

# Risk and Capital Management

- information according to Pillar 3

# 2013

# This is Handelsbanken

Handelsbanken is a full-service bank for both private and corporate customers. The Bank has a nationwide branch network in Sweden, the UK, Denmark, Finland, Norway and the Netherlands. The Bank regards these countries as its home markets. Handelsbanken was founded in 1871 and has operations in 24 countries.

The purpose of this publication is to provide information about risks, risk management and capital adequacy as described in Pillar 3 of the capital adequacy regulations (Basel II).



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More information about risk and capital management at Handelsbanken is available at [www.handelsbanken.se/ireng](http://www.handelsbanken.se/ireng). This includes information concerning Pillar 3 since 2007.



# Introduction

The purpose of this publication is to provide information about risks, risk management and capital adequacy as described in Pillar 3 of the capital adequacy regulations (Basel II). The disclosure requirements are specified in the Swedish Financial Supervisory Authority's regulations (FFFS 2007:5) which apply for information regarding 2013. Complete information has been published every year in this form since the regulations came into force. For periodic information, see the relevant interim report.

## SCOPE

This publication contains a detailed description of risks that exist at the Bank, risk management and capital requirements. The information is presented as at 31 December 2013, unless specified otherwise.

The disclosure requirements in Pillar 3 include a description of the Bank's capital requirement for credit, market and operational risk (Pillar 1), as well as information about the Bank's internal processes to assess the Bank's total capital requirement (Pillar 2). The latter includes risk types in addition to those in Pillar 1.

Svenska Handelsbanken AB (publ)<sup>1</sup> is the parent company in the Handelsbanken Group. In the context of capital adequacy, it is the banking group that is subject to capital requirements and not the entire Group. Thus, information in this publication is principally provided for the banking group. Handelsbanken is also covered by the rules applying to financial conglomerates. The conglomerate rules mean that the capital requirements for the banking group and the capital requirement for the insurance operation are combined. The conglomerate is not covered by the Pillar 3 rules.

For capital adequacy purposes all companies in the banking group are fully consolidated. In the group accounts, associated companies are consolidated using the equity method. The Group's Annual Report provides information about which subsidiaries exist. Companies that are part of the banking group and are thus covered by the capital adequacy requirements according to the capital adequacy regulations are listed on page 61.

In 2007, Handelsbanken received initial permission from the Swedish Financial Supervisory Authority to report parts of the credit portfolio according to the foundation IRB approach. In 2010, Handelsbanken also received permission from the Swedish Financial Supervisory Authority to report parts of the corporate portfolio using the advanced IRB approach, whereby the Bank uses its own estimates for the LGD (Loss Given Default) and CF (Conversion Factor) risk parameters. In 2013, the Bank also received permission from the Swedish Financial Supervisory

Authority to report Large Corporates in the Bank's home markets (excluding the Netherlands) using the advanced IRB approach. Another application was submitted to the Authority in 2013 regarding exposures to Large Corporates outside the Bank's home markets and the Netherlands and certain other corporate exposures.

At the end of 2013, Handelsbanken had calculated the capital requirement using the IRB approach for about 87 (89) per cent of the total risk-weighted assets, according to the Basel II rules. Some 84 (61) per cent of the corporate exposures reported according to the IRB approach were reported using the advanced approach.

Since 2008, Handelsbanken's goal is that available financial resources (AFR) must be at least 120 per cent of economic capital (EC) and that the tier 1 ratio according to Basel II in the long term should be in the 9–11 per cent interval. In view of the anticipated new rules concerning increased capital requirements (see below), the Bank has opted to increase its capitalisation above the target interval. At the end of 2013, the tier 1 ratio according to Basel III was 21.5 (21.0) per cent. New adjusted capital targets can be decided when the new regulations have been established.

## TRENDS DURING 2013

The turbulence in the financial markets decreased during the year, with lower risk premiums and growth in share prices. The macroeconomic situation, on the other hand, was weak. In the global economy, economic prospects are still divergent; many countries are burdened with debt, which is slowing down the global recovery.

Handelsbanken's credit risk, measured as the average risk weight in approved IRB exposures, continued to fall during the year. The lower risk weight for corporate exposures is due to new business having been made with counterparties in better risk classes and better collateral than the average of the Bank's existing credit portfolio.

Handelsbanken's exposure to market risk is also low. Essentially, market risks in the banking operations are only taken as part of meeting

customers' investment and risk management needs. During the past few years, the Bank has worked actively to reduce the market risks in its balance sheet. One result of this is that a much smaller part of the earnings come from net gains/losses on financial transactions. Handelsbanken has a strong liquidity situation. The total liquidity reserve provides a high degree of resistance to possible disruptions in the financial markets. At the year-end, the Bank's liquidity reserve exceeded SEK 800 billion.

## FUTURE CAPITAL REQUIREMENTS CRD IV/CRR

On 27 June 2013, the new European CRDIV/CRR regulations were published, based on what is known as the Basel III agreement. New stricter minimum capitalisation requirements are being introduced for the components in the capital base with the highest quality – common equity tier 1 capital and tier 1 capital. In addition to the minimum capital requirements, a capital conservation buffer is being introduced. This is built up during good times to prevent banks from breaching capital requirements during difficult periods. A countercyclical buffer is also required which will vary over a business cycle in order to counteract excessive credit growth. Finally, special buffer requirements for systemically important institutions will be introduced, as well as the option of stating special buffer requirements for exposures that are deemed to constitute a systemic risk.

To avoid restrictions on dividends, for example, these buffers must be covered by capital. The new regulations formally come into effect on 1 January 2014, but the sections that must be implemented through legislation in Sweden will not apply until the date when the Swedish legislation has been passed. Some parts of the regulations can be implemented in stages. All capital and buffer requirements must be implemented in full by 2019 at the latest. There are also certain transitional rules which apply up to and including 2024. However, the regulations can be implemented at a national level earlier.

<sup>1</sup> Corporate identity no.: 502007-7862

**STRICTER REQUIREMENTS IN SWEDEN**

In late 2011, the Swedish government, the Swedish Financial Supervisory Authority and the Riksbank (the Swedish central bank) published their views about how the new framework should be implemented in Sweden. The starting point is that Swedish banks need stricter minimum capital requirements than European banks and that the regulations should be introduced more rapidly. In November 2011, the Swedish authorities announced that in 2015 systemically important Swedish banks must have a common equity tier 1 ratio in Pillar 1 of 14.5 per cent, including a countercyclical buffer of 2.5 per cent – the maximum level. This only applied to Pillar 1 and included no other potential common equity capital requirements within the framework of Pillar 2. It is expected that the stricter capital requirements will be implemented in two stages where the Swedish requirements are set 3 percentage points higher than the general EU requirements at the time of implementation, which is expected to take place in 2014, and with full effect with a higher common equity capital requirement of five percentage points from 2015. Sweden also plans to apply a shorter implementation period than proposed by the EU.

**HIGHER RISK WEIGHTINGS ON SWEDISH MORTGAGE LOANS**

As a Pillar 2 supervisory measure, the Swedish Financial Supervisory Authority decided on 21 May to introduce a capital requirement equivalent to a 15 per cent risk weight floor for Swedish mortgage loan portfolios. For Handelsbanken in 2014, this means a capital require-

ment in Pillar 2 of approximately SEK 8 billion, based on the Bank's Swedish mortgage loan volume at the year-end. If the proposal from the Swedish authorities to increase the total capital requirement of systemically important banks in 2015 by an additional 2 percentage points is implemented, the Bank's margin in Pillar 2 will increase to just over SEK 9 billion.

The decision means that banks must have a buffer capital in Pillar 2 for Swedish mortgage loans corresponding to the difference between the actual risk weight in Pillar 1 and the risk weight floor in Pillar 2. The risk weights in Pillar 1 will not be changed which means that the risk weight floor will not affect the minimum requirements in Pillar 1.

The IRB models reflect the banks' historical losses on mortgage loans and imply a correct calculation of the capital requirement under Pillar 1. The extra capital requirement margin which the Swedish Financial Supervisory Authority has now implemented is intended to address risks which may have arisen in the Swedish housing and mortgage loan market in recent years and which are therefore not fully reflected in the history on which the banks' IRB models are based. It is important to point out that the Swedish Financial Supervisory Authority does not criticise the banks' existing IRB models.

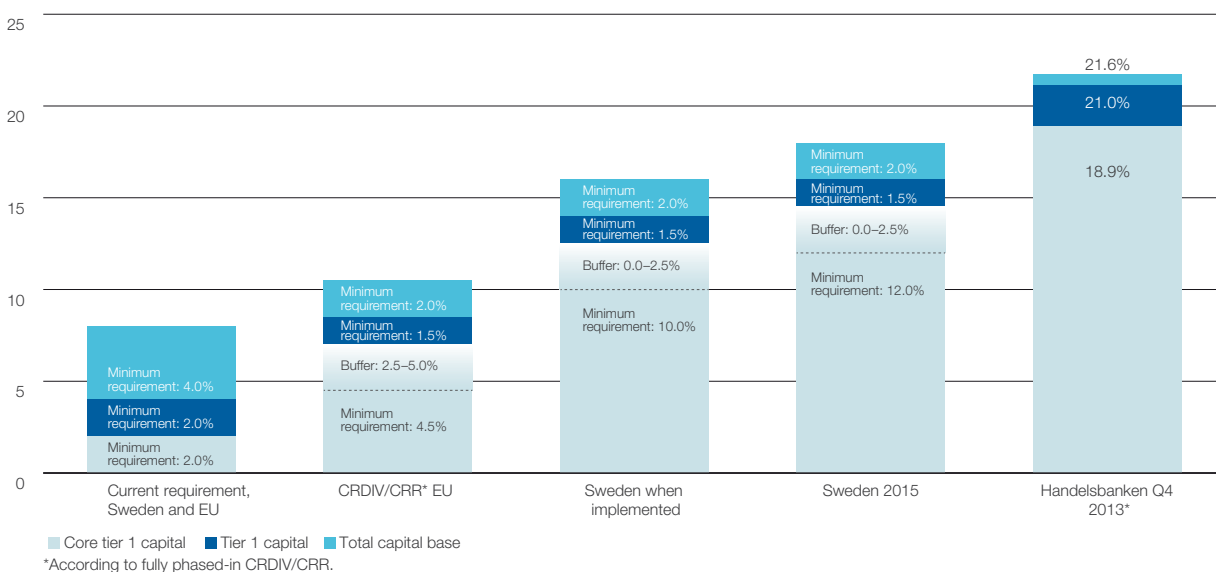
During the fourth quarter, the Swedish Financial Supervisory Authority stated that it is motivated to increase the risk-weight floor in Pillar 2 to 25 per cent if the new capital adequacy regulations allow for this. An implementation of this in 2015 would increase the Bank's capital requirement in Pillar 2 by approximately a further SEK 9 billion.

Since the introduction of Basel II in 2007, in its internal capital adequacy assessment process (ICAAP) Handelsbanken has from the outset kept considerably more capital for these exposures than is formally required according to Pillar 1. This is because the Bank's capital assessment is based on calculations of economic capital and stress tests which result in the capital requirement being considerably more than indicated by the historical loan losses.

**NEW LIQUIDITY REGULATIONS**

In the area of liquidity, a number of new regulations have been gradually introduced with the purpose of strengthening market financial stability. In this area too, Sweden has moved more quickly, in this case by developing Swedish liquidity rules based on Basel agreements. The Swedish regulations implemented as of 2013 contain a measurement of banks' liquidity in the form of a short-term liquidity buffer – Liquidity Coverage Ratio (LCR). This measure is based on the LCR measure proposed internationally but it contains some deviations. In particular, the major changes to the ratio proposed by the Basel Committee in January 2013 have not yet been implemented in the Swedish regulations.

Proposed new capital requirements for Swedish banks



# Risk management

The acute turbulence that has affected the financial markets for a number of years eased slightly in 2013. However, the global economic recovery is highly uncertain and displays major geographic variations. Sooner or later the massive monetary policy support measures will be scaled down and the market will adapt to more normal circumstances. Meanwhile, the financial sector must adapt its business models and operations to future regulations. Handelsbanken's business model has stayed intact during a number of financial crises and recessions and has proved very resistant to external strains.

Although the turbulence in the financial markets decreased during the year, the structural problems that brought on the crisis remain. The debt problems of certain countries are still a concern and both the financial sector and the real economy continue to be supported by massive stimuli in the form of monetary policy. Sooner or later the players in the economy must adapt to more normal circumstances. For the financial sector, apart from managing these circumstances, it also means adapting to significantly more stringent and extensive regulatory requirements – which

have not yet been established in their entirety.

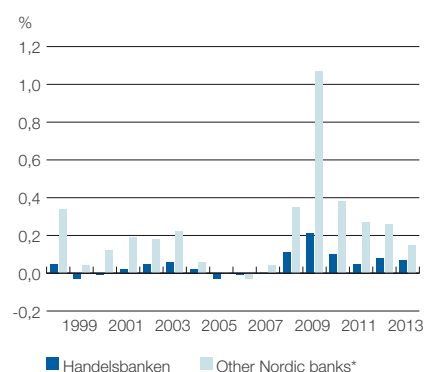
Handelsbanken's historically low tolerance of risk, sound capitalisation and strong liquidity situation means that the Bank is well equipped to cope with substantially more difficult market conditions than those experienced during the year. The core operations will continue to be run using the same business model, even under stricter regulations.

Handelsbanken's strict approach to risk means that the Bank deliberately avoids high-risk transactions, even if the remuneration may be high at that time. The low risk tolerance is

maintained through a strong risk culture that is sustainable in the long term and applies to all areas of the Group. Lending has a strong local involvement, where the close customer relationship promotes low credit risks. Market risks in the banking operations are only taken as part of meeting customers' investment and risk management needs and in conjunction with the Bank's funding. The Bank's liquidity situation is planned so that business operations are not restricted when the financial markets are disrupted.

This strict approach to risk also enables the

Loan losses as a percentage of lending 1998–2013



\* For the period until 2000 inclusive, only Swedish banks are included.

## Risks at Handelsbanken

	Description
Credit risk	Credit risk is the risk of the Bank facing economic loss because the Bank's counterparties cannot fulfil their contractual obligations.
Market risk	Market risks arise from changes in prices and volatilities in the financial markets. Market risks are divided into interest rate risks, equity price risks, exchange rate risks and commodity price risks.
Liquidity risk	Liquidity risk is the risk that the Bank will not be able to meet its payment obligations when they fall due, without being affected by unacceptable costs or losses.
Operational risk	Operational risk refers to the risk of loss due to inadequate or failed internal processes, people and systems, or external events. The definition includes legal risk.
Insurance risk	The risk in the outcome of an insurance that depends on the insured party's longevity or health.
Property risk	The risk of changes in prices of the Bank's property holdings.
Business risk	The risk of unexpected changes in earnings that are not attributable to the risk categories described above.
Compensation risk	Compensation risk is the risk of loss or other damage arising due to the compensation system.

## Exposure to sovereign states with weak finances 31 December 2013, EAD, SEK m

Exposure class	Greece	Ireland	Italy	Portugal	Spain
Sovereign	-	-	-	-	-
Institutions*	15	149	151	15	278
Corporate	-	20	696	2	372
Retail	-	-	-	4	6
<b>Total exposure</b>	<b>15</b>	<b>169</b>	<b>847</b>	<b>21</b>	<b>656</b>
<i>Provisions (all exposure classes)</i>	-	-	-	-	-
<i>*of which: EBA guarantees (Euro Banking Association clearing system)</i>	15	10	30	15	25

## Exposure to sovereign states with weak finances 31 December 2012, EAD, SEK m

Exposure class	Greece	Ireland	Italy	Portugal	Spain
Sovereign	-	-	-	-	0
Institutions*	16	20	302	17	91
Corporate	-	8	202	-	259
Retail	29	25	45	20	202
<b>Total exposure</b>	<b>45</b>	<b>53</b>	<b>549</b>	<b>37</b>	<b>552</b>
<i>Provisions (all exposure classes)</i>	-	-	-	-	-
<i>*of which: EBA guarantees (Euro Banking Association clearing system)</i>	15	10	30	15	35



Bank to be a stable and long-term business partner for its customers. It contributes to good risk management and sustaining a high service level even when operations and the markets on which the Bank operates are subject to strain. The same principles for the Bank's approach to risks apply in all countries where the Bank operates and they are guiding principles in the Bank's future international expansion. In 2013, the Bank established a regional bank in the Netherlands, which is thereby one of the Bank's home markets. In addition, organic growth in the UK continued and was supplemented by the acquisition of asset management firm Heartwood Wealth Group Limited.

Since the turbulence in the financial markets started in 2007, Handelsbanken has had good access to liquidity in all currencies of importance to the Bank. The Bank has broadened its investor base and increased the number of funding programmes for both covered and senior funding. The fact that this has taken place in the prevailing market conditions is a clear sign

of the market's confidence in the Bank's risk work and business model. The Bank has had and continues to have access to the financial markets via its short-term and long-term funding programmes. Central Treasury's liquidity portfolio, which is part of the Bank's liquidity reserve, has a low risk profile and consists mainly of government bonds and covered bonds. The total liquidity reserve has risen further during the year, which provides a high degree of resistance to possible disruptions in the financial markets. At the year-end, the Bank's liquidity reserve exceeded SEK 800 billion.

SEK 368 billion of the reserve consisted of liquid assets invested with central banks, SEK 90 billion were liquid securities and the remainder was mainly an unutilised issue amount for covered bonds at Stadshypotek. Liquidity reserves are kept in all currencies that are important to the Bank. The total liquidity reserve covers the Bank's liquidity requirements in a stressed scenario with an outflow of deposits for more than two years without access to new

market funding. Operations can also be maintained for a considerable period of time even in an extreme situation when the foreign exchange markets are closed.

The Bank's capital situation continued to grow stronger during the year and its earnings have been stable. Coupled with low loan losses, this has contributed to the strong position. Moreover, the reduced risk profile of the credit portfolio has resulted in lower capital requirements for credit risks. The strong capital situation provides good protection insurance in the fragile macro-economic situation, and should also be viewed in light of future regulatory amendments. Handelsbanken already meets future requirements regarding the common equity tier 1 ratio, even though all proposed capital buffer requirements have been set at maximum level by the authorities.

Handelsbanken is a universal bank, offering a wide range of various banking and insurance products. These entail a variety of risks that are systematically identified, measured and managed in all parts of the Group.

#### Handelsbanken's risk management

##### Business operations

The Bank's total view of risk and capital management comprises the following components:

##### Business operations

The Bank is characterised by a clear division of responsibility where each part of the business operations bears full responsibility for its business and for risk management. Those with the greatest knowledge of the customer and market conditions are best equipped to assess the risk and can also act at an early stage in the event of problems. Each branch and each profit centre bears the responsibility for dealing with any problems that arise. As a consequence, there are strong incentives for high risk awareness and for prudence in business operations.

##### Local risk control

The accountability of the person taking a business decision is supplemented by local risk control in the regional banks and within the various business areas. This ensures that risk-taking does not become excessive in an individual transaction or in local operations, and that transactions are in line with the Bank's views of risk-taking. The local risk control assesses risk, checks limits, etc. and verifies that individual business transactions are documented and conducted in a manner that does not involve undesirable risks. Local risk control is also responsible for analysing the risk in new products and services. The local risk control reports to central risk control and also to the business operations management.

##### Local risk control

##### Central risk control

As business decisions become more decentralised, the need for central monitoring of the risk and capital situation increases. The central credit and risk functions are therefore a natural and vital component of the Bank's business model.

The Central Credit Department prepares decisions made by the Board or by the Board's credit committee. The Central Credit Department also ensures that credit assessments are consistent and that loans are granted in accordance with the credit policy decided by the board. The Central Credit Department is also responsible for identifying risks in all major individual commitments and offers support and advice to other areas of the credit organisation.

Central risk control has the task of identifying, measuring, analysing and reporting on all the Group's material risks. It monitors that the risks and risk management comply with the Bank's low tolerance of risks and that senior management has reliable information to use as a basis for managing risks in critical situations. Central risk control also has functional responsibility for local risk control in the business areas and subsidiaries, for ensuring that risks are measured effectively and consistently, and ensuring that the Bank's senior management receives regular reports and analyses of the current risk situation.

##### Central risk control

##### Capital planning

##### Capital planning

If – despite the work in the three components described – Handelsbanken were to suffer serious losses, it holds capital to ensure its survival both during and after extreme events. Capital planning is based on an assessment of the capital situation in terms of the legal capital requirement, combined with calculation of economic capital and stress tests. Stress tests identify the measures that need to be prepared or implemented in the future to ensure satisfactory capitalisation at any given time.

Apart from the formal risk organisation, Central Treasury is responsible for ensuring that the Group at any given time has satisfactory liquidity and is well prepared to quickly strengthen liquidity as needed. Central Treasury is also responsible for the Bank's liquidity reserve. A liquidity report is issued daily to the CFO and regularly to the Bank's CEO and Board.

In addition, operations are reviewed by compliance – at central, business area and subsidiary level – and the internal and external auditors.

Handelsbanken's risk management activities have stood the test of time and their effectiveness is illustrated by the fact that for a long time the Bank has had lower loan losses than its competitors and has shown a very stable financial performance.



# Risk organisation

Handelsbanken's Board is responsible for assessing and monitoring the risks arising in the Group's operations. Central risk control has the day-to-day responsibility for overall risk assessment. It reports to the CEO and the Board and informs the Bank's CFO on a regular basis.

Handelsbanken's Board is responsible for assessing and monitoring the risks arising in the Group's operations. The Board ratifies policy documents and instructions describing how various risks should be managed and reported. The Board also ratifies the decision structure for credit limits.

Central risk control has the day-to-day responsibility for overall risk assessment. It reports to the CEO and the Board and informs the Bank's CFO on a regular basis. This responsibility entails ensuring that decision documentation regarding risk measurements and limits is prepared, and that fit-for-purpose information and reporting systems are in place. Central risk control is also responsible for identifying and controlling the Group's risks, for the models used to measure these risks, and for proposing risk reduction measures.

The Board determines the total market and liquidity risk limits for the entire Group within each type of risk. The limits are then allocated by the CEO and the CFO. In each business area which has been allocated limits, a local risk control unit reports the risk exposure to central risk control and also to the management of the business area.

The CEO is responsible for the Bank pursuing capital planning which ensures that the Group's supply of capital is secure. The Head of Capital Management is responsible for measuring available capital and for applying the Group's capital planning policy. This includes responsibility for maintaining the correct level of available capital and the correct proportions of the various types of capital and currencies in the capital base.

Central Treasury is responsible for the Group's liquidity and funding, and for carrying out the risk management measures that are decided upon by the Bank's CFO.

## REPORTING AND MONITORING OF RISK AND CAPITAL SITUATION

The credit risk situation is reported quarterly to the Board in terms of volume growth, risk-reported credits, information from the Bank's credit risk models, etc.

In addition to the reporting of loans with provision requirements, which is carried out within the framework of external accounting, defaulted credits are also reported regularly,

to satisfy the information requirement of the internal credit risk model and the calculation of the capital requirement. Each branch also compiles a quarterly risk report, where it reviews all its credit commitments to identify and report credits where the borrower's repayment capacity is impaired and the Bank's collateral is insufficient, or there is a risk that it will be insufficient. Repayment capacity is followed up at regular intervals. For exposures where the repayment capacity is poorer than normal, a special action plan is always established. Normally, problems are identified at an early stage and risk-limiting measures are taken before a commitment becomes non-performing. The risk reports are presented each quarter to the boards of the regional banks and subsidiaries and to the Board of the Bank.

The financial risks and limit utilisation for Handelsbanken Capital Markets, the internal bank, the mortgage business and other operations which carry less market risk, are checked on a daily basis and summarised when necessary and at least weekly.

In the Risk committee where the Bank's CFO is chairman, an in-depth follow-up of the market risk and liquidity risk situation is performed monthly. Other types of risk are commented on where necessary. The committee discusses potential risks and measures proactively. In addition, any overdrawn limits are reported to this committee, as well as the current risk situation in the various risk classes and for the Group as a whole. Central risk control reports the Risk committee's analyses and observations to the CEO on a regular basis, and at least after each Risk committee meeting. The risk situation, utilisation of market risk limits, the liquidity situation and funding are reported to the Board at each ordinary board meeting.

The capital situation is reported weekly to the CFO and Head of Capital Management, based on a short-term capital forecast. In cases where certain thresholds are exceeded, or where, for any other reason, the Head of Capital Management or the CFO deems it appropriate, the matter is reported to the CEO. The capital situation in a medium- and long-term perspective is summarised quarterly by the Capital committee. The forecast

is fully updated quarterly, and when there are significant changes in market conditions. A report is made quarterly to the CEO and Board of the Bank and otherwise when necessary.

The liquidity risk is reported daily to the Bank's management and to the Board at each ordinary board meeting. The Liquidity committee, which acts as an advisory unit to the Head of Central Treasury, meets every month before each ordinary board meeting and otherwise when necessary. At this committee meeting, reports are presented on the current liquidity situation, on results of stress tests and a scenario analysis, and other information which is relevant for the assessment of the Group's liquidity situation.

Group Finance has a Valuation committee with the task of creating conditions for correct valuation of recognised assets and liabilities. The Valuation committee must ensure that internal guidelines, instructions and applied models in the valuation are fit for purpose and comply with external regulations.

In 2013, operational risks were reported every six months to the Board and quarterly to the Capital committee. These reports include information regarding significant events, major losses and important proactive measures. The reports also include an aggregated risk assessment at Group level. Operational risks are monitored daily via reports concerning incidents which have occurred from branches and units throughout the Handelsbanken Group. In addition, the local risk controls carry out monitoring and follow-up of proactive measures in close collaboration with central risk control.

# Credit risk

Handelsbanken's low risk tolerance is maintained by means of a strong credit policy and credit risk culture which covers the whole Group and is sustainable over time. The Bank's decentralised organisation with a local presence provides high quality in the credit decisions and ensures that the credit risk is managed close to the customer.

**Credit risk is the risk of the Bank facing economic loss because the Bank's counterparties cannot fulfil their contractual obligations.**

At Handelsbanken, the credit process is based on a conviction that a decentralised organisation with local presence ensures high quality in credit decisions. The Bank aims to be a relationship bank where the branches maintain regular contact with the customer, which gives them an in-depth understanding of each individual customer and a continually updated picture of the customer's financial situation.

In the Bank's decentralised organisation, each branch responsible for the customer has total credit responsibility. Customer and credit responsibility lies with the branch manager or with those employees at the local branch appointed by the manager.

Branch managers and most staff at branches have personal decision limits allowing them to decide on credits to the customers they are responsible for.

If there is a need for larger credits, there are regional and central decision levels. Each additional level of decision adds credit expertise. Each decision level has the right to reject credits both within their own decision level and also credits which would otherwise have been decided at a higher level. All delegates in the decision process, regardless of level, must be in agreement in order for a positive credit decision to be made. The largest credits are decided by the Board's credit committee, or by the entire Board, where cases are prepared by the Central Credit Department. However, no credit application may be processed in the Bank without the recommendation of the branch manager.

The decision procedure for credits is illustrated in the diagram below. It also shows the percentage of decisions and amounts at the various decision levels.

In Handelsbanken's decentralised organisation, the documentation that forms the basis

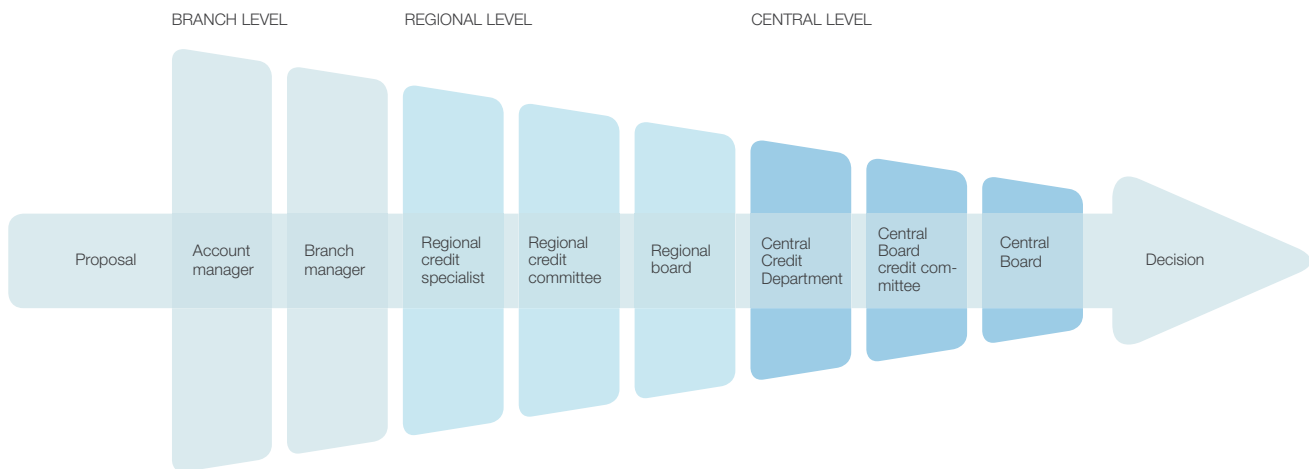
for credit decisions is always prepared by the branch responsible for the credit, regardless of whether the final decision is to be made at the branch, at regional level, in the Board's credit committee or by the Board. Credit decision documentation includes general and financial information regarding the borrower, and an assessment of their repayment capacity, loans and credit terms, as well as a valuation of collateral. For borrowers whose total loans exceed SEK 3 million, the credit decision is made in the form of a credit limit.

In the case of loans to private individuals against collateral, a limit requirement comes into play for amounts exceeding SEK 6 million. For loans to housing co-operative associations against collateral in the residential property, a limit is required for amounts exceeding SEK 12 million.

Credit limits granted are valid for a maximum of one year. When extending limits, the decision documentation and decision procedure are the same as for a new credit.

In Handelsbanken's decentralised organisation where a large proportion of the credit and

The credit process and decision levels in Handelsbanken



Distribution of limit decisions

	BRANCH LEVEL	REGIONAL LEVEL	CENTRAL LEVEL
Proportion of number of limits	67%	31%	2%
Proportion of limit amount	7%	23%	70%

limit decisions are made by individual branches, it is important that there is a well-functioning review process to ensure that the credit decision is of high quality. The branch manager examines the quality of the staff's decisions and the regional credit departments examine the quality of decisions made by branch managers.

The purpose of the quality review is to ensure that the Bank's credit policy and internal instructions are complied with, that credit quality is maintained, and that credit decisions show that there is good credit judgement and a sound business approach. A corresponding examination of the quality is also made for credit decisions made at higher levels in the Bank. Credits granted by regional credit committees and regional bank boards are examined by the Central Credit Department, which also prepares and examines credits decided by the Bank's Central Board or its credit committee.

Rather than being a mass market bank, Handelsbanken is selective in its choice of customers. The credits must be of high quality. The quality requirement is never neglected in favour of higher credit volumes or to achieve higher returns. The Bank also avoids participating in financing where there are complex customer constellations or complex transactions which are difficult to understand.

The local branch's close contact with its customers also enables the branch to quickly identify any problems and take action. In many cases, this means that the Bank can take action more rapidly than would have been possible with a more centralised management of problem loans. The branch also has full financial responsibility for granting credits, and therefore addresses problems that arise when a customer has repayment difficulties and also bears any loan losses. If necessary, the local branch obtains support from

the regional head office and central departments. The Bank's method of working means that all employees whose work involves transactions linked to credit risk acquire a solid and well-founded approach to such risks. This approach forms an important part of the Bank's culture.

#### MEASUREMENT OF CREDIT RISKS

Since 2007, the Bank has had permission from the Swedish Financial Supervisory Authority to calculate the capital requirement for credit risk using the IRB approach. The permission applied to the banking group led by Svenska Handelsbanken AB (publ) and the two companies Svenska Handelsbanken AB (publ) and Stadshypotek AB (publ). The Bank has since applied for and received equivalent permission for Handelsbanken Finans AB and Handelsbanken Rahoitus Oy. Certain exposures in the subsidiaries Handelsbanken S.A. in Luxembourg and Handelsbanken Finans (Shanghai) Financial Leasing Co Ltd are reported according to the IRB approach.

The Swedish Financial Supervisory Authority has also granted time-limited and permanent exceptions from application of the IRB approach for certain exposures, for which the standardised approach will be used instead. The permitted permanent exception refers to exposures to sovereigns, the Riksbank (the Swedish central bank) and Swedish municipalities. Time-limited exceptions comprise portfolios of insignificant size as defined in the Financial Supervisory Authority's regulations as well as the equity exposures held by the Bank at the turn of the year 2007/2008. The portfolio in Handelsbanken Fonder AB is attributable to portfolios of insignificant size.

In 2013, reporting according to the IRB approach comprised the portfolios in the

Swedish regional banks, Regional Bank Norway, Regional Bank Finland, Regional Bank Denmark, Handelsbanken Finans in Sweden and Finland, major parts of the regional banks in the UK and the Netherlands, the Bank's exposures to other banks (institutional exposures) and large parts of the Handelsbanken International and Handelsbanken Capital Markets business areas.

In 2010, Handelsbanken received permission from the Swedish Financial Supervisory Authority to report certain portfolios using an IRB advanced approach. The permit refers to counterparties which are categorised as medium-sized companies, property companies and housing co-operative associations. In 2013, the Bank also received permission from the Swedish Financial Supervisory Authority to report exposures to Large Corporates in the home markets (excluding the Netherlands) using the advanced IRB approach. Another application was submitted to the Authority in 2013 to use the advanced IRB method for exposures to Large Corporates outside the home markets and the Netherlands and certain other corporate exposures. The exposures that have been approved for reporting according to the IRB approach but not yet for the advanced approach, will be reported according to the foundation approach for the time being.

At the end of 2013, the Bank calculated the capital requirement using the IRB approach for about 87 (89) per cent of total risk-weighted assets, calculated according to the Basel II rules. 84 (61) per cent of the corporate exposures reported according to the IRB approach, were reported using the advanced approach.

