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Nordea Economic Outlook 3/2019

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"There has been a further escalation in the trade war between the US and China, and the clashes go far beyond trade."

Jan von Gerich Nordea Chief Analyst

"There are indications that globalisation has peaked."

Helge J. Pedersen Nordea Group Chief Economist

Time of fear

The trade war, Brexit and overall political uncertainty have significantly dampened the global growth outlook. This has once again sparked fears in the financial markets and caused central banks to make a U-turn. Monetary policy normalisation has been put on hold, with further easing in the form of rate cuts on both sides of the Atlantic and a restart of the ECB printing press in Frankfurt now on the cards. This conclusion is supported by our new Hawk-o-Meter, which is based on artificial intelligence and machine training.

The green shoots in the world economy in the spring have withered away and over the summer, fear has once again taken hold of the financial markets. Poor economic indicators, the escalating trade war between the US and China, geopolitical tensions in Asia and the Middle East, even greater uncertainty about the UK's future relations to the EU and an Italian government crisis have proved to be the perfect cocktail to shake not only markets, but also major central banks around the world.

In our new forecast we have markedly revised down growth in the world economy this year and the next. In both years we see growth around a modest 3%, the lowest level since the financial crisis. In 2021, which now for the first time is included in our forecast horizon, growth should start to accelerate again particularly because by that time the situation surrounding Brexit should have been resolved and the US and China should have agreed a trade deal.

Just as the setback in the world economy is due to political factors, namely the unravelling of the liberal world order, a return to growth will require that the leading countries in the world come together in a stable and trustful environment of economic and political cooperation. However, this is by no

means certain, and there is a real risk that the relationship between the US and China, which basically is a struggle for global dominance, turns even worse. That is one reason why we see a bigger risk of growth surprising on the downside rather than the upside in the coming years.

All things considered there are indications that globalisation has peaked. This will also affect the growth potential of the small open Nordic economies, which all to a significant extent take part in the global value chains through trade and investment. Especially Sweden and Finland are greatly exposed to the current frosty global economic climate because the structure of their corporate sectors to a greater extent than Norway's and Denmark's are affected by international business cycle movements.

The global economic slowdown coupled with sustained low inflation has caused central banks around the world to make a monetary policy U-turn. All discussions of a normalisation have been put on the backburner and replaced by renewed easing. In the US, the Federal Reserve cut rates already in July to prolong the historically long upswing, and in the euro area the ECB has signalled its readiness to follow suit. Similarly, it has opened the door wide for a revival of its significant asset purchase

programme. So the low interest rate environment, which is rooted in structural factors such as low potential growth, demographics and a substantial savings surplus, has come to stay, and perhaps policy rates in negative territory is becoming the new normal.

At present, central banks are dominating the financial markets, and with the current considerable uncertainty surrounding the real economy and the markets, monetary policy rhetoric will no doubt be thoroughly scrutinised in the coming period.

For that very purpose we have started to increasingly use artificial intelligence, which through meticulous training can provide solid input for projections of themes the central banks focus on and of their next step whether it be taken in Washington, Frankfurt, London or Stockholm.

The results are measured both in an analytical Sentiment Score and a special Hawk-o-Meter. And they will likely point to further uncertainty, monetary policy easing and dovish rhetoric over the coming quarters.

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GLOBAL AND FINANCIAL MARKETS OVERVIEW

Confidence crisis

Mounting global uncertainties have hit economies around the globe. Among the advanced economies, especially the euro area, the outlook has deteriorated rapidly. The counterstrike of major central banks has begun, and many bond yields have sunk to unprecedented levels. The USD benefits from the uncertain environment.

The weakening of the global outlook is a given. The main question relates to the magnitude of the slow-down. Is growth merely slowing, or are we heading straight into a global recession?

We remain modestly optimistic in the sense that a global recession can still be avoided, but there are differences by country. The euro area does not have a large buffer against a recession any more, and especially the German economy is already on the brink of recession, as is the UK. The US, by contrast, is still doing relatively well, thanks to its positive domestic economy. The US outlook is also aided by easier monetary policy and a more favourable fiscal policy outlook than looked likely just some months ago.

The state of the Chinese economy is one of the big uncertainties. The official data is still pointing only to a gradual slowdown, but the real picture is unlikely to be quite so sanguine. The stimulus measures are having an impact and fiscal stimulus will be complemented by more monetary easing, but no big-bang stimulus package is likely this time. We hold on to our view of a gradual slowdown. That is at least what the official GDP data will continue to show.

The major central banks have started their counterstrike against the mounting signs of a slowdown at a time when inflation has still mostly been undershooting their targets. The Fed has cut rates once and even if its basic message has been one of a mid-cycle adjustment in monetary policy, more cuts are ahead. The ECB will launch an entire package of easing measures in September and will probably do more under the new president.

Unfortunately, the main sources of uncertainty have not gone away, almost the opposite. There has been a further escalation in the trade war between the US and China, and the clashes go far beyond trade. Some even talk about the start of a second cold war. We do not think we have seen the last shot fired in the trade war and expect Trump to eventually extend tariffs of 25-30% to virtually all Chinese exports to the US.

From an economic growth perspective, it would not necessarily take the removal of the tariffs to lower uncertainty and have a positive impact on growth. Only having some clearer visibility and more certainty that further rises would not be on the cards would be enough to lower uncertainty.

In Europe, a no-deal Brexit remains on the table, while Italy may be heading towards early elections.

The combination of the weakening economic outlook, increasingly dovish central banks and major global uncertainties taking their toll on risk appetite has fed a massive rally in government bonds. Yields have plummeted globally, and in the euro area, have fallen to levels never seen before. The entire German curve is now trading in negative territory.

3

Number of rate cuts we expect from the Fed until the end of 2020

-0.6%

The low we expect for the ECB's deposit rate

0.7%

Annual GDP growth we expect for the euro area economy in 2020

Risks still tilted to the downside

Risks to the global economy are firmly tilted to the downside. A further escalation and broadening of the trade war remains our biggest concern.

Given the uncertainties, risk appetite has still held up relatively well, no doubt helped by the prospects of easier monetary policy ahead. A larger correction in risk appetite and the tighter financial conditions it would bring remain one of the key risks, especially in the US, even if easier central bank policy should alleviate that risk to some extent.

On the upside, the boost to confidence from easier central bank and possibly also fiscal policies could prove to be larger than we have in our baseline. This could be the case especially in the US.

German economy on the brink of recession

Bad economic data has continued to flow in especially from the German economy and the industrial sector. So far, the broader economy has been largely able to resist the downward pressure from the weakening industrial sector, but that picture is now changing, at least in Germany. The fall in unemployment has halted and wage growth has probably peaked. Further, confidence data implies that significantly weaker times are ahead in the services sector as well.

As a whole, the euro area economy has continued to grow, as the gap between weak manufacturing and resilient services has not closed. Total employment has continued to grow as have wages, which have supported the domestic economy. As is the case in Germany, we expect the continued uncertainty and the weak manufacturing sector to gradually burden the service sector increasingly as well and euro area GDP to grow clearly below potential for several quarters. In this environment, inflation will not return to target and the ECB will need to unleash more easing.

While we do not expect further monetary stimulus to materially change the course for the euro area economy – it would take a removal of the global uncertainties to do that – the central bank cannot admit it has lost the game. As a result, the ECB is likely to announce a package of measures at its September meeting, including at least strengthened forward guidance, another rate cut and a restart to its net asset purchases. We expect a further easing package at the December meeting, after Christine Lagarde takes over the presidency of the ECB.

The discussion of Germany trying to boost the economy via fiscal stimulus has picked up in earnest. However, the current government, including Chancellor

"The main sources of global uncertainties have only intensified, hitting the global outlook."

Jan von Gerich Nordea Chief Analyst

A / The global outlook has continued to deteriorate



B / Risks remain tilted to the downside

Our assessment of the most prominent risk factors

Risk factor	Type of risk	Likelihood	Magnitude
Escalation of the trade war - tariffs on cars and focus on currencies	Downside	Considerable	e High
Rapid tightening of financial conditions	Downside	Medium	High
Recession in the Euro area	Downside	Medium	Medium
Boost to confidence from more central bank (and fiscal) easing	Upside	Medium	Medium
Faster US growth due to easier fiscal and monetary policy	Upside	Medium	Medium
Quick removal of tariffs between the US and China	Upside	Low	Medium
			Source: Nordea

**** /

Manufacturing PMIs have fallen globally.

B/

Escalation and broadening of the trade war the most prominent downside risk.

Sources: Nordea and Macrobond

GDP GROWTH FORECAST, % Y/Y

GDP GROW	H FURECA	31, 70 1/	T													
	Wo	orld	Adva	anced	Eme	rging	U	s	Euro	area	Chi	ina	Jap	an	U	K
	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old
2018	3.7	3.6	2.2	2.2	4.7	4.6	2.9	2.9	1.9	1.8	6.6	6.6	0.8	0.8	1.4	1.4
2019E	3.0	3.3	1.6	1.8	4.1	4.3	2.3	2.6	1.0	1.0	6.2	6.2	0.9	0.6	1.2	1.3
2020E	2.9	3.3	1.1	1.4	4.3	4.5	1.5	1.5	0.7	1.2	5.9	5.9	0.4	0.7	1.2	1.3
2021E	3.3		1.5		4.6		1.9		1.1		5.7		0.4		1.4	

Merkel, the CDU leader Annegret Kramp-Karrenbauer and Finance Minister Scholz from the SPD have all pledged to support the so-called black zero policy of no deficits. Further, the German constitution includes a debt brake that limits the federal structural deficit to 0.35% of GDP. As a result, while targeted and small-scale measures, such as more government support for shorter working hours, appear likely, it would probably take a clearly rising unemployment rate to make the current government announce more sizable fiscal easing. Also a change of government could result in easier fiscal policies.

The French economy appears to have turned a corner and left the worst domestic uncertainties behind. Economic growth remains decent at least compared to Germany, and Macron's reforms are likely to continue, albeit in a slower and somewhat more modest fashion compared to his original agenda.

Political uncertainty has increased again in Italy, as Salvini, the leader of the junior coalition party Lega, has pulled its support from the current government. While an alternative majority within the current parliament looks likely, it is unlikely to be durable and we still expect to see early elections next year at the latest. While Salvini may not seek to take Italy out of the euro area, even if he becomes prime minister, he will present the euro area economy and financial markets with an additional source of uncertainty. Salvini would no doubt seek to raise the Italian public deficit, but the economic effects of easier fiscal policy would be at least partly offset by the negative consequences of higher uncertainty and possibly another rise in Italian bond yields.

Some good news from the US economy

While the industrial sector has been under pressure in the US as well, the domestic economy is very much in line with a slowdown narrative rather than an outright recession. Household consumption remains relatively strong, employment is growing, while the fall in interest rates will support the housing market and construction.

The Fed has started easing monetary policy rather early compared to earlier business cycles, and unlike in the euro area, there is some room for the central bank to cut rates in a way that actually bites in the economy. Fed rate cuts will continue later this year and also next, building a buffer against a recession.

Also the fiscal outlook has turned much more favourable for growth. The budget agreement reached in Congress in July removed the previous caps on federal spending, and fiscal policy can now actually be even mildly expansionary next year. While the US fiscal outlook implies a totally irresponsible policy with no concern for rising federal debt in the longer-term perspective, on a shorter horizon it acts as a further buffer against a recession in the US economy.

Bond markets in unprecedented territory

Bond yields plunged to new record lows in a number of countries during the summer, as the levels previously seen as some sort of a floor were broken. As central banks have not given any clear benchmarks to the extent of their easing potential, the markets have been free to price in strong easing measures amidst weak data flows.

Curves have inverted in a number of countries, which takes away one argument to buy longer bonds, namely the yield pick-up available, when the curve is upward-sloping. While it is relatively easy to argue that the bond rally is warranted in light of the deterioration in the outlook, intensified global uncertainties and the signals from major central banks, a further

"The outlook for the German economy is increasingly worrvina."

Jan von Gerich Nordea Chief Analyst

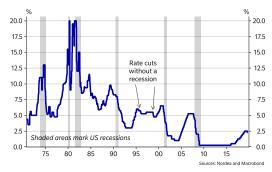
C / The outlook for also German services weakened

Ifo current vs expected situation in the German services sector



D / The Fed can cut rates without a recession as well

The history of Fed rate cycles vs. US recessions



C/

The services sector is increasingly feeling the heat as well in Germany

D/

The Fed has managed to cut rates pre-emptively a couple of times in the

Sources: Nordea and Macrobond

significant fall in yields would not be consistent with our baseline economic and central banks forecast.

We note that the bond market is already pricing in a more negative economic scenario than we see. The same applies to the short end of the curve: the market is pricing in deeper cuts from both the ECB and the Fed compared to what we see in our baseline scenario.

That said, we do think the global uncertainties will continue for quite some time, which will lead to subdued economic performance throughout our forecast horizon. In such an environment, an eventual pick-up in growth will be slow and will not support much higher yields.

The USD will remain supported

Even if the US is at the epicentre of the current geopolitical crisis, including the trade war, the US dollar will continue to benefit from safe-haven demand. Despite the longer-term US fiscal challenges, there is no real alternative to the USD and the US Treasury market, as far as finding a safe asset is concerned. The uncertain environment will mean that the USD will stay stronger for longer.

