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The case of the Nordic-Baltic region - macroprudential policy and crisis management in an area with high financial integration[1]

Introduction

The Nordic-Baltic banking system is highly integrated and concentrated, and is dominated by a handful of large banks. Six regional banks make up 90 percent of the total assets of the region's publicly-listed banks.[2] Four of these banks, Handelsbanken, Nordea, SEB and Swedbank are headquartered in Sweden. The consolidated banking assets of the four Swedish banks, i.e. taking into account their cross-border assets as well, is equivalent to almost four times the size of Swedish GDP.[3] While financial integration increased competition that in turn has led to a greater variety of financial products for companies and households, as well as lower prices and interest rates, financial systems have become increasingly woven together, increasing the risk that a problem in one country and in one bank can easily spread to other banks and across borders. Hence, in view of the high degree of financial integration, cooperation between the Nordic and Baltic countries in the financial stability area has since a number of years been strong. This note provides an overview of the current status with respect to the implementation of macroprudential policy in the region as well as ongoing work in the financial crisis management area. The note ends with a short discussion on current structural challenges to the financial sector in the Nordic-Baltic region.

Background

The financial integration of the Nordic-Baltic region started in the latter part of the 1990s. It was during these years that the Swedish bank Nordbanken merged with the Finnish bank Merita, forming the largest banking group in the Nordic countries under the name Nordea. Financial integration continued in the 2000s with Nordea, SEB, Swedbank, DNB and Danske Bank merging with local banks in the Baltic countries, soon to dominate the Baltic banking market (see Chart 1).[4] The cross-border linkages have mainly been through subsidiaries. This is, for example, the case for Swedbank and SEB's operations in the Baltic countries. However, the largest bank and only G-SIFI in the region, Nordea, transferred its operations in the region from subsidiaries to branches in 2016. Hence, there has recently been a shift towards branches (in some cases systemically important branches), which in turn makes cross-border supervisory cooperation even more important.

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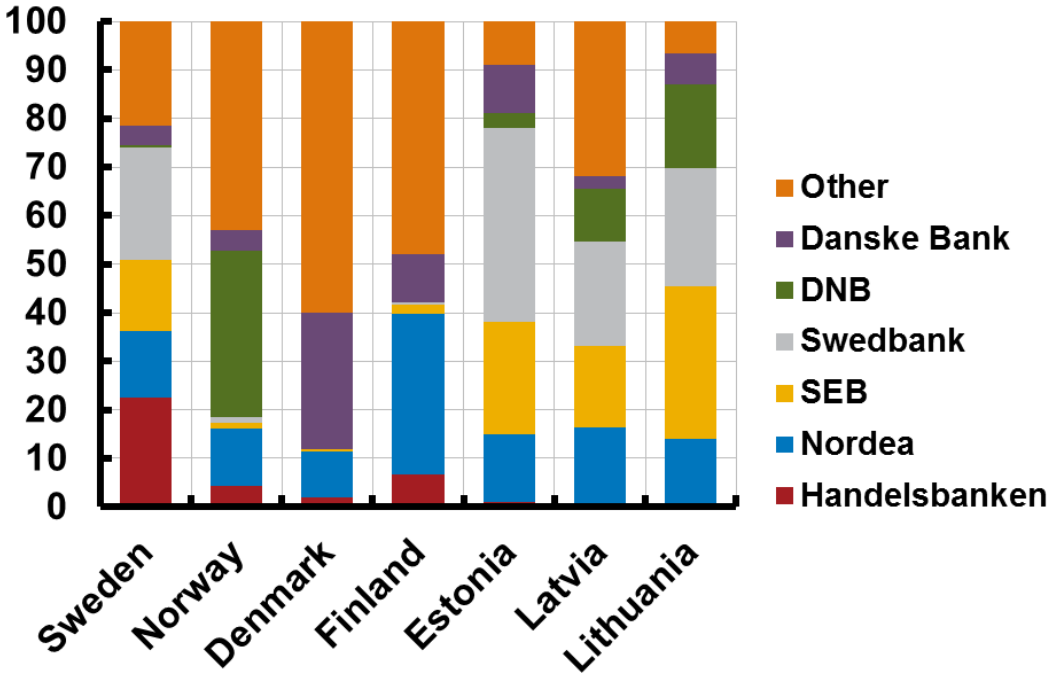
[2] IMF (2013).