#### Calculation of credit risks broken down by method and business area, 2013

Method	Business areas			
	Regional banks in the Nordic countries <sup>1</sup>	Regional banks UK <sup>1</sup>	Regional Bank Netherlands <sup>1</sup>	Handelsbanken International <sup>1</sup>
<b>Standardised approach</b>	Sovereign exposures "Insignificant portfolio" according to FI approval	Sovereign exposures "Insignificant portfolio" according to FI approval Retail exposures	Sovereign exposures "Insignificant portfolio" according to FI approval	Sovereign exposures "Insignificant portfolio" according to FI approval
<b>Foundation IRB approach</b>	Corporate exposures Institutional exposures Exposures without a counterparty Equity exposures	Corporate exposures Institutional exposures Exposures without a counterparty Equity exposures	Corporate exposures/ Large Corporates Institutional exposures Exposures without a counterparty Equity exposures	Corporate exposures/ Large Corporates Institutional exposures Exposures without a counterparty Equity exposures Securitisation positions
<b>Advanced IRB approach</b>	Corporate exposures (Medium-sized companies, Property companies, Housing co-ops) Corporate exposures/Large Corporates Retail exposures	Corporate exposures (Medium-sized companies, Property companies, Housing co-ops) Corporate exposures/Large Corporates		

<sup>1</sup> May include legal entities in addition to the parent company (Stadshypotek, Handelsbanken Finans, Handelsbanken Capital Markets and others).

### Risk rating system

Handelsbanken's risk classification system comprises a number of different systems, methods, processes and procedures to support the Bank's classification and quantification of credit risk.

Handelsbanken's internal rating system is used to measure the credit risk in all operations reliably and consistently. The risk rating builds on the Bank's internal rating, which is based on an assessment of each counterparty's repayment capacity. The rating is determined by the risk of financial strain and by the assessed resistance to this strain. The method and classification are based on the rating model that the Bank has applied for several decades.

The internal rating is the most important component of the Bank's model for calculating the capital requirement in accordance with the IRB approach. The rating is dynamic; it is reassessed if there are signs that the counterparty's repayment capacity has changed. The rating is also reviewed periodically as stipulated in the regulations. The rating is made by the person responsible for granting the credit and it is subsequently checked by independent bodies.

### Exposure classes

One of the basic premises of the capital adequacy regulations is that the institution's exposures are categorised into the exposure classes stipulated by the regulations. The number of exposure classes depends on the method used to calculate the credit risk. Exposures to be calculated according to the standardised approach can be allocated to 15 different exposure classes, while there are seven exposure classes in the IRB approach.

The Bank uses different models for calculating credit risk depending on the type of exposure. The overall division into exposure classes in the IRB model comprises sovereign, institutional, corporate, retail and equity exposures, as well as positions in securitisations. In addition there are also exposures without counterparties – assets which are not regarded as credits.

Some exposure classes contain sub-groups in which special models are applied. In practical terms, the division into exposure classes and sub-groups is made when the employee at a branch or unit responsible for the customer decides which business assessment template is to be used when assigning the counterparty a rating.

Exposures to states, central banks, government agencies and municipalities are classed as sovereign exposures. Exposures to institutions refer to exposures to counterparties defined as banks and other credit institutions, and certain investment firms.

Retail exposures include both exposures to private individuals and to sole traders, where the total exposure within the Group does not exceed SEK 5 million. Also included are legal entities with a maximum turnover of SEK 50 million, where the total exposure within the Group does not exceed SEK 5 million (excluding mortgage loans). Retail exposures are divided into two sub-groups: property loans and other retail exposures.

Corporate exposures refer to exposures to non-financial companies, consisting of legal entities with a total exposure within the Group in excess of SEK 5 million or where the company's turnover is more than SEK 50 million, and sole traders with a total exposure for the Group in excess of SEK 5 million. Apart from ordinary non-financial companies, the exposure class includes insurance companies, housing co-operative associations and exposure in the form of "specialised lending".

Equity exposures refer to the Bank's holdings of shares that are not in the trading book. For equity exposures held by the Bank at the year-end 2007/2008, the risk weight during 2013, in accordance with the Swedish Financial Supervisory Authority's transitional rules, was calculated using to the standardised approach. However, these exposures are reported as IRB exposures. New equity exposures after this date have been calculated according to the IRB approach.

For division into exposure classes according to the standardised approach, the Bank's volumes are put into the following exposure classes: sovereign and central banks, municipalities, institutions, retail, exposures with collateral in property, non-performing items and other items. Non-performing items in the standardised approach are exposures where overdue interest or principal amounts have remained unpaid for more than 90 days, calculated from the original contracted payment date. Other items include prepaid costs, holdings in equities, cash in hand and unminted gold.

### Risk classification methods

To quantify its credit risks, the Bank calculates the probability of default (PD), the exposure the Bank is expected to have if a default occurs (exposure at default, EAD), and the proportion of the loan that the Bank would lose in the case of default (loss given default – LGD). Default is defined as when the counterparty is either 90 days late in making payment, or when an assessment has been made that the counterparty will not be able to pay as contractually agreed, for example, if declared bankrupt.

The PD value is expressed as a percentage where, for example, a PD value of 0.5 per cent means that one borrower of 200 with the same PD value is expected to default within one year. A credit in default does not necessarily mean that the Bank will incur a loss since in most cases there is collateral for the exposure. Nor does a default mean that it is out of the question that the counterparty will pay at some time in the future.

For corporate and institutional exposures, the internal rating set for each counterparty is directly converted into a risk class on a scale between 1 and 10 (where risk class 10 refers to defaulted counterparties). A certain average PD is calculated for each risk class and type of counterparty. For institutional exposures and the corporate exposures that are subject to a capital requirement according to the foundation IRB approach, standardised values prescribed by the Swedish Financial Supervisory Authority's regulatory code are applied to the loss given default (LGD). The standardised value that may be used is determined by the collateral provided for each exposure.

For retail exposures, the risk class is also based on the internal rating assigned to all credit customers. The rating is not translated directly into a risk class as for corporate exposures; instead, the different exposures are sorted into a number of smaller groups on the basis of certain factors. Such factors include the type of credit, the counterparty's debt-servicing record and whether there are one or more borrowers. An average probability of default is calculated for each of the smaller groups, and on the basis of this, the groups are sorted into one of the ten risk classes. Different models are used for exposures to private individuals and to small companies respectively (that are also classed as retail exposures), but the principle is the same.

For retail exposures and exposures to medium-sized companies, property companies and housing co-operative associations, the loss given default (LGD) is determined by the Bank's own loss history. For exposures to Large Corporates that are subject to a capital

requirement using the IRB advanced approach, the LGD is calculated on the basis of internal losses and external observations. For retail exposures secured by property in Sweden and for property exposures to medium-sized companies, property companies and housing co-operative associations, different values are applied depending on the loan-to-value ratio of the exposure. For other exposures, the LGD value is determined by factors that may depend on the existence and valuation of collateral, the product and similar factors.

For each class of exposure, the average probability of default (PD) is calculated for each of the nine risk classes that refer to non-defaulted counterparties or agreements. Probability of default is based on calculations of the historical percentage of defaults for different types of exposure. The average proportion of defaults is then adjusted by a safety margin and a business cycle adjustment factor. The safety margin is intended to ensure that the probability of default is not underestimated.

The business cycle adjustment factor takes into account the fact that the measured proportion of default per risk class can be expected to vary due to the business cycle. The measured proportion may therefore need to be adjusted in relation to where in the business cycle the Bank's borrowers were in the period on which the calculations are based. This is in order to reflect a long-term probability of default which must be used for the risk weighting.

The business cycle adjustments are based on the Bank's internal history from 1985 to 2012 and these become less pronounced the longer there is historical information available for calculating the historical average per risk class.

Handelsbanken's method for business cycle adjustment is intended to even out business cycle fluctuations in probability of default (PD) at risk class level. The means that the PD per risk class will be less volatile over time and that the PD at counterparty and portfolio level varies in association with some counterparties being assigned a changed rating in the case of strong business cycle variations. However, Handelsbanken's internal rating of a counterparty is so long-term that the PD at counterparty and portfolio level is expected to be stable during a normal business cycle.

When calculating the LGD, the risk measure must reflect the loss proportion during economically unfavourable circumstances, known as a downturn LGD. For collateral in property, the downturn LGD is based on observed losses from the property crisis in the early 1990s. For other collateral relating to retail exposures, observed LGD is adjusted for downturns by

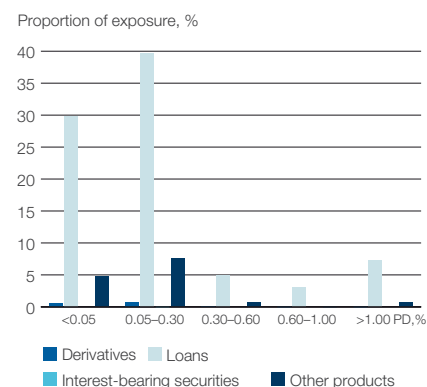
a factor which depends on the PD and type of product. For corporate exposures in the advanced IRB approach, the LGD is adjusted for downturns so that the Bank's observed losses in the crisis years of 1991–92 can be explained by the risk weights with a good margin.

When the exposure at default (EAD) is to be calculated, certain adjustments are made to the carried exposure. Examples of this are committed loan offers or revolving credits, where the Bank agrees with the customer that the customer may borrow up to a certain amount in the future. This type of commitment constitutes a credit risk that must also be covered by adequate capital. Normally this means that the credit granted is adjusted using a certain conversion factor (CF) for the part of the credit that is unutilised. For certain product categories for corporate exposures and institutional exposures, the conversion factors are determined by the regulatory code, while for retail exposures and certain product categories for Large Corporates, medium-sized companies, property companies and housing co-operative associations, the Bank uses its own calculated conversion factors. Here, it is the product referred to that mainly governs the conversion factor, but the utilisation level may also be of relevance.

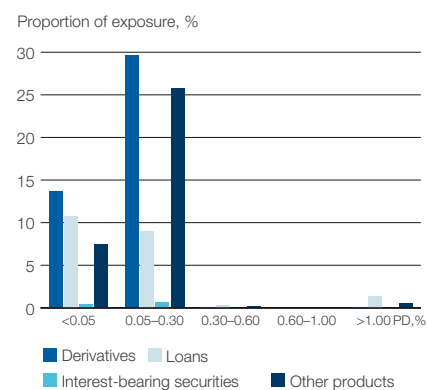
In addition to the capital adequacy calculation, measures of risk (PD, EAD, LGD) are used to calculate the cost of capital in each individual transaction and to calculate economic capital (EC). This means that margins in the form of business cycle adjustments and safety adjustments in the risk measurements are also included in the cost of capital in individual transactions and in calculations of economic capital, which means that the loss levels that the risk measurements imply are conservative. New credits that are assessed to involve higher than normal risk are refused, regardless of the price and regardless of the collateral available. The method used means that the Bank's historical losses have a direct impact on risk calculations and capital requirements, which contributes to the positive outcome for the Bank of the Basel II regulations compared with Basel I.

For corporate, institutional and retail exposures, the adjoining figures show how the exposure is distributed between bonds and other interest-bearing securities, and loans, derivatives and other products respectively. Other products are, for example, guarantees and committed loan offers. The diagrams show how the exposures (EAD), excluding credits in default, are distributed between different PD ranges in each exposure class. The PD values used are those applied when calculating the capital requirement.

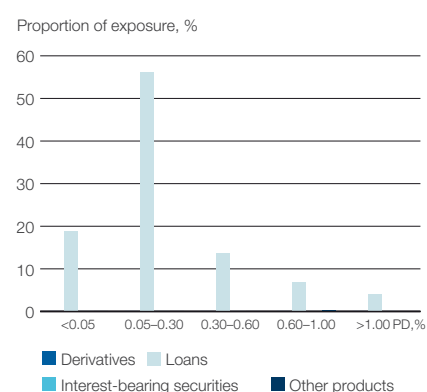
Proportion of exposure per product type per PD interval excluding defaulted credits – Corporate exposures



Proportion of exposure per product type per PD interval excluding defaulted credits – Institutional exposures



Proportion of exposure per product type per PD interval excluding defaulted credits – Retail exposures



### Comparisons with external ratings

The Bank's risk classes are not directly comparable with the ratings applied by external credit rating agencies. The agencies' ratings do not correspond to a direct classification of the probability of the counterparty defaulting, as the Bank's rating model does. In addition, the rating agencies vary in the extent to which they factor in the seriousness of the losses that default can lead to. The time horizon within which credit-worthiness is assessed is not always the same for the Bank as it is for the rating agencies. The Bank's risk classes do not state a uniform scale, whereby a certain risk class always corresponds to a certain probability of default. Furthermore, different PD scales are applied to different parts of the credit portfolio and the PD values change over time, depending on business cycle adjustment factors and developments in the model, for example.

Overall, it is difficult to unambiguously and consistently translate the internal risk classes into an external rating. However, by analysing the historical proportion of defaults in Handelsbanken's risk classes in relation to the proportion of defaults in the external rating classes according to the Moody's rating agency, a fair table of comparison can be obtained. Shown below are the external rating classes that best correspond to the historical proportion of defaults in each of Handelsbanken's risks classes. For institutional exposures, there are not sufficient internal defaults, and the rating comparison is instead based on customers with an external credit assessment.

### Quality assurance of the credit risk model

The Bank carries out a detailed annual review of its internal rating model. The review checks that the internal ratings on which the Bank's risk classification is based are applied in a consistent, correct and fit-for-purpose manner (evaluation) and also that the models used measure risk in a satisfactory manner (validation).

The purpose of evaluating internal ratings is to ensure that they function well as the central factor in the risk classification of the Bank's counterparties. For example, the analysis includes evaluating whether the rating reflects the risk in the counterparty, that customers are assessed equally regardless of where in the Bank the rating takes place, that the rules for rating are followed and that ratings are updated. The evaluation may highlight ratings in certain parts of the Bank or for certain types of counterparties, with measures being taken to remedy any deficiencies. Such measures may include more frequent, specifically targeted follow-up action, changes to rating instructions or adaptations to models.

The models and risk measurements on which these are based are validated at least annually. The validation aims to ensure that the risk classification system satisfactorily measures the risk in the different risk dimensions PD, LGD and EAD. They are primarily assessed to ascertain whether the outcomes observed during the past year confirm that the models applied by the Bank function as intended. To achieve this, a number of statistical tests are used with pre-defined threshold values, so that if there

are deficiencies in the models, clear signals are given. The validation may necessitate changes to models, risk measurements or instructions.

The results of the evaluations and validations are reported to the Bank's Board and audit committee and are examined by the Swedish Financial Supervisory Authority.

The table shows the values applied (predictions) and the outcome for 2013 for the various measurements of risk. The year's provisions for probable loan losses and actual losses for defaults in 2013 are also shown so that a comparison can be made between the losses the model predicts and the actual losses the Bank has had for these exposures in 2013. The LGD outcome for the year refers to average (exposure-weighted) realised losses for retail agreements that defaulted in 2011 with a 24-month recovery period and corporate counterparties (including Large Corporates and institutions) that defaulted in 2012 with a 12-month recovery period. In both cases, provisions remaining at the end of the recovery period are included in the loss definition. The PD outcome states the proportion of healthy retail agreements and corporate counterparties at the start of 2013 that defaulted in 2013.

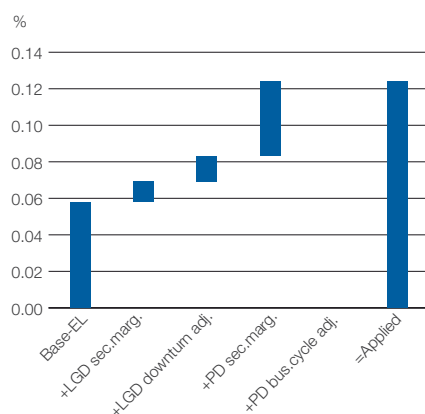
For the expected loss (Expected Loss, EL), the total EL is shown for the exposures in approved IRB models as at 31 December 2012, broken down by exposure class. The EL for defaulted exposures is proportionally very high since their PD is 100 per cent. The table shows EL both including and excluding defaulted exposures. For PD and LGD, the average value of the IRB-approved exposures is shown, both for the value used in the models in 2013 and for the actual outcome in 2013. The average of EL and LGD is weighted according to the exposure volume, while PD is weighted according to number. The PD values shown here are those applied in the calculation of the capital requirement, thus including both security margins and the business cycle adjustment factors.

The expected loss presented here does not in fact, despite its name, represent the most likely loss level for the Bank. One reason for this is that the PD values used according to the regulations are to correspond to a long-term average. Another reason is that a number of conservative safety adjustments are made to the value calculated using the Bank's IRB model. The main aim of these adjustments is to ensure that the Bank's internal model does not underestimate the actual risk.

#### Link between external and internal rating

Risk class	Corporate exposures			Institutional exposures
	Large Corporates	Small and medium-sized companies	Property companies	Housing co-operative associations
1	Aaa-Aa	Aaa-Aa	Aaa-Aa	Aaa-Aa
2	Aaa-Aa	A	Aa-A	Aa-A
3	A	Baa	A-Baa	A
4	A-Baa	Baa-Ba	Baa	A-Baa
5	Baa	Ba	Baa-Ba	Baa
6	Baa-Ba	Ba-B	Ba	Baa-Ba
7	Ba-B	B	B	Ba-B
8	B	B	B	B
9	Caa-C	Caa-C	Caa-C	Caa-C



**Breakdown of EL for all IRB-approved exposures excluding defaulted exposures**


The diagram shows how these adjustments affect the calculated value for expected losses.

The above diagram shows EL for all IRB-approved exposures, excluding defaulted exposures. The first column shows the observed EL value: EL based on the original estimate of PD and LGD, which is approximately 0.06 per cent. The next columns show how EL is affected when the security margins, business cycle adjustments and regulatory “floor for applied PD” levels are introduced.

The purpose of the safety margin is to ensure

that the value applied does not underestimate the true risk because the statistical data on which the models are based is not sufficiently comprehensive. The business cycle and recession adjustment takes into account the fact that the proportions of defaults and losses measured can be expected to vary due to the business cycle. The default and loss rates used for risk weighting therefore need to be adjusted in relation to where in the business cycle the Bank’s borrowers were in the period on which the calculations are based.

Until recently, the average default rates since 2005 have been below a level which is consistent with the calculated long-term average and the PD has therefore been adjusted upwards. As the measurement period has been extended and now covers a large part of a credit cycle, the need for such an adjustment is lower. Due to the increased default rates observed since the start of the financial crisis in 2008, the business cycle adjustment now results in a calculated downwards adjustment of the average default rates measured since 2005 and which is the basis of the unadjusted PD and EL shown in the diagram. Handelsbanken has a conservative principle of not applying a business cycle adjustment which implies a downward adjustment of observed default rates. This explains why no business cycle adjustment was made for 2013.

The final column shows the EL calculated using the approved IRB approach. It is approximately 0.12 per cent of the exposure.

The diagram excludes the capital requirement for defaulted credits. EL excluding defaulted exposures shows a more likely level for the Bank’s losses than EL including defaulted exposures. This level is also considerably closer to the Bank’s net loan loss ratio calculated for defaults in 2013, namely 0.04 per cent.

In addition to evaluations and validations, Internal Audit also comprises an important part of the process. It examines the risk rating system, its components and its application on a regular basis. The way the Bank calculates, rates and quantifies risks, and validates the models used for the calculations, has also been an important part of the Swedish Financial Supervisory Authority’s review in conjunction with approval of the Bank’s application of the IRB approach. The Swedish Financial Supervisory Authority’s supervision of the Bank includes regular monitoring of how the Bank’s application of the IRB approach is progressing. Within the framework of its overall capital assessment, the Swedish Financial Supervisory Authority confirmed the application of the IRB approach as the starting point.

Predictions and outcome for risk parameters in the IRB model, 2013 %	EL		Loan losses and provisions for defaults 2013 (proportion of total EAD) <sup>2</sup>	PD		LGD	
	Excluding defaults	Including defaults		Prediction for 2013	Outcome 2013	Prediction for 2013	Outcome 2013 <sup>1</sup>
<b>Exposure class</b>							
Corporate <sup>3</sup>	0.17	0.44	0.05	0.72	0.58	31	5
Retail, property	0.04	0.07	0.01	0.26	0.30	13	3
Retail, other	0.31	1.20	0.09	1.16	1.22	31	17
Institutions	0.03	0.03		1.56	0.00	17	
Total, all	0.12	0.34	0.04				

Predictions and outcome for risk parameters in the IRB model, 2012 %	EL		Loan losses and provisions for defaults 2012 (proportion of total EAD) <sup>2</sup>	PD		LGD	
	Excluding defaults	Including defaults		Prediction for 2012	Outcome 2012	Prediction for 2012	Outcome 2012 <sup>1</sup>
<b>Exposure class</b>							
Corporate <sup>4</sup>	0.13	0.45	0.08	0.77	0.84	33	12
Retail, property	0.04	0.07	0.01	0.31	0.37	13	2
Retail, other	0.32	1.10	0.11	1.22	1.39	28	16
Institutions	0.02	0.02		0.88	0.00	21	
Total, all	0.11	0.33	0.05				

<sup>1</sup> Handelsbanken Finans Finland excluded.

<sup>2</sup> Handelsbanken Finans excluded.

<sup>3</sup> Predictions reflect IRB-A for Large Corporates, medium-sized companies, property companies and housing co-operative associations.

<sup>4</sup> Predictions reflect IRB-A for medium-sized companies, property companies and housing co-operative associations.



**COLLATERAL**

When Handelsbanken assesses the credit risk of a specific customer, the assessment must start with the borrower's repayment capacity. According to the Bank's credit policy, weak repayment capacity can never be compensated for by being offered good collateral. Collateral may, however, substantially reduce the Bank's loss if the borrower cannot fulfil his or her obligations. Credits must therefore normally be adequately secured.

Unsecured credit is mainly granted to customers with very good repayment capacity. For unsecured credits, special loan conditions are drawn up that entitle the Bank to renegotiate or terminate the agreement if the borrower's repayment capacity deteriorates or if the conditions are otherwise violated.

Since collateral is not generally utilised until a borrower faces serious repayment difficulties, the valuation of collateral focuses on the expected value of the collateral in the case of a rapid sale in unfavourable circumstances in connection with insolvency. The value of certain assets may change considerably in an insolvency situation leading to a forced sale.

A large part of lending to credit institutions consists of reverse repos. A reverse repo is a repurchase transaction in which the Bank buys interest-bearing securities or equities with a special agreement that the security will be resold to the seller at a specific price on a specific date. Handelsbanken regards reverse repos as secured lending.

In special circumstances, the Bank may buy credit derivatives or financial guarantees to hedge the credit risk in claims, but this is not part of the Bank's normal lending process.

**Collateral which reduces the capital requirement**

Collateral for the exposures that are IRB-approved is managed according to two different calculation methods: the foundation IRB approach and the advanced IRB approach. Collateral affects the capital requirement in different ways in these two approaches. In the foundation approach, only certain types of collateral are eligible and the estimates for LGD and CF are applied as prescribed in the regulations. The Bank does however accept other types of collateral than those considered eligible under the capital adequacy regulations.

When reporting according to the advanced approach, the Bank applies its own calculated LGD estimates. For the exposures approved for reporting according to the advanced approach, it has been possible to use most types of collateral occurring in the Bank to reduce the capital requirement.

Since collateral affects the capital requirement to a greater extent following the implementation of the advanced approach, there is a greater incentive for the Bank to reduce the credit risks as far as possible by acquiring collateral. The Bank follows up and regularly updates the market values for the collateral used for corporate exposures. A control procedure is established, whereby the market value of residential properties is checked at least every third year and that of any other type of property is checked every year. For properties with an exposure exceeding EUR 3 million, a new valuation by an independent valuer is made at least every third year.

In accordance with permission from the Swedish Financial Supervisory Authority, the Bank uses volatility adjustments (so-called

haircuts) when calculating capital requirements according to the IRB foundation approach for exposures that are secured by financial collateral. This means that in its capital requirement calculations, the Bank adjusts the value of financial collateral based on the historical volatility of the financial collateral instead of using the standardised volatility adjustments otherwise prescribed by the regulations.

This method allows for better risk measurement when using financial collateral and has a greater impact on reduction of the capital requirement. Handelsbanken regularly monitors the concentration risk in individual securities.

An advanced IRB approach is used for retail exposures, where the exposures are categorised into various groups, partly based on the existence of collateral. For certain types of property collateral, a segmentation is made based on the loan-to-value of the collateral. The LGD of the exposure is established on the basis of these groups.

For corporate exposures and institutional exposures, the capital requirement is reduced through an adjustment of either the PD or the LGD. The PD is adjusted in cases where there are approved protection providers, for example the issuer of a guarantee or surety as for own debt, with a lower PD value than the borrower. For other types of collateral the LGD is adjusted.

Handelsbanken has also entered into a large number of so-called netting agreements with, for example, institutional counterparties, thus reducing the exposure. Information concerning the netting effect is presented in the section on counterparty risk.

<b>Credit risk exposure on balance, broken down by collateral</b>		
SEK m	2013	2012
Residential property <sup>1</sup>	1 030 392	961 955
Other property	245 196	240 895
Sovereigns, municipalities and county councils	452 502	339 171
Guarantees	19 338	18 698
Financial collateral	54 286	89 458
Collateral in assets	19 360	20 115
Other collateral	55 671	57 798
Unsecured	272 851	287 854
<b>Total credit risk exposure on balance</b>	<b>2 149 596</b>	<b>2 015 944</b>

<sup>1</sup> Including housing co-operatives.

<b>Loans to the public, broken down by collateral</b>		
SEK m	2013	2012
Residential property <sup>1</sup>	1 030 392	961 955
Other property	245 196	240 895
Sovereigns, municipalities and county councils	59 869	81 404
Guarantees	19 327	18 639
Financial collateral	13 773	26 328
Collateral in assets	19 360	20 114
Other collateral	55 671	57 798
Unsecured	252 751	273 346
<b>Loans to the public</b>	<b>1 696 339</b>	<b>1 680 479</b>

<sup>1</sup> Including housing co-operatives.

### IRB-approved exposures

For capital requirement calculation of corporate exposures, property mortgages correspond to approximately 47 (44) per cent of the reported exposure amount. The equivalent figure for financial collateral mainly in the form of repos is about 2 (3) per cent and it is some 8 (8) per cent for guarantees and other collateral.

For retail exposures, mortgages on property – mainly residential – correspond to around 87 (86) per cent of the reported exposure amount. Of the remaining exposure amount, roughly 1 (1) percentage point is categorised as having some form of collateral, while the remaining 11 (12) percentage points are set an LGD value due to other terms. These terms are chiefly determined by factors such as the type of borrower, type of credit or number of borrowers.

For institutional exposures, financial collateral covers some 55 (62) per cent of the reported exposure amount. The corresponding figure for guarantees is approximately 3 (2) per cent. The

remaining exposure amount is included in the capital requirement calculation as unprotected exposure.

Of the exposures that are covered by guarantees, totalling SEK 100,547 million (104,514), SEK 74,861 million (78,654) relates to guarantees from states and municipalities, SEK 1,246 million (1,313) relates to guarantees from institutions, and SEK 24,350 million (24,547) relates to guarantees from companies. Companies that are approved as guarantors in the calculation of capital requirements according to the IRB method are of risk class four or better.

If an exposure is covered by several cases of collateral and no individual collateral has an approved collateral value according to the capital adequacy calculation which covers the total exposure, the exposure is divided up into one part-exposure per collateral. The capital requirement is then calculated by part-exposure, based on the existence of collateral.

### Exposures calculated according to the standardised approach

For exposures which are reported in the institutional, corporate and retail exposure categories according to the standardised approach, and exposures secured by property, collateral totals about 49 (41) per cent of the reported exposure amount, of which approximately 5 (7) percentage points refer to guarantees.

For all exposures calculated using the standardised approach, the regulations state a risk weight based on the exposure class of the counterparty. The risk weight multiplied by the exposure amount gives the risk-weighted exposure amount.

Acceptable collateral which reduces the capital requirement, IRB-approved exposures		2013		2012	
		Exposure amount covered by collateral	Proportion of total exposure (%)	Exposure amount covered by collateral	Proportion of total exposure (%)
SEK m	Type of collateral				
Corporate exposures	- Guarantees	94 951	8	99 017	8
	- Receivables	893	0	2 472	0
	- Financial collateral	18 098	2	34 415	3
	- Property	548 739	47	522 725	44
Retail exposures	- Guarantees	143	0	115	0
	- Residential property <sup>1</sup>	712 211	87	673 190	86
Institutional exposures	- Guarantees	3 313	3	3 265	2
	- Financial collateral	61 090	55	85 688	62
	- Property	0	0	0	0
Securitisation positions	- Guarantees	2 050	60	2 117	54
<b>Total IRB</b>		<b>1 441 488</b>	<b>69</b>	<b>1 423 004</b>	<b>67</b>

<sup>1</sup> Including housing co-operatives.

Collateral which reduces the capital requirement, exposures calculated according to the standardised approach		2013		2012	
		Exposure amount covered by collateral	Proportion of total exposure (%)	Exposure amount covered by collateral	Proportion of total exposure (%)
SEK m	Type of collateral				
Sovereign & central banks	- Financial collateral	7 818	2	12 494	4
Institutions	- Guarantees	204	7	39	1
	- Financial collateral	12	0	60	1
Corporate	- Guarantees	2 110	7	6 385	16
	- Financial collateral	1 380	4	305	1
Retail	- Guarantees	0	0	0	0
	- Financial collateral	669	4	650	5
Collateral in property	- Property	39 443	100	28 018	100
<b>Total standardised approach</b>		<b>51 636</b>	<b>11</b>	<b>47 951</b>	<b>11</b>

**Loan-to-value for property lending**

For property financing, like all granting of credit, the borrower must have a good repayment capacity. For mortgage loans to private individuals, the Swedish Financial Supervisory Authority's regulations on the mortgage ceiling apply.

The below recommendation concerning maximum loan-to-value ratios (LTV) for property financing applies to the whole Handelsbanken Group. The LTV is based on the market value.

- Multi-family dwellings, including housing co-operatives, 75 per cent
- Commercial and office property, 60 per cent
- Family farms, forestry and agricultural properties, 75 per cent.

The recommended LTVs correspond to what is applied at Stadshypotek. At the time of granting the credit, LTVs which exceed the recommendations are never permitted at Stadshypotek.

For loans in the Bank, LTVs which exceed the recommendations may occur but must be specially justified.

The value of industrial and warehouse property and undeveloped land may often be much more volatile than for other property, partly due to the location, alternative use etc. The LTV should therefore be well below 60 per cent.

Financing of industrial and warehouse property and undeveloped land is only permitted in the Bank, i.e. this type of property is not eligible for loans from Stadshypotek.

**Property lending at Stadshypotek, Sweden**

Stadshypotek's lending takes place through Handelsbanken's branch network. A co-operation agreement regulates the overarching relationship between the parties.

According to the Handelsbanken Group's credit policy, weak repayment capacity can never be accepted on the grounds that good collateral has been offered to the Bank. Collateral may, however, substantially reduce Stadshypotek's loss if the borrower cannot fulfil his/her commitments towards Stadshypotek. Credits in Stadshypotek must therefore always be satisfactorily secured by mortgages in property or a co-operative apartment. Unsecured loans are only granted when governments or municipalities are the borrower or the guarantor.

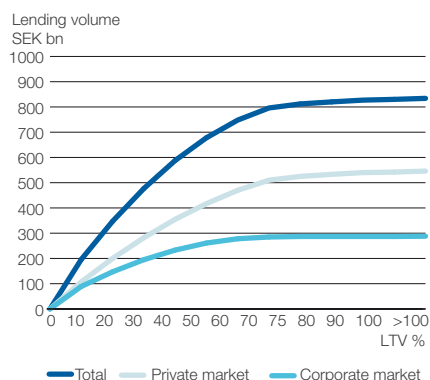
The tables below show the total loan volume broken down into loan-to-value ratios (LTV) for Stadshypotek's Swedish property lending. An accumulated distribution of the LTVs as at 31 December 2013 is also presented. The graph shows that a very heavy fall in prices of property

would be required for large parts of the lending volume to exceed a 100 per cent LTV.

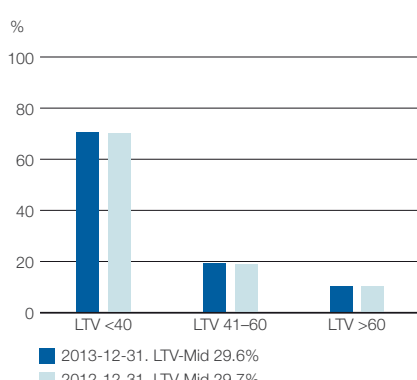
Loan-to-value is lending as a proportion of the market value of the collateral. The calculation takes account of any pledging with other credit institutions. The latest valuation is mainly used as the market value when compiling the LTVs. Handelsbanken continuously checks the market values for properties: residential properties at least every three years and commercial properties every year. In addition to allocating the loan volume into LTVs, at Stadshypotek the average LTV is calculated by weighting each property's highest LTV according to the principal debt (LTV Max).

LTV Mid is a calculated average of mortgage priority intervals in the diagram "Proportion of loan volume distributed by LTVs (Stadshypotek, Sweden)". The calculation of LTV Mid is weighted according to the principal debt in the mortgage priority interval. If an institution has all its lending with highest priority, LTV Mid will be half of LTV Max. The below table shows that LTV Mid is almost half of LTV Max which means that almost all of Stadshypotek's loans have the highest priority mortgages.

**Lending volume broken down by LTV, Stadshypotek, Sweden 31 December 2013**

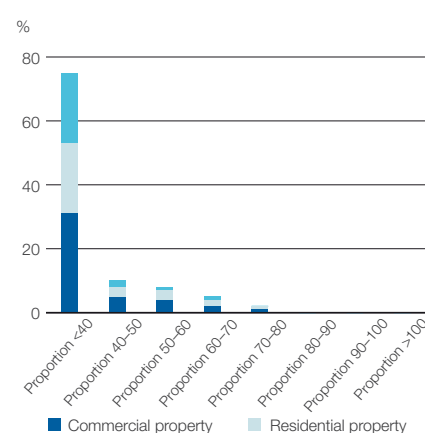


**Proportion of loan volume, distributed by LTVs Stadshypotek, Sweden**



The lending in one property can occur in several intervals.

