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Consultation response on Nordea's applications for permission to implement merger plans

A transformation of Nordea from a subsidiary structure to a branch structure means that large parts of Nordea's banking operations in Denmark, Finland and Norway, which are currently conducted via a separate subsidiary in each country, will instead be conducted through branches of a Swedish company. Such a change will give Swedish authorities a more direct responsibility for supervision and crisis management regarding the company's operations abroad. This may entail more integrated supervision of Nordea and make it easier to manage a situation where the bank is in crisis. A transformation into a branch structure also gives Nordea a simpler legal structure, which can create efficiency gains for the bank.

At the same time, the transformation into a branch structure will increase the Swedish state's undertakings as Nordea Bank AB's balance sheet total will be larger. These undertakings include possible liquidity support from the Riksbank and possible state crisis management measures. There is therefore reason to increase the bank's resilience to, among other things, disruptions in its funding by tightening the requirements regarding its liquidity buffers. The Riksbank therefore considers that Nordea should be subject to adequate liquidity coverage requirements (LCR) in all significant currencies, including Danish and Norwegian kronor. There are LCR requirements in euros and US dollars already in place. Moreover, the Riksbank has previously recommended that an LCR requirement in Swedish kronor be introduced.

The fact that the Swedish part of Nordea will be larger also increases the need for supervisory actions from Finansinspektionen. Finansinspektionen should therefore be granted adequate resources to be able to carry out its expanded supervisory remit with a suitable degree of supervisory intensity. A transformation into a branch structure also increases the importance of Finansinspektionen being given clear powers so that it can reciprocate macroprudential policy measures taken in the countries where Nordea conducts its foreign operations.

The fact that a branch structure increases the Swedish state's potential undertakings also underlines the need for a number of measures that the Riksbank has previously called for and which apply to the major banks in general. These measures include the introduction of a leverage ratio requirement of 5 per cent, a review of the risk-based capital requirements and the need for the banks to reduce their funding risks and achieve the minimum level of 100 per cent in stable funding (NSFR). In addition, the banks need to

- *have a sufficient proportion of liabilities that can be written down or converted into capital in order to absorb losses if the bank is put into resolution.*

On 18 March 2016, Nordea Bank AB submitted applications to Finansinspektionen to merge with subsidiaries in Denmark, Finland and Norway, thereby transforming into a branch structure. Finansinspektionen has given the Riksbank the opportunity to comment on Nordea's applications. This response presents the Riksbank's main comments. In the annex "Nordea's applications for permission to implement merger plans – annex to the Riksbank's response", the Riksbank presents its standpoint in more detail.

The Nordea Group is the only Nordic bank among the 30 banks in the world classified as global systemically important (G-SIB). The Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS) have, as a result of the importance of G-SIBs for the financial system, published a stricter standard for how much capital and loss-absorbing capacity such banks shall have. Nordea is also considered a domestic systemically important bank in all the Nordic countries and has substantial operations in the Baltic countries. Nordea has about one third of the market for deposits and lending in Finland, about a fifth in Denmark and a slightly lower share in Sweden, Norway and the Baltic countries. The Nordea Group's total assets amount to almost SEK 6,000 billion, which is about 140 per cent of Sweden's GDP.

The organisational change for which Nordea has applied will give Swedish authorities a more direct responsibility for supervision and crisis management regarding the company's foreign banking operations. This may simplify the authorities' overall dealings with Nordea, especially in a crisis, which reduces uncertainty for the bank and its stakeholders. The branch structure also simplifies Nordea's legal structure and compliance efforts, and reduces the number of decision-making bodies, which can increase the bank's efficiency.

At the same time, the transformation into a branch structure will increase Nordea Bank AB's balance sheet total from about SEK 1,800 billion to an estimated SEK 4,800 billion. One consequence will be that the scope of the potential undertaking for liquidity support from the Riksbank and potential future state crisis management measures will significantly increase. In addition, the demands on Finansinspektionen's supervision will increase considerably since a larger proportion of Nordea's operations will fall within Finansinspektionen's remit.

Increase in the Riksbank's responsibility for liquidity support

Should a Swedish bank encounter liquidity problems, the Riksbank has an important role as lender of last resort. This is due to the Riksbank's unique capacity to create unlimited liquidity in Swedish kronor. In addition, the Riksbank can supply the financial system with foreign currency via its foreign currency reserve.

A transformation of Nordea into a branch structure will imply that the responsibility for supervision and resolution of Nordea will mainly rest with Finansinspektionen and the Swedish National Debt Office respectively. In line with this, it is probable that the Riksbank will be responsible for possible emergency liquidity assistance (ELA) to Nordea Bank AB should the case arise, and that the Riksbank, as a result, can be exposed to a greater share of the risks in the bank's operations once it adopts a branch structure. This increases the risks for the Riksbank and ultimately for Swedish public finances. In addition, the increased responsibility for ELA also includes Danish kronor, euros and Norwegian kronor to a greater extent than is the case in a subsidiary structure. The entire Nordea Group's total liabilities in foreign currency correspond to over 900 per cent of the Riksbank's foreign currency reserve, which illustrates the scope of the responsibility.

When the markets function normally, it does not seem to be a major problem for either Nordea or the Riksbank to swap Swedish kronor for the desired currencies. But it is far from certain that this would be the case in a crisis situation, something which became clear during the crisis in 2008-2010.[1]

As a consequence of the increased undertaking, it will be important for the Riksbank to, ex-ante, have greater clarity regarding how Nordea manages its liquidity risks and which liquidity rules will apply to Nordea once it adopts a branch structure. The responsibility for liquidity management shall primarily rest with the banks themselves in order to mitigate the risk of the state, and ultimately the taxpayer, having to bear the costs that arise should the banks encounter financial problems (see more under Need for measures as a result of a transformation into a branch structure).

Increase in Finansinspektionen's supervisory responsibility for Nordea

A transformation of Nordea's operations into a branch structure also involves a greater Swedish supervisory undertaking, since the responsibility for the supervision of Nordea's banking operations abroad will be largely transferred to Finansinspektionen. Nordea will, however, continue to have subsidiaries of a significant size in the host countries. The foreign supervisory authorities will therefore continue to play an important role and participate in the supervisory college. In the event of Nordea's branch operations being deemed significant, the Finnish supervisory authority's tasks with respect to the Finnish branch will be exercised by the ECB.

Increase in Sweden's crisis management undertaking

A transformation of Nordea into a branch structure will increase the size of the Swedish banking system by about SEK 3,000 billion, an amount approximately equivalent to 70 per cent of Sweden's annual GDP. Although the branch transformation process may lead to a temporary increase in operational risks, having a branch structure will probably not change the structural risks in Nordea's operations. However, the Swedish state will be exposed to a greater share of the risks in Nordea's operations. One can indeed claim that the current group structure already involves a significant Swedish undertaking. But, in the event of a transformation into a branch structure, the Swedish state will have an explicit undertaking for the bank as a whole since Nordea Bank AB is a Swedish company which, in a crisis, is to be dealt with in accordance with Swedish law.

If Nordea Bank AB were to encounter problems that led to the bank being considered failing or likely to fail, it may be put into resolution. The main rule is that the bank is to be recapitalised by the bank's shareholders and creditors being given the responsibility for covering all the losses made by the failing bank. There is, however, scope for exempting creditors from contributing to the recapitalisation under certain circumstances.[2] If such an exception is made, state funding from the resolution reserve may be used to capitalise the bank.[3] Another possibility is that the state takes alternative measures to guard against

[1] Baba, Nagano and Packer (2008) BIS Quarterly Review http://www.bis.org/publ/qtrpdf/r_qt0803h.htm, and McGuire, P. and von Peter, G. (2009), "The US dollar shortage in global banking", BIS Quarterly Review, March 2009. Similar problems also arose on the repo market, where both Bear Stearns and Lehman Brothers could not even borrow money against US government securities as collateral, the Financial Crisis Inquiry Report http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/fcic_final_report_full.pdf

[2] An exception may, for example, be made if it is necessary and proportionate in order to avoid significant contagion effects that lead to a serious disruption of the financial system.

[3] A prerequisite for using the resolution reserve is, however, that owners and creditors must first of all have contributed a certain share to the capitalisation and that the European Commission does not oppose the measure.

Nordea being put into resolution in the first place, for example by providing state funding in the form of a capital injection in order to prevent the bank from failing.[4]

All in all, it cannot be ruled out that the Swedish state, if Nordea encounters financial problems, may need to inject considerable amounts into Nordea either in the form of preventive capitalisation or within the framework for resolution. There is still a risk therefore that the state may need to set aside funding in order to support Nordea economically notwithstanding the new regulatory framework for resolution.[5] This is also reflected in the credit ratings awarded to Swedish banks by certain credit rating agencies.

Need for measures as a result of a transformation into a branch structure

According to the Riksbank, the abovementioned consequences require the implementation of a number of measures in order to mitigate the risks that may arise from Nordea's transformation into a branch structure. These measures are discussed below.

