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# DISTRESSED BANKERS CRISIS MANAGEMENT

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# DISTRESSED BANKERS CRISIS MANAGEMENT

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# 1 Subject, problem statement, method and sources of law

When the financial crisis broke out around 2008, financial institutions were the subject of much attention solitude. Several financial institutions ended up having to be liquidated through banking packages, for example EBH Bank, Løkken Sparekasse and many more.1 In the wake of the financial crisis, Basel began the committee to work on a new set of regulations to strengthen financial robustness across financial institutions and thus hopefully prevent another financial crisis.2 Basel Committee ar work has resulted in austerity in many areas for the financial sector, among other things as regards the requirements for the capital with which financial institutions have to 'pad' themselves. In this thesis we will take a closer look at the capital requirements banks must meet and, in addition, also how it should be done handled when the requirements are not met and which tools can be used to again meet the capital requirement. In the thesis, we will use a case-based approach to the regulation etc. we process. We primarily start from a highly current case in the form of Østjydsk Bank A/S, which on 21 December 2017 announced via a company announcement that the bank, after an in inspection from the Danish Financial Supervisory Authority had to find that it no longer complied with the law's requirements for ca pitalen.3 In addition, we use other cases and references where relevant.

Our problem statement reads as follows:

We will analyze some nearby tools that can be used by banks that are in crisis

due to a breach of the capital requirement rules. We will continuously assess the effectiveness of the tools as well as con sequences.

In order to answer the formulation of the problem, we must necessarily include several types of legal sources including EU treaties, EU regulations, EU directives, laws, statutory orders and announcements. The reason for this is that all these sources of law affect, for example, banks' capital requirements and the crisis management rules that come into force in certain cases. With such a wide application of legal separation 4 there we find it relevant to first explain their characteristics and mutual hierarchy.

An EU treaty is an agreement under international law which is entered into between states and which is therefore binding point binds the states and not the citizens of the countries concerned. In this thesis, the EU function will onstraktat (= Treaty on the Functional Area of the European Union), hereafter TFEU, remain

<sup>&</sup>quot;See the list of the failed Danish banks here", article from Ritzau published on www.nordjyske.dk on 30 January 2013

<sup>&</sup>lt;sup>2</sup> "History of the Basel Committee" of 14 April 2018. Available on the Bank of International Settlements website: www.bis.org, under History of the BCBS. The Basel Committee is part

of BIS 3 Company announcement no. 11/2017 published by Østjydsk Bank A/S on 21 December 2017

<sup>&</sup>lt;sup>4</sup> Hansen, Lone L. & Erik Werlauff: The legal method – an introduction, chapter 3

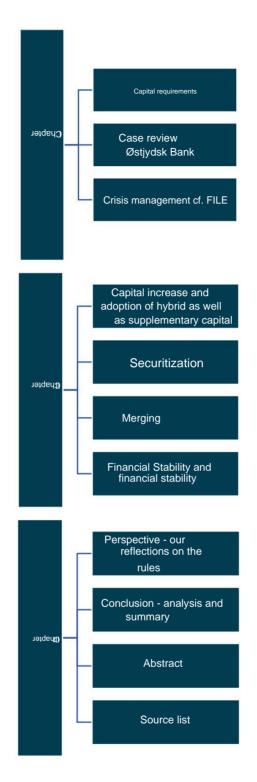
involved. A regulation and a directive are both sources of law which are issued by the EU after adoption in the EU's Council of Ministers and Parliament, respectively. A regulation has the same legal effect as a Danish law, that is to say that from its effect it applies to Danish persons, companies and authorities. Directives, unlike regulations, do not have direct legal effect, but must instead implemented in Danish law, which usually happens via laws. The member states of the EU are obliged to implement the directive within a specified time limit. <sup>5</sup> Examples of for scheme and directive relevant to this task are CRR and CRD, which we will come to further into.

A law is a source of law issued by the Danish Parliament, and what is included in a law confers rights and obligations for Danish individuals and companies. When a law needs to be changed, it happens as a starting point when issuing amending laws, which in principle can only contain one celt change. In order to create an overview of an original law and the subsequent amending laws, legal notices are used. Statutory orders are in effect a law, but in team-wise, a compilation of the main law with accompanying amending laws. Notices, which must not be confused with statutory orders, is a legal regulation that can be authorized in a law. If the content of an executive order is authorised, it has legal effect, just like a law got it. The issuer will often be the relevant ministry or agency, and thereby a large part of the competence for the area in question transferred from the Danish Parliament to another party. Often, notices are of a high degree of detail and may need to be updated often, which may be the reason why the information is partly not desired in the law itself, and partly because a party other than Folke the Thing has the right to issue the executive order.

In addition to legal sources, we also use books, articles, websites for e.g. public authorities there and the like. In cases where we use these sources, we will continuously assess the validity of the source. If we are in doubt about the validity, we note this when using the source, if the source is used for to substantiate a central point in the thesis.

The thesis is divided into three chapters. Chapter I will contain the legal and theoretical basis which we assess, is necessary in order to be able to optimally understand the tools that are dealt with in ka epithel II. The task ends with chapter III, which will contain a perspective and conclusion sion on the thesis. The structure of the thesis is illustrated in the figure below:

<sup>&</sup>lt;sup>5</sup> Hansen, Lone L. & Erik Werlauff: The legal method – an introduction, chapter 3



Several aspects can be included in the answer to the chosen problem formulation, but after

in our opinion, not all aspects are equally important. Of proximate aspects that we

have opted out, mention may be made of accounting regulation, stock exchange law, special rules for SIFI institutes (ind drawn to a low extent), credit institutions other than banks and crisis management in a broader sense than

handling non-fulfillment of capital requirements. It is our opinion that the opt-out of the above standing aspects result in a more focused thesis, without it being expected to change the conclusion sion on the thesis to a significant extent. In addition, it is important to point out that in this action is focused on acute averting of crisis as a result of non-fulfillment of capital requirements and not on long-term solutions as far as good bank operations are concerned.

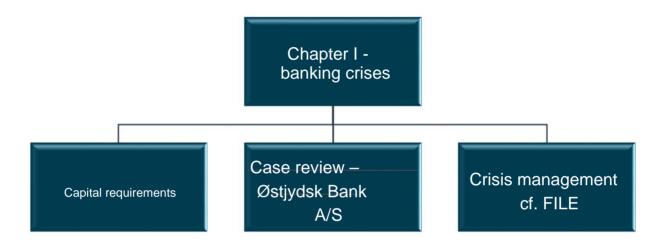
### **1.1 Abbreviations**

- ABCP: Asset Backed Commercial Paper
- ABL: Stock Profit Taxation Act
- ABS: Asset Backed Security
- BRRD: Bank Recovery and Resolution Directive
- CDS: Credit Default Swap
- **CRD:** Capital Requirement Directive
- **CRR:** Capital Requirement Regulation
- ECAI: European Credit Assessment Institution
- FILE: Financial Business Act
- FSB: Financial Stability Board
- FUL: The Merger Tax Act
- G-SIFI: Global Systemically Important Financial Institution
- LCR: Liquidity Coverage Ratio
- LL: The law of equations
- NEP: Impairment-eligible liabilities
- OIV: Objective indication of impairment
- RAL: Act on restructuring and liquidation of certain financial companies
- SIFI: Systemically Important Financial Institution
- SL: Companies Act
- SPV: Special Purpose Vehicle
- SSPE: Standardized Special Purpose Entity



# Capital requirements, crisis management and Østjydsk Bank

In this chapter, we will take a closer look at parts of the special regulation to which banks are subject, so both we and the readers of this thesis are better prepared for Chapter II, where we delve into some relevant ones tools for crisis management. We begin the chapter by going in depth with the requirements for a bank capital, as these requirements are the reason why a bank is classified as in crisis. Next gen we examine a highly topical case, Østjydsk Bank A/S, which for several years has fought a battle to comply with the capital requirements. Finally, we give an account of some of the special rules that are relevant when a bank no longer meets the capital requirements and is thus in crisis.



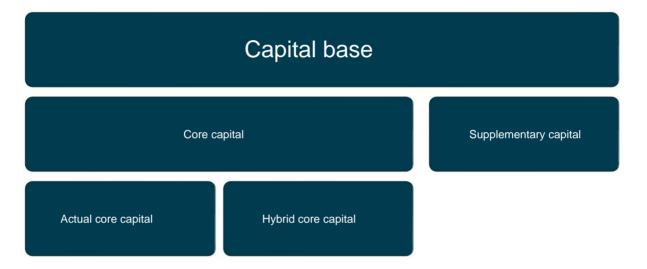
#### 2 Capital requirements in financial institutions

Capital requirements are an important part of the regulation Danish banks are subject to, and the subject is crucial for crisis management in financial institutions. Capital requirements are used i.a. to define when a bank is in crisis, and it is the capital percentages on which a bank's solvency is measured. The capital percentage is calculated for three different categories of capital and is calculated by the following fraction:

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The three different types of capital that make up the capital base are illustrated below:

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#### Figure 1: Overview of capital types

The risk-weighted exposures against which the capital is measured can be calculated in two different ways there; the standard method and the IRB method. The IRB method places great demands on the institute's procedures as well as the tools and systems the institute has for rating the engagements, which is why it is a lot few Danish banks can use this method. This thesis will therefore emphasize the standard method in connection with the statement of the risk-weighted exposures.

The section on capital requirements is comprehensive, which is why it may be beneficial to read the final section summary first. The structure of the section is given below:

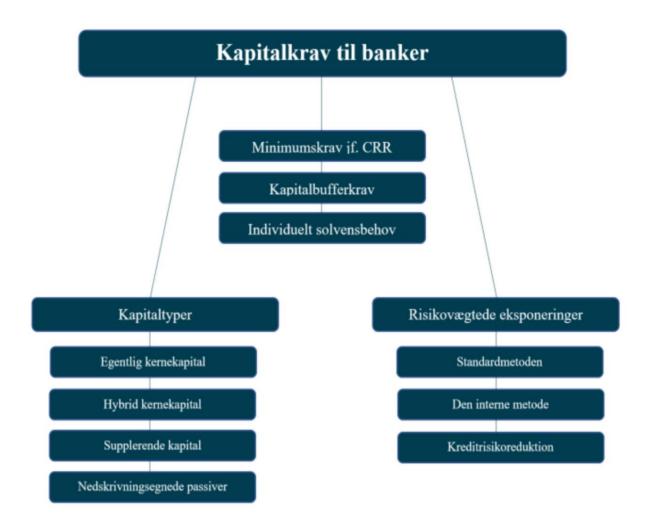


Figure 2: Overview of the structure for capital requirements sections

Initially, however, we review the legal basis for the chapter. Here are more sources of law games, and the section must give the reader an overview of these. Next, we will explain the specific ones capital requirements. This is divided into sections on CRR's minimum capital requirement, CRD's capital buffer requirement and finally we explain how the individual solvency requirement is calculated.

Subsequently, the capital types and the method for calculating the risk-weighted expo are reviewed nerings.

The chapter ends with a brief summary of an otherwise complex area. Here the reader can get one compressed insight into the area and all the conditions that the chapter has reviewed in detail.

# 2.1 Legal basis

Capital requirements for banks are regulated by both Danish and EU legislation. No matter what it is a rule described in Danish legislation or EU legislation, the banks must

respect and comply with this. The fact that you have to search several different sources of law for knowing whether something is allowed/required or not helps to increase the complexity of the area.

A large part of the rules that apply today have arisen as a result of the work of the Basel Committee. The committee consists of 28 members consisting of central banks from all over the world, including the eu European Central Bank (ECB), which represents Denmark. The members include in addition ECB, for example the USA, Germany, France and China. The Basel Committee's recommendations are not law and initially has no real legal effect. failures, the member states must implement these in their legislation. The EU handles this pro ces for Denmark and the other EU countries, and a political process is taking place in connection with legislative work, which is why the Basel rules are not necessarily implemented 100% in legislation nothing. Most recently, the set of rules called Basel III entered into force in 2014, and the committee published i December 2017 proposal for a new set of rules (Basel IV).

In the area of capital requirements, the EU rules are found in the regulation CRR and the directive CRD. Since CRD is implemented in FIL, we will primarily use the Danish legal text as a basis for The CRD set of rules with a view to including Danish special rules. EU laws take precedence over this area, why a Danish special rule must give way if this is in conflict with an EU directive or an EU regulation.

#### 2.2 CRR's minimum capital requirement

CRR's minimum capital requirement is as follows:7

- Tier 1 capital ratio: 4.5%
- Tier 1 capital ratio: 6%
- Total capital ratio: 8%

The three types of capital are thoroughly explained in the corresponding sections. The capital composition is illustrious right in Figure 1.

The capital types are held up against the total risk exposure, whereby the proportional

key figures can be calculated.

<sup>6 &</sup>quot;FACTS: The powerful Basel Committee", article published on Dagbladet Børsen's website www.borsen.dk on 24 May 2016 7 CRR art. 92, subsection 1

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The formula for the core capital ratio and total capital ratio follows the same principle, whereby only the numerator of the fraction is changed.8

=

#### 2.3 Capital buffer requirements

In addition to the CRR's minimum capital requirements, additional buffer requirements set out in the CRD/FIL apply. Over in order, there are 4 capital buffers, which together make up the combined capital buffer requirement:

- The capital preservation buffer, FIL § 125 a, subsection 3
- The company-specific countercyclical capital buffer, FIL § 125 a, subsection 4
- G-SIFI buffer for globally systemically important institutions, FIL § 125 a, subsection 5
- SIFI buffer, FIL § 125 a, subsection 6

In addition, the institute must fulfill an NEP requirement, which will be explained at the end of this section capital buffer requirement.

The combined capital buffer requirement must be met with actual Tier 1 capital, whereby CRR's actual core capital requirements of 4.5% are thereby increased. The combined capital buffer requirement 9 is also beyond the individual solvency requirement (discussed in section 2.4).

For Danske Bank, which is the largest Danish bank, it constituted the combined capital buffer requirement in 2017 of 4.25% (1.25% capital preservation buffer and 3% SIFI buffer), whereby Danske The bank's actual core capital ratio should amount to 8.75%.

#### 2.3.1 The capital conservation buffer

The capital conservation buffer must amount to at least 2.5% of the total risk-weighted exposures and, as mentioned, must be covered by core capital10. The capital conservation buffer has been un phasing in since 2015 (started at 0%) and is fully phased in in 2019. In 2017 the rate was 1.25%, and in 2018 it is 1.875%11.

<sup>8</sup> CRR art, 92, subsection 2

<sup>9</sup> FILE § 125 a. subsection

<sup>7 10</sup> FILE § 125 a, subsection 3 <sup>11</sup> Act amending the Financial Business Act, Act No. 268 of 25 March 2014, § 23, subsection 1

#### 2.3.2 The company-specific countercyclical capital buffer

The company-specific countercyclical capital buffer must constitute a more precisely defined pro cent rate of the total risk-weighted exposures. <sup>12</sup> The Minister for Business publishes the in other words, the countercyclical buffer rate, which i.a. are based on "credit cycle, the risks resulting from excessive lending growth and special conditions in the national economy". <sup>13</sup> This capital buffer is thus particularly sensitive to economic cycles, which is also considered to be the intention of this buffer. The Systemic Risk Board has recommended that the Minister of Business and Industry activate this buffer in the first instance quarter 2019, which the Minister for Business has chosen to do.

#### 2.3.3 G-SIFI buffer for globally systemically important institutions

Global SIFIs are designated once a year on the basis of an assessment prepared by the FSB15 . This requirement came into force on 1 January 2016. Global SIFIs are determined, among other things, from its size, its connectedness in the financial system, cross-border activities, etc.16 . Commercial forging the nister sets the G-SIFI buffer rate, and it depends on the subcategory the institution is located in. On 21 November 2017, the FSB published the list of G-SIFI institutions in 2018, and there were no Danish institutes among them.

#### 2.3.4 SIFI buffer for Danish systemically important institutions

An institution qualifies as a Danish SIFI, if the institution exceeds in two consecutive years there is one or more of the following conditions:

- 1) The institute's balance sheet represents more than 6.5% of Denmark's GDP
- 2) The institution's lending in Denmark constitutes more than 5% of the Danish money and mortgage institutions tutter's total lending in Denmark
- 3) The institution's deposits in Denmark constitute more than 3% of the Danish banks' total deposits in Denmark19

www.fsb.org 18 FILE

<sup>12</sup> FILE § 125 a,

subsection 4

<sup>13</sup> FILE § 125 f 14 Press release from the Ministry of Trade and Industry of 14 March 2018: "Determination of the countercyclical buffer for the 1st quarter of 2019". Available on the Ministry of

Commerce's

website 15

FIL § 125 g 16 FIL § 310 17 Financial Stability Board's note of 21 November 2017: "2017 list of global systemically important banks". Available on the FSB's website,

<sup>§ 308,</sup> subsection 2 19 Ministry of Business and Industry: "Evaluation of Danish SIFI rules", published on 19 December 2017

An institute that qualifies as a SIFI must be below the above thresholds twice in a row <sup>20</sup> However, it is possible for the Minister of Business to ignore it the following year to cease to be a SIFI. from the 2-year rule and unilaterally decide that an institution either becomes a SIFI or ceases to be a SIFI if the institution moves significantly above or below the limits in one year.21 The Minister for Business determines the SIFI buffer rate. <sup>22</sup> On 2 October 2017, the Ministry of Business established steren SIFI buffer rates for the 7 (incl. Spar Nord, which was appointed as SIFI on 19 cember 2017) Danish SIFIs for 2018. The buffer rate is differentiated depending on the institute's stemness. DLR Kredit A/S and Sydbank A/S, which have the lowest systemicity, are subject to a SIFI buffer requirement of 1%, while Danske Bank with a systemicity of 41.5 is imposed a SIFI buffer

requirement of 3.0%.23

If an institution is subject to a G-SIFI buffer requirement as well as a local SIFI buffer requirement, the highest buffer requirement must apply24.

#### 2.4 The institute's individual solvency needs

The institute must not only keep an eye on capital ratios, buffer requirements and NEP requirements know. In FIL, it is established that the institute's board and management have the task of assessing whether capi the numerical basis is sufficient based on the concrete risks and other circumstances that apply for the specific institute. Based on this assessment, they must calculate the institution's individual solvency needs. This cannot be lower than CRR's capital percentage.25 If the board reaches the conclusion that the institute needs a supplement to the 8% requirement, this supplement must consist of 56% <sup>26</sup> The proportional distribution of capital actual core capital and a total of 75% core capital. the basis must therefore be kept constant within set limits.

The Danish FSA has prepared a so-called 8+ model, which works with two pillars in the solvency requirement. Pillar I is based on the CRR requirement of 8%, which takes into account common risks such as result of the method for calculating risk-weighted exposures (dealt with in separate section i this report). Pillar II must address special risks which apply to the institution and which

<sup>20</sup> FILE Section 308, subsection 4 <sup>21</sup> FILE § 208, subsection 3 and 5

<sup>22</sup> FILE Section 125 h

<sup>23</sup> Press release from the Ministry of Trade and Industry of 2 October 2017: "Announcement on determination of SIFI buffer requirements for 2018" Available on the website of the Ministry of Business.

<sup>24</sup> FILE § 125e, subsection 2

<sup>25</sup> FILE § 124, subsection 1 and subsection 2

<sup>&</sup>lt;sup>26</sup> Decree on capital to meet the individual solvency supplement for banks and mortgage credit institutions, no. 1587 of 3 December 2015, § 2

lies beyond the usual risks. This method can be used by the financial institutions to calculate the individual solvency need and thus provide an insight into the practical method for the calculation thereof and thus the adjustments the institutes make to calculate their solvency need. <sup>27</sup>

The central thing for the institutes' calculation of the individual solvency need is that this must be cautiously and prospectively.

According to the 8+ method, institutions must calculate their special risks within 8 risk areas:

28

#### 1) Earnings

The solvency requirement is assessed based on the basic earnings in relation to loans and guarantees before write-downs and price adjustments. Specifically, the institute must assess the risk here so that the basic earnings as a first buffer cannot cover losses on loans and guarantees. The basic earnings can be calculated either from the latest annual accounts or from a be board-approved budget for the coming year. In this connection, it must also be taken account for the volatility in the base earnings. An institute of Østjydsk Bank A/S' size should, according to the guidance, set aside an allowance in pillar II if their basic earnings are lower than 1% of loans and guarantees.

#### 2) Loan growth

The expected future lending growth must be included in the assessment of the solvency requirement, so it is directed that the forward-looking risks are taken into account. If lending growth is expected for the coming year of more than 10%, this must be taken into account in the form of a pillar II Appendix.

#### 3) Credit risks

The credit risks are divided into credit risk for large customers with financial problems,

other credit risks and credit risk concentration.

The 8+ method works with 5 creditworthiness categories in connection with this calculation. Only the worst credit rating category usually results in a write-down, cf. the accounting reg

ler, which has been in force until 2018. This schedule is reproduced below:

29

<sup>&</sup>lt;sup>27</sup> Guidance on adequate capital base and solvency requirements for credit institutions of 13 October 2017; ROAD No. 9981 of 13/10/2017, section 2.

<sup>28</sup> Guidance on adequate capital base and solvency requirements for credit institutions of 13 October 2017; ROAD No. 9981 of 13/10/2017 29

Guidance on adequate capital base and solvency requirements for credit institutions of 13 October 2017; ROAD No. 9981 of 13/10/2017, appendix 2

Grade	Description
3	Customers with undoubted good creditworthiness
2a	Customers with normal creditworthiness
2b	Customers with certain signs of weakness
2c	Customers with significant signs of weakness but without OIV
1	Customers with objective indication of impairment = OIV

Cf. According to the Danish Financial Supervisory Authority's guidance, the institute must in connection with the calculation of its individual solvency needs as a minimum review all exposures with grade 2c and

1, which exceeds 2% of the institution's capital base in connection with the calculation of its credit risk for large customers. In this way, an exposure can be written down more in for connection with the solvency statement than in the financial statements, since account must be taken of short-term, estimated future losses on customers with grade 2c who do not have OIV30 and therefore should not be written down for accounting purposes. In connection with the implementation gen of IFRS 9, it is our assessment that these differences will be reduced as a result of IFRS 9's different approach.

In relation to the concentration of credit risk, it is primarily the risk of the unexpected loss that

is taken into account. According to the Danish Financial Supervisory Authority, a high concentration of exposures results within a given industry etc. in a potentially greater fluctuation in the write-down rate

terns. This volatility must therefore be taken into account in the solvency statement.

#### 4) Market risks

Market risk is the risk that the value of a portfolio of financial instruments

deteriorate as a result of rate and price changes on the financial markets. It is divided

in respectively interest rate, currency and equity risk. The starting point is sensitivity analyzes and stress tests. For the interest rate risk, for example, a decision must be made as to how much of ker

net capital that is lost by a general interest rate increase of 1 percentage point on all debts

instruments, and this must be taken into account in the calculation of the solvency requirement.

#### 5) Liquidity risks

Liquidity risk is defined as the risk that an institution does not have the liquidity to meet its payment obligations on time. A possible Pillar II supplements must take them into account

<sup>&</sup>lt;sup>30</sup> The order on financial reports for credit institutions and stockbroking companies etc. of 2014 (previous set of rules), §§51-53

funding costs that will be incurred in connection with the necessary liquidity advance acquisition. The starting point is stress tests in this connection.

#### 6) Operational risks

Operational risk is defined as the risk of financial loss as a result of inadvertence technical or defective internal procedures, human or system errors or as a result of external events including legal risks. Operational risks can for example arising as a result of a lack of functional separation, risk of IT downtime breakage, the staff's skills and experience, etc.

#### 7) Leverage

According to the Danish Financial Supervisory Authority, high leverage means that the institution is exposed to risks linked to sudden changes in market conditions and asset price declines. If the institute's work working capital is less than DKK 65 billion. DKK, these are exempt from taking this into account in connection share with the calculation of the solvency requirement.

#### 8) Regulatory maturity of capital instruments

The institution must take into account the maturity of the debt instruments included in capital the basis in connection with the calculation of the solvency requirement. If it is assessed that instituttet will have challenges in replacing the capital instrument with an instrument of the same type quality and size, a pillar II supplement must be incorporated into the solvency requirement.

In addition, the guidance includes additional requirements for institutes that use the IRB method i in connection with the calculation of the risk-weighted exposures.

Every year, the banks must prepare and publish a risk report that maps the bank's ri sic. Here, the bank's management also explains how the individual solvency requirement is calculated per status day. In order to make concrete the Danish Financial Supervisory Authority's 8+ method, we have used Øst Jydsk Bank's risk report per 31 December 2016. The bank calculated its individual solvency requirement as follows:

Pillar I requirements	8%
Supplement for low basic earnings	0%
Supplement for loan growth	0%
Supplement for credit risks	3.4%
Supplement for market risks	0.1%
Supplement for liquidity risks	0%
Supplement for operational risks	0%
Supplement for high leverage	0%
Supplement for regulatory maturity of capital instruments	0%
Individual solvency need per 31.12.2016	11.5%

The allowance for market risk is concretely calculated on the basis of the bank's exposures in shares

or foreign currency. It is calculated on the basis of stress tests.

The credit risk entails the largest supplement in pillar II. As appears from the later section 3 on

During Østjydsk Bank's course, the bank has been particularly exposed to business enterprises

and especially properties. The high concentration results in a higher surcharge, as described above.

# 2.5 The capital basis

As explained earlier, the capital base is composed of 3 types of capital base instruments

ter. What these have in common is that they are all subordinated to all other debts in the event of insolvency or liquidation dation.

The general requirements for the capital base are specified in Articles 72-91 of the CRR. The most important be

votes in this series are articles 77 and 78, which deal with the reduction of the capital base -

i.e. the institution's redemption of the capital instruments.

An institute must have the approval of the authorities before the institute makes a reduction, repayment

sale or repurchase of core capital instruments. The institute must also be authorized

the parties' approval before it makes early redemption, redemption at maturity, repayment

ling or repurchasing either hybrid core capital instruments or supplementary capital instruments

<sup>31 ter.</sup> However, this must not be done earlier than 5 years after the date of issue, unless it is available

<sup>31</sup> CRR art. 77

authority approval, which is only given if there has been a change in the applicable tax processing which entails significant changes for the issuing institution, or there is a change in the treatment of the instrument, which will result in a re-qualification of the instrument to capital base of a lower rank. For both conditions, the institute does not with ri meligibility could foresee these changes at the time of issue. 32

The Danish Financial Supervisory Authority can approve redemption/reduction/repurchase if either is issued simultaneously same amount of similar or higher ranking capital, or the institute has been able to reimburse to the authorities that the institution has a reasonable margin down to capital after the transaction <sup>33 the requirements in art. 92.</sup> In August 2016, Østjydsk Bank requested a partial repayment from the Danish Financial Supervisory Authority Else of the state's hybrid core capital. The Danish Financial Supervisory Authority refused this request, after which the FSA were not convinced that Østjydsk Bank would after the partial redemption have a sufficient margin down to the individual solvency requirement. This relationship is elaborated in section 3.

