

European Viewpoint

Nordics monthly: different tolerance

Sweden recession, Norway avoids

Consumer and business confidence bottomed out in Sweden but remains consistent with recession. So, we continue to forecast a mild recession in Sweden, but gradual growth in Norway. Higher headline inflation in Sweden, driven in part by food prices, is squeezing real income more while households are sensitive to interest-rate hikes.

Start of inflation slide

We expect core inflation (headline ex-food and energy) to have peaked in Sweden and Norway in March/April and to slide 250-300bp by year end in both countries as non-energy industrial goods inflation slows following easing supply chain difficulties (and falling energy prices). We expect headline inflation to fall more as energy and food inflation slow. We see Swedish headline inflation at 2% by year-end but above 4% in Norway, reflecting stronger domestic inflation pressure in the latter.

Rates higher for longer in Norway

The data flow would suggest to us a higher terminal rate in Norway than Sweden. But Norges and Riksbank seem to have diverged in the speed with which they want to return inflation to target. The Riksbank seems to us to aim to return inflation as fast as possible to target, at the cost of a bigger hit to the real economy. Norges meanwhile seems to place more weight on output, forecasting a prolonged period to get inflation back to 2%. Both central banks have increased the weight on the currency in their reaction function recently. That said, the Riksbank's April Monetary Policy Report shifted language, suggesting the rates peak is close. They argue policy is contractionary, the recent wage deal has provided some comfort, and they can slow down hikes. This was in-line with our forecast.

We expect Norges to peak lower than Riksbank (3.5% vs. 3.75%) but also to cut less in 2024 (two cuts vs. four). Lower terminal rate means rates in restrictive territory for longer in Norway. Focus on currencies could provide upside risks to our terminal calls.

FX: fundamentals suggest NOKSEK undervalued

We revised our EUR/Scandies profiles up, more so for NOK. We are more bullish than consensus on NOK but slightly more bearish on SEK, expecting NOKSEK at well above parity in 2H. In hindsight, we can justify NOK's weakness until end-February but find its weakness since overdone (and surprising). We are constructive on NOK, especially in 2H, counting on a softer USD, stabilised risk sentiment and higher oil prices, on Norges Bank doing its part, and on more favourable oil-related NOK flows. Our SEK bearishness stays owing to "hard-landing" risks in Sweden—but the recent wage deal is good news.

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Refer to important disclosures on page 19 to 21.

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Growth: Sweden more exposed

We see Sweden as more exposed to global shocks and tighter monetary policy than Norway, in part because of the latter's energy sector and because of the former's sensitivity to interest rate hikes. As a result, real household income should fall more in Sweden than Norway, and the same applies to house prices (Exhibit 18). We forecast recession in Sweden but assume Norway will narrowly avoid that.

That said, monthly GDP growth has been stronger than Riksbank expected. Business and consumer confidence seems to be bottoming out in Sweden but they remain weak, consistent with recession (Exhibit 7). Falling house prices and further interest rate hikes will likely cut consumer confidence and housing investment (Exhibit 10-Exhibit 12). Norges Bank's regional network survey suggests growth slowed close to zero (Exhibit 6) and oil price falls should weigh on Norway's manufacturing PMI (Exhibit 4).

We look for 2023 growth of -0.9% in Sweden and 1.4% in Norway.

Exhibit 1: Sweden GDP and Riksbank forecast (percent)

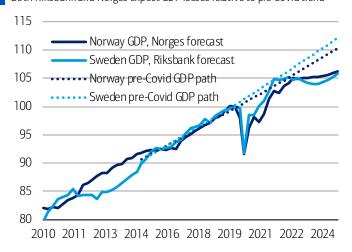
Riksbank expects recession this year



Source: BofA Global Research, Statistics Sweden, Riksbank

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Exhibit 3: Riksbank and Norges GDP forecasts, 4Q 2019 = 100Both Riksbank and Norges expect GDP losses relative to pre-Covid trend



Source: BofA Global Research, Statistics Sweden

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Exhibit 2: Norway GDP and Norges Bank forecast (percent)

Norges expects to avoid recession

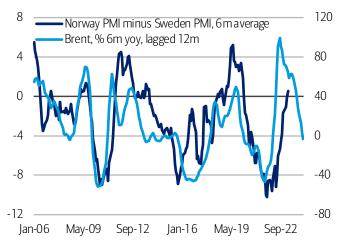


Source: BofA Global Research, Statistics Norway, Norges Bank

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Exhibit 4: Norway vs. Sweden PMI and Brent

Oil price falls likely to weigh on Norway PMI in coming months



Source: BofA Global Research, Bloomberg, Swedbank, Statistics Norway

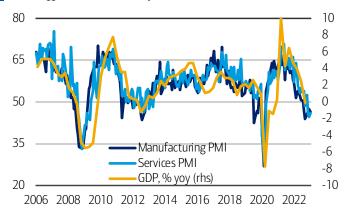
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Exhibit 5: Sweden PMI and GDP

PMIs suggest Swedish economy in recession

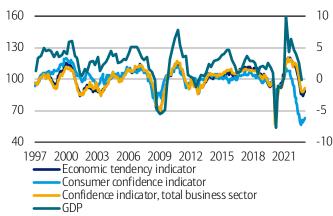


Source: BofA Global Research, Statistics Sweden, Swedbank

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Exhibit 7: Sweden economic confidence and GDP

 $Consumer confidence \ tentatively \ rising, still \ suggests \ recession$

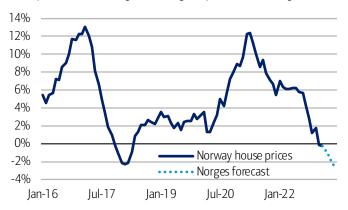


Source: BofA Global Research, National Institute of Economic Research, Statistics Sweden

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Exhibit 9: House prices, Norway, % four-quarter change

House price inflation stronger than Norges expected, but slowing

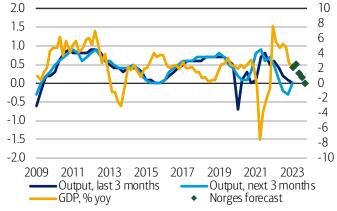


Source: Eiendomsverdi, Finn.no, Real Estate Norway and Norges Bank. Dotted lines show Norges Bank forecasts.