Stricter requirements concerning Nordea's liquidity management

To increase resilience and the element of self-insurance for Nordea against funding problems and thereby reduce the risk of potential problems in Nordea resulting in costs for the Riksbank and ultimately the Swedish state, it is reasonable, according to the Riksbank, for there to be Liquidity Coverage Ratio (LCR) requirements in all currencies that are significant for the bank. There are already LCR requirements in euros and US dollars in place. In addition, the Riksbank has previously recommended that Finansinspektionen introduce an LCR requirement in Swedish kronor. As a result of Nordea adopting a branch structure, it is the Riksbank's opinion that Nordea should also be subject to LCR requirements in Danish and Norwegian kronor. Since the Riksbank may also have a greater undertaking for liquidity support in euros than is the case in a subsidiary structure, the need for additional requirements for liquidity buffers in euros on top of the current requirement should also be investigated.

Imposing LCR requirements in significant currencies, such as Danish and Norwegian kronor, on the bank is also in line with the intention of the Basel III Accord from 2013[6] and the European Commission's delegated regulation on the liquidity coverage requirement.[7] These state that a bank is expected to maintain a liquidity reserve that has a currency distribution matching its liquidity needs. LCR requirements in local currencies for banks with cross-border operations are not unusual in an international context, and can be found in for example Australia[8], Switzerland and Singapore.

To a certain extent, Nordea relies on being able to convert central bank placements in euros and dollars into Norwegian and Danish kronor on the swap market. The Riksbank believes that it is not possible to rule out a situation in which Nordea, in the absence of LCR requirements in Norwegian and Danish kronor, may own assets in other currencies that are both less liquid than central bank funds and more difficult to convert on the

[4] Preventive state aid shall, among other things, be approved by the European Commission in accordance with the rules on state aid.
[5] During the negotiations in the EU on the Banking Recovery and Resolution Directive (BRRD), the Swedish Government pointed out that the proposed regulatory framework was not actually adapted to dealing with real systemic risks and that Member States should be given greater flexibility. The negotiations resulted in certain elements being added to the directive that increase flexibility, for example the option of the Member State to provide preventive state aid or to take over the ownership of a bank in resolution. (See the Financial Crisis Committee's report "Resolution – a new method of managing banks in crisis" (SOU 2014:52), pp 340).
[6] Article 42 in Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, BCBS, January 2013:
[7] European Commission's delegated regulation 2015/61 on liquidity coverage requirements for credit institutions:
[8] In Australia, banks may, under certain circumstances and for a monthly fee and against suitable collateral, have access to a Committed Liquidity Facility (CLF). This can be seen as a liquidity line to the central bank.

swap market than euros and dollars. In such a situation, the bank's resilience to liquidity stress would be weaker compared to a situation in which they maintained buffers directly in Danish and Norwegian kronor.

Moreover, relying on the swap market to cover outflows in other currencies is not compatible with the Basel regulatory framework.[9]

Measures that the Riksbank needs to take

The fact that Nordea fulfils the LCR requirements imposed upon the bank does not offer complete protection against liquidity risks as LCR only measures the extent to which a bank has liquid assets to cover liquidity outflows over a 30-day period. Other measures may therefore be required to safeguard the Riksbank's ability to supply liquidity in the currencies needed. These include, for example, a review of the size and composition of the foreign currency reserve. In addition, the Riksbank may need to establish swap agreements with other central banks. It is to be noted, however, that a swap agreement between the Riksbank and another central bank does not mean that a swap transaction can be automatically carried out as soon as a need for foreign currency arises, since the agreements generally require additional approval of each swap transaction. Any swap agreements should therefore only be considered as a complement to the need for a larger foreign currency reserve. All else being equal, the need to review the size and composition of the foreign currency reserve will be smaller, the greater the liquidity buffers Nordea is obliged to have itself. Further discussion on currency reserves should therefore be dependent on how LCR requirements in individual currencies are introduced.

The greater responsibility for possible ELA will also increase the Riksbank's need to collect information on the liquidity situation in Nordea's operations. It may therefore be relevant to increase the frequency of information reporting and also to include the bank's liquidity situation in Danish and Norwegian kronor. The Riksbank further intends to intensify the cooperation and coordination with other central banks in the Nordic and Baltic countries.

If market circumstances or regulation mean that the degree of self-insurance against liquidity shocks at banks is inadequate, there is also reason to examine more closely whether the Riksbank's liquidity facilities and their terms can be designed so that the banks to a larger degree bear the costs of self-imposed liquidity risks.

Sufficient resources for a greater Swedish supervisory responsibility and extended cross-border mandate

A transformation into a branch structure involves a greater supervisory responsibility for Finansinspektionen than if the operations are conducted in a subsidiary structure. This means that Finansinspektionen will need significantly more resources in order to be able to exercise effective supervision over Nordea. Exactly how much the need for resources will increase depends, however, on factors such as how the host countries change their supervision resources as a result of Nordea's transformation. In light of Nordea having branches and subsidiaries of a significant size in the host countries, it is important that the staffing levels for the total number of people working with the supervision of Nordea do not decrease.

As a result of Nordea's transformation, the Swedish state will receive higher supervision fees from Nordea. In the Riksbank's opinion, it is important that Finansinspektionen, via these increased fees, is allocated the resources needed to be able to carry out its

[9] Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, BCBS, January 2013.

expanded remit in the supervision of a G-SIB with a suitable degree of intensity as a result of Nordea's transformation into a branch structure.

The transformation into a branch structure also means that Finansinspektionen will have crucial influence regarding which macroprudential policy measures will impact Nordea's foreign branches. In light of the fact that Nordea is a bank with extensive cross-border operations, it will, in the Riksbank's opinion, be especially important to ensure that Finansinspektionen has the necessary tools and the possibility to replicate macroprudential policy measures that have been implemented by a host country. Otherwise, situations may arise whereby stability risks highlighted by Nordea's host countries are not counteracted via macroprudential policy measures directed at Nordea. It could also lead to Nordea not building up adequate resilience to stability risks in the host countries, which may weaken financial stability in both Sweden and the host countries.

Need for further measures

In addition to the measures discussed above, the Riksbank has previously argued for the introduction of a number of other measures to strengthen stability in the financial system. These measures have been discussed in publications such as the Riksbank's Financial Stability Report and affect all four major banks. These are not a direct result of Nordea's transformation into a branch structure but the importance of their introduction is underlined by the increased undertaking for the Swedish state emanating from Nordea's plans.

LCR requirements in Swedish kronor and achievement of the minimum NSFR level

As the Riksbank has previously pointed out, the major Swedish banks should be subject to a LCR requirement in Swedish kronor that amounts to a minimum of 60 per cent. In addition, they should achieve an NSFR of 100 per cent. As previously pointed out by the Riksbank, the Swedish banking system is strongly interlinked and problems in one bank can spread to others. In light of the increased undertaking for the Swedish state caused by a transformation into a branch structure, it is therefore of added importance that banks have satisfactory liquidity management. Nordea's transformation therefore underlines the need for both an LCR in Swedish kronor and an NSFR.

Tighter capital requirements

According to the Riksbank, Nordea's transformation into a branch structure makes it more important to strengthen the resilience of the Swedish banking system by tightening the capital requirements on the four major banks.

The Riksbank has previously argued in favour of the four major Swedish banks being subject to a leverage ratio requirement of 5 per cent and an increase in the risk-based capital requirement.[10] It can be noted that Switzerland, the United Kingdom and the United States intend to introduce leverage ratio requirements of approximately the same magnitude for their systemically important banks. The IMF and OECD have also stated

[10] Sveriges Riksbank (2015b), see bibliography for the name of the publication.

that a leverage ratio requirement of 5 per cent would be desirable.[11] Support for similar leverage ratio requirement levels is also given in a recently published study by BIS.[12]

Finansinspektionen is currently performing a review of the Swedish banks' calculations of capital requirements for corporate exposures. This work may result in increased risk-weighted capital requirements for Swedish banks that use internal models and hence in higher leverage ratios. The Riksbank welcomes this work.

Strict requirements for loss-absorbing capacity

At the same time, the Riksbank wishes to point out that more stringent capital requirements can by no means eliminate the risk of failure. To reduce the likelihood of the Swedish state having to inject capital in a crisis situation, it is also important for Sweden to introduce strict requirements for loss-absorbing capacity.[13] This maximises the prerequisites for the bank to be able to recapitalise by writing down its liabilities or converting them into equity.

The Riksbank believes that the calibration of these requirements should be based on both conservative assumptions, as regards the losses that occur prior to and during resolution, as well as on the desired level of capital adequacy and buffers after recapitalisation in order for the bank to regain the confidence of the market. The bail-in tool is indeed basically untested but if the requirement for the bank is calibrated based on these assumptions, it provides the best possible prerequisites for a bail-in to enable the state to avoid having to inject capital while the bank can continue its role as lender in an effective manner.[14]

Appropriate requirements

In conclusion, the Riksbank deems the proposed measures to be appropriate given the size of the Swedish banking system and the changes Nordea's transformation into a branch structure will imply. Furthermore, Nordea has the capacity to fulfil the requirements in the short term without any significant impact on its operations.