Since there are specific requirements for the size of both actual core capital, the core capital as well as the capital base, it is far from unimportant how the capital instruments are categorized res. In the following sections, the requirements for the various types will be explained capital, as well as how it is calculated.

#### 2.5.1 Core capital proper

The requirements for the actual core capital are defined in CRR art. 26-50. Article 50 defines it actual core capital as follows:

#### CRR art. 50:

"An institute's actual core capital consists of the actual core capital items after the adjustment preferably in articles 32-35, the deductions in article 36 and the exceptions and alternatives in article 49 and 79."

The statement of actual core capital will be based on the structure of Article 50.

<sup>32</sup> CRR art. 78, subsection

<sup>4 33</sup> CRR art. 78, subsection 1

#### 2.5.1.1 Core capital items proper

Common core capital items include the following capital instruments that meet conditions specified below: <sup>34</sup>

- a) Premium on issue in connection with these instruments
- b) Transferred profit if the proposed dividend has been deducted and the accounts are approved by the auditor known35
- c) Accumulated other total income if this can be immediately and without restrictions turned over to cover losses
- d) Other reserves if these can be used immediately and without restrictions to cover loss
- e) Funds to cover general credit institution risks if these immediately and without request limits can be used to cover losses

The most significant difference from the equity capital of an ordinary Danish capital company is thus that fo declared dividend must be deducted from the statement. On the other hand, the most important similarity is that an actual core capital instrument is also subordinated to all other capital in the event of insolvency or li 36 receipt.

An actual Tier 1 capital instrument must meet a number of conditions to be qualified thus. For example, the instrument must be fully paid up, and the institute must not have finance secured the purchase directly or indirectly – nor via collateral.

#### 2.5.1.2 Adjustments of actual core capital items

Individual adjustments must be made to the actual core capital items in connection with op the making.

Positive equity impacts resulting from asset securitization must be excluded from all capital base items. <sup>38</sup> Securitization is a tool that i.a. can be used to reduce the risk-weighted exposures, which the thesis will deal with in section 6. In this context, it is

<sup>34</sup> CRR art. 26, subsection 1 35 CRR art. 26, subsection 2 36 CRR art. 28, subsection 1, letter j 37 CRR art. 28 38 CRR art. 32

important to highlight that if the bank realizes a profit from such a transaction, the equity effect cannot be included in the actual core capital.

If derivative financial instruments are valued on the basis of the institute's own credit risk, the portion of the fair value adjustment that is due to the institute's changed credit risk must not is included in the calculation of the actual core capital.39 Alternatively, a positive or negative tive change in the bank's credit situation have a "snowball effect" on the capital base.

In conclusion, there is a general precautionary principle in the CRR. <sup>40</sup> This has arisen as a consequence of financial institutions' general requirement to measure assets and liabilities at fair value. Article 34 refers to the general precautionary principle, which is laid down in Article 105, which provides requirements for how the institute must prepare a "prudent valuation". Article 34 states furthermore, that after applying the principles of prudent valuation, the institute must still once assess whether the actual core capital items must be adjusted down further.

#### 2.5.1.3 Deduction in actual core capital items

A number of deductions must be made in the calculation of core capital. These are specified in the CRR articles 36-47.

In general, it is a requirement that the assets that must be deducted from the equity reserves must be reduced with the expected deferred tax liabilities that fall on these. 41 An asset to be deducted kes with a gross value of DKK 100, must be reduced by the deferred tax liability. If it is assumed that the deferred tax on this amounts to DKK 22, the capital base must therefore be reduced

res with DKK 78.

Losses in the current financial year must be deducted from the actual core capital. <sup>42</sup> When the institute Sat bende monitors the actual core capital, the institute must therefore take into account any deficit incurred during the year. Intangible assets must also be deducted from the actual cost negative capital.<sup>43</sup>

<sup>39</sup> CRR art. 33 and 35 40

CRR art. 34 and 105

<sup>&</sup>lt;sup>41</sup> For example, CRR art. 37, letter a)

<sup>&</sup>lt;sup>42</sup> CRR Art. 36, subsection 1, letter

a 43 CRR art. 36, subsection 1, letter b and art. 37

In addition, the institute must deduct its holding of own core capital instruments from already the time at which a commitment to purchase thereof is given,<sup>44</sup> as well as a number of deductions for holdings of core capital instruments in other financial companies. companies in the form of issue positions which are in the bank's possession for a maximum of 5 days, the actual core capital is not deducted. <sup>46</sup>

There is a difference in the calculation of the deduction depending on whether the institute's capital share is categorized as significant or not. A significant share of capital in this context is defined as a minimum 10% - and if the institute has close links to an entity, this must be treated equally regardless of the size of the capital share (in that case it is simply a requirement that capital shares in the entity are owned).47

If the institution owns a significant share of capital or has close links to the entity that own capital shares in, the entire holding must be deducted. It is more complicated to calculate from there of holdings of instruments in entities in which the institute does not own a significant share. Here two factors a) and b) are drawn up, which multiplied together give the relevant deduction:

> Factor a) appears by calculating the total holdings of the capital base instruments in entities in the financial sector for which the institute does not have a entity equal capital share in. The part of this amount that exceeds 10% of the institute's own actual core capital before deduction of significant capital holdings in units in it financial sector, constitutes factor a).

Factor b) is obtained by dividing the value of the institution's direct, indirect and synthetic holdings of actual core capital instruments in entities that insti tuttet does not have a significant capital share in, with the total value of all capital basic instruments in the financial sector which are in the institute's possession. That the latter is without regard to which type of capital base instrument it is, as well as whether or not the institution has a significant capital share in the unit.49

<sup>44</sup> CRR art. 36, subsection 1, letter f 45 CRR art. 36, subsection 1, letter gi and art. 43-46 46
CRR art. 47 47
CRR art. 43 48 CRR art. 46, subsection 1, letter a 49 CRR art. 43, sec. 1, letter b This amount is distributed proportionally among all holdings of actual core capital instruments in entities in which the institute does not own a significant capital share.<sup>50</sup>

The part of the holdings that does not exceed 10% of the institute's own core capital – i.e. the remainder from factor a) – must not be deducted, but instead risk-weighted accordingly with the rules for this.  $^{51}$ 

#### 2.5.1.4 Exceptions and alternatives

CRR article 48 deals with exceptions to deductions in relation to deferred tax shares and holdings of capital base instruments in financial companies.

The following instruments may be covered by this exception: 52

- a) Deferred tax assets depending on future profitability if these amount to a maximum 10% of the institution's actual core capital base before deduction of deferred tax assets, significant capital holdings in financial companies as well as hybrid core capital features that could not be contained in the hybrid core capital.
- b) Substantial capital holdings in other financial companies (>10% of the debt).
   the entity's actual core capital) if these holdings amount to no more than 10% of this institute's actual core capital calculated in the same way as above ia).

If these instruments together do not exceed a defined threshold amount, the institute can fail to deduct the amount from the actual core capital. The threshold amount is calculated as 17.65% of the actual core capital calculated according to art. 32-36 – i.e. after deductions but before using the exceptions described herein.53

If instruments exceed the threshold, the institute cannot itself choose how much is excluded drawn. CRR Art. 48 pcs. 3 states that there must be the same relationship between deferred tax assets tives depending on future profitability and significant capital holdings in financial companies names in both the part that is contained in the threshold and the part that is subtracted. Illustrated by ne the following example:

<sup>50</sup> CRR art. 43, subsection 3

<sup>51</sup> CRR art. 43, subsection 4

<sup>52</sup> CRR art. 48, subsection 1

<sup>53</sup> CRR art. 48, subsection 2

	Deferred tax shares	Substantial capital expenditure	Sum of which 17.65% threshold	
	dependent on forward	positions in financial		which is given in
	early profitability	companies		this example
Total	NOK 400 / 40%	NOK 600 / 60%	NOK 1000	NOK 600
Not deducted				
actually coreka	NOK 240	NOK 360	NOK 600	
pital				
Actually deducted	NOK 160	NOK 240	NOK 400	
core capital				

As shown, only the part that lies beyond the threshold value is deducted from the actual value

core capital base, and thus negatively affects the actual core capital ratio.

The share to which the exception is applied, and which is therefore not deducted from the actual core capital, must be risk-weighted by 250%, which reduces the benefits of using this exception gels. <sup>54</sup>

#### 2.5.2 Hybrid core capital

The second part of the core capital is made up of the hybrid core capital. The requirements for the hybrid

Tier 1 capital is defined in CRR art. 51-61. Article 61 defines the hybrid Tier 1 capital sole Dec:

#### CRR art. 61:

"An institute's actual core capital consists of the hybrid core capital items after deduction of the items mentioned in Article 56 and after application of Article 79."

The report on hybrid core capital will be based on the structure of Article 61.

#### 2.5.2.1 Hybrid core capital items

The conditions for an instrument to qualify as hybrid Tier 1 capital are listed in the CRR Article 52, which includes 16 conditions. However, many of them are equivalent to actual core capitals number instruments – for example, they must be fully paid in before they can count, the institute must have not financed the purchase. In addition, hybrid core capital is subordinated to all capital other than actual core capital in the event of liquidation or insolvency.

<sup>54</sup> CRR art. 48, subsection

<sup>4 55</sup> CRR art. 52 respectively letter a, letter bce and letter g etc.

Hybrid Common Equity Tier 1 instruments are perpetual,<sup>56</sup> whereby they effectively have an unlimited term. As described in the introduction to the capital base section, it is also a requirement that the Danish FSA must give permission for hybrid core capital instruments to be redeemed. <sup>57</sup> You decide nor must it appear that the instruments will be entered exempt in cases other than liquidation or minor repurchase of the instruments.58 There may also be not be redeemption incentives such as interest rate ladders. It is a crucial condition that the principal of the instruments in the event of a triggering event can

written down permanently or temporarily – or alternatively converted to actual core capital <sup>number,59</sup> A triggering event occurs when the actual Tier 1 capital ratio falls below that 5.125% or a higher limit, if such is stipulated in the regulations that regulate the instrument. <sup>60</sup> For example, Østjydsk Bank had hybrid core capital instruments, where it triggering event was defined as 7% in actual core capital percentage. <sup>61</sup> The write-down of these took place in autumn 2017. Before write-down or conversion takes place, must as well authorities such as the holders of the instruments are notified of the situation. <sup>62</sup> Write this down ning or conversion right is a significant difference between hybrid core capital instruments in for stick to pure debt instruments.

Before an institution starts dealing with hybrid Tier 1 capital instruments, it must ensure state that it has obtained all necessary prior authorizations in order to perform conversions ring from hybrid core capital to actual core capital, and that there are no articles of association, owner agreements etc. that prevent the conversion.

In conclusion, it is important that the investor is not necessarily entitled to a distribution of background of the instrument64 – in the case of most hybrid core capital instruments these will distributions be interest. If the institute is in capital or liquidity problems, the institute can tet fail to attribute and pay out the interest on hybrid core capital instruments.

- 56 CRR art. 52, subsection 1, letter g
- 57 CRR art. 77, letter b 58 CRR art. 52. subsection 1. letter iik 59
- CRR art. 52 pcs. 1, letter n 60 CRR
- art. 54. subsection 1. letter a
- <sup>61</sup> Østjydsk Bank's annual report 2016, note 28

5 63 CRR art. 54, subsection

<sup>62</sup> CRR art. 54, subsection

<sup>6-7 64</sup> CRR art. 52, subsection 1, letter I

#### 2.5.2.2 Deduction in hybrid core capital items

The institute must deduct certain items in connection with the calculation of the hybrid core capital:

- a) Holdings (direct/indirect/synthetic) of own hybrid core capital instruments
- b) Holdings of hybrid core capital instruments in entities in the financial sector which also has holdings in the first-mentioned bank. The aim on the part of the legislator is to prevent cross-ownership with a view to artificially increasing the capital base
- c) Holdings of hybrid core capital instruments in entities in the financial sector which the institute does not have a significant capital share in
- d) Holdings of hybrid core capital instruments in entities in the financial sector which the institute has a significant capital share in
- e) Elements that must be deducted from the supplementary capital, but which cannot be included here

The deduction for holdings of hybrid core capital instruments from entities in the financial sec tor works very similarly to the deduction for holdings of actual core capital instruments. For pray holdings in units in which the institute has a significant capital share, the entire holding is deducted. For the others, the deduction is calculated in the same way – only with hybrid core capital instruments, which count in the fraction for factor b.65 The holdings that do not exceed 10% of the institution's actual core capital is risk-weighted according to these rules.

#### 2.5.3 Supplementary capital

The last part of the capital base is made up of supplementary capital. The requirements for the supplementary capital is defined in CRR art. 62-71. Article 71 defines the supplementary capital as follows:

#### CRR Art. 71:

"An institute's supplementary capital consists of the institute's supplementary capital items after deductions of the items mentioned in Article 66 and after application of Article 79."

The statement on supplementary capital will be based on the structure of Article 71.

65 CRR art. 60

<sup>66</sup> CRR art. 60, subsection 4

#### 2.5.3.1 Supplementary capital items

Supplementary capital items consist of both capital instruments and subordinated loans as well as above courses in connection with these. In order to qualify as supplementary capital, it must be fully paid up, and neither the institute nor its affiliated and associated companies may have financed the loan/instrument67.

Supplementary capital must also be subordinated to all other capital apart from core capital, and finally, there must be an original term of at least 5 years - and as for others capital base instruments there must be no redemption incentives.

In relation to redemption, the same rules apply as for hybrid core capital.

In contrast to core capital, supplementary capital is amortizable. It matters where much the supplementary capital can count in the last 5 years of its term. First you calculate a factor based on nominal value on the first day of the remaining 5 years divided by the number of calendar days in the 5-year period. This factor is multiplied by the remaining number of calendar days in the term.70 If, for example, the loan has a nominal value of DKK 1,000 5 years before expired, and there are now 4 years left on the loan, the calculation will look like this:

$$\frac{1000}{5 \times 365} \times (4 \times 365) = 800$$

#### 2.5.3.2 Deduction in supplementary capital items

The deductions in the supplementary capital items are equal to the deductions in the hybrid core capital. That is deduction for holdings of own instruments, deduction for cross-ownership and deduction for possession view of supplementary capital base instruments in entities in the financial sector (also here the same method as for hybrid core capital).71

71 CRR art. 66

<sup>67</sup> CRR art. 63, letter

ac 68 CRR art. 64, respectively

letters d and gh 69

CRR art. 63, letter j 70 CRR art. 64 - In article 64, letter a, it appears that the nominal value must be multiplied by the remaining number of days in the 5-year period. It is, however, a translation error, cf. the English version: "the nominal amount of the instruments or subordinated loans on the first day of the final five year period of their contractual maturity **divided** by the number of calendar days in that period"

#### 2.5.4 Impairment-eligible liabilities Via the

EU's crisis management directive (BRRD)72, the Danish FSA has a mandate to set a requirement to the size of an institution's eligible liabilities (NEP). <sup>73</sup> BRRD defines write down suitable liabilities as *"the liabilities and capital instruments that do not qualify as own equal or hybrid core capital instruments or supplementary capital instruments in an institution* (...) that are not excluded from the scope of the bail-in tool pursuant to Article 44, 74 pcs. 2".

*The bail-in* tool is explained in BRRD articles 43 and 44. The purpose of this tool is that recapitalize the institute through conversion of debt to equity or to reduce ho the court on the institution's debt obligations. Some types of claims can never be NEP – that concerns, for example, employee obligations, covered deposits or covered bonds oner.

In the directive, the NEP share is calculated as follows:<sup>75</sup>

Unlike the capital requirement percentages, the NEP is not calculated in relation to the risk-weighted exposures nerings, but instead the total value of the entire liability side.

(

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The Danish Financial Supervisory Authority has prepared a guide in which they explain how Danish banks must comply with the BRRD requirements. In this guide, the Danish Financial Supervisory Authority explains that all Danish bans ker receives a so-called NEP supplement for their individual solvency needs. This supplement must be fulfilled by liabilities suitable for impairment, which are not capital base instruments. The Danish Financial Supervisory Authority has generally determined that the NEP supplement will amount to 3.5-6% individually for each financial institution with an average NEP supplement of 4.7%.

The NEP supplement consists of two individual supplements; loss absorption allowance and recapitalization amount. Together with the capital requirement and the capital buffers, these form the overall NEP basis.<sup>76</sup> There distinguish between SIFI and non-SIFI. As defined in the thesis delimitation, the SIFI rules will

 <sup>&</sup>lt;sup>72</sup> Directive 2014/59/EU of the European Parliament and of the Council on "rules for the recovery and resolution of credit institutions"
 73 BRRD art. 45, subsection

<sup>1 74</sup> BRRD art. 2, no. 71. In the BRRD, the liabilities suitable for impairment are referred to as "impairment-relevant liabilities"

<sup>75</sup> BRRD art. 45, subsection 1, 2. pt.

<sup>76</sup> Memorandum prepared by the Danish Financial Supervisory Authority on 30 October 2017; "Principles for determining NEP requirements for smaller institutes"

not be processed further. The NEP supplement will be phased in from 2018 and is expected to be fully phased in end of 2021. 77

The loss absorption supplement is calculated on the basis of the 8+ model, which is used in the calculation of the solvency requirement. Here, some adjustments are made, primarily regarding larger exposures, which re starving in a supplement.78

The recapitalization amount is calculated as 8% of the risk-weighted exposures on loans and guarantees over DKK 5 million. DKK in creditworthiness categories 1, 2c and 2b79 in relation to the institution's total risk-weighted exposures.80 Thus, customers who merely have "certain signs of weakness" must be included in this statement.

In order to be qualified as a write-down liability - which is not already included in cap the numerical basis – the following 5 conditions must be met:

- 1) The obligation has a remaining term of at least 1 year
- 2) The obligation does not arise from a derivative
- 3) The debt instrument is issued and fully paid with funds that are not directly or indirectly rekte is financed by the bank
- 4) The obligation is not an obligation towards the bank itself, and this has no effect easy security or guarantee for the obligation
- 5) The obligation does not arise from deposits that are placed before simple creditors in bankruptcy the order cf. § 13 of the Act on restructuring and liquidation of certain financial companies and Chapter 10 of the Bankruptcy Code. Cf. under the Bankruptcy Act, this will for example be employee obligations or supplier charges82

<sup>77</sup> Memorandum prepared by the Danish Financial Supervisory Authority on 30 October 2017; "Principles for determining NEP requirements for smaller institutes" 78 Memorandum prepared by the Danish Financial Supervisory Authority on 30 October 2017; "Principles for determining NEP requirements for smaller institutes" 79 respectively "customers with objective indication of impairment (OIV)", "customers with significant signs of weakness, but without OIV" and "customers with certain signs of weakness", cf. the Danish Financial Supervisory Authority's Guidance on sufficient base capital and solvency requirements for credit institutions, appendix 1 (VEJ no. 9981 of 13 October 2017).

<sup>80</sup> Memorandum prepared by the Danish Financial Supervisory Authority on 30 October 2017; "Principles for determining NEP requirements for smaller institutes" 81 FILE § 267

<sup>&</sup>lt;sup>62</sup> Bankruptcy Act, §§ 95 and 96

## 2.6 Risk-weighted exposures

As mentioned, the calculated capital base must be seen in relation to the sum of the institution's risk wall ted exposures. All exposures that are not deducted directly from the capital base must risk weighted.

There are two methods for risk weighting of exposures; the standard method and the internal ra thing method (IRB). Both methods have authority in the CRR, and while the CRR explains the standard method it specifically and describes how the exposures must be weighted according to credit assessments, lays out CRR rules and requirements for the methods and calculations that must be used to apply IRB.

#### 2.6.1 The standard method

The standard method is described in CRR section 2, chapter 2. Here are credit ratings from ECAI's84 central to the weight assigned to an exposure. If no such assessment is submitted ring, there is a general rule for the exposure class. At the same time, the standard method contains individual exceptions or special conditions regarding the class.

Overall, the exposures are divided into 17 exposure classes. <sup>85</sup> The table below gives a condensed overview of these classes and their weighting:

Exposure class	Main rule/no ECAI	If credit rated by	Special circumstances/
	assessment	ECAI	
Exposures to central	Risk-weighted 100%.	0-150% depending on	exceptions Exposures
governments or central		credit quality level.	to the ECB are weighted at 09
banks86			Exposures to EU countries' central railways
			ker is weighted 0%.
Exposures to regional or	Treated either as oak	See respectively central	EBA maintains a database
local authorities87	deposits against institutions or	government/banks and institutes.	over the authorities
	central governments and -		treated as
	banks.		central banks.
Exposures to public	Risk weighted based on the	20-150% depending on	Exposures with an original
entities88	credit quality step assigned	the credit quality level of	maturity of < 3 months are
	to the central government by an	the central government. Provided always weighted 20%.	
	ECAI.	the central government does not	

<sup>83</sup> CRR art. 113, subsection 1, 1st point

84 Definition of an ECAI, cf. CRR art. 4 pcs. 1, letter 98: "A credit rating agency that is registered or approved in accordance with Regulation No. 1060/2009 of the European Parliament and of the Council of 16/9 2009 on credit rating agencies, or a central bank that issues credit ratings that are exempt from application of Regulation

No. 1060/2009". 85 CRR art. 112 86

CRR art. 114 87

CRR art. 115 88

CRR art. 116

		is credit rated, is assigned	
		a weight of 100%.	
Exposures to multilateral	Treated as institutes, unless	Development banks on the	
development banks89	they are on the positive list in CRR art. 117 pcs. 2.	positive list are weighted 0%.	
Exposures to international organizations90	Weighted 0% if the organization is on the positive list i CRR art. 118.	0%	
Exposures to institutions91	Risk weighted 20-150% on the basis of the credit quality level assigned by an ECAI to the central government in the institution's home country. If Ian it is not credit rated the exposure is weighted 100%.	Exposures with a maximum maturity of more than 3 months: 20-150% depending on credit quality level. That best of the 6 credit ratings small steps trigger a weight of 20%, the three lowest ranked steps trigger a weight of 100% or there over. Under 3 months: 20-150% depending on credit quality level. 3 of the 6 credit quality steps triggers a weight of 20%, 1 step triggers a weight of 100% or more.	Exposures with an original maturity of max. 3 months against institutes without credit assessment from ECAI is weighted 20%.
Exposures to companies92	Risk weighted 100%. If the company is domiciled in a country where exposures to the central government would have resulted in a higher weight, this is used instead.	Risk weighted 20-150% depending on credit quality level.	
Retail exposures93	Weighted 75%, if the exposure meets the requirement specification in CRR art. 123.		If the exposure does not meet the requirements it belongs to someone else exposure class. Stocks can never be retail exposures. Leasing agreements are possible

89 CRR art. 117. Multilateral development banks are, for example, the International Financial Institution, the Inter-American Development Bank and others.

90 CRR art. 118. The positive list includes, for example, the EU and the International Monetary

Fund 91 CRR art.

119-121 92 CRR

art. 122 93 CRR art. 123. In order to qualify as a retail exposure, 3 requirements must be met: a) must be against natural persons or SMEs, b) one of many exposures with similar characteristics so that the risks of these loans are reduced, c) the total amount owed by the borrower to the institution (excl. mortgage-secured real estate loans) may not exceed DKK 1 million. EUR.

			on the other hand, good to be on the list.
Exposures secured by	In the case of mortgages on		The national authorities
mortgages on real estate94	residential property judgments:		may determine a
	The exposure is weighted 35%		higher weighting if this
	on the part of the exposure		is deemed necessary
	that is below 80% of the		poem.
	mortgage value95 of the fixed		
	property judgment.		
	In the case of mortgages		
	on commercial property, the		
	exposure is weighted 50%		
	on the part that is below		
	60% of the mortgage value		
	of the real estate.		
Exposures due to non-	Unsecured default97 exposures		
compliance96	are weighted 100-150%.		
Exposures associated	Weighted 150%. Exposure		In addition, several can
with particularly high	likes to include: investment in		types of exposures are
risk98	venture capital companies,		covered by the class
	some investments in		if there is a big ri
	alternative investment funds,		risk for loss as a result
	private equity investments and		of the borrower's arrears
	speculative financing of real		
	estate.		
Exposures in the form of	If the conditions are met and	If the conditions are met	CRR art. 129 contents
SDOs and special	the bond is <b>not</b> credit rated by	and the bond is credit rated	there is a detailed
covered mortgage bonds99	a	by a	description of what
	ECAI, the exposure is	ECAI, the exposure is	required for the bond to
	weighted again 10-100%	weighted 10-100%	be weighted as
	depending on the risk weight	depending on the bond's	described. Dan
	that an exposure to the	credit quality level.	mortgage bonds will
	issuing institution would have rec	eived.	usually qualify.
Items representing	Securitization positions are		
securitization positions	weighted by 1,250% if all		
oner	significant risk has not		
	been transferred to a third party.		

94 CRR art. 124-126

97 Definition of "default" cf. CRR art. 178: If the institute considers it unlikely that the borrower will meet all his debt obligations to the institute without, for example, collateral being realised, or if the borrower has been in arrears for more than 90 days.

98 CRR art. 128 99 CRR art. 129

<sup>95</sup> Definition of "leveraged value" cf. CRR art. 4 pcs. 1, letter 74: "The value of a real estate as determined through a careful assessment of the future sales possibilities, taking into account, among other things, the property's long-term durability, the general and local market conditions, the property's current use and alternative uses". 96 CRR art. 127

Exposures to institutions	REACH	If an ECAI has out	
•	NEXOT	worked a short-term	
and companies with a			
short-term credit rating		credit assessment, this is weighted 20-150% of	
from ECAI100		C C	
		depending on the credit quality level.	
Exposures in the form of	Weighted by 100%.	Weighted 20-150% of	An average method
shares or shares in		depending on credit quality	can also be used for
CIUs101		step.	the weighting, which
			is based on
			The exposure of the CIU
			gives.
Equity exposures102	Weighted as a general rule		As described elsewhere
	by 100%.		there are special rules
			for shareholdings in
			other financial institutions
			sial companies.
Other items103	Tangible assets: 100%		Minimum rental payments
	Accruals: 100%		(possible liabilities) are
			included as exposures.
	Liquid funds: 20%		
	Cash: 0%		
	Gold bars that are stored in our		
	own box facilities or with		
	third parties: 0%		

As the table shows, there can be advantages associated with requesting an ECAI to credit assess the exposures. On the other hand, the institute can also risk that an exposure must is weighted 150% instead of 100% as a result of the credit assessment. The institutes cannot be selective in this regard – the institution chooses to use an ECAI to credit assess an asset in an exposure class, the credit rating agency must assess all exposures in the class sen, and the institute must use these. At the same time, the ECAI and its assessments must be used consistently over time. 104

### 2.6.2 The internal rating-based method (IRB)

Instead of using the standard method's standardized rates and appointing an ECAI, insti the tuts apply for permission to use an internal rating-based method (IRB method). Here will it may be the institutes' own calculations and estimates that form the basis of the risk weighting

<sup>100</sup> CRR art. 131

<sup>101</sup> CRR art. 132 / Definition CIU: a collective investment institution, cf. CRR art. 4, letter 7).

