

**SYSTEMICALLY IMPORTANT  
FINANCIAL INSTITUTIONS  
IN DENMARK:  
IDENTIFICATION,  
REQUIREMENTS AND CRISIS  
MANAGEMENT**

**The Committee on Systemically Important  
Financial Institutions in Denmark**

**Copenhagen 11. March 2013**

*Unofficial translation: The Danish original text applies*

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### **Box 1: The Committee on Systemically Important Financial Institutions in Denmark**

- Michael Møller, Professor, Copenhagen Business School (chairman)
- Jesper Lau Hansen, Professor, University of Copenhagen
- Niels Tørslev, Director General, Letpension
- Signe Krogstrup, Assistant Director, Schweizerische Nationalbank (Swiss National Bank)
- Jens Lundager, Deputy Director General, Danmarks Nationalbank (Danish central bank)
- Kristian Vie Madsen, Deputy Director General, Finanstilsynet (Danish FSA)
- Louise Mogensen, Head of division, Ministry of Business and Growth
- Niels Kleis Frederiksen, Head of division, Ministry of Finance

The Ministry of Business and Growth has been secretariat for the Committee with support from the Danish FSA, Danmarks Nationalbank and the Ministry of Finance.

## ***Introduction and summary***

### **Background**

On 12 January 2012 the Danish Minister for Business and Growth set up the Committee on Systemically Important Financial Institutions in Denmark. The Committee was established on the basis of a political agreement reached on 25 August 2011 between the former government (Denmark's Liberal Party and the Danish Conservative People's Party), the Danish Social Democrats, the Danish Social-Liberal Party, the Socialist People's Party, the Danish People's Party and Liberal Alliance, encompassing a number of consolidation initiatives (Bank Package 4).

The Committee was commissioned to consider criteria by which banks and credit institutions should be identified as being systemically important financial institution (SIFI) in Denmark, requirements that these Danish SIFIs should meet, and how failing Danish SIFIs should be handled. The terms of reference of the Committee are enclosed as Annex 1.

The Committee held 16 meetings during 2012 and 2013, and relevant experts have been interviewed by the Committee.

In accordance with its terms of reference, the Committee has exclusively considered credit institutions, which comprise banks and mortgage-credit institutions in Denmark. The Committee has not considered whether financial institutions other than credit institutions – e.g. insurance companies or pension funds – could be SIFIs in Denmark.

Against this background, the Committee has prepared this report for the Minister for Business and Growth. The report includes a number of recommendations on identifying Danish SIFIs, requirements for Danish SIFIs, as well as crisis management of Danish SIFIs. A key message of the report is that tighter requirements for Danish SIFIs are vital in order to underpin financial stability, and to reduce the risk of the state bearing costs in connection with crisis management of Danish SIFIs. Strong protective measures, notably in the form of capital and liquidity requirements, combined with intensified supervision and an effective recovery plan are to minimise the probability that SIFIs fail and that crisis management is therefore required.

### **International developments**

The Committee's recommendations should be seen in the context of the current work at the international level on the regulation of credit institutions. At EU level, the key directives and regulations addressing the regulation of credit institutions, including national SIFIs, have not yet been finalised. In particular, negotiations on the revision of

the Capital Requirements Directive (CRD4)<sup>1</sup>, where a political agreement has been reached in the beginning of March but where a technical finalisation of the directive is awaiting, and the Directive on the recovery and resolution of credit institutions have not yet been concluded.<sup>2</sup> Adoption of a full set of rules at EU level is not expected until the second half of 2013 at the earliest, and implementation of the rules in national legislation is not expected until 2014-15. Accordingly, it remains unclear to which exact extent there will be flexibility at the national level to establish specific rules for identification of SIFIs, requirements for SIFIs and crisis management of SIFIs. The Committee has therefore taken as its starting point the proposals for future EU rules and possible political agreements, or, when appropriate, the latest compromise proposals, and on this basis it has made its assessment of the most appropriate solutions and recommendations in a Danish context.

A framework for common EU supervision of credit institutions under the auspices of the European Central Bank is currently being negotiated.<sup>3</sup> Moreover, it is expected that discussions on a common crisis management regime at EU level will begin in the course of 2013. These proposals – possibly together with a proposal on a common deposit guarantee scheme – comprise the so-called “Banking Union”. It has not yet been decided whether Denmark should participate in a Banking Union. If Denmark decides to participate, this may have significant consequences for the regulation of SIFIs in Denmark, including whether it will be possible or necessary to implement the Committee’s recommendations.

In this light, it may be relevant to implement the Committee’s recommendations in stages. The Committee’s recommendations on identification of and requirements for SIFIs, which are primarily linked to CRD4, could thus be implemented by 2014. In contrast, because negotiations on the crisis management of financial institutions at EU level are less advanced, a balance has to be struck between implementing a crisis management regime for Danish SIFIs as soon as possible, and awaiting adoption of EU rules in order to ensure compatibility with international rules.

Furthermore, requirements for the internal organisation of credit institutions, and notably, the separation of retail activities and investment activities, are currently being debated internationally. Specifically, such requirements have been proposed in the United Kingdom, France and Germany, and the so-called Liikanen group has proposed similar requirements at EU level.<sup>4</sup> The Committee finds it appropriate to await possible

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<sup>1</sup> European Commission, “Proposal for a directive of the European Parliament and of the Council on the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (COM 2011/453)” and “Proposal for a regulation of the European Parliament and the Council on prudential requirements for credit institutions and investment firms (COM 2011/454)”.

<sup>2</sup> European Commission, “Proposal for a directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms (COM 2012/280)”.

<sup>3</sup> European Commission, “Proposal for a Council regulation conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (COM 2012/511)”.

<sup>4</sup> High-Level Expert Group on reforming the structure of the EU banking sector, “Final Report (Liikanen Report)”, 2. October 2012.

future EU rules before deciding whether such requirements may be relevant for Danish SIFIs.

The terms of reference state that, as far as possible, the Committee should strive to ensure equal terms of competition between SIFIs and other credit institutions in Denmark, as well as between Danish SIFIs and SIFIs in other countries. With regard to competition between SIFIs in Denmark and SIFIs in other countries, the challenge is that EU rules in this area have not yet been finally determined and only few European countries have implemented actual regulation of their national SIFIs. The Committee has therefore based its assessment on the view that Danish regulation of SIFIs should as far as possible take into account Danish societal interests, even if this means that equal competitive terms cannot be fully secured.

## **Considerations concerning the regulation of SIFIs**

A well-functioning financial sector is an important prerequisite for a modern economy as it ensures financing of activity in society by distributing money from those who have excess liquidity and savings to those in the business community that require funds to finance their activities, and for households that want to finance housing purchases and other investments.

However, risks can build-up in the financial system which may influence the economy as a whole. Such risks can be due to SIFIs. In the view of the Committee, it is essential to limit the probability of a SIFI encountering difficulties, by setting a number of additional requirements for Danish SIFIs. These additional requirements aim to minimise the probability that SIFIs fail, and to limit the costs to society and the state, if this should happen anyway. Thus, additional requirements aim at underpinning financial stability by making the institutions more resilient, even under severe stress.

To a certain extent, additional requirements for SIFIs may increase their costs, as additional capital will need to be raised. Increased costs could influence the possibility for the relevant institutions to provide lending, particularly in the period where the institution is adapting to the additional requirements. This may have a negative effect on the entire economy.

It is, however, the view of the Committee that the total effect on the economy of the proposed additional requirements will be positive. A stable financial sector is a basic prerequisite for long-term growth and employment. Furthermore, possible negative effects have been sought remedied through phasing-in periods and non-simultaneous implementation of the Committee's recommendations, whereby the requirements will not all have to be implemented at the same time. Furthermore, most Danish SIFIs have already carried out part of the adjustment which will be necessary following the Committee's recommendations. This is because credit institutions are already expecting additional future regulation, and are seeking to meet the financial markets' higher expectations for how much capital financial institutions should hold. This reduces the immediate negative effects on the sector. Furthermore, the total costs of additional

capital requirements are not necessarily large, as better capitalised institutions will usually be met with a lower expected return from creditors and shareholders and thus lower funding costs.<sup>5</sup>

The Financial Stability Board (FSB)<sup>6</sup> and the Basel Committee on Banking Supervision (BCBS)<sup>7</sup> have estimated that the total effect on the economy of the international capital requirements, including the special requirements for global systemically important banks, will be positive. The full requirements are estimated to have a negative impact on global GDP of 0.3 per cent during the phasing-in period, while the long-run permanent positive effects of a reduced likelihood of a future systemic banking crisis will result in a higher global GDP of 2.5 per cent.<sup>8</sup> Similarly, the European Commission estimates that the positive effects of the CRD4 proposal will result in a higher EU GDP of around 2 per cent in the long run.<sup>9</sup>

The Committee's recommendations should be viewed in light of the Danish Bank Package 3, which has put Denmark ahead in Europe in creating a specific winding-up model for banks where creditors and the banking sector can help bear losses incurred in the winding-up process. Contrary to the consequences of a traditional bankruptcy, this model ensures proper winding-up of a failing bank. The European Commission's proposal for a directive on the recovery and resolution of credit institutions is based on much the same principles as Bank Package 3. However, agreement has not yet been reached on the EU rules, and the provisions of the proposed write-down of creditors will most likely not enter into force until 2018 at the earliest. It is unclear how other EU countries will manage failing credit institutions until the EU rules enter into force.

However, it is the view of the Committee that Bank Package 3 and the existing winding-up scheme for mortgage-credit institutions will generally not suffice for managing failing SIFIs. To protect the economy, it will be necessary to allow systemic functions of a failing SIFI to keep operating, rather than winding up the entire institution. In addition, even with compensation from the Guarantee Fund for Depositors and Investors, it is very uncertain whether a buyer for a failing SIFI can be found, even if foreign buyers are a possibility. Thus, the current assumption must be that the government could be compelled to intervene if, in a specific situation, it is perceived that the derived effects of a winding-up will be more harmful for the economy, including the government's finances, than if the government takes on a risk in relation to crisis management. The stronger the expectation among market

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<sup>5</sup> See e.g. Admati, A., DeMarzo, P., Hellwig, M. and Pfleiderer, P., "Fallacies, Irrelevant Facts, and Myths in Capital Regulation: Why Bank Equity is not Expensive", Stanford University Working Paper No. 86, 2010.

<sup>6</sup> The Financial Stability Board is an international committee at the Bank for International Settlements which works to ensure implementation of effective regulation and supervision of the financial sector.

<sup>7</sup> The Basel Committee on Banking Supervision (BCBS) is a committee at the Bank for International Settlements which works to develop international regulation of the banking sector. The BCBS has 28 members from countries with the largest financial sectors.

<sup>8</sup> BCBS and FSB, "Assessment of the macroeconomic impact of higher loss absorbency for global systemically important banks", 10. October 2011.

<sup>9</sup> See note 1.

participants that a SIFI will receive public support if it is failing, the cheaper the institution will be able to fund itself.

The Committee therefore recommends creating appropriate protective measures for SIFIs in order to prevent SIFIs from failing. Since the risk of a SIFI failing cannot be entirely eliminated in a market economy, it is further recommended that additional crisis management tools<sup>10</sup> are provided for the authorities than what is included in Bank Package 3 and the existing winding-up scheme for mortgage-credit institutions. Such tools aim to provide the best possible basis for carrying out crisis management, if this should nevertheless become necessary, with as few harmful effects on the economy as possible and without costs for the state.

## **Criteria for identifying SIFIs**

Until now, only few countries have formally identified their national SIFIs. The Committee has taken note of the very different criteria and limits that have been proposed or implemented in Sweden, the United Kingdom and Switzerland, which also have addressed the issue of identifying national SIFIs. The Committee recommends identifying Danish SIFIs on the basis of size and substitutability. The latter refers to the fact that certain functions, particularly credit institution's lending, cannot easily be taken over (substituted) by other institutions within a short time horizon.

Specifically, it is proposed that Danish SIFIs be identified at a consolidated level on the basis of the total assets of the institutions in relation to GDP, the institutions' deposits in Denmark as a percentage of the total deposits of the credit institution sector in Denmark and the institutions' loans in Denmark as a percentage of the total loans of the credit institution sector in Denmark. An institution should be identified as a SIFI based on just one of the three indicators in order to be identified as SIFI in Denmark. The limit for identification is set at 10 per cent for the total asset indicator and 5 per cent for the indicators for loans and deposits. It is recommended that the Danish FSA which – due to its supervision of the sector – is the natural authority in the area designates Danish SIFIs based on a recommendation from the Systemic Risk Council. Designation should be re-evaluated each year. A general gradual phasing-in of requirements for newly designated SIFIs over for example two years is considered to be appropriate.

If the recommended quantitative approach is applied, six credit institutions will be identified as SIFIs in Denmark, cf. Table 1. The bold font indicates the threshold values exceeded by these institutions.

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<sup>10</sup> In the report the term “crisis management” is consistently used in relation to the handling of failing SIFIs instead of the term “resolution” which is used in relation to the handling of other credit institutions. Similarly the terms “crisis management plans” and “crisis management authority” is used instead of the terms “resolution plans” and “resolution authority”. When describing the proposal for an EU-directive on recovery and resolution of credit institutions the term “resolution” is used even if the proposal also covers SIFIs since this term is used in the proposed directive.

**Table 1: Danish banks and mortgage-credit institutions which fulfil the quantitative criteria for identification as SIFI, consolidated level, June 2012**

	Total assets in per cent of GDP	Loans in per cent of the total loans of the sector	Deposits in per cent of the total deposits of the sector
Danske Bank	<b>182.6</b>	<b>30.6</b>	<b>32.6</b>
Nykredit	<b>80.4</b>	<b>30.8</b>	4.0
Nordea Bank Danmark	<b>48.9</b>	<b>15.9</b>	<b>22.2</b>
Jyske Bank	<b>14.4</b>	3.2	<b>8.9</b>
BRFkredit	<b>12.6</b>	<b>5.2</b>	0.4
Sydbank	8.9	1.9	<b>5.4</b>

As the quantitative indicators are simple and general, and thus do not necessarily capture all the elements that may make a credit institution systemic, it should be possible to include a qualitative element in the identification, under careful consideration. The qualitative element should allow for identifying more institutions as SIFIs than the institutions identified using a quantitative approach, or for identifying less institutions as SIFIs than those identified using a quantitative approach. In this regard, the Committee finds it particularly relevant for the Systemic Risk Council to consider recommending identifying DLR Kredit as a SIFI based on the institution's large market share of lending to the agricultural sector which is difficult for other institutions to substitute in light of the current state of the sector.

Furthermore, it is recommended that credit institutions in the Faeroe Islands and in Greenland are identified as SIFIs on the basis of the same criteria and indicators as credit institutions in Denmark, but based on the size of the local sector and the local GDP, and possibly with other threshold values. In the view of the Committee, the question of who should identify SIFIs in the Faeroe Islands and in Greenland is a political one, and is related to the question of how to finance crisis management of SIFIs in the Faeroe Islands and in Greenland.

The Committee has not considered branches of foreign credit institutions in the identification of SIFIs in Denmark. Generally, the home country of the institution will set requirements and supervise branches abroad. The Danish FSA participates in supervisory colleges for the relevant institutions. This issue would have to be addressed if branches of foreign credit institutions became systemic in Denmark.

## **Requirements for SIFIs**

The Committee recommends that Danish SIFIs become subject to an additional capital requirement of Common Equity Tier 1 capital.<sup>11</sup> The requirement is set on the basis of a quantitative measure of the systemic importance of a SIFI. A differentiated capital requirement of currently 1-3.5 per cent of the risk-weighted assets is recommended. It

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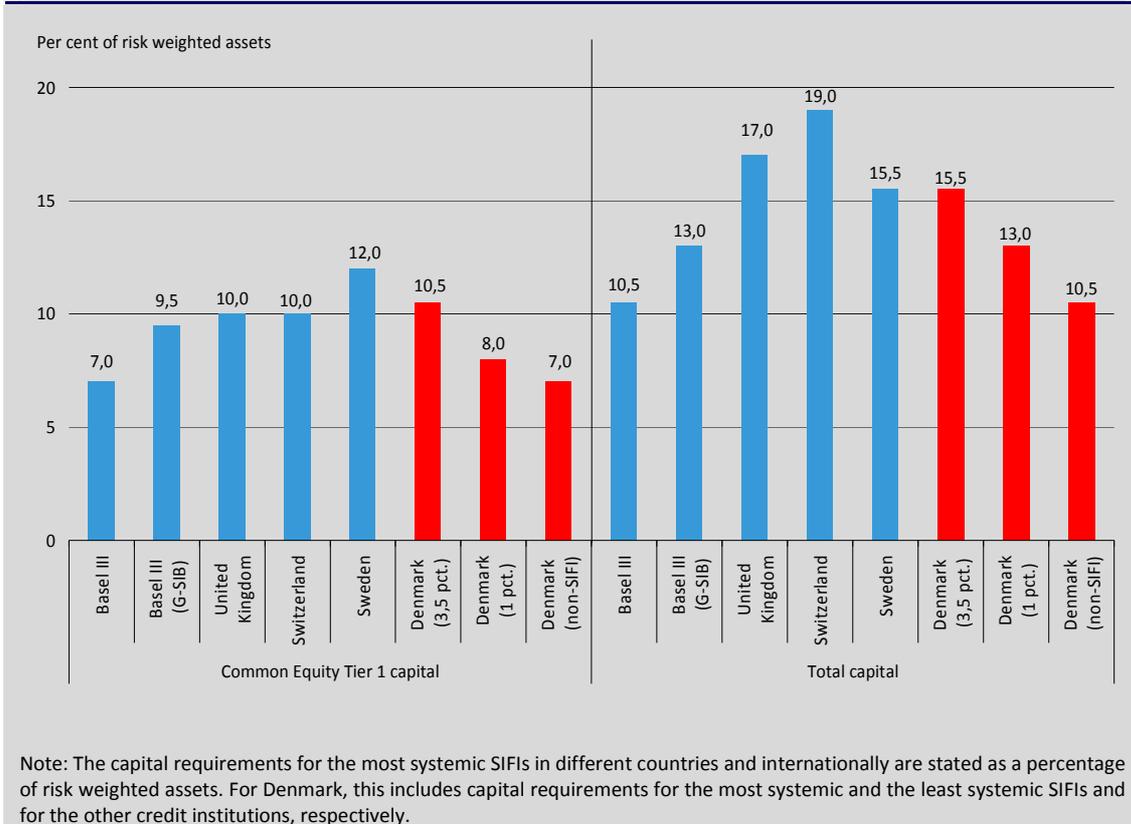
<sup>11</sup> Common Equity Tier 1 capital is the most loss-absorbing type of capital and is therefore seen as capital of the highest quality. Common Equity Tier 1 capital comprises e.g. shares, retained earnings etc.

is furthermore recommended that the requirement may increase to 4 per cent or higher, if the SIFI becomes more systemic. The most systemic institutions will therefore become subject to the highest requirements, as it is the view of the Committee that risks increase more than proportionally when institutions become more systemic. The capital requirement may be adjusted by half a percentage point upwards or downwards on the basis of a qualitative assessment. However, the capital requirement may never be less than 1 per cent of the risk weighted assets. The capital requirement is to be phased-in over a number of years until 2019.

Moreover, the Committee recommends that all SIFIs, irrespective of how systemic they are, establish a “crisis management buffer” of 5 per cent of the risk weighted assets. The buffer may consist of debt instruments which can be converted into Common Equity Tier 1 capital or written down if the institution becomes subject to crisis management. Additional Tier 1 capital (“Hybrid capital”) and Tier 2 capital (“Subordinated capital”), used by the institution to fulfil the minimum capital requirement, may also be used to fulfil part of the crisis management buffer if the set requirements for the crisis management buffer are met. Following CRD4, Additional Tier 1 capital and Tier 2 capital can comprise 3.5 per cent of risk weighted assets, whereby the crisis management buffer will only imply an additional requirement of 1.5 percentage points, if Additional Tier 1 and Tier 2 capital is used. The crisis management buffer may also be satisfied with Common Equity Tier 1 capital if this is preferred by the institution. It is recommended that the crisis management buffer is established over a three-year period starting in 2020, i.e. when the additional capital requirement for SIFIs has been fully phased-in.

Figure 1 shows the Common Equity Tier 1 capital requirement for Danish SIFIs and the overall capital requirement for Danish SIFIs (Common Equity Tier 1 capital plus the crisis management buffer). The figure compares the requirements for Danish SIFIs with international minimum requirements for all credit institutions of 7 per cent Common Equity Tier 1 capital and 10.5 per cent total capital – which will be the requirements for Danish non-SIFIs – and for global SIFIs of 9.5 per cent Common Equity Tier 1 capital and 13 per cent total capital. Furthermore, a comparison is made with the capital requirements for SIFIs in the few European countries which have introduced, or are in the process of introducing, SIFI regulation.

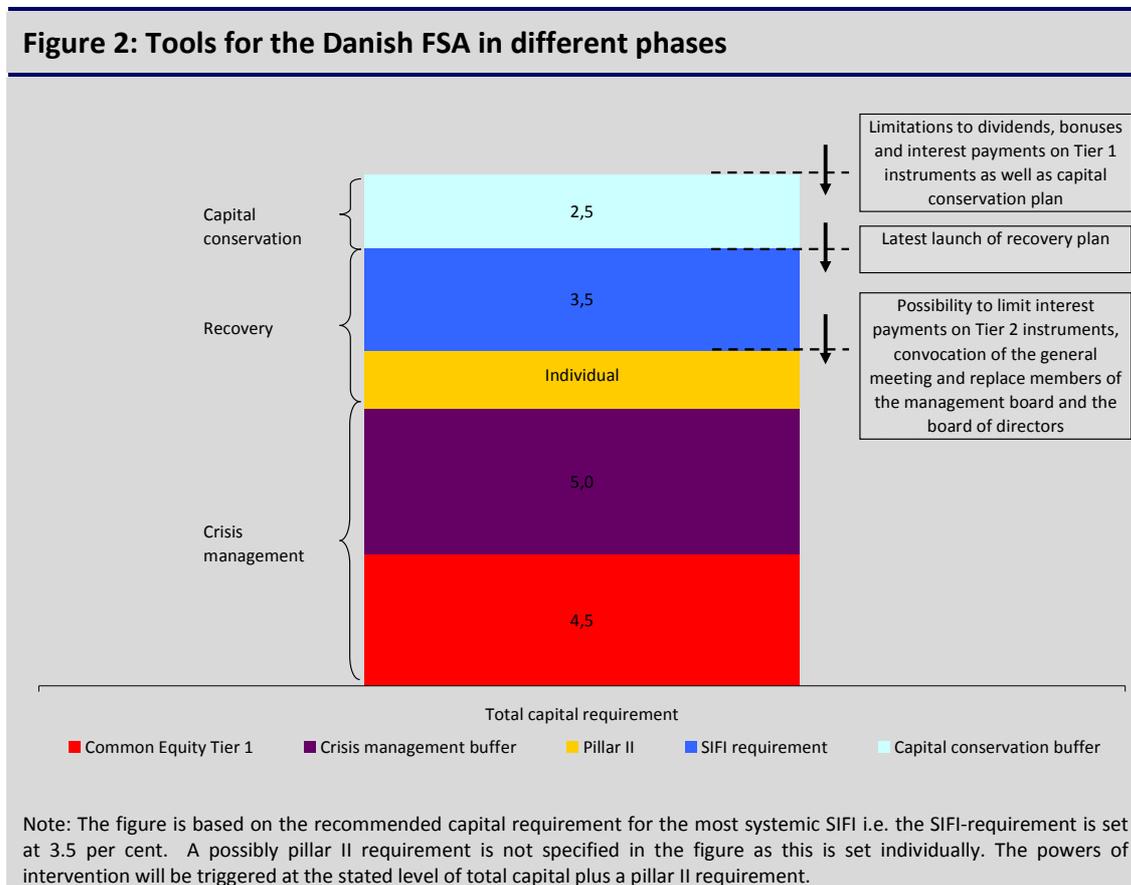
**Figure 1: Capital requirements for Danish and foreign SIFIs and non-SIFIs (fully phased-in)**



As can be seen from Table 1, both the requirement for Common Equity Tier 1 capital as well as the total capital requirement for the most systemic Danish SIFI will be above the international minimum requirements for the most systemic global SIFIs. The total capital requirement for the most systemic Danish SIFI of 15.5 per cent will be at the same level as the requirements for SIFIs in Sweden, whereas the requirement for Common Equity Tier 1 capital of 10.5 per cent will be slightly lower than in Sweden. For the other Danish SIFIs, the requirements will be lower than in Sweden. A possible additional individual solvency requirement (pillar II requirement)<sup>12</sup> is not included in the figure since such requirement is not disclosed in other countries than Denmark.

<sup>12</sup> The individual solvency need is set by each institution in order to cover individual risks which are not covered within the minimum capital requirement. The Danish FSA can set a higher individual solvency requirement. In this report the term “pillar II requirement” is used in relation to the individual solvency need or an individual solvency requirement. Going forward the starting point will be that the pillar II requirement can only be fulfilled with Common Equity Tier 1 capital. The revision of the financial business act in December 2012 means that the Danish FSA can decide which type of capital the specific institution shall use to fulfil the pillar II requirement. It is stated in the comments to the law that the Danish FSA shall make an individual assessment of the circumstances of the specific institution but that the starting point will be that the Danish FSA will demand that the pillar II requirement is fulfilled by Common Equity Tier 1 capital. It is supplementary stated in the comments that Additional Tier 1 or Tier 2 capital which automatically converts to Common Equity Tier 1 capital or is written down if the solvency need or a relevant Common Equity Tier 1 trigger is breached can also be taken into consideration.

The Committee also recommends a strengthening of the powers of the Danish FSA to intervene before a SIFI has to undergo crisis management. Figure 2 illustrates the phases the institutions may go through and indicates which further tools should be made available for the Danish FSA in these different phases.



Failing to meet the capital conservation buffer will, pursuant to CRD4, lead to restrictions on the ability to make distributions to shareholders, pay variable remuneration to employees and make payments on Tier 1 instruments.<sup>13</sup> Furthermore, pursuant to CRD4, institutions will be required to prepare and forward a capital conservation plan to the supervisory authority for approval. It is recommended that the capital conservation buffer is placed “at the top” in relation to the other capital requirements. Following the recommendations of the Committee, the most systemic institutions will enter this “capital conservation phase” at a level of total capital of 15.5 per cent plus the pillar II requirement and a level of Common Equity Tier 1 capital of 10.5 per cent plus the Common Equity Tier 1 capital which the institution uses to fulfil the pillar II requirement, cf. figure 2. The least systemic SIFIs will enter the capital conservation phase at a level of total capital of 13 pct. plus the pillar II requirement, and a level of Common Equity Tier 1 capital of 8 per cent plus the Common Equity Tier 1 capital which the institution uses to fulfil the pillar II requirement.

<sup>13</sup> The various types of capital are described in annex 2.

At the latest, the recovery phase will commence if the institution breaches the SIFI capital requirement. The Committee recommends that all SIFIs prepare individual recovery plans which at the latest are to be implemented if the institution breaches the SIFI capital requirement. The recovery plans have to be approved by the Danish FSA. Following the recommendations of the Committee, the most systemic institutions will enter the recovery phase, and will at the latest have to implement the recovery plan, at a level of total capital of 13 per cent plus the pillar II requirement and a level of Common Equity Tier 1 capital of 8 per cent plus the Common Equity Tier 1 capital which the institution uses to fulfil the pillar II requirement. The least systemic SIFIs will enter the recovery phase at a level of total capital of 10.5 per cent plus the pillar II requirement and a level of Common Equity Tier 1 capital of 5.5 per cent plus the Common Equity Tier 1 capital which the institution uses to fulfil the pillar II requirement.

If the institution, in addition to the SIFI capital requirement, also breaches the pillar II requirement, the Danish FSA should be able to intervene more directly in order to ensure that further steps are being taken to recover the institution. The Danish FSA should have the authority to convene the general meeting of the institution, to replace members of the management board and board of directors, and to restrict payments on Tier 2 instruments. The Committee recommends that this phase of more direct intervention by the FSA commences at a level of total capital of 9.5 per cent plus the pillar II requirement and a level of Common Equity Tier 1 capital of 4.5 per cent plus the Common Equity Tier 1 capital which the institution uses to fulfil the pillar II requirement.

Further to the requirement for Danish SIFIs to develop recovery plans, the Committee also recommends that crisis management plans are developed for all SIFIs. Crisis management plans contribute to effective and appropriate crisis management of the failing institution. Crisis management plans are to be developed by the crisis management authority in close cooperation with the Danish FSA and Danmarks Nationalbank (the central bank) and with the necessary involvement of the SIFI in question.

Apart from the additional capital requirements, the requirement to prepare recovery and crisis management plans and the strengthened early intervention powers to the Danish FSA, the Committee also recommends that Danish SIFIs become subject to additional liquidity and corporate governance requirements and finally that SIFIs become subject to intensified regular supervision.

The Committee recommends a faster full phasing-in of the short-term international liquidity requirement (LCR) for SIFIs than suggested in CRD4. This is considered relevant since the recent financial crisis showed that access to funding when the markets are under stress can be crucial for the ability of credit institutions to survive. Thus, it is recommended that the requirement is phased in fully by 2015, whereas CRD4 allows for a gradual phasing-in until 2018. More stable funding requirements are also recommended for SIFIs by 2014. Specifically, it is proposed to set requirements for the amount of the institutions' funding stemming from for example retail customers and market funding with a maturity of more than one year as a per cent of the total

loans of the SIFI. When implementing this requirement, special consideration should be given to the mortgage-credit activities of the SIFI.

In relation to corporate governance it is recommended that the requirements include fit and proper requirements for managerial staff, risk management functions and the IT area. Such requirements are to contribute to ensuring responsible and effective operation of the institutions.

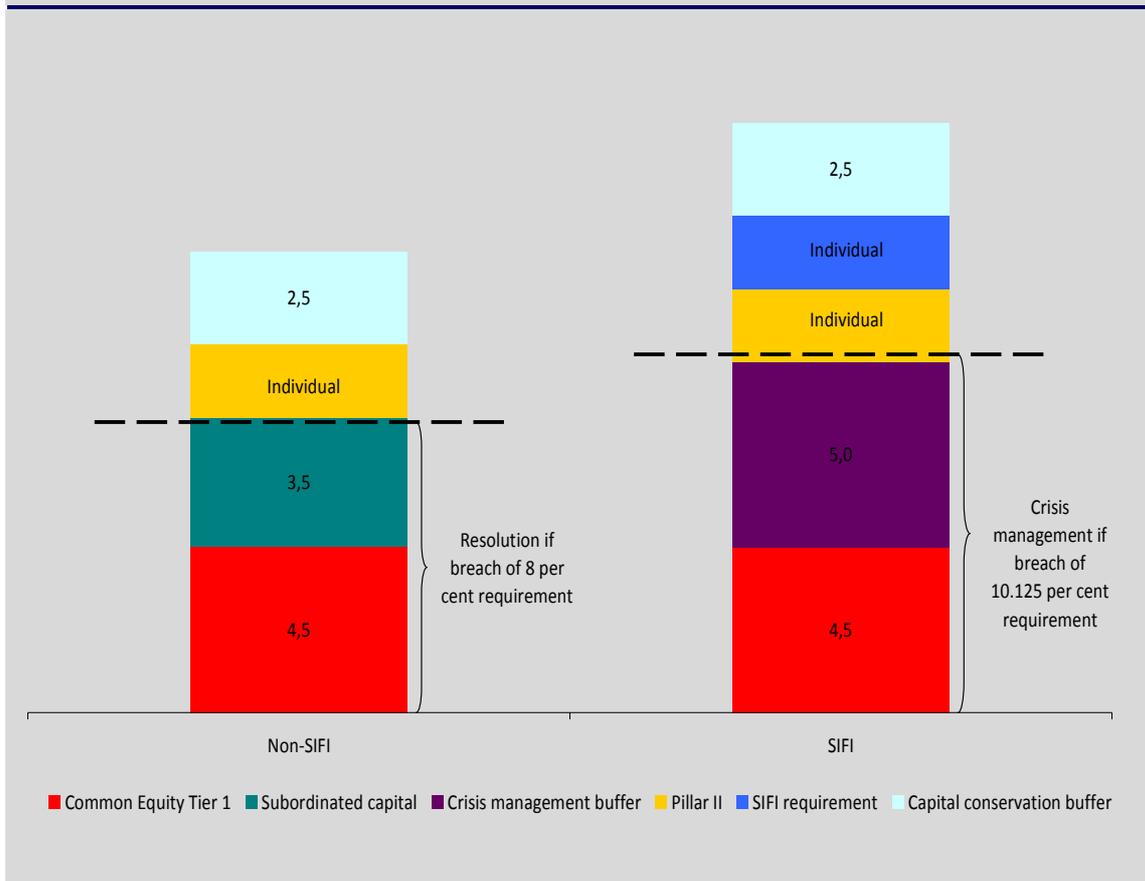
The strengthened regular supervision of Danish SIFIs should provide the authorities with a more solid basis for early intervention in relation to SIFIs if necessary. Strengthened supervision is recommended to include corporate governance, model risk, capital allocation, enhanced examination activities and intra-group exposures.

### **Crisis management of SIFIs**

Based on the special challenges of managing failing SIFIs, including the need to maintain the lending capacity to the economy, the Committee recommends introducing a special approach for the crisis management of SIFIs including alternative tools to Bank Package 3 and the existing winding-up scheme for mortgage-credit institutions.

Figure 3 shows the composition of the capital requirement for SIFIs and non-SIFIs and illustrates that different approaches are recommended for when SIFIs and non-SIFIs should be subject to crisis management or resolution.

**Figure 3: Trigger for resolution or crisis management for Danish SIFIs and non-SIFIs**



For non-SIFIs, resolution will commence if the institution breaches the 8 per cent minimum capital requirement, cf. figure 3. This is also the case today. For SIFIs, the 8 per cent minimum capital requirement will be less relevant. The Committee recommends crisis management to commence if a SIFI breaches a requirement of 10.125 per cent total capital, comprising the minimum requirement of Common Equity Tier 1 capital of 4.5 per cent, plus a small add-on of 0.6125 per cent following CRD4, and the crisis management buffer of 5 per cent. The crisis management buffer will be converted into Common Equity Tier 1 capital when crisis management commences. If the institution chooses to fulfil the crisis management buffer with Common Equity Tier 1 capital, the trigger for crisis management will be 10.125 per cent Common Equity Tier 1 capital. If the institution fulfils the crisis management buffer with convertible debt instruments and breaches a threshold of 5.125 per cent Common Equity Tier 1 capital this will also be a trigger of crisis management. Furthermore, the Danish FSA should have the power to decide that an institution has to undergo crisis management if the institution is not viable. The reason for initiating crisis management for SIFIs earlier than for other institutions is to ensure that sufficient capital is available in the SIFI – specifically around 10 per cent Common Equity Tier 1 capital – to continue the operation of the systemic activities of the institution and reduce further losses.

Less well-capitalised institutions might find it challenging to sell the necessary convertible debt instruments at a reasonable price and thus meet the requirement to

maintain a crisis management buffer. In this case the requirement will in effect be an additional Common Equity Tier 1 capital requirement.

