Nordic experience of cooperation on cross-border regulation and crisis resolution

Report from a RCG Europe Working Group

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[1] ***A list of members of the RCG for Europe can be found at http://www.fsb.org/wp-content/uploads/rcg.pdf***

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Abstract[1]

The Nordic banking system is highly integrated and may provide an example of how cross-border banks may influence the interaction between national authorities. The merger of four large national banks into the Nordea bank in 2001 led to a phase of enhanced cooperation on cross-border regulation and crisis resolution among the Nordic central banks and supervisory authorities. Several Nordic MoUs on financial stability were completed in the following years. A broader MoU focusing on crisis management and also including the ministries of finance was signed after the 2008 crisis based on the then agreed EU MoU for cross-border banking groups. The implementation of the Basel III framework subsequently led to enhanced cooperation on reciprocity arrangements.

The Nordic cooperation on financial stability issues has been facilitated by close historical and economic ties. This report presents some key facts about the Nordic experience and the challenges faced by the national authorities. Overall, the countries have found pragmatic solutions when needed. Some efforts to enhance cooperation have failed due to diverging national interests, in particular as regards managing and resolving crises in cross-border banks. The report also highlights some remaining challenges related to the European Banking Union, systemically important branches and crisis management and resolution.

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1. The development of financial integration in the Nordic-Baltic area

1.1 Some stylized facts

There was little financial integration in the four largest Nordic countries (Denmark, Finland, Sweden and Norway - N4) until the late 1990s. The banking crisis in the region in the early 1990s, which affected three of the four Nordic countries, was caused by several common factors including financial liberalisation and a subsequent boom-bust economic cycle. Integration took a leap forward with the creation of the Nordea Bank around the turn of the century. Today the banking systems of the four countries are closely integrated through a mixture of direct cross-border banking, subsidiaries and branches. The banking systems also share several key characteristics, see Box 1: *Characteristics of the Nordic Banking sectors.*

Box 1

Characteristics of the Nordic banking sectors

The banking sector in the Nordic countries has grown in line with the level of household debt. Credit has been readily available to households and strong demand has fuelled and sustained growth in house prices, which again have provided collateral for further lending. Household debt in percent of GDP is among the highest in the world. Residential mortgages account for a large share of total loans in all countries reflecting also a high degree of home ownership and low public borrowing in the four countries. The Nordic banking sectors are relatively large in comparison with EU averages, see table.

Each country has 3-5 large banks and concentration ratios in Nordic countries are generally higher than EU-wide averages. In addition to a few large banks, there are many smaller credit institutions, e.g. savings banks and cooperative banks, mainly operating in local markets without material cross-border linkages.

Key numbers for the Nordic credit institutions end 2015

	DK	**FI**	**SE**	**NO**
Total assets as a percentage of GDP	398 %	277 %	396 %	227 %
Concentration, four largest credit institutions' market share (total assets)	58 %	94 %	66%	48%
Wholesale funding as a share of total assets*	65 %	15 %	41%	52%
Residential mortgage loans in percent of total loans	38 %	26%	28%	42%
Total CET1 capital in percent of total risk-weighted assets with Basel I floor**	12.2 % (16.7%)	17.7% (21.4%)	7.0 % (18.9%)	14.7% (16.6%)
Leverage ratio	6.0 %	5.6 %	4.7%	7.1%

*Excluding foreign branches and subsidiaries.

** Without Basel I floors in brackets. For Denmark, Finland and Sweden, four largest banks only.

Three of the four Nordic countries are members of the EU, but only Finland is part of the euro area. Norway is not a member of the EU, but through the EEA agreement all four countries are

part of the single market for financial services. The regulatory framework for their financial systems is thus the EU directives and regulations. Although the EU directives were minimum requirements, they resulted in a convergence of financial legislation in the N4 Nordic countries from 1994 onwards. Box 2: *Nordic cooperation on financial stability issues before and independent of developments in cross-border banking*, elaborates on the early cooperation on financial stability between the Nordic countries.

Box 2

Nordic cooperation on financial stability issues before and independent of developments in cross-border banking

The Nordic countries (N4 + Iceland) have traditionally translated their natural shared cultural and geographical ties into active social, economic and political cooperation. In the early 1950s a consultative body was created, where Nordic parliamentarians met on a regular basis. The common Nordic labour market (1954) and the Nordic Passport Union (1958) serve as key examples of specific outcomes of this close cooperation. All the Nordic countries had joined the European Free Trade Area (EFTA) by the early 1960s. Denmark joined the EEC in 1973. Sweden and Finland joined the European Union (EU) in 1995, and in 1999 Finland adopted the euro. After twice voting against membership of the EU, Norway joined the European Economic Area (EEA) in 1994.

The cooperation that was built up around the Nordic constituency in the IMF served as a basis for cooperation on several economic issues. The ministries of finance and the central banks held regular meetings (up to three times a year) to coordinate their positions on IMF issues. At times these meetings also served as a forum for exchange of information on other financial and monetary developments. Denmark acted as a bridge between the EEC and the other Nordic countries after they joined in 1972. After the establishment of the Basel Committee on Banking Supervision (BCBS) in 1975, Sweden regularly informed the other countries about the discussions in the BCBS. These meetings have continued and been expanded to include the Baltic countries after they joined the IMF as part of the Nordic-Baltic constituency in 1992. There are, however, few if any examples of formal coordination of Nordic views on the development of global standards for the financial industry.

The Nordic ministries of finance, central banks and supervisory authorities have a long tradition of holding annual meeting at the top level. Heads of financial stability departments of the Nordic central banks started to meet at least once a year after the banking crisis. Staff at a lower level has held annual workshops to encourage closer cooperation. The Baltic countries have been included in these workshops in recent years.

Cooperation among supervisors increased during the 1960s and 1970s as large Nordic banks cooperated on establishing foreign subsidiaries, largely to avoid strict regulation at home. As supervision was expanded from banks only to unified financial sector supervision in the 1980s, cooperation was broadened. A Nordic MoU covering broad areas of supervisory cooperation was signed in 2000, replacing former bilateral agreements.

Both central banks and supervisory authorities have used short-term staff exchanges as an instrument to promote cooperation and mutual understanding.

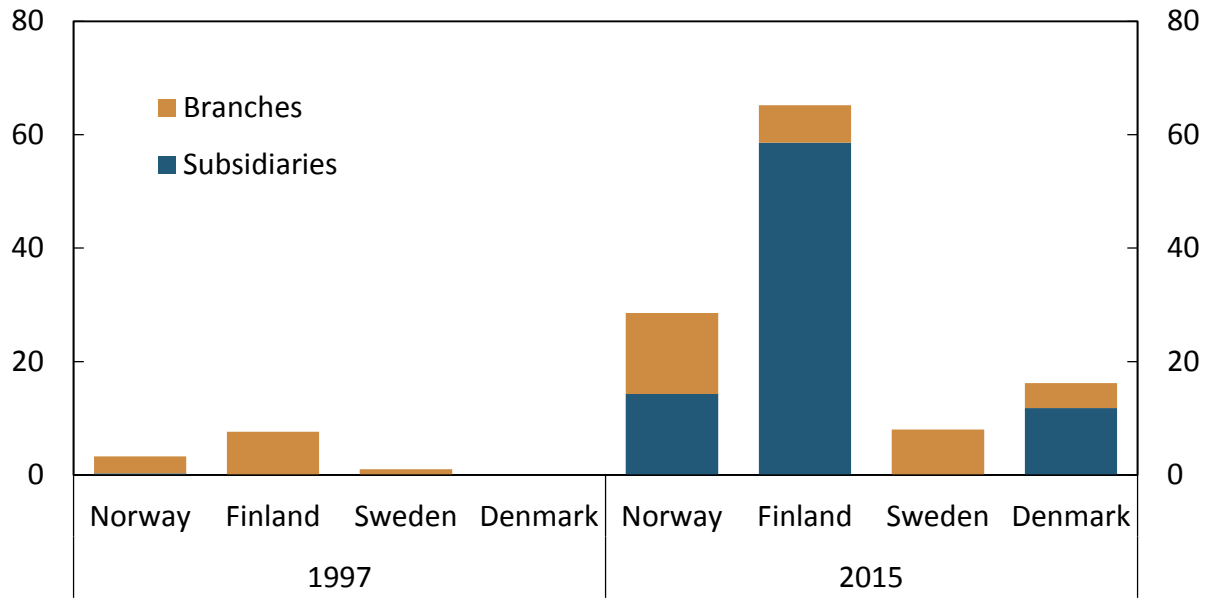
The scale of cross-border banking activities in the Nordic region was very small until the late 1990s, see Chart 1. As all the Nordic countries became part of the single market for financial services, legal obstacles to cross-border activities had disappeared by the mid-1990s. Economic incentives for cross-border expansion were economies of scale combined with relatively low risks as the new markets shared many similarities with the home country.