<sup>102</sup> CRR art. 133

<sup>103</sup> CRR art. 134

<sup>104</sup> CRR art. 138

instead of standard weightings and credit ratings. As a result of the company actually itself defines the weighting of the exposures, great demands are placed on the systems used, and the method behind the calculations in order to ensure that the exposures get a fair indication risk weighting.

An institute must have a special permit from the Danish Financial Supervisory Authority to be able to use the IRB method.<sup>105</sup> In this connection, the Danish FSA must assess several factors, including whether the internal ra ting systems provide a relevant assessment of the specific risks and that the internal framework is appropriate, which i.a. involves a credit risk control unit that is responsible for the rating system met, and that the institute has documented the rating systems and the effectiveness of their design.<sup>106</sup>

The exposures are divided into 7 exposure classes: <sup>107</sup>

- Exposures to central governments and central banks
- Exposures to institutions
- Occupational exposures
- Retail exposures
- Equity exposures
- Records representing securitization positions
- Other assets

For each exposure class, a specific formula for calculating the risk weighting applies.

An explanation of this is beyond the scope of this report. However, the formulas work to a large extent 3 key terms which are relevant to the understanding of the IRB method and which give an insight into the calculations:

- "PD"/"probability of default" is the probability that a counterparty defaults on its obligations over a period of one year108
- "LGD"/"Loss given default" is the loss from an exposure as a result of the counterparty's failure arrears in relation to the outstanding receivable due to the default109
- "M"/"Maturity" is the term

<sup>105</sup> CRR art. 143

<sup>106</sup> CRR art. 144

<sup>107</sup> CRR art. 147

<sup>108</sup> CRR art. 4, no. 54

<sup>109</sup> CRR art. 4, No. 55

When using internal ratings, the institutes typically achieve lower exposure values, where with the solvency requirement, other things being equal, it becomes easier to meet. The difference of an exposure value using the standard method and the IRB method is the focus of the legislator at the moment. In December 2017, the Basel Committee published their recommendations for future banking regulation ring, and here the focus was particularly on an output floor, which will result in an exposure value cf. As a minimum, the IRB method should constitute 72.5% of the exposure value if the standard method had been used.110

### 2.6.3 Credit risk reduction

CRR provides the opportunity to reduce the risk weighting of the assets - both according to the standard method the and the IRB method - if the institute has used a recognized technique for credit risk reduction tion. <sup>111</sup> In this connection, collateral is primarily thought of.

Credit risk hedging can be both financed and unfinanced. Financed credit risk of coverage includes, for example, collateral in cash deposits, life insurance policies pledged with a lending bank112 <sup>113</sup> In addition, sure can and listed shares and bonds. interests in real estate, receivables and other forms of physical security count as a financed credit risk hedging technique. A cross-cutting requirement for these is that the legal conditions concern return the security must ensure that the institute has clear access to the security and income <sup>114</sup> In Denmark, registration of a mortgage is usually the relevant one when realizing the security. security deed.

The adjustment for funded credit risk coverage can be calculated in two ways; the simple method and the developed method. The simple method can only be used if the institute otherwise settles <sup>115</sup> The security is valued at a market value its exposures according to the standard method. at least every six months and every time the institute has reason to believe that the value of the security is dropped considerably.<sup>116</sup>

<sup>110 &</sup>quot;Basel announcement gives important first clarification", article published by FinansDanmark (interest organization for Danish banks) on 7 December 2017. Available on their website www.finansdanmark.dk CRR art. 193, subsection 3 CRR art. 200 113 CRR art. 197 111 114 112

CRR art. 209, subsection 3, letter a. This provision applies to claims, but similar provisions exist for properties (art. 208) and other physical security (art. 210)

<sup>115</sup> CRR art. 222, subsection

<sup>1 116</sup> CRR art. 207, subsection 4, letter d), cf. CRR art. 222 pcs. 2.

When using the simple method, the security is then put "in place of" the loan - i.e. that it credit risk hedged exposure must be weighted as if the institution were exposed to 117 the security. If a loan of, for example, DKK 100,000 is covered by a mortgage in a holding of Danish government bonds, where the value of the security is calculated to be able to cover the entire loan, the loan must therefore be risk-weighted as a Danish government bond. Cf. previous section on weightings according to the standard method, exposures to the central governments of EU countries weighted with 0%. However, it is a requirement that there is a minimum weight of 10% on these exposures118, which is why the lending will be included in the risk-weighted assets of DKK 10.000 - whereby a "savings relse" of DKK 90,000 is achieved by using this rule.

Østjydsk Bank A/S used the expanded method for calculating the financial credit risk reduction. <sup>119</sup> When the extended method is used, it is taken into account to a great extent <sup>120</sup> The value of the exposure is calculated as the risk-weighted exposure the volatility of the security. (according to the standard method or IRB) multiplied by a volatility factor121, which can carry a reduced value.

CRR defines unfunded credit risk hedging as "a technique for credit risk reduction where the reduction of the credit risk of an institution's exposure is due to the third party's obligation to pay an amount in the event of the borrower's default or other specified credit conditions <sup>122</sup> Examples of this are guarantees or credit derivatives which meet a number of criteria; parts". for example, that the contract does not contain provisions whose fulfillment is beyond the institute's control or gives the provider the right to cancel the contract.123

When possible credit risk reduction is taken into account, a risk-weighted exposure is calculated thus according to the standard method:124

### $(0, \ddot{v}) \times + \times$

The factors are explained below:

E, is the value of the exposure without taking into account the weighting discussed in the above section.

<sup>117</sup> CRR art. 222, subsection 3

<sup>118</sup> CRR art. 222, subsection 5. In other cases, the exposure must be weighted with min. 20% cf. CRR art. 222, subsection 3, 2nd paragraph. <sup>119</sup> Østjydsk Banks A/S's risk report 2016, page 32.

<sup>120</sup> CRR art. 223 121 CRR art. 224 CRR art.

<sup>122</sup> 4, no. 59 123 CRR art. 213

Ga, is the value of the credit risk hedge adjusted for any lack of maturity or currency match. If there are no such mismatches, the credit risk cover is valued again to the amount the provider has guaranteed to pay in the event of the borrower's default.

r, is the risk weight for exposures to the borrower, as discussed in the above section on the standard method.

g, is the risk weight for exposures to the provider (of the collateral) cf. standard method it if there had been an exposure to this.

For the IRB method, the security is included in the calculation for the internal rating, why above standing does not apply to institutes that use the IRB method.

Specifically, it may be a loan of DKK 100,000 taken out by a private person. This per son's parents have given a deposit for 50% of the amount. Following the standard method, an exponent will call to a private person should be weighted 75% (retail exposure cf. CRR art. 123).

 $(100,000 \ \text{y} \ 50,000) \times 75\% + 50,000 \times 75\% = 37,500 + 37,500 = 75,000$ 

It will therefore only be in cases where unfunded credit risk reduction is exercised across exposure classes where the credit risk reduction rules lead to a lower exposure value.

There is a general clause in the regulations that an exposure cannot be imposed on one higher weighting than if no security had been provided. <sup>125</sup> Alternatively, a security which should be weighted higher than the original exposure, could have a negative effect on capital percent, which would have an inappropriate effect on the institutes.

Regardless of whether the rules for credit risk reduction in many cases do not necessarily result in a lower rate risk weighting of the exposures, a security for a commitment will reduce, other things being equal the supplement that the institution must include in the calculation of its individual solvency requirement (credit risk). Thus, collateral will lead to a lower solvency requirement, although this does not necessarily happen in in connection with the risk weighting of the assets.

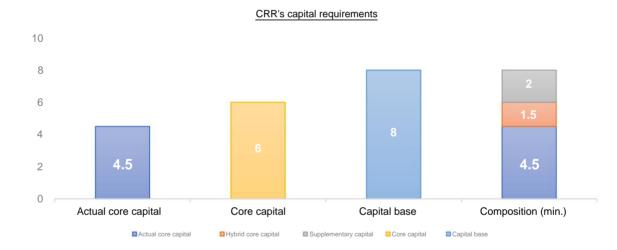
<sup>125</sup> CRR art. 193, subsection 1

# 2.7 Capital requirements - in brief

The capital requirements are central to financial institutions, and the purpose of the regulations is to ensure solid and well-consolidated financial institutions that are robust enough to withstand financial crises. As they As the previous pages emphasize, however, these are complex rules. This section summarizes the main points from the capital requirements section.

The capital requirements describe how much loss-absorbing capital an institution must have in relation to its risk-weighted exposures. The loss-absorbing capital is divided into actually ker equity capital, hybrid core capital and supplementary capital. Common to all capital types is that this capital is subordinated to all other obligations in the event of liquidation or insolvency. Simultaneously are there specific requirements for maturity and rules for redemption, which must ensure that the capital instruments can be kept at a stable level.

CRR requires a capital base of 8% distributed as follows:



### Figure 3: Overview of the minimum capital requirements cf. CRR

Proper core capital is typically equity, while hybrid core capital and supplementary capital are debt instruments where interest is paid to the counterparty. In case of solvency problems, can these interest payments are stopped, and the instruments can either be written down or converted to ca capital of higher quality (shares – and thus actual core capital).

In 2018, a new requirement has been introduced. The term "liabilities suitable for impairment" covers over capital base instruments as well as liabilities suitable for impairment. Write-down liabilities are long-term debt obligations that are not capital base instruments, but which in a crisis situation can be converted to equity or written down in order to re-capitalize the institute. The NEP originates from the crisis management directive (BRRD) and reaches institute terns must meet this NEP requirement, it is with a view to ensuring that they are constantly prepared in such a crisis situation. The Danish Financial Supervisory Authority determines the NEP supplement for the institutes, and through on average, this must amount to 4.7%.

In addition, there are a number of capital buffers which must be met with actual core capital. Buff the ferry requirements have been continuously phased in and are fully implemented in 2019. The buffer requirements lies beyond the CRR's minimum requirements and is also an addition to the individual solvency requirement Oops.

The capital base must be compared with the risk-weighted exposures. All exposure ger is assigned a risk weight. There are two methods; the standard method and the internal method (IRB). The standard method is schematic and the most widespread in Denmark, where very few institutes makes use of the IRB.

The standard method divides all exposures into 17 classes, and there are specific weights for each single class. It is possible to use credit rating agencies in this connection, whereby the institute can achieve a more precise weighting, which in many cases will result in a lower risk cow weight. For example, exposures to companies are weighted at 100%, but if a credit rating agency has assessed the credit quality, the exposure is weighted by 20-150% depending credit quality.

The institute can use collateral as a credit risk reduction tool. The simple me tode effectively provides the collateral instead of the exposure, whereby a be can be obtained savings on the risk weight if the security comes from an exposure class (cf. standard me toden), which has a lower risk weight. The extended method – as Østjydsk Bank A/S an turned – starts from the risk-weighted exposure and adjusts for a volatility factor tor on safety.

The institutes must calculate an individual solvency need. Unlike the calculation of capital pro the centers above see the need for solvency going forward, and future risks must be taken into account. Fi The Danish Health and Safety Authority uses an 8+ model with two pillars. Pillar I consists of CRR's 8% requirement, and pillar II consists of supplements to cover specific forward-looking risks. If you, for example, has a high concentration of engagements within a certain sector – in the case of Østjydsk Bank properties – the credit risk increases, and the institution receives a Pillar II supplement. The figure below illustrates how an institution with an individual solvency requirement of 12% with addition of a combined capital buffer requirement of 1.875% must meet this requirement in 2018.

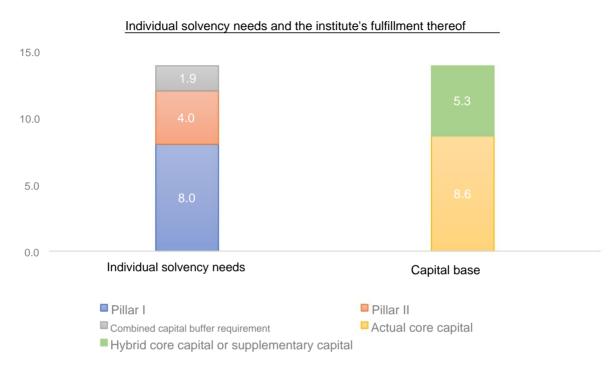


Figure 4: Example of fulfillment of individual solvency needs

The actual core capital must thus be met by 4.5% from pillar I, 2.25% from pillar II and ca the pital conservation buffer of 1.875%.

# 3 Case review – Østjydsk Bank A/S

In the years following the financial crisis, several Danish banks and savings banks were in crisis. Including Løkken Sparekasse, EBH Bank and Roskilde Bank. What these three banks had in common was that they did not made it through their respective crises. This was also the case for Østjydsk Bank, which is the latest Danish case where a bank has not been able to navigate through one prolonged crisis. Østjydsk Bank's crisis was precisely a crisis that stretched over a longer one period. Therefore, the bank has on several occasions actively worked to manage its crisis by use of several of the crisis management options available in the current regulation, and which this thesis will later deal with. On the basis of the case's topicality and relevance to the relationship to the problem addressed, we have chosen to use the case to relate in this thesis regulation and theory to a problem in practice.

In the following, the course of the specific case surrounding Østjydsk Bank A/S is explained due to publicly available material, be it annual reports, published orders, re statement from the Danish Financial Supervisory Authority, articles, statements, etc. The account proceeds chronologically and in managed in 2006 immediately before the financial crisis left its mark.

In the financial year 2006, Østjydsk Bank A/S created the bank's best result ever with a re profit before tax of DKK 90.3 million. DKK. This was primarily created on the basis of increased business volume, positive price adjustments as well as historically low write-downs on exposures. <sup>126</sup> It increased business scope primarily involved increased lending to new and existing customers – through rain in the financial year 2006, the lending stock increased significantly by 47%, while write-downs on exposures amounted to 4.9 million DKK corresponding to a write-down percentage in relation to lending and guarantee assets late at 0.1%. The bank's solvency ratio amounted to 31.12.2006 14.5% against 14% in 2005 despite the increasing growth in the lending stock. The maintenance of the solvency ratio was due to the year's positives result, a capital increase and taking in additional supplementary capital. <sup>127</sup>

In the annual report for 2006, the management expressed its expectations for the following financial year. Here, a result in the region of DKK 80 million was expected. DKK, while loan growth was expected would be decreasing compared to the realized growth for 2006. <sup>128</sup> Despite the relatively subdued expectations for 2007, the bank exceeded all history and expectations and realized a result earlier

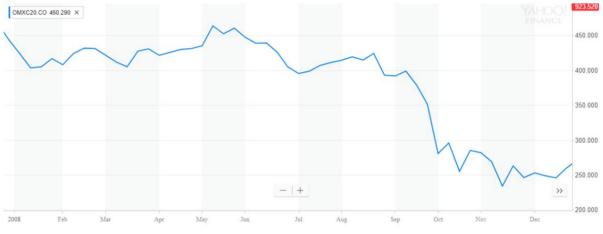
<sup>126</sup> Østjydsk Bank annual report 2006 p. 10

<sup>127</sup> Østjydsk Bank annual report 2006 p. 10

<sup>&</sup>lt;sup>128</sup> Østjydsk Bank annual report 2006 p. 11

tax of DKK 102.9 million DKK, a loan growth of another approx. 40% and once again low write-downs on commitments amounting to 0.2% of the lending and guarantee pool. The solvency ratio developed in the period only negative by 0.7 percentage points despite the significant increase in the balance sheet. This was because the bank carried out another capital increase, while the supplementary capital li was also increased, which partially offset the effect of the increased balance sheet on the total capital ratio.129

After the bank's good financial years in 2006 and 2007, there was significantly more unrest in the financial market there, and in the second half of 2008 the financial crisis hit Denmark, which is reflected both by the curve in The C20 index and Østjydsk Bank's annual accounts for 2008.





In the intervening period up to and including 2012, the bank maintained and improved more or less its net interest and fee income, while write-downs on exposures increased significantly and was a direct cause of the poorer and poorer results the bank produced.

In 2012, the bank got into serious trouble for the first time after the financial crisis, when write-downs on commitments increased from DKK 128 million. DKK in 2011 to DKK 364 million. DKK in 2012, and the bank realized thereby also its first deficit after the financial crisis of DKK 203 million. The DKK 364 million DKK, as the bank cf. the annual accounts written down in 2012, however, turned out to be insufficient. Fi In May 2013, the Norwegian Financial Supervisory Authority inspected the bank, where the Norwegian Financial Supervisory Authority reviewed a total of 178 commitments consisting of all commitments over DKK 20 million. DKK and a sample of 100 exposures between a quarter and 20 million DKK In this connection, the bank was ordered to make take further write-downs totaling DKK 342 million. DKK, of which approx. 127 million DKK could be attributed

<sup>129</sup> Østjydsk Bank annual report 2007 p. 10

for the financial year 2012. The bank therefore issued supplementary/corrective information for the annual report porten for 2012, which for the financial year showed total write-downs on loans and receivables turns at DKK 491 million. The write-downs made in 2012 amounted to 7.2% of total lending and guarantee mass. <sup>130</sup> The Danish Financial Supervisory Authority stated in its statement that among the 78 largest engage ments was OIV of 35 engagements and that these were primarily real estate engagements in premises the area. Banks' exposure to the property market was 16.5%, while the average for group 3 banks were 5.7%. The bank was thus 3 times as exposed to fluctuations in the property the judgment market like other banks of the same size as Østjydsk Bank. Well and half len of the ordered additional write-downs was also due to the bank's calculated values of properties pledged as collateral for lending were too high. In addition, 25% of those ordered can mer write-downs are attributed to the bank's smaller business and private customers, where the bank cf. Finance the authority's report has been too optimistic in relation to these customers' ability to repay, which have been based on optimistic budgets rather than realized results.

Derived from the mentioned additional write-downs, cf. above, the bank's capital ratio had fallen to 8.7%.

This is higher than the then legal requirement of 8%, but still below that calculated by the Danish Financial Supervisory Authority individual solvency requirement of 11.7% cf. the Danish Financial Supervisory Authority's announcement of 30 May 2013. In the same notification, the bank was ordered to take the necessary measures with a view to re

establish solvency so that the individual requirement is met. In addition, the Danish Financial Supervisory Authority declared the bank to be under recovery, which means that before 7 June 2013 the bank should submit a recovery plan, where the bank's planned measures to restore solvency were submitted.

In addition, the bank was ordered by the Danish Financial Supervisory Authority to limit dispositions. This meant, among other things, that the bank was not allowed to pay out dividends or interest for the time being issued share capital as well as hybrid core capital and subordinated capital. The disposition limits sending measures also meant that the bank was not allowed to undertake any further significant ones risks, for example lending, however taking into account day-to-day operations. All of the above orders were to be waived when the bank again met the stipulated individual solvency requirement.132

Based on the recovery plan drawn up by the bank, the bank succeeded in re establish solvency in 2013, so that the individual solvency need was once again met. This

<sup>&</sup>lt;sup>130</sup> Supplementary/corrective information to the annual report for 2012 p. 16 The Danish

<sup>&</sup>lt;sup>131</sup> Financial Supervisory Authority's report on the inspection of Østjydsk Bank A/S of 30 May 2013 The

<sup>132</sup> Danish Financial Supervisory Authority's determination of solvency requirements and disposition-limiting order of 30 May 2013

happened i.a. via a capital increase in September 2013, which provided the bank with net proceeds of 102 million In addition to the capital injection, work was also part of the bank's recovery plan with the asset side by reducing the risk-weighted exposures. On that background sold out Østjydsk Bank's shares in DLR Kredit A/S to A/S Arbejdernes Landsbank and respectively Nykredit Realkredit A/S. In addition to the shares in DLR Kredit A/S, the bank also managed to sell its three southern branches in Vejle, Horsens and Skanderborg to A/S Arbejdernes Landsbank, which further reduced the bank's risk-weighted exposures. <sup>133</sup> The end of 2013 was solvency the percentage increased to 16.2%, which in relation to a calculated individual solvency requirement of 11.9% meant, that the bank was no longer under recovery.

2013 also saw changes in the bank's management. Jens Vendelbo, who for a 20-year period had had been the bank's director, was fired and released, which according to the bank itself came "in connection with the publication of the period notice for the 1st quarter of 2013". In this period notice the bank informed the public about the additional write-downs that the Danish FSA had ordered the bank to carry out. The dismissal and the subsequent communication are difficult to interpret as well as the fact that the bank's board was not satisfied with the bank's handling of the credit area and that responsibility for this belonged to Jens Vendelbo. To replace the exempted director was Max Hovedskov appointed new director of the bank and thus one man on the board. In the same order commitment, several measures were initiated to improve the bank's credit management, including opda tering of business procedures, assistance from external advisers, etc. In addition, the bank also employed a new manager who was to be responsible for the credit area. About the implementation of these measures alone can be attributed to Max Hovedskov, is unknown.

Per On 1 January 2014, the previously mentioned capital requirements directive CRD IV entered into force, as well as capital requirements regulation CRR in force. According to the management, these new rules in the area of capital tightened capit the numerical requirements for Østjydsk Bank. In its annual report for 2013, the bank was able to report on a capital procents per 31.12.2013, calculated according to the rules in CRR and CRD of 15%, which was 1.2 percent points lower than according to the rules in force at the time.

In 2014, the Danish Financial Supervisory Authority again inspected Østjydsk Bank. The inspection was a follow-up on the inspection that took place in 2013, which gave rise to an order for further write-downs nings of engagements. Again, the inspection was able to establish that the bank was particularly exposed to

<sup>133</sup> Østjydsk Bank Annual Report 2013 p. 15

<sup>134</sup> Østjydsk Bank Annual Report 2013 p. 15

<sup>135</sup> Østjydsk Bank Annual Report 2013 p. 15

for the property market with a total exposure of 17.4% against an average for together similar institutions at 11.6% (group 3 banks). The result of this inspection, which by the way included the bank's 87 largest engagements as well as 180 randomly selected engagements, was one order on the need for further write-downs of DKK 216 million. DKK This additional need for down writings, the Danish FSA identified various reasons for. The explanations were, among other things, foal from the Danish Financial Supervisory Authority:

- In several cases, the bank had increased exposures as a result of continued negative operations with the customers
- The bank had prematurely reversed write-downs on exposures
- Commitments had developed negatively compared to the last visit in spring 2013
- The bank had in several cases overestimated the value of projects
- The bank has not been sufficient for small and medium-sized business engagements close to the engagements
- Assets pledged as security for exposures have in several cases been overvalued nest
- The bank does not write down fast enough

With an order for further write-downs of DKK 216 million. DKK this meant that the bank's capital ratio at the end of June 2014 fell to 10.2%, which is well above the legal minimum requirement, but lower than that individual solvency needs of 12.9% calculated by the Danish Financial Supervisory Authority. This circumstance indicated lead to the bank once again finding itself in a recovery situation. Therefore, the bank got as during the previous recovery, order to prepare a recovery plan that detailed describes the measures the bank will implement to restore the capital. This time the bank was given a week by the Danish Financial Supervisory Authority to submit this plan. 136

Again, the bank had to try to re-establish the necessary capital by focusing on both assets and liabilities. Therefore, in 2014 the bank sold additional shares in DLR Kredit A/S for DKK 38 million. DKK for to reduce its risk-weighted exposures. As before, the bank sold in this one round also departments from. This time it was the branches in Randers and Gjerlev that stayed sold to Jutlander Bank A/S. The sale contributed both to a reduction of the bank's risk-weighted equity sponsorships as well as access to the equity based on the proceeds received.

<sup>137 &</sup>lt;sub>One</sub>

<sup>136</sup> The Danish Financial Supervisory Authority's determination of solvency requirements and disposition-limiting order of 3

<sup>137</sup> July 2014 Østjydsk Bank Annual Report 2014 p. 12

another measure in connection with recreating a satisfactory capital situation was to convert a loan of approx. 50 million DKK in hybrid capital to equity capital. Despite the implemented measures, which everyone here and now improved the bank's capital base, so it was not enough at the time point to meet the FSA's calculated solvency requirement of 12.9%, and the bank thereby entered into 2015 under restoration.

Not surprisingly, the Danish Financial Supervisory Authority was also here on an inspection to follow up on the previous ones inspections in 2013 and 2014. The situation was different compared to the two previous inspections, as this time the bank was already under recovery when the inspection began. Content in terms of this visit was not significantly different from the previous ones, as the FSA left behind the bank with an order to carry out further write-downs for approx. 60 million DKK primarily on background for the same reasons as listed earlier. The order for further write-downs meant that the bank's actual core capital amounted to 5.5%, which was above the minimum requirement of the law of 4.5%. However, the Danish Financial Supervisory Authority had calculated the need for a supplement to this of 4.2%, corresponding to a total requirement for the bank's actual core capital of 9.7%, and there was thus an undercoverage of the actual core capital of 4.2%. Despite this undercoverage, the bank's total capital ratio at the end of March 14%. Thus, at that time, it was the composition of the capital base and not the total capital percentage set by the Danish FSA 13.2%, which the bank could not meet.

In addition, the bank received a risk notification that it exceeded the supervisory diamond's threshold value too large exposures, and thus the bank could only meet four of the five measurement points in the supervisory diamond. 139

As a consequence of the fact that, after this visit, the bank still did not meet the applicable capital requirements, it was thus still covered by the disposition-limiting injunctions and once again had tasked with preparing a recovery plan for submission to the Danish Financial Supervisory Authority.<sup>140</sup> In the annual accounts bet for 2015, the bank's management stated that, as part of the recovery plan in 2015, it had carried out a capital increase that derived gross proceeds of DKK 83.4 million. DKK In addition issued the bank's hybrid capital for DKK 75 million. DKK. These transactions combined with previously mentioned from sale of departments to Jutlander Bank A/S meant that the bank was no longer in existence at the end of 2015

<sup>138</sup> Østjydsk Bank Annual Report 2015 p. 13 The

<sup>&</sup>lt;sup>139</sup> Financial Supervisory Authority's report on inspection of Østjydsk Bank A/S of 19 May 2015.

