



Landshypotek Bank

# Landshypotek Bank Information regarding capital adequacy and risk management 2016

Pillar III

For a richer life in the countryside

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# 1. Introduction

This capital adequacy and risk management report contains information about Landshypotek Bank's risks, risk management, capital adequacy and liquidity in accordance with the Basel III rules regarding information disclosure.

## 1.1 Introduction and objective

The objective of this capital adequacy and risk management report is to publish information about material risks for Landshypotek Bank, the management of these risks and the current capital and liquidity situation. The report, together with the information in the bank's Annual Report, interim reports and on its website ([www.landshypotek.se](http://www.landshypotek.se)), meets the disclosure requirements under the CRR, FFFS 2014:12 and the Commission Implementing Regulation on the reporting of own funds information. This report is published in conjunction with the Annual Report on Landshypotek Bank's website. This report has been reviewed by the Board's Risk and Capital Committee and adopted by the Board of Directors.

All licensable activities are conducted within the bank. The capital and liquidity-related figures in the report pertain to the consolidated situation at 31 December 2016 unless otherwise specified. For the publication of periodic information, where the bank has determined that more frequent disclosure should be conducted, please refer to the bank's interim reports. Section 9 contains a list of definitions and abbreviations used in the report together with their explanations.

A corporate governance report is included in the bank's 2016 Annual Report.

# 2. About Landshypotek Bank

Landshypotek Bank is a member-owned bank with its main operations financing ownership and entrepreneurship for farming and forestry, and living in the countryside.

## 2.1 A member-owned bank

Landshypotek Bank has a long history dating back to 1836. The bank is a wholly owned subsidiary of Landshypotek Ekonomisk Förening, which is a financial holding company. The bank's borrowers in farming and forestry become members of the bank. At the end of 2016, the association had about 41,000 members that jointly owned the association, and where each member has a vote at the annual regional meetings. The appointed Board members from the respective regions, 43 members, then represent the members at the Association Meeting.

## 2.2 Credit portfolio

Essentially, the bank's operations comprise lending to people against mortgage deeds in real property within 75 percent of an internally assessed loan-to-value (LTV) ratio. Customers are also offered lending with higher LTV ratios and lending against other forms of collateral, such as EU support, and to some extent guarantees. The bank holds a strong position in the Swedish credit market for financing farming and forestry with a market share of 26 percent.

In 2017, the bank will start offering home loans against mortgage deeds in real property within 75 percent of an internally assessed LTV ratio. The bank's primary target group for this new product is households in urban areas in Sweden outside of the three largest cities.

In addition to the above credit granting, the bank also collaborates with Sparbanken Syd, DNB, Gjensidige Försäkringsbolag and EuroAccident with the aim of offering its customers a broader range of financial products.

At 31 December 2016, the bank's credit portfolio amounted to SEK 66.5 billion. The exposure-weighted LTV ratio in the credit portfolio on the same date was 48 percent.

## 2.3 Funding

Landshypotek Bank funds operations primarily through the Swedish capital and money markets, but also partly international funding. Since 2013, the bank has had a deposit offering aimed at the bank's members and the general public in Sweden, which accounts for a growing share of the bank's funding. The bank's funding strategy is to attain a favourable maturity balance between assets and liabilities.

Landshypotek Bank has a Swedish MTN programme for covered funding within a framework amount of SEK 60 billion. Moreover, the bank has an EMTN programme for international funding, under which the bank can issue both subordinated and senior debt. The programme also allows for the issue of subordinated debt in the form of dated subordinated loans. The limit for the EMTN programme is EUR 3.5 billion, or a corresponding amount in other currencies.

A Swedish commercial paper programme of SEK 10 billion covers the bank's short-term funding. Over time, the programme is used sparingly, but is used, among other things, for bridge financing when temporary liquidity is needed.

At 71 percent, the covered bonds comprise a majority of funding. Senior and subordinated debt comprise 10 percent of funding and certificates 3 percent. Deposits comprise 16 percent of funding and are growing as a funding source.

The bank's issuance strategy is to make one large public issue each year to create greater bond liquidity for investors. Other issues are carried out through smaller private placements initiated by the investor. When it is economically possible, the bank tries to work actively buying back and extending debt to reduce refinancing risks.

The bank's deposits strategy is to have attractive offerings aimed at the general public in Sweden and small businesses. The bank's target is for deposits to represent 20 percent of the bank's funding within three years. In 2016, deposits increased SEK 1.4 billion and, at 31 December 2016, deposits totalled SEK 11.7 billion (10.3). Through increased deposits, liquidity can

Diagram 1 Maturities of market funding

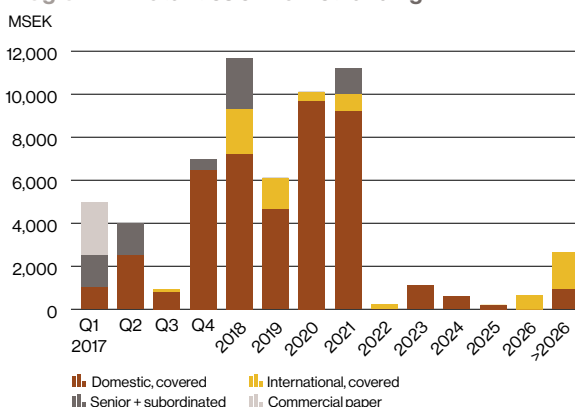
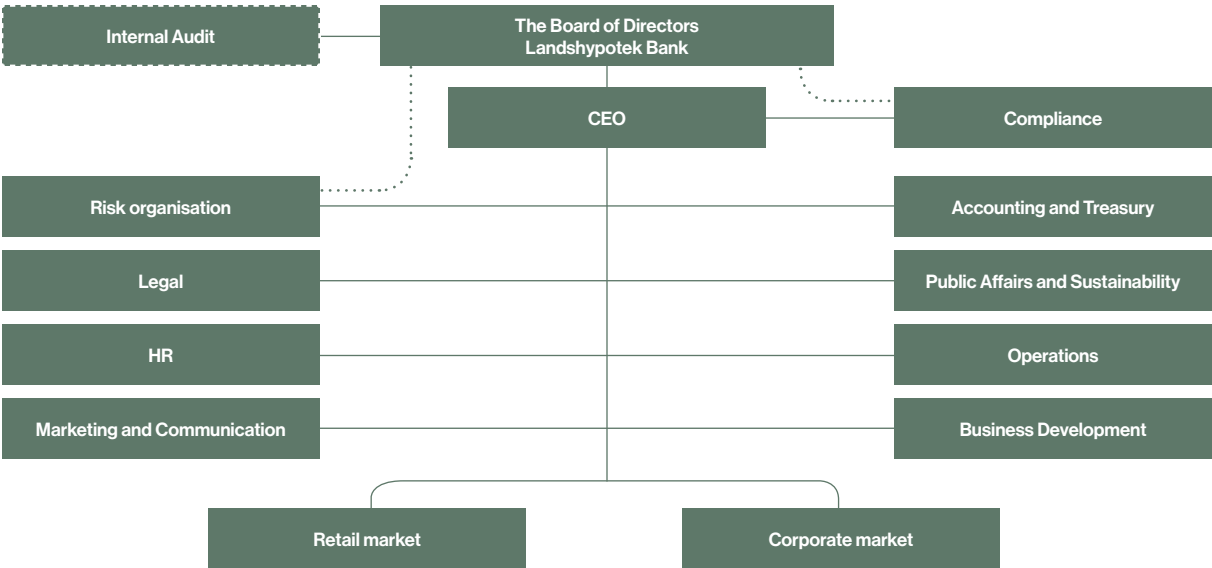


Diagram 1 Organisational overview



be improved in the event of market stress and thereby strengthen the prerequisites for a favourable external rating. The bank's deposit products are covered by the deposit insurance following the decision by the Swedish National Debt Office.

**2.4 Developments at the bank**

The bank implemented a number of organisational changes in 2016. In addition to dividing lending operations in to two areas, retail and corporate, a number of changes were implemented in the administrative support function operations and the risk organisation to enhance efficiency and improve risk management, refer also to Section 3.2.

**2.5 Organisation**

Landshypotek Bank's lending operations are split into two different areas of operation: corporate and retail. The corporate market is organised into eight districts and has 19 offices across Sweden. Local presence is an important success factor for the bank and its customer contacts. The account managers have a good level of local knowledge and expertise of farming and forestry criteria, as well as entrepreneur-driven enterprise and living in the countryside.

Retail market operations are mainly located at the Linköping office, which handles smaller retail customers. Contact with customers managed through this organisation is mostly through digital channels and by telephone. The Bank's new home loan initiative will be managed via digital channels and is organised under the retail market.

At 31 December 2016, the bank had around 160 employees. The bank is domiciled in Stockholm. The above diagram provides an overview of the bank's organisation.

