ING Bank Śląski S.A.



Qualitative and Quantitative Disclosures Relating to Capital Adequacy of the Capital Group of ING Bank Śląski S.A. for the year 2008





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INTRODUCTION	2
1. OWN FUND	3
1.1 OWN CAPITAL	3
1.2 SHORT-TERM CAPITAL	4
1.3 CALCULATION OF OWN FUND	4
2. CAPITAL REQUIREMENTS	6
2.1 CALCULATION OF CAPITAL REQUIREMENTS	6
3. SOLVENCY RATIO	7
4. INTERNAL CAPITAL	8
ATTACHMENT	9



# INTRODUCTION

Pursuant to Article 111 a. of the Banking Law Act dated 29 August 1997 (Journal of Laws of 2002 No. 72, item 665 as amended), hereinafter referred to as the "Banking Law Act", ING Bank Śląski S.A., hereinafter referred to as the Bank, is obliged to make qualitative and quantitative disclosures relating to the capital adequacy, excluding irrelevant information and information whose disclosure might have an adverse impact on the Bank's standing in the relevant market, within the meaning of regulations on competition and consumer protection and information covered by legal secrecy.

Pursuant to resolution 11/II/2008 of the Bank Supervisory Board of 27 March 2008, disclosures relating to the capital adequacy of the Capital Group of ING Bank Śląski S.A. are made.

Since the year 2008, the capital requirements and capital funds have been calculated on the basis of Basel II regulations.

Pursuant to article 14 of PFSA Resolution 1/2008, in the year 2007 the Bank enjoyed the transition period for the needs of estimation of the capital requirements and capital funds. Application of the transition term meant in practice that the above-mentioned figures were calculated on the basis of former regulations (Basel I). Disclosures in the annual consolidated financial statements of the Capital Group of ING Bank Śląski S.A. for the year 2007 were made in line with Basel I, both in terms of capital requirements and the capital fund calculation. For comparison, this document presents data for 2007 estimated on the basis of regulations being currently in force (Basel II).

Disclosures in this document were made based on the data from the annual consolidated financial report of the Capital Group of ING Bank Śląski S.A. for the year 2008.

Other disclosures from the annual statements of ING Group (a dominant entity in the holding) were made in the enclosure hereto.



# 1. OWN FUNDS

# 1.1 OWN CAPITAL

The capital comprises: the share capital, the share premium account, revaluation capital and retained earnings. All capitals and funds are recognised at their face value.

The share capital is recognised at its face value, in accordance with the statute and entry into the commercial register.

The share premium account comprises the share premium earned from the issue of shares less the direct costs thereof.

The revaluation capital comprises:

- measurement of financial assets available for sale
- measurement of financial instruments hedging the cashflow
- measurement of fixed assets measured at fair value

Charges for deferred tax connected with the abovementioned measurements are carried through the revaluation capital. The revaluation capital is not subject to distribution.

Retained earnings represent the profits earned by the Bank in the previous term less paid up dividends. Retained earnings comprise:

- other supplementary capital
- Capital reserve
- general risk fund
- undistributed profit/loss of past years
- net financial result for shareholders of the dominant entity

Other supplementary capital is established from earnings after tax with the aim of covering the balance sheet loss. The decision on using the supplementary capital is taken by the General Meeting.

The capital reserve is established separately from the supplementary capital from earnings after tax in the amount decided by the General Shareholder Meeting. The capital reserve is earmarked for covering special losses and expenses. The decision on using the capital reserve is taken by the General Meeting.

The General Risk Fund is established under the Banking Law Act from earnings after tax and is earmarked for covering unidentified risk of banking operations. The decisions on using the fund are taken by the Management Board.



# 1.2 SHORT-TERM CAPITAL

The short-term capital is calculated in accordance with Ordinance Fin/31/08 of the President of the Bank Management Board dated 17 January 2008, compliant with the current regulations in this area. In view of the fact that the Bank's trading activity is material, the short-term capital is used in order to determine the capital adequacy standard.

The short-term capital is the sum of:

- the market profit including the daily market result on operations classified to the trading portfolio and the daily market result due to the exchange rate variations and prices of goods in operations classified to the banking portfolio, calculated on a cumulative basis until the reporting date, less the known charges,
- the losses (negative value) on all operations classified to the banking portfolio, calculated on a cumulative basis until the reporting date, excluding losses due to exchange rate variations and prices of goods.

A positive value of the short-term capital is taken into consideration when setting the capital adequacy standard, up to the level not exceeding the sum of capital requirements for market risk.

# 1.3 CALCULATION OF OWN FUND

Disclosures relating to the capital fund per Basel II were presented in line with Article 127 of the Banking Law Act and Resolution No. 2/2007 of the Banking Supervision Commission (KNB) dated 13 March 2007 concerning other reductions of Tier I capital, their volume, scope and conditions of Tier 1 capital reductions, other balance sheet items which are taken to Tier II capital, reductions of Tier II capital, their volume, scope and conditions of Tier 2 capital; and the scope and method of organising the activities of banks in calculating capital funds.



	31.12.2008	<b>31.12.2007</b> (comparative data <b>)</b>
I. Tier I capital	3 767 114	3 101 097
1. Core capital	1 161 239	1 160 175
- Paid up capital	130 100	130 100
- Share premium account	956 250	956 250
- Other supplementary capital elements	74 889	73 825
2. Capital reserve	2 191 882	1 729 568
- Capital reserve, including undistributed profit of past years	1 887 836	1 609 298
- Minority capitals	2 299	1 720
- Net profit of the current term and profit under approval	407 470	359 622
- Tier I capital revaluation	-105 723	-241 072
3. General Risk Fund	730 179	530 179
4. Reductions of Tier I capital	-316 186	-318 825
- Intangible assets	-316 186	-318 825
II. Tier II capital	4 727	10 275
- Tier I capital revaluation adjustment recognised as Tier II capital	4 727	10 275
III. Reductions of Tier I and Tier II capitals	-40 000	-40 000
- Reductions of Tier I capital	-35 273	-29 725
- Reductions of Tier II capital	-4 727	-10 275
Total capital funds	3 731 841	3 071 372
Short-term capital	79 691	66 674
Total capital funds for capital adequacy purposes	3 811 532	3 138 046

# The capital fund and the short-term capital per Basel II in thousands PLN

The capital reserve includes profit in the process of approval and the net profit of the current reporting term less expected charges and dividend in the amount not exceeding the profit amount as verified by the chartered accountant.