<sup>&</sup>lt;sup>140</sup> The Danish Financial Supervisory Authority's report on the inspection of Østjydsk Bank A/S of 19 May 2015.

under recovery, as the capital ratio could be calculated at 16.7%, while the actual core <sup>141</sup> The management also stated in the annual accounts for 2015, capital ratio could be calculated at 7.5%. that this had drawn up a capital plan for the period end of 2015 to end of 2019, after which management opinion showed that the bank was able to meet the capital requirements even after 1 January 2018, when the state hybrid capital could no longer be counted in the calculation of the capital 142 and after the full phasing in of the buffer requirements cf. CRD in 2019. In March 2016, the Danish Financial Supervisory Authority once again inspected the bank, where the loans were again suspended reviewed. The inspectorate again found a need for further write-downs. This time in size 22 million DKK per at the end of the 1st quarter 2016. The Danish FSA found again that the bank was in excess secured against business customers and especially real estate engagements in relation to sam similar institutes. However, the supervisory authority was able to ascertain that the capital conditions in the snapshot was satisfactory, and that the bank had improved significantly in the credit area. But was the authority was not convinced by the capital plan prepared by the management, and the authority gave in this connection a risk information about this, since in their opinion the plan operated with such care 143 the a margin that even minor deviations would lead to a breach of the capital buffer requirements. Immediately after the publication of the inspection report of 2 August 2016 the bank applied to the Danish Financial Supervisory Authority for permission to redeem 40% of its state hybrid core capital. This with the argument that a redemption would improve the bank's earnings from savings interest on the instruments. This improved earnings would make the bank better able to resist any future orders for additional write-downs. Furthermore, the bank argued because a partial repayment of the debt would increase the probability that the bank realized the results tater that was assumed in the prepared capital plan. However, the Danish Financial Supervisory Authority granted this application refused by the bank. 144 In the management report in the annual report for 2016, the management reports that the capital ratio on

being time was satisfactory. This satisfactory level was, however, based on that the bank included in its capital base the state hybrid core capital, which per 1st of January 2018 could no longer be counted as capital basis. The management also stated that that of the then-current "guidance on sufficient capital base and

<sup>141</sup> Østjydsk Bank Annual Report 2015

<sup>&</sup>lt;sup>142</sup> p. 13 Østjydsk Bank Annual Report

<sup>&</sup>lt;sup>143</sup> 2015 p. 13 The Danish FSA's report on inspection of Østjydsk Bank of 2

<sup>&</sup>lt;sup>144</sup> August 2016 The FSA's decision on application from Østjydsk Bank A/S to redeem 40% of the state's hybrid core capital

solvency needs for credit institutions" it appeared that the bank, for reasons of prudence, a year before that state equal to the maturity of hybrid capital, should calculate an addition to the solvency requirement, if the bank does not expected to replace this capital with other capital instruments of the same or higher quality little. The supplement had to correspond to what the bank included in its capital base from the state hybrid capital. This meant that the bank per On 1 January 2017, the capital conservation buffer requirement was broken vet, which at the time amounted to 1.25%. Therefore, the bank stopped paying from then on interest on the bank's hybrid capital instruments, and at the same time the bank prepared a capital plan, which was subsequently approved by the Danish Financial Supervisory Authority. The plan, like previous recovery plans, took starting from reducing the risk-weighted exposures. In addition, it also implied attempt to refinance the bank's subordinated capital and to once again apply to Finanstil synet for permission to redeem the state's hybrid core capital early.145

The Danish Financial Supervisory Authority's latest inspection of Østjydsk Bank A/S took place in the 3rd quarter of 2017. Inspection The transaction was also the last of its kind in the company Østjydsk Bank A/S. The inspectorate found out due to the inspection, additional write-downs are needed for a total of DKK 131.6 million. DKK, which meant that the bank's solvency fell to 14.6% per 30 September 2017, while the actual core capital decreased to 6.7%, mind you, after the bank had written down hybrid core capital of DKK 75 million. DKK However, the bank's solvency requirement was calculated at 20.5%, which the bank has a solvency ratio of 14.6% obviously could not pay. The bank was thus once again tasked with finding one solution to its capital difficulties. Before 10 January 2018, the bank had to have prepared and submitted a recovery plan to the Danish Financial Supervisory Authority. More experts and stakeholders in Østjydsk Bank A/S, Lars Krull, senior advisor, was out to comment in this connection at Aalborg University, who did not attribute the bank's chances of surviving independently this crisis in which it found itself; <sup>146</sup> "It will take a miracle if Østjydsk Bank is to go over live," he stated.

After submitting the recovery plan, the bank had to try to execute it. The plan proved unsuccessful, however, and on 22 February the bank notified the Danish Financial Supervisory Authority that the possibilities to find a private solvent solution were exhausted. Given that it had not been possible to find a solution, the supervisory authority expected the bank to be in distress.

<sup>145</sup> Østjydsk Bank Annual Report 2016 p. 15 "Bank expert: It

<sup>146</sup> looks very difficult for Østjydsk Bank\*, article by Kristoffer Brahm, published on www.finans.dk on 21 December 2017 147

The Financial Supervisory Authority's decision on setting a deadline for compliance with solvency requirements for Østjydsk Bank A/S of 22 February 2018

February 2018, the bank filed for bankruptcy. At the same time, the bank stated that all assets and passports siver, with the exception of subordinated capital, was sold to Sparekassen Vendsyssel for a sale price of 50 million This end of several years of financial difficulties left the bank's shares fees without value, while according to the plan there should be partial coverage for the subordinated capital speak up. This was, however, a solution that did not result in losses for the bank's customers, who in the future will be customers of Sparekassen Vendsyssel.148

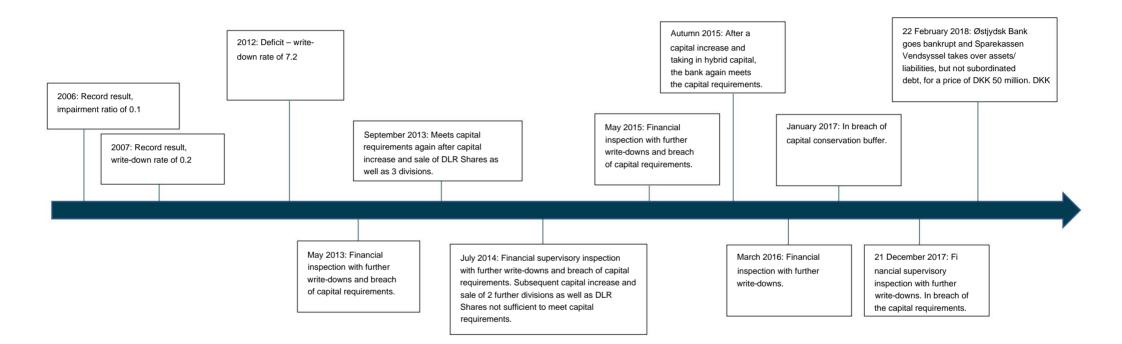
# 3.1 Summary of the process

In 2006 and 2007, Østjydsk Bank increased the lending balance by 47% and 40%, at the same time that the bank largely did not identify the need for write-downs on loans, which led to one record profits after the second in these years.

In 2008, the financial crisis hit Denmark, which slowed down the large lending growth, at the same time that the bank slowly began to identify write-down needs. However, apparently not to sufficient extent, since the Danish Financial Supervisory Authority ordered the bank to write down significantly higher i in connection with its inspections. The hallmark of the entire process has been that the Danish Financial Supervisory Authority since his visit in 2013 has criticized the bank's credit policy and processes in the credit area. There in addition, the management has for several years provided information about uncertainty regarding the recognition and measurement of lending in the management report, as the bank has not had sufficient IT support creates for calculation of write-downs. However, the management assessed that this uncertainty was not significant for the accounts.

In the period 2006-2018, the bank has undergone recovery three times. Two of the times it is the bank succeeded in re-establishing the capital by capital increases, issuance of hybrid capital, write-down of hybrid capital and sale of branches. New capital requirements including chap number preservation buffer requirements as well as regulatory maturity of government hybrid core capital meant that the bank was put under more pressure than it was before. The drop that broke the cup was the order from the Danish Financial Supervisory Authority on 21 December 2017 regarding the need for additional write-downs of 131.6 million DKK The bank could not recover from this recovery situation. The course is illu dashed on the timeline below.

<sup>&</sup>lt;sup>148</sup> "Østjydsk Bank goes bankrupt - assets sold to Sparekassen Vendsyssel", article published on www.euroinvester.dk on 22 February 2018.



### 3.1.1 The bank was so far from meeting the capital requirements

Since the management of Østjydsk Bank at the beginning of 2018 had to try to find a solution to the bank's capital challenges, it was with the starting point that the bank met the CRR's requirements about a capital percentage of 8%, including a core capital of 6%, of which 4.5% must be made up of actual core capital. As previously mentioned, what the bank did not meet was the capital preservation buffer the fair requirement of 1.875%, which must be met with actual core capital and that of the Danish Financial Supervisory Authority calculated individual solvency needs of 14% per 2018 corresponding to a total capital base of DKK 357 million. DKK 149 The Danish Financial Supervisory Authority reports in its decision of 22 February 2018 that at the latest statement, a capital percentage of 8.5% was calculated, corresponding to a capital base of DKK 215 million. As a result, the bank was in an emergency situation and lacked DKK 142 million. DKK in capital basis to fulfill it individual solvency needs according to the Danish Financial Supervisory Authority's order and carrying out the additional write-downs per 21 December 2017 and after regulatory maturity of hybrid government hybrid core capital. Considering the requirements for fulfillment and distribution of pillar II supplements, respectively 56% actual core capital and 75% core capital, as well as that the bank was in breach of the capital preservation buffer requirement, but still otherwise fulfilled the requirements cf. CRR for respectively core capital and actual core capital, then the bank's lack of capital was distributed as follows: 150

In total, the bank lacks DKK 142 million. DKK to meet individual solvency needs:

- The gap between the bank's actual solvency ratio and the individual solvency need out

did 5.5 percentage points

- In addition, the bank lacked 1.875 percentage points in the capital conservation buffer
- In total, the gap between the bank's actual solvency ratio and the total requirement was 7.375 per cent centpoint corresponding to 142 million DKK

The Pillar II supplement's share of the total capital requirement can be calculated at 75%, cf. this calculation:

= <u>5.5</u> = <u>75%</u> 7.375

The Pillar II supplement thus amounts to DKK 106.5 million. DKK. This must be fulfilled with respectively 56% actually care equity capital (DKK 59.6 million) and 75% core capital (DKK 79.9 million).

<sup>&</sup>lt;sup>149</sup> The Danish Financial Supervisory Authority's decision on setting solvency requirements and disposition-limiting measures of 21 December 2017.

<sup>150</sup> Estimated calculation. We assume that the missing 142 million is inclusive of the capital conservation buffer requirement.

The capital preservation buffer constitutes the remaining part of the missing capital. Thus many there is an additional 35.5 million DKK in actual core capital. The total need for actual core capital amounts to DKK 95.1 million. DKK

# 4 Crisis management in financial institutions

The word crisis management may at first seem somewhat broad and subjective, but for financial services in some cases there is a very specific set of rules that must be followed. The relevant rules can be found in FIL, where there are, among other things, chapters with titles such as 'Cessation', 'Early intervention', 'Crisis management' and 'Impairment and conversion of capital instruments'. After read through ning of these chapters in FIL, it is our impression that although there are strict requirements for financial companies, and perhaps particularly strict requirements in the event of a crisis in financial companies, then the law is also arranged in a way that seeks to promote the possibilities of a private and flexible solution, when a financial company is in crisis. Rules that promote the possibility of private solutions will we also comment on in this section.

Despite the extensive set of rules regarding crisis management in FIL, there is no one specified in the law definition of the word 'crisis'. Instead, there is a definition of when a bank, etc. seen as to be destitute. The definition contains 3 scenarios, all of which result in emergency status dende: <sup>151</sup>

- 1) The bank violates, or will in the near future violate, the capital requirements
- 2) The bank will not be able to service its debt in the near future as it due
- 3) The bank receives extraordinary support from the public

In this thesis, the above definition will cover the concept of 'crisis'.

Some of the requirements and options in FIL become available under specific conditions, such as differs from the above definition of crisis. In those cases, it will be indicated which prerequisites nings that give access to the opportunity or oblige in relation to requirements. In relation to the one above standing definition and the review of Østjydsk Bank's history in section 3, the bank has most recently been in crisis since 30 December 2016, when it was explained in company announcement no. 12/2016 for the bank per 1 January 2017 was unable to meet the requirement for a capital conservation buffer of 1.25%.152

151 FILE § 224

a 152 Company announcement no. 12/2016 issued by Østjydsk Bank A/S on 30 December 2016

# 4.1 Early intervention

From and including the time when Østjydsk Bank with overwhelming probability in the near future violates the requirements of, among other things FIL and CRR, the Danish Financial Supervisory Authority has a number of injunction options and etc rich tools they can use in the attempt to improve the bank's financial situation. To able to assess within a short period of time whether a financial institution is in distress, there is a provision in FIL melse, which obliges financial institutions to have effective procedures and systems, so that they within 24 hours can provide the necessary information in connection with the assessment again.153 When a bank has been assessed as distressed, the Danish FSA has, among other things, the following ordering possibilities:154

- Order that the bank must prepare or update its recovery plan
- Order that the bank must prepare and submit an action plan to the Danish Financial Supervisory Authority
- Order that the bank must convene the highest authority (the general meeting)
- Order that one or more members of the bank's board or management must resign

lay down the task

- Order to prepare and submit a plan for negotiations on the restructuring of

the company's debt

- Order to contact potential buyers with a view to preparing a liquidation of

the company

From the examples above, it is clear that the Danish Financial Supervisory Authority has far-reaching competences over the companies it supervises. For non-financial companies, it must be expected that that a decision to contact potential buyers with a view to preparing a liquidation of the company will be a decision made by a company's board of directors and general assembly, but in this case, where it is a bank in crisis, this competence is also attributed to the Danish Financial Supervisory Authority. At the same time, the Danish Financial Supervisory Authority can order Østjydsk Bank to submit a recovery plan and an action plan. The Danish Financial Supervisory Authority made use of that competence at the latest 21 December 2017. The recovery plan is not publicly available, but from the relevant executive order155 it is possible to gain an insight into what a recovery plan must contain, and

<sup>153</sup> FILE § 245 a,

subsection 1 154 FILE §

<sup>243</sup> a, subsection 1 and 2 155 BEK no. 724 of 27/05/2015 – Order on recovery plans for banks, mortgage credit institutions and fund brokerage companies I

how extensive such a thing is. For example, a recovery plan must include enter into a be letter of potential merger parties, an explanation of how a number of scenarios seriously equal macroeconomic and financial stress will affect the bank as well as a number of indicators if for aim is to define when the bank should initiate measures from the recovery plan.

If it turns out that the orders above are not sufficient in relation to ensuring an improvement of the bank's financial position (or an amalgamation in the form of a merger, etc.), has the Danish FSA possibility to order one or more management members, i.e. both board and management members to resign. However, the FSA does not have the authority to appoint new management members.156 If the FSA assesses that there is still a need for changes in

the management, after the aforementioned option has been used, they have the option to order the company to appoint one or more temporary administrators who either replace or assist the board sen. 157

### 4.2 Crisis management

If the bank in question has not been successful in ensuring compliance with the capital requirements after the work during the early intervention, the set of rules regarding crisis management is applied. That first, which is addressed in the chapter 'Crisis management' in FIL, is a merger with another bank. From the first two paragraphs in the chapter, it appears that in the event of a merger with a distressed bank is an opportunity to collect a tax applicable to the tax authorities relative value of the distressed bank's loans and guarantees. This can be obtained from a valuation board, which within no later than 5 days after receiving the request, as well as additional reasonable basis for assessing the tax value of the loans and guarantees, must come up with its decision.158 For the two parties to the merger, there is thus a quick way in which they can clarify an important issue in the merger process, which helps to paint a picture of a set of rules, which wants to promote the possibilities for crises in the banking sector to be resolved via private in volvering and not with state support.

Another administrative relief introduced in the chapter is the possibility that the company's highest authority (the general meeting of Østjydsk Bank) can be convened with a 3-day deadline, if measures are to be decided in order to be able to meet the capital requirements. However, it must

156 FILE § 243 b

<sup>157</sup> FILE § 243 c

<sup>158</sup> FILE §§ 244 and 245

it should be noted that for listed banks, which Østjydsk Bank was, it will have to be convened with a notice of at least three weeks.159 When the supreme authority is convened, the measures can be adopted with 2/3 of the represented capital160, although this is contrary to the provisions of the Companies Act.161 If 50% of the capital is represented at the general meeting, a simple majority is sufficient to adopt the measures.162

If the board wishes to transfer the bank's business to another financial institution, it has possibility to do this with the permission of the Minister for Business (in practice the Danish Financial Supervisory Authority), with unless the general meeting adopts another solution which will ensure that the bank complies with the capital requirements.163 This is therefore a significant relief, as the board of directors with a large sibility has the option of transferring the bank's business to another bank. It may it is assumed that if the board has not been able to find another solution that will could restore the necessary capital, then the general meeting will not, all else being equal be able to do that.

Precisely this solution ended up being the chosen solution for Østjydsk Bank, as we previously have gone through. If a bank has lost its equity, is insolvent or expects to become so insolvent, the board can transfer the company to another financial institution, without general the assembly has the option of adopting other solutions. An orientation meeting with the general meeting must therefore only be convened. 164

From company announcement no. 1/2018 issued by Østjydsk Bank A/S on 22 February 2018 it appears the fact that the bank calls an informational shareholder meeting in accordance with FIL § 247, subsection 2. Thus Østjydsk Bank must have been in a situation where they were insolvent or expected to become so. The shareholders in Østjydsk Bank A/S were effectively powerless and without the opportunity to change the board of directors decision to transfer the company.

In our opinion, this possibility exists because, as previously mentioned, it is a wish from the legislator's side, that there are private solutions to crisis situations in the banking sector. From action ers' point of view, however, in our opinion it is inappropriate that they in a situation where they get no cover (i.e. lose all of his invested capital in the shares in Østjydsk Bank A/S), not

159 FILE § 246, subsection

1 160 FILE § 246, subsection 5 161 SL §§ 106 and 107 162 FIL § 246, subsection 2 163 FILE § 246, subsection 2 164 FILE § 247 has any real opportunity to influence the solution decided by the board. This is eczema pel that the interests of the shareholders are disregarded in favor of the interests of society as well as hensy net to maintain confidence in the financial sector.

# 4.3 Impairment and conversion of capital instruments

As we have previously reviewed, a large part of banks' capital can be made up of capital types such as can be written down or converted in certain cases. We began this chapter by stating that if the FSA assesses that the bank in question will not be viable, unless if certain capital instruments are either converted or written down, the supervisory authority must do this without undue delay.165 The assessment includes that the bank in question first and above all must be in crisis, and secondly that the Danish FSA must assess that there is no prospect for a solution neither of a private nature nor via the intervention of the Danish Financial Supervisory Authority, which will prevent the bank from being liquidated.166

<sup>165</sup> FILE § 272, subsection

<sup>1 166</sup> FILE § 272, subsection 2

# Chapter II

# Analysis and assessment of tools for crisis management

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In this chapter, we will delve into some approximate tools, such as a bank in crisis our opinion should consider to get out of the crisis. The list of tools is presumably far from exhaustive, but it is nevertheless our take on the most obvious tools asks to put into use and partly a tool that we expect will be used to a large extent in the future.

Chapter I clarified that when a bank is in crisis, there are several parameters that must be taken into account to the work of getting the bank out of crisis again. Based on that knowledge, we have chosen that we will evaluate the individual tools based on three parameters:

- Effect on capital
- Effect on liquidity
- Availability and flexibility

When a bank is categorized as in crisis, it is i.a. because it can no longer comply the capital requirements that apply. Therefore, the first parameter we will look at is in which about catch the individual tools affect a bank's capital ratio. The next parameter we will look at is is the liquidity effect. As the banking market looks today, it is our opinion that there is no problem in fact, there is a lack of liquidity - perhaps the opposite. <sup>167</sup> Having said that, access to liquid was a challenge i.a. in connection with the financial crisis, which will be evident from our review of the banking packages later in this chapter. Therefore, we also estimate that the liquidity effect of the one celt tools is an important parameter, but whether increased liquidity is positive or negative must depend on the situation and the individual case. Østjydsk Bank A/S wanted increased liquidity our opinion would not be favourable, as the bank had no need for liquidity to finance further lending, and at the same time the liquidity would cost money to have on hand at Danmarks Nationalbank.168 The last parameter we will evaluate the tools on is accessibility and flexibility. It will we, because banks in crisis have a certain deadline to maintain capital requirements again before their license as a bank, will ultimately be revoked. Therefore, it is essential that the individual ed creates can be used relatively quickly and with a high degree of flexibility in relation to scope. With based on the three parameters, we will conclude by comparing the individual tools and assess to what extent they can possibly be combined with each other.

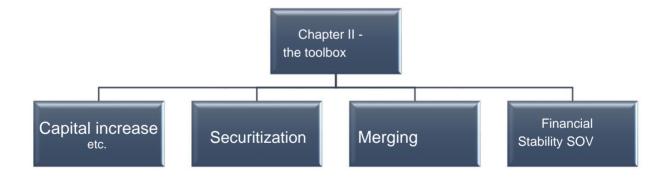
<sup>&</sup>lt;sup>167</sup> "Money in the bank doesn't pay - but we save like never before", article by Dorthe Lønstrup published on www.politiken.dk on 6 June 2016.

<sup>168 &</sup>quot;Official interest rates", published on Nationalbank's website www.nationalbanken.dk under Markedsinfo, valid from 8 January 2016.

The tools we work with in this chapter are all intended as emergency tools in a time of crisis not as long-term solutions for banks with unsatisfactory business and operations. We fo in other words, the bank must be able to get out of its crisis-stricken status, but not on what lies after this. The tools we have chosen to focus on are:

- Capital increase and adoption of hybrid as well as supplementary capital
- Securitization
- Merging
- Financial Stability

Financial Stability differs from the other tools in the way that the purpose of Financial Stability is not saving a bank out of crisis, but instead liquidating a bank at its best possible way, taking into account financial stability. When we have it with us anyway our analysis, it is because we find it essential to also investigate what happens to one bank, if it does not succeed in getting out of its crisis with the help of, for example, those mentioned above tools.



### 5 Capital increase and adoption of hybrid as well as supplementary capital

#### speak up

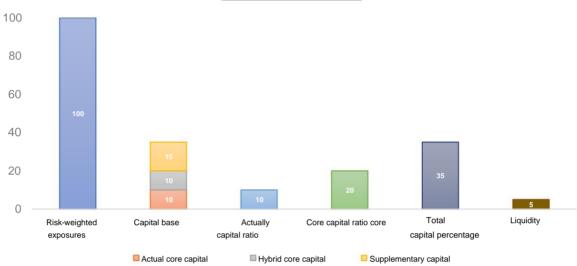
When a bank is in crisis and wants to increase the numerator in the capital percentage fraction, it can be done either via a capital increase, by issuing hybrid instruments, by issuing subordinated debt or a combination of the aforementioned. In this section, we will review the effects of using or ca capital increase and issuance of hybrid capital as well as supplementary capital. In addition, we will gen comply with the requirements and possibilities of company law. There will continuously be related to Østjydsk Bank, where we deem it relevant.

### 5.1 Capital increase A capital

increase is a company law transaction authorized by the Companies Act.169 There are three vari of the capital increase: subscription of new capital shares, transfer of reserves to the company pital by increasing funds or issuing convertible debentures or warrants. In this section, we will deal with the first variant: subscription of new capital shares. The reason we don't will include a fund increase, is that this method does not increase the capital, but simply reclassifies equity from reserves to share capital and thus does not improve the capital base. Issue of convertible debentures and warrants cannot meet the criteria for Tier 1 capital cf. definition the ones described in the section on capital requirements and capital base, but convertible debt letters can instead, if structured in a certain way, meet the requirements to constitute a hybrid core capital instrument.

The capital increase consists of a transfer between one or more investors and the company in question, where the investor pays an amount (either cash or other valuables170) to the company, for which investor receives newly issued capital shares. The purpose of the capital increase is to increase the bank's equity capital, which counts in the actual core capital. As we previously analyzed seen, Østjydsk Bank lacked at least DKK 95 million. DKK, before it could meet the minimum requirement to actual core capital and a further DKK 947 million. DKK in capital base before it could fulfill it solvency requirements determined individually by the Danish Financial Supervisory Authority. The only ways to increase the actual ker capital ratio of is either to lower the exposures or to increase the actual core capital,

169 SL § 153 170 SL § 160 which mainly consists of equity capital. An advantage of improving the actual core capital percent is that this also counts in both the total core capital percentage and the total capital base. The effect on the capital base is illustrated below.



Before capital increase

### Figure 6: Example of relevant capital-related key figures - before capital increase

In this example, we have assumed that a bank has risk-weighted exposures of 100. Beware on the reed side of the balance sheet, the bank has an actual core capital of 10, hybrid core capital of 10 as well supplementary capital of 15, which corresponds to an actual core capital percentage of 10, core capital number percentage of 20 and total capital percentage of 35. The bank is now carrying out a capital increase with a net proceeds of 10, which affects capital and liquidity, as illustrated below.

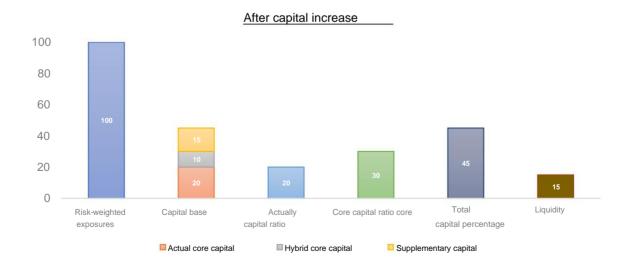


Figure 7: Example of relevant capital-related key figures - after capital increase

The risk-weighted exposures are not affected by the capital increase171 and therefore amount to 100 boats before and after the expansion in the example above. The capital base is affected by net provo the present of the capital expansion, which accrues to the equity in the bank. In the example above, this is illustrated by an increase in the actual core capital from 10 to 20. At the same time, this means that the actual core capital ratio is increased from 10 to 20, while the core capital ratio and the lead capital percentage is increased from 20 and 35 to respectively. 30 and 45. The capital expansion of 10 will as starting point be paid in cash, and therefore increase liquidity - in this example from 5 to 15.

### **Corporate law requirements**

In order to carry out a capital increase, it is necessary to call a general meeting <sup>172</sup> To be able to adopt again, as it is the general meeting that has the necessary competence. increase requires the same majority vote as for changes to the articles of association (double 2/3).173 Alterna tively, the general meeting can authorize the central management body (the board of directors in Østjydsk Bank) to carry out a capital increase within certain frameworks set by the general meeting, including, for example, which method of increase is authorized for, for how long be the authorization runs (maximum 5 years) as well as the maximum amount the capital can be increased within the authorization.174 There is thus an opportunity to give the board of a bank increased flexibility little in relation to increasing the capital and thus strengthening the capital base. Of Section 2 of Østjydsk Banks articles of association state that the board has been authorized to expand the share capital both via new subscription of shares or debt conversion. The authorization is maximized to DKK 96 million. DKK in no minal share capital corresponding to DKK 192 million. shares during the term of the authorization, which ends on 15 March 2019. When Østjydsk Bank A/S lacked approx. 95 million DKK to restore the minimum requirement to the actual core capital percentage, a capital increase could be within the board's remit well bringing the core capital ratio above the minimum requirement again.