# 3. Risk management

Landshypotek Bank has a low risk appetite and promotes a sound risk culture and a low degree of risk undertaking throughout operations.

## 3.1 The bank's objective with risk management

A sound risk culture is a high priority at Landshypotek Bank. The bank strives to achieve a high degree of risk awareness in the organisation and a low degree of risk undertaking. A high degree of risk awareness means that each employee understands the risks implied for the bank by the individual's work duties, the degree of risk undertaking that is acceptable and how to behave to avoid exceeding the acceptable level of risk. A low degree of risk undertaking is achieved through setting low levels for risk appetite and risk limits, a clear risk framework with a high level of risk awareness among staff, where customer responsibility also includes responsibility for profitability and the risk in each unique commitment.

The bank's employees are tasked with maintaining high quality in all of the activities undertaken, being sensitive to changes in the macro environment and understanding the impact of these changes on customers, the value of assumed collateral and the bank's business model.

## 3.2 Development of risk management

Customers, legislators, investors and general macro environmental developments are continuing to raise requirements for companies in the financial sector. Therefore, Landshypotek Bank is developing its operations to meet expectations from customers new and old, structural changes in the farming and forestry sectors and more stringent regulations, and has worked intensely to meet these challenges in 2016. In addition to producing new products, customer offerings and implementing comprehensive systems development, the bank continued goal oriented efforts to improve the implementation of applicable and new regulations in its operations. This applied not least to regulatory frameworks pertaining to governance, risk management and control. In 2016, the bank's Board also kept considerable focus on corporate governance issues, and revised and adopted a number of policies and processes to ensure that the Board has effective control and governance of the bank.

Moreover, a number of improvements were implemented across the bank, not least in terms of credit and insolvency processes. The measures led, inter alia, to a reduction in credit risks and a general increase in the efficiency of the bank's risk management.

## 3.3 Risk appetite and risk limits

Landshypotek Bank has a number of overarching appetites, targets and limits. The bank's rating targets are a key component of the risk appetite and mean that the bank must retain a AAA rating for its covered bonds in line with its Swedish competitors. Landshypotek Bank has an overarching risk appetite for the bank's loan loss level. Over an average economic cycle, the bank's average annual loan losses for the credit portfolio may not exceed 0.05 percent, of the bank's total volume of loans outstanding.

In addition to the above risk appetite, the bank applies a credit-risk limit, for the bank's annual loan loss level, of 0.075 percent of the bank's total volume of loans outstanding.

To ensure risk undertaking does not exceed the risk appetite, the bank has identified, categorised and limited all material risks. The bank focuses on assuming the types of risks that the operations are best able to understand and manage.

The single largest risk to which the bank is exposed is credit risk associated with lending to customers. This risk is directly linked to the business model and is managed throughout the credit process.

Conducting business activities also requires taking certain other risks, including liquidity, market and operational risks. A certain level of acceptance for these types of risks must exist, although the bank aims to keep them at a low level.

## 3.4 The bank's three lines of defence

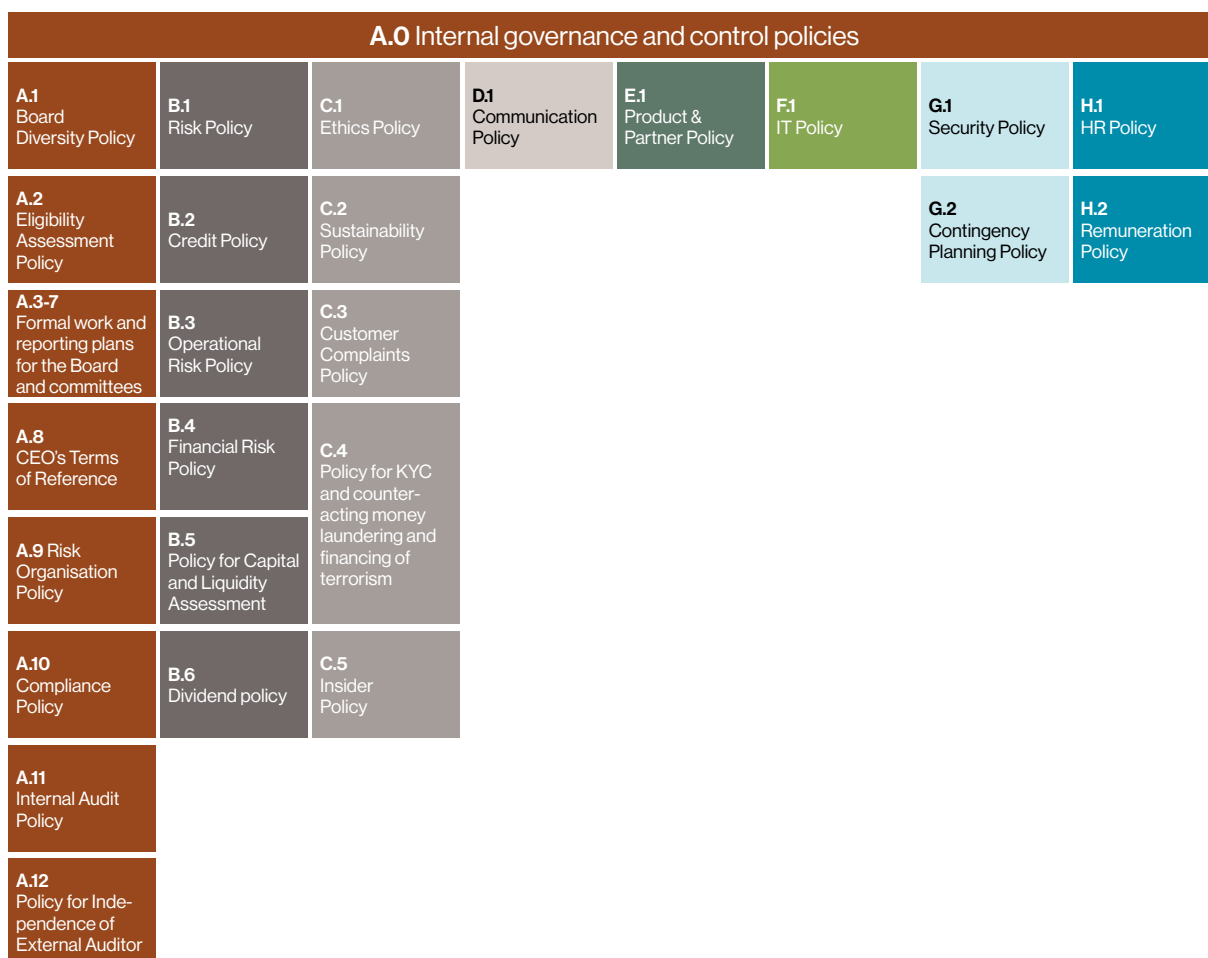
To ensure appropriate risk management — to identify, analyse, rectify, monitor and report risk — and internal control, responsibility is divided between various functions based on the three lines of defence principle.

The model differentiates between functions responsible for risk and regulatory compliance (first line of defence), functions for monitoring and control (second line of defence) and functions for independent review (third line of defence).

### 3.4.1 The first line of defence — business operations

A core principle is that the line organisation forms the first line of defence with responsibility for internal control and risk management. Responsibility for self-assessment is thus located where risk originates. This means that each employee is responsible for managing the risks in their own areas of responsibility. Therefore, internal control and risk management includes all employees.

Diagram 2 Overview of the bank's policies



**3.4.2 The second line of defence — independent control functions**

The risk organisation and compliance are independent control functions and comprise the second line of defence. These functions monitor the business areas' risk management and regulatory compliance. The second line of defence maintains policies and frameworks for the first line of defence's risk management and validates the first line's methods and models for risk measurement and control.

*Risk organisation*

The risk organisation is responsible for structured and systematic measurement, control, analysis and continuous reporting on all material risks in the bank. The risk organisation is also tasked with, inter alia, the regular performance of relevant stress tests of material risks for the bank and for performing in-depth risk analyses in one or more risk areas where higher risks may exist. The work is conducted pursuant to a policy decided by the Board that describes its responsibilities and an annual plan. The risk organisation is independent from operations and the Chief Risk Officer is directly subordinate to the CEO and the Board.

*Compliance*

Compliance is tasked with advising and supporting the CEO and employees with ensuring that the bank's operations are conducted pursuant to the regulatory frameworks that govern licensable activities and to identify and report compliance risks. The work is conducted pursuant to a policy decided by the Board that describes its responsibilities and an annual plan. The Compliance unit is independent from business operations and the Chief Compliance Officer reports directly to the CEO and Board.