Tier II capital comprises the Tier I capital revaluation adjustment recognised as Tier II capital in regard to unrealised earnings on debt and capital instruments available for sale.

Pursuant to KNB Resolution 2/2007 (article 4), the Group diminished Tier I and Tier II capitals by the value of capital exposures in financial institutions (in the event of the Capital Group of ING Bank Śląski it is the amount of exposure in the affiliated entity, ING Powszechne Towarzystwo Emerytalne S.A.). The reductions cover first Tier II capital and then Tier I capital.

The short-term capital is calculated in accordance with article 5 of KNB Resolution 01/2007.



# 2. CAPITAL REQUIREMENTS

# 2.1 CALCULATION OF CAPITAL REQUIREMENTS

The Bank applies the standard approach to the credit risk.

The standard approach compliant with Basel II is used to calculate the requirement for market risk.

The capital requirement for operational risk was estimated using the Basic Indicator Approach (BIA).

	31.12.2008	<b>31.12.2007</b> (comparative data <b>)</b>
Total capital requirements for the following risks: credit risk, counterparty's credit risk, dilution and delivery of instruments at a later date	2,580,271	1,755,343
Capital requirement for settlement-delivery risk	1,319	0
Total capital requirements for the following risks: prices of equity securities, risk of debt instrument prices, FX and commodity price risk	27,707	49,455
Total capital requirements for operational risk	274,247	259,636
Capital requirement for overall interest rate risk	51,984	17,219
Total capital requirements	2,935,528	2,081,653

The capital requirement for credit risk represents approx. 88% of the Group's overall capital requirement and has the greatest impact on capital adequacy calculation.

The table below presents the structure of credit exposures and the volume of exposures for individual risk weights:

Risk weight	Exposure value before off- balance-sheet exposure conversion ratio			es of off-balan version ratios	ce-sheet	Exposure value	Risk- weighted exposure value	Total capital requirements for the following risks: credit risk, counterparty's credit risk, dilution and delivery of instruments at a later date
		0%	20%	50%	100%			
0%	23,364,801	40	0	0	0	23,364,762	0	0
20%	14,816,662	133,010	352	407,747	608	14,479,498	2,895,900	231,672
50%	3,160,628	558,622	45,599	21,913	207	2,554,571	1,277,285	102,183
75%	11,461,016	737,276	1,711	2,200,541	186,267	9,622,101	7,216,576	577,326
100%	61,035,911	37,321,725	180,042	5,804,852	1,415,776	20,667,726	20,667,726	1,653,418
150%	130,963	170	0	396	0	130,595	195,892	15,672
Total	113,969,981	38,750,843	227,704	8,435,449	1,602,858	70,819,253	32,253,379	2,580,271



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# 3. SOLVENCY RATIOS

The solvency ratio is calculated as percentage, namely a fraction whose:

- numerator is the value of the capital fund plus short-term capital,
- denominator is the overall capital requirement multiplied by 12.5,

multiplied by 100.

The consolidated solvency ratio of the ING Bank Śląski S.A. Capital Group as at 31 December 2008 is 10.39 %.

# 4. INTERNAL CAPITAL

The economic capital – a term used by ING Group for the internal capital - is defined as the capital required in order to cover all material risks in the bank's operations. The economic capital's volume should cover the level of unexpected losses, assumed by the bank, that the bank may be exposed to in the future. When estimating the level of capital indispensable to protect the bank against the adverse impact of risk, the yearly time span is assumed as well as the confidence level corresponding to AA rating, i.e. 99.95%. The Bank uses methodologies developed by ING Group for the needs of the economic capital calculation.

ING Bank Śląski identifies and measures the following types of economic capital:

- 1. Capital for coverage of the credit risk
  - includes the risk of the creditor's default,
  - is determined on the basis of the MKMV model, including among others the parameters of the transactions and client risk (EAD, PD, LGD) and the transaction's correlation with the entire Bank's portfolio;
- 2. Capital for coverage of the transfer risk
  - includes the risk of default in the event of transactions in foreign currencies,
  - is determined similarly to the credit risk, on the basis of the sovereign risk parameters;
- 3. Capital for coverage of the market risk
  - includes the risk of loss resulting from adverse developments in the financial market, including among others the interest rate risk, FX rate risk and the risk of changes in prices of financial instruments being part of the bank's portfolio,
  - is determined using the Value at Risk (VaR) method, i.e. the statistical estimation of the potential loss within the assumed time;



- 4. Capital for coverage of the operational risk
  - includes the risk of direct or indirect loss resulting from inadequate or faulty internal processes, people and systems, IT risk and internal events, reputational risk and litigation risk,
  - is determined using the Advanced Measurement Approach (AMA);
- 5. Capital for coverage of the business risk
  - includes the risk of loss of value of the bank's portfolio connected with the fluctuations of volumes, margins and costs caused by internal and external factors,
  - is determined using the analysis of the fluctuation trends of profit and loss figures over time.

The total value of the economic capital is the sum of the abovementioned capitals. The calculation of individual capitals does not account for correlations between specific risks the bank is exposed to, thus the calculated total capital level is adjusted with the diversification ratio. Taking account of the diversification effect is based on the assumption that the probability of materialisation of all risks at the same time is insignificant. Thus, the diversification ratio allows for avoiding overestimation of the overall economic capital needed to protect the bank against the risk.

The economic capital calculation models were developed at the ING Group's level in Amsterdam. It needs to be emphasised that most parameters needed in order to calculate the economic capital required for protecting the bank against the market, business and operational risk are also calculated at the Group's level. ING Group also provides data on the diversification effect.



# ATTACHMENT



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# INTRODUCTION

This Pillar 3 section includes information that Basel II requires to be made publicly available (unless it has already been provided in the risk management section). The information relates to ING Bank N.V. and all of its subsidiaries. The information contained in this section has not been audited by the Group's external auditors.