It is recommended that a crisis management authority is established, which should be given responsibility for crisis management of SIFIs, in addition to a range of legally established crisis management powers in relation to credit institutions. It should be considered how a crisis management authority can most appropriately be organised, including whether this role could be given to an existing institution e.g. the Financial Stability Company A/S. The crisis management authority should have a range of alternative tools available to conduct the crisis management of SIFIs.

The Committee recommends that the crisis management authority is given the possibility of mandatory use of the crisis management tools when managing failing SIFIs. This is contrary to the tools of the previous bank packages, which all are voluntary. The need for a mandatory approach for SIFIs is based on the potential adverse effects on the economy if a SIFI decides to opt for bankruptcy instead of the proposed crisis management regime. A mandatory approach is also included in the proposal for a directive on the recovery and resolution of credit institutions. Mandatory crisis management tools can imply legal challenges, especially in relation to expropriation, which have to be addressed.

It should be noted that the recommended approach includes both a contractual possibility to write down or convert debt in relation to the crisis management buffer and statutory powers of write down or conversion of unsecured creditors. A contractual write down or conversion can not be expropriation.

The specific crisis management tools should include the power to transfer all or parts of an institution's assets, rights and liabilities to a bridge bank<sup>14</sup> which is wholly or partly owned by the state. The aim of a bridge bank is to ensure that all or parts of the functions of the institution are continued in a value-preserving manner. In particular, systemic functions should be carried on with the intention of later sale. The crisis management authority should be given the power to sell value-impaired assets to a publically owned company, with the intention to wind-up these assets. More generally, the crisis management authority should have the power to sell assets to a third party.

As a final measure, and after shareholders and subordinated capital have taken losses, it should be possible for the authorities to convert or write down unsecured creditors of the SIFI, in order to recapitalise or re-establish equilibrium in the balance sheet of institutions. A write down will reduce the liabilities of the institution, ensuring a balance between assets and liabilities. In practise, the tool should be used together with the bridge bank tool, and a recapitalisation will be necessary to make the institution viable going forward. Contrary to a write down in itself, a conversion of debt to equity will imply that by receiving shares in the institution, the creditors will be part of the future ownership of the institution. Thus, a recapitalisation of the institution is ensured

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<sup>14</sup> A state owned temporary institution similar to the institutions set up by the Financial Stability Company A/S.

through a conversion, and the institution can continue all or parts of the business with new ownership.

Finally, it will be relevant to set up a stability fund financed by Danish SIFIs and possibly SIFIs from Greenland and the Faroe Islands, to ensure a contribution from the financial sector to the costs of crisis management of SIFIs. A stability fund can be phased in from 2020, after full phasing-in of the additional capital requirement for SIFIs. When setting up the fund, it is recommended that international developments be taken into consideration, notably regarding the phasing-in of the fund, the fund's overall size and the possibilities for using the fund in practice.

One of the purposes of providing alternative crisis management tools is to provide the existing shareholders with a strong incentive to inject additional capital in the institution particularly in the recovery phase, with a view to avoiding significant dilution or write-downs of shareholder capital in a crisis management situation.

It should be clarified how the additional crisis management tools, and in particular the debt write down and debt conversion tools, can be implemented in a legally appropriate way in Denmark.

## **Summary**

The Committee's recommendations regarding the requirements for and crisis management of SIFIs include a number of different elements which have been described above. Taken together, these elements constitute a system with the aim of preventing that SIFIs fail and for the crisis management of SIFIs if they nevertheless fail. Figure 4 gives an overview of this system for the regulation of SIFIs. The complete recommendations of the Committee are listed in Box 1.

**Figure 4: Overview of recommendations from the Committee in relation to requirements for and crisis management of SIFIs**

Total capital requirement ▶	Capital conservation buffer (2.5 pct.)	SIFI-requirement (1-3.5 pct.)	Pillar II (Individual)	Crisis management buffer (5 pct.)	Common Equity Tier 1 (4.5 pct.)
	Capital conservation trigger	Recovery trigger	Crisis management trigger (10.125 pct.)		
Prevention	Capital conservation	Recovery		Crisis management	
Capital requirements	Capital conservation plan	Recovery plan	Convocation of general meeting	Conversion of crisis management buffer (5 pct.) to Common Equity Tier 1	
Liquidity requirements	Limitation on dividends		Replacement of members of the management board and the board of directors	Launch of crisis management plan and commencement of crisis management	
Recovery plans	Limitation on bonuses		Limitation on interest payments on Tier 2-instruments	The crisis management authority takes control and ownership and management is partly or fully replaced	
Crisis management plans	Limitation on interest payments on Tier 1-instruments			<u>Tools:</u> Bridge bank Sale of assets Debt write down Debt conversion Stability fund	
Corporate governance					
Strengthened supervision					
Bank management is in control – but involvement of the Danish FSA increases				The crisis management authority is in control	

Note: As a starting point the pillar II requirement shall be fulfilled with Common Equity Tier 1 capital, but may be fulfilled by subordinated capital which automatically converts if the institution breaches the solvency need.

## Box 1: Complete recommendations of the Committee

It is recommended that:

### Identification of SIFIs

- Danish SIFIs are identified at consolidated level on the basis of the size of the total assets relative to GDP, the size of loans relative to the total loans of the sector and the size of deposits relative to the total deposits of the sector. Identification as a SIFI will require that just one of the indicators has been met. In connection with identification, the possibility to include a qualitative element following careful consideration should be available.
- The threshold for identification is set at 10 per cent for the total asset indicator and 5 per cent for the indicators for loans and deposits.
- Designation is made by the Danish FSA based on a recommendation from the Systemic Risk Council. The designation is re-evaluated annually.
- Credit institutions in the Faeroe Islands and in Greenland are identified as SIFIs on the basis of the same criteria and indicators as credit institutions in Denmark, but based on the size of the local sector and the local GDP, as well as possibly applying other threshold values.

### Requirements for SIFIs

#### *Capital requirement*

- A SIFI capital requirement is set which, with the recommended approach, is currently between 1 and 3.5 per cent of the risk-weighted assets, depending on the degree to which the institution is systemic. It is possible to set a higher requirement than 3.5 per cent if the institutions become more systemic.
- The SIFI capital requirement is met with Common Equity Tier 1 capital. The capital requirement is set at consolidated and individual level. The requirement is phased in until 2019.
- SIFIs are required to additionally hold a crisis management buffer consisting of debt which can be converted or written down. The buffer amounts to 5 per cent of the risk-weighted assets. Under certain conditions, this requirement can be met with existing hybrid capital and subordinated capital. The crisis management buffer is established over a three-year period starting in 2020.

#### *Recovery and crisis management plans*

- Recovery and crisis management plans for Danish SIFIs are prepared. Recovery plans are to be prepared by the institution itself and approved by the Danish FSA. Crisis management plans are to be prepared by the crisis management authority in close cooperation with the Danish FSA and Danmarks Nationalbank (the central bank) and with the involvement of the institutions deemed necessary. The plans are updated annually.

- The recovery plan is launched at the latest if the institution breaches the SIFI capital requirement. The Danish FSA should have further means of intervention if the institution breaches the Pillar II requirement. These include the authority to convene the general meeting of the institution and to replace members of the management and board of directors of the institution as well as to restrict payments on subordinated capital (Tier 2 instruments). The crisis management plan is launched if the institution is to undergo crisis management.

#### *Liquidity requirements*

- The short-term liquidity requirement (LCR) is phased in more quickly for SIFIs than what EU rules suggest. Concretely, SIFIs should fully meet the LCR requirement from 2015. Requirements are set for more stable funding for SIFIs from 2014, in order to ensure that the dependence of SIFIs on very short-term funding is reduced.

#### *Corporate governance*

- The existing fit and proper requirements are expanded to also apply to managerial staff of the SIFIs and not just to the board of directors and the management. Special requirements are set for the SIFIs' organisation and staffing of risk management functions as well as the IT systems.

#### *Strengthened supervision*

- SIFIs are subjected to strengthened supervision, which to a higher degree than today focuses on corporate governance, regular monitoring and dialogue, model risk and allocation of capital, increased inspection activity as well as intra-group exposures.

#### **Crisis management of SIFIs**

- The trigger point for beginning crisis management of a SIFI is set at 10,125 per cent total capital. This is in contrast to the trigger of 8 per cent for other credit institutions. Furthermore, the Danish FSA can decide to begin crisis management if the institution is no longer viable.
- A crisis management authority is established, and made responsible for crisis management of Danish SIFIs. It should be considered how a crisis management authority can most appropriately be organised, including whether this role could be given to an existing institution e.g. the Financial Stability Company A/S.
- It is made possible to make the use of the crisis management tools mandatory, contrary to the existing voluntary schemes.
- Alternative crisis management tools are introduced, providing the possibility of:
  - Establishing a bridge bank,
  - Selling assets,
  - Write-down of debt,
  - Debt conversion.

A stability fund financed by Danish SIFIs and possibly SIFIs from Greenland and the Faroe Islands is established, and phased in from 2020. When setting up the fund, international developments should be taken into account.

## **Chapter 1: Background**

### **1.1 Systemically important financial institutions**

A well functioning financial sector is an important prerequisite for a modern economy as it ensures financing of activity in society by distributing money from those who have excess liquidity and savings to those in the business community that require funds to generate growth and create workplaces, and for households that want to finance housing purchases and other investments. Credit institutions in particular play a vital role in this context. However, financial activity also involves significant risks, which may potentially have impacts on the economy as a whole.

When Lehman Brothers went bankrupt in September 2008 it had severe negative externalities for the international financial system. Several countries, including Denmark, created a safety net of general state guarantees for credit institutions. A number of countries directly recapitalised or took over credit institutions wholly or partly with a view to ensuring financial stability. However, combined with many years of unsustainable economic policy, this has resulted in a considerable deficit in government budgets in many countries. Some countries have even had to request international financial support. This implicit or explicit state guarantee for credit institutions in many countries has created an undesirable link in certain countries between the health of credit institutions and government budgets.

Even though some credit institutions were prevented from failing through support by their respective governments during the financial crisis, the failure of others has made it clear that some financial institutions are so large and complex that if they were to go bankrupt, the financial system and the economy as a whole may suffer significant damage. Such institutions, which are primarily credit institutions, have systemic importance and are thus referred to as systemically important financial institutions (SIFI).

Following the financial crisis, the G20<sup>15</sup> has commenced work at FSB and BCBS level to develop common international rules for SIFIs. The new rules are to reduce the risk that SIFIs fail in the future and also to ensure that failing SIFIs can be managed, as far as possible, without incurring costs for the state. The FSB and the BCBS have also up international standards on requirements for, and crisis management of global SIFIs<sup>16</sup> as well as national SIFIs.<sup>17</sup> The FSB and the BCBS are also working on standards for other systemically important financial institutions than credit institutions, including e.g. insurance companies, clearing houses, etc.

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<sup>15</sup> The G20 is the central, international forum for coordinating international economic and financial policy. The G20 consists of 19 of the largest economies and the EU.

<sup>16</sup> The BCBS, “Global systemically important banks: assessment methodology and the additional loss absorbency requirement”, 4 November 2011.

<sup>17</sup> The BCBS, “A framework for dealing with domestic systemically important banks”, October 2012.

At EU level, requirements for credit institutions are being discussed during negotiations on CRD4 and in proposals for a directive on the recovery and resolution of credit institutions. This generally also includes implementing the FSB and the BCBS standards for SIFIs at EU level.

Parallel with international initiatives, some individual EU-member states and other countries have launched and implemented initiatives on requirements for and crisis management of SIFIs. The USA and Switzerland have already introduced special regulation of their SIFIs, while similar initiatives are in the pipeline in the United Kingdom, Sweden and the Netherlands.

On request of the European Commission, the "Liikanen group" has also examined the need to reform the structure of the European banking sector. In its report, the "Liikanen group" proposes a legal separation of the trading and investment activities of credit institutions from the other activities of the institutions. Such reforms may have particular importance for SIFIs. It has yet to be decided whether a proposal for EU regulation will be submitted on the basis of the group's recommendations.

Finally, negotiations continue on setting up common EU supervision of credit institutions in the euro area under the auspices of the European Central Bank which non-euro countries will have the possibility to join. Furthermore, there are discussions on whether to set up an actual "Banking Union" with a common European resolution regime, including a common resolution authority, common financing mechanisms as well as a possible common deposit guarantee scheme. The common supervision and a common resolution regime may impact the supervision and crisis management of SIFIs in Denmark, particularly if Denmark chooses to join the common supervision and a possible common crisis management regime.

The new regulations for SIFIs are being introduced further to the overall tightening of the regulation and supervision of the financial sector which has been carried out at national level, as well as at EU and international levels since the start of the crisis. In addition to proposals for e.g. tightened capital and liquidity requirements laid down in CRD4, as well as new regulations on the recovery and resolution of credit institutions, the reforms also comprise revision of the regulations on the deposit guarantee schemes, new remuneration rules for the management of credit institutions, setting up three European supervisory authorities and a European systemic risk board, regulation of financial derivatives trading, etc. The additional regulation of SIFIs is to provide society with additional security in respect of the institutions which pose a particular risk for the economy.

## **1.2 Initiatives in Denmark**

Denmark has implemented a number of initiatives to tighten regulation and supervision of the financial sector following the financial crisis. Box 3 sums up the most important reforms.

### **Box 3: Tightening of the regulation and supervision of the Danish financial sector**

#### **Tightened preventive supervision**

- The Danish FSA is to examine the sustainability of the business model of financial institutions and should be in a position to intervene at an earlier stage, if the business model is deemed unsustainable
- The "supervisory diamond" determines limits for banks in a number of risk areas (growth in loans, property exposure, large exposures, excess liquidity, stable financing). The Danish FSA may sanction breaches hereof
- Revision of the write-down rules of banks to provide less room for individual interpretation
- More conservative calculation of the individual solvency need in risk institutions
- Increased focus on early intervention and recovery and in this connection, a more patient approach to managing potentially failing banks

#### **More transparency**

- Credit institutions are to publish their individual solvency needs and individual solvency requirements
- The main conclusions of the Danish FSA following on-site inspections must be published

#### **Tightened requirements for management of the institutions**

- Tightened requirements for remuneration of management of credit institutions, including limits on the percentage of bonuses in the form of share options etc.
- Prohibitions against loan-financed sales of own shares and guarantor certificates by credit institutions
- Tightened fit and proper requirements make it easier for the Danish FSA to dismiss the management of an inappropriately run financial institution

#### **General strengthening of supervision**

- The Danish FSA has the legal basis to issue administrative fines
- The Danish FSA has been allocated more resources

#### **Consumer protection**

- The Consumer Ombudsman can assist consumers in legal proceedings and may be appointed as representative in class action lawsuits
- Introduction of a labelling scheme in relation to investment products
- Introduction of a labelling scheme in relation to loans
- Introduction of a certification scheme for bank advisors
- Revision of financing of the guarantee fund for depositors (insurance approach)

#### **Systemic risks**

- Setting up a systemic risk council to monitor the development of systemic risks and recommend measures to manage such risks

#### **Reference rates**

- Public supervision of reference rates, introduction of the alternative reference rate (CITA) and powers for the Danish FSA to review internal material on the establishment of reference rates

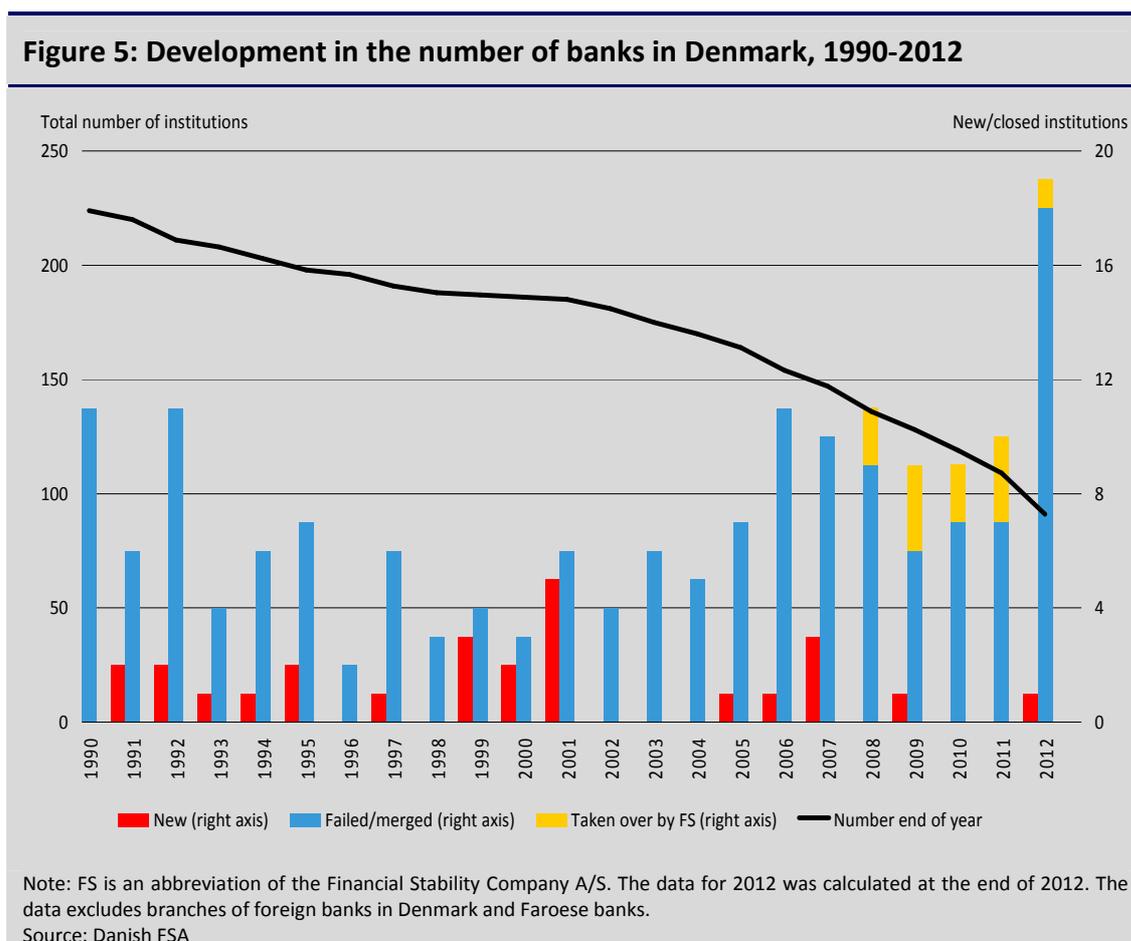
#### **Winding-up of banks**

- A winding-up scheme has been introduced for failing banks, as well as a supplementary compensation scheme

The reforms already implemented are central in relation to ordinary financial undertakings but they do not address the special challenges posed by SIFIs, and accordingly, also Denmark will see a need for further separate regulation of SIFIs. Such regulation is to contribute to reducing the risk that SIFIs fail and to ensuring effective crisis management of SIFIs if this should happen anyway, in order to limit the negative effects on the financial system and the economy as far as possible.

### 1.3 Danish credit institutions

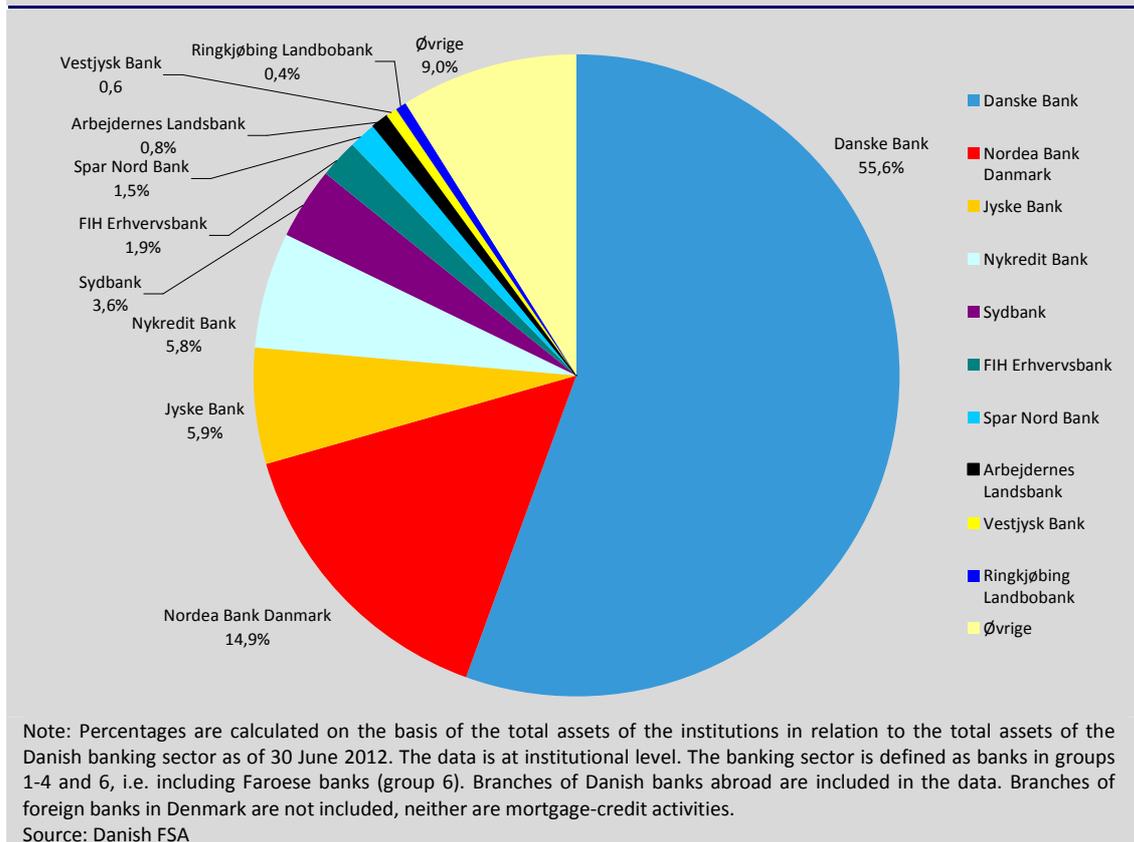
At the end of 2012, Denmark had 91 credit institutions, of which 83 were banks, while eight were mortgage-credit institutions. Over the past decades, Denmark has seen a significant reduction in the number of banks. This is reflected in Figure 5. During this period, a number of institutions were failing. In recent years, these institutions have been taken over by the Financial Stability Company A/S. Other institutions have merged. Characteristic of failing banks is that they represent a small part of the total assets of the sector. In the period 2008-2012, this included about 5 per cent of the sector's total assets.



In Denmark, the five largest banks together represented about 85 per cent of the sector's total assets in mid-2012. The smaller banks thus represent a small part (about 15 per

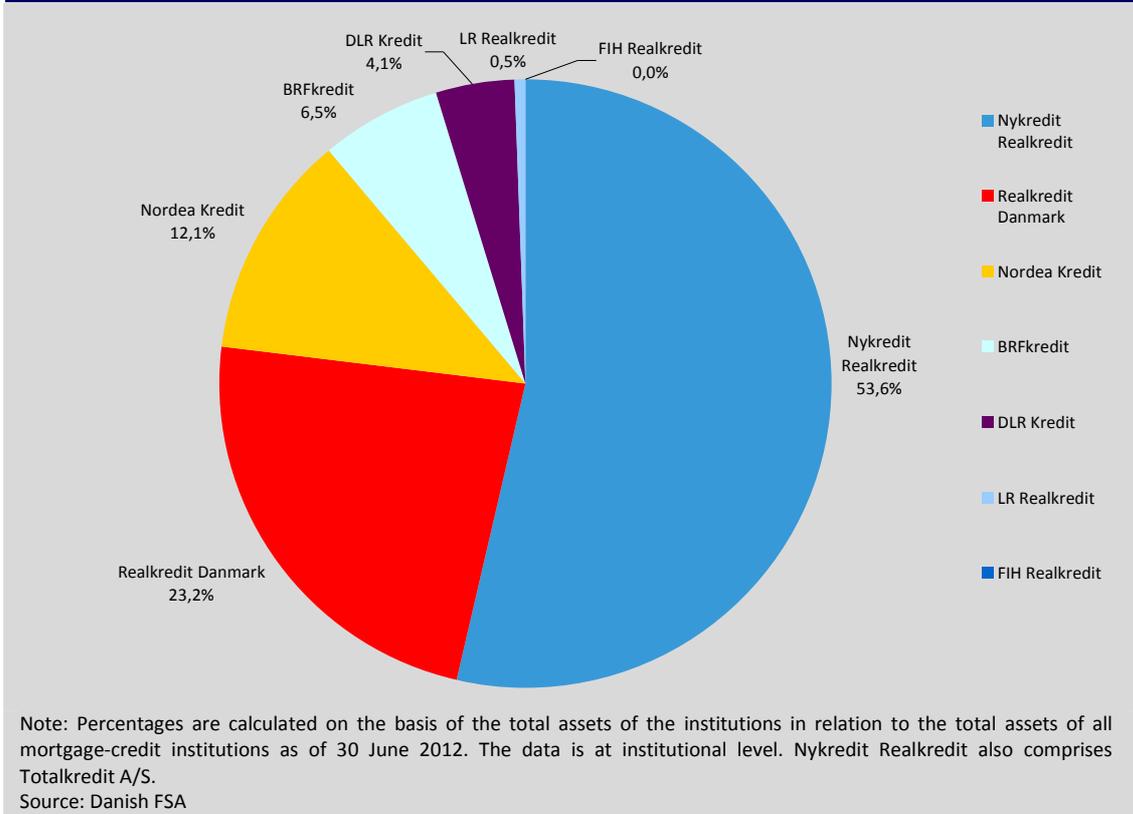
cent) of the sector's total assets. Figure 6 shows the size of the ten largest banks, while Figure 7 shows the size of the eight Danish mortgage-credit institutions. As shown in Figure 6, Danske Bank is by far the largest bank in Denmark, with a share of total assets of Danish banks of about 56 per cent, followed by Nordea Bank Danmark, Jyske Bank, Nykredit Bank and Sydbank.

**Figure 6: Proportion of the Danish banking sector, total assets as a percentage of the overall sector, 30 June 2012**



As shown in Figure 7, Nykredit Realkredit (including Totalkredit) is the largest mortgage-credit institution in Denmark with a share of total assets of Danish mortgage-credit institutions of about 54 per cent, followed by Realkredit Danmark and Nordea Kredit. Realkredit Danmark and Nordea Kredit are part of the Danske Bank group and the Nordea Bank Danmark group, respectively, while Nykredit Bank is part of the Nykredit group, and FIH Realkredit is part of the FIH Erhvervsbank group.

**Figure 7: Proportion of the Danish mortgage-credit institutions sector, total assets as a percentage of the overall sector, 30 June 2012**



In relation to credit institutions in general, the Danske Bank group (i.e. including Realkredit Danmark, but excluding Danica) is by far the largest group in Denmark measured in terms of total assets in relation to GDP and measured in terms of deposits as a share of the overall deposits of the sector, cf. Table 2. Nykredit is the largest group measured in terms of loans as a share of total loans of the sector in Denmark.

**Table 2: Characteristics of the largest Danish banks and mortgage-credit institutions, group level, 30 June 2012**

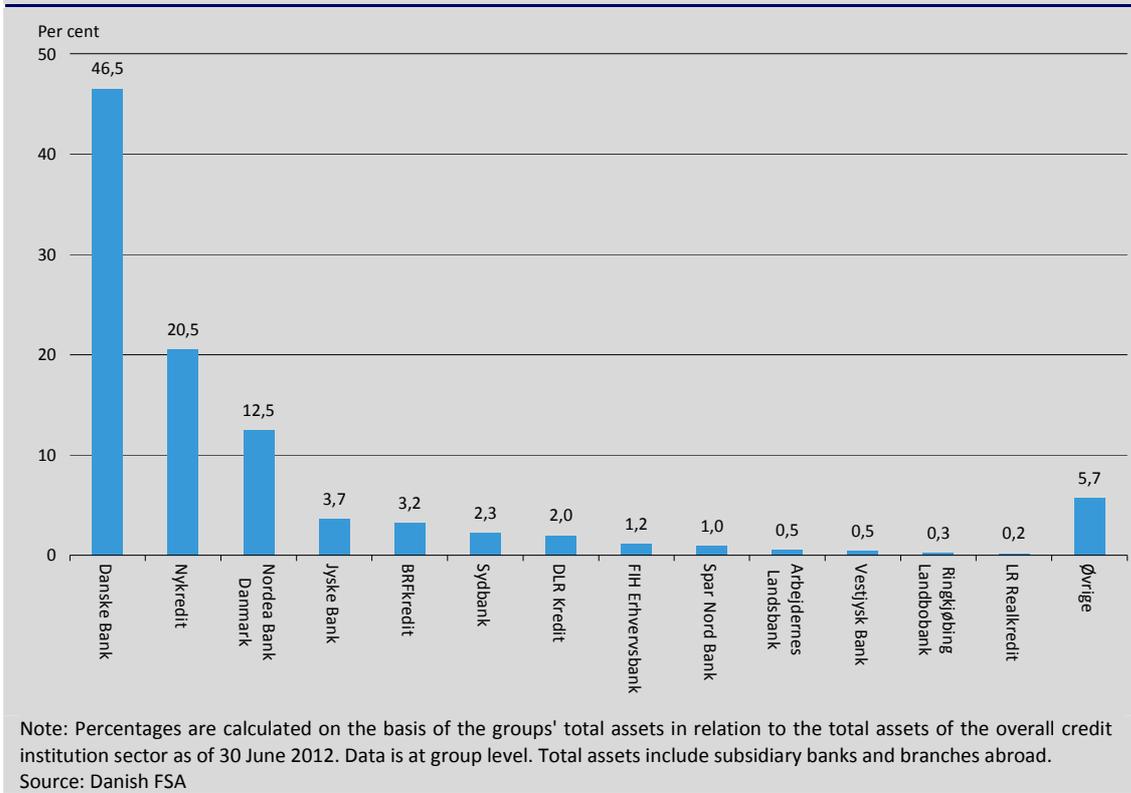
	Total assets in per cent of GDP	Loans in per cent of the total loans of the sector	Deposits in per cent of the total deposits of the sector
Danske Bank	182.6	30.6	32.6
Nykredit	80.4	30.8	4.0
Nordea Bank Danmark	48.9	15.9	22.2
Jyske Bank	14.4	3.2	8.9
BRFkredit	12.6	5.2	0.4
Sydbank	8.9	1.9	5.4
DLR Kredit	7.8	3.4	0.0
FIH Erhvervsbank	4.6	0.6	0.7
Spar Nord Bank	3.8	0.9	2.7
Arbejdernes Landsbank	2.0	0.4	1.7
Vestjysk Bank	1.9	0.6	1.3
Ringkjøbing Landbobank	1.0	0.3	0.9
LR Realkredit	0.9	0.3	0.0

Note: Where it is deemed relevant, loans and deposits have been adjusted for subsidiary banks and branches abroad. Total assets include subsidiary banks and branches abroad. GDP for 2011 is in current prices, DKK millions. Loans and deposits include repo transactions. Loans exclude guarantees. As a consequence of the transfer of the exposures portfolio from FIH Erhvervsbank to the Financial Stability Company A/S, the total assets of the FIH group total assets are subsequently reduced.  
Source: Danish FSA and Statistics Denmark

Note in relation to Table 2 that the size of total assets in relation to GDP includes the activities of the groups abroad and may thus illustrate the overall size of the groups. Loans and deposits primarily relate to activities in Denmark and thus represent the relative size of the groups in Denmark.

Figure 8 shows the various groups' shares of the overall sector based on the size of the institutions, and illustrates that the Danske Bank group represents nearly half of the credit institutions sector in Denmark.

**Figure 8: Proportions of the Danish credit institutions sector (banks and mortgage-credit institutions), total assets as percentage of the overall sector, group level, 30 June 2012**



Geographically, the Danish credit institutions sector comprises activities in Denmark, in Greenland and on the Faeroe Islands. By far the largest parts of the activities are in Denmark, cf. Table 3.

**Table 3: Credit institutions in Denmark, Greenland and on the Faeroe Islands, 30 June 2012**

	Total assets, DKK bn.	Total assets in per cent of local GDP
Denmark, banks	4,378	245.6
Denmark, mortgage-credit institutions	3,382	189.7
Denmark, total credit institutions	7,760	435.3
Faeroe Islands, banks	22	169.4
Greenland, banks	6	49.6

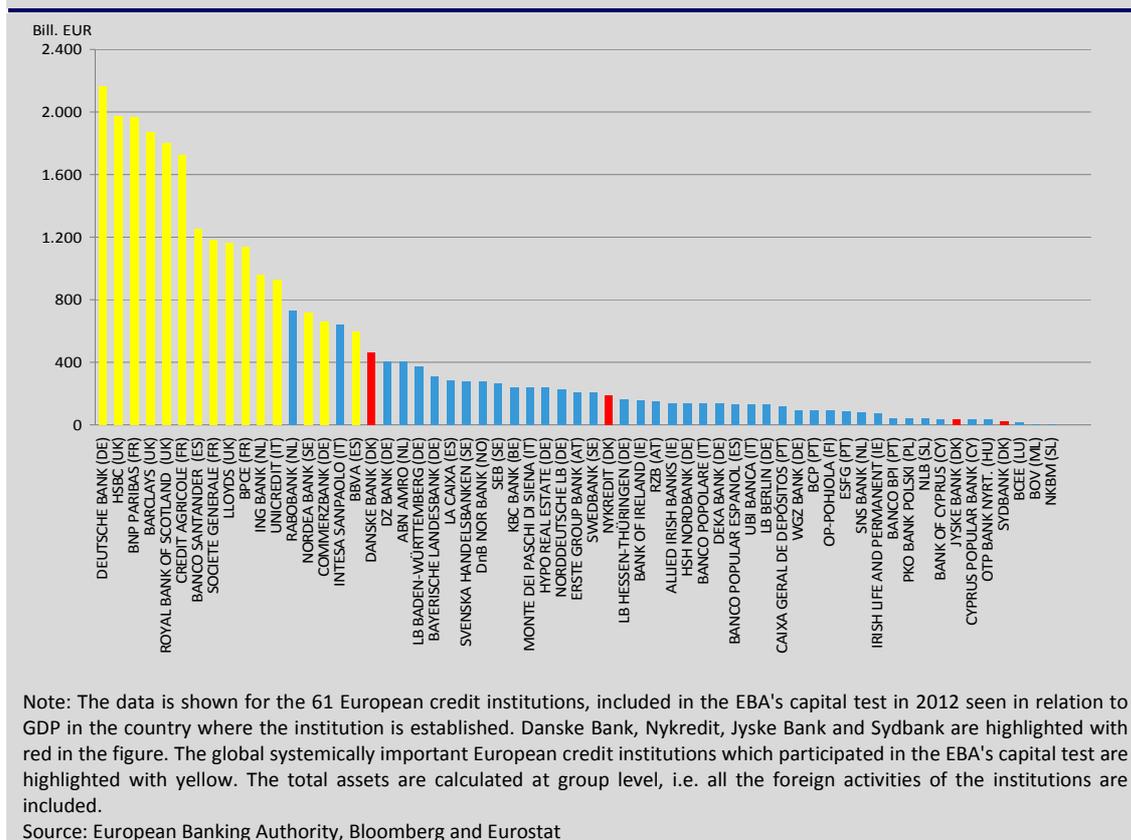
Note: The data for Denmark also includes the activities of banks on the Faeroe Islands and in Greenland. The Danish FSA is not in a position to separate the activities of credit institutions on the Faeroe Islands and in Greenland for Danish credit institutions. The data is at institutional level. The data for Denmark also includes branches of Danish banks abroad. However, branches of foreign banks are not included. The data for the Faeroe Islands and Greenland is based on a separate calculation. Note that persons and undertakings in Greenland and on the Faeroe Islands may also use credit institutions located in Denmark.  
Source: Statistics Denmark, BankNordik, Interim Report, H1 2012, the Faroese statistics agency hagstova.fo, the Greenlandic statistic agency, stat.gl, the Danish FSA and own calculations.