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Exhibit 6: Norges Bank Regional Network Survey and GDP

Norges business survey suggests growth weakening



Source: BofA Global Research, Statistics Norway, Norges Bank

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Exhibit 8: Norway monthly GDP and Norges forecast

Norges expects flat GDP in coming months

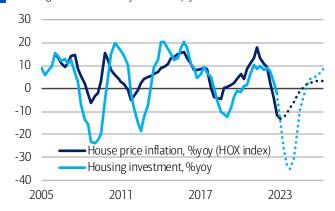


Source: BofA Global Research, Statistics Norway, Norges Bank

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Exhibit 10: Sweden house prices and investment

Dwellings investment likely to fall sharply

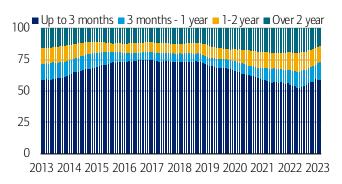


Source: Valueguard and Riksbank (Monetary Policy Report April 2023). Dotted lines show Riksbank forecasts



Exhibit 11: Households' remaining fixed-interest periods, %

In Feb c27% of loans with 1Y+ remaining fixed-interest period and c14% 2Y+

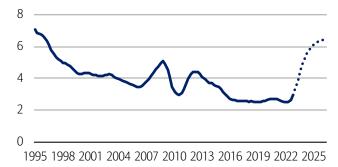


Source: Statistics Sweden via Riksbank (Monetary policy Report, April 2023)

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Exhibit 12: Interest-to-income ratio

Riksbank expects the Interest-to-income ratio to approach mid-90s levels



Source: Statistics Sweden and Riksbank (Monetary policy Report, April 2023). Dotted line shows Riksbank forecast.

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Labour market: easing in Sweden

The labour markets in Norway and Sweden have diverged, consistent with the growth picture. Vacancies have fallen from their peak and unemployment stabilised in Sweden. PMIs point to stalling employment growth (Exhibit 17).

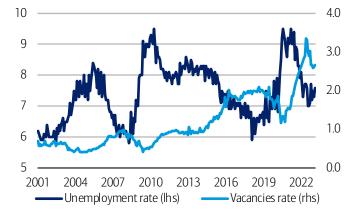
Though the data are lagging the labour market in Norway may only recently have begun to ease. Norges Bank reports that new job vacancies, rather than the stock, have been declining. The Regional Network Survey also shows labour supply constraints continuing to ease.

Wage deals in both countries should provide the central banks with more comfort. In Sweden social partners in manufacturing agreed to a 4.1% pay rise this year and 3.3% next year, a little stronger than the Riksbank expected but it provides some certainty about inflation passthrough. The Riksbank argues "If wage drift follows a normal historical pattern, wages are assessed to rise at a pace that - given economic developments in general - is compatible with inflation being close to the target in 2024."

In Norway unions agreed on a wage increase of 5.2% with additional increases for low earners. This provides more impetus to wages than Sweden, and less certainty given it is not for two years. But it does not significantly challenge Norges outlook in our view.

Exhibit 13: Sweden unemployment rate and vacancies

Swedish labour market loosens



Source: BofA Global Research, Statistics Sweden.

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Exhibit 14: Norway unemployment and vacancy rate

Vacancies still rising in Norway and labour market remains very tight

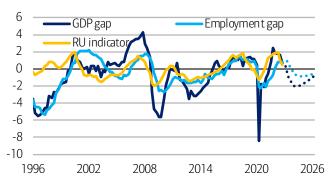


Source: BofA Global Research, Statistics Norway.



Exhibit 15: Sweden capacity constraints

Riksbank expects capacity constraints to ease soon



Source: Employment Service, National Institute of Economic Research, Statistics Sweden and the Riksbank (Monetary Policy Report, April 2023). Dotted lines show Riksbank forecasts. The RU indicator is a Riksbank statistical measure of resource utilization; which has been normalised so that the mean value is 0 and the standard deviation is 1 since 1996.

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2005 2007 2010 2012 2014 2017 2019

Exhibit 16: Norges Bank Regional Network Survey

0.7

0.6

0.5

0.4

0.3

0.2

0.1

0.0

Source: Norges Bank

Labour supply and capacity constraints continue to ease

Labour supply constraints

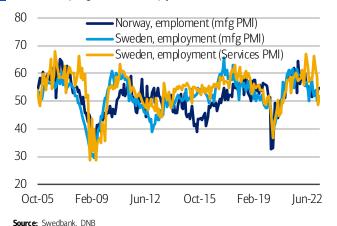
2022

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Capacity constraints



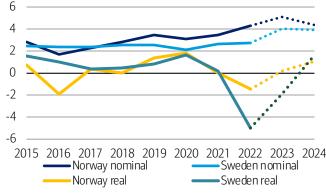
PMI services job growth falls sharply in Sweden



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Exhibit 18: Nominal wage growth (percent)





Source: Swedish National Mediation Office, Statistics Sweden, Riksbank, Statistics Norway, Norges Bank. Note: Dashed lines show Norges Bank (dark blue) and Riksbank (light blue) forecasts

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Inflation: More persistence in Norway

Inflation continues to exceed central bank forecasts and is far higher in Sweden than Norway. That reflects much stronger food and goods inflation in Sweden (Exhibit 24, Exhibit 31, Exhibit 32). The weakening exchange rate in both countries has likely contributed to higher inflation, but we doubt it has been a key explanation (Exhibit 25, Exhibit 26).

Domestic inflation pressure and signals of inflation persistence seem softer in Sweden. Wage growth has strengthened less, the labour market appears to be loosening, services inflation is a little softer. Inflation expectations are also falling at all horizons in Sweden, and medium-run expectations seem well anchored. In contrast, Norway continues to see rising inflation expectations.

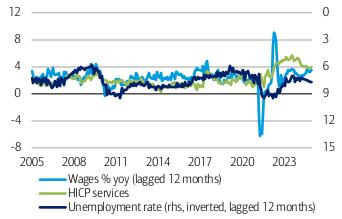
We tweak out inflation forecasts for recent data. For Sweden we leave CPI unchanged but cut CPIF (CPI excluding interest rates) 10bp in 2023 to 6.2%. We raise CPIF 30bp in 2024 to 2.3%. We expect inflation back to target in 2H 2024. For Norway we raise headline inflation 50bp in 2023 to 5.4% and 10bp in 2024 to 3.0%. We do not expect inflation to return to the target by end-2024. In short, we expect inflation to slow more in Sweden than Norway over the next couple of years, because Sweden starts with much higher inflation driven in large part by very rapid food price inflation that should fade.



Core inflation – on the EU definition of headline excluding food and energy – in the two countries has behaved similarly (Exhibit 24).

Exhibit 19: Sweden wages and services inflation, BofA forecast

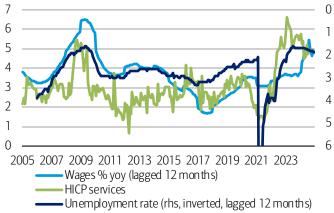
Wage growth boosted by labour market tightness and inflation



Source: BofA Global Research, Statistics Sweden

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Exhibit 20: Norway wages and services inflation, BofA forecastWage growth potentially adding to persistence of services inflation

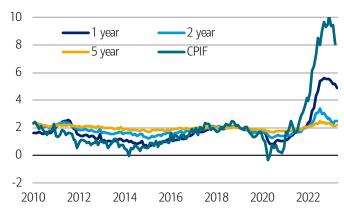


Source: BofA Global Research, Statistics Norway

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Exhibit 21: Sweden inflation expectations (percent)

Expectations falling or stable close to 2% at all horizons in "small" Prospera



Source: Prospera, Statistics Sweden. Note: We use the monthly survey data ("Small Prospera").