Nordea was established in 2001. It started with the merger of Merita Bank (Finland) and Nordbanken (Sweden) into MeritaNordbanken in 1997. MeritaNordbanken then merged with Unidanmark (Denmark) in 2000, acquired Christiania Bank og Kreditkasse (Norway) in late 2000 and Postgirot Bank (Sweden) in 2001. Nordea got its name in 2001 at the same time as

Chart 1

Foreign banks' and credit institutions' market share

in Denmark, Finland, Norway and Sweden based on total assets



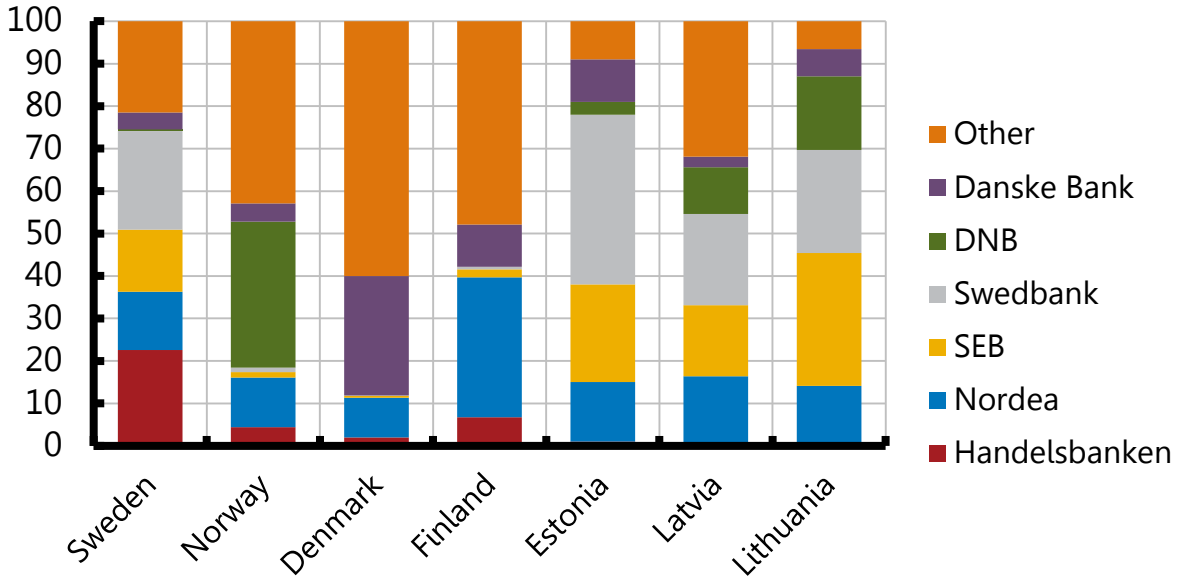
Sources: Danmarks Nationalbank, Finanssivalvonta Finland, Norges Bank and Sveriges Riksbank.

its headquarters moved from Helsinki to Stockholm. Nordea was established with a subsidiary structure and the bank at the time was and still is one of the three largest banks in all of its host countries. It is also large in a global context and was designated as a Global Systemically Important Bank (G-SIB) by the FSB in 2011. From the beginning, Nordea supplied a full range of financial services including investment banking, insurance and pension instruments. Liquidity management was centralised from the beginning but other activities were gradually centralised, blurring the distinction between business lines and the legal structure.

Other large banks headquartered in the N4 countries have also increased their cross-border activities in the region, see Chart 2. They have expanded partly by establishing subsidiaries (as Nordea) and partly by establishing branches. Their market shares in the other N4 countries are generally smaller than Nordea's, but some of them, as well as Nordea, have large market shares in the Baltic countries. Four of the six largest Nordic banks are headquartered in Sweden. Most of the cross-border banking activity in the Nordic region is done by Nordic banks and banks from outside the region generally have low market shares.

Chart 2

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, Sveriges Riksbank (2015)

1.2 Challenges stemming from the development of cross-border banking

In general, the single passport principle left very limited room for authorities (both home and host) to regulate structural developments in their domestic financial systems. One immediate concern following the growth of cross-border banking was related to supervision. The need for supervisory cooperation was mainly related to:

- capitalisation of the group (consolidated and for the subsidiaries),
- liquidity management in the group, and
- the business lines of new cross-border banks did not necessarily coincide with the legal structure.

The growth in cross-border branches has created additional challenges for microprudential supervision. The supervisory powers of a branch supervisor have been and still are quite limited or even non-existent in relation to prudential supervision. For example, the supervision of a branch does not encompass solvency aspects. The existing regulatory framework gives branch members of a supervisory college access to some information, but this access through "participating" in supervision without powers is strongly dependent on the willingness and openness of the home authority.

Reciprocity issues came more into question with the introduction of CRD4/CRR and its new emphasis on macroprudential policies and with the growth of branches. The increased use of

Internal Rating Based (IRB) models as a result of the implementation of the Basel II framework also played a role as a source of discrepancies with potentially large differences in risk weights (and hence capital requirements) for apparently quite similar exposures. *How the host country could safeguard financial stability in such circumstances became an issue.* The tools available were limited and their use, in the form of raising requirements above their regulatory minimum, threatened the competitive position of domestic credit institutions.

The expansion of cross-border banks also exposed countries to new sources of contagion. Problems in one part of a cross-border group would affect (potentially systemically important) units in all the N4 countries. *How should the authorities approach a request for either liquidity or capital support to a group in a crisis situation*? *And were the subsidiaries stand-alone entities that could be ringfenced from the group and solved domestically in a crisis?*

The increased interlinkages between the N4 banking systems contributed subsequently to the IMF decision in 2013 that the financial systems in all the N4 countries should be considered systemically important and thus be included in the list of 29 jurisdictions globally with systemically important financial sectors, see Box 3: *IMF's decision that the 4 Nordic countries are among the 29 jurisdictions globally with systemically important financial sectors.*

2. Nordic experiences of cooperation among authorities on cross- border supervision, regulation and crisis resolution issues

2.1 Microprudential supervision and regulation

The first bilateral discussions on supervisory cooperation - between Finland and Sweden for MeritaNordbanken (the predecessor to Nordea) - started in late 1997. The main supervisor at that time was the Finnish FSA (Rahoitustarkastus). This was the first attempt to establish working level relations and exchange information about supervisory practices between authorities in Sweden and Finland. These initial discussions led to a mutual understanding on the supervisory approach for the new cross-border institution (MeritaNordbanken) and a Memorandum of Understanding (MoU) was agreed soon thereafter.