[3] Riksbank (2017).

[4] FSB RCG (2016)

Chart 1. Bank integration in the Nordic-Baltic area: share of lending to the public

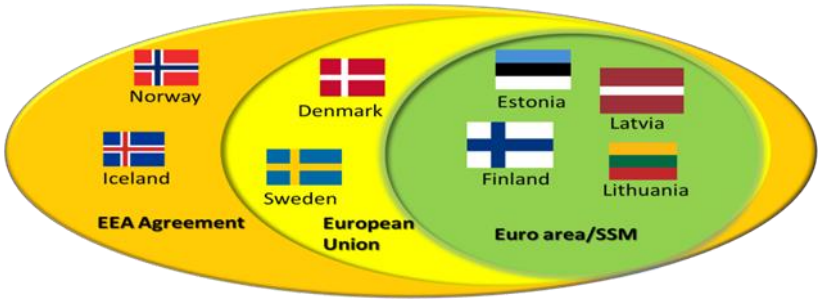


Source: Statistics Sweden, Statistics Norway, Statistics Finland, Association of Latvian Commercial Banks, Association of Lithuanian banks, Estonian Financial Supervision Authority, Bank reports, The Riksbank (2016)

Heterogeneous countries

Although the financial links are strong in the Nordic-Baltic region, there are significant differences between the countries. The level of GDP per capita is, for example, larger in the Nordic countries compared to the Baltic countries. Six of the countries participate in the European Union. Four of these countries are also euro area members and therefore participate in the Single Supervisory Mechanism (SSM) and are hence under the supervision of the European Central Bank (see Figure 1). For those countries outside the euro area, three countries (Norway, Iceland and Sweden) are inflation-targeters with floating exchange rates while one country (Denmark) pursues a fixed exchange rate regime against the euro.

Figure 1. Classification of type of membership (EEA, EU, SSM)



Source: Nordic-Baltic central banks

These differences pose some challenges. One such challenge is that the responsibility for supervision lies with the country where the bank is legally domiciled. That means that parent banks and their subsidiaries are regarded as independent entities and that supervision of a banking group is shared between several countries. When it comes to branches, the supervisory responsibility lies with the home authority, regardless of how large the bank's foreign operations are. Thus, after the Nordea change into a branch structure, the sole responsibility for supervision has fallen on the Swedish FSA while the bank also plays an important role for financial stability in other countries.

The fact that the banks with branches also operate in countries with different currencies also poses a challenge should the bank need liquidity assistance in a currency other than that of its home country. That is because the central bank only has unlimited access to its own currency. Furthermore, should there be a need to restructure the bank; the costs associated with such a measure would fall on the home country.

Macroprudential policy

Following the global financial crisis of 2007-2009, extensive international regulatory work started in order to remedy weaknesses in the financial system and its oversight, bringing to the surface macroprudential policy tools, with the aim of preventing the build-up of risks in the financial system as a whole, thereby safeguarding financial stability and the real economy.

In the years that have followed, countries have set up institutional frameworks for conducting macroprudential policies, and on an EU-level, the European Systemic Risk Board (ESRB) was established in 2010.[5] Macroprudential tools have also been introduced via the Capital Requirements Regulation and Directive (CRR/CRD IV), including the counter-cyclical capital buffer and the Systemic Risk Buffer[6]. Though macroprudential tools were available before the financial crisis, these were mainly aimed at reducing credit growth. CRR/CRD IV has thus paved the way for more diverse means of tackling both cyclical and structural risks.