The USD will lose its appeal only gradually further out, when the biggest pressure on risk appetite eases, assuming we are right that the economic uncertainty will eventually lift or at least stabilise. This would still not lead to a much higher EUR/USD at the end of our forecast horizon compared to today.

On a shorter horizon, we expect EUR/USD to fall further. In addition to the uncertainty argument, the debt ceiling agreement reached in July means that the US Treasury will replenish its cash account at the Fed, which it was earlier using when it was not able to raise new debt. This operation will mean a fall in USD liquidity, which should be USD positive.

Large moves in the GBP possible

As the end of October nears, Brexit-related uncertainty will only grow, which will probably still take EUR/GBP a bit higher.

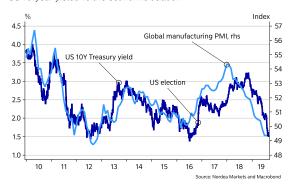
Still, the uncertainty about the eventual outcome is large as is the number of possible scenarios for how the Brexit debacle could end. Prime Minister Johnson is taking the UK towards a no-deal Brexit, while the Parliament is strongly opposing this and looking for ways to stop him.

"Easier monetary and fiscal policies add a buffer against a recession in the US"

Jan von Gerich Nordea Chief Analyst

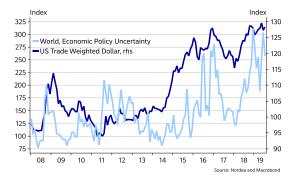
${\bf E}$ / The fall in long yields driven by the weaker outlook

US 10-year yields vs the economic outlook



F / USD in demand in uncertain times

USD vs measures of global uncertainty



E/

Benchmark bond yields have fallen again.

F/

The uncertain economic environment supports the

Sources: Nordea and Macrobond

FOREIGN EXCHANGE RATES, MONETARY POLICY RATES AND BOND YIELDS, END OF PERIOD

					ECB	Fed	US	Germany
	EUR/USD	EUR/GBP	USD/JPY	EUR/SEK	Deposit rate	Fed funds target rate (up- per end)	10Y benchmark yield	10Y benchmark yield
2018	1.14	0.90	110	10.1	-0.40	2.50	2.69	0.24
2019E	1.08	0.94	104	11.0	-0.60	1.75	1.55	-0.65
2020E	1.17	0.88	112	10.5	-0.60	1.50	1.80	-0.45
2021E	1.22	0.87	115	10.3	-0.60	1.50	1.85	-0.35

Our baseline is that there will be another extension until the end of March 2020 and that we will see early parliamentary elections later this year. We still believe that Brexit with a deal is the most likely outcome, but it is hard to have especially strong convictions in the current environment.

With a number of scenarios very possible, large swings in the GBP look likely, when market pricing swings from pricing in one alternative to another. Our baseline of an eventual Brexit with an agreement leaves some upside potential for the GBP longer out.

Further slowdown but not a collapse in China

Uncertainty about the true state of the Chinese economy has increased. It is safe to say that growth has slowed down and there are a lot of question marks. Also the accuracy of the official growth numbers has received increased scrutiny lately. We continue to find a soft landing the most likely scenario, but especially the trade war and broader political uncertainties are an increasingly dark cloud over the Chinese economy

We were a bit surprised by China's seeming unwillingness to compromise in the negotiations to find a solution to the trade war, which was one reason behind another escalation of the dispute. Such a stance suggests that despite the weaker economic environment, President Xi cannot appear weak in the negotiations and cannot compromise too much. As a result, finding an agreement will be difficult.

The weaker economic outlook will probably lead to more monetary easing to complement fiscal easing. So far, the central bank has mainly lowered its reserve requirement, but we expect rate cuts to follow rather soon.

On the FX front, the CNY has received a lot of attention after USD/CNY breached 7, a level that was previously seen as key regarding the future direction of the currency. We expect further weakening of the CNY, but in a more controlled manner. Further weakening will be driven by market pressure but is also in

the interest of the Chinese authorities to offset some of the effects of the US tariffs. Further weakening of the currency could lead to a vicious circle, where the weakening would spur capital flight, which in turn would accelerate the pace of weakening and probably force China to reintroduce capital controls.

Elsewhere in the EM space, growth is set to remain weak for the rest of the year on the back of last year's rapid FX depreciation, tightening financial conditions in the US and the ongoing trade war. The most exposed countries are the notoriously politically unstable and indebted countries such as Turkey and Argentina, while also Brazil, Mexico and South Africa should face weaker growth in 2019 than expected. Looking further ahead, we expect EM to remain vulnerable and volatile before seeing some recovery in the second half of 2020.

BoJ will struggle with the JPY

The Japanese economy cannot exactly thrive in this environment either and the global uncertainties will make it increasingly difficult for the Bank of Japan to reach its inflation target. Prime minister Abe remains committed to raising the sales tax in October, which will be a further burden for the economy.

The BoJ has had it relatively easy in terms of its yield curve control lately, as the markets have been doing the work for it amidst the global fall in bond yields. As the Fed is easing, the ECB is preparing to announce an easing package, and the BoJ is not about to add monetary stimulus, the JPY is facing strengthening pressure, which is certainly not welcome for the BoJ.

The stronger currency will put pressure on the BoJ to ease policy further, but the central bank will struggle to keep up. The JPY will probably not start to weaken in earnest until the global economic environment picks up, safe-haven flows abate and the downward pressure on bond yields eases.

-0.45%

The level we expect the German 10-year benchmark yield to reach by the end of 2020.

1.17

The level we expect EUR/USD to hit by the end of 2020.

0.88

The level we expect EUR/GBP to reach by end-2020.

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"Global uncertainties could push the euro area economy towards a recession"

Jan von Gerich Nordea Chief Analyst

"Norway is the outlier due to its industry structure."

Erik BruceNordea Chief Analyst

The Nordics in brief



The Nordics can't operate in a vacuum and with the global outlook dimming, this is playing out to different degrees in local markets. Sweden and Finland have most to fear from a slowdown and that is likely to usher in a difficult 12-18 months. Conditions in Denmark are much more benign, while it's water off a duck's back for Norway as it looks set to prosper on the back of investment in the oil sector filtering through the economy.

SWEDEN

The Riksbank interest rate

-0.5%

That's where the Riksbank repo rate is expected to be at the end of this year, signaling a further cut of 25 bps. With GDP growth slated for 1.0% in 2020, it's not exactly batten-the-hatches-down time, but it is indicative of a caution that will keep the economy in check for some time though there will be some stabilisation in conditions in 2020.

/ page 14

DENMARK

GDP growth in 2020

1.5%

That's expected GDP growth in 2020, underpinning the belief that Denmark will ride out any global turmoil with relative ease. While that's not to say the economy is impervious to global ripples, stability in the housing market and further central bank rate cuts on the way should keep the economy bubbling along nicely even if exports take a hit.

/ page 18

NORWAY

Wage growth in 2019

3.4%

Norway's the definite outlier in the Nordics and it is no surprise then to see wage growth for 2019 marching forward at such a prodigious rate. With oil investments offshore rising sharply, that is likely to keep momentum in place until 2021 but a key challenge could emerge if growth in the workforce cannot keep pace. Immigration is unlikely to meet demand.

/ page 22

FINLAND

GDP growth in 2021

0.5%

That number reflects a sharp downturn in Finland from the 1.2% projection for 2019 and underpins the belief that global trade difficulties are beginning to work their way through the economy. The euro area is in difficulty and key trading partner Germany in particular looks to be heading towards recession which is likely to hit Finnish exports hard.

/ page 26

SWEDEN

Frosty times

The Swedish economy continues to weaken. Domestic demand is sluggish and exports are losing momentum. Unemployment is rising and resource utilisation will drop below normal levels. The Riksbank will lower the repo rate and the SEK is facing stiff headwinds. There are plenty of risks but the economy is expected to stabilise next year.

The slowdown in the Swedish economy is becoming increasingly evident. Domestic demand has been stagnant since early 2018 and employment has consequently declined. Exports have been surprisingly high over the past year, but indicators suggest a dampening going forward.

Sluggish ahead

Economic activity in H2 2019 will remain sluggish, with weak consumption, falling investment, stagnant exports and lower employment. We cannot rule out a GDP contraction during the coming quarters.

We believe that conditions will stabilise next year. The sharp plunge in interest rates worldwide and lower oil prices will stimulate export demand. And uncertainties related to the trade war should diminish. The domestic scene has also seen a shift – from rate-hike signals to a general view that the low interest rate level will persist.

This supports the view that the housing market, and residential construction will level out. Household consumption should pick up, with GDP returning to growth next year. However, economic growth will undershoot the historical average and resource utilisation will fall below normal levels in the coming years.

Inflation remains a challenge for the Riksbank. The Riksbank will cut the repo rate as early as this year. The SEK is struggling to gain a firm footing and will likely remain weak during the forecast period.

-0.1%

Our forecast for employment in 2020.

1.0%

Our GDP forecast for 2020.

-0.5%

Our forecast for public sector financial savings, % of GDP.

Sources: Nordea estimates and Macrobond

There are always risks

While low interest rates support economic growth short term, they add to the vulnerability of the economy in the long term. Interest rates will likely remain low for the foreseeable future, but in case of an increase in a few years, contrary to expectations, a challenging situation will arise – not least for the Swedish economy.

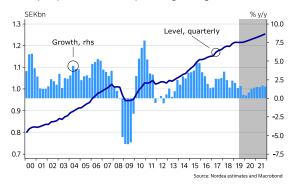
There are several other obvious risks to our forecast, including Brexit and growing tension between China and the rest of the world given the trade war and the situation in Hong Kong. Another risk is that we might underestimate the negative dynamics resulting from reduced production, a weaker labour market and muted income growth. To this should be added limited room for manoeuvre in monetary policy in several countries and regions. But things may also improve more than we expect – for example via economic stimulus from the current and future low interest rate environment. Still, risks to our baseline scenario are tilted towards the downside.

SWEDEN: MACROECONOMIC INDICATORS

	2017	2018	2019E	2020E	2021E
Real GDP (calendar adjusted), % y/y	2.4	2.5	1.4	1.0	1.6
Underlying prices (CPIF), % y/y	2.0	2.1	1.6	1.5	1.4
Unemployment rate, %	6.7	6.3	6.6	7.1	7.2
Current account balance, % of GDP	3.7	3.1	4.6	4.8	5.0
General gov. budget balance, % of GDP	1.4	0.9	0.0	-0.5	-0.6
General gov. gross debt, % of GDP	40.6	38.8	35.7	35.8	35.4
Monetary policy rate (end of period)	-0.50	-0.25	-0.50	-0.50	-0.50
EUR/SEK (end of period)	9.83	10.13	11.00	10.50	10.30

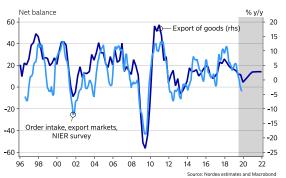
A / GDP growth sliding

SEKbn per guarter and annual percentage change



B / Stagnating exports in the near term

SEKbn per quarter and annual percentage change



Α/

There is a risk of GDP contracting in the coming quarters. Growth is expected to stabilise next year.

B/

Indicators point to a slowdown in exports this year. Some improvement is expected in the coming years.

Weak exports near term

GDP growth has slowed over the past year but nevertheless remained quite decent. The reason is that an unexpected spike in exports has disguised weaker trends in the domestic economy.

Exports of services rose particularly sharply – accounting for no less than 1% point of the GDP growth of 1.5% y/y in H1 2019. The increase was broadly based, but the strong performance of telecom operator Friesson seems to have added an extra boost

Exports of goods also showed a comparatively decent trend – once again seemingly thanks to sector-specific factors. Exports of pharmaceuticals rebounded, accounting for nearly half the increase in exports of goods in H1. Triangular trade has also gone up over the past year, that is, the profit margin on the sale of goods produced by Swedish companies abroad. Exports of vehicles have improved compared to last year, but the trend has levelled off. On the other hand, exports of commodities have contracted.

The manufacture of exports uses economies of scale and creates significant economic value. Moreover, some of the components that make up the increase in exports of goods and services, for example triangular trade, does not generate employment near term to the same extent as other areas of the economy. That explains why employment has decreased despite some growth over the past year.

All international and domestic indicators suggest that exports will stagnate in H2, which is also our forecast – although exports of services may show a somewhat stronger trend. Consequently, capacity utilisation in the industrial sector will fall and

investment activity will slow. During 2020, exports will gradually improve and this positive trend will remain intact during the forecast period.

Cautious households

Domestic consumption has remained flat since early 2018. The main reason is uncertainty among households.

Past evidence shows that fluctuations in housing prices have a huge impact on households' consumption and savings patterns. Now history is repeating itself. Since housing prices started to head south during H2 2017, consumption has stagnated and savings have gone up. The uncertain global outlook and volatile equity markets have probably also made households more cautious.

Real disposable incomes rose by 1.8% in 2018. Due to income tax cuts, income growth will remain close to 2% this year but decline to below 1% on average over the coming two years as employment growth levels off. Rising incomes support consumption, but households' income growth expectations are more important. When uncertainties arise, for example about the housing market, households tend to spend less and save up more – as we have seen over the past two years.