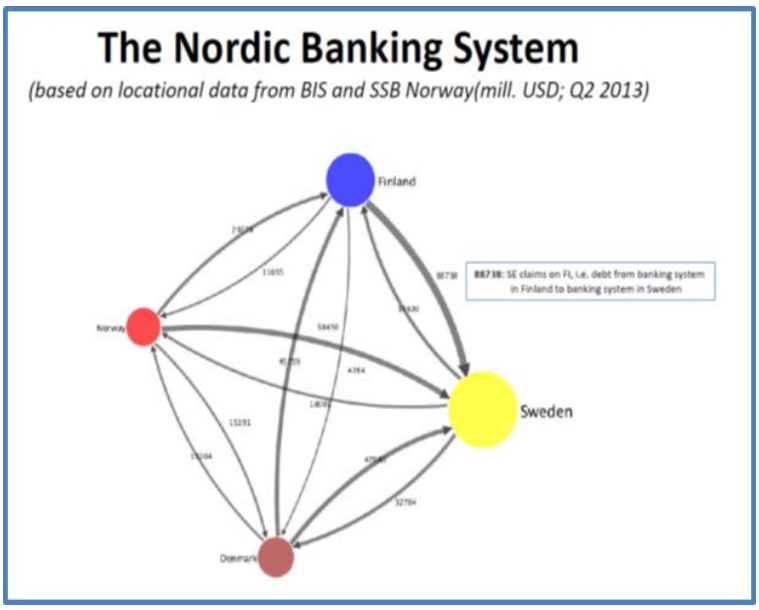
Box 3

IMF's decision that the four Nordic countries are among the 29 jurisdictions globally with systemically important financial sectors

In 2014, Denmark, Finland, and Norway were included in the group of 29 jurisdictions globally with systemically important financial sectors. Sweden was already in the group. As a result, the four countries are now on a mandatory five-year cycle of FSAPs and will be subject to annual Article IV consultations. The inclusion was the result of a change in the methodology used by the IMF to determine which countries have systemically important financial sectors.

The old methodology was rather crude and simply put a 70 percent weight on the size of the financial sector and the rest on interconnections. The new methodology is based on recent advances in network analysis and puts much more weight on interconnections. It expands the range of potential contagion channels by including bank claims, equity claims and "pure" price contagion. Exposures within each channel are then weighted by size (PPP GDP) and complexity (gross derivatives exposures). Finally, a new analytical method (Clique Percolation Method – CPM) is used to identify the core of each exposure network, and the union of these (four networks) then determines the ranking of systemically important financial sectors. The new methodology identified 29 jurisdictions as the new "systemic core" of the global financial system, based on 2013 data.

The three new Nordic countries were included in this new core solely based on the bank network effect, largely due to the regional business model of certain large banking groups and the attendant dense web of cross-border claims.



Different bank data could be used when analysing interconnectedness potentially yielding different results. The IMF's estimates of interconnectedness among the Nordic banking systems are based on Bank for International Settlements bilateral locational banking statistics (see figure). These data capture banking exposures vis-à-vis other jurisdictions based on where the exposures have been registered, which could be a foreign branch, rather than which legal entity is responsible for the exposures. They pay less attention to whether a particular financial system is the source of shocks or on the receiving end of shocks in the Nordic banking network. The method thus abstracts from features related to the legal status of the entities of the banking groups that could influence the actual propagation of shocks through the banking network.

When MeritaNordbanken subsequently expanded into Denmark and Norway, supervisory authorities in these countries joined the MoU. When the bank moved its headquarters from Finland to Sweden in 2001, and changed its name to Nordea, the Swedish FSA (Finansinspektionen) became the consolidating supervisor for the group and the MoU was adjusted accordingly.

2.1.1 Supervisory colleges

As a result of the MoU between the supervisors, the Nordea College was established in 2001. It is considered to be the first supervisory college in the EU. Thus the Nordic college approach was an early example when the EU subsequently introduced supervisory colleges.[2] Now CRD IV includes requirements on written cooperation and coordination arrangements for supervisory colleges. There is now also an international consensus that cross-border banking groups should be supervised on a consolidated basis, covering all aspects of their business, both domestic and cross-border. Supervisory authorities from both countries with subsidiaries as well as branches are included in the colleges.

Supervisory colleges should meet physically at least once a year; in the Nordea College the supervisors have met even four times a year. The contacts between the Nordic members in the supervisory college are quite frequent and informal, using different forms of communication (e-mail, telephone contacts and conference calls, video meetings, web college pages and also regular meetings) both within the college and between the college and the supervised entity. The work of the supervisory college is chaired and led by the consolidating supervisor. The efficiency of the work is thereby very much dependent on the activity and interest of the consolidating supervisor.

The main duties of the supervisory colleges are:

- to agree on a joint examination plan (also including joint supervisory inspections and other activities),
- to conduct risk assessments on group and local level,
- to decide on the annual formal Joint decision on capital and the annual formal Joint decision on liquidity (in two separate documents), and the annual formal Joint decision on the recovery plan,
- to be involved in Joint decisions on model approvals, and
- to share and exchange information and raise issues of concern.

There are now supervisory colleges for all the largest cross-border banks in the Nordic Baltic region.[3] The members of the Nordea core college today are supervisory authorities in Sweden, Denmark, Norway and the ECB Single Supervisory Mechanism (SSM) (representing the prudential supervisor of the Finnish entity). The Finnish FSA is mainly an observer in

[2]Set-up with physical meetings, membership of college, content of the meetings, information exchange and planning and coordination of joint activities.

[3] The Swedish supervisory authority is chairing colleges for: the Nordea Group, the Swedish Handelsbanken Group, the SEB Group and the Swedbank Group; the Danish supervisory authority is chairing the college for the Danske Bank Group and the Norwegian supervisory authority is chairing the college for the DNB Group.

prudential matters covering Nordea Bank Finland. Other members of the general college are the Baltic countries, Luxembourg and the UK. The Baltic countries were included in the college a few years after the establishment of the Nordea College, since Nordea has significant branches in all of the Baltic countries. The input from these countries is considered to be relevant for the risk assessment of the local branch and the group as a whole. However, the supervisors of a branch are not formal decision makers related to capital and liquidity requirements.

A prerequisite for a well-run supervisory college is a limited number of active participants with a genuine interest in capital and risk-related issues. The supervisory college should be an instrument for active cooperation, and not just a formality in order to fulfil the legal requirements in a directive. The limited number of active participants has been one of the advantages of the Nordic supervisory colleges, as the colleges have been able to influence the outcome also on group level on e.g. capital levels and liquidity.

Well-functioning colleges provide effective supervision of international banking groups (on a consolidated and solo basis), despite the fact that they are not formal decision-making bodies. The Nordic supervisory colleges have facilitated discussions, information sharing and risk assessments of the financial groups and the local entities in each country. Before 2008, the Nordea College carried out annual risk assessments of the Nordea Group and distributed it to the bank. From 2008 onwards, the college has carried out annual joint assessments of the capital situation both on the Group level and for the main subsidiaries. The results were forwarded to the Group and the main subsidiaries by the home supervisor and the main host supervisors respectively. There was no legal framework for these joint assessments. Instead, they were based on guidelines from the European Banking Authority (EBA), stating that the consolidating (home) supervisor should take comments received from other supervisors into account. Formal joint decisions according to CRD IV have been described in chapter 2.1.3.

Close cooperation between the Nordic supervisory authorities and the active work of the colleges have also facilitated close planning and coordination of supervisory activities. For over a decade there have been annual joint inspections (1-2 per year) as well as other supervisory activities (2-4 per year). These joint activities are genuinely done as a team effort, one Nordic team in charge of both the off-site and on-site work and with only one report to the supervised entity based on input from all the participants. These joint activities have fostered a cooperative spirit and broadened the supervisors' knowledge and experience in addition to providing the bank with a joint supervisory position. Local supervisory activities continue to be conducted by the local supervisors.

The MoUs represent non-binding documents detailing the intention to cooperate and work well in the on-going supervision. They are, however, insufficient for crisis situations, as illustrated by the recent financial crisis. More legally binding obligations have therefore been implemented in the Bank Recovery and Resolution Directive (BRRD) [4], the EU's implementation of the FSB's Key Attributes of Effective Resolution Regimes for Financial Institutions (the Key Attributes).[5]

2.1.2 The home-host framework

Home-host cooperation is the general principle for all cross-border supervision. The term host supervisor is now used for both branches and subsidiaries, although the supervisory responsibilities are very different for the two types of institutions. The home, or the consolidating supervisor, is in charge of the supervision of the whole financial group, including branches in other jurisdictions. The host, or the local, supervisors are in charge of the supervision of local subsidiaries. With this home-host set-up, supervisors are seeking to ensure that all aspects of the supervision of the whole cross-border group are taken into account, although divergent interests of the home and host supervisors may at times not be fully reconciled.