On behalf of the Executive Board

Stefan Ingves

Kerstin Haglund

The following took part in the Executive Board's decision: Stefan Ingves (Chairman), Kerstin af Jochnick, Martin Flodén, Per Jansson, Henry Ohlsson and Cecilia Skingsley.

Reports were presented by Amelie Stierna and Marcus Pettersson.

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[11] Sweden: Article IV Consultation – Staff Report, IMF Country Report No. 14/261, August 2014. International Monetary Fund (IMF). Box 1.5 in OECD Economic Outlook, November 2012. Organisation for Economic Cooperation and Development (OECD)

[12] Fender I. and Lewrick U. (2015), Calibrating the leverage ratio, BIS Quarterly Review, December 2015. Bank for International Settlements (BIS).

[13] Total Loss Absorbing Capacity (TLAC) and Minimum Requirement for own funds and Eligible Liabilities (MREL).

[14] The Swedish National Debt Office has announced that the authority will publish principles for the establishment of minimum requirements for eligible liabilities (MREL) in the spring.

Appendix

Memorandum

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Nordea's applications for permission to implement merger plans – annex to the Riksbank's consultation response

This memorandum is an annex to the Riksbank's consultation response. It provides further clarification of the Riksbank's standpoints and explains the reasoning behind them.

The first part of the memorandum briefly describes Nordea's branch structure plans. Part two describes how the plans change the Riksbank's responsibility for liquidity supply and how they affect Finansinspektionen's (FI's) supervision. It also explains how the transformation changes the state's undertaking with focus on the scope for dealing with the bank were it to be put into resolution. Part three discusses the requirements that should be imposed on Nordea if it adopts a branch structure. The transformation also underlines the need for a number of measures that the Riksbank has previously called for and which concern the major banks in general. These measures are also presented in part three. Part four describes how Nordea can fulfil the proposed requirements, and the memorandum ends with a concluding discussion.

1. Background

In mid-2015, Nordea announced that the bank had begun a dialogue with the authorities in the countries in which it operates about changing its corporate structure from a group with subsidiaries in the other Nordic countries to predominantly a branch structure. Nordea's intention is, via a merger, to transfer the assets and liabilities in Danish, Finnish and Norwegian subsidiaries to the Swedish parent company. The bank intends to conduct the same operations as before in these countries, but through branches instead of through subsidiaries. Nordea will still have subsidiaries, however, including mortgage lending companies, in Denmark, Finland and Norway (*the host countries*).

The Nordea Group is the only Nordic bank among the 30 banks in the world classified as global systemically important banks (G-SIB).[15] The Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS) have, as a result of the importance of G-SIBs for the financial system, published a stricter standard for how much capital and loss-absorbing capacity such banks shall have. Nordea is also a domestic systemically important bank in all the Nordic countries and has substantial operations in the Baltic

[15] http://www.fsb.org/wp-content/uploads/2015-update-of-list-of-global-systemically-important-banks-G-SIBs.pdf

countries. Nordea has about one third of the market for deposits and lending in Finland, about a fifth in Denmark and a slightly lower share in Sweden, Norway and the Baltic countries (see Table 1).

Table 1. Nordea's market shares in the Nordic and Baltic countries December 2015, per cent

	Sweden	Finland	Denmark	Norway	Baltic countries
Mortgages	15.4	30.3	17.3	11.1	15.2
Consumer loans	6.6	30.8	19.1	7.4	5.8
Corporate loans	13	28.6	24	12	15.1
Deposits, private individuals	14.8	29.3	22.8	7.9	5.3
Deposits, corporate	16.3	32.4	26.4	11.9	9.7

Source: Nordea's Fact Book

Nordea's total assets amount to almost SEK 6,000 billion, which is about 140 per cent of Sweden's GDP (see Table 2). Half of Nordea's assets are made up of loans to the general public. Its capitalisation is high in a European perspective if measured in accordance with the Common Equity Tier 1 (CET1) ratio (16.5 per cent). On the other hand, if measured according to the leverage ratio, the bank is closer to the average. Nordea's total Liquidity Coverage Ratio, LCR, in all currencies, stands at 201 per cent. In EUR and USD, it stands at 303 per cent and 188 per cent respectively. More on Nordea's key ratios and how they relate to the measures proposed by the Riksbank can be found in Chapter 4.

Table 2. Nordea in figures

December 2015

Measure	**Nordea's level**
Assets	About SEK 6,000 billion
Loans to general public	About SEK 3,000 billion
Common Equity Tier 1 (CET1)	16.5 per cent
Leverage ratio	4.6 per cent
LCR, total	201 per cent
LCR in EUR	303 per cent
LCR in USD	188 per cent

Note. Nordea does not report LCR in SEK or NSFR.

Source: Nordea's Annual Report

2. The consequences of the transformation

A transformation of Nordea into a branch structure is deemed to have both positive and negative consequences for stability in the Swedish financial system.

According to Nordea, the aim of the transformation is to simplify the legal structure of the banking group in order to strengthen corporate governance, reduce administrative complexity and increase efficiency. The branch structure also simplifies Nordea's legal structure and compliance efforts, and reduces the number of decision-making bodies, which can increase the bank's efficiency.

In addition, the supervision of Nordea will probably be simplified as a large share of the supervision will be linked to one main counterparty (FI) and can therefore be conducted more consistently. Nordea will, however, continue to have a few subsidiaries and branches of significant size in the host countries. The foreign supervisory authorities, including the ECB, will therefore continue to play an important role (see more under Chapter 2.2).

From the Swedish state's perspective, a branch structure might also mean that any resolution of Nordea can take place in a more coordinated fashion via the Swedish resolution authority, the Swedish National Debt Office. This can improve the efficiency of a resolution procedure, thereby increasing the likelihood of any resolution proceeding according to plan.

As the Riksbank describes in more detail below, the transformation will, however, increase the scope of possible liquidity support from the Riksbank and other possible public crisis management measures. This is true not least for the Riksbank's undertaking to assist Nordea Bank AB with liquidity support in foreign currencies should the bank encounter financial problems. In addition, FI's responsibility for supervision will increase significantly.[16]

Below, the Riksbank describes how Nordea's transformation changes the Riksbank's responsibility for liquidity supply and how it affects FI's supervision, as it is these areas where Nordea's transformation is expected to have the greatest impact. It also explains how the state's undertaking is changed by the transformation of Nordea into a branch structure with focus on the scope for dealing with the bank were it to be put into resolution.

2.1. Increase in the Riksbank's responsibility for liquidity supply

Most central banks, including the Riksbank, can provide both general[17] and targeted liquidity support (referred to as emergency liquidity assistance or ELA). Normally, both branches and subsidiaries have access to general liquidity facilities in the countries in which they operate. The situation is not as clear for ELA, however. Even if central banks have the option of providing ELA, such decisions are discretionary.[18]

A transformation of Nordea into a branch structure will imply that the responsibility for supervision and resolution of Nordea will mainly rest with Finansinspektionen and the Swedish National Debt Office respectively. In line with this, it is reasonable to assume that the Riksbank will have the main responsibility for potential emergency liquidity assistance (ELA) to Nordea Bank AB should such a need arise. Even if it is not possible to predict with any certainty the decisions central banks in the host countries might take with respect to providing ELA to a systemically important branch, the Riksbank assumes that, in its

[16] Nordea's transformation will also increase the size of the deposits guaranteed by the Swedish deposit guarantee system, although this is not described in any further detail in this memorandum.
[17] For example, the extraordinary lending facilities set up by many central banks, including the Riksbank, in conjunction with the crisis in 2008.
[18] For countries in the euro area, such as Finland, a national central bank's decisions to provide ELA must in practice also be approved in advance by the European Central bank (ECB).

capacity as the home country central bank, it will need to have a higher level of preparedness to provide ELA to Nordea than is the case in a subsidiary structure.

As a result of the transformation, Nordea Bank AB will be a much bigger bank than before, as its balance sheet total will include many of the operations that were previously conducted by the Danish, Finnish and Norwegian subsidiaries. As of June 2015, the entire Nordea group' s total liabilities in foreign currency corresponds to over 900 per cent of the Riksbank's foreign currency reserve and about 120 per cent of Swedish GDP, which illustrates the scope of the responsibility.

This means that, if Nordea adopts a branch structure, the Riksbank will need to be prepared to deal with a larger bank than previously. The Riksbank may therefore be exposed to a greater share of the risks in Nordea's operations. In addition, the increased responsibility for ELA also includes Danish kronor, euros and Norwegian kronor to a greater extent than is the case in a subsidiary structure. The Riksbank does take collateral for all forms of lending but it is not certain that this collateral always covers the Riksbank's risks.