The total size of credit institutions corresponds to about 435 per cent of Danish GDP. In Greenland and on the Faeroe Islands, credit institutions are also large compared with local GDP; about 170 per cent on the Faeroe Islands and about 50 per cent in Greenland, respectively.

The FSB has designated 28 banks as systemic at global level, including the Swedish-based Nordea group.<sup>18</sup> No Danish bank has been designated as systemic in relation to the global economy.

In a European context, four Danish credit institutions<sup>19</sup>, Danske Bank, Jyske Bank, Nykredit and Sydbank, have participated in annual stress tests carried out by the European banking authority, the EBA, as well as in the special analysis of the need for recapitalisation of the largest European institutions carried out in 2011-2012. Even though Danske Bank is quite large compared to its Danish home market, it is not one of Europe's largest credit institutions. However, Danske Bank is one of the largest institutions in Europe not designated as a global SIFI cf. Figure 9, which lists the 61 credit institutions included in the EBA's capital test. Global SIFIs are highlighted with yellow and Danish credit institutions are highlighted with red.

**Figure 9: Total assets of large European credit institutions, end of 2011**

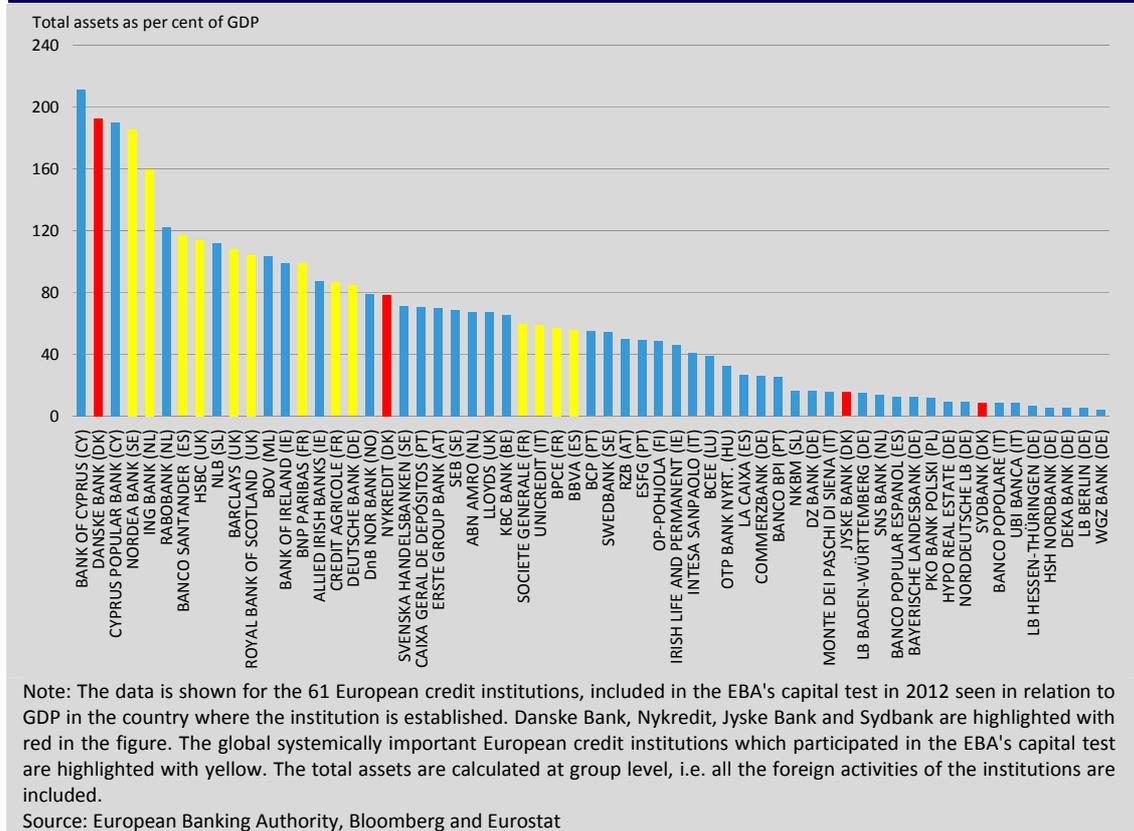


<sup>18</sup> The FSB, "Update of group of global systemically important banks (G-SIBs)", 1 November 2012.

<sup>19</sup> The Swedish Nordea group, which includes Nordea Bank Danmark, has also participated in the EBA's stress tests and capital test.

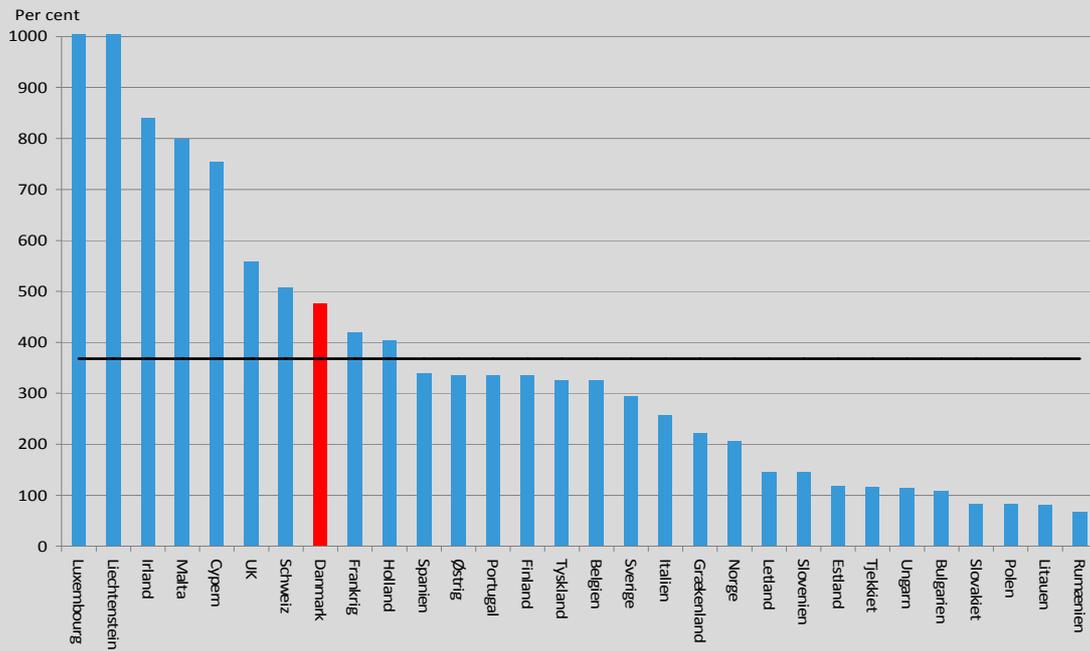
Danske Bank's total assets in relation to Danish GDP is very substantial compared with the size of other large European institutions in relation to the GDP of their countries of establishment, cf. Figure 10.

**Figure 10: Total assets of large European credit institutions in relation to local GDP, end of 2011**



The total credit institutions sector in Denmark is relatively large in relation to Danish GDP compared with other EU countries, cf. Figure 11. Thus credit institutions play an important role in the Danish economy. Note however, that Figure 11 also comprises foreign activities of Danish institutions.

**Figure 11: Size of the credit institution sector in relation to local GDP, end of 2011.**



Note: The size is measured as total assets of the sector in relation to local GDP. The horizontal line shows the unweighted average for the countries. The data is shown for the 27 EU countries as well as for Norway, Switzerland and Liechtenstein. The data includes all foreign activities for credit institutions with a parent undertaking in e.g. Denmark. The Y-axis stops at 1,000 per cent, but in Luxembourg and Liechtenstein the credit institution sector represents a larger share of GDP.

Source: European Banking Federation and Eurostat

## **Chapter 2: Criteria for identifying SIFIs in Denmark**

The terms of reference of the Committee state that there are SIFIs in Denmark. The Committee is tasked with examining how SIFIs may specifically be identified in Denmark. The following sections propose a method of identifying Danish SIFIs on the basis of international considerations. As established in the terms of reference, the focus is on credit institutions, i.e. banks and mortgage-credit institutions, whilst a review of whether other financial institutions than credit institutions, e.g. insurance companies or pension funds, may be SIFIs in Denmark has not been carried out.

### **2.1 International considerations**

The FSB defines SIFIs as financial institutions, whose disorderly failure would cause significant disruption to the financial system and the real economy.<sup>20</sup> The BCBS' standards for global SIFIs apply five central criteria for identifying global SIFIs.<sup>21</sup> These include:

- i) cross-jurisdictional activity,
- ii) size,
- iii) interconnectedness with the financial system,
- iv) substitutability of the institution's activities and
- v) complexity of the institution.

The BCBS proposes a method where a weighted average of the institution's score on the different criteria is calculated, and against this background, a decision is made as to which institutions are identified as global SIFIs and how much additional capital the relevant institutions should be required to hold.

For national SIFIs, the BCBS takes a more principle-based approach, firstly based on four of the five criteria mentioned above, excluding the criteria on cross-jurisdictional activities, and secondly providing the possibility to consider specific national conditions, including the opportunity to involve relevant country-specific factors.<sup>22</sup> This does not include an exact method of calculation for how systemic national SIFIs are, as is the case for global SIFIs. The recommendations on national SIFIs thus give more room for discretion in the national assessment.

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<sup>20</sup> FSB, "Policy measures to address systemically important financial institutions", 4 November 2011.

<sup>21</sup> Cf. note 16.

<sup>22</sup> Cf. note 17.

The international standards in themselves are not binding for Denmark. However, elements of these are included in CRD4, which set requirements regarding the identification of domestic SIFIs. Such identification shall be based on at least one of the following criteria:

- 1) size,
- 2) importance for the economy of the EU or member state,
- 3) significance of cross-border activities,
- 4) interconnectedness of the institution with the financial system.

Application of the criteria will be laid down in more detail by the European Banking Authority (EBA).

Some European countries have already designated their national SIFIs. In Sweden, so far the authorities have designated the four largest Swedish credit institutions – Nordea, Skandinaviska Enskilda Banken (SEB), Handelsbanken and Swedbank – as SIFIs. Furthermore, Nordea has been designated as a global SIFI by the FSB. These will be subject to an additional capital requirement, cf. section 3.1.2.<sup>23</sup> The criteria according to which the specific institutions in Sweden have been designated have not been published, nor has information on whether more will be designated.

The largest credit institutions in the United Kingdom; Barclays, HSBC, Standard Chartered and Royal Bank of Scotland, have been designated as global SIFIs by the FSB. In addition, the British government is planning to introduce a separation of the institutions' activities so that activities critical to the real economy can only be carried out by statutorily ring-fenced, and thus particularly secure, credit institutions. Currently, only deposits business with private customers and small and medium-sized enterprises will be covered by the ring-fencing.<sup>24</sup> Requirements for ring-fencing are likely to be set on the basis of the size of the institutions' deposits. The ring-fenced institutions are also expected to comprise the national SIFIs in the United Kingdom.

In Switzerland, Credit Suisse and UBS are on the FSB's list of global SIFIs and these have also been designated as national SIFIs. The designation is based on specific indicators in the form of i) market shares within systemically important business areas (deposits, loans and clearing), ii) the value of uncovered deposits, iii) the size of the institution in relation to GDP and iv) the risk profile of the institution.<sup>25</sup>

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<sup>23</sup> Finansinspektionen, “New capital requirements for Swedish banks”, 25 November 2011.

<sup>24</sup> HM Treasury, “Banking reform: a new structure for stability and growth”, 4 February 2013.

<sup>25</sup> The Swiss Financial Markets Supervisory Authority, “Addressing Too Big To Fail”. The Swiss SIFI Policy”, 23 June 2011.

## 2.2 Criteria for identifying Danish SIFIs

The terms of reference of the Committee state that when setting criteria for identifying Danish SIFIs, the Committee must include considerations in relation to criteria on:

- i) size,
- ii) the possibility of substitution,
- iii) interconnectedness with the rest of the system, and
- iv) complexity (business-related, structural and operational).

The criteria mentioned reflect the BCBS' standards for national SIFIs and are in line with the criteria in CRD4. In line with the BCBS standards, a more qualitative assessment may also be included.

### 2.2.1 Criteria and indicators for identifying Danish SIFIs

National differences in the structure and size of banking markets in relation to national GDP imply a need for national flexibility when identifying SIFIs. Therefore, it cannot be assumed that all the criteria recommended by the BCBS and included in CRD4 and which are listed in the terms of reference, are equally relevant in the identification of Danish SIFIs. The different criteria are discussed in the following sections.

#### *Size*

The size of a credit institution is central for its significance in the financial system, as the size of the credit institution indicates the extent of financial services supplied by the institution to the real economy and the financial system. Any possible damaging effects in the form of risks for the economy (negative externalities) if a credit institution fails, are likely to increase more than proportionally with the size of the institutions. If a large institution fails this may, to a greater extent than for smaller institutions, damage public confidence in the financial system as a whole. Generally, the size of institutions is therefore assessed to be a central criterion for identifying Danish SIFIs.

Arguably also small institutions may have systemic importance, if they encounter difficulties at the same time. However, in the view of the Committee, the existing regulation of credit institutions and schemes for winding-up credit institutions, ensure that problems in a number of smaller institutions will not be of systemic importance.

The size of a credit institution can be measured in several ways. The BCBS uses the total exposure of the institution as an indicator for size in connection with identifying global SIFIs. In the United Kingdom, risk-weighted assets as a percentage of GDP are used as an indicator of how systemic institutions are, while Switzerland uses an indicator composed of market share for loans and deposits and the size of total assets in relation to GDP. Thus, at international level, a uniform measure for the size of an institution in relation to identifying SIFIs has not been established.

The total assets of the institution seen in relation to GDP may indicate the overall size of the institution, and thus the difficulty of carrying out crisis management of an institution, and the effect of such crisis management on society. The Committee recommends using the total assets of the institution in relation to GDP as an indicator for size, since the total assets capture largely all activities of the institution and thus provides a measurement of the potential difficulties that may arise if an institution fails. An indicator based on total assets also includes activities by the institution abroad and thus provides a view of the overall size of the institution.

The alternative could be to use the risk-weighted assets of the institution in relation to GDP. Risk-weighted assets express the risks relating to the institution's specific activities and may reduce any overrating of how systemic the institution is, as low risk items may be included in the total assets of the institution. However, in the view of the Committee, the total assets are a better indicator for the size of the institution, as the object of the size indicator is to measure how difficult crisis management of the institution will be overall and not necessarily the risks related to the specific activities of the institution. In addition, the risk-weighted assets may change due to increased use of internal models without a corresponding change in how systemic the institution is. This speaks against using risk-weighted assets as a measurement of how systemic the institution is.

As an indicator based on total assets does not focus on the systemic activities of the institution as such, but also includes other activities which are not necessarily systemic, it may be relevant, however, to include additional indicators which more specifically relate to the conditions that make the institutions systemic. In the view of the Committee, particularly the loans and deposits of the institutions will be systemic. Loans are discussed under the substitutability criteria below, as the challenge in relation to loans is the issue of whether other institutions can take over, or substitute, the lending portfolio of a SIFI without disrupting the economy as a whole.

Deposits are another measurement for the scope of possible adverse effects on the economy due to the winding-up of a credit institution. Depositors not covered by the deposit guarantee scheme must be expected to suffer losses in connection with a winding-up, and for households and enterprises such losses may limit their consumption and investments, and ultimately mean that they are not capable of fulfilling their obligations. This bears the risk of creating a vicious circle between the economic trends and developments in the financial sector. At the same time, if more households and enterprises suffer losses in connection with a winding-up, this creates more uncertainty and general lower confidence in the credit institutions. This may give rise to financial instability and limit the possibility of the sector to provide the services that it is expected to deliver, and thus also restrict economic activity. Another challenge in connection with deposits is that the guarantee fund for depositors and investors is unlikely on its own to be in a position immediately to cover covered deposits in connection with the winding-up of a SIFI with a large amount of covered deposits. Therefore, the guarantee fund for depositors and investors may take up state-guaranteed loans on the markets. This, however, imposes risks on the government. Therefore the deposits of institutions are deemed to be systemic.

The relevant indicator for deposits is deemed to be the size of the deposits in relation to the sector's overall deposits, as this expresses the relative size of the institution and also the potential consequences of a winding-up. It is deemed relevant to examine the activities of the institution in Denmark only, as the volume of deposits may only have systemic importance in Denmark.

Accordingly, the size of credit institutions defined as total assets in relation to GDP and deposits as a share of the total deposits of the sector is deemed a relevant criterion in the identification of Danish SIFIs. Table 4 shows the distribution of the ten largest banks and mortgage-credit institutions in Denmark at group level based on the two indicators.<sup>26</sup>

**Table 4: Indicators of size of the largest Danish banks and mortgage-credit institutions, group level, 30 June 2012**

	Total assets in per cent of GDP	Deposits in per cent of the total deposits of the sector
Danske Bank	182.6	32.6
Nykredit	80.4	4.0
Nordea Bank Danmark	48.9	22.2
Jyske Bank	14.4	8.9
BRFkredit	12.6	0.4
Sydbank	8.9	5.4
DLR Kredit	7.8	0.0
FIH Erhvervsbank	4.6	0.7
Spar Nord Bank	3.8	2.7
Arbejdernes Landsbank	2.0	1.7
Vestjysk Bank	1.9	1.3
Ringkjøbing Landbobank	1.0	0.9
LR Realkredit	0.9	0.0

Note: Where relevant, deposits have been adjusted for subsidiary banks and branches abroad. Total assets include subsidiary banks and branches abroad. GDP for 2011 is calculated in current prices, DKK mill. As a consequence of the transfer of the exposures portfolio from FIH Erhvervsbank to the Financial Stability Company A/S, FIH group total assets have subsequently been reduced.  
Source: Danish FSA and Statistics Denmark

### *Substitutability*

Danish credit institutions, i.e. banks and mortgage-credit institutions, have lending as their core business activity. Lending comprises activities which can be difficult or impossible for other credit institutions to take over or replace in the short term.

In order to be able to provide loans, the institution must have sufficient liquidity and capital to meet the statutory requirements, even after having provided the loans; and, in relation to some customer or product segments, highly specialised credit expertise. To

<sup>26</sup> The data is based on reports to the Danish FSA. Other data could also be relevant, e.g. Danmarks Nationalbank's MFI statistics. However, the different types of data yield very similar results.

some extent, credit experts will potentially be found or taken over from the failing institution. It is likely that the larger the loan, the more difficult it will be to take over from other institutions. Extensive losses and subsequent winding-up of a SIFI may therefore result in limitation of the lending capacity in the sector, which will mostly be noticeable in terms of new loans, particularly in situations where there is already a risk of lending restrictions due to economic trends. This may limit economic growth. Therefore loans are considered difficult to substitute and to be of particularly significant systemic character.

In a Danish context, the use of financing outside the credit institution, e.g. through corporate bonds occasionally issued by large Danish enterprises, is only limited.<sup>27</sup> This underlines the need to ensure lending capacity in Danish credit institutions in general.

The Committee recommends that an indicator for the size of the lending is based on the lending by the individual institutions in Denmark as a percentage of the total lending by the sector in Denmark. Such an indicator will e.g. show the difficulty for other institutions to take over a loans portfolio of a failing institution. Table 5 shows the distribution of the ten largest banks and mortgage-credit institutions in Denmark at group level based on an indicator for lending.

	Loans in per cent of the total lending by the sector
Nykredit	30.8
Danske Bank	30.6
Nordea Bank Danmark	15.9
BRFKredit	5.2
Jyske Bank	3.2
DLR Kredit	3.4
Sydbank	1.9
Spar Nord Bank	0.9
FIH Erhvervsbank	0.6
Vestjysk Bank	0.6
Arbejdernes Landsbank	0.4
Ringkjøbing Landbobank	0.3
LR Realkredit	0.3

Note: Where relevant, loans have been adjusted for subsidiary banks and branches abroad. Loans exclude guarantees as these are inhomogeneous and have a more volatile and short-term character. Loans include repo transactions.  
Source: Danish FSA

Other circumstances for credit institutions than loans may potentially be important in relation to the issue of substitutability in identifying SIFIs. Such circumstances are described briefly below. However, even though such circumstances may increase the systemic importance of the institutions, the Committee does not deem it necessary to

<sup>27</sup> Cf. e.g. the "Report from the Committee on corporate bonds as a source of financing for small and medium-sized enterprises", 22 November 2012.

use them as independent indicators, as in a Danish context, these are closely related to the size indicators.

In the DKK market, large Danish credit institutions function as correspondent banks for foreign credit institutions. Furthermore, large institutions play a key role in providing payment services and in distributing liquidity on the interbank markets. The winding-up of one of the large institutions may potentially result in significant disturbances of the market in all of these areas. However, such effects are deemed to already have been covered by the indicator for total assets.

A number of small institutions have tasks, such as stock exchange business, international payments, clearing and advisory services performed by larger institutions. Therefore, it is relevant to consider whether winding-up one of these larger institutions may result in significant interruption of business opportunities for a number of smaller institutions. However, in the view of the Committee, these are relatively standardised activities which other institutions would be able to perform satisfactorily, and therefore any winding-up of the relevant suppliers would not have significant adverse effects on society, but there would be consequences for the smaller institutions affected.

Furthermore, the Committee has looked at e.g. the role of the institutions in connection with loans to selected sectors, payments services and their role in share and bond markets, in order to assess the substitutability of the institutions. Against this background, the Committee has deemed indicator on total assets to provide the same information as such potential indicators. If an institution is deemed to be systemic because it provides special financial services, this may possibly be included in a qualitative assessment.

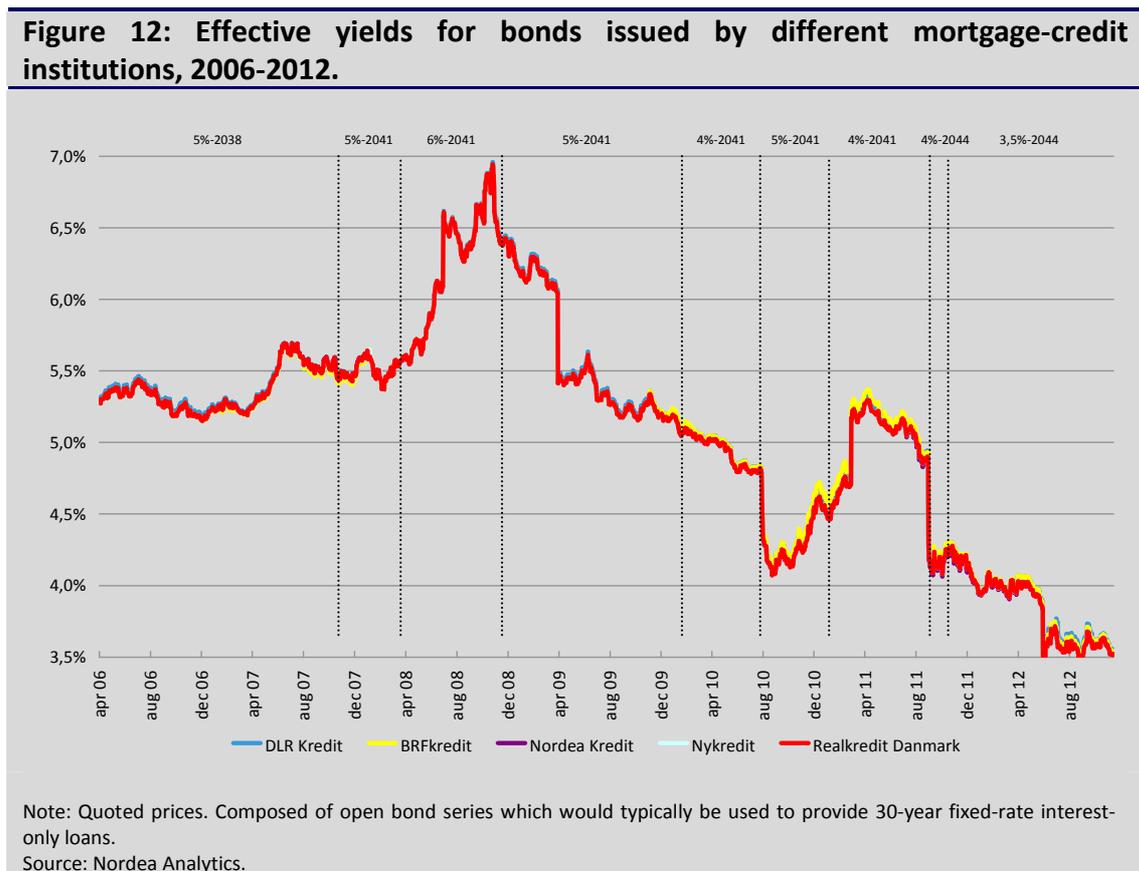
### *Interconnectedness*

Interconnectedness means that problems in a credit institution may spread to the rest of the sector, for example as a consequence of contractual obligations between the institutions. The interconnectedness of the institution with the rest of the financial system may e.g. pose a risk that winding-up the institution reduces the loss-absorbing capacity of the rest of the sector due to losses on exposures incurred by the SIFI. This could be in the form of unsecured and secured loans, bond portfolios (including mortgage-credit bonds), derivative contracts etc., which limit the total credit supply of the sector, and thus potentially economic growth. Due to the current structure of the sector, the largest Danish institutions are also those which are the most interconnected with the rest of the sector. However, the risk of contagion as a consequence of the institutions' obligations to the guarantee fund for depositors and investors has been reduced with the most recent change in the funding of the guarantee fund for depositors and investors which going forward is a fixed annual payment.

To assess the interconnectedness of credit institutions with the rest of the financial system, the Committee has examined market financing, receivables from and payables to other credit institutions, as well the importance of the institutions on the repo market.

With the current structure of the sector, the indicator for total assets should cover the information provided by the indicators on interconnectedness.

In a Danish context, the mortgage-credit sector plays a special role, as investors in mortgage-credit bonds may regard the mortgage-credit bond market as a homogenous market where all bonds carry roughly the same risk and liquidity. Figure 12 shows approximate interest rates on 30-year fixed-interest loans from bond series from selected mortgage-credit institutions in the period from 2006 to 2012, and illustrates that interest-rate differentials are generally limited, also in times of crisis.



Since 2006, at times the interest rate differential between the institutions has been up to ten basis points (0.1 percentage points) on 30-year fixed-interest bonds. These are very marginal differences.

This uniformity may partly be due to a relatively uniform risk profile, and partly due to high confidence in the mortgage-credit system itself. If a mortgage-credit institution fails and must be wound up, and if bond owners suffer losses, it cannot be ruled out that this may potentially have a contagion effect in the form of lower confidence in the other mortgage-credit bonds and thus in the mortgage-credit sector as a whole. The consequence could be a general selling out of mortgage-credit bonds which would make it harder for mortgage-credit institutions to issue bonds and thus contribute to the supply of credit.

In addition, many credit institutions and other financial undertakings use mortgage-credit bonds as part of their liquidity management. A fall in the value of mortgage-credit bonds due to uncertainty about the value of the bonds may have considerable consequences for the institutions.

In the view of the Committee, as a consequence of interconnectedness, caution should be observed when identifying SIFI mortgage-credit institutions. Even though experience shows that the risk of problems in a mortgage-credit institution is lower than in the banking sector, the consequences of a failing mortgage-credit institution may be substantial. The mortgage-credit legislation has already introduced special regulation of mortgage-credit issuances in light of their systemic importance (e.g. the balance principle). The purpose of the mortgage-credit legislation is to ensure that mortgage-credit bonds are a safe investment. As legislation already takes into account the special nature of the mortgage-credit system, the Committee recommends treating mortgage-credit institutions in the same way as banks when identifying and determining requirements for SIFIs, cf. section 2.2.4.

### *Complexity*

An institutions systemic importance will be higher, if the institution has a business model, structure and operations which make it particularly costly to wind up. The winding-up of complex institutions is likely to generate higher costs than winding-up less complex institutions, and will therefore, all else being equal, have a greater impact on financial stability and economic development.

Factors which complicate winding-up may e.g. be the scope of bilateral (Over-The-Counter OTC) trading with financial derivatives, large trading portfolios, or that the institution has many assets in its balance sheet which have not been measured at market value and thus may prove to have a significantly different realisable value. Finally, the costs of winding-up an institution with significant cross-border activities will increase operational risks and put pressure on the time aspects of crisis management because of the need for coordination between national authorities.

The complexity of a credit institution is very closely linked to the size of the institution, as the large institutions in particular, will also be the most complex in relation to the organisation, business model, etc. In order to assess the complexity of the institutions, the Committee has looked at the nominal derivative positions as well as cross-border activities of the institutions. The assessment is that the indicators on size cover the information in the indicators on the complexity of banks in particular. The business model of mortgage-credit institutions is generally less complex than for banks. However, interconnectedness is larger among mortgage-credit institutions, cf. above.

### **2.2.2 Identification at group level**

In the sections above, Danish credit institutions were viewed at group level in the description of the individual indicators. It is relevant to consider whether the identification of Danish SIFIs is most appropriately carried out at group level, or whether identification at institutional level is more relevant.

Identification at institutional level takes into account the extent of systemic risks connected with the individual institution. However, in Danish credit institutions, institutions are usually financially and organisationally closely linked. According to current rules, financial institutions wishing to provide loans for a parent company or another subsidiary within the same group must obtain prior authorisation from the Danish FSA. It cannot be ruled out that to a large extent an institution will provide financing for its subsidiaries, if these experience financial difficulties. Experience from the financial crisis seems to support this view which is due to the fact that an institution which allows its subsidiary to fail will damage confidence in the institution. In the worst case scenario, financial backing might endanger the survival of the group. Seen in isolation, an institution may be less systemic important while the same institution may potentially have significance due to its group affiliation.

Identification at group level takes into account the total systemic significance of the group, and the fact that the group's institutions are linked and thus carry a potential contagion element. Therefore, identification of Danish SIFIs should be made at group level.

In practice, there are relatively few large financial groups in Denmark. The consequence of making the identification at group level is e.g. that if the Danske Bank group is identified as a SIFI, this will also include Realkredit Danmark, which is the group's mortgage-credit institution organised as a subsidiary, not taking into account whether Realkredit Danmark in itself is a SIFI.

It should be noted that the additional requirements for SIFIs will apply at group level and for each credit institution in the group, but not to other types of subsidiary undertakings, cf. chapter 3.

### **2.2.3 Selection of criterion for identification**

Section 2.2.1 argued that in particular criteria for size and substitutability are relevant in a Danish context in relation to identification of SIFIs. In addition to the systemic element of the institution's size, the criterion on size also captures deposits which are deemed to be systemic. The criterion on substitutability captures the lending of the institutions which is also deemed to be of systemic nature. This method is also supported by the fact that the indicators for the other criteria described above, i.e. interconnectedness and complexity, are closely interconnected to indicator for the total size of the institutions. This indicates that significantly different results will not be

generated, if a more complicated identification model with more criteria than size and substitutability is used.

A simple model for identification of Danish SIFIs will have the advantage of ensuring simplicity and transparency in the identification. At the same time, Denmark will be at par with the other European countries which have introduced SIFI regulation.

Table 6 shows the ten largest banks and mortgage-credit institutions' position on the three indicators. The table corresponds to Table 2 in chapter 1.

	Total assets in per cent of GDP	Loans in per cent of the total lending by the sector	Deposits in per cent of the total deposits of the sector
Danske Bank	182.6	30.6	32.6
Nykredit	80.4	30.8	4.0
Nordea Bank Danmark	48.9	15.9	22.2
Jyske Bank	14.4	3.2	8.9
BRFkredit	12.6	5.2	0.4
Sydbank	8.9	1.9	5.4
DLR Kredit	7.8	3.4	0.0
FIH Erhvervsbank	4.6	0.6	0.7
Spar Nord Bank	3.8	0.9	2.7
Arbejdernes Landsbank	2.0	0.4	1.7
Vestjysk Bank	1.9	0.6	1.3
Ringkjøbing Landbobank	1.0	0.3	0.9
LR Realkredit	0.9	0.3	0.0

Note: Where it is deemed relevant, loans and deposits have been adjusted for subsidiary banks and branches abroad. Total assets include branches abroad. GDP for 2011 is in current prices, DKK millions. Loans and deposits include repo transactions. Loans exclude guarantees. As a consequence of the transfer of the exposures portfolio from FIH Erhvervsbank to the Financial Stability Company A/S, FIH group total assets have subsequently been reduced.  
Source: Danish FSA and Statistics Denmark

#### **2.2.4 Specific model for identification**

Danish SIFIs are proposed to be identified on the basis of a criterion for size and a criterion for substitutability, by applying indicators for the institution's total assets in relation to GDP and the institution's deposits and loans in Denmark as a percentage of the total deposits and loans of the sector in Denmark.

As SIFIs if they fail may imply systemic consequences on the basis of each of the three indicators, a credit institution should preferably meet just one of the three indicators in order to become identified as a SIFI. This establishes a precautionary approach, where it will be appropriate to set additional requirements to a larger group of institutions for reasons of financial stability in order to reduce the risk that such institutions fail.

Furthermore, specific levels must be set for when an institution is to be identified as a SIFI on the basis of the three indicators. In this connection, it is relevant to consider the approach used in other European countries which have already designated or which are in the process of designating national SIFIs. However, the figures are not fully comparable across borders.

In Sweden, so far the four largest credit institutions have been designated as national SIFIs. Exact criteria for identification have not been established, which may be due to the structure of the Swedish banking market where the four largest institutions are considerably larger than the other institutions. Measured in terms of total assets, Swedbank is the smallest of the four largest institutions with total assets comprising about 32 per cent of Swedish GDP. Measured in terms of lending, SEB is the smallest of the four large institutions with loans comprising 16 per cent of the total loans of the sector. The fifth largest institution, Länsförsäkringar Bank, comprises about 2 per cent of GDP measured in terms of total assets and 2 per cent of the total loans of the sector.<sup>28</sup> Against this background, the implicit limit for identification of SIFIs in Sweden must be assumed to be somewhere between 2 and 32 per cent of GDP and between 2 and 16 per cent of the total loans of the sector. If the limit for identification in Sweden is assumed to be 32 per cent of GDP and 16 per cent of the sector and similar limits are set out for Denmark, Danske Bank, Nykredit and Nordea Bank Danmark would be identified as SIFIs. This corresponds to 80 per cent of the Danish banking sector being identified as SIFIs in terms of total assets and 77 per cent in terms of lending. In Sweden, the corresponding share is 81 per cent in respect of total assets, and 73 per cent in respect of loans.