Concern with local market conditions may sometimes lead the host supervisors to favour higher capital requirements or different risk weights for certain credit risks. There may at times also be other challenges relating to the home-host cooperation that need to be addressed by the college, e.g. resource allocation for a joint supervisory activity or other issues related to earlier agreed joint activities. So far, the Nordic supervisory colleges have been able to reach common views on all Joint decisions on capital and liquidity and there has been no need for mediation by the EBA.

2.1.3 Joint decision on capital and liquidity requirements

The Joint formal decisions on capital and liquidity requirements according to CRD IV as well as recovery plans according to the BRRD are now the most important tasks of the Nordic supervisory colleges, both on group and solo level. From 2013, formally signed joint decisions according to CRD IV have been carried out for both the banking groups and the main subsidiaries.

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[4] See European Commission's home page on crisis management: http://ec.europa.eu/finance/bank/crisis_management/index_en.htm.

[5] See http://www.fsb.org/wp-content/uploads/r_141015.pdf.

The quality of the discussions in the Nordic colleges about capital needs has improved over time. Before the implementation of the Capital Requirement Directive 2006/48/EU there was no legal framework for these joint decisions. Hence, it was in practice left to the home supervisor to decide whether to take into account comments received from other supervisors. Now, the legal requirements covering the Joint decision on capital and liquidity requirements give all the supervisors of subsidiaries in a group the possibility to be involved in decisions both at the group level and for their own subsidiaries. They may also challenge other supervisors' views on their subsidiaries. All the involved supervisors need to reach an agreement on capital levels and the supervisory liquidity requirements.

The host supervisor of a branch, whether the branch is significant or not, is not involved in the Joint decision on capital requirements as there is no capital in a branch. The host supervisors of branches can have an impact and be involved in the risk assessment of the local branches. The risk assessment is the first part of the work leading up to the Joint decision on capital requirements.

2.1.4 Joint model approvals

Most of the large Nordic cross-border banks have implemented IRB models for the calculation of their regulatory capital for credit, market, counterparty and operational risks. Approval of the IRB models has been conducted jointly under the lead of the home supervisor since 2006 - 2007, and with the home supervisor ultimately responsible for approving the models used in subsidiaries. These joint processes have been challenging at times, but they have also given the local supervisors an opportunity to vent concerns before the model was approved. Certain model validation teams have on occasion referred disputed issues to the supervisory colleges.

2.1.5 Nordic harmonisation of national options

National harmonisation of the capital adequacy rules has been conducted in a dedicated joint working group - called the *Nordic Capital Adequacy Working Group (NCAWG)*. One of the objectives of this group has been to limit the possibilities for regulatory arbitrage among financial groups between different Nordic jurisdictions.

As the number of national options has been gradually reduced by several European initiatives (such as CRD IV/CRR and later via the SSM), there is now less need for this kind of specific Nordic harmonisation and the NCAWG has not been active lately.

In connection with the implementation of Basel III through the CRD IV/CRR directives the issue of Nordic harmonisation was raised at the political level. In November 2011, the N4

ministries of finance appointed a working group to assess the scope for cooperation among the Nordic countries in the implementation of CRD4/CRR.[6] The aim was to secure a level playing field among the Nordic banks in each country by agreeing to extend the host authorities' decisions on local capital requirements to cover foreign branches in addition to foreign subsidiaries.

The working group did not see major challenges for Nordic credit institutions as a whole in implementing the new capital and liquidity requirements, although limited availability of highly liquid assets was a concern in some countries.[7][8] The group concluded further that Nordic coordination on new liquidity, funding and capital requirements – as well as on residential mortgage risk weights – was both possible and desirable.

The group's specific proposals, which were endorsed by the ministers, were to - within the framework of national and EU/EEA legislation – consider the possibility of:

- a common understanding of the forthcoming EU/EEA rules on liquidity requirements,
- establishing a system of mutual recognition of capital requirements in the Nordic countries (so-called reciprocity and host country regulation), and
- cooperation on common criteria and similar practises for model approval (for the calculation of capital requirements - both the standardised and the IRB approach).

The Nordic supervisory authorities were asked to follow up these proposals. In their immediate response they referred to ongoing work on the issues identified both at the European level (EBA) and in existing groups among Nordic supervisory authorities, see above. They also noted that further cooperation would take place within the existing framework for cooperation between the Nordic FSAs.

By 2014, these cooperation efforts had made some progress. Concerned about banks' low risk weights for residential mortgages as a result of the introduction of IRB models, the Norwegian FSA proposed to raise certain specific parameters in the models.[9] Given the large market share of foreign banks, they wanted foreign branches to follow suit. Both the Swedish and Danish FSA announced that they would ensure that their banks operating in Norway would do so.

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[6] At this time Swedish authorities had already announced that they would tighten capital requirements for their four largest banks well above those proposed in Basel III.

[7] At the time of finalisation of the working group's report, the CRD IV/CRR framework was subject to trilogue negotiations between the European Commission, the Parliament and the Council. The working group based its considerations on CRD IV/CRR versions adopted by these three legislative bodies.

[8] Nordic Working Group on Basel III/CRD IV and National Discretion, Report from the Nordic working group consisting of representatives from the Nordic ministries responsible for financial markets regulation in the Nordic countries, June 2012, available at: *https://www.regjeringen.no/en/aktuelt/report-from-the-nordic-working-group-on-/id696320/.*

[9] The proposal would raise risk weights for residential mortgages to the range of 20-25 percent.

2.2 Macroprudential policy implementation

Prior to the financial crisis in 2008-2009, the use of macroprudential policy measures was quite limited in the Nordic countries. Setting regulatory standards higher than the regulatory minimum was seen as threatening the competitiveness of domestic institutions in a number of countries when market shares of foreign branches were growing rapidly. The lack of dedicated measures to safeguard financial stability also led to a discussion of the possible use of monetary policy to "lean against the wind".

The Baltic countries introduced certain macroprudential measures just before the financial crisis to dampen growth in mortgage lending, but the high penetration of foreign branches reduced the effectiveness of these policy measures.[10] Given the high degree of financial integration in the Nordic-Baltic area and the fact that Nordic banks dominate the banking sector, especially in Estonia, the Baltic countries have been part of the macroprudential cooperation since the start.

The global financial crisis of 2008 – 2009 underscored the costs of systemic instability and highlighted the need for dedicated macroprudential policies to achieve financial stability. The aim of macroprudential policy is to prevent the buildup of risks in the financial system as a whole, thereby safeguarding financial stability and the real economy. Macroprudential policy thus takes a system-wide perspective while microprudential supervision traditionally focuses on idiosyncratic risks and the solvency of individual institutions.

Since the crisis, several countries have established institutional frameworks for the conduct of macroprudential policies, and at EU level the European System Risk Board (ESRB) was established in 2010.[11] Some macroprudential tools were introduced in the EU via the Capital Requirements Regulation and Directive (CRR/CRD IV), while the ESRB has since recommended the consideration of further tools.[12] Before the financial crisis macroprudential tools were mainly aimed at reducing credit growth. The new capital regulations (CRR/CRD IV) have paved the way for a wider policy tool kit to tackle both cyclical and structural risks.

[10] Estonia increased the risk weights for residential mortgages from 50 percent to 100 percent in 2006 and Latvia introduced a restriction on loan-to-value (LTV) in 2007.

[11] ESRB is mandated with the macroprudential oversight of the financial system within the EU in order to contribute to the prevention or mitigation of systemic risks to financial stability in the EU (Regulation (EU) No 1092/2010).

[12] Recommendation of the ESRB of 4 April 2013 on intermediate objectives and instruments of macro-prudential policy (ESRB/2013/1), available at: *http://www.esrb.europa.eu/pub/pdf/recommendations/2013/ESRB_2013_1.en.pdf.*

2.2.1 Organisation of macroprudential policy in the Nordic-Baltic countries

All the countries in the Nordic Baltic region have formally designated a domestic authority or body in charge of macroprudential policy, but they have chosen widely different institutional set-ups, 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 and financial stability area. In the Icelandic and Swedish councils, the Ministry of Finance acts as chair, while in Denmark the central bank governor chairs the Systemic Risk Council. In the case of Sweden, Finansinspektionen is the designated and competent authority for macroprudential policy.

