# Macro Research

# Global Macro Forecast

January 22, 2020 Sunrise or a false dawn?

- Geopolitical uncertainty in the background
- Stabilisation, but lower growth than normal
- Passive central banks



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# **Executive summary**

- Geopolitical uncertainty in the background
- Stabilisation, but lower growth than normal
- Passive central banks

# Global backdrop: Sunrise or a false dawn?

World economic has growth declined throughout 2019, but we are now seeing tentative signs of improvement in indicators. The fragile upturn could easily be disrupted, for instance by increasing geopolitical risks, but our baseline assumption is that global demand growth should improve during 2020. Growth will still be lower than normal both this year and next, and central banks will be on high alert. However, we expect unchanged policy rates in the coming years, meaning the low interest rate environment will persist.

### UK: Brexit uncertainty will not go away

On Johnson's insistence, the Brexit transition period will expire at the end of this year, implying that a nodeal Brexit in 2021 cannot be ruled out at this stage. Momentum in the UK economy nearly came to a halt last year; looking ahead, we believe Brexit uncertainty will continue to dampen economic activity, weaken the pound and possibly force a rate cut from the Bank of England.

### Sweden: Low growth and slowdown in economic activity

Growth in the Swedish economy slowed down last year, as a result of both lower housing construction and a weaker global economy. Forward-looking indicators point to growth remaining weak this year, with unemployment figures continuing to rise. As the economic downturn progresses, we expect the resource utilisation to be slightly below normal. At the same time, the inflation rate is set to be significantly below 2 percent in the next few years. Despite this, the Riksbank is expected to leave the repo rate unchanged. Now the question is whether the government is changing the policy in a more expansionary mode to mitigate the downturn.

# Norway: GDP growth has peaked; Norges Bank on hold

Mainland GDP growth has passed its peak, now that the impulse from rising petroleum investments has started to fade. However, we also note that growth prospects have been lowered across the board. With the potential growth rate still weak, however, overall capacity should remain fairly neutral in the coming

years. Risks are skewed to the downside and Norges Bank will probably keep its policy rate on hold at 1.50 percent.

# Denmark: Soft landing ahead

Even though Denmark's GDP likely grew above 2 percent in 2019, outperforming several of its European peers, it is not immune to the slowdown in the global economy. We forecast a soft landing for the Danish economy and that GDP growth will slow to around 1.25 percent for this year and 2021. Additionally, we forecast a rate hike in the coming months.

# Finland: Towards cooling growth

Finnish economic growth was surprisingly resilient last year. GDP is expected to have grown by 1.5 percent in 2019. Growth was broad-based as exports and private consumption supported economic activity. In 2020, we forecast that GDP growth will slow somewhat, but at 0.9 percent it is in line with long-term trend growth.

# The Netherlands: Growth dependent on fiscal policy during 2020

Although currently experiencing higher GDP growth than the rest of the eurozone, the export-based Dutch economy is expected to slow down, mainly due to global trade, but also accentuated by domestic factors such as a weaker housing market and lower employment growth. Further down the road, when consumption and investments also falter, fiscal policy will take over as the main driver of economic growth.

# **Global backdrop**

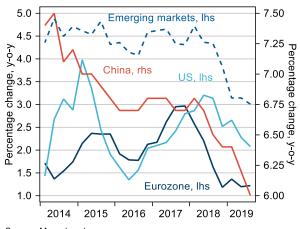
# Sunrise or a false dawn?

World economic growth has declined throughout 2019, but we are now seeing tentative signs of improvement in indicators. The fragile upturn could easily be disrupted, for instance by increasing geopolitical risks, but our baseline assumption is that global demand growth should improve during 2020. Growth will still be lower than normal both this year and next, and central banks will be on high alert. However, we expect unchanged policy rates in the coming years, meaning the low interest rate environment will persist.

# The world economy has slowed

Global economic growth continued to slow through 2019. In China and Europe the decline in growth rates began in early 2018, while activity growth continued to improve in the US up until the start of 2019. Throughout 2019, however, it became clear that the world was facing a synchronised deceleration in activity growth rates.





Source: Macrobond

The downturn was initially driven by structural factors, such as the transition of the Chinese economy from investment to consumption. The slowdown was also accentuated by the global decline in auto production.

Synchronised deceleration in activity growth rates in 2019

Furthermore, geopolitical issues really took centre stage last year with the escalating US-China trade war and the high risk of a no-deal Brexit. The potential downside risks put a damper on global demand growth, and in 2019, for the first time since the financial crisis, world trade actually started falling. The manufacturing sector has taken the hardest hit, with annual growth rates in global manufacturing production down below 1 percent in Q3 last year.

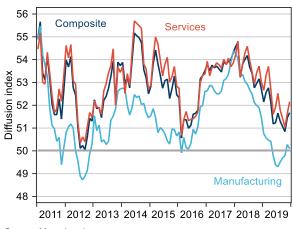




#### Tentative signs of improvement

Now, however, we are seeing some tentative signs of improvement. Manufacturing PMI readings from across the world have strengthened in the last couple of months, and the global manufacturing PMI in November turned positive with readings above 50 for the first time since April 2019. Even though the level of sentiment is still low, the surveys seem to suggest that the worst may be over for global manufacturing.

#### **Global PMI**



Source: Macrobond

Monetary policy easing carried out in 2019 in the US and Europe, and fiscal and monetary stimulus carried out in China, are also expected to support demand growth ahead. Some positive effects can already be observed, for instance in the US housing market and in Chinese monthly activity numbers.

In addition, with Boris Johnson's landslide election victory in the UK, the threat of a no-deal Brexit has been taken off the table, at least in the short term. Also, the US and China have finally managed to agree to a phase 1 trade deal, which implies tariffs will not be hiked further in the near term and some tariffs will be scaled back.

#### The phase one agreement contains specifics on:

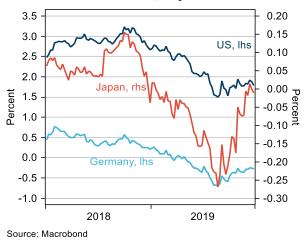
Chinese purchases of US goods and services, which Beijing will ramp up by \$200 billion over the next two years, using 2017 as a benchmark. This includes increased purchases of manufactured, energy and agricultural goods as well as technology services.

Associated Tariff Relief: Although not included as a part of the text in the agreement, as a condition of Beijing signing the deal, the US agreed to cut tariffs on USD 120bn in Chinese goods by half, to 7.5 percent, within about 30 days, and to forgo other planned tariffs. The deal thus leaves the vast bulk of US tariffs on USD 360bn, roughly three-quarters of Chinese imports to the US of Chinese goods, in place.

Other components: The deal also includes language related to preventing and punishing industrial espionage, removing barriers to help US financial institutions expand in the Chinese market, the creation of a dispute-resolution office, addressing longstanding complaints from the US business community that disagreements with Chinese partners have not been justly resolved, and a Chinese commitment to not devalue its currency or make persistent intervention in its currency market.

These positive developments have led to improved market sentiment, with stocks rising and, towards year-end, longer-term bond yields in the US, Europe and Japan all trended higher.

#### Government benchmarks, 10 year



# Less pronounced deterioration in services

Over the past decades, the manufacturing sector has shrunk compared to the services sector worldwide. However, the manufacturing downturn has probably contributed to dampening economic sentiment overall. During 2019, services demand growth was also dragged down. However, the deterioration in services output growth was much less pronounced. If the manufacturing improvement turns out to be merely a bounce instead of a true turnaround, the malaise could start to affect the services sector more pronouncedly. Our assessment is that the business cycle is about to stabilise, but we do not see a fast turnaround ahead. Consistent with this view is a moderate rise in PMI for the manufacturing industry over the next year.

#### Global growth bottoming out

Taken together, we believe global growth will continue to weaken a little further going into 2020, as company order books point to some further softness and the effects of previous US fiscal stimuli wear off. However, we believe the easier monetary policy and hopefully a more benign geopolitical backdrop should lead to growth stabilising and eventually picking up later in 2020. Global GDP is therefore expected to increase by only 3.0 percent this year, and then increase to 3.1 percent next year.

#### **Global growth eventually improving**



2006 2008 2010 2012 2014 2016 2018 2020 2022 Sources: Macrobond and Handelsbanken

### Geopolitical risks remain...

All things considered, we believe geopolitical uncertainty will linger in 2020 and continue to dampen investment. However, we are hopeful that uncertainty will be more in the background than in 2019.

In our view, the fragile upturn in economic indicators could easily be disrupted, for instance if the US-Iran conflict escalated further or if the US-China trade war intensified again.

- The financial markets have not been significantly affected by the escalating conflict between the US and Iran. In real terms, the direct economic effects are likely to be limited, unless the conflict escalates and oil prices increase substantially.
- We believe China and the US are on a collision course, despite the recent trade agreement. China is challenging the US's dominance economically, technologically, geopolitically and militarily. The trade war seems to be merely the tip of the iceberg. We see it as more likely than not that political and economic frictions between the rivalling titans will be a constant backdrop ahead.
- We also see a risk that Donald Trump will shift his focus to Europe if the trade war with China calms down. Trump has already warned that tariffs might be introduced on a number of French goods as retaliation for the newly imposed digital tax in France, which affects American tech giants, among others. The threat of increased import tariffs on cars is also worrying.
- How the US election and the Democratic effort to impeach Donald Trump will play out in 2020 is uncertain. If, as we think is the more likely scenario, the Senate refuses to remove the

president from office, Trump could get a boost of self-confidence, which could take the trade relationship with China in any direction.

> Geopolitical risks will linger, but play a more background role

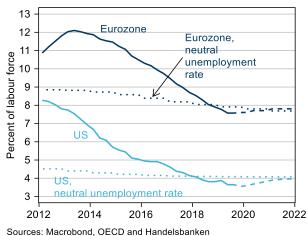
# ...there is also possibility for better outcomes

Although risks still dominate the global economy, there are also opportunities for stronger development. If there is a reduction in uncertainty, investments will gain momentum once more. We see the greatest chance of positive surprises in the US.

A more structural factor that can contribute to a stronger global economy is the functioning of labour OECD markets. In several countries. unemployment has fallen to historically low levels, without inflationary and wage pressures having increased to any great extent. This is probably a result of people re-entering the labour market and there consequently being more slack in the labour markets than previously expected. Unemployment rates in both the US and Europe are now below what the OECD deems to be neutral rates. However, given the feeble inflation response, the neutral rates could be even lower than what the current forecasts suggest.

In the short term, we believe labour markets will remain rather resilient, but expect unemployment to creep upwards during 2020, as the labour market development usually lags actual GDP growth rates. However, we lower our unemployment forecasts for both the United States and the eurozone.

#### **Unemployment - actual and neutral**

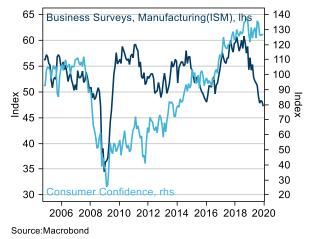


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#### The US's recent highs are coming to an end

Over the past few years, the US economy has been growing at a strong clip and unemployment is currently at historically low levels. The high demand for labour has contributed to a slight rise in wage pressure during 2019, but the underlying inflationary pressure remains muted. Consumer confidence remains much higher than normal and consumption growth rose notably in the third quarter. Household confidence has been buoyed by the strong labour market and somewhat increasing wage growth. In the short term, we believe household optimism will remain high, ensuring that consumption continues to rise at a steady rate. Confidence in the manufacturing industry deteriorated last year, although the indicators have been spreading in recent months. However, we expect weaker global demand, together with a strong dollar, to continue to hurt the manufacturing industry and cause a decline in corporate investments.

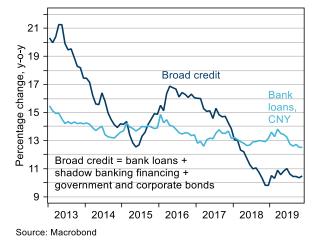
#### **US:Business and consumer confidence**



Confidence has also diminished within the service sector. In addition, the positive effects of the fiscal stimulus implemented in 2018 are gradually wearing off, which should also dampen US demand growth ahead. Still, low interest rates, a resilient labour market and optimistic households should contribute to continued relatively strong domestic demand, and we believe US demand growth will be slightly higher in the near term than we previously expected. The ongoing slowdown in the US economy will probably be relatively mild, in our view. For 2020, we expect GDP growth of 1.6 percent, down from 2.3 percent in 2019. As growth slows somewhat, the labour market is expected to also weaken, although unemployment is set to remain low over the next few years. Continued expansionary monetary policy should contribute to dampening the slowdown in activity and a normalisation of growth in 2021.

### The Chinese dragon is slowly losing its fire

Growth rates in China eased through 2019, but the deceleration was mitigated to some extent by government stimulus, that being fiscal, monetary policy and regulatory measures. However, the magnitude of government stimulus has been much weaker than in previous economic slowdowns. Ahead, we see few reasons to expect China's authorities to step up the stimulus.



#### China credit growth has nok taken off

One of the best indicators of China's economic policy stance is credit or, more precisely, bank loans, bond issues and the various forms of shadow banking lending. With limited interest rate cuts and only measured easing of the liquidity situation and lending regulation, credit growth has not taken off to the same extent as during previous slowdowns. This illustrates that the authorities are reluctant to turn to broadbased credit-driven stimulus. The main reason for this is likely that a renewed credit boost risks re-inflating the credit bubble and reversing the huge effort made to lower financial stability risks and dampen shadowbanking activities. Other reasons for the authorities to balk at larger-scale stimulus likely include the elevated consumer price inflation, even though this is not demand driven. Fast-growing house prices are also a concern.

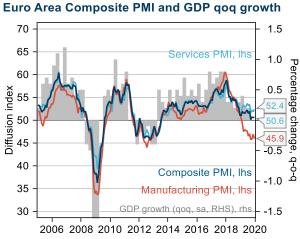
However, there are currently some positive signs in the Chinese economy. The production of cars and electronics are growing again, having fallen on an annual basis for the past year, and manufacturing confidence has rebounded fairly strongly. That said, any signs of a real rebound for manufacturers have yet to be seen, and industrial profit growth has fallen to the most negative values on record.