In Switzerland, credit institutions are identified as SIFIs on the basis of their market shares in either deposits or loans, as well as their total assets in per cent of GDP. Against this background, the Swiss authorities have so far identified UBS and Credit Suisse as SIFIs; this corresponds to about 53 per cent of the banking market in Switzerland being designated as SIFIs measured in terms of total assets and 31 per cent measured in terms of lending.<sup>29</sup> The exact limit values for being identified as a SIFI have not been published. However, the increased capital requirements for identified SIFIs rise proportionally with market shares in loans and deposits as well as total assets in per cent of GDP, if these exceed 10 per cent and 250 per cent, respectively. If these limit values were set as an upper estimate for identification as a SIFI in Switzerland, but where both limits are not required to be met at the same time, Danske Bank, Nykredit and Nordea Bank Danmark would be identified as SIFIs. This corresponds to 80 per cent of the Danish banking sector being identified as SIFIs in terms of total assets, 77 per cent in terms of lending and 59 per cent in terms of deposits.

In the United Kingdom, the government has not yet finally announced its limits for identifying national SIFIs. However, the institutions which will be subject to legal ring-fencing are expected also to comprise the group of national SIFIs, and therefore the same requirements may be assumed to be used in the identification of national SIFIs. Preliminary reports indicate that the limit for which institutions must meet the

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<sup>28</sup> Svenske Bankföräningen, "Bank- and finance statistics 2011", September 2012.

<sup>29</sup> Swiss Bankers Association, "2012 Banking Barometer", September 2012.

requirement on ring-fencing will be set at deposits of more than GBP 25 bn., corresponding to a limit for identification as a SIFI by which deposits must be higher than 1.8 per cent of GDP. This means that 85-90 per cent of deposits in the United Kingdom will be covered by the requirement.<sup>30</sup> If a similar limit were established in Denmark, Danske Bank, Nykredit, Nordea Bank Danmark, Jyske Bank, Sydbank and Spar Nord Bank would be identified as SIFIs. This corresponds to 76 per cent of the Danish banking sector being identified as SIFIs in terms of deposits.

As shown, work is being done on very different limits across borders, and there is no consensus on an exact level for each of the different potential indicators. The Committee view is that it will be very difficult to directly transfer limits across borders as there are significant differences in the structure of the different markets, etc. Sweden and Switzerland, for example, have relatively homogenous groups of SIFIs whereas there is a considerably larger spread between the largest Danish credit institutions, measured in terms of the different indicators.

In order to take account of the special characteristics of the Danish credit institution sector, with a few very large institutions, but also a group of medium-sized institutions which may cause considerable problems for the economy in the event of failure, it is proposed to apply an approach where the limits for identification as a SIFI based on the different indicators are set relatively low. Again, this should be viewed in light of a precautionary principle, under which it is appropriate for financial stability reasons, to set additional requirements for a larger group of institutions, in order to reduce the risk that such institutions fail, and to ensure that the alternative crisis management tools for SIFIs can be used for such institutions, cf. chapter 4. This also reduces the risk that problems in a number of medium-sized institutions may become systemically important, cf. section 2.2.1.

Thus the Committee recommends the following specific limits for the three indicators:

- *Total assets in per cent of GDP:* The limit for identification as a SIFI is to be set at 10 per cent of GDP.
- *Loans in per cent of the total lending by the sector:* The limit for identification as a SIFI is to be set at 5 per cent of the total loans of the sector in Denmark.
- *Deposits in per cent of the total deposits of the sector:* The limit for identification as a SIFI is to be set at 5 per cent of the total deposits of the sector in Denmark.

As mentioned above, the limit for just one of the indicators must have been exceeded in order for the institution to be identified as a SIFI.

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<sup>30</sup> British Bankers Association, "August figures for the main high street banks", 25 September 2012.

It should be noted that the final rules in CRD4 may impact on how SIFIs are to be identified at national level including the EBA lays down common guidelines for this area.

With the proposed approach, six Danish credit institutions will be identified as SIFIs, cf. Table 7, in which the indicators exceeded for each institution are highlighted in bold. The identified institutions together represent 89 per cent of credit institutions measured in terms of total assets and 88 per cent and 74 per cent measured in terms of loans and deposits, respectively.

	Total assets in per cent of GDP	Loans in per cent of the total lending by the sector	Deposits in per cent of the total the deposits of the sector
Danske Bank	<b>182.6</b>	<b>30.6</b>	<b>32.6</b>
Nykredit	<b>80.4</b>	<b>30.8</b>	4.0
Nordea Bank Danmark	<b>48.9</b>	<b>15.9</b>	<b>22.2</b>
Jyske Bank	<b>14.4</b>	3.2	<b>8.9</b>
BRFkredit	<b>12.6</b>	<b>5.2</b>	0.4
Sydbank	8.9	1.9	<b>5.4</b>

Despite the high co-variation between the indicators selected and other indicators, it cannot be ruled out that in some cases, the model may not capture all the relevant aspects of systemic importance. Therefore, after careful consideration, it may be relevant to include a qualitative element in the identification of Danish SIFIs in order to identify even more institutions as SIFIs than the institutions identified using a quantitative approach. This may be as a consequence of a large market share within special segments or geographical areas, or because the institution is particularly linked to the rest of the sector. Similarly, from a qualitative approach, it should be possible to avoid designating institutions as SIFIs which would otherwise be identified using a quantitative approach.

DLR Kredit and Danmarks Skibskredit are institutions which could be considered in connection with qualitative assessments.

DLR Kredit has a market share of about 23 per cent of lending to the agricultural sector. For mortgage-credit loans alone, the market share is 30 per cent.<sup>31</sup> Even though a number of other credit institutions, both banks and mortgage-credit institutions, provide a large amount of loans to Danish agriculture, under the current conditions, it may be difficult for other institutions to replace the role of DLR Kredit as the key provider of mortgage-credit loans to agriculture. Furthermore, the market for lending to agriculture is deemed primarily to be a national market with limited access to financing by foreign lenders. If DLR Kredit temporarily or permanently ceased its lending

<sup>31</sup> The information has been provided by the Danish FSA.

activity to the agricultural sector this could have substantial, negative effects on Danish agriculture and the Danish economy. Thus, there are aspects speaking in favour of DLR Kredit being designated as a SIFI in Denmark on the basis of a qualitative assessment and becoming subject to requirements similar to SIFIs identified using the quantitative approach.

Danmarks Skibskredit accounts for about 20 per cent of financing for shipbuilding by Danish shipping companies<sup>32</sup>. However, in the view of the Committee, the market for ship finance is largely international and Danish shipping companies to a high degree have opportunities to finance their shipbuilding activities outside national borders. This is where the market for ship finance differs from the ordinary loan market in Denmark. Thus the lending activity by Danmarks Skibskredit is likely to be sufficiently substituted by lending on the international market to avoid severe damaging effects on the Danish economy in the event that Danmarks Skibskredit ceases to provide loans for a period. Thus, there are aspects speaking against Danmarks Skibskredit being designated as a SIFI in Denmark on the basis of a qualitative assessment as well.

## **2.3 Institutional implementation of the identification process**

It is recommended that the specific designation of Danish SIFIs on the basis of the above indicators is carried out by the Danish FSA which already supervises the relevant institutions and which is therefore the natural authority in this area.

To ensure that input is collected from all relevant authorities, that external experts are included in the process, and to ensure cohesion with the rest of the work on supporting financial stability in Denmark, it will be relevant for the Systemic Risk Council to make a recommendation to the Danish FSA on the Danish credit institutions which should be designated as Danish SIFIs, including based on a possible qualitative assessment.

The systemic importance of credit institutions develops during the years, and developments in the business models and products of the credit institutions may make it necessary to take other criteria into consideration in the identification of SIFIs than those recommended in this report. Therefore, it will be relevant for the Systemic Risk Council each year to recommend to the Danish FSA which Danish credit institutions should be designated as Danish SIFIs. The Council should also have the possibility to recommend to the government that the criteria for identifying Danish SIFIs be re-assessed. The Danish FSA and the government will be required to offer a public explanation if the recommendations of the Council are not followed. It will be appropriate for institutions designated as SIFIs to be given a certain period of time in which to meet the additional requirements laid down for SIFIs, cf. chapter 3.

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<sup>32</sup> This account is based on information from Danmarks Skibskredit A/S.

## 2.4 The Faeroe Islands and Greenland

A group of locally based banks operate with the Faeroe Islands and Greenland as their primary area of activity. Table 8 shows that the largest institution in the Faeroe Islands, BankNordik, has a market share for loans of about 47 per cent, and the institution's total assets correspond to about 86 per cent of the GDP of the Faeroe Islands. Eik Banki is the second-largest institution in the Faeroe Islands with a market share for loans of about 37 per cent, and total assets corresponding to about 61 per cent of the GDP of the Faeroe Islands. Similarly, Grønlandsbanken has a market share for loans of about 79 per cent in Greenland, and the institution's total assets correspond to about 42 per cent of Greenland's GDP.

**Table 8: Proportions and total assets in relation to local GDP of institutions in the Faeroe Islands and in Greenland, June 2012**

	Total assets in per cent of GDP	Loans in per cent of the total loans of the sector	Deposits in per cent of the total deposits of the sector
<b>The Faeroe Islands</b>			
BankNordik	86,3	46,8	38,3
Eik Banki	61,1	37,4	45,4
Nordoya Sparikassi	16,2	12,1	11,3
Suduroyar Sparikassi	5,8	3,7	5,1
Total	169,4	100	100
<b>Greenland</b>			
Grønlandsbanken	42,2	78,5	88,0
BankNordik (filial)	7,4	21,5	12,0
Total	49,6	100	100

Note: The proportions based on loans for the Faroese banks is calculated as loans in per cent provided by the individual Faroese institution based on the total loans of the Faroese institutions in the Faeroe Islands. Proportions for the Greenlandic institutions are calculated correspondingly. Total assets in per cent of GDP are calculated as the total assets in per cent of the GDP in Greenland and in the Faeroe Islands, respectively. For BankNordik only the Faroese and Greenlandic activities are included, but the group also has activities in Iceland and in Denmark. GDP for the Faeroe Islands is calculated in current prices for 2011 in DKK mill., whilst GDP for Greenland is calculated in current prices for 2010 in DKK mill. Note that individuals and enterprises in the Faeroe Islands and in Greenland may also use a bank located in Denmark. The Danish FSA cannot separate credit-institution activities in the Faeroe Islands and in Greenland for Danish credit institutions.

Source: BankNordik, Interim Report, H1 2012, Hagstova Føroya, Statistics Greenland, the Danish FSA and own calculations.

On the basis of an assessment of the size of Faroese and Greenlandic institutions in relation to the overall Danish economy and credit institution sector, these institutions would not be identified as SIFIs. However, small communities such as the Faeroe Islands and Greenland are subject to several conditions which may have importance for whether the largest institutions in the Faeroe Islands and in Greenland are to be identified as SIFIs.

Markets for credit institutions in the Faeroe Islands and in Greenland are subject to the same regulation and supervision as in Denmark, and some institutions from the Faeroe Islands and Greenland, in particular BankNordik, have activities in Denmark. However,

in the view of the Committee, the markets for credit institutions in the Faeroe Islands and in Greenland may be widely seen as independent banking markets, separate from the Danish banking market. Furthermore, the Faeroe Islands and Greenland, because of home rule and self government, have an independent economy with their own state budget etc. As BankNordik, Eik Banki and Grønlandsbanken are large in relation to the GDP of the Faeroe Islands and Greenland respectively, these are credit institutions which play a key role in the local economy.

Furthermore, it cannot be assumed that other institutions, including Danish institutions, will have a genuine interest in taking over the business of the largest Faroese and Greenlandic institutions, if these should fail. The composition of the Faroese and Greenlandic economies and to a great extent the private economies, which are very dependent on the development in fisheries, indicate a particular customer segment which Danish institutions are not necessarily interested in taking over. The Faroese banking crisis in the beginning of the 1990s showed that there was no interest among Danish institutions in taking over Faroese institutions, and instead the Danish government had to make funds available to enable takeover by the Home Rule Government and capitalisation of Føroya Banki (which is now BankNordik).<sup>33</sup>

Against this background, it is recommended to assess the largest Faroese and Greenlandic institutions independently from Danish credit institutions. Institutions in the Faeroe Islands and in Greenland may not be identified as SIFIs in a purely Danish context, but they may be considered SIFIs in the Faeroe Islands or in Greenland. Accordingly, it will be appropriate to apply the same indicators for identification as for purely Danish SIFIs, i.e. loans and deposits as a percentage of loans and deposits in the local sector and total assets in relation to local GDP, as well as possibly applying other limit values.

Who should make the specific identification of SIFIs in the Faeroe Islands and in Greenland is a political matter. This should e.g. be viewed in connection with the question of how to finance crisis management of SIFIs in the Faeroe Islands and in Greenland. If identification of SIFIs in the Faeroe Islands and in Greenland is to be a Danish matter, it is recommended that the Danish FSA makes this identification upon recommendation from the Systemic Risk Council. If crisis management of SIFIs in the Faeroe Islands and in Greenland is to be a Danish matter, it is recommended that the same procedure is applied as for Danish SIFIs. The two questions should be viewed together. However, it is outside the terms of reference of the Committee to make recommendations in these areas.

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<sup>33</sup> Note however, that after the collapse of Eik Bank and the takeover by the Financial Stability Company A/S of the Faroese parent institution and the Danish subsidiary bank, a Faroese buyer was found who acquired the Faroese part of the institution. However, it cannot be assumed that there will be Faroese buyers for a failing large Faroese institution in the future.

## 2.5 Summary

Identification of SIFIs is not an exact science. A number of different criteria may be established which is also reflected in ongoing international work and experience in the other countries which have identified or are working on identifying SIFIs.

The Committee recommends using a relatively simple model of identification in a Danish context aimed at reflecting the conditions in the Danish credit institution sector and at ensuring a transparent process of identification.

As negotiations on CRD4 at EU level have not yet been finally concluded, it cannot be ruled that coming EU regulations in this area to a certain degree may limit the national flexibility to set up own models for identification of SIFIs. Therefore, there may be a need to adjust national regulation on the identification of SIFIs when the final EU regulations are agreed.

The overall recommendations of the Committee on identification of SIFIs in Denmark are shown in Box 4.

### **Box 4: The Committee's recommendations on identification of SIFIs**

It is recommended that:

- Danish SIFIs are identified at consolidated level on the basis of the size of the total assets relative to GDP, the size of loans relative to the total loans of the sector and the size of deposits relative to the total deposits of the sector. Identification as a SIFI will require that just one of the indicators has been met. In connection with identification, the possibility to include a qualitative element following careful consideration should be available.
- The threshold for identification is set at 10 per cent for the total asset indicator and 5 per cent for the indicators for loans and deposits.
- Designation is made by the Danish FSA based on a recommendation from the Systemic Risk Council. The designation is re-evaluated annually.
- Credit institutions in the Faeroe Islands and in Greenland are identified as SIFIs on the basis of the same criteria and indicators as credit institutions in Denmark, but based on the size of the local sector and the local GDP, as well as possibly applying other threshold values.

### ***Chapter 3: Requirements for SIFIs***

Designation as a SIFI implies that additional requirements are set for the institution. According to the terms of reference, the Committee must prepare recommendations for the additional requirements for Danish SIFIs. This chapter firstly reviews the international considerations in this area, and secondly looks at the requirements recommended by the Committee to be set for Danish SIFIs.

Special requirements for SIFIs shall establish additional protection to minimise the risk of failure of a SIFI, as this may have severe damaging effects on the economy. Additional capital and liquidity buffers, corporate governance requirements, strengthened supervision and a structured process on preparing recovery and crisis management plans may all contribute to limiting the risk of a SIFI getting failing. Moreover, additional requirements may also contribute to reducing the incentives for institutions to become inappropriately large and complex. Finally, the requirements may ensure that, on the basis of prior organisation and planning, institutions can be managed effectively if they should fail.

According to the terms of reference of the Committee, additional requirements for Danish SIFIs must take international standards and developments in other countries as a starting point. Furthermore, specific experience from the financial crisis should be considered.

Figure 13 illustrates the various phases - prevention, capital conservation, recovery and crisis management - and provides an overview of the Committee's recommendations. The figure corresponds to Figure 4 in the introduction. The recommendations concerning the requirements for SIFIs in the phases of prevention, capital conservation and recovery will be described in more detail in the following sections.

**Figure 13: Overview of recommendations from the Committee in relation to requirements for and crisis management of SIFIs**

Total capital requirement ▶	Capital conservation buffer (2.5 pct.)	SIFI-requirement (1-3.5 pct.)	Pillar II (Individual)	Crisis management buffer (5 pct.)	Common Equity Tier 1 (4.5 pct.)	
	Capital conservation trigger	Recovery trigger		Crisis management trigger (10.125 pct.)		
	Prevention	Capital conservation	Recovery	Crisis management		
Capital requirements	Capital conservation plan	Recovery plan	Convocation of general meeting	Conversion of crisis management buffer (5 pct.) to Common Equity Tier 1		
Liquidity requirements	Limitation on dividends		Replacement of members of the management board and the board of directors	Launch of crisis management plan and commencement of crisis management		
Recovery plans	Limitation on bonuses		Limitation on interest payments on Tier 2-instruments		The crisis management authority takes control and ownership and management is partly or fully replaced	
Crisis management plans	Limitation on interest payments on Tier 1-instruments				<b>Tools:</b> Bridge bank Sale of assets Debt write down Debt conversion Stability fund	
Corporate governance						
Strengthened supervision						
Bank management is in control – but involvement of the Danish FSA increases				The crisis management authority is in control		

Note: As a starting point the pillar II requirement shall be fulfilled with Common Equity Tier 1 capital, but may be fulfilled by subordinated capital which automatically converts if the institution breaches the solvency need.

### 3.1 International considerations

The FSB and the BCBS have adopted international standards on requirements for global and national SIFIs, cf. section 2.1. In addition, some European countries have started work on their own account on setting additional requirements for their national SIFIs. These requirements are described in more detail in the following.

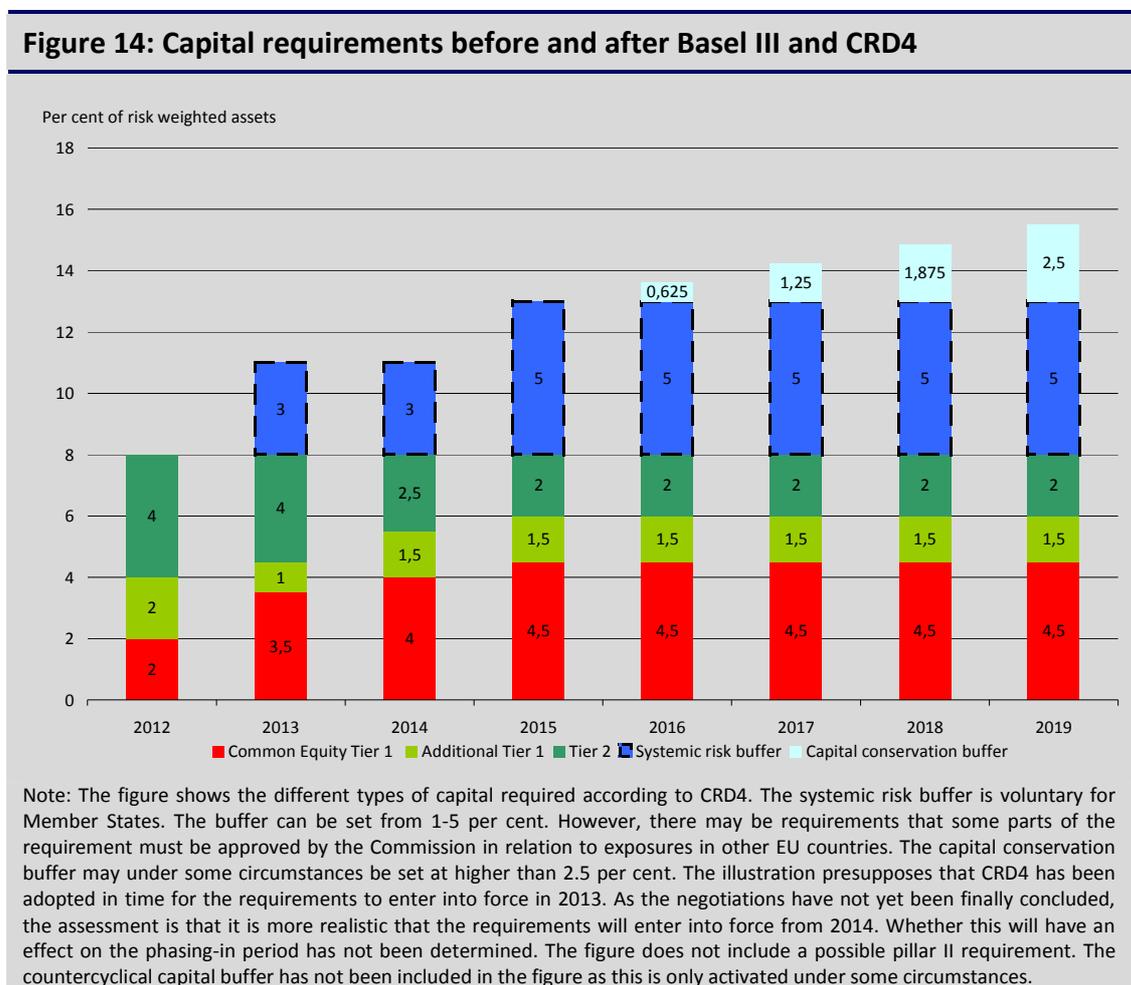
#### 3.1.1 Current and future capital requirements for all credit institutions

The Basel standards, which are implemented in the EU via CRD4, alter the minimum capital requirements for credit institutions. As previously, the capital base must represent at least 8 per cent of the risk-weighted items.<sup>34</sup> Furthermore, requirements

<sup>34</sup> The minimum capital base of credit institutions is called the capital base (Total Capital). The capital base is composed of Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital, which each have different loss absorbance capacity. Common Equity Tier 1 capital and Additional Tier 1 capital are together called Tier 1 capital.

have been laid down on the size of Tier 1 capital and Common Equity Tier 1 capital. Going forward, following a period of transition, Common Equity Tier 1 capital must comprise at least 4.5 per cent of risk-weighted assets. Previously, this capital by itself had to be at least 2 per cent. The previous definition also included capital of lower quality than in the new definition. After a period of transition, going forward Tier 1 capital will have to comprise at least 6 per cent of the risk-weighted assets. Today the requirement is at least 4 per cent.

The total future capital requirements are shown in Figure 14. In relation to the figure, note that the different colours in the figure illustrate different categories of capital requirements which are activated in different ways and imply different consequences in the event of breach. Several of the categories will need to be made up of the same type of capital e.g. Common Equity Tier 1 capital. The different types of capital are described further in Annex 2.



In addition to changes in the minimum capital requirement, a capital conservation buffer is introduced, which is to comprise 2.5 per cent of the risk-weighted assets in Common Equity Tier 1 capital. Institutions will be permitted to be below the requirement for the capital conservation buffer, however, if so, a number of restrictions

will take effect, including on payment of dividends, bonuses and interest-rate payments on Tier 1 instruments. The buffer is to ensure that no further capital erosion takes place.

In addition, requirements are laid down for the introduction of a countercyclical capital buffer. The countercyclical capital buffer can be activated by the national authorities in periods with above-normal growth in loans in the economy. With the countercyclical capital buffer, institutions may be ordered to have up to 2.5 per cent additional Common Equity Tier 1 capital in relation to the basic capital requirement. The national authorities can set the buffer requirement even higher if there are important reasons to do so. The countercyclical capital buffer is to be build-up during times of above-normal growth in loans in the economy and reduced during an economic downturn. Similar to the capital conservation buffer, institutions will be permitted to be below the countercyclical capital buffer, but here a number of restrictions will then take effect.

The capital requirements and the capital buffers will be phased in over a period until 2019.

Finally, CRD4 makes it possible for countries to set additional requirements for Common Equity Tier 1 capital for SIFIs. National authorities wishing to set additional capital requirements for SIFIs larger than 3 per cent of the risk-weighted assets will be subject to prior approval from the European Commission. However, after 2015, it will be possible to set additional capital requirements of up to 5 per cent without the approval of the European Commission, if the requirement is solely based on national exposures of the institutions and exposures in countries outside the EU. This is to prevent possible adverse effects in the internal market if the requirement is based on exposures in other EU countries.

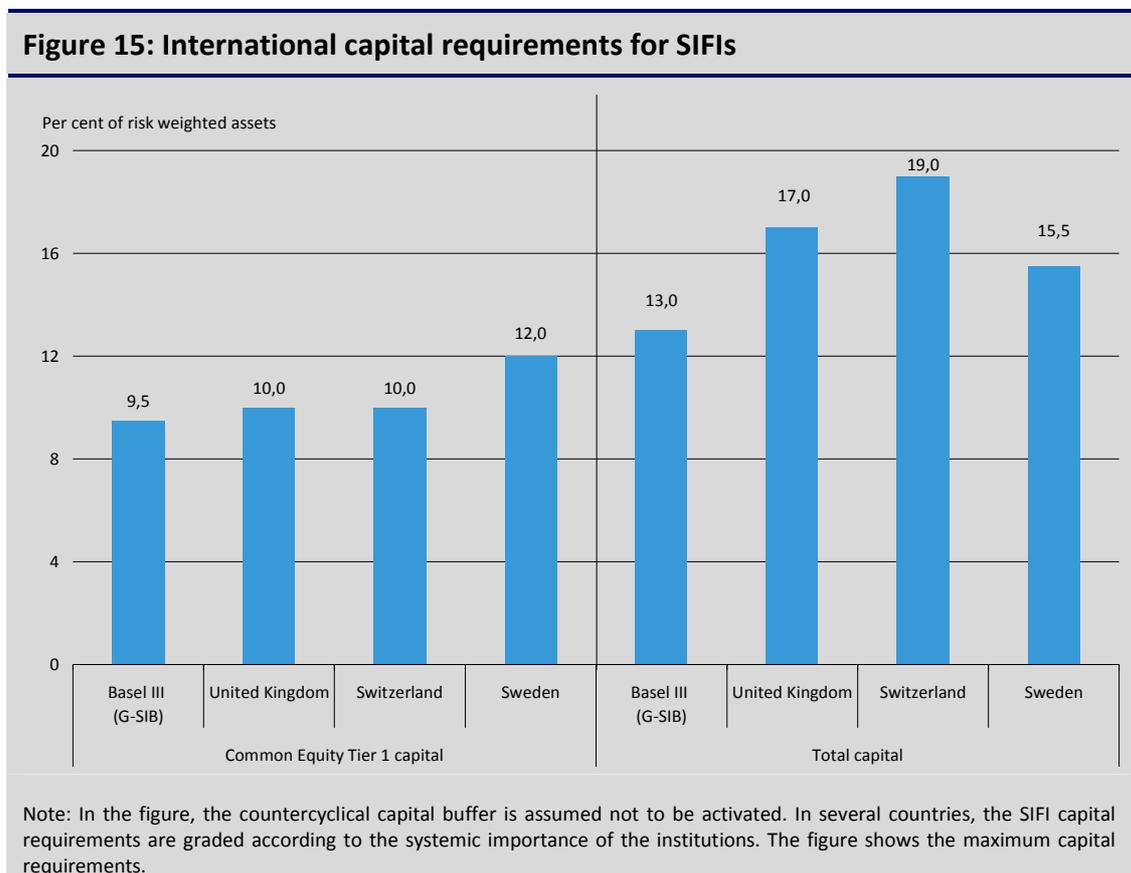
### **3.1.2 SIFI capital requirements**

According to the BCBS standards for global SIFIs, depending on the extent of their systemic importance, an additional capital requirement is set in the interval of 1-2.5 per cent. The requirement may increase to 3.5 per cent if institutions become more systemic. The FSB proposes a similar approach for national SIFIs, without describing however, the extent of the additional capital requirement. This is left to the discretion of the national authorities. The capital requirement must be met with Common Equity Tier 1 capital.

It is also proposed that the additional capital requirements for national SIFIs are set at national level, also for subsidiaries of foreign institutions, including for global SIFIs, operating in the relevant country. A subsidiary may become subject to higher capital requirements than the group's requirements as a global SIFI. In this context, coordination with the group's home country must be ensured.

The BCBS standards will not take legal effect in Denmark until they have been incorporated into EU regulation. As mentioned above, CRD4 is expected to make it possible to set additional capital requirements for SIFIs at national level.

Some European countries have launched or implemented their own SIFI regulation in parallel with international work. However, a number of countries have still not taken a position on regulation of SIFIs. In the United Kingdom, Sweden and Switzerland, the requirements for Common Equity Tier 1 capital for national SIFIs are expected to be tighter than the BCBS' minimum requirements for global SIFIs, cf. Figure 15.



In Sweden, the plan is for the largest institutions to be subject to a SIFI capital requirement of 5 per cent of the risk-weighted assets in Common Equity Tier 1 capital, applicable from 2015. The United Kingdom government is planning to introduce legal ring-fencing of the activities critical for the real economy, cf. chapter 2. It is expected that the largest ring-fenced credit institutions are ordered to maintain an additional capital requirement of 3 per cent of the risk-weighted assets in Common Equity Tier 1 capital. This requirement is expected to be fully phased in by 2019. The principles for grading the requirement for smaller ring-fenced institutions have not yet been determined. In Switzerland, already today, SIFIs must meet an additional capital requirement of 3 per cent Common Equity Tier 1 capital.<sup>35</sup>

Switzerland and the United Kingdom have also set requirements on additional loss-absorbing capacity. In Switzerland, the current SIFIs must have additionally 9 per cent contingent convertible bonds. Of these, 3 per cent are converted if the Common Equity

<sup>35</sup> Switzerland has finished processing this legislation. Sweden is awaiting implementation until CRD4 has been adopted. The British government proposed a bill in February 2013. The final regulations are expected to be adopted during 2013.

Tier 1 capital drops to 7 per cent (with a view to recovery of the institution), while the remaining 6 per cent are converted in the event of a drop to 5 per cent (with a view to orderly resolution). The United Kingdom is expected to set a resolution buffer for ring-fenced credit institutions and global SIFIs consisting of ordinary uncovered debt of 7 per cent of the risk-weighted assets.

### **3.1.3 Recovery and resolution plans**

The FSB standards for the resolution of credit institutions include requirements stipulating that all institutions must prepare recovery and resolution plans. Similar requirements are laid down in the Commission proposal for a directive on the recovery and resolution of credit institutions which also gives the supervisory authority strengthened powers of intervention in the recovery phase.

The proposed directive requires that all institutions must prepare a recovery plan with more detailed guidelines on how the institution may restore the financial situation in the event of a material deterioration of the institution's financial situation. Individual recovery plans must be prepared for institutions which are not subject to consolidated supervision, whereas groups which are under consolidated supervision must prepare recovery plans. The group plan must establish individual plans for each institution in the group. The recovery plan must be updated at least once a year. The national supervisory authority is obligated to make an assessment of the recovery plan, and if necessary, may require that the institution prepares a revised plan. If the revised recovery plan fails to address the problems identified, the supervisory authority may order the institution to launch various measures such as reduction of risks, change in business strategy etc.

Generally, the management of the institution itself is expected to take initiatives to help bring the institution back on the right track if the development of the institution is moving in the wrong direction. In this case, the management must restore the strength of the company to ensure its viability. Managerial initiatives could be e.g. strengthening the capital base, limiting loans, divesting business areas etc. Provided a number of conditions are met, the directive also allows for providing financial support in the form of loans, guarantees or mortgages between companies within the same group. During the recovery phase, the management of the institution therefore continues to run the institution and take the decisions.

If the financial situation of the institution deteriorates, making it likely that the institution will breach the statutory requirements within a relatively short period of time, the supervisory authorities will have the possibility to take specific steps to contribute to the recovery of the institution. Pursuant to the proposed directive, the authorities may thus e.g. order that the recovery plan be wholly or partly implemented, that the institution calls for a general meeting, that the members of the board of directors and the board of management be replaced, that the institution renegotiates debt contracts with its creditors, that contact is taken to potential buyers of the

institution with a view to preparing a resolution, and ultimately that a special manager is brought in to run the institution.

Further to a recovery plan and more powers of intervention in the recovery phase, the directive lays down requirements for appointment of a resolution authority<sup>36</sup> which, together with the supervisory authority for each institution, must prepare a resolution plan, to be updated at least once a year. The plan must include a description of the resolution powers the resolution authority is to have, in case the institution meets the criteria for winding-up.

In relation to groups, a resolution plan for the whole group and for the individual institutions in the group must be prepared. Against this background, the resolution authority is to assess whether an institution can be wound up. This assessment is to be based on whether it is possible and realistic for the resolution authority to manage the institution with the resolution tools without creating significant adverse effects for the financial system. If the authority deems that the institution is not suitable for resolution, the authority can order the institution to make various changes. For example, the institution may be required to change its group structure, to separate functions, or to establish service agreements in order to carry on critical functions. Reporting requirements may also be increased. The aim is to prepare for possible crisis management.

The directive will provide supervisory and resolution authorities with the possibility to demand preventive changes in the institution's organisation, structure, etc. with a view to enhancing the possibility for effective recovery and resolution of the institution.

The requirements for recovery and resolution plans must be proportional in relation to the size, business model and complexity of the institutions. The same applies in relation to the information which the individual institutions are obligated to submit to the resolution authority.

The regulations of the directive in respect of resolution of credit institutions are described in chapter 4.

### **3.1.4 Strengthened supervision**

The FSB has prepared a number of recommendations to strengthen the supervision of SIFIs.<sup>37</sup> The recommendations focus on different supervisory methods to intensify supervision of SIFIs. The FSB recommends that the supervisory authority engages in a closer dialogue with SIFIs, at management level in general and at more technical level, in the most significant risk areas in order to ensure ongoing exchange of information and to support ongoing monitoring by the supervisory authority.

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<sup>36</sup> The organisation of a resolution authority has not yet been determined in Denmark. The matter is discussed in chapter 4 of this report.

<sup>37</sup> Financial Stability Board, "Intensity and Effectiveness of SIFI Supervision – Recommendations for enhanced supervision", 2 November 2010.

As part of direct supervisory activities, the FSB recommends more extensive use of surveys across several institutions. Cross-institutional surveys can help ensure more effective identification of institutions with inferior practices than comparable institutions, and they can establish a basis for assessing whether practices among SIFIs are generally adequate in relation to the risks involved.

In terms of methodology, the FSB also points to the relevance of financial analyses, including detailed analyses of the SIFI's earnings in various business areas, to identifying, at an earlier stage, deviating trends in the institution's risk-taking and business model. Furthermore, the cohesion between monitoring macro economic developments and supervising SIFIs should be strengthened with a view to managing systemic risks as early as possible in supervision of the institutions.