Table 1

Designated authority in charge of macroprudential policy

	Denmark	Estonia	Finland	Iceland	Latvia	Lithuania	Norway	Sweden
Central Bank		x				x		
Supervisory Authority			x	x	x			x
Government	x						x	
Memo: Countries with a council	x			x	x			x

Source: Central Bank and Supervisory authorities of the Nordic and Baltic countries

Some countries differentiate 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.

2.2.2 Cooperation on macroprudential policies in the Nordic-Baltic area

With an interlinked banking system (see Box 3) 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. With the NBMF, for the first time a high level forum was created, consisting of both central bank governors and heads of

supervisory authorities in the whole region.[13] One important reason for creating the NBMF was also the need to have a forum for discussion of issues that could arise in the newly formed ESRB.

The NBMF is an informal body with no decision-making authority. It is mandated to discuss risks facing financial stability in the Nordic-Baltic countries and the implementation of macroprudential measures. The NBMF has discussed a number of financial stability-related issues such as the application of risk weights in the Nordic-Baltic area and key reference rates. Separate work streams have also been established for more in-depth examination of topics such as the analytical frameworks for the countercyclical capital buffer and reciprocation of macroprudential policy.[14]

In order to streamline the discussion of risks and macroprudential policy measures, a regular survey has been prepared and circulated among the central banks and supervisory authorities. The survey results have been presented in a biannual report for the NBMF. This has enabled the NBMF to have a more focused discussion on risks and macroprudential policy implementation. Meetings have been held at the Arlanda Airport (outside Stockholm), enabling members of the forum to fly in and out on the same day, thereby enhancing efficiency.

Information sharing, discussions and other forms of cooperative work between the eight countries in the NBMF in general have been considered very useful since the forum was created in 2011. However, some issues can be noted. First, there have been minor differences of views in terms of the optimal degree of transparency related to the work of the group. Some countries have favoured publication of NBMF reports, while other countries found that the reports needed further work in order to be published. At the meeting in April 2016 it was decided to send the NBMF note on risks and macroprudential policy measures to the ESRB Secretariat for information. Second, not all designated macroprudential authorities are members of the NBMF. Hence, some authorities do not directly benefit from the information and sharing of experiences.

When assessing progress for Nordic-Baltic cross-border cooperation on macroprudential policies, one also has to keep in mind that macroprudential policies by design have a national focus, since they are supposed to affect cyclical and structural developments in specific countries. The discussion in cross-border groups like the NBMF therefore focuses on how macroprudential policies can be coordinated between countries that may be in different cyclical

[13] Prior to 2011, Nordic central banks met in various forms and at different levels of seniority, for example the Nordic central bank governors met and still meet regularly. 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 Nordic and Baltic countries prior to NBMF (see also Box 2).

[14] Farelius (2015).

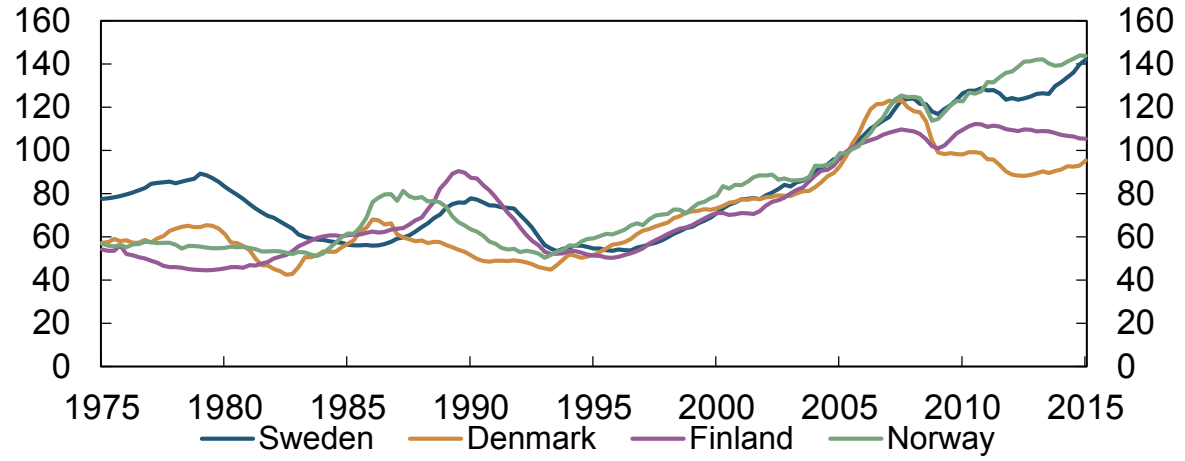
positions, while they may be exposed to similar exogenous shocks. Through information sharing and policy discussions, authorities may converge towards policies and reciprocation that can result in a better policy outcome for the region as a whole.

2.2.3 Choice and design of instruments

Implementation of macroprudential policies depend on the cyclical positions among countries. The Nordic-Baltic countries presently face both domestic and regional risks to financial stability. Elevated house prices and household debt represent a distinct financial stability risk domestically, as a house price or an interest rate shock could quickly lead to reduced aggregate demand, see Chart 3.[15]

Chart 3

Developments in real house prices in the Nordic countries, 2005=100.



Source: Sveriges Riksbank

In addition, the potential spillovers between the regional economies are relatively large, given the interconnected banking systems of the Nordic-Baltic region and their exposures to some common risks. From a structural perspective, the large size of some of the national banking systems relative to GDP could also increase the potential severity of a crisis. Moreover, the relatively heavy dependence on wholesale funding, often in foreign currency, in some countries could add to financial stability risk both at the domestic and regional level.

So far, the favoured macroprudential policy instrument in the Nordic-Baltic region to deal with the imbalances in the housing market and household indebtedness has been loan-to-value (LTV) restrictions, see Table 2. LTV restrictions are now in use or being phased-in in all Nordic-Baltic countries with levels ranging from 85 to 95 percent.

[15] See also Nordic Regional Report, IMF (2013).

Table 2
Macroprudential policy implementation in Nordic and Baltic countries
Status of legal framework. Underscored if the instrument has also been activated

	LTV restric-tions	CCB	Sector specific risk weights, risk weight floor	Syste-mic Risk Buffer	Capital Conser-vation Buffer	Additional capital requirements for systemically important institutions	LCR	NSFR	Amortisation requirement/maxi mum loan maturity
Denmark	X	X	X	X**	X	X**	X		
Estonia	X	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	X	X		
Lithuania	X	X	X	X	X	X	X		X
Norway	X	X	X	X	X	X	X		X
Sweden	X	X	X	X	X	X	X		X

*= planned measure. **=SRB used for additional capital requirements for systemically important institutions.
Source: Nordic and Baltic central banks and supervisory authorities

Also in the EU, the LTV is the most prevalent macroprudential tool.[16] Other instruments targeting the housing market and household indebtedness are loan-to-income (LTI) restrictions or debt-service-to-income (DSTI) ratios. A few countries combine LTV with income-related restrictions. For example, Estonia introduced an LTV of 85 percent combined with a DSTI limit of 50 percent in 2015, as well as an amortisation period of 30 years.[17]

A few countries have also implemented measures related to risk weights addressing 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.[18,19]

The countercyclical capital buffer is also in the process of being implemented in the Nordic-Baltic region. All countries have introduced the legal framework for the buffer. Norway and Sweden are the only countries in the region to have activated and implemented a positive buffer so far. Requirements on amortisation or maximum loan maturity are already in place in Estonia, Lithuania, Norway and Sweden.

[16] ESRB (2015).
[17] Eesti Pank (2014).
[18] Finanstilsynet (2015).
[19] Finansinspektionen (2015).