**3.4.3 The third line of defence — internal audit**

The third line of defence, internal audit, evaluates the bank's overall management of risk and regulatory compliance, and reviews the work of the first and second lines of defence. Internal Audit aims to examine and evaluate internal governance and controls as well as provide an image of how well processes and procedures contribute to the operational goals. This includes, not least, the evaluation of the effectiveness of the risk management efforts and the work of the control function. The internal audit review initiatives are conducted pursuant to a policy decided by the Board that describes its responsibilities and an annual plan. During 2016, the bank's internal audit has been carried out by Deloitte AB.

# 4. Capital adequacy and capital requirements

The bank strives to maintain a level of capitalisation that provides the Bank with sufficient capital to secure the bank's survival even in the event of exceptional unforeseen circumstances.

## 4.1 Own funds

For capital adequacy purposes, own funds at Landshypotek Bank comprise equity (Common Equity Tier 1 capital) and subordinated term loans (Tier 2 capital). At 31 December 2016, own funds for the consolidated situation amounted to MSEK 6,455, of which MSEK 4,754 was Common Equity Tier 1 (CET1) capital, as shown in Table 1 under Section 4.3. CET1 capital is comprised essentially of member contributions, other contributed capital and retained earnings. The members are obliged to contribute capital to the cooperative association in an amount corresponding to 4 percent of the respective member's capital debt to the bank. Members who have repaid their loans and ceased to be members are normally repaid their contributions around three years after ending their membership. However, the repayment of member contributions requires the approval of the Board of the cooperative association. Accordingly, the Board has full and unrestricted control of the contributed capital. When calculating own funds, deductions are made from CET1 capital for additional value adjustments, intangible assets, deferred tax assets dependent on future profitability and negative amounts resulting from the calculation of expected losses. The bank's Tier 2 capital was MSEK 1,701 and comprised subordinated term loans.

## 4.2 Regulatory capital requirements and the combined buffer requirements

Landshypotek Bank bases calculation of the regulatory capital requirement in the minimum rules (Pillar I) as found in the CRR and in FFFS 2014:12. The bank estimates the regulatory capital requirement for credit risk, operational risk and credit valuation adjustment (CVA) risk.

For the majority of the bank's credit portfolio, the regulatory capital requirement for credit risk is calculated by applying the IRB approach, the use of which for capital adequacy purposes by Landshypotek Bank has been approved by Finansinspektionen (the Swedish Financial Supervisory Authority). For other credit risk, including counterparty risk, the standardised approach is used.

For capital adequacy purposes, the basic indicator approach is applied for operational risks and the standardised approach for CVA risk.

In addition to the regulatory capital requirement for the consolidated situation, under the Capital Buffers Act and FFFS 2014:12, the bank must have adequate CET1 capital to meet the combined buffer requirement, which in the bank's case comprises the sum of a capital conservation buffer of 2.5 percent of the total risk exposure amount and a countercyclical buffer of 1.5 percent of the total risk-weighted exposure amount. The countercyclical buffer was raised to 2 percent on 19 March 2017. However, the combined buffer requirement differs from other regulatory capital requirements, since not meeting them is allowed on a temporary basis.

The bank aims to change its exposure classes to better reflect the market trends for farming and forestry, and to adapt to new regulatory changes. As a consequence of the above, the bank applied to Finansinspektionen in the autumn for permission to use the IRB approach, excluding own estimates of LGD values and conversion factors, for corporate exposures. The bank has also applied for permission to change its method for retail exposures. The bank's regulatory capital requirement will increase on approval, this is detailed in Section 4.5.

Since the bank applies the IRB approach to calculate capital requirements for credit risk, the bank also has to meet the Basel I floor.

Capital adequacy and buffer requirements under Basel III and capital adequacy under the Basel I floor are shown in Table 1.

The regulatory capital requirement for the consolidated situation is divided into risk, method and exposure class and presented in Table 2.

## 4.3 Capital ratio

Landshypotek Bank's total capital ratio amounted to 39.9 percent compared with 26.1 percent at 31 December 2015 and the CET1 capital ratio was 29.4 percent (23.4). During the year, own funds increased MSEK 1,521 to MSEK 6,455, mainly due to the issue of T2 capital. The regulatory capital requirement decreased MSEK 219 to MSEK 1,295, mainly due to reduced risk weights for exposures where the capital requirement is calculated with the IRB approach for credit risk. The bank's CET1 capital to cover the combined buffer requirement and Pillar II requirements corresponded



Table 1 Capital adequacy analysis

SEK thousand	Consolidated situation 31 December 2016
<b>CET1 capital: instruments and reserves</b>	
Member contributions	1,585,080
Other contributed capital	1,797,796
Reserves	14,991
Actuarial differences	-16,359
Retained earnings	1,424,584
Net profit for the year <sup>1)</sup>	296,926
<b>Equity in balance sheet</b>	<b>5,103,018</b>
Deductions related to the consolidated situation and other foreseeable costs	-123,806
<b>CET1 capital before regulatory adjustments<sup>2)</sup></b>	<b>4,979,212</b>
<b>CET1 capital: regulatory adjustments</b>	
Further value adjustments	-52,404
Intangible assets	-66,748
Deferred tax assets that rely on future profitability	-2,955
Fair value reserves related to gains or losses on cash-flow hedges	6,723
Negative amounts resulting from the calculation of expected loss amounts (IRB)	-126,324
Defined-benefit pension plans	16,359
<b>Total legislative adjustments to CET1 capital</b>	<b>-225,349</b>
<b>CET1 capital</b>	<b>4,753,863</b>
<b>Additional Tier 1 capital: instruments</b>	
Additional Tier 1 capital	0
<b>Tier 1 capital (CET1 capital + Tier 1 capital)</b>	<b>4,753,863</b>
<b>Tier 2 capital: instruments and provisions</b>	
Capital instruments and subordinated loans eligible as T2 capital	1,699,972
Positive amounts resulting from the calculation of expected loss amounts (IRB)	1,059
<b>Tier 2 capital before regulatory adjustments</b>	<b>1,701,031</b>
<b>Tier 2 capital: regulatory adjustments</b>	
Total legislative adjustments to Tier 2 capital	0
<b>Tier 2 capital</b>	<b>1,701,031</b>
<b>Own funds (Tier 1 capital + Tier 2 capital)</b>	<b>6,454,894</b>
<b>Total risk exposure amount</b>	<b>16,190,434</b>
<b>Capital ratios and buffers</b>	
<b>Regulatory capital requirement</b>	<b>1,295,235</b>
CET1 capital ratio (%)	29.4
Tier 1 capital ratio (%)	29.4
Total capital ratio (%)	39.9
Institution-specific CET1 capital requirement including buffer requirements (%)	8.5
of which: capital conservation buffer requirement (%)	2.5
of which: countercyclical capital buffer requirement (%)	1.5
CET1 capital available to meet buffers (%) <sup>3)</sup>	23.4
<b>Capital adequacy under the Basel I floor</b>	
Own funds	6,580,159
Own funds requirement	4,345,588
Capital quotient	1.51

<sup>1)</sup> A decision by Finansinspektionen on 19 February 2016 gave Landshypotek Bank approval, subject to specific terms and conditions in the decision, for using the interim or full-year surplus in own-funds calculations for the institute and also for its consolidated situation.

<sup>2)</sup> This item pertains to the consolidated situation and differs from equity under IFRS in that the proposed dividend's contribution to equity is excluded.

<sup>3)</sup> Calculated as "the bank's CET1 capital less CET1 used to cover the CET1 capital requirement and less any other CET1 items used to cover the tier 1 capital requirement and/or total own funds requirements divided by the total risk exposure amount".

Table 2 Subordinated loans

Name of loan	Currency	Nominal amount, SEK thousand	Nominal amount outstanding, SEK thousand	First possible redemption date	Interest rate	Interest rate after first possible redemption date	Due date
EMTN47	SEK	70,000	70,000	1 Jun 2017	5.82%	3M Stibor + 3.85%	1 Jun 2022
EMTN48	SEK	430,000	430,000	1 Jun 2017	3M Stibor + 3.85%	3M Stibor + 3.85%	1 Jun 2022
EMTN67	SEK	1,200,000	1,200,000	2021-05-25	3M Stibor + 2.70%	3M Stibor + 2.70%	25 May 2026

Table 3 Own funds requirement by risk, approach and exposure class

31 December 2016, SEK thousand	Exposure value	Risk exposure amount	Own funds requirement <sup>1)</sup>	Average risk weight <sup>2)</sup>
<b>Credit risk — IRB approach</b>	<b>65,219,975</b>	<b>8,799,420</b>	<b>703,954</b>	<b>13%</b>
Retail — real estate collateral	65,101,874	8,681,320	694,506	13%
Other non-credit-obligation assets	118,100	118,100	9,448	100%
<b>Credit risk — Standardised approach</b>	<b>18,169,531</b>	<b>4,454,257</b>	<b>356,341</b>	<b>25%</b>
Central governments or central banks	1,313	-	-	0%
Regional governments or local authorities or agencies	5,473,685	-	-	0%
Institutions	2,022,530	676,236	54,099	33%
Corporates	295,273	293,037	23,443	99%
Retail	116,781	81,293	6,503	70%
Secured by mortgages on immovable property	3,019,193	2,661,034	212,883	88%
Exposures in default	15,889	20,170	1,614	127%
Covered bonds	7,224,867	722,487	57,799	10%
<b>Operational risk — Basic indicator approach</b>		<b>1,423,728</b>	<b>113,898</b>	
<b>Credit valuation adjustment risk — Standardised approach</b>	<b>1,543,530</b>	<b>1,513,029</b>	<b>121,042</b>	<b>98%</b>
<b>Total</b>	<b>84,933,035</b>	<b>16,190,434</b>	<b>1,295,235</b>	

<sup>1)</sup> Calculated by multiplying the risk exposure amount by 8 percent. Does not include any buffer requirements.