**Distribution of corporate exposures by LTV (LTV-Mid), and property type, regional banks**



**LTV for property lending, Stadshypotek Sweden, mortgages specified by property, private and corporate market**

	31 December 2013			31 December 2012		
	Private market %	Corporate market %	Total	Private market %	Corporate market %	Total
0-40%	65.0	81.1	70.5	65.0	81.0	70.4
41-60%	21.0	15.6	19.2	20.8	15.7	19.1
61-75%	10.2	2.9	7.7	10.1	2.9	7.7
>75%	3.8	0.4	2.6	4.1	0.4	2.8
LTV-Max	64.6	44.7	57.7	64.5	44.6	57.8
LTV-Mid	33.0	23.3	29.6	33.0	23.3	29.7

**LTV for property lending, Stadshypotek Sweden, if property prices fall by 10 per cent**

LTV-Max	71.6	49.7	64.1
LTV-Mid	36.6	25.9	32.9

LTV-Max The highest loan-to-value of the property is weighted according to the principal debt.  
 LTV-Mid The collateral level distribution of the property is weighted according to the principal debt within the collateral level interval.

**CREDIT PORTFOLIO****Breakdown of the portfolio**

The Bank's credit portfolio is presented in this section based on the balance sheet item categories. The section on Capital requirement for credit risks on page 26 presents the credit portfolio based on the capital adequacy regulations.

Unlike balance sheet information – where credit risk exposure is categorised in balance sheet items in the form of loans to the public/ loans to credit institutions and off-balance sheet items divided into product type – credit exposure for the purposes of capital requirement is categorised into the exposure classes stipulated in

the regulations for the respective calculation method. Exposure means the sum of items on and off the balance sheet.

Credit risk exposure SEK m	2013	2012
Loans to the public <sup>1</sup>	1 696 339	1 680 479
<i>of which reverse repos</i>	15 711	33 799
Loans to other credit institutions	62 898	89 511
<i>of which reverse repos</i>	33 874	59 241
Unutilised part of granted overdraft facilities	122 572	132 534
Committed loan offers	246 518	239 774
Other commitments	9 046	20 779
Guarantees, credits	8 371	10 723
Guarantees, other	58 568	39 913
Letters of credit	7 190	30 164
Derivatives <sup>2</sup>	69 961	110 850
Treasury bills and other eligible bills	57 451	48 906
Bonds and other fixed-income securities	64 125	68 354
<b>Total</b>	<b>2 403 039</b>	<b>2 471 987</b>

The amounts do not include holdings with central banks.

<sup>1</sup> SEK 2,580m (4,078) of this amount is loans which upon initial recognition were classified at fair value in the income statement.

<sup>2</sup> Refers to the total of positive market values. Including legally viable netting agreements, the exposure is SEK 25,775m (30,422).

Geographical distribution 2013 SEK m	Loans				Off-balance sheet commitments		Total
	Public	Credit institutions	Derivatives	Investments	Guarantees	Other	
Sweden	1 153 930	21 598	69 957	98 399	26 896	227 889	1 598 669
UK	131 424	546	-552	0	5 390	27 874	164 682
Denmark	70 725	73	57	5	2 890	26 619	100 369
Finland	100 119	186	70	0	3 791	24 728	128 894
Norway	196 596	110	0	0	7 299	49 558	253 563
Netherlands	17 869	3	0	0	678	4 310	22 860
Germany	4 778	39	9	0	3 368	5 345	13 539
Poland	2 297	74	0	0	1 043	81	3 495
USA	2 827	33 555	406	21 619	10 726	13 730	82 863
Other countries	15 774	6 714	14	1 553	4 858	5 192	34 105
<b>Total</b>	<b>1 696 339</b>	<b>62 898</b>	<b>69 961</b>	<b>121 576</b>	<b>66 939</b>	<b>385 326</b>	<b>2 403 039</b>

Geographical distribution 2012 SEK m	Loans				Off-balance sheet commitments		Total
	Public	Credit institutions	Derivatives	Investments	Guarantees	Other	
Sweden	1 169 937	33 297	110 726	99 942	23 486	273 379	1 710 767
UK	112 871	339	-942	0	3 763	24 207	140 238
Denmark	65 200	51	121	27	2 137	19 628	87 164
Finland	88 247	304	116	-	4 543	23 306	116 516
Norway	204 473	32	2	-	7 728	40 176	252 411
Netherlands	13 261	3	-	-	656	5 601	19 521
Germany	7 136	243	20	-	3 051	7 600	18 050
Poland	2 573	86	1	-	719	190	3 569
Other countries	16 781	55 156	806	17 291	4 553	29 164	123 751
<b>Total</b>	<b>1 680 479</b>	<b>89 511</b>	<b>110 850</b>	<b>117 260</b>	<b>50 636</b>	<b>423 251</b>	<b>2 471 987</b>

Loans to the public, by sector	2013			2012		
	Loans before deduction of provisions	Provisions for probable loan losses	Loans after deduction of provisions	Loans before deduction of provisions	Provisions for probable loan losses	Loans after deduction of provisions
SEK m						
Private individuals	788 495	-790	787 705	743 454	-852	742 602
<i>of which mortgage loans</i>	642 459	-54	642 405	607 163	-44	607 119
<i>of which other loans with property mortgages</i>	77 461	-111	77 350	67 031	-115	66 916
<i>of which other loans, private individuals</i>	68 575	-625	67 950	69 260	-693	68 567
Housing co-operative associations	140 320	-33	140 287	129 131	-17	129 114
<i>of which mortgage loans</i>	128 524	-9	128 515	105 421 <sup>1</sup>	-4	105 417
Property management	461 726	-394	461 332	436 694	-365	436 329
Manufacturing	39 051	-517	38 534	45 170	-473	44 697
Retail	31 570	-362	31 208	33 646	-441	33 205
Hotel and restaurant	7 396	-24	7 372	8 234	-36	8 198
Passenger and goods transport by sea	14 733	-423	14 310	17 839	-406	17 433
Other transport and communication	26 972	-80	26 892	32 406	-182	32 224
Construction	12 295	-116	12 179	13 395	-106	13 289
Electricity, gas and water	23 620	-44	23 576	23 965	-25	23 940
Agriculture, hunting and forestry	8 365	-25	8 340	8 917	-15	8 902
Other services	22 996	-101	22 895	25 558	-213	25 345
Holding, investment, insurance companies, mutual funds etc.	73 272	-569	72 703	89 219	-601	88 618
Sovereigns and municipalities	20 935		20 935	36 711	-	36 711
Other corporate lending	28 496	-68	28 428	40 268	-108	40 160
<b>Total loans to the public, before collective provisions</b>	<b>1 700 242</b>	<b>-3 546</b>	<b>1 696 696</b>	<b>1 684 607</b>	<b>-3 840</b>	<b>1 680 767</b>
Collective provisions			-357			-288
<b>Total loans to the public</b>	<b>1 700 242</b>		<b>1 696 339</b>	<b>1 684 607</b>		<b>1 680 479</b>

<sup>1</sup> The amount only includes Stadshypotek Sweden.

Loans to the public, by sector broken down by country 2013								
SEK m	Sweden	UK	Denmark	Finland	Norway	Netherlands	Other countries	Total
Private individuals	599 930	32 737	35 890	32 467	80 051	2 942	3 688	787 705
<i>of which mortgage loans</i>	553 400	0	18 032	22 460	48 513	0	0	642 405
<i>of which other loans with property mortgages</i>	15 661	20 985	13 468	6 038	15 263	2 747	3 188	77 350
<i>of which other loans, private individuals</i>	30 869	11 752	4 390	3 969	16 275	195	500	67 950
Housing co-operative associations	119 564	0	446	9 171	11 106	0	0	140 287
Property management	248 084	81 060	11 991	23 612	76 397	12 633	7 555	461 332
Manufacturing	21 380	2 743	1 498	3 688	3 440	1 065	4 720	38 534
Retail	17 385	5 334	2 827	2 502	2 762	0	398	31 208
Hotel and restaurant	2 802	1 987	974	380	179	0	1 050	7 372
Passenger and goods transport by sea	3 508	41	3 589	3 338	3 705	0	129	14 310
Other transport and communication	20 717	325	392	2 994	1 236	214	1 014	26 892
Construction	5 761	1 095	287	973	4 063	0	0	12 179
Electricity, gas and water	10 981	31	488	8 827	2 456	0	793	23 576
Agriculture, hunting and forestry	7 420	681	149	54	36	0	0	8 340
Other services	10 797	3 045	2 336	2 547	3 053	453	664	22 895
Holding, investment, insurance companies, mutual funds etc.	56 593	1 109	4 417	1 126	5 622	444	3 392	72 703
Sovereigns and municipalities	13 690	0	2	7 050	193	0	0	20 935
Other corporate lending	15 530	1 270	5 455	1 426	2 344	123	2 280	28 428
<b>Total loans to the public, before collective provisions</b>	<b>1 154 142</b>	<b>131 458</b>	<b>70 741</b>	<b>100 155</b>	<b>196 643</b>	<b>17 874</b>	<b>25 683</b>	<b>1 696 696</b>
Collective provisions	-212	-34	-16	-36	-47	-5	-7	-357
<b>Total loans to the public</b>	<b>1 153 930</b>	<b>131 424</b>	<b>70 725</b>	<b>100 119</b>	<b>196 596</b>	<b>17 869</b>	<b>25 676</b>	<b>1 696 339</b>

### Securitisation

Handelsbanken has limited exposures which are securitisations. These are holdings in bonds and other debt instruments issued by special purpose vehicles. These exposures are mainly in the Bank's liquidity portfolio. Existing holdings mature at regular intervals and no new investments are made. The purpose of the holdings is to utilise them as collateral with various central

banks and thus create liquidity facilities. But the Bank has no securitisations of its own.

Handelsbanken has applied the IRB approach to securitisations in other operations since the fourth quarter of 2008.

All securitised exposures were acquired prior to 2008. Handelsbanken's total exposure in securitisation positions after credit risk protection amounts to SEK 1,369 million (1,819).

Of this sum, SEK 491 million (496) has been deducted from the capital base. All positions are in the role of investor. The risk weight for positions in securitisations is determined on the basis of external credit rating using the external rating approach.

Securitisation positions in other operations after credit risk protection by risk weight 2013				
SEK m	Exposure amount	Risk weight		
		7-10%	12-850%	1 250%
Traditional securitisation	878	365	-	513
Synthetic securitisation	-	-	-	-
<b>Total IRB</b>	<b>878</b>	<b>365</b>		<b>513</b>

Securitisation positions in trading portfolio by risk weight 2013				
SEK m	Exposure amount	Risk weight		
		7-10%	12-850%	1 250%
Securitisation	111	111	-	-
<b>Total</b>	<b>111</b>	<b>111</b>		

Securitisation positions in other operations after credit risk protection by risk weight 2012				
SEK m	Exposure amount	Risk weight		
		7-10%	12-850%	1 250%
Traditional securitisation	1 323	807	-	516
Synthetic securitisation	-	-	-	-
<b>Total IRB</b>	<b>1 323</b>	<b>807</b>		<b>516</b>

Securitisation positions in trading portfolio by risk weight 2012				
SEK m	Exposure amount	Risk weight		
		7-10%	12-850%	1 250%
Securitisation	174	174	-	-
<b>Total</b>	<b>174</b>	<b>174</b>		

### Credit risk concentrations

Handelsbanken's branches focus strongly on establishing long-term relationships with customers of sound creditworthiness. If a branch identifies a good customer, it should be able to do business with this customer, irrespective of whether the Bank as a whole has major exposure to the business sector that the customer represents. In granting credit the Bank thus has no built-in restrictions to having relatively extensive exposures in individual sectors. The Bank monitors and calculates concentration risks continually for various business sectors, geographic areas and individual major exposures. Concentration risks are identified in the Bank's calculation of economic capital for credit risks and in the stress tests conducted in the internal capital adequacy assessment. This ensures that Handelsbanken has sufficient capital, taking into account concentration risks. If the concentration risks are judged to be excessive, the Bank has the opportunity and capacity to reduce them using various risk mitigation measures.

In addition to mortgage loans and lending to housing co-operative associations, Handelsbanken has considerable lending operations

for property management (SEK 462 billion). Property management refers here to all companies assessed for credit purposes as "property companies". It is common for groups of companies operating in other industries to have subsidiaries managing the properties in which the group conducts business, and such property companies are also considered here to belong to the property management. However, the underlying credit risk in such cases is not only property-related.

A large proportion of property lending is to government-owned property companies, municipal housing companies and other housing-related operations where the borrowers consistently have strong, stable cash flows and thus very high creditworthiness. A large part of lending to the property sector is therefore to companies with a very low probability of default and low LTVs. The Bank's exposure to the property sector is specified in the tables below.

The proportion of exposures to property counterparties with a poorer rating than the Bank's risk class 5 (normal risk) is very low. 98 (96) per cent of total property lending in Sweden is in risk class 5 or better. The corresponding

figures for property lending in the UK, Denmark, Finland, Norway and the Netherlands are 96 (94) per cent, 99 (91) per cent, 92 (99) per cent, 93 (95) per cent and 100 per cent respectively. For counterparties in poorer risk classes than normal, the majority are in risk classes 6 or 7 with only small volumes in the higher risk classes 8 and 9.

In the past few years, Handelsbanken has seen major credit growth in the UK as a result of a planned expansion of the branch network. A relatively large part of the growth has been in property-related credits. This has occurred during a period of poor performance in the UK property market. A strict credit policy often makes it easier to assess creditworthiness in a poorer economic climate since it is easier to identify potential problems. In its expansion, Handelsbanken has had the same strict requirements on repayment capacity and collateral quality as in its other home markets. The result of this is a high concentration of customers in good risk classes and a loan loss ratio in line with other home markets.

Specification Loans to the public – Property management	2013			2012		
	Loans before deduction of provisions	Provisions for probable loan losses	Loans after deduction of provisions	Loans before deduction of provisions	Provisions for probable loan losses	Loans after deduction of provisions
SEK m						
<b>Loans in Sweden</b>						
State-owned property companies	7 798	-	7 798	9 213	-	9 213
Municipal-owned property companies	15 430	-	15 430	14 468	-	14 468
Residential property companies	73 571	-15	73 556	72 894	-13	72 881
<i>of which mortgage loans</i>	57 726	-1	57 725	52 759	-3	52 756
Other property management	151 410	-110	151 300	145 066	-129	144 937
<i>of which mortgage loans</i>	75 969	-3	75 966	61 097	-5	61 092
<b>Total loans in Sweden</b>	<b>248 209</b>	<b>-125</b>	<b>248 084</b>	<b>241 641</b>	<b>-142</b>	<b>241 499</b>
<b>Loans outside Sweden</b>						
UK	81 129	-69	81 060	69 699	-20	69 679
Denmark	12 108	-117	11 991	10 623	-96	10 527
Finland	23 612	-	23 612	19 481	-10	19 471
Norway	76 457	-60	76 397	80 549	-74	80 475
Netherlands <sup>1</sup>	12 633	-	12 633			
Other countries	7 578	-23	7 555	14 701	-23	14 678
<b>Total loans outside Sweden</b>	<b>213 517</b>	<b>-269</b>	<b>213 248</b>	<b>195 053</b>	<b>-223</b>	<b>194 830</b>
<b>Total loans – property management</b>	<b>461 726</b>	<b>-394</b>	<b>461 332</b>	<b>436 694</b>	<b>-365</b>	<b>436 329</b>

<sup>1</sup> Regional bank as of 1 January 2013.

Specification Loans to the public – Property management	2013					2012				
	Total	Companies owned by government and municipality/property lending guaranteed by government and municipality	Multi-family dwellings/residential property	Commercial properties and other collateral	Unsecured	Total	Companies owned by government and municipality/property lending guaranteed by government and municipality	Multi-family dwellings/residential property	Commercial properties and other collateral	Unsecured
SEK m										
Sweden	248 209	24 744	89 037	111 582	22 846	241 641	25 252	80 983	105 039	30 367
UK	81 129	0	34 724	41 475	4 930	69 699	9	29 339	36 623	3 728
Denmark	12 108	0	6 290	3 813	2 005	10 623	1	5 368	3 911	1 343
Finland	23 612	8 549	2 974	10 452	1 637	19 481	6 624	2 492	8 982	1 383
Norway	76 457	964	13 626	52 671	9 196	80 549	24	17 146	49 518	13 861
Netherlands	12 633	0	3 682	8 046	905					
Other countries	7 578	532	828	5 645	573	14 701	694	1 801	10 670	1 536
<b>Total</b>	<b>461 726</b>	<b>34 789</b>	<b>151 161</b>	<b>233 684</b>	<b>42 092</b>	<b>436 694</b>	<b>32 604</b>	<b>137 129</b>	<b>214 743</b>	<b>52 218</b>



**Specification Loans to the public – Property management, risk class and country 2013**  
 SEK m

Risk class	Sweden	UK	Denmark	Finland	Norway	Netherlands	Other countries	Total		%	Accum. % of total
1	20 341	746	2	3 143	1 234	62	930	26 458	5.73		6
2	69 224	14 996	440	10 899	13 566	4 474	3 641	117 240	25.39		31
3	91 645	36 764	5 881	7 484	36 291	5 979	2 290	186 334	40.36		71
4	45 804	15 657	2 965	1 341	16 312	1 575	196	83 850	18.17		90
5	15 851	7 461	1 844	487	5 678	487	390	32 198	6.97		97
6	2 492	1 917	225	155	1 762	0	105	6 656	1.44		98
7	1 643	1 855	187	33	1 165	56	0	4 939	1.07		99
8	327	401	163	16	38	0	0	944	0.20		99
9	139	112	33	0	56	0	0	340	0.07		99
Defaults	743	1 220	368	54	356	0	25	2 766	0.60		100
<b>Total</b>	<b>248 209</b>	<b>81 129</b>	<b>12 108</b>	<b>23 612</b>	<b>76 458</b>	<b>12 633</b>	<b>7 577</b>	<b>461 726</b>	<b>100</b>		

**Specification Loans to the public – Property management, risk class and country 2012**  
 SEK m

Risk class	Sweden	UK	Denmark	Finland	Norway	Netherlands <sup>1</sup>	Other countries	Total		%	Accum. % of total
1	20 059	1 027	3	3 125	1 218		882	26 314	6.03		6
2	71 341	11 856	545	8 156	17 202		6 165	115 265	26.39		32
3	88 330	31 319	3 650	6 119	34 650		6 105	170 173	38.97		71
4	37 792	14 745	4 015	1 351	18 761		855	77 519	17.75		89
5	16 651	6 491	1 412	523	4 870		331	30 278	6.93		96
6	4 663	1 883	263	84	2 018		260	9 171	2.10		98
7	1 864	1 265	169	90	1 185		17	4 590	1.05		99
8	328	121	233	9	109		16	816	0.19		99
9	171	37	1	7	67		-	283	0.07		99
Defaults	442	954	332	17	469		71	2 285	0.52		100
<b>Total</b>	<b>241 641</b>	<b>69 698</b>	<b>10 623</b>	<b>19 481</b>	<b>80 549</b>		<b>14 702</b>	<b>436 694</b>	<b>100</b>		

<sup>1</sup> Regional bank as of 1 January 2013.

**Specification Loans to the public – Property management, risk class and type of collateral 2013**  
 SEK m

Risk class	Exposure		Collateral			Unsecured
			Multi-family dwellings/ residential property	Commercial property	Guarantee from government or municipality	
1	26 458	14 253	5 282	4 186	1 186	1 551
2	117 240	41 572	54 975	8 894	977	10 822
3	186 334	63 910	94 792	3 822	6 216	17 594
4	83 850	23 497	46 212	473	5 988	7 680
5	32 198	10 249	14 940	540	3 630	2 839
6	6 656	2 281	3 710	11	332	322
7	4 940	1 683	2 520	9	211	517
8	944	357	366	0	9	212
9	340	182	120	0	3	35
Defaults	2 766	1 134	808	8	75	741
<b>Total</b>	<b>461 726</b>	<b>159 118</b>	<b>223 725</b>	<b>17 943</b>	<b>18 627</b>	<b>42 313</b>

**Specification Loans to the public – Property management, risk class and type of collateral 2012**  
 SEK m

Risk class	Exposure		Collateral			Unsecured
			Multi-family dwellings/ residential property	Commercial property	Guarantee from government or municipality	
1	26 314	13 815	5 590	3 406	555	2 948
2	115 265	35 677	50 046	6 772	968	21 802
3	170 173	56 803	84 866	3 934	5 198	19 372
4	77 519	22 030	43 577	619	4 963	6 330
5	30 278	10 483	13 538	348	3 195	2 714
6	9 171	2 829	4 343	25	681	1 293
7	4 590	1 586	2 108	16	157	723
8	816	339	396	2	9	70
9	283	54	162	0	43	24
Defaults	2 285	846	745	8	68	618
<b>Total</b>	<b>436 694</b>	<b>144 462</b>	<b>205 371</b>	<b>15 130</b>	<b>15 837</b>	<b>55 894</b>

**IMPAIRMENTS AND PAST DUE LOANS**

Loans are defined as impaired if contracted cash flows are not likely to be fulfilled. The full amount of all loans which have been classified as impaired are carried as impaired loans even if parts of the loan are covered by collateral. This means that the reserve ratio (provision for probable loan losses as a proportion of impaired loans) does not provide an indication of the remaining risk of loss. Loans which have been written off as actual loan losses are not included in impaired loans.

A past due loan is identified as a loan for which interest, repayments or overdrafts have been overdue for payment for more than five days. In addition to the definition of default established in the capital adequacy regulations, the time for identification of a past due claim is determined internally.

All units with customer and credit responsibility in the Handelsbanken Group regularly perform individual assessments of the need for recognising impairment losses for loans and receivables that are recognised at amortised cost. Impairment testing is performed where there is objective evidence that the recoverable amount of the loan is less than its carrying amount. Objective evidence could, according to the circumstances, be late or non-payment, bankruptcy, changed credit rating, or a decline in the market value of the collateral.

When performing impairment testing, the recoverable value of the loan is calculated by discounting the estimated future cash flows related to the loan and any collateral (including guarantees) by the effective interest rate of the loan. If the collateral is a listed asset, the valuation of the collateral is based on the quoted price; otherwise the valuation is based on the yield value or the market value estimated in some other manner. Collateral in the form of property mortgages is valued in the same way as repossessed real property. An impairment loss is recognised if the estimated recoverable amount is less than the carrying amount and is recognised as a loan loss in the income state-

ment. A reported loan loss reduces the carrying amount of the loan in the balance sheet, either directly (actual loss) or by a provision account for loan losses (probable loss). Information concerning repossessed property to protect claims can be found in note G10, Loan losses, in the Annual Report.

In addition to the above-mentioned assessment of individual loans, a collective assessment is made of individually valued loans and of homogenous groups of loans with a similar risk profile, with the purpose of identifying the need to recognise an impairment loss that cannot yet be allocated to individual loans. If necessary, a group impairment is recognised for the group of loans. This impairment loss is based on events that have occurred and that signal lower credit-worthiness but that have not been observed individually and where no default has actually occurred. The provisioned amount is based on the change in expected loss in the case of rating migration to risk classes that are poorer than normal risk. Impairment losses which have been recognised for a group of loans are transferred to impairment losses for individual loans as soon as there is information that a provision at an individual level is needed.

Loan losses for the period comprise actual losses and probable losses on credits granted, minus recoveries and reversals of previous impairment losses recognised for probable loan losses. Actual loan losses may refer to entire loans or parts of loans and are recognised when there is no realistic possibility of recovery. This is the case, for example, when a trustee in bankruptcy has estimated bankruptcy dividends, a scheme of arrangement has been accepted or the receivable has been waived in some other way. An amount forgiven in connection with reconstruction of a loan or group of loans is always classified as an actual loss. If the customer is following a payment plan for a loan which was already previously classified as an actual loan loss, the amount of the loss is subject to new testing.

Recoveries comprise reversed amounts on

loan losses previously reported as actual losses. Information about probable and actual losses is provided in note G10, Loan losses, in the Annual Report.

Impairment losses on available-for-sale financial assets are recognised when there is objective evidence that one or more events of default have occurred with an impact on expected future cash flows for the asset. For interest-bearing financial assets, examples of events of default that may indicate an impairment loss are a probable bankruptcy, evidence of considerable financial difficulties on the part of the issuer or evidence of permanent changes in the market for the asset. For equity instruments, a permanent or considerable decline in the fair value is an indication of the need to recognise an impairment loss. When recognising an impairment loss, the part of the cumulative loss that was previously recognised in the fair value reserve in equity (corresponding to the difference between the acquisition cost and the current fair value less any previous impairment loss) is recognised in the income statement.

Previously recognised impairment losses on interest-bearing securities classified as available-for-sale financial assets are reversed in the income statement if the fair value of the asset has increased since the impairment loss was recognised and the increase can be objectively related to an event occurring after the impairment loss was recognised. Previous impairment losses on equity instruments classified as available-for-sale financial instruments are not reversed.

The below maturity analysis of past due loans that are not impaired loans is divided into the volumes in question based on the balance sheet. For non-performing loans that are not impaired loans, the assessment is that contracted payments will probably be fulfilled.

Maturity structure for past due loans which are not impaired 2013		Loans to the public			Total
		Loans to credit institutions	Retail	Corporate	
SEK m					
Past due ≥ 5 days ≤1 month	-	3 088	1 174	-	4 262
Past due >1 month ≤2 months	-	395	166	-	561
Past due >2 months ≤3 months	-	247	117	-	364
Past due >3 months ≤12 months	-	614	405	-	1 019
Past due >12 months	-	608	159	-	767
<b>Total</b>	-	<b>4 952</b>	<b>2 021</b>	-	<b>6 973</b>

Maturity structure for past due loans which are not impaired 2012		Loans to the public			Total
		Loans to credit institutions	Retail	Corporate	
SEK m					
Past due ≥ 5 days ≤1 month	-	3 827	1 636	-	5 463
Past due >1 month ≤2 months	-	481	154	-	635
Past due >2 months ≤3 months	-	391	119	-	510
Past due >3 months ≤12 months	-	1 035	213	-	1 248
Past due >12 months	-	591	214	-	805
<b>Total</b>	-	<b>6 325</b>	<b>2 336</b>	-	<b>8 661</b>

Past due exposures, provisions for probable losses and impact on profit/loss for IRB-approved exposures, by exposure classes 2013				Impact on profit/loss 2013	
SEK m	Past due > 5 days EAD	EAD on agreement for provision	Provision probable losses	Gross provision <sup>1</sup>	Net incl. reversals
Corporate exposures	4 097	3 339	1 621	-751	-556
Retail exposures	5 944	1 731	1 326	-505	-421
private individuals	5 174	1 144	796	-331	-279
<i>of which property loans</i>	2 943	234	163	-45	-38
<i>of which other</i>	2 231	910	633	-286	-241
small companies	770	587	531	-174	-142
<i>of which property loans</i>	38	218	197	-80	-68
<i>of which other</i>	732	369	334	-94	-74
Institutional exposures	33	0	0	0	0
Securitisation positions	0	1 003	513	0	3
<b>Total</b>	<b>10 074</b>	<b>6 073</b>	<b>3 460</b>	<b>-1 256</b>	<b>-974</b>

Past due exposures, exposures with impairment losses and impact on profit/loss for non-IRB-approved exposures using the standardised approach 2013				Impact on profit/loss 2013	
SEK m		Exposures with provision	Provision probable losses	Gross provision <sup>1</sup>	Net incl. reversals
Past due items		262	86	-31	-24

<sup>1</sup> Gross provisions refer to probable losses which have reduced the year's profits, excluding reversals.

Past due exposures, provisions for probable losses and impact on profit/loss for IRB-approved exposures, by exposure classes 2012				Impact on profit/loss 2012	
SEK m	Past due > 5 days EAD	EAD on agreement for provision	Provision probable losses	Gross provision <sup>1</sup>	Net incl. reversals
Corporate exposures	5 175	2 890	1 786	-884	-733
Retail exposures	7 117	1 625	1 319	-427	-400
private individuals	6 258	1 055	779	-262	-251
<i>of which property loans</i>	3 690	211	156	-54	-52
<i>of which other</i>	2 568	844	623	-208	-199
small companies	859	570	540	-165	-149
<i>of which property loans</i>	54	207	196	-60	-50
<i>of which other</i>	805	363	344	-105	-99
Institutional exposures	53	0	0	0	0
Securitisation positions	0	1 011	516	0	86
<b>Total</b>	<b>12 345</b>	<b>5 526</b>	<b>3 621</b>	<b>-1 312</b>	<b>-1 048</b>

Past due exposures, exposures with impairment losses and impact on profit/loss for non-IRB-approved exposures using the standardised approach 2012				Impact on profit/loss 2012	
SEK m		Exposures with provision	Provision probable losses	Gross provision <sup>1</sup>	Net incl. reversals
Past due items		431	219	-79	-68

<sup>1</sup> Gross provisions refer to probable losses which have reduced the year's profits, excluding reversals.

Impaired and/or non-performing loans, geographic distribution 2013	Impaired loans			Non-performing	
	Gross	Provisions	Net <sup>1</sup>	Of which non-performing	loans which are not impaired loans
Sweden	2 605	-1 367	1 238	1 106	1 126
UK	320	-106	214	47	459
Denmark	1 324	-871	453	173	19
Finland	1 090	-444	646	396	153
Norway	433	-177	256	214	310
Netherlands	15	-3	12	12	-
Rest of Europe	140	-65	75	69	83
North America	1 015	-513	502	-	-
Asia	2	0	2	-	-
<b>Total</b>	<b>6 944</b>	<b>-3 546</b>	<b>3 398</b>	<b>2 017</b>	<b>2 150</b>

<sup>1</sup> Carrying amount after deduction of specific provisions for individually valued loans and provisions for collectively valued loans but excluding collective provisions for loans which are individually assessed.

Impaired and/or non-performing loans, geographic distribution 2012	Impaired loans				Non-performing loans which are not impaired loans
	Gross	Provisions	Net <sup>1</sup>	Of which non-performing	
SEK m					
Sweden	2 762	-1 653	1 109	989	1 327
UK	440	-158	282	177	441
Denmark	1 239	-811	428	237	34
Finland	1 042	-318	724	415	278
Norway	645	-292	353	207	417
Netherlands	-	-	-	-	-
Rest of Europe	174	-92	82	43	66
North America	1 021	-516	505	-	-
Asia	2	0	2	-	-
<b>Total</b>	<b>7 325</b>	<b>-3 840</b>	<b>3 485</b>	<b>2 068</b>	<b>2 563</b>

<sup>1</sup> Carrying amount after deduction of specific provisions for individually valued loans and provisions for collectively valued loans but excluding collective provisions for loans which are individually assessed.

<sup>2</sup> Regional bank as of 1 January 2013.

Impaired and/or non-performing loans, by sector 2013	Impaired loans				Non-performing loans which are not impaired loans
	Gross	Provisions	Net <sup>1</sup>	Of which non-performing	
SEK m					
Private individuals	1 634	-790	844	689	1 316
Housing co-operative associations	101	-33	68	45	7
Property management	1 299	-394	905	560	526
Manufacturing	890	-517	373	189	9
Retail	705	-362	343	210	42
Hotel and restaurant	37	-24	13	11	9
Passenger and goods transport by sea	424	-423	1	1	1
Other transport and communication	110	-80	30	28	5
Construction	194	-116	78	71	88
Electricity, gas and water	72	-44	28	28	7
Agriculture, hunting and forestry	33	-25	8	7	2
Other services	153	-101	52	43	33
Holding, investment, insurance companies, mutual funds etc.	1 138	-569	569	61	4
Other corporate lending	154	-68	86	74	101
Credit institutions	-	-	-	-	-
<b>Total</b>	<b>6 944</b>	<b>-3 546</b>	<b>3 398</b>	<b>2 017</b>	<b>2 150</b>

<sup>1</sup> Carrying amount after deduction of specific provisions for individually valued loans and provisions for collectively valued loans but excluding collective provisions for loans which are individually assessed.

Impaired and/or non-performing loans, by sector 2012	Impaired loans				Non-performing loans which are not impaired loans
	Gross	Provisions	Net <sup>1</sup>	Of which non-performing	
SEK m					
Private individuals	1 541	-852	689	584	1 611
Housing co-operative associations	32	-17	15	12	46
Property management	1 004	-365	639	365	465
Manufacturing	829	-473	356	174	118
Retail	1 085	-441	644	399	45
Hotel and restaurant	79	-36	43	42	19
Passenger and goods transport by sea	419	-406	13	13	0
Other transport and communication	288	-182	106	105	17
Construction	216	-106	110	107	66
Electricity, gas and water	88	-25	63	1	13
Agriculture, hunting and forestry	26	-15	11	9	36
Other services	415	-213	202	190	59
Holding, investment, insurance companies, mutual funds etc	1 153	-601	552	25	13
Other corporate lending	150	-108	42	42	55
Credit institutions	-	-	-	-	-
<b>Total</b>	<b>7 325</b>	<b>-3 840</b>	<b>3 485</b>	<b>2 068</b>	<b>2 563</b>

<sup>1</sup> Carrying amount after deduction of specific provisions for individually valued loans and provisions for collectively valued loans but excluding collective provisions for loans which are individually assessed.

Loan losses SEK m	2013	2012
<b>Specific provision for individually assessed loans</b>		
The year's provision	-1 287	-1 460
Reversal of previous provisions	289	344
<b>Total</b>	<b>-998</b>	<b>-1 116</b>
<b>Collective provisions</b>		
The year's net provision for individually assessed loans	-60	77
The year's net provision for homogeneous loans	15	5
<b>Total</b>	<b>-45</b>	<b>82</b>
<b>Off-balance sheet items</b>		
Losses on off-balance sheet items	-9	-
Reversal of losses on off-balance sheet items	0	0
Changes in collective provision for off-balance sheet items	-10	5
<b>Total</b>	<b>-19</b>	<b>5</b>
<b>Write-offs</b>		
Actual loan losses for the year	-1 503	-1 383
Utilised share of previous provisions	1 174	975
Recoveries	196	186
<b>Total</b>	<b>-133</b>	<b>-222</b>
<b>Net loan losses</b>	<b>-1 195</b>	<b>-1 251</b>
<b>Impaired loans etc.</b> SEK m	<b>2013</b>	<b>2012</b>
Impaired loans	6 944	7 325
Specific provisions for individually assessed loans	-3 454	-3 725
Provisions for collectively assessed homogeneous groups of loans with limited value and similar credit risk	-92	-115
Provisions by group for individually assessed loans	-357	-288
<b>Net impaired loans</b>	<b>3 041</b>	<b>3 197</b>
Total impaired loans reserve ratio, %	56.2	56.4
Proportion of impaired loans, %	0.18	0.18
Impaired loans reserve ratio excluding collective provisions, %	51.1	52.4
Non-performing but not impaired loans	2 150	2 563
Impaired loans reclassified as normal loans during the year	30	41

Loans are classified as impaired loans if contracted cash flows are not likely to be fulfilled. The full amount of all claims which give rise to a specific provision is included in impaired loans even if parts are covered by collateral. This means that the reserve ratio does not take into account collateral received. Non-performing loans are loans where interest, repayments or overdrafts have been due for payment for more than 60 days.