In respect of corporate governance, the FSB has recommended increased supervisory focus on the performance of duties by the board of directors and organisation of internal risk management. Well functioning and organisationally powerful risk management functions are deemed to be fundamental to building a healthy risk culture and keeping the management of SIFIs properly informed about risk developments.

As part of the recommendations on intensified supervision of SIFIs, the FSB has emphasised the importance of supervisory authorities having sufficient resources and competences to be able to perform their duties.

### **3.1.5 Ring-fencing of systemic functions**

As mentioned in section 2.1, in the United Kingdom, the government is planning to introduce a separation of the institutions' activities so that activities which are critical for the real economy can only be performed by statutorily ring-fenced particularly safe institutions. This relates in particular to the deposits business of the institutions. This is to reduce the risk that non-essential activities, such as investment activities, undermine the systemically important activities. The initiative should also contribute to facilitating crisis management of ring-fenced institutions. Similar, though less extensive, initiatives are on the way in France and Germany.

On request of the European Commission, the "Liikanen group" has also examined the need to reform the structure of the European banking sector. In its report, the "Liikanen group" proposes a legal separation of the trading and investment activities of credit institutions from the other activities of the institutions, generally in line with the United Kingdom reforms. Such reforms may have particular importance for SIFIs. It has yet to be decided whether a proposal for EU regulation will be submitted on the basis of the group's recommendations.

## **3.2 Capital requirements for Danish SIFIs**

Section 3.1 described the future capital requirements for all credit institutions and the international trends in relation to setting additional capital requirements for SIFIs. In addition to the general requirements for all credit institutions, the Committee recommends setting additional capital requirements for Danish SIFIs in order to increase their resilience and thus reduce the risk that SIFIs fail. The Committee recommends setting a SIFI capital requirement and establishing a crisis-management buffer.

Further to the statutory capital requirements, the Danish FSA may, in the concrete supervisory process, stipulate higher individual requirements (pillar II requirements) than the minimum requirement for each institution. The pillar II requirement is to cover extraordinary risks specific for the institution which are not covered by the minimum capital requirement. This applies to all credit institutions, including SIFIs.

### **3.2.1 SIFI capital requirements**

The SIFI capital requirement is to be an extra cushion to reduce the risk that Danish SIFIs fail. In compliance with the BCBS guidelines, the SIFI capital requirement should be met with Common Equity Tier 1 capital.

The SIFI capital requirement should be established on the basis of a simple model in order to ensure transparency for institutions and investors. In establishing the capital requirement, institutions should be discouraged from becoming so large that crisis management becomes very difficult. This favours setting relatively high additional capital requirements for Danish SIFIs and that the capital requirement is differentiated between the SIFIs depending on how systemic they are.

A concrete model for setting capital requirements for Danish SIFIs should be based on the same indicators as are used to identify SIFIs in chapter 2, i.e. the loan share of the total loans of the sector, the deposit share of the total deposits of the sector and the size of total assets in relation to GDP, as the relevant indicators can be viewed as a measurement of the systemic importance of the institution.

Different models are possible in order to determine the SIFI capital requirement, including a model where the capital requirement is based on one of the three indicators, or a model where the capital requirement is based on a balanced measurement of systemic importance, e.g. calculated as the average of the institution's score on the three indicators. In order to ensure that all relevant indicators are sufficiently taken into account, a model should be used where systemic importance is calculated by balancing the three indicators of systemic importance.

As mentioned in section 2.2.3, when identifying SIFIs at group level, the total systemic importance of the group is taken into account as well as the fact that the institutions in the group are closely interconnected and thus carry a risk of intra-group contagion in

the event of financial problems in parts of the group. For the same reason, the SIFI capital requirement should be set at group level with the same percentage requirement at consolidated level and for each credit institution in the group. This also implies that foreign-owned institutions which are SIFIs in Denmark will become subject to a SIFI capital requirement at subgroup and institutional level, regardless of whether the group as such has already become subject to SIFI capital requirements in its home country. The size of additional capital requirements for SIFIs in different countries and in relation to international standards varies. This also reflects the need to take special national conditions and market terms into account when setting the requirement.

The terms of reference of the Committee emphasise that the SIFI capital requirement should be determined in line with other EU countries in order to ensure equal competitive terms for Danish credit institutions. However, as the coming EU regulation has not yet been finally adopted and as most countries have not taken a position on how they will be regulating SIFIs, it is only possible to take this partly into account. A primary aim is to set requirements which as far as possible contribute to ensuring financial stability in Denmark.

CRD4 provides a possibility for the capital requirement for SIFIs to vary at intervals of 0.5 percentage points from 1 to 5 per cent. However, there may be requirements that parts of this capital requirement will have to be approved by the Commission in the case of exposures in other EU countries. This is to prevent possible adverse effects on the internal market if the requirement is based on exposures in other EU countries.

In relation to grading the SIFI capital requirement depending on systemic importance, it is relevant to examine the approach used in other European countries.

In Sweden it is expected that all SIFIs will have to meet the same additional capital requirement. Currently, Sweden is thus not working on dividing the capital requirement into separate levels.

In the United Kingdom, the government has not yet made a final decision on the capital requirement for SIFIs. However, a preliminary statement has been issued regarding capital requirements for credit institutions which will be covered by the requirement for statutory ring-fencing. Such institutions are expected to maintain between 1 and 3 per cent additional capital, graded according to the risk-weighted assets of the institutions in relation to GDP. However, there is still no explicit method for allocating a specific capital requirement for the individual institutions, including limits for the various levels of the capital requirement.

In Switzerland, SIFIs are subject to an additional capital requirement of 3 per cent Common Equity Tier 1 capital.

As mentioned, the BCBS standards for global systemically important credit institutions use an approach in which the capital requirement is determined after a balancing of the results of the institutions on a number of indicators which reflect the five general SIFI criteria of the BCBS for overall assessment of systemic importance.

Thus there is no single international approach which can be used as the basis for setting additional capital requirements for Danish SIFIs.

The following calculates the systemic importance of the identified Danish SIFIs as a simple average of the institutions' score on the three indicators used when identifying SIFIs in chapter 2, i.e. the total assets, loans and deposits. In order to make the scales more uniform and thus ensure that the three indicators carry the same weight, a measurement is used for the institution's total assets in per cent of the total assets of the sector in the calculation of systemic importance rather than the total assets as a share of GDP, cf. Table 9.

<b>Table 9: Characteristics of the Danish SIFIs, group level, 30 June 2012</b>					
	Total assets in per cent of GDP	Total assets in per cent of total assets of the sector	Loans in per cent of the total lending by the sector	Deposits in per cent of the total deposits of the sector	Systemic importance
Danske Bank	182.6	46.5	30.6	32.6	36.6
Nykredit	80.4	20.5	30.8	4.0	18.4
Nordea Bank Danmark	48.9	12.5	15.9	22.2	16.8
Jyske Bank	14.4	3.7	3.2	8.9	5.3
BRFkredit	12.6	3.2	5.2	0.4	2.9
Sydbank	8.9	2.3	1.9	5.4	3.2

Note: Where relevant, loans and deposits have been adjusted for subsidiary banks and branches abroad. Total assets include subsidiary banks and branches abroad. GDP for 2011 is in current prices, DKK millions. Loans exclude guarantees. Loans and deposits include repo transactions.  
Source: Danish FSA, Statistics Denmark and own calculations.

Figure 16 shows the degree of systemic importance of the institutions.

**Figure 16: Systemic importance of Danish SIFIs**

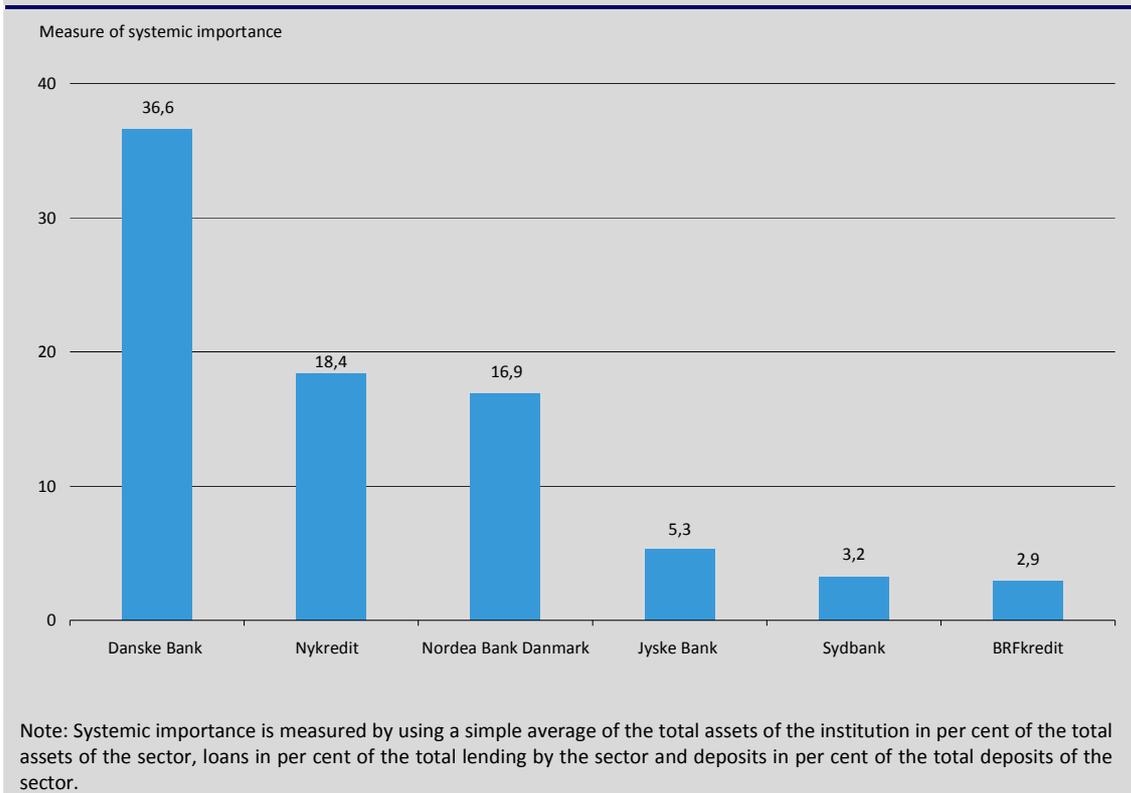
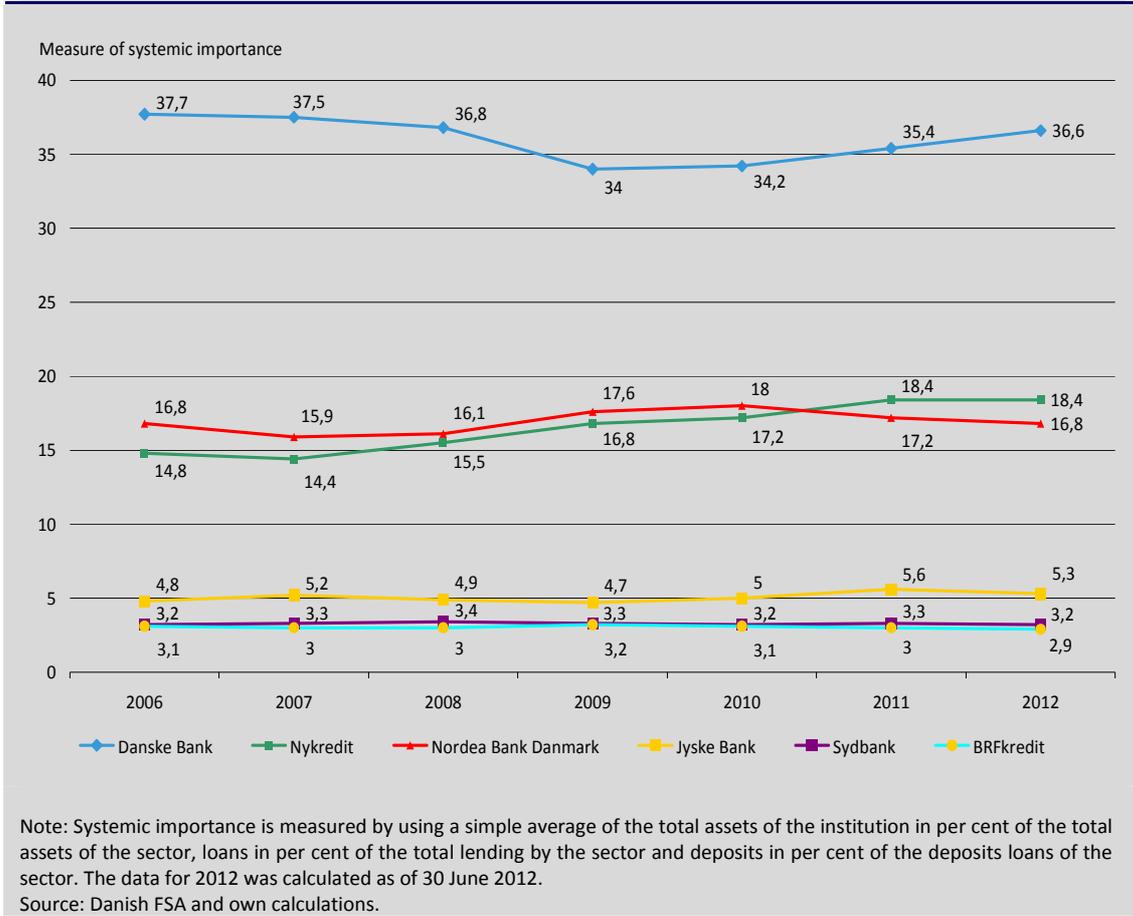


Figure 16 illustrates the distribution of the identified institutions in three groups where Danske Bank is significantly more systemic than the other SIFIs. Figure 17 shows developments in the indicator for systemic importance in the period 2006-2012. The figure illustrates that there have been fluctuations in the level of systemic importance during the period, particularly for the most systemic institutions.

**Figure 17: Systemic importance of Danish SIFIs - developments in the period from 2006-2012**



To provide institutions with an incentive to resist further growth or to reduce their systemic importance, a relatively detailed distribution of categories of systemic importance is recommended as a basis for imposing additional capital requirements on institutions. A concrete proposal is shown in Table 10.

Table 10: Additional capital requirements for Danish SIFIs								
Capital requirement								
		1,0	1,5	2,0	2,5	3,0	3,5	4,0
Systemic importance	≤ 5	BRF kredit (2,9) Sydbank (3,2)	-	-	-	-	-	-
	5-15	-	Jyske Bank (5,3)	-	-	-	-	-
	15-25	-	-	Nordea (16,8) Nycredit (18,4)	-	-	-	-
	25-30	-	-	-	( )	-	-	-
	30-35	-	-	-	-	( )	-	-
	35-40	-	-	-	-	-	Danske Bank (36,5)	-
	40-45	-	-	-	-	-	-	( )

The additional capital requirement is recommended to start at 1 per cent of the risk-weighted assets, and in intervals of half a percentage point it can go up to 3.5 per cent of the risk-weighted assets. Furthermore, it should be possible to impose a further capital requirement of half a percentage point up to 4.0 per cent, if an institution becomes more systemic. This provides an incentive for the most systemic institutions to limit their growth. If an institution is graded in the upper category, new categories on top of this should be created. It should be possible to adjust the capital requirement by half a percentage point upwards or downwards on the basis of a qualitative assessment. However, the capital requirement should never be less than 1 per cent. Institutions which may be designated as SIFIs on the basis of a qualitative assessment, but which otherwise do not meet the identification criteria, should become subject to a capital requirement of 1 per cent.

It should be noted that additional capital requirements of more than 3 per cent according to CRD4 will need approval from the European Commission if the requirement is to be imposed on exposures in other EU countries. It should be clarified how the full capital requirement can be set in accordance with the EU rules in case an approval from the European Commission of a requirement above 3 per cent cannot be obtained.

The additional capital requirement is recommended to be phased in together with the generally tightened requirements for credit institutions following CRD4 so that the capital requirements are fully phased in by 2019. A concrete phasing-in model

according to which phasing-in is assumed to commence in 2014 is illustrated in Table 11.

Year/ Capital requirement	2014	2015	2016	2017	2018	2019
1,0	0,17	0,33	0,50	0,67	0,83	1,0
1,5	0,25	0,50	0,75	1,0	1,25	1,5
2,0	0,33	0,67	1,0	1,33	1,67	2,0
2,5	0,42	0,83	1,25	1,67	2,08	2,5
3,0	0,50	1,0	1,50	2,0	2,50	3,0
3,5	0,58	1,17	1,75	2,33	2,92	3,5
4,0	0,67	1,33	2,0	2,67	3,33	4,0

The additional capital requirement should be re-assessed annually in connection with the reassessment by the Danish FSA on identification of Danish SIFIs following recommendations from the Systemic Risk Council, cf. section 2.3. If the capital requirement is changed, it will be relevant to give the institution a transition period in which it can adjust to the new requirement until the end of the relevant year. An institution which has phased in a 1 per cent additional capital requirement in 2019 but which has become more systemic and thus has been imposed a requirement of 1.5 per cent in 2020, should therefore meet the new requirement by the end of 2020 at the latest.

If an institution is designated as a SIFI, there should be a transition period of two years before the institution should be required to fully meet the requirement.

With the tightened capital requirements in CRD4, and if the SIFI capital requirement recommended above is implemented, the total requirement for Common Equity Tier 1 capital of institutions will increase. Figure 18 illustrates the overall future requirements for Common Equity Tier 1 capital in the institutions for each of the institutions identified as a SIFI, with the approach recommended. In addition, the current level of Common Equity Tier 1 capital for the institutions is stated above each of the examples. It should be noted following the financial crisis and in anticipation of increased capital requirements, several institutions have increased their Common Equity Tier 1 capital. As the countercyclical capital buffer can only be activated in periods of rapid economic expansion, this requirement is not included in the figure.

In relation to Figure 18 and Figure 19 below, it should also be noted that the current capital ratios of the institutions have been calculated according to current regulations. The capital ratios will be lower if calculated according to the CRD4 regulations. One of the reasons is that institutions may have capital elements which do not meet the requirements of CRD4, and that the adjustments in capital deductions may lead to the capital of such institutions being calculated at a lower level. Finally, there are elements in CRD4 which may increase the risk-weighted assets and thus reduce capital ratios.

The effect varies significantly from institution to institution. For example, for Danske Bank the changed regulations are expected to mean a drop in the Common Equity Tier 1 ratio of about 2 percentage points. For Jyske Bank total solvency is expected to drop by 0.2-0.5 percentage points.

**Figure 18: Fully phased-in requirements for Common Equity Tier 1 capital and current Common Equity Tier 1 capital of the groups, 31 December 2012**

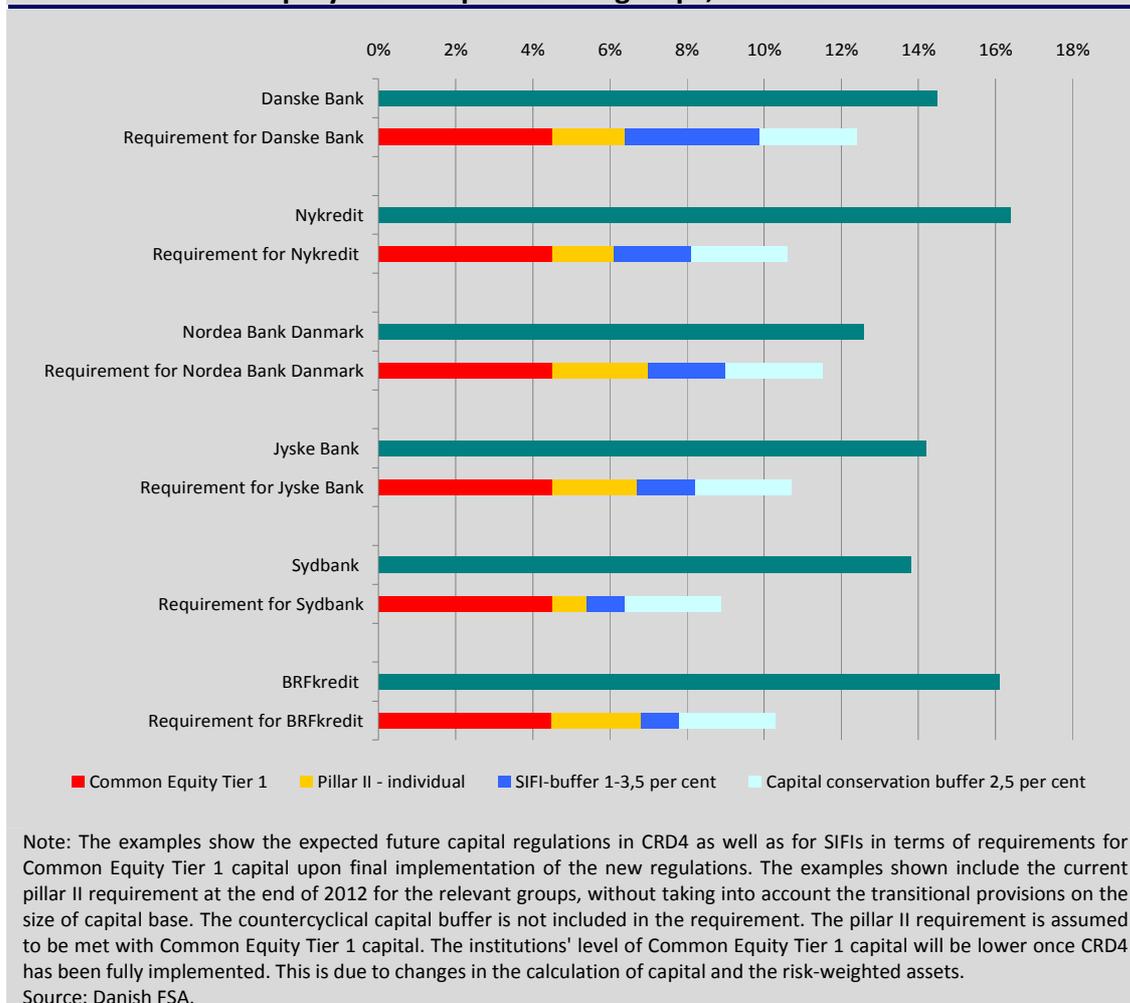


Figure 18 shows that in the future the most systemic institution, Danske Bank, will be subject to a requirement for Common Equity Tier 1 capital of 12.4 per cent, including the pillar II requirement, which was 1.9 per cent at the end of 2012, without taking into account the transitional provisions on the size of the capital base. The least systemic institution, BRFkredit, will be subject to a requirement for Common Equity Tier 1 capital of 10.3 per cent. Furthermore, there may be an additional requirement of up to 2.5 percentage points if the countercyclical capital buffer is activated. The crisis-management buffer, cf. below, is not included as this will not have to consist of Common Equity Tier 1 capital.

Going forward the starting point will be that the pillar II requirement can only be fulfilled with Common Equity Tier 1 capital. The revision of the financial business act

in December 2012 means that the Danish FSA can decide which type of capital the specific institution shall use to fulfil the pillar II requirement. It is stated in the comments to the law that the Danish FSA shall make an individual assessment of the circumstances of the specific institution but that the starting point will be that the Danish FSA will demand that the pillar II requirement is fulfilled by Common Equity Tier 1 capital. It is supplementary stated in the comments that Additional Tier 1 or Tier 2 capital which automatically converts to Common Equity Tier 1 capital or is written down if the solvency need or a relevant Common Equity Tier 1 trigger is breached can also be taken into consideration. The recommendations by the Committee do not concern these changes. In Figure 18, the pillar II requirement is assumed to be met with Common Equity Tier 1 capital.

In addition to the statutory capital requirement, the institutions will, in light of market expectations, want to have a certain amount of additional Common Equity Tier 1 capital so that they are well above the statutory requirement.

It should be noted that, in the assessment of the capitalisation of institutions by the Danish FSA, in addition to the composition of the capital, overall focus is on the total solvency need of the institution, i.e. all types of capital and not just Common Equity Tier 1 capital. The overall capital need is described in more detail in section 3.2.3.

### **3.2.2 Crisis-management buffer**

In the United Kingdom and in Switzerland, part of the proposed or implemented regulation of SIFIs stipulates that SIFIs must have additional capital in the form of convertible bonds or convertible senior debt to finance crisis management of SIFIs. In Switzerland, the institutions must have convertible bonds for use in crisis management, and the size of this crisis-management buffer depends on the systemic importance of the SIFI. The current Swiss SIFIs must have 9 per cent convertible bonds based on the size of their balance sheet and market shares in deposits and loans.

In the United Kingdom, a requirement of up to 7 per cent convertible senior debt which is written down in the event of a winding up is proposed. Furthermore, an additional 3 per cent convertible debt is proposed to be required of SIFIs which are organised in a way which complicates winding-up.

In the view of the Committee, a similar requirement will be appropriate in Denmark, providing SIFIs with a "crisis-management buffer" consisting of debt instruments, which can be converted to Common Equity Tier 1 capital, or written down if the institution becomes subject to crisis management. The requirement may also be satisfied with Common Equity Tier 1 capital if this is preferred by the institution.

Such a crisis-management buffer is proposed to be 5 per cent of the risk-weighted assets and must be converted to Common Equity Tier 1 capital or written down at the latest when the Common Equity Tier 1 capital of the institution falls to below a certain limit. After the conversion, the institution is transferred to crisis management. CRD4 establishes that Additional Tier 1 capital must be converted to Common Equity Tier 1

capital, if the Common Equity Tier 1 capital falls below 5.125 per cent, cf. section 4.2.1. It is recommended to use the same limit as that which triggers the transition to crisis management for SIFIs, as under certain circumstances Additional Tier 1 capital may be included in the crisis-management buffer. This is also in order to avoid setting too many quantitative limits.

To ensure that there is always a considerable amount of capital available for crisis management, crisis management should also be triggered if the sum of the crisis-management buffer and the Common Equity Tier 1 capital falls below 10.125 per cent of the risk-weighted assets. In other words, the crisis-management buffer is always required. If the institution meets the requirements of the crisis-management buffer with Common Equity Tier 1 capital, the limit for transition to crisis management should correspondingly be 10.125 per cent. This is because the same amount of Common Equity Tier 1 capital will be needed for crisis management regardless of how the crisis-management buffer is met.

An institution may encounter problems at a level of Common Equity Tier 1 capital above 5.125 per cent of the risk-weighted assets, and accordingly, crisis management may be required at an earlier stage. Therefore, it should be possible to begin crisis management if the Danish FSA deems the institution to be failing or likely to fail, and if a private or supervisory initiative is unlikely to prevent the institution from failing within a reasonable time limit. This is called a "point-of-non-viability trigger", cf. also the proposal for a directive on recovery and resolution of credit institutions, as described in section 4.2.1. The basis for the assessment by the Danish FSA should be, according to the directive, an expectation of imminent breach of the capital, liquidity or other requirements, which are a prerequisite for the institution's right to operate.

The various triggers for crisis management will be further clarified in chapter 4.

Certain weakly capitalised institutions may be challenged in relation to selling the necessary convertible debt instruments on the market and thus meeting the requirement. In this case the requirement will in practice act as an additional Common Equity Tier 1 capital requirement since the Committee recommends that SIFIs should at any time have a crisis-management buffer of 5 per cent or corresponding Common Equity Tier 1 capital.

By converting or writing down the buffer in the event of crisis management, a considerable amount of Common Equity Tier 1 capital in the institution is ensured. This helps reduce the probability of losses for others than shareholders and owners of Additional Tier 1 capital and Tier 2 capital, and also reduces possible losses for other parties in connection with crisis management if these are incurred.

Specifically, convertible debt should be subject to minimum requirements to ensure it is available when needed. Such requirements will include that:

- The original maturity should be at least 2 years,

- The institution must ensure that one-eighth of the capital falls due in the same quarter,
- The instrument cannot mature, if the sum of Common Equity Tier 1 capital and the crisis-management buffer after repayments is less than 10.125 per cent of the risk-weighted assets,
- Early redemption or repayment on maturity can only take place after approval from the Danish FSA.

The terms and time of conversion etc. should be laid down by the institution and its creditors. Existing shareholders should expect a noticeable dilution in the terms of conversion to provide shareholders with a clear incentive to contribute new capital during the recovery phase.

It is possible that the Additional Tier 1 capital (“Hybrid capital”) and Tier 2 capital (“Subordinated capital”) of 3.5 per cent, which institutions can hold as part of the minimum capital requirement pursuant to CRD4, can be included as part of the crisis-management buffer provided the set requirements for the crisis management buffer are met. The proposal for a directive on the recovery and resolution of credit institutions is likely to introduce requirements according to which it will be possible to convert or write down Additional Tier 1 capital and Tier 2 capital.

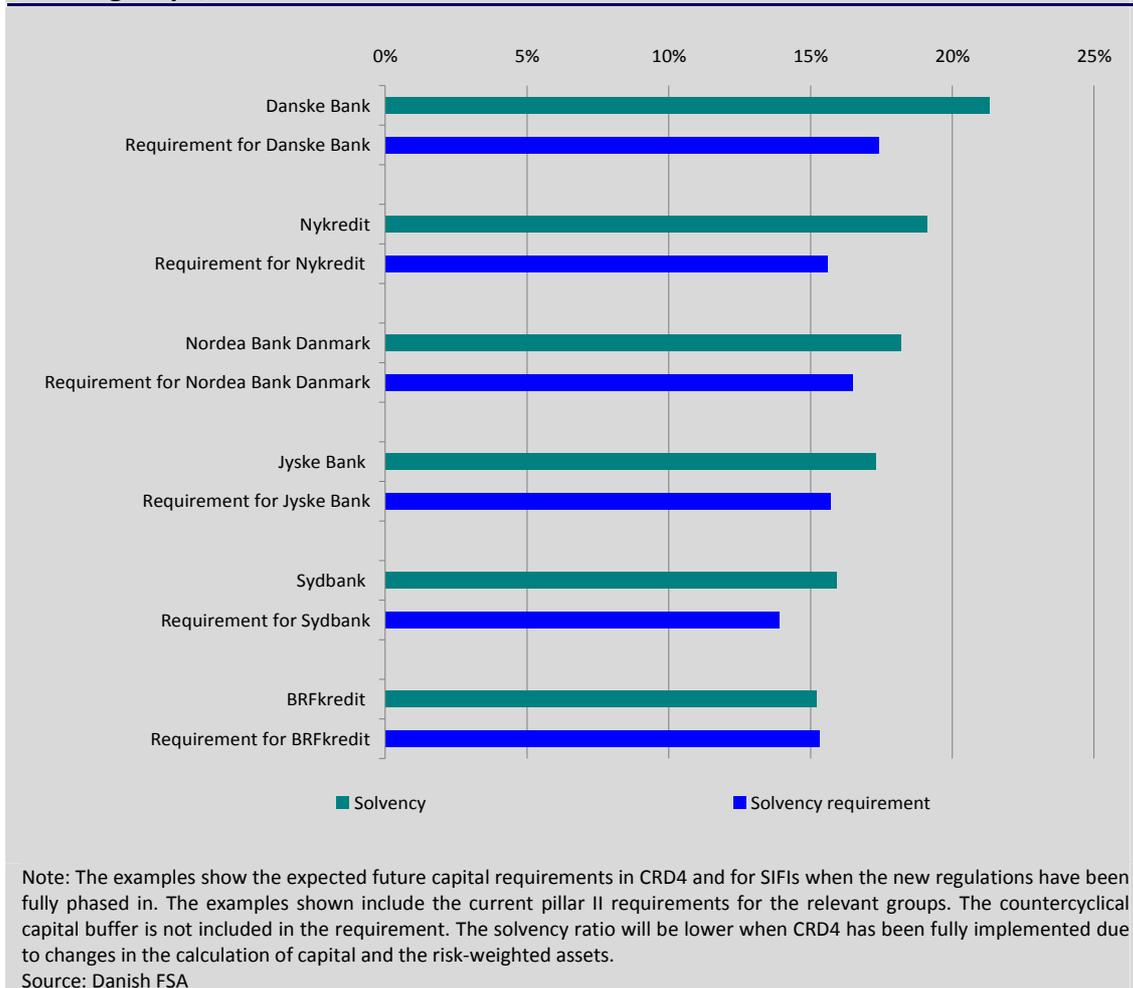
Therefore, after entry into force of the EU regulations, the actual additional requirement for the crisis-management buffer is likely to be 1.5 per cent of the risk-weighted assets.

Taking into account the overall effect on the institutions' willingness to lend of the proposed requirements, it is recommended that the crisis-management buffer is implemented over a three-year period from 2020, i.e. when the additional capital requirement for SIFIs has been fully phased in. This will make it possible to take into account the final EU regulations on recovery and resolution of credit institutions which possibly may influence the requirements for establishing a crisis-management buffer.

### **3.2.3 Overall recommendation on capital requirements**

In the above, it has been recommended to introduce a special SIFI capital requirement of 1-3.5 per cent of the risk-weighted assets in Common Equity Tier 1 capital, and to require the establishment of a crisis-management buffer of 5 per cent of the risk-weighted assets. The SIFI capital requirement is to reduce the risk of SIFIs failing, while the crisis-management buffer is to contribute to effective crisis management of the institution if it should fail nonetheless. Figure 19 sums up the overall capital requirements for the six institutions, which will be identified as SIFIs in Denmark, if the recommended approach is used, compared with the current capital situation of the institutions measured in terms of the solvency ratio.

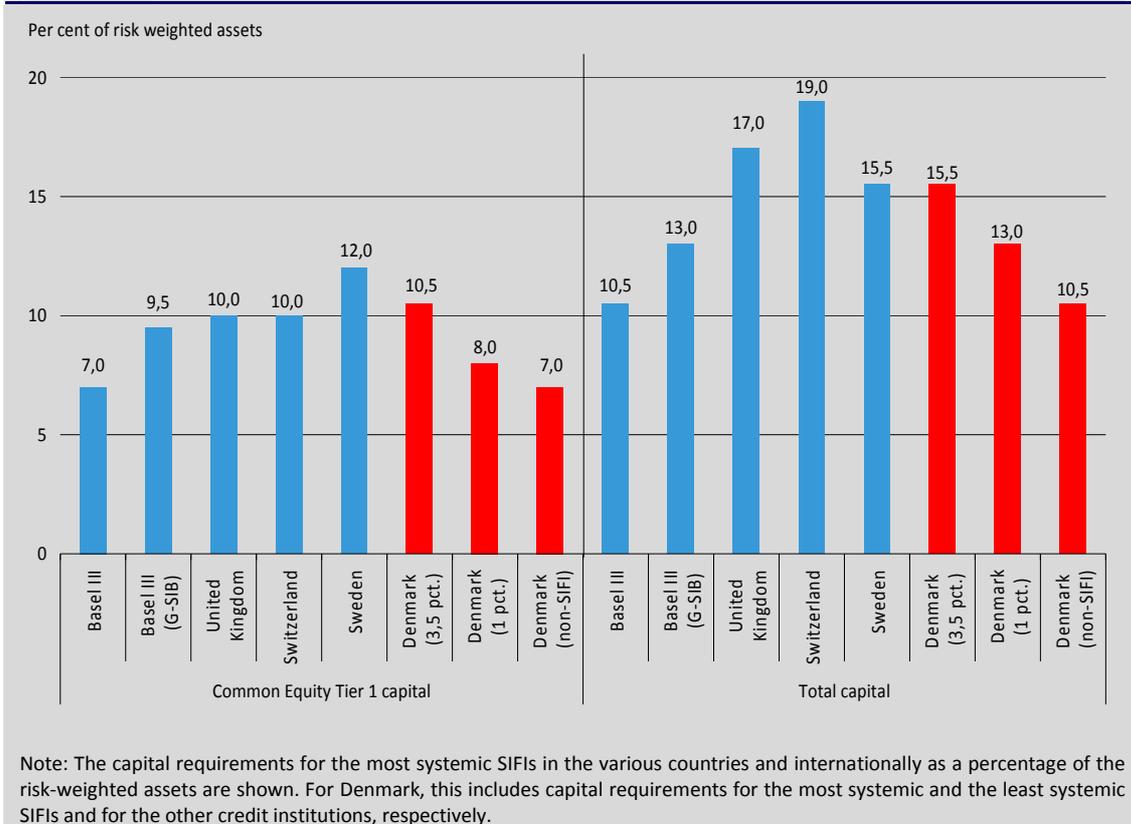
**Figure 19: Fully phased-in requirements for total capital and current total capital of the groups, 31 December 2012**



According to the figure, the total capital requirement for Danske Bank, which is the most systemic institution, will be 17.4 per cent, and this includes the pillar II requirement at the end of 2012 without taking into account the transitional provisions on the size of capital base. For the least systemic institution, BRFkredit, the total requirement will be 15.3 per cent. In all cases, the countercyclical capital buffer is assumed not to be activated. In relation to the figure, it should be noted that the current Additional Tier 1 capital and Tier 2 capital will not carry the conversion elements required for these to be used to meet the crisis-management buffer. These instruments will thus potentially have to be replaced by new instruments.