If it is necessary to call the general meeting to make a decision, it must according to the rules of the Companies Act, meetings are called with a minimum of 2 weeks and a maximum of 4 weeks' notice. If it is a listed limited company, which was the case for Østjydsk Bank, the free

<sup>171</sup> We assume that cash and cash equivalents are placed with Danmarks Nationalbank whereby they are risk-weighted with 0% 172 SL § 154.

subsection 1 173 SL §§ 154,

subsection 2 and 106 174 SL § 155

sterne minimum 3 weeks and maximum 5 weeks notice. In both cases, the articles of association can set a higher minimum limit for the call.175 This was not the case for

Østjydsk Bank, which, according to its articles of association, had a minimum notice of 3 weeks and a maximum of 3 weeks mum 5 weeks. For financial companies, there is an exception to the deadline rules for summoning general meeting, when the call is made as part of approving a capital increase, which after the bank's assessment is necessary to prevent the bank from becoming insolvent. In that case, the minimum requirement for the deadline is reduced to 10 days. 176

The starting point for a capital increase is that the existing shareholders have a proportional right of preemption.177 In this way, existing shareholders can protect themselves against unwanted dilution by subscribing its proportional share in the company implementing the capital increase. Wishes the shareholders to allow a capital increase without pre-emptive rights, this can be done with double 2/3 majority. From Østjydsk Bank's articles of association, § 2, it appears that part of the board's authorisation to carry out capital increase, includes capital increase without pre-emptive rights for existing ordinary shareholders. If it is a capital increase with preemptive rights, this will increase the time it takes to implement a capital increase, as a minimum period of 2 weeks must be given from the time of notification to the time when the shareholders have to decide whether they want to use the subscription right or not.178

### Assessment of capital increase as a tool for crisis management in Østjydsk Bank

A prerequisite for a successful capital expansion is that it is possible to attract the investors who which will shoot money in the bank. It is clear from the case review in section 3 that it it is far from a given that investors find it attractive to inject new capital – capital stock increases have been discussed several times in Østjydsk Bank, but apparently they have not been easy to attract the necessary capital, presumably because the underlying business in ban ken has been too poor in relation to the business that investors have expected.

An example of this is the capital increase Østjydsk Bank carried out in autumn 2013, where the bank altogether applied for approx. 176 million DKK, but alone succeeded in raising DKK 115 million. DKK before costs linked to the expansion.179 In this connection, Lars Krull, senior adviser at Aalborg, stated

<sup>175</sup> SL § 94

<sup>176</sup> FIL § 67,

subsection 3

<sup>177</sup> SL § 162 178

SL § 158, no. 8 179 Stock exchange announcement no. 30/2013 issued by Østjydsk Bank A/S on 23 September 2013

University that he did not find it realistic that the bank would be able to return the investors' invested capital satisfactorily on the basis of the bank's operations.180

In addition, a capital increase in a crisis-stricken bank will presumably also mean that shares the members of the bank have not yet received sufficient business from the investment they have made, which may increase the reluctance to deposit 'fresh' capital into the bank in question. Despite a capital increase in autumn 2013, which was only partially subscribed, Østjydsk Bank succeeded to carry out another capital increase at the end of 2015, where the bank raised a total of approx. 83.4 million DKK Something suggests that, despite its challenges, Østjydsk Bank has managed to create interest in his business on an investment level. However, this also means that action each time has ended in disappointment, since there have been no improvements in the bank's financial conditions.

It is our expectation that Østjydsk Bank has attempted to carry out a capital increase in in connection with the rescue attempts, which ultimately ended in bankruptcy, but the board is in favor maturely judged that it was unrealistic to raise a sufficient amount. The 95 million DKK, which banks were short of actual core capital, according to our calculations, amounts to more than the amount which was most recently raised in a capital increase. The amount is of significant size in relation to the company bet market value of approx. 60 million DKK, which is why we believe that it is not surprising that the bank ultimately failed to complete yet another capital increase.

As an example of how much the shareholders in Østjydsk Bank have already lost and been in again easy, see below the market value and share price for Østjydsk Bank since October 2006 and until the bankruptcy in February 2018:



Figure 8: Graph with share price and market value for Østjydsk Bank A/S, period Oct. 2006 – February 2018. Source: Bloomberg

<sup>180 &</sup>quot;Researcher turns thumbs down to new Østjydsk Bank shares", article by Ulrik Horn, published on Dagbladet Børsen's website www.borsen.dk on 3 September 2013.

The blue marking on the graph is the share price, while the green line shows the market value of the company. At first glance, it may seem strange that the market value can increase in a period ode with a stable or falling rate, but this is due to the dilution that takes place at kapi number increases. Before the financial crisis, the market value of Østjydsk Bank peaked at approx. 900 million DKK, and just before the bank went bankrupt, the market value was approx. 60 million The shareholders, who have chosen to stand by the bank, have thus experienced massive losses already, and if they have participated in capital increases over the years, they have several times made fresh investment in the company, which after the following is eroded away. If they have not participated in the capital increases, they have been diluted very high degree (which in the light of hindsight is to be preferred versus throwing away more good money after bad ones).

# 5.2 Hybrid and supplementary capital

When a company is in crisis as a result of poor solvency, taking on debt for non-financial cial companies usually worsen solvency. For banks, however, this is the case (cf. section 2), that if debt is structured according to certain conditions, it can actually improve sol the friend in the bank in question. In addition, it is possible to record a special form of capital, the hybrid capital which in some ways resembles a debt instrument but in other ways similar to an equity instrument. This type of capital also improves the solvency of a bank.

One of the reasons why hybrid and supplementary capital can be included in the capital base despite its status as partial or complete debt, is that the capital in question must be in arrears easy, ie simple non-subordinated claims will be at the top of the bankruptcy order, as we also illustrate set out in section 2. At the same time, there is a risk that interest payments on the types of capital will cease, and that the capital is converted to equity. Together, these characteristics make the capital a certain limit protects other creditors. For banks, it provides additional flexibility that they can fulfill capital requirements with something other than traditional equity, but the price is, on the other hand, interest, which must is expected to be significantly higher than the interest rate for non-subordinated debt. For example, East has jydsk Bank hybrid capital with interest of up to 11.15%. <sup>181</sup> Such interest expense (whatever it is for accounting purposes is classified in the income statement or in the equity statement) reduces the equity capital, and thereby also the actual core capital percentage, but the inclusion of these ca types of capital are not counted in the actual core capital, and therefore it is important to consider

<sup>181</sup> Østjydsk Bank's annual report 2016 note 28

the proportion and composition of these types of capital. The effect of taking hybrid and supple working capital is illustrated below.

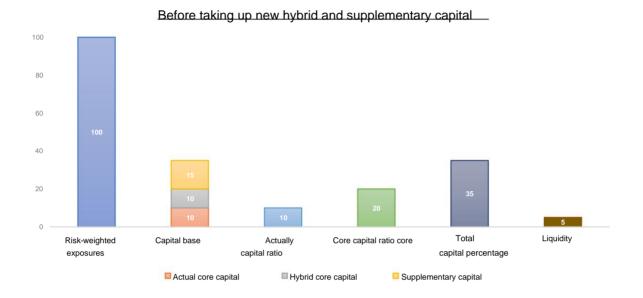


Figure 9: Example of relevant capital-related key figures - before new hybrid and supplementary capital

The starting point here is the same as in the example of capital expansion. If in this example, hybrid capital of 10 and supplementary capital of 10 is taken up, the individual items are affected as shown below.

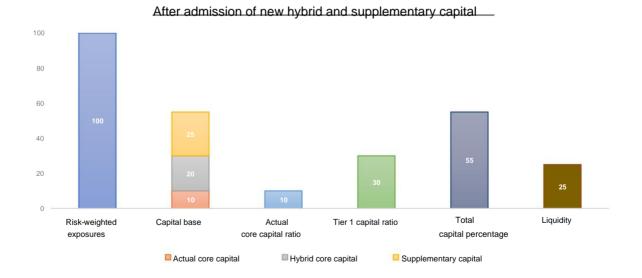


Figure 10: Example of relevant capital-related key figures – after new hybrid and supplementary capital

The risk-weighted exposures remain unchanged, <sup>182</sup> like the actual core capital and thus the actual core capital ratio does. The hybrid core capital is increased from 10 to 20, the supplementary capital from 15 to 25 and thus the core capital percentage becomes 30, while it total capital percentage is increased to 55. In terms of liquidity, this is again a cash payment, why liquidity is increased from 5 to 25.

In order to raise hybrid and supplementary capital, the bank in question must find investo rer/creditors who want to make the capital available. This in itself may prove to be difficult, just as was the case with a capital increase, if it is a crisis-affected company bank, as the investors/creditors must be able to see a sensible business in providing their capital available, while the bank, on the other hand, must avoid an excessively high interest rate that can be expected over time will burden the actual core capital. In addition, it is necessary that the contractual basis struktu is managed in such a way that it meets the requirements of the CRR for resp. hybrid and supplementary capital. Therefore, in addition to the interest cost, a relatively significant cost must also be expected preparation and negotiation of the basis of the agreement.

In the case of Østjydsk Bank, it will probably ease the administrative process that the bank already has raised capital of the type in question before, and therefore has knowledge of the requirements. There is no requirement that the inclusion of the mentioned types of capital require general meeting approval, unless it is a question of debt instruments with conversion rights, which require the authorization of the general meeting.183 This makes the solution more flexible in relation to the administrative burden work and the temporal aspect of the process.

The last time Østjydsk Bank raised new either hybrid or supplementary capital was in connection with the recovery of the bank at the end of 2015, where, as previously mentioned, the bank also carried out a capital increase. It was a matter of raising hybrid capital of DKK 75 million. DKK

# 5.3 Summary and assessment of the tool

Both a capital increase and the raising of either hybrid or supplementary capital have the advantage that that they can be used relatively quickly to acutely increase a bank's capital. For the capital increase it is required that the general meeting approve such a decision, but often it will be given a prior authorization to the board within certain limits. This makes that capital increase can be carried out even faster than if the general meeting had to be convened first

<sup>182</sup> We assume that liquid assets are placed with Danmarks Nationalbank whereby they are risk-weighted with 0% 183 SL § 155, subsection 2

for example, a 3-week deadline (for non-listed banks, in crisis situations, 3 days notice, see section 4 on Crisis management according to FIL). Correspondingly, the process will be able to be shortened if it is a capital increase without pre-emptive rights that is carried out, since in otherwise, a minimum of 2 weeks' decision-making period must be given in relation to the assigned subscription right. There are no special rules in relation to the admission of hybrid or supplementary capital, and this solution is therefore potentially even more flexible and accessible than the capital increase. However it is incredibly important that the terms of the agreement are carefully adapted to the requirements of the CRR, so that it cannot be created doubt as to whether the capital qualifies as hybrid or supplementary capital.

As a capital increase provides actual core capital, this is of a higher quality than opta generation of hybrid capital, which is correspondingly of a higher quality than supplementary capital. other than that it is important to be aware that both hybrid and supplementary capital bear interest, which over time reduces the actual core capital. Is the bank in question in a situation, where it lacks actual core capital, as was the case with Østjydsk Bank, this is possible cannot be solved with either hybrid or supplementary capital, but instead with an increase in sel the cabinet's equity through a capital increase.

However, the capital increase does not come without a cost either, even if the cost does not increase is done in the form of interest. The investors who invest equity in a company will expect a return on this, and as shareholders they will have the opportunity to influence the payment of dividend, which also reduces the actual core capital. In this situation, the board has in it the bank in question, however, the initial task of proposing a dividend, and it therefore has mu equality to take account of the bank's capital situation. If the board deems it indefensible easy to pay dividends, we believe that a lot needs to be done before the general meeting will override this assessment.

Despite the effective effect and high flexibility in capital increase and admission of hybrid as well as supplementary capital, it is important to be aware that there is basically talk about temporary solutions. If the underlying operation of the bank in question is not healthy and sustainable, the solutions discussed in this section will most likely not change this, on the contrary, they may turn out to worsen the long-term profitability of the bank due to increased clean tea expenses. Therefore, these solutions must be seen in the context of the plans and strategies that otherwise are drawn up for the crisis-stricken bank, and are most often simply regarded as short-term and urgent methods to keep the capital within the framework set by the EU and the Danish Financial Supervisory Authority. Is not there plans, which can lead to sustainable operations in the crisis-stricken bank, it will predominantly it is also likely to be difficult to find lenders and investors who want to supply it necessary capital, whether in the form of equity capital, hybrid capital or supplementary capital capital.

# 6 Securitization as a tool for crisis management

The following section will deal with another option that Danish banks can use in the meantime share with crisis management. This is securitization. For the sake of order, however, it must be in in this connection, it is emphasized that securitization should not be understood exclusively as a solution for crisis management. Securitization should at all times be considered and assessed on an equal footing with all alternatives such as, for example, capital increase, taking on debt, etc. as part of the general public of banks equal financing structure and maintaining the necessary capital base.

In the following, the regulation to which this area is subject will be briefly explained, and at an overall level be explained the theory behind securitization. It is ours position that this knowledge is necessary for the reader to understand why securitization in this thesis is considered relevant as a potential tool for crisis management in banks. Also an example will be included where the Swedish bank Nordea has made use of securiti sering. Along the way, securitization as a tool is also related to Østjydsk Bank's crisis hand tering, including whether securitization could have been used by the bank.

The term securitization comes from the English word "securitization", which is derived from the one Gaelic word for securities, "securities". In other words, the concept of securitization covers the fact that a security is created, which the Swedish word for securitization, "värdepapperisering", very well emphasizes.

Securitization is currently regulated by CRR and CRD. The Council and the Commission have however per In December 2017, a new regulation was adopted, the purpose of which is precisely to regulate the market for securitization. This regulation applies to all securitizations issued on 1 January 184 2019 or later. In connection with the adoption of this new regulation, things change led by CRR. The Council and the Commission explain on their website that this regulation is came about because, after the financial crisis, there has been a decline in the use of securitization. It regrets one over in the EU, since the Council and the Commission estimate that if the level of securitizations is brought back to its average from before the crisis, then it will be able to create between 100 and 150 billion euros in additional funding in the EU.

<sup>&</sup>lt;sup>184</sup> Regulation 2017/2402 of 12 December 2017

<sup>&</sup>lt;sup>185</sup> "Securitisation: improving the financing of the EU economy", information published on the website of the Council of Europe http://www.consilium.europa.eu, under policies and the Capital Markets Union on 10 November 2017

on diversifying funding in the EU, the Council and the Commission have adopted this foreword ning, in order to establish common rules for all securitizations and thereby create a framework for safe, simple, transparent and standardized securitization products as it is conducted necessary supervision of, and which, in addition, is kept sufficiently separated from more complicated fi nancial instruments.186

Securitization can therefore be used by most types of companies that hold homogeneous assets of a certain size. The reason why this option is particularly relevant for banks is that in addition to covering the need for financing and liquidity, which is a long-term need all companies, then it can ease the capital requirement for banks.

The assets mentioned above could, for example, be lending, which is part of a bank's core business. Therefore, banks also have several different types of loans. It is easy to imagine say that a bank wants to refinance a number of home loans, as the loans must be uniform in form of risk, cash flows, etc. If the mass of housing loans is sufficiently large, the bank can grup pay off all or parts of the loans and transfer them to an SPV, which issues bonds in the form of ABCPs with collateral in the underlying loans. The bonds can be issued in tranches, and credit is assessed according to their priority position in the bankruptcy order. The safest tranche is the one that is only fulfilled in the event of bankruptcy. In this way, the bank sells its receivables and repaid in bonds that can be disposed of on the market, which frees up liquidity. Exactly li For financial companies, liquidity is also a parameter that is regulated and supervised. For example, the Danish Financial Supervisory Authority's supervisory diamond sets up a number of benchmarks, including among second for banks' liquidity, where the Danish FSA prescribes a liquidity surplus of 50% in relation to the law's minimum requirements, cf. FIL § 152.<sup>187</sup> However, adjustments have already been made to the latest guidance on the supervisory diamond right on the benchmark for liquidity applies per 30 June 2018. After this, the benchmark will be adapted to Basel III, which defines the LCR requirement (Li liquidity coverage ratio). The LCR benchmark reflects a financial company's ability to 188 face liquidity stress over a three-month period.

It is our view that securitization has only been used to a very modest extent by Danish banks for the purpose of improving the capital ratio. This is not to say that securitization

<sup>&</sup>lt;sup>186</sup> "Securitization: improving the financing of the EU economy", information published on the website of the Council of Europe http://www.consilium.europa.eu, under policies and the Capital Markets Union on 10 November 2017

<sup>&</sup>lt;sup>187</sup> Guidance on the supervisory diamond for financial institutions applicable from 1 January 2018

<sup>&</sup>lt;sup>188</sup> Guidance on the supervisory diamond for financial institutions applicable from 30 June 2018

is not used in Denmark - because it is to a large extent. An example of this is the mortgage system, where large amounts of mortgages secured by properties have been securitized. In addition, is it our view that many non-financial companies can also securitize groups of uniform assets. In this way, the company makes it possible for investors to invest in precisely this type of asset, which would normally not have been possible.

### 6.1 Traditional Securitization

As mentioned, securitization is regulated i.a. via CRR. The regulation defines traditional security sering in the following way: <sup>189</sup>

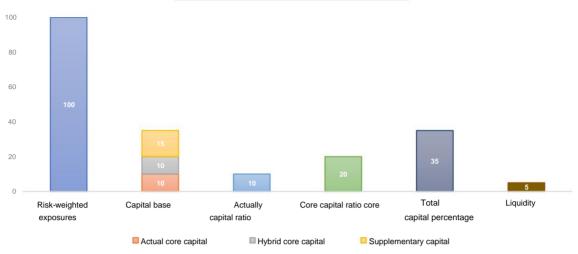
### CRR art. 242, par. 11

"Traditional securitization is securitization that implies that the exposures that see securitized, financially transferred (to a special purpose securitization entity (SSPE)); this is done by transferring the ownership of securitized exposures from that exposure ring-providing institution to an SSPE or through an SSPE's indirect participation; they out placed securities must not result in payment obligations for the exposure provider institute's balance sheet"

Previously, we referred to banks' ability to handle crisis situations via capital increases, which, if the drawing is successful, affects the bank's liabilities, including equity, posi tively, and thus the numerator in the capital percentage calculation. With securitization, there is the opposite focus on the bank's asset side, where it is sought to reduce the risk-weighted exposures by divest a number of assets with similar characteristics to a special purpose vehicle, SPV. Thus the bank takes the risk-weighted exposures off its books and thus reduces the denominator in the capital ratio calculation, which results in a strengthened capital ratio.190 The effect of a traditional securitization is illustrated below:

<sup>189</sup> CRR article 242 no. 11.

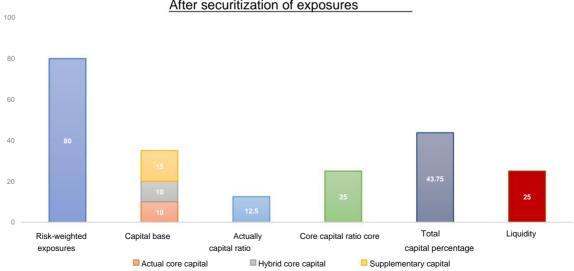
<sup>190</sup> CRR article 243 par. 1.



### Before securitization of exposures

Figure 11: Example of relevant capital-related key figures – before traditional securitisation

The example from section 5.1 on capital increase is continued here. From the figure it can be seen that an expo neration-providing institution prior to traditional securitization of exposures has risk-weighted exposures of 100 and capital base of 35, consisting of actual core capital of 10, hybrid core capital of 10 and supplementary capital of 15. The actual core capital percentage calculated at 10, core capital percentage at 20, total capital percentage at 35, while liquidity constitutes 5. Now the institution providing the exposure carries out a securitization corresponding to a reduction of the risk-weighted exposures by 20. The effect of a traditional securitization is illustrated below:



After securitization of exposures

Figure 12: Example of relevant capital-related key figures - after traditional securitisation

The risk-weighted exposures are reduced by the securitization and thus fall in this example pel from 100 to 80. The capital base is not affected by securitization. Thus the denominator is i the capital percentage calculation reduced while the numerator is unchanged after the securitization, which leads to higher capital ratios. It can be seen above that the actual core capital percentage is ste got from 10 to 12.5, the core capital ratio has increased from 20 to 25, while the total capital ratio has risen from 35 to 43.75. Provided that the bank providing the exposure sells the bonds, with which it was compensated by the SPV, the securitization also creates liquidity. The figure shows that liquidity increases from 5 to 25,191

When a bank finances itself through securitization, it is done, as mentioned, by separating assets from it the bank's balance sheet, as different assets have different risk weights according to CRR. One basic prerequisite for carrying out a securitization that improves the bank's capital stock team, is that the exposure provider establishes an SPV in the form of an independent legal entity, which must not be owned by the exposure provider itself. The reason is that this will cause that it had to consolidate the subsidiary into its balance sheet and so it had been just about done relation to reducing the risk-weighted exposures. Therefore, it will be the most in Denmark it is obvious that a commercial foundation is established, which will become the mother foundation for the SPV. <sup>192</sup> Thus will the exposure supplier has transferred ownership of the assets, so they no longer count in the calculation of the risk-weighted exposures, cf. the thesis section on this.

The SPV finances the acquisition of the assets by issuing bonds secured by them underlying assets - these are called i.a. for ABCP. In this review it is assumed that this is a transfer of receivables in the form of loans to the bank's customers. Customers will thus in practice do not experience that after the securitization they are customers of the legal entity "SPV A/S", as the exposure-providing bank will in most cases continue to operate as administrator tion company. The exposure provider is thus compensated for the transferred loans with those of The SPV issued securities in the form of bonds. The exposure provider can either do these choose to keep, in which case the exposure is not off his books, but now figures as a security in the bank's balance sheet with their respective risk weights. The alternative, and as the most obvious, when the wish is to reduce the risk-weighted exposures, is for the bank to sell value the papers on the market and thus gets rid of the exposures completely. Bond money flows are adjusted so that the income from the SPV's acquired loans balances with the SPV's

<sup>191</sup> We assume that liquid assets are placed with Danmarks Nationalbank, whereby they are risk-weighted with 0%
<sup>192</sup> Lennart Lynge Andersen & Erik Werlauff: Kreditretten, 6th edition, published by Karnov Group in 2014, ch. 4, p. 78

expenses, including interest expenses for the bondholders as well as administration expenses for the management company.193 The process for a traditional securitization is illustrated below:

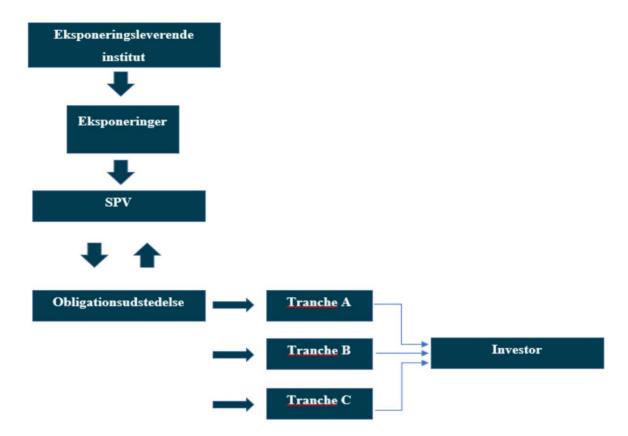


Figure 13: illustration of securitization

When a securitization is carried out, it is crucial that it is a real sale of the assets. Both as regards the separation from the balance sheet, and thus whether the exposures must be included in the calculation of the risk-weighted exposures, but also for tax reasons consequences. In Tfs 1997.85 LR, the equalization council rejected a proposed hall in a binding response and lease back construction that was to be implemented as a securitization. It was about one Danish company that, through its 100% owned American subsidiary, was in the process of constructing a production facility. They wanted to sell the property to an American public company, that was approved by the respective state and contributed to attracting and creating employment promotional measures in the local area. It was stated that the event was to be established by, that the public American company should issue bonds of an order of magnitude to corresponding to the value of the production facility that was included in the sale and lease back agreement. The American

<sup>&</sup>lt;sup>193</sup> Lennart Lynge Andersen & Erik Werlauff: Kreditretten, 6th edition, published by Karnov Group in 2014, ch. 4, p. 79

Maybe the company that built the production plant should then buy the bonds and sell them the public company had to use the proceeds from the bond sale to compensate the American company for the transferred assets. The lease payment would be fixed at the same amount as the sum of interest and installments that the American selling company had to pay on the bonds. Furthermore, it was stated in the recommendation that the American company to a could terminate the leasing agreement at any time by returning the bonds to the public utility sum and at the same time pay an amount of USD 10, just as it was at the end of the lease period built in an option to acquire ownership of the assets by paying an amount of USD 10. Furthermore, it appeared that the American company was during the entire leasing period responsible for maintenance, pay any tax and take out the necessary associated insurances ning to the leased assets.

The Equalization Council ruled that the American company retains the right to write off production the facility, and thus no tax effect could be attributed to the leasing services in form of interest and installments that, according to the agreement, had to be exchanged between the public company and the American company when calculating the taxable income. The reason for this was, among other things, that the American company could terminate the agreement at any time and acquire the property the right over the assets upon payment of a symbolic amount. In addition, there was the option to return purchase the assets at the end of the lease period for a symbolic amount of USD 10 decisively in vur the fact that the American company appeared to have an owner's disposal and risk for the leased assets. The conclusion in this case was that it was not a real sale, but rather a sale of a formal nature, at least in tax terms.194

#### 6.2 Synthetic Securitization

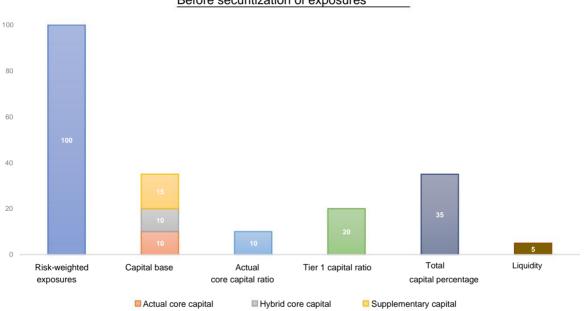
In addition to traditional securitization, the CRR also mentions and defines synthetic security sering, whose essential characteristic compared to the traditional form is that it does not activate out separated from the exposure provider's balance sheet. Instead, the aim is to eliminate the associated risks to the assets. The exact definition according to the CRR is the following:

### CRR art. 242, par. 11

"Synthetic securitization is securitization where the division into tranches is done by using credit derivatives or guarantees and where securitized exposures are not removed from it balance sheet of the exposure-providing institution."