<sup>2)</sup> Calculated by dividing the risk exposure amount by the exposure value for the respective risk/exposure class.

to 23.4 percent of the total risk exposure amount at 31 December 2016. The capital quotient under the Basel I floor increased to 1.5 from 1.2 last year. However, refer also to Section 4.4 for a report on the bank's internally assessed capital requirement.

## 4.4 Capital requirements

Within the framework for Pillar II under Basel III, the institute is also responsible for describing and assessing the capital requirement for other material risks not covered by the aforementioned capital and buffer requirements mentioned in Section 4.2. In 2016, Landshypotek Bank's assessment was that within the Pillar II framework the bank had a capital requirement for credit risk, market risk, rating risk and pension risk.

The bank has prepared under the Pillar II framework for the increased capital requirement that is expected to arise as a consequence of the changes applied for by the bank with Finansinspektionen, and described in

more detail in Section 4.2, including a buffer given that this is a preliminary assessment.

As set out in Section 4.2, the bank also needs to comply with the Basel I floor. Moreover, the bank also needs to have a capital planning buffer so as not to risk breaching the Basel I floor in a highly stressed scenario.

Therefore, the ICAAP and ILAAP are based, as notified to Finansinspektionen on an annual basis, on the two aforementioned capital assessment methods (Basel III and the Basel I floor) and the capital requirement is determined by the method that sets the highest capital requirement.

The bank's assessment is that the changes, which are described in more detail in section 4.2, will lead to an increase of around SEK 750 million in the capital requirement as per 31 December 2016. The internally assessed capital requirement on 31 December 2016 was SEK 4.7 billion. The capital requirement should be compared with estimated own funds of SEK 6.2 billion. The capital assessment method in Basel III was the

method that resulted in the highest capital requirement and, accordingly, was the method that determined the capital requirement in 2016.

## 4.5 Leverage ratio

From 2015, a leverage ratio must be calculated and reported externally by the bank. As yet, the metric does not give rise to any mandatory capital requirement. The design of the metric and the calibration of requirements is being evaluated by the regulators and a mandatory leverage ratio requirement could, according to the proposal referred by the European Commission from November 2016, be implemented at the earliest in 2019. The regulations referred by the EU Commission mean that banks will have to maintain a leverage ratio of not less than 3 percent.

The Bank's leverage ratio amounted to 5.8 percent, up on the preceding year (5.4).

## 4.6 Planned regulatory changes

Work is ongoing within a number of authorities to change several of the rules that impact banks' capital situation. Certain rules have also recently entered into force or been decided.

- In the application for the IRB approach mentioned in Section 4.2, the bank has prepared for the increased capital requirement that will arise from Finansinspektionen's consultation memorandum 24 May 2016 (FI Ref. 15-13020) regarding risk weights for exposures to corporates.

- In accordance with Section 4.2, the bank will also be impacted by the increase in the requirement for the countercyclical buffer.
- In conjunction with the implementation of the Banking Recovery and Resolution Directive (BRRD), the Swedish National Debt Office is currently evaluating which Swedish banks are to be managed through resolution in the event of default. The Swedish National Debt Office's decision will impact the bank, inter alia, in terms of the requirements regarding the minimum requirement for own funds and eligible liabilities (MREL).

Other planned regulatory-related changes that could impact the bank's capitalisation are:

- IFRS 9, including the transitional rules for the effect on own funds
- the leverage ratio requirement, in accordance with Section 4.5
- revised rules for market risk and credit valuation adjustment risk
- new rules regarding the IRB approach for credit risk
- revised capital adequacy rules for operational risk
- revised rules for the standardised approach for credit risk as well as new floor rules related to the standardised approach.

Several of these rules are at an early proposal stage and will not enter force for a number of years. Based on a preliminary overall analysis, the bank cannot envisage the proposed changes in their current format having a significant impact on the bank's capital situation.

Table 4 Leverage ratio

SEK thousand, Consolidated situation	31 December 2016
Balance Sheet according to the accounting standards	82,180,154
Adjustment for assets not included in the consolidated situation	0
Adjustment for differences between carrying amounts and leverage exposure — derivatives	-320,256
Collateral adjustments — derivatives	-443,955
Adjustment for differences between carrying amounts and leverage exposure — repos and bond loans	0
Assets recognised off the balance sheet, gross (before adjustments for conversion factors)	1,927,425
Deductions from off-balance-sheet assets or application of conversion factors	1,455,303
Assets recognised off the balance sheet, net	472,122
Other adjustments	-155,606
<b>Assets used to calculate the leverage ratio</b>	<b>81,732,459</b>
<b>Capital used to calculate the leverage ratio</b>	
Tier 1 capital	4,753,863
<b>Leverage ratio</b>	
Leverage ratio calculated using Tier 1 capital	5.8%

# 5. Credit risk

Credit risk is the most significant risk at Landshypotek Bank and represents 82 percent of the regulatory capital requirement. Accordingly, the bank has clear rules for credit risk management.

## 5.1 Definition

Landshypotek Bank defines credit risk as follows:

*The risk that Landshypotek Bank does not receive payment as agreed and that the value of the collateral is not adequate and therefore will not cover the outstanding claim.*

## 5.2 Credit risk

Landshypotek Bank's loans to the public totalled SEK 66.5 billion at 31 December 2016. Lending encompasses lending to entrepreneurs and residents in the countryside mainly against collateral in real property, primarily agricultural units. All lending takes place in Sweden. The geographic distribution of the bank's credit portfolio presented in Table 7 mirrors the districts to which customers belong and shows that the geographic distribution in Sweden is favourable. The credit portfolio has grown by SEK 10.9 billion since 2011, corresponding to average lending growth of slightly more than 3.6 percent per year over the past five years. Average lending per customer of Landshypotek Bank amounted to MSEK 1.6 on 31 December 2016. The exposure-weighted LTV ratio on the same date was 48 percent.

The Bank's credit portfolio is attributed almost exclusively to the retail exposure class — real estate collateral, which applies the IRB approach for capital adequacy purposes. The exposure value for these assets amounted to SEK 65 billion. Other lending in the bank's credit portfolio, such as legal entities, applies the standardised approach for capital adequacy purposes. However, as mentioned in Section 4.2, the bank intends to change its exposure classes and has applied for permission to use the IRB approach, excluding own estimates of LGD values and conversion factors, for corporate exposures.

## 5.3 Management of credit risk in the credit portfolio

### 5.3.1 Credit process

The credit policy sets out the frameworks and fundamental principles for granting credit at Landshypotek Bank. All granting of credit at the bank is to be based on customers' repayment capacity and loans are only granted if, based on sound reasoning, commitments can be expected to be fulfilled. To further protect the bank against loan losses, collateral primarily comprises real property. The collateral is to guarantee the loan receivable by a healthy margin. Collateral of a high value

may never replace the requirements imposed on the repayment capacity of the customers. Credit granting must always be in proportion to the incomes or cash flows that are to cover loan payments.

Credit granting is the result of analysis of the individual customer and/or the limit group to which the customer is linked. The bank's customers, excluding legal entities, are risk classified as described in Section 5.3.2.

All granting of credit is performed pursuant to a credit mandate matrix approved by the Board, which is governed by parameters such as total credit limits, PD risk class and LTV ratio. All credit decisions are taken in duality, utilising a level structure that complies with the aforementioned credit mandate matrix. The highest decision-making body for day-to-day credit cases is the Board's Credit Committee.

Landshypotek Bank grants loans against mortgage deeds in real property within 75 percent of an internally determined LTV ratio. In addition, the company offers loans with EU support as collateral (EU loans). To reduce the risk of loss, some borrowers need to provide additional collateral, such as sureties and chattel mortgages.