# Chinese activity growth is on a structurally downward path

We believe that GDP growth is bound to continue shrinking, both as a result of a stagnating labour force and the structural move towards a more consumptiondriven economy. Given that we only see scope for limited government stimulus ahead, we believe GDP growth will decline gradually from 6.1 percent in 2019 to 5.7 percent in 2020 and then to 5.5 percent in 2021.

#### Eurozone: slim prospects for stimulus

GDP growth in the eurozone continued at the slow quarterly pace of 0.3 percent in the third quarter. There has been a growing divergence in economic performance between countries like Spain and France on the upside and Germany and Italy on the downside.



Source: Macrobond

Germany avoided a technical recession in the third quarter, as the stronger services sector compensated for the ongoing manufacturing recession. However, the better-than-feared growth outcome translates to less pressure on the German government to make fiscal policy more expansionary than it otherwise would.

> Eurozone activity growth to remain anaemic in the next couple of years

The weak performance of the eurozone economy over the past couple of years has largely been driven by the countries most heavily exposed to lower export demand, in particular Germany. In addition, fiscal space is severely limited in several eurozone countries, such as Italy, due to already extended public balance sheets. The countries that do have fiscal space, such as Germany and the Netherlands, have shown a lukewarm appetite for increasing stimulus. We therefore do not expect fiscal stimulus to contribute to improving growth rates ahead. Furthermore, and as explained below, we also believe the ECB has almost exhausted its potential for monetary policy stimulus, and we expect policy rates to remain on hold for the entirety of our forecast horizon. For the eurozone combined, we expect weak activity growth to persist throughout the forecast horizon, with only a partial recovery towards the end of 2021.

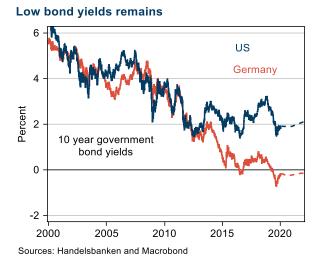
#### Monetary policy to stay expansionary

Central bank communication in Europe and the US shifted, going into 2019, from previously signalling tightening policy, to foreseeing easing ahead. The Federal Reserve ended up making three 25 basis point cuts to the policy rate in 2019. As we now see a somewhat stronger development in the US this year, we no longer believe that the Fed will lower interest rates further, instead we assume unchanged policy rates this year and next.

In the eurozone, during 2019, the ECB cut its policy rate by 10 basis points to -0.5 percent and revived its programme for bond buying. We believe the ECB is unlikely to make further rate cuts. In any case, the ECB has come a long way in exhausting its potential for monetary policy stimulus. The policy rate, we believe will stay unchanged at -0.5 percent for the next two years. When it comes to the bond-buying programme, we believe the ECB will have to focus more on risk composition, and put a relatively larger weight on corporate over sovereign bonds. We do not think this will be enough to bring inflation back up to the inflation target by 2021.

# Sideways for long-term yields and currencies

Although bond yields have risen from very low levels this autumn, we expect interest rates to remain low for a long time to come. A relatively weak economy and passive central banks are behind this picture. In 2021, we expect a global recovery that could put upward pressure on interest rates in both the US and the eurozone. The lower interest rates in the eurozone compared to the US are due both to the fact that inflation is expected to be lower in the eurozone and that the real interest rate is lower due to weaker growth potential and weaker economic outlook.



The low interest rate environment means that valuations in asset and stock markets are generally historically high. As we note in our theme article on the stock market, we expect this to remain the case. The low interest rates also keep the volatility down, i.e. major changes in financial markets. This applies not least to the foreign exchange market.

However, the British pound rebounded sharply after a no-deal Brexit was avoided during the autumn. We expect that uncertainty about how the final exit will look will weigh on both the UK economy and the pound in 2020. As the US economy cools, we expect a slight weakening of the dollar, but to a lesser extent than in our previous forecast.

#### Theme article: Stock market

# Is the stock market out of sync?

Last year was the best year for the stock market since 2013, despite heightened geopolitical uncertainty and persistent cuts to global GDP growth forecasts. We conclude that equity market developments imply a much stronger global economy ahead than what is consistent with our forecasts.

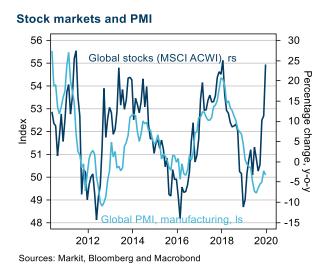
Global stock markets rose by between 20 and 30 percent in 2019, a year characterised by geopolitical uncertainty and recurring downward revisions to growth prospects. Should stock markets acquiesce and take weaker real growth conditions into consideration? Bond yields may well have climbed out of the doldrums since the beginning of autumn, but their pricing seems to indicate a notably more modest economic recovery. We do not make a forecast for the stock market, but we investigate here whether its performance deviates from the historical pattern, in terms of correlation with economic trends.





As well as the economy, the stock market is driven by many other factors, such as risk appetite, market interest rates and the outlook for long-term growth prospects. Our assessment is that around half of the variation in the stock market is due to economic trends. The economic indicator that most closely correlates with the performance of the stock market is the Purchasing Managers' Index (PMI) for the manufacturing industry.

Although the manufacturing industry's importance to stock markets and advanced economies has gradually declined, its correlation has not diminished, as the manufacturing sector responds quickly to changes in growth conditions, but such changes are not visible in broader data and other sectors of the economy until later.



The chart above shows the upturn in the stock market over the past 12 months – more than 20 percent – which seems to indicate a substantial rise in the PMI in the future. However, in percentage terms, the upturn in 2019 was strengthened by a weak year for the stock market in 2018, when stock markets fell by around 10 percent. Equity market volatility is also bigger than swings in the manufacturing sector. For both of these reasons, we prefer to look at a 12-month moving average of stock market performance.

#### **Global stocks and PMI**



Sources: Markit, Bloomberg and Macrobond

However, also in this chart there is a clear increase in PMI "priced" into equity markets, assuming that current levels persist, albeit not as extreme as that seen in the previous graph. While the US stock market has been at the forefront of the upturn during the last 12 months, the conclusion is the same for stock markets in general.

> Stock markets are priced for a marked improvement in the economy ahead

The following graph depicts a simple regression with stock markets, based on PMI alone. It shows just how large the current deviation from the historical trend is. Similarly to how the stock market slump at the end of 2018 was larger than that indicated by macroeconomic data, the ongoing upturn is not justified by the improvement in PMI.

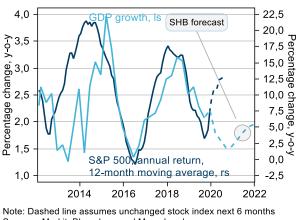
#### Stock indices on high levels given PMI



While we raise our growth forecasts for the US this year from our estimate in October, we see a risk of the stock market's performance disappointing, given the implicit expectations. The next graph shows the correlation between US GDP growth and the US stock market. The correlation is not as strong as it is with PMI; however, the stock market trend appears to show expectations for an upturn in US GDP in 2020, which is the opposite of our forecast.

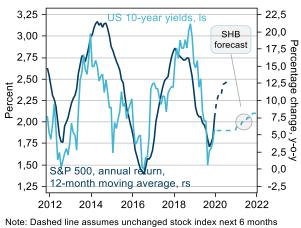
> The stock market expects an upturn in US GDP in 2020; we forecast the opposite

US GDP and S&P 500



# Sources: Markit, Bloomberg and Macrobond

What correlation is there between the stock market and the fixed income market? For simplicity, we only look at the US market (i.e. the S&P 500 and US 10year yields). A similar exercise, with a moving average for the stock market, shows that the historical correlation remains intact. The correction to bond yields in recent months aligns well with the historical pattern, meaning that the stock market is often a step ahead regarding turning points. If the stock market is right and the PMI climbs substantially, further upturns in bond yields can be expected.



#### US bond yields and S&P 500

Sources: Markit, Bloomberg and Macrobond

On the other hand, if our forecasts for economic developments and bond yields prove correct, equity markets are too optimistic, similar to what was the case in 2011, 2014 and 2017. That does not necessarily need to result in a sharp downturn in equities. It may instead be reflected in low or no return while the economy catches up to valuation.

While the stock market may have rallied too strongly in a short-term perspective, long-term valuations do not appear to be noticeably high, given the prevailing low interest rate environment.

The next graph shows the expected earnings yield in the US stock market compared with US 10-year yields. The earnings yield is low by historical standards, which may be perceived as high valuation; however, the earnings vield is well above the 10-year yield and the difference is in fact historically high. For the whole of the 1990s and the beginning of the noughties, the earnings yield was below the 10-year yield. In the absence of a significant increase in interest rate levels, there should be no general pressure on stock market valuation.

#### Corporate earnings and bond yields



Note: Earnings yield uses 10-year moving average of earnings Sources: Macrobond and Bloomberg

> Valuations do not appear to be noticeably high, given the prevailing low interest rate environment

We conclude that the current deviation between stock market developments and the economy is unusually large. The historical pattern indicates that the economy must improve markedly in 2020 to justify the performance of the stock market over the past year. Our forecast is that the global economy will remain weak; the jury is still out.

# Passing the policy baton to (politically) tied hands

The eurozone has benefited from several years of monetary stimulus, but as the European Central Bank (ECB) is running out of ammunition is, fiscal policy and structural reforms are unlikely to step in and take over the policy baton from the ECB. In both cases, political weakness lies at the root of policy inertia. As a result, the eurozone is set to move into 2020 without a clear policy course to drive growth.

#### Curtain call for monetary stimulus?

Since the beginning of the 2008 crisis, the ECB has lowered policy rates by 375 basis points and has bought more than EUR 2.6 trillion of assets through its asset-purchasing programme. Although official policy rates are currently -0.5 percent, estimates of shadow rates show that the policy stance is much looser than that. Shadow rates, which also take into account less conventional monetary policy methods, are close to -7 percent.<sup>1</sup>

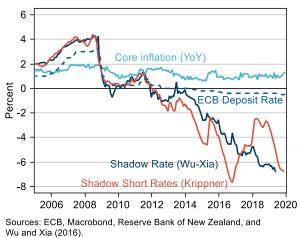
Regardless of the measure of the policy stance, the ECB is unlikely to be able to provide further stimulus to the same extent that it has in the recent past. In addition, with most measures of economic slack at or above potential, even as underlying inflation – measured by headline consumer prices excluding energy and food – remains *below* target, there has been increasing discussion on the broader monetary framework in the eurozone.

The ECB president, Christine Lagarde, has announced the Bank will launch a strategic review of the central bank's remit and tools in January, and its inflation target will be one of the key areas that the review will consider. In its only previous strategic review in 2003 it altered its medium-term inflation objective from between zero and 2 percent to an objective of "below but close to 2 percent" to also consider the risk of deflation. By the end of this year, the ECB is widely expected to change its main policy objective once again.

Lagarde has said she views climate change as "mission-critical" yet tilting the ECB's monetary policy framework towards directly affecting climate change is unlikely. It would put the ECB on a different course than both the Fed and the Bank of England, which have so far not attempted to do this directly. Within the ECB's Governing Council, there are also those who believe a more central role for climate change would be against the objectives of the bank.

As such, while eurozone monetary policy is likely to remain an important policy tool, further stimulus to increase growth needs to be found elsewhere.

#### Stimulus without the inflation to show for it



#### Fiscal policy limited to Germany, the Netherlands

With monetary policy having limited room to manoeuvre in the near future, fiscal policy has been discussed as a complementary policy tool.<sup>2</sup> In the euro area, the EU provides an important institutional constraint via the Stability and Growth Pact (SGP). The SGP consists of several rules, with the structural balance rule often considered the most binding one.

 The 3 percent of GDP limit on the annual government budget deficit of each member country, which if exceeded systematically subjects the erring country to an "excessive

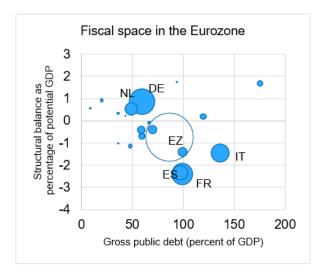
<sup>&</sup>lt;sup>1</sup> Krippner, Leo, "A comment on Wu and Xia (2015), and the case for two-factor Shadow Short Rates," CAMA Working Paper 48/2015 December 2015, <u>https://bit.ly/2N5OfYq</u>; Wu, Jing Cynthia and Fan Dora Xia "<u>Measuring the Macroeconomic Impact of</u> <u>Monetary Policy at the Zero Lower Bound</u>", Journal

of Money, Credit, and Banking, 2016, 48(2-3), 253-291.

<sup>&</sup>lt;sup>2</sup> "Euro-Area Officials Join Draghi in Call for Looser Purse Strings," Bloomberg, September 13 2019, <u>https://bloom.bg/2T0pDE8</u>

deficit procedure" mandating it to fiscal adjustment.

 The structural balance rule, which accommodates for cyclical factors and needs to meet a country-specific Medium-Term Objective (MTO).



Note: Circles are proportional to GDP. Unfilled circle corresponds to average for the Eurozone. Sources: AMECO and Macrobond.

A quick overview of the fiscal situation in the eurozone reveals that Germany and the Netherlands are the countries in which there is economically meaningful fiscal space. Since it is mostly Germany's contribution to euro growth that has shrunk in recent periods, this is where a fiscal boost could have the largest impact. Most other countries exhibit either restrictive fiscal deficits, high public indebtedness, or limited economic weight within the eurozone.

Relative to the SGP's medium-term objective, Germany currently has around 2.1 percent of fiscal space. Yet there are further domestic restrictions. Beyond the SGP, Germany has two different fiscal targets. The "black zero" ("*Schwarze Null*") is a political commitment to keep the federal budget in surplus. The second, known as the debt brake (*Schuldenbremse*), is of constitutional status, and restricts the expected structural deficit of the federal budget to 0.35 percent of GDP.<sup>3</sup>

As changing the constitution would be a significant institutional undertaking, the closest point of departure would be for politicians to abandon the black zero target. Doing so would allow the federal structural deficit to be increased by 0.35% of GDP for 2020, roughly the equivalent of 0.1% of eurozone GDP, and further boosts could be provided through public investments. In autumn, German Federal Minister for Economic Affairs and Energy Peter Altmaier suggested a new kind of "civic bond" for climate-relevant investment, with the added characteristic that it would not show up in Germany's debt statistics.<sup>4</sup>

As such, Germany has on paper many of the requirements to tilt fiscal policy towards a more growth-oriented purpose, as well as perceived deficit in public investments.<sup>5</sup> Yet the real binding constraint appears to be political. In particular, the long-ruling Christian Democratic Union of Germany (CDU) has shown little fiscal appetite. Moreover, as the path to Merkel's successor remains unclear, it appears unlikely that the party will unilaterally shift its policy position. However, should the next national elections, currently scheduled for 2021, produce a new governing coalition, especially one including the Greens, then the ensuing bargaining outcome could result in a discontinuation of the commitment to the black zero and more aggressive use of public investments, likely for projects with a green tint.