# **NEW CAPITAL ADEQUACY RULES – BASEL II ACCORD**

The rules on capital adequacy, also referred to as Regulatory Capital (RECAP), express the regulators' and legislators' opinions of how much capital a bank and other regulated credit institutions must retain in relation to the size and the type of risk taking expressed in the form of risk-weighted assets. The most important part of the capital base is the shareholders' equity. In addition to equity, the institution may issue certain liabilities such as subordinated loans to be included in the capital base. The legal minimum requirement stipulates that the capital base must correspond to at least 8% of the Risk-Weighted Assets (RWA).

The Dutch government adopted the Capital Requirements Directive (CRD), the European reflection of the Basel II capital accord in December 2006. Since the new regulations adopt a "risk-based approach" to determine the required capital base, there is a significant difference in the measurement of capital compared to the former rules. Therefore, the Dutch government adopted legislation to implement the new rules in stages. For 2008, the capital base may not fall below 90% of the amount that would have been applicable under the former rules, called Basel I. For 2009, the floor reduces to 80%. No floor is applied after year end 2009.

This section relates to Pillar 3, market discipline, and as such provides information on several topics. Some of the required information have already been given elsewhere in the annual report, e.g. in the risk management section and in the capital management section. This section provides additional information, as well as references to the relevant sections.

The Pillar 3 information mostly relates to credit risk, but also to market risk, operational risk and Securitisations. The requirements are mainly for underlying exposure, risk weighted assets and regulatory capital. As such it relates primarily to the first Basel II pillar, the minimum capital requirement. The second pillar concerns the banks internally used economic capital, and the supervisors review of that capital and the underlying models. Economic Capital, and consequently Pillar 2, is disclosed extensively in the risk management section. As such, the text of this Pillar 3 section should be read in conjunction with statements made in the risk management section and capital management section of the annual accounts, where there is a comprehensive discussion of risk management and capital management.

#### **RISK MANAGEMENT AT ING BANK**

ING has a group risk management function that is embedded at all levels of the organisation and operates through a comprehensive risk governance framework.

The primary responsibility of the Bank risk management function lies with the Chief Risk Officer (CRO), who is a member of the Executive Board. The CRO is responsible for the management and control of risk on a consolidated level to ensure that ING's bank risk profile is consistent with its financial resources and the risk appetite defined by the Executive Board. The CRO has several direct reports who are all responsible for a specific risk management function within ING Bank.



A more detailed description of risk management at ING can be found in the risk management section.

# **REGULATORY CAPITAL REQUIREMENTS**

#### **Regulatory capital requirements**

	2008
Credit risk	
Portfolios subject to standardised approach	3,083
Portfolios subject to advanced IRB approach	
<ul> <li>Central governments and central banks</li> </ul>	309
- Institutions	1,680
- Corporate	9,366
<ul> <li>Residential mortgages</li> </ul>	3,062
- Other retail	885
Total portfolios subject to advanced IRB approach	15,302
Securitisation exposures	2,321
Equity portfolios in the banking book under the simple risk weight approach	194
Other Non-Credit Obligation Assets (ONCOA)	2,166
Total credit risk	23,066
Market risk	
Standardised approach	449
Internal models approach – trading book	587
Total market risk	1,036
Operational risk	
Advanced measurement approach	3,368
Total Basel II required Regulatory Capital	27,470
Basel II floor*	34,369
additional capital requirement	6,899

\* 90% of Basel I required Regulatory Capital

In order to prevent large short term effects on capital requirements, the regulators introduced transition rules (the "capital floor") for institutions implementing the new capital adequacy reporting. For 2008 and 2009 the capital requirements should be no less than 90% and 80% respectively of the capital requirements calculated under Basel I regulations. The additional capital requirements according to the transition rules are EUR 6,899 million.

The required regulatory capital shown in this section should be compared to the available regulatory capital for which details can be found in the Capital Management section under the heading "Regulatory Capital".

# **CREDIT RISK**

# **BASIS OF PRESENTATION FOR CREDIT RISK**

The following paragraphs address the risk information for Pillar 3 reporting.

For credit risk, data included in these tables is related to ING Bank's core credit risk activities in the areas of: Securities Financing, Derivatives (collectively Pre-Settlement Risk); Money Market activities (including reserve deposits at Central Banks); Lending (both on and off balance sheet); and Investment risks.

The amounts presented in this section relate to amounts used for credit risk management purposes, which follow ING's interpretation of the definitions as prescribed under the Basel II accords. Therefore, the numbers are different than the accounting numbers as reported in the annual accounts under IFRS-EU. Figures for Derivatives and Securities Financing are based on "risk weighted amounts", which generally is equal to the mark-to-market value of the underlying trades plus a (regulatory defined) "add-on" which represents estimated potential future exposure. The amounts are then further modified by an adjustment that is related to the underlying collateral (market) values (after a haircut is applied) and any legal netting or compensation that may be permitted under various master agreement arrangements, such as ISDAs, CSAs, GMLAs, etc.

Figures associated with Money Market and Lending activities are generally the nominal amounts, while amounts associated with Investment activities are based on the original amount invested less repayments. Off-Balance Sheet exposures include the letters of credits and guarantees, which are associated with the Lending Risk Category. Additionally, Off-Balance Sheet exposures include a portion of the unused limits, associated with the statistically expected use of the unused portion of the limit between the moment of measurement and the theoretical moment of statistical default. Collectively, these amounts are called "credit risk oustandings".

Exposures associated with Securitisations (Asset Backed Financing, Commercial/Residential Mortgage Backed Securities and Covered Bonds) are shown separately. These amounts also relate to the amount invested prior to any impairment activity or mark-to-market adjustments. This amount is also considered to be "outstandings".

Unless otherwise stated, the tables included in this Section focus on the measurement of Exposure at Default (EAD) and Risk Weighted Assets (RWA) under the Basel II definitions. EAD is generally the sum of the on-balance and off-balance sheet lending, investment and money market activities plus an estimated portion of the unused credit facilities extended to the obligor. Additionally, the risk weighting amounts (plus add-ons) are included. Multiplying RWA by 8% will result in the level of Regulatory Capital (RECAP) that is required to be held against these portfolios (for the credit risk portion of the activities). In this section a threshold of 2% of the total value reported is used for determining materiality where applicable. All categories below that threshold have been reported in the category "Other".