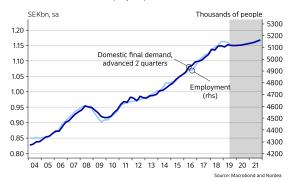
Lacklustre investment activity

The housing market is the main drag on investment activity. Residential construction peaked in 2017 with 64,000 new flats. Last year the number of housing starts fell to 52,000. We expect a decline to 44,000 this year followed by a levelling off to about 37,000 housing starts in 2020 and 2021.

"Since housing prices declined in 2017, consumption has stagnated and savings have gone up."

Torbjörn Isaksson Nordea Chief Analyst

C / Domestic demand and employment go hand in handSEKbn and number of employed persons



D / Worrying change in flows on the labour market

Share of non-labour force to employment and annual change



C/

Domestic demand has stagnated, which explains the weak employment trend.

D/

Fewer people go directly from being outside the labour force to employment, indicating further weakening of the labour market.

This year investment activity has also been subdued in other areas of the economy. In the industrial sector as well as a number of service sectors, trends have been weak. This lacklustre pattern looks set to continue this year and the next.

Neutral fiscal policy but with potential

The trend in public consumption is also weak. The fundamentally solid public finances could sustain an expansion of the public sector. But the fiscal policy line is restrained and growth in the public sector will be modest during the forecast period – particularly this year.

One of the reasons for the relatively tight fiscal policy is the government's ambition to fulfil budget targets. As a result, public finances have shown major surpluses over the past four years and government debt has shrunk as a percentage of GDP.

Public sector financial savings are projected to be in deficit next year for the first time since 2014, implying that public debt (Maastricht) will stabilise at around 35% relative to GDP.

As savings are negative, fiscal policy could be said to be somewhat expansionary although the effect on GDP growth is limited. Sweeping infrastructure investments are planned for the coming ten years to the tune of SEK 65bn on average per year. The effect will likely not be visible until the latter part of the forecast period. If, contrary to expectations, economic trends worsen significantly, fiscal policy will probably play a more active role in terms of stabilising the economy – particularly as the monetary policy room for manoeuvre is exhausted. However, for that to happen, the economy will have to deteriorate sharply.

Weaker labour market

Employment has been on the rise for the past ten years. Not even the stagnation in 2012 when GDP growth was zero made any major difference – in fact the number of people employed rose by as much as 0.7% that year.

The labour market now seems less robust. Employment contracted during H1 2019 due to the slowdown in domestic demand, while unemployment rose, albeit from low levels. All labour market indicators point in the wrong direction – not least the figures for labour market flows. The percentages of both unemployed people and people outside the labour market finding jobs are at their lowest since the autumn of 2009.

We believe that employment will continue to decline somewhat during 2019, but the trend should subsequently stabilise. Unemployment will level off at about 7% at the end of the forecast period. In addition to the economic performance, employment is hampered by demographic factors, for example the decrease in the number of Swedish-born people of working age, who have a very high labour market-participation rate. Demographic effects on unemployment are more limited as lower population and labour-force growth offset the increase in unemployment

Important pay talks

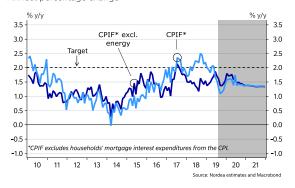
Despite a historically strong labour market, the rate of wage growth has not accelerated. In fact, it has remained stable at around 2.5% annually during the past six years. During the spring of 2020, 500 new pay deals need to be negotiated, covering all sectors of the economy and 2.8 million wage-earners. We expect the outcome of the coming pay round to be on

"The overall picture is that inflation will remain a challenge for the Riksbank."

Torbjörn Isaksson Nordea Chief Analyst

E / Too low inflation

Annual percentage change



${\bf F}$ / $\,{\bf Reduced}$ risks on the housing market in the near term

Factors that could affect our baseline scenario

Downside	Small	High
		riigii
Upside	Medium	Medium
Downside	Medium	Medium
Ambiguous	Medium	Medium
Ambiguous	Medium	Medium
Downside	Considerable	Medium
	Downside Ambiguous Ambiguous	Downside Medium Ambiguous Medium Ambiguous Medium

E/

Risks associated with household debt and the housing market have been reduced in the near term, but will remain in the longer term

Inflation will remain under

the 2% target throughout

the forecast period.

a par with that of the previous one in 2017, that is, three-year agreements with annual pay rises of about 2%.

A key factor for the pay round is that the manufacturing industry traditionally sets the benchmark that other sectors follow. Weaker global demand puts a damper on wage claims in industry. Moreover, employment is expected to contract also in other sectors. Wage drift is expected to remain low in future. Total wage growth, that is the combination of payround increases and wage drift, is likely to remain at about 2.5% over the forecast period.

Still subdued inflation

Moderate wage growth implies continued subdued domestic inflation. As is often the case, inflation depends to a large extent on the trend in energy and food prices and the performance of the SEK exchange rate.

Prices of energy and food have risen rapidly in recent years, mainly as a consequence of supply disruptions. In 2018 higher energy and food prices accounted for about 1% point of inflation.

Energy prices have declined this year, now contributing to keeping inflation down. Food prices, on the other hand, have moved further up. This year's harvest in Sweden looks set to be better than in several years, and at the same time global food prices are

stable. We expect food prices to continue to rise, but at a much lower rate than in recent years. The weak SEK has lifted inflation this year, albeit not by as much as expected. Lastly, the effects of the SEK weakening, although unexpectedly modest, should abate going forward.

The Riksbank will cut rates

CPIF inflation will be at or below 1.5% over the forecast period. In turn, this means that inflation expectations may remain stuck below the 2% mark. We therefore expect the repo rate to be cut by 25bp to -0.50% in December this year and remain at that level during the entire forecast period. The QE-programme may also change in order to stimulate the economy.

SEK still facing headwinds

Given the weak domestic demand, Sweden's relative growth advantage is history. Moreover, the Riksbank's rate cut will weigh down on the exchange rate near term. That is why we expect the SEK to weaken against the USD as well as the EUR until the turn of the year — before gaining terrain. The drivers of the appreciation longer out will be the Riksbank leaving its monetary policy unchanged while some other central banks pursue new stimulus measures. The strengthening will be gradual, and the SEK will trade at historically weak levels also at the end of the forecast period.

Torbjörn Isaksson

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DENMARK

Solid bulwark

The Danish economy is well positioned to withstand the negative impulses from lower global growth. However, as Denmark is a small open economy, some impact cannot be avoided and therefore growth in the years ahead will be slightly lower than previously expected.

Since 2013 the Danish economy has grown at an annual average rate of some 2%. This is slightly above the potential level so during this period employment has also grown at a healthy clip.

Global ripples

The significant global uncertainties recently have, however, started to show through in the Danish economy. Over the past few months employment growth has slowed, and business confidence in Danish industry is close to its lowest since end-2016.

But the good news is that the Danish economy is well positioned to withstand the effects of the global slowdown. Both households and businesses have built up huge savings that can be used if the global slowdown starts to bite in earnest.

The housing market is free of any major imbalances, and more and more homeowners are taking advantage of the sharp drop in interest rates to refinance their mortgages into fixed-rate loans to protect themselves against future interest rate rises. Lastly, the diversity of Danish exports is significant, which makes Danish exports less vulnerable to a global slowdown compared with many other countries.

Against this backdrop we stick to our forecast and look for growth in the Danish economy of 1.8% this year. In the coming two years growth is expected to slow again to around 1.5%, which is on a par with the potential long-term growth rate given the current circumstances. The expected decline in growth will mainly be driven by lower exports and slightly lower

1.5%

Expected GDP growth in 2020

25%

Estimated risk of an economic recession in coming years

-0.85%

The expected level of the Danish central bank's policy rate in 2020

Sources: Nordea estimates and Macrobond

investment activity as a result of the deterioration of the global economy.

Resilient, but not immune

The prospect of only a moderate decline in growth over the coming years could be challenged if the global slowdown ends up being deeper and sharper than expected. A prolonged global slowdown could trigger a bigger-than-expected drop in exports, which through lower investment activity and increased uncertainty among Danish businesses could lead to lower employment and increased household savings. If that happens, we cannot rule out an economic recession also in Denmark at some point during the coming years. However, at this juncture we consider the probability of this scenario emerging as relatively small (around 25%).

On the other hand, the global uncertainties could abate to some extent, which means that the Danish economy might not be hit as badly by negative impulses from the global scene. If that happens, Danish GDP growth could well rebound above 2%.

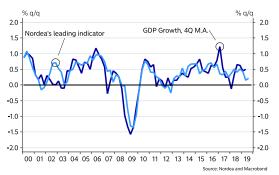
DENMARK: MACROECONOMIC INDICATORS

Monetary policy rate refers to the certificate of deposit rate

	2017	2018	2019E	2020E	2021E
Real GDP, % y/y	2.3	1.5	1.8	1.5	1.5
Consumer prices, % y/y	1.1	0.8	0.8	1.2	1.4
Unemployment rate, %	4.3	4.0	3.8	3.9	3.9
Current account balance, % of GDP	8.0	5.7	6.1	5.5	5.1
General gov. budget balance, % of GDP	1.4	0.6	2.0	0.6	0.0
General gov. gross debt, % of GDP	35.5	34.2	33.7	33.4	33.2
Monetary policy rate, deposit (end of period)	-0.65	-0.65	-0.85	-0.85	-0.85
USD/DKK (end of period)	6.20	6.53	6.91	6.66	6.38

A / Leading indicators point to a growth slowdown

Quarterly change in actual GDP and model



B / Risk scenarios

Factors that pose a risk to our baseline scenario

Risk factor	Type of risk	Likelihood	Magnitude
Global slowdown led by Europe	Downside	Considerable	High
Hard Brexit	Downside	Medium	Medium
Sharp downturn in housing prices	Downside	Low	High
Higher global trade and stronger external demand	Upside	Medium	High
Increased marginal propensity to consume in households	Upside	Medium	Medium
Fiscal easing	Upside	Medium	Low

Source: Nordea estimates

Α/

Leading indicators suggest that growth in the Danish economy will slow going forward.

B/

Both upside and downside risks to the main scenario.

Danish exports benefit from strong fundamentals

Danish export companies are basically well equipped to withstand lower global demand. Their competitiveness in terms of wages has sharply improved over the past ten years and export prices have begun to rise faster than import prices. Moreover, in recent years, Danish exports of green technology and pharmaceuticals have increased sharply and these products are traditionally some of the least sensitive to changes in global market sentiment.

The strong fundamentals of Danish export companies will, however, not be sufficient to cushion the economy from the global slowdown. The slowdown especially in the German and Swedish markets will affect Danish subsuppliers and the food industry may be hit hard by the unresolved situation surrounding Brexit. Also the large Danish shipping sector, accounting for almost half of total Danish services exports, may be adversely affected by the decline in world trade – even though the actual numbers for the sector do not yet show signs of a slowdown.

Against this backdrop we expect Danish exports to grow by 2-3% in coming years. However, import growth, underpinned by stronger domestic demand, will still outstrip export growth. That is why we also expect the current account surplus to decline from the current level of around 6% of GDP.

The growing uncertainty about the global economic growth outlook is also likely to cause business investment activity to stagnate. However, the slowdown will take place at a relatively high level as particularly investment in intellectual rights such as R&D and computer software has risen sharply in recent years.

Lucrative environment for households

The solid growth in the Danish economy since 2013 has boosted household incomes as employment has gone up and the low rate of inflation has led to a significant increase in real wages.

At the same time many Danish homeowners have taken advantage of the low interest rate level to refinance their mortgage loans. This has contributed to sharply reducing households' interest expenses, which are now almost 75% lower than ten years ago. This decline in interest expenses corresponds to nearly 10% of total annual household consumption. Moreover, when refinancing their loans many homeowners have chosen loans that offer a higher degree of consolidation and safety. Hence, more and more homeowners choose fixed-rate mortgage loans and the number of loans with an interest-only period is at its lowest level in more than ten years. So, in addition to boosting households' purchasing power the low interest rate environment has also made households more resilient to interest rate increases.

We expect household consumption to grow at a slightly slower pace in the next few years compared with previously. The reason is the increased uncertainty on the economic outlook and a slowdown in employment growth. However, thanks to the marked increase in incomes and households' vast wealth accumulation in recent years, consumption will still grow at a healthy clip and contribute to keeping a floor under overall growth in the Danish economy.

"The underlying fundamentals for the Danish economy are strong – but global uncertainties could put a lid on growth."

Jan Størup Nielsen Nordea Chief Analyst

C / Solid export growth

Quarterly trend in total exports, level and change



D / Employment growth has slowed

Number of wage-earners in the Danish labour market



C /

Export continues to grow.

D/

The number of wageearners in the Danish labour market has been rising steadily since mid-2013. However, in recent months this upward trend has been replaced by stagnation.

Busy autumn on the political front

At end-June Denmark got a new Social-Democratic minority government backed by the left-wing parties and the Social Liberal Party. The new government has made a major review of government budgets and, based on that, will present its draft finance bill for 2020 towards the end of September.