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Exhibit 22: Norges Bank inflation expectations survey

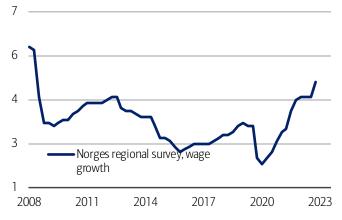
Shorter-term expectations surge, but 5y expectations more anchored



1y and 2y expectations are the average of economists', households', firms' and social partners' expectations. 5y expectations are the average of economists' and social partners' expectations. **Source:** Norges Bank

Exhibit 23: Norges regional survey and inflation (percent)

Wage growth rose further in Norges regional survey, wage deal with unions may be some relief to Norges

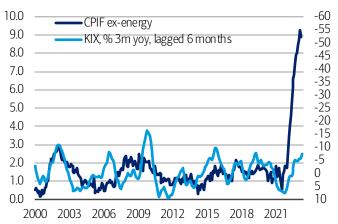


Source: Norges Bank, Statistics Norway

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Exhibit 25: Swedish ex-energy inflation and KIX

Currency likely explains small part of Sweden inflation surge

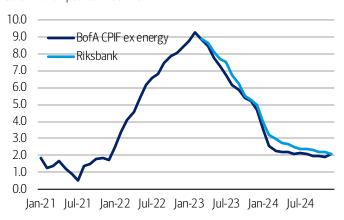


Source: BofA Global Research, Statistics Sweden, Bloomberg

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Exhibit 27: Riksbank and BofA core inflation forecast (percent)

Core inflation peaked in our view

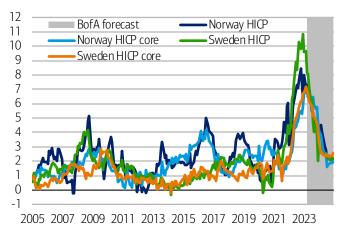


Source: BofA Global Research, Riksbank

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Exhibit 24: Norway vs. Sweden CPI inflation (percent)

Sweden seeing larger inflation spike, driven by food and goods



Source: BofA Global Research. Eurostat

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Exhibit 26: Norway inflation and Norges forecast (percent)

Currency likely explains small part of inflation rise



Source: BofA Global Research, Statistics Norway, Norges Bank. Note: We use Norges Bank projections for both CPI ex energy and the effective exchange rate

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Exhibit 28: Riksbank and BofA inflation forecast (percent)

Inflation likely to drop sharply 2H 2023 as energy inflation eases

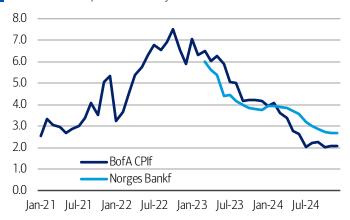


Source: BofA Global Research, Riksbank



Exhibit 29: BofA and Norges Bank inflation forecasts

Headline inflation peaked in Norway

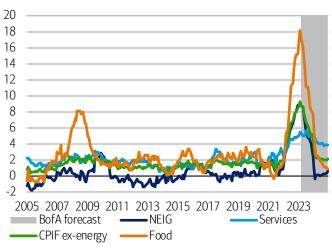


Source: BofA Global Research, Norges Bank, Statistics Norway.

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Exhibit 31: Sweden HICP components and BofA forecast

Swedish inflation heavily driven by global factors, but services strong

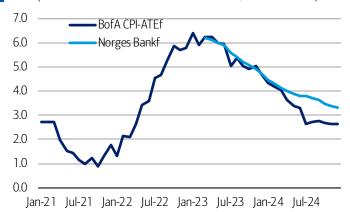


Source: BofA Global Research, Statistics Sweden.

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Exhibit 30: BofA and Norges Bank inflation forecasts

We expect core inflation to be stickier than headline, but also to have peaked



Source: BofA Global Research, Norges Bank, Statistics Norway.

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Exhibit 32: Norway HICP components and BofA forecast

Food and energy make large inflation contribution, but services risen



Source: BofA Global Research, Statistics Norway

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Policy: all about inflation tolerance

Our policy calls need to balance the data flow, which in our view points to faster easing inflation pressure in Sweden than Norway, against the central banks' reaction functions. Both have focused more on their currencies as a key driver of policy recently, pinning some of the inflation pressure on recent depreciations. But by far the biggest difference between the two central banks is, in our view, over the time frame they are prepared to take to return inflation to target. This relative time frame has in our view changed in the past few months.

The Riksbank made a major hawkish shift in February response to upside inflation surprises, also raising the focus on the exchange rate. The Riksbank wants to return inflation to target relatively rapidly at the cost of considerably weaker growth. Norges meanwhile seems more comfortable with allowing inflation to run above target for longer, allowing a period of weak growth to slowly erode capacity pressures (Exhibit 35, Exhibit 36).

100bp of hikes later (50bp in February and 50bp in April) the Riksbank has eased back on its hawkish language. It now considers policy to be contractionary. With inflation peaking



also it now believes slowing rate hikes to 25bp is the appropriate course of action. "After a year of interest rate hikes, monetary policy is assessed to be contractionary. The Riksbank will continue to regularly evaluate how the economy responds to the policy rate hikes already implemented and will adjust monetary policy accordingly." The Riksbank's policy rate path suggests a peak of around 3.65% (less than one more 25bp hike, though more than a 50% probability of one more hike).

We continue to expect Riksbank terminal of 3.75%, with one more 25bp rate hike in June (risks this is delayed until September). We expect two more 25bp hikes from Norges, in May and June, for 3.5% terminal. We see similar upside risks to both terminal rates, both from underlying inflation pressure but also both central bank's focus on the exchange rate.

We continue to think both central banks will stop their hiking cycles in June because we expect headline inflation to fall sharply through late Spring and into the second half of the year, first on energy and goods base effects then for the Riksbank in particular falling food price inflation. Our proprietary central bank mood indicators support this view. Both the Riksbank and Norges appear to be well past peak hawkishness and returning towards a neutral stance (Exhibit 34, Exhibit 37, Exhibit 38).