Institutional responsibility and cooperation in the macroprudential area

All the countries in the Nordic Baltic region have taken decisions to formally designate a domestic authority or body in charge of macroprudential policy. How the countries have chosen to implement the institutional set-up differs however (see Table 1). In some countries (Estonia and Lithuania), the central bank is in charge of macroprudential policy. In Finland and Sweden, the Financial Supervisory Authority has this role while in Norway; the Ministry of Finance is the designated macroprudential authority. In Denmark, the Minister for Business and Growth has the role as designated authority. Domestic cooperative bodies (councils) have been formed in Denmark, Iceland, Latvia and Sweden, bringing together relevant authorities in the macroprudential area. In the Icelandic and Swedish councils, the Ministry of Finance is the chair, while in Denmark; the Central Bank Governor chairs the Systemic Risk Council. Some countries also make a

[5] ESRB is mandated with macroprudential oversight of the financial system within the European Union in order to contribute to the prevention or mitigation of systemic risks to financial stability in the EU. The ESRB is part of the European System of Financial Supervision (EFSF).
[6] See Niemeyer (2016) for a background to the Basel III framework.

difference between the designated authority and the competent authority for macroprudential policy. For example, in Denmark, the Minister for Business and Growth is the designated authority for the countercyclical capital buffer, while the supervisory authority is the competent authority for risk weights.

Table 1. Institutional responsibility for macroprudential policy

	Denmark	Estonia	Finland	Iceland	Latvia	Lithuania	Norway	Sweden
Central Bank		X				X		
Supervisory Authority			X		X			X
Government	X						X	
Council	X			X				X

Source: Central banks and supervisory authorities in the Nordic and Baltic countries

With an interlinked banking system and the crisis of 2008-2009 in mind, the Nordic-Baltic countries established the Nordic-Baltic Macroprudential Forum (NBMF) in 2011, under the chairmanship of Stefan Ingves, Governor of the Riksbank[7]. With the NBMF, a high-level forum was created, bringing together both central bank governors and heads of supervisory authorities in the whole region for the first time.[8]

While the NBMF is an informal body with no decision-making authority, the Forum has a mandate to discuss risks to financial stability in the Nordic-Baltic countries and the implementation of macroprudential measures. The NBMF has also discussed a number of separate topics such as the application of risk weights in the Nordic-Baltic area, and reference rates. Separate work streams have also been established for more in-depth examination of various topics on, for example, the introduction and analytical frameworks of the countercyclical capital buffer and reciprocation of macroprudential policy.