2.2.4 Reciprocation of macroprudential policy

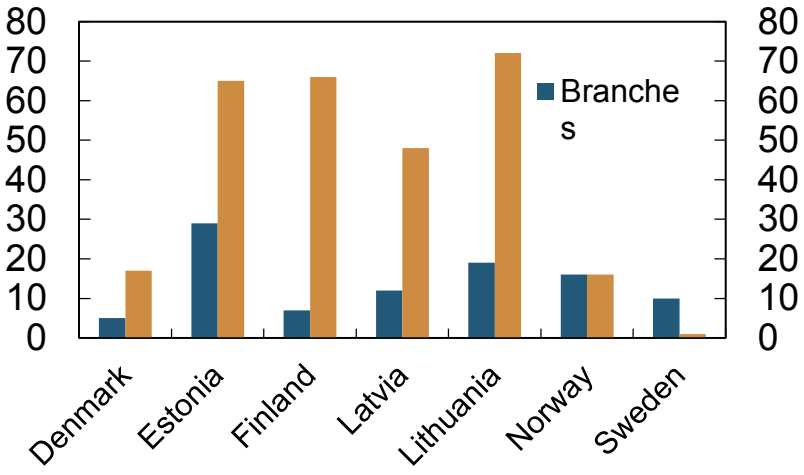
Reciprocity of prudential requirements is widely regarded as a mechanism to address the negative consequences of different prudential requirements for the same exposure in different countries. The term "reciprocity" refers to an arrangement whereby the authority in the home country recognises the prudential requirement set by the authority in a host country for exposures through its foreign branches or direct lending from its home market. In the absence of such a reciprocity decision, the prudential requirement will only apply to domestic exposures of institutions that fall under the supervision of the host supervisors. This means that in host countries with important branches, reciprocity agreements with the home supervisors of these banks will be important for the effectiveness of their macroprudential policy.

Chart 4 shows the relative importance of foreign branches and subsidiaries in the Nordic-Baltic countries. As can be seen, reciprocity for macroprudential policies will be particularly important in Estonia, where around 30 percent of banking assets are held by foreign branches.

Reciprocity is mandatory for some instruments in the CRD IV/CRR such as the countercyclical capital buffer (up to 2.5 percent) and some measures aimed at increasing risk weights and loss-given-default rates. For other measures, such as the systemic risk buffer, reciprocity is voluntary. There are already examples of voluntary reciprocity arrangements in the Nordic area, see chapter 2.1.5.[20]

Chart 4

Relative importance of foreign branches and subsidiaries in the Nordic-Baltic countries. Percent of total assets, 2013



Source: Nordic-Baltic central banks

[20] The letter from Finanstilsynet (in Norwegian), the note describing the proposed calibration (in English) and the answers from the Danish FSA (in Danish) and the Swedish FSA (in Swedish) are available at Finanstilsynet's website: http://www.finanstilsynet.no/no/Artikkelarkiv/Aktuelt/2014/2_kvartal/Okte-risikovekter-for-boliglan--nordisk-samarbeid/.

Given the importance of reciprocity in some of the Nordic-Baltic countries, work on reciprocity issues started in the NBMF in 2013. This work has later fed into work at the EU level where the ESRB has issued a recommendation about voluntary reciprocity.[21] An underlying principle will be that measures targeting exposures (such as mortgages) should be reciprocated, while there would be less of a presumption to reciprocate measures targeting institutions (such as buffers for systemically important institutions).

The ESRB has been given a key role in this new framework. EU member states activating a measure will have to notify the ESRB and ask for the measure to be reciprocated. Countries with banks that have exposures in the activating country will have to reciprocate or explain the reason for not reciprocating.

One future development that could potentially have important consequences for reciprocity of macroprudential policy in the Nordic-Baltic area is the announced change of the legal structure of Nordea, see Box 4: *Nordea announces plans for new legal structure*. Should this change be implemented, it will imply that reciprocity issues will become even more important in the region, not least for Finland as its largest domestic bank would then become a foreign branch. Nordic-Baltic authorities are currently exploring the need for strengthening cooperation agreements further in view of the announced change in the legal structure of Nordea.

Box 4

Nordea announces plans for new legal structure

In early February 2016, Nordea announced plans to convert its subsidiary banks in Norway, Denmark and Finland into branches of the Swedish parent company Nordea Bank AB. Nordea argues that this will imply a simplification of its legal structure, which will decrease the administrative complexity and make the bank's operations more efficient. The changes are planned to take place by early 2017.

Simplifying the legal structure of Nordea has been considered by management ever since Nordea was formed in 2001. In 2004, the company considered the possibility of converting Nordea Bank AB into a European company, a "Societas Europaea" ("SE"), in accordance with the European Company Statute. The new company would be legally domiciled in Sweden and the conversion would merge the then subsidiary banks into the new group. This planned legal transformation did not take place, partly due to uncertainties around the deposit guarantee obligations for the new SE company, and partly due to concerns among national banking regulators of the consequences of such a transformation.

[21] Recommendation of the European Systemic Risk Board of 15 December 2015 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures (ESRB/2015/2).

2.3 Crisis resolution

2.3.1 Nordic central bank MoU in 2003 and the issue of burden sharing

The emergence of large, systemically important Nordic banks with significant activities in Sweden, Finland, Denmark and Norway created potentially new and important sources of contagion during a crisis. Central banks are responsible for Emergency Liquidity Assistance (ELA). Several issues related to providing liquidity in a crisis follows from the emergence of large cross-border banks. In particular, the effects of liquidity management within a cross-border bank could potentially require more comprehensive and frequent sharing of information and coordinated preparations for crisis resolution between central banks.

In an effort to address these challenges, the Nordic central banks adopted an MoU on "Management of a financial crisis with cross-border establishments" in 2003. The MoU mainly dealt with principles for information sharing and cooperation during a crisis. This early Nordic cooperation on crisis management was in many ways a pioneering work and laid the basis for similar initiatives at EU level (starting with the adoption in 2003 of a MoU on principles for the cooperation and exchange of information in case of serious cross-border financial crises) and similar work at the Financial Stability Forum, the predecessor to the FSB.

The discussions of crisis management among authorities were gradually expanded to include all aspects of crisis management and crisis resolution, including the issue of burden sharing.[22] One proposal was to agree ex ante on some principles for the sharing of the fiscal costs related to the potential recapitalisation of an insolvent systemic bank. However, it was difficult to reach agreement on such principles among the Nordic home and host authorities also because views differed on the advisability of public recapitalisation and on whether subsidiaries could or should be ringfenced during a crisis.[23] After several years of concerted efforts to coordinate crisis preparation at the Nordic-Baltic and EU level, which included the participation in EU exercises in 2005 and 2006, the Nordic authorities decided to test the frameworks for crisis resolution cooperation in a crisis simulation exercise in 2007. The Baltic countries were invited in as observers. One particular focus of the exercise was the issue of burden sharing. However, the exercise showed that there was little appetite among authorities to engage in such agreements during a crisis.

The exercise also exposed the need for an agreed framework for systemic assessment in a cross-border cooperation framework and a need for clearer rules on information sharing. Furthermore,

[22] The concept of burden sharing was first introduced in Goodhart and Schoenmaker (2006) and was soon after discussed in speeches by officials from Sveriges Riksbank.

[23] As MoUs are not legally binding they are not suitable for any agreement on burden sharing.

the exercise revealed several differences in national rules which would prove an obstacle to effective coordination. An additional challenge proved to be differences in rules and conduct in relation to ringfencing, where, in some countries, authorities at that time were obliged by local law to ringfence subsidiaries of cross-border banks, thus preventing transfers to other parts of a bank group or increases in intergroup exposures.

In general, the exercise exposed the need to modernise and extend the Nordic-Baltic crisis management cooperation framework. However, in the years immediately following the exercise these issues were overtaken by events during the international financial crises.

2.3.2 Cooperation during the 2008 financial crisis

The international crisis hit the Nordic-Baltic countries very differently. Both Denmark and Iceland faced severe problems in their banking sectors. During the most hectic periods of the crisis the 2003 MoU on crisis management between the central banks did not quite stand the test of practical crisis management. In particular, there was not enough time to follow the MoU's guidelines on information sharing and coordination. Nevertheless, information sharing in most cases worked fairly well through direct contact among senior policy makers.[24]

Nordic central banks engaged in swap agreements with both Iceland and Latvia to alleviate the most immediate liquidity problems. These swap agreements to some degree constituted bridge financing to longer-term financing under the IMF program. Financing from the IMF was also supplemented by longer-term financing from the governments of Denmark, Norway and Sweden.