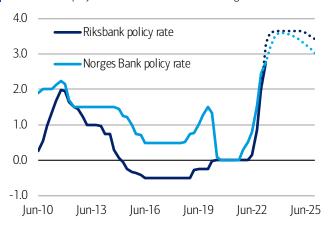
The Riksbank has begun shifting its focus to how long rates will need to remain elevated. In the April Monetary Policy Report they add the new condition that "The underlying inflation rate is expected to fall rapidly, but policy rate cuts will not begin until it has been close to the target for a while." This raises risks that the Riksbank will not cut as early or as far as we expect (four cuts in 2024). We do not forecast underlying inflation (CPIF ex-energy) to return to 2% until 3Q 2023.

While the Riksbank's new condition for cutting rates suggests risks of fewer cuts than the four we expect in 2024 we think the Riksbank will ease more and earlier than Norges next year. Norges seems prepared to take longer to return inflation to target which means more persistent rates. We look for two 25bp rate cuts from Norges in 2024 but four from the Riksbank. We see risks skewed to fewer Norges cuts and more from Riksbank.



Exhibit 33: Policy rates

Riksbank now projects a similar terminal rate to Norges

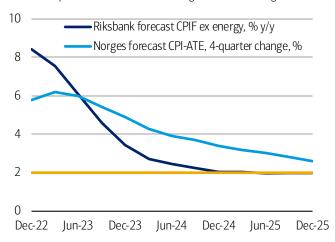


Source: Riksbank, Norges Bank

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Exhibit 35: Riksbank vs Norges inflation forecasts

Riksbank expects inflation to return to target faster than Norges

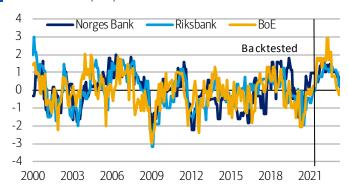


Source: Riksbank, Norges Bank

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Exhibit 34: BofA central bank mood indicators, standard deviations from average

Central banks well past peak hawkishness

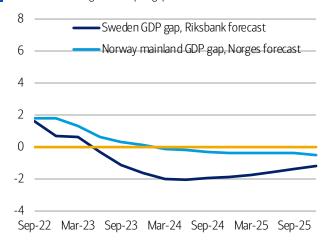


Source: BofA Global Research, Norges Bank, Riksbank, Bank of England. NORBI/Riksbank/BoEMI are scaled from 0 to 1, and reflects the proportion of 'hawkish' sentences in monetary policy assessments. A score of 0.5, for instance, means half of the sentences were hawkish. In the chart we show the raw mood score converted into standard deviations from average. The indicator identified as NORBI/Riksheard/BoEMI is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This economic indicator was not created to act as a benchmark. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Exhibit 36: Riksbank vs Norges output gap forecasts

...due to a more negative output gap

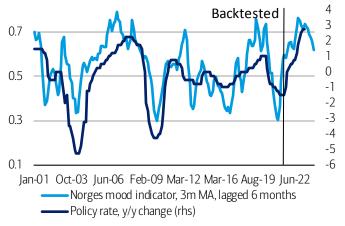


Source: Riksbank, Norges Bank



Exhibit 37: BofA Norges Bank mood indicator (NORBI)

NORBI suggest Norges past peak hawkishness

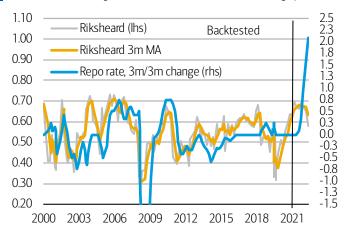


Source: BofA Global Research, Norges Bank. NORBI is scaled from 0 to 1, and reflects the proportion of 'hawkish' sentences in monetary policy assessments. A score of 0.5, for instance, means half of the sentences were hawkish. The indicator identified as NORBI is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This economic indicator was not created to act as a benchmark. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. For more details, please see European Viewpoint: Assessing Norges Bank's hawkishness

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Exhibit 38: BofA Riksbank mood indicator (Riksheard)

Riksheard waited longer to react to hawkishness, now catching up

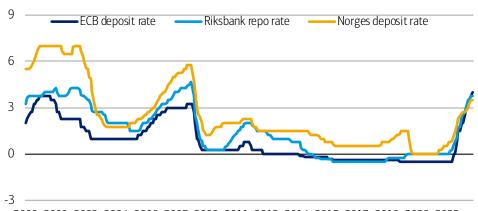


Source: BofA Global Research. Note: Riksheard is scaled from 0 to 1, and reflects the proportion of 'hawkish' sentences in each publication. A score of 0.5, for instance, means half of the sentences were hawkish. The indicator identified as Riksheard is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This economic indicator was not created to act as a benchmark. This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. For more details, please see European Viewpoint: Riksheard: doves without a tool.

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Exhibit 39: BofAf ECB, Riksbank and Norges policy rates

Our forecasts put Norges policy rate below the ECB by June, unusually



2000 2001 2003 2004 2006 2007 2009 2011 2012 2014 2015 2017 2019 2020 2022

Source: BofA Global Research, ECB, Riksbank, Norges Bank

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FX: Fundamentals should help NOKSEK

We revised our EUR/Scandies profiles higher, more so for NOK (Exhibit 40). We are more bullish than Bloomberg consensus on NOK but slightly more bearish on SEK for this year. We continue to expect NOKSEK to recover to well above parity (1.05-1.06) in 2H.

In hindsight, we can justify NOK's weakness from October until February but find its weakness since overdone (and surprising). We remain constructive on NOK for this year, especially in 2H, counting on a softer USD, stabilised risk sentiment and higher oil prices in 2H, on Norges Bank doing its part, and on more favourable oil-related NOK flows.



The Riksbank's focus on inflation is SEK-positive near term and longer term, but we remain concerned about harder landing risks and property-market risks in Sweden.

Exhibit 40: Latest Scandies FX forecasts (previous forecasts in brackets)

NOKSEK should strengthen into H2

	Jun-23	Sep-23	YE 2023	Mar-24	Jun-24	Sep-24	YE 2024
EUR/NOK	11.20 (10.80)	10.90 (1060)	10.60 (10.30)	10.40 (10.20)	10.40 (10.10)	10.20 (10.10)	10.00 (9.80)
USD/NOK	10.67 (10.29)	10.19 (9.91)	9.64 (9.36)	9.45 (9.27)	9.45 (9.18)	8.87 (8.78)	8.70 (8.52)
EUR/SEK	11.40 (11.40)	11.50 (11.20)	11.00 (10.80)	10.70 (10.70)	10.60 (10.60)	10.50 (10.50)	10.30 (10.30)
USD/SEK	10.86 (10.86)	10.75 (10.47)	10.00 (9.85)	9.73 (9.73)	9.64 (9.64)	9.13 (9.13)	8.96 (8.96)
NOK/SEK	1.02 (1.06)	1.06 (1.06)	1.04 (1.05)	1.03 (1.05)	1.02 (1.05)	1.03 (1.04)	1.03 (1.05)
EUR/USD	1.05	1.07	1.10	1.10	1.10	1.15	1.15

Source: BofA Global Research

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NOK: Counting on Norges and China

We have been surprised by NOK's recent weakness, from a much-undervalued level. We remain constructive on NOK for later in the year, counting on higher oil and Norges.