# **CREDIT RISK AT ING**

ING Bank's credit policy is to maintain an internationally diversified loan and bond portfolio, while avoiding large risk concentrations. The emphasis is on managing business developments within the business lines by means of top-down concentration limits for countries, individual obligors and obligor groups. The aim is to expand relationship-banking activities, while maintaining stringent internal risk/return guidelines and controls.

**Credit Risk** is the risk of loss from the default by debtors or counterparties. Credit risks arise in ING Bank's lending, money market, pre-settlement and investment activities, as well as in its trading activities. Credit risk management is supported by dedicated credit risk information systems and internal rating methodologies for debtors and counterparties.

ING Bank's credit exposure is mainly related to traditional lending to individuals and businesses, bonds held in the investment portfolios and financial markets trading activities. Loans to individuals are mainly mortgage loans secured by residential property. Loans to businesses are often collateralised, but can be unsecured based on internal analysis of the obligors' creditworthiness. Financial Markets activities include derivatives trading, securities financing, and Foreign Exchange (FX) transactions, which we collectively refer to as Pre-Settlement risks. ING uses various market pricing and measurement techniques to determine the amount of credit risk on pre-settlement activities. These techniques estimate ING's potential future exposure on individual and portfolios of trades. Master agreements and collateral agreements are frequently entered into to reduce these credit risks.

# **PILLAR 3 CREDIT RISK IN PRACTICE**

The Basel II Accord not only changes the way ING reports its credit risk for regulatory purposes; it also affects the daily operations and practices of all types of risk management at all levels within ING Bank. It has no effect on ING Insurance or Asset Management operations.

One of the key elements of the Basel II Accord is the "Use Test", which requires ING to use Basel concepts in its day-today activities. The diagram below illustrates where ING has incorporated the Basel II concepts into its daily activities, both globally and locally:



# **RISK MEASUREMENT AND REPORTING**

ING distinguishes three separate information requirements from senior management related to the Advanced IRB (AIRB) approach for credit risk:

- Reporting on (minimum) regulatory capital requirements;
- Model monitoring reports; and
- Stress testing reports.

The acceptance, maintenance, measurement, management and reporting of credit risks at all levels of ING Bank is accomplished through promotion of single, common credit risk data standards and the integration into common credit risk tools that support standardised and transparent credit risk practices.

# THE IRB METHOD IN SHORT

There are four elements which drive the Basel II "risk-based approach" to the determination of the capital base. For each of these elements, ING has developed a series of statistical, expert and hybrid models based on ING's historical experience and other market observations.

- **Probability of Default (PD):** The first is the borrower's, counterparty's, or issuer's (collectively referred to as the "obligor") probability of default, which measures an obligor's creditworthiness in terms of likelihood to go into default. The result of this calculation attempts to measure the senior, unsecured standalone creditworthiness of an organisation without consideration of structural elements of the underlying transactions, such as collateral, pricing, or maturity.
- Exposure at Default (EAD): The second element is the obligor's exposure at default. These models are intended to estimate the outstanding amount or obligation at the moment of default in the future. Since the fact that an obligor will go into default is not known, and the level of outstandings that may occur on that date is also not known, ING uses a combination of statistical, expert and hybrid models to estimate the Exposure at Default. With the exception of guarantees and letters of credit, the EAD is always equal to or higher than the associated credit risk outstandings, under the assumption that obligors tend to absorb liquidity from available credit resources before financial problems become apparent to the obligor's creditors.
- Loss Given Default (LGD): The third element is the loss given default. These models are intended to estimate the amount ING will lose when liquidating collateral pledged in association with a given loan or financial obligation, or alternatively, liquidating the company as a whole, as part of a workout process. LGD models are based on cover types, estimated recovery rates given orderly liquidation, and (in)direct cost of liquidation.
- **Maturity (M):** The fourth element is the time to the maturity of the underlying financial obligation. Basel II caps the maturity element at five years, despite the fact that many obligations extend longer than five years.

**Expected Loss (EL):** The expected loss provides a measure of the value of the credit losses that ING may reasonably expect to incur on its portfolio. ING must hold a reserve (as part of its capital base) to cover the expected losses in its credit portfolio. In its basic form, the expected loss can be represented as:

# EL = PD \* EAD \* LGD

**Unexpected Loss (UL):** Additionally, ING must also maintain a capital buffer against unexpected losses in order to protect itself against credit losses associated with unusual market events outside of the statistical norms.

Basel II uses these same components (expected loss and unexpected loss) conceptually in the determination of the Risk Weighted Assets (RWA). Like EL, RWA takes PD, EAD, and LGD into account, but also includes variables associated with the type of obligor and its size.

The PD, EAD and LGD models that are used in the calculation of Basel II regulatory capital are the same models that ING uses in the determination of its internally based economic capital models. Additionally, these models are used for loan pricing and customer profitability calculations, as well as forming the foundation for loan loss provisioning calculations.

# **CREDIT RISK MODELS**

ING considers a well-balanced and controlled set of rules around model development, maintenance and validation to be an essential component for professional risk measurement and risk management. In 2006, ING developed and implemented a Credit Risk Model Governance framework, which consists of a set of extensive guidelines and requirements to which all stakeholders must adhere when developing, implementing and maintaining PD, LGD and EAD models.

# Types of Credit Risk Modelling

Within ING Bank, there are three types of modelling which form the foundation of the PD, EAD and LGD models used throughout the bank.

- Expert models are based on the knowledge of experts from both Risk Management and Front Office staff and literature from rating agencies, supervisors and academics. These kinds of models are especially appropriate for portfolios for which limited historical defaults exists thereby reducing the reliability of a statistical model. These portfolios are also often referred to as "Low Default Portfolios";
- Statistical models are created where a large set of default or detailed loss data is available. They are characterised by a sufficient number of data points which facilitate meaningful statistical estimation of the model parameters. The model parameters are estimated with statistical techniques based on the data set available.
- Hybrid models contain characteristics of both expert and statistical models.

Next to the model choice, the definition of default is an important starting point for model building. ING uses a framework that integrates elements of the regulatory definition of "Default" and the loan loss provisioning indicators under IAS 39. The rationale is that several indicators are very close to the indications of an obligor's "unlikeliness to pay" under Basel II and similar regulations.