Change in provision for probable loan losses 2013				
SEK m	Provision for individually assessed loans	Collective provision for individually assessed loans	Provision for collectively assessed homogeneous loans	Total provision for probable loan losses
<b>Provision at beginning of year</b>	<b>-3 725</b>	<b>-288</b>	<b>-115</b>	<b>-4 128</b>
The year's provision	-1 287	-60	-55	-1 402
Reversal of previous provisions	289	-	15	304
Utilised for actual loan losses	1 174	-	56	1 230
Foreign exchange effect etc.	95	-9	7	93
<b>Provision at end of year</b>	<b>-3 454</b>	<b>-357</b>	<b>-92</b>	<b>-3 903</b>

Change in provision for probable loan losses 2012				
SEK m	Provision for individually assessed loans	Collective provision for individually assessed loans	Provision for collectively assessed homogeneous loans	Total provision for probable loan losses
<b>Provision at beginning of year</b>	<b>-3 680</b>	<b>-366</b>	<b>-115</b>	<b>-4 161</b>
The year's provision	-1 460	-	-82	-1 542
Reversal of previous provisions	344	77	15	436
Utilised for actual loan losses	975	-	72	1 047
Foreign exchange effect etc.	96	1	-5	92
<b>Provision at end of year</b>	<b>-3 725</b>	<b>-288</b>	<b>-115</b>	<b>-4 128</b>

## CAPITAL REQUIREMENT FOR CREDIT RISKS

This section presents the credit portfolio based on the capital adequacy regulations. The presentations show both the IRB approach and the standardised approach. The IRB portfolios are divided into the foundation approach and the advanced approach. For balance sheet information, see the previous section concerning the credit portfolio. When the capital requirement is calculated, this is normally done for credit exposures calculated according to EAD (exposure at default). This is the sum of

the exposure on the balance sheet and the exposure off the balance sheet multiplied by a conversion factor.

### Exposure, exposure amount and capital requirement

The table below shows exposures and the total exposure amounts within the IRB-approved credit portfolio, their risk-weighted amounts and the capital requirement the exposures will generate. Exposures are the total exposures on and off the balance sheet. Exposure at default (EAD) is the exposure on which the capital require-

ment is calculated under the capital adequacy regulations. The following are also shown: the average exposure amount during the year, the average risk weight for the exposures (the risk-weighted amount divided by the exposure amount) and the average LGD value applied.

When the Bank calculates the capital requirement according to the advanced approach, different risk estimates are used for LGD and CF than those stated in the regulations for the foundation approach. Risk estimates according to the advanced approach are based on the Bank's historical outcome data corrected for

Credits approved for internal risk classification. Exposures according to various definitions and details of capital requirements for various exposure classes 2013

SEK m	Exposure before credit risk protection	Exposure amount (EAD)	Of which off-balance sheet	Average exposure amount	Risk-weighted amount	Average risk weight %	Exposure-weighted LGD %	Capital requirement
<b>Corporate exposures</b>	<b>1 168 255</b>	<b>915 218</b>	<b>135 205</b>	<b>927 699</b>	<b>260 294</b>	<b>28</b>	<b>29</b>	<b>20 824</b>
of which repos and securities loans	8 376	8 376	1 184	-	43	0.5	-	3
of which other lending, foundation approach	242 729	140 425	93 322	-	50 273	36	-	4 022
of which other lending, advanced approach	917 150	766 417	40 699	-	209 978	27	27	16 798
- Large Corporates	237 301	153 810	23 954	-	80 741	52	-	6 459
- Small and medium-sized companies	84 418	72 305	7 208	-	41 534	57	-	3 323
- Property companies	451 542	401 705	7 715	-	80 434	20	-	6 435
- Housing co-operative associations	143 888	138 597	1 823	-	7 269	5	-	582
<b>Retail exposures</b>	<b>820 841</b>	<b>818 080</b>	<b>46 369</b>	<b>793 836</b>	<b>67 558</b>	<b>8</b>	<b>17</b>	<b>5 405</b>
private individuals	790 954	789 722	39 957	765 305	57 545	7	16	4 604
of which property loans	705 005	705 004	14 126	-	36 679	5	-	2 934
of which other	85 949	84 718	25 831	-	20 866	25	-	1 670
small companies	29 887	28 358	6 412	28 531	10 012	35	33	801
of which property loans	7 208	7 207	16	-	1 818	25	-	145
of which other	22 679	21 151	6 396	-	8 194	39	-	656
<b>Institutional exposures</b>	<b>111 476</b>	<b>100 503</b>	<b>46 757</b>	<b>111 947</b>	<b>11 922</b>	<b>12</b>	<b>18</b>	<b>954</b>
of which repos and securities loans	48 863	48 863	6 548	-	384	0.8	-	31
of which other lending	62 613	51 640	40 209	-	11 538	22	-	923
<b>Equity exposures</b>	<b>5 693</b>	<b>5 693</b>		<b>5 473</b>	<b>8 177</b>	<b>144</b>	<b>-</b>	<b>654</b>
<b>Exposures without a counterparty</b>	<b>2 204</b>	<b>2 204</b>		<b>2 373</b>	<b>2 204</b>	<b>100</b>	<b>-</b>	<b>176</b>
<b>Securitisation positions</b>	<b>3 419</b>	<b>878</b>		<b>925</b>	<b>27</b>	<b>3</b>	<b>-</b>	<b>2</b>
Traditional securitisation	878	878		925	27	3	-	2
Synthetic securitisation	-	-	-	-	-	-	-	-
<b>Total IRB</b>	<b>2 111 888</b>	<b>1 842 576</b>	<b>228 331</b>	<b>1 842 253</b>	<b>350 182</b>	<b>19.0</b>		<b>28 015</b>

Credits in the parts of the credit portfolio for which capital requirements are calculated using the standardised approach. Details of capital requirements for various exposure classes where exposures exist, 2013<sup>1</sup>

SEK m	Exposure before credit risk protection	Exposure amount	Of which off-balance sheet	Average exposure amount	Risk-weighted amount	Average risk weight %	Capital requirement
Sovereign and central banks	397 959	406 996	26 149	354 698	144	0.05	12
Municipalities	25 146	57 231	15 809	55 321	22	0.04	2
Multilateral development banks	1 647	1 647	0	1 633	0	0.0	0
Institutions	2 926	2 238	2 114	3 625	568	25	45
Corporate	31 324	23 032	6 335	21 783	23 033	100	1 842
Retail	14 974	11 117	5 188	10 319	8 338	75	667
Property mortgages	39 443	36 378	4 122	31 324	13 769	38	1 102
Past due items	262	168	2	193	229	127	18
Other items	14 748	14 748	2	13 732	6 714	50	537
<b>Total standardised</b>	<b>528 428</b>	<b>553 555</b>	<b>59 721</b>	<b>492 628</b>	<b>52 817</b>	<b>11</b>	<b>4 225</b>
<b>Total IRB + standardised</b>	<b>2 640 317</b>	<b>2 396 131</b>	<b>288 052</b>	<b>2 334 881</b>	<b>402 999</b>	<b>17</b>	<b>32 240</b>

<sup>1</sup> Details of capital requirements for exposure classes where there are exposures.

business cycle factors and applying the security margins approved by the Swedish Financial Supervisory Authority. Unlike the foundation approach, in the advanced approach the capital requirement is also affected by the maturity of the credit. The risk estimates for LGD and CF led to a slight reduction of the capital requirement at the first reporting occasion as at the fourth quarter of 2010. On the other hand, application of the maturity factor (M) meant that the capital requirement increased compared with the foundation approach. Thus, the overall impact on the capital requirement of the introduction of the

advanced approach was only marginal.

For corporate exposures, SEK 70,633 million (74,469) are covered by guarantees from counterparties within the sovereign and municipal exposure class and in the institutional class. This reduces the exposure amount. The corresponding figure for institutional exposures is SEK 3,302 million (3,265). When there is a guarantor, the capital requirement is calculated based on this instead of the original counterparty. This is known as substitution. This means that the guarantor's more advantageous PD can be used instead of the borrower's PD. On the

other hand, the capital requirement calculation does not take account of the fact that the credit risk is less since both the borrower and the guarantor must default in order for the Bank to make a loan loss.

For the non IRB-approved parts of the credit portfolio and also where a permanent/time-limited approval has been given by the Swedish Financial Supervisory Authority, the capital requirement for credit risks during 2013 is calculated according to the standardised approach. The table below shows the exposure and capital requirement for the standardised portfolio.

Credits approved for internal risk classification. Exposures according to various definitions and details of capital requirements for various exposure classes 2012

SEK m	Exposure before credit risk protection	Exposure amount (EAD)	Of which off-balance sheet	Average exposure amount	Risk-weighted amount	Average risk weight %	Exposure-weighted LGD %	Capital requirement
<b>Corporate exposures</b>	<b>1 184 843</b>	<b>944 987</b>	<b>156 352</b>	<b>923 782</b>	<b>287 825</b>	<b>30</b>	<b>30</b>	<b>23 026</b>
of which repos and securities loans	23 286	23 286	5 449	-	147	0.6	-	12
of which other lending, foundation approach	518 978	341 048	134 155	-	151 711	45	-	12 137
of which other lending, advanced approach	642 579	580 653	16 748	-	135 967	23	24	10 877
- Large Corporates	-	-	-	-	-	-	-	-
- Small and medium-sized companies	85 748	72 467	7 151	-	44 365	61	-	3 549
- Property companies	423 502	380 147	7 951	-	82 655	22	-	6 612
- Housing co-operative associations	133 329	128 039	1 646	-	8 947	7	-	716
<b>Retail exposures</b>	<b>784 725</b>	<b>780 772</b>	<b>43 646</b>	<b>769 713</b>	<b>67 521</b>	<b>9</b>	<b>16</b>	<b>5 402</b>
private individuals	754 396	752 176	37 561	740 884	56 619	8	16	4 529
of which property loans	665 970	665 970	11 948	-	36 060	5	-	2 885
of which other	88 426	86 206	25 613	-	20 559	24	-	1 645
small companies	30 329	28 596	6 085	28 830	10 902	38	34	872
of which property loans	7 223	7 222	13	-	1 826	25	-	148
of which other	23 106	21 374	6 072	-	9 076	42	-	726
<b>Institutional exposures</b>	<b>139 143</b>	<b>128 748</b>	<b>51 678</b>	<b>129 038</b>	<b>12 199</b>	<b>9</b>	<b>15</b>	<b>976</b>
of which repos and securities loans	76 588	76 588	12 672	-	475	0.6	-	38
of which other lending	62 555	52 160	39 006	-	11 724	23	-	938
<b>Equity exposures</b>	<b>5 206</b>	<b>5 206</b>		<b>4 910</b>	<b>7 295</b>	<b>140</b>		<b>584</b>
<b>Exposures without a counterparty</b>	<b>2 279</b>	<b>2 279</b>		<b>2 280</b>	<b>2 279</b>	<b>100</b>		<b>182</b>
<b>Securitisation positions</b>	<b>3 936</b>	<b>1 323</b>		<b>1 469</b>	<b>46</b>	<b>3</b>		<b>4</b>
Traditional securitisation	3 936	1 323		1 469	46	3	-	4
Synthetic securitisation	-	-	-	-	-	-	-	-
<b>Total IRB</b>	<b>2 120 132</b>	<b>1 863 315</b>	<b>251 676</b>	<b>1 831 192</b>	<b>377 165</b>	<b>20</b>		<b>30 174</b>

Credits in the parts of the credit portfolio for which capital requirements are calculated using the standardised approach. Details of capital requirements for various exposure classes where exposures exist, 2012<sup>1</sup>

SEK m	Exposure before credit risk protection	Exposure amount	Of which off-balance sheet	Average exposure amount	Risk-weighted amount	Average risk weight %	Capital requirement <sup>2</sup>
Sovereign and central banks	292 312	301 760	32 015	404 727	111	0.04	9
Municipalities	23 870	53 038	14 120	53 724	17	0.03	1
Multilateral development banks	673	673	0	1 358	0	0	0
Institutions	5 036	4 606	6 160	5 949	1 288	28	103
Corporate	40 047	22 325	13 663	23 753	22 325	100	1 786
Retail	12 797	9 340	4 242	9 488	7 005	75	560
Property mortgages	28 018	25 961	2 790	22 614	9 871	38	790
Past due items	431	173	6	154	238	138	19
Other items	10 283	10 283	0	13 429	6 632	64	531
<b>Total standardised</b>	<b>413 467</b>	<b>428 159</b>	<b>72 996</b>	<b>535 196</b>	<b>47 487</b>	<b>11</b>	<b>3 799</b>

**Total IRB + standardised**      **2 533 599**      **2 291 474**      **324 672**      **2 366 388**      **424 652**      **19**      **33 973**

<sup>1</sup> Details of capital requirements for exposure classes where there are exposures.

<sup>2</sup> Capital requirement for Standardised not adjusted for IAS 19.



## Geographical distribution

IRB-approved exposures per country, divided into corporate, retail, institutional and securitisation exposures, 2013

Exposures before credit risk protection SEK m	Corporate exposures	Retail exposures		Institutional exposures	Securitisation positions	
		Private individuals	Small companies		Traditional	Synthetic
Sweden	674 549	631 837	24 154	59 377	320	-
UK	135 066			11 306		-
Denmark	49 796	38 986	2 957	7		-
Finland	85 067	35 445	1 411	143		-
Norway	168 699	84 686	1 365	86		-
Netherlands	4 371			3		-
USA	23 593			33 670	3 099	-
Other countries	27 114			6 884		-
<b>Total</b>	<b>1 168 255</b>	<b>790 954</b>	<b>29 887</b>	<b>111 476</b>	<b>3 419</b>	<b>-</b>

Exposures calculated using the standardised approach per country, distributed by exposure class, 2013<sup>1</sup>

Exposures before credit risk protection SEK m	Sovereign and central banks		Multilateral development banks		Corporate	Retail	Property mortgage	Past due items	Other items
	Municipalities			Institutions					
Sweden	25 036	18 626	1 647	1 581	1 685	1 224	580	7	12 448
UK	48 296	595	0	55	1 059	10 244	29 190	116	119
Denmark	21 176	246	0	173	845	1 606	0	15	275
Finland	41 951	4 700	0	311	257	17	0	0	141
Norway	15 102	979	0	7	1 032	379	677	3	1 731
Netherlands	8 571	0	0	0	14 438	225	5 615	10	0
USA	235 353	0	0	55	915	1	5	0	18
Other countries	2 474	0	0	744	11 093	1 278	3 376	111	16
<b>Total</b>	<b>397 959</b>	<b>25 146</b>	<b>1 647</b>	<b>2 926</b>	<b>31 324</b>	<b>14 974</b>	<b>39 443</b>	<b>262</b>	<b>14 748</b>

IRB-approved exposures per country, divided into corporate, retail, institutional and securitisation exposures, 2012

Exposures before credit risk protection SEK m	Corporate exposures	Retail exposures		Institutional exposures	Securitisation positions	
		Private individuals	Small companies		Traditional	Synthetic
Sweden	710 230	601 738	24 388	66 900	574	-
UK	126 588			16 292		-
Denmark	41 600	33 247	3 032	13		-
Finland	81 245	32 261	1 437	254		-
Norway	165 680	87 150	1 472	152		-
Netherlands <sup>2</sup>	5 111					-
USA	24 050			51 695	3 362	-
Other countries	30 339			3 837		-
<b>Total</b>	<b>1 184 843</b>	<b>754 396</b>	<b>30 329</b>	<b>139 143</b>	<b>3 936</b>	<b>-</b>

Exposures calculated using the standardised approach per country, distributed by exposure class, 2012<sup>1</sup>

Exposures before credit risk protection SEK m	Sovereign and central banks		Multilateral development banks		Corporate	Retail	Property mortgage	Past due items	Other items
	Municipalities			Institutions					
Sweden	42 790	18 618	673	3 141	12 536	1 140	222	21	5 594
UK	528	946	0	132	1 476	8 062	20 957	137	76
Denmark	9 897	466	0	171	793	1 497	0	35	686
Finland	76 200	3 019	0	392	115	12	39	0	1 057
Norway	8 759	819	0	2	1 968	578	601	5	2 822
Netherlands <sup>2</sup>									
USA	148 651	0	0	99	666	1	6	0	22
Other countries	5 487	2	0	1 099	22 493	1 507	6 193	233	26
<b>Total</b>	<b>292 312</b>	<b>23 870</b>	<b>673</b>	<b>5 036</b>	<b>40 047</b>	<b>12 797</b>	<b>28 018</b>	<b>431</b>	<b>10 283</b>

EAD by country broken down into IRB-approved exposures and exposures calculated using the standardised approach

SEK m	2013		2012	
	IRB	Standardised	IRB	Standardised
Sweden	1 238 967	90 081	1 247 998	102 019
UK	127 453	84 546	129 123	29 170
Denmark	85 993	22 541	73 857	12 557
Finland	90 749	61 356	86 080	91 911
Norway	224 183	17 659	229 690	13 616
Netherlands <sup>2</sup>	2 786	24 324	4 392	13 067
USA	48 206	235 862	67 926	151 513
Other countries	24 239	17 186	24 249	14 306
<b>Total</b>	<b>1 842 576</b>	<b>553 555</b>	<b>1 863 315</b>	<b>428 159</b>

<sup>1</sup> Details of capital requirements for exposure classes where there are exposures.<sup>2</sup> Regional bank as of 1 January 2013.

## Breakdown by sector and type of counterparty

IRB-approved exposures by sector and type of counterparty, broken down into corporate exposures and retail exposure/small companies

SEK m	Exposures before credit risk protection 2013		Exposures before credit risk protection 2012 <sup>1</sup>	
	Corporate	Small companies	Corporate	Small companies
Housing co-operative associations	146 232	0	134 227	0
Property management	511 204	2 588	485 447	2 395
Manufacturing	94 140	2 344	108 597	2 409
Retail	56 257	5 532	56 123	5 815
Hotel and restaurant	7 295	1 249	7 215	1 241
Passenger and goods transport by sea	21 928	59	25 690	65
Other transport and communication	40 928	2 434	57 317	2 463
Construction	24 294	3 738	23 629	3 730
Electricity, gas and water	37 741	132	42 073	146
Agriculture, hunting and forestry	9 133	1 689	8 287	1 706
Other services	31 815	5 721	35 924	5 724
Holding, investment, insurance companies, mutual funds etc.	142 141	1 883	162 913	1 890
Other corporate lending	45 147	2 518	37 401	2 745
<b>Total IRB</b>	<b>1 168 255</b>	<b>29 887</b>	<b>1 184 843</b>	<b>30 329</b>

<sup>1</sup> Some companies were reclassified in 2013.

## Information on maturity intervals

IRB-approved exposures broken down by maturity for various exposure classes, 2013

SEK m	Exposures before credit risk protection	Within 3 mths	3 mths to 1 yr	1 yr to 5 yrs	>5 yrs
Corporate exposures	1 168 255	171 788	222 119	508 437	265 911
Retail exposures	820 841	205 479	110 903	309 736	194 723
Institutional exposures	111 476	4 143	3 310	72 772	31 251
Securitisation positions	3 419		1 094	1 164	1 161
<b>Total IRB</b>	<b>2 103 991</b>	<b>381 410</b>	<b>337 426</b>	<b>892 109</b>	<b>493 046</b>

Exposures calculated using the standardised approach, distributed by maturity intervals for the various exposure classes where exposures exist, 2013<sup>1</sup>

SEK m	Exposures before credit risk protection	Within 3 mths	3 mths to 1 yr	1 yr to 5 yrs	>5 yrs
Sovereign and central banks	397 959	389 358	3 349	2 220	3 032
Municipalities	25 146	740	2 078	11 517	10 811
Multilateral development banks	1 647	679	2	944	22
Institutions	2 926	2 562	138	226	0
Corporate	31 324	3 475	3 320	21 898	2 631
Retail	14 974	2 057	2 538	5 739	4 640
Property mortgages	39 443	1 729	974	8 907	27 833
<b>Total standardised</b>	<b>513 419</b>	<b>400 600</b>	<b>12 399</b>	<b>51 451</b>	<b>48 969</b>
<b>Total IRB + standardised</b>	<b>2 617 410</b>	<b>782 010</b>	<b>349 825</b>	<b>943 560</b>	<b>542 015</b>

IRB-approved exposures broken down by maturity for various exposure classes, 2012

SEK m	Exposures before credit risk protection	Within 3 mths	3 mths to 1 yr	1 yr to 5 yrs	>5 yrs
Corporate exposures	1 184 843	191 584	190 954	587 998	214 307
Retail exposures	784 725	265 416	112 456	232 788	174 065
Institutional exposures	139 143	20 502	3 600	91 778	23 263
Securitisation positions	3 936		1 011	1 521	1 404
<b>Total IRB</b>	<b>2 112 647</b>	<b>477 502</b>	<b>308 021</b>	<b>914 085</b>	<b>413 039</b>

Exposures calculated using the standardised approach, distributed by maturity intervals for the various exposure classes where exposures exist, 2012

SEK m	Exposures before credit risk protection	Within 3 mths	3 mths to 1 yr	1 yr to 5 yrs	>5 yrs
Sovereign and central banks	292 312	280 744	4 280	4 832	2 456
Municipalities	23 870	3 793	4 149	10 644	5 284
Multilateral development banks	673	0	0	673	0
Institutions	5 036	3 987	614	435	0
Corporate	40 047	14 665	6 161	14 401	4 820
Retail	12 797	2 194	2 402	4 250	3 951
Property mortgages	28 018	1 432	867	5 967	19 752
<b>Total standardised</b>	<b>402 753</b>	<b>306 815</b>	<b>18 473</b>	<b>41 202</b>	<b>36 263</b>
<b>Total IRB + standardised</b>	<b>2 515 400</b>	<b>784 317</b>	<b>326 494</b>	<b>955 287</b>	<b>449 302</b>

<sup>1</sup> Details of capital requirements for exposure classes where there are exposures.

**Risk weight and breakdown into risk classes**

Below are shown IRB-approved exposures broken down into risk classes where the counterparty's internal rating has been converted to risk class 1–9 and defaults. The same information is presented according to a geographical breakdown. Exposures within a risk class may have different PD values. The PD values in the tables are therefore expressed as exposure-weighted average PD. The breakdown is shown for corporate, institutional and retail exposures.

The PD values applied in calculating the capital requirement are based on the Bank's own loss and default history. Handelsbanken's low, stable loan loss ratio means that the Bank's PD values are low, particularly in good risk classes where defaults have been extremely rare even in times of economic turbulence. The risk weights are also affected by the LGD values used. These are also calculated on the basis of the Bank's own loss history for all exposures covered by the advanced approach.

In the calculations for PD and LGD values, safety margins have been added. Comprehensive tests have also been performed to ensure that the risk measures are applicable

to the Bank's current portfolios. An important consequence of this is that differences between banks' average risk weights are due to the credit quality of the existing exposures and the historic loan losses.

Differing portfolio composition is another factor which leads to variations in different banks' average risk weights for various exposure classes. An important aspect is how banks have chosen to categorise their exposures. Handelsbanken has classified its lending to housing co-operative associations as corporate exposures while certain other banks have decided to classify this as retail lending.

At the same time, lending to housing co-operative associations has lower risk than corporate lending on average. This means that the total average risk weight for the corporate exposures category, including housing co-operative associations, will be lower than for banks which have classified housing co-operative associations as retail lending. Handelsbanken's choice is conservative since the capital requirement is higher for companies than for households.

The differences are therefore due to the quality of the banks' credit portfolio, the institution's

historical loan losses, the security margin, whether the advanced approach is used and how various loans have been classified in the different exposure classes.

The Bank has very low exposures to counterparties in poorer risk classes. For corporate exposures, 95 (95) per cent of EAD is in risk class 1–5 with low PD values. The corresponding figure for institutional exposures is 100 (100) per cent. For retail exposures – private individuals and small companies – the corresponding figures in the better risk classes are 98 (97) per cent and 83 (83) per cent respectively. A clear majority of the Bank's exposures are in risk classes 1–4, which means that the average risk level in the credit portfolio is significantly lower than the level which is assessed as normal risk.

The risk weights applied by Handelsbanken result in a capital requirement that is considerably higher in relation to the Bank's historical loss proportion than the equivalent average ratio for other Nordic and European banks. This means that Handelsbanken's risk weights are more cautious in relation to the Bank's historical losses than the average of other banks.

**Distribution, risk class****IRB-approved corporate exposures broken down by risk class**

	2013				2012			
	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD
Risk class 1	0.03	87 600	9.57	9.57	0.03	90 215	9.55	9.55
Risk class 2	0.04	250 977	27.43	37.00	0.03	252 633	26.73	36.28
Risk class 3	0.10	327 483	35.79	72.79	0.11	338 603	35.83	72.11
Risk class 4	0.32	141 623	15.47	88.26	0.36	152 583	16.15	88.26
Risk class 5	0.83	59 190	6.47	94.73	0.85	67 574	7.15	95.41
Risk class 6	4.15	26 493	2.89	97.62	2.51	21 602	2.29	97.70
Risk class 7	7.36	10 628	1.16	98.78	8.15	10 736	1.14	98.84
Risk class 8	15.53	2 664	0.29	99.07	8.63	4 101	0.43	99.27
Risk class 9	50.86	2 232	0.24	99.31	22.38	595	0.06	99.33
Defaults	100.00	6 328	0.69	100.00	100.00	6 345	0.67	100.00
<b>Total</b>		<b>915 218</b>	<b>100.00</b>			<b>944 987</b>	<b>100.00</b>	
		<b>Risk class 1–5</b>				<b>Risk class 1–5</b>		
		<b>866 873</b>				<b>901 608</b>		
		<b>% Risk class 1–5</b>				<b>% Risk class 1–5</b>		
		<b>94.72%</b>				<b>95.41%</b>		

**IRB-approved institutional exposures broken down by risk class**

	2013				2012			
	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD
Risk class 1	0.04	21 558	21.45	21.45	0.04	17 574	13.65	13.65
Risk class 2	0.08	44 784	44.57	66.02	0.07	77 261	60.01	73.66
Risk class 3	0.18	33 407	33.24	99.26	0.14	32 625	25.34	99.00
Risk class 4	0.51	211	0.21	99.47	0.50	680	0.53	99.53
Risk class 5	1.47	263	0.26	99.73	1.47	351	0.27	99.80
Risk class 6	2.34	180	0.18	99.91	2.47	66	0.05	99.85
Risk class 7	14.01	85	0.08	99.99	5.28	176	0.14	99.99
Risk class 8	27.41	15	0.01	100.00	7.42	10	0.01	100.00
Risk class 9	45.44				15.19	5	0.00	100.00
Defaults	100.00				100.00			
<b>Total</b>		<b>100 503</b>	<b>100.00</b>			<b>128 748</b>	<b>100.00</b>	
		<b>Risk class 1–5</b>				<b>Risk class 1–5</b>		
		<b>100 223</b>				<b>128 491</b>		
		<b>% Risk class 1–5</b>				<b>% Risk class 1–5</b>		
		<b>99.72%</b>				<b>99.80%</b>		

## IRB-approved retail exposures, private individuals, broken down by risk class

	2013				2012			
	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD
Risk class 1	0.03	161 851	20.49	20.49	0.03	142 246	18.91	18.91
Risk class 2	0.07	306 266	38.78	59.27	0.07	267 797	35.61	54.52
Risk class 3	0.13	171 813	21.76	81.03	0.13	189 871	25.24	79.76
Risk class 4	0.37	113 202	14.33	95.36	0.40	113 906	15.14	94.90
Risk class 5	0.90	17 262	2.19	97.55	0.85	18 261	2.43	97.33
Risk class 6	3.86	5 946	0.75	98.30	3.72	6 626	0.88	98.21
Risk class 7	6.29	5 258	0.67	98.97	6.48	5 941	0.79	99.00
Risk class 8	12.74	4 807	0.61	99.58	18.02	3 979	0.53	99.53
Risk class 9	31.60	560	0.07	99.65	30.04	554	0.07	99.60
Defaults	100.00	2 757	0.35	100.00	100.00	2 995	0.40	100.00
<b>Total</b>		<b>789 722</b>				<b>752 176</b>	<b>100.00</b>	
		<b>Risk class 1-5</b>				<b>Risk class 1-5</b>		
		<b>770 394</b>				<b>732 081</b>		
		<b>% Risk class 1-5</b>				<b>% Risk class 1-5</b>		
		<b>97.55%</b>				<b>97.33%</b>		

## IRB-approved retail exposures, small companies, broken down by risk class

	2013				2012			
	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD
Risk class 1	0.03	103	0.36	0.36	0.03	115	0.40	0.40
Risk class 2	0.09	4 407	15.54	15.90	0.10	4 191	14.66	15.06
Risk class 3	0.26	5 035	17.76	33.66	0.26	4 867	17.02	32.08
Risk class 4	0.40	3 774	13.31	46.97	0.41	3 266	11.42	43.50
Risk class 5	1.22	10 094	35.59	82.56	1.08	11 195	39.15	82.65
Risk class 6	2.74	1 643	5.79	88.35	2.55	1 456	5.09	87.74
Risk class 7	6.24	1 565	5.52	93.87	5.76	1 697	5.93	93.67
Risk class 8	15.34	850	3.00	96.87	15.68	600	2.10	95.77
Risk class 9	29.00	16	0.06	96.93	23.13	291	1.02	96.79
Defaults	100.00	871	3.07	100.00	100.00	918	3.21	100.00
<b>Total</b>		<b>28 358</b>				<b>28 596</b>	<b>100.00</b>	
		<b>Risk class 1-5</b>				<b>Risk class 1-5</b>		
		<b>23 413</b>				<b>23 634</b>		
		<b>% Risk class 1-5</b>				<b>% Risk class 1-5</b>		
		<b>82.56%</b>				<b>82.65%</b>		

## Distribution, risk class and country

## IRB-approved corporate exposures, broken down by risk class and country 2013

	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD	Exposure-weighted average LGD %	Sweden %	UK %	Denmark %	Finland %	Norway %	Netherlands %	USA %	Other countries %
Risk class 1	0.03	87 600	9.57	9.57	28.71	9.29	2.29	24.69	14.32	8.50	6.71	37.16	2.06
Risk class 2	0.04	250 977	27.43	37.00	25.84	30.44	20.01	13.23	36.67	22.60	0.54	30.05	30.18
Risk class 3	0.10	327 483	35.79	72.79	28.93	34.40	44.34	24.29	23.70	41.16	76.36	24.97	45.98
Risk class 4	0.32	141 623	15.47	88.26	30.97	14.38	19.86	20.68	11.55	17.97	5.58	3.63	10.93
Risk class 5	0.83	59 190	6.47	94.73	29.98	6.76	8.02	7.08	3.45	5.76	-	2.50	5.04
Risk class 6	4.15	26 493	2.89	97.62	35.72	2.95	2.56	1.91	6.85	1.66	-	1.48	4.74
Risk class 7	7.36	10 628	1.16	98.78	35.38	0.91	1.70	1.36	1.44	1.59	10.81	-	-
Risk class 8	15.53	2 664	0.29	99.07	39.34	0.22	0.38	0.45	0.61	0.30	-	-	0.71
Risk class 9	50.86	2 232	0.24	99.31	33.02	0.34	0.09	0.19	0.04	0.11	-	0.21	0.21
Defaults	100.00	6 328	0.69	100.00	27.30	0.31	0.75	6.12	1.37	0.35	-	-	0.15
<b>Total</b>		<b>915 218</b>	<b>100.00</b>										
		<b>Risk class 1-5</b>											
		<b>866 873</b>											
		<b>% Risk class 1-5</b>											
		<b>94.72%</b>											

## Distribution, risk class and country, cont.

## IRB-approved institutional exposures, broken down by risk class and country 2013

	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD	Exposure-weighted average LGD %	Sweden %	UK %	Denmark %	Finland %	Norway %	Netherlands %	USA %	Other countries %
Risk class 1	0.04	21 558	21.45	21.45	23.86	27.19	27.73	80.11	4.80	10.51	-	11.74	16.98
Risk class 2	0.08	44 784	44.57	66.02	16.02	35.10	49.64	19.31	16.57	44.80	-	52.21	69.72
Risk class 3	0.18	33 407	33.24	99.26	15.43	36.78	20.87	-	75.18	7.51	100.00	36.05	12.39
Risk class 4	0.51	211	0.21	99.47	29.78	0.19	0.70	0.58	0.75	10.83	-	-	0.44
Risk class 5	1.47	263	0.26	99.73	31.53	0.40	0.17	-	0.04	25.89	-	-	0.30
Risk class 6	2.34	180	0.18	99.91	41.01	0.14	0.89	-	1.73	-	-	-	0.17
Risk class 7	14.01	85	0.08	99.99	45.00	0.17	-	-	0.93	0.16	-	-	-
Risk class 8	27.41	15	0.01	100.00	45.00	0.03	-	-	-	-	-	-	-
Risk class 9	45.44	-	-	-	-	-	-	-	-	0.30	-	-	-
Defaults	100.00	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>		<b>100 503</b>	<b>100.00</b>										
		<b>Risk class 1-5</b>	<b>100 223</b>										
		<b>% Risk class 1-5</b>	<b>99.72%</b>										

## IRB-approved retail exposures, private individuals, broken down by risk class and country 2013

	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD	Exposure-weighted average LGD %	Sweden %	UK %	Denmark %	Finland %	Norway %	Netherlands %	USA %	Other countries %
Risk class 1	0.03	161 851	20.49	20.49	12.34	25.68	-	-	-	-	-	-	-
Risk class 2	0.07	306 266	38.78	59.27	16.54	36.46	-	75.68	51.04	33.41	-	-	-
Risk class 3	0.13	171 813	21.76	81.03	14.29	21.40	-	-	1.60	42.94	-	-	-
Risk class 4	0.37	113 202	14.33	95.36	20.56	12.29	-	21.85	28.22	20.37	-	-	-
Risk class 5	0.90	17 262	2.19	97.55	26.10	2.14	-	-	10.96	-	-	-	-
Risk class 6	3.86	5 946	0.75	98.30	22.27	0.69	-	-	-	1.90	-	-	-
Risk class 7	6.29	5 258	0.67	98.97	23.77	0.53	-	1.45	1.70	0.91	-	-	-
Risk class 8	12.74	4 807	0.61	99.58	21.69	0.51	-	-	4.67	-	-	-	-
Risk class 9	31.60	560	0.07	99.65	33.83	0.03	-	0.21	0.55	0.15	-	-	-
Defaults	100.00	2 757	0.35	100.00	29.72	0.27	-	0.81	1.26	0.32	-	-	-
<b>Total</b>		<b>789 722</b>	<b>100.00</b>										
		<b>Risk class 1-5</b>	<b>770 394</b>										
		<b>% Risk class 1-5</b>	<b>97.55%</b>										