NOK in line with history until end-Feb but its weakness since overdone

We were not expecting NOK's weakness in the past six months. But, in hindsight, NOK's performance (in trade-weighted terms) from October until February was in line with its past performance. While we would have expected a roughly flat NOK since, it has instead weakened by c.4% despite the flat oil prices (their demand-supply mix has only slightly moved against NOK) and relative monetary policy unlikely to have mattered (Exhibit 41). Granted, NOK's implied volatility spread worsened notably over this period (Exhibit 42) amid financial turmoil and oil-price volatility given NOK's low liquidity, but we would need to over-stretch its typical impact.

Relatedly, we find NOK has weakened by more than its betas to the first three G10 FX principal components would imply (see in Exhibit 43 and Well behaved USD 25 Apr 23).

Besides positioning and/or technicals, adverse oil-related flows by Norges & Norway's oils combined may have also mattered.

Looking ahead: we remain constructive on NOK

Going forward, we remain constructive on NOK, especially in 2H, counting on:

- (1) More stable risk sentiment and a softer USD, after the Fed rate cuts for this year are priced out (Global FX Weekly: Still not landing 21 Apr 23).
- (2) Higher oil prices, with our commodities team expecting Brent at \$90+/bbl in 2H, partly counting on China's reopening (OPEC+'s whatever it takes moment 5 Apr 23). In fact, China's international flights are at just 46% of 2019 levels (see China Watch: Chart book series #91: Holiday bookings surged; home price picked up in Mar 20 Apr 23), we remain optimistic about the tourism recovery in 2H (see Tourism China: China tourism survey: The "goldest" week ahead since COVID 25 Ap 23), and we are anyway more bullish on China growth than consensus (China Watch: Raise GDP growth forecast on new credit cycle kicking off 21 April 2023).
- (3) Norway's under-appreciated fundamentals and Norges' willingness to help avoid more and/or persistent NOK weakness.

NOK was a key factor behind Norges' higher rate path in March (Exhibit 44). Its current level is already c. 2% weaker vs. Norges' (rather modest) forecast and, in fact, this may have contributed to Norges market pricing's recovery to its pre-financial turmoil level. This suggests additional NOK weakness could prove self-limiting (Exhibit 45, Exhibit 46).

Meanwhile, NOK remains much undervalued according to several equilibrium measures, including our preferred one (see Exhibit 47 and Updating G10 FX equilibrium 20 Apr 23).

- (4) More favourable oil-related NOK flows in H2, partly in reflection of Norway's higher fiscal needs expected in the May budget, and of the lower energy prices vs. last year (which are expected to affect the 2H oil tax payments).
- (5) Lighter positioning driven by Hedge Funds, which have turned slightly short NOK. But NOK is now Real Money's longest position (Exhibit 48).

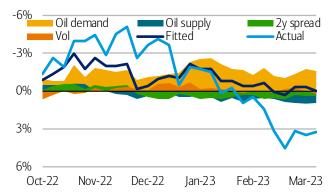
Forecasts: EURNOK profile higher. Risks: risk sentiment, oil & China, Norges

We revised our EURNOK profile higher, expecting EURNOK at 10.60 by year-end vs. 10.30 previously, USDNOK at 9.64 (vs. 9.36) and NOKSEK at 1.04 (vs. 1.05).

Key risks remain around risk sentiment & the USD. Oil prices, recession risks and the impact of China. Norges Bank staying the course and not disregarding the ECB.

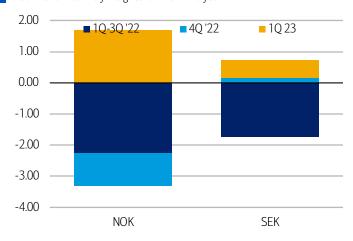
Exhibit 41: Fitted vs. actual NOK I-44 (inverted values)

NOK in line with history until late-Feb, but its recent weakness overdone



Source: BofA Global Research, Bloomberg, Federal Reserve Bank of New York, Oil Price Dynamics Report, https://www.newyorkfed.org/research/policy/oil_price_dynamics_report.html. Lower values of the import-weighted krone index (NOK I-44) show a stronger NOK. Weekly data through Apr 7. Regression estimates are for Jan 2018- Sep 2022. We regress changes in (log) NOK I-44 (Norges's import-weighted krone index) on: demand-driven and supply-driven changes in (log) Brent crude spot prices as per the New Fed Oil Price Dynamics Report data; changes in Norway's 2-year trade-weighted swap spread; and changes in the idiosyncratic NOK implied-vol spread.

Exhibit 42: Idiosyncratic 3-month implied volatility spreads Relative vol has likely weighed on NOK this year

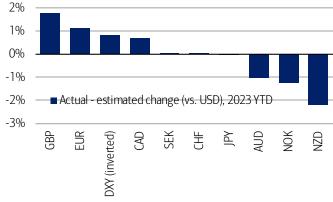


Source: BofA Global Research, Bloomberg. Note: We define the idiosyncratic NOK (SEK) implied volatility spread as that between the equally weighted average of the 3-mth EUR/NOK and USD/NOK (EUR/SEK and USD/SEK) implied volatilities and the equally-weighted average of the 3-mth EUR/USD, USD/JPY, EUR/JPY and EUR/CHF implied volatilities. Data weekly through Apr 21.

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Exhibit 43: Actual vs. PCA-based changes (vs. USD), 2023 YTD

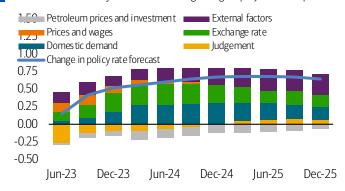
NOK appears as mot oversold after NZD



Source: BofA Global Research, Bloomberg. See Liquid Insight: Well behaved USD 25 Apr 23

Exhibit 44: Decomposition of changes in Norges Bank's rate path

Weaker NOK was a key factor behind Norges' higher projected rate path

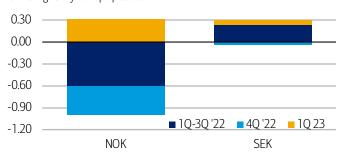


Source: Norges Bank, MPR 1/23, BofA Global Research. Note: Judgment is the difference (residual) between the rate-path changes and the cumulative contribution of the remaining five components.



Exhibit 45: Change in 2yr trade-weighted swap spreads (percent)

Norges' hawkishness in Marchand recent NOK weakness likely contributed to the higher 2yr swap spreads...