Integration of both frameworks makes it possible to use the regulatory risk components PD, LGD and EAD in the collective provisioning process under IAS 39, further enhancing ING's compliance with the Basel II "use test".

Independent Model Validation is one of the cornerstones of this framework. It consists of the process of determining that a model is appropriate for its intended use. It is an ongoing process whereby the reliability of the model is verified at different stages during its lifecycle: at conception, before approval, periodically after implementation, and when significant changes are made to the model. The validation process contains a mix of developmental evidence, process verification and outcome analysis.

# APPROACHES APPLIED BY ING BANK

On 1 January, 2008, ING adopted the AIRB to the majority of its significant portfolios that contain credit risk in accordance with the approvals granted by DNB (Dutch Central Bank), and various local regulators, as required. However, there remains a small portion of the portfolio that is subject to the Standardised Approach (SA). Individually, these portfolios are relatively small, very specialized, or are related to new acquisitions in companies that themselves did not yet follow the AIRB Approach. In some cases, the Standardised Approach is mandated in conjunction with transition restrictions imposed by local regulators.

ING anticipates that collectively approximately 50% of the remaining standardised portfolios will migrate to the AIRB approach during 2009; in some cases migrations may require additional regulatory approvals.

ING uses the AIRB and the Internal Assessment Approach (IAA) for liquidity lines provided to Asset Backed Commercial Paper programs. For a number of portfolios that are either on an exit strategy or immaterial in terms of size and risk profile, the Standardised Approach is used.

# **EXPOSURE CLASSES**

The Basel II Accord has developed the concept of "Exposure Classes". These are essentially groupings of credit risks associated with a common obligor type or product type. For the AIRB Approach, most of the exposure classes have subcategories. ING has applied the following definitions to determine Exposure Classes:

**Governments** include Sovereign Government entities, Central Banks and Basel II recognised Local / Regional Authorities as well as Supranational Organisations;

**Institutions** include all Commercial Banks, non-Bank Financial Institutions, such as Leasing Companies, Funds and Fund Managers, and Insurance Companies, as well as local and regional government entities not classified as governments;

Corporates includes all legal entities, that are not considered to be Governments, Institutions or Retail Other;

Residential Mortgages include all mortgage loans for residential properties that are not part of a securitisation;

**Retail Other** includes all other credit obligations related to Retail SMEs, such as partnerships, one-man businesses and private individuals, such as consumer loans, car loans and credit cards.

Under these exposure class definitions, it is possible for a private individual to be included under both Residential Mortgages and Retail Other. For other types of counterparties or issuers, there is no potential overlap.

# CREDIT RISK EXPOSURES

	Central governments and central			Residential		
2008	banks	Institutions	Corporate	mortgages	Other retail	Total
Standardised Approach	7,801	3,165	17,706	21,060	14,116	63,848
AIRB Approach	75,869	127,797	272,645	255,567	29,979	761,857
Total	83,670	130,962	290,351	276,627	44,095	825,705

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\* includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

# Gross credit risk exposures (EAD) by geographic area

2008	Central governments and central banks	Institutions	Corporate	Residential mortgages	Other retail	Total
Netherlands	9,258	2,711	78,636	134,051	20,187	244,843
Germany	11,566	27,371	6,808	43,627	3,504	92,876
Belgium	15,111	5,181	33,115	18,319	9,047	80,773
United States of America	120	11,201	32,159	25,636	62	69,178
Spain	10,134	16,856	11,027	7,292	582	45,891
France	7,697	14,462	14,198	922	170	37,449
Australia	497	4,722	4,364	19,701	24	29,308
United Kingdom	425	10,120	16,436	2,089	383	29,453
Italy	6,328	3,914	9,116	5,794	1,082	26,234
Canada	1,415	3,833	1,003	13,388	455	20,094
Other	21,119	30,591	83,489	5,808	8,599	149,606
Total	83,670	130,962	290,351	276,627	44,095	825,705

\* includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

The figures presented in this table are EAD based on the country of the residence of the obligor. As such, these figures do not represent the risk associated with a country transfer risk event, such as a restriction on the convertibility of local currency into internationally tradable currencies. Nor do these figures represent the economic exposure that is present in a given country. The figures above are the most significant exposures. Smaller exposures are all group under Other, where none of the individual underlying exposures are more than 16.5 billion. Figures associated with ING's transfer risk positions and economic country risk exposure can be found in risk management section, including their corresponding definitions.

#### Gross credit risk exposures (EAD) by economic sector Central governments Residential and central 2008 Institutions Corporate Other retail Total banks mortgages 0 16,876 2,475 19,351 0 **Builders & Contractors** 0 0 0 23,786 **Central Banks** 23.786 53,794 0 0 0 53,794 **Central Governments** 806 112,093 110.377 882 28 **Commercial Banks** 0 18.203 2.246 20,449 Food, Beverages & Personal Care 20,209 0 17,865 2,344 **General Industries** 5,019 15,526 0 106 20,651 Lower Public Administration 0 0 28,794 406 29,200 Natural Resources 3,690 48,344 845 52,879 Non-Bank Financial Institutions 0 124 276,627 22,314 299,065 Private Individuals 191 40 53,305 2,009 55,545 **Real Estate** 0 93 3,898 22,973 18,982 Services 25,232 0 24,166 1,066 Transportation & Logistics 74 1,236 62,810 70,478 6,358 Other 290,351 825,705 83,670 130,962 276,627 44,095 Total

\* includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

The figures presented above are based on the Basel II defined EAD, and differ from the industry distribution figures that are presented in the annual accounts. Note that all other sectors have exposures that are less than 16.5 billion.

ING uses a common industry classification methodology based on the NAICS system (North American Industry Classification System). This methodology has over 1,500 detailed industry descriptions, which are aggregated into 22 industry classes at the highest level. Certain countries require ING to report locally based on other industry classification methodologies, which are generally derived from the NAICS classifications presented here. Residential mortgages are generally only extended to private individuals.