District office account managers are assisted in the property valuation process by Landshypotek Ekonomisk Förening's organisation of representatives. The network of representatives ensures that the properties are correctly valued and that the valuations are based on documented industry experience and a high degree of familiarity with local conditions. Quality is ensured through a certification process that includes training and written exams. Valuations are also conducted by other third parties on behalf of the bank.

### 5.3.2 The IRB approach

#### *Internal Ratings Based (IRB) approach*

The bank's IRB models are used for calculation of the regulatory capital requirement and capital requirement for the retail exposure class — real estate collateral. The models are also integrated in the credit process, and the PD risk class, LTV ratio and total credit limit control the credit decision procedure. The risk classes are also part of the decision data for credit decisions and impact pricing. Furthermore, the risk classes also govern the frequency of credit monitoring. In addition, the Board and Bank Management receive regular reports on the status of the credit portfolio, based on such factors as PD risk classes and expected losses.

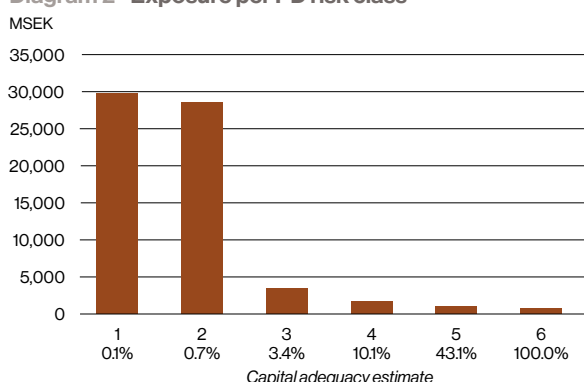
Landshypotek Bank calculates its own estimated parameters for PD, CF and LGD.

*Description of the bank's IRB models*  
*Probability of Default (PD)*

Landshypotek Bank's PD model comprises internal payment history statistics and a UC model (UC AB, the business and credit information provider) as explanatory factors. However, new customers are risk graded based only on the UC model. The PD model is a statistical model that is used to estimate the probability of the customer defaulting within one year. In addition to the statistical risk class, it is possible to manually set a PD risk class if the account manager believes the statistical risk class does not accurately reflect the default risk. An upgrade is limited to one risk class step, while downgrades may be carried out without limit to the number of steps. An upgraded risk class may never be decided at below Credit Advisory Committee level, which is the second highest body for day-to-day credit cases.

The PD model allocates credits to various risk classes (1–6), where risk class 1 represents the highest credit quality and risk class 6 is for defaulted loans. The bank estimates the PD for each performing risk class. With the aim of calculating the PD per risk class for capital adequacy purposes, the last 12 years of actual data is used as a basis and, in addition, a conservative business cycle adjustment is applied that also takes into account outcomes from the financial crisis years in the early 1990s as well as a safety margin. Further stress is applied to the above risk class PD through a Finansinspektionen formula for the calculation of the regulatory capital requirement. Diagram 2 illustrates the retail exposure by PD risk class.

**Diagram 2 Exposure per PD risk class**

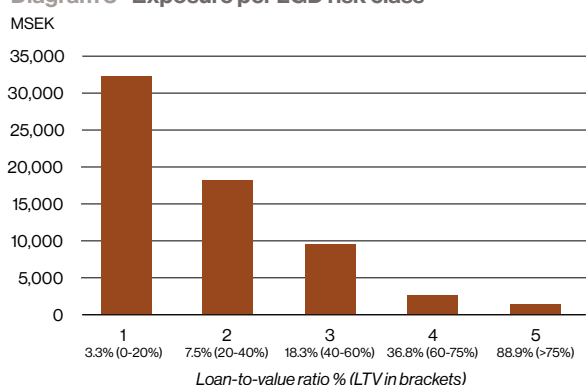


*Loss Given Default (LGD)*

The assessment of how much of the exposure value that Landshypotek Bank stands to lose in the event of default, downturn LGD, is based on internal loss data gathered during the period 1994–2008. The outcome per LGD risk class has been adjusted upward on a portfolio basis to correspond with the portfolio LGD outcome

for 1994 and, thereafter, a safety margin increment has been applied to LGD estimates for all LGD risk classes and certain LGD estimates have been adjusted up further to create a healthy margin between latter years' risk class outcomes and risk class estimates. Loans are allocated to one or several of the five LGD risk classes depending on the LTV. Diagram 3 illustrates the retail exposure by LGD risk class.

**Diagram 3 Exposure per LGD risk class**



*Conversion Factor (CF)*

The exposure value is the amount that the counterparty is expected to owe to the bank in the event of a default. For standard loans, exposure value is calculated as the loan receivable outstanding. For the bank's "flexible first lien mortgage loans," where parts of the commitments are off-balance-sheet items, the exposure value is calculated by multiplying the counterparty's credit limit by the bank's internal conversion factor (CF) estimate for this product. This CF is applied on the entire credit ceiling of the flexible first lien mortgage loan and is conservatively set at 107 percent. The exposure value of flexible first lien mortgage loans was SEK 2 billion at 31 December 2016.

*Validation*

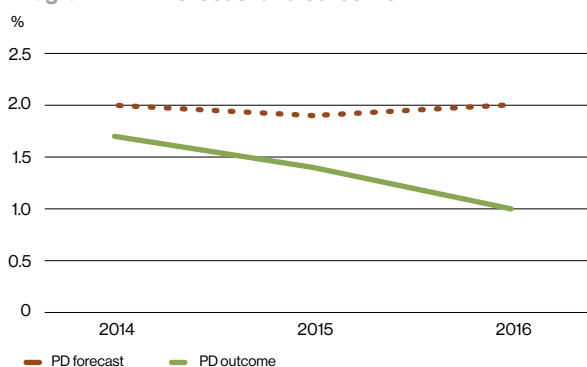
The IRB models are validated each year to ensure, inter alia, that the bank estimates credit risk in a sufficiently conservative manner and that the models adequately grade borrowers and lending according to risk. The analysis results in a validation report, which is presented to and discussed with the Bank Management and the Board's Risk and Capital Committee.

*Forecast and outcome for PD and LGD*

In accordance with the regulatory framework, the PD reflects the long-term average for risk of default and this means that the likelihood of default in a specific year exceeding the forecast is higher for PD than for LGD, where the forecast reflects the expected share of losses, given default under unfavourable economic conditions.

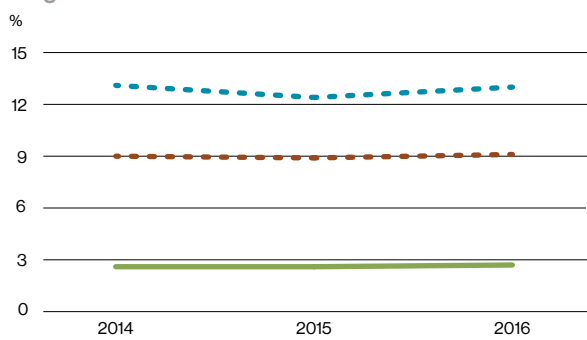
Diagram 4 shows that PD outcomes have been below PD forecasts in each of the past three years. Diagram 5 shows that LGD forecasts have exceeded observed LGD outcomes with a healthy margin over the last three years.

**Diagram 4 PD forecast and outcome\***



\* Opening PD estimate weighted by number of loans and the PD outcome in the following year

**Diagram 5 LGD forecast and outcome\***



\* Exposure-weighted LGD; the LGD outcome is added to the year in which the default terminated. The current LGD estimate has also been applied for previous years.

### 5.3.3 Monitoring of the credit portfolio

Landshypotek Bank's Chief Risk Officer is responsible for regulating the credit process through internal governance documents and the first line of defence is responsible for ensuring compliance with the internal rules for credit granting. The credit control unit performs regular checks to ensure that operations comply with established regulatory framework and monitoring activities.

All commitments are subject to credit monitoring on a scheduled and ongoing basis. Customers with higher risk levels are monitored more frequently. All credit decisions are to be preceded by a careful risk assessment and risk classification. Consequently, making a credit decision requires knowledge about regional and industry-specific factors that may impact customers'

repayment capacity and the value trend of the collateral. The credit control unit uses portfolio analysis to identify sectors and segments, where risk has risen, for further assessment.

### 5.3.4 Management of problem loans

Operations at Landshypotek Bank bear full responsibility for customer relationships, profitability and risks in all customer commitments. When needed, operations is assisted by the central departments with in-depth analyses and with managing problem customers and insolvency cases. The unit for special issues assists with expertise with regard to problem commitments and confirmed insolvency cases. The bank's insolvency unit works primarily with defaulting commitments with the aim of discontinuing the loans with a minimal loss for the bank.

## 5.4 Counterparty risk — credit risk in treasury activities

Landshypotek Bank's counterparty risks comprise the risk of default by counterparties in the bank's funding operations. Counterparty risks arise as a consequence of the bank's management of liquidity, interest-rate and currency risks. Risk tolerance for counterparty risk is generally low.