### Structural reforms

In addition to calling for more growth-friendly fiscal policy, former ECB President Mario Draghi also repeatedly called for more structural reform. <sup>6</sup> One illustration of the need for such reform is that the eurozone ranks below most of its peers in terms of competitiveness, as evident from the latest report from the World Economic Forum (WEF). The WEF ranks countries along a multitude of indicators in its Global Competitiveness Index, which combines measures of macro- and microeconomic elements of a country's economic dynamism. Although Germany

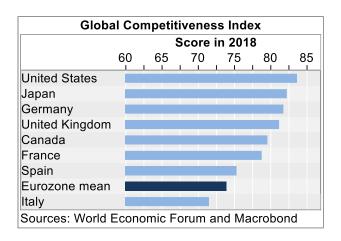
<sup>&</sup>lt;sup>3</sup> Germany's Federal Debt Brake, Federal Ministry of Finance, <u>https://bit.ly/2QJ7g3P</u>

<sup>&</sup>lt;sup>4</sup> "German 'black zero' budget faces €40bn green challenge," Financial Times, September 19, 2019, <u>https://on.ft.com/2sWJ7i9</u>

<sup>&</sup>lt;sup>5</sup> "Understanding (the lack of) German public investment," Bruegel blog post, June 19 2018, <u>https://bit.ly/2tA041W</u>

<sup>&</sup>lt;sup>6</sup> "Structural reforms in the euro area," Introductory remarks by Mario Draghi, President of the ECB, at the ECB conference "Structural reforms in the euro area", Frankfurt am Main, 18 October 2017, <u>https://bit.ly/37FIYQb</u>

ranks rather high, all other major eurozone countries as well as the euro area average score below countries such as the US, Japan, UK and Canada.



Implementation of structural, or supply-side, reforms have been shown to be correlated with increased resilience in the face of recessions. A recent IMF special paper<sup>7</sup> showed that eurozone recessions have been both more severe and more frequent relative to other advanced economies over the past two decades and, in addition, the dispersion in recoveries has increased. With member states lacking the ability to adjust through country-specific nominal exchange rates, and with limited room of pan-euro policy architecture to adequately accommodate all country-specific shocks, other national policies have become more important. To that point, the authors found that the severity of major recessions were dampened in advanced economies that had reformed their labour and product markets.

Another recent piece of research<sup>8</sup> shows that, in 66 democracies over the period 1973-2014, liberalising reforms led to increased economic growth, but with a lag of several years. As such, it is less politically costly to engage in structural reform at the beginning of a term period. In particular, the authors find that governments that implement such reforms close to elections tend to suffer at the polls.

Thus, whereas there is broad agreement on the aggregate economic benefits of structural reforms, the political economy of reform is less settled.

Reforms may generate gains only in the longer term while distributional effects may be sizable in the short run – for example by raising the retirement age or market deregulation – and because governments may lack political capital to confront vocal interest groups. In these circumstances, politicians may hold back on reforms, fearing they will be penalised at the ballot box.

The recent experience in France is testament to the challenges in pursuing structural reform. Despite winning a clear majority in both presidential and parliamentary elections, Emmanuel Macron's "big push" of structural reforms related to tax and the benefit system, employment protection, and collective bargaining have faced significant hurdles.<sup>9</sup>

Moreover, most euro countries don't even have the same amount of political capital as Macron started off with. In Germany, the coalition between the centre parties the CDU and the Social Democrats appears brittle and regional elections have shown voting support trickling down to other less mainstream political parties. In Spain, Italy, and Austria, prolonged uncertainty over government formations have been resolved in the short term, yet the strength of these coalitions have yet to be put to the test, and tend to resemble marriages of convenience rather than durable political compacts. Broader trends of voters abandoning incumbent centre parties for either more environmentally oriented or far-from-centre parties suggest politicians could be even less likely than usual to push for tough structural reforms when the political playing field looks so uncertain. In this setting, the eurozone is likely to move into 2020 without a clear policy course.

 <sup>&</sup>lt;sup>7</sup> The Political Costs of Reforms : Fear or Reality?, 2019, Staff Discussion note <u>https://bit.ly/2FoBaoK</u>
<sup>8</sup> Alesina et al, 2019, "Structural Reforms and Election Evidence from a World-Wide New Dataset" <u>https://bit.ly/2tz0Mwq</u>

<sup>&</sup>lt;sup>9</sup> "Macron Government Pushes Pension Reform as Opposition Mounts," Bloomberg, December 17, 2019, <u>https://bloom.bg/2tFJttr</u>

# Forecasts

# **Our home markets**

Handelsbanken regularly produces analysis and macroeconomic forecasts for our home markets; the UK, Sweden, Norway, Finland, Denmark and the Netherlands. Annual averages, expressed as percentage change, year-over-year, except where noted otherwise.

# **United Kingdom**

	2018	2019p	2020p	2021p
GDP	1.3	1.3	1.0	1.2
Unemployment*	4.1	3.8	4.0	4.2
Inflation	2.5	1.8	1.5	1.7
Policy rate, percent**	0.8	0.8	0.8	0.8
Exchange rate, EUR/GBP**	0.90	0.85	0.88	0.88
Sources: ONS, Macrobond and Handel	sbanken			

\* Percent of the labour force \*\*At year-end

#### Sweden

	2018	2019p	2020p	2021p
GDP*	2.3	1.1	0.7	1.4
GDP, actual	2.2	1.1	0.9	1.5
Household consumption*	1.7	1.0	1.8	1.8
Fixed investment*	4.2	-1.2	-0.5	1.5
Net exports, GDP contribution*	-0.1	1.2	-0.1	-0.1
Unemployment**	6.3	6.8	7.2	7.4
Inflation, CPIF	2.1	1.7	1.5	1.5
Policy rate, percent***	-0.25	0.00	0.00	0.00
Exchange rate, EUR/SEK***	10.28	10.43	10.55	10.45

Sources: Macrobond and Handelsbanken \*Calendar adjusted \*\*Percent of the labour force \*\*\*At year-end

#### Norway

-	2018	2019p	2020p	2021p
GDP	1.3	1.0	2.4	2.0
GDP. mainland	2.2	2.5	1.8	1.4
Household consumption	2.0	1.6	1.6	1.8
Petroleum investments	1.9	15.0	3.0	-10.0
Unemployment*	3.8	3.7	3.6	3.5
Inflation. CPIATE	1.6	2.3	2.0	2.0
Policy rate. percent**	0.75	1.50	1.50	1.50
Exchange rate. EUR/NOK**	9.95	9.86	10.20	10.20

Sources: Macrobond and Handelsbanken

\*Percent of the labour force \*\*At year-end

#### Finland

	2018	2019p	2020p	2021p
GDP	1.7	1.5	0.9	1.2
Household consumption	1.9	1.1	1.2	1.0
Fixed investments	3.3	0.4	-0.3	1.0
Net exports, GDP contribution	-1.2	0.6	-0.1	0.3
Unemployment*	7.4	6.6	6.5	6.5
Inflation	1.1	1.0	1.2	1.4
General govt balance**	-0.8	-1.4	-1.6	-1.4
EMU debt**	59.0	58.6	59.0	59.5

Sources: Macrobond and Handelsbanken \*Percent of the labour force \*\*Percent of GDP

#### Denmark

	2018	2019p	2020p	2021p
GDP	2.4	2.1	1.2	1.3
Household consumption*	2.6	1.3	1.4	1.6
Government consumption	0.4	0.0	1.2	0.9
Fixed investments	5.4	-0.6	-1.4	1.4
Exports	2.4	3.4	2.4	1.1
Imports	3.6	0.1	1.2	1.1
Unemployment, LFS**	5.1	5.1	5.6	6.0
Inflation	0.8	0.8	1.3	1.5
Policy rate (den rate) percent**	-0.65	-0.75	-0.65	-0.65

Policy rate (dep. rate), percent\*\* Sources: Macrobond and Handelsbanken \*Incl. NPISH \*\*Percent of the labour force \*\*\*At year-end

#### **Netherlands**

	2018	2019p	2020p	2021p
GDP	2.6	1.7	1.3	1.3
Unemployment*	3.8	3.4	4.1	4.3
Inflation, HICP	1.6	2.6	1.2	1.4
Sources: Macroband and Handelebankon				

\* Percent of the labour force

# **United Kingdom**

# Brexit uncertainty will not go away

On Boris Johnson's insistence, the Brexit transition period will expire at the end of this year, implying that a no-deal Brexit in 2021 cannot be ruled out at this stage. Momentum in the UK economy nearly came to a halt last year; looking ahead, we believe Brexit uncertainty will continue to dampen economic activity, weaken the pound and possibly force a rate cut from the Bank of England.

#### The Brexiters have become "untouchable"

Ahead of the December 12 general election, Boris Johnson's campaign pledge was getting Brexit done, and obviously that played very well with the voters. The Conservatives managed to win 365 seats in parliament, securing a solid 80-seat working majority.

After his landslide victory, Johnson now faces few hurdles in parliament, and the Brexit deal he negotiated with the EU is passed without difficulty. Even Johnson's suggestion to make it unlawful to prolong the Brexit transition period beyond December 2020 has received little pushback in the new parliament. The UK is now set to formally leave the EU on January 31 at 11:00pm GMT. However, leaving the EU is the easy part. The more difficult task, which is just kicking off, is to negotiate the future relationship between the UK and the EU. The UK decision to rule out an extension of the Brexit transition period implies very little time for negotiations. The EU believes it is unrealistic to negotiate a full free trade agreement by the end of 2020, as it usually takes years to complete such complex deals.

The EU sees the UK Brexit timetable as unrealistic

Should there be no trade deal by the end of the transition period, the UK would have to trade with the EU on WTO terms until a deal is ready. According to EU officials, the EU is now exploring options to prevent a cliff-edge outcome if a full trade agreement is not ready. Instead of aiming for a full trade agreement by the end of next year, we believe the UK and the EU will try to land the most important issues first, and probably aim to have a limited deal for the cross-border trading of goods ready by the end of next year, with other issues left for later. However, even getting a trade deal on goods might be tricky. Boris Johnson has insisted that the UK should reserve its right to deviate from EU rules and regulation. This would effectively imply more friction at the borders, as the EU has repeatedly underlined

that UK market access to the EU depends on its willingness to stick close to EU rules. The smoothness of the Brexit transition will depend on how much is resolved by the end of next year. Ultimately, we believe the parties will find arrangements that prevent a cliff-edge outcome.

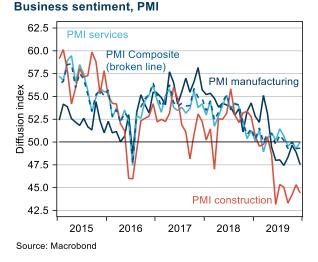
#### Brexit uncertainty to still dampen activity

Momentum in the UK economy all but stagnated during last year, with activity weighed down by weak international demand growth and Brexit uncertainty. However, the general election on December 12 eliminated the risk of an imminent no-deal Brexit and also provided a clearer direction for the UK economy ahead, with the Conservatives now comfortably in charge. We believe the election result could give a slight boost to economic activity, at least short term. That said, Brexit uncertainty will not go away completely. As the terms upon which the UK will leave the EU in 2021 are still quite unclear, and as Brexit negotiations probably will prove strenuous and difficult, we expect Brexit uncertainty to linger and continue to dampen UK economic activity.

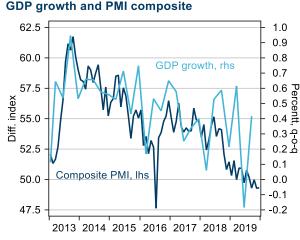
According to the latest survey of the Bank of England's Decision Maker Panel, conducted between December 6-20 last year, 53 percent of businesses reported that Brexit was one of their top three sources of uncertainty in December. Also, the date on which businesses expected Brexit-related uncertainty to be resolved was pushed further into the future, with 42 percent of respondents believing it would not be resolved until at least 2021, up from 34 percent in November. Fewer respondents also expected Brexit uncertainty to be resolved in 2020.

> Businesses believe Brexit uncertainty will persist

Company sentiment has suffered from the Brexit uncertainty, and the malaise has spread across sectors. According to the PMI surveys, overall company sentiment remained in negative territory in December.



Manufacturing sentiment deteriorated in December, pulled down by new orders and production, and construction sentiment also fell. Services sentiment, on the other hand, improved, as incoming new business climbed back to positive territory, possibly helped by the election result. UK GDP grew by 0.4 percent in Q3 after shrinking by 0.2 percent in Q2. Looking through the volatility of the quarterly GDP numbers, the underlying trend in UK economic activity growth weakened through last year. Despite a slight improvement to services sentiment in December, the PMI surveys together suggest that GDP growth should stay close to zero in the near term.



Source: Macrobond

Ahead, we believe global growth will stay muted and we expect Brexit uncertainty to keep weighing on UK activity. We expect GDP growth in 2020 of 1.0 percent, down from 1.3 percent in 2019.

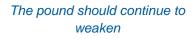
The UK labour market has remained resilient despite decelerating GDP growth, and at 3.8 percent, the unemployment rate is currently below what the Bank of England deems as neutral (4¼ percent). However, employment growth has weakened over

the past months and the PMI surveys suggest employment growth should remain weak in the near term. Ahead, we believe the unemployment rate will creep upwards as economic growth remains tame. Wage growth will probably continue to trend lower but should still remain comfortably above consumer price inflation. Consumer confidence has been rather resilient to the Brexit uncertainty: nevertheless, it has moderated somewhat. In addition, the household saving rate continued to increase last year. Taken together, we believe consumption growth private should remain moderately positive ahead.