Figure 20 compares the highest and the lowest total capital requirements and the requirement for Common Equity Tier 1 capital for Danish SIFIs with similar requirements for SIFIs in other countries, which have introduced, or are introducing, SIFI regulation, as well as the international capital requirements (Basel). The figure does not include the pillar II requirement as this is not disclosed in other countries than Denmark. Here it is also assumed that the countercyclical capital buffer has not been activated. The figure also shows the capital requirements for other Danish credit institutions which reflect the requirements in CRD4.

**Figure 20: Capital requirements for Danish and foreign SIFIs and non-SIFIs (fully phased-in)**



The requirements recommended in Denmark will imply that the capital requirements for the most systemic Danish SIFIs will be higher than the international requirements set for the globally most systemic SIFIs. Generally, this is because international requirements are general minimum requirements which do not take national differences into account. The total capital requirement will be at the same level as the requirements for SIFIs in Sweden, whereas the requirement for Common Equity Tier 1 capital will be slightly lower than in Sweden. In this context, it should be noted that currently Sweden is proposing to use the same capital requirements for all SIFIs, whereas in Denmark, it is proposed to differentiate the capital requirement so that institutions can become subject to high or low capital requirements depending on whether they become more or less systemic over time.

Finally, it can be argued that because of the differences in the business model and accompanying risks of banks and mortgage-credit institutions there should be a differentiation in capital requirements for different types of institution. Such differences are specifically that mortgage-credit institutions traditionally have seen considerably less losses than banks and can thus be perceived as less risky. However, a differentiation is not considered appropriate as the different risks of the institutions are already taken into account in the recommended capital requirements. The SIFI capital requirement and the crisis-management buffer are thus measured in relation to the risk-weighted assets of the institutions which take into account the risk of the individual institution. The risk weights on secured loans, which largely comprise loans by

mortgage-credit institutions, are thus generally lower than the risk weights on other types of loan where no corresponding security on the loan has been given. In addition, the measurement of systemic importance is calculated on the basis of an average of the indicators based on total assets, loans and deposits. As mortgage-credit institutions have no deposits, by including the deposits indicator in their calculation of systemic importance, they obtain a significant reduction in systemic importance and thus potentially a lower capital requirement.

### **3.3 Requirements for the recovery phase and crisis management plans**

In order to help restore failing institutions to sustainable operations, it will be important to tighten the requirements for SIFIs in the recovery phase and strengthen the powers of the Danish FSA to intervene at an early stage.

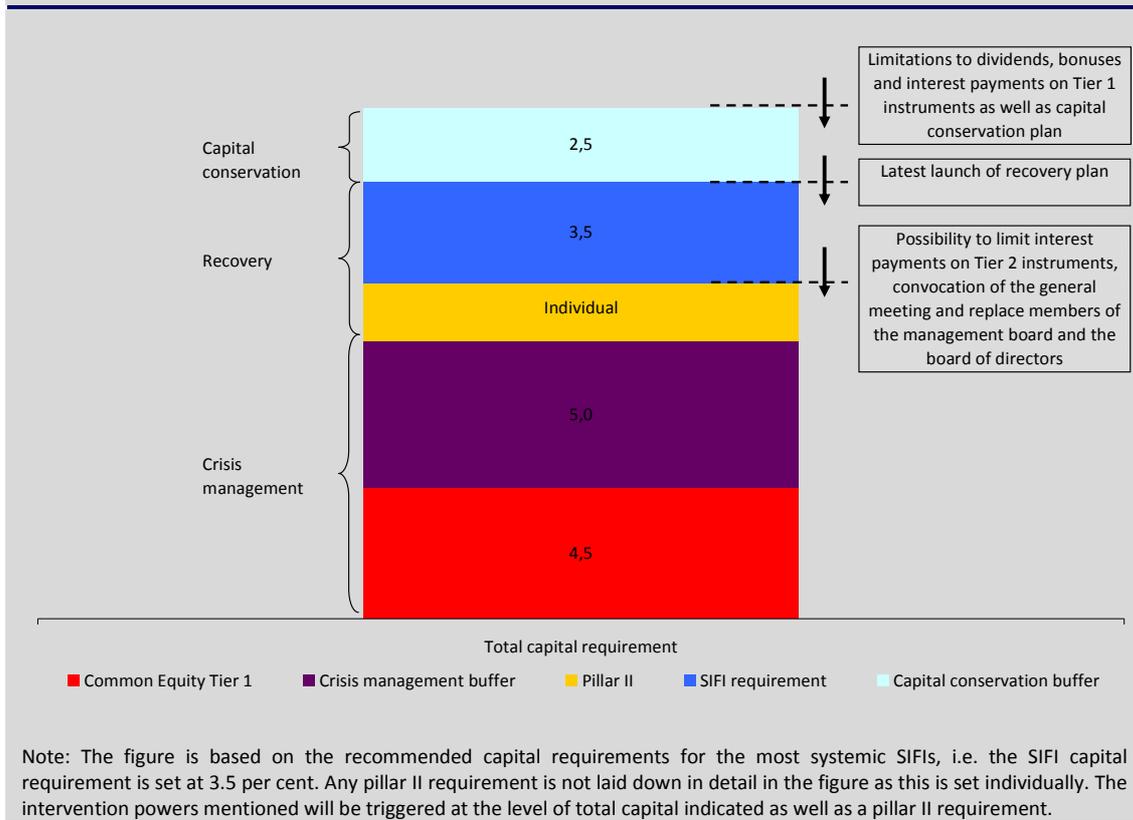
According to the Commission proposal for a directive on the recovery and resolution of credit institutions, all credit institutions will be required to prepare recovery and resolution plans. In addition, it is proposed that the supervisory authority have more powers to intervene during the recovery phase, cf. section 3.1.3.

#### **3.3.1 Capital conservation and recovery**

The management of an institution showing noticeable problems is initially expected to take initiatives itself to bring the institution back on the right track. This may be in the form of internal restructuring, raising additional capital in the market, selling parts of the business etc.

If the institution despite such actions breaches the capital requirements, the Danish FSA should be in a position to launch a number of initiatives to contribute to the recovery of the institution. Figure 21 illustrates the different phases the institutions may go through and indicates which other tools should be made available to the Danish FSA in the different phases.

**Figure 21: Tools for the Danish FSA in different phases**



Failing to meet the capital conservation buffer will, pursuant to CRD4, lead to restrictions on the ability to make distributions to shareholders, pay variable remuneration to employees and make payments on Tier 1 instruments. The sanctions must prevent further erosion of capital or reduction of current profit for as long as the institution is below to the buffer requirement. Furthermore, pursuant to CRD4, institutions will be required to prepare and forward a capital conservation plan to the supervisory authority for approval.<sup>38</sup> It is recommended that the capital conservation buffer is placed “at the top” in relation to the other capital requirements. Following the recommendations of the Committee, the most systemic institutions will enter this “capital conservation phase” at a level of total capital of 15.5 per cent plus the pillar II requirement and a level of Common Equity Tier 1 capital of 10.5 per cent plus the Common Equity Tier 1 capital which the institution uses to fulfil the pillar II requirement, cf. figure 21. The least systemic SIFIs will enter the capital conservation phase at a level of total capital of 13 pct. plus the pillar II requirement, and a level of Common Equity Tier 1 capital of 8 per cent plus the Common Equity Tier 1 capital which the institution uses to fulfil the pillar II requirement.

At the latest, the recovery phase will commence if the institution breaches the SIFI capital requirement. At this point the institution will have to launch the recovery plan. Thus, the Committee recommends that all SIFIs prepare individual recovery plans cf.

<sup>38</sup> Similar requirements apply in case of breaches of the countercyclical capital buffer. As this is generally not activated continually, focus is on breach of the capital conservation buffer.

the directive on the recovery and resolution of credit institutions. It should be possible for the Danish FSA to demand an earlier launch of the recovery plan than if the institution breaches the SIFI capital requirement, for example if the initiatives laid down in the plan will take significant time to take effect. It should also be possible - other than in cases of breach of the SIFI capital requirement - to activate the recovery plan if there is a breach of an individual trigger based on the liquidity situation of the institution. Generally, to prevent crisis management, the recovery plan should be launched well before the institution might come into conflict with either the requirement for Common Equity Tier 1 capital, an individual liquidity limit or similar. Thus in order for actions in the recovery plan to have the desired effect, time must be factored in.

Following the recommendations of the Committee, the most systemic institutions will enter the recovery phase, and will at the latest have to implement the recovery plan, at a level of total capital of 13 per cent plus the pillar II requirement and a level of Common Equity Tier 1 capital of 8 per cent plus the Common Equity Tier 1 capital which the institution uses to fulfil the pillar II requirement. The least systemic SIFIs will enter the recovery phase at a level of total capital of 10.5 per cent plus the pillar II requirement and a level of Common Equity Tier 1 capital of 5.5 per cent plus the Common Equity Tier 1 capital which the institution uses to fulfil the pillar II requirement.

The specific general requirements for recovery plans can be established in connection with any legislation work, but should, as a minimum, include guidelines for how the institution can restore its financial situation in cases of significant deterioration of this in different scenarios. This should include the specific initiatives such as raising capital, streamlining, restructuring and disposals etc. that the institution expects to implement in a possible recovery situation. Similarly, specific requirements for the institutions should be laid down in the recovery plans. The Danish FSA should approve the recovery plans and will also be responsible for supervising management of the recovery situation.

If the institution, in addition to the SIFI capital requirement, also breaches the pillar II requirement, the Danish FSA should be able to intervene more directly in order to ensure that further steps are being taken to recover the institution.<sup>39</sup> Already today, the Danish FSA has the authority to order an institution to take the necessary steps in situations where the financial position of the institution is so weak that the interests of depositors or investors are at risk, or if there is considerable risk that the financial situation of the institution will develop such that the institution loses its authorisation. This may be relatively late in the recovery phase, however.

The proposal for a directive on the recovery and resolution of credit institutions makes it possible for the supervisory authorities, if the management of the institution fails to launch its own initiatives, to intervene and lay down requirements for the institution, including e.g. the authority to convene the general meeting of the institution and to replace members of the management board and board of directors, cf. section 3.1.3.

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<sup>39</sup> An amendment was adopted recently which introduces a new approach to enforcement of the pillar II requirement. With this new approach, initial failure to comply with the requirement solely has a limiting effect on operations and thus does not make up the basis for any resolution of the institution - as has been the case in Denmark until now.

Similarly the Danish FSA's possibilities of intervention should be improved. Therefore, it is recommended that the additional powers conferred on the Danish FSA on early intervention, laid down in the proposal for a directive on the recovery and resolution of credit institutions are implemented for Danish SIFIs as soon as possible. Furthermore, in the event of a breach of the pillar II requirement, the Danish FSA should be able to restrict interest payments on Tier 2 instruments. If the recommended model is used, this will be the case for all SIFIs at a level of total capital of 9.5 per cent plus the pillar II requirement and at a level of Common Equity Tier 1 capital of 4.5 per cent plus the Common Equity Tier 1 capital the institution uses to fulfil the pillar II requirement.

As mentioned in chapter 4, the supervisory management of a recovery of groups of credit institutions with significant activities in other EU countries must already be coordinated and implemented in collaboration with the supervisory authorities in the supervisory colleges, including the EBA. This will also apply to Danish SIFIs with significant activities in other EU countries.

### **3.3.2 Crisis management plans**

In addition to recovery plans, in line with the proposal for a directive on the recovery and resolution of credit institutions, requirements should be laid down for preparation of crisis management plans for all SIFIs in order to prepare for effective and appropriate crisis management of failing SIFIs. As a minimum, crisis management plans should include a decision on the most appropriate crisis management powers to be used by the crisis management authority if an institution becomes subject to crisis management. In relation to groups, a crisis management plan should be prepared for the group as a whole and for the individual institutions in the group, as there may be special challenges in crisis management of group affiliated institutions.

The national crisis management authority should be responsible for preparing crisis management plans in close cooperation with the Danish FSA and Danmarks Nationalbank (the central bank), and with the involvement of the institutions deemed necessary. Management in the institutions must provide the information necessary for preparing the crisis management plan. Similar to recovery, crisis management of SIFIs with significant activities in other EU countries should be coordinated and implemented in cooperation with the crisis management authorities in the relevant countries. At Nordic-Baltic level, a cooperation agreement on crisis management of cross-border institutions has already been concluded, and a general crisis management group with participation of ministries, central banks and supervisory authorities has been set up, cf. section 4.5.

### **3.4 Liquidity requirements and leverage ratio**

In addition to capital requirements, the Basel III standards and CRD4 also include requirements that credit institutions should hold sufficient liquidity to be able to withstand stressed situations, and requirements for possible introduction of a leverage ratio to set a limit for the ratio of assets to capital for the institution. Unlike for capital

requirements, the FSB and the BCBS have not laid down tightened liquidity requirements or leverage ratios in their standards for global and national SIFIs.

In terms of introducing a binding leverage ratio, it is deemed most appropriate to await the conclusion of CRD4 in which such requirement is not likely to take effect until from 2018. However, in relation to SIFIs it will be appropriate to give the Danish FSA the legal basis to set requirements for leverage as part of its supervisory process on the basis of a concrete and individual assessment.

In relation to introduction of liquidity requirements, it should be noted that as of 1 January 2013, Sweden has introduced tightened liquidity requirements for their SIFIs in the form of requirements for the SIFIs to satisfy the short-term liquidity requirements in the Basel III standards (Liquidity Coverage Ratio - LCR).<sup>40</sup>

The LCR requires the size of liquid assets of high quality to be able to cover the liquidity needs of the credit institution for 30 days during stressed conditions. Compliance with LCR from 2013 is earlier than such requirement will be implemented at EU level. CRD4 includes the possibility of gradual phasing in for all or selected credit institutions from 2015 until 2018, although it may be possible to introduce the requirement with full effect from 2015. Already very early on, Switzerland decided to introduce a tightened version of the Basel III standards in respect of liquidity and leverage ratio.

It is deemed necessary to lay down special liquidity requirements for Danish SIFIs as the most recent financial crisis showed that access to financing on stressed markets may be central for the survival of credit institutions. Thus the aim is to ensure sufficiently robust liquidity in the largest institutions. Specifically, Danish SIFIs should fully comply with LCR from 2015, when the requirement will finally be laid down at EU level, so that the transitional period permitted until 2018, is not used.

Generally, the LCR applies to the total liquidity of the institution regardless of currency. As the institutions hold assets and liabilities in various currencies, liquidity management in institutions may result in currency risk in the form of failure to pay liabilities or obtain financing in a certain currency. For example, this was the case in the financial crisis in relation to the American dollar. In order to address these risks, the LCR for SIFIs should apply to each of the relevant currencies so that, for each currency, the SIFI holds sufficient liquidity to cover the need for 30 days under stressed conditions. The definition of significant currencies can either be made on the basis of the specific conditions in the individual institution or as currencies selected for all SIFIs. Therefore, the Committee recommends that LCR for SIFIs should apply to each of the institution's most important currencies with a view to ensuring sufficiently robust liquidity.

The Basel III standards also introduce a requirement for long-term stable financing (Net Stable Funding Ratio, NSFR) which is to ensure a better link between the long-term loans and financing of the institutions. With CRD4, this requirement, however, is not

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<sup>40</sup> This is a slightly adjusted version of the international requirement.

expected to apply until from 2018, if it is decided to introduce it in the EU. It is deemed appropriate to await conclusion of the EU regulations in this respect.

Significant dependence on short-term financing may, however, be problematic in stressed situations and may make recovery of the institution difficult. In order to limit dependence of short-term financing and thus ensure sufficiently robust liquidity for SIFIs, regardless of the fact that the NSFR has not been introduced, a requirement for the extent of the SIFIs' stable core financing is recommended. This is a simpler requirement than the anticipated NSFR. More specifically it will be relevant to set requirements in relation to the amount of the institution's deposits from e.g. retail customers and market financing with a maturity of more than one year as a per cent of the total loans of the SIFI. The Committee recommends introducing a requirement for stable core financing of SIFIs from 2014. When implementing the requirement, account should be taken of the mortgage-credit activities of the SIFI.

On the basis of a specific and individual assessment, as part of the supervisory process, the Danish FSA will still be in a position to set tighter requirements for liquidity and financing structure.

During the financial crisis, particularly the largest institutions have increased their use of financing on a secure basis, i.e. banks have put up assets as collateral for the liquidity raised as access to raising unsecured financing became more difficult as the crisis escalated. This development has emphasised the importance of SIFIs holding sufficient unencumbered quality assets during normal periods. Such quality assets may subsequently represent an extra buffer if the unsecured financing markets become unstable. This increases the SIFI's room for manoeuvre in periods of stress.

Currently, work is being carried out at EU level on ensuring, among other things, that the institutions have sufficient unencumbered quality assets at their disposal under normal circumstances. It is recommended to monitor this work very closely and if necessary, use the European conclusions as the basis for preparing requirements in this area for the Danish SIFIs. Naturally, this will not include mortgage-credit institutions, since their business model is based on secured financing in the form of mortgage-credit bonds.

### **3.5 Requirements for corporate governance**

In addition to tightened capital and liquidity requirements, it is deemed appropriate to set tightened requirements for SIFIs in respect of corporate governance. Requirements for corporate governance should contribute to ensuring that the institutions have internal procedures and guidelines, which, as far as possible, contribute to responsible and effective operation of the institution and thus reduce the risk that the institution fails. This is deemed vital for SIFIs as, due to their size, SIFIs are relatively complex and failing SIFIs may have great impacts on the economy.

Against this background, it is recommended that the following tightened requirements are laid down for SIFIs:

- The existing fit and proper requirements are also to apply to managerial staff in the institution and not just to the board of directors and the board of management.
- Special requirements for organisation and staffing of risk management functions are to be laid down. This means that the institutions have risk management at the same level as the best practice of international SIFIs, and that risk management is relevant in relation to the business model and complexity of the institutions.
- Special requirements are to be laid down in the IT area. Besides IT emergency plans dealing with failure of IT systems, the IT systems of institutions are to support effective and secure risk management of the institutions.

### **3.6 Requirements for strengthened supervision**

Furthermore, strengthened supervision of SIFIs is vital so that the authorities have a better foundation for early intervention in a SIFI, and are well informed if intervention becomes necessary. This will also be in accordance with international guidelines from the FSB, which highlight the importance of much stronger supervision of SIFIs, cf. section 3.1.4.

Already today, Danish credit institutions are subject to differentiated supervision, and the largest institutions are subject to more extensive supervision than the smaller institutions. However, there will be a need to formalise and further tighten supervision of the institutions identified as Danish SIFIs.

Strengthened supervision is assessed to include the following specific areas:

- *Increased focus on overall assessment of the institutions and benchmarking with comparable institutions.* There must be increased focus on the overall risk-taking of the institutions and comparison of this across the Danish SIFIs and in relation to comparable institutions in other European countries. Furthermore, a better overview should be ensured of the assessments by the market and market players of risks and institutions.
- *Increased focus on corporate governance* in the form of e.g. focus on quarterly review of the minutes of the board of directors, selected internal management reports, minutes from meetings in relevant internal committees, internal reporting from the compliance function, etc. Furthermore, it will be relevant for the Danish FSA to regularly examine the procedures regarding chief risk officers at institutions in order to focus on requirements for a pro-active and strong risk organisation of good quality.

- *Strengthened supervision and dialogue* in the form of an increase of the scope of fixed, recurring meetings with management or managerial staff in the institutions designated as SIFIs. Frequency and scope can be differentiated between SIFIs and depending on the managerial level. Furthermore, as part of the dialogue, explicit requirements should be laid down that SIFIs are to inform the Danish FSA early on about material circumstances such as intended strategy changes or organisational changes.
- *Increased focus on model risk and capital allocation* in the form of increased focus on model risk through enhanced identification of risks connected with internal models and securing appropriate risk hedging. It will also be appropriate to strengthen the supervisory focus on the relationship between allocation of capital and risk in order to reserve sufficient capital to cover risks both in the respective institutions of the group and at group level.
- *Increased inspection activity* in the form of an increase in the scope and/or frequency of onsite inspections, including in the form of cross-institutional thematic reviews among SIFIs. For example, annual functional inspections may be carried out in the most significant risk areas. In the credit area, it is likely that an annual inspection frequency will not result in increased supervision compared to today for some of the largest institutions (Danske Bank, Nordea Bank Danmark) whilst this could mean increased activity in relation to other SIFIs. In other risk areas (market risk, liquidity risk and IT) there will be increased supervisory activity.
- *More restrictive practice for authorisation of intra-group exposures* in the form of lower maximum limits for financial institutions in a SIFI group. A more restrictive practice for SIFIs will contribute to limiting the risk of intra-group contagion in the event of financial problems in parts of the group.

### **3.7 Requirements for subsidiary undertakings, including subsidiary banks of foreign groups**

Like other institutions, taking into account proportionality, Danish subsidiaries of foreign groups of credit institutions must comply with the requirements laid down in the Financial Business Act. The Committee recommends that the special requirements for SIFIs should apply to the designated groups and their respective subsidiaries in the form of credit institutions, including subsidiary banks of foreign groups. Subsidiary banks of foreign groups which are established in Denmark will have to comply with the requirements set in the Danish legislation notwithstanding a possible higher requirement set in the group's home country.

This means that capital requirements and requirements for a crisis-management buffer must be complied with at consolidated level for Danish subgroups and for the individual credit institutions of the group.

In connection with CRD4, it will be possible to wholly or partly grant exemptions from liquidity requirements (LCR and NSFR) for subsidiaries of credit institutions taking into account various conditions. However, the systemic importance of SIFIs is likely to make it difficult to grant exemptions from the liquidity requirements for subsidiaries. The liquidity requirements recommended at group level should therefore also apply to SIFIs which are subsidiaries of foreign credit institutions if the requirements are relevant for the type of institution.

In addition to applying to the group, recovery and crisis management plans should also be prepared for the individual credit institutions in the group.

The requirements recommended on corporate governance and the requirement for a strengthened supervision will also be relevant to all credit institutions in the group. A more restrictive practice for authorisations for intra-group exposures will also comprise SIFIs which are subsidiaries of a foreign group.

For SIFIs which are subsidiaries of a foreign group, the consideration for financial stability in Denmark requires the establishment of the same requirements for organisation as for other Danish SIFIs, including requirements in respect of management and control. However, intra-group outsourcing will be possible taking into consideration the ordinary regulations on outsourcing.

Allowing the SIFI requirements to apply also to the individual credit institutions in the group improves the possibilities of crisis management where e.g. parts of a group may continue in the event of problems in other parts of the group.

### **3.8 Overall assessment of the recommended requirements**

As previously emphasised, it is the view of the Committee that the additional requirements for Danish SIFIs are vital in order to support financial stability and to reduce the risk of the government having to bear the costs of crisis management of Danish SIFIs. Strong protective measures in the form of capital and liquidity requirements, requirements for corporate governance, strengthened supervision and an effective recovery plan will minimise the probability of SIFIs encountering serious problems requiring crisis management.

However, there must be an appropriate balance so that financial stability is supported as cost-effectively as possible. The additional requirements will add costs to the institutions. To a certain extent, additional requirements for SIFIs will increase their costs e.g. additional capital will need to be raised, more liquidity must be held, and recovery plans etc. need to be prepared. Increased costs can possibly influence the possibility for the relevant institutions to lend, particularly during the period when the institution is adapting to the tightened requirements. This may have a contagion effect on the wider economic situation.

In addition, transitional schemes have been incorporated in addition to step by step phasing-in of the Committee's recommendations, so that all requirements are not introduced right away and at the same time. The additional capital requirements for SIFIs are phased in over a number of years from 2015 to 2019. Moreover, the crisis-management buffer and the stability fund will similarly be phased in over a number of years, and not until from 2020, i.e. after the SIFI capital requirement has been implemented.

Most Danish SIFIs have already carried out part of the adjustments necessary following the Committee's recommendations, based on expectations of coming tightened regulations and expectations of stronger capitalisation in the financial markets. Thus the majority of SIFIs already meet the tightened capital requirements, as seen in figures 18 and 19, cf. section 3.2.

Such circumstances reduce the immediate strain on the sector from the recommended additional requirements.

Furthermore, the total costs of additional capital requirements are not necessarily large, as better capitalised institutions will usually be met with a lower expected return from creditors and shareholders and thus lower funding costs. Amongst other things, the increased costs will be in a relatively moderate extra expense due to corporation taxes, which generally makes financing through equity less attractive. However, if capital markets are well functioning, the burden of increased capital requirements is relatively moderate. Therefore, there will primarily be a transfer of risk between different players which can procure capital, and this should not increase total costs. If the institution holds higher equity, the risk of losses on subordinate loan capital and ordinary deposits will be reduced and thus interest rates will be reduced. However, some effect specifically in the short term cannot be ruled out if the capital markets only gradually adjust to the new conditions.

However, in the view of the Committee the overall effect on the economy of the proposed additional requirements for SIFIs will be positive in the long term. A stable financial sector is a fundamental prerequisite for long-term growth and employment and in the view of the Committee, the requirements recommended will significantly contribute to financial stability in the future.

The Committee is basing its assessment of the macro economic consequences of the recommendations on the international analyses from the FSB and the BCBS on the effect of similar requirements on the global economy. The FSB and the BCBS have estimated that the overall effect on the macro economy of the international capital requirements (Basel III), including the special requirements for global systemically important credit institutions, will be positive in the long term.<sup>41</sup>

Specifically, the additional capital requirement for global SIFIs is estimated to have a negative effect on global GDP of 0.1 per cent in the phasing-in period. Conversely, the advantage of the requirement is estimated to be that global GDP will be increased by

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<sup>41</sup> Cf. note 8.

approx. 0.4 per cent in the long term. Similarly, the overall Basel III regulations, including requirements for global SIFIs, are estimated to have a negative effect on global GDP of 0.34 per cent during the phasing-in period. However, the long-run permanent positive effects of a reduced probability of a systemic banking crisis are estimated to result in a higher global GDP of up to 2.5 per cent.

The FSB and the BCBS recognise that there are significant uncertainties connected with the estimate, but in all cases, there is clear indication that there will be a positive effect on the macro economy in the long term from the tightened requirements. It should be noted that in its proposal, the Commission similarly estimates that CRD4 the positive effects of the proposal will result in a higher EU GDP of around 2 per cent in the long run.<sup>42</sup>

Even though it is not possible to transfer the conclusion from the international surveys directly to Danish conditions, it is the view of the Committee that the estimated effects of the international regulation support the conclusion that tightened regulation of SIFIs will also have long-term positive effects on the Danish economy.

### **3.9 Summary**

In order to minimise the risk that Danish SIFIs fail, SIFIs should be subject to additional requirements. On the basis of international recommendations and the trends in other countries, such additional requirements are recommended to relate to a SIFI capital requirement and a requirement for a crisis-management buffer, requirements for preparation of recovery and crisis management plans, liquidity requirements, tightened requirements for corporate governance as well as requirements for strengthened supervision.

As negotiations on CRD4 and the directive on the recovery and resolution of credit institutions have not yet been finally concluded, future EU regulation in this area may still limit the room for manoeuvre at national level to set additional requirements for Danish SIFIs.

With regard to the issue of requirements for the internal organisation of credit institutions, including in particular separation of retail activities and investment activities, which are underway in the United Kingdom, France and Germany and proposed at EU level by the “Liikanen group”, it is deemed relevant to await any future EU regulation before taking a position on whether such requirements are relevant for Danish SIFIs.

Box 5 provides an overview of the Committee's overall recommendations on requirements for Danish SIFIs.

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<sup>42</sup> Cf. note 1.

## Box 5: Recommendations by the Committee on requirements for SIFIs

It is recommended that:

### Capital requirement

- A SIFI capital requirement is set which, with the recommended approach, is currently between 1 and 3.5 per cent of the risk-weighted assets, depending on the degree to which the institution is systemic. It is possible to set a higher requirement than 3.5 per cent if the institutions become more systemic.
- The SIFI capital requirement is met with Common Equity Tier 1 capital. The capital requirement is set at consolidated and individual level. The requirement is phased in until 2019.
- SIFIs are required to additionally hold a crisis management buffer consisting of debt which can be converted or written down. The buffer amounts to 5 per cent of the risk-weighted assets. Under certain conditions, this requirement can be met with existing hybrid capital and subordinated capital. The crisis management buffer is established over a three-year period starting in 2020.

### Recovery and crisis management plans

- Recovery and crisis management plans for Danish SIFIs are prepared. Recovery plans are to be prepared by the institution itself and approved by the Danish FSA. Crisis management plans are to be prepared by the crisis management authority in close cooperation with the Danish FSA and Danmarks Nationalbank (the central bank) and with the involvement of the institutions deemed necessary. The plans are updated annually.
- The recovery plan is launched at the latest if the institution breaches the SIFI capital requirement. The Danish FSA should have further means of intervention if the institution breaches the Pillar II requirement. These include the authority to convene the general meeting of the institution and to replace members of the management and board of directors of the institution as well as to restrict payments on subordinated capital (Tier 2 instruments). The crisis management plan is launched if the institution is to undergo crisis management.

### Liquidity requirements

- The short-term liquidity requirement (LCR) is phased in more quickly for SIFIs than what EU rules suggest. Concretely, SIFIs should fully meet the LCR requirement from 2015. Requirements are set for more stable funding for SIFIs from 2014, in order to ensure that the dependence of SIFIs on very short-term funding is reduced.

### Corporate governance

- The existing fit and proper requirements are expanded to also apply to managerial staff of the SIFIs and not just to the board of directors and the management. Special requirements are set for the SIFIs' organisation and staffing of risk management functions as well as the IT systems.

### Strengthened supervision

- SIFIs are subjected to strengthened supervision, which to a higher degree than today focuses on corporate governance, regular monitoring and dialogue, model risk and allocation of capital, increased inspection activity as well as intra-group exposures.

## ***Chapter 4: Crisis management of SIFIs in Denmark***

According to its terms of reference, the Committee is to assess how failing SIFIs can be managed such that the harmful effects on the economy can be limited as much as possible. Specifically, the Committee is to draw up recommendations for tools which should be included in a national regime for crisis management. The Committee is to look at international standards, including EU regulation as well as developments in other countries.

The health of a credit institution can vary over time as a result of the institution's strategy, the economic cycle, etc. Therefore, the institution can go through different phases spanning from normal operations, during which the crisis situations are prevented by the institution itself and by the authorities through regulation and supervision, to recovery measures by the institution or the authorities to ensure that the institution recovers if it is heading for problems, and ultimately to actual crisis management, which takes place if the institution fails.

This chapter examines how failing SIFIs can be managed in a crisis situation. Firstly the relevant Danish regulations and international developments in the area are examined, then specific crisis management tools are recommended for Danish SIFIs. It should be noted in this connection that since the future EU regulations for the area are still unclear, the Committee makes a general reservation regarding the precise design of a crisis management regime for Danish SIFIs. Therefore, the Committee's recommendations are principle-based and will have to be fully detailed in a subsequent legislative process.

Figure 22 illustrates the various phases - prevention, capital conservation, recovery and crisis management - and provides an overview of the Committee's recommendations. The figure corresponds to Figure 4 in the introduction. The recommendations regarding crisis management are described in more detail in the following.

**Figure 4: Overview of recommendations from the Committee in relation to requirements for and crisis management of SIFIs**

Total capital requirement ▶	Capital conservation buffer (2.5 pct.)	SIFI-requirement (1-3.5 pct.)	Pillar II (Individual)	Crisis management buffer (5 pct.)	Common Equity Tier 1 (4.5 pct.)	
	Capital conservation trigger	Recovery trigger	Crisis management trigger (10.125 pct.)			
Prevention	Capital conservation	Recovery	Crisis management			
Capital requirements	Capital conservation plan	Recovery plan	Convocation of general meeting	Conversion of crisis management buffer (5 pct.) to Common Equity Tier 1		
Liquidity requirements	Limitation on dividends		Replacement of members of the management board and the board of directors	Launch of crisis management plan and commencement of crisis management		
Recovery plans	Limitation on bonuses		Limitation on interest payments on Tier 2-instruments	The crisis management authority takes control and ownership and management is partly or fully replaced		
Crisis management plans	Limitation on interest payments on Tier 1-instruments			<b>Tools:</b> Bridge bank Sale of assets Debt write down Debt conversion Stability fund		
Corporate governance						
Strengthened supervision						
Bank management is in control – but involvement of the Danish FSA increases				The crisis management authority is in control		

Note: As a starting point the pillar II requirement shall be fulfilled with Common Equity Tier 1 capital, but may be fulfilled by subordinated capital which automatically converts if the institution breaches the solvency need.

## 4.1 Resolution regime for Danish banks and mortgage-credit institutions

The following section summarises the existing regulations on resolution for banks and mortgage-credit institutions in Denmark.

### 4.1.1 Existing resolution regime for banks

There is currently no distinction between crisis management of SIFI banks and other banks, respectively.

Bank Package 3 has introduced a resolution tool as an alternative to bankruptcy proceedings for failing banks. The aim is to ensure an orderly resolution which seeks to preserve the value of the institution's assets and support financial stability. Under Bank Package 3, the Financial Stability Company A/S takes over all the assets and liabilities corresponding to the value of the assets of the failing bank which are then placed in a

subsidiary established for this purpose by the Financial Stability Company A/S. Share capital and subordinated debt as well as a hair cut of the uncovered senior debt and uncovered depositors is left in the shell of the failing institution. The guarantee fund for depositors and investors also contributes to the resolution by taking the place of the covered depositors in the insolvent estate.