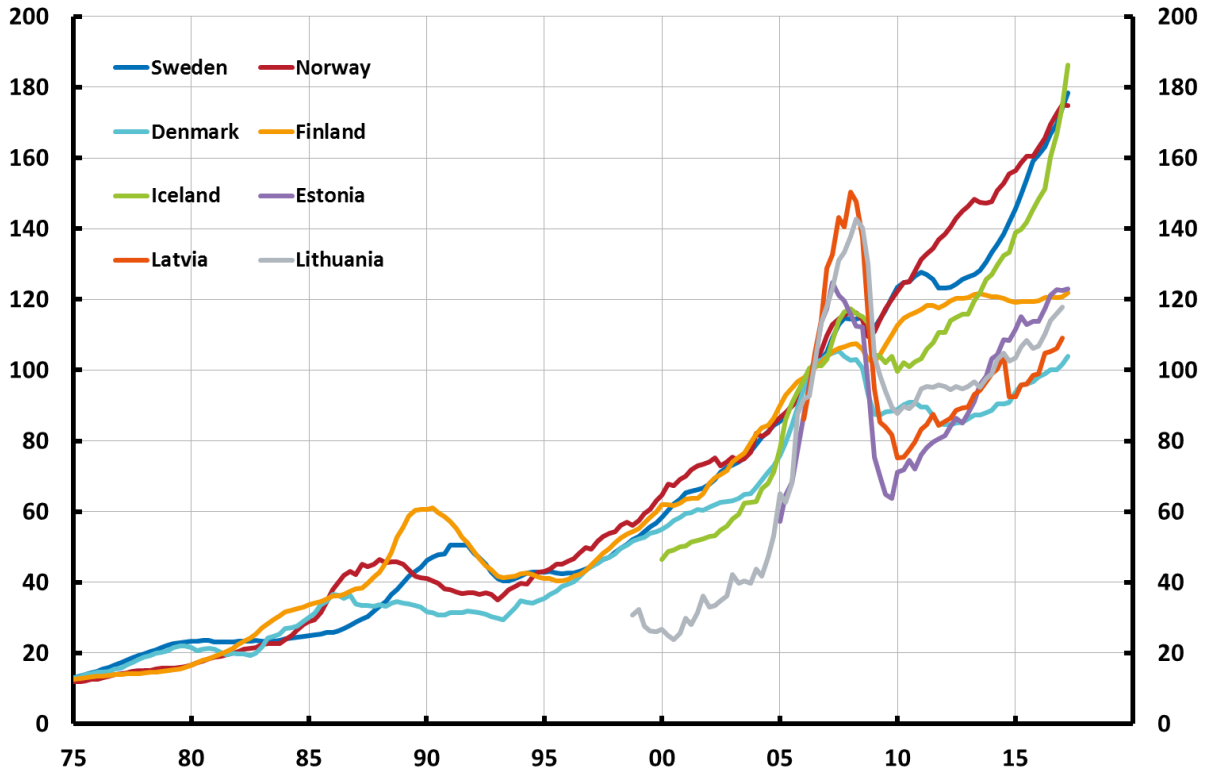
Current risks to financial stability

The Nordic and the Baltic countries are at present faced with both domestic and regional risks to financial stability. Domestically, elevated house prices and household debt levels could make it more likely that house price or interest rate shocks could quickly lead to reduced aggregated demand[9]. Chart 3 shows that house prices have been on the rise in all Nordic countries during the last ten years. In Iceland, Norway and Sweden, the rise has been particularly prevalent.

[7] Farelius (2015)
[8] Prior to 2011, Nordic central banks meet in various forms and different levels of seniority, for example the Nordic central bank governors, who have regular meetings. The heads of the Nordic supervisory authorities also meet regularly. However, there was no high-level forum for both central bank governors and heads of supervisory authorities in the Nordic and Baltic countries prior to NBMF.
[9] IMF (2013).

Chart 3. Residential Real Estate price developments in the Nordic countries

Index 2006=100



Note: current prices

Source: BIS and Dallas Fed

From a regional perspective, given the financial openness of the Nordic economies, spillovers from the pan-Nordic banking system are potentially large. From a structural perspective, the large size of the banking system relative to GDP could increase the potential severity of a crisis. Moreover, the relatively heavy dependence on wholesale funding in some countries adds to risks.

Implementation of macroprudential policy

The implementation of macroprudential instruments in different countries should be seen in the light of different stages of financial cycles and different structural characteristics. Concerning instruments targeted towards imbalances in the housing market, the loan-to-value limit is the most prevalent in the Nordic-Baltic region. As can be seen from Table 2, the LTV limit is now in use or being phased-in in all Nordic-Baltic countries with levels ranging from 85 to 95 percent. Also in the European Union, the LTV limit is the most commonly used macroprudential tool[10]. Other instruments targeting the housing market are loan-to-income (LTI) limits or debt-service-to-income (DSTI) ratios. A few countries combine LTV limits with income-related limits. For example, in

[10] ESRB (2017).

2015 Estonia introduced a LTV limit of 85 percent combined with a DSTI limit of 50 percent as well as an amortisation period of 30 years[11].