# Monetary policy depends on Brexit uncertainty

Mark Carney's time at the helm of the Bank of England is soon up, and as of March 16, 2020, Andrew Bailey takes office as the new Governor of the Bank of England. Bailey is currently head of the Financial Conduct Authority in the UK. We believe the switch of governor should not affect monetary policy in the short term.

As mentioned, we believe GDP growth in the UK will stay muted this year, with growth rates slightly below the longer-term potential. Our forecast implies much of the same momentum in the UK economy this year as the Bank of England has assumed. Our baseline expectation is therefore that the Bank of England keep its policy rate on hold at 0.75 percent through 2020. As mentioned, we believe the election result should give a slight boost to economic activity short term. However, should economic indicators fail to pick up, indicating that Brexit uncertainty still dominates, we believe the Bank of England could cut the policy rate.



Markets initially cheered the December general election result, with the pound strengthening markedly. However, after it became clear Boris Johnson would refuse to extend the Brexit transition period beyond December 2020, the pound has weakened again on fears of continued Brexit uncertainty. Over the coming quarters, we expect the pound to weaken somewhat further as the Brexit negotiations become difficult and the end of the transition period draws closer.

#### Sweden

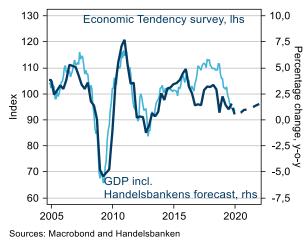
# Low growth and slowdown in economic activity

Growth in the Swedish economy slowed down last year, as a result of both lower housing construction and a weaker global economy. Forward-looking indicators point to growth remaining weak this year, with unemployment figures continuing to rise. As the economic downturn progresses, we expect resource utilisation to be slightly below normal. At the same time, the inflation rate is set to be significantly below 2 percent in the next few years. Despite this, the Riksbank is expected to leave the repo rate unchanged. Now the question is whether the government is changing the policy in a more expansionary mode to mitigate the downturn.

#### Lower growth and a weaker economy

The Swedish economy has slowed down, following several years of healthy growth. This slowdown began last year, with a decline in housing construction, which was exacerbated by the weaker global economy, due partly to uncertainty about Brexit and the US-China trade conflict. Most indicators suggest that the Swedish economy will continue to weaken in the near future. Confidence indicators for both households and companies are low, which suggests that corporate investments and household consumption will be subdued. At the same time, exports are being held back by the continuing weakness of international demand.

#### The economic slowdown continues



The slowdown has meant that corporate recruitment plans and the shortage of labour have both shrunk significantly. Other economic indicators, too, such as the Riksbank's resource utilisation indicator, suggest that resource utilisation has declined, and the economic climate is now at normal levels. As the downturn progresses, we expect resource utilisation to be slightly below normal this year.

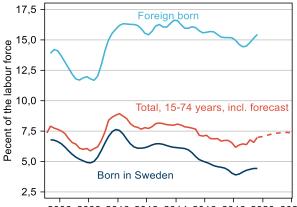
#### The labour market is slowing down

Both the revised labour market statistics from Statistics Sweden and the Swedish Public

Employment Service statistics show that, in the past year, the labour market has slowed, with the unemployment rate increasing slightly, and a less steep rise in employment. Demand for labour is expected to decline further this year, and remain subdued in 2021.

The stalling growth rate of demand in the business world means that there will not be any major need for companies to increase headcounts. The municipalities' poor finances are also holding back growth in the public sector. At the same time, labour supply continues to increase, and labour force participation remains at a historically high level. Thus, unemployment is expected to continue rising in 2020 and 2021. This is not a matter of a broad, dramatic rise, but in line with previous economic downturns, groups that are not strongly rooted in the labour market will probably be affected more tangibly.

#### Unemployment is rising in the coming years



<sup>2006 2008 2010 2012 2014 2016 2018 2020 2022</sup> Sources:Macrobond and Handelsbanken.

#### House prices continue to rise

Since the slide in house prices in the second half of 2017, the housing market has stabilised and prices have moved upwards. In the past year, house prices have seen a broad rise, with increases for both housing co-operative apartments and single-family dwellings in most of the country. The impending

weaker economy and rising unemployment will mean smaller increases in income for households, which we expect to subdue the price trend. However, this will be offset by the expectation that interest rates will remain low, and the housing shortage will continue. All told, we expect house prices to increase in line with the inflation rate in 2020-21. A stable housing market will help to ease uncertainty among households, and increase their wealth. In our assessment, this may buoy household consumption in the next few years.

#### Inflation significantly lower than 2 percent



Sources: Handelsbanken, Statistics Sweden, Riksbanken and Macrobond

# Union wage negotiations 2020: Higher or lower wages?

On March 31, 2020, Swedish industry's current collective wage agreements expire in a situation where the economy is clearly in a downturn phase. At the same time, companies' assessments of their profitability have decreased, although they are still higher than normal. This year, the manufacturing trade unions have pushed up their demands to a 3.0 percent wage increase in a one-year agreement, compared with the 2.8 percent they were demanding in previous rounds of the negotiations. One argument being highlighted is the fact that Swedish competitiveness has strengthened. The employers' side has not yet put a figure on their offer, but has stated that wages must be lower in forthcoming agreements, now that the economy is in decline. We expect the agreement to end up at roughly the same level as the 2017 agreement, which was for 2.2 percent per year, in a three-year agreement.

Wage growth rates remaining moderate in relation to productivity growth will mean that labour costs will continue to increase less strongly than what would be consistent with a 2 percent inflation rate. In addition, the positive inflation effect of the previous depreciation of the krona will tail off, to be replaced by a headwind as the SEK strengthens somewhat in 2021. Therefore, we expect underlying inflation to remain subdued in the next couple of years, with the CPIF inflation rate around 1.5 percent, both this year and next.

Stabilisation policy conspicuous by its absence Normally, monetary policy would be shifted to a more expansionary mode when the economy weakens and inflation is significantly below the target rate. Despite this, the Riksbank has instead raised rates and signalled that the repo rate will be unchanged in the next couple of years. We believe that the Riksbank must gradually revise down its inflation forecasts in 2020 and that inflation expectations fall back. The pressure on the Riksbank to change its footing and cut rates will therefore increase. At the same time, we expect economic indicators to start to turn up during the year and thus believe that the Riksbank will leave the repo rate unchanged.

The Riksbank is currently buying government bonds at SEK 2.5 billion per month. Without a new executive board decision, the buying programme ends this year. In connection with a bond redemption in December, the Riksbank's balance sheet will decline by around SEK 80 billion. To counteract, we expect the Riksbank to decide to continue to buy government bonds at the same pace over the following 18 months, until the middle of 2022.

For its part, the Swedish government is not yet showing any signs of shifting fiscal policy into a clearly more expansionary mode. The reforms in conjunction with the April Budget Bill may admittedly be somewhat greater than normal, and will include increased funds for the municipalities, but this will not have a major impact on the Swedish economy this year. Now that the economy is declining and the Riksbank has, in practice, handed over a greater responsibility for stabilisation policy to the government, an unusually expansionary fiscal policy would otherwise be a sensible form of insurance for the Swedish economy, reducing the risks of vulnerable groups ending up outside the labour market in the long term. Norway

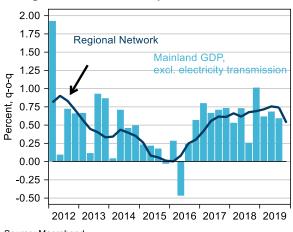
# GDP growth has peaked; Norges Bank on hold

Mainland GDP growth has passed its peak, now that the impulse from rising petroleum investments has started to fade. However, we also note that growth prospects have been lowered across the board. With the potential growth rate still weak, however, overall capacity utilisation should remain fairly unchanged in the coming years. Risks are skewed to the downside and Norges Bank will probably keep its policy rate on hold at 1.50 percent.

# Growth has started to decelerate

GDP growth - actual vs. expected

Mainland GDP growth has clearly passed the peak and growth expectations among domestic enterprises have been lowered across the board. These developments are in line with our long-held assumptions. Consequently, our forecasts are little changed. We anticipate mainland GDP expanded by 2.5 percent in 2019, before dropping to 1.8 percent in 2020.<sup>10</sup> We also continue to believe that growth will continue to decelerate further out in the forecast horizon. However, the growth potential for the economy remains weak and our estimates imply that overall capacity utilisation will hover around fairly normal levels. As such, we continue to believe that Norges Bank will keep its policy rate on hold (1.50 percent) in the coming years.



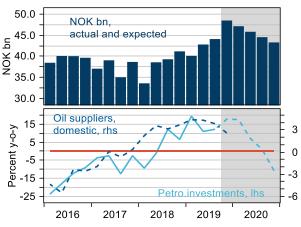
#### Source: Macrobond

### The oil boom is fading

Mainland GDP has been given a solid boost from rising petroleum investments in 2019, but this impulse is about to fade. Due to the completion of several large projects, such as phase 1 of the Johan Sverdrup field in particular, real petroleum investments increased by as much as 15 percent in 2019. However, the lack of investment projects of similar magnitude, going forward, implies real petroleum investments will decline in the coming years.

Note that the latest investment survey for oil and gas shows nominal investments in 2020 a bit below the 2019 level. A couple of known projects of some magnitude, such as the Balder X project, have not been formally reported yet, however. These will lift the outlook for 2020 relative to what has been captured by the investment survey so far. However, when taking inflation into account, the outlook for real petroleum investments remains negative for the next two years. On the more technical side, note that, in y-o-y growth terms, we expect a small gain in 2020 (measured as an annual average). However, we stress that this follows purely from the overhang from 2019; i.e. the quarterly pace for real petroleum investments is likely to be negative throughout 2020. The drop in real petroleum investments will become more pronounced in y-o-y terms in 2021.

#### Real petroleum investments, quarterly



Source: Macrobond and the Norwegian Petroleum Directorate

On several previous occasions, we have highlighted the issue of a temporary oil boom in 2019, followed by a fading phase and then another downturn. Now that fade has started to become visible in hard data. According to Norges Bank's Regional Network,

<sup>&</sup>lt;sup>10</sup> Here we refer to working day adjusted figures, which is also the practice followed by Norges Bank. Note that our estimate of 1.8 percent implies annual growth of 2.3 percent, if we do *not* adjust for the fact there are three more working days in 2020.

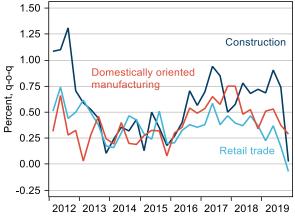
Which calculation you choose to present will have no effect on the output gap, however (i.e. more working days also implies greater potential).

domestic oil supplying industries have started to scale down their growth expectations.

#### Growth is also revised down across the board

In addition to weakening prospects among the oil suppliers, the latest report from the Regional Network, conducted in November, has shown broader downward revisions among domestic enterprises. Growth has slowed in all sectors, but most dramatically in retail trade, construction, domestically oriented manufacturing and, as already explained, in domestically oriented oil services. Looking ahead, enterprises expect growth to continue to decline slightly in the next six months. The construction and domestically oriented oil service industries expect the most pronounced slowdowns.

#### **Regional Network: Expected growth**



Source: Macrobond

Overall, mainland output growth has slowed to 0.53 percent q-o-q over the past few months, according to the Network contacts. Expectations for the next six months are down to 0.48 percent q-o-q. Notwithstanding that global downside risks have eased into the start of 2020, domestic conditions, and the outlook for real petroleum investments in particular, imply that mainland GDP growth may continue to slow. Needless to say, the current situation contrasts starkly with the quarterly pace of 0.7-0.8 that was reported throughout 2018 and much of 2019. Having said that, the growth potential for the economy is weak. We continue to foresee that the economy, following what was a relatively brief period of "modest overheating", will hover closer to its potential throughout the next couple of years.

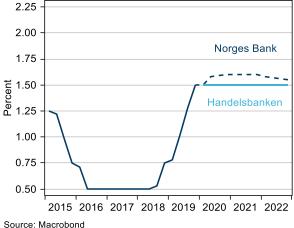
#### Core inflation hovering around target

In theory, normal capacity utilisation in the economy coupled with well-anchored inflation expectations implies a situation where actual (core) inflation should hover around target. That is presently the case and we continue to believe that the CPI-ATE will fluctuate around the 2 percent target in the coming years. Domestic cost inflation and, most importantly, wages are well in line with the target. We also expect the effects on inflation from a weaker NOK to fade gradually throughout the forecast horizon. We see some depreciation in the near term before the NOK eventually stabilises. Our forecast is for a slightly higher EURNOK over the next six months, at around 10.10.

#### Norges Bank on hold

At its December meeting, Norges Bank kept its policy rate on hold (1.50 percent) and signalled that the policy rate is likely to stay at this level in the period ahead. Growth is abating, mainly due to domestic conditions, but probably not to the extent that spare capacity will start to build. With core inflation also expected to hover around target, coupled with a well-balanced housing market, an appropriate policy response should be to keep the policy rate in neutral territory. At 1.50 percent currently, the key policy rate is probably at the lower end of the interval of what Norges Bank deems to be neutral. However, downside risks to the economy have not been fully eliminated. Summing up, we believe Norges Bank will keep its policy rate at 1.50 percent for the foreseeable future.





### Finland

# **Towards cooling growth**

Finnish economic growth was surprisingly resilient last year. GDP is expected to have grown by 1.5 percent in 2019. Growth was broad-based as exports and private consumption supported economic activity. In 2020, we forecast that GDP growth will slow somewhat, but at 0.9 percent it is in line with long-term trend growth.

# **Robust service exports**

Finnish manufacturing output held up well in 2019, given the prolonged weakness in global manufacturing. However, manufacturing confidence declined during the year and, in recent months, it has stabilised to clearly below-average levels. This, together with companies' more negative assessments of order-book levels, points towards softening industrial activity in the near term.

The global manufacturing slowdown is also expected to hit Finnish goods exports more intensively in 2020. In addition, there is only one large cruise ship delivery in the pipeline for this year versus two large deliveries in 2019. However, the service exports have been remarkably strong lately and will support overall exports during the forecast period. As external demand is forecast to remain rather weak, net exports will contribute modestly to GDP growth in 2020-21.

### The best investment period is behind us

In addition, the outlook for investments is rather gloomy. After strong performance in 2017-18, the trend in both residential construction and machinery and equipment investments reversed course in 2019. Based on a substantial drop in residential building starts, a more notable decline is expected in construction investments in 2020. Furthermore, the latest investment survey indicates that fixed investments in the manufacturing sector are expected to grow only marginally in 2020.