# Outstandings by Tenor Bucket (based on credit risk outstandings) per 31/12

2008	Central governments and central bank	Institutions	Corporates	Residential mortgages	Other retail	Total	
Current Outstandings	80,020	117,066	250,413	266,918	34,795	749,212	
1 month	73,841	107,314	233,559	266,346	33,676	714,736	
3 month	47,681	88,317	218,945	265,805	33,069	653,817	
6 month	47,469	82,899	209,209	264,981	31,982	636,540	
1 year	52,289	70,942	167,254	262,052	20,412	572,949	
2 years	47,241	64,600	137,498	258,619	17,828	525,786	
3 years	40,753	56,474	110,622	254,560	15,546	477,955	
5 years	33,314	44,387	70,160	241,541	11,457	400,859	
7 years	22,270	32,210	44,087	232,649	9,577	340,793	
10 years	7,331	7.725	23.915	213.740	7,147	259.858	

Includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

Problem Loans (rating 20-22) are excluded in the figures above.

Basel II does not include a cash flow methodology that would look at future portfolio runoff. This table, therefore, presents figures that are based on credit risk outstandings, and not EAD. Credit Risk outstandings include amounts associated with both on and off balance sheet products, but exclude amounts related to unused limits. For derivatives and securities financing, the mark-to-market plus add-on methodology is applied, but the add-ons are generally less conservative than the add-ons applied under the Basel II definitions.

The figures above assume that loans, money market and investments in fixed income securities are fully repaid at their maturity dates and that limits are reduced in conjunction with repayment schedules contained in the associated loan documentation, without regard for potential renewal or extension, or portfolio sales or acquisitions. Pre-Settlement risks are assumed to reduce over the legal maturity of the underlying transactions. However, under mark-to-market plus addon methodology, it is possible for exposures to increase in time, rather than decrease. This is a function of ING's estimates of future interest rates and foreign exchange rates, as well as potential changes in future obligations that may be triggered by such events. Generally, credit risk outstandings are lower than EAD.

Further, all figures assume that no new credit risks are introduced into the portfolio and that there are no delays in repayments associated with problem loans, nor are there write offs associated with provisions or impairments. The portfolio runoff is implied by the difference in the figures between two periods.

# LOAN LOSS PROVISIONS

There are three types of provisions that have to be made and accounted for:

- Individually Significant Financial Asset (ISFA) Provisions for those loans where specific, individualized provisions are still required. These are generally loans that exceed the threshold amount.<sup>1</sup> These provisions are made using an estimated future recovery methodology and then applying a net present value concept. The future cash flows are based on the restructuring officers' best estimate of when/if recoveries will occur. Recoveries can be from any source. such as the sale of collateral, ongoing cash flows, sale of a business/subsidiary, etc. ISFA provisions are all calculated using a common tool across ING Bank.
- Incurred But Not Recognized (IBNR) Provisions: are made for the "performing" loan portfolio as an estimate or proxy for the losses/defaults that may have already occurred in the portfolio, but which ING has not yet determined or recognised. These provisions are based on a modified expected loss methodology. The primary modification is that the PD time horizon (12 months) is shortened to periods of 3, 6, or 9 months, depending on the type of obligor. Generally, the larger the obligor, the shorter the PD time horizon. IBNR provisions are calculated centrally using a common tool across ING Bank.

Individually Not Significant Financial Asset (INSFA) Provisions: are made for acknowledged problem loans (ratings 20-22) that are below the threshold amount. Due to their small size, the IFRS rules permit a statistical approach to measuring these provisions. Therefore, the calculation is based on the same statistical formula that is used to determine IBNR Provisions and is also calculated centrally using a common tool across ING Bank.

<sup>&</sup>lt;sup>1</sup> The threshold amount varies per business unit, but generally is EUR 0 in the international units, and EUR 1 million in the "home markets".

# Cumulative Provisions by geographic area

2008	Central governments and central banks	Institutions	Corporate	Residential mortgages	Other retail	Total
Netherlands	-	-	239	92	298	629
Germany	-	-	57	211	86	354
Belaium	-	-	187	31	114	332
United States of America	-	-	90	170	6	266
Spain	-	-	112	2	2	116
Poland	0	0	93	1	28	122
France	-	2	19	3	74	98
Iceland	-	68	-	-	-	68
Turkev	1	0	71	2	11	85
Italy	-	-	18	2	40	60
Other	3	46	349	40	43	481
Total	4	116	1,235	554	702	2,611

Includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

Excludes revaluations made directly through the equity account

Above presentation of the cumulative provisions is based on country of the residence of the obligor. Countries not shown in above table have cumulative provisions of less than 50 million, and are grouped under Other.

2008	Central governments and central banks	Institutions	Corporate	Residential mortgages	Other retail	Total
Automotive	-	-	92	-	11	103
Builders & Contractors	-	-	183	-	34	217
Commercial Banks	-	106	0		0	106
Food, Beverages & Personal Care	-	-	149	-	36	185
General Industries	-	-	193	-	32	225
Media	-	-	41	-	13	54
Natural Resources	-	-	77	-	2	79
Non-Bank Financial Institutions	-	8	68	-	11	87
Private Individuals	-	-	0	554	316	870
Real Estate	-	-	134	-	33	167
Retail	-	-	37	-	58	95
Services	0	-	85	-	50	135
Transportation & Logistics	-	-	58	•	11	69
Other	4	2	118	-	95	219
Total	4	116	1235	554	702	2,611

• Includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

• Excludes impairments made directly to the equity accounts.

Sumulativa Brovisions by

The tables above should be read in conjunction with the corresponding tables below related to Past due loans by geographic area and Past due loans by economic sector as well as information and statements in the annual accounts. Economic sectors not shown in above table have cumulative provisions of less than 50 million, and are grouped under Other.

2008	Residential mortgages	Other retail	Total
Belgium	2,128	271	2,399
Netherlands	2,293	37	2,330
Australia	775	0	775
United States of America	584	1	585
Turkey	101	220	321
Germany	245	13	258
India	57	134	191
Other	251	114	365
Total	6,434	790	7,224

Includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

• Excludes revaluations made directly through the equity account

Above presentation of the past due loans is based on country of the residence of the obligor. Countries not shown in above table have past due loans of less than 140 million, and are grouped under Other.