## IRB-approved retail exposures, small companies, broken down by risk class and country 2013

	Exposure-weighted average PD %	EAD	Proportion EAD %	Accum. % of total EAD	Exposure-weighted average LGD %	Sweden %	UK %	Denmark %	Finland %	Norway %	Netherlands %	USA %	Other countries %
Risk class 1	0.03	103	0.36	0.36	20.94	0.46	-	-	-	-	-	-	-
Risk class 2	0.09	4 407	15.54	15.90	28.30	19.76	-	-	-	-	-	-	-
Risk class 3	0.26	5 035	17.76	33.66	31.22	16.19	-	24.04	44.18	-	-	-	-
Risk class 4	0.40	3 774	13.31	46.97	31.34	13.41	-	-	-	59.51	-	-	-
Risk class 5	1.22	10 094	35.59	82.56	33.68	32.97	-	62.60	17.64	31.05	-	-	-
Risk class 6	2.74	1 643	5.79	88.35	31.63	5.93	-	-	22.70	-	-	-	-
Risk class 7	6.24	1 565	5.52	93.87	33.00	6.31	-	-	6.88	4.59	-	-	-
Risk class 8	15.34	850	3.00	96.87	36.92	2.12	-	8.26	3.72	3.88	-	-	-
Risk class 9	29.00	16	0.06	96.93	38.42	0.02	-	0.30	0.04	-	-	-	-
Defaults	100.00	871	3.07	100.00	58.18	2.83	-	4.80	4.84	0.97	-	-	-
<b>Total</b>		<b>28 358</b>	<b>100.00</b>										
		<b>Risk class 1-5</b>	<b>23 413</b>										
		<b>% Risk class 1-5</b>	<b>82.56%</b>										

### Breakdown, risk class according to IRB foundation approach

#### Corporate exposures – Total foundation approach broken down by risk class

SEK m	2013					2012				
	EAD	Exposure-weighted average PD %	Exposure-weighted average LGD %	RWA	Average risk weighting	EAD	Exposure-weighted average PD %	Exposure-weighted average LGD %	RWA	Average risk weighting
Risk class 1	28 424	0.03	39.90	3 813	13.42	48 661	0.03	42.01	6 900	14.18
Risk class 2	44 065	0.06	40.10	8 637	19.60	87 200	0.04	38.55	13 263	15.21
Risk class 3	50 251	0.15	36.55	15 373	30.59	129 618	0.17	38.17	45 668	35.23
Risk class 4	14 900	0.45	41.32	8 824	59.22	57 402	0.57	43.70	42 896	74.73
Risk class 5	4 932	0.88	36.75	3 738	71.81	24 038	1.03	43.44	22 533	93.74
Risk class 6	4 051	4.75	43.63	6 035	148.95	8 562	3.35	42.71	11 247	131.35
Risk class 7	875	7.85	42.65	1 461	166.93	3 310	5.56	44.09	5 155	155.76
Risk class 8	466	17.92	42.44	976	209.45	2 504	6.52	43.53	4 119	164.49
Risk class 9	719	59.22	29.89	1 459	203.08	40	23.16	40.00	77	192.19
Defaults	118	100.00	38.87	0	0.00	2 999	100.00	44.91	0	0.00
<b>Total</b>	<b>148 801</b>			<b>50 316</b>		<b>364 334</b>			<b>151 858</b>	

### Breakdown, risk class according to IRB advanced approach

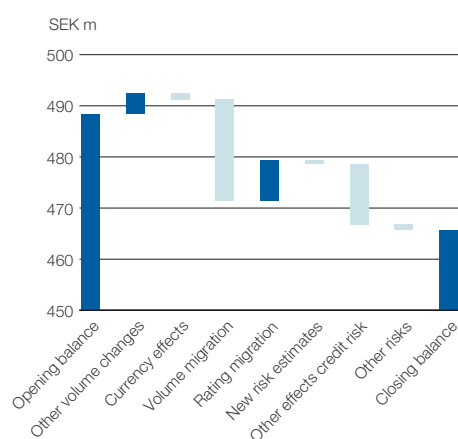
#### Corporate exposures – Total advanced approach broken down by risk class

SEK m	2013					2012				
	EAD	Exposure-weighted average PD %	Exposure-weighted average LGD %	RWA	Average risk weighting	EAD	Exposure-weighted average PD %	Exposure-weighted average LGD %	RWA	Average risk weighting
Risk class 1	59 176	0.03	23.33	4 742	8.01	41 554	0.03	17.50	2 697	6.49
Risk class 2	206 912	0.03	22.81	18 897	9.13	165 433	0.03	20.49	12 733	7.70
Risk class 3	277 232	0.09	27.55	51 209	18.47	208 985	0.08	24.51	33 040	15.81
Risk class 4	126 723	0.30	29.75	46 210	36.47	95 181	0.24	27.58	30 285	31.82
Risk class 5	54 258	0.82	29.36	31 579	58.20	43 536	0.76	28.35	23 176	53.23
Risk class 6	22 442	4.05	34.30	24 580	109.53	13 040	1.95	33.07	10 426	79.96
Risk class 7	9 753	7.32	34.73	12 222	125.32	7 426	9.31	37.51	10 553	142.11
Risk class 8	2 198	15.03	38.68	3 877	176.37	1 597	11.94	37.94	2 594	162.38
Risk class 9	1 513	46.89	34.51	2 346	155.04	555	22.32	35.21	939	169.11
Defaults	6 210	100.00	27.08	14 316	230.54	3 346	100.00	32.90	9 524	284.58
<b>Total</b>	<b>766 417</b>			<b>209 978</b>		<b>580 653</b>			<b>135 967</b>	

### Development of risk-weighted assets (RWA) in 2013

In 2013, the Bank's risk-weighted assets decreased by about SEK 23 billion or approximately 5 per cent. The changes in 2013 are almost entirely for credit and counterparty risk. The largest decrease in risk-weighted assets during the year is the result of improved quality

#### Development of risk-weighted assets 2013



in the portfolio since volumes have fallen for exposures with a high risk weight, while they have risen for exposures with a low risk weight. In other words, new business has been made with counterparties in better risk classes and better collateral than the average of the Bank's existing credit portfolio which is known as volume migration.

But the effect of counterparties migrating between risk classes – rating migration – has led to increased risk-weighted assets due to a slightly negative net migration during the year. This is measured as the net of exposures to customers which migrate to better risk classes and those that migrate to poorer classes. However, the effect of the volume migration was larger than the effect of the rating migration, which has caused the total risk-weighted assets to go down by almost SEK 23 billion. In other words, the portfolio has lower risk at the end of 2013 than at the beginning of the year. The combined effect of the annual validation of the risk estimates and the introduction of the advanced approach for Large Corporates had a marginal impact on risk-weighted assets. The item Other effects credit risk includes factors such as increased use of collateral, the effects of defaults and

changed LTVs in the existing credit portfolio. In net terms, these factors have contributed to a lowering of risk-weighted volume.

In 2013, additional credit portfolios have been granted approval for reporting according to the advanced approach. In addition to new volumes in the advanced IRB approach, business volumes have increased in the portfolios reported according to the advanced approach, while business volumes reported according to the foundation approach have fallen. The effect of this is included in the category Volume migration in the table on the left.

During the year, Other risks, net have decreased the risk-weighted assets marginally. The risk-weighted assets for operational risk have increased since the previous year, due to higher operating income, while risk-weighted assets for market risk have gone down marginally during the year.

**Migrations**

Trends in the quality of the credit portfolio can be identified to some extent by analysing changes in the internal risk assessment at counterparty level. This is known as migration (number migration).

The Bank's corporate counterparties are given an internal rating which is split into two dimensions. The first refers to the risk of financial strain and the second to the counterparty's financial resistance to such strain. The rating is converted to an internal risk class for application of the IRB model.

For private individuals, in addition to the internal rating, other factors are included when setting the risk class for application of the IRB model. In the analysis of how the risk assessment changes at counterparty level for private individuals, only the internal rating is used. This grades the risk level in a dimension which combines the risk of financial strain and financial powers of resistance on a scale from very low risk to very high risk.

Handelsbanken's internal rating method is dynamic, which means that the rating is re-assessed when there are signs that the counterparty's repayment capacity has changed to lower or higher risk.

In the adjoining graphs, the proportion of counterparties migrating between risk classes is presented for corporate exposures and for small companies, which due to their size are included in the exposure class for retail exposures.

The graphs refer to the years 2009 to 2013 and show that there was a positive net migration over time for both corporate counterparties and small companies. In other words, the number of rating changes to lower risk classes exceeds the number of changes to higher risk classes. Thus, the number of risk class migrations in the portfolio showed a trend towards lower risk.

For corporate exposures, the gross migration is stable between the years. Net migration has continually moved towards lower risk from 2009 to 2012. During 2013, it went over to being slightly negative. The negative trend is driven by increased risk classification towards higher risk in companies outside the property sector throughout the Group and to a certain extent

also property-related companies outside Sweden. However, the change is mainly between risk classes which indicate lower risk than normal. The migration to risk classes that indicate a more substantial risk of default is limited.

For small companies, migration in 2013 continued to move towards lower risk on a par with previous years. In 2011, net migration moved towards lower risk due to a clearly positive migration. One reason for the trend for small companies during 2011 was the higher activity level for updating the rating, due to the stricter internal requirement for dynamic rating of these exposures. As of 2011, counterparties with a small credit exposure are also included in the requirement for an active confirmation of the current rating at least once a year, even if there is no reason for a dynamic change of the rating. In 2012 and 2013, the positive migration was weaker than in 2011, while the activity level and degree of change remained at a higher level.

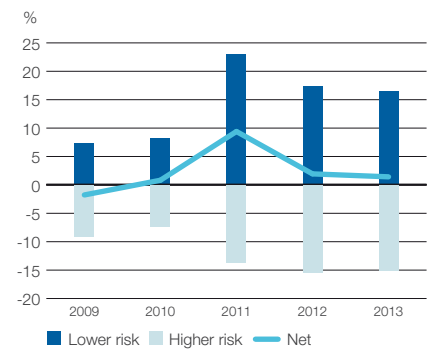
The adjoining graphs present the number of migrations based on the internal rating for private individuals in the class for retail exposures.

The underlying migration trend is stable over time with small changes in risk.

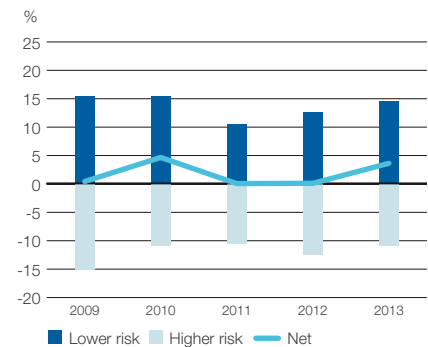
**No. of migrations/internal risk class. Corporate exposures, 2009–2013**



**No. of migrations/internal risk class. Retail exposures – small companies, 2009–2013**



**Migration/internal rating. Retail exposures – private individuals, 2009–2013**





## COUNTERPARTY RISK

Counterparty risks arise when the Bank has entered into derivative contracts with a counterparty for instruments such as futures, swaps or options, or contracts regarding loans of securities.

Counterparty risk is regarded as a credit risk where the market value of the contract determines the size of the exposure. If the contract has a positive value, the default of the counterparty means a potential loss for the Bank – in the same way as for a loan.

In calculating both the capital requirement and economic capital (EC), counterparty exposures are taken into account based on the exposure amounts stipulated by the capital adequacy regulations. These credit exposures are then treated in the same way as other credit exposures.

In addition to derivatives, the capital adequacy regulations treat both repurchase transactions and equity loans as counterparty risks. When calculating EC, these transaction types are treated in the same way. The Bank applies the mark to market method to calculate the exposure amount for counterparty risks for capital adequacy purposes.

The size of counterparty exposures is restricted by setting credit limits in the regular credit process. The size of the exposures may vary substantially due to fluctuations in the price of the underlying asset. In order to take account of the risk that the exposure may increase, supplements are added to the value of the exposure when setting credit limits. These add-ons are calculated using standard amounts that depend on the type of contract and the time to maturity. The exposures are calculated and followed up daily. The counterparty risk in derivatives is reduced through so-called netting agreements, which involve setting off positive values against negative values in all derivative transactions with the same counterparty. Handelsbanken's policy is to aim

to have netting agreements with all counterparties. Netting agreements are supplemented with agreements for issuing collateral for the net exposure, which further reduces the credit risk.

The collateral for these transactions is mainly cash, but government securities are also used. Due to the high proportion of cash, the concentration risks in the collateral are limited. A very small number of the collateral agreements entered into by the Bank include terms and conditions concerning rating-based threshold amounts for Handelsbanken. These conditions mean that the Bank must provide further collateral for the counterparty in question, in the event of the Bank's rating from external parties being lowered. At year-end, a downgrading from AA- to A+ would have meant the Bank having to issue further collateral of SEK 30 million (144).

The Bank holds a portfolio of credit derivatives (credit default swaps, CDS) which are classed as trading book. The value of purchased protection is SEK 0.8 billion (1.1) and the value of sold protection is SEK 0.8 billion (1).

According to the Basel III regulations, a new capital requirement will be applied to counterparty risk exposures as of 1 January 2014. This capital requirement is based on the risk of a change in value due to the counterparty's credit quality (credit valuation adjustment, CVA) in the counterparty risk exposures. According to the 2013 regulations, the banks hold capital for the default risk, but not for the value. In Sweden, these rules are being implemented through the European implementation of the Basel III regulations, known as CRD IV. With the existing structure of the counterparty risks, an introduction of CVA risk in 2013 would increase the capital requirement for counterparty risk by approximately SEK 0.4 billion. Calculated according to the 2012 regulatory proposal, CVA for 2012 was SEK 1.4 billion.

Handelsbanken has strived to reduce this effect through, for example, changes to contract structure and collateral as well as greater use of clearing.

Payment risks arise in transactions where the Bank has fulfilled its commitments in the form of foreign exchange conversion, payments or delivery of securities, but cannot at the same time ensure that the counterparty has fulfilled its commitments to the Bank. The risk amount equals the amount of the payment transaction. The payment risks are not included in the credit limit of each customer; instead, they are covered by a separate limit. At Handelsbanken, the risk of value changes in spot transactions is categorised as payment risk, while the risk of value changes in derivative transactions is categorised as credit risk.

Setting a limit for the payment risk is a vital part of Handelsbanken's constant aim to limit risks. This includes developing technical solutions which reduce the period of time during which there is a payment risk. In these efforts, Handelsbanken co-operates with various banking sector clearing institutions. The Bank has also established co-operation with the banks which are considered to be the strongest and the most creditworthy.

Handelsbanken also participates in clearing collaborations such as CLS (Continuous Linked Settlement) for currency trading. CLS is a global organisation which aims at securing currency exchange settlement by limiting the counterparty risk. Handelsbanken is one of approximately 60 owners which are the largest international FX banks. Handelsbanken is also a partner and direct member of EBA (Euro Banking Association) and its euro payment system.

Counterparty risks in derivative contracts excluding standard add-ons for potential future exposure SEK m	2013	2012
Positive gross market value for derivative contracts	72 844 <sup>1</sup>	108 872
Netting gains	47 069	78 450
Current set-off exposure	25 775	30 422
Collateral	15 405	11 843
Net credit exposure for derivatives	10 370	18 579

<sup>1</sup> The gross market value is stated for the banking group, excluding cleared derivatives which are not subject to capital adequacy in 2013.

### Counterparty risks in derivative contracts including potential future exposure 2013

SEK m	Current set-off exposure	Potential future exposure	Total credit exposure for derivatives/EAD	Risk-weighted amount	Capital requirement
Sovereign exposures	1 249	1 174	2 423	14	1
Institutional exposures	14 174	20 440	34 613	6 082	487
Corporate exposures	10 321	4 247	14 568	4 392	351
Other	31	36	67	48	4
<b>Total</b>	<b>25 775</b>	<b>25 897</b>	<b>51 671</b>	<b>10 536</b>	<b>843</b>

### Counterparty risks in derivative contracts including potential future exposure 2012

SEK m	Current set-off exposure	Potential future exposure	Total credit exposure for derivatives/EAD	Risk-weighted amount	Capital requirement
Sovereign exposures	888	1 726	2 615	11	1
Institutional exposures	14 305	19 006	33 311	5 756	460
Corporate exposures	15 142	4 601	19 743	6 101	488
Other	87	43	130	43	3
<b>Total</b>	<b>30 422</b>	<b>25 376</b>	<b>55 799</b>	<b>11 911</b>	<b>952</b>

## Current liquidity themes

The global financial crisis that began in 2007 was, to a large extent, a liquidity crisis for the global banking system. It showed banks' vulnerability to disruptions in the funding markets, and caused investors to place far more importance on the risks in the banks' funding and liquidity management. This section discusses some current themes regarding liquidity.

### Handelsbanken's funding structure

There is an ongoing discussion at present in the banking world as to how banks should obtain funding in the best way in order to limit their liquidity risks as far as possible. Handelsbanken prioritises bond funding and in an international perspective has a low proportion of deposit funding. When the Bank issues a bond, from a liquidity management perspective, it is better than funding from deposits. The Bank knows that the money is available throughout the life of the bond, while the saver could withdraw the money at any time if it were in a deposit account. Moreover, the price of the bond is fixed for the entire term, which contributes to the stability of the Bank's margins. This is not the case for deposits, where the cost during periods of financial stress and stiff competition for deposits may increase significantly.

Sweden has a well-developed welfare system, where households have a small need for a large buffer of liquid assets because the state covers the costs of illness, unemployment or other situations when people's private finances come under strain. This is an important reason why Swedes do not save in deposit accounts to the same extent as people in other countries. Instead Swedes are mainly interested in saving for retirement, both privately and through various forms of occupational pension solutions. Since pension savings have a long-term perspective, it becomes more attractive to invest in assets with higher expected long-term returns, such as equities and bonds, rather than in account investments that provide a return equivalent to a short-term interest rate. However, households' long-term savings benefit the Bank since the institutional investors that manage households' pension savings, such as public pension funds and life insurance companies buy the covered bonds issued by the Bank. In this way, the Bank's liquidity risk is reduced since potential short term deposits are converted into bonds with a long maturity.

### Risks of short-term funding and the value of a large liquidity reserve

The 2008 financial crisis demonstrated that all banks must consider the risk of closed securi-

ties markets in general, although by virtue of its high credit rating, Handelsbanken had access to securities funding throughout the crisis. A bank is always at risk of losing some of its funding in a crisis scenario, whether depositors withdraw their money, or the securities market is closed to new funding.

A key starting point in Handelsbanken's liquidity risk management policy is that the Bank should not be dependent on the securities markets always being open. This is why the short-term securities market is only used for financing of assets which are liquid even in a stressed scenario, or which have a term shorter than the short-term funding.

In a situation where the funding market closes, the Bank can realise liquid assets before the short-term securities funding matures, and is thus not dependent on short-term funding. In a stressed scenario, Handelsbanken can manage for more than two years without borrowing new money in the market even if 10 per cent of corporate and household deposits were withdrawn.

By keeping a large reserve of liquid assets, Handelsbanken can deal with a stressed funding situation by either realising or pledging assets in the liquidity reserve. The requirements on the assets in the liquidity reserve are therefore high, and they must either be possible to sell quickly and at a low cost on the market, or be eligible to be pledged as collateral.

It may be difficult to obtain new funding in the market even when secure assets are used as collateral, and the assets must therefore be eligible to be pledged at the central bank, which provides liquidity to banks as long as the collateral is adequate.

Handelsbanken has gradually expanded its liquidity reserve during the financial crisis because of the rising risk of closed funding markets, mainly due to the euro crisis.

During the crisis, many investors also found it difficult to find counterparties who were regarded as sufficiently secure, and they regarded Handelsbanken as a safe haven. The Bank has chosen to be available for these investors and has therefore taken short-term investments from them although the Bank has not needed

this liquidity. Since Handelsbanken does not use short-term funding to finance its lending, these surplus funds have been placed overnight with central banks and have helped to increase the size of the liquidity reserve. Handelsbanken has not only had good access to short-term funding, but has also been able to issue long-term bonds throughout the financial crisis.

### The value of foreign funding

For Handelsbanken, diversification of funding sources is crucial to limiting liquidity risk. By broadening and varying (i.e. diversifying) the type of borrowing instruments, markets and currencies, Handelsbanken ensures maximum availability of funding. While foreign funding sources may be more likely to withdraw funding in a stressed liquidity situation, that is not a reason to avoid taking advantage of them in good times.

If the Bank uses a well-diversified investor base in good times, and thus does not over-use the domestic investor base, the probability increases that there will be scope for domestic investors to buy Handelsbanken's bonds in a more stressed funding situation. Swedish investors have had a huge appetite for covered bonds in particular, even in times of crisis. For example, Handelsbanken was able to issue covered bonds during the weeks around the Lehman Brothers' bankruptcy in 2008, when the rest of the world's bond markets were largely closed.

When Swedish banks borrow abroad, this reflects the desire of Swedish investors to diversify their investments abroad for the purpose of achieving greater diversification of risk and higher expected returns. Swedish institutional investors such as life insurance companies and pension funds invest about 40 per cent of their money abroad. When a large percentage of Swedish savings is invested abroad, it becomes necessary to bring foreign savings into the country to support the Swedish economy. Since the Swedish krona is a small and historically volatile currency, foreign institutional investors are not particularly interested in buying Swedish krona assets. It is therefore extremely valuable for Swedish banks to borrow money

abroad and transform it into capital that contributes to the growth of the Swedish economy.

Another aspect is that Swedish institutional investors also have currency hedges on their investments, using Swedish banks which finance currency derivatives by means of fully matched short-term borrowing abroad. If this short-term funding were to disappear, the banks could stop offering these currency derivatives, which would not be a problem for the Swedish banks, since the borrowing is matched. A small, open economy like Sweden's, which has international companies and supports free trade and free capital flows, must be willing to obtain capital abroad in order to avoid limiting growth opportunities in the country.

#### Covered bonds versus senior bonds

Handelsbanken uses both forms of bond funding. Since the Bank has a large mortgage loan portfolio, about two thirds of long term market funding is achieved with covered bonds and about one third with senior bonds. From the Bank's perspective it is important to have a balance between the two types of funding.

Covered bonds are the foundation of Swedish housing financing and provide investors with double security with respect to the probability of recovering the money, partly through the Bank's own ability to pay, and partly because they have collateral in a portfolio of low loan-to-value mortgages. As a result, the risk to investors is very small and the cost of this borrowing is therefore low. At the same time, it is important not to overuse the market for covered bonds. Since covered bonds have a higher priority than senior bonds, senior bondholders are subordinate to owners of covered bonds. If a large part of the Bank's assets are pledged in favour of prioritised creditors, there is a risk that access to senior funding is made difficult and that the risk premium demanded by senior bondholders to lend money to the Bank is higher.

Although investors have a solid belief in Handelsbanken's repayment capacity, it is valuable if there is a large, high-quality asset base that serves as protection for investors in Handelsbanken's senior bonds. Handelsbanken has a portfolio of highly creditworthy, unencum-

bered assets that are more than twice the size of the outstanding volume of unsecured market funding. The unencumbered assets that provide protection for senior bondholders include a large volume of high-quality mortgage loans, which the Bank chooses not to finance with cheaper covered bonds.

Another reason not to overuse covered bonds is that the unused scope for such issues can be used as a liquidity reserve. Since the market for covered bonds is so resilient, covered bonds can be issued in many situations when other markets are not open. Covered bonds are eligible as collateral in central banks and thus liquidity can be obtained from them in a particularly difficult market.

#### Regulatory requirements for long-term stable funding – implementation of a net stable funding ratio (NSFR)

Handelsbanken believes it is important to have a balance between illiquid assets and stable funding, which is the purpose of the regulatory requirement for stable funding proposed internationally by the Basel Committee (NSFR). For Handelsbanken, this view means that the Bank ensures that cash inflows greatly exceed cash outflows for each day for more than a year ahead, and that illiquid assets such as loans are always funded with sources that cannot suddenly be expected to disappear (for a more detailed description, see the section on liquidity risk management). Handelsbanken has been critical of the original proposal for the NSFR as presented by the Basel Committee in 2010, and considers that it does not capture the balance between illiquid assets and stable funding in an effective manner.

One problem with this measure has been that the previous version only had two maturity ranges: shorter and longer than a year. A measure intended to ensure stable funding should be closer to banks' practical management of liquidity risk, and use several intervals.

These problems, and several others relating to the ratio, have been addressed in the revised proposal concerning the NSFR which the Basel Committee presented in January 2014. The new ratio contains a maturity interval between

six months and one year, where half of the funding which matures in this interval can be counted as stable funding when calculating the ratio.

The new proposal also implies a more reasonable balance between the size of the requirements for stable funding for lending and how stable the funding sources are assessed to be. Since the previous proposed ratio was heavily criticised both by the financial sector and the regulators, these changes were not unexpected. Handelsbanken's assessment is that the NSFR requirement according to the new Basel definition has been more or less achieved for the Bank with the present funding structure.

#### Disclosure of the liquidity coverage ratio (LCR) specifically in Swedish kronor

The purpose of the LCR is to ensure that a bank has a large enough liquidity reserve to cover a sharp outflow of liquidity for 30 days. The liquidity reserve must consist of liquid assets that can either be sold in the market or used as collateral for borrowing, either in the market or at the central bank. The ability to create liquidity in this manner is usually not dependent on the liquidity reserve being in the same currency as the potential cash outflows that the liquidity is to cover. If assets in a foreign currency are sold, the foreign currency can be exchanged for the domestic currency.

In order for pledging also to be possible, Handelsbanken chooses to hold assets that are eligible to be used as collateral at the Riksbank, even if they are denominated in currencies other than Swedish kronor. Thus it is possible to use a liquidity reserve in foreign currency to cover a cash outflow in Swedish kronor. In addition, special problems are associated with holding a liquidity reserve in Swedish kronor because of the limited supply of Swedish government bonds, due to the strong financial position of the Swedish government. At least 60 per cent of the liquidity reserve must consist of the highest class of approved liquid assets and for assets denominated in Swedish kronor, essentially only government bonds belong to this class.

If the liquidity reserve were to consist only of assets denominated in Swedish kronor, Swedish banks would need to hold a significant

percentage of the total issued volume of Swedish government bonds. Not only would demand increase for an asset already suffering from an inadequate supply, with effects on price as a result, but the link between the state and the banking system would also increase. Given that the euro crisis has largely been the result of the link between states and the banking system becoming too strong, this can be seen as an undesirable development. From a risk diversification perspective, it is generally positive if the liquidity reserve can be invested in assets that have low correlation with the risk of liquidity stress in the domestic banking system. Against this background, it would not be appropriate to require the LCR to be met specifically in Swedish kronor.

The Riksbank has requested that banks disclose the LCR in Swedish kronor in order to increase the transparency of their liquidity management, but without expressing an opinion as to whether there should be a requirement for LCR also to be fulfilled in Swedish kronor.

From Handelsbanken's perspective there are many better ways of improving the transparency of liquidity risks and the Bank has been working with this for a long time. The Bank therefore does not consider it worthwhile to disclose a key figure that it is not appropriate to meet, since it sends a confusing signal where it is easy to get the impression that the key figure should actually be met.

#### **Bank Recovery and Resolution Directive will be of major importance for banks' funding**

One of the remaining building blocks in strengthening the regulations for banks which were prompted by the global financial crisis is to improve the framework for managing banks in a crisis. Within the EU this is being done by means of the Bank Recovery and Resolution Directive, BRRD.

The most important consequence of this directive in terms of banks' borrowing is that it introduces the possibility of a "bail-in". This means that the government writes down certain

debts if a bank is at risk of failing, instead of the lenders losing money first if the bank goes bankrupt. This increases the risk that a bank's lenders will lose money in the event of a bank failure, compared with the previous situation when the government did not have such a tool available.

The effects of a "bail-in" tool are extensive and complex, and no final decision has been taken on the rules. Comments here will therefore address just a few aspects.

By way of introduction, it can be stated that the "bail-in" tool cannot be used as soon as a bank has some form of funding problems. It requires the losses to be so large that the equity is essentially consumed before the tool can be used. Thus the financial problems must be extremely large and extensive. Nevertheless, it means an increased risk for buyers of bank bonds, which should generally result in increased costs for the portion of bank borrowing at risk of being subject to the "bail-in".

Covered bonds and deposits covered by the deposit guarantee would be essentially exempt from the "bail-in" rules. For holders of covered bonds it is generally positive that a "bail-in" is implemented. This is because the possibilities of writing down other debt increases the likelihood that the issuing bank can continue to pay coupons in a very difficult financial situation. The likelihood of a default on the covered bond is therefore reduced.

One consequence of senior debt holders being covered by the "bail-in" is that it becomes clearer that many lenders to banks need to consider the risk of losing money on bank deposits. One example is amounts greater than EUR 100,000 deposited by companies which because of the size of the deposit are not covered by the deposit guarantee.

When lenders to banks have to consider the risk of bank failure, they need to make a more accurate risk assessment of the banks in which they deposit money. One consequence is that that the difference in the cost of borrowing money can be expected to increase between

different banks, which should benefit banks with the lowest risk profile, such as Handelsbanken. Moreover, the "bail-in"-risk probably means that deposits from companies would become more volatile and therefore less suitable as a source of funding for a bank's lending. Handelsbanken already has a cautious approach to using corporate deposits as a source of funding for long-term lending.

## Current capital themes

In the aftermath of the global financial crisis, the requirement for banks' capital adequacy has been subject to a comprehensive review by governments and supervisory authorities around the world. Most elements have been finalised through the international agreement on Basel III and the implementation of these regulations in the EU and Sweden through the fourth capital requirements directive, CRD IV. This section discusses some current questions regarding capital.

### **Despite its low risk level, Handelsbanken is one of the best capitalised banks in Europe**

Handelsbanken has a fundamentally conservative attitude to risk, and having strong capital adequacy is essential to the Bank. According to the textbook, there is an inverse relationship between a company's capitalisation and its return, whereby a lower capitalisation is expected to lead to a higher return on shareholders' equity. However, this theory has proved to be invalid for banking operations. Indeed, experiences from recent years indicate that the reverse is the case.

Strongly capitalised banks have had higher profitability than weakly capitalised banks. Handelsbanken is the clearest example of this, with both capital adequacy and return on equity among the highest in a comparison with European banks. The reason for the inverse relationship is that, for a bank, credibility and financial strength are such key factors for both business performance and funding costs. In recent years, Handelsbanken has been able to strengthen its capital adequacy by some 0.5 percentage points per quarter. This is due to a combination of high profitability, balanced dividends and slightly decreasing risk-weighted assets.

Handelsbanken has gone through the prolonged financial crisis that has prevailed since 2007 with very low loan losses. Even during 2009, the worst year of the crisis, the Bank's loan loss level was no higher than 0.21 per cent of lending – a figure that many European banks do not achieve even in a good year. At the same time, Handelsbanken's earnings have continued to grow, through the expansion of its operations outside Sweden, which has resulted in a higher return on equity than the average of peer banks.

In recent years, the risk level in the Bank's operations has also decreased further. Trading risks have been eliminated, and the Bank's lending to low-risk counterparties has increased – while its lending to higher-risk counterparties has decreased. This has resulted in a slight reduction in risk-weighted assets. During the crisis years, the Bank has also continued to pay ordinary dividends equivalent to 35–50 per

cent of its profits. The combined effect of these factors has been a strengthening of capital adequacy, which has been achieved without needing to implement a new share issue/rights issue to the shareholders.

Many European banks have had weak profitability, partly due to substantial loan losses, which have restricted their ability to build up capital. Many of them have also had to carry out a rights issue in order to meet their capital requirements.

### **Conditions for setting a long term capital target**

It has long been clear that the new capital adequacy regulations developed in the wake of the global financial crisis would include much higher capital requirements. Although the CRD IV decisions have now been made, some questions regarding the Swedish implementation of the regulations remain, and these are highly significant for Handelsbanken's capital planning. These particularly apply to the final application of what are known as the Pillar 2 requirements, and what type of capital it will be possible to use to meet these requirements.

Pillar 2 represents the Swedish Financial Supervisory Authority's individually determined requirements for capital, in addition to the capital adequacy requirements that are calculated directly on the basis of the capital adequacy regulations (Pillar 1).

Handelsbanken wants to be able to establish a long-term capital target. When the future capital adequacy regulations have been determined sufficiently clearly, Handelsbanken will set a new capital adequacy target.

### **The need for tier 1 and tier 2 capital<sup>1</sup>**

Due to the favourable capital situation, coupled with the lack of clarity regarding the future capital adequacy requirements, Handelsbanken has long refrained from issuing capital instruments. At the same time, the Bank allowed around SEK 30 billion of older subordinated loans to mature in 2011–2013. Handelsbanken has the strongest tier 1 ratio according to Basel III of

all major European banks. Therefore there has been no need to add more capital than has been accumulated through the Bank's profit generation.

When Handelsbanken has obtained sufficient clarity concerning the capital adequacy regulations and can thus present a new capital target, the capital structure will be reviewed, in order to create an optimal balance between different types of capital instruments. It is too early to say exactly which instruments will be most useful, but it is clear that there will be some scope for regular tier 2 instruments. Handelsbanken has therefore implemented a couple of issues of tier 2 instruments that meet the requirements according to CRD IV: a small issue in Swedish kronor back in 2012 and recently a large issue of EUR 1.5 billion in January 2014.

Thanks to Handelsbanken's high credit rating and the lack of capital instruments available from the Bank, the demand for this latter issue was extremely high. More than 300 investors placed orders of more than EUR 5.5 billion and the bond was priced with the lowest effective yield ever for a European bank for this type of instrument.