194 TfS 1997.85 LR

In this way, it is also the risk-weighted exposures that are reduced, which everything else just improves the capital base of a bank. A synthetic securitization can, for example, take place taken in the form of issuing CDSs, which Nordea used in 2016, as the first nordi be institute. <sup>195</sup> It was a securitization of a group of business loans to a value of 8.4 billion euros corresponding to approx. 63 billion The purpose of the sale of the CDS was to reduce the bank's risk-weighted exposures and thus improve the bank's capital leeway, after which the bank has the opportunity to establish new exposures in the form of loans to customers. Nordea esti added that the securitization reduced the bank's need for core capital relative to the risk-weighted exposures by 30 basis points.196 The effect of a synthetic securitization is illustrated below:



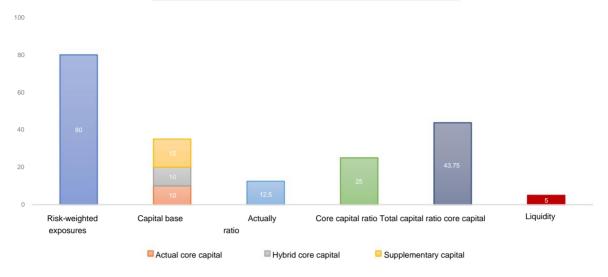
Before securitization of exposures

Figure 14: Example of relevant capital-related key figures – before synthetic securitisation

The starting point in this example is the same as in traditional securitization. The exposure-providing bank will now carry out a synthetic securitization corresponding to a reduction of the risk-weighted exposures with 20.

<sup>195 &</sup>quot;Nordea launches its first capital requirement-reducing EUR 8.4 billion synthetic securitization", article published on Mann heimer Swartling's website www.mannheimerswartling.se on 29 August 2016

<sup>196 &</sup>quot;Nordea launches its first capital requirement-reducing EUR 8.4 billion synthetic securitization", article published on Mann heimer Swartling's website www.mannheimerswartling.se on 29 August 2016



### After synthetic securitization of exposures

### Figure 15: Example of relevant capital-related key figures – after synthetic securitisation

The effect of the synthetic securitization is not much different from the traditional one. As previously mentioned, this type of securitization is more like credit insurance rather than a sale of assets, which is why there is no reimbursement of that exposure ring-providing bank, which means that a synthetic securitization does not create liquidity. Of the figure above shows that the only effective difference between the traditional versus the synthetic securitization is on the liquidity column where liquidity remains 5 at the synthetic, while it rises to 25 at the traditional one.

### 6.3 Credit Rating

The market for securitization is unconditionally dependent on the interaction between companies with be court for funding as well as investors who are willing to take on some risk in exchange for a return adjusted for this. It is common knowledge that investors are not necessarily intimidated by risk, but in return, investors demand to be able to trust the information that they have to form their own decision basis on the basis of. There is a large element of trust here, which is assessed and is assumed to be one of the most important preferences of investors. Cf. CRR exists there as well "rated" securitization positions as well as "unrated" securitization positions.

197 CRR art. 242, par. 7 and 8 198 CRR definitions rated/not rated will be a necessity if the securities are to be offered on a public offering market. Examples of ECAIs include Standard & Poors and Moody's.

The credit assessment will typically be included in the tender material that must be prepared in connection with The SPV's issuance of securities secured by the underlying assets. That expose the lending bank that has sold the assets to the SPV will itself be responsible for ud the preparation of the part of the prospectus or other tender material that describes the respective assets.200

### 6.4 Refinancing register

Assets that a bank sells to an SPV must be registered in a refinancing register. The register
banks have the opportunity to apply for permission to set up
<sup>201</sup> For each securitization
or refinancing transaction that the bank undertakes, a registration must be made in the register.
<sup>202</sup>
The register itself must contain information that enables clear and unambiguous identification
the registered assets, including the priority position of the securities and the entitled entity –
for example an SPV. In addition, the registration in the refinancing register must be for each transaction
tion also include information on the date of both entry and deletion of the asset.203 However, banks have the option
of outsourcing the running of the refinancing register.204

As mentioned, the above requires that a bank has obtained the Danish Financial Supervisory Authority's permission to set up a bank refinancing register. The Danish FSA assesses whether the applicant bank has another sufficient organization and resources to carry out the task of running and maintaining a refi financing register. Therefore, the application must contain information that enables the Danish Financial Supervisory Authority to assess this. The following must also be enclosed with the application: 205

- Board instructions to the executive board on tasks and division of responsibilities for the operation of refinance the registration register
- Business process approved by the management for operating the refinancing register
- Operating plan for the refinancing register

199 "CRA Authorization", list of authorized ECAIs published on ESMA's (European Securities and Markets Authority) website www.esma.europa.eu. Last updated on 1 May 2018 200 FILE § 152 I 201 FILE § 152 I

202 FILE § 152

j, subsection 1 203

FILE § 152 j, subsection

<sup>2 204</sup> FILE § 152 j,

subsection 3 205 FILE § 152 i, subsection 2, No. 1-5

- Business process for IT, security and control functions to support the operation of the refinancing register
- Declaration from the financial institution's independent auditor that this does not, on the basis of a review of the bank's planned organization and business procedures including the documents in no. 1-4, have reason to assume that the bank's organisation, perso financial and IT resources are not sufficient to conduct and maintain a refinance registration register in accordance with the requirements for this

Cf. paragraph of the same paragraph 3 it appears that the Danish Financial Supervisory Authority keeps a register of the financial institutions who have obtained permission to keep and maintain a refinancing register. This register over refinancing registers is public. At the time of writing, there is still no Danish money in institutes that have obtained permission to keep and maintain a refinancing register. This information sees the supervisory authority on its website, which is also the reason that the Norwegian Financial Supervisory Authority's register is not yet available is created.206

An important factor when a securitization is carried out is that the exposure provider's eventual prosecuting creditors cannot come after the assets that he has transferred to an SPV in connection with a securitization. Cf. FILE § 152 n, subsection 1 it applies that where an agreement on sale of, for example, a series of loans between a financial institution as seller and an eligible entity (SPV) as buyer, and where the assets are entered in a refinancing register, the transfer of ownership constitutes the transfer207 . The legal effect vis-à-vis the bank's creditors occurs cf. FIL section 152 n, subsection 2 from the time of entry of the transferred assets into the refinancing register. Entry in the refinancing register right is therefore to be regarded as the security act in these arrangements in the same way as, for example, things lighting. Assets entered in the refinancing register in connection with a securitization, belongs at any time to the SPV to which the assets are transferred. Since the bank as previously mentioned will often continue to operate as an administration company for the loans, then there is also a requirement that the bank keep the securitized loans separate from the bank's other loans.208

<sup>&</sup>lt;sup>206</sup> The FSA's register regarding refinancing transactions, located on the FSA's website www.finanstil

synet.dk under the section Companies under supervision / registers. Last updated on 30 March 2015 207 FILE § 152 n, subsection 1 208

FILE § 152 n, subsection 3

### 6.5 Assessment of securitization as a tool for crisis management

The process of completing a securitization transaction will, in our opinion, be as follows costly, that there must be securitizations of a significant size before such a trans action will prove profitable. This assessment is, among other things, made based on the circumstances that the bank will have to bear the costs of financial and legal advisers and the credit rating of the bond the tions that are issued, etc. Against this background, it is also estimated that there are very few Danes banks that will be able to improve their capital ratios by using securitization transactions - simply because they don't have a size that allows them to have a suitably large amount of uniform assets. From the Financial Supervisory Authority's report on the financial institutions' size grouping for 2018 it can be seen that in group 1, i.e. banks with a working capital of over DKK 75 billion. DKK, just are four banks. This is about respectively Danske Bank, Jyske Bank, Sydbank and Nykredit.

Based on the above, it is our belief that although it serves the purpose as ed create for crisis management, or serve the general maintenance of the necessary capital tool, then securitization is in practice an instrument that is initially reserved for the larger ones Danish banks. When the largest banks have gained experience and structured models for this, can one imagines that securitization can also become widespread among smaller banks.

Furthermore, it is a prerequisite to be able to carry out a securitization that the refinancing company has assets of a certain quality. If it is a question of assets in the form of lending, and the general credit quality of the customers is very poor, a consequence of this may be that it does not is possible to find investors for the issued bonds, since the security behind these bonds is too weak.

In the Østjydsk Bank case, it is our view based on the Financial Supervisory Authority's statements, orders etc., that the quality of large parts of the bank's business loans was of a quality that was not demanding for securitization transactions. In addition, it is estimated that the amount of uniform assets was too small for a securitization to "pay off" in the profitability sense.

If, on the other hand, you look at securitization as a tool for crisis management for larger banks that have that have sufficient uniform assets and are able to carry out sufficiently large transactions, thus the costs for this take up less space relative to the value of the securitization, so it remains these events significantly more interesting. There are several arguments for this. First and above all, it is our assessment that there is a market for these investment products. This can be seen Among other things, of already existing trade with or CDS, ABS and the mortgage system. Investors who invests in the bonds issued by the SPV, gets security in all the securitized assets which whole and not just a specific loan. In this way, the investor achieves differentiation in the security pool, which means that the risk is spread. Combined with a credit assessment of the collateral as well as statements about the sustainability of the various tranches, the investor has a good decision basis, which is a decisive factor for the existence of the market for this type of weather dipapers. Furthermore, as mentioned, there is a direct reduction of risk-weighted exposure ger, why a securitization transaction reduces the need for actual core capital in capital the percentage calculation. Furthermore, the bank providing the exposure also obtains liquidity, if a traditional securitization is carried out, while it is only a question of a reduction of risk-weighted exposures in a synthetic securitization. In addition, traditional secu provides ritization a bank's ability to transfer loans, such as due to intense price con currency generates a modest interest margin and thus create air in the capital statement so that the bank can enter into new loans with customers where the interest margin is more advantageous.

# 7 Merger with another bank

An amalgamation is an FIL overarching term that includes both merger and business transfer (supply of assets).209 It is a solution that, for banks in crisis, will often result in the "old" bank ceases, while operations are carried on by a stronger bank. Therefore separates this tool differs from other tools such as, for example, a capital increase in that the bank ef following is gone, and thus the effect of this tool on the bank's capital cannot be measured number percentage.

This section will explain how a merger between financial institutions proceeds, and ana shed light on the consequences of a merger for the parties involved. Starting point tet will be the rules of the Companies Act (SL) and the Mergers Tax Act (FUL), as follows be superimposed with FIL's special rules. The section will analyze the fiscal and company/FIL legal consequences of a merger.

### 7.1 Merger

In a merger, two capital companies merge into one company, where the capital owners in it or they defunct companies receive remuneration for this. This transfer of assets and liabilities can be carried out without the creditors' consent (universal succession).210 This is an exception to Danish law in general, where a change of debtor requires creditor consent.

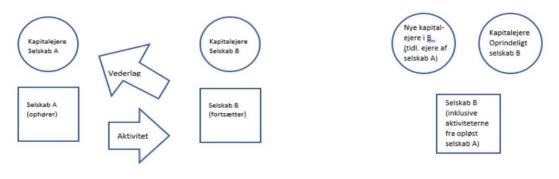


Figure 16 - Process for improper merger

Figure 17 - Result of improper merger

Overall, there are 2 types of mergers; real merger and non-real merger. Know one actually merger, the activities are continued in a newly founded company, which means that both depositors companies cease, while the activities are continued in one of the merging companies, when this is the case

<sup>&</sup>lt;sup>209</sup> Peer Schaumburg-Müller and Erik Werlauff: Financial companies – rules and reporting, Jurists- and Economists Association its Publisher, 1st edition, 2017, page 281 210 SL § 236

an improper merger.211 Intra-group mergers can be both vertical and horizontal – and they vertical can go in either direction. A reverse vertical merger will occur if a parent company merges with its subsidiary and the activities continue in the subsidiary.212

In order to complete a merger, the companies must prepare a merger plan and a merger report safety. The merger plan contains, among other things, a description of the consideration, the time of the merger implementation, draft articles of association in the continuing company as well as any special conditions regarding the merger and the shares. The merger plan is drawn up by the merging parties jointly.213 Each single merger party must prepare a merger report for consideration at the general meeting of the individual company.214 In a current case – the proposed merger between Nordjyske Bank and Ringkjøbing Landbobank – the joint merger plan and merger statement were made public in a company

announcement on 8 May 2018.215

The merger can be completed on the basis of the most recently submitted annual accounts, unless the merger plan 216 will be signed in the second half of the year. In that case, an intermediate balance must be drawn up, which must be audited by an independent external auditor.

In addition, an assessment report must be prepared on contributions in kind, if one is made capital increase in the continuing company, or a completely new company is founded. Of fiscal considerations, the shareholders of the defunct company are often primarily compensated with shares in that company setting company, which is why in practice there will almost always be a requirement for an assessment report i a merger that includes a company of Østjydsk Bank's size.

In a corporate merger, the principles of universal succession apply. This means that there can change of debtor without the creditor's consent. In return, an appraiser's report must be prepared opinion and a creditor's declaration, which decides whether the creditors' position is in favour called by this provision. A negative conclusion on this will grant the creditors special rights density.

<sup>&</sup>lt;sup>211</sup> SL § 236, 1st and 2nd point

<sup>212</sup> Erik Werlauff: "Company Law", 10th edition, 2016, page 751 213 Erik

Werlauff: "Company Law", 10th edition, 2016, pages 753-755 214 Erik Werlauff: "Company Law", 10th edition, 2016, page 755 -756

<sup>&</sup>lt;sup>215</sup> Nordjyske Bank, company announcement no. 12.2018, 8 May 2018.

<sup>216</sup> SL § 239, subsection 1. cf. FIL section 191, the financial year of a bank must follow the calendar year.

The merger documents must be submitted to the Danish Business Authority no later than 4 weeks after signing <sup>217 sen.</sup> The decision to complete the merger can be made 4 weeks after this date at the earliest 218 share.

In the continuing company, the decision to implement a merger can be taken by the central office management body, unless changes to the articles of association are to be made in this connection in addition to change of company name or alias. <sup>219</sup> In the winding up company, the decision is taken in general the gathering. <sup>220</sup> A double 2/3 majority (§ 106 majority) is required in this connection. <sup>221</sup> Provided it is a vertical merger between a parent company and a wholly owned subsidiary, it can central management body of the terminating company, however, make this decision. <sup>222</sup>

#### Tax consequences of a merger

A merger can either be carried out taxable or tax-free. If the merger is implemented liable to tax, the usual rules for taxation of share gains apply, cf. Share gains the tax law. The rules on tax-free mergers must be found in the Merger Tax Act.

When a merger is carried out and a company is dissolved to be continued in another company, is there really a transfer of the shares in the defunct company. The proceeds the company after lets, will be the liquidation proceeds, which the shareholders can set off against the original acquisition felsessum i, if the proceeds are distributed in the same calendar year as the company is finally dissolved.

If the terminating company or companies are exclusively owned by shareholders who are companies and hold at least 10% of the capital, these shares will be tax-free for the shareholder224, whereby a taxable merger will not trigger taxation for the shareholders. This exception does not exist for natural persons who will thus be affected by a taxable merger.

However, the tax exemption/obligation also applies in the opposite case in the event of a loss. If a loss occurs, shareholders who are companies and own at least 10% of the capital, could not deduct the loss from tax tax-wise, while natural persons will have a deductible loss. In the case of Østjydsk Bank has the valuation of the company been so low that most shareholders would realize a loss at

- 219 SL § 247
- 220 SL § 246

<sup>217</sup> SL § 244

<sup>218</sup> SL § 245

<sup>221</sup> Erik Werlauff: "Company Law", 10th edition, 2016, page 763 222 SL § 252 223 LL § 16A, subsection 3,

no. 1 224 ABL § 4A

ceased. Natural persons' losses on listed shares (as Østjydsk Bank was) can be deducted in gains on other listed shares.

When the terminating company's assets and liabilities are transferred to the continuing company, this happens fair value at the time of transfer. Acquisition sum and time in the continuing sale closet is set for this. The terminating company is taxed on these disposals in connection with the liquidation, whereby the deferred tax in the company is realised.

The alternative to a taxable merger is a tax-free merger - which is really just a method to defer tax payment. In the case of a tax-free merger, the acquisition sums are succeeded, where in the case of the shares received as consideration for the merger, simply replacing the original ones shares in the defunct company.

The succession also applies to the transferred assets and liabilities, as in what follows company is considered to have been acquired at the original time of acquisition and at the original purchase price. The deferred tax is therefore carried forward.226

In order to carry out the merger tax-free, it is a requirement that the shareholders in the termination company is remunerated with shares and possibly a cash compensation sum. <sup>227</sup> Alternatively, there was not any shares, the original acquisition sums could be carried forward in. The equalization sum is one possibility, because in practice the exchange ratio can rarely amount to whole shares. A current oak tree examples of this are Nordjyske Bank and Ringkjøbing Landbobank's merger plans, where exchange the ratio is fixed at 1 RL share for 2 NB shares. In addition, the shareholders are reimbursed in Nordjyske Bank with 18 kroner per 2 shares (the equalization sum) in order to increase the exchange ratio.228 The cash equalization sum is taxed as a dividend if the shareholder subsequently still has shares in the continuing company.

In addition, FUL sets requirements for the merger date. In order to complete a tax-free merger, the merger date coincides with the cut-off date in the receiving company's accounts fiscal year 230 – in bank mergers therefore always per 1st of January. However, this requirement is waived by changes to joint taxation district.

<sup>225</sup> ABL § 13A

<sup>226</sup> Erik Werlauff: Corporate income tax 2017/18, 19th edition, Karnov Group 2017, pages 527-528  $^{227}$  FUL § 2

<sup>&</sup>lt;sup>228</sup> Nordjyske Bank A/S' company announcement no. 09.2018 on 18 April 2018.

<sup>229</sup> Erik Werlauff: Corporate income tax 2017/18, 19th edition, Karnov Group 2017, page 530 230 SL § 5

An application of the Merger Tax Act's rules on a tax-free merger results in tax-related 231 deficit to be carried forward is lost for all companies involved. If Østjydsk Bank had participated in a tax-free merger, the bank's carry-forward loss would thus be lost. That makes any tax-free restructuring with the participation of Østjydsk Bank less interesting. So as long as there is a deferred tax liability on assets, it therefore makes sense to implement merger taxable, whereby any gain realized by Østjydsk Bank will be able to counter is counted in whole or in part in a tax loss, and the receiving company will be able to "a fresh start".

## 7.2 Business transfer (supply of assets)

In a business transfer, the entire company's activity or independent parts are transferred of which to another company. The depositing company receives a fee for this. This is different from a merger in which the capital owners from the contributing company are repaid, and the contributing company company ceases.

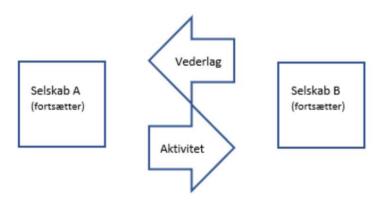


Figure 18 - Business transfer / supply of assets

A business transfer is not a transaction defined under company law. The Companies Act in it therefore holds no direct conditions for this. The management of the transferring company will there with could decide on this transfer, if otherwise is not required in the articles of association. As one

result of a business transfer, it may however be relevant for the company to change the statutes - for example the purpose clause. In that case, a business transfer will be indirect 232 had to be adopted at the general meeting with a double 2/3 majority.

The remuneration to the depositing company can be either cash or shares. To be able to through conduct the transaction tax-free, it is a requirement that the contributing company is exclusively reimbursed 233 with shares. For tax purposes, the term "supply of assets" is used. It is also a requirement that it must either be a branch of a company or the entire company. A branch of the company is defined as assets and liabilities in an independent department based on an organi sational perspective. It is a requirement that it must be an independent entity that can function with its own resources. <sup>234</sup> A bank branch could meet these requirements.

At the same time, it is required that the companies involved are domiciled in a member state of the EU and are not considered to be a transparent entity for taxation in this country235 - for example, a partner company could not participate in a tax-free contribution of assets.

The tax-free contribution of assets can be carried out either with or without permission. If the is carried out without permission, an ownership period requirement of 3 years from acquisition applies.236 This ownership period requirements must prevent tax evasion. It is assumed that if permission is requested, will the expected period of ownership should be included as a parameter, and the permit may possibly be conditional. This

requirements for permission or tenure are a difference from the merger rules, where such a requirement does not exist cf. the review in section 7.1.

Just as with a merger, the tax-free version requires that the cut-off date coincide with the receiving company's financial year, unless joint taxation is changed. There in addition, a tax loss is also lost in the case of a tax-free contribution of assets. Thus will Østjydsk Bank could not transfer its banking activities (tax-free or taxable) and there after being the recipient in a tax-free contribution of assets, where the company with its large fiscal losses are transferred to a profitable activity, which can then save tax. Such an idea must therefore

<sup>232</sup> SL § 106: "A decision to amend the articles of association is only valid if it is approved by at least 2/3 of both the votes cast and the part of the company capital represented at the general meeting (..)" <sup>233</sup> FUL § 15 c, subsection 2, 1st point

<sup>234</sup> FUL § 15 c, subsection 2, 2nd point

<sup>235</sup> FUL § 15 c, subsection 1, 1st point

 $<sup>^{236}</sup>$  FUL § 15 c, subsection 1, 3 and 4 points

is either "born" in the company or supplied in a taxable manner. In a taxable contribution with a low over gangsum, SKAT will have the opportunity to challenge the valuation in a subsequent period ode, which will give the parties involved an uncovered risk on the transaction.

## 7.3 Merger according to FIL

As described in the introduction, "merger" is FIL's overall term for company acquisitions and mergers. However, FIL has a number of special rules which supplement or take their place for the previously described company law rules.

237 This The Minister for Business must grant permission for mergers of financial companies. is a decisive difference from ordinary companies, which can adopt a merger at a general meeting ling or in the board of directors, cf. the above section on mergers. This permission is given by subject tive conditions, and the Minister for Business can reject a request for amalgamation, if sam the arrangement is contrary to important social considerations. nomy <sup>238</sup> In addition, conditions such as eco are included and organization in the assessment.239

A large number of company law exceptions do not apply when merging finances sial companies. For a merger, neither a merger statement nor the assessor's can statement of the creditors' position is excluded, notwithstanding that the condition of agreement between chap the tale owners are fulfilled.<sup>240</sup>

FIL does not impose requirements that affect the tax conditions in a merger/business transfer go directly. In the tax-free versions, however, one must be aware that the capital owners in it depositing company (or the depositing company in case of business transfers) must know is added with shares, which is why one must pay attention to the thresholds for ownership of share capital and votes. If, as a result of the transaction, the contributing party gains ownership of more than 10% of the share capital/voting rights in the receiving company, the company must request permission for this from the Danish Financial Supervisory Authority.<sup>241</sup> This also applies if the thresholds <sup>242</sup> However, one must assume that this one 20%/33%/50% of the capital or votes are exceeded. permission is obtained together with the permission for the merger.

238 FILE § 204, subsection 3 239 Peer Schaumburg-Müller and Erik Werlauff: Financial companies – rules and reporting, Jurists- and Economists Association

<sup>237</sup> FILE § 204, subsection 1

its Publisher, 1st edition, 2017, page 282 240 FILE §

<sup>204,</sup> subsection 4 FILE

<sup>241</sup> Section 61, subsection

<sup>242 1</sup> FILE § 61, subsection 1

A remuneration consisting of shares is not always an advantage for a bank as a result of bank shares impact on the capital requirements (this is elaborated in section 2). If the ownership share exceeds 10%, a share of this must be deducted directly from the actual core capital. If the ownership share is less than 10%, the share portfolio is risk-weighted as ordinary shares - cf. the standard method, the weighting will be 100%. The alternative to remuneration in shares is remuneration in the form of cash, which is significantly weighted lower cf. the standard method.

It is our opinion that the share consideration will be considered a significant disadvantage for ban core in connection with partial business transfers (sale of branches). This is due to both CRR's rules for shareholdings in financial companies, and the fixed rules for tax-free restructurings, where cut-off date requirements and ownership period requirements in particular do not meet banks' needs for flexibility.

## 7.4 The merger of Østjydsk Bank with Sparekassen Vendsyssel

Østjydsk Bank ended up handing over its activities to Sparekassen Vendsyssel for thereafter to file a bankruptcy petition. This is a business transfer. East Jutland Bank transferred the majority of its assets and liabilities (subordinated loans and equity remained in it old company) to Sparekassen Vendsyssel for DKK 50 million. DKK On the day of the company announcement Østjydsk Bank A/S closed the share at price 0.678. The market value was therefore DKK 60.6 million. DKK 243

Cf. the half-yearly report per On 30 June 2017, the bank's equity was calculated at DKK 306 million. DKK, while subordinated capital otherwise amounted to DKK 200 million. DKK. In connection with the Danish Financial Supervisory Authority's visit to ef In 2017, loans were written down by DKK 132 million. DKK. The equity will, in isolation, then go out make 174 million DKK

Sparekassen Vendsyssel bought all assets and all liabilities excl. subordinated debt. Net the value of these, cf. half-yearly report, amounted to DKK 506 million. After write-downs, these amounted to DKK 374 million These activities are sold for DKK 50 million. DKK, which results in a reduction of equity with 324 million Equity is then negative with DKK 150 million. DKK. This calculation beforehand states that the result for the second half of the year was DKK 0, when the Financial Supervisory Authority's write-down is disregarded. Sparekassen Vendsyssel has thus valued Østjydsk Bank A/S at DKK -150 million. DKK, and has

subsequently renounced the assumption of subordinated debt of DKK 200 million. DKK, whereby Østjydsk Bank

<sup>243 89,400,000</sup> shares x price 0.678 = DKK 60,613,200. The number of shares is disclosed in the annual report for 2016 in note 29 "Share capital". The course is located at www.euroinvester.dk

A/S was awarded DKK 50 million. DKK for the activities. There may be several reasons for this - i.a. that 173 million of these were government capital instruments, which bore interest at 11.15%. equation, Sparekassen Vendsyssel pays interest on its subordinated capital instruments with 5.3%-8.4%. <sup>245</sup> Another possible reason could be that Østjydsk Bank would otherwise have to pay Sparekassen Vendsyssel to take over the activities.

Since the consideration consists of cash, the condition for a tax-free contribution of assets is met not cf. previous section on this. The acquired assets and liabilities are thus included in the Savings Bank Reversal at the fair value at the time of transfer instead of the original acquisition sesame. Thus, the deferred tax in Østjydsk Bank is realised.