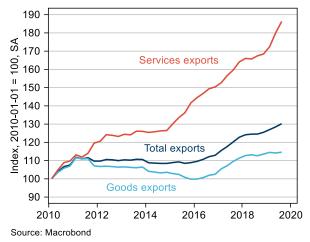
### Household consumption is the main driver

Higher wages, low inflation and increased employment supported household consumption in 2019. Demand for semi-durable goods was strong. Private consumption will be the main driver of economic growth in 2020. Higher real disposable income due to wage increases and modest inflation will underpin household consumption.

The Finnish labour market has benefitted from the overall solid economic growth. Last year, the number of employed people increased by close to 30,000 and the unemployment rate fell to 6.6 percent. However, recently there have been signs that the labour market is cooling. We expect that

employment growth will slow almost to a standstill and the unemployment rate will remain broadly unchanged in 2020. The labour market mismatch will continue as the number of vacancies will remain higher than ever before.

#### Services exports in robust growth



# **Minor forecast changes**

We have made minor changes to our GDP growth forecasts, partly due to data revisions. According to our forecast, we expect Finnish GDP to grow by 0.9 percent in 2020 and 1.2 percent in 2021. In 2019, we expect GDP to have grown by 1.5 percent. In the 2020s, the growth trend of the Finnish economy will dampen due to a shrinking working-age population and modest productivity growth.

# Public sector finances are set to deteriorate

In 2019, the deficits of central and local governments widened. As Prime Minister Sanna Marin's government is frontloading public expenditures, the public sector deficit is expected to widen during the forecast period. In addition, the fiscal position of local governments is under pressure due to higher social and health care costs caused by an aging population. The financial position of social security funds will remain in surplus. The debt-to-GDP-ratio will remain close to the 60 percent Maastricht criterion.

# Soft landing ahead

Even though Denmark's GDP likely grew by more than 2 percent in 2019, outperforming several of its European peers, it is evident that Denmark is not immune to the slowdown in the global economy. However, the economy appears well-balanced and our main scenario is for a soft landing, so we forecast that Danish GDP growth will slow to around 1.25 percent for this year and 2021. We believe that risks are mainly tilted to the downside, stemming from developments abroad. Additionally, we see an increasing likelihood of a rate hike in the coming months.

# Stronger upswing coming to an end

The Danish economy has so far shown resilience against the global economic slowdown, with 2019 GDP growth likely being just above 2 percent. The picture of a strong recovery has been further cemented by new, substantial, upward revisions to historical national account figures, with GDP growth now recorded as having been persistently above 2% for the last five years. Thus, Denmark's economy not only appears to have grown stronger than those of most of its European peers last year, but the Danish upswing since 2015 also appears to have outperformed Handelsbanken's other home markets and the eurozone as a whole.

Despite this, we expect that Denmark will be increasingly affected by the weaker trends and subdued outlooks for several of its main trading partners as we move into 2020. In general though, we find that the Danish economy appears more balanced this time around than it was during previous upswings. Wage growth has remained relatively subdued, and competitiveness in the industrial sector has remained healthy. Households have taken advantage of 'the good times' to reduce debt and increase savings; the improvement in most of the housing market has been relatively gradual and subdued, and there are few - if any - signs of overinvestment in the corporate sector. Lastly, public balances appear to be in good shape, leaving ample room for manoeuvre if the risk of a more severe downturn emerges.

This provides a solid footing for the future performance of the Danish economy, in our view, and paves the way for a soft landing. Thus, we expect GDP growth to cool to 1.2 percent this year and then to rise modestly to 1.3 percent in 2021 in tandem with a slightly stronger global economy. As a result of the slowdown, we expect unemployment to pick up over the forecast horizon, with underlying inflation pressures remaining muted. Risks to our outlook mainly stem from abroad, with a bias to the downside. Overall, we consider the risk of a more serious setback as being lower than during previous slowdowns given the lack of signs of overheating.

# The Danish economy is not immune

One reason behind the relatively solid improvement in recent years has been the stellar performance of the less cyclical pharmaceutical sector, which has lifted both industrial production and goods exports significantly. However, other more cyclical, sensitive sectors have begun to slow, and confidence in the industrial sector has fallen. We expect that growth in both exports and industrial production will slow in 2020, as our outlook for continued weakness in European industry lowers demand. As the global economy gradually regains footing, we expect momentum to pick up somewhat later in the forecast period.

We believe that private consumption should underpin economic growth both this year and next, as we still see solid fundamentals for households, supported by real wage growth, low interest rates and continued, albeit slowing, improvement on the housing market. We expect consumer price inflation to rise this year and next, but mainly owing to government-agreed higher tobacco prices. However, continued focus on reducing debt will likely keep a lid on consumption growth, in our view, and as the labour market weakens, which we expect, the prospect of an acceleration in household spending appears dim. Property tax refunds, expected to be paid out late this year, could provide a boost to consumption in 2021, albeit with a large degree of uncertainty.

Investments have contributed solidly to the upswing so far, but we expect both business and residential investments to act as a drag on the economy this year, owing to the high degree of economic uncertainty and as the construction boom diminishes. Since the latest bout of monetary policy easing from the ECB, the Danish krone has persistently traded on the weak side of central parity vs. the euro, prompting FX intervention from Danmarks Nationalbank in the last three months of 2019. We expect further intervention in the coming months, followed by a hike in the deposit rate of 0.1 percentage points, as the weakening pressure on the krone indicates that the interest rate spread versus the ECB might have grown a bit too large.

#### The Netherlands

# Growth dependent on fiscal policy during 2020

Although currently experiencing higher GDP growth than the rest of the eurozone, the exportbased Dutch economy is expected to slow down, mainly due to global trade, but also accentuated by domestic factors such as a weaker housing market and lower employment growth. Further down the road, when consumption and investments also falter, fiscal policy will take over as the main driver of economic growth.

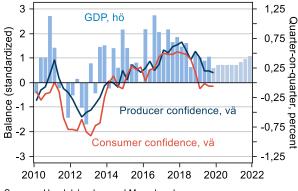
# Global uncertainty harming open economies

In the past, the Dutch economy has grown at a faster rate than the eurozone average, but now growth has slowed due to global uncertainty and weaker economic trends in China and Germany. So far, this slowdown has mainly been reflected in lower growth in exports and, to a certain extent, in consumption, while investments have remained fairly strong.

However, higher-frequency data point to weaker confidence within the business sector and, as in other countries in the region, the manufacturing industry is driving the decline. Moreover, consumer confidence has dropped significantly since early 2018, and now points to a distinct slowdown in household consumption.

For an economy as open to global shocks as the Netherlands is, with exports at around 85 percent share of GDP, lower foreign demand combined with the aforementioned global uncertainty is expected to have a direct impact via lower exports and an indirect impact via weaker investments.

#### Slower growth ahead



Sources: Handelsbanken and Macrobond.

### Strong employment growth expected to wane

The labour market has continued to exhibit a high degree of vacancies, high employment growth and record-low unemployment. The strong labour market, together with real wage increases, has strengthened household finances. However, our expectation is that employment growth will now decline, and that increased financial insecurity will mean that households increase their savings rather than their consumption. At the same time, we expect the housing market to slow down, reducing construction investments and consumption.

#### Making the most of fiscal policy is important

Although the Netherlands is one of the countries most exposed to a global downturn, it is also one of the most capable of enduring it. In fiscal policy terms, the Netherlands has plenty of scope for easing the economic downturn, with a public debt of 49 percent and a budget surplus of 1.7 percent last year. We expect public consumption to be the only area where growth increases more this year than in 2018. Established political agreements, such as pension and climate agreements, will mean considerable increases in public expenditure from next year and onwards. The budget presented for 2020 reflects an effort to increase household purchasing power with the aid of tax cuts, to increase investments in the housing sector (which are expected to tail off as the country aligns with the EU's regulations on hydrogen emissions) and to strengthen the armed forces. However, aggressive measures will be required to stave off the downturn, and our forecast is coloured by the dearth of such fiscal policy initiatives.

#### Growth and inflation to fluctuate during 2020-21

We expect GDP to grow 1.7 percent in 2019. Growth is then expected to decrease gradually to around 1.3 percent in 2020 and 2021.

The downturn in unemployment in recent years is expected to have bottomed out at around 3.4 percent in 2019. As the economy is increasingly affected by the global slowdown, we forecast unemployment to rise to 4.1 percent in 2020 and 4.3 percent in 2021. We expect higher inflation in 2019, at around 2.6 percent, mainly due to rises in VAT and energy tax. However, these temporary effects will wear off, and we forecast an inflation rate of 1.2 percent for 2020 and 1.4 percent for 2021, which is considerably below the ECB's inflation target.

# **Key ratios**

# **Real GDP forecast**

# Annual average

	2018	2019	2020	2021
Sweden*	2.3	1.1 (1.1)	0.7 (0.8)	1.4 (1.3)
Denmark	2.4	2.1 (1.9)	1.2 (1.2)	1.3 (1.1)
Finland*	1.7	1.5 (1.4)	0.9 (0.7)	1.2 (1.0)
Norway, total economy	1.3	1.0 (1.2)	2.4 (2.1)	2.0 (1.8)
Norway, mainland economy	2.2	2.5 (2.6)	1.8 (1.8)	1.4 (1.2)
Eurozone	1.9	1.2 (1.1)	0.9 (0.9)	1.1 (1.1)
Netherlands	2.6	1.7 (1.6)	1.3 (1.2)	1.3 (1.3)
United Kingdom	1.3	1.3 (1.1)	1.0 (1.0)	1.2 (1.2)
United States*	2.9	2.3 (2.2)	1.6 (1.3)	1.8 (1.7)
China	6.6	6.1 (6.1)	5.7 (5.7)	5.5 (5.5)

\* Calendar adjusted

# Inflation forecast

# Annual average

	2018	2019	2020	2021
Sweden, CPI	2.0	1.8 (1.8)	1.6 (1.6)	1.5 (1.6)
Sweden, CPIF	2.1	1.7 (1.7)	1.5 (1.6)	1.5 (1.6)
Denmark	0.8	0.8 (0.8)	1.3 (1.2)	1.5 (1.2)
Finland	1.1	1.0 (1.1)	1.2 (1.2)	1.4 (1.4)
Norway, CPI	2.7	2.2 (2.2)	2.0 (2.0)	2.0 (2.0)
Norway, CPIATE	1.6	2.3 (2.3)	2.0 (2.1)	2.0 (2.0)
Eurozone	1.8	1.2 (1.2)	1.2 (1.2)	1.4 (1.4)
Netherlands	1.6	2.6 (2.3)	1.2 (1.2)	1.4 (1.4)
United Kingdom	2.5	1.8 (1.9)	1.5 (1.8)	1.7 (1.9)
United States, PCE Core	2.0	1.6 (1.7)	1.9 (2.0)	2.0 (2.0)

# **Unemployment forecast**

### Annual average

	2018	2019	2020	2021
Sweden	6.3	6.8 (6.7)	7.2 (7.0)	7.4 (7.2)
Denmark	5.1	5.1 (5.1)	5.6 (5.2)	6.0 (5.6)
Finland	7.4	6.6 (6.6)	6.5 (6.5)	6.5 (6.7)
Norway	3.8	3.7 (3.5)	3.6 (3.4)	3.5 (3.5)
Eurozone	8.2	7.6 (7.7)	7.7 (7.9)	7.8 (8.0)
Netherlands	3.8	3.4 (3.4)	4.1 (4.1)	4.3 (4.3)
United Kingdom	4.1	3.8 (3.8)	4.0 (4.1)	4.2 (4.3)
United States	3.9	3.7 (3.7)	3.7 (4.0)	3.9 (4.3)