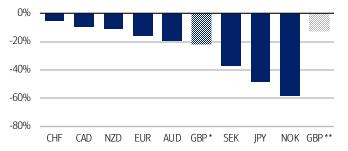


Source: BofA Global Research, Bloomberg. Note: The 2-year NOK swap spread is with respect to Norway's 9 largest trading partners as per the, import-weighted, NOK I-44 index. The 2-year SEK Spread is with respect to Sweden's 11 largest trading partners as per the, trade-weighted, krona index ("KIX"). Data weekly through April 21.

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Exhibit 47: XXX/USD misalignment

Scandies of the most undervalued in G10 according to our preferred fairvalue model



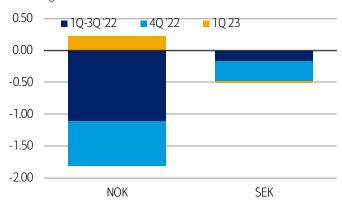
Source: Bloomberg and BofA Global Research

Note: for GBP * panel approach ** bilateral estimate, see report $\underline{\mathsf{GBP}}$ at the end of the Brexit road for methodology. For details please Updating G10 FX equilibrium 20 Apr 23

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Exhibit 46: Change in 2yr swap spreads vs EUR (percent)

...including vs. the EUR

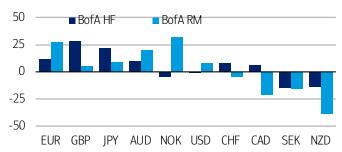


Source: BofA Global Research, Bloomberg. Data weekly through Apr 21.

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Exhibit 48: BofA investor G10 FX positioning

Hedge Funds have turned short NOK but Real Money have been buying NOK dips. Both remain short SEK but have reduced their shorts this year



Source: BofA Securities. Currencies ranked on investor positioning, defined as the equally weighted average of Hedge Funds and Real Money positioning. Each input is scaled to +50 and -50. +50 (-50) represents a max long (short) positioning relative to history.

BofA GLOBAL RESEARCH

SEK: prolonged weakness

We stay bearish on SEK through 3Q—despite finding it undervalued from a long-term perspective, see Exhibit 47—worried about Sweden's weakness, particularly seen in retail sales and the housing market, and risks around commercial real estate.

We believe it is precisely property market concerns—a minor factor at best in recent years—that have driven the stark divergence between the actual and fitted SEK value after November (Exhibit 49) despite the USD weakness.

While the Riksbank is unlikely to disappoint markets near term in a major way, we also think it is unlikely to help SEK meaningfully given market pricing. The Riksbank (and SEK) could also be caught between a rock and a hard place if Eurozone inflation proved stickier, forcing a more hawkish ECB stance, given Sweden's much higher rate sensitivity and tighter fiscal stance.

But we should be clear not all has been "doom and gloom" lately: we find the two-year wage deal and the well-behaved inflation expectations positive developments, which have likely contributed to Riksbank's "dovish" hike in April. We are also encouraged by some signs of stabilisation in the housing market although we remain very cautious.

Still, the worst for SEK is unlikely to be over until inflation starts falling meaningfully (similarly to our economists' base case), which would let the Riksbank soften its stance and lower "harder landing" risks. Reflective of such risks we think is the (renewed) striking divergence between EURSEK and EURUSD (Exhibit 50) in line with the long



EURSEK positioning (Exhibit 48). Meanwhile, we remain cautious on risk sentiment until the Fed rate cuts for this year are priced out and China's reopening gains steam.

Exhibit 49: Fitted vs. actual Swedish krona index

Concerns around property markets likely explain divergence from estimates



Source: BofA Global Research, Bloomberg, Lower values of the trade-weighted krona index (KIX) show a stronger SEK. Weekly data through Apr 21. Fitted values are based on regression estimates for 2018-2021. We regress changes in log KIX (trade-weighted krona index) on 1) residual changes in the (log) Bloomberg Dollar Index (see below for details); 2) changes in the trade-weighted ten-year SEK swap spreads, 3) changes in the first principal component of VIX, the MOVE Index and the US Corporate BAA 10-year spread, which we interpret as a proxy for market stress. The residual changes of the Bloomberg Dollar Index are changes in the Bloomberg Dollar Index unaccounted for by changes in market stress conditions.

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Exhibit 50: EURUSD vs EURSEK

EURUSD - EURSEK likely reflective of harder landing risks



Source: Bloomberg. Weekly data through Apr 21

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Stockholm BofA Real Estate fieldtrip suggests yields will keep rising

The main findings of our recent fieldtrip to Stockholm focusing on Nordic real estate were: (1) yields are expected to rise further as investors/landlords pay more for their financing; (2) current buyers are equity buyers (not debt reliant, "pension capital"), with virtually no transactions for low-yielding assets; and (3) past years' largest buyers (listed and private property companies) are now sellers (see Exhibit 51, Exhibit 52, Europe - Real Estate/Property: Key takeaways from BofA 2023 EMEA Real Estate CEO Conference 4 Apr 23).

Forecasts: SEK weakness for longer. Risks: inflation, property markets, ECB

We remain bearish on SEK for longer than before, expecting EURSEK to test its recent highs in the coming months (we see EURSEK peak at 11.50 in Q3). We forecast EURSEK at 11.00 by year-end vs. 10.80 previously, USDSEK at 10.00 (vs. 9.82 previously) and NOKSEK at 1.04 (1.05 previously).

Risks are around the Fed stance and risk sentiment, the ECB stance, and the Swedish property markets. We still think risks are for more and prolonged SEK weakness.

We would be encouraged from a medium-term perspective if Swedish inflation started falling fast and/or property markets showed consistent signs of relief. Meanwhile, we think a more hawkish ECB stance could prove a double-edged sword for SEK.

Exhibit 51: Real estate bond yield by region

Swedish real estate bond yields have increased faster in recent months

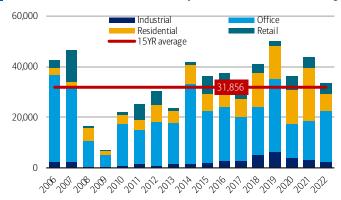


Source: BofA Global Research, Bloomberg as of 30 March 2023. For more details, please see Europe - Real Estate/Property: Key takeaways from BofA 2023 EMEA Real Estate CEO Conference 4 Apr 23

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Exhibit 52: Stockholm investment volume (SEK m)

Investment volume fell in 2022, driven by residential, but still at 15Y average



Source: CBRE 4Q'22. For more details, please see Europe - Real Estate/Property: Key takeaways from BofA 2023 EMEA Real Estate CEO Conference 4 Apr 23