The Riksbank's credit risk can also increase in a situation where the Riksbank provides ELA to a bank that is subsequently put into resolution. The Riksbank's claim – on that part of the loan for which there is no collateral – could then be written down or converted, just like the bank's debts to private actors. In the preparatory works to the new Resolution Act, it is stated that the Riksbank could obtain a state guarantee for any ELA it provides, although this cannot be taken for granted.[19]

As a consequence of the increased undertaking, it will be important for the Riksbank to, ex-ante, have greater clarity regarding how Nordea manages its liquidity risks and the liquidity rules which will apply to Nordea once it adopts a branch structure. The responsibility for liquidity management shall primarily rest with the banks themselves in order to mitigate the risk of the state, and ultimately the taxpayer, having to bear the costs that arise should the banks encounter financial problems. As greater liquidity reserves among the banks reduce the need for a foreign currency reserve at the Riksbank, the state's expenses for the foreign currency reserve may decrease if the banks insure themselves against liquidity risks to a greater degree (see more under 3.1).

2.2 Increase in Finansinspektionen's supervisory responsibility for Nordea

Supervision

Another consequence of Nordea's transformation into a branch structure is that FI's responsibility for supervision of Nordea will increase.

Supervision of Nordea Bank AB is currently conducted by FI while supervision of its subsidiaries in Denmark, Finland and Norway is conducted by the supervisory authority in each country respectively. Furthermore, supervision of the Nordea Group is coordinated in a "supervisory college", headed by FI in its capacity as supervisory authority of the group's parent company. If Nordea Bank AB merges with its subsidiaries, Nordea Bank AB will take over the foreign subsidiaries' assets and liabilities. For the operations that Nordea Bank AB will conduct through branches in Denmark, Finland and Norway, the main responsibility for supervision, under EU law, will rest with FI. The transformation will therefore mean that FI will be responsible for supervising a significantly larger Nordea Bank AB than currently. For the operations conducted by the Swedish bank, including

[19] Government Bill. 2015/16:5 p. 659.

operations run abroad via branches, only Swedish law will in effect apply, for example regarding issues such as capital and liquidity requirements. The supervisory authorities in the host countries may not place such requirements on the branches.

All decision-making powers regarding the current group will not, however, be transferred to FI as Nordea will continue to have a number of subsidiaries in the host countries even after the transformation. There will therefore be a supervisory college for the group. Supervision of the significant branches will also be coordinated in the college.[20]

When it comes to the supervision of Nordea's branch operations, FI may make on-site inspections of the branches' operations in the host countries. FI may, however, request the host country authority to carry out certain inspections on its behalf. The host country authority can then choose between performing the inspection itself and allowing FI to do it. The supervisory authorities in the host countries also have certain powers of their own to protect financial stability in the host country. For example, they may collect information directly from the branch, carry out on-site inspections or take what are referred to as "safety measures".[21] In addition, the host country authority that has supervision over a significant branch is entitled to more information from the home country authority than the host country authority for a normal branch. If Nordea adopts a branch structure, the Finnish branch will probably be so large that the Finnish supervisory authority's tasks in relation to the branch will be performed by the ECB.

To maintain financial stability in the region, it is important that FI can conduct effective supervision of both the Swedish and foreign operations. FI will therefore need to earmark resources to carry out supervision of Nordea Bank AB's operations in the host countries. Furthermore, FI will need to keep track of real economic and financial developments in each country and understand the environment in which the operations are conducted. Regardless of how the tasks are distributed among the authorities, the supervision will have to be well coordinated in order to ensure that the knowledge that exists at the host country supervisory authorities is transferred to FI (see Chapter 3.1 for more information about the need for supervisory intensity).

Macroprudential policy

The transformation into a branch structure means that FI will have crucial influence as regards which macroprudential policy measures will impact Nordea's foreign branches. Under Swedish law, FI is also obliged to replicate certain macroprudential policy measures adopted in another EEA country, for example the countercyclical capital buffer. No such automatic reciprocity exists for other macroprudential policy measures, however. It is hence important that FI is able to reciprocate macroprudential policy measures taken by a host country even when this is not mandatory. Otherwise, situations may arise whereby stability risks highlighted by Nordea's host countries are not counteracted via macroprudential policy measures directed at Nordea. It could also lead to Nordea not

[20] Within the EEA, a distinction is made between significant branches and other branches. A branch whose operations are systemically important in the host country can be significant (see Article 51 in Directive 2013/36/EC of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC). It is reasonable to assume that the branches in Denmark, Finland and Norway will be classified as significant. However, it is ultimately the host country authority that decides whether a branch is significant or not. There are certain differences between significant branches and other branches. If a branch is significant, for example, the host country authority shall always be included in the supervisory college.

[21] The description is based on Directive 2013/36/EU. The directive does not state exactly what these measures are. In simple terms, in order to deal with an infringement of the rules, a host country authority, if dissatisfied with the home country authority's measures, may take measures of its own to prevent further infringements, to protect the interests of depositors, investors and other recipients of services or to protect the stability of the financial system. This may come to the fore, for example, in a liquidity stress scenario.

building up adequate resilience to stability risks in the host country in question, which may weaken financial stability in both Sweden and the host country.

To reduce the likelihood of such effects, the European Systemic Risk Board (ESRB) has issued a recommendation on "The assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures", which recommends Member States to replicate the exposure-based macroprudential policy measures of other Member States (host countries). Alongside the ESRB's recommendation, work is also ongoing in the Nordic Baltic Macroprudential Forum to reach a consensus on reciprocity.

2.3 Increase in Sweden's crisis management undertaking

If Nordea adopts a branch structure, the Swedish National Debt Office, in its capacity as the Swedish resolution authority, will be able to independently decide to put the Swedish bank and its branches into resolution. This is positive from a Swedish perspective and for Nordea as the resolution procedure can thereby be more cohesive for a greater proportion of the Nordea's operations. However, the Swedish National Debt Office needs to cooperate with the resolution authorities in the host countries regarding the branches and the host countries can still decide on resolution of the subsidiaries (for example the mortgage lending companies) that still exist in these countries.

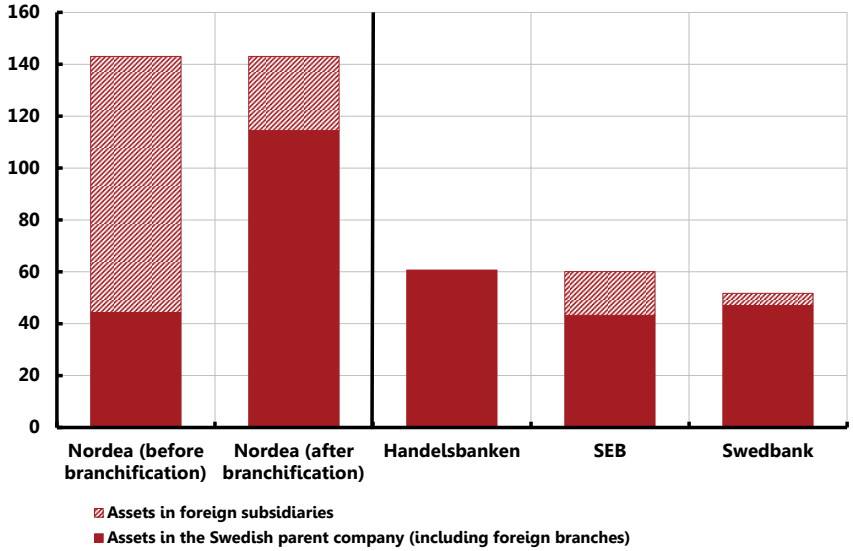
In Sweden, both the private and the public sector have chosen to a varying degree to utilise foreign funding. For this funding to work, the market must have confidence in the Swedish state and banking system. With a large banking system comes a potential major undertaking for the Swedish state to manage bank crises.

A transformation of Nordea into a branch structure will increase the size of the Swedish banking system by about SEK 3,000 billion, an amount approximately equivalent to 70 per cent of Sweden's annual GDP. Although the branch transformation process may lead to a temporary increase in operational risks, having a branch structure will probably not change the structural risks in Nordea's operations. On the other hand, the Swedish state will be exposed to a greater share of the risks in Nordea's operations. One can indeed claim that the current group structure already involves a significant Swedish undertaking. But, in the event of a transformation into a branch structure, the Swedish state will have an explicit undertaking for the bank as a whole since Nordea Bank AB is a Swedish company which, in a crisis, is to be dealt with in accordance with Swedish law.

The basis for negotiations about sharing the cost burden among countries will be worse compared with a structure of separate foreign subsidiaries. The starting-point for burden-sharing between the home and host countries for a banking group is how the bank's assets are distributed among the various countries. This means that the greater the proportion of assets that belong to the Swedish parent company, the greater the burden is likely to be on the Swedish state.[22] Currently, about 30 per cent of the Nordea Group's total assets are owned by the Swedish parent company. With a branch structure, however, an estimated 80 per cent of the Nordea's assets are expected to be owned by the Swedish parent company (see Figure 1).

[22] This is also reflected by the fact that the resolution fee for the whole bank, including its branches, is paid to the Swedish resolution reserve.