The political document (the so-called "forståelsespapir") negotiated by the government and the parties backing it lays down conditions for the government's economic policy. One condition is that spending proposals must be fully financed and another is that new initiatives must not have a negative effect on employment. The new government also wants to increase public spending in order to meet demographic needs and provide a real welfare boost. In addition, one of the government's top priorities is to get a new climate act passed that aims at reducing the emission of greenhouse gases by 70% relative to the 1990 level before 2030. This could result in higher public investment spending, which coupled with the expected increase in public consumption spending could make it difficult for the government to fulfil its ambition to ensure balanced public finances by 2025.

Labour market in balance

Since early 2013 the number of wage-earners in the Danish labour market has increased by nearly 250,000. Most of this increase is made up of foreign labour, currently accounting for about 10% of total employment. At the same time, reforms have increased the labour force participation rate of persons aged 60+ sharply. Also the participation rate of refugees and immigrants has increased. Combined, this has helped to reduce the number of people on welfare benefits by almost 20% since 2010.

As a result of the increase in the labour force, the current number of unemployed corresponds to just over 100,000 full-time equivalents (3.8% of the labour force), which is largely on a par with the structural level. Due to the expected slowdown in economic activity we look for only modest employment growth of a total of around 40,000 persons until end-2021. This means that unemployment will remain around the current level and that the fears of mounting bottlenecks will gradually fade.

Central bank ready to cut rates

We expect the European Central Bank to cut rates further before 2020. In order to defend the Danish fixed exchange rate regime the Danish central bank will likely follow suit, bringing its key policy rate down to -0.85% by the end of the year.

The prospect of rate cuts also does not mean that market rates will go down further. Current market rate levels already factor in significant monetary policy easing. This is a pattern we have seen previously, with markets pricing in the effects of central bank moves long before they are actually made. That is why we also expect recent months' sharp decline in interest rates to gradually level off during the autumn in tandem with the central banks delivering the easing already priced in by the market at current levels.

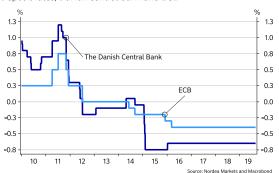
So, we expect Danish market rates to move largely sideways around current levels until the beginning of 2020. After that, we expect a reversal of global economic trends to gradually dampen expectations of further monetary easing and ultimately pave the way for moderately higher Danish market rates.

"New rate cuts from the Danish central bank are in the pipeline."

Jan Størup Nielsen Nordea Chief Analyst

E / Danish central bank and the ECB likely to cut rates

Deposit rates, Danish central bank and ECB



F / Regulations have dampened the housing price uptrend

Trend in nominal housing prices



Ε/

Policy rates at the Danish central bank and the ECB are heading towards new record lows.

F / After having risen sharply for a period, prices of owner-occupied flats have started to move sideways.

Uncertain times in the housing market

With the declining interest rates, homeowners are offered the cheapest mortgage loans ever. This applies both to the fixed-rate segment where mortgage lenders during the summer started to offer 30-year bond loans with a coupon rate of a mere 0.5% and to the floating-rate segment where the cash loan rate including the administration and reserve fee in some cases is below 0%. In theory, more Danish homeowners could find themselves in a situation where they are actually paid interest on their mortgage loans. However, for this to happen market rates would have to decline further; a scenario that we have not pencilled into our baseline.

The sharp decline in mortgage rates since November 2018 has contributed to boosting activity in the housing market. In H1 2019 prices of single-family houses rose by about 3% on average compared with the year-earlier period. In the market for owner-occupied flats, the downtrend in prices which began in mid-2018 has been replaced by slightly rising prices, and growth in the number of owner-occupied flats on the market has slowed.

We believe that the recent pick-up in housing prices does not mark the onset of a new period of sharply rising prices. The reason is first and foremost that the Danish authorities have repeatedly tightened the regulation of the housing market to dampen the effects of the sharply declining interest rates. One example is the guidelines calling for caution in the credit quality assessment of borrowers applying for

mortgage loans on property located in growth areas. These guidelines stipulate that homebuyers' debt cannot exceed four times their annual income unless their existing wealth can withstand a price drop of 10%. If the debt-to-income ratio is above 5x, their existing wealth must be able to withstand a price drop of 25%. This requirement prevents some first-time homebuyers from entering the housing market in Copenhagen and Aarhus.

Also, a majority in the Danish parliament has decided to introduce a new property tax system at the beginning of 2021. In our opinion, this measure alone will contribute to reducing prices of owner-occupied flats by 5-10%, but probably contribute to lifting prices of single-family houses by a couple of percent. However, it is still uncertain when this effect will actually show through in prices.

We expect prices of single-family and terraced houses to rise by 2-3% annually on average in both 2020 and 2021. Assuming we are right, this will only be slightly faster than the expected increase in inflation. However, the ultimate test of the fundamental strength of the housing market will be how the market responds to higher mortgage rates when they start rising. At that time notably homeowners in the most expensive areas will face both rising financing costs and stricter credit standards. However, we do not expect this to happen within our current forecast horizon.

"Due to tighter regulations housing prices will only slowly edge higher."

Jan Størup Nielsen Nordea Chief Analyst

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NORWAY

In the clear

Norway will not be hit by the same kind of weakness currently seen in neighbouring countries due to the structure of the Norwegian corporate sector. Sharply rising oil investment will pull up growth, but strong demand in the mainland economy and especially private consumption will prove to be the main driver. The labour market will continue to tighten and wages will accelerate further. Norges Bank will hike rates, but the global uncertainty warrants caution. The NOK will remain at historically weak levels but strengthen slightly over the coming years.

Growth in many countries is now slowing mainly due to weak manufacturing trends. The manufacturing sector only makes up a small part of the economy and the big question is whether the current weakness will spill over to the rest of the economy, which at least so far has performed quite well. Redundancies in industry could quickly harm consumption and thus a larger part of the economy.

In Norway the situation is different. Industrial production has gained momentum this year and although the pace will probably slow over the coming years, there are no signs of a downturn on the horizon. That is why there is no reason to expect the Norwegian economy to be hit by the same kind of weakness seen in many other countries.

Manufacturing industry – a growth engine?

A key factor behind the momentum in Norwegian industrial production is the oil companies' sharply increased offshore investments, not only on the Norwegian shelf, but also elsewhere. This has triggered strong growth in a key market for Norwegian industry. This market will likely slow going forward, but based on what we know about oil investment on the Norwegian shelf and elsewhere, the overall trend is not likely to flatten until 2021. The weak NOK should help Norwegian manufacturers to gain market share so we look for modest growth in the oil services industry also in 2021.

While growth in the oil-related industries will slow in future, commodity-oriented exports will likely enjoy a boost in coming years. Product prices in these industries have risen sharply over the past years, largely driven by the simultaneous NOK weakening.

+3%

Industrial output growth in Norway in June

-6%

Industrial output growth in Germany in June

3.4%

Wage growth in 2019

Sources: Nordea estimates and

These companies have sharply scaled up their investment activity this year, which will boost capacity and production going forward.

Some Norwegian exporters will of course feel the effect of the global slowdown, but the weaker NOK will probably cushion that effect. However, as these exporters account for only a small part of the Norwegian economy, this will not change our main conclusion: The global slowdown will not prevent solid growth in the sectors of the mainland economy that generate their earnings outside of the mainland economy.

Solid consumption growth

Without negative spill-over effects from the manufacturing sector as in some other countries, domestic factors will decide the pace of growth in the mainland economy going forward. In this context the outlook for private consumption is key.

Last year consumption growth was surprisingly weak given the sharply improved labour market. A key explanation is the sharp spike in electricity prices, which drove the CPI higher. As a result, real wage growth stagnated despite rising wages.

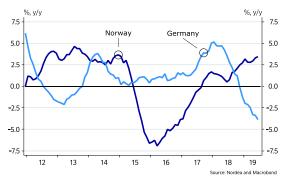
NORWAY: MACROECONOMIC INDICATORS

Monetary policy rate refers to the certificate of deposit rate

	2017	2018	2019E	2020E	2021E
Real GDP (Mainland), % y/y	2.0	2.2	2.5	2.3	2.1
Core consumer prices, % y/y	1.4	1.5	2.3	2.2	2.0
Unemployment rate, %	4.2	3.9	3.5	3.2	3.1
Current account balance, % of GDP	5.6	8.1	6.9	5.9	6.0
General gov. budget balance, % of GDP	4.9	7.3	5.9	5.1	5.1
Private consumption, % y/y	2.2	2.0	1.9	2.4	2.5
Monetary policy rate, deposit (end of period)	0.50	0.75	1.50	1.75	1.75
EUR/NOK (end of period)	9.82	9.90	10.25	9.75	9.60

A / Norwegian industry out of sync with other countries

Annual growth in industrial production in Norway and Germany



B / Balanced risk picture

Our view on key risk factors

Risiko faktorer	Type of risk	Likelihood	Magnitude
Sharp drop in oil prices	Downside	Medium	High
Escalation of the trade war with tariffs on cars	Downside	Considerable	Low
Rapid tightening of financial conditions	Downside	Considerable	High
Sharp increase in oil prices	Upside	Low	Low
Faster rebound in world economy	Upside	Medium	Low
Quick removal of tariffs between the US and China	Upside	Low	Low

Source: Nordea estimates

A /

While many other European countries are witnessing a downturn in industry, the opposite is the case in Norway.

в/

With widely fluctuating oil prices, the risk to the Norwegian economy is both on the upside and the downside.

Now the situation is the opposite. Electricity prices have declined again, thus significantly dampening consumer price growth. This, coupled with the wages spurt, has sharply boosted real wages this year. In the coming years, the increasingly tighter labour market could jack up wage rises further. Sustained low growth in energy prices and a somewhat stronger NOK should also keep inflation at relatively modest levels even though higher wages could lead to higher prices on goods and services produced in Norway.

Rising real wages is not the only factor suggesting stronger consumption growth ahead. Employment is now up at a rate close to 13/4%, which provides a strong boost to both household incomes and consumer confidence.

Slightly higher rates do not change the picture

Slightly higher interest rates will contribute to dampening the pick-up in households' disposable incomes, but the increase in interest rates will be far too modest to markedly change our expectation of strong income growth ahead. This year, higher interest expenses could shave 1/2% off households' disposable incomes, while strong employment and wages could boost incomes by a total of about 4%.

One could argue that higher interest rates would lead to higher savings and lower consumption growth. But, as noted above, the increase in interest rates will be too modest to have any significant effect. Moreover, strong employment figures, low unemployment and rising real wages will boost consumer confidence, which should underpin a scenario of rising consumption and lower savings.

The ultimate effect of interest rates on household demand also depends on their impact on housing prices. Our forecasts factor in an increase in average mortgage rates of around 1% point from mid-2018 to end-2020. This will contribute to dampening the rate of increase in housing prices. But the pick-up in interest rates is very cautious by historical standards, and interest rates are still at extremely low levels. It is also worth remembering that the pick-up in interest rates is driven by the strong economy combined with vibrant employment. This is a positive environment for housing demand. All in all, we look for a very modest increase in housing prices in the years ahead. We see a relatively low risk of falling housing prices making a dent in sentiment.

Mainland investment rising

Applications for building permits for new homes have increased nicely over the past year. And, even if they stabilise around current levels, the scene is still set for relatively strong growth in housing investment in the coming year before the trend might flat-

Investment in the manufacturing industry is currently rising sharply. Investment plans for 2019 suggest growth of over 30%. The commodity-based part of Norwegian manufacturing is now investing particularly heavily. However, in line with current investment plans we expect investment in industry to level off next year.

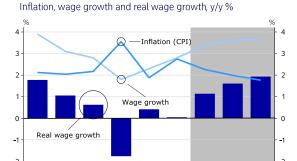
"In other countries, they worry about spill-over effects from the manufacturing industry. Not so in Norway."

Erik Bruce Nordea Chief Analyst

C / Strong growth in oil investment and industrial outputOil investment and industrial production



D / Wage growth heading higher



20

21

C/

Oil investment a growth engine.

D/

New times for wage earners. Real wage growth is rising.

In other mainland business sectors, investment activity levels have remained largely unchanged recently. But with rising production and increasing capacity utilisation we look for a more widespread, gradual pick-up in mainland business investment. We particularly expect to see higher growth in the services sector, which accounts for by far the biggest part of mainland business investment.

Moderate growth in public demand

Signals from the government indicate an almost neutral fiscal policy line in the years ahead. However, it will not be without challenges. With strong growth in state benefits, partly as a result of the aging population, they will absorb a large part of the relatively modest growth in expenditure this policy line implies. Aggressive investment in infrastructure coupled with the recent disagreement about toll financing will further increase the pressure on the state coffers. We think the government will largely fulfil its ambitions and look for relatively modest growth in public demand. But the risk is on the upside.

Labour shortages

Even though the impact from oil investment looks set to decrease next year, solid domestic demand will underpin the mainland economy. As a result, employment will continue to rise at a healthy clip.

Employment growth now by far outstrips growth in the working-age population. And this trend looks set to continue in the coming years. As a result, labour market pressures will increase. For many businesses, labour shortage will be a key challenge.

No help from immigration

14

It appears that immigration will not be sufficient to meet demand. In Q2 2019, immigration (gross) was at its lowest level since 2006. More prosperous times and strong labour markets in many of the home countries of potential immigrants have kept them at home. Consequently, immigration looks set to remain at low levels also in future.