### **Handelsbanken's low risk weights are due to the Bank having far lower loan losses than other banks for a long time**

The risk weights are determined within the framework of the IRB approach in the capital adequacy regulations. The size of the risk weights is determined by mechanical calculations of the past default rate of various groups of borrowers and how much the Bank has historically lost on various types of loans. Therefore the regulations do not give scope for subjectively calculating how much capital the Bank's credit portfolio requires; instead, the capital requirement is a result of the Bank's historic losses.

Handelsbanken has had significantly lower losses than all comparable banks for a long period of time. Since the start of the 1990s, Handelsbanken's loss level has averaged a third of those of other Swedish banks, and since

<sup>1</sup> Tier 1 capital comprises, in addition to normal equity capital, securities which are subordinated to all debt and which meet the requirements of the capital adequacy regulations for this kind of capital, for example that it can be converted into share capital or written down if the capital adequacy falls to certain levels. Tier 2 capital comprises securities which are subordinated to senior debt and which meet the requirements of the capital adequacy regulations for this kind of capital, for example that it must have a maturity of more than 5 years.



1997 just one-fifth of the loan losses of other major Nordic banks. Nordic banks generally have low loan loss levels, and in a comparison with other European banks, the difference would be even greater.

Placing the average losses in relation to the size of the calculated capital requirement produces an indication of how conservatively the IRB systems of each bank translate the historic losses into a capital requirement.

In a comparison of how large the capital requirements resulting from the IRB approaches are for major Nordic banks, we can see that Handelsbanken's implementation of the IRB approach is very conservative.

Handelsbanken's capital requirement according to Basel II corresponds to 45 years' average loan losses, while the capital requirements for other major Nordic banks on average only cover around 17 times the average annual loss.

Handelsbanken's capital requirement thus contains wide safety margins, and the Bank's IRB system demonstrates significantly greater caution than those of comparable banks – seen in relation to the size of the historical loan losses.

### The value of reporting a leverage ratio

The leverage ratio has been drawn up as an alternative to risk-based capital requirements. The purpose is to achieve a simple, clear measure of capital strength. The ratio is designed to show the capital as a proportion of the size of the assets, without taking into account the risk level of the assets.

Despite the motive of creating a simple ratio, the design of the new ratio has been the subject of extensive discussion, both in the Basel Committee and in the general debate on how capital adequacy requirements should be formulated for banks. The discussion includes how the value of derivatives should be calculated, how off-balance sheet commitments are to be taken into account, and what type of capital is to be included in the ratio.

In January 2014, the Basel Committee presented its final decision on the ratio. However, it must be implemented in national regulations

before it can be regarded as definitively established. The new version included amendments meaning, among other things, that a complex regulation will be introduced for the extent to which the netting<sup>2</sup> of derivatives, securities loans and repos can lead to the reduction of assets, as well as the introduction of risk-weighting of loan commitments and revolving credits<sup>3</sup>. These amendments mean that it is difficult to consider the Basel Committee's leverage ratio as a simple, non-risk-based measurement of capital adequacy. Instead, it appears to be a variation on a standardised risk-based measurement, similar to the measurement set out in the Basel I regulations. The risk-weighting also appears difficult to comprehend. For example, deposits in central banks, which should be the most secure assets that a bank can have on its balance sheet, are risk-weighted at 100 per cent. At the same time, a binding committed loan offer to a company, regardless of how high its risk, has a risk weight of 20 per cent.

Handelsbanken regards the leverage ratio as an unimportant ratio for a risk assessment of banks and unsuitable for use as a regulatory requirement. The risks in a banking operation are governed by the assets that a bank has on its balance sheet, and the equity aims to cover any losses that the bank risks incurring from its exposure in various assets.

It is obvious that a bank that trades in high-risk securities or lends to high loan-to-value companies needs a larger capital buffer than a bank in which the assets consist of housing loans with low LTVs for the mortgaged properties or investments in government securities issued by stable countries. In addition to the fact that the leverage ratio does not take account of the customer's payment capacity, there is also reasons to question why a loan protected by high quality collateral is compared to an unsecured loan from a capital requirement perspective, since the value of the collateral protects the Bank and is utilised before the Bank's capital is jeopardised. As the leverage ratio does not differentiate between the risk in different assets in any way, the ratio will indicate that these

different banks need the same capital buffer. It is difficult to see the value of such a ratio. If it is used as a regulating requirement, it will also have negative consequences.

Banks generally choose to invest in assets or lend to counterparties that can generate earnings that cover the cost of maintaining the equity. Low-risk assets normally generate a low yield in a functioning financial market. If banks must maintain a large capital buffer for assets with a low risk, there is no reason for keeping these assets on the balance sheet; instead, it is better to have them financed outside the banking system.

Swedish government bonds and mortgage loans are two practical examples of low-yielding assets that are important to Swedish banks. Government bonds are mainly held as part of banks' liquidity portfolios, and to enable banks to act as market makers in government instruments. A leverage ratio requirement gives banks an incentive to keep volumes of government bonds as small as possible, and for seeking higher-risk assets for their liquidity portfolios, which naturally increases the credit risk and liquidity risk and leads to poorer liquidity in government securities trading.

As far as mortgage loans are concerned, there is an opportunity for banks to remove them from the balance sheet by securitising them. The securitisation of mortgage loans does not give the lender the incentive to perform a thorough credit assessment of the borrowers, which was one of the most important problems behind the financial crisis of 2008–2009. It is difficult to regard regulations that support this as being suitable from a risk perspective. In general terms, a non-risk-based capital requirement gives banks an incentive to hold assets with the highest risk possible.

The leverage ratio is very imprecise, and with the lack of an established, accepted way of calculating the ratio, the value of the information is limited. Handelsbanken has therefore not deemed it necessary to present a specific leverage ratio and considers that it is better to show various alternative definitions. The diagram

<sup>2</sup> Netting means that the opposite positions that the counterparties have on each other where one position is an asset and the other is a liability, can be set off against each other so that only the net position is reported as an asset when calculating the leverage ratio.

<sup>3</sup> Revolving credits are credits where the borrower has a pre-determined amount available to borrow but where utilisation of the credit varies over time. Credit cards and overdraft facilities are two common examples of revolving credits.

shows how the ratio is affected for Handelsbanken with different definitions of the assets, starting with the assets comprising the actual consolidated balance sheet and moving gradually towards an asset definition where certain assets with particularly low risk are removed from the ratio. Most of the information used to calculate the ratio according to the various definitions is available in the Bank's public reporting. It is thus possible for anyone to perform the calculations themselves and in doing so, select the definition that is suitable.

The main reason for using the leverage ratio as a binding capital requirement as presented in the debate seems to be that the risk-based capital requirements give banks too much opportunity to influence the capital requirement through their internal models and that the supervisory authorities do not have sufficient control over this risk-weighting. As discussed in the next section, however, the models are a result of historic losses that banks cannot influence and the public authorities have the opportunity to check and approve how the

banks have implemented their internal models. It should therefore be better to concentrate on improving the supervision of the internal models rather than introducing regulations that give banks an incentive to increase the risk on their balance sheet.

#### Control mechanisms for a fair application of the risk-based capital requirements

The regulations surrounding the risk-based capital requirements for credit risk (IRB approach) are extensive and strict in terms of how exposures are classified, how counterparties are assigned a rating and how historical losses are translated into values for the calculation of capital adequacy. Banks have limited freedom in shaping the IRB system. A bank's historic defaults and losses are the factors that generate the parameters used in the risk-weighting calculation, and this cannot be eliminated through creative modelling work. The regulations are far too strictly designed to enable this.

Through the follow-up of risk parameters that takes place through the banks' continual valida-

tion of the IRB system, it is possible to monitor whether the risk is overestimated or underestimated by the Bank's risk parameters.

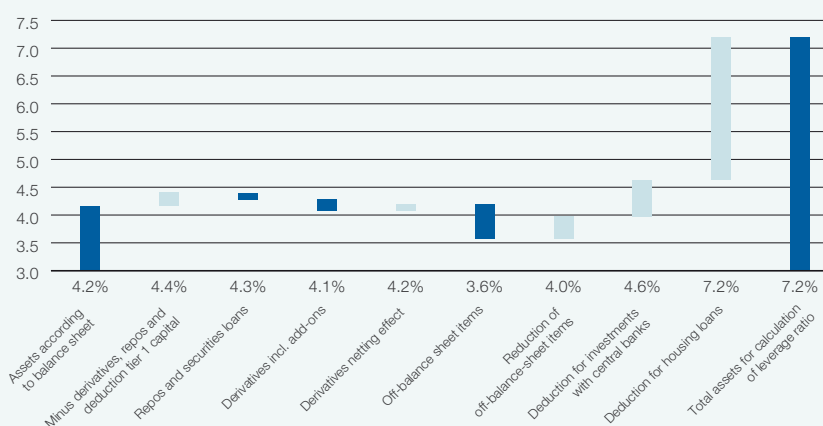
On page 13 in this report Handelsbanken shows how well the outcome of the Bank's losses at an overall level relates to the values that the IRB approach had forecast. For all exposure classes and for all measures, the risk parameters used are higher than the outcome, which demonstrates the caution and safety margins which are built into Handelsbanken's use of the IRB approach. Of course, an in-depth assessment of the Bank's validation of the model also forms the basis of a supervisory authority's continual monitoring of a bank. If a bank does not take account of the results of the validation or if this is not performed correctly, the supervisory authority has every possibility of intervening against the bank and ensuring that the risk parameters that the bank uses are raised in the calculation of the capital requirement.

Since the introduction of Basel II, the supervisory authorities have been working to ensure that the IRB approaches are used consistently and with caution. The Basel Committee and the European Banking Authority (EBA) are conducting an extensive investigation into whether there are unjustified differences between how the IRB approaches are used, both between banks and between different countries.

The initial reports from this work show that a high proportion of the differences in risk weights between banks can be attributed to differences in the counterparties the banks lend to, for example if the proportion of household lending is high, or if a high proportion of lending is to companies. Another key factor that explains differences in risk weights is whether defaulted exposures are included in the risk weight calculation or not.

Some unexplained differences between banks remain, but it has not been possible to show whether these differences depend on actual differences in risk that the IRB approach aims to identify, or whether it is a case of unjustified differences in the implementation. Clearer conclusions regarding this will probably be presented in the future. The uncertainty felt by both investors and authorities about whether the risk-weighting works should therefore be possible to reduce as the authorities hone their supervisory work and when banks become better at showing how well the IRB approach works.

Leverage ratio based on various definitions of the assets, capital defined as tier 1 capital, 31 December 2013



The first column shows the leverage ratio based on the assets reported in the consolidated balance sheet. The next step shows the effect of deducting certain assets which are reported net according to certain accounting systems such as US GAAP. These assets are then restored (mainly repos and securities loans) and at the next step derivatives including the add-ons which the capital adequacy regulations contain for the risk of future value changes. The effect of netting of derivatives is shown in the next step. After this the effect of adding off-balance sheet commitments is shown as proposed by CRR, and then the effect of using the conversion factors in the standardised rules for these commitments, which the Basel Committee decided in January 2014. Finally, the effect of the risk-free investments with central banks not being included is shown, and in the final step the effect of mortgage loans (defined as the mortgage loans that can be put in a covered bond pool) not being included. This illustrates the effect of them either not being included in the ratio or of them being securitised and thus disappearing from the balance sheet.



# Market risk

Handelsbanken's policy is to have low market risks and low volatility in its earnings. Market risks mainly arise in Handelsbanken Capital Markets as a result of customer-driven transactions, and at Central Treasury through the Bank's funding.

Market risks arise from price and volatility changes in the financial markets. Market risks are divided into interest rate risks, equity price risks, exchange rate risks and commodity price risks.

Handelsbanken has a restrictive view of market risks. Essentially, market risks in the banking operations are only taken as part of meeting customers' investment and risk management needs. During the past few years, the Bank has worked actively to reduce the market risks in its balance sheet. One result of this is that a much smaller part of the earnings come from net gains/losses on financial transactions.

At a universal bank like Handelsbanken, market risks arise when the Bank's customers demand services where the Bank must have flexible funding. The Bank can also obtain funding on other markets than those where it has its lending so that it can diversify its sources of funding. The funding can also have a different maturity than the assets which are to be funded. Central Treasury manages a liquidity portfolio that can be converted into liquidity at short notice in conjunction with possible disruptions in the markets where the Bank conducts its

operations. The portfolio secures the Group's payments in the daily clearing operations and forms part of the Bank's liquidity reserve.

Market risks also arise to meet customers' demand for financial instruments with exposure to the fixed income, currency, equity or commodities markets. To meet this demand, it may be necessary for the Bank to have certain holdings. This situation arises for example when the Bank has undertaken to set market prices in its function as a market maker. Finally, the Bank has major business flows, making it reasonable for it to take advantage of possible economies of scale.

The Bank's limit system restricts the size of the exposure to market risks. Measuring methods and limits are established by the Board. The limits for interest rate, currency and liquidity risk are allocated by the CEO and the CFO to the Head of Central Treasury, who in turn allocates these to the business-operating units. The Head of Central Treasury has operational responsibility for managing interest rate, currency and liquidity risks.

The CEO and the CFO also decide on supplementary risk measures, limits and detailed guidelines. The supplementary limit measures aim to reduce the Bank's total sensitivity to volatility changes in the financial markets, and to limit the risks of specific holdings and the liquidity risk per currency. These measures also limit the risks from a maturity perspective. The CFO, CEO and Board continually receive reports on

the market risks and utilisation of the limits.

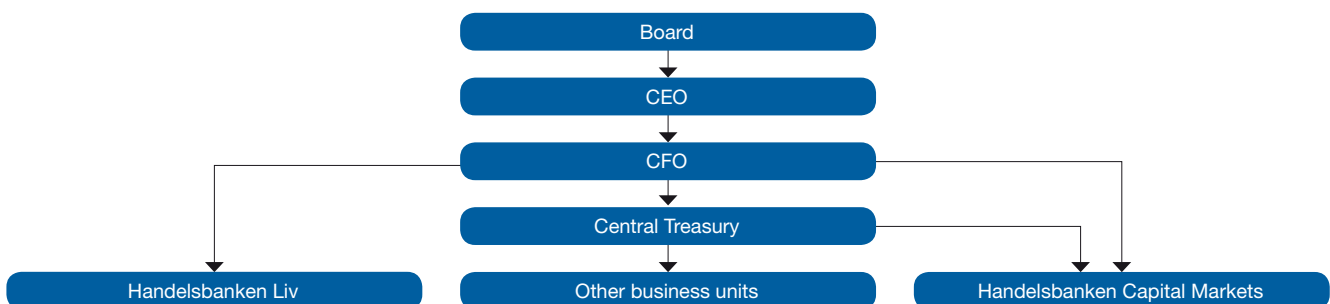
Market risks in the Bank's business operations mainly arise at Central Treasury, Handelsbanken Capital Markets and Handelsbanken Liv, and are managed there. The market risks at the insurance company, Handelsbanken Liv, are described in a separate section. Consequently, the information on market risks given in this section refers to risks excluding Handelsbanken Liv.

### Risk measurement

Market risk is measured using several different methods. Various sensitivity measures are used, showing the changes in value arising from pre-defined changes in prices and volatilities. Position-related risk measures and probability-based Value at Risk models (VaR) are also used. VaR expresses the losses in Swedish kronor that may arise in risk positions due to movements in the underlying markets over a specified holding period and for a given confidence level.

The VaR method means that different risk classes can be handled in a uniform way so that they can be compared and aggregated into a total market risk. Handelsbanken has, however, been, and will continue to be, very restrictive in basing the limit system on VaR risk measurements since VaR in its construction stipulates a given loss level. The risk in that case would be that this loss level would become accepted as a norm in the operations.

### Decision levels and monitoring of market risk



VaR for trading book, Handelsbanken Capital Markets and Central Treasury

SEK m	Total		Equities		Fixed income		Currency		Commodities	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Average	18	15	3	2	18	15	2	3	1	1
Maximum	42	26	6	5	40	31	5	8	4	7
Minimum	9	7	1	0	9	8	0	1	0	0
Year-end	14	11	1	2	14	11	1	4	2	1

**Risk at Handelsbanken measured as VaR**

For the portfolios classified as the trading book at Handelsbanken Capital Markets and Central Treasury, VaR is calculated for the individual risk classes and at portfolio level with a 99 per cent confidence level and a one-day holding period.

Since VaR is based on model assumptions, the model is continually verified to check that it is up-to-date. For that reason VaR is regularly evaluated using back testing. The result is reported quarterly to the CFO, the CEO and the Board. These tests verify the number of days

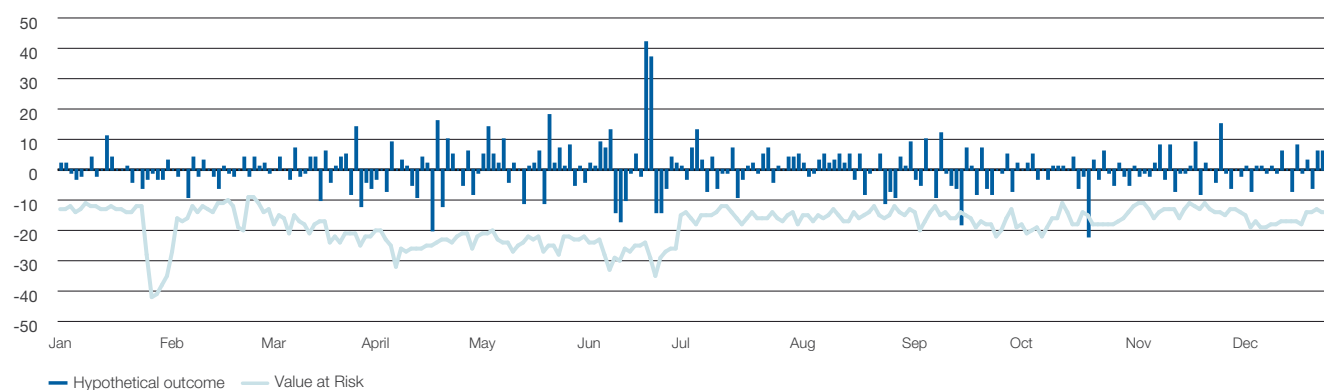
when the loss exceeded the estimated VaR. Back testing is performed on both the actual outcome and on the hypothetical outcome. The latter measures the outcome if the portfolio had been unchanged during the holding period.

A VaR model with a 99 per cent confidence level implies that the outcome will be worse than measured VaR on two to three occasions every year. If the number of observed occasions exceeds the expected number, there is a risk that the model underestimates the actual risk. On two occasions in 2013 the hypothetical

outcome was worse than the VaR. This is in line with what a VaR model with a confidence level of 99 per cent implies.

The VaR model does not identify risks associated with extreme market fluctuations. The calculations are therefore supplemented with regular stress tests where the portfolios are tested against scenarios based on all events in the financial markets since 1994. The results of these stress tests are also reported to the CEO, CFO and the Board on a regular basis.

VaR and hypothetical outcome for trading book 2013, Handelsbanken Capital Markets and Central Treasury



Worst outcome in stress test for trading book, Handelsbanken Capital Markets and Central Treasury

SEK m	2013	2012
Average	26	38
Maximum	69	70
Minimum	12	18
Year-end	28	28

**INTEREST RATE RISK**

Interest rate risk mainly arises at Handelsbanken Capital Markets, Central Treasury and in the lending operations.

In the latter, the interest rate risk arises as a result of the lending partly having longer interest-rate fixing periods than the funding. In bond funding, the reverse may also apply, i.e. that the interest-rate fixing period on the bonds is longer than the interest-rate fixing period for the lending that the bonds are funding. Interest rate is mainly managed by means of interest rate swaps. In general, interest rate risk exposure is in markets which are characterised by good liquidity.

Interest rate risk is measured at the Bank in several ways. VaR and other risk measure-

ments, supplemented by various stress scenarios, are used for Handelsbanken Capital Markets' portfolios and at Central Treasury. Yield curve twist risks – which are measured and followed up on a regular basis – show the development of the risks in the case of hypothetical changes in various yield curves. The non-linear interest rate risk, for example, part of the risk in interest rate options, is measured and a limit set with pre-defined stress scenarios expressed in matrices. This means that the risk is measured as changes in underlying market interest rates and volatilities.

For other units and for the aggregate interest rate risk in the Group, the interest rate risk is measured as the effect on fair value of a major instantaneous parallel shift of all interest rates.

At year-end, the Bank's total interest rate risk in the case of a one percentage point parallel upward or downward shift in the yield curve, measured as the worst outcome, was SEK -992 million (-701). This risk measure includes both interest-bearing items at market value and not at market value, and it is therefore not appropriate to assess the effects on the balance sheet and income statement. The risk measure does not take into account the equity held by the Bank nor the Bank's opportunities to adapt to changed interest rate levels.

The net interest income effect when interest rates change is measured as the change in net interest income over a 12-month period in the case of a general increase of market rates by one percentage point. This effect reflects the

<b>Interest rate sensitivity</b> (change in present value of future cash flows due to 1% shift in yield curve)		
SEK m	2013	2012
SEK	-746	-680
NOK	-138	-1
DKK	-121	-103
USD	114	72
GBP	-54	-43
EUR	-41	59
Other currencies	-6	-5
<b>Total</b>	<b>-992</b>	<b>-701</b>

differences in interest-rate fixing periods and volume composition between assets, liabilities and derivatives outside the trading book, assuming that the size of the balance sheet is constant.

The calculation takes account of the fact that interest rates on some deposit accounts without a fixed interest-rate period are not directly linked to market rates. The net interest income effect was SEK 1,191 million at the year-end.

Specific interest rate risk is measured and limits set using sensitivity to changes in credit spreads. This risk only arises within Handelsbanken Capital Markets and in the Central Treasury liquidity portfolio. The risk is measured and limited on the basis of different rating classes and is calculated as a market value change for the worst outcome in the case of a parallel shift in the credit spreads of +/- one basis point, i.e. the difference between the interest on the

current holding and the yield on a government bond with the same maturity. This is performed for each individual counterparty and the outcomes are summed as an absolute total. The total specific interest rate risk at the year-end was SEK 7 million (8).

<b>Interest rate adjustment periods for assets and liabilities 2013</b>						
SEK m	Up to 3 mths	3-6 mths	6-12 mths	1-5 yrs	Over 5 yrs	Total
<b>Assets</b>						
Loans	1 183 993	79 945	88 320	317 937	26 294	1 696 489
Banks and other financial institutions	431 284	1 351	130	87	0	432 852
Bonds etc.	30 549	11 182	1 218	42 861	7 508	93 318
<b>Total assets</b>	<b>1 645 826</b>	<b>92 478</b>	<b>89 668</b>	<b>360 885</b>	<b>33 802</b>	<b>2 222 659</b>
<b>Liabilities</b>						
Deposits	804 844	3 499	2 074	2 277	1 624	814 318
Banks and other financial institutions	167 610	6 943	489	125	5 019	180 186
Issued securities	369 497	169 073	24 758	501 699	101 579	1 166 606
Other liabilities	-	-	-	-	-	-
<b>Total liabilities</b>	<b>1 341 951</b>	<b>179 515</b>	<b>27 321</b>	<b>504 101</b>	<b>108 222</b>	<b>2 161 110</b>
Off-balance sheet items	-200 184	-14 766	5 014	160 395	49 191	-350
Difference between assets and liabilities including off-balance sheet items	103 691	-101 803	67 361	17 179	-25 229	61 199

The table shows the interest rate adjustment periods for interest-rate related assets and liabilities as at 31 December 2013, reported by trade date. Non-interest-bearing assets and liabilities have been excluded.

<b>Interest rate adjustment periods for assets and liabilities 2012</b>						
SEK m	Up to 3 mths	3-6 mths	6-12 mths	1-5 yrs	Over 5 yrs	Total
<b>Assets</b>						
Loans	1 169 895	72 208	98 827	315 171	24 378	1 680 479
Banks and other financial institutions	324 464	1 171	95	279	-	326 009
Bonds etc.	16 713	2 428	955	65 867	7 980	93 942
<b>Total assets</b>	<b>1 511 071</b>	<b>75 807</b>	<b>99 876</b>	<b>381 317</b>	<b>32 358</b>	<b>2 100 430</b>
<b>Liabilities</b>						
Deposits	662 783	3 995	2 746	976	39	670 538
Banks and other financial institutions	172 723	5 399	766	146	5 066	184 100
Issued securities	410 652	106 050	116 130	457 898	81 862	1 172 592
Other liabilities	-	98	316	193	3 176	3 783
<b>Total liabilities</b>	<b>1 246 158</b>	<b>115 542</b>	<b>119 958</b>	<b>459 212</b>	<b>90 143</b>	<b>2 031 013</b>
Off-balance sheet items	-207 011	-22 769	23 115	157 104	50 390	829
Difference between assets and liabilities including off-balance sheet items	57 902	-62 505	3 032	79 209	-7 395	70 245

The table shows the interest rate adjustment periods for interest-rate related assets and liabilities as at 31 December 2012, reported by trade date. Non-interest-bearing assets and liabilities have been excluded. Handelsbanken Liv has been excluded from the table and consequently the comparative figures for 2012 have changed. The market risks in the Insurance operations are described in full in a separate section.

**EQUITY PRICE RISK**

The Bank's equity price risk mainly arises at Handelsbanken Capital Markets through customer trading and in the Bank's own equity portfolio.

**Equity price risk in the trading book**

The equity price risk at Handelsbanken Capital Markets arises in customer-generated equity-related transactions. Handelsbanken Capital Markets is a market maker for structured products, which gives rise to equity price risk, both linear and non-linear. The non-linear equity price risk arises via options included in the structured products.

The extent of own position-taking, which arises to meet customers' needs, is restricted by the limits decided by the Bank's Board, the CEO and the CFO. The Bank limits and measures the equity price risk at Handelsbanken Capital Markets using matrices. The advantage of this method is that it effectively identifies equity price risk including the non-linear risk. VaR as well as other risk measures and stress scenarios are used as a complement when measuring the equity price risk. The supplementary risk measures include dividend risk, event risk and sensitivity to general volatility changes on the equity market.

**Equity price risk outside the trading book**

The majority of the Group's shareholdings – 96 per cent – comprises shares listed on an active market valued at market price. Holdings of unlisted securities mainly consist of various types of jointly owned operations related to the Bank's core business. In general, such holdings are valued at the Bank's share of the company's net asset value. For unlisted shares where the company agreement regulates the price at which the shares can be divested, the holdings are valued at a divestment price determined in advance. In all material respects, unlisted shares are classified as available for sale.

The table below shows the risk in the Bank's total equity positions in the case of hypothetical changes in underlying prices and volatilities at year-end.

**EXCHANGE RATE RISK**

Handelsbanken has home markets outside Sweden and also operations in a number of other countries. Indirect currency exposure

of a structural nature therefore arises, because the Group's accounts are expressed in Swedish kronor. The structural risk is minimised by matching assets and liabilities in the same currency as far as possible. The exchange rate movements that affect the Bank's equity are shown in the table on page 68 of the Annual Report: Statement of changes in equity – Group.

The Bank's direct foreign exchange exposure arises as a consequence of customer-driven intra-day trading in the international foreign exchange markets. Trading is conducted at Handelsbanken Capital Markets. The Board, CEO and CFO have set VaR limits for exchange rate risk. At the year-end, VaR was SEK 0.4 million (2).

Some foreign exchange exposure also arises in the normal banking operations as part of managing customer payment flows and in funding operations at Central Treasury. The Board, CEO and CFO have allocated position limits for these exposures. At year-end, the aggregate net position amounted to SEK 186 million (293). The exchange rate risk in the Bank does not

depend on trends for an individual currency or group of currencies, because the positions are very short and arise in management of customer-driven flows. The total exchange rate risk was SEK 5 million (-18), measured as the impact on the Bank's earnings of an instantaneous 5 per cent change of the Swedish krona.

**COMMODITY PRICE RISK**

Exposure in commodity-related instruments only occurs as a result of customer-based trading in the international commodity markets and is restricted by limits decided by the Board, CEO and CFO. Trading in commodities is conducted exclusively at Handelsbanken Capital Markets. Commodity price risk, both linear and non-linear, is measured as the absolute total of risk for all commodities to which the Bank is exposed. At the year-end, the commodity price risk was SEK -24 million (-20), measured as the maximum loss on price changes up to 20 per cent in underlying commodities and changes in volatility up to 35 per cent.

Exchange rate sensitivity (worst outcome +/- 5% change SEK against the respective currency)		
SEK m	2013	2012
EUR	10	-8
USD	-10	-9
GBP	-5	-3
NOK	-2	-8
DKK	-2	0
Other currencies	-10	-24

Equity exposures outside the trading book SEK m		
	2013	2012
Classified as available for sale	5 725	5 205
<i>of which listed</i>	4 369	4 176
<i>of which unlisted</i>	1 356	1 029
Classified as available for sale	5 725	5 205
<i>of which business-related</i>	768	546
<i>of which other holdings</i>	4 957	4 659
Fair value reserve at beginning of year	796	134
Unrealised market value change value during the year for remaining and new holdings	420	661
Realised due to sale and settlements during the period	1	1
Fair value reserve at end of year	1 217	796
Included in tier 2 capital	1 216	797

Equity price risk SEK m	Change in volatility					
	2013			2012		
Change in equity price	-25%	0%	25%	-25%	0%	25%
10%	581	581	581	514	511	507
-10%	-577	-570	-565	-525	-518	-509

# Funding and liquidity risk

The starting point for Handelsbanken's work on liquidity risk is a well-balanced balance sheet where long-term assets are financed with stable funding. In the past year, Handelsbanken has continued to expand its funding programmes, issued both covered and senior bonds, broadened its investor base and expanded its liquidity reserve. This enables operations to be maintained in circumstances that are much more difficult than those which have existed in the past few years.

Liquidity risk is the risk that the Bank will not be able to meet its payment obligations when they fall due without being affected by unacceptable costs or losses.

### Funding strategy

Handelsbanken has a low tolerance of liquidity risks and works actively to minimise them in total and also in all currencies. The ambition is that this will provide good access to liquidity, a low level of variation in earnings and a considerable capacity to meet customers' funding needs, even in difficult times. This is achieved by maintaining a good matching of incoming and outgoing cash flows over time in all currencies of importance to the Bank and by maintaining large liquidity reserves of good quality.

Furthermore, the Bank aims for breadth in its funding programmes and their use so that no type of investor is treated at a disadvantage compared to others. This ensures that the Bank can keep its core business intact for a very long period of time, even if there is extensive disruption in the financial markets.

The starting point of this work is a well-matched balance sheet, where illiquid assets are financed using stable funding. The illiquid assets comprise credits to households and companies; these credits constitute the Bank's core business. The long-term stable funding of these assets consists of covered bonds issued in Stadshypotek, senior bonds issued by Handelsbanken, deposits from households and companies, subordinated liabilities and equity. Part of the core operations are short-term lending to households and companies and on the liabilities side some of the deposits for these customers are shorter term.

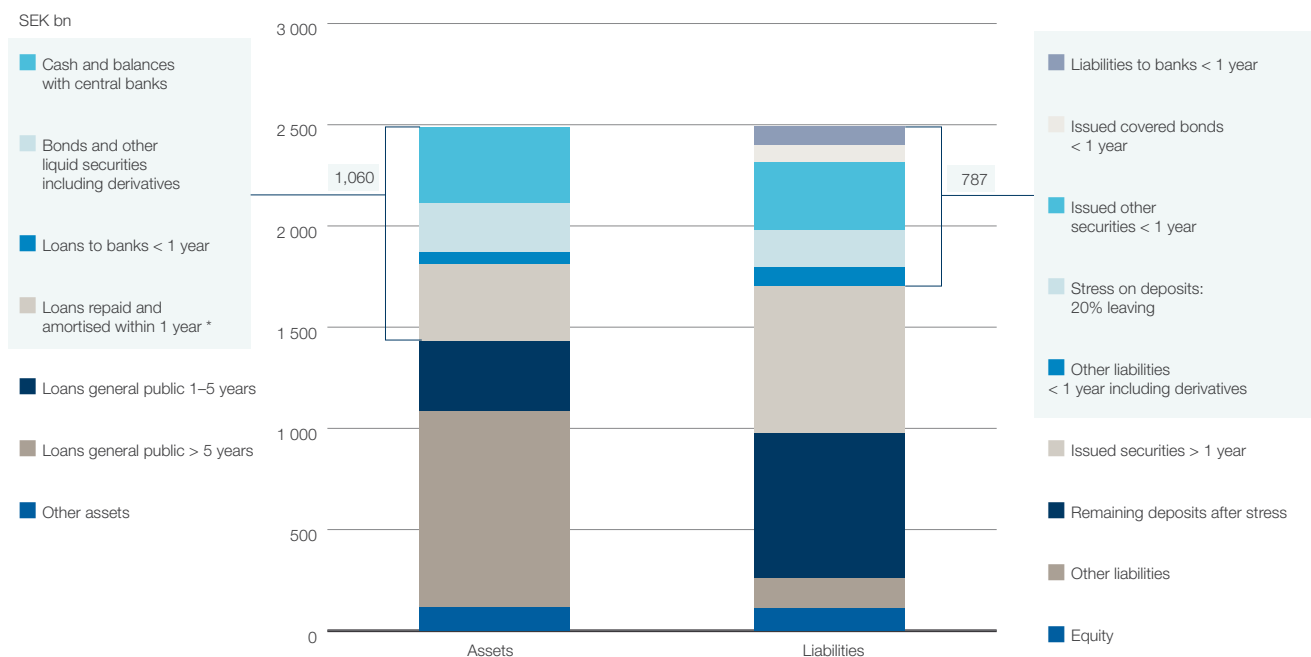
The main point is thus that illiquid assets are not funded with short-term liabilities. The rest of

the balance sheet comprises liquid assets and liabilities that are shorter term.

The short-term market funding and deposits from financial institutions finance liquid assets and assets with shorter maturities. In addition, more short-term assets and liabilities arise via transactions that support customer-driven transactions, such as derivative and repo transactions with other banks.

A balance sheet is a snapshot of assets and liabilities. To ensure that the Bank's obligations towards customers and investors are fulfilled, it is important to adopt a future-oriented perspective in funding and liquidity risk management. The balance sheet is therefore structured in such a way that even during lengthy periods of stress in the financial markets, the real economy players in the form of companies and households and their needs for credit can be supported. Current assets cover current liabilities by a good margin. A long-term crisis could result in a reduced balance sheet with retained core business. In the event of an even longer crisis,

Composition of the balance sheet from a maturity perspective, 31 December 2013



\* Scheduled amortisations, contractual maturities and estimated additional loan repayments.

measures have been prepared to create liquidity which will provide more support to the business operations.