Figure 1. Banks' assets in relation to GDP
December 2015, per cent



Sources: Handelsbanken, Nordea, Statistics Sweden, SEB, Swedbank and the Riksbank's calculations.

A G-SIB like Nordea will probably not be allowed to go bankrupt should it encounter financial problems. If Nordea were to encounter problems that led to the bank being considered failing or likely to fail, it will probably be put into resolution instead. The resolution procedure is guided by the Resolution Act which was recently introduced to incorporate the European Bank Recovery and Resolution Directive (BRRD) into Swedish law. The aim of the new act is to minimise or limit the state's costs for handling a failing bank by allowing shareholders and creditors in the bank to cover losses and take responsibility for the bank's capitalisation.

The main rule in a resolution procedure is that the bank's shareholders and creditors shall have the responsibility for covering all the losses made by the failing bank and for recapitalising the bank. This is to be done by reducing the equity capital in combination with writing down or converting certain liabilities. If these measures are taken, the state will not be burdened with any costs for the capitalisation of Nordea. There is, however, scope for exempting creditors from contributing to capitalisation under certain circumstances. If such an exception is made, state funding from the resolution reserve may be used to capitalise the bank instead of contributions from creditors. A prerequisite for using the resolution reserve is, however, that owners and creditors must first of all have contributed a certain share to the capitalisation and that the European Commission does not oppose the measure.

Another possibility is that the state takes alternative measures to guard against Nordea being put into resolution in the first place, for example by providing state funding in the form of a capital injection in order to prevent the bank from failing.[23]

The new resolution framework is as yet untested, however, and it cannot be ruled out that the Swedish state, despite the new powers granted under the framework, may need to inject considerable amounts – within the frameworks allowed by the EU – to capitalise a

[23] Preventive state aid may only be given under certain circumstances and shall, for example, be approved by the European Commission in accordance with the rules on state aid.

bank in resolution or to prevent one from failing. There is therefore still a risk that the state may need to support Nordea economically notwithstanding the new regulatory framework for resolution.[24] This is also reflected in the credit ratings awarded to Swedish banks by certain credit rating agencies.

From a Swedish perspective, the advantages of a branch structure, in the form of a simpler and more cohesive resolution procedure therefore need to be weighed against the greater potential undertaking for the Swedish state should the bank encounter problems in a crisis situation.

2.4 Summary of consequences

In conclusion, the Riksbank considers that Nordea's transformation into a branch structure increases the Riksbank's undertaking to provide possible liquidity support, which thereby imposes demands on the preparedness needed by both the Riksbank and Nordea. In addition, FI will require significantly greater resources as a result of its increased supervisory responsibility. Despite the simplified corporate structure created by the transformation and the new regulatory framework for crisis management, the Riksbank believes that the Swedish state may still have a greater undertaking for crisis management measures. In light of this, and of the fact that Nordea is classed as a G-SIB, certain measures should be taken if Nordea adopts a branch structure. These are described below.

3. Need for measures

According to the Riksbank, the abovementioned consequences require the implementation of a number of measures in order to mitigate the risks that may arise for the Swedish state from Nordea's transformation into a branch structure. These are discussed in Section 3.1. The Riksbank also believes that a number of other measures should be implemented to strengthen stability in the financial system. These measures have been discussed in publications such as the Riksbank's Financial Stability Report and affect all four major banks. These measures are hence not a direct result of Nordea's transformation into a branch structure but the importance of their introduction is underlined by the increased undertaking for the Swedish state emanating from Nordea's merger plans. These measures are discussed in Section 3.2.

3.1 Need for measures as a result of a transformation into a branch structure

Liquidity requirements in foreign currency

When Nordea Bank AB's balance sheet grows, the Riksbank's responsibility for ELA also increases, and thus its exposure to credit risk may also increase. In addition, the increased responsibility may also include other currencies, DKK, EUR and NOK, to a greater extent than in a subsidiary structure. This implies that the Riksbank may need a higher level of preparedness to provide Nordea with ELA in the currencies mentioned.

[24] During the negotiations in the EU on the Banking Recovery and Resolution Directive (BRRD), the Swedish Government pointed out that the proposed regulatory framework was not actually adapted to dealing with real systemic risks and that Member States should be given greater flexibility. The negotiations resulted in certain elements being added to the directive that increase flexibility, for example the option of the Member State to provide preventive state aid or to take over the ownership of a bank in resolution. (See the Financial Crisis Committee's report "Resolution – a new method of managing banks in crisis" (SOU 2014:52), pp 340).

It should, however, be pointed out that, if a larger foreign currency reserve is necessary, it may be expensive for the state since the cost of funding a liquid foreign currency reserve is usually greater than its yield. According to the Riksbank, the state, via the Riksbank, should not have to foot the bill for banks' self-imposed liquidity risks. Instead, the beneficiaries, that is the banks, should primarily insure themselves against possible institution-specific funding difficulties by having their own adequate liquidity management in the currencies that are important for them. All else being equal, the need for foreign currency reserves also increases the lower the banks' own liquidity buffers. One way of ensuring that the costs are borne to a greater extent by the beneficiary is to introduce LCR requirements in all currencies that are significant for the bank.

FI has already set LCR requirements in EUR and USD at 100 per cent. In addition, the Riksbank has recommended that FI introduce an LCR requirement in SEK set at at least 60 per cent. From the Riksbank's perspective, Nordea's transformation into a branch structure should also lead to Nordea being subject to LCR requirements in DKK and NOK. As the Riksbank may need to take on a greater undertaking for liquidity support in EUR than is the case in a subsidiary structure, it should be investigated whether there is a need for higher requirements than the 100 per cent level that currently applies for LCR in EUR. The exact levels to which the requirements in the various currencies should be set, as well as whether they should be introduced via Pillar 1 or Pillar 2, should be further examined. It is important, however, that the solution selected is transparent.

LCR requirements in separate currencies are also well in line with Article 42 in the Basel Committee's LCR standard from 2013:[25]

"While the LCR is expected to be met and reported in a single currency, banks are expected to be able to meet their liquidity needs in each currency and maintain HQLA consistent with the distribution of their liquidity needs by currency. The bank should be able to use the stock to generate liquidity in the currency and jurisdiction in which the net cash outflows arise."

The article thereby stipulates that a bank is expected to be able to satisfy part of its liquidity needs in each currency and maintain a liquidity reserve consistent with the distribution of their liquidity needs by currency.

Setting LCR requirements in local currencies is not unique, either. A glance at other jurisdictions shows, for example, that Singapore has LCR requirements in Singapore dollars of 100 per cent. Switzerland has a requirement expressed thus: "outflows in Swiss francs (CHF) shall be covered by liquid assets in CHF", although the banks can, given certain conditions, cover some of the outflows in CHF with liquid assets in foreign currencies. Australia also requires outflows in Australian dollars (AUD) to be covered by liquid assets denominated in AUD.[26] Norges Bank has also recommended that banks operating in Norway should also be covered by an LCR requirement in NOK.

The Riksbank shares the Basel Committee's opinion that banks must maintain liquid assets in the currencies in which outflows may arise. The Riksbank also considers that banks must insure themselves against liquidity risks in all currencies appropriate to the bank. The Riksbank also notes that with LCR requirements in DKK and NOK, the banks will have more diversified liquidity portfolios than is currently the case when they rely on

[25] Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools": A similar provision can also be found in Article 8.6 in the European Commission's delegated act 2015/61 on LCR requirements for credit institutions: *"Credit institutions shall ensure that the currency denomination of their liquid assets is consistent with the distribution by currency of their net liquidity outflows."*

[26] In Australia, banks may, under certain circumstances and for a monthly fee and against suitable collateral, have access to a Committed Liquidity Facility (CLF). This can be seen as a liquidity line to the central bank.

converting EUR and USD to DKK and NOK on the currency swap market and hold covered bonds denominated in DKK and NOK. LCR requirements in these currencies would require a greater proportion of the banks' liquidity buffers to be held directly in the currencies in which outflows may arise and that they are also distributed across different asset types. This would, in turn, make the banks less dependent on a well-functioning swap market and on covered bonds to cope with periods of stress.

An argument occasionally put forward against LCR requirements in separate Nordic currencies for Swedish banks is that low reserves in these currencies are not a problem as long as the banks also maintain large reserves in EUR and USD. These reserves, it is assumed, could be used to cover outflows in Nordic currencies via the currency swap market. If LCR requirements in DKK and NOK were to be introduced and this led to the banks reducing their buffers in EUR and USD in favour of the smaller currencies, this would be considered to weaken rather than strengthen financial stability. The Riksbank presumes, however, that the banks will need to achieve an LCR level in EUR and USD of at least 100 per cent even in the future and that the banks therefore will also continue to maintain liquidity buffers in these currencies. Furthermore, the Riksbank notes that LCR requirements in DKK and NOK would lead to better diversified liquidity portfolios.