# Past due loans by economic sector (based on outstandings)

2008	Residential mortgages	Other retail	Total
Private Individuals	6,434	434	6,868
Other	-	356	356
Total	6,434	790	7,224

• Includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

• Excludes revaluations made directly through the equity account

Economic sectors not shown in above table have past due loans of less than 75 million, and are grouped under Other.

The tables above should be read in conjunction with the corresponding tables below related to cumulative provisions by geographic area and cumulative provisions by economic sector as well as information and statements in the annual accounts.

ING considers past due loans to be those loans where any payment of interest or principal is more than one day past due. The methodology is principally extended to loans to private individuals, such as residential mortgage loans, car loans, and other consumer loans. For business loans (governments, institutions, corporates), ING has adopted a policy to classify the obligor as a problem loan as quickly as possible upon the occurrence of a payment default. Therefore, the concept of past due loans does not exist for these types of obligors (and hence the reason why certain exposure classes show no figures).

The figures above are based on credit risk outstandings, and not EAD. Credit Risk outstandings include amounts associated with both on and off balance sheet products, but exclude amounts related to unused limits. For derivatives and securities financing, the mark-to-market plus add-on methodology is applied, but the add-ons are generally less conservative than the add-ons applied under the Basel II definitions.

# Loan Loss Provision Shortfall

The Loan Loss Provision Shortfall is the difference between the EL and loan loss provisions for AIRB exposures. This difference is caused by the different PD time horizons that exist for IAS 39 Loan Provisioning (3, 6, and 9 months) and the 12 month time horizon used for EL and regulatory capital calculation. Basel II requires that the shortfall is deducted from the regulatory capital, 50% from Tier 1 and 50% from Tier 2 capital.

At December 31, 2008, the loan loss provision shortfall was EUR 1,360 million. The cumulative amount of loan loss shortfall will generally increase in periods where loan loss provisions are decreasing on a portfolio basis, and will decrease in periods where loan loss provisions are increasing.

# The Standardised Approach

Unlike the AIRB approach, the standardised approach applies a fixed risk weight to each asset as dictated by the Financial Supervisory Authorities, and is based on the exposure class to which the exposure is assigned. As such, the Standardised Approach is the least sophisticated of the Basel II methodologies and is not as sensitive as the risk-based approach. Where external rating agency ratings are available, they may be used as a substitute to using the fixed risk weightings assigned by the Financial Supervisory Authorities. Because the underlying obligors are relatively small, the underlying obligors tend not to have external ratings.

# PORTFOLIOS UNDER THE STANDARDISED APPROACH

Gross exposure under the Standardised Approach (SA)

2008	Exposure before risk mitigation	Exposure after risk mitigation
Risk buckets used:		
0%	6,881	7,072
10%		
20%	4,240	4,414
35%	20,188	20,188
50%	4,131	4,200
75%	24,259	21,456
100%	35,081	33,947
150%	610	562
200%		

• includes only the SA Portfolios; excludes securitisations, equities and ONCOA.

Excludes revaluations made directly through the equity account

Under the standardized approach there are two principal methods for reducing or mitigating credit risk: a) reduction of credit risk through the acceptance of pledged financial assets as collateral, such as marketable securities or cash; or

b) mitigation or shifting of credit risks to a lower risk weighting group by accepting guarantees from unrelated third parties.

The risk weighting categories are defined in Basel 2 and are interpreted by ING as follows:

# 0% Risk Weighting

These assets fall into three categories as described below. In all of these cases, ING has developed credit risk models for the specific portfolios, but has not yet implemented the AIRB approach due to restrictions imposed by local regulators. In most cases, these portfolios are eligible to be converted to the AIRB approach in 2009.

# Central government and central banks

In accordance with national discretion rules, the risk weight for many central governments and central banks under the standardised approach is 0%.

# Regional governments and local authorities

In many countries, exposures to provincial, regional and municipal governments are treated as exposures to the central government in whose jurisdiction they are established.

# Multilateral Development Banks

Exposures to certain specific multilateral development banks and other international organisations such as the International Bank for Reconstruction and Development are risk weighted at 0%.

#### 10% Risk Weighting

The 10% risk weighting is applied to covered bonds exposures under the standardised approach. All of ING's covered bond positions are measured under the AIRB.

# 20% Risk Weighting

20% Risk Weighting is applied to exposure based on their exposure class and external rating. These are generally high quality exposures.

#### 35% Risk Weighting

Exposures secured by mortgages on residential real estate are assigned a risk weight of 35%. The risk weight is only reduced for the part of the exposure that is fully secured.

#### 50% Risk Weighting

50% Risk Weighting is applied to exposure based on their exposure class and external rating. These are generally not prime grade exposures

# 75% Risk Weighting

Retail exposures under the standardised approach are assigned a risk weight of 75%.

#### 100% Risk Weighting

Under the standardised approach, exposures without external ratings that do not fall into one of the other categories are assigned a risk weight of 100%.

# 150% Risk weighting

Under the standardised approach, certain specified exposures, such as exposures to venture capital and private equity, as well as the unsecured portion of any past due obligation is assigned a risk weighting of 150%.

#### 200% Risk weighting

The 200% risk weighting must be applied to collective investment undertakings which contain high risk equity investments.

# PORTFOLIOS UNDER THE AIRB APPROACH

# **RISK RATING METHODOLOGY**

In principle all Risk Ratings are based on a Risk Rating (PD) Model that complies with the minimum requirements detailed the CRD, the DNB Supervisory Rules and CEBS guidelines. This concerns all Obligor Types and Segments, including Countries.

ING's Probability of Default (PD) rating models are based on a 1-22 scale, which roughly corresponds to the same rating grades that are assigned by external rating agencies, such as Standard & Poor's and Fitch. For example, an ING rating of 1 would correspond to an S&P/Fitch rating of AAA; an ING rating of 2 would correspond to an S&P/Fitch rating of AAA; and so on.