The bank's total counterparty exposure comprises:

- the market value of securities;
- the exposure value of derivative instruments calculated based on the mark-to-market approach stipulated in the CRR; and
- cash deposits.

Counterparty risk may only be undertaken against:

- public bodies that are assigned 0 percent in risk weight for capital adequacy;
- covered bonds issued by financial institutions; and
- financial institutions.

New counterparties are to be approved and limited by the Board and existing limits reviewed and decided each year. Limits are set for exposure values and tenors. All of Landshypotek Bank's derivative contracts are registered in the cover pool, and the bank has International Swaps and Derivatives Association (ISDA) agreements and unilateral Credit Support Annexes (CSAs) in place for each counterparty, whereby the counterparties provide collateral under certain conditions. Under these agreements, Landshypotek Bank can never be obligated to provide collateral.

The bank received permission from Finansinspektionen to net derivative exposures with the same counterparty for capital adequacy purposes.

Table 5 Liquidity portfolio by rating, measured at fair value

SEK thousand	Covered bonds	Municipal bonds	Bonds issued by Kommuninvest Sverige AB
AAA	7,228,601	2,374,636	625,102
AA+		2,449,780	
<b>Total</b>	<b>7,228,601</b>	<b>4,824,416</b>	<b>625,102</b>

Table 6 Derivative contracts by rating, measured at fair value

SEK thousand	Positive gross market-value incl. premium for potential future exposure	Positive gross market value	Positive gross market-value incl. premium for potential future exposure, adjusted for bilateral netting agreements
AA-	1,035,635	807,104	464,296
A+	276,443	131,796	118,777
A	871,288	674,532	722,051
BBB*	459,399	421,237	459,399
<b>Total</b>	<b>2,642,765</b>	<b>2,034,669</b>	<b>1,764,523</b>

\* Landshypotek Bank received SEK 443,955,000 in cash collateral under derivative contracts. This cash collateral has not been taken into account in the above figures.

## 5.5 Loan losses

Net loan losses amounted to MSEK 14.8 (45.9) in 2016. Landshypotek Bank's confirmed losses were MSEK 37.7 in 2016, which was lower compared with 2015 (50.3). Provisions for probable loan losses amounted to MSEK 56.3 (82.2) in 2016, including collective provisions. The exposure value of defaulted loans was MSEK 757 (1,017) at 31 December 2016. Over the past two years, the bank has developed its work on the credit portfolio. Central units assist operations with in-depth analyses and with

managing problem customers and insolvency cases. Provisions over the past few years pertain to a few isolated commitments with financial difficulties, where the prerequisites of the individual entrepreneurs proved the deciding factors for the customers' default. In 2016, the bank made a collective provision of MSEK 4.7, which is attributable to wind power commitments. Issues pertaining to the electricity price, residual values and the secondhand market, which were not possible to identify at an individual level, led to the collective provision.

Table 7 Lending, in default and provisions broken down by sales district of Landshypotek Bank AB

31 December 2016, SEK thousand	Amount lent, incl. accrued interest	Of which: overdue receivables	Of which, provisions*
Gotland	2,502,975	21,591	13,508
Rural living — farms	5,971,761	25,626	617
Middle Sweden	10,001,148	158,732	14,965
Mälardalen	9,145,021	149,007	9,695
The North	3,627,277	67,548	11,400
Skåne	9,949,352	37,956	1,125
Småland, etc.	6,688,711	113,592	8,021
Västra Götaland	8,098,718	55,801	5,259
Östergötland	10,736,352	116,909	12,017

\* Provisions for probable loan losses including past-due interest payments and fees.

# 6. Liquidity risk

The bank's appetite for liquidity risk is low and the bank has a liquidity reserve that allows the bank to operate normally even during extended periods of stressed liquidity.

## 6.1 Definition

Landshypotek Bank defines liquidity risk as follows:

*The risk of being unable to discharge its payment obligations at the due date.*

## 6.2 Liquidity risk

Landshypotek Bank's assets almost exclusively comprise loans with collateral in agricultural units with LTV ratios below 75 percent and with long credit periods. The bank is largely dependent on market funding, which on average has shorter tenors thereby giving rise to refinancing risk. To diversify financing and to reduce refinancing risk, the bank offers deposit accounts to members and non-members. However, deposits mean that the bank has a risk of outflows in stressed conditions.

## 6.3 Management of liquidity risk

Landshypotek Bank's operations are naturally exposed to liquidity risk and the consequences of a lack of liquidity can be serious. Therefore, the bank's appetite for liquidity risks is low and the management of liquidity risks is of high priority. The bank reduces its liquidity risk by maintaining a liquidity reserve comprised of high-quality securities. This reserve gives the bank the opportunity of bridging temporary strains on liquidity, but also provides the opportunity of procuring funds at times of severe liquidity crises by borrowing against or selling securities in an orderly fashion and reducing the financing need. The main criterion for the selection of assets is that the security is accepted as collateral by the Riksbank, Sweden's central bank.

To ensure good payment capacity is maintained, the Board of Landshypotek Bank has decided that a liquidity reserve should be available that corresponds to the forecast, accumulated net cash outflows for the next 180-day period and the outflows of deposits in periods of stress, without any possibility of refinancing. Under this measurement method, the liquidity reserve in the cover pool may only be used to measure outflows from the cover pool. At 31 December 2016, the bank had sufficient funds available to cover all payment obligations for about 334 days under this metric.

In addition to the above set and defined limit, a number of risk metrics are followed and monitored. However, these risk metrics are not limited, but are used either to follow the status of the liquidity reserve or are governed by legislation or regulations.

The bank also applies limits for the liquidity reserve, based on it covering net outflows over a 30-day significant stress period in accordance with the external liquidity coverage ratio (LCR) regulations. For contracted flows, the bank applies a 33-day period however. At 31 December 2016, the bank's LCR under the CRR and the EU Liquidity Coverage Requirement Regulation was 270 percent for Landshypotek Bank's consolidated situation<sup>1)</sup>. This can be compared to the external LCR requirement of 70 percent.

The holdings in the liquidity reserve comprise covered bonds issued by Nordic credit institutions with high credit ratings and bonds issued by Swedish municipalities and county councils, as well as bonds issued by Kommuninvest Sverige AB.

The market value of the liquidity reserve was SEK 12.7 billion on 31 December 2016, of which 44 percent was placed as supplemental collateral in the pool for covered bonds and of which 78 percent of the liquidity reserve comprised securities with a AAA rating.

## 6.4 Stress tests

In addition to daily limit checks, Landshypotek Bank performs continuous stress tests to ensure that liquidity is sufficient even during unfavourable market conditions. Examples of stressed scenarios that are tested include:

- a stop in the borrowing market, no new deposits are available;
- lower market values of the investments in the liquidity reserve;
- customers stop paying interest and repaying their loans;
- full utilisation of customers' flexible loans in the first month; and
- withdrawals from deposits.

The stress tests carried out by the bank have indicated a healthy payment capacity even if several different events that have a negative effect on liquidity were to occur simultaneously. At 31 December 2016, the Bank was able to meet its payment obligations for about 130 days when stress was applied to all parameters. Withdrawals from deposits is the single scenario that has the most significant negative impact on liquidity. The bank believes that the current payment capacity is satisfactory and corresponds well to the bank's low appetite for liquidity risk..

<sup>1)</sup> In this regard, the bank takes into consideration the entire liquidity reserve in the pool for covered bonds.



Table 8 Maturity analysis for financial assets and liabilities

SEK thousand	< 3 months	3–12 months	1–3 years	3–5 years	> 5 years	Total
<b>Financial assets</b>						
Loans to credit institutions	592,071					592,071
Loans to the public	41,186,493	11,401,482	9,708,502	4,336,739	881,571	67,514,788
Bonds and other interest-bearing securities	1,021,805	2,460,136	4,988,356	4,247,475	0	12,717,772
Derivatives	95,542	586,072	4,463,601	1,706,286	4,121,613	10,973,114
<b>Total</b>	<b>42,895,910</b>	<b>14,447,690</b>	<b>19,160,459</b>	<b>10,290,500</b>	<b>5,003,185</b>	<b>91,797,745</b>
<b>Financial liabilities</b>						
Liabilities to credit institutions	1,002,399					1,002,399
Borrowing/deposits from the public	11,731,390					11,731,390
Granted credit facilities	711,321					711,321
Debt securities in issue	5,061,366	11,949,519	19,303,495	20,974,798	7,000,139	64,289,317
Derivatives	63,403	445,088	4,052,693	1,597,522	3,792,388	9,951,094
Subordinated liabilities	10,089	528,586	73,110	1,276,152	0	1,887,937
<b>Total</b>	<b>18,579,969</b>	<b>12,923,194</b>	<b>23,429,297</b>	<b>23,848,472</b>	<b>10,792,527</b>	<b>89,573,459</b>
<b>Contracted cash flows</b>	<b>24,315,941</b>	<b>1,524,496</b>	<b>-4,268,838</b>	<b>-13,557,971</b>	<b>-5,789,343</b>	<b>2,224,285</b>

The above table includes all contracted cash flows. The amounts are not discounted and are recognised during the time slot when Landshypotek is entitled to request payment or has an obligation or right to repay. Future variable rates of interest have been included in the calculation for derivatives and financial liabilities, but not for loans to the public, which reflects what would happen if operations were to cease as of 31 December 2016. The calculation of future rates of interest is based on forward rates plus any credit spreads.