Inflation at or above target

Over the past year, core inflation has picked up nicely and now exceeds the inflation target. The drivers have been the weaker NOK and accelerating wage growth. The recent NOK weakening will contribute to keeping up core inflation for a while yet, but importers will gradually adjust their prices and imported inflation will decrease. Also, the expected modest NOK strengthening later in the forecast period will add to the downward pressure on inflation.

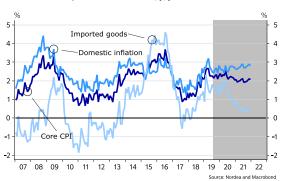
The reason why we nevertheless expect core inflation to be at or slightly above target over the entire forecast period is the strong wage pressure that could even accelerate further. Hence, the Norwegian labour market's textbook response with a tighter labour market leading to rising wage growth will likely continue also in future.

"Labour shortages will become a challenge, and immigration does not seem to be the solution."

Erik Bruce Nordea Chief Analyst

E / Core inflation down towards target

Domestic and imported core inflation, y/y %



Norges Bank hikes rates

Our baseline scenario is a global slowdown, but largely thanks to the structure of the Norwegian corporate sector, this will have a limited effect on Norway's economy. Growth will remain strong enough to add to the pressure on the labour market, and wages will accelerate. Meanwhile, core inflation will remain at or above target. The scene is thus set for further rate hikes. But global uncertainties have increased and as we do not expect the trade war to be resolved any time soon, uncertainties will likely persist. Consequently, Norges Bank should progress with caution. We look for one more rate hike this year in line with Norges Bank's recent interest rate forecast and then one more during 2020.

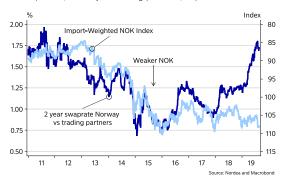
Risks not only tilted to the downside

The downside risk to our forecast for the Norwegian economy is mainly attributable to the global downturn, as it could prove worse than expected. This could result in tighter financial conditions and especially if a downturn ends up in driving oil and commodity prices lower, it will also hit the Norwegian economy.

On the other hand, the positive dynamics of domestic demand could prove stronger than we currently envisage. The labour market has surprised both us and Norges Bank on the upside since the mainland economy started recovering. Higher employment growth

F / No correlation between rate spread and NOK

2Y swap rates, Norway vs trading partners, % points



and a tighter labour market than currently predicted could lead to higher consumption driven by increased optimism and the wages boost.

Persistent weak NOK, but at slightly stronger levels

Previously, we would also have mentioned a rapid and sharp strengthening of the NOK as a downside risk to our view. The fact that Norges Bank "is allowed" to hike its policy rate while other central banks are cutting theirs is surprising. But recent years' experience tells us that rate spreads are no longer as important for the value of the NOK. Shifts in risk sentiment are now a far more important driver. So, the fact that high rates do not attract more NOK interest now may not be that odd after all. A 1-year interest rate profit from being invested in NOK assets could be eroded overnight by even a minor deterioration of risk sentiment. One tweet may be all it takes.

Against this backdrop we look for a relatively weak NOK going forward. Slightly longer term, we see the NOK strengthening a tad assuming some stabilisation of the global economic outlook and more stable risk sentiment. From a Norwegian perspective, the NOK will still remain historically weak, and the expected strengthening will be so modest that it will not significantly affect our relatively positive view on the Norwegian economy.

E / Stronger NOK argues for lower core inflation, while higher wage growth for higher domestic inflation.

F / The correlation between rate spreads and the NOK seems to have broken down.

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HIGHLIGHTS • Finland's growth outlook has weakened and economic growth continues at a decelerating pace • Slower growth is sustained by consumption, which is supported by increased purchasing power • Lots of uncertainty still enveloping Finland because of global factors • Raising the employment rate will be challenging going forward

FINLAND

In need of a turbo boost

Colder winds are blowing in the Finnish economy. Already in late 2018, growth decelerated sharply and the global economic outlook has become even more subdued since. Economic growth will slow down in the coming years and risks are tilted to the downside.

Although the Finnish economy has still been doing relatively well this year, we have already seen signs of weaker growth. Hence, we lower our growth forecast for 2019 from 1.5% to 1.2%. Going forward, the global economic weakness will hit Finland harder. We therefore expect the growth profile to remain on a downtrend and maintain our forecast of 1.0% for 2020 and expect 0.5% growth for 2021.

In the next couple of years, slower growth will be sustained by domestic consumption, which is supported by improved purchasing power. However, we expect the consumption growth to decelerate in 2021. Exports and investments will not offer a significant boost, as the weakening global economy and uncertainty take a toll on Finland's small open economy.

Weakness about to hit the export sector

Finnish exports have proven surprisingly resilient early in the year despite the stumbles of global trade that began at the end of 2018. However, the outlook for exports looks considerably gloomier going forward.

The economic situation of Finland's main trading partners has weakened and there is no quick recovery in sight. Close to 40% of goods exported from Finland go to the euro area with 15% going to Germany alone. This means that weaker economic growth in the euro area and the troubles in Germany's manufacturing sector will inevitably affect Finnish exports, too. According to the statistics of the Finnish Customs, exports to Germany already decreased remarkably in June, and we expect this downward trend to continue.

0.5%

GDP growth in 2021.

73%

Employment rate in

58.9%

Public sector gross debt to GDP ratio end-2018.

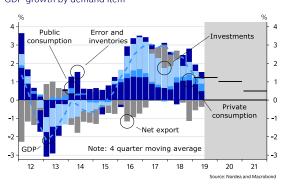
Sources: Nordea, Ministry of Finance and Macrobond Finnish exports also suffer from the current state of uncertainty due to their structure, as they are integrated into global production chains and a significant share of the exports consists of capital goods, which are affected by uncertainty and a weak economy more than most. Our current view of Finland's exports growth is more pessimistic than in our forecast for the spring. We do not expect Finnish exports to recover before the end of the forecast period, and even this requires the country to maintain an adequate level of competitiveness to succeed in the export market.

The wage negotiations between labour market organisations taking place in the autumn will determine whether Finland's competitiveness will decrease or increase in the next few years. Moderate wage raises in line with productivity growth would boost both competitiveness and the employment rate, while large raises would erode competitiveness, exacerbating the effects of the expected upcoming cycle. Moreover, the actions of Finland's competitors add to its challenges. Wage negotiations in Sweden are expected to result in moderate rises due to a weaker manufacturing outlook, for instance (Sweden's wage negotiations p. 16-17).

FINLAND: KEY FIGURES

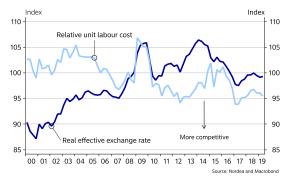
	2017	2018	2019E	2020E	2021E
Real GDP, % y/y	3.0	1.7	1.2	1.0	0.5
Consumer prices, % y/y	0.7	1.1	1.1	1.3	1.3
Unemployment rate, %	8.6	7.4	6.5	6.4	6.4
Wages, % y/y	0.2	1.7	2.5	3.0	2.8
Public sector surplus, % of GDP	-0.8	-0.7	-0.6	-1.2	-1.3
Public sector debt, % of GDP	61.3	58.9	58.5	58.4	58.7
ECB deposit interest rate (at year-end)	-0.40	-0.40	-0.60	-0.60	-0.60

A / Finland's growth will slow down in the coming years GDP growth by demand item



B / Competitiveness a key factor in exports

Finland's relative price competitiveness



Α/

Economic growth continues at a decelerating pace towards the end of the forecast period. We forecast growth of 1.0% for 2020 and 0.5% for 2021

B/

Finland's price competitiveness will be a key factor in exports. The wage negotiations in the autumn will largely determine the development of Finland's competitiveness.

Construction puts the brakes on growth

During the latest upcycle in Finland, economic growth was driven by investment and construction in particular. While investments have been on a rising trend since 2016, the pace is slowing down significantly this year already, as construction is beginning to hamper both investment and economic growth.

The main reason for this decline is the drop in residential construction. The decreasing number of construction permits since early 2018 has anticipated a slowdown in housing investment for a while now. New construction starts have followed this trend since the end of 2018 and the decline is expected to continue throughout the forecast period. The slowdown in housing investment does not, however, spell a collapse in residential construction. It constitutes more of a correction closer to the long-term average, as housing construction has been exceptionally high in recent years.

Investments needed to boost productivity

Productivity will play a larger role in driving economic growth in the future, as the size of the working population decreases. Nevertheless, productivity growth has been rather weak in recent years. To reverse this trend, it is necessary that production investments will continue.

One of the weaknesses of productivity growth has been R&D investment. In the past decade, R&D investment growth has been quite anaemic, leaving us far behind the figures before the financial crisis. To ensure productivity growth and economic growth potential, it would be crucial to have companies invest more in intangible assets too.

While growth in machinery and equipment investments has been brisk in the past few years, it has slowed down recently. Despite this, we expect machinery and equipment investments to continue to grow moderately in the forecast period, supported by consumption growth and favourable financial conditions. In addition, a tighter labour market and wage growth may incentivise companies to make investments in production which increase productivity and save labour. On the other hand, investments might be postponed due to uncertainty.

Growth in employment has halted

The employment rate took a sharp upward turn in the autumn of 2017 and growth in employment has been a major driver of economic growth since then. This year, however, growth in employment has come to a halt, with the employment rate trending at 72.4% in January to July.

Raising the employment rate will be all the more difficult going forward. One reason for this is that the mismatch in the Finnish labour market has increased. The share of hard-to-fill vacancies of all vacant positions has risen. Small and medium-sized enterprises identify the difficulty in recruiting skilled labour as their single greatest challenge. In addition, the number of the employed will increase more slowly in the coming years, as the size of the working population decreases. Reversing this trend would require especially higher labour immigration.

We forecast the employment rate to rise to 73% in 2021, which is far from the government's target of 75% in 2023. As employment growth will not be supported by the economic cycle in the next few years, it

"Raising the employment rate will be all the more difficult in the coming years."

Olli Kärkkäinen Nordea Senior Analyst

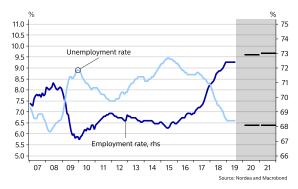
C / Elusive productivity growth

Investments and intangible investments



D / Employment growth has come to a halt this year

Employment and unemployment rates in Finland



C/

Investments in intangible assets have been trending down since the financial crisis but they are crucial for ensuring productivity growth.

D/

The brisk employment growth of recent years is behind us and raising the employment rate will be all the more difficult going forward. Employment growth will receive no boost from the economic cvcle.

will depend almost entirely on the reforms to the labour market and increasing competitiveness. The government, which took office in the spring of 2019, has yet to propose concrete employment measures whose effects could be taken into account in the employment forecast.

Uncertainty slows down consumption

In recent years, the purchasing power of Finnish households has been strengthened by employment growth as well as wage growth that has outpaced inflation. Wage growth remained at about 4% early in the year, while inflation has been low (0.8% in July).

With employment growth slowing down significantly, the purchasing power of individual households will rely more on wage growth in the next few years. We forecast wage growth to accelerate in the coming years due to wage drift and the end of holiday bonus cuts in the public sector, among others.

The new government's fiscal policy will support the purchasing power of low-income households next year by increasing welfare benefits. But on the other hand, the purchasing power of wage earners is decreased by higher consumption taxation and social insurance contributions. Therefore you should not expect the fiscal policy as a whole to offer much support to household purchasing power in the next few years.

Private consumption will be an important source of economic growth in the coming years but it has also shown signs of weakening. In the first guarter of 2019, it decreased especially in terms of durable goods. Car sales picked up slightly by the end of the spring, but the overall outlook for 2019 remains gloomy.

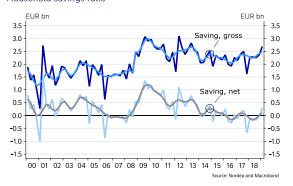
The disposable income of households has grown faster than their consumption, and the household savings ratio has returned to positive territory. Consumer confidence in the Finnish economic outlook, in particular, has weakened, which may decrease consumption especially in terms of large purchases. We expect the household savings ratio to remain positive, which will slow down private consumption growth. At the same time, a higher savings ratio will prevent households from getting into more debt. We expect the household debt ratio to remain steady in the next few years.

Divergence continues in the housing market

In recent years, the housing market has been slower than predicted based on economic growth or consumer confidence. In the second quarter of 2019, the housing market picked up rather surprisingly in terms of both sales volumes and housing loans drawn down. In January to June, the increase in new housing loans was 1.4% compared to last year.

The regional divergence in housing prices has continued to increase rapidly. The prices have gone up in the Greater Helsinki area and other growing cities in this decade but fallen in depopulated areas. Divergence has also been seen within growth centres, as the prices of studio apartments have risen faster than those of other types of homes due to investor demand.

E / Household savings ratio has returned to positive territory Household savings ratio



F/ Risks tilted to the downside

The risks and opportunities of the Finnish economy

Risk factor	Type of risk	Likelihood	Magnitude
Deterioration of confidence	Downside	Considerable	High
Escalation of trade war	Downside	Considerable	Medium
Weakening competitiveness	Downside	Medium	Medium
Government's economic policy	Upside/ Downside	Medium	High
Domestic investment projects	Upside	Medium	Medium
			Source: Nordea

E/

Households have become more cautious in their saving behaviour. The savings ratio has recently been on the increase, which has reduced consumption.