Even if Swedish banks in normal times can swap EUR and USD for smaller currencies, the Riksbank believes that the banks leave themselves vulnerable to stress situations if they rely too much on the currency swap market. Even if this market works relatively well in general, individual banks may, during stress periods, be associated with a heightened level of counterparty risk or liquidity risk and therefore find it difficult to find currency swap counterparties.[27] Even without a heightened counterparty risk, access to the currency swap market may be impaired. When the Riksbank's surplus liquidity in SEK was withdrawn in 2010, it became both difficult and expensive to obtain SEK on the currency swap market. For example, at this time, borrowing SEK in exchange for EUR for a maturity of three months on the swap market became about 50 basis points more expensive compared with borrowing directly in SEK.

Relying on the swap market to cover outflows in other currencies is also not compatible with the Basel Committee's regulatory framework:

"Banks and supervisors cannot assume that currencies will remain transferable and convertible in a stress period, even for currencies that in normal times are freely transferable and highly convertible". [28]

The banks' future funding conditions in EUR and USD also constitute grounds for introducing LCR requirements in the Nordic currencies. In the long run, it will probably become less attractive for Swedish banks to hold liquidity buffers in the form of central bank placements with the Federal Reserve System (Fed) and the ECB. This is because funding conditions in foreign currencies will become less favourable as the central banks' extraordinary measures are phased out. It cannot be ruled out that the Swedish banks may choose to own assets in EUR and USD that are less liquid than today's placements in central banks. Or that they may come to own assets in other foreign currencies that, under financial stress, will be more difficult to convert to Nordic currencies on the currency swap market in comparison with EUR and USD.[29] In such a situation, the banks'

[27] Baba, Nagano and Packer (2008) BIS Quarterly Review
http://www.bis.org/publ/qtrpdf/r_qt0803h.htm
[28] Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, BCBS, January 2013.
[29] The assets referred to are those the banks would maintain in addition to those needed to meet the minimum requirements of the LCRs in EUR and USD.
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resilience to liquidity stress may be weaker compared with if they held buffers directly in Nordic currencies.

The need for increased foreign currency reserves and swap agreements with other central banks

However, LCR requirements do not provide complete protection against liquidity risks as they only measure whether a bank has enough liquid assets to cope with outflows for 30 days. But, the lower the liquidity buffers in foreign currency the banks have, the greater the foreign currency reserve the Riksbank needs to maintain to safeguard preparedness for ELA.

As Nordea Bank AB's balance sheet grows, the Riksbank's responsibility and undertaking for ELA also increases, and thus the need for assets in the foreign currency reserve. In addition, this increased responsibility may mean that the composition of the foreign currency reserve needs to be changed so that it includes the currencies DKK, EUR and NOK to a greater extent than is the case with a subsidiary structure, so that the Riksbank can increase its preparedness to support Nordea with any necessary ELA in these currencies.

However, it should be pointed out that, if it is necessary to increase the foreign currency reserve in this manner, it may be expensive for the state to maintain the increased foreign currency reserve. This is due to the fact that the funding costs for a liquid foreign currency reserve normally exceed its yield. As well as this, the Riksbank needs to expect increased market and credit risks in the event of lending.

Another way of improving the Riksbank's access to DKK, EUR and NOK ahead of Nordea's transformation to a branch structure is to prepare swap agreements with the concerned central banks. However, a swap agreement does not mean that a swap transaction can automatically be conducted as soon as the need for a currency arises. The possibility of activating the agreement depends on the prevailing circumstances internationally, which means that this alternative cannot replace the Swedish state's independent preparedness to manage any crisis situations arising. Any swap agreements is therefore only a complement to the need for increased foreign currency reserves.

As greater liquidity reserves among the banks reduce the need for a foreign currency reserve at the Riksbank, the state's current expenses for the foreign currency reserve may be decreased if the banks insure themselves to a greater degree. Further discussion on the foreign currency reserve should therefore be dependent on how LCR requirements in individual currencies are introduced.

If market circumstances or regulation mean that the degree of self-insurance against liquidity shocks at banks is inadequate, there is also reason to examine more closely whether the Riksbank's liquidity facilities and their terms can be designed so that the banks to a larger degree bear the costs of their self-imposed liquidity risks.

Increased liquidity reporting to the Riksbank

Along with the Riksbank's increased commitment and potential credit risk exposure, the Riksbank will also have to strengthen its oversight of the banks. Among other things, this will mean requesting more comprehensive financial information on the liquidity preparedness Nordea has in its most important currencies. For example, this may involve requesting daily reporting on liquidity in NOK and DKK, in a similar way to how the Riksbank currently requests reporting of liquidity data in SEK, EUR and USD. This is needed to ensure that the Riksbank will continue to be able to oversee the liquidity situation and the stability of the payment system in an appropriate manner. The Riksbank

considers that efforts should be made to also make this information available for the Nordic and Baltic central banks if it is requested.

Increased cooperation with Nordic-Baltic central banks

The Riksbank further intends to intensify the cooperation and coordination with other central banks in the Nordic and Baltic regions. Among other things, work has been initiated with these central banks on updating the Memorandum of Understanding (MoU) from 2003 that concerns cooperation between central banks in times of crisis.[30] The MoU establishes a structure for crisis management and information sharing between Nordic central banks as regards cross-border banking groups, for example by creating a consensus on the conditions for ELA. The current work on updating the MoU was not caused by Nordea's plans.

Sufficient resources for a greater Swedish supervisory responsibility and extended cross-border mandate

A transformation into a branch structure involves a greater supervisory responsibility for FI than if the operations are conducted in a subsidiary structure. This means that FI will need significantly more resources in order to be able to exercise effective supervision over Nordea. Exactly how much the resource need will need to increase depends, however, on how much the host countries reduce their supervision resources following Nordea's transformation. However, it is important that the staffing levels for the total number of people working with the supervision of Nordea in all Nordic countries do not decrease and that all parties in the supervisory college as a whole are satisfied with the supervision of Nordea.

As a result of Nordea's transformation, the Swedish state will receive higher supervision fees from Nordea. In the Riksbank's opinion, it is important that FI, via these increased fees, is ensured the resources needed to be able to carry out the expanded remit of supervising a G-SIB with extensive branch operations with a suitable degree of supervisory intensity. This will be important, not least in light of the internationally increased operational risks (such as conduct risks[31]).

It is also important that the cooperation in the supervisory college with foreign supervisory authorities is maintained so that supervision can be conducted appropriately and at an intensity considered to be satisfactory by the various supervisory authorities. This will be important as Nordea will probably have significant branches in the host countries.

In light of the fact that Nordea is a bank with extensive cross-border operations, it will furthermore be especially important to ensure that Finansinspektionen has the necessary tools and the possibility to replicate macroprudential policy measures that have been implemented by a host country. Otherwise, situations may arise whereby stability risks highlighted by Nordea's host countries are not counteracted via macroprudential policy measures directed at Nordea. It could also lead to Nordea not building up sufficient resilience to stability risks in the host countries, which may weaken financial stability in both Sweden and the host countries.

[30] Management of a financial crisis in banks with cross-border establishments.
[31] An example of a conduct risk is the so-called LIBOR scandal in which six British banks, in May 2015, were ordered to pay a total of 3.9 billion pounds sterling (about SEK 50 billion) in penalty charges to British and US authorities.

3.2 Need for further measures

In addition to the measures described above, the Riksbank has previously argued that further measures are needed to strengthen stability in the Swedish financial system. These measures have been discussed in publications such as the Riksbank's Financial Stability Report and affect all four major banks.[32] These measures have not been brought into focus by the transformation of Nordea into a branch structure, but the importance of their implementation increases as a result of the increase of the Swedish state's overall undertaking to the Swedish banking sector.

LCR requirements and achievement of the minimum NSFR level

As the Riksbank has previously pointed out in its Financial Stability Report, the major Swedish banks should be subject to a requirement for LCR in Swedish kronor amounting to at least 60 per cent[33], in addition to fulfilling the minimum requirement of 100 per cent in the Net Stable Funding Ratio (NSFR).[34] As previously highlighted by the Riksbank on several occasions, the Swedish banking system is strongly interlinked and problems in one bank may therefore spread to others. The increased undertaking therefore makes it even more important for the banks to have satisfactory liquidity management. Nordea's transformation therefore underlines the need for both an LCR in SEK and an NSFR.

Strengthened capital requirements (leverage ratio and risk-weighted capital requirement)

At the same time, the transformation will increase the undertakings of the Swedish state (including the Riksbank) as it will give Nordea Bank AB a larger balance sheet total. From this, it follows that the Swedish state will also probably have to bear a greater share of the responsibility of providing Nordea with any necessary capital, should the bank encounter financial problems. Against the background of the Swedish state being exposed to a greater proportion of the risks in Nordea's operations and the fact that a single country has less of a capacity to manage such costs than several countries together, the Riksbank considers it to be of particular importance that capital requirements are adjusted so that the economic risk for the state that a branch structure in Nordea can entail does not increase. It is thus very important that the Riksbank's previous recommendations be fulfilled (see discussion below).