One important development during the crisis was the new approach to crisis resolution adopted by Denmark in 2010, which was first applied to Amagerbanken in 2011, see Box 5: *Bail-in: The case of Amagerbanken, Denmark 2011*. The new resolution approach was implemented without the need for any direct fiscal intervention, largely foreshadowing the premise later adopted by the BRRD that the shareholders and creditors of a firm should bear the costs of failure.

In general, the financial crisis in 2008-2009 exposed the vulnerability of comprehensive MoUs for crisis resolution in a real crisis situation, where national interests tend to dominate and the need to find quick solutions lead to less cooperative decision modes. This experience was a key driver behind the global efforts after the financial crisis to develop more realistic principles for cross-border banking resolution.

[24] The severity of the Icelandic banking crisis in 2008 overwhelmed authorities to the extent that even bilateral communication was overtaken by the pace and gravity of events.

2.3.3 Nordic-Baltic Stability Group (NBSG)

A MoU on Cooperation between the Financial Supervisory Authorities, Central Banks and Finance Ministries of the EU on cross-border financial stability was adopted in 2008. This MoU recommended that countries with specific common financial stability concerns developed voluntary specific cooperation agreements.

Box 5

Bail-in: The case of Amagerbanken, Denmark 2011

Years ahead of the BRRD, in autumn 2010 the Danish Government introduced a bank resolution scheme with similar features, including the possible bail-in of depositors and senior creditors.

The aim of the scheme was to provide a viable alternative to compulsory liquidation of a stressed bank, which could otherwise easily result in renewed pressure for government intervention. The scheme replaced an unlimited state guarantee for deposits and senior unsecured debt, which had been in force since the financial markets froze two years earlier. It was fully in line with the position of the European Commission, which in the summer of 2010 signalled that future resolution schemes should ensure a controlled resolution of banks, entailing no costs for government or taxpayers.

The scheme was applied for the first time to Amagerbanken, which was wound up in February 2011. Amagerbanken was at the time the ninth biggest Danish bank with a 1.6 percent share of total bank lending. The bank had taken excessive risks, and after a period of successive capital increases, which proved to be insufficient, the bank now agreed to enter into resolution. The bank transferred its activities to a new bank set up by the Danish Financial Stability Company. The new bank took over liabilities equivalent to 58.8 percent of the non-subordinated claims. Thus, non-subordinated creditors, including deposits above 100,000 euros, had their claims reduced by 41.2 percent. Equity and subordinated debt was written off completely.

The dividend payment rate was later in 2011, after auditor valuation, increased to 84.4 percent, thereby reducing the haircut to 15.6 percent. The final haircut - yet to be determined – is likely to be even somewhat lower.

The resolution scheme – which has so far only been applied on one other occasion to a small bank – succeeded in removing any implicit government guarantee for the banking sector, reducing moral hazard and creating incentives for increased marked discipline.

With the background of this recommendation and the lessons learned in the 2007 exercise, the Nordic-Baltic countries adopted a MoU in 2010, which included the establishment of the *Nordic-Baltic Stability Group (NBSG)*.[25] The MoU is a non-legally binding agreement between the finance ministries (Ministry for Business and growth in Denmark), central banks and financial supervisory authorities in Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden.

[25] Cooperation agreement on cross-border financial stability, crisis management and resolution between the relevant authorities of the Nordic and Baltic countries, available on Norges Bank's website: http://www.norges-bank.no/en/about/Mandate-and-core-responsibilities/financial-stability/Crisis-management/Cooperation-with-the-authorities/.

The objective of the agreement is 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 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 financial crisis management and resolution.

The parties to the MoU were also committed to continue to work to establish principles for burden sharing. In preparing the MoU some parties argued that any cooperation on burden sharing should be supported by commitments to cooperate on preventive measures as well. There should be no commitment to pay for a crisis without an opportunity to influence the conditions likely to cause a crisis. In the final MoU, financial crisis prevention was stated as an objective for the cooperation on the same footing as crisis management and crisis resolution. The mandate for the NBSG reads:

*The **Nordic-Baltic Cross-Border Stability Group (NBSG)** consists of representatives from the Parties of the authorities from the Signatory Countries, with the objective of preventing a financial crisis, enhancing preparedness for and facilitating the management and resolution of a cross-border financial crisis.*

The issue of preventive measures was not followed up in the mandates for the NBSG's subgroups.

Four sub-groups were established as part of the NBSG in order to deal with specific stability and financial crisis management issues:

1) *Working Group on Burden Sharing (WGBS)*
   Develop and update criteria and models for possible sharing of net budgetary resolution costs.
2) *Institutions and Systemic Importance Working Group (ISIWG)*
   Organise and update a list of relevant financial groups with significant activities in more than one signatory country and keep an up-to-date database for information regarding these financial groups.
3) *Resolution Tools Working Group (RTWG)*
   Identify obstacles for coordinated decision making and joint solutions, encourage authorities to work on removing them and consider alternative workable joint crisis management tools and crisis resolution mechanisms.
4) *Monitoring Working Group (MWG)*
   Adopt information sharing templates and assessment procedures; Assess financial stability in the Nordic-Baltic area and consider issues related to prevention of financial crisis.

The working groups were staffed with people from different authorities and different countries. In the WGBS there were only representatives from ministries of finance. The MWG only consists of central bank representatives.

Soon after the NBSG was established, the FSB published the Key Attributes. It was clear that these principles would be implemented in EU legislation covering all the Nordic-Baltic countries. The Key Attributes overlapped to a large extent with what was foreseen to take place within the NBSG and its subgroups and gradually their activity fell. Most of the work foreseen within its subgroups will now be taken over by the individual resolution colleges under the BRRD, which implements the FSB's Key Attributes into EU law. Thus, the only outstanding issue for the NBSG at this point in time is the potential agreement on a crisis management exercise based on the experiences of the 2007 exercise and with the aim of testing the new regulatory framework of the BRRD when it has been implemented in all the Nordic-Baltic countries.

In light of the entry into force of the BRRD, the NBSG has debated a possible future mandate and strategy for the group. In that regard it has been agreed to look further into the legal possibilities and obstacles within the NBSG and BRRD frameworks with the aim of aligning the NBSG with the BRRD. This is expected to be discussed at future NBSG meetings.

2.3.4 Crisis Management Group Nordea (CMG Nordea)

A separate Crisis Management Group for Nordea - CMG Nordea - was established by the NBSG based on the FSB's Key Attributes in March 2012, following Nordea's designation as a G-SIB. The Key Attributes require that each G-SIB has a recovery and resolution plan in place, is subject to regular resolvability assessments and that an institution-specific cross-border cooperation agreement is in place between the home and relevant host authorities. The Nordic-Baltic 2010 MoU already envisaged and contained provisions for a "subgroup to deal with specific stability and financial crisis management issues".

The Nordea CMG has been chaired by the Ministry of Finance of Sweden as the home authority. The participants include supervisory authorities, central banks, resolution authorities, finance ministries and public authorities responsible for guarantee schemes in Sweden, Denmark, Finland and Norway (home and "key hosts"), and the central banks of Estonia, Latvia, Lithuania and Poland (invited as "other host countries"). The tasks of the Nordea CMG has been to develop the cooperation agreement required by the FSB and to comment on recovery and resolution plans for Nordea, as well as on a resolvability assessment for Nordea. The Nordea CMG has worked in parallel with the Nordea Supervisory College (consisting of supervisory

authorities only). Nordea's own recovery plan was finalised at the end of 2012.

Work on the cooperation agreement, resolution strategy, resolution plans and resolvability assessments have progressed slowly, largely due to differences in the national approaches to resolution, in particular with regards to burden sharing and the role and involvement of national authorities in a crisis.

In 2015 the work of the CMG was abandoned in light of the emerging resolution college which was to be established according to the BRRD. The Nordea resolution college was set up later in 2015 under the chairmanship of the Swedish National Debt Office and took over the functions of CMG Nordea in relation to the FSB.