F/

Risks to Finland's economy are tilted to the downside. The highest risks come especially from abroad, while there are opportunities to be found in Finland

New housing construction has increased rapidly in recent years, which has kept the rise of housing prices in the Greater Helsinki area and other growth centres in check. Now that construction is showing signs of slowing down, this may fuel a rise in housing prices, as there is more demand for housing in growth centres due to increasing urbanisation.

The housing market is affected by uncertainty due to decelerating economic growth and weaker consumer confidence. On the other hand, it is supported by low interest rates. We expected housing prices to remain steady on average, with prices going up moderately in growth centres and down in depopulated areas.

Uncertainty remains high

In our forecast, risks to Finland's economy are tilted to the downside. As the country's economic growth is highly dependent on the global economy, it is threatened by the mere prospect of weaker growth in the global economy.

If the issues in the euro area turn out more substantial than expected, this will push Finnish exports, which are driven by investments and manufacturing, into a corner. A sharp slowdown of growth in China and the US or escalation of the trade policy tension would also make Finland's economic outlook bleaker. The result of Brexit negotiations will have both direct and indirect effects on the Finnish economy too. A no-deal Brexit would cause turmoil in Europe and would make the Finnish export outlook even gloomier.

The wage negotiations starting this autumn include a risk of a decrease to Finland's price competitiveness. High wage increases which would decrease competitiveness would lead to an even sharper slowdown in exports.

There are also opportunities for the Finnish economy to outperform our forecast. In Finland, there are several large investment projects in the works, especially in the forest industry. These involve a lot of uncertainties in terms of the execution and the schedule of the projects, but they would boost investment growth even if only part of them were to be realised.

Economic growth in Finland would benefit from an easing of the uncertainty and a cyclical recovery in the global economy. This could also boost consumer confidence and lead to faster growth in private consumption in 2021. Moreover, the economy could outperform our forecast if the government institutes economic policies that effectively boost employment growth and corporate investment.

"The uncertainty and weakness stemming from global factors cast a shadow over Finland's economic growth."

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RUSSIA

In search of growth

In H1 2019, the Russian economy avoided technical recession by a narrow margin. Consumption remained weak and the 3% growth target became more distant. But another sovereign rating upgrade came in recognition of rising resilience to external shocks.

Russia's economy has continued to muddle through 2019. The GDP contracted by 0.4% q/q in Q1 in seasonally adjusted terms but preliminary data for Q2 shows that a technical recession was avoided. Still, because of the meagre performance of the first half of the year, we have revised our GDP growth forecast downwards and we now expect no more than 1.1% growth in 2019. The economy's weakness is largely linked to the decline in investments and the continued weakness of internal demand exacerbated by the value-added tax hike early this year.

The trade war has also taken its toll on the Russian economy. In Q1, exports contracted in real terms (-0.4% y/y) for the first time since early 2016. While the reasons for weak economic growth are largely internal, a softening global outlook certainly doesn't make the whole picture brighter. Russia's primary vulnerability at times of trade war lies in its dependence on commodities. Oil prices represent the primary channel through which a more severe trade war may impact Russia. Oil price adjustments to potentially lower global demand become more likely. The official target of bringing Russian growth to above 3% by 2021 becomes ever-more challenging in this environment.

When the economy is slow, build roads

The so-called May decree (a decree setting targets for 2024 signed by Putin back in May of 2018) is seen by the authorities as the primary tool to reinvigorate growth. The government intends to boost growth by spending around EUR 350bn until 2024 focusing primarily on infrastructure. Russia is notorious for the poor state of its infrastructure and an attempt to remedy this weakness is certainly welcome. We, however, remain sceptical as to the ability of the state to efficiently execute all the planned investment and

4.2%

Expected inflation in 2019

7%

Expected key rate at the end of 2019

66

Our USD/RUB forecast for the end of 2019

Sources: Nordea estimates and

thus keep our 2021 GDP growth forecast significantly below the official 3% target.

Consumers feeling the pain

The stagnating economy is affecting purchasing power which is still far below the levels before the crisis of 2014. Consumers try to compensate for smaller real incomes by borrowing, which keeps growth rates of household lending at double-digit levels. A sharp improvement in purchasing power is not on the cards. The May decree should make growth more investment-driven. For consumers to feel the difference, larger investments should first give additional drivers to the economy and then give ground for higher wages growth. With consumer demand so weak, the central bank is getting more room to cut rates. Inflation pressure is muted and even the VAT hike impact on prices was smaller than expected. Weak demand will keep companies in a state of fierce competition often forcing them to reduce their margins.

RUB gripped by global risk-off

The RUB was showing a very strong performance in the first half of the year (+9.5% vs the USD) but could not disregard the deterioration of

RUSSIA: MACROECONOMIC INDICATORS

Monetary policy rate refers to the key rate

	2017	2018	2019E	2020E	2021E
Real GDP, % y/y	1.6	2.3	1.1	1.5	1.8
Consumer prices, % y/y	2.5	4.3	4.2	4.0	4.0
Unemployment rate, %	5.1	4.8	4.5	4.3	4.0
Current account balance, % of GDP	2.0	7.0	5.7	5.5	5.1
Federal gov. budget balance, % of GDP	-1.7	2.6	1.8	1.0	0.8
Private consumption, % y/y	3.3	2.3	1.7	1.8	2.2
Monetary policy rate (end of period), %	7.75	7.75	7.00	6.75	6.25
USD/RUB (end of period)	57.7	69.4	66	67	65

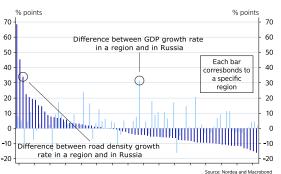
risk sentiment in August. The currency has been negatively affected by a new round of trade war escalation and its repercussions on the oil market. Limited Fed dovishness, US yield curve inversion and the resulting strong dollar are other negative factors, which are going to play against EM currencies and the RUB in the near future. Isn't that enough? No way. A fresh round of sanctions against Russia has added more fuel to the fire. A likely scenario for the rest of this year is prolonged global uncertainty driving capital to safe havens and keeping the RUB under pressure.

Sanctions still manageable

In August, Russia faced a new round of Skripal-related sanctions. From now on, US banks can no longer participate in the primary market for non-RUB denominated Russian sovereign bonds. The Russian Ministry of Finance will thus de facto lose the ability to borrow in USD. The measure is hardly painful in the short term as Russia's budget is in surplus since 2018, the break-even oil price is around USD 50/bbl and the bulk of borrowing is done locally. However, the decision gives a clear signal that the sanctions' grip is by no means relaxed. Fresh sanctions haven't prevented Fitch from upgrading the Russian rating from 'BBB-' to 'BBB' (the 2014 level) and from emphasising that the country is in good shape to cope with more sanctions thanks to its low external debt and healthy fiscal balance. Latest examples show that it's very easy to get caught unawares by new waves of sanctions. We remain particularly alert with regard to sanction risks in 2020 as the coming US presidential elections may well provoke more talk about Russia's alleged involvement in the presidential campaign of 2016.

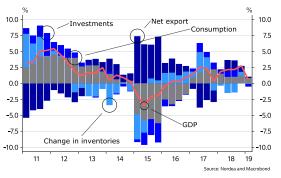
GDP growth and road density growth in regions versus Russia

A / Better infrastructure # higher growth



B / Weak net exports partly explain slower growth

GDP growth and components



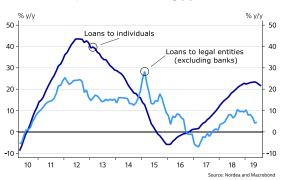
C / Current inflation is below the 4% target

MoM seasonally-adjusted inflation, 3-month moving average



D / Population is on a borrowing spree

Growth rate of corporate and retail lending, y/y



A /

Regions with more rapid road density growth in 2012-17 (proxy for infrastructure investments) were not the best in terms of GDP growth. Hence secondary effects of infrastructure development on GDP growth are far from certain.

B/

Net export growth slowed markedly set against the escalating trade war, resulting in a much smaller contribution from this component GDP to growth.

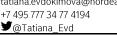
C/

Inflation pressure proved to be weaker than anticipated, giving the CBR room for further easing.

D/

Household lending is growing at double-digit rates as consumers try to offset declining purchasing power.

Tatiana Evdokimova Chief Economist Russia tatiana.evdokimova@nordea.ru +7 495 777 34 77 4194





ources: Nordea estimates and

Al-ing central banks

Central banks have become more uncertain and more dovish but are not easing for the same reasons they normally do. This time is different. We use algorithms to predict what is ahead in terms of monetary policy at the Fed, ECB, BoE and the Riksbank.

Artificial Intelligence and machine learning techniques have become an essential part of central bank analysis. In this Economic Outlook theme, we further develop the unsupervised learning algorithm that we trained for the Macro Theme: Read my mind, instantaneously: AI central bank watching (May 9, 2019). We use these results to discuss how the Fed, Riksbank, ECB and Bank of England are thinking and to construct Hawk-o-Meters and Sentiment Scores to predict near-term policy rate changes.

What central banks care about: Interpreting what central banks are saying has almost become an art as all major central banks use communication as an active means to transmit their intended policy through financial markets to the real economy. Machine learning models can be used as a supplement to endless analyst hours of reading and listening. In our case, the machine learning models distribute central bank texts into topics, allowing the interpretation of the amount of text used to discuss a specific topic as how much the central bank cares about it.

What central banks will do: Predicting upcoming policy rate changes is crucial for almost all financial assets. We construct a Hawk-o-Meter for predicting rate changes based on the machine learning models as a form of contextual word counts. Some words can

be hawkish when used within some contexts and dovish in others and from the, say, one million plus words in Fed minutes dating back to 1993, we assign hawkish weights to words in topics usually used ahead of Fed hikes and vice versa for rate cuts. Using these weights on new minutes allow us to predict upcoming rate changes as a Hawk-o-Meter. We also construct Sentiment Scores where our analysts have chosen the hawkish and dovish words rather than the algorithm.

How uncertain central banks are: The change in minutes from one to the next meeting can be interpreted as a measure of the uncertainty involved in policy-making and perhaps as general uncertainty. Combining changes with specific topics, we can construct more specific indices, such as the Brexit-o-Meter where we score more and less worrying words in paragraphs about Brexit.

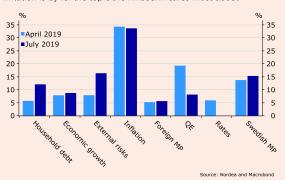
Conclusions: Central banks have become more uncertain, especially the Fed. Moreover, the Sentiment Scores for all central banks are clearly dovish, supporting expectations of at least one more rate cut from the Fed and an easing package from the ECB. The Hawk-o-Meters say that this time is different. Central banks are not cutting for the reasons they usually do.

"Artificial Intelligence and machine learning techniques have become an essential part of central bank analysis"

Anders Svendsen Chief Analyst

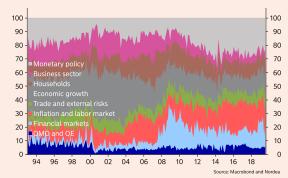
A / Riksbank topics

Inflation is by far the topic the Riksbank cares most about



B / Fed topics

A history of the Fed through the topics it has cared about



A /

Proportions of Riksbank minutes devoted to each topic.

B /

Proportions of FOMC minutes devoted to each topic over time.

C/

Financial markets and have become more important under Chair Powell.

D/

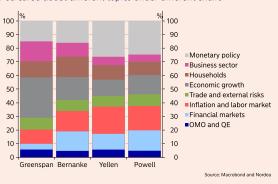
Brexit concerns have increased significantly.

"The algorithm doesn't know the meaning of words and doesn't know the right answer, but still manages to allocate minutes into topics in a way that makes intuitive sense."

Anders Svendsen Chief Analyst

C / Topics by Fed chairs

Fed cared about different topics under different chairs



D / Brexit concerns have increased

The Brexit-o-Meter combines words and topics



Topic modelling

We apply a machine learning algorithm called Latent Dirichlet Allocation to minutes of monetary policy meetings held by the Fed, the ECB, the Riksbank and the Bank of England. Several others have already done this for the Fed, but to our knowledge it is only the second attempt for the Riksbank.

The basic aim is to train an algorithm to learn the latent topics of all paragraphs of central bank minutes. It does not know what the words mean and there is no way to know the right answer.

The results make sense, though. We can tell a very intuitive story about the history of monetary policy at the central banks by looking at the topics that have been discussed at their meetings. We do this by labelling the latent topics through analysing the words that the algorithm has assigned to each topic and by visualising the topic distribution over time.

For the Riksbank, for example, the topic of "external" risks" showed an increase around the financial crisis in 2008. During this time, there was little discussion about inflation. The topic of quantitative easing first appeared around 2014. This was around the time when the Riksbank started purchasing government bonds to make monetary policy more expansive in addition to lowering its policy rate. "Household debt" as a topic has also become more prevalent in recent years.