A business transfer of this scope will require a change to the purpose of the articles of association ragraph cf. SEL. Since Østjydsk Bank at this time met the definition of "emergency dende", applied to FIL's chapter 16 on crisis management in this situation. As described in the section "Crisis management", the bank's board will be able to enter into an agreement with another financial institution (in this in the case of Sparekassen Vendsyssel) on the transfer of the company on the condition that Er the minister of employment can approve this merger. <sup>246</sup> At the same time, the board must report for this transaction to the general meeting. If the general meeting does not a decision is made to initiate other measures that could result in the bank fulfilling the capital requirements (for example a capital increase), the agreement will stand. <sup>247</sup>

Cf. section 3, however, it was simply a question of an "informative" general meeting, where it was not possible to make a different decision. The board of Østjydsk Bank had legal authority for this, because they expected to become insolvent. <sup>248</sup> The expectation of becoming insolvent may be justified in that the Danish Financial Supervisory Authority can withdraw the bank's license to operate a bank if the capital requirements are not met 249 is observed. If the bank's license is revoked, Østjydsk Bank will no longer be allowed to receive deposits, and these will therefore fall due immediately. This will be mostly true visibility cause Østjydsk Bank to become insolvent. At the same time, however, we see a paradox in that Østjydsk Bank can fail to obtain the approval of the general meeting on the decisive

<sup>&</sup>lt;sup>244</sup> Østjydsk Bank A/S' annual report 2016, note 28

<sup>&</sup>lt;sup>245</sup> Sparekassen Vendsyssel's annual report for 2017, note 25

<sup>246</sup> FILE § 246, subsection 1

<sup>247</sup> FILE § 246, subsection 2

<sup>248</sup> FILE § 247 249

FILE § 224, subsection 1, No. 2

disposition which results in the insolvency, thereby fulfilling the criterion for the exemption provision Dec. However, one must assume that the Danish Financial Supervisory Authority has been aware of this assessment, whereby has secured sufficient legal arguments for the exceptional provision to be met, and an informative general meeting was sufficient. As part of this assessment it is included with a high probability that the bank has repeatedly been in recovery, and according to Finanstil synet's inspection report from January 2018, the bank was in breach of capital preservation throughout 2017 the buffer.

## 7.4.1 The alternative to the business transfer - merger

Within mergers, the alternative will be a business transfer with the Savings Bank Vendsyssel as receiving party be a merger with Sparekassen Vendsyssel as recipient other party. However, there are several factors that make this merger not an option according to ours assessment.

In this specific situation, Sparekassen Vendsyssel has valued Østjydsk Bank at -150 million. DKK. In a merger, "assets and liabilities as a whole" are transferred, <sup>250</sup> why you wouldn't be able to omit the subordinated debt instruments from the transaction. Usually receives capital the owners of the depositing company a consideration for this, but since the trading value is negative, Østjydsk Bank A/S' shareholders will be "reimbursed" with a bill of DKK 150 million. DKK, which should payable to Sparekassen Vendsyssel. In an ordinary merger, the receiving company's increases market value as a result of the merger. The increase in value corresponds to trade of the contributed company and accrues to the capital owners who owned the contributing company. If the agreed valuation is used as a basis, the new shares will be issued at a nega tive value – and thus a discount, which is not allowed cf. SL. <sup>251</sup>

Even if we assumed that SL allowed this, in practice it would be very difficult to implement. You saw fall, Østjydsk Bank's shareholders would receive neither cash nor shares, whereby they would indeed throw more good money after bad. The payment would increase shareholders' equity losses and even affect their liquidity. This will also apply to capital owners who are individuals only cause the loss on the shares to increase, and since these are listed shares, these will could only be offset against future gains on listed shares.

250 SL § 235, 1st point 251 SL § 31 252 ABL § 13 A we it as highly unlikely that Østjydsk Bank A/S's general meeting was good known a merger to the valuation used.

A merger in the case of Østjydsk Bank had also taken longer than that of the chosen company transfer. Cf. FIL's chapter 16 on crisis management, no exception provisions apply for quick dispatch of a merger, such as the possibility of a "briefing general". assembly" cf. FILE §247. On the other hand, a valuation board can, at the request of one of fu sion parties decide on the tax value of assets and liabilities with a view to to "lock" these values so that the process can be terminated. <sup>253</sup> The valuation board has 5 weekdays here. <sup>254</sup> Therefore, the Companies Act's requirements for formality and time frame also apply reason for a merger with the participation of a distressed bank. This means, for example, that fusio nen can be adopted at the earliest 4 weeks after the merger documents have been submitted.<sup>255</sup>

Furthermore, a merger will result in universal succession in the continuing company, which is allowed presumably, has weighed negatively in a possible merger partner's assessment of this case. As it is reflected in section 3, Østjydsk Bank has had problems for a long period, and this is not unthinkable ligt, that disputes may arise on the basis of the bank's actions during that period. If a merger is carried out and the universal succession is thus used, such demands will be able to be made towards the transaction's continuing company – in this case Sparekassen Vendsyssel.

In conclusion, it must be pointed out that the specific merger partner – Sparekassen Vendsyssel – is a guarantor savings bank. It is thus a self-contained unit as opposed to one capital company as Østjydsk Bank A/S. It is not possible to merge a savings bank and a bank, without first converting the savings bank into a savings bank joint-stock company. This element complicates the merger plans Østjydsk Bank could have had with savings banks – including Sparekassen Vendsyssel. Unless Sparekassen Vendsyssel has a long-term stra tegi to merge for the purpose of expansion, we consider it unlikely that Spa rekassen Vendsyssel would carry out such an extensive restructuring just to take over East Jutland Bank.

<sup>253</sup> FILE § 245,

subsection 1 254

FILE § 245, subsection 4 255 SL § 245 – cf. this provision is not covered by FIL § 204, subsection 4's list of company law provisions that do not apply to mergers of financial companies.

#### Savings banks' transformation into savings bank joint-stock companies

Savings banks are independent entities that cannot merge with capital companies ber such as Østjydsk Bank A/S. Therefore, the savings bank must be converted into a so called "sparekasseaktieselskab". The rules for this appear in FIL §§207 and 211, which outlines 2 solution models. It is also possible to use a combination tion of the two models.

#### The fund model, FIL § 207 (with additional requirements in FIL §§ 208-209)

By using the fund model, a limited liability company is established, which receives permission to run a bank. The establishment of the limited company takes place by contribution in kind from sparekassen's assets and liabilities at fair value. In return for this, the spa receives rekassen shares, which are transferred to a commercial fund. 256 This fund thus becomes a shareholder in the newly founded savings bank. The savings bank was dissolved is then seen with the required majority in the board of representatives. The guarantee capital cannot continue to exist in a limited company. Therefore, all guarantors must are offered the exchange of their guarantee certificates at market value for shares in spare the joint stock company or cash deposit - possibly a combination of these with with a view to making the exchange rate go up. 257 When using the fund model will the future group of owners will thus consist partly of the business foundation and partly the former guarantors who have chosen to exchange their guarantor certificates for ak silent.

The encapsulation model, FIL § 211 (with additional requirements in FIL §§ 212-213)

The first step of the encapsulation model is similar to that of the fund model. Instead of over withdraw shares to a commercial fund, this value is encapsulated (daytime the value of assets minus liabilities) as a restricted reserve at the savings bank the equity capital of the limited company.<sup>258</sup> The group of owners therefore consists exclusively afterwards know of the guarantors who have chosen to exchange their guarantor certificates for shares. The savings bank reserve continues in the event of a merger of the savings bank joint stock company with another company. <sup>259</sup> The savings bank reserve can only be reduced as a result of deficit coverage and cannot be used for distribution. <sup>260</sup>

256 FILE § 207, subsection 1 257 FILE § 208, subsection 2 258 FILE § 211 259 FILE § 212, subsection 3 260 FILE § 212, subsection 1

## 7.5 Assessment of amalgamation as a solution in crisis-affected banks

Merger is a FIL term that covers both a merger and a business transfer gelse, which is known from "ordinary" companies. FIL suspends part of the exceptions which The Companies Act opens the door for, including opting out of a merger plan or a valuer's opinion on position of creditors. At the same time, FIL requires the Ministry of Trade and Industry's approval of a joint laying of financial institutions. From a tax point of view, it is possible to implement both types of sam disposal tax-free or taxable. However, the tax-free options imply that the remuneration must primarily be share-based. In the event of a merger, the capital owners of the terminating company must therefore receive shares in the continuing company in order for the transaction to be considered tax-free, while the contributing company – in connection with a business transfer – must receive shares in the continuing company. It is our opinion that mergers are most often implemented taxes freely (like the current Ringkjøbing Landbobank/Nordjyske Bank merger), while corporate transfers are usually taxable, whereby the contributing company is reimbursed in cash. This could, for example, be in connection with a branch sale or with Østjydsk Bank's transfer of assets and non-subordinated liabilities to Sparekassen Vendsyssel.

Mergers differ from capital increases and balance sheet thinning in securitization in the decisive way that one is more dependent on external factors. A capital increase transfer can be carried out by means of a directed issue to a major shareholder via a general meeting request end, while a merger or a business transfer requires a partner/buyer. It does everything otherwise, the process is more unpredictable and complicated.

A bank in crisis – like Østjydsk Bank – will rarely be the continuing/receiving seal create in an amalgamation, which is why it does not make sense to measure the effect of this on East Jutland Bank's capital ratios. As a result, Østjydsk Bank will cease to exist on it one way or another. The completed transaction in which Østjydsk Bank transferred assets and non-subordinated liabilities to Sparekassen Vendsyssel, all other things being equal, result in a lower ca capital percentage at Sparekassen Vendsyssel, since exposures and liabilities are transferred sees, but no capital base instruments. Thus, the capital percentage counter will increase, without the denominator is affected. However, one must expect that Sparekassen Vendsyssel has had this in mind considerations and have a plan for how to achieve synergies so that the purchased assets teter from Østjydsk Bank can make a positive contribution to the savings bank. Within mergers and distressed banks, there is a high degree of flexibility in relation to to carry out business transfers, since this in extreme cases – like East Jutland Bank var – can be done without the general meeting's prior approval. This flexibility does not exist for mergers, which makes a merger a tool that is more preventive and can be used by the sector's players for strategic consolidation (e.g. Ringkjøbing Landbo bank and Nordjyske Bank).

In the tax-free amalgamation variants, there are no large liquidity draws, because deposits party is primarily repaid with shares and the tax payment is deferred. This can be seen, for example, in The Ringkjøbing Landbobank/Nordjyske Bank merger. In the specific case with Østjydsk Bank, the parties have chosen a taxable solution whereby all assets and liabilities are realized in it old "Östjydsk Bank shell", and the shareholders therein will subsequently have the estate settled. In that con krete case it has not been necessary for the old shareholders to provide new liquidity, but in other cases, where the taxable transaction is chosen, it may be a cash transaction heavy process, since payable tax is realized in the depositing company and the receiving company company pays in cash.

# 8 Financial Stability and financial stability

In October 2008, one month after Lehmann Brothers filed for bankruptcy, Stability established. The purpose of Financial Stability was and is to help ensure financial stability stability in Denmark primarily by continuing crisis-affected financial institutions that are not themselves able to continue and cannot find a private solution – for example as in Østjydsk Bank.262 Initially, however, Finansiel Stabilitet was only intended to play a temporary role in Danish society,263 but on 1 June 2015 Finansiel Stabilitet was transformed from a limited liability company to an independent public company (SOV) and thus became of a permanent nature.264 The transformation occurred as a result of a new law coming into force on that date,

and powers to Financial Stability as resolution authority. The transformation is home

easy in the same law and it also appears from this that the independent public company Financial

Stabilitet continues the business previously run with associated assets and liabilities in Finan siel Stabilitet A/S as well as all rights and obligations.266 Today, Finansiel Stabilitet generally comprises three distinct legs:267



Figure 19: Overview of the structure for the section on Financial Stability and financial stability

In the following, we will review the role of Financial Stability in relation to crisis-affected banks as well as the contents of the three legs shown above.

263 "Finansiel Stabilitet's agreement on the sale of Andelskassen JAK Slagelse to Netfonds Holding AB will not be carried out, and liquidation of the cooperative fund will begin", Announcement from Finansiel Stabilitet on 31 October 2016, published at www.finansiel stabilitite.dk

265 RAL § 78

266 RAL §§ 60 and 63

<sup>267</sup> "Restructuring and liquidation of certain financial companies", description from www.finansielstabilitet.dk

<sup>&</sup>lt;sup>261</sup> http://dm.epiq11.com/#/case/LBH/info

<sup>262 &</sup>quot;On Financial Stability", from Finansiel Stabilitet's website www.finansielstabilitet.dk, used on 27 May 2018.

<sup>264 &</sup>quot;Finansiel Stabilitet is transformed into an independent public company", announcement from Finansiel Stabilitet on 1 June 2015, published on www.finansielstabilitet.dk

## 8.1 Restructuring and liquidation of certain financial companies

With the aforementioned law, which entered into force on 1 June 2015, Finansiel Stabilitet received a number of opportunities to intervene in financial institutions in crisis, including the possibility of liquidation the institute. In order to be able to initiate a liquidation, the following conditions, cf. the Financial Stability Board's assessment, must be met:268

- The Danish Financial Supervisory Authority has notified Financial Stabilitet that the institution in question is in distress dende (defined in section 4)
- 2) The Danish Financial Supervisory Authority has notified Financial Stabilitet that other options for handling the company is exhausted
- The public interest necessitates the initiation of one or more liquidations measures

In other words, Financial Stability must first come into play when absolutely all other conceivable solutions are reached has been tried and failed cf. section 2 above. Can the crisis-hit bank solve its challenges by means of, for example, a capital increase, a merger or by reducing its shares exposures, this must therefore precede any intervention by Finansiel Stabilitet. There in addition, Finansiel Stabilitet will only intervene if it is in the public interest. It is only in section 3, that Finansiel Stabilitet must make an assessment, in that the first two points are objective from the point of view of Financial Stability (just need to be notified by the Danish Financial Supervisory Authority). Our assessment is that in the vast majority of cases distressed financial institutions will have public access its interest, and we will therefore expect that section 3 is not of a significant nature in relation to Finansiel Stabilitet's decision, once section 1 and 2 are fulfilled.

If Finansiel Stabilitet assesses that an intervention is necessary, cf. above, it will seek to liquidate the institution in question according to certain objectives below:269

- To ensure the continuation of critical functions whose settlement can be expected to disrupt it financial stability
- To avoid significant negative consequences for financial stability in particular by
  - prevent spread
- To protect public funds by minimizing dependence on extraordinary public financial support

<sup>268</sup> RAL § 4, subsection 1 269 RAL § 5

- To protect depositors and investors
- To protect customers' funds and assets

Although the above order is not officially in order of priority, according to our me It is no coincidence that the first two points deal with financial stability. the purpose of establishing Financial Stability in connection with the financial crisis was precisely to set up a safeguard against a financial crisis could spread like ripples in water. After the two points concerning finance In terms of stability, it is mentioned that the settlement must, as a matter of principle, take place without this costing the state money, which i.a. is sought to be secured through the creation of the Settlement Asset, a financing term ning administered by Finansiel Stabilitet. The liquidation assets can be used when Finansiel Stabi litet exercises its powers. The size of the assets corresponds to 1% of the deposits in financial institutions, which is covered cf. § 9, subsection 1 and § 10 of the Act on a depositor and investor guarantee scheme. Deviation The assets are built up by collecting contributions from the covered companies (financial institutions etc.). <sup>270</sup> Examples of possible uses include the following:271

- Guarantee assets and liabilities of the company during liquidation
- Buy assets in the company during liquidation
- Pay compensation to capital owners or creditors (if they have suffered greater losses than
  - in bankruptcy proceedings of the company)

When Finansiel Stabilitet initiates a winding-up process, it must use the tools that best suited to meet the settlement objectives. To prepare these decisions, Finance must siel Stability for all financial institutions etc. draw up a resolution plan, which is adopted by the Danish Financial Supervisory Authority.272 The resolution plan contains an explanation of the possible resolution methods that can are used, and are thus the starting point for Finansiel Stabilitet's approach in the event that they have to step in.273 Finansiel Stabilitet's tools in connection with settlement include, among other things, the following:274

- Taking over control of the company
- Full or partial sale of the company
- Transfer all or parts of the company to a subsidiary of Finansiel Stabilitet

<sup>270</sup> RAL §§ 56, 57 and 58 271

RAL § 59 272

FIL § 259 273

RAL § 12, subsection 3

<sup>&</sup>lt;sup>274</sup> "Restructuring and liquidation of certain financial companies", description from www.finansielstabilitet.dk

- Impairment and conversion of relevant capital instruments

- Bail-in

The home of respectively business sale, continuation in a bridge institution, write-down of relevant capital instruments, takeover of control and *bail-in* are found in the aforementioned law.275

When taking over control, Finansiel Stabilitet gets all the powers that are normally assigned capital owners and board of directors. This means that Finansiel Stabilitet can freely dispose of assets etc. in that regard dende institute. Control is taken over either directly or indirectly via one or more appointed persons in the form of administrators.276 Finansiel Stabilitet will naturally try to sell the

### parts of the company as it can, but since company transfer etc. is also a part

of the crisis management and early intervention that takes place before Financial Stability comes in above, this possibility is not very likely, we judge. Instead, it must be expected that Finance siel Stabilitet writes down and converts all capital instruments and continues the institution as a subsidiary of Finansiel Stabilitet.

An example of this occurred on 5 October 2015, when Finansiel Stabilitet took control with Andelskassen JAK Slagelse. In this connection, Finansiel Stabilitet canceled the cooperative capital as well as wrote down other capital instruments to 0, and at the same time the ownership became cooperative the fund taken over by a bridge institution, which was a newly founded and 100% owned subsidiary of Finansiel Stabilitet.277

In addition, Finansiel Stabilitet decided to *bail-in* for loss absorption on all others obligations (both subordinated, which could not be written down or converted, as well as non-subordinated obligations) but not the obligations that are exempt from *bail-in278*. To be able to make these write-downs, it is a requirement that a valuation of the institute's assets is carried out and liabilities which are reasonable, prudent and realistic. In addition, the valuation must be independent.279

16 277 "Finansiel Stabilitet takes over control of Andelskassen JAK Slagelse", announcement from Finansiel Stabilitet on 5 October 2015, published on www.finansielstabilitet.dk 278 RAL §

<sup>275</sup> RAL §§ 15-28

<sup>276</sup> RAL §§ 15 and

<sup>25 279</sup> RAL § 6 pieces. 1

In the case of Andelskassen JAK Slagelse, Finansiel Stabilitet used the opportunity to prepare a temporary valuation.280 When the final assessment was prepared,

this confirmed that the dispositions made regarding write-downs and bail-in had to be considered as one divisive, as the losses were so great in the co-operative fund that there was no cover for either the co-operative capital, subordinated debt or non-subordinated debt.281 In the subsequent period Finansiel tried Stability to sell the cooperative and also succeeded in entering into an agreement with a Swedish company. Approx. one year after Finansiel Stabilitet took control, specifically on 31 October 2016, however, it was not possible to carry out the sale, as the Swedish company had not received approval to purchase the company. Finansiel Stabilitet therefore chose to continue the co-operative fund itself with a view to being able to submit the banking license to the Danish Financial Supervisory Authority as soon as possible.282

## In the same announcement, it was announced by Finansiel Stabilitet that all deposits and agreements on

### payment card etc. would be terminated and that there would be an increase in interest rates on the loans,

which still remained. An interest rate increase was a necessity, because when Finansiel Stabilitet takes over

gives a financial institution and settles it via a subsidiary, there are a large number of business

requirements that must be met. For example, lending interest and fees must be in the 10%

highest segment of the Danish bank market, which is calculated on the basis of National

the bank's interest rate statistics. Deposit interest must accordingly be in the 10% lowest segment in the Danish bank

### market.283

In addition, it is essential that Finansiel Stabilitet only liquidates and does not attempt to

improve the profitability of its portfolio by expanding the scope of business, establishing new customers

relationship or expand existing engagements. Expansion of existing engagements can

thus only permitted if it is necessary for the sake of preserving the value of the commitment.

In any case, such an extension must amount to a maximum of 20% of the existing one loan and a maximum of 2.5% of the lender's total loan portfolio. In addition, customers' allocated cash must

secured credits are reduced.284 All of this must lead to the subsidiary of Finansiel Stabilitet A/S

284 BEK no. 1139 of 28/09/2010 - Order on liquidation of subsidiaries of Finansiel Stabilitet A/S and payment of risk premium, § 3

<sup>280</sup> RAL § <sup>281</sup> 7 "Assessment report, annual report etc. for Andelskassen JAK Slagelse under control" announcement from Finansiel Stabilitet

<sup>282 &</sup>quot;Finansiel Stabilitet's agreement on the sale of the cooperative fund JAK Slagelse to Netfonds Holding AB will not be completed, and the liquidation of the cooperative fund will begin", Announcement from Finansiel Stabilitet on 31 October 2016, brought to www.finansiel stabiliting.dk

<sup>283</sup> BEK no. 1139 of 28/09/2010 - Order on liquidation of subsidiaries of Finansiel Stabilitet A/S and payment of risk premium, §§ 4 and 5

as soon as possible, and no later than 5 years after the conclusion of the transfer agreement, can wind down all activities, which requires a license to operate a bank.

In the case of Andelskassen JAK Slagelse, this happened on 31 May 2017, when the banking license was filed and the company was simultaneously transformed into a financial company with the name FS Finans V A/S, in which only certain remaining loans remained. That there, in our opinion, are so tough rules regarding the conduct of business in the banks taken over by Finansiel Stabilitet are due to reg the provisions on the prohibition of state aid in the TFEU (Treaty on the Functioning of the EU). It follows from this that a state may not provide state aid that distorts competition,285 which in this context is ensured filled by introducing the very specific and unequivocally tough business requirements for banks the activities in Financial Stability.

## 8.2 The depositor and investor guarantee scheme

Finansiel Stabilitet manages Garantiformuen, which has taken over all assets and liabilities from the former Guarantee Fund. This happened in connection with the conversion of Financial Stability to an independent public company per 1 June 2015, when the former Guarantee Fund closed down laid down, and Finansiel Stabilitet took over administrative responsibility for the new Guarantee Fund. Although Finansiel Stabilitet manages the Guarantee Fund, this may not be financially combined is included with Finansiel Stabilitet's other business areas, just as Finansiel Stabilitet is not liable for the debts of the Guarantee Fund, and the Guarantee Fund is not liable for the debts of Finansiel Stabilitet in other business areas.286

Cf. The guarantee asset's website is the purpose of the asset to ensure coverage for cash deposits shot as well as losses due to non-return of securities, if a bank either goes out of business course or entering reconstruction treatment. For cash deposits up to 100,000 is covered euro per deposits. In addition, there are some special rules for deposits, which are covered by up to 150,000 euros per depositor, e.g. sums received for compensation according to the law for damages caused by crime etc. In addition, pension savings accounts are fully covered.287 Has an in vestor suffers a loss as a result of the bank in question not being able to return securities, this loss is covered with up to 20,000 euros per investor.288 In other words, the above means that if a bank goes bankrupt or is undergoing reconstruction, the Guarantee Fund is set up to ensure

<sup>285</sup> TFEU art. 107

<sup>286</sup> LBK no. 917 of 08/07/2015 - Promulgation of the Act on a depositor and investor guarantee scheme - § 1

<sup>287</sup> LBK no. 917 of 08/07/2015 - Promulgation of the Act on a depositor and investor guarantee scheme - § 9

<sup>288</sup> LBK no. 917 of 08/07/2015 - Promulgation of the Act on a depositor and investor guarantee scheme - § 11

the persons (both natural and legal) who have money to stand in the bank, either in the form of a deposits or in the form of securities, which the bank may not be able to return to the investor. If a bank is in crisis, Finansiel Stabilitet has the option to, on behalf of Garan tiformuen to contribute to the settlement by, for example, guaranteeing coverage of the bank's non-subordinated creditors.289 However, this does not mean that the Guarantee Fund can end up paying an amount that is higher than if the bank went bankrupt.290 We therefore interpret the set of rules as another path towards to ensure financial stability in Denmark.

The guarantee assets are divided into four departments; bank department, mortgage department, fund the brokerage department and the restructuring department. The three first-mentioned departments finan is said by each department's connected units, i.e. respectively banking institutions, mortgage credit institutions ter and stockbroking companies, etc. The fourth department, the restructuring department, is financed also by financial institutions and aims to cover the amounts for settlement of crisis-affected deposits <sup>291</sup> institutes. With the guarantee asset's structure and form of financing, it is thus ensured that the tire ing of depositors and investors, when they meet the conditions, takes place via funds from the loans dend institutions in the sector itself in contrast to, for example, a guarantee scheme with the state such as the fi financing and thus paying party. In our view, the guaranteed assets are therefore also the same as much to protect the Danish state as it is to protect the Danish depositors and investors.

## 8.3 Bank package activities

Since the foundation in the autumn of 2008, Finansiel Stabilitet has been responsible for administering the by taken bank packages. Bank packages have become the term used as a collective term for a a number of the political measures that have been taken since 2008 to ensure financial stability in Denmark field, but each individual measure also has a more telling name for the nature of the measure in question ristics. Below we have outlined an overview of the five adopted measures, which the "bank packages" includes.

<sup>289</sup> LBK no 917 of 08/07/2015 – Promulgation of the Act on a depositor and investor guarantee scheme - § 2 290 LBK no 917 of 08/07/2015 – Promulgation of the Act on a depositor and investor guarantee scheme - § 2a, subsection 5 291 LBK no 917 of 08/07/2015 – Promulgation of the Act on a depositor and investor guarantee scheme - §§ 5 – 7a

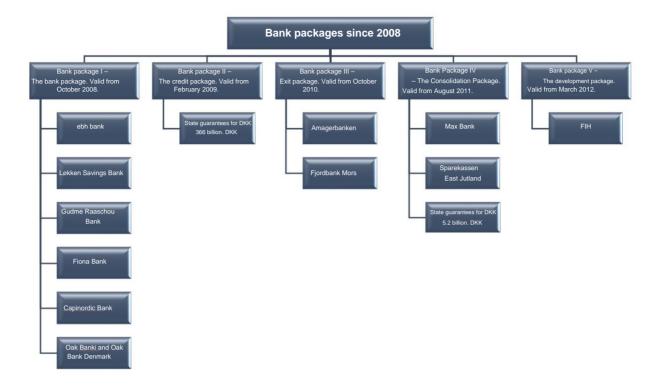


Figure 20: Overview of the bank packages and acquired banks etc. Source: www.finansielstabilitet.dk

In the figure above, we have indicated the individual packages with their own names and added the banks,

which is taken over under the individual packages. In the following, we will, in order to be able to express an overall

conclusion on Financial Stability as an alternative to private solutions for banks in crisis,

Briefly explain the individual bank packages. The bank packages are not a current settlement option

for financial institutions in crisis, as this competence today lies under the first leg of Finance

siel Stability: restructuring and liquidation of certain financial companies.