Source: Handelsbanken

In brackets: Global Macro Forecast October 9, 2019

# Interest rate forecast

# End of year

Eurozone     -0.4     -0.50 (-0.50)     -0.50 (-0.50)     -0.50 (-0.50)       Sweden     -0.25     0.00 (-0.25)     0.00 (-0.25)     0.00 (-0.25)       Denmark     -0.65     -0.75 (-0.75)     -0.65 (-0.75)     -0.65 (-0.75)       Jnited Kingdom     0.75     0.75 (0.75)     0.75 (0.75)     0.75 (0.75)       Norway     0.75     1.50 (1.50)     1.50 (1.50)     1.50 (1.50)       Interbank rates     2018     2019     2020     2021       Jnited States, LIBOR     2.81     1.91 (1.93)     1.93 (1.68)     1.93 (1.68)       Sweden, STIBOR     -0.13     0.15 (-0.05)     0.20 (-0.05)     0.20 (-0.05)       Eurozone, EURIBOR     -0.31     -0.38 (-0.42)     -0.42 (-0.42)     -0.42 (-0.42)       Denmark, CIBOR     1.27     1.84 (1.90)     1.90 (1.90)     1.90 (1.90)       2 year govt. bond yield     2018     2019     2020     2021       Jnited States     2.48     1.57 (1.50)     1.60 (1.40)     1.70 (1.50)       Eurozone (Germany)     -0.61     -0.63 (-0.76)     -0.69 (-0.69)     -0.66 (	Policy rates	2018	2019	2020	2021
Sweden     0.25     0.00 (-0.25)     0.06 (-0.25)     0.06 (-0.25)       Jinited Kingdom     0.75     0.75 (0.75)     0.75 (0.75)     0.75 (0.75)       Varway     0.75     1.50 (1.50)     1.50 (1.50)     1.50 (1.50)       Varway     0.75     1.50 (1.50)     1.50 (1.50)     0.20 (-0.65)     0.20 (-0.65)       Varebank rates     2018     2019     2020     2021       United States, LIGOR     0.31     0.34 (-0.42)     0.42 (-0.42)     0.42 (-0.42)       Sweden, STIBOR     0.31     0.34 (-0.42)     0.42 (-0.42)     0.42 (-0.42)       Sweden, STIBOR     0.31     0.34 (-0.42)     0.42 (-0.42)     0.42 (-0.42)       Sweden     1.27     1.84 (1.80)     1.30 (1.30)     0.33 (-0.55)       United States     2.48     1.57 (1.50)     1.50 (1.40)     1.70 (1.50)       Sweden     0.63     0.42 (-0.42)     0.42 (-0.42)     0.44 (-0.42)       Sweden     0.42 (-0.42)     0.46 (-0.66)     0.45 (-0.65)     0.50 (-0.70)     0.44 (-0.42)       Variad Sweden     0.33     0.45 (-0.65)	United States	2.375	1.625 (1.625)	1.625 (1.375)	1.625 (1.375)
Demmark     -0.65     -0.75     -0.65     -0.75     0.75	Eurozone	-0.4	-0.50 (-0.50)	-0.50 (-0.50)	-0.50 (-0.50)
Jnied Kingdom     0.75	Sweden	-0.25	0.00 (-0.25)	0.00 (-0.25)	0.00 (-0.25)
Norway     0.75     1.50 (1.50)     1.50 (1.50)     1.50 (1.50)       Interbank     2018     2019     2020     2021       Dired States, LIBOR     2.81     1.91 (1.93)     1.39 (1.68)     1.33 (1.68)       Swaden, STIBOR     -0.13     -0.38 (0.42)     -0.42 (0.42)     -0.42 (0.42)       Demmark, CIBOR     -0.31     -0.38 (0.42)     -0.42 (0.42)     -0.42 (0.42)       Demmark, CIBOR     -0.31     -0.08 (0.42)     -0.42 (0.42)     -0.42 (0.42)       Demmark     -0.31     -0.40 (0.40)     -0.35 (0.40)     -0.36 (0.40)       Varway, NIBOR     1.27     1.84 (1.90)     1.90 (1.90)     1.90 (1.90)       Varga govt, hond yield     2018     2019     2020     2021       Demmark     -0.60 (-0.66)     -0.56 (-0.70)     -0.40 (-0.65)       Swaden     -0.73     0.52 (0.35)     0.60 (0.40)     0.56 (0.55)       Jnited Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.46 (-0.66)       Vorway     1.11     1.34 (1.42)     1.34 (1.40)     1.40 (1.40)       Varegovt, hond	Denmark	-0.65	-0.75 (-0.75)	-0.65 (-0.75)	-0.65 (-0.75)
Interbanic varies     2018     2019     2020     2021       Junited States, LIBOR     2.81     1.91 (1.63)     1.93 (1.68)     1.93 (1.68)       Sweden, STIBOR     -0.13     -0.38 (0.42)     -0.42 (0.42)     -0.42 (0.42)       Bermark, CIBOR     -0.31     -0.38 (0.42)     -0.42 (0.42)     -0.42 (0.42)       Demark, CIBOR     1.27     1.84 (1.90)     1.90 (1.90)     1.30 (1.80)       Symarg out, bond yield     2018     2019     2020     2021       Jinled States     2.48     1.57 (1.50)     1.60 (1.40)     1.70 (1.50)       Sweden     -0.39 (0.65)     -0.15 (0.40)     -0.66 (0.66)     -0.46 (0.65)       Demark     -0.60     -0.66 (0.63)     -0.55 (0.60)     -0.46 (0.45)       Jinited Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.66 (0.65)       Jinited Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.66 (0.65)       Jinited Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.60 (0.40)       Sweden     0.73     0.52 (0.42)     0.76 (0.45)     0.40 (0.40) <td>Jnited Kingdom</td> <td>0.75</td> <td>0.75 (0.75)</td> <td>0.75 (0.75)</td> <td>0.75 (0.75)</td>	Jnited Kingdom	0.75	0.75 (0.75)	0.75 (0.75)	0.75 (0.75)
Jnied Stares, LBOR     2.81     1.91 (1.93)     1.93 (1.68)     1.93 (1.68)       Swaden, STIBOR     -0.13     0.15 (0.05)     0.20 (-0.05)     0.20 (-0.05)       Juricorane, EURISOR     -0.31     -0.38 (-0.42)     -0.42 (-0.42)     -0.42 (-0.42)       Vervay, NIBOR     1.27     1.84 (1.90)     1.90 (1.90)     1.90 (1.90)       Vervay, NIBOR     1.27     1.84 (1.90)     1.90 (1.90)     1.90 (1.90)       Vervay, NIBOR     2.17     1.84 (1.90)     1.00 (1.90)     1.90 (1.90)       Vervay, NIBOR     1.27     1.84 (1.90)     1.90 (1.90)     1.90 (1.90)       Vervay, NIBOR     0.61     -0.63 (-0.76)     -0.69 (-0.69)     -0.66 (-0.66)       Swaden     -0.39     -0.33 (-0.60)     -0.55 (-0.57)     -0.55 (-0.57)     -0.55 (-0.60)     -0.45 (-0.55)       Swaden     -0.37     -0.52 (-0.35)     -0.55 (-0.60)     -0.45 (-0.55)     -0.55 (-0.60)     -0.45 (-0.55)       Vervay     1.11     1.34 (1.25)     1.35 (1.40)     1.40 (1.40)     1.30 (1.60)     1.40 (1.40)       Vervay     0.31     -0.49 (-0.45)	Norway	0.75	1.50 (1.50)	1.50 (1.50)	1.50 (1.50)
Sweden, STEOR     -0.13     0.15 (-0.05)     0.20 (-0.05)     0.20 (-0.05)       Eurozone, EURIBOR     -0.31     -0.38 (-0.42)     -0.42 (-0.42)     -0.42 (-0.42)       Permark, CIBOR     -0.3     -0.40 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)     -0.66 (-0.66)     -0.66 (-0.66)     -0.66 (-0.66)     -0.66 (-0.66)     -0.65 (-0.55)     -0.15 (-0.40)     -0.46 (-0.55)     -0.15 (-0.40)     -0.46 (-0.55)     -0.15 (-0.40)     -0.46 (-0.55)     -0.15 (-0.40)     -0.46 (-0.55)     -0.55 (-0.57 (-0.65)     -0.45 (-0.55)     -0.15 (-0.40)     -0.41 (-0.41)     -0.46 (-0.55)     -0.55 (-0.51)     -0.45 (-0.55)     -0.15 (-0.40)     -0.41 (-0.41)     -0.25 (-0.50)     -0.45 (-0.55)     -0.06 (-0.50)     -0.45 (-0.55)     -0.15 (-0.40)     -0.41 (-0.41)     -0.25 (-0.50)     -0.45 (-0.55)     -0.06 (-0.40)     -0.41 (-0.41)     -0.46 (-0.50)     -0.25 (-0.50)     -0.25 (-0.50)     -0.25 (-0.50)     -0.25 (-0.50)     -0.25 (-0.50)     -0.25 (-0.50)     -0.25 (-0.50) <td>Interbank rates</td> <td>2018</td> <td>2019</td> <td>2020</td> <td>2021</td>	Interbank rates	2018	2019	2020	2021
Eurozone, EURIBOR     -0.31     -0.38 (-0.42)     -0.42 (-0.42)     -0.42 (-0.42)       Denmark, CIBOR     -0.31     -0.40 (-0.40)     -0.35 (-0.40)     -0.35 (-0.35)       Synway, NIBOR     1.27     1.84 (1.90)     1.90 (1.90)     1.90 (1.90)       year sout. bond yield     2018     2020     2021       Linted States     2.44     1.57 (1.50)     1.60 (1.40)     1.70 (1.50)       Eurozone (Germany)     -0.61     -0.63 (-0.76)     -0.55 (-0.67)     -0.40 (-0.65)       Sweden     -0.55     -0.57 (-0.65)     -0.55 (-0.60)     -0.45 (-0.55)       Junited Kingdom     0.73     0.52 (0.51)     0.60 (-0.40)     -0.45 (-0.50)       Vorway     1.11     1.34 (1.25)     1.35 (1.40)     1.40 (1.40)       Sweden     -0.31     -0.49 (-0.64)     -0.46 (-0.46)     -0.41 (-0.41)       Sweden     -0.33     -0.24 (-0.50)     -0.20 (-0.25)     -0.00 (-0.10)       Demmark     -0.33     -0.24 (-0.50)     -0.26 (-0.50)     -0.25 (-0.30)     -0.24 (-0.24)       Sweden     -0.33     -0.26 (-0.55)     -0.06 (-0.4	United States, LIBOR	2.81	1.91 (1.93)	1.93 (1.68)	1.93 (1.68)
Dammark, QEOR     -0.3     -0.40 (-0.40)     -0.35 (-0.40)     -0.35 (-0.40)       Narway, NBOR     1.27     1.84 (1.90)     1.90 (1.90)     1.90 (1.90)       Linted States     2.48     1.57 (1.50)     1.60 (1.40)     1.70 (1.50)       Linted States     2.48     1.57 (1.50)     -0.69 (-0.69)     -0.66 (-0.66)       Swaden     -0.39     -0.33 (-0.60)     -0.55 (-0.65)     -0.57 (-0.65)     -0.45 (-0.55)       Jinted Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.66 (-0.50)       Veyrag out, bond yield     2019     2020     2021       Jinted Kingdom     0.73     0.52 (0.55)     -0.25 (-0.35)     0.00 (-0.10)       Veyrag out, bond yield     2019     2020     2021       Jinted States     2.51     1.69 (1.58)     1.75 (1.58)     1.90 (1.80)       Eurozone (Germany)     -0.31     -0.48 (-0.70)     -0.40 (-0.50)     -0.20 (-0.25)       Jonted Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.66 (0.55)       Jonted Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.70 (2.40 (	Sweden, STIBOR	-0.13	0.15 (-0.05)	0.20 (-0.05)	0.20 (-0.05)
Norway, NIBOR     1.27     1.84 (1.90)     1.90 (1.90)     1.90 (1.90)       yper govt. bond yield     2018     2019     2020     2021       Dinted States     2.48     1.57 (1.50)     1.60 (1.40)     1.70 (1.50)       Dinted States     2.48     1.57 (1.50)     -0.68 (-0.66)     -0.50 (-0.70)     -0.46 (-0.66)       Swedan     -0.50     -0.57 (-0.65)     -0.55 (-0.60)     -0.45 (-0.55)     -0.66 (-0.60)       Dinted Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     -0.65 (-0.50)     -0.40 (-0.55)       Norway     1.11     1.34 (1.25)     1.35 (1.40)     1.40 (1.40)     5 yeer govt. bond yield     2018     2020     2021       Dinted States     2.51     1.69 (1.58)     1.75 (1.55)     1.90 (1.60)     -0.61 (-0.41)       Sweden     -0.03     -0.24 (-0.50)     -0.20 (-0.35)     -0.00 (-0.40)     -0.61 (-0.41)     -0.25 (-0.30)     -0.20 (-0.25)     -0.00 (-0.40)     -0.61 (-0.41)     -0.25 (-0.30)     -0.20 (-0.25)     -0.05 (-0.25)     -0.05 (-0.25)     -0.05 (-0.25)     -0.25 (-0.30)     -0.20 (-0.25)     -0.05 (-0.25)	Eurozone, EURIBOR	-0.31	-0.38 (-0.42)	-0.42 (-0.42)	-0.42 (-0.42)
2 year govt. bond yield     2018     2019     2020     2021       Jinted States     2.48     1.57 (1.50)     1.60 (1.40)     1.70 (1.50)       Eurozone (Germany)     -0.61     -0.68 (-0.68)     -0.66 (-0.69)     -0.66 (-0.60)       Denmark     -0.60     -0.66 (-0.60)     -0.55 (-0.75 (-0.65)     -0.55 (-0.60)     -0.45 (-0.65)       Jinited Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.66 (0.50)       Verway     1.11     1.34 (1.25)     1.35 (1.40)     1.40 (1.40)       Syear govt. bond yield     2018     2020     2021       Jinted States     2.51     1.69 (1.58)     1.75 (1.58)     1.90 (1.80)       Luozone (Germany)     -0.31     -0.49 (-0.64)     -0.46 (-0.46)     -0.41 (-0.41)       Sweden     -0.03     -0.24 (+0.50)     -0.25 (-0.30)     -0.20 (-0.25)       Jinted Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.65 (0.55)       Verway     1.43     1.38 (1.25)     1.40 (1.30)     1.45 (1.45)       United States     2.69     1.92 (1.65)     1.90 (1.73) <t< td=""><td>Denmark, CIBOR</td><td>-0.3</td><td>-0.40 (-0.40)</td><td>-0.35 (-0.40)</td><td>-0.35 (-0.35)</td></t<>	Denmark, CIBOR	-0.3	-0.40 (-0.40)	-0.35 (-0.40)	-0.35 (-0.35)
Inited States     2.48     1.57 (1.50)     1.60 (1.40)     1.70 (1.50)       Lurozone (Germany)     -0.61     -0.63 (-0.76)     -0.68 (-0.69)     -0.66 (-0.66)       Sweden     -0.33     -0.50     -0.33 (-0.60)     -0.30 (-0.55)     -0.15 (-0.40)       Denmark     -0.60     -0.66 (-0.80)     -0.55 (-0.60)     -0.46 (-0.65)       Jinted Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.65 (0.55)       Norway     1.11     1.34 (1.26)     1.35 (1.40)     1.40 (1.40)       Syser govt. bond yield     2019     2020     2021       Jinted States     2.51     1.69 (1.58)     1.75 (1.56)     1.90 (1.80)       Lined States     2.51     1.69 (1.50)     -0.22 (-0.35)     0.00 (-0.40)       Jonted States     2.51     1.69 (1.50)     -0.22 (-0.35)     0.00 (-0.40)       Jonted States     2.69     1.92 (1.65)     1.90 (1.80)     1.45 (1.45)       Jonted States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Jonted States     2.69     1.92 (1.65)     1.90 (1.75)     2.1	Norway, NIBOR	1.27	1.84 (1.90)	1.90 (1.90)	1.90 (1.90)
Eurozone (Germany)     -0.61     -0.63 (-0.76)     -0.69 (-0.69)     -0.66 (-0.60)       Sweden     -0.39     -0.33 (-0.66)     -0.30 (-0.56)     -0.16 (-0.40)       Jenmark     -0.60     -0.66 (-0.80)     -0.55 (-0.60)     -0.46 (-0.55)       Jinted Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     -0.65 (0.50)       Syare govt. bond yield     2018     2019     2020     2021       Jinted States     2.51     1.69 (1.58)     1.75 (1.58)     1.90 (1.80)       Eurozone (Germany)     -0.31     -0.49 (-0.50)     -0.20 (-0.35)     0.00 (-0.10)       Senden     -0.03     -0.24 (-0.50)     -0.25 (-0.30)     -0.20 (-0.25)       Jinted Kingdom     0.89     0.60 (-0.40)     0.60 (0.50)     -0.36 (-0.40)       Senger yot. bond yield     2018     2019     2020     2021       Jinted Kingdom     0.89     0.60 (-0.40)     0.60 (0.50)     0.0.26 (-0.5)       Senger yot. bond yield     2018     2019     2020     2021       Jinted Kingdom     0.45     0.14 (-0.20)     0.15 (-0.5)     0.0.	2 year govt. bond yield	2018	2019	2020	2021
Sweden     -0.39     -0.33 (-0.60)     -0.30 (-0.55)     -0.15 (-0.40)       Dermark     -0.60     -0.66 (-0.80)     -0.50 (-0.70)     -0.40 (-0.65)       Jinited     -0.55     -0.55 (-0.60)     -0.55 (-0.60)     -0.65 (-0.60)       Jinited Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.65 (0.50)       Veyrer gov. bond yield     2018     2020     2021     2021       Jinited States     2.51     1.69 (1.56)     1.76 (1.58)     1.90 (1.80)       Eurozone (Germany)     -0.31     -0.24 (-0.50)     -0.20 (-0.35)     0.00 (-0.10)       Sweden     -0.03     -0.24 (-0.50)     -0.20 (-0.35)     0.00 (0.10)       Demark     -0.34     -0.48 (-0.70)     -0.40 (-0.50)     -0.30 (-0.49)       Sinted Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.65 (0.50)       Norway     1.43     1.38 (1.25)     1.40 (1.30)     1.45 (1.45)       Diver govt. bond yield     2018     2020     2021     2021       Dirited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (0.10)	Jnited States	2.48	1.57 (1.50)	1.60 (1.40)	1.70 (1.50)
Denmark     -0.60     -0.66 (-0.80)     -0.50 (-0.70)     -0.40 (-0.65)       initiand     -0.55     -0.57 (-0.65)     -0.55 (-0.65)     -0.65 (-0.60)     -0.48 (-0.55)       Norway     1.11     1.34 (1.25)     1.35 (1.40)     1.40 (1.40)       is year govt. bond yield     2018     2019     2020     2021       Juited States     2.51     1.69 (1.56)     1.75 (1.58)     1.90 (1.80)       Eurozone (Germany)     -0.31     -0.49 (-0.64)     -0.46 (-0.46)     -0.41 (-0.41)       Sweden     -0.03     -0.24 (-0.50)     -0.20 (-0.50)     -0.30 (-0.40)       Eurozone (Germany)     -0.48     -0.70     -0.40 (-0.50)     -0.66 (0.50)       Sweden     -0.08     -0.35 (-0.50)     -0.25 (-0.30)     -0.20 (-0.25)       Jnited Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.66 (0.50)       Sweden     0.48     -0.17 (-0.50)     -0.25 (-0.20)     -0.26 (-0.45)       Divear govt. bond yield     2018     2019     2020     2021       Jnited States     2.69     1.92 (1.65)     1.90 (1.75)<	Eurozone (Germany)	-0.61	-0.63 (-0.76)	-0.69 (-0.69)	-0.66 (-0.66)
Finland     -0.55     -0.57 (-0.65)     -0.55 (-0.60)     -0.45 (-0.55)       Jnited Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.68 (0.59)       Sowray     1.11     1.134 (1.25)     1.35 (1.40)     1.40 (1.40)       Syaar govt. bond yield     2018     2019     2020     2021       Jnited States     2.51     1.69 (1.58)     1.77 (1.58)     1.90 (1.80)       Suezone (Germany)     -0.31     -0.44 (-0.40)     -0.46 (-0.46)     -0.41 (-0.41)       Sweden     -0.03     -0.24 (-0.50)     -0.22 (-0.35)     0.00 (-0.10)       Parmark     -0.34     -0.48 (-0.70)     -0.40 (-0.50)     0.65 (0.55)       Jnited Kingdom     0.89     0.60 (0.40)     0.60 (0.60)     0.65 (0.55)       Joned States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.0)       Doeser govt. bond yield     0.54     0.01 (-0.65)     0.25 (0.20)     0.05 (0.05)       Jnited Kingdom     0.27     0.74 (0.50)     0.73 (0.60)     0.80 (0	Sweden	-0.39	-0.33 (-0.60)	-0.30 (-0.55)	-0.15 (-0.40)