For the Bank of England, Brexit has become a huge theme, taking up a big part of the discussions at the policy meetings, according to the minutes. A Boris Johnson-led government has increased the odds of a no-deal Brexit and our Brexit-o-Meter increased with the release of the August 1 minutes.

The history of ECB minutes – or accounts as they are called - is too short for us to construct Hawk-o-Meters.

E / Fed Hawk-o-Meter

The words used are not the same as ahead of previous cuts



F / Fed Sentiment Score

Knowing what to look for makes the Fed look more dovish



E/

The Fed Hawk-o-Meter also had no clue about one other period in time: the mid-90s "mid-cycle policy adjustment".

F/

The Fed Sentiment Score has moved from very hawkish in December to very dovish in June.

"The Riksbank Sentiment Score supports our view that an upcoming rate cut is more likely than a rate hike"

Sofia Fröid Associate

Fed Hawk-o-Meter and Sentiment Score

Since 2000, the Fed Hawk-o-Meter has correctly predicted 31 rate hikes and 16 rate cuts based on previous minutes only and without any wrong signals. During the same period, however, the Fed Hawk-o-Meter has failed to predict seven rate hikes and eight rate cuts, including the rate cut this July.

In other words, the signals are very strong, but every fifth policy rate change cannot be predicted using the previous minutes, most likely because new information comes to light in between meetings. In June, for example, the Fed's dot-plot showed no rate cuts this year and yet rates were cut in July after the trade war had escalated.

Not surprisingly, the Hawk-o-Meter could not sniff out an upcoming rate cut from words used in the June minutes. The Fed did not use the same words in relation to growth and inflation, for example, as it has done ahead of earlier rate cuts.

Interestingly, the only other period when the Hawko-Meter has had no clue that rate cuts were ahead was in the mid-90s, which is exactly the 'mid-cycle policy adjustment' that the Fed is comparing the current situation to.

On the other hand, the Sentiment Score captured the upcoming rate cut nicely. The Sentiment Score is calculated based on words that our analysts consider hawkish and dovish, whereas the Hawk-o-Meter is trained to learn which words are hawkish and dovish and in which contexts.

As analysts, we correctly predicted the rate cut in July as did most other analysts. The Sentiment Score shows why: The Fed was using words that we

currently judge as dovish. The Hawk-o-Meter shows why Chair Powell struggled to explain the Fed's rate decision at the July press conference: The Fed is currently not pessimistic on growth and inflation. At least not to the same extent as ahead of previous rate cuts.

We expect another rate cut in September, but Powell may hold another press conference where he finds it difficult to explain why rates are cut.

Riksbank Hawk-o-Meter and Sentiment Score

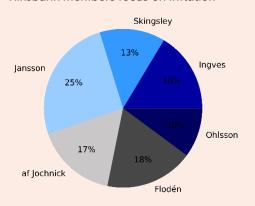
The Riksbank Hawk-o-Meter is completely neutral, assigning a 70% probability for unchanged rates at the next two meetings and only slightly higher probability of a rate hike than a rate cut.

The Sentiment Score, however, has called the Riksbank out as outright dovish in the recent minutes, fitting better with our analysts' view that the likelihood of a rate cut is higher than the likelihood of a rate hike, at least if the ECB pulls through and delivers a big September easing package.

Our Riksbank Hawk-o-Meter has signalled upcoming rate hikes 20 times since 2005, all correct, and rate cuts 19 times, including one false positive. However, it failed to predict seven hikes and nine cuts, making it slightly less accurate compared with the Fed Hawk-o-Meter.

From 2007, the Riksbank minutes were changed to identify each member's part of the minutes. That makes it possible to interpret what individual members care about. The Riksbank's main problem in recent years has been inflation, and how to get inflation back to target within a small open economy in a big global economy with no inflation. The Riksbank algorithm identifies Jansson and Flodén as the members who cares most about inflation.

Riksbank members focus on inflation



ECB Sentiment Scores

The ECB did not start publishing accounts of its monetary policy meetings until 2015, so we have included the introductory statements as well, but do only Sentiment Scores. The Sentiment Score has clearly moved into dovish territory, supporting our expectations of a big easing package in September.

Dovish ECB



Uncertainty

Central banks have a tough job setting rates now with so much uncertainty. But is it tougher than before? And is the outlook more uncertain than in the past?

To answer those questions, we have constructed 'Uncertainty indices', or indices of lexical innovation, which can be used to identify changing economic and financial conditions and serve as a proxy for the different central bankers' implicit assessment of uncertainty.

We use a deep learning method, Word Mover's Distance, to measure the extent of similarity between

one set of minutes and the previous one, to capture the change in the central banks' perceptions of the environment, as reflected in their policy discussions.

Central bank uncertainty is not much different from markets' implied uncertainty, here measured by the VIX – an implied S&P500 volatility index. The Fed has gradually become less uncertain after the financial crisis as the recovery took hold. Two notable exceptions were ahead of the financial crisis when the markets – in retrospect – were too complacent, and during the first half of 2019 when the Fed became much more uncertain as the trade war escalated.

Fed uncertainty vs market uncertainty



Conclusion

Al and machine learning techniques will increasingly act as a supplement to analysts' interpretations, but we are still learning how to use these new tools. We will publish the results through our Twitter account MondeaMacroLab as we learn.

"The Fed became much more uncertain in the first half of this year. Much more than other central banks."

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Real GDP. % v/v

Consumer prices, % v/v

Real GDP, % y/y						Consumer prices, %	y/ y				
	2017	2018	2019E	2020E	2021E		2017	2018	2019E	2020E	2021E
World ¹⁾	3.8	3.7	3.0	2.9	3.3	World ¹⁾	3.2	3.8	3.6	3.5	3.4
	2.4	2.2	4.5	4.4	4.5		47	1.0	4.5	4.5	4.5
Advanced economies	2.4	2.2	1.6	1.1	1.5	Advanced economies	1.7	1.9	1.5	1.5	1.5
USA	2.4	2.9	2.3	1.5	1.9	USA	2.1	2.5	1.8	1.8	1.9
Euro area	2.6	1.9	1.0	0.7	1.1	Euro area	1.5	1.8	1.3	1.2	1.2
Japan	1.9	0.8	0.9	0.4	0.4	Japan	0.5	1.0	8.0	1.5	1.1
Denmark	2.3	1.5	1.8	1.5	1.5	Denmark	1.1	0.8	0.8	1.2	1.4
Norway	2.0	2.2	2.5	2.3	2.1	Norway	1.9	2.7	2.3	2.0	1.8
Sweden	2.4	2.5	1.4	1.0	1.6	Sweden	1.8	2.0	1.7	1.2	1.3
UK	1.8	1.4	1.2	1.2	1.4	UK	2.7	2.5	1.9	1.9	2.1
Germany	2.5	1.5	0.3	0.2	0.9	Germany	1.7	1.9	1.4	1.3	1.2
France	2.4	1.7	1.2	1.0	1.1	France	1.2	2.1	1.3	1.3	1.2
Italy	1.8	0.7	0.0	0.2	0.4	Italy	1.3	1.2	0.7	0.9	0.9
Spain	3.0	2.6	2.1	1.6	1.6	Spain	2.0	1.7	1.0	1.4	1.2
Finland	3.0	1.7	1.2	1.0	0.5	Finland	0.7	1.1	1.1	1.3	1.3
Baltics	2.2	4.3	3.0	2.8	2.8	Baltics	3.5	2.7	2.5	2.5	2.3
Emerging economies	4.8	4.7	4.1	4.3	4.6	Emerging economies	4.4	5.2	5.2	4.8	4.7
China	6.9	6.6	6.2	5.9	5.7	China	1.6	2.1	2.2	2.4	2.8
Russia	1.6	2.3	1.1	1.5	1.8	Russia	2.5	4.3		4.0	4.0
		7.4		7.1	7.4				4.2		
India	6.9		6.9			India	3.6	3.5	3.9	4.2	4.2
Brazil	1.1	1.1	2.1	2.5	2.2	Brazil	3.4	3.7	3.6	4.1	4.0
Poland	4.8	5.1	3.8	3.1	2.8	Poland	2.0	1.6	2.0	1.9	2.0
Rest of World	3.4	2.9	2.1	2.4	2.9	Rest of World	5.6	6.5	6.4	5.6	5.3

Public sector balance, % of GDP

Current account, % of GDP

	2017	2018	2019E	2020E	2021E
USA	-3.8	-4.3	-4.6	-4.5	-4.5
Euro area	-1.0	-0.6	-1.2	-1.1	-1.0
Japan	-3.5	-3.2	-2.9	-2.2	-2.0
Denmark	1.4	0.6	2.0	0.6	0.0
Norway	4.9	7.3	5.9	5.1	5.1
Sweden	1.4	0.9	0.0	-0.5	-0.6
UK	-1.8	-1.4	-1.3	-1.2	-1.1
Germany	1.0	1.6	0.5	0.5	0.8
France	-2.7	-2.6	-3.2	-2.7	-2.5
Italy	-2.4	-1.9	-2.2	-2.2	-3.5
Spain	-3.1	-2.7	-2.3	-2.1	-2.4
Finland	-0.8	-0.7	-0.6	-1.2	-1.3
Baltics	-0.1	0.3	0.0	0.1	0.1
China	-3.9	-4.8	-6.1	-5.7	-5.6
Russia	-1.4	2.5	1.8	1.0	0.8
India	-7.0	-6.7	-6.9	-6.6	-6.4
Brazil	-7.9	-6.8	-7.3	-7.0	-6.9
Poland	-1.4	-0.6	-2.2	-3.1	-3.1

Current account, % of GDP									
	2017	2018	2019E	2020E	2021E				
USA	-2.3	-2.4	-2.5	-2.3	-2.5				
Euro area	3.2	3.0	2.9	2.8	2.7				
Japan	4.0	3.5	3.4	3.5	3.4				
Denmark	8.0	5.7	6.1	5.5	5.1				
Norway	5.6	8.1	6.9	5.9	6.0				
Sweden	3.7	3.1	4.6	4.7	5.0				
UK	-3.3	-3.9	-4.2	-4.0	-3.9				
Germany	8.0	7.4	7.1	6.8	6.5				
France	-0.6	-0.7	-0.4	0.0	0.1				
Italy	2.8	2.6	2.9	2.6	2.4				
Spain	1.8	8.0	0.8	0.8	8.0				
Finland	-0.7	-1.6	-1.7	-1.6	-1.6				
Baltics	1.3	8.0	0.5	0.1	0.1				
China	1.4	0.4	0.5	0.4	0.2				
Russia	2.1	7.0	5.7	5.5	5.1				
India	-1.9	-2.4	-2.5	-2.4	-2.4				
Brazil	-0.4	-0.8	-1.7	-1.6	-1.6				
Poland	0.1	-0.7	-1.2	-1.5	-1.7				

Source: IMF and Nordea estimates

The appendix with a full overview of macroeconomic indicators for Nordics and Russia is available in the electronic version of the Nordea Economic Outlook. You can download it from http://e-markets.nordea.com

Monetary policy rates, %

	29.8.19	3M	30.6.20	31.12.20	31.12.21
US*	2.25	2.25	2.00	1.50	1.50
Japan	-0.10	-0.10	-0.20	-0.20	-0.20
Euro area	-0.40	-0.60	-0.60	-0.60	-0.60
Denmark	-0.65	-0.85	-0.85	-0.85	-0.85
Sweden	-0.25	-0.25	-0.50	-0.50	-0.50
Norway	1.25	1.50	1.75	1.75	1.75
UK	0.75	0.75	0.75	1.00	1.00
Switzerland	0.00	-0.85	-0.85	-0.60	-0.35
Poland	1.50	1.50	1.50	1.75	1.75
Russia	7.25	7.00	6.75	6.75	6.25
China	4.35	4.10	3.60	3.60	3.60
India	5.40	5.15	5.15	5.15	5.15
Brazil	6.00	5.50	4.75	4.75	5.50

Monetary policy rate spreads vs Euro area, %-points

,	,			,	
	29.8.19	3M	30.6.20	31.12.20	31.12.21
US	2.65	2.85	2.60	2.10	2.10
Japan ¹	-2.35	-2.35	-2.20	-1.70	-1.70
Euro area	-	-	-	-	-
Denmark	-0.25	-0.25	-0.25	-0.25	-0.25
Sweden	0.15	0.35	0.10	0.10	0.10
Norway	1.65	2.10	2.35	2.35	2.35
UK	1.15	1.35	1.35	1.60	1.60
Switzerland	0.40	-0.25	-0.25	0.00	0.25
Poland	1.90	2.10	2.10	2.35	2.35
Russia	7.65	7.60	7.35	7.35	6.85
China	4.75	4.70	4.20	4.20	4.20
India	5.80	5.75	5.75	5.75	5.75
Brazil	6.40	6.10	5.35	5.35	6.10
1) Coward real Ca					

1) Spread vs USA

3-month rates, %

	29.8.19	3M	30.6.20	31.12.20	31.12.21
US	2.12	2.20	2.05	1.60	1.80
Euro area	-0.42	-0.64	-0.65	-0.65	-0.65
Denmark	-0.46	-0.60	-0.65	-0.60	-0.60
Sweden	0.00	-0.10	-0.35	-0.35	-0.35
Norway	1.61	2.00	2.15	2.15	2.15
UK	0.76	0.70	0.80	1.00	1.00
Poland	1.73	1.70	1.80	2.10	2.10
Russia	7.58	7.60	7.30	7.30	7.05