A balance sheet that is structured in this manner at all times – on market terms – is how Handelsbanken assumes its responsibility in its role as a systemically important bank in the Swedish financial system.

The market has great confidence in Handelsbanken and its assessment is that Handelsbanken has a very low credit risk. One illustration of this is that the cost of insuring a credit risk on the Bank, which is known as the CDS spread, is one of the lowest of all among European banks, and Handelsbanken has the lowest funding cost of all peer banks.

Good diversification between different types of sources of funding in various markets, currencies and forms of funding instruments is a key component of the funding strategy. This reduces the significance of individual markets or sources of funding. In recent years, the Bank has considerably broadened its long-term international funding and has issued significant volumes of bonds in, for example, the eurozone, the UK, the US, Asia and Australia. The most important sources of funding are deposits from households and companies as well as covered and senior bonds. The short-term funding mainly comprises deposits from financial companies and institutions as well as issues of certificates. Central Treasury has a number of different funding programmes for market funding at its disposal, which in addition to the programmes reported in the table Funding programmes/

limits contain covered bonds in Swedish kronor. Bonds and certificates are issued under these programmes in the Bank's and Stadshypotek's names. The funding programmes ensure well-diversified access to funding in terms of different currencies, the number of investors and geographic distribution.

**Encumbered assets and cover pools**

An important part of Handelsbanken's liquidity management consists of retaining significant volumes of unutilised collateral that can be used in the event of disruptions in the financial markets. One prerequisite for being able to pledge additional collateral is for the Bank to have collateral at its disposal from the outset. The Bank retains substantial volumes of non-encumbered assets that could be used as collateral in the issue of covered bonds and highly liquid securities with high credit ratings. The Bank is very restrictive about entering into agreements that stipulate that the Bank, according to certain criteria, may be forced to provide collateral to another counterparty. In addition to securing the Bank's liquidity, this also contributes to limiting the extent to which the Bank's senior lenders could be subordinated to lenders who invest in covered bonds, known as subordination.

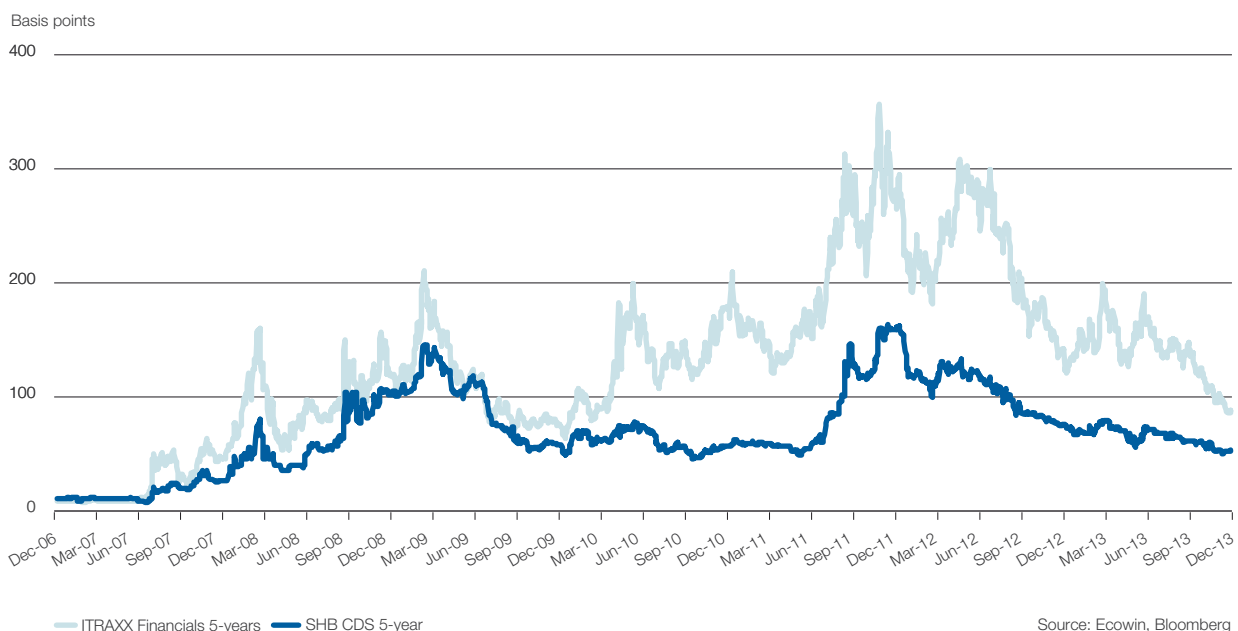
To assess the degree of subordination between investors of non-encumbered funding and encumbering funding, the volume and credit quality of the non-encumbered assets are the relevant factors. Handelsbanken's very restrictive approach to risk-taking means that the non-encumbered assets are of very high

quality. Since Handelsbanken wishes to have a balanced utilisation of covered bonds, there is a large volume of mortgage loans which are not encumbered. Other non-encumbered loans also have a very low risk measured in terms of the Bank's internal rating.

The table shows that the volume of non-encumbered assets for Handelsbanken is 222 per cent of the outstanding volume of non-encumbered funding.

The majority of the encumbered assets consist of Stadshypotek's cover pools, which comprise mortgage loans provided as collateral for outstanding covered bonds. The Bank also has voluntary OC (over-collateralisation – extra assets in addition to those which are needed to cover the issued bonds) of 10 per cent which is included in the pool. These extra assets are in the pool in case the value of the mortgage loans were to fall to a level such that further assets are needed to match the volume of outstanding bonds. When assessing the risk that it will be necessary to add further assets, the loan to value (LTV) of the mortgage loans in the cover pool is of fundamental importance. The lower the LTV, the less the risk that more mortgage loans are required in the pool if prices fall in the property market. Handelsbanken's average LTV in the Swedish pool is very low and at year-end it totalled 50 per cent; the corresponding figure in the Norwegian pool was 54 per cent. This shows that the Bank can withstand substantial drops in prices of underlying property assets before further mortgage loans have to be added to the pools.

Handelsbanken's 5-year CDS spread compared with ITRAXX Financials 2007–2013



Source: Ecwin, Bloomberg

ITRAXX Financials is an index of CDS spreads for the 25 largest bond issuers in the European bank and insurance sector. It describes the average premium that an investor requires in order to accept credit risk on the companies.

Encumbered assets and other pledged collateral	Exposure on balance sheet				
	2013		2012		
SEK bn					
Loans to the public		562		560	
Assets for insurance policyholders		92		79	
Government instruments and bonds		53		56	
Cash, equities and securities loans		15		7	
Other		17		0	
<b>Total pledged assets</b>		<b>739</b>		<b>702</b>	
Pledged without underlying claim <sup>1</sup>		57		51	
<b>Non-encumbered/non-pledged assets</b>					
		<b>2013</b>		<b>2012</b>	
		<b>Exposure on balance sheet<sup>2</sup></b>		<b>Exposure on balance sheet<sup>2</sup></b>	
		<b>% of non-secured funding<sup>3</sup></b>		<b>% of non-secured funding<sup>3</sup></b>	
SEK bn					
Cash and balances with central banks		370	48	246	31
Liquid bonds in liquidity portfolio		90	60	114	45
<b>Loans to households</b>		<b>385</b>		<b>349</b>	
<i>of which mortgage loans</i>		255	93	225	74
<i>of which loans secured by property mortgage</i>		16	95	17	76
<i>of which other household lending</i>		114	110	107	90
<b>Loans to companies</b>		<b>679</b>		<b>687</b>	
<i>of which mortgage loans</i>		85	122	67	98
<i>of which loans to housing co-operative associations excl. mortgage loans</i>		24	125	23	101
<i>of which loans to property companies incl/excl mortgage loans</i>					
- risk category 1-3		203	151	196	126
- risk category 4-5		85	162	79	136
- of which risk category >5		12	164	12	137
<i>of which other corporate lending</i>					
- risk category 1-3		168	186	194	162
- risk category 4-5		71	195	91	173
- risk category >5		31	199	25	176
<b>Loans to credit institutions</b>		<b>69</b>		<b>88</b>	
- risk category 1-3		68	208	86	187
- risk category >3		1	209	2	188
<b>Other assets</b>		<b>0</b>	<b>209</b>	<b>33</b>	<b>192</b>
Other lending		101	222	118	207
<b>Non-encumbered/non-pledged assets</b>		<b>1 694</b>	<b>222</b>	<b>1 635</b>	<b>207</b>

<sup>1</sup> Over-collateralisation in cover pool (OC).

<sup>2</sup> NEA: Non-encumbered assets.

<sup>3</sup> Issued short and long non-secured funding and due to credit institutions.

Cover pool data	Sweden		Norway	
	31 December 2013	31 December 2012	31 December 2013	31 December 2012
SEK m				
Stadshypotek total lending, public	833 614	780 770	60 902	59 961
Available assets for cover pool	745 954	691 596	53 365	49 308
Utilised assets in cover pool	604 316	596 128	14 794	11 173
Maximum LTV, weighted average ASCB definition	49.6	47.4	54.1	54.8
Volume-weighted LTV (LTV-mid)	25.1	23.7	28.2	27.5
<b>LTV, distribution</b>				
0-10%	24.1	26.6	21.1	22.6
10-20%	20.9	21.9	20.9	21.4
20-30%	18	17.7	18.4	17.9
30-40%	15.1	14.1	16.6	15.6
40-50%	12.3	11	13.5	12.9
50-60%	9.4	8.3	9.5	9.3
60-70%	0.1	0.3	0	0.2
70-75%	0.1	0.1	0	0.1
Loan amount, weighted average, SEK	614 400	544 800	2 698 600	2 119 400
Loan term, weighted average, no. of months	39	38	20	17
<b>Interest fixing periods, distribution</b>				
Floating rate %	42	34	100	100
Fixed rate %	58	66	0	0



## Organisation

Handelsbanken has a highly decentralised business model, but all funding and liquidity risk management in the Group is centralised to Central Treasury. Funding and liquidity risk management is governed by policies established by the Board which also decides on limits. Guidelines from the CEO and CFO make these policies concrete. The guidelines stipulate limits, the composition of the funding and guides in the case of disruptions in the funding markets.

The basic condition for the funding operation is that it must promote long-term stable growth in profits by limiting market and liquidity risks. This is achieved by matching cash flows between funding and lending. The Bank thus minimises the economic risks in funding and can thereby decide on stable and long-term internal interest rates to the business-operating units. Furthermore, all liquidity risk limits are channelled via Central Treasury out into the operations.

In the wake of the financial crisis of recent years, a number of new regulations will come into force in the next few years. The Bank has made various changes to meet these new requirements. These include a centralised treasury function with overall responsibility for all funding and liquidity risk management, an increased proportion of long-term funding, internal prices that reflect the market price, liquidity

risk and maturity. In addition, the transparency related to funding and liquidity risk has been considerably increased.

Central Treasury is also responsible for the Bank's clearing operation and monitors liquidity flows during the day to ensure that the Bank has sufficient collateral in its payment systems at any given time to meet the Bank's payment obligations. The Bank's liquidity monitoring takes place locally, near the transactions, and is supplemented by central management of collateral and liquidity reserve for the whole group. The Bank participates in Continuous Linked Settlement (CLS) and other local payment systems required to support the core operation and thereby ensure payments and settlements by providing liquidity or collateral.

In 2013, the Bank became a direct member of CHAPS in the Bank of England. The size of collateral in the clearing systems is determined on the basis of what the Bank deems is required to fulfil the Bank's obligations, both in normal circumstances and in larger flows. If the flow changes, the size of collateral and liquidity are adjusted, and in times of crisis, collateral can also be redistributed and the liquidity reserve can be activated. The Bank secures liquidity in its nostro accounts for expected payment and settlement undertakings through active liquidity planning and monitoring in all currencies.

## Pricing of liquidity risk

An important part of liquidity risk management is that deposits and lending are priced internally, taking into account the liquidity risks that they give rise to. For example, when the Bank grants a loan with a long maturity this creates the need to obtain additional long-term funding – which is more expensive than more short-term funding. This is because investors who purchase the Bank's long-term bonds, in addition to yield, normally also demand higher compensation for the maturity. This must be taken into account in the Bank's internal pricing, which ensures that the price which internal units in the Bank have to pay for the loans they obtain from the Bank's treasury function varies according to the maturity at the same time as no liquidity risks can be taken locally. The internal pricing is important in order to create the right incentive and thereby avoid unsound risk-taking. The Bank has worked with maturity-based internal prices for a long time. They ensure that the price at contract level takes into account the liquidity risk that the agreement has given rise to. This system was fully implemented at the Bank in 2010.

### Funding programmes/limits as at 31 December 2013

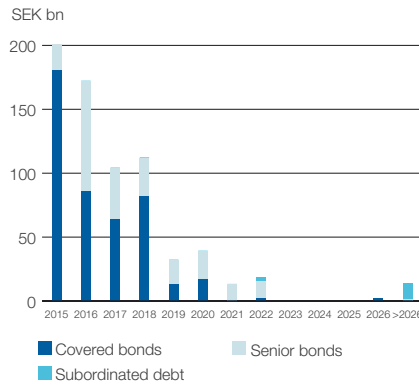
Programme	Programme size	Currency	Unutilised amount, current programme	Countervalue SEK m
ECP <sup>1</sup>	5 000	EUR	3 080	27 430
ECP (Stadshypotek) <sup>1</sup>	4 000	EUR	2 521	22 452
French Certificates of Deposit	7 500	EUR	6 889	61 352
EMTCN (Stadshypotek) <sup>1</sup>	20 000	EUR	8 384	74 666
MTN <sup>1</sup>	100 000	SEK	75 639	75 639
Swedish Commercial Paper	25 000	SEK	24 805	24 805
Swedish Commercial Paper (Stadshypotek)	90 000	SEK	90 000	90 000
EMTN <sup>1</sup>	50 000	USD	25 660	166 030
Other funding > 1 yr <sup>1</sup>	15 000	USD	12 650	81 851
USCP	15 000	USD	7 994	51 724
Extendible Notes	15 000	USD	7 920	51 246
US 144A / 3(a)(2)	15 000	USD	5 150	33 323
Stadshypotek US 144A	15 000	USD	12 250	79 262
Stadshypotek AUD Covered Bond Programme	5 000	AUD	4 250	24 409
Samurai	400 000	JPY	349 500	21 503
<b>Total</b>				<b>885 692</b>
Total programme or limited amounts, SEK m	1 402 188			
Unutilised amount, SEK m	885 692			
<b>Remaining to utilise, %</b>	<b>63</b>			

<sup>1</sup> It is possible to issue in other currencies than the original programme currency under these programmes, where currency conversion takes place at the time of issue.

**Composition of funding**

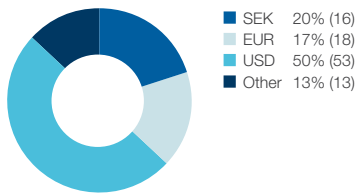
The Bank used all funding programmes during the year. They were supplemented during the year with a funding limit in Japan. During the year, Handelsbanken issued covered and non-covered long-term bonds in all currencies that are relevant to the Bank. Short-term funding mainly takes place through issues of certificates of deposit under the various loan programmes in Sweden, Europe and the US. These loan programmes are supplemented by funding in the international interbank market. Central Treasury ensures that the maturity structure and currency composition in the balance sheet are in keeping with the Bank's risk tolerance. In total SEK 290 billion (239) in long-term funding was issued during the year.

**Maturity profile long-term funding**



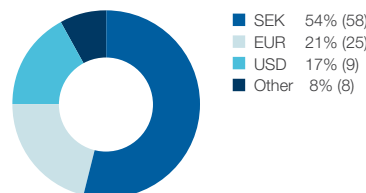
Refers to issued securities as at 31 December 2013 with an original maturity exceeding one year.

**Short-term funding per currency  
31 December 2013**



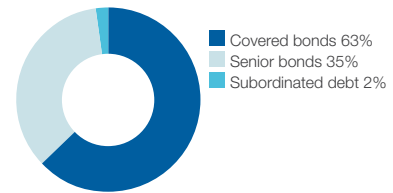
Refers to the currency distribution as at 31 December 2013 for issued securities and financing from credit institutions with a residual maturity of less than one year.

**Long-term funding per currency  
31 December 2013**



Refers to the currency distribution as at 31 December 2013 for issued securities and financing from credit institutions with a residual maturity of more than one year.

**Long-term funding per instrument  
31 December 2013**



Refers to distribution per instrument as at 31 December 2013 for issued securities with residual time to maturity of more than one year.

Holdings with central banks and banks, and securities holdings in the liquidity reserve, 31 December 2013, market value					
SEK m	SEK	EUR	USD	Other	Total
Cash and balances with and other lending to central banks	2 034	48 127	235 115	83 075	368 351
Balances with other banks and National Debt Office, overnight	3	487	539	1 153	2 182
Government-issued securities	20 609	7 690	12 979	1 462	42 740
Securities issued by municipalities and other public entities	6	-	-	-	6
Covered bonds	26 097	2 329	0	8 267	36 693
Own covered bonds	6 499	73	-	53	6 625
Securities issued by non-financial companies	0	2	974	0	976
Securities issued by financial companies (excl. covered bonds)	1 130	788	417	170	2 505
Other securities	-	-	-	-	-
<b>Total</b>	<b>56 378</b>	<b>59 496</b>	<b>250 024</b>	<b>94 180</b>	<b>460 078</b>

Holdings with central banks and banks, and securities holdings in the liquidity reserve, 31 December 2012, market value					
SEK m	SEK	EUR	USD	Other	Total
Cash and balances with and other lending to central banks	1 398	77 217	148 312	19 167	246 094
Balances with other banks and National Debt Office, overnight	12 790	313	734	3 451	17 288
Government-issued securities	20 463	3 830	10 939	218	35 450
Securities issued by municipalities and other public entities	507	0	130	-	637
Covered bonds	47 557	2 268	4 525	1 846	56 196
Own covered bonds	15 286	286	-	1 773	17 345
Securities issued by non-financial companies	-	-	1 233	-	1 233
Securities issued by financial companies (excl. covered bonds)	660	1 591	455	-	2 706
Other securities	-	-	-	-	-
<b>Total</b>	<b>98 661</b>	<b>85 505</b>	<b>166 328</b>	<b>26 455</b>	<b>376 949</b>

### Liquidity reserve

To ensure sufficient liquidity to support its core operations in stressed financial conditions, the Bank holds large liquidity reserves. Liquidity reserves are kept in all currencies that are relevant to the Bank and are accessible from Central Treasury. The liquidity reserve is independent of funding and foreign exchange markets and can provide liquidity to the Bank at any time – some parts immediately and other parts gradually over a period of time.

The liquidity reserve comprises several different parts. Cash, balances and other lending to central banks are components which can provide the Bank with immediate liquidity. The reserve also comprises government bonds, covered bonds and other high-quality securities which are liquid and eligible as collateral with central banks. These can also provide the Bank with immediate liquidity. The remainder of the liquidity reserve comprises an unutilised issue amount for covered bonds and other liquidity-creating measures. As at the year-end, the Bank's total liquidity reserve exceeded SEK 800 billion.

### Liquidity risk

The Bank handles a large number of incoming and outgoing cash flows every day. The gap between incoming and outgoing cash flows is restricted by means of limits. Central Risk Control reports risk utilisation daily to the CFO, weekly to the CEO and on a regular basis to the Board.

Liquidity planning is based on an analysis of cash flows for the respective currency. As a general rule, a larger exposure is permitted in currencies with high liquidity than in currencies where the liquidity is low. The strategy is that expected outgoing cash flows from the Bank must always be matched with incoming cash flows into the Bank that are at least of the same amount, and that a positive cash flow and cash position must be maintained – even in stressed conditions. This kind of gap analysis is supple-

mented by scenario tests, in which the effect on liquidity is stressed and analysed using various assumptions. These stress tests are performed at Group level and individually for the currencies that are important to the Bank. The internal governance of the Bank's liquidity situation is based on these stressed liquidity figures.

As a measure of short-term disruptions in the funding market, both the Basel Committee and the Swedish Financial Supervisory Authority have proposed the Liquidity Coverage Ratio (LCR). It is not defined in the same way by the Swedish Financial Supervisory Authority and the Basel Committee.

Since 2013, LCR has been a binding requirement for Swedish banks, and Handelsbanken reports it according to the Swedish Financial Supervisory Authority's definition. The requirement applies to LCR at aggregate level and separately for USD and EUR. The figure states the ratio between the Bank's liquidity buffer and net cash flows in a very stressed scenario during a 30-day period. The ratio must be more than 100 per cent.

A short-term liquidity ratio may display a degree of volatility over time, for example when funding that was originally long term and that finances mortgage loans is replaced by new long-term funding, or when the composition of counterparty categories varies in the short-term funding. At the year-end, the Group's aggregated LCR, according to the Swedish Financial Supervisory Authority's definition was 128 per cent (136), which shows that the Bank has large resistance to short-term disruptions on the funding markets. This also applies in US dollars and euros.

Daily stress testing of cash flows based on certain assumptions is used to test resistance to more long-term disruptions in the market. For example, it is assumed that the Bank cannot obtain funding in the financial markets at the same time as 10 per cent of deposits from households and companies disappear gradually in the first month. It is further assumed that the

Bank will continue to conduct its core activities, i.e. that fixed-term deposits from and loans to households and companies will be renewed at maturity and that issued commitments and credit facilities will be partly utilised by customers. The Bank also takes into account that balances with central banks and banks will be utilised and that Central Treasury's securities can immediately supply liquidity if provided as collateral in central banks.

Measures to create liquidity are also used to gradually provide the Bank with liquidity. With these conditions, the Bank will be liquid for over two years. Thus, the Bank also has major powers of resistance to very serious long-term disruptions in the funding markets.

A prerequisite for the Bank to be able to maintain such substantial resistance to disruptions in the financial markets as stated above consists of ensuring that the balance sheet is balanced in the way that is schematically described at the start of this chapter. Furthermore, the volume and quality of unutilised collateral must be able to give the Bank the liquidity it needs in times of crisis. Consistently steering the Bank towards positive future net cash flows, instead of point in time ratios, also secures this over time.

The maturity analysis table shows cash flows for the contracted payment commitments that are due for payment at the latest within the stated time intervals, including interest flows. The table shows holdings of bonds and other interest-bearing securities in the time intervals in which they can be converted to liquidity if they are pledged as collateral or sold. This means that the table does not reflect the actual maturities for the securities included. Assets, liabilities and interest flows are also shown that mature in the time intervals corresponding to the contractual maturity dates. Interest flows for lending in the mortgage operations are matched in time with the liabilities that funded the lending. Financial guarantees, committed loan offers and unutilised overdraft facilities are reported in their entirety in the 0–3-month interval. The total outstanding amount of these commitments does not necessarily represent future funding requirements. For derivative instruments, cash flows are reported net for interest rate swaps and gross for instruments where gross cash flows are paid or received, such as currency swaps.

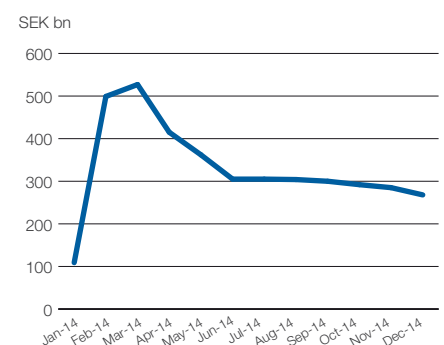
Liquidity Coverage Ratio (LCR), %	2013	2012
EUR	110	301
USD	170	174
<b>Total</b>	<b>128</b>	<b>136</b>

Calculated according to the Swedish Financial Supervisory Authority's directive 2012:6 which came into force on 1 January 2013.

Liquidity Coverage Ratio (LCR) – decomposition, SEK m	2013	2012
<b>Liquid assets</b>	<b>162 346</b>	<b>210 299</b>
Liquid assets level 1	130 591	161 442
Liquid assets level 2	31 755	48 857
<b>Cash outflows</b>	<b>507 882</b>	<b>402 356</b>
Deposits	165 295	149 860
Market funding	265 572	207 681
Other cash outflows	77 016	44 815
<b>Cash inflows</b>	<b>380 912</b>	<b>247 176</b>
Inflows from maturing lending to non-financial customers	22 080	26 122
Other cash inflows	358 832	221 054

The components are defined in line with the Swedish Financial Supervisory Authority's directives and requirements for the liquidity coverage ratio and reporting of liquid assets and cash flows, FFFS 2012:6. Liquid assets level 1 corresponds to Chapter 3, Section 6. Liquid assets level 2 corresponds to Chapter 3, Section 7. Customer Deposits corresponds to Chapter 4, Sections 4–9. Market funding corresponds to Chapter 4, Sections 10–13. Other cash flows corresponds to Chapter 4, Sections 14–25. Loans to non-financial customers corresponds to Chapter 5, Section 4. Other cash inflows corresponds to Chapter 5, Sections 6–12.

### Liquidity stress test including liquidity-creating measures – cumulative liquidity position



Maturity analysis for financial assets and liabilities, 2013						Unspecified maturity	Total
SEK m	Up to 3 mths	3–12 mths	1–5 yrs	Over 5 yrs			
Cash and balances with central banks	369 957	-	-	-	-	-	369 957
Interest-bearing securities eligible as collateral with central banks <sup>1</sup>	58 112	-	-	-	-	-	58 112
Bonds and other interest-bearing securities <sup>2</sup>	64 863	-	-	-	-	-	64 863
Loans to credit institutions	57 769	1 075	1 878	2 441	291	-	63 454
<i>of which reverse repos</i>	33 892	-	-	-	-	-	33 892
Loans to the public	139 112	198 242	412 719	1 063 934	3 859	-	1 817 866
<i>of which reverse repos</i>	15 714	-	-	-	-	-	15 714
Other	55 730	-	-	-	183 309	-	239 039
<i>of which shares and participating interests</i>	48 595	-	-	-	-	-	48 595
<i>of which claims on investment banking settlements</i>	7 135	-	-	-	-	-	7 135
<b>Total</b>	<b>745 543</b>	<b>199 317</b>	<b>414 597</b>	<b>1 066 375</b>	<b>187 459</b>		<b>2 613 291</b>
Due to credit institutions	138 694	4 673	2 024	14 511	17 197	-	177 099
<i>of which repos</i>	748	-	-	-	-	-	748
<i>of which central banks</i>	68 544	1 404	-	-	1 634	-	71 582
Deposits and borrowing from the public	198 909	20 696	5 074	10 145	591 646	-	826 470
<i>of which repos</i>	7 606	-	-	-	-	-	7 606
Issued securities <sup>3</sup>	212 815	242 028	673 606	113 676	-	-	1 242 125
Subordinated liabilities	3 800	1 709	10 123	3 245	-	-	18 877
Other	29 947	-	-	-	296 749	-	326 696
<i>of which short positions</i>	23 170	-	-	-	-	-	23 170
<i>of which investment banking settlement debts</i>	6 777	-	-	-	-	-	6 777
<b>Total</b>	<b>584 165</b>	<b>269 106</b>	<b>690 827</b>	<b>141 577</b>	<b>905 592</b>		<b>2 591 267</b>
<b>Off-balance sheet items</b>							
Financial guarantees and unutilised commitments	378 136						

Derivatives 2013						Total
SEK m	Up to 3 mths	3–12 mths	1–5 yrs	Over 5 yrs		
Total derivatives inflow	465 618	284 153	437 695	133 681	-	1 321 147
Total derivatives outflow	481 367	268 287	424 401	127 844	-	1 301 899
<b>Net</b>	<b>-15 749</b>	<b>15 866</b>	<b>13 294</b>	<b>5 837</b>		<b>19 248</b>

<sup>1</sup> SEK 26,098m of the amount (excl. interest) has a residual maturity of less than one year.

<sup>2</sup> SEK 11,192m of the amount (excl. interest) has a residual maturity of less than one year.

<sup>3</sup> SEK 424,710m of the amount (excl. interest) has a residual maturity of less than one year.

For deposit volumes the column "Unspecified maturity" refers to deposits payable on demand. Reference numbers for 2012 are not recorded according to the more specific presentation 2013.

The table contains interest flows which means that the balance sheet rows are not reconcilable with the Group's balance sheet. Maturity tables without interest flows including maturity tables in foreign currencies can be found in the Fact Book.

Maturity analysis for financial assets and liabilities, 2012						Unspecified maturity	Total
SEK m	Up to 3 mths	3–12 mths	1–5 yrs	Over 5 yrs			
Cash and balances with central banks	248 917	-	-	-	-	-	248 917
Bonds and other interest-bearing securities	119 019	-	-	-	-	-	119 019
Loans to credit institutions	67 130	692	942	3 954	17 473	-	90 191
<i>of which reverse repos</i>	59 257	-	-	-	-	-	59 257
Loans to the public	246 870	221 126	349 089	938 782	15 777	-	1 771 644
<i>of which reverse repos</i>	33 800	-	-	-	-	-	33 800
<b>Total</b>	<b>681 936</b>	<b>221 818</b>	<b>350 031</b>	<b>942 736</b>	<b>33 250</b>		<b>2 229 771</b>
Due to credit institutions	132 664	6 235	454	17 225	33 683	-	190 261
<i>of which repos</i>	2 394	-	-	-	-	-	2 394
Deposits and borrowing from the public	129 799	23 471	5 562	11 124	515 826	-	685 782
<i>of which repos</i>	12 295	-	-	-	-	-	12 295
Issued securities	322 185	277 089	553 903	90 840	-	-	1 244 017
Other trading liabilities	14 261	-	-	-	-	-	14 261
Subordinated liabilities	607	4 242	13 429	6 091	550	-	24 919
<b>Total</b>	<b>599 516</b>	<b>311 037</b>	<b>573 348</b>	<b>125 280</b>	<b>550 059</b>		<b>2 159 240</b>
<b>Off-balance sheet items</b>							
Financial guarantees and unutilised commitments	393 087						

Derivatives 2012						Total
SEK m	Up to 3 mths	3–12 mths	1–5 yrs	Over 5 yrs		
Total derivatives inflow	712 417	327 296	514 236	132 378	-	1 686 327
Total derivatives outflow	714 534	322 003	503 293	131 641	-	1 671 471
<b>Net</b>	<b>-2 117</b>	<b>5 293</b>	<b>10 943</b>	<b>737</b>		<b>14 856</b>

# Risks in the insurance operations

The risks in the insurance business arise partly in management of customers' insurance assets and how these assets match future commitments.

## The risks in the insurance business mainly comprise market risks and insurance risks.

### Market risk

Handelsbanken Liv conducts life insurance operations with traditional management, unit-linked insurance and portfolio bond insurance. For unit-linked and portfolio bond insurance, the customer chooses the investment option and bears the market risk. In traditional insurance with guaranteed interest, Handelsbanken Liv bears the risk of the financial guarantees entailed by the insurance terms not being fulfilled.

The financial guarantee means that the company makes a capital contribution at the value of the insurance contract at specific points in time when the value is less than the guaranteed value of the insurance. Any capital contributions are realised at the year-end or when there is an insurance event.

Handelsbanken Liv's board establishes the annual investment guidelines for the company, and this is the ultimate controlling document for allocation of the company's investment assets relating to traditionally managed insurance. The purpose of the investment guidelines is to provide instructions on how the assets are to be invested given the undertakings to the policyholders and the statutory requirements of the Swedish Insurance Business Act and the applicable regulations of the Swedish Financial Supervisory Authority.

Handelsbanken Liv has a low risk tolerance. The goal of the asset management is to secure the company's obligations to the policyholders.

Market risk at Handelsbanken Liv arises in the management of investment assets for the traditional insurance and from the fact that valuation of the company's obligations is sensitive to interest rate changes.

The total market risk at Handelsbanken Liv is calculated using Value at Risk (VaR) with a 99.5 per cent confidence level and a holding period of one quarter. In addition, the company's solvency ratio, the so-called traffic-light model and cover of liabilities are checked according to statutory requirements. The market risk management model used by Handelsbanken Liv weights the risk of a capital contribution at insurance contract level together with the risk of a capital contribution at company level due to

the increased present value of future guaranteed amounts. Market risk is measured in terms of the overall sensitivity of the capital contributions to market disruptions. The risk exposure is checked daily against a limit stipulated by the Board of Handelsbanken. The larger of the value of contributions to policyholders or contributions due to solvency constitutes the risk utilisation. Sub-categories of financial risk are interest rate risk, equity risk, credit risk, property risk and currency risk. The main risk at Handelsbanken Liv is interest rate risk. At year-end, VaR was SEK 893 million (995).

Liquidity risk in the insurance operations is the risk that the company will not be able to meet its payment obligations when they fall due, or that the company will not be able to sell securities at acceptable prices. This risk is limited by most of the investment assets being invested in listed securities with good liquidity.

### Insurance risk

Insurance companies set their premiums based on assumptions regarding the size of costs for future insurance events. Insurance risk is the risk that the actual and assumed insurance costs differ. The ultimate controlling document is the insurance risk policy issued by the board of Handelsbanken Liv, specifying the amounts within which insurance policies may be issued.

Insurance risk at Handelsbanken Liv is related to the following events:

- mortality – payment to the policyholder in the event of the death of the insured person
- longevity – payment that is dependent on the insured person living, e.g. pension disbursements
- morbidity – payment in the event of illness or work incapacity
- accident – payment in the event of accident.

An insurance policy may contain combinations of these four events.

Most of Handelsbanken Liv's policies are taken out by small companies and private individuals. There is no risk concentration in terms of insurance risk, other than that most of the policies are taken out in Sweden.

Increased longevity in Sweden has an impact on the life insurance company's future commitments. The effect is positive for mortality insurance, but for life insurance it could become an economic burden for the company since average life expectancy is rising and pension disbursements must then be made over a

longer period. Since 2009, Handelsbanken Liv has used life expectancy assumptions according to DUS06, which is the industry standard. If mortality continued to decline and in general were to be 10 per cent lower than the company's assumptions, the present value of the expected increased cost would be SEK 56 million, for the older section of the group who have lifelong payouts. Most of Handelsbanken Liv's insurance policies with mortality risk are, however, priced annually. This means that the company can unilaterally change the premium from year to year. Thus, an incorrect mortality assumption can be changed with rapid effect.

Changes in morbidity occur much more rapidly than changes in mortality, which may contribute to variations in the risk result. The result therefore depends both on how many insured persons fall ill and how many recover in relation to the assumptions applied. Sickness/disability insurance products are generally designed in such a way that the premium can be changed annually, thus allowing the company to compensate for changes in morbidity. The sickness/disability result for 2013 is SEK 67 million, where SEK 70 million is attributable to sickness cases reported during the year, SEK -19 million to existing sickness cases which are being closed and the remaining SEK 16 million to sickness cases which have occurred but not yet been reported.