Finland     -0.55     -0.57 (-0.65)     -0.55 (-0.60)     -0.45 (-0.55)       Jnited Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.68 (0.50)       Storway     1.11     1.134 (1.25)     1.35 (1.40)     1.40 (1.40)       Store govt. bond yield     2018     2019     2020     2021       Jnited States     2.51     1.69 (1.58)     1.77 (1.58)     1.90 (1.80)       States     2.51     1.69 (1.58)     1.77 (1.58)     0.00 (-0.10)       States     0.03     -0.24 (-0.50)     -0.22 (-0.35)     0.00 (-0.10)       Demmark     -0.34     -0.48 (-0.70)     -0.40 (-0.50)     0.68 (0.55)       Jnited Kingdom     0.89     0.60 (0.40)     0.60 (6.60)     0.65 (0.55)       Jonked Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.45 (0.22)       Jnited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.0)       Jnited Kingdom     1.27     0.74 (0.55)     0.05 (0.25)     0.05 (0.20) <t< td=""><td>Denmark</td><td></td><td></td><td></td><td>, ,</td></t<>	Denmark				, ,
Jnited Kingdom     0.73     0.52 (0.35)     0.60 (0.40)     0.65 (0.50)       Vorway     1.11     1.34 (1.25)     1.35 (1.40)     1.40 (1.40)       Spear govt. bond yield     2018     2020     2021       Inited States     2.51     1.69 (1.58)     1.75 (1.58)     1.90 (1.80)       Eurozone (Germany)     -0.31     -0.49 (-0.64)     -0.46 (-0.46)     -0.41 (-0.41)       Sweden     -0.03     -0.24 (-0.50)     -0.20 (-0.35)     -0.00 (-0.10)       Demmark     -0.34     -0.48 (-0.70)     -0.40 (-0.50)     -0.26 (-0.30)     -0.22 (-0.25)       Jnited Kingdom     0.88     0.60 (0.40)     0.66 (0.50)     0.66 (0.55)     Jone (-0.55)       Jonited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.25)     -0.05 (-0.15)       United States     2.64     0.66 (-0.25)     0.01 (-0.05)     0.12 (0.20)       Jnited Kingdom     1.27     0.74 (0.50) <td></td> <td></td> <td></td> <td></td> <td>, ,</td>					, ,
Norway     1.11     1.34 (1.25)     1.35 (1.40)     1.40 (1.40)       is year govt. bond yield     2018     2019     2020     2021       Duited States     2.51     1.69 (1.50)     1.75 (1.58)     1.90 (1.80)       Eurozone (Germany)     -0.31     -0.49 (-0.64)     -0.46 (-0.46)     -0.41 (-0.41)       Sweden     -0.03     -0.24 (-0.50)     -0.26 (-0.35)     0.00 (-0.10)       Denmark     -0.34     -0.48 (-0.70)     -0.40 (-0.50)     -0.20 (-0.25)       Janted Kingdom     0.89     0.60 (0.40)     0.66 (0.50)     0.65 (0.55)       Jonted Kingdom     0.89     0.60 (0.40)     0.66 (0.50)     0.65 (0.55)       Jonted States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Survorp (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Denmark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Surveden     0.45     0.14 (-0.20)     0.71 (-0.25)     -0.05 (-0.15)       Jonted States     2.64     1.66 (1.70)     1.80 (1.60) <t< td=""><td></td><td></td><td></td><td></td><td>, ,</td></t<>					, ,
Syear govt. bond yield     2018     2019     2020     2021       Jinted States     2.51     1.69 (1.58)     1.75 (1.55)     1.90 (1.80)       Eurozone (Germany)     -0.31     -0.49 (-0.64)     -0.46 (-0.46)     -0.41 (-0.41)       Sweden     -0.03     -0.24 (-0.50)     -0.20 (-0.50)     -0.03 (-0.40)       Demmark     -0.03     -0.24 (-0.50)     -0.25 (-0.30)     -0.20 (-0.25)       Jinted Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.65 (0.55)       Norway     1.43     1.38 (1.25)     1.40 (1.30)     1.45 (1.45)       Dired States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.25)     -0.05 (-0.15)       Sweden     0.45     0.05 (-0.25)     0.00 (-0.05)     0.10 (0.05)       Jinted States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)<	•		. ,		, ,
Jnited States     2.51     1.69 (1.58)     1.75 (1.58)     1.90 (1.80)       Sweden     -0.31     -0.49 (-0.64)     -0.46 (-0.46)     -0.41 (-0.41)       Sweden     -0.03     -0.24 (-0.50)     -0.20 (-0.35)     0.00 (0.10)       Jenmark     -0.34     -0.48 (-0.70)     -0.40 (-0.50)     -0.30 (-0.40)       Jinted Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.65 (0.55)       Jonay     1.43     1.38 (1.25)     1.40 (1.30)     1.45 (1.45)       Jinted States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     0.25 (0.20)       Demark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Sinladd     0.54     0.05 (-0.25)     0.00 (-0.05)     0.10 (0.05)       Jinted Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)	•		. ,	( )	· · ·
Eurozone (Germany)     -0.31     -0.49 (-0.64)     -0.46 (-0.46)     -0.41 (-0.41)       Sweden     -0.03     -0.24 (-0.50)     -0.20 (-0.35)     0.00 (-0.10)       Denmark     -0.34     -0.48 (-0.70)     -0.40 (-0.50)     -0.30 (-0.40)       Iniland     -0.08     -0.35 (-0.50)     -0.22 (-0.25)     -0.20 (-0.25)       Jnited Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.65 (0.55)       Norway     1.43     1.38 (1.25)     1.40 (1.30)     1.45 (1.45)       D year govt. bond yield     2018     2020     2021       Dirited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     -0.05 (-0.15)       Eurozone (Germany)     0.24     -0.17 (-0.45)     -0.05 (-0.15)     -0.05 (-0.15)       Demmark     0.19     -0.17 (-0.45)     -0.16 (-0.16)     1.80 (1.60)     1.90 (1.70)       Linited Kingdom     1.27     0.74 (0.50)     0.73 (0.60	United States				
Sweden     -0.03     -0.24 (0.50)     -0.20 (0.35)     0.00 (0.10)       Demmark     -0.34     -0.48 (0.70)     -0.40 (0.50)     -0.30 (0.40)       Finland     -0.08     -0.35 (-0.50)     -0.25 (-0.30)     -0.20 (-0.25)       Junited Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.550 (0.55)       Norway     1.43     1.38 (1.25)     1.40 (1.30)     1.45 (1.45)       Divear gort. bond yield     2018     2019     2020     2021       Junited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     0.25 (0.20)       Denmark     0.19     -0.07 (-0.45)     -0.16 (-0.05)     0.10 (0.05)       Jnited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Varay ava rate     2018     2019     2020     2021       Jnited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)	Eurozone (Germany)				, ,
Denmark     -0.34     -0.48 (-0.70)     -0.40 (-0.50)     -0.30 (-0.40)       Finland     -0.08     -0.35 (-0.50)     -0.25 (-0.30)     -0.20 (-0.25)       Jnited Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.65 (0.55)       Jorden     1.33     1.38 (1.25)     1.40 (1.30)     1.45 (1.45)       Joyear govt. bond yield     2018     2019     2020     2021       Jinited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.25)     -0.05 (-0.15)       Denmark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Sweden     0.45     0.06 (-0.25)     0.00 (-0.05)     0.10 (0.05)       Jnited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.21)     0.26 (-0.26)       Jnited Kingdom     1.16     0.80 (0.70)     0.85 (0.00) <t< td=""><td>· · · ·</td><td></td><td></td><td></td><td>, ,</td></t<>	· · · ·				, ,
Finland     -0.08     -0.35 (-0.50)     -0.25 (-0.30)     -0.20 (-0.25)       Jnited Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.65 (0.55)       Norway     1.43     1.38 (1.25)     1.40 (1.30)     1.45 (1.45)       Dinted States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     0.25 (0.20)       Denmark     0.19     -0.77 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Jnited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       2 year swap rate     2018     2019     2020     2021       Durited Kingdom     1.16     0.80 (0.70)     0.85 (0.80)     0.01 (-0.25)       Linted States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)	Denmark				, ,
Jnited Kingdom     0.89     0.60 (0.40)     0.60 (0.50)     0.65 (0.55)       Norway     1.43     1.38 (1.25)     1.40 (1.30)     1.45 (1.45) <b>10 year gort. bond yield 2018 2020 2021</b> Jurited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     0.25 (0.20)       Demmark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.00 (-0.05)       Jnited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       Z year swap rate     2018     2020     2021     2021       Jnited States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Surozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Jnited					, ,
Norway     1.43     1.38 (1.25)     1.40 (1.30)     1.45 (1.45)       IO year govt. bond yield     2018     2019     2020     2021       Jinited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     0.25 (0.20)       Denmark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Jinited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       Vorway prate     2018     2019     2020     2021       Jinited States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.21 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Jermark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)					, ,
10 year govt. bond yield     2018     2019     2020     2021       Jnited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     0.25 (0.20)       Denmark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Jnited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       2 year swap rate     2018     2020     2021       Jnited States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jnited Kingdom     1.16     0.80 (0.60)     0.80 (.70)     0.85 (0.80)       Norway <td>-</td> <td></td> <td>. ,</td> <td></td> <td>, ,</td>	-		. ,		, ,
Juited States     2.69     1.92 (1.65)     1.90 (1.75)     2.10 (2.10)       Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     0.25 (0.20)       Denmark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Jinited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       Zera swap rate     2018     2019     2020     2021       Jinited States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     -0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jinited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)       Norway     1.54     1.99 (1.90)     1.95 (2.00)     1.95 (2.00)	•			. ,	, ,
Eurozone (Germany)     0.24     -0.19 (-0.41)     -0.24 (-0.24)     -0.16 (-0.16)       Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     0.25 (0.20)       Denmark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Jinited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       Zyear swap rate     2018     2020     2021       Jinited States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jinited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)       Norway     1.54     1.99 (1.73)     1.90 (1.73)     2.05 (1.95)       Supar swap rate     2018     2019     2020     2021       Jinited States	, , ,				
Sweden     0.45     0.14 (-0.20)     0.15 (-0.05)     0.25 (0.20)       Denmark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Finland     0.54     0.05 (-0.25)     0.00 (-0.05)     0.10 (0.05)       Jnited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       2year swap rate     2018     2019     2020     2021       United States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jnited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)       Norway     1.54     1.99 (1.73)     1.90 (1.73)     2.05 (1.95)       Eurozone     0.2     -0.13 (-0.19)     -0.01 (-0.01)     0.04 (0.04)       Sw			. ,		, ,
Denmark     0.19     -0.17 (-0.45)     -0.15 (-0.25)     -0.05 (-0.15)       Finland     0.54     0.05 (-0.25)     0.00 (-0.05)     0.10 (0.05)       Jnited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       2 year swap rate     2018     2019     2020     2021       Jnited States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     -0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jnited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)       Norway     1.54     1.99 (1.90)     1.95 (2.00)     1.95 (2.00)       Jnited States     2.57     1.69 (1.73)     1.90 (1.73)     2.05 (1.95)       Eurozone     0.2     -0.13 (-0.19)     -0.01 (-0.01)     0.04 (0.04)					
Finland     0.54     0.05 (-0.25)     0.00 (-0.05)     0.10 (0.05)       Jnited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       2 year swap rate     2018     2019     2020     2021       United States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jnited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)       Norway     1.54     1.99 (1.90)     1.95 (2.00)     1.95 (2.00)       Jnited States     2.57     1.69 (1.73)     1.90 (1.73)     2.05 (1.95)       Eurozone     0.2     -0.13 (-0.19)     -0.01 (-0.01)     0.04 (0.04)       Sweden     0.51     0.39 (-0.05)     0.40 (0.08)     0.50 (0.32)       De			, ,		, ,
Jnited Kingdom     1.27     0.74 (0.50)     0.73 (0.60)     0.80 (0.70)       Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       Zyear swap rate     2018     2019     2020     2021       Jnited States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jnited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)       Norway     1.54     1.99 (1.73)     1.95 (2.00)     1.95 (2.00)       Syear swap rate     2018     2019     2020     2021       United States     2.57     1.69 (1.73)     1.90 (1.73)     2.05 (1.95)       Eurozone     0.2     -0.13 (-0.19)     -0.01 (-0.01)     0.04 (0.04)       Sweden     0.51     0.39 (-0.05)     0.40 (0.08)     0.50 (0.32)       Denmark					, ,
Norway     1.79     1.55 (1.25)     1.50 (1.30)     1.55 (1.50)       2 year swap rate     2018     2019     2020     2021       United States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jnited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)       Norway     1.54     1.99 (1.90)     1.95 (2.00)     1.95 (2.00)       5 year swap rate     2018     2019     2020     2021       United States     2.57     1.69 (1.73)     1.90 (1.73)     2.05 (1.95)       Eurozone     0.2     -0.13 (-0.19)     -0.01 (-0.01)     0.04 (0.04)       Sweden     0.51     0.39 (-0.05)     0.40 (0.08)     0.50 (0.32)       Denmark     0.26     0.01 (-0.15)     0.10 (0.00)     0.20 (0.10)       Jnited Kingdom			, ,		
2 year swap rate     2018     2019     2020     2021       United States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jnited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)       Norway     1.54     1.99 (1.90)     1.95 (2.00)     1.95 (2.00)       5 year swap rate     2018     2019     2020     2021       Jnited States     2.57     1.69 (1.73)     1.90 (1.73)     2.05 (1.95)       Eurozone     0.2     -0.13 (-0.19)     -0.01 (-0.01)     0.04 (0.04)       Sweden     0.51     0.39 (-0.05)     0.40 (0.08)     0.50 (0.32)       Denmark     0.26     0.01 (-0.15)     0.10 (0.00)     0.20 (0.01)       Jnited Kingdom     1.3     0.88 (0.65)     0.88 (0.70)     0.95 (0.80)       Norway	•		. ,	. ,	. ,
Jnited States     2.64     1.66 (1.70)     1.80 (1.60)     1.90 (1.70)       Eurozone     -0.17     -0.29 (-0.36)     -0.29 (-0.29)     -0.26 (-0.26)       Sweden     0.06     0.24 (-0.11)     0.25 (-0.13)     0.35 (0.00)       Denmark     -0.06     -0.17 (-0.30)     0.00 (-0.25)     0.10 (-0.20)       Jnited Kingdom     1.16     0.80 (0.60)     0.80 (0.70)     0.85 (0.80)       Norway     1.54     1.99 (1.90)     1.95 (2.00)     1.95 (2.00)       Spear swap rate     2018     2019     2020     2021       United States     2.57     1.69 (1.73)     1.90 (1.73)     2.05 (1.95)       Eurozone     0.2     -0.13 (-0.19)     -0.01 (-0.01)     0.04 (0.04)       Sweden     0.51     0.39 (-0.05)     0.40 (0.08)     0.50 (0.32)       Denmark     0.26     0.01 (-0.15)     0.10 (0.00)     0.20 (0.10)       Jnited Kingdom     1.3     0.88 (0.65)     0.88 (0.70)     0.95 (0.80)       Norway     1.81     2.01 (1.70)     1.90 (1.75)     1.95 (1.85)       IO ye			. ,		
Eurozone-0.17-0.29 (-0.36)-0.29 (-0.29)-0.26 (-0.26)Sweden0.060.24 (-0.11)0.25 (-0.13)0.35 (0.00)Denmark-0.06-0.17 (-0.30)0.00 (-0.25)0.10 (-0.20)Jnited Kingdom1.160.80 (0.60)0.80 (0.70)0.85 (0.80)Norway1.541.99 (1.90)1.95 (2.00)1.95 (2.00)Syear swap rate2018201920202021Jnited States2.571.69 (1.73)1.90 (1.73)2.05 (1.95)Eurozone0.2-0.13 (-0.19)-0.01 (-0.01)0.04 (0.04)Sweden0.510.39 (-0.05)0.40 (0.08)0.50 (0.32)Denmark0.260.01 (-0.15)0.10 (0.00)0.20 (0.10)Jnited Kingdom1.30.88 (0.65)0.88 (0.70)0.95 (0.80)Norway1.812.01 (1.70)1.90 (1.75)1.95 (1.85)D year swap rate2018201920202021Jnited States2.71.86 (1.70)1.95 (1.80)2.15 (2.15)Eurozone0.810.19 (0.09)0.27 (0.27)0.34 (0.34)Sweden1.130.69 (0.31)0.60 (0.41)0.70 (0.62)Denmark0.80.33 (0.10)0.35 (0.30)0.45 (0.40)Jnited Kingdom1.431.02 (0.80)1.05 (0.90)1.15 (1.00)					
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Source: Handelsbanken In brackets: Global Macro Forecast October 9, 2019		0.14	· · · · · · · · · · · · · · · · · · ·	2 00 (1 75)	2 10 (1 00)