3-month spreads vs Euro area, %-points

	29.8.19	3M	30.6.20	31.12.20	31.12.21
US	2.54	2.84	2.70	2.25	2.45
Euro area	-	-	-	-	-
Denmark	-0.04	0.04	0.00	0.05	0.05
Sweden	0.42	0.54	0.30	0.30	0.30
Norway	2.03	2.64	2.80	2.80	2.80
UK	1.18	1.34	1.45	1.65	1.65
Poland	2.15	2.34	2.45	2.75	2.75
Russia	8.00	8.24	7.95	7.95	7.70

10-year government benchmark yields, %

	29.8.19	3M	30.6.20	31.12.20	31.12.21
US	1.50	1.55	1.75	1.80	1.85
Euro area	-0.71	-0.70	-0.65	-0.65	-0.50
Denmark	-0.67	-0.65	-0.60	-0.60	-0.45
Sweden	-0.38	-0.35	-0.33	-0.30	-0.20
Norway	1.19	1.32	1.35	1.35	1.45
UK	0.44	0.50	0.80	1.10	1.10
Poland	1.81	1.90	2.00	2.20	2.50

10-year yield spreads vs Euro area, %-points

	29.8.19	3M	30.6.20	31.12.20	31.12.21
US	2.21	2.25	2.40	2.45	2.35
Euro area	-	-	-	-	-
Denmark	0.04	0.05	0.05	0.05	0.05
Sweden	0.33	0.35	0.32	0.35	0.30
Norway	1.90	2.02	2.00	2.00	1.95
UK	1.15	1.20	1.45	1.75	1.60
Poland	2.52	2.60	2.65	2.85	3.00

Exchange rates vs EUR

Excitating crack	55 V5 E G IX				
	29.8.19	3M	30.6.20	31.12.20	31.12.21
EUR/USD	1.11	1.08	1.12	1.17	1.22
EUR/JPY	117.61	112.32	119.84	131.04	140.30
EUR/DKK	7.46	7.46	7.46	7.46	7.46
EUR/SEK	10.79	11.00	10.70	10.50	10.30
EUR/NOK	10.06	10.25	9.80	9.75	9.60
EUR/GBP	0.91	0.94	0.91	0.88	0.87
EUR/CHF	1.09	1.08	1.10	1.12	1.15
EUR/PLN	4.39	4.40	4.30	4.25	4.25
EUR/RUB	73.83	71.28	74.48	78.39	79.30
EUR/CNY	7.90	7.67	8.06	8.54	8.91
EUR/INR	79.20	76.68	80.64	85.41	89.06
EUR/BRL	4.61	4.43	4.65	4.91	5.19

* Upper part of target range Source: Nordea estimates

Exchange rates vs USD

	29.8.19	3M	30.6.20	31.12.20	31.12.21
-					
USD/JPY	106.25	104.00	107.00	112.00	115.00
USD/DKK	6.74	6.91	6.66	6.38	6.12
USD/SEK	9.74	10.19	9.55	8.97	8.44
USD/NOK	9.09	9.49	8.75	8.33	7.87
GBP/USD	1.22	1.15	1.23	1.33	1.40
USD/CHF	0.98	1.00	0.98	0.96	0.94
USD/PLN	3.96	4.07	3.84	3.63	3.48
USD/RUB	66.72	66.00	66.50	67.00	65.00
USD/CNY	7.14	7.20	7.30	7.40	7.35
USD/INR	71.56	71.00	72.00	73.00	73.00
USD/BRL	4.17	4.10	4.15	4.20	4.25

Appendix

SWEDEN:	M	lacroeconomic	indicators

	2016 (SEKbn)	2017	2018	2019E	2020E	2021E
Private consumption	1,962.6	2.2	1.2	0.7	1.2	1.4
Government consumption	1,153.5	0.0	0.9	0.6	1.7	1.5
Fixed investment	1,049.8	6.0	4.0	-1.4	-1.0	1.1
- industrial investment	164.1	5.0	5.3	0.0	-1.0	0.0
- residential investment	225.2	11.6	-2.6	-11.0	-8.8	-5.0
Stockbuilding*	25.4	0.1	0.3	-0.2	-0.1	0.0
Exports	1,947.2	3.2	3.9	3.1	2.2	3.1
Imports	1,753.0	4.8	3.8	-0.1	1.1	2.4
Real GDP, % y/y		2.1	2.4	1.3	1.2	1.7
Real GDP (calendar adjusted), % y/y		2.4	2.5	1.4	1.0	1.6
Nominal GDP (SEKbn)	4,385.5	4,578.8	4,789.9	4,960.6	5,098.9	5,263.8
Unemployment rate, %		6.7	6.3	6.6	7.1	7.2
Employment, % y/y		2.3	1.8	0.3	-0.1	0.4
Consumer prices, % y/y		1.8	2.0	1.7	1.2	1.3
Underlying prices (CPIF), % y/y		2.0	2.1	1.6	1.5	1.4
Hourly earnings, % y/y		2.5	2.2	2.5	2.5	2.5
Current account balance (SEKbn)		170.7	148.0	230.2	243.3	263.5
Current account balance, % of GDP		3.7	3.1	4.6	4.8	5.0
Trade balance, % of GDP		2.4	2.0	3.2	3.3	3.4
General gov. budget balance (SEKbn)		64.6	42.9	1.5	-22.9	-29.2
General gov. budget balance, % of GDP		1.4	0.9	0.0	-0.5	-0.6
General gov. gross debt, % of GDP		40.6	38.8	35.7	35.8	35.4
Monetary policy rate (end of period)		-0.50	-0.25	-0.50	-0.50	-0.50
USD/SEK (end of period)		8.18	8.86	10.19	8.97	8.44
EUR/SEK (end of period)		9.83	10.13	11.00	10.50	10.30

DENMARK:	Macroeconomic indicators	

	2016 (DKKbn)	2017	2018	2019E	2020E	2021E
Private consumption	984.2	2.1	2.2	1.5	2.1	1.9
Government consumption	524.2	0.7	0.9	0.5	0.7	0.8
Fixed investment	438.8	4.6	6.7	0.2	1.8	2.1
- government investment	77.1	-6.2	0.1	3.0	2.1	1.2
- residential investment	89.7	12.9	4.8	3.3	2.3	2.2
- business investment	64.0	5.0	9.1	-2.0	1.3	2.2
Stockbuilding*	8.6	-0.1	0.2	0.0	0.0	0.0
Exports	1,125.6	3.6	0.4	3.3	2.7	2.9
Imports	984.1	3.6	3.3	1.7	2.9	3.2
Real GDP, % y/y		2.3	1.5	1.8	1.5	1.5
Nominal GDP (DKKbn)	2,100	2,178	2,223	2,293	2,360	2,429
Unemployment rate, %		4.3	4.0	3.8	3.9	3.9
Gross unemployment level, '000 persons		116	108	103	106	104
Consumer prices, % y/y		1.1	0.8	0.8	1.2	1.4
Hourly earnings, % y/y		1.7	2.2	2.2	2.1	2.2
Nominal house prices, one-family, % y/y		4.0	3.8	2.4	3.2	2.8
Current account balance (DKKbn)		173	127	140	130	125
Current account balance, % of GDP		8.0	5.7	6.1	5.5	5.1
General gov. budget balance (DKKbn)		31.6	12.4	38.7	34.7	18.7
General gov. budget balance, % of GDP		1.4	0.6	2.0	0.6	0.0
General gov. gross debt, % of GDP		35.5	34.2	33.7	33.4	33.2
Monetary policy rate, deposit (end of period)		-0.65	-0.65	-0.85	-0.85	-0.85
USD/DKK (end of period)		6.20	6.53	6.91	6.38	6.12
EUR/DKK (end of period)		7.45	7.46	7.46	7.46	7.46

NORWA	V • IV/I a C	$r \cap \Delta C \cap n \cap r$	γ	indicato	١rc

	2016 (NOKbn)	2017	2018	2019E	2020E	2021E
Private consumption	1,411.4	2.2	2.0	1.9	2.4	2.5
Government consumption	754.7	2.5	1.2	1.2	1.8	1.9
Fixed investment	780.8	3.6	1.0	6.8	3.6	1.2
- gross investment, mainland	603.2	7.0	1.1	4.7	3.4	2.1
- gross investment, oil	165.4	-3.8	2.7	15.0	4.0	-2.0
Stockbuilding*	105.4	0.1	0.4	-0.2	0.0	0.0
Exports	1,098.6	-0.2	-0.7	2.6	3.2	2.3
- crude oil and natural gas	373.7	1.5	-4.7	0.0	5.0	2.2
- other goods	355.7	1.7	2.7	5.0	2.6	2.5
Imports	1,037.3	1.6	0.6	2.6	2.5	1.8
Real GDP, % y/y	3,098.1	2.0	1.4	2.2	2.7	2.1
Real GDP (Mainland), % y/y	2,737.7	2.0	2.2	2.5	2.3	2.1
Unemployment rate, %		4.2	3.9	3.5	3.2	3.1
Consumer prices, % y/y		1.9	2.7	2.3	2.0	1.8
Core consumer prices, % y/y		1.4	1.5	2.3	2.2	2.0
Annual wages, % y/y		2.3	2.9	3.4	3.6	3.7
Current account balance (NOKbn)		186	285	256	227	220
Current account balance, % of GDP		5.6	8.1	6.9	5.9	5.5
Trade balance, % of GDP		3.2	5.5	3.8	2.8	2.4
General gov. budget balance (NOKbn)		164	256	217	197.0	189.0
General gov. budget balance, % of GDP		4.9	7.3	5.9	5.1	4.7
222. 23 23 23 23 23 23 23 23		,5		3.3	3.,	•••
Monetary policy rate, deposit (end of period)		0.50	0.75	1.50	1.75	1.75
USD/NOK (end of period)		8.18	8.66	9.50	8.33	7.87
EUR/NOK (end of period)		9.82	9.90	10.25	9.75	9.60

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	2016 (EURbn)	2017	2018	2019E	2020E	2021E
Private consumption	119.0	1.2	2.0	1.0	1.4	1.0
Government consumption	51.5	-0.3	1.4	1.2	1.0	0.4
Fixed investment	46.8	5.2	3.1	0.5	0.1	0.5
Stockbuilding*	0.7	0.1	0.7	-0.3	0.2	-0.4
Exports	77.5	7.6	1.1	3.0	1.0	1.5
Imports	79.7	4.0	4.1	1.5	1.7	1.2
Real GDP, % y/y		3.0	1.7	1.2	1.0	0.5
Nominal GDP (EURbn)	216.1	223.9	232.1	237.4	242.9	247.3
Unemployment rate, %		8.6	7.4	6.5	6.4	6.4
Industrial production, % y/y		8.0	-0.1	2.5	1.5	1.2
Consumer prices, % y/y		0.7	1.1	1.1	1.3	1.3
Hourly earnings, % y/y		0.2	1.7	2.5	3.0	2.8
Current account balance (EURbn)		-1.6	-3.7	-4.0	-4.0	-4.0
Current account balance, % of GDP		-0.7	-1.6	-1.7	-1.6	-1.6
Trade balance (EURbn)		1.6	0.8	1.0	0.7	1.1
Trade balance, % of GDP		0.7	0.3	0.4	0.3	0.4
General gov. budget balance (EURbn)		-1.8	-1.6	-1.4	-2.9	-3.2
General gov. budget balance, % of GDP		-0.8	-0.7	-0.6	-1.2	-1.3
General gov. gross debt (EURbn)		137.3	137.5	138.9	141.9	145.1
General gov. gross debt, % of GDP		61.3	58.9	58.5	58.4	58.7
Monetary policy rate (end of period)		-0.40	-0.40	-0.60	-0.60	-0.60
EUR/USD (end of period)		1.20	1.14	1.08	1.17	1.22

^{*} Contribution to GDP growth (% points)

APPENDIX

RUSSIA: Macroeconomic indicators

	2016 (RUBbn)	2017	2018	2019E	2020E	2021E
Private consumption	45,317	3.3	2.3	1.7	1.8	2.0
Government consumption	15,729	2.5	0.3	0.8	0.8	0.8
Fixed investment	18,911	5.2	2.9	2.0	1.5	3.0
Exports	22,138	5.0	5.5	2.0	4.0	5.0
Imports	17,689	17.4	2.7	2.5	7.0	9.0
Real GDP, % y/y		1.6	2.3	1.1	1.5	1.8
Nominal GDP (RUBbn)	86,149	92,101	103,875	103,453	109.20	115,617
Unemployment rate, %		5.1	4.8	4.5	4.3	4.0
Consumer prices, % y/y (end of year)		2.5	4.3	4.2	4.0	4.0
Current account balance, % of GDP		2.0	7.0	5.7	5.5	5.1
General gov. budget balance, % of GDP		-1.7	2.6	1.8	1.0	0.8
Monetary policy rate (end of period)		7.75	7.75	7.00	6.75	6.25
USD/RUB (end of period)		57.70	69.40	66.00	67.00	65.00
EUR/RUB (end of period)		69.70	79.50	71.28	78.36	75.40



Nordea