Leverage ratio requirement

The Riksbank considers that a leverage ratio requirement constitutes an important complement to the risk-weighted capital requirements. A leverage ratio requirement prevents the banks' capital from falling too low and can simultaneously contribute towards improving the credibility of their capital adequacy. The Riksbank has previously argued in favour of the four major Swedish banks being subject to a leverage ratio requirement of 5 per cent as of 2018.[35]

The IMF and OECD have also previously stated that a leverage ratio requirement of 5 per cent would be desirable for both the Swedish and the European economies.[36] These levels are also supported by a new study published by the Bank for International Settlements (BIS). The BIS assesses that a minimum requirement of between 4 and 5 per cent would

[32] The four major banks are Handelsbanken, Nordea, SEB and Swedbank
[33] The recommendation that the LCR requirement be set at a lower level than 100 per cent was due to consideration needing to be taken of the restricted supply of liquid assets (e.g. government bonds denominated in SEK).
[34] Sveriges Riksbank (2015a)
[35] Sveriges Riksbank (2014)
[36] IMF (2014) and Box 1.5 in OECD (2012)

be a more appropriate calibration of the forthcoming international requirement for systemically-important banks than the current proposal of 3 per cent.[37]

Critics of higher leverage ratio requirements have expressed the view that such requirements may increase the banks' risk-taking. A study published by the ECB indicates that banks for which the leverage ratio requirement is binding have actually slightly increased their risk-taking. However, this has been compensated for by the fact that capital has increased even more in these banks and their resilience has thus been strengthened. According to the study, there is a clear connection between increased resilience and an increased leverage ratio, up to levels of around 5 per cent.[38]

In recent years, several countries have decided to introduce leverage ratio requirements that are higher than the proposed international requirements. The common factor for several of these countries is that they, like Sweden, have large banking systems. The level of the requirements differs from country to country, but they are essentially comparable with the Riksbank's recommendation (see Table 3). The formulation of the requirements also partly differs from country to country. Certain countries have only introduced requirements for banks that are considered systemically important, while other countries have requirements for a wider circle of banks. However, in the latter case, the systemically important banks face higher requirements than the other banks.

Table 3. Composition of proposed leverage ratio requirements in other countries

Country	Minimum level	Introduced
Canada	General requirement of 3%, stricter requirements for individual institutions	2015
Netherlands	4 %*	2018 at latest
Switzerland	5 %*	Before 2019
United Kingdom	3 to 4.95%***	2016-2019
USA	5 to 6 %	2016-2019

*Systemically-important institutions,
**Globally systemically-important institutions,
***4.95% including countercyclical supplements.

In summary, the Riksbank considers that a leverage ratio requirement of at least 5 per cent would be appropriate for the major Swedish banks. However, it should be noted that several academic studies indicate that leverage ratio requirements of significantly higher levels would be appropriate (see Table 4 for a summary).

Table 4. Appropriate leverage ratio requirements according to various studies

Name	Appropriate level
Admati-Hellwig (2014)	20 to 30 %
Bair (2015)	8 %
Calomiris (2013)	10 %
Fender, Lewrick (2015)	4 to 5 %
Haldane (2012)	4 to 7 %
King (2016)	10 %

[37] Fender & Lewrick (2015)
[38] ECB (2015) and Grill, Lang, & Smith (2015)

Miles et al. 2013	7 to 10 %

Risk-weighted capital requirements

The Riksbank has previously also argued for a review of the regulatory framework surrounding the risk-weighted capital requirement and a tightening of the capital requirements. The reason for this stance is presented in "Appropriate capital ratios in major Swedish banks" (Sveriges Riksbank, 2011) and in the Riksbank's contribution to the meeting of the Financial Stability Council in July 2015.[39] These reports are based, in turn, on "An assessment of the long-term economic impact of the new regulatory framework - LEI" (BCBS, 2010) and other international studies.[40]

The Basel Committee is currently working on a review of the framework for the internal models. This work may lead to higher risk-weights, which may increase the amount of capital that Swedish banks need to retain. In addition, in March 2016, FI referred a proposal to review the banks' calculations of the capital requirement in internal models for corporate exposures. This work may also result in increased capital requirements and lead to higher leverage ratios for Swedish banks with permission from FI to use internal models. The Riksbank welcomes this work, even if it is too early to make a more specific statement on how it will affect Swedish banks' capital requirements.

Any increases in the risk weights resulting from the work of the Basel Committee and FI will thus not only affect Nordea but all Swedish banks with internal models.

Lastly, the Riksbank emphasises the importance of the banks ensuring that they hold enough capital not only for credit and market risks but also for operational risks.

Requirements for loss-absorbing capacity

At the same time, the Riksbank wishes to point out that more stringent capital requirements can by no means eliminate the risk of failure. To reduce the likelihood of the Swedish state having to inject capital in a crisis situation, it is also important for the Swedish resolution authority, the Swedish National Debt Office, to introduce strict requirements for loss-absorbing capacity. This maximises the prerequisites for the bank to be able to recapitalise by writing down its liabilities or converting them into equity. The state will then avoid the costs of the capital injection as the bank's creditors will be impacted by losses, instead of the state.

In November 2015, the Financial Stability Board (FSB) decided that the globally systemically-important banks are to have a Total Loss Absorbing Capacity (TLAC) of at least 6.75 per cent of total assets (according to the leverage ratio definition) and 18 per cent of risk-weighted assets. This is a minimum requirement that should be complemented by an individually-adjusted requirement if the authorities deem this is needed for an orderly resolution. So far, both Switzerland and the United States have indicated an intention to introduce higher requirements for their banks. In terms of the leverage ratio definition, in Switzerland's case, this concerns a requirement of 9.5 per cent, and, in that of the United States, of 10 percent, while, in terms of risk-weighted assets, the figures are 28.5 per cent in Switzerland and 18 per cent in the United States.

A study published by the FSB in 2015 indicates that Fortis' losses and recapitalisation needs amounted to 25 per cent of the bank's risk-weighted assets and 9 per cent of total

[39] Sveriges Riksbank (2015b)
[40] Miles, Yang, & Marcheggiano (2013), Caruana (2014) and Admati, DeMarzo, Hellwig, & Pfleiderer (2013)

assets. The corresponding figures for Dexia and Merrill Lynch were 18 per cent and 15–17.5 per cent of risk-weighted assets.[41]

The Riksbank has not, as yet, expressed any formal position on the level that would be appropriate for Nordea or other Swedish banks. However, the Riksbank believes that the calibration should be based both upon conservative assumptions as regards the losses that occurred before resolution and valuation losses arising in conjunction with resolution, as well as upon the desired level of capital adequacy and buffers after recapitalisation in order for the bank to regain the confidence of the market (see Table 5 for Nordea's current level and how it relates to the FSB's requirement).

The bail-in tool is indeed basically untested but if the requirement for the bank is calibrated based on these assumptions, it provides the best possible prerequisites, all else being equal, for a bail-in to enable the state to avoid having to inject capital while the bank can continue its role as lender in an effective manner. This will be important not least in light of Nordea's size and systemic importance.

Table 5. TLAC - Requirements and holdings

	In relation to risk-weighted assets (RWA), per cent	**In relation to total assets (LR), per cent**
FSB's minimum requirement	18	6.75
Nordea's recorded TLAC, September 2015	20,1*	5.9

* In accordance with the TLAC regulatory framework, the capital held to fulfil the capital requirement for Basel buffers is excluded from the risk-weighted measure, but included in the LR measure. LR refers to leverage ratio.

4. How can Nordea fulfil the proposed requirements?

How Nordea can comply with the requirements proposed by the Riksbank is presented below. In cases where Nordea has not published its present levels, an average for the four major banks is used. See Table 6 for a compilation of Nordea's figures.

[41] See Historical Losses and Recapitalisation Needs, 6 June 2015, Financial Stability Board. Lehman Brothers and Bear Stearns were not included in the study as their individual reporting ceased due to bankruptcy and acquisition respectively.

Table 6 Nordea in figures and the Riksbank's proposed measures

December 2015, per cent

Measure	Nordea's current level	Proposed measures
LCR in DKK	Not public	Should be implemented
LCR in NOK	37*	Should be implemented
LCR in EUR	303	A level above the current requirement of 100 per cent should be investigated
LCR in SEK	Not public. Average for the major banks 85**	At least 60
NSFR	Not public. Average for the major banks 100	100
Leverage ratio	4.6	5
Common Equity Tier 1 (CET1)	16.5	Risk weights will be tightened through work of BCBS and FI
TLAC - of RWA and LR***	20.1 and 5.9	Should be introduced on the basis of conservative assumptions of level of losses and desired level of capital adequacy requirement and buffers after recapitalisation.

* Refers to Nordea Bank Norge. The LCR in NOK is calculated using a slightly different definition compared to LCRs in EUR and SEK The main difference is that a greater share of covered bonds may be included in the definition used for NOK.
**Since January 2015.
***RWA refers to risk-weighted assets, and LR to leverage ratio. These figures are the Riksbank's estimates and based on September 2015 data.