As an alternative to winding-up pursuant to Bank Package 3, the guarantee fund for depositors and investors may provide compensation to the institution taking over the entire failing institution. A prerequisite for using the compensation scheme is that such resolution incurs less cost for the guarantee fund for depositors and investors than winding up pursuant to Bank Package 3. Consequently, it is assessed whether, in specific cases, it is most appropriate to add funds or to place guarantees to cover the non-subordinated creditors of the institution, or to wind up the bank according to Bank Package 3.

When the failing bank receives a time limit from the Danish FSA for meeting the solvency requirements, the institution must decide whether it will be managed via the bank packages if it is not possible to meet the solvency requirement within the time limit. If this option is rejected, ordinary bankruptcy proceedings will commence after expiry of the time limit.

As the board of directors of the institution decides whether to be wound up through the bank packages, it is not considered expropriation when the Financial Stability Company A/S takes over the bank.

#### **4.1.2 Existing regulations on resolution for mortgage-credit institutions**

A Danish mortgage-credit institution has never been declared bankrupt, but there is detailed legislation on how a mortgage-credit institution should be wound up if this were to happen. The process is described in more detail in annex 3.

If a mortgage-credit institution is declared bankrupt, a liquidator takes over administration of the mortgage-credit institution. Even though a mortgage-credit institution is declared bankrupt, owners of bonds cannot claim early repayment of their bonds. The rights of borrowers, e.g. with regard to repayment, are also unchanged. This means that winding-up the institution can be gradual as loans expire. However, it is also possible to sell capital centres, i.e. parts of the institution which are linked to the bond issues by the loans granted and the collateral placed.

The liquidator will primarily consider the mortgage-credit institution as a number of capital centres which are to be treated as independent entities and which can be wound up independently. The liquidator must primarily seek to ensure prompt payment of investors in mortgage-credit bonds, cf. the bankruptcy hierarchy.

For each capital centre, the liquidator must honour the individual investors according to the type of investment they have made in the original mortgage-credit institution. The different types of investment are honoured in accordance with the following hierarchy:

1. Expenses for managing the estate in bankruptcy,
2. Covered bonds (SDO), covered mortgage-credit bonds (SDRO) and mortgage-credit bonds (RO)<sup>43</sup>, and
3. Junior covered bonds (JCB).<sup>44</sup>

Surplus funds in the capital centre and the "rest of the institution", after senior creditors have been repaid, are included in the bankruptcy estate for distribution to other creditors. Amounts due to holders of mortgage-credit bonds and other securities which have not been repaid in the capital centre or the "rest of the institution", are paid from the bankruptcy estate before payment of ordinary unsecured creditors. Owners of junior covered bonds (JCB) have a simple claim on the bankruptcy estate.

As described above, the regulations on bankruptcy are based on securing prompt payment for bond investors as far as possible. Claims from bond investors do not fall due automatically as a result of bankruptcy. The liquidator should regularly pay bond investors in accordance with the terms of payment for the bonds. This means that the bankruptcy is likely to last as long as the term of the longest bond.

## **4.2 International regulation and developments in other countries**

The following is a general description of international developments in the area with regard to crisis management for credit institutions. In this context, initiatives in other relevant European countries are addressed.

### **4.2.1 International regulation**

In 2011, the FSB adopted standards for the resolution of credit institutions. The objective of the standards is to ensure that all countries have effective resolution regimes which minimise costs for the government in connection with winding up credit institutions. Specifically, the standards contain a number of demands for institutions as well as new intervention powers for national supervisory and resolution authorities.

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<sup>43</sup> Mortgage-credit bonds (RO) are different from covered bonds (SDO) and covered mortgage credit bonds (SDRO) in that the lending limits applied for ROs only have to be observed at the time the loan is granted. For covered bonds (SDO) and covered mortgage credit bonds (SDRO) the lending limits must continuously be observed throughout the term of the loan. If the underlying asset falls in value, the credit institution therefore has to provide supplementary collateral. Therefore SDOs and SDROs have a lower risk-weight in the credit institution's solvency statement than ROs. SDOs are issued by banks and mortgage-credit institutions, while SDROs are only issued by mortgage-credit institutions. Sometimes both types of covered bonds are called SDOs.

<sup>44</sup> Junior covered bonds (JCB) are senior debt issued in order to place supplementary collateral in covered bonds (SDO)/covered mortgage credit bonds (SDRO) capital centres. However, revised legislation has recently been adopted on expansion of the scope to include RO capital centres and thus to include other purposes than supplementary collateral, e.g. supplementary collateral to maintain a rating.

In the EU, on the basis of the FSB's standards, the European Commission has presented a proposed directive on the recovery and resolution of credit institutions, cf. also section 3.1.1. The directive is still under consideration by the Council and the European Parliament. The description below is based on the original proposal from the European Commission.

The objective of the directive is to ensure uniform rules for crisis management, including through resolution etc., of credit institutions which are failing or likely to fail across EU borders. The directive covers all credit institutions, i.e. banks, mortgage-credit institutions and financial holding companies, and it does not just cover SIFIs. According to the proposal, the regulations are to enter into force from 1 January 2015, although there is an option for later implementation of the regulations on write-down of creditors, cf. below, which are to apply from no later than 1 January 2018. Each Member State is to designate a public resolution authority which is to have the power to utilise the resolution tools stipulated by the directive.

### *Resolution*

If a recovery is unsuccessful, and if the institution does not meet the central statutory requirements, the institution will be in a crisis situation which must be managed by the authorities. Under the proposed directive, a resolution process can therefore be initiated, if the supervisory authority deems that the institution is failing or likely to fail and there is no prospect that a private or supervisory initiative will prevent the institution from failing within a reasonable period of time (point of non-viability). Application of the resolution powers should be in order to meet specific objectives, taking into account a number of general conditions, cf. box 6.

## Box 6: Objectives and conditions for resolution

The objectives of resolution:

- Ensure that central functions can continue,
- Avoid significant negative impacts on financial stability,
- Protect tax-payers by reducing the need for state aid,
- Avoid unnecessary loss of value,
- Protect depositors.

Important conditions for resolution:

- Shareholders are the first to take losses,
- Creditors take losses after shareholders and according to the creditor ranking (hierarchy of claims) proposed by the directive,
- Management is replaced and is responsible,
- Creditors within the same class are treated reasonably, but different treatment can be justified for financial stability reasons,
- No creditor should suffer a larger loss in the resolution than they would have done if the institution had gone bankrupt pursuant to relevant bankruptcy regulations.

The proposed directive also contains four different resolution tools, which a resolution authority should be able to apply as a minimum. In addition to these resolution tools, the proposal does not exclude the individual country from having further resolution tools, if these do not prevent effective resolution of groups and are in accordance with the objects of the directive and the general principles for resolution. The four tools are:

- *Divestment*: This provides the resolution authority with the option to sell all or part of an institution on market terms and without the consent of the shareholders. The sale must be to a buyer with a permanent licence to operate such a company, e.g. another credit institution, and therefore the buyer cannot be a bridge bank.
- *Establishment of a bridge bank*: This provides the resolution authority with the option to sell all or parts of an institution's assets, rights and liabilities to a bridge bank which is wholly or partly government owned and which later can sell assets as part of an orderly resolution.
- *Asset separation*: This provides the resolution authority with the option to sell value-impaired assets to a publicly owned company (asset management vehicle) with a view to winding up these assets. At the same time it is important to ensure that the surrendering institution undergoes a restructuring.

- *Debt write down/conversion:* This provides the resolution authority with the option to do the following, without such being stipulated in the debt contracts in advance:
  - *Open bank model* - recapitalise an institution so that it meets the capital requirements by converting debt to Common Equity Tier 1 capital or by writing down debt. This avoids the institution in question having to be wound up, as the capital base is restored and the institution can continue operations. In order to utilise recapitalisation, there is a requirement that debt conversion or write-down will lead to a realistic possibility that the institution will subsequently be able to survive in the long term. In this context a restructuring plan should be prepared and an administrator should be appointed to prepare and implement this plan.
  - *Closed bank model* - write down debt or convert debt to Common Equity Tier 1 capital (in a bridge bank) as part of a transfer of assets and liabilities from the failing bank to a bridge bank such that the bridge bank only takes over debt corresponding to the real (impaired) value of the assets taken over.

The tools can be used singly or in conjunction, except for the asset separation tool, which is to be used with one or more of the other resolution tools. If the tools are utilised, except for write-down of creditors or debt conversion, there is a presumption that the part of the institution which is not to continue will be wound up. As a rule, the resolution tools will have to be utilised before it is possible to use public funds.

The directive on the recovery and resolution of credit institutions also contains requirements that it is possible to write down the Additional Tier 1 capital and Tier 2 capital if the supervisory authorities assess that the institution is no longer viable (point of non-viability trigger). Write down cannot take place until the institution's Common Equity Tier 1 capital has been fully written down. The supervisory authorities can decide to allocate Common Equity Tier 1 capital to the owners of the Additional Tier 1 capital and Tier 2 capital so that the write down actually corresponds to conversion to Common Equity Tier 1 capital. Such a write down and possible conversion of the capital is a requirement for application of the resolution tools in the directive. If the write down is sufficient to restore the institution, the institution will be able to continue operations without having to be wound up.

Pursuant to the directive on the recovery and resolution of credit institutions, there will probably also be requirements that Additional Tier 1 capital and Tier 2 capital must be written down or converted to Common Equity Tier 1 capital in the following situations: 1) the relevant authority decides that the institution will no longer be viable unless write down or conversion takes place; or 2) the institution has received state aid in the form of Common Equity Tier 1 capital. The possibility for write down or conversion should either be stipulated in a contract or by national legislation. CRD4 is also expected to

contain requirements for conversion or write down of Additional Tier 1 capital when the level of Common Equity Tier 1 capital of the institution falls below 5.125 per cent.

The form of the final EU regulations regarding write down and conversion of various capital elements has not yet been clarified.

The European Commission's proposal extends cooperation between the authorities with requirements on the establishment of a resolution college with participation from all relevant authorities from each country in relation to managing a group with cross-border activities. The resolution college will draw up a resolution plan for the group, and it will be a forum for decisions regarding resolution. In relation to resolution and when deciding which actions to take according to the proposal, the college must consider preserving the value of the group as a whole, limiting the impacts on financial stability in the relevant countries, and limiting the use of public support.

### *Financing resolution*

The directive stipulates that national financing arrangements should be established so that the resolution authority can apply the resolution tools effectively. The directive requires that, within a 10-year period, each Member State builds up a resolution fund, financed in advance, with assets of no less than 1 per cent of the covered deposit. If certain conditions are met, countries can choose that the national deposit guarantee scheme should also be utilised as a resolution fund. In this case there is no requirement to build up a separate resolution fund, but the assets of the deposit guarantee scheme must amount to 1 per cent of the covered deposits.

According to the proposed directive, the resolution fund can be used in different ways, including as guarantees, loans, means to purchase assets, etc. However, according to the proposed directive, the funds cannot be utilised until the possibility to cover costs by writing down shareholders' and creditors' assets has been exhausted. With this interpretation, it will, however, rarely be possible to utilise the fund in practice, as it will be possible to write down unsecured creditors to a considerable extent.

If there are not adequate resources in the fund to cover the costs of resolution, extraordinary contributions can be demanded from the institutions in order to cover the remaining costs. The proposal also contains provisions that, under certain circumstances, the funds in different countries should be able to borrow from each other.

### **4.2.2 Developments in other countries**

In the United Kingdom the expectation is that, in general, failing global SIFIs will be managed through a write-down of creditors at the highest level in the group, even if problems have arisen in an entity further down in the group. The view is that this will make crisis management more efficient and reduce coordination problems with host

countries.<sup>45</sup> In addition to this, specific legislation has been adopted on winding up credit institutions and this entitles the central bank to sell all or part of the institution to a private buyer, or transfer all or part of the business to a bridge bank. The legislation also provides for the possibility for temporary government ownership.<sup>46</sup> The forthcoming ring-fencing of retail banks, cf. section 3.1.5, will also make it easier to ensure continuation of systemic activities in a crisis-management situation. There is also an intention to change the creditor ranking (hierarchy of claims) so that the deposit guarantee scheme is ranked in front of all other unsecured creditors.<sup>47</sup>

In 2010, Germany adopted legislation to ensure appropriate management of SIFIs which breach the capital requirements. This enables the supervisory authority to transfer all or part of the assets and liabilities of an institution to a third party or a newly established company to ensure appropriate resolution of the institution. The German legislation also addresses the potential financing challenges in a resolution by establishing a restructuring fund, financed in advance by the financial sector. The fund can establish a bridge bank to which assets and liabilities can be transferred, it can purchase parts of the bridge bank, and it can guarantee claims against the receiving entity or recapitalise it.<sup>48</sup>

In the Netherlands, a new resolution regime entered into force in 2012, in which the Dutch authorities (the central bank in close collaboration with the Ministry of Finance) are to prepare resolution plans for the Dutch SIFIs. The resolution plans are to enable the Dutch authorities to continue operation of the critical functions of a SIFI while other parts are wound up. Owners and creditors will have losses corresponding to the losses they would have had in an ordinary liquidation process. The resolution regime also gives the Dutch central bank four new resolution tools which can be utilised when a court has confirmed that the conditions necessary for resolution have been met. These are i) transfer of the share capital of the failing institution to another institution (and thus the institution as a whole), ii) transfer of depositors to another institution, iii) possibility to split into a healthy ("green") and unhealthy ("red") bank (i.e. possibility to transfer assets and liabilities), and iv) establishment of a bridge bank which can temporarily take over all or parts of the failing SIFI, if there are no private buyers.<sup>49</sup>

In Switzerland, from 1 November 2012 the supervisory authority has been given extended powers in crisis management of failing banks. These powers are in line with the FSB's recommendations. As the resolution authority, the supervisory authority can now convert debt to equity in a restructuring of the institution. Depositors will rank before other unsecured creditors in a debt conversion. Creditors cannot recall their loans to the institution during the period in which the restructuring is taking place. The requirement that the Swiss SIFIs issue a specific amount of convertible bonds, cf.

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<sup>45</sup> Federal Deposit Insurance Corporation and the Bank of England, "Resolving Globally Active Systemically Important Financial Institutions", 10 December 2012.

<sup>46</sup> Banking Act 2009.

<sup>47</sup> The so-called "depositor preference". This issue is also being discussed in negotiations on the proposal on recovery and resolution of credit institutions.

<sup>48</sup> Deutsche Bundesbank, "Fundamental features of the German Bank Restructuring Act", June 2011.

<sup>49</sup> De Nederlandsche Bank, "Resolution Framework for Systemically Important Banks in the Netherlands", 11 July 2012.

section 3.2.2, means that the other unsecured creditors will be forced to convert at a later date and to a lesser degree, as convertible bonds are converted first.<sup>50</sup>

In Sweden, the government has introduced a scheme whereby government support, in the form of an injection of capital, guarantees or similar, can be given in connection with crisis management of failing credit institutions. In this context a stability fund has been established to finance crisis management of failing institutions. The fund is financed by the credit institutions themselves through an annual levy of 0.036 per cent of the total assets of the institution. The aim is to build up the fund to 2.5 per cent of GDP in 2023, corresponding to SEK 87 bn.<sup>51</sup> In connection with establishment of the fund, the government injected SEK 15 bn., and the government's shareholding in Nordea is part of the capital of the fund. The government will also cover the costs of crisis management, if there are not adequate resources in the fund.<sup>52</sup> The Swedish scheme has not been approved by the European Commission in accordance with state aid rules.

### **4.3 Crisis management tools for Danish SIFIs**

There are currently no specific tools for crisis management of Danish SIFIs. The regulations above are therefore the basis for all banks and mortgage-credit institutions, including SIFIs. However, the existing winding-up regulations may be inappropriate for resolution of SIFIs; both banks and mortgage-credit institutions.

Therefore, it is the view of the Committee that Bank Package 3 and the existing winding-up scheme for mortgage-credit institutions will generally not suffice for managing failing SIFIs. To protect the economy, it will be necessary to allow systemic functions of a failing SIFI to keep operating, rather than winding up the entire institution. Thus, the current assumption must be that the government could be compelled to intervene if, in a specific situation, it is perceived that the derived effects of a winding-up will be more harmful for the economy, including the government's finances, than if the government takes on a risk in relation to crisis management. This will increase the risk of losses for public finances which will ultimately have to be covered by Danish tax-payers.

On this basis the Committee recommends that alternative crisis management tools are made available for the authorities in addition to Bank Package 3 and the existing winding-up scheme for mortgage-credit institutions in order to give the best possible conditions for crisis management to be conducted without significant negative effects on the economy and without incurring costs for the government going forward.

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<sup>50</sup> Swiss Financial Markets Supervisory Authority, "Ordinance of the Swiss Financial Market Supervisory Authority on the Insolvency of Banks and Securities Dealers", 22 October 2012

<sup>51</sup> Calculation based on Swedish GDP for 2011 of around SEK 3,500 bn.

<sup>52</sup> Lag (2008:814) om statligt stöd till kreditinstitut.

Having the best possible conditions for crisis management of a SIFI without incurring cost for the government also improves the incentives for the owners and creditors. This ensures more equal competition between SIFIs and other credit institutions.

On this basis it is relevant to look at which alternative tools for the crisis management of SIFIs both banks and mortgage-credit institutions, which can reduce these risks associated with the existing tool box. In this context, the point of departure is the various tools in the directive on the recovery and resolution of credit institutions. The crisis management authority should have the power to utilise these tools. In a given crisis management situation, there will probably be a need for a combination of the different tools mentioned. The crisis management authority should therefore be able to use the tools flexibly.

As described in chapter 3.2 in relation to the crisis management buffer, the Committee recommends introducing several possibilities for activation of the crisis management process. For SIFIs, with the recommendations of the Committee, the 8 per cent requirement will thus no longer be a key element. The following possibilities should exist for an institution to become subject to crisis management:

- If the institution no longer satisfies a requirement of 10.125 per cent of total capital in the form of the minimum requirement for Common Equity Tier 1 capital of 4.5 per cent, plus a small addition of 0.6125 percentage points<sup>53</sup> laid down by the directive, as well as the crisis management buffer of 5 per cent.
- If the institution chooses to meet the crisis management buffer with Common Equity Tier 1 capital, similarly, the limit will be 10.125 per cent of Common Equity Tier 1 capital.
- If the institution meets the crisis management buffer with convertible debt, breaching a limit of 5.125 per cent of Common Equity Tier 1 capital will also lead to crisis management. On the other hand, breaching the requirement for 5 per cent convertible debt in the crisis management buffer will not trigger crisis management if the institution has adequate Common Equity Tier 1 capital to cover both its total requirement for Common Equity Tier 1 capital and the requirement for the crisis management buffer.
- Finally, the Danish FSA should have the power to decide that an institution has to undergo crisis management if the institution is not viable.

The reason for initiating crisis management for SIFIs earlier than for other institutions is to ensure that sufficient capital is available in the SIFI – specifically around 10 per

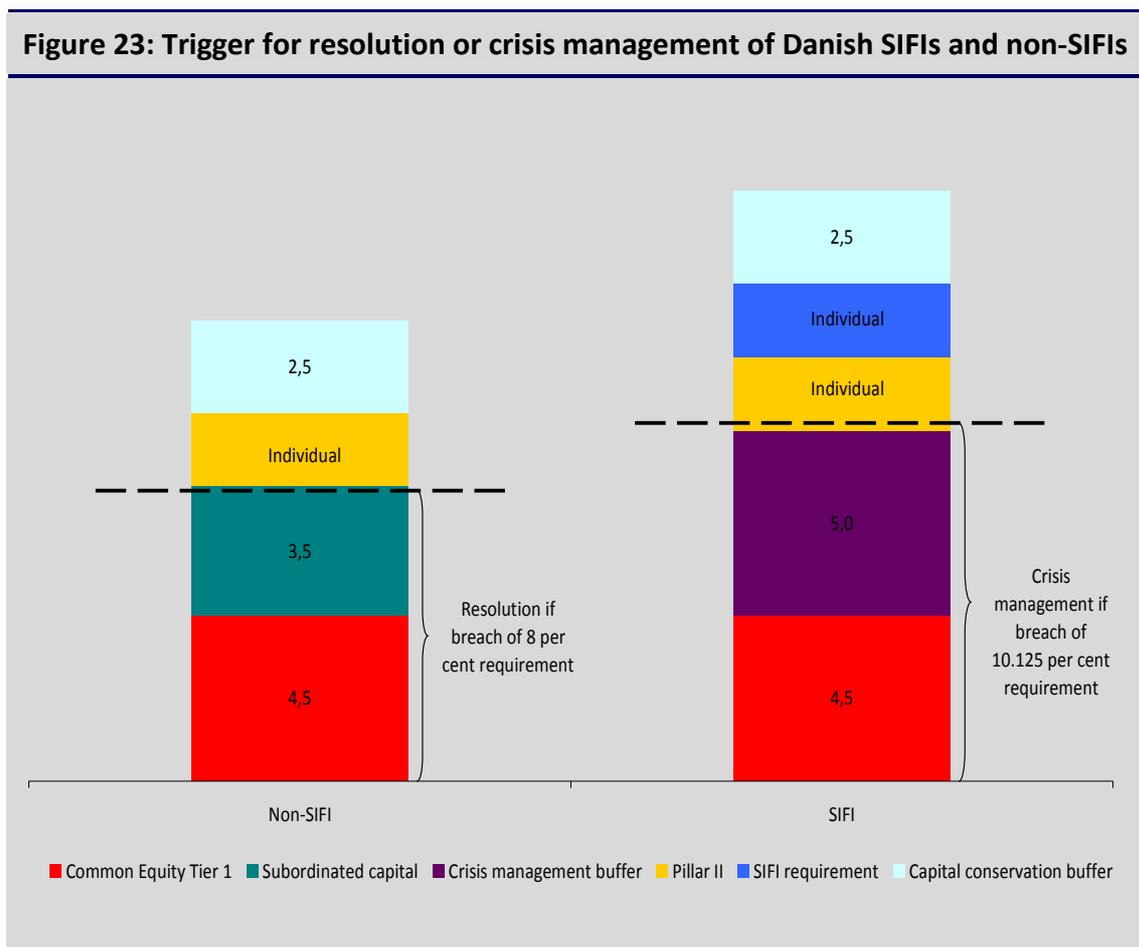
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<sup>53</sup> CRD4 includes a requirement that Additional Tier 1 capital must be written down or converted if the institution reaches a level for Common Equity Tier 1 capital of 5.125 per cent. As Additional Tier 1 capital may be included in the recommended crisis management buffer under certain circumstances, the Committee deems it appropriate to use the limit of 5.125 per cent in setting the trigger for transfer to crisis management. However, there is no general requirement in CRD4 or the proposal for a directive on the recovery and resolution of credit institutions that crisis management should be triggered at a level of Common Equity Tier 1 capital of 5.125 per cent.

cent Common Equity Tier 1 capital – to continue the operation of the systemic activities of the institution and reduce further losses.

Despite the recommendations for a number of different triggers for transition to crisis management, for reasons of simplicity, the report primarily works with a limit of 10.125 per cent total capital as the trigger for crisis management.

For non-SIFIs, resolution will be triggered if breaching the requirement for 8 per cent total capital, as is the case today. Figure 23 shows how the trigger for transition to crisis management for SIFIs differs from resolution of non-SIFIs.



The Committee recommends that the crisis-management authority should have the possibility of mandatory use of the crisis management tools. Given the systemic significance of SIFIs, it should not be possible for owners of a SIFI to "threaten" to allow the institution to go bankrupt rather than allow themselves to be managed under a crisis-management scheme, as a bankruptcy would have a very negative impact on the entire economy. The shareholders could have an incentive to make such a threat in order to force the government into rescuing the SIFI. This would probably be more beneficial for shareholders than a crisis management situation. The European Commission's proposed directive on the recovery and resolution of credit institutions also states that use of the crisis management tools should be mandatory.

Mandatory crisis management tools could, however, involve legal challenges which will have to be addressed, especially with regard to expropriation. If it is not possible in the short term to deal with the legal challenges of mandatory use of the crisis management tools, the Committee considers that initially the system should be based on a voluntary scheme so that implementation of the tools is not delayed. In a voluntary scheme the institution's general meeting will decide in advance that the institution, if it fails, will accept crisis management with the crisis management tools rather than going bankrupt. This approach has been applied in previous bank packages.

It should be noted that the recommended approach includes both a contractual possibility to write down or convert debt in relation to the crisis management buffer and statutory powers of write down or conversion of unsecured creditors. A contractual write down or conversion can not be expropriation.

The following description of the recommended crisis management tools is based on a presumption of mandatory use of the crisis management tools.

#### **4.3.1 Crisis-management authority**

It is recommended that a crisis management authority is established, which should be given responsibility for crisis management of SIFIs, in addition to a range of legally established crisis management powers in relation to credit institutions. It should be considered how a crisis management authority can most appropriately be organised, including whether this role could be given to an existing institution e.g. the Financial Stability Company A/S.

#### **4.3.2 Bridge bank with transfer of all or parts of the institution**

In the proposal for a directive on the recovery and resolution of credit institutions, the authorities, cf. section 4.2.1 will be authorised to transfer all or parts of an institution's assets, rights and liabilities to a bridge bank which should be wholly or partly owned by the state. The aim of a bridge bank is to ensure a value-preserving continuation of all or part of the institution, including in particular the systemic functions, with the intention of a later sale. The directive also allows for the crisis management authority to sell value-impaired assets to a publicly owned company with a view to winding up of these assets.

In connection with establishment of a bridge bank, the institution's systemic activities, assets with ordinary risk profiles and non-impaired assets can be transferred to the bridge bank and valued under the assumption of continued operation (going concern). The corresponding liabilities are also transferred to the bridge bank. The own funds and subordinated debt remain with non-systemic assets in the shell of the old institution, which is wound up.

If the assets transferred are less than the liabilities, the bridge bank will also receive a claim against the institution corresponding to the difference. The bridge bank is capitalised using one of the other crisis management tools, cf. below, and subsequently put up for sale in whole or in part at normal market conditions over a period of a few years.

The crisis management authority should have authority to establish and operate a bridge bank.

#### **4.3.3 Sale of assets to a third party**

Sale of all or parts of the institution to a third party could also be considered. For example, this could be relevant if an institution has suffered a moderate loss, i.e. that it cannot meet its capital requirement, but is still solvent. With regard to mortgage-credit institutions, this could involve selling one or more capital centres. A sale implies that both liabilities to bond owners and rights to receive payments from borrowers (incl. access to collateral placed by borrowers) being transferred to the buyer.

#### **4.3.4 Debt conversion**

The European Commission's proposed directive on the recovery and resolution of credit institutions also contains the option to convert debt to equity in a crisis management situation.

Contrary to a debt write down, cf. below, in a debt conversion the institution's creditors receive an ownership interest in the institution in the form of shares. Thus there is a recapitalisation of the institution, which then can continue all or part of its activities with new ownership. Therefore new share capital is added to the company in the form of converted debt. It will probably be necessary for the crisis management authority or an administrator to take responsibility of the company until a new board of directors has been elected by the new owners.

#### **4.3.5 Debt write down**

As described in section 4.2.1, the European Commission's proposed directive on the recovery and resolution of credit institutions contains requirements that the authorities be afforded general powers to write down unsecured creditors in connection with management of a failing institution.

The objective of the write down is to make it possible for the institution to be recapitalised by reducing its debt. This means that the institution can be restored and the crisis management authority or an administrator can take charge of operations until the institution can be sold. In practice, the tool should be applied with the bridge bank tool and there should be a recapitalisation.

Loans by mortgage-credit institutions are financed by issuing debt against collateral in the loan granted. This type of debt can usually not be written down under crisis management of a mortgage-credit institution. At the same time, the proportion of subordinate and unsecured debt is relatively small. In order to utilise debt write down in practice in crisis management of mortgage-credit institution, it is important that there are other types of debt which can be incorporated in a debt write down or debt conversion. In this connection, it should be noted that the crisis management buffer in itself provides increased possibilities for write-down and conversion.

The crisis management authority should have powers to organise such a debt write down on the basis of the same approach as in Bank Package 3.

Debt write down should be regarded as a final solution which could likely be relevant as a crisis management tool if the institution has negative own funds, cf. section 4.4.3.

#### **4.3.6 Stability fund**

The European Commission's proposed directive on the recovery and resolution of credit institutions requires that a resolution fund be established, possibly under the existing deposit guarantee fund, cf. section 4.2.1.

The Committee recommends setting up a stability fund financed by the Danish SIFIs to ensure a contribution from the financial sector to the crisis management of SIFIs. A stability fund can be phased in from 2020, after full phasing-in of the additional capital requirement for SIFIs. When setting up the fund, international developments should be taken into consideration, including in relation to the phasing-in of the fund and the size of the fund as well as the possibilities to use the fund in practice.

It is not certain that such a fund will be able to replace the proposed resolution fund, as it will not fulfil some of the current requirements in the proposal, including that all market players are to make payments to the fund. In connection with implementation of the directive, it will be important to assess whether it is relevant to establish such a fund, including whether it can and should be established separately from the existing guarantee fund for depositors and investors and whether the guarantee fund for depositors and investors can act as the resolution fund required in the directive for credit institutions which are not SIFIs.

The idea behind establishing a stability fund for SIFIs is to build up funds which can be utilised to finance crisis management of SIFIs. It will be appropriate to establish one joint stability fund for mortgage-credit institutions and banks. The fund could be utilised in conjunction with the other crisis management tools and could be used to support the liquidity of an institution during crisis management by guaranteeing assets or liabilities, granting loans or buying assets, or the fund could be used to recapitalise a bridge bank. The stability fund should be established as a self-governing public institution in which the crisis management authority can decide how the resources of the fund are to be spent.

It is proposed that the assets of the fund be built up as fixed annual contributions from the SIFIs based on the risk-weighted assets of the institutions. The contribution from the individual institution should be based on its share of the total risk-weighted assets of the SIFIs at the end of the previous year. Basing contributions to the fund on the institutions' risk-weighted assets is an attempt to take into account different business models. It should not be possible to demand extraordinary contributions in the event that withdrawals are made from the fund, as this would result in the risk of contagion between SIFIs. As the fund will only have to contribute to crisis management of SIFIs, only Danish SIFIs should make payments to the fund.

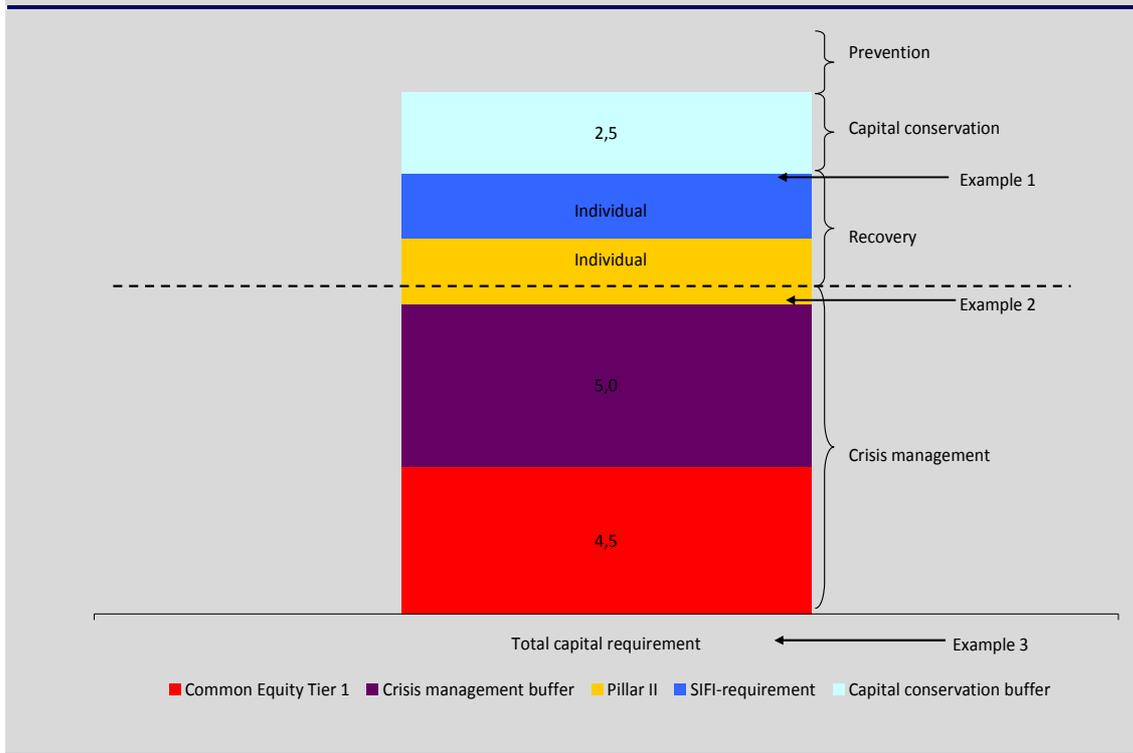
The establishment of a stability fund ensures that the financial sector in connection with using the crisis management tools makes a contribution to crisis management of Danish SIFIs and there will always be some resources to finance crisis management of Danish SIFIs. On the other hand, a certain amount of capital is bound outside the institutions and this will limit the flexibility of the institutions. Furthermore, the fund will presumably have to be large in order to be able to contribute significantly to financing crisis management of one of the larger Danish SIFIs.

#### **4.4 Examples of recovery and crisis management of SIFIs**

In order to illustrate the relevance of the various recovery and crisis management tools, specific examples have been listed below of recovery and crisis management of a SIFI, respectively.

The recovery example is a situation in which the institution is not yet failing. The crisis management examples deal in part with a situation in which the institution is to a lesser degree in breach of the capital requirement, and in part with a situation in which the institution has negative own funds. Figure 24 illustrates how the three examples fit into the recovery and crisis management process.

**Figure 24: Examples of recovery and crisis management**



In all of the examples it is relevant to seek to restore the viability of the institution in order to ensure that the systemically important functions primarily the capacity to lend is carried on without material impact on the economy and financial stability.