The insurance operations report their market, insurance and operational risks to the insurance company's board and chief executive, to Handelsbanken's central risk control and to the Bank's CFO and CEO. The risk situation is also reported regularly to the Board of the Bank.

### Solvency II

During the past few years, Handelsbanken Liv has worked actively on adapting its operations to future new regulatory demands and this will continue during 2014. The full introduction of the Solvency II regulations is expected in 2016 when the directive will also be implemented in Swedish law. As of January 2014 parts of the regulations are being introduced into the supervisory authorities' practical supervision work. For example, new stipulations on calculating discounting curves for solvency, a traffic-light model and cover of liabilities will come into force.

One overall purpose of the regulations is to strengthen protection for insurance policyholders by linking the solvency requirement and thereby the capital requirement more clearly to how the insurance companies identify, measure and manage all risks.

# Operational risk

Operational risks must be managed so that the Group's operational risks and losses remain small, both in comparison with previous own losses incurred, and - when comparison is possible - with other banks' operational losses.

Operational risk refers to the risk of loss due to inadequate or failed internal processes, people and systems, or external events. The definition includes legal risk.

Handelsbanken has a low tolerance of operational risks and works actively to identify and manage operational risks. This work is supported by the Bank's strict attitude to risk, but also by the strong focus on cost-effectiveness, since deficiencies in administrative order can easily lead to unnecessary costs.

Operational errors and deficiencies are therefore reduced as far as possible. This applies to minor but frequent events and major events which could cause major unexpected losses. The Bank's management performs frequent, active follow-ups of operational risk through the organisation for risk control. Operational risks which may lead to the most serious consequences are the subject of special attention. Internal Audit's examination of the operations also focuses on operational risk.

Operational risk exists in all operations within Handelsbanken, and the responsibility for the day-to-day identification, management and control of risk is a clear, integrated part of managerial responsibility at all levels of the operations. The Bank's decentralised method of work promotes cost-consciousness that results in vigilance against potential loss risk in daily procedures and events. By focusing on

good administrative order and possible proactive measures, all parts of the operations keep their risks at an acceptable level.

Operational risks are included in internal instructions issued by managers with function responsibility, where account is taken of whether the division of work and responsibilities, the control structure of procedures, and information and reporting systems are fit for purpose. Rules and procedures are assessed annually and the internal control of procedures and business flows is documented. The manager of each unit also conducts annual security reviews with their staff, including internal control, information security, bank confidentiality and other security measures.

Apart from the responsibility for operational risk borne by the managers, there are officers with special responsibility for information security and Group security who report directly to the CEO.

The responsibility for the management of operational risks is distributed between the business operations, local co-ordinators for operational risk, local risk control and Central Risk Control.

The business operations are responsible for the regular identification and management of risks and for implementing proactive measures.

Local co-ordinators for operational risk are in place at regional banks, main departments, subsidiaries and units outside the Bank's home markets. These co-ordinators are responsible for ensuring that existing methods and procedures for managing operational risks are used in the business operations. They are also responsible for monitoring that the business operations take and implement appropriate proactive measures.

There are also local risk control functions to

check that management of operational risk is correctly performed at regional banks, main departments, subsidiaries and units outside the Bank's home markets. This is achieved by means of regular quality assurance and evaluation.

Central Risk Control has the overall responsibility for the methods and procedures used to identify, steer, control and report operational risks, and for follow-up at overall Group level. To achieve and maintain good quality in this management, Central Risk Control has close, regular co-operation with the local co-ordinators for operational risk and the local risk control functions. Central Risk Control is also responsible for analysing and reporting the Group's operational risks to the management and Board.

As an aid to continual identification, handling and management of operational risks, the Bank has a reporting and case management system for incidents and a self-assessment procedure.

All employees throughout the Group must collect facts about incidents which have affected their unit and which result in a loss in excess of SEK 25,000. To further promote the unit's proactive work with risks, all employees are encouraged to collect facts about incidents which lead to smaller losses or no loss at all.

Incidents reported are reviewed and categorised on a regular basis by the local co-ordinator for operational risk. The Bank categorises operational risk according to Basel's seven event types: execution, delivery and process management; business disruption and system failure; clients, products and business practices; external crime; damage to physical assets; employment practices and workplace safety; internal fraud. The work also includes following up proactive

## Operational risk management at Handelsbanken





measures in collaboration with the units and branches affected. Local compliance also has access to and can monitor incidents reported in their part of the business operations. Local risk control performs an annual evaluation of the procedure. Central Risk Control then performs an aggregated evaluation at Group level.

OPRA Risk Analysis is a self-assessment procedure to document and assess operational risks which may have an impact on the Bank. These are carried out at least once a year at all units. The respective head of all regional banks, main units, subsidiaries and international units outside the Bank's home markets is responsible for this being performed. The local co-ordinator for operational risk provides support for the planning and implementation. Units with more complex operations divide the self-assessment procedure into several sessions. Normally, between five and eight experienced employees who have a good overview of the unit's operations and risks participate in the sessions. The aim is to assess the consequence and likelihood of an event. The assessment of the impact includes both financial losses and lost reputation. Important input includes facts and statistics from incidents reported during the previous year together with incidents that have affected other parts of the Group or other banks and companies. The self-assessment procedure results in an action plan stating the risks to be reduced, how this will be done, who is responsible and time limits for when measures are to be taken. The action plan is a working document that is regularly followed up during the year by the business operations with the support of the local co-ordinator for operational risk. The local risk

control is informed about the completed OPRA analysis, including the action plan so that it can evaluate the procedure. Central Risk Control provides regular support to the co-ordinators for operational risk in planning, implementation and follow-up and also performs an annual aggregate assessment of the evaluations from all local risk control units.

The Bank pays great care when processing new products and services and major changes to existing products and services. Each business area, subsidiary and regional bank with product responsibility processes new products in accordance with central guidelines, which are minimum requirements. This includes an established process for deciding how products are to be introduced. A risk analysis led by the local risk control is always performed before a product is launched. The analysis takes account of the risks for the Bank and for the customer, including operational risks. Central Risk Control is informed of the results of the analysis and is involved in complex cases when this is justified.

There are emergency and continuity plans in place in all parts of the Group for dealing with serious disruptions. The emergency plans help the crisis team to quickly and systematically start to deal with a crisis situation and its effects. There is a central crisis team for the whole Group, and a local crisis team within each regional bank, subsidiary and international unit outside the Bank's home markets and also at the Central IT Department and Handelsbanken Capital Markets.

The central crisis team has permanent staff consisting of members of management and/or those close to them. The central crisis team functions as a liaison crisis team in the event of

a major crisis in the Group, supports any local crisis team(s) working with an acute crisis and functions as a crisis team for the main central departments. Continuity planning focuses on taking preventive measures to minimise the consequences of a serious disruption of business operations. Local risk control performs an annual evaluation of the procedure. Central Risk Control then performs an aggregated evaluation at Group level.

Handelsbanken uses the standardised approach to calculate the capital requirement for operational risks. According to the standardised approach, the capital requirement is calculated by multiplying a factor specified in the regulations by the average operating income during the last three years of operation. Different factors are applied in different business segments.

The total capital requirement for operational risks for the whole of the Handelsbanken Group was SEK 4,246 million (4,181) at the end of 2013.



# Risks in the compensation system

Handelsbanken's compensation system is intended to boost the Bank's competitiveness and to contribute to higher profitability by attracting, retaining and developing skilled staff. An incorrectly designed compensation system risks leading to actions that conflict with the Bank's long-term goals and stimulate undesirable risk-taking which can negatively affect the company's financial position.

To ensure that Handelsbanken has a well designed compensation system, risks in the compensation system are managed as a separate risk, with the same allocation of responsibilities as other types of risk.

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## Compensation risk is the risk of loss or other damage arising due to the compensation system.

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The aim of Handelsbanken's policy on salaries is to increase the Bank's competitiveness and profitability, to enable the Bank to attract, retain and develop skilled staff, and to ensure good skills development and management succession planning. Good long-term profitability and productivity performance at the Bank create the conditions for stable and positive salary development for the Bank's employees.

Compensation for work performed is set individually for each employee, and is paid in the form of a fixed salary, customary salary benefits and a pension provision. At Handelsbanken, salaries are set at the local level. Salaries are set in salary reviews between the employee and their line manager. These principles have been applied for many years with great success. They mean that managers at all levels participate regularly in salary processes, and take responsibility for the Bank's salary policy and the growth in their own unit's staff costs. Salaries are based on salary-setting factors defined in advance: the nature and level of difficulty of the work, skills, performance and results achieved, leadership (for managers who are responsible for the career development of employees), supply and demand in the market, and the task of ambassador for the Bank's corporate culture.

Handelsbanken has low tolerance of compensation risks and actively strives to keep them at a low level. This is achieved in part by only using variable compensation to a very limited extent and only in the areas

where this is market practice and is necessary in order to achieve the goals for the unit's operations. Where variable compensation exists, it is subject to deferred payment.

The Bank's principles for compensation to employees are long established. The principles for the Bank's compensation system are stipulated in the compensation policy which is decided by the Board. More detailed implementation directives are decided by the CEO. The responsibility for identifying and managing compensation risks rests with every responsible manager in the operations and is managed according to internal policy documents, guidelines and instructions. Local risk control regularly monitors that the compensation system is applied as intended. The Bank's Central Risk Control is responsible for analysing the risks associated with the compensation policy and the compensation system before the compensation policy is processed and established by the Board. This is done at least once a year. The report analyses elements such as the incentive structure, the balance between fixed and variable compensation, deferral rules, and effects on the capital base. In addition, Central Risk Control evaluates the application of the compensation. Based on this risk analysis and evaluation, an assessment is made as to whether the compensation system is designed in a way that could threaten the Bank's financial position. The responsibility also includes ensuring that risk costs are calculated correctly in the context of compensation.

Handelsbanken's remuneration policy and compensation system are deemed to generate low risks and promote sound and effective risk management, counteract excessive risk-taking, fit in with the Bank's low tolerance of risks and support the Bank's long-term interests. The compensa-

tion system is designed in such a way that there is no risk that the Bank's capital base is undermined as a result of mandatory payment of variable compensation. It is possible to reduce or remove variable compensation, wholly or partly – this applies both to allocations for variable compensation and to deferred variable compensation which has not yet been paid.

For more detailed information and statistics about the Bank's compensation system, see the Corporate Governance Report and note G8 in the Annual Report.

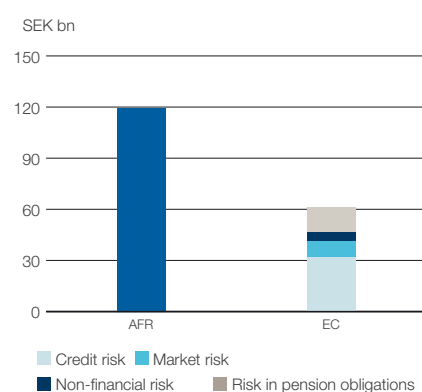
# Economic capital

Handelsbanken is well capitalised in relation to the total risks. The Group's total values exceed by a wide margin the values that could be lost in an event that is extremely detrimental to the Group.

Handelsbanken's model for calculating economic capital identifies in one measurement the Group's overall risks and indicates the capital which, with very high probability, will cover unexpected losses or decreases in value

The Central Risk Control function is responsible for comprehensive monitoring of the Group's various risks. The Bank's model for economic capital (EC) is an instrument in this monitoring. It is a vital component in planning to ensure that the Group has sufficient capital at all times in relation to all risks in the Group. The Group perspective therefore means that economic capital also includes risks in the insurance operations and risks in the Bank's pension obligations.

Total of AFR and EC including diversification, 31 December 2013



Economic capital is calculated with a time horizon of one year and a confidence level that reflects an acceptable level of risk and desired rating. The Board has determined that the calculation of the EC must be made with a 99.97 per cent confidence level, which captures an event which is extremely unfavourable for the Bank. EC is the difference between the outcome in an average year – with positive results and good growth in the value of the Bank's assets – and the outcome at a 99.97 per cent confidence level.

Diversification effects between the different risk classes are taken into account when calculating EC. The capital requirement for all risks is therefore lower than the sum of the EC for each individual risk, because the risks are partly independent of each other.

The capital and other financial resources which form a buffer that can absorb negative outcomes are called available financial resources (AFR). AFR is Handelsbanken's equity with the addition of other financial values on and off the balance sheet, available to cover losses with a one-year time horizon.

In risk and capital management, the Group applies a shareholder perspective. The economic capital model provides an overall view of the Group which makes it possible to optimise the risk and capital situation from the shareholder's perspective. The outcome of the calculations plays an important role when new transactions or structural changes are considered.

Credit risk is calculated using simulated outcomes of default for all the Group's counterparties and exposures.

Market risks comprise the risk of assets classed as trading book, interest rate risk in the banking operations, market risks in the insurance operations and the risk of value losses in the Bank's own share portfolio.

The risk in the pension obligations mainly consists of the risk of a decrease in the values

that exist for securing the Bank's pension obligations. Most of the pension obligations are in Sweden and are secured there in a pension foundation and insured in an occupational pension fund.

The non-financial risks are operational risk, business risk, property risk and insurance risk. Business risk is related to unexpected variations in earnings in the business area in question. This may arise if, for example, demand or competition changes unexpectedly, thus resulting in lower volumes and narrower margins. Property risk captures the risk of a fall in the value of the properties which the Bank owns.

At year-end, EC was SEK 61 billion (57), of which credit risks accounted for the main part of the total risks. The Board stipulates that the AFR/EC ratio should be at least 120 per cent. The ratio was 197 per cent (213) at year-end, which illustrates that the Bank is well-capitalised in relation to its overall risks. The Swedish Financial Supervisory Authority has come to the same conclusion in its overall capital assessment of the Bank.

The risk and capital situation reported is a snapshot picture, even though the risk calculations include safety margins for business cycle fluctuations. To perform a final assessment of the Group's capital adequacy requirements, account must also be taken of the stress and scenario analysis carried out as part of the Bank's capital planning.

# Capital planning

If Handelsbanken were to suffer serious losses despite its low risk tolerance, the Bank holds capital to ensure its survival even in the wake of unexpected, extreme events. Capital planning is based on assessments of the capitalisation based on statutory capital requirements, coupled with calculations of economic capital and stress tests. Stress tests are vital in the Bank's work of identifying threats and as early as possible preparing the necessary measures to ensure satisfactory capitalisation in all situations.

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Handelsbanken's capital planning aims to ensure that the Group has adequate financial resources available at all times and that the capital is of optimal composition.

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The capital planning unit is responsible for assessment of the Bank's total capital requirement. The capital requirement is a function of the Group's risks, expected development, the regulations and target ratios, Handelsbanken's model for economic capital and also of stress tests. The Bank's capital requirement is reported weekly to the CFO, regularly to the CEO, and at least quarterly to the Board.

The targets for the Bank's capital are determined regularly by the Board on the basis of stress tests of regulatory capital and EC. The Board stipulates that the tier 1 ratio in Basel II, which is the relevant measurement for management of the Bank according to the 2013 rules, must be between 9 and 11 per cent.

In view of the anticipated new rules with increased capital requirements, the Bank has opted to increase its capitalisation above the target interval. An adjusted target for capital can be established when the Swedish application of the new regulations has been decided.

As part of proactive capital planning, there is a contingency and action plan with specific measures that can be taken if the Bank needs to improve its capital position. The purpose of the contingency and action planning is to ensure that there is a warning system that identifies potential threats at an early stage and that the Group is prepared to take rapid action, if necessary.

A long-term capital plan is drawn up annually, which is designed to give a comprehensive overview of the Group's current capital situation, a forecast of expected capital performance, and the outcome in various scenarios. These scenarios are designed to substantially differ from expected events and thus harmonise with the Group's low risk tolerance. The capital plan also contains proposals for how to maintain the capital situation at a satisfactory level in a strongly negative business environment, from both a regulatory and shareholder perspective.

The capital planning is divided into short-term and mid- to long-term forecasting. The part of capital planning that comprises short-term forecasts up to two years ahead principally focuses on assessing existing performance and the development of the capital requirement. This forecasting is necessary to enable continual adaptation of the size and composition of the capital base.

Capital planning is performed through an ongoing analysis of changes in volume, risk and performance, and by monitoring events that may affect capital requirements and capital level. Short-term forecasting includes all sub-components that make up the Group's capital base. This work also includes conducting various sensitivity analyses, with a short-term perspective, of the expected change in the capital adequacy requirement and capital base. The Bank can thus be prepared to alter the size and composition of the capital base if required – for example, through market operations.

The result of the short-term analysis forms the basis of any capital operations performed and is continually reported to the CFO and, if necessary, to the CEO and Board. The analysis is based on a prudent basic scenario, with decision points in the near future for how the existing earnings capacity can cope with various changes in volume, as well as what effects arise from potential capital operations.

The part of capital planning that comprises mid- to long-term forecasts aims to ensure compliance with statutory capital adequacy requirements and that the Group's AFFR at all times covers by a good margin all risks calculated according to the economic capital model.

The objective is to forecast the expected performance and judge whether the Bank's resistance is satisfactory in various scenarios. The planning horizon is at least five years and takes account of the Group's overall business performance trend.

Scenario and stress tests are also continuously performed. A basic scenario forms the foundation of the capital forecast. This scenario is obtained from expected performance in the next five years regarding profit, volume growth, financial assumptions such as loan losses, and performance of the equity, property and fixed income markets. The basic scenario is then compared to the outcomes in a number of business cycle and crisis scenarios. The stress scenarios have been established following analysis of the historical links between the impacts of different macroeconomic variables on the financial markets and have been selected by using the scenarios expected to have the most severe impact on Handelsbanken.

The result of the internal capital adequacy assessment is reported quarterly to the Board.

At the end of 2013, the tier 1 ratio according to Basel II was 21.5 per cent, since the Bank, pending a decision concerning capital regulations, has decided to increase its capitalisation to a level exceeding the Bank's target interval in Basel II of 9–11 per cent. The ratio between AFFR and EC was 197 per cent at the same date.

The Bank's strong position is further emphasised by the result of the various forward-looking stress scenarios which are carried out, showing that Handelsbanken's long-term capital situation is very stable from both a financial and regulatory perspective.

# Capital base and capital requirement

Handelsbanken aims to maintain a satisfactory capital level which exceeds the minimum legal requirements by a wide margin.

## CAPITAL BASE

The Bank's Annual Report provides a description of the composition of the capital base for the banking group, the terms applying to the different parts of the capital base and the deductions from various items.

For the Bank's risk management, it is important that in risk terms both the Group and the banking group can be viewed as one unit. To enable efficient risk management in the Group, capital may need to be re-allocated among the various companies in the Group. In general, Handelsbanken is able to re-allocate capital among the Group companies, to the extent that is permitted by legislation, for example, with reference to capital adequacy requirements and restrictions in corporate law. The Bank sees no other material or legal obstacles to a rapid transfer of funds from the capital base, or repayment of liabilities between the parent company and its subsidiaries.

Capital base SEK m	2013	2012	2012 Not adjusted IAS 19
<b>TIER 1 CAPITAL</b>			
Equity, Group	111 339	103 850	106 897
Accrued dividend, current year	-10 485	-6 804	-6 804
Deduction of equity outside the banking group	1 727	-1 018	-1 167
Difference in earnings between banking group and Group	-680	2 851	2 853
Minority interests, Group	-2	-2	-2
<b>Equity, capital base</b>	<b>101 899</b>	<b>98 877</b>	<b>101 777</b>
Minority interests, banking group	602	572	572
Deducted items			
Goodwill and other intangible assets	-8 296	-7 458	-7 458
Revaluation reserve	-100	-108	-108
Value adjustments for positions measured at fair value	-1	-14	-14
Deferred tax assets	-58	-61	-61
Special deduction for IRB institutions	-993	-1 094	-1 094
Capital contribution in companies outside the banking group	-3 691	-1 483	-1 483
Positions in securitisation	-245	-248	-248
Adjustments in accordance with stability filter			
Cash flow hedges	1 518	-1 149	-1 149
Unrealised accumulated gains, shares	-1 216	-797	-797
Unrealised accumulated gains/losses, fixed income instruments	116	170	170
<b>Total common equity tier 1 capital</b>	<b>89 535</b>	<b>87 207</b>	<b>90 107</b>
Innovative tier 1 capital contributions	7 705	9 323	9 323
Non-innovative tier 1 capital contributions	2 897	2 903	2 903
<b>Total tier 1 capital</b>	<b>100 137</b>	<b>99 433</b>	<b>102 333</b>
<b>TIER 2 CAPITAL</b>			
Perpetual subordinated loans		3 133	3 133
Dated subordinated loans	3 882	4 274	4 274
Additional items			
Unrealised accumulated gains, shares	1 216	797	797
Revaluation reserve	100	108	108
Deducted items			
Special deduction for IRB institutions	-993	-1 094	-1 094
Capital contribution in companies outside the banking group	-3 691	-1 483	-1 483
Positions in securitisation	-245	-248	-248
<b>Total tier 2 capital</b>	<b>269</b>	<b>5 487</b>	<b>5 487</b>
<b>Total tier 1 and tier 2 capital</b>	<b>100 406</b>	<b>104 920</b>	<b>107 820</b>
Deductable items from total capital base			
Capital contribution in insurance companies	-	-4 417	-4 417
Surplus value pension assets	-	-	-1 524
<b>Total capital base for capital adequacy purposes</b>	<b>100 406</b>	<b>100 503</b>	<b>101 879</b>

**CAPITAL REQUIREMENT**

The capital requirement for credit risks is calculated by a risk-weighted exposure amount being calculated for all the banking group's exposures. The risk-weighted exposure amount for credit risk is partly calculated according to the IRB internal risk classification model, foundation and advanced approaches, and partly according to the standardised approach. Handelsbanken applies the standardised approach for calculating the capital requirement for operational risks. The Swedish Financial Supervisory Authority's standardised approaches are used to calculate the capital requirement for market risk.

The adjoining table shows the total capital requirement and its various components.

**CAPITAL ADEQUACY FOR THE FINANCIAL CONGLOMERATE**

Institutions and insurance companies which are part of a financial conglomerate must have a capital base which is adequate in relation to the capital requirement for the financial conglomerate. The capital base for the financial conglomerate has been calculated by means of a combination of the aggregation and settlement method and the consolidation method. This means that the capital base for the banking group has been combined with the capital base for the Handelsbanken Liv AB insurance group. Correspondingly, in order to calculate the requirement for the conglomerate, the solvency requirement for the insurance group has been added to the capital requirement for the banking group.

Capital requirement SEK m	2013	2012
<b>Credit risk</b>		
Credit risk according to standardised approach	4 225	3 654
Credit risk according to IRB approach	28 015	30 174
<b>Market risk</b>		
Interest rate risk	745	880
<i>of which general risk</i>	493	660
<i>of which specific risk</i>	252	220
Equity price risk	11	26
<i>of which general risk</i>	3	10
<i>of which specific risk</i>	6	13
<i>of which funds</i>	2	3
Foreign exchange risk	-	-
Commodities risk	14	9
Settlement risk	0	3
<b>Operational risk</b>		
Operational risk	4 246	4 181
<b>Total capital requirement according to Basel II</b>	<b>37 256</b>	<b>38 927</b>
Adjustment according to transitional rules	44 039	41 454
<b>Total capital requirement according to Basel II transitional rules</b>	<b>81 295</b>	<b>80 381</b>
Risk-weighted assets according to Basel II transitional rules	1 016 192	1 004 763
Risk-weighted assets according to Basel II	465 701	486 588
<b>Capital adequacy analysis, %</b>	<b>2013</b>	<b>2012</b>
Capital requirement in Basel II compared to transitional rules	46	48
Capital ratio according to		
<i>Basel II</i>	21.6	20.7
<i>transitional rules</i>	9.9	10.0
Tier 1 ratio according to		
<i>Basel II</i>	21.5	20.4
<i>transitional rules</i>	9.9	9.9
Common equity tier 1 ratio according to		
<i>Basel II</i>	19.2	17.9
<i>transitional rules</i>	8.8	8.7
Capital base in relation to capital requirement		
<i>Basel II</i>	270	258
<i>transitional rules</i>	124	125
<b>Capital adequacy financial conglomerate SEK m</b>	<b>2013</b>	<b>2012</b>
Capital base after reduction and adjustments	107 365	107 482
Capital requirement	82 180	81 451
<b>Surplus</b>	<b>25 185</b>	<b>26 031</b>

# Banking group

Companies included in the banking group	Corporate identity number	Domicile	Companies not included in the banking group	Corporate identity number	Domicile
<b>Handelsbanken AB (publ)<sup>1</sup></b>	502007-7862	Stockholm	Handelsbanken Liv Försäkring AB (group excl. Handelsbanken Fastigheter AB)	516401-8284	Stockholm
<b>SUBSIDIARIES</b>			Svenska Re S.A.	RCS Lux B-32053	Luxembourg
<b>Handelsbanken Finans AB<sup>1</sup></b>	556053-0841	Stockholm	Handelsbanken Skadeförsäkrings AB	516401-6767	Stockholm
Kredit-Inkasso AB	556069-3185	Stockholm	Handelsbanken Renting AB (in liquidation)	556043-2766	Stockholm
Handelsbanken Rahoitus Oy	0112308-8	Helsinki	Filisekompaniet Holding AS	992999136	Oslo
Kreditt-Inkasso AS	955074203	Fredrikstad	Dyson Group plc	163096	Sheffield
Handelsbanken Finans (Shanghai) Financial Leasing Co., Ltd	310101717882194	Shanghai	Plastal Industri AB	556532-8845	Gothenburg
<b>Stadshypotek AB<sup>1</sup></b>	556459-6715	Stockholm	Festival AS	993798304	Kristiansand
Svenska Intecknings Garanti AB Sigab (inactive)	556432-7285	Stockholm			
<b>Handelsbanken Fondbolagsförvaltning AB</b>	556070-0683	Stockholm			
Handelsbanken Fonder AB	556418-8851	Stockholm			
Handelsinvest Investeringsförvaltning A/S	12930879	Copenhagen			
Handelsbanken Fondbolag Ab	1105019-3	Helsinki			
Handelsbanken Kapitalförvaltning AS	973194860	Oslo			
<b>AB Handel och Industri</b>	556013-5336	Stockholm			
<b>Heartwood Wealth Group Limited</b>	05498937	London			
Heartwood Wealth Management Limited	4132340	London			
Heartwood Nominees Limited (inactive)	2299877	London			
Heartwood Second Nominees Limited (inactive)	3193458	London			
Private Office Limited (inactive)	4332528	London			
Ejendomsselskabet af 1. januar 2002 A/S	38300512	Herning			
Ejendomsselskabet af 1. maj 2009 A/S	59173812	Hillerød			
Forva AS	945812141	Oslo			
Lejontrappan AB (inactive)	556481-1551	Gothenburg			
Handelsbanken Markets Securities, Inc <sup>1</sup>	11-3257438	New York			
Handelsbanken Mezzanine Fond 1 KB (inactive)	969710-3126	Stockholm			
Handelsbanken Mezzanine Management AB (inactive)	556679-2668	Stockholm			
Lokalbolig A/S	78488018	Hillerød			
Rådstuplass 4 AS	910508423	Bergen			
SIL (Nominees) Limited (inactive)	1932320	London			
Svenska Handelsbanken Delaware Inc.	13-3153272	Delaware			
Svenska Handelsbanken S.A. <sup>1</sup>	RCS Lux B-15992	Luxembourg			
Svenska Property Nominees Limited (inactive)	2308524	London			
Handelsbanken Fastigheter AB	556873-0021	Stockholm			
Svenska Handelsbanken Representações (Brasil) Ltda	15.367.073/0001-93	São Paulo			
EFN Ekonomikanalen AB	556930-1608	Stockholm			
<b>ASSOCIATES</b>					
Bankomatcentralen AB	556197-2265	Stockholm			
BDB Bankernas Depå AB	556695-3567	Stockholm			
BGC Holding AB	556607-0933	Stockholm			
Bankgirocentralen BGC AB	556047-3521	Stockholm			
Devise Business Transactions Sweden AB	556564-5404	Stockholm			
Finansiell ID-teknik BID AB	556630-4928	Stockholm			
Upplysningscentralen UC AB	556137-5113	Stockholm			
UC Ekonomipublikationer AB	556613-0042	Stockholm			
UC Ljungquist Information AB	556576-7133	Stockholm			
UC allabolag AB	556730-7367	Stockholm			
Bankomat AB	556817-9716	Stockholm			
Getswish AB	556913-7382	Stockholm			

<sup>1</sup> Credit institution.

# Definitions and explanations

## CAPITAL BASE

Comprises the sum of tier 1 (primary) and tier 2 (supplementary) capital. To obtain the total capital base for capital adequacy purposes, deductions are made for capital contributions in insurance companies, reported surplus values of pension assets and the difference between the expected loss and the provisions made for probable loan losses.

## CAPITAL REQUIREMENT

The statutory capital requirement is that the capital base must be at least 8 per cent of the risk-weighted amount. In this calculation, the capital base is reduced by the net of EL minus provisions.

## CAPITAL RATIO

The total capital base for capital adequacy purposes in relation to risk-weighted volume.

## CONVERSION FACTOR

The factor that is used when calculating EAD for unutilised overdraft facilities, committed loan offers, guarantees and other off-balance sheet commitments (CF).

## COMMON EQUITY TIER 1 CAPITAL

Tier 1 capital excluding tier 1 capital contributions.

## COMMON EQUITY TIER 1 RATIO

Common equity tier 1 capital in relation to risk-weighted volume.

## CREDIT RISK EXPOSURE

The exposure which is subject to a capital requirement according to the credit risk regulations in FFFS 2007:1.

## CREDIT RISK PROTECTION

Risk-reducing factors/measures such as property mortgages.

## DEFAULTS

An exposure to a specific counterparty is deemed to be in default if any of the following criteria are fulfilled:

- The institution deems it probable that the counterparty will not be able to fulfil its commitments towards the institution without the institution having to realise collateral, if any, or take similar measures.
- The counterparty is more than 90 days late with a payment unless it is an insignificant amount.

## EAD

Exposure at default. Basel exposure is the amount which is subject to a capital requirement. It is calculated inclusive of interest and fees. Off-balance sheet amounts are recalculated with the conversion factor (CF). For derivatives, EAD is calculated as positive MTM (replacement cost) plus value change risk (i.e. the nominal amount multiplied by upward adjustment factor).

## EL

Expected loss is the same as expected loss amount, i.e.  $PD \times LGD \times EAD$ .

## EXPOSURE

Exposure means the total exposures on and off the balance sheet.

## EXPOSURE AMOUNT

Exposure amount is the same as EAD.

## HAIRCUT

The percentage by which the market value of a financial asset is reduced to take into account the risk of price movements when calculating capital requirements, margins and collateral.

## IMPAIRED LOAN

Loans are classified as impaired loans if contracted cash flows will probably not be fulfilled. The full amount of all claims which give rise to a specific provision are included in impaired loans even if parts are covered by collateral.

## IRB

Internal rating-based approach for risk classification.

## ITRAXX

ITRAXX Financials is an index of CDS spreads for the 25 largest bond issuers in the European bank and insurance sector. It describes the average premium that an investor requires in order to accept credit risk on the companies.

## LCR

Liquidity Coverage Ratio. The Basel Committee's proposal for a short-term stress measure of liquidity.

## LGD

Loss Given Default is the same as the proportion of an exposure that the Bank loses on average in the event of a default.

## LOAN LOSS RATIO

Loan losses and changes in value of repossessed property in relation to loans to the public and credit institutions (excluding banks) at the beginning of the year, and also repossessed property and credit guarantees.

## LTV

Loan-to-value ratio.

## M

M stands for Maturity and refers to the maturity according to the IRB regulations.



**OTC DERIVATIVES**

Over-the-counter means unlisted tailor-made derivatives.

**PD**

The probability of default is the same as the probability of a borrower defaulting within one year. A PD of 0.2 percent implies that two borrowers out of 1,000 are expected to default within one year.

**PROPORTION OF IMPAIRED LOANS**

Impaired loans (net) in relation to total loans to the public and credit institutions (excluding banks). Impaired loans are reported without deduction for the collateral which exists to secure the claim.

**RISK WEIGHT**

A measure to describe the level of risk of an exposure is expected to have according to the capital adequacy regulations.

**RISK-WEIGHTED ASSETS**

Total risk-weighted amount. The statutory capital requirement is based on this.

**RISK-WEIGHTED VOLUME**

The total risk-weighted amount from each credit risk exposure. The risk-weighted amount is the same as the risk weight of the exposure multiplied by its exposure amount. The risk weight is based on a number of factors such as the repayment capacity and debt-servicing of the counterparty, type of product and the value of any collateral.

**RISK-WEIGHTED AMOUNT**

Risk-weighted amount is the risk weight for each exposure multiplied by the size of the exposure (EAD).

**STANDARDISED APPROACH**

The method of calculating and reporting credit risks in Basel II. It is based on standardised risk weights on the basis of the external rating.

**TIER 1 CAPITAL**

Consists of shareholders' equity and tier 1 capital contribution. Deductions are made for, inter alia, dividends generated, goodwill and other intangible assets and also the difference between an expected loss and provisions made for probable loan losses. Profits generated in the Group's insurance company are not included in the tier 1 capital. For a more detailed description, see note G49.

**TIER 1 RATIO**

Tier 1 capital in relation to risk-weighted volume.

**TIER 1 CAPITAL CONTRIBUTIONS**

Tier 1 capital contributions (hybrid loans) comprise subordinated loans that may be included in the tier 1 capital with the consent of the Swedish Financial Supervisory Authority.

**TIER 2 CAPITAL**

Mainly consists of perpetual and fixed-term subordinated loans.

**VaR**

Value at Risk. Probability-based risk measure.

#### **FINANCIAL INFORMATION**

The following reports can be downloaded or ordered from Handelsbanken's website [handelsbanken.se/ireng](http://handelsbanken.se/ireng):

- annual reports
- interim reports
- risk reports
- corporate governance reports
- fact books
- sustainability reports

#### **IMPORTANT DATES 2014**

5 February	Highlights of Annual Report 2013
26 March	Annual general meeting
30 April	Interim report January–March 2014
17 July	Interim report January–June 2014
22 October	Interim report January–September 2014