Table 2: Macroprudential policy implementation in the Nordic and Baltic countries

	Capital-based						*Liquidity-based*		*Residential real estate*		
	Counter cyclical capital buffer	Systemic Risk Buffer	Sector-Specific risk weights	O-SII Buffer	Leverage Ratio	Pillar 2	LCR	NSFR	LTV	Amortization requirements	DSTI
Denmark	x	x		x			x		x		
Estonia	x	x		x			x		x	x	x
Finland	x	x	x	x			x		x		
Iceland	x	x		x			x	x	x		
Latvia	x			x			x		x		
Lithuania	x			x			x		x	x	
Norway	x	x	x	x	x		x		x	x	x
Sweden	x	x	x	x		x	x		x	x	

Source: Nordic and Baltic central banks and supervisory authorities (2017)

Note: Announced measures as of October 2017. The systemic risk buffer (SRB) is intended to increase the resilience of the financial sector to non-cyclical risks that could have a serious negative impact on the national financial system or the real economy.

A few countries have also implemented measures in the risk weight area to address risks related to household debt and housing markets. In view of the very low risk weights resulting from the banks internal models, both Norway and Sweden have taken measures to raise the floor on risk weights for mortgages[12] [13].

The countercyclical capital buffer is also in the process of being implemented. Iceland, Norway and Sweden are the countries in the region to have activated and implemented the buffer above zero percent. Further, an amortisation requirement has been implemented in Sweden since 2016 in the face of rapidly increasing household indebtedness. Amortisation requirements have been in place in Norway since July 2015.

Tax incentives for borrowing are also fairly common in the Nordic countries although in a few countries there are discussions on reducing them (Sweden) while reductions of tax deductibility have been adopted in both Denmark and Finland.

The exact design of the macroprudential instruments varies across the Nordic and Baltic countries. In some cases they are designed as a strong guideline from the supervisor. For example, this applies to the LTV limit in Sweden[14]. On the other hand, in the three Baltic States, the LTV limit is a legal requirement.

Crisis management

All eight Nordic-Baltic countries have recently experienced financial crises in various forms. Norway, Finland and Sweden were hit severely by banking crises in the late 1980s and early 1990s, all three ranked as part of the “big five” advanced economy crises according to Reinhart and Rogoff. In those days, the banking systems were almost exclusively domestic as were the crises.

[11] Eesti Pank (2014).

[12] Finanstilsynet (2014).

[13] Finansinspektionen (2014).

[14] Prior to July 2015, the LTV in Norway was part of a soft guideline for prudent mortgage lending.

Iceland went through a severe financial and political crisis in 2008 involving the default of three of the country's main privately owned commercial banks following their difficulties in refinancing their short-term debt as well as a run on deposits in the Netherlands and the UK.

The crisis in the Baltic countries in 2008-2009, on the other hand, showed how problems in the subsidiaries spread to the Swedish parent banks and thus quickly became an issue for systemic stability in Sweden. In 2008, as the global financial crisis hit Europe, domestic demand collapsed in the Baltic countries following the burst of a property bubble. Fear of a deep recession and abandonment of the fixed exchange rates against the euro, which would result in large loan losses, made investors lose faith in the Baltic banks and consequently in their parent banks. The parent banks in Sweden and in the other Nordic countries fund themselves to a large extent through the wholesale market. During the crisis in the Baltic countries, market funding for the Swedish parent banks became both more expensive and scarcer. Due to the fact that the Swedish banking system is highly concentrated and interconnected, banks with small or non-existing exposures to the Baltic countries also felt this effect.

Despite the adverse economic development in the Baltic countries, parent banks continued to roll over a large share of their loans to their subsidiaries, acknowledging that cutting credit would probably lead to a worse outcome.[15] Hence, while the risk of contagion is high in an integrated financial system, the close connection also helped to stabilise the financial system, at least in the case of the Baltics. Since the financial crisis of 2008-2009, all three Baltic countries have joined the euro area, and the Nordic banks' subsidiaries in the Baltic States increasingly fund themselves through domestic deposits.