## 6.5 Encumbered assets

Landshypotek Bank's assets almost exclusively comprise lending with collateral in real property with LTV ratios below 75 percent. These loans are largely financed through covered bonds. This provides the bank with a relatively high degree of encumbrance. At 31 December

2016, the bank's encumbrance ratio, that is the ratio of encumbered assets to total assets pursuant to Article 100 in the CRR, was 84 percent and where the assets in the cover pool for issuing covered bonds comprised the source of encumbrance. A total of SEK 65 billion of the bank's assets were encumbered at 31 December 2016.

Table 9 Disclosures, encumbered assets, Consolidated situation

MSEK	Carrying amount of encumbered assets	Carrying amount of unencumbered assets
Bonds and other interest-bearing securities	2 886	9,819
Other assets	61,903	2,454
<b>Total</b>	<b>64,789</b>	<b>12,273</b>

MSEK	Fair value of pledged collateral received or own issued interest-bearing securities	Fair value of collateral received or own issued interest-bearing securities that can be encumbered
Bonds and other interest-bearing securities	0	0
Other collateral received	0	0
<b>Total</b>		

MSEK	Matching liabilities, contingent liabilities or securities lent	Assets encumbered, collateral received and own interest-bearing securities issues excluding covered bonds and asset-backed securities
<b>Total</b>	<b>51,287</b>	<b>64,789</b>

# 7. Market risk

The bank does not set any prices and conducts no trading operations, which means the bank's market risk is low.

## 7.1 Definition

Landshypotek Bank is exposed to market risk in the form of interest-rate risk, currency risk, credit-spread risk and basis-spread risk, which are defined as follows:

- *Interest-rate risk* — The risk that the market value of discounted future inflows and outflows will develop negatively as a result of changes in interest rates.
- *Currency risk* — The risk of losses on borrowed, lent or invested capital when exchange rates fluctuate.
- *Credit-spread risk* — The risk of decreased market values as a consequence of widened spreads for risk-free interest for assets measured at fair value.
- *Basis-spread risk* — The risk of decreased market values for derivatives entered into on borrowing in foreign currencies that cannot be compensated with a corresponding change in the market value of the issued debt instrument.

## 7.2 Market risk

Interest-rate risk arises in the bank's core operations and is attributable to differences in tenors between assets and liabilities. Currency risk arises in the bank's international funding when there is a change in exchange rates. Credit-spread risk arises in the bank's management of liquidity risk when the credit ratings for the assets comprising the liquidity reserve change. Basis-spread risk arises as a consequence of the reduction of the first two risks through the use of derivatives.

## 7.3 Management of market risk

The financial risk policy regulates how market risks are to be measured and reported and sets the framework for the bank's appetite for market risks. The bank's Treasury unit manages the bank's market risks. Derivative instruments are used to efficiently reduce the effects of changes in the interest-rate and currency markets on the bank's assets, liabilities and earnings.

### 7.3.1. Interest-rate risks

Interest-rate risk arises when fixed-interest terms for assets and liabilities are mismatched and is measured, inter alia, as the changes in the market values that occur from a one-percentage-point parallel shift in the interest-rate curve. The total risk is measured daily

and limited, and divided into different time slots (three months and thereafter per calendar year). Measurement uses equity as financing for customers' loans outstanding, with an average tenor of about two to three years. The Treasury unit also has a smaller deviation mandate for the practical management of the interest-rate risk. At year end, the interest-rate risk was MSEK 6.7 according to this metric. Excluding equity, the interest-rate risk in the banking book was MSEK 116. The bank utilises interest-rate swaps as a tool for managing interest-rate risks.

### 7.3.2. Currency risks

Currency risk arises for the bank when certain funding takes place in a currency other than SEK. At 31 December 2016, approximately SEK 7.6 billion of its funding was in foreign currencies.

Landshypotek Bank reduces currency risk by using swaps to convert the bank's cash flows in foreign currency back to SEK. The limit for currency risk is set extremely low (MSEK 1). At the end of the year, all currency risk had been hedged.

Table 10 Currency exposure including derivative payments

Currency	Assets	Liabilities	Exposure
CHF	200,000	200,000	0
EUR	510,000	510,000	0
NOK	2,200,000	2,200,000	0

### 7.3.3 Credit-spread risk and basis-spread risk

Credit-spread risk arises as a consequence of the bank reducing its liquidity risk by maintaining a liquidity reserve of liquid bonds. Credit-spread risk is created by movements in credit spreads for the assets that comprise the liquidity reserve. The bank has hedged interest-rate changes, but value changes related to market perceptions of credit risk in the underlying assets have not been hedged. The bank measures these changes in value and it is this portion of the total changes in asset value that impacts the income statement and balance sheet. The bank limits credit-spread risk by setting maturity limits on holdings and by only buying securities with high credit ratings, which reduces credit-spread volatility.

Basis-spread risk arises for the bank when the currency and interest-rate risk from borrowing in a currency other than SEK, is reduced through derivatives. The hedging of cross-currency interest-rate swaps means that the bank's foreign currency payments are

swapped for payments in SEK, thus allowing the bank to hedge currency and interest-rate risk in foreign currencies even though basis-spread risk arises. Earnings effects arise when changes in the market values of cross-currency interest-rate swaps are not matched by corresponding market value changes in the issued debt. Basis spreads have been volatile in recent years and can contribute to relatively substantial impacts on earnings.

Due to increased volatility in basis spreads, Landshypotek Bank has chosen not to take up any funding in foreign currencies since 2011. However, if the bank does not terminate the derivatives, the net earnings impact on expiry would be zero, but derivatives can impact the earnings of individual interim periods or calendar years.

**Table 11 Fixed-interest terms for the Group's interest-bearing assets and liabilities**

SEK thousand	< 3 months	3–12 months	1–3 years	3–5 years	> 5 years	Total
<b>Assets</b>						
Loans to credit institutions	592,071					592,071
Loans to the public	40,921,812	11,075,976	9,279,752	4,199,585	783,402	66,260,527
Bonds and other interest-bearing securities	5,918,000	1,800,000	1,550,000	2,900,000	0	12,168,000
Derivatives	28,997,168	4,235,823	5,533,050	7,188,800	5,355,133	51,309,973
<b>Total assets</b>	<b>76,429,051</b>	<b>17,111,799</b>	<b>16,362,802</b>	<b>14,288,384</b>	<b>6,138,535</b>	<b>130,330,571</b>
<b>Liabilities</b>						
Liabilities to credit institutions	1,002,399					1,002,399
Borrowing/deposits from the public	11,731,390					11,731,390
Debt securities in issue	32,400,000	6,605,823	7,538,050	7,888,800	5,455,133	59,887,805
Derivatives	30,656,118	9,200,000	6,704,000	4,290,000	570,000	51,420,118
Subordinated liabilities	1,630,000	70,000	0	0	-	1,700,000
<b>Total liabilities</b>	<b>77,419,908</b>	<b>15,875,823</b>	<b>14,242,050</b>	<b>12,178,800</b>	<b>6,025,133</b>	<b>125,741,713</b>
<b>Net</b>	<b>-990 856</b>	<b>1,235,976</b>	<b>2,120,752</b>	<b>2,109,585</b>	<b>113,402</b>	<b>4,588,859</b>
Interest-rate sensitivity, net	-3 288	-179	-49,552	-66,575	3,701	-115,893
Cumulative interest-rate sensitivity	-3,288	-3,467	-53,019	-119,594	-115,893	-

The above table includes all the nominal amounts (absolute values) under the time slots when interest is reset. This differs from the maturity analysis, which includes all contracted flows, that is, nominal amounts plus contracted interest payments.

# 8. Operational risk

The bank's business focus means that its operational risk is low.

## 8.1 Definition

Landshypotek Bank defines operational risk as:

*The risk of losses as a result of inappropriate or failed internal processes, human error, faulty systems and external events, including legal risk.*

## 8.2 Operational risk

Landshypotek Bank has a low appetite for operational risk. The bank does not conduct operations in areas that generally generate the largest operating losses for banks. The bank conducts no trading operations or operations related to payment services, and conducts relatively uncomplicated banking operations.