The first package, the Bank package, which was adopted in October 2008, is in relation to the number of takeovers financial institutions the most extensive. The bank package contained a guarantee scheme which entailed, that simple creditors in banks were fully covered from the period 11 October 2008 to 30 September 2010.292 In relation to the guarantee assets, this means that a depositor during this period not only was covered for up to 100,000 euros, but that the depositor was instead covered without a ceiling. other than that the guarantee scheme also applied between financial institutions, if one financial institution had lent money to another. 293

<sup>292</sup> LBK no 875 of 15/09/2009 - Promulgation of the Financial Stability Act - § 17

<sup>293</sup> LBK no 875 of 15/09/2009 - Promulgation of the Financial Stability Act - § 1

The credit package became a reality on 4 February 2009, when a change in the law made it possible for Fi nansiel Stabilitet A/S could provide individual state guarantees with a term of up to 3 years as well as state guarantees capital contribution in the form of hybrid core capital. The scheme expired on 31 December 2010, and the last state guarantees under the Credit Package expired in November 2013.294 Before the scheme expired, the state to grant guarantees for DKK 366 billion. DKK distributed over 64 institutes. At the end of the scheme, all issues from

the institutes had been redeemed.295

With the exit package, simple creditors' coverage was reduced from full coverage to now only om grasp 100,000 euros. In addition, crisis-hit financial institutions could now choose whether or not they wanted liquidation via Finansiel Stabilitet or not (the alternative was normal liquidation in the form of bankruptcy). Both Amagerbanken and Fjordbank Mors ended up being liquidated via Finansiel Stabilitet under the exit package. The former Garantifond, now Garantiformuen, guaranteed for any loss that the state risked in liquidation through Finansiel Stabilitet.296

The main purpose of the consolidation package was to increase the incentive for non-crisis affected banks ter to take over commitments from the crisis-affected financial institutions. Two months were introduced shares: 297

1) With one model, a bonus is given to the acquiring bank in the form of a dowry.

The dowry is provided by Finansiel Stabilitet and the former Guarantee Fund. Instead, over the continuing financial institution takes the entire balance sheet from the crisis-affected financial institution with it exception of share capital and other responsible capital.

2) In the second model, it is Finansiel Stabilitet that takes over the distressed money institute, but at the same time sells the viable part of the acquired company. In this model, Finansiel Stabilitet receives a dowry provided by the former Guarantee Fund.

In addition to the above two models, the option was given for individual state guarantees when there was a merger between a crisis-affected and a non-crisis-affected bank. Per end of 2013 was there issued such guarantees for DKK 5.2 billion. DKK, <sup>298</sup> and Finansiel Stabilitet took over through Konsolide the Max Bank and Sparekassen Østjylland ring package.

<sup>294 &</sup>quot;About bank packages" description from www.finansielstabilitet.dk 295 "About bank packages" description from www.finansielstabilitet.dk 296 "About bank packages" description from www.finansielstabilitet.dk 297 "About bank packages" description from www.finansielstabilitet.dk https://www.finansielstabilitet.dk/ 298

Default.aspx?ID=153

The last banking package was titled the Development package. The primary purpose of the Development Package was to increase the liquidity flow in the sector and thus improve the possibilities of obtaining credit for companies. This happened through strengthened and new opportunities for Eksport Kredit Fonden as well Vækstfonden, establishment of an agricultural financing institute whose purpose was to lend money to farmers (LFI no longer has a license as a bank) and through Finansiel Stabilitet's takeover of a large property portfolio from FIH Erhvervsbank.299

From Finansiel Stabilitet SOV's accounts for 2017, it appears that the balance sheet total for the above activities taken via the bank packages amounted to DKK 9.3 billion. DKK at the end of 2017 (DKK 9.5 billion in 2016). There with, Finansiel Stabilitet wound up a very small part of its activities in 2017, which is why it has to it is assumed that this settlement process will continue for several more years.

## 8.4 Summary and assessment

In 2008, the foundation was laid for what we know today as Financial Stability SOV via. law about financial stability. Financial Stability in its current form contains three business legs; restruk turation and liquidation of certain financial companies, Garantiformuen and bank package assets teeter. To regard Financial Stability as a solution model is to distort the meaning of the word solution, but there is no doubt that Financial Stability is a destination that is affected by the crisis banks have to deal with. Can the crisis-stricken banks not find private solutions, and if there is no prospect that they can get back on their feet on their own, then Finansiel Stabilitet will likely to step in. In this connection, it must be expected that share capital and other capital instruments are written down to 0, which will therefore result in the same result for shareholders as in bankruptcy. In the case of Østjydsk Bank, there was, cf., the stock exchange announcement with an advertisement ring of the bankruptcy prospect of a partial redemption of the hybrid and supplementary capital, but that unlikely to be much. For customers with deposits in a bank, however, there is a significant difference between to end up in Financial Stability and, for example, the solution that was found in Østjydsk Bank. Here passed all customers namely to Sparekassen Vendsyssel and thus suffered no losses. Had the customers in ste if it were to be transferred to Financial Stability, customers with deposits would receive maximum coverage 100,000 euros via the Guarantee Fund (with the exception of certain specially covered deposits), and there with there is a high probability of losses for some of the customers with deposits. The bank packages are in the great past - now all that remains is the liquidation of the funds taken over by Finansiel Stabilitet institutes as well as the lawsuits that have arisen in the process. That being said, it is in our opinion

<sup>&</sup>lt;sup>299</sup> https://www.finansielstabilitet.dk/Default.aspx?ID=1850

not inconceivable that if something similar to a new financial crisis were to arise, it could there may be an opportunity for the Folketing to adopt new measures in the form of bank packages etc to ensure financial stability in relation to Finansiel Stabilitet's current opportunities.

# Chapter III

# **Reflections and conclusion**

## 9 Reflections on the future

This master's thesis has dealt with the capital requirement rules, the Danish rules for crisis management and analyzed on solution models for banks in crisis. The work on the thesis has given us occasion for reflection on the analyzed set of regulations, and we have found occasion to point out several paradoxical relationships. This section will elaborate and justify our reflections, which primarily deals with the impact of the ever-increasing capital requirements on the sector, FIL's main purpose as well as the consequences of the solutions most often used for crisis management in Danish banks.

The section will be built up towards a number of concluding points based on the explanation of individual basic elements.

#### Increased capital requirements

The capital requirements and calculation methods discussed in this thesis are relatively new. The CRR and CRD entered into force on 1 January 2014 and these sources of law are part of the EU's implementation of the Basel III regulations. We have not dealt with the set of rules that applied before then in this assignment, but based on the material we have reviewed, it is our clear impression that the rules which entered into force on 1 January 2014, has led to a tightening of the capital requirement rules. In writing the rules are not fully implemented. For example, the CRD's capital conservation buffer is the first to run out slightly phased in at 2.5% in 2019 (1.875% in 2018).

In December 2017, the Basel Committee published its recommendations for the upcoming regulation ring of the capital requirements. The reactions to this have primarily been that it is again a matter of strictness ning of the rules. We have carried out studies of the regulations on a smaller scale, and the results thereof is that work is primarily done with the calculation of the risk-weighted exposures. The areas we has focused on in this connection, is the output floor and the more risk-oriented standards dead. The output floor reduces the benefits of using the IRB method, since a limit is set for how big an advantage the institutes can achieve by using the IRB. In addition, stan the dard method is less standardized and more risky.

All other things being equal, the consequences of the above must be hardest for the largest banks, which uses the IRB for risk weighting of the exposures. In addition, it goes without saying that one more risk-weighted standard method will be an advantage for institutions with low risks, while institutions with riskier exposures will be met by demands for higher capital commitment as a result of this. It is our assessment that the increased capital requirements will be of great importance for the future banking sector. The banks have to increase their capital base. If this happens upon issue of hybrid or supplementary capital instruments, the interest expenses will be negative over time impact on the actual core capital. The actual core capital is the "finest" capital, and it is with this, the CRR's minimum requirement of 4.5%, 56% of pillar II supplement as well as the CRD's binary capital buffer requirements must be met.

As a result, banks may be forced to increase their Tier 1 capital. It can happen either by issuing additional actual core capital instruments (share issue), by increasing its earnings or by retaining a larger share of the profit as an alternative to distribution to shareholders. A share issue can dilute the existing shareholders if they do not have right of first refusal. Increased earnings can be achieved through efficiencies in the business, higher prices to customers or by becoming more skilled at avoiding losses and write-downs of loans. Higher retention rate of profits will result in a lower dividend yield for shareholders.

### Our understanding of FIL's main purpose

When you have dealt with FIL, you become aware of the law's unwritten general clause: "The purpose of the regulation of the financial sector is to ensure trust in the financial sector dry". This can be seen, for example, when FIL defines the management's suitability: *"When assessing whether a a member of the board of directors or the executive board meets the requirements in subsection 2 and par. 3, no. 1, 3 and 4, shall emphasis is placed on maintaining trust in the financial sector."* provisions are not seen within the Companies Act - "ordinary" companies must secure a passport send earnings so that it can correspond to everyone's, but without necessarily taking into account its respective industry or to society as a whole. It is our opinion that the company's interests always come first in an ordinary limited company, as it is otherwise no attraction tive to provide capital as risk-averse as share capital is.

The financial regulation, on the contrary, is designed so that the interests of the shareholders comes second. Society comes first. The prioritization comes to the fore in particular pressure in the requirements for banks' solvency, since it is only in the financial sector that legislates sets requirements for how much loss-absorbing capital a company must have. In addition, is the supervisory authority assigned several far-reaching competences, including, for example, compe-

<sup>300</sup> FILE §64, subsection 4

the tendency to, under certain conditions, order a financial company to carry out write-downs nings of capital instruments. This is another example that consideration of the financial sta bility and society come before the shareholders who have provided the risk-averse capital.

## The result of current solution models

We have analyzed four solution models for banks in crisis; capital increase, securitization, merger and takeover of Finansiel Stabilitet. The first three are so-called private possible heats, where the sector solves the crisis itself. The legislation encourages this in connection with a crisis handling, where the most controversial provisions are probably found in connection with active transfer of ownership, where the board of directors can in extreme cases transfer the bank's activity to a other bank without the approval of the general meeting, but with the approval of the Danish Financial Supervisory Authority. For shareholders in "ordinary" limited liability companies, it would be unheard of for the board in collaboration with an authority could change so drastically a company without the approval of the general meeting warrant. However, the provision is necessary in order to operate quickly in crisis situations, sole that trust in the financial sector can be maintained.

The thesis has included Østjydsk Bank as a pervasive element, and in Østjydsk Bank was specifically speaking of the use of the above tool. However, the company transfer did not include subordinated capital – i.e. that all the investors behind Østjydsk Bank's capital base instruments was left in the bankruptcy estate, which must be presumed to be empty of values apart from the consideration of 50 million DKK. This method of transfer is the same as that used when Finansiel Sta bility must take over a bank in crisis.

Thus, it can be deduced that two FIL legal special provisions in the set of rules for crisis-affected banks; company transfer followed by orientation general meeting and transfer to Fi nansiel Stabilitet SOV leaves the risk-averse investors as losers. These provisions is, in our opinion, particularly far-reaching compared to the provisions of the Companies Act.

A characteristic of these instruments is precisely that they are risk-taking capital. As an investor in a bank's capital base instruments can therefore risk losing all or part of it of your investment, just as if you had invested in an ordinary company. The difference is, however, that the legislature does not establish rules for the solvency of ordinary companies and thus on the companies' ability to earn interest on the investors' invested capital works. It is a prerequisite relatively easier for a company to earn a return on its investors' capital, which is inherently risky willingly, when there is no requirement at the same time as to how much capital must be tied up. That there is silence requirements for solvency correspond to limiting the extent to which the business in question togetherness must be leveraged. In its core business, a bank is fundamentally an investment company which speculating on the interest rate spread between deposits and loans. There are countless examples of *hedge funds* etc., which has the same business model, but which leverages significantly more than the approx. 12 times, as the minimum capital requirements for banks allow.

## The paradox

Can investors get a reasonable return on their investment in a bank's capital base instruments, when the legislature simultaneously defines how large a part of this capital must be "tied up" and have the option to write down the same capital instruments under certain conditions? Cf. above, there is a high risk associated with the investments, and at the same time the legislator has defi nered that the shareholders come second - society and its trust in the financial sector comes first.

The return can be in the form of an increasing value of the instrument. It can also be in shape of distributions to investors; dividends to shareholders and interest to holders of hybrid and supplementary capital instruments. The critical thing is that the institute earns interest on the capital in the form of solderings, is that, other things being equal, they reduce the actual core capital – and gradually the buffer requirements have been phased in, it is the most important type of capital. If Danske Bank's SIFI buffer from 2016 is kept constant at 3%, in 2019 they must have an actual core capital percentage of 10% as a result of CRR's minimum capital requirement of 4.5%, SIFI buffer of 3% and capital preservation ring buffer of 2.5%. Thus, the actual core capital must amount to 125% of CRR's mini minimum requirement for the total capital base of 8%. The bank is thus forced to pay the investors' return requirements, because they are dependent on the capital, but at the same time a negative spiral, because as they earn interest on the capital, they reduce their capital base, whereby be the cost of capital increases. If the bank cannot increase its capital, it will over time break even the capital requirements, and ultimately it is categorized as distressed. And a distressed bank is likely to result in losses for investors.

## Solution and options

The solution to this must be that the banks are forced to increase earnings in the future. Because with it regulatory risk that investors undertake beyond the usual business ri siko, they must necessarily also expect a correspondingly higher return. Earnings can be increased again easy streamlining and thus saved costs or through higher prices for customers.

Increased efficiency can, for example, be achieved via economies of scale, which is expected to result further consolidation of the sector. In the effort to reduce the cost level several financial companies are trying their hand at AI technology, which replaces employees with machines down. The figure below from FinansDanmark illustrates the sector's focus on cost savings reduction in the form of fewer branches and employees:



# Filialer af danske pengeinstitutter og antal ansatte

## Figure 21: Survey prepared by FinansDanmark. Source: FinansDanmark

A third option would be to reduce write-downs on loans by becoming more proficient at to know good and bad customers apart. It must become a major focus for the banks in them coming year, and this will be a positive consequence of the regulation in the area.

If it turns out that the regulatory risk exceeds the return that the banks can deliver to its shareholders etc., an alternative solution may be to change the way of working crisis management on today. As we have mentioned several times, it is clear that shareholders are coming according to social considerations, as the rules look now. If instead, as a society, you had an approach for crisis management in banks, which included wanting to contribute to restoring the bank and not just wind up the bank, if private initiatives fail, so will the regulatory risk presumably fall. This solution will be a step in the direction of a socialist state where

companies are not allowed to go bankrupt, which seems like an unlikely step and for many nor a desired step (ourselves included). However, in our opinion, one must be careful to the balance that should exist between, on the one hand, quiet strictness and high regulation ring requirement for a sector and on the other hand would not touch the same sector with a tongs, when, despite high demands, a company in the sector nevertheless comes into crisis.

In this thesis we have treated securitization as an opportunity to improve the capital ratio ten. Creating a security that can be sold on the market is not just a method that can slim banks' balance sheets. In the long term, it will be an opportunity to create even more investments ring objects, and when the commitments are in these papers, it will be in these that the investor will demand a higher rate of return, as this is where the risks in banks' business traditionally lie. That can potentially have a positive effect on investors' requirements for return on capital instruments in the banks, because the risks are moved out of the banks, whereby the high interest rate requirement must follow. This can also eliminate the aforementioned regulatory risk for the banks.

# **10 Conclusion**

The regulation of banks' capital ratios aims to ensure solid and well-consolidated banks ker that has sufficient loss-absorbing capital in the event of financial crises. In 2014 stepped respectively CRR and CRD in force and parts thereof are still being phased in, which is why the requirements have since been disputed entry into force have continuously been tightened.

Banks' total capital base consists of three types of capital; actual core capital, hybrid ker net capital and supplementary capital. The capital base is subordinated to all other obligations. When banks' capital ratios are measured, it is done as a relative share of the bank's total risk-weighted exposures. The CRR sets a minimum capital requirement for the banks of 8% consisting of at least 4.5% in actual core capital and 6% in core capital, which is the sum of actual core capital and hybrid core capital. In addition to the CRR's minimum requirements, the institutes must calculate their individual solvency needs, which must take into account the institute's particular and forward adjusted risks. The CRR requirement is referred to in the Danish FSA's 8+ model as a pillar I requirement, while difference everything from here to the individual solvency court is called the pillar II supplement.

In addition to the individual solvency requirement, the institutions must meet special buffer requirements. These will i 2019 be fully implemented, where the capital conservation buffer will provide an addition to the actual one core capital in addition to the individual solvency requirement of 2.5%. Finally, the Financial Supervisory Authority can determine put a pillar II supplement on top of pillar I and the buffer requirements.

Furthermore, in 2018, another requirement for banks' capital ratios was introduced; The NEP requirement that covers both capital base instruments and liabilities. The intention is that a certain part of banks' liabilities must be arranged with an option to either convert to egenka pital or write-down in case of crisis. The average NEP supplement will henceforth amount to 4.7%.

It is our assessment that the requirements set for banks' capital ratios in recent years have become tighter, and based on i.a. Basel IV it is also our expectation that the requirements in the future only gets tighter.

A current example of a bank that has had difficulty meeting the ever-increasing capital requirements, is Østjydsk Bank. The bank struggled for a long period after the financial crisis with fulfill the applicable requirements, but had to find on 22 February 2018 that it had not been successful the bank to find a solvent solution, as the bank filed for bankruptcy. Sparekassen Vendsyssel

in this connection bought the activity in the bankrupt bank. That left shareholders and creditors behind be of subordinated debt with virtually nothing. Østjydsk Bank was in the period after the financial crisis and until the bankruptcy several times in crisis and solved it i.a. when carrying out a capital increase see, issuance of debt instruments, sale of branches and conversion of hybrid capital instruments ments to equity capital.

Banks can resolve crisis situations on their own, such as Østjydsk Bank in several rounds did so, or they may do so with others in carrying out a merger or business transfer. Based on this consideration, possible solutions for crisis management are; capital increase, taking on subordinated debt, securitization, merger or in the end final transfer to Finansiel Stabilitet.

A prerequisite for carrying out a capital increase is that there are investors in the market who are willing to contribute risk capital, which is not necessarily the case for a crisis distressed bank, unless investors can see an upside in the distressed bank. Implementation of a capital increase requires compliance with the Companies Act and FIL. The decision to implement a capital increase either requires the board to be authorized in advance to make a decision about this, or that the decision is taken by the general meeting. A capital increase adds a bank capital of the highest quality, as the proceeds go to the actual core capital. The counter in the actual core capital percentage calculation increases, while the risk-weighted exposures do not be changed, provided that the proceeds are placed at a risk weighting of 0 in, for example, Danmarks Nationalbank.

It is our assessment that it was unrealistic for Østjydsk Bank to implement and succeed a capital increase when they were last in crisis. This is because the trust after a long period of economic difficulties as well as several previous capital increases that had not given the investors it for expected return, was gone. In addition, it is assumed that the investors' consideration of whether good money had to be thrown away after bad ones, did not speak to Østjydsk Bank's advantage.

An alternative that, like a capital increase, increases the capital (the numerator in the fraction) is a take-up of either hybrid core capital instruments or supplementary capital instruments. However, it is important to point out that these instruments do not add capital of the same quality in terms of capital layered as a capital increase and thereby does not necessarily meet the same needs. Recording of these instruments is flexible and easily accessible in the sense that decision on admission basically does not require authorization from or a decision by the general meeting. However authorization may be required in the case of debentures with conversion rights.

Admission of hybrid Common Equity Tier 1 or Tier 1 capital instruments would not alone could have remedied Østjydsk Bank's latest crisis, when the bank lacked DKK 95 million. DKK i actual core capital, which these instruments cannot fulfill.

In contrast to capital increases as well as taking up hybrid or supplementary capital ska Securitization does not require capital, but instead reduces the risk-weighted exposures and thereby the denominator in the capital percentage calculations.

Bundling loans and issuing securities with collateral in the underlying loans has been around for decades been used by the Danish mortgage system. Despite that, securitization as a tool for reduction of risk-weighted exposures has not yet been used by Danish banks. However, have Nordea made use of securitization in 2016, where they reduced their risk-weighted exposure ger by 30 basis points by issuing CDSs for DKK 63 billion. DKK on part of the bank's business pledge items. Nordea is the first Nordic institution to carry out a securitization with for the goal of improving its capital ratios. Thus, securitization as a tool has been introduced in Nor that and in view of the EU's focus on promoting securitization in the EU, i.a. by adoption of a new regulation whose purpose is to ensure common rules for securitization, so for we expect that securitization both in Denmark and in the rest of the EU will gain ground in the coming years years, when banks have to keep pace with ever tighter capital requirements.

Considering that securitization reduces the risk-weighted exposures and thereby has an effect on the actual core capital percentage, without the bank having to go out and carry out a capital increase, where investors have to see a case in the entire company, we see it as an extremely good tool for crisis management. This requires that the bank has sufficient uniform assets that can be bundled together, so that the reduction of the risk-weighted exposures achieves a certain size.

In the case of Østjydsk Bank, it was difficult to imagine that they would have sufficient ensar ted assets that they could securitize – the costs and effect on reducing risk weighted exposures taken into account.

In FIL terminology, "amalgamation" consists of the concepts known from company law, merger and business transfer. By merging, a crisis situation is resolved in contrast to the above prevailing solutions together with others. Both merger and company transfer can take place taken in a tax-free or taxable version. Crucial for a merger to take place tax-free, is that the seller is repaid in shares, which can however have a negative effect on capital the percentage.

According to FIL, mergers require the approval of the Minister for Business, which in practice will say the Danish Financial Supervisory Authority's permission. However, it is difficult to imagine that an application for together laying in a crisis situation will not be approved when the interests of customers, investors and lenders considered. In addition, in certain extreme cases, the board of directors of a bank has the opportunity to take decision to carry out a company transfer without the general meeting, rest ket makes this solution particularly flexible and accessible for a bank in crisis.

When Østjydsk Bank had gone bankrupt, a business transfer was used. However, transferred no subordinated debt to Sparekassen Vendsyssel. Østjydsk Bank was compensated with 50 million DKK, which was lower than Østjydsk Bank's market value according to the stock market price, which was valued at put the bank at DKK 60 million. DKK (incl. subordinated debt). There was no company transfer need for a general meeting approval, since Østjydsk Bank applied an exception see provision in FIL, why the general meeting only had to be informed. Exception late could be used, as Østjydsk Bank expected to become insolvent.

In the case of Østjydsk Bank, a merger would not be possible, due to Sparekassen Vend employment valuation of the bank. In addition, it would require a transformation of the Savings Bank Returning to a savings bank joint-stock company, if a merger had not been disqualified background of the valuation.

If none of the above tools alone or in combination is sufficient to bring a bank out of crisis, then Financial Stability is a form of terminus more than an actual one solution for banks in crisis. For stakeholders such as shareholders and subordinated debt lenders to that extent it does not matter whether the bank goes bankrupt or ends up in Financial Stability, since it has to it is assumed that share capital and subordinated capital are written down completely.

Considering Østjydsk Bank's situation, Financial Stability was a consideration they must have done when it turned out that they were unable to find a private solvent solution. For East Jutland It has been important to the bank's customers that Sparekassen Vendsyssel registered with the bank, as customers with deposits were thereby fully secured, while a transfer to Finansiel Stabilitet only had secured deposits via the Guarantee Fund up to 100,000 euros. It is our assessment that the supervisory authority goes a long way in trying to encourage and on work for private solutions rather than letting banks end up in Financial Stability.

All the tools we have analyzed have their advantages and disadvantages. In a crisis situation it will be individually which tools make the most sense to use and whether there is a need to combine some of the tools. For example, a bank with reasonable underlying operations can have good success in carrying out a capital increase, while a bank such as Øst jydsk Bank will presumably have problems using this tool. On the other hand, it can securitization will eventually become a suitable tool in crisis-affected banks. It presupposes a larger knowledge and experience of securitization. We expect the sector to gain better knowledge of this in step with the larger banks, their eyes open to this possibility.

If there is no value left in the crisis-stricken bank, a business transfer may be the last resort way out before Finansiel Stabilitet takes over the bank, since the business transfer does not must necessarily result in proceeds to shareholders, etc. In the case of Østjydsk Bank, it ended using this very tool. Based on our investigations, it is our assessment that this was the only possible tool if you wanted to avoid handing the bank over to Finansiel Stabi little.

In our view, there is a risk that investors will find it less and less attractive in the future to invest in the banking sector, and in particular in banks already in crisis, since they have to take on significant regulatory risk at the same time that no help is provided from society to the shareholders of the crisis-affected banks. Basically, we do not believe that society should save companies, but that they must be allowed to go bankrupt. However, we believe that there must be one for sensible balance between the regulation offered to the banking sector and thus its investors, and the (lack of) help that society offers when the banks come in despite high demands crisis.

# **11 Abstract**

This thesis seeks to analyze and evaluate certain tools that can be used in a situation of crisis banks. In this thesis, crisis is defined as a failure to comply with the capital requirements that apply for the sector. To analyze and evaluate the chosen tools we use a case-based method, primarily revolving around the former Østjydsk Bank A/S which filed for bankruptcy in early 2018.

The thesis is divided into three chapters. Chapter I focuses on the capital requirements for banks, the special regulation that applies when banks are in crisis and a walk-through of the East Jutland Bank case. Chapter II contains the analysis and evaluation of 3 tools and 1 alternative to the private solutions/tools: An increase of the banks' share capital and absorption of new additional tier 1 capital and tier II capital, securitization, mergers etc. and finally a takeover by Financial Stability SOV Chapter III contains our reflections on the topic and our findings and a conclusion on the thesis.

After analyzing the 4 tools mentioned above, we found that each solution has its own benefits and downsides. It may for example be difficult to find investors willing to put up new capital in a share capital increase because the bank is in crisis, which indicates a poor business model and failure to operate at an acceptable level. Another option could then be to use securitization to lower the banks' risk weighted exposures, but this is a rare practice in Denmark, meaning that the banks have no experience in doing so, and few capable resources to draw on. A transfer of the bank's business to another bank ended up being the solution in Østjydsk Bank, leaving the bank to file bankruptcy after all assets and liabilities other than subordinated debt had been sold two Sparekassen Vendsyssel. The last and final way out for banks who cannot comply with the capital requirements, is to be taken over by Finansiel Stabilitet, which also includes a transfer of business and thus leaving the bank in bankruptcy but saving customers (deposits up to 100,000 euros and loans will have altered terms to match the 10% worst terms in the sector).

When reflecting on our findings, we see a paradox in the way banks are highly regulated but at at the same time not aided when entering a crisis. We worry that this will dampen investors' app tite for banks, seeing as they take on significant regulatory risk and limitations on leverage through the capital requirements. Perhaps a new way of handling banks in crisis will be necessary sary if and when the regulation of the sector tightens further.

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