Global Macro Forecast April 29, 2020

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Macro Research and Trading Strategy

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