LCR

The Riksbank considers that the level and method of implementation for the LCR in DKK, EUR and NOK should be subject to further investigation. In previous Financial Stability Reports, the Riksbank has recommended that FI should introduce a requirement for the LCR in SEK of at least 60 per cent. Nordea does not report the LCR in SEK, but the major banks have had average LCR levels of 85 per cent since the start of 2015. An average major bank thus has a good capacity for reaching the Riksbank's proposed 60 per cent.

NSFR

The Riksbank has recommended that Nordea and the other major banks attain an NSFR of 100 per cent as soon as possible. Nordea does not publish its NSFR. Over the period September 2015 to March 2016, the major Swedish banks had an average NSFR of 100 per cent. An average major bank thus has a good capacity for reaching the Riksbank's proposed 100 per cent.

Leverage ratio

Nordea's current leverage ratio amounts to 4.6 per cent. To reach 5 per cent, the bank would have to increase its Tier 1 capital[42] by SEK 20 billion. This can be put in relation to

[42] Tier 1 capital means Common Equity Tier 1 (CET1) and Additional Tier 1 (AT1).

the bank's present Tier 1 capital of SEK 240 billion and a profit for 2015 of SEK 35 billion. Put another way, the bank would have to increase its Tier 1 capital by the equivalent of 60 per cent of one year's profit, which the Riksbank considers should be feasible without any significant effect on operations.

Total loss absorbing capacity (TLAC)

At present, Nordea has approved TLAC instruments corresponding to about SEK 300 billion. These are mainly made up of the bank's capital base. This SEK 300 billion corresponds to 5.9 per cent of total assets (i.e. according to the leverage ratio definition) and about 20 per cent of risk-weighted assets. Nordea thereby already meets the minimum requirement of 18 per cent of risk-weighted assets proposed by the FSB, but not 6.75 per cent of total assets. At the same time, it would not take a huge sum for Nordea to reach the minimum requirement of 6.75 per cent. To reach the levels proposed by the United States and Switzerland, further measures would be needed. Such measures could include issuing subordinated bank bonds.

According to the FSB, certain types of liability are not suitable for write-down or conversion ('bailing in') and consequently are not approved as TLAC instruments (i.e. they are exempt from write-downs). These include secured borrowing and derivative contracts, for example. To be counted as TLAC, a debt instrument must have a *lower* priority (be subordinated) than the exempt instrument to not give rise to legal uncertainty. In addition, the instrument must have a remaining time to maturity of at least one year.

The instruments that are typically TLAC approved are the capital instruments included in the bank's capital base under Basel III[43] and bank bonds that are not secured. In Sweden, however, bank bonds are allocated the same priority as covered bonds and derivatives, which is why they are not currently included in TLAC. Many other countries that have had a similar situation have changed this by, either by law or directly in the banks' bond contracts, subordinating bank bonds to make them TLAC approved. Subordination by contract is probably achieved in practice over a longer time period as existing contracts expire and are replaced by bonds that are subordinated.

With a subordination, Nordea's costs for issuing these bank bonds would in all likelihood increase compared with current borrowing costs as the bonds will be allocated lower priority than is the case today. It is difficult to estimate, however, what the impact of this would be on the bank's earnings. Even if these bank bonds were to be more expensive, the bank's other funding would probably be less expensive as it would be less risky for the investor due to the improved priority. The net effect is therefore uncertain.

5. Concluding discussion

The requirements and measures discussed in this memorandum aim to create the necessary conditions for the Swedish state to manage the potentially increased risks posed by Nordea's transformation into a branch structure. Table 7 summarises the measures proposed by the Riksbank. It contains both the measures presented in 3.1 and directly linked to Nordea's transformation and those in 3.2, which have not necessarily been brought to the fore by Nordea's transformation but where the importance of their introduction has been further strengthened by Nordea's plans.

[43] Equity (CET1), Tier 1 capital (AT1), Tier 2 capital (T2)

Table 7. Summary of proposed measures

Area for measure	Measure
LCR in DKK	Should be implemented
LCR in NOK	Should be implemented
LCR in EUR*	A level above the current requirement of 100 % should be investigated
Foreign currency reserve	Potentially larger need through increased undertaking of liquidity assistance for the Riksbank
Swap-agreements	Continued discussions with Nordic central banks and ECB
Riksbank's liquidity facilities	Potential oversight of design and terms
Reporting to the Riksbank	Extended reporting of liquidity data
MoU	Update previous MoU
FI's resources	Needs to be increased substantially
FI's mandate for macroprudential policy	The government must ensure that FI has sufficiently clear macroprudential mandate
Areas where the Riksbank previously has called for the need for measures	
LCR in SEK	At least 60 %
NSFR	100%
Leverage ratio	5%
Risk-weighted capital requirements	Risk-weights will be increased through BCBS's and FI's work
TLAC	Should be implemented with conservative assumptions as regards loss levels and the desired level of capital adequacy and buffers after resolution. The chosen TLAC levels in USA and Switzerland could hereby serve as points of reference

Note. *There is also an LCR requirement in USD of 100 per cent already in place

The measures would improve Nordea's resilience to financial problems by increasing the amount of liquidity, capital and instruments that can be written down or converted. This would in turn help to mitigate the risk of public funds, in the form of increased risky liquidity support or capital injection in resolution, needing to be used. At the same time, Swedish authorities would be better placed to perform their task in an adequate manner. Even if the Riksbank considers all the measures in the package to be important, it is the measures that concern liquidity management for both Nordea and the Riksbank that are the most important from a strictly Riksbank perspective. These can be considered to be more or less necessary if the Riksbank is to be able to perform its task of safeguarding an efficient and safe payment system.

Even if Nordea were to change its balance sheet in line with the proposed package of measures, this would not mean that all the risks had been taken care of. On the contrary, the Riksbank wishes to point out that the proposed requirements are in many cases on the low side compared with what has been highlighted as appropriate in many academic studies and also in comparison to the requirements introduced in many other countries with similar banking systems.

All in all, the Riksbank deems the proposed measures described above to be appropriate given the size of the Swedish banking system and the changes Nordea's transformation into a branch structure will imply. The requirements can furthermore be fulfilled by Nordea without too much difficulty.

Bibliography

Admati, A., & Hellwig, M. (2014). *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It.* Princeton University Press.

Admati, A., DeMarzo, P., Hellwig, M., & Pfleiderer, P. (2013). *Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Socially Expensive.* Max Planck Institute for Research on Collective Goods 2013/23.

Bair , S. C. (2015). *How a supplemental leverage ratio can improve financial stability, traditional lending and economic growth.* Banque de France.

BCBS. (2010). *Basel III: International framework for liquidity risk measurement, standards and monitoring.* Basel Committee on Banking Supervision.

Calomiris, C. W. (2013). *Is a 25% bank equity requirement really a no-brainer?* Retrieved from Vox: http://www.voxeu.org/article/25-bank-equity-requirement

Caruana, J. (2014). *How much capital is enough?* London: Bank of International Settlements.

ECB. (2015). *The impact of the Basel III leverage ratio on risk-taking and bank stability.* ECB.

ESRB. (2016). European Systemic Risk Board. *Recommendation on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures (ESRB/2015/2)*.

European Commission. (2015). COMMISSION DELEGATED REGULATION (EU) 2015/61 of 10 October 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions.

Fender, I., & Lewrick, U. (2015). *Calibrating the leverage ratio.* Bank for International Settlements.

Financial Stability Board. (2015). *Historical Losses and Recapitalisation Needs.*

Grill, M., Lang, J., & Smith, J. (2015). *The Leverage Ratio, Risk-Taking and Bank Stability.*

Haldane, A. G. (2012). The dog and the frisbee. *Tal vid Federal Reserve of Kansas City's 36th economic policy symposium.*

IMF. (2014). *Sweden: Article IV Consultation - Staff Report.* International Monetary Fund (IMF).

King, M. (2016). *The End of Alchemy: Money, Banking and the Future of the Global Economy.* W.W Norton & Company, Inc.

Miles, D., Yang, J., & Marcheggiano, G. (2013). Optimal Bank Capital. *The Economic Journal, 123*(567), 1-37.

OECD. (2012). *OECD Economic Outlook.* Organisationen för ekonomiskt samarbete och utveckling (OECD).

Regeringens proposition. (2015). Genomförande av krishanteringsdirektivet. [Government Bill. (2015) Implementation of the Bank Recovery and Resolution Directive] *Government Bill. 2015/16:5*, pp. 659. https://www.riksdagen.se/sv/Dokument-Lagar/Forslag/Propositioner-och-skrivelser/Genomforande-av-krishanterings_H3035/?text=true.

Sveriges Riksbank. (2014). *Financial Stability Report 2014:2.*

Sveriges Riksbank. (2015a). *Financial Stability Report 2015:2.*

Sveriges Riksbank. (2015b). *Capital requirements for the major Swedish banks – the Riksbank's view*. Memorandum to the Financial Stability Council's meeting in June 2015.