# Exchange rate forecast

# End of year

	2018	2019	2020	2021
EUR/SEK	10.28	10.43 (10.65)	10.55 (10.65)	10.45 (10.55)
USD/SEK	9.01	9.32 (9.68)	9.25 (9.34)	9.09 (8.79)
GBP/SEK	11.45	12.31 (11.97)	11.99 (12.10)	11.88 (11.99)
NOK/SEK	1.03	1.06 (1.04)	1.03 (1.03)	1.02 (1.02)
DKK/SEK	1.38	1.40 (1.43)	1.41 (1.43)	1.40 (1.41)
CHF/SEK	9.12	9.57 (9.77)	9.42 (9.51)	9.25 (9.34)
JPY/SEK	8.21	8.87 (9.22)	8.26 (8.34)	8.11 (7.85)
CNY/SEK	1.31	1.34 (1.34)	1.27 (1.26)	1.21 (1.16)
	2018	2019	2020	2021
EUR/USD	1.14	1.12 (1.10)	1.14 (1.14)	1.15 (1.20)
USD/JPY	109.77	105.00 (105.00)	112.00 (112.00)	112.00 (112.00)
EUR/GBP	0.898	0.848 (0.890)	0.880 (0.880)	0.880 (0.880)
GBP/USD	1.27	1.32 (1.24)	1.30 (1.30)	1.31 (1.36)
EUR/CHF	1.13	1.09 (1.09)	1.12 (1.12)	1.13 (1.13)
USD/CNY	6.88	6.96 (7.20)	7.30 (7.40)	7.50 (7.60)
	2018	2019	2020	2021
EUR/DKK	7.46	7.47 (7.46)	7.46 (7.46)	7.46 (7.46)
SEK/DKK	0.73	0.72 (0.70)	0.71 (0.70)	0.71 (0.71)
USD/DKK	6.55	6.67 (6.78)	6.54 (6.54)	6.49 (6.22)
GBP/DKK	8.31	8.81 (8.38)	8.48 (8.48)	8.48 (8.48)
CHF/DKK	6.62	6.85 (6.84)	6.66 (6.66)	6.60 (6.60)
JPY/DKK	5.96	6.35 (6.46)	5.84 (5.84)	5.79 (5.55)
	2018	2019	2020	2021
EUR/NOK	9.95	9.86 (10.20)	10.20 (10.30)	10.20 (10.30)
SEK/NOK	0.97	0.95 (0.96)	0.97 (0.97)	0.98 (0.98)
USD/NOK	8.73	8.81 (9.27)	8.95 (9.04)	8.87 (8.58)
GBP/NOK	11.08	11.64 (11.46)	11.59 (11.70)	11.59 (11.70)
CHF/NOK	8.83	9.05 (9.36)	9.11 (9.20)	9.03 (9.12)
JPY/NOK	7.95	8.39 (8.83)	7.99 (8.07)	7.92 (7.66)

Source: Handelsbanken

In brackets: Global Macro Forecast October 9, 2019

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# **Macro Research and Trading Strategy**

#### **Macro Research**

Lena Fahlén	Head of Global Research	+46 8 701 83 29	Denmark			
Christina Nyman	Head of Macro Research and	+46 8 701 51 58	Jes Asmussen	Head, Macro Research, Denmark	+45 46 79 12 03	
	Chief Economist		Rasmus Gudum-Sessingø	Senior Economist, Denmark	+45 46 79 16 19	
			Bjarke Roed-Frederiksen	Senior Economist, China	+45 46 79 12 29	
Web Editor						
Terese Loon		+46 8 701 28 72	Norway			
			Kari Due-Andresen	Head, Macro Research, Norway, UK	+47 22 39 70 07	
Sweden			Nils Kristian Knudsen	Senior Strategist FX/FI	+47 22 82 30 10	
Helena Bornevall	Scenario Analysis and		Marius Gonsholt Hov	Senior Economist, Norway	+47 22 39 73 40	
	Senior Economist	+46 8 701 18 59	Halfdan Grangård	Senior Economist, Norway	+47 22 39 71 81	
Johan Löf	Senior Economist, Sweden	+46 8 701 5093	Ŭ			
Anders Bergvall	ders Bergvall Senior Economist, Thematic Analysis		Trading Strategy			
	and US	+46 8 701 8378	Claes Måhlén	Chief Strategist	+46 8 463 45 35	
Erik Meyersson	Senior Economist, Eurozone	+46 8 701 1412	Nils Kristian Knudsen	Senior Strategist FX/FI	+47 22 82 30 10	
			Lars Henriksson	Senior Strategist FX	+46 8 463 45 18	
Finland			Kiran Sakira	Senior Strategist FX	+46 8 701 46 14	
Timo Hirvonen	Chief Economist, Finland	+358 10 444 2404		3		
Janne Ronkanen	Senior Economist, Finland	+358 10 444 2403				

#### **Debt Capital Markets**

Tony Lindlöf	Head of Debt Capital Markets	+46 8 701 25 10			
Per Eldestrand	Head of Debt Capital Markets	Sweden +46 8 701 22 03			
Måns Niklasson	Head of Corporate Loans and	+46 8 701 52 84			
	Acquisition Finance				
Thomas Grandin	Head of Corporate Bonds	+46 8 463 45 83			
Sales					
Fixed Income Sales					
Henrik Franzén		+46 8 701 11 41			
Corporate Sales					
Bo Fredriksson		+46 8 701 345 31			
FX Sales					
Håkan Larsson		+46 8 701 345 19			
Syndication					
Thomas Grandin		+46 8 701 345 83			
Regional sales					
Amsterdam			London		
Annelies Pruik	+31 204 127 668		Tolga Kulahcigil	+44 207 578 86 12	
Copenhagen			Luleå/Umeå		
Kristian Nielsen	+45 46 79 12 69		Ove Larsson	+46 90 154 719	
Gothenburg			Malmö		
Björn Torsteinsrud	+46 31 774 83 39		Fredrik Lundgren	+46 40 243 900	
Gävle			Oslo		
Petter Holm	+46 26 172 103		Petter Fjellheim	+47 22 82 30 29	
Helsinki			Stockholm		
Mika Rämänen	+358 10 444 62 20		Malin Nilén	+46 8 701 27 70	
Linköping					
Fredrik Lundgren	+46 13 28 91 10				
Toll-free numbers	From Sweden to N.Y. & Singapore 020-58 64 46	From Norway to N.Y. & Singapore 800 40 333	From Denmark to N.Y. & Singapore 8001 72 02	From Finland to N.Y. & Singapore 0800 91 11 00	Within the US 1-800 396-2758

# Svenska Handelsbanken AB (publ)

Stockholm Blasieholmstorg 11 SE-106 70 Stockholm Tel. +46 8 701 10 00 Fax. +46 8 611 11 80

Copenhagen Havneholmen 29 DK-1561 Copenhagen V Tel. +45 46 79 12 00 Fax. +45 46 79 15 52

Helsinki Itämerenkatu 11-13 FI-00180 Helsinki Tel. +358 10 444 11 Fax. +358 10 444 2578

Oslo Tjuvholmen allé 11 Postboks 1249 Vika NO-0110 Oslo Tel. +47 22 39 70 00 Fax. +47 22 39 71 60 London 3 Thomas More Square London GB-E1W 1WY Tel. +44 207 578 8668 Fax. +44 207 578 8090

New York Handelsbanken Markets Securities, Inc. Securrules, Inc. 875 Third Avenue, 4<sup>th</sup> Floor New York, NY 10022-7218 Tel. +1 212 326 5153 Fax. +1 212 326 2730 FINRA, SIPC

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