3. Lessons learned and remaining challenges

3.1 Lessons learned

Strong historical and economic ties have facilitated close cooperation between the Nordic countries. Together, these countries have found pragmatic solutions on regulatory cooperation when needed. Some of these solutions have been further refined under the new regulatory regime that developed after the financial crisis, and some may serve as examples also for wider European cooperation. On the other hand, differences in cyclical positions, financial structures, EU relations and institutional and also some legal set-ups pose challenges for further developing the cooperation on financial stability policies. Some efforts to enhance cooperation have failed due to diverging national interests, in particular as regards crisis resolution schemes for cross-border banks.

The Nordic supervisory colleges have functioned well. Supervisory colleges are now a requirement in the EU. There is also a requirement to prepare written cooperation and coordination arrangements for all colleges. International banking groups need to be supervised on a consolidated basis, covering all aspects of their business, both domestic and cross-border. Colleges of supervisors are the vehicles through which supervisory cooperation takes place. A long history of cooperation among the Nordic supervisors has facilitated an open and frank discussion in the supervisory colleges. There have been intense discussions at times, in particular on the issue of capitalisation of parent banks vs that of subsidiaries, where national interests have diverged. In the EBA’s regular reviews of the operation of EU colleges, the Nordic colleges generally get high scores. The Nordea College may serve as an example for how supervisory colleges should work.

There has been strong cross-country backing for reciprocity agreements for bank capital beyond the minimum legal requirements. Cyclical conditions vary between the Nordic countries and lead to different needs for macroprudential policies. Still, there is scope for convergence when it comes to the required policies for one particular country, especially between home and host supervisors. Cooperation on such policy measures is dependent on overcoming issues raised by the divergent ways macroprudential policy responsibilities have been organised in the different Nordic countries. There is scope for further Nordic cooperation on the implementation of other micro- and macroprudential policy tools.

Cooperation on analysis related to common risk factors has proven useful. Household debt levels are high in all the N4 countries and there are also common structural features in their banking systems, like a high level of foreign funding that may be the subject for a common analytical platform.

The Nordic MoUs on crisis resolution have been less successful. Cooperation, e.g. on information sharing, took other routes than envisaged during the financial crisis in 2008. Information sharing nevertheless worked well on an informal and bilateral level, partly due to the existing close contacts, including those established during the MoU preparations.

Agreeing on ex ante principles for burden sharing proved to be demanding. Risks and rewards are not symmetrical. Differing views on the possibility for host countries to ringfence their domestic banks, or even branches, further complicate the issue. Also, emergency liquidity provision became a contentious issue, partly due to the way some large cross-border banking groups were organised (along business lines, overriding the legal structure). The 2010 MoU linked cooperation on crisis prevention policies with burden sharing. Since authorities did not agree on burden sharing, there was consequently limited engagement on developing common crisis prevention policies. Recently, the implementation of the BRRD introduces new tools for crisis resolution such as bail-in. These aim at replacing the use of fiscal instruments, and hence burden sharing, in crisis resolution. By removing this obstacle, the new regime may facilitate ex ante cooperation on resolution schemes for cross-border banks in the future.

3.2 Remaining challenges

The conversion of systemically important subsidiaries into branches highlights existing challenges for the EU's single passport policy for banks and the country-specific role of home and host country authorities in ensuring financial stability through the use of key policy tools related to supervision, regulation, crisis prevention and crisis management for banks. With increased market shares for cross-border banks, also in retail banking, this issue may over time

imply risks to financial stability both in home and host countries, as well as potentially increased responsibility for home authorities. In order to secure a level playing field, and if macroprudential policy is going to play the role envisaged in legislation, further progress on reciprocity is needed, in particular for countries with systemically important branches. Among the N4 countries, finding the right balance between the principles of mutual recognition in banking ("single passport") and the legitimate national objectives of financial stability is further complicated by the disparate affiliation to EU and its institutions. While both the FSB (Key Attributes), the BCBS (Basel III) and the EU (CRD IV/CRR and BRRD) have developed a set of relevant rules, it would be a benefit to all if there were clearer international guidelines addressing home-host responsibilities related to significant branches.

To improve the trade-off between the benefits of free entry and financial stability concerns on behalf of both home and host countries, it may be necessary to increase the legal power of host authorities beyond their current rights as stated for systemically important branches in CRD IV, Article 51. Given the host authorities' mandate and responsibility for financial stability, host authorities could be given more influence on microprudential and macroprudential supervision, as well as crisis management in jurisdictions with systemically important branches. In this regard, it will be important how the SSM carries out its tasks.

The experiences so far with the EU's single passport policy suggest some caution related to free entry through branches or subsidiaries in the banking sector. There is probably not one size that fits all on this issue. Large systemic branches pose special challenges, both in the wholesale and retail segments. Home authorities may prefer a subsidiary structure when their banks expand abroad if there are potential financial stability concerns about host countries. Challenges may also arise if operational structures are not aligned with legal structures. The same holds for host authorities in cases where they believe their system is more robust than that in the home country. Host countries with less developed financial systems may, on the other hand, want to import better supervised and regulated banks through branches.

Notwithstanding some recent minor interventions, the crisis management tools of the BRRD remain largely untested. The BRRD contains provisions for information sharing and coordination during a crisis, as well as for new crisis resolution tools. The Single Resolution Fund may provide a limited amount of national funding during a crisis for countries that are part of the Banking Union, provided certain conditions are met, but its operational significance remain uncertain. Moreover, the establishment of the Single Resolution Board in the Banking Union could be challenging in the Nordic context. The role of deposit insurance schemes, including the new rules for depositor preference in crisis resolutions, is also untested. Further

work remains to clarify these issues. The Nordic-Baltic countries have decided to hold a cross-border crisis management exercise to test the provisions in the BRRD when it has been implemented in all the countries in the region.

The rules of engagement on emergency liquidity assistance (ELA) to large cross-border banks may need to be clarified. Central bank ELA can be extended to illiquid, but solvent institutions against adequate collateral. The need for ELA will not in itself imply that an institution is nonviable (ref. BRRD (41)). However, solvency is notoriously difficult to determine in the midst of a crisis. The availability of adequate collateral may in practice determine whether ELA is perceived as financial support or not. There are current arrangements between the central banks of Denmark, Norway and Sweden on utilisation of central bank deposits at one of the central banks as collateral for intraday liquidity lending in another of the three central banks (Scandinavian Cash Pool). However, it may be difficult for a host central bank to obtain collateral for ELA in local currency for a branch of a foreign bank. Further development of cross-border LCR requirements or swap arrangements between the central banks may prove important to settle this issue.

References

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, November.

European Systemic Risk Board (ESRB) (2015), "National Measures in the EU/EAA Notified to the ESRB, or of which the ESRB is Aware, and are of Macroprudential Interest".

Farelius, David (2015): "Macroprudential Policy in the Nordic-Baltic Area", SEACEN Financial Stability Journal, vol 5, November, pp 33 – 48.

Financial Supervisory Authority of Norway (2015): "Finanstilsynet proposes establishing requirements on residential mortgage lending practices in the form of regulations". Finanstilsynet Press release 2/2015.

Finansinspektionen, Sweden (2015): "Amortisation requirement for new mortgages", Press release, 11. March 2015.

Goodhart, C and D. Schoenmaker (2006): "Burden sharing in a banking crisis in Europe", Sveriges Riksbank Economic Review, No. 2, pp. 34-57, 2006.

Haare, Lund and Solheim (2015): «Norges Banks rolle på finanssektorområdet i perioden 1945-2013 med særlig vekt på finansiell stabilitet», Norges Bank, Occasional papers no. 48

IMF (2013): "Nordic Regional Report", Staff report for the 2013 Cluster Consultation, IMF Country Report No. 13/274.

Nordic Working Group on Basel III/CRD IV and National Discretion,
"Report from the Nordic working group consisting of representatives from the Nordic ministries responsible for financial markets regulation in the Nordic countries", (June 2012).

Poulsen, Ulrik Løgtholdt & Andreasen, Brian Liltoft, (2011): "Handling Distressed Banks in Denmark", Danmarks Nationalbank, Monetary Review, 3rd Quarter 2011 part 1.

Finansinspektionen, Sweden (2015):"The Swedish Mortgage Market 2015".