Annex: economic forecasts

Exhibit 53: BofA Sweden inflation Updated forecasts

		CPI									
			Unprocessed	Processed food,							CPIF ex
	NEIG	Energy	food	alcohol, tobacco	Food	Services	Headline	Core	CPI	CPIF	energy
Jan-22	1.69	23.79	2.66	1.79	1.93	2.37	3.91	2.06	3.69	3.92	2.53
Feb-22		20.06	6.34	2.96	3.54	2.71	4.44	2.73	4.29	4.49	3.40
Mar-22		34.43	8.28	4.63	5.26	3.00		3.31	5.97	6.12	4.07
Apr-22		33.16	10.22	4.91	5.83	3.83	6.61	3.73	6.36	6.44	4.54
May-22		32.73	12.25	6.64	7.60	4.16	7.52		7.27	7.25	5.40
Jun-22		40.33	13.96	8.43	9.38	4.62		5.04	8.68	8.47	6.13
Jul-22		27.04	15.77	10.31	11.25	4.62	8.32		8.49	7.98	6.57
Aug-22		37.78	13.51	11.21	11.60	4.46	9.48		9.83	9.00	6.82
Sep-22		38.45	17.19	12.74		4.74	10.26			9.66	7.43
Oct-22		27.60	18.82		14.46	4.85	9.79		10.85	9.28	7.90
Nov-22		29.18	19.20		15.16	4.72	10.10		11.46	9.53	8.02
Dec-22		31.80	17.86	14.71	15.25	4.97			12.34	10.17	8.43
Jan-23		14.74	19.47		16.96	5.01			11.68	9.34	8.75
Feb-23		9.69	23.41		18.16	5.49			11.95	9.42	9.26
Mar-23		-2.15	19.48	16.75	17.17	5.32			10.64	8.04	8.89
Apr-23		0.41	16.93	16.01	16.11	4.99	8.08	6.68	10.56	7.95	8.46
May-23		-1.51	17.04	14.21	14.64	5.02		6.19	9.75	7.24	7.76
Jun-23		-7.50	14.88		13.24	5.12		5.92	8.57	6.22	7.29
Jul-23		-1.07	15.44	10.19	11.04	5.68		5.81	8.44	6.36	6.76
Aug-23		-11.31	16.59	10.05	11.13	5.26	4.76	5.17	6.64	4.89	6.18
Sep-23		-15.27	16.36	8.59	9.87	4.82	4.01	5.18	5.64	4.19	5.88
Oct-23		-6.48	14.22	7.49	8.60	5.05	4.61	4.83	5.78	4.68	5.37
Nov-23		-11.53	15.86	6.69	8.21	4.93	3.80	4.63	4.79	4.00	5.20
Dec-23	2.54	-21.66	16.07	6.02	7.68	5.26	2.00	4.12	2.97	2.39	4.68

Source: BofA Global Research, Statistics Sweden

BofA GLOBAL RESEARCH

Exhibit 54: BofA Norway inflationUpdated forecasts

				HICP						CPI
			Unprocessed	Processed food,						
	NEIG	Energy	food	alcohol, tobacco	Food	Services	Headline	Core	CPI	CPI-ATE
Feb-22	2.45	16.98	2.41	1.09	1.26	2.58	3.54	2.51		2.12
Mar-22	2.25	35.03	1.61	0.64	0.76	3.09	4.68	2.67	4.54	2.12
Apr-22	2.42	43.34	1.87	2.03	2.00	3.92	5.87	3.17	5.39	2.64
May-22		34.50	3.15	2.59	2.66	4.10	6.22	4.21	5.74	3.44
Jun-22	3.99	41.54	6.56	3.86	4.25	4.83	6.97	4.41	6.33	3.61
Jul-22		30.50	9.90	8.30	8.54	4.98	7.33	4.66	6.79	4.55
Aug-22		26.09	9.14	8.38	8.50	5.09	7.07	4.77		4.66
Sep-22	4.95	24.36	12.87	9.58	10.07	5.59	7.65	5.28	6.89	5.25
Oct-22		30.40	14.46	10.19		5.23	8.45	5.49		5.88
Nov-22		18.91	15.08		10.48	5.04	7.28	5.26		5.70
Dec-22		6.05	12.10	9.20	9.62	5.28	6.31	5.81	5.89	5.77
Jan-23		17.41	12.39	9.42	9.84	5.97	8.02	6.76		6.40
Feb-23		14.18	13.78	6.30	7.36	6.62	7.17		6.30	5.89
Mar-23	7.84	11.70	15.05	5.83	7.14	6.32	7.28	7.08		6.22
Apr-23		2.04	15.77	6.15	7.52	6.09	6.46	6.97		6.22
May-23		10.39	16.30	6.51	7.90	5.90	6.88	6.45		5.99
		6.95	11.09	6.83	7.45	5.13	6.34	6.02		5.94
Jul-23		6.15	4.44	3.20	3.39	5.16	5.48	6.01		5.06
Aug-23	7.27	-0.73	5.89	3.85	4.16	5.56	5.37	6.44		5.38
Sep-23		-10.04	4.68	4.36	4.40	5.68	4.10		4.18	5.02
Oct-23	5.53	-8.31	6.08	4.54	4.77	5.73	4.16		4.20	4.91
		-11.12	6.47	5.42	5.58	5.63	4.16		4.22	5.06
Dec-23	3.92	-5.52	9.59	6.33	6.82	5.46	4.29	4.74	4.18	4.65