However, a certain degree of operational risk exists in all operations and the bank breaks operational risk down into the following areas:

- Business and process risk
- Personnel risk
- IT and information security
- External risk

A total of 60 incidents were reported in 2016, and the losses caused by these amounted to SEK 106,000.

## 8.3 Management of operational risk

The management of operational risk is primarily described in the bank's operational risk policy and risk policy. The risk policy describes the appetite for operational risk losses and the operational risk policy governs the identification, management and reporting of risks. The operations bear responsibility for operational risk and incidents, and all employees are obligated to act to reduce the risk of operational losses. The bank's risk organisation has a supporting and controlling role in the work with operational risks.

Landshypotek Bank uses a system for incident management and risk analysis, whereby risks and

incidents are linked to processes deemed significant for the bank. Identified risks are assessed based on probability and consequence, meaning how likely it is that the risk will materialise and the effect materialisation of the risk will have on the operations. As a complement to the risk analysis, the bank has identified risk indicators that individually or collectively can indicate changes in operational risk levels.

The results of the risk mapping, compilation of incidents, risk indicators and proposed actions are presented to the CEO and the Board and the implementation of action plans is followed up.

The main purpose of these efforts is, as far as possible, to identify operational risks in the significant processes and to take actions to ensure these risks do not materialise. The incident reporting and the risk mapping are also used, to a certain extent, as supporting data for the annual ICAAP.

Landshypotek Bank has an established process for significant changes, known as New Product Approval (NPAP). The process aims to ensure the bank is ready to manage new products, services and other significant changes. Key components in this process comprise the involvement of relevant departments at the bank, transparent discussion of the risks that could arise from the changes and well-documented decisions.

The bank's business continuity management identifies the critical parts of operations with the aim of creating robustness in these areas even in the case of extraordinary events that may be difficult to predict. Should the incident, risk and business continuity management prove inadequate for the management of an extraordinary situation, the bank's crisis management processes are activated.

In 2016, Landshypotek Bank has expanded the number of roles and resources with a focus on operational risk and established a local network of risk and compliance managers in its operations.

These individuals are all tasked with comprising a link between the bank's control functions and its operations, consulting on the preparation of new policies, assisting with the implementation of new regulatory frameworks and participating in new training initiatives.

## 9. Definitions and explanations

Basel I floor	Basel I floor entails a requirement that own funds under Basel I comprise not less than 80 per cent of the total amount of own funds the bank must hold under Basel I rules. Own funds under Basel I are calculated based on own funds under the CRR, but neutralise the impact of negative amounts resulting from the calculation of expected loss amounts (IRB) on the size of own funds under the CRR.
Basel III	In Sweden, the implementation of the Basel III agreement has been performed through the direct impact of the EU CRR and the Swedish implementation of CRD IV, which was implemented through Finansinspektionen's regulations and general guidelines as well as through Swedish legislation.
Basic indicator approach	An approach for calculating the capital requirement for operational risk.
Capital Buffers Act	The Capital Buffers Act (2014:966)
Capital Requirements Regulation (CRR)	Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.
Combined buffer requirement	The combined buffer requirement for Landshypotek Bank comprises the sum of the CET1 capital requirement, which pursuant to the Capital Buffers Act follows from the capital conservation buffer and the institution-specific countercyclical capital buffer.
The Commission Implementing Regulation on the reporting of own funds information	Commission Implementing Regulation (EU) No. 1423/2013 laying down implementing technical standards with regard to disclosure of own funds requirements for institutions.
Common Equity Tier 1 (CET1) capital	CET1 capital is a subcomponent of own funds and primarily comprises equity. Deductions are made for dividends generated, goodwill and other intangible assets, as well as the difference between expected losses using the IRB approach and provisions made for probable loan losses.
Common Equity Tier 1 capital ratio	CET1 capital in relation to the total risk exposure amounts.
Consolidated situation	The consolidated situation encompasses Landshypotek Ekonomisk Förening and the Landshypotek Bank Group.
Conversion Factor (CF)	Conversion factor. The factor used in the calculation of the exposure value for unutilised credit facilities, guarantees and other off-balance sheet commitments.
CRD IV	Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.
Credit limit	Maximum credit limits that have been decided and confirmed to customers and which may be utilised for credit.
Credit portfolio	Loans to the public in accordance with the balance sheet.
Default	Exposure to a specific counterparty is deemed to be in default if any of the following criteria are met: <ul style="list-style-type: none"> <li>• Landshypotek Bank deems it unlikely that the customer will pay its credit obligations in full to the bank without the bank having to take measures to realise collateral.</li> <li>• Any of the customer's significant credit obligations to the bank falling past due by more than 90 days.</li> </ul>
EMTN programme	The Euro Medium Term Note programme is an international borrowing programme for issuing covered bonds, senior debt and dated subordinated loans in both SEK and foreign currencies.
EU Liquidity Coverage Requirement Regulation	The Commission Delegated Regulation (EU) No. 2015/61 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions
Exposure value	Exposure value calculated in accordance with the CRR. In certain cases, instead of exposure value, the abbreviation EAD (Exposure at default) and the term exposure amount were used in Landshypotek Bank's previous Pillar III reports.

FFFS 2014:12	Finansinspektionen's (the Swedish Financial Supervisory Authority) regulations regarding prudential requirements and capital buffers, FFFS 2014:12.
Internally assessed capital requirement (ICAAP)	A credit institution must have an internal process for assessing the size of the capital requirement to cover the institution's total risks. The capital requirement comprises the risks covered by the calculation of the capital requirement (Pillar I), the combined buffer requirement and the risks arising in the bank's ICAAP (Pillar II).
IRB approach	An internal ratings-based approach for calculating the regulatory capital requirement for credit risk. Two IRB approaches are applied. The simpler variant, known as the foundation IRB approach, is often known as the IRB approach without own estimates of LGD and CF. The more advanced method, known as the advanced IRB approach, is also often referred to as the IRB approach with own estimates of LGD and CF.
Landshypotek Bank or the bank	Landshypotek Bank AB (publ)
The Landshypotek Bank Group	In addition to Landshypotek Bank AB, the Group comprises two dormant subsidiaries. The former subsidiary Landshypotek Jordbrukskredit AB was liquidated in 2016.
LGD floor	The average exposure-weighted LGD value is steered by a limitation rule that entails a floor for the total LGD level of 10 percent for all retail exposures against collateral in residential properties and 15 percent for all retail exposures with collateral in commercial properties.
Limit group	A group of customers with internal economic ties of such a nature that financial issues one customer can infect another. Limit groups can also comprise customers with no credit limits.
Liquidity coverage ratio (LCR)	The liquidity coverage ratio, is a measure of liquidity risk, whereby net cash outflows over a 30-day significant stress period are shown in relation to how much liquidity the bank has.
Loan-to-value (LTV) ratio	The long-term sustainable value of the collateral being loaned against with the bank. The LTV ratio is never permitted to exceed the market valuation by the bank.
Loss Given Default (LGD)	Loss given default.
Mortgages on immovable property	The bank accepts mortgage deeds on various types of immovable property as collateral, but almost exclusively agricultural and forest properties (known as agricultural units).
MSEK	Millions of Swedish kronor.
MTN programme	The Medium Term Note programme is a programme for issuing covered bonds denominated in SEK or EUR.
Own funds	Own funds is comprised of the total of Tier 1 capital and Tier 2 capital.
Probability of Default (PD)	The probability of a borrower defaulting within one year (Probability of default).
Regulatory capital requirement	The regulatory capital requirement means that institutions subject to the CRR must have a CET1 capital ratio of not less than 4.5 percent, a tier 1 capital ratio of not less than 6 percent and a total capital ratio of not less than 8 percent. This means that own funds for the respective ratios must amount to the specified percentage of the total risk exposure amount.
Risk exposure amount	The risk exposure amount (REA) is the risk-weight for each risk exposure multiplied by the exposure value.
Risk weight	A metric that describes the risk level of an exposure under the CRR. Calculated by dividing the risk exposure amount by the exposure value for the respective risk exposure.
SEK thousand	Thousands of Swedish kronor.
Standardised Approach	A method for calculating and reporting credit risks pursuant to the CRR and is based on standardised risk weights. The standardised approach can also be applied for market risk and operational risk
Tier 1 capital	CET1 capital including additional Tier 1 capital.
Tier 2 capital	Tier 2 capital is a subcomponent of own funds, and consists of subordinated loans that meet the requirements in the CRR for Tier 2 capital.
Total capital ratio	Total own funds in relation to the total risk exposure amount.
Total credit limit	Total of the collective limit for the limit group.





**Landshypotek Bank**