In 2010, the Nordic-Baltic countries adopted a MoU which included the establishment of the Nordic-Baltic Stability Group (NBSG).[16] The MoU is a non-legally binding agreement between the finance ministries, central banks and financial supervisory authorities in Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden.

The objective of the agreement has been to ensure that the parties are prepared to deal with financial crisis situations by agreeing in advance on procedures for cooperation, sharing of information and assessments as well as for the crisis management and resolution of cross-border crises. The main tasks of the full NBSG are to implement and efficiently apply the provisions of the agreement, with the aim of fostering an efficient and sufficiently detailed process for cooperation in the financial crisis management and resolution.

With the advent of the BRRD (Bank Recovery and Resolution Directive) in 2014 and its gradual introduction into national legislation in the Nordic and Baltic countries, the NBSG is currently revisiting its MoU in order to update it to the new environment. One main task will be to implement a regional crisis simulation exercise in 2018. A working group chaired by the Riksbank (Central Bank of Sweden) has been created under the NBSG to be in charge with preparing the exercise. An external consultant has been contracted to help in preparing the simulation exercise.

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[15] Committee on the Global Financial System (2010).

[16] Co-operation agreement on cross-border financial stability, crisis management and resolution between the relevant authorities of the Nordic and Baltic countries

Current structural challenges

The structure of the banking system in the Nordic and Baltic countries is facing changes. As noted above, the largest bank, Nordea, completed in 2016 a process of transforming its subsidiaries into branches. Following this development, Nordea announced in September 2017 that it plans to move its headquarters from Sweden to Finland[17]. The move to Finland will imply that the largest Nordic bank now is headquartered inside the Eurozone's banking union. The change of domicile is scheduled to be completed in October next year, subject to regulatory and shareholder approval.

The Nordea move to Finland will imply that the main responsibility for supervision, resolution and Deposit Guarantee would move from the Swedish authorities to the finish and European supervisory authorities. While the process to transform its subsidiaries in the Nordic countries into branches made it necessary to discuss issues related to reciprocity of macroprudential policy, not least in Finland given the large size of the Nordea branch there, reciprocity will become increasingly important for Sweden after the move to Finland. In addition, the move to Finland will imply that the size of the Swedish banking system in relation to the size of the Swedish economy will decrease from around 400 percent to 300 percent of GDP. From a Swedish financial stability perspective, it will be important that the move of Nordea to Finland will not lead to increased risks for financial stability, for example lower capital or liquidity requirements for the bank.

[17] Nordea (2017)

References

Committee on the Global Financial System (2010), "Funding patterns and liquidity management of internationally active banks", *CGFS Papers* No 39, Bank for International Settlements.

Eesti Pank (2014), "Requirements for housing loans Background analysis for the introduction of limits on the LTV ratio, the DSTI ratio and the loan maturity on housing loans issued in Estonia", September 2014.

European Systemic Risk Board (2017), "Overview of national macroprudential measures", November 2017.

Farelius, David (2015), "Macroprudential Policy in the Nordic-Baltic area", Financial Stability Journal, Volume 5, SEACEN

Finansinspektionen Sweden (2014,), "Capital requirements for Swedish banks".

Finanstilsynet Norway (2014), "Estimation of prudent risk weights for mortgages", *Risk weights for mortgages*.

Financial Stability Board (FSB) Regional Consultative Group (2016) "*Nordic experience of cooperation in cross-border regulation and crisis resolution*"

IMF (2013), *Nordic Regional Report*, Staff report for the 2013 cluster consultation.

Niemeyer, Jonas, "Basel III: what and why", Economic Review 2016:1, Sveriges Riksbank

Nordea Bank (2017), Regulatory Press Release: "The Nordea Bank AB (publ) Board of Directors initiates a re-domiciliation of the parent company to Finland" (September 2017)

Reinhart, Carmen M. and Kenneth Rogoff (2008), "Is the 2007 US subprime crisis so different? *NBER Working Paper* 13761, January 2008.

Sveriges Riksbank (2017), *Financial Stability Report* 2017:1.