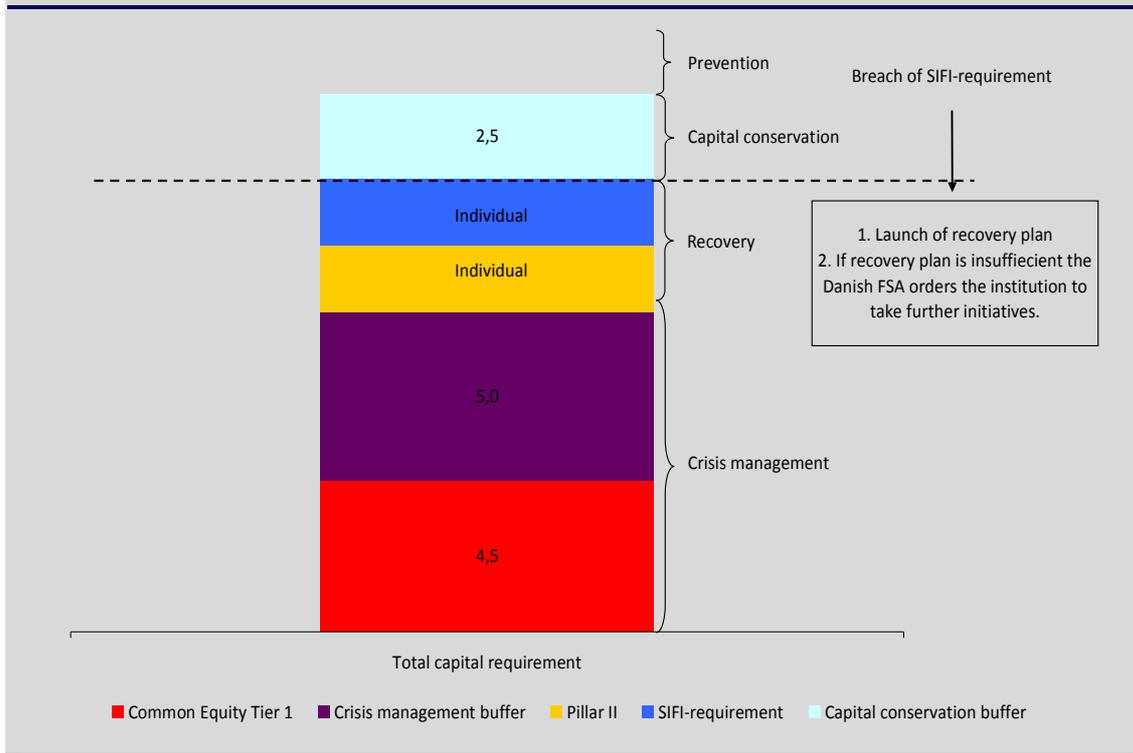
#### 4.4.1 Example 1: Recovery

The first example is a situation in which a SIFI is in the recovery phase but not failing. Specifically it is assumed that the SIFI has been made subject to limitations in connection with breaching the capital conservation buffer without being able to secure recovery of the situation. Therefore the SIFI is now also in conflict with the SIFI capital requirement and possibly also with the pillar II requirement and therefore it has entered the recovery phase.

The background for the current problems facing the SIFI could be weak earnings, increasing write downs and uncertainty regarding credit quality. The SIFI will probably move into crisis management unless there is an intervention.

As the SIFI is in conflict with the SIFI capital requirement, the institution's recovery plan will have to be activated. Figure 25 illustrates the process.

**Figure 25: Recovery of a SIFI**



If the Committee's recommendations for recovery plans are followed, cf. above, when exactly the recovery plan is activated will be specific for the individual institution. However, the plan must be activated no later than when the breach of the SIFI capital requirement occurs. Similarly the elements in the recovery plan will vary from institution to institution. Specifically, a recovery plan could include reduction or hedging of risks, increase in capital, divestment of legal entities or business areas, etc.

If the recovery plan cannot adequately ensure recovery of the institution, and the institution also breaches the pillar II requirement, it will be relevant for the Danish FSA to order the institution to take further initiatives to ensure recovery, in addition to those in the recovery plan. The Danish FSA will have extensive powers in this situation, but specific initiatives could be to demand changes in the board of directors or board of management, sale of assets, or similar.

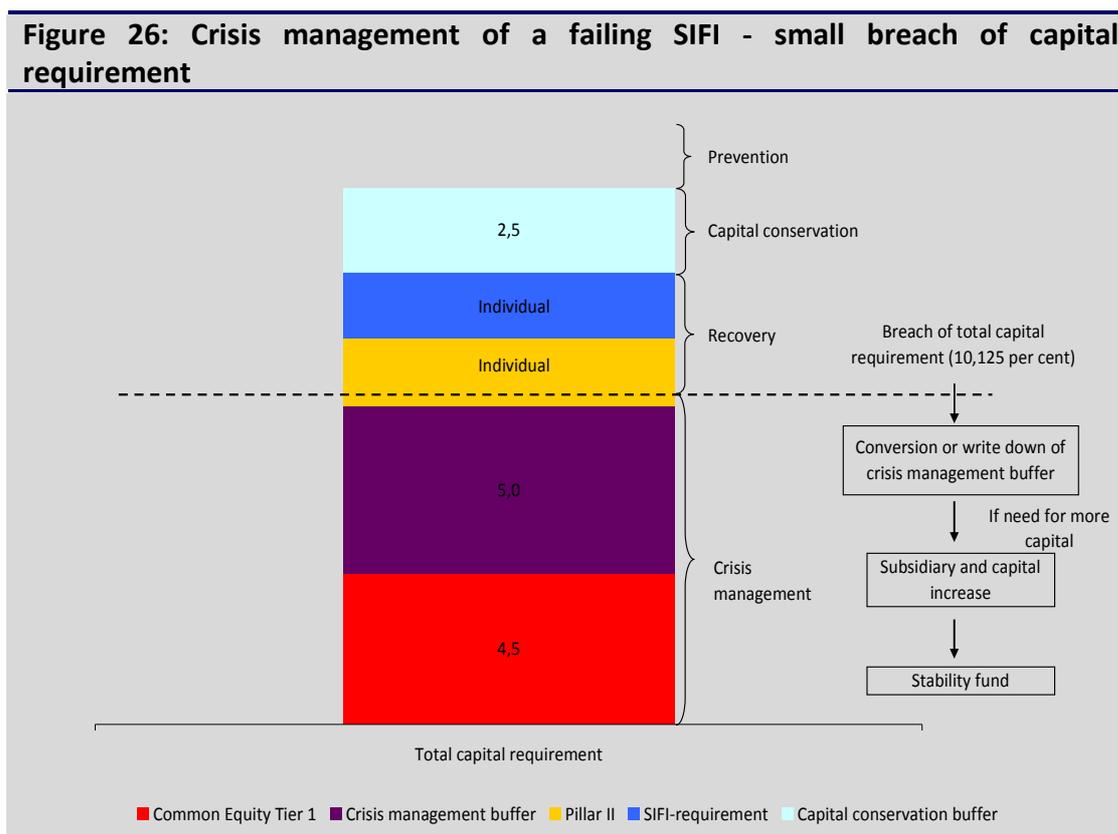
In a crisis situation in which the credit institution is in the recovery phase, but moving into crisis management phase or at risk of doing so, the institution may have problems in financing itself, for example as a result of lack of confidence in the institution or because of negative developments in the financial markets. However, with suitable collateral, solvent but non-liquid institutions will be able to borrow from Danmarks Nationalbank (the central bank).

#### 4.4.2 Example 2: Crisis management after a small breach of the capital requirement

In this example the institution could have been through the recovery phase without being able to secure recovery of the institution's capital position. Due to continuously weak earnings, considerable write-downs on the loans portfolio and generally negative economic trends, the institution will e.g. breach the total capital requirement of 10.125 per cent, cf. Figure 24 above.

When crisis management is activated, the institution's crisis management plan will be applied. This will be specific for the institution, but the following illustrates how crisis management could take place. The object of crisis management will be to recapitalise the institution so that it is again viable as the existing legal entity and satisfies all the capital requirements.

The first step in crisis management will be to activate the crisis-management buffer of 5 per cent so that the debt items are converted to Common Equity Tier 1 capital or written down. Therefore, when the crisis management begins, the institution will have Common Equity Tier 1 capital of approx. 10 per cent. Figure 26 illustrates the process.



The crisis management buffer can contribute to ensuring that there are assets in the institution to minimise losses for other parties in connection with crisis management. However, there will be a need for further capital to ensure recapitalisation of all or parts of the institution.

Such additional capital could for example be found by the crisis management authority having the board of directors of the institution sell the whole institution, or the most important parts of the institution, to a subsidiary for which the institution is the sole shareholder on establishment. The crisis management authority can then have the board of directors of the institution execute an increase in capital in the subsidiary through a rights issue for shareholders in the parent company. Given that there is still share capital in the institution at this time, the existing shareholders will have an incentive to subscribe to the new shares in order to protect their existing shares.

After the increase in capital, the subsidiary will continue operations with a new management and possibly new shareholders. As a prospectus will have to be prepared, there will be a need for a subscription guarantee to secure confidence in the institution up to completion of the capital increase. The capital increase could be guaranteed by a possible stability fund.

If some assets with a high risk profile are not transferred to the subsidiary, these assets could either remain in the parent company or be transferred to a separate subsidiary. In this case, capital is kept in the parent company to cover the risk in the relevant assets. Liquidity for this could come from a possible crisis management authority, stability fund or the subsidiary which continues the previous activities of the institution.

If such a capital increase in a subsidiary is not successful, it may be possible to raise further capital by applying other crisis management tools. Debt conversion could be relevant in this context.

The recapitalisation should be adequate to ensure that the subsidiary with the systemic and healthy parts of the institution is viable moving forward. There will be a requirement that the management of the institution is replaced and that the institution is restructured in the crisis management process.

#### **4.4.3 Example 3: Crisis management for significant breaches of the capital requirement**

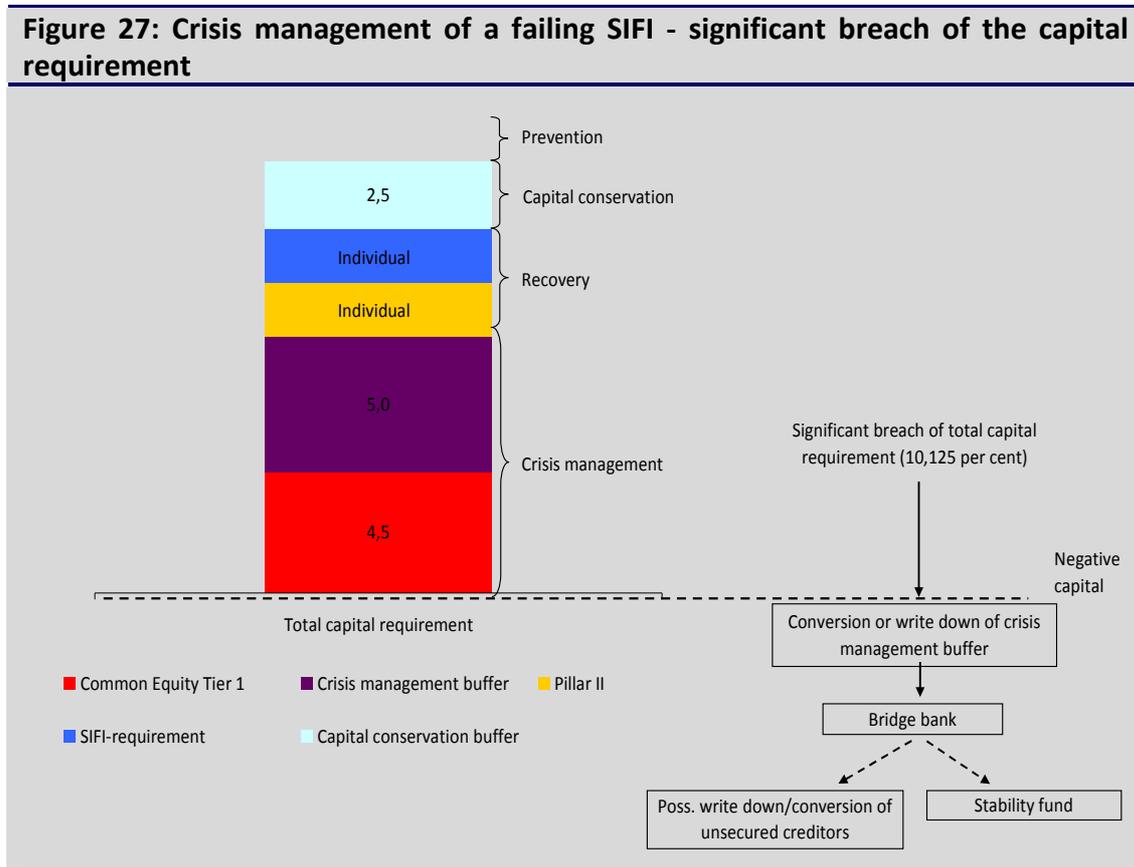
It is not very likely that a SIFI will suddenly have to undergo crisis management with negative own funds. It must be expected that there will be a gradual process in which the Danish FSA and the crisis management authority constantly monitor the SIFI and initiate crisis management as soon as the institution breaks the requirement for Common Equity Tier 1 capital or is assessed by the Danish FSA to no longer be viable, cf. example 2.

However, it cannot be wholly ruled out that, on the basis of sudden losses, e.g. as a result of operational risks (IT break-down or similar) or a large isolated loss on very risky or possibly unauthorised trading activities, a SIFI can suddenly enter a situation in which all its capital is lost.

In this case it will be necessary rapidly to isolate the systemic parts of the SIFI in order to continue these parts without large losses in the value of assets and without significant

losses in lending capacity. The systemic and healthy parts of the institution can therefore be transferred to a bridge bank, while the other activities of the institution are left in the shell of the old institution and wound up.

The crisis management process will primarily correspond to the description in example 2. Figure 27 illustrates the process.



If there is a breach of the capital requirement, the institution's crisis management plan will be activated. First there will be conversion or write down of the crisis management buffer in order to realise the first level of Common Equity Tier 1 capital to cover the losses and contribute to recapitalisation of the bridge bank. Because of the large loss, however, there could be situations in which, taking into account an assessment of possible consequences for society, the crisis management authority could choose to complete a write down or conversion of the institution's unsecured creditors. A possible stability fund could contribute to recapitalising the institution. The interplay between contributions from a possible stability fund and a possible debt write down and/or conversion will have to be examined more closely, also to ensure equal treatment of creditors and consistency with the coming EU regulation.

The recapitalisation should be adequate to ensure that the bridge bank with the systemic and healthy parts of the institution is viable going forward. It will be a precondition that the management of the institution is replaced and that the institution is restructured in the crisis management process.

#### **4.4.4 Summary**

It is the view of the Committee that Bank Package 3 and the existing winding-up scheme for mortgage-credit institutions will generally not suffice for managing failing SIFIs. To protect the economy, it will be necessary to allow systemic functions of a failing SIFI to keep operating, rather than winding up the entire institution. Thus, the current assumption must be that the government could be compelled to intervene if, in a specific situation, it is perceived that the derived effects of a winding-up will be more harmful for the economy, including the government's finances, than if the government takes on a risk in relation to crisis management. This will increase the risk of losses for public finances which will ultimately have to be covered by Danish tax-payers.

Therefore the Committee recommends that alternative crisis management tools are made available for the authorities in addition to Bank Package 3 and the existing winding-up scheme for mortgage-credit institutions in order to give the best possible conditions for crisis management to be conducted without significant negative effects on the economy and without incurring costs for the government going forward.

The alternative crisis management tools and the central focus on continuing the systemic activities of the SIFI can contribute to reducing the negative affects of a crisis in a SIFI. The purpose of the crisis management buffer and a possible stability fund is to contribute to ensuring adequate resources in the SIFI in connection with crisis management in order to cover losses and recapitalise the continuing parts of the institution, without the crisis management having significant negative consequences for society.

The possibilities to establish a bridge bank and/or buy assets should give the crisis management authority flexibility to continue the systemic parts of the institution as efficiently as possible.

The competences of the authorities to be able to write down or convert the creditors of the institution should help ensure that financing can be realised to cover losses and for recapitalisation, including in cases where the SIFI has suffered large losses. The possibility for debt write down is deemed only to be relevant in a situation with very high losses in the institution.

#### **4.5 Crisis management of the foreign activities of Danish institutions**

For a group with cross-border activities, regular supervision is coordinated in accordance with the relevant EU regulations in a supervisory college set up by the authority in the home country of the parent institution with supervision responsibility at group level. In addition to the group supervisor, supervisory authorities from the host countries for the subsidiaries or significant branches of the group parent institution as well as EBA are members of the supervisory college. According to the current regulations, the supervisory authorities in the supervisory college must jointly assess the risks of the group and the individual group companies, and make a joint decision on

the capital need. Moreover, the supervisory authorities should work together in the event of a critical development in the group's financial position and in the event of actual crisis management.

The European Commission's proposed directive on the recovery and resolution of credit institutions extends cooperation between the authorities with requirements to establish resolution colleges of all relevant authorities from each country to manage a cross-border group. The resolution college will draw up a resolution plan for the group, and it will be a forum for decisions regarding resolution. When implementing and deciding actions, according to the proposal, the college must consider preserving the value of the group as a whole, limiting the impacts on financial stability in the relevant countries, and limiting use of government support.

With regard to Danish SIFIs with significant activities in other EU countries in the form of subsidiary banks or significant branches, supervisory management of a recovery must already be coordinated and implemented in collaboration with the supervisory authorities in the supervisory college. The same applies for Danish SIFIs which are part of a foreign-based group.

In order to implement the initiatives in the 2008 European cooperation agreement on cross-border financial stability, in 2010 the authorities in the Nordic and Baltic countries established a cooperation agreement on cross-border financial stability, crisis management and crisis management.<sup>54</sup> The objective of the agreement is to enhance cooperation on prevention and crisis management in cross-border financial companies. The agreement is not legally binding, but it describes practical procedures for information sharing and coordination. A Nordic-Baltic coordination group has been set up in order to implement the plan.

Under the directive on the recovery and resolution of credit institutions it is likely that the Danish authorities will have to include the stability considerations of foreign authorities to a greater extent in managing crisis situations in Danish cross-border groups and institutions which are part of foreign bank groups. Danish implementation of methods for crisis management of SIFIs which are, or will be, part of cross-border groups can therefore not be regarded in isolation of implementation in other countries.

In connection with crisis management of a failing SIFI with cross-border activities, it may be relevant to consider whether the group structure of the SIFI is significant for how crisis management should proceed. Specifically, there may be a difference between how a SIFI should be managed, depending on whether the SIFI is organised with branches or subsidiaries abroad. If the SIFI has significant foreign activities in branches, there will be a need to coordinate crisis management with foreign authorities, including with regard to allocating financing of any losses. On the other hand, a branch structure will have the advantage that the authorities of the home country are responsible for crisis management. If subsidiaries are used, there may be a challenge in

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<sup>54</sup> "Cooperation agreement on cross-border financial stability, crisis management and resolution between Ministries, Central Banks and Financial Supervisory Authorities of Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden", 17 August 2010.

coordinating crisis management initiatives between the different authorities in the countries in which the SIFI has subsidiaries.

## 4.6 Summary

Today there are no specific tools for recovery and crisis management for Danish SIFIs. Given the special challenges in managing SIFIs, including the need to preserve lending capacity in society, it will be relevant to expand the toolbox of the crisis management authority to include, in addition to the existing tools, alternative tools which are particularly relevant for the recovery and crisis management of SIFIs.

It must be clarified how the crisis management tools, including especially in relation to debt write down and debt conversion, can be implemented in a legally appropriate way in Denmark.

The specific recommendations in relation to recovery and crisis management of SIFIs are stated in box 7.

### **Box 7: The Committee's recommendations for recovery and crisis management of failing SIFIs**

It is recommended that:

- The trigger point for beginning crisis management of a SIFI is set at 10,125 per cent total capital. This is in contrast to the trigger of 8 per cent for other credit institutions. Furthermore, the Danish FSA can decide to begin crisis management if the institution is no longer viable.
- A crisis management authority is established, and made responsible for crisis management of Danish SIFIs. It should be considered how a crisis management authority can most appropriately be organised, including whether this role could be given to an existing institution e.g. the Financial Stability Company A/S.
- It is made possible to make the use of the crisis management tools mandatory, contrary to the existing voluntary schemes.
- Alternative crisis management tools are introduced, providing the possibility of:
  - Establishing a bridge bank,
  - Selling assets,
  - Write-down of debt,
  - Debt conversion.

A stability fund financed by Danish SIFIs and possibly SIFIs from Greenland and the Faroe Islands is established, and phased in from 2020. When setting up the fund, international developments should be taken into account.

## ***Annex 1: Terms of reference of the Committee***

### **Committee on Systemically Important Financial Institutions in Denmark**

#### **Background**

In October 2011, the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS) adopted international standards on managing the global systemically important financial institutions (SIFIs). In November 2011, the G20 endorsed these standards. In spring 2012, the FSB is expected to present proposals for applying these standards to regional or national SIFIs.

The standards relate to (i) criteria for identifying SIFIs, (ii) the special requirements applicable to SIFIs, and (iii) the instruments to be applied if SIFIs encounter difficulties.

Some European countries (Switzerland, the United Kingdom and Sweden) have already declared that nationally they have systemically important financial institutions and they have indicated the requirements they will impose on these.

There are credit institutions in Denmark which are important enough for the Danish economy to be systemic and must therefore be subject to a special set of rules, cf. the political agreement of 25 August 2011 on a series of consolidation initiatives (Bank Package 4).

The Minister for Business and Growth has therefore set up a committee of experts to look into criteria applicable for being identified as a systemically important financial institution (SIFI) in Denmark, how the international requirements for SIFIs are to be implemented in Denmark, as well as how SIFIs which encounter difficulties are to be managed.

#### **The tasks of the Committee**

The tasks of the Committee shall be as follows:

##### **1) Criteria for being designated as a SIFI**

The Committee shall draw up recommendations for criteria suitable to determine which credit institutions are systemically important in relation to the Danish financial markets. In this context, the following criteria included in the standards issued by the FSB and the BCBS shall be incorporated: (i) the size of the institution, (ii) the connectedness of

the institution with the rest of the system, (iii) the possibilities for substitution of the role of the institution in the system, and (iv) the complexity of the institution (business, structural and operational). The Committee shall also assess whether there is a need to include other, including qualitative, criteria to identify SIFIs.

The Committee shall consider all types of credit institution and if necessary it can propose differentiated requirements for different types of institution.

The Committee shall also consider whether the recommended criteria are robust in relation to future developments in the sector and, if this is not the case, the Committee shall draw up recommendations for how the criteria can best be adapted over time.

Finally, the Committee shall assess whether there are SIFIs in Greenland and on the Faeroe Islands, and if so it shall draw up recommendations for the criteria to be applied to identify Greenlandic and Faeroese SIFIs, respectively.

## **2) Requirements for SIFIs**

On the basis of experience from the current financial crisis and in the standards from the FSB and the BCBS as well as legislation in the countries which have established a formal set of rules for SIFIs, the Committee shall draw up recommendations on the additional requirements to be imposed on SIFIs, including whether there should be differentiated requirements for different institutions.

In this work, the Committee shall investigate how a higher capital requirement for SIFIs can be implemented in Denmark, including what types of capital are necessary to meet the requirement, and what sanctions are to enter into force in the event of failure to meet the requirement.

The Committee shall also assess whether and if so how other types of requirements should be imposed on SIFIs, e.g. corporate governance, risk management, liquidity etc.

The Committee shall also assess what stricter supervision of SIFIs could entail.

In its deliberations, as far as possible the Committee shall strive to ensure equal competition between SIFIs and other credit institutions in Denmark, and between Danish SIFIs and SIFIs in other countries.

Finally, the Committee shall consider how to ensure that the requirements for SIFIs are robust against future developments in the sector.

## **3) Instruments for SIFIs which could encounter difficulties**

On the basis of standards from the FSB and the BCBS as well as legislation in the countries which have established a formal set of rules for managing failing SIFIs, the

Committee shall investigate how SIFIs which could encounter difficulties can be managed so that harmful effects on the macro economy are limited as far as possible.

Therefore the Committee shall draw up recommendations for tools to be included in a regime to manage SIFIs which may encounter difficulties, and as far as possible without involving public funds, including whether the SIFIs could be split up, requirements on preparation of recovery and resolution plans, etc.

## **Composition of the Committee**

The Committee shall be constituted as:

- One Chairman,
- Three expert members,
- One representative nominated by Danmarks Nationalbank,
- One representative nominated by the Danish FSA,
- One representative nominated by the Danish Ministry of Finance,
- One representative nominated by the Danish Ministry of Business and Growth,

The Minister for Business and Growth shall appoint the members of the Committee.

The secretariat of the Committee shall be the Ministry of Business and Growth, with assistance from the Ministry of Finance, the Danish FSA and Danmarks Nationalbank.

The Committee may involve external expertise if the Committee considers this necessary.

The Committee shall report to the Minister for Business and Growth before the end of 2012.

## ***Annex 2: Overview of classes of capital***

Below is a description of the various classes of capital as well as what can be recognised under the different classes. The individual elements are reviewed below.

### **Common Equity Tier 1 capital – CET1**

Common Equity Tier 1 capital has the greatest ability to absorb losses and therefore it is seen as being of the highest quality. Common Equity Tier 1 capital primarily includes paid-up share capital, guaranteed capital and cooperative capital, i.e. capital which either shareholders, guarantors or holders of cooperative shares have paid to the institution.

In addition to paid up capital, Common Equity Tier 1 capital also includes share premium as well as retained profits/losses. Share premium is the amount paid in connection with a new issue of shares which exceeds the nominal value of the shares. Retained profits/losses are composed of the institution's annual results retained in the income account and transferred to the balance sheet. Common Equity Tier 1 capital can also include the current year's profit, if this has been confirmed by an external auditor, and expected dividends and other predictable costs have been deducted. Finally, the Common Equity Tier 1 capital comprises other reserves which may be various provisions, e.g. provisions from surpluses in some subsidiaries. Various items should be deducted when calculating Common Equity Tier 1 capital, including any current losses, proposed dividends, intangible assets and deferred tax assets etc.

### **Tier 1 capital – Additional Tier 1 capital**

Tier 1 capital is composed of Common Equity Tier 1 capital, as described above, and Additional Tier 1 capital. In the calculation of Tier 1 capital, further items are deducted. Additional tier 1 capital is a hybrid between Common Equity Tier 1 capital and debt, as the instruments have characteristics reminiscent of both. Additional tier 1 capital can comprise 50 per cent of tier 1 capital after deductions.

According to the current Danish regulations, Additional Tier 1 capital must meet the following conditions:

- Minimum 30-year term
- Redemption at the initiative of the institution requires approval by the Danish FSA and can usually only take place after more than five years from initial deposit
- If a repayment date has been stipulated, this should not be combined with an incentive to redeem.
- If there is no repayment date, incentives to redeem should only take effect after 10 years

- The claims of the lender should be subordinate to all other debt, including subordinate loan capital
- Claims by the lender should not be covered by collateral
- Interest payments should cease if the institution fails to meet its capital requirement, if the institution deems that it is necessary for the health of the institution, or if the Danish FSA deems it necessary because of the financial or solvency situation of the institution
- It should be possible to write down the Additional Tier 1 capital if the solvency ratio or the Additional Tier 1 capital ratio falls below a previously set threshold value
- It should also be possible to convert the Additional Tier 1 capital to share capital or similar if the institution fails to meet the capital requirement or is failing in some other way.

With implementation of CRD4, a further tightening of the requirements for Additional Tier 1 capital is expected, including that the instrument may not include a repayment date and that there should never be an incentive to redeem.

## **Tier 2 capital**

The sum of the institution's Tier 1 capital (Common Equity Tier 1 capital and Additional Tier 1 capital) and Tier 2 capital makes up the capital base as various deductions are made in the calculation.

Tier 2 capital is primarily composed of subordinate loan capital, but revaluation reserves and Additional Tier 1 capital not included in Tier 1 capital can also be included. Revaluation reserves arise when certain assets are revalued to fair value.

According to the current Danish regulations, subordinate loan capital must meet the following conditions:

- The borrower's claim is subordinated all other non-subordinated debt
- Redemption before due date cannot be at the initiative of the lender or without approval from the Danish FSA.
- The institution must be able to write down the subordinate loan capital and unpaid interest if equity is lost.
- Payment of interest may be postponed if the capital base does not exceed the capital requirement

With implementation of CRD4, a further tightening of the requirements for Tier 2 capital is expected, including that the initial term must be at least five years.

### **Annex 3: Existing regulations on resolution for mortgage-credit institutions**

A Danish mortgage-credit institution has never yet been declared bankrupt, but there is detailed legislation on how a bankruptcy should be managed if this were to happen. In general, mortgage-credit institutions are composed of several different capital centres (series with series reserve funds<sup>55</sup>), from which bonds are issued in series, as well as a remainder known as the "rest of the institution", from which loans and bonds are also issued. The main elements of the resolution process are illustrated in figure 28.

**Figure 28: Distribution of funds on the bankruptcy of a mortgage-credit institution**

Step 1: Capital centre

1. Expenses for managing the estate in bankruptcy,
2. Claims from mortgage credit bonds (RO)/ covered bonds (SDO)/ covered mortgage credit bonds (SDRO) and financial instruments,
3. JCB,
4. Surplus funds are transferred to the bankruptcy estate.

Step 2: The "rest of the institution"

1. Expenses for managing the estate in bankruptcy,
1. Claims from mortgage credit bonds (RO)/ covered bonds (SDO)/ covered mortgage credit bonds (SDRO) and financial instruments, (but max. mortgage deeds + 8 per cent of the risk-weight of the mortgage deeds),
2. JCB,
3. Surplus funds are transferred to the bankruptcy estate.

Step 3: The bankruptcy estate

The ranking according to Part 10 of the Bankruptcy Act

1. Expenses for managing the estate in bankruptcy,
1. Claims from mortgage credit bonds (RO)/ covered bonds (SDO)/ covered mortgage credit bonds (SDRO) and financial instruments which have not been satisfied by a capital centre or the "rest of the institution",
2. Simple claims (including junior covered bonds (JCB) which have not been satisfied by a capital centre or the "rest of the institution"),
3. Capital base,
4. Share capital.

<sup>55</sup> The legislation only uses the term series or groups of series with series reserve funds. Mortgage-credit institutions use the term capital centre for such series. Therefore capital centres are series with series reserve funds.

If a mortgage-credit institution is declared bankrupt, the relevant legislation states how the creditors are covered (the bankruptcy hierarchy).

Step 1: Initially all revenues from borrowers are used as well as other funds in a given series (capital centre) to pay the expenses for managing the estate in bankruptcy. After this all holders of mortgage-credit bonds, covered bonds (SDO), covered mortgage credit bonds (SDRO)<sup>56</sup> (and other securities such as commercial papers which are used to finance mortgage-credit loans) in the series in question as well as claims for accrued interest on these. Counterparties to financial instruments (derivatives) established to hedge the risks in the series are equal in bankruptcy law to holders of mortgage-credit bonds, covered bonds (SDO) and covered mortgage-credit bonds (SDRO) in the relevant series. After this junior covered bonds (JCB) are covered.<sup>57</sup> Surplus funds are transferred to the bankruptcy estate.

The series (capital centre) is not liable for the liabilities which other capital centres or the "rest of the institution" have accepted, and initially they are wound up separately.

Step 2: In a bankruptcy, the same approach and bankruptcy ranking is applied for the "rest of the institution" as for the capital centres, cf. above. In many respects the "rest of the institution" is itself a capital centre. However, the assets bond holders have superior claims to in a bankruptcy situation can, in the "rest of the institution", amount to a maximum of the mortgage deeds corresponding to the bonds as well as an amount corresponding to 8 per cent of the risk-weighted value of the mortgage deeds. This means that there is a limit for the amount of assets in the "rest of the institution" to which bond holders have a superior claim. The 8 per cent limit corresponds to the minimum solvency requirement applicable for mortgage-credit institutions in the Danish Financial Business Act. Such a limit does not apply for capital centres for which all funds in the capital centre can be utilised to cover bond holders.

One can say that in the resolution situation Chinese walls are established between the individual capital centres in the institution (including the "rest of the institution"), which are then wound up separately. During winding-up of the individual capital centre, all senior creditors are satisfied (i.e. SDOs, SDROs, ROs and JCBs, but not ordinary simple and subordinated creditors).

Step 3: Surplus funds at the capital centre and the "rest of the institution", after senior creditors have been repaid, are included in the bankruptcy estate for distribution to

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<sup>56</sup> Mortgage-credit bonds do not fulfil all the same requirements as covered bonds (SDO) and covered mortgage credit bonds (SDRO) and therefore they weight 0.2 in the capital adequacy statement when financial undertakings invest in them. SDOs and SDROs satisfy the requirements of the EU Capital Requirements Directive and therefore they weight 0.1 in the capital adequacy statement when financial undertakings invest in them. SDROs satisfy both the regulations applying for mortgage-credit bonds and the regulations applying for SDOs. The biggest difference is that SDOs and SDROs must monitor that the lending limit is always observed, and if it is exceeded supplementary collateral must be provided. It is not necessary to provide supplementary collateral for mortgage-credit bonds, irrespective of whether the lending limit is subsequently exceeded, e.g. as a result of a fall in property prices.

<sup>57</sup> Junior covered bonds (JCB) are senior debt issued in order to place supplementary collateral in capital centres for covered bonds (SDO)/covered mortgage credit bonds (SDRO), or for other purposes such as maintaining a rating.

other creditors. Amounts due to holders of mortgage-credit bonds, covered bonds (SDO) and covered mortgage-credit bonds (SDRO) and other securities as well as claims for accrued interest, which have not been repaid in the capital centre or the "rest of the institution", are paid from the bankruptcy estate before payment of ordinary unsecured creditors. Owners of junior covered bonds (JCB) have a simple claim on the bankruptcy estate.

At the request of the Danish FSA, the bankruptcy court decides whether an institution (in this case a mortgage-credit institution) is to be declared bankrupt or taken under financial reconstruction. In bankruptcy situations, the bankruptcy court appoints a liquidator to manage the bankruptcy proceedings and in reconstruction situations the bankruptcy court will appoint a reconstructor.

Funds cannot be transferred between capital centres and the "rest of the institution" after notification of reconstruction or issuing the bankruptcy notice. This binding applies until cessation of the reconstruction. For bankruptcy, the surplus funds are included in the bankruptcy estate, cf. above.

For both bankruptcy and reconstruction<sup>58</sup>, as far as possible the institution must continue to honour its payment liabilities. In the event of a bankruptcy or a reconstruction, with the consent of the liquidator/reconstructor, the institution can establish agreements on financial instruments and take up loans to pay investors. Finally, the liquidator/reconstructor can issue refinancing bonds in the relevant series if, after the issue, it is likely there will be sufficient funds to pay claims from bond investors and claims from the financial counterparties in the capital centre.

Refinancing bonds have corresponding collateral ranking as the bonds they replace. Refinancing bonds can only be issued by a liquidator or reconstructor to the extent they deem that it is necessary to utilise such bonds to secure the assets in the series or group of series, if this is in the interests of all the creditors (bond investors).

The revenues from the issue of refinancing bonds can only be utilised to redeem bonds that expire. The liquidator or reconstructor can also take out loans (except for refinancing bonds) to satisfy payment of liabilities (e.g. interest payments) and thus provide collateral in the first mortgage instalment from the borrowers on the mortgages. With consent from the reconstructor and permission from the Minister, the liquidator or the institution can agree to transfer all of a series or group of series with a series reserve fund (capital centre) to another mortgage-credit institution.

Issuing a bankruptcy notice to a mortgage-credit institution cannot be applied by bond investors or holders of junior covered bonds (JCB) to justify premature redemption of payment liabilities. Neither does issuing a bankruptcy notice deny borrowers their right to carry out part or full redemption of mortgage-credit loans in accordance with the terms of redemption applicable for the loan. Borrowers can therefore still buy and

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<sup>58</sup> In accordance with the relevant regulations in the Bankruptcy Act, reconstruction makes it possible for insolvent, but viable companies to survive, possibly in a new form.

surrender underlying bonds to redeem the loan or otherwise redeem the loan in accordance with the agreement.