Source: BofA Global Research, Statistics Norway



Exhibit 55: Sweden Economic forecasts

Recession in 2023. Inflation to fall back towards target

		2020	2021	2022	2023	2024	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24
GDP	% qoq						-0.2	0.2	0.3	-0.5	-0.3	-0.4	-0.4	0.1	0.2	0.3	0.4	0.4
	% qoq ann.						-0.7	0.8	1.4	-2.0	-1.2	-1.6	-1.6	0.4	0.8	1.2	1.6	1.6
	% yoy	-2.3	5.2	2.7	-0.9	0.5	4.6	4.0	2.5	-0.1	-0.2	-0.9	-1.6	-1.0	-0.5	0.2	1.0	1.3
Private Consumption	% qoq						-1.2	1.4	-1.8	-0.4	-0.2	-0.2	-0.2	0.2	0.3	0.4	0.4	0.4
	% yoy	-3.2	6.2	2.2	-1.2	0.9	5.2	5.7	0.2	-2.0	-1.0	-2.6	-1.0	-0.4	0.1	0.7	1.3	1.5
Government Consumption	% qoq						-0.2	-0.2	0.5	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	% yoy	-2.0	2.4	0.0	1.6	2.0	0.1	-0.8	0.2	0.3	1.0	1.7	1.7	2.0	2.0	2.0	2.0	2.0
Investment	% qoq						1.2	2.4	0.5	-1.0	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4
	% yoy	1.5	5.7	5.3	0.6	1.2	5.8	6.6	5.7	3.1	2.1	-0.1	-0.4	0.8	0.9	1.1	1.3	1.5
Final Domestic Demand1	% qoq						-0.3	1.3	-0.6	-0.4	0.1	0.1	0.1	0.3	0.4	0.4	0.4	0.4
	% yoy	-1.6	4.8	2.3	0.0	1.2	3.9	4.2	1.7	0.0	0.4	-0.8	-0.1	0.6	0.8	1.2	1.5	1.6
Net exports1	% qoq						0.2	-0.9	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% yoy	-0.1	-0.1	-0.6	0.6	-0.1	-0.8	-2.0	-0.4	0.7	0.5	1.4	0.6	-0.1	-0.1	-0.1	-0.1	-0.1
Stockbuilding1	% qoq						-0.1	0.0	0.1	-0.8	-0.4	-0.5	-0.5	-0.2	-0.1	-0.1	0.0	0.0
	% yoy	-0.7	0.5	1.0	-1.6	-0.7	1.6	2.0	1.2	-0.8	-1.1	-1.5	-2.1	-1.5	-1.2	-0.8	-0.4	-0.2
Current Account Balance	% of GDP	5.9	6.5	4.4	5.2	5.0	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Industrial production	% qoq						-0.2	0.0	4.2	-4.5	-0.8	0.0	0.4	0.6	0.6	0.6	0.6	0.6
	% yoy	-5.0	7.0	1.9	-1.8	2.2	1.6	19.5	4.7	3.8	1.5	0.9	5.7	-0.7	-1.2	-1.2	-4.8	0.2
Unemployment rate 2	%	8.5	8.8	7.5	7.5	8.0	7.7	7.7	7.0	7.4	7.3	7.4	7.5	7.7	7.8	7.9	8.0	8.2
CPI Inflation (harmonised) ²	% yoy	0.7	2.7	8.1	6.1	2.4	4.9	7.7	9.4	10.2	9.1	7.2	5.0	3.5	2.8	2.4	2.1	2.1
CPI2	% yoy	0.5	2.2	8.4	8.0	2.4	4.7	7.4	9.7	11.6	11.4	9.6	6.9	4.5	3.0	2.3	2.0	2.0
CPIF	% yoy	0.5	2.4	7.7	6.2	2.3	4.8	7.4	8.9	9.7	8.9	7.1	5.1	3.7	2.8	2.3	2.0	2.1
Repo Rate ⁴	%	0.00	0.00	2.50	3.75	2.75	0.00	0.75	1.75	2.50	3.00	3.75	3.75	3.75	3.50	3.25	3.00	2.75

Notes. ¹ Contribution to GDP growth ² quarterly averages ³ Period averages, quarterly change. Source: BofA Global Research, Statistics Sweden, Bloomberg

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Exhibit 56: Norway Economic forecasts

Growth to slow through 2022 and 2023, inflation to fall back towards target in 2023

		2020	2021	2022	2023	2024	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24
GDP (mainland)	% qoq						-0.4	1.2	0.6	0.8	0.2	0.0	0.0	0.1	0.2	0.2	0.3	0.3
	% qoq ann.						-1.5	4.7	2.3	3.4	0.8	0.0	0.0	0.4	0.8	0.8	1.2	1.2
	% yoy	-3.4	4.2	3.8	1.4	0.7	5.3	4.9	2.7	2.2	2.8	1.6	1.0	0.3	0.3	0.5	0.8	1.0
Private Consumption	% qoq						-3.9	3.2	0.6	5.6	0.0	-0.1	0.1	0.2	0.2	0.2	0.3	5.6
	% yoy	-6.6	4.3	6.9	5.3	8.0	10.1	9.8	2.9	5.4	9.7	6.2	5.6	0.2	0.4	0.7	0.9	1.0
Government Consumption	% qoq						-1.7	0.5	0.0	0.9	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	% yoy	-0.5	5.0	0.1	1.6	1.2	1.9	0.5	-1.6	-0.3	1.8	1.5	1.8	1.2	1.2	1.2	1.2	1.2
Investment	% qoq						2.1	0.5	1.1	1.1	0.0	0.0	0.0	0.2	0.5	0.5	0.5	0.5
	% yoy	-3.1	1.7	6.6	1.5	1.4	6.8	6.8	7.9	4.7	2.6	2.1	1.1	0.2	0.7	1.2	1.7	2.0
Final Domestic Demand1	% qoq						-1.9	1.8	0.5	3.2	0.1	0.0	0.1	0.2	0.3	0.3	0.3	0.3
	% yoy	-4.3	4.0	5.0	3.5	1.1	6.9	6.4	2.7	3.6	5.8	3.9	3.5	0.5	0.7	1.0	1.2	1.3
Net exports1	% qoq						0.6	-1.1	0.4	-1.3	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
	% yoy	3.1	1.7	-1.3	-1.5	-0.6	-1.3	-2.0	-0.5	-1.4	-2.2	-1.2	-1.8	-0.7	-0.7	-0.6	-0.5	-0.5
Stockbuilding1	% qoq						1.0	0.5	-0.4	-1.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
	% yoy	-2.2	-1.6	0.0	-0.6	0.1	-0.4	0.4	0.4	-0.2	-1.0	-1.2	-0.7	0.5	0.2	0.1	0.1	0.1
Current Account Balance	% of GDP	1.1	13.9	32.5	18.6	15.9	31.8	26.8	44.6	26.6	25.3	16.6	16.4	16.3	16.2	15.9	15.9	15.7
Industrial production	% qoq						1.9	0.8	2.5	-2.3	-0.4	-0.3	-0.2	0.0	0.3	0.5	0.6	0.6
	% yoy	4.1	3.3	2.5	-1.0	0.9	2.2	2.7	2.3	2.3	2.9	0.6	-0.5	-3.1	-0.8	-0.2	0.6	1.4
Unemployment rate 2	%	5.1	3.1	1.8	1.7	2.0	2.0	1.8	1.7	1.7	1.6	1.7	1.7	1.8	1.9	1.9	2.0	2.0
CPI Inflation (harmonised) ²	% yoy	1.2	3.9	6.2	5.8	3.3	3.8	6.4	7.4	7.3	7.5	6.6	5.0	4.2	4.5	3.5	2.6	2.5
CPI2	% yoy	1.3	3.5	5.8	5.4	3.0	3.8	5.8	6.7	6.6	6.6	6.0	4.8	4.2	4.0	3.2	2.5	2.4
CPI-ATE2	% yoy	3.0	1.7	3.9	5.2	2.9	1.9	3.2	4.8	5.8	6.2	5.4	4.5	4.6	3.6	3.1	2.5	2.3
Policy Rate ³	%	0.00	0.50	2.75	3.50	3.00	0.75	1.25	2.25	2.75	3.00	3.50	3.50	3.50	3.25	3.25	3.00	3.00

Notes: 1 Contribution to GDP growth 2 quarterly averages 3 End period. Source: BofA Global Research, Statistics Norway, Norges Bank.



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