#### Risk Ratings from Rating Models:

Risk Rating processes take on several forms as described below:

- <u>Rating Models requiring manual interference</u>: these are Models that require manual interference from the User who has to answer Rating Model based questions for each individual legal organisation in order to arrive at a Risk Rating. If not reviewed, the Risk Rating will expire 18 months after the previous review. These models are typically used for Governments, Institutions and larger Corporates; and
- <u>Automated Rating Models</u>: these are Models that do not require manual interference. Instead, data is automatically gathered and used to determine the Risk Rating (this process is detailed further in the sections that describe ING's Data Management and IT processes). These models are typically used for small businesses, consumer loans, and residential mortgage exposures.
- <u>Risk Ratings from Appeals</u>: Rating Model outcomes that are perceived to be inaccurate can be appealed through the relevant Rating Appeal Process, where this exists. The Rating Appeal Process applies to all Rating Models that require manual interference. It does not apply to automated Rating Models developed for consumer lending and residential mortgage business.

# Additional Pillar 3 information for ING Bank only (continued)

<u>Non-Rating Model based Ratings</u>: this pertains to Risk Ratings not calculated by means of an approved Rating Model, but manually calculated or set on the basis of an approved subjective methodology. These are generally only used for problem loan classifications (18-22) which are owned by the relevant global or regional credit restructuring unit; and for the securitisation portfolios, whereby the external ratings of the tranche in which ING has invested are leading.

# Exposures (EAD) by PD grade under the AIRB approach

2008	Central governments and central	la stituti su s	0t-	Residential	Other retail	Tatal
	banks	Institutions	Corporate	mortgages	Other retail	Total
1 (AAA)	28,745	1,857	7,698	-	181	38,481
2 (AA+)	26,271	2,185	1,553	1,859	146	32,014
3 (AA)	3,321	19,158	5,142	1,990	100	29,711
4 (AA-)	11,463	43,761	6,352	1,046	84	62,706
5 (A+)	618	23,075	9,156	4,761	2,638	40,248
6 (A)	314	10,589	12,181	1,571	311	24,966
7 (A-)	865	9,357	14,793	18,839	1,086	44,940
8 (BBB+)	948	5,441	24,173	19,238	2,481	52,281
9 (BBB)	129	1,950	30,589	40,149	4,067	76,884
10 (BBB-)	848	3,792	39,143	45,809	3,523	93,115
11 (BB+)	116	1,636	35,671	66,961	6,085	110,469
12 (BB)	1,969	1,329	30,210	30,016	2,558	66,082
13 (BB-)	42	1,121	23,890	6,088	2,036	33,177
14 (B+)	151	432	14,343	1,501	1,139	17,566
15 (B)	53	415	4,993	7,396	1,089	13,946
16 (B-)	-	403	2,289	855	347	3,894
17 (CCC-C)	9	1,011	3,771	2,776	481	8,048
18 (Special Mention)	-	52	2,183	311	488	3,034
19 (Substandard)	3	43	567	1,566	271	2,450
20 (Doubtful)	4	181	3,359	1,466	679	5,689
21 (Liquidation – no loss)	-	-	182	1,346	79	1,607
22 (Liquidation – with loss)	-	9	407	23	110	549
Total	75,869	127,797	272,645	255,567	29,979	761,857

Includes only AIRB portfolios; Excludes securitisations, equities and ONCOA.

• Excludes revaluations made directly through the equity account

The figures presented above are based on EAD and as such differ from those presented in the annual accounts due to different measurement methodology.

Over 95% of ING's credit risks have been rated using one of the in-house developed PD rating models. Within the AIRB Portfolio, the level of Basel II ratings exceeds 99% coverage by exposure. Bankwide, ING has implemented approximately 90 PD models, including various submodels that may be applicable. Some of these models are universal in nature, such as models for Large Corporate, Commercial Banks, Insurance Companies, Central Governments, Local Governments, Funds, Fund Managers, Project Finance, and Leveraged Companies. While other models are more regional or country specific, such as PD models for SME companies in Central Europe, the Netherlands, Belgium, Luxembourg, and the United Kingdom, as well as residential mortgage and consumer loan models in the various retail markets.

Rating Models for retail obligors are predominantly statistically driven and automated, such that they can be updated on a monthly or bi-monthly basis. Models for SME companies, and larger corporates, institutions and banks are manually updated, and are individually monitored on at least an annual basis.

Under Basel II rules, the nominal exposures are weighted to determine the RWA (and regulatory capital) of a portfolio, under a "risk-based approach". This approach dictates that less capital is required for credit risks which are well-rated, while progressively more capital is required as an obligor's risk (rating) deteriorates. This effect can cause RWA assets to increase or decrease together with risk rating migration without a significant change in the size of the underlying financial assets, in terms of financial accounting. As such, rating migrations are closely monitored within ING.

# Average LGD by PD Grade under the AIRB approach

2008	Central governments and central	Institutions	Corporate	Residential mortgages	Other retail	Total
1 (AAA)	20%	16%	34%	10%	53%	23%
2 (AA+)	20%	22%	34%	10%	46%	20%
3 (AA)	20%	21%	37%	10%	42%	23%
4 (AA-)	20%	22%	41%	10%	37%	23%
5 (A+)	20%	24%	35%	12%	55%	27%
6 (A)	21%	24%	28%	10%	52%	25%
7 (A-)	24%	27%	31%	21%	40%	26%
8 (BBB+)	55%	27%	34%	18%	22%	27%
9 (BBB)	18%	37%	29%	16%	33%	23%
10 (BBB-)	41%	29%	25%	14%	26%	19%
11 (BB+)	22%	38%	20%	13%	37%	17%
12 (BB)	37%	42%	22%	16%	38%	<b>20%</b>
13 (BB-)	49%	43%	18%	16%	40%	20%
14 (B+)	8%	36%	23%	15%	39%	23%
15 (B)	8%	43%	26%	13%	45%	21%
16 (B-)	52%	74%	20%	14%	33%	25%
17 (CCC-C)	17%	33%	30%	12%	37%	24%
18 (Special Mention)	20%	24%	16%	19%	19%	17%
19 (Substandard)	33%	48%	18%	14%	35%	18%
20 (Doubtful)	28%	30%	25%	24%	44%	27%
21 (Liquidation – no loss)	-	1%	15%	14%	57%	16%
22 (Liquidation – with loss)	-	15%	27%	14%	73%	36%
Total	21%	24%	26%	15%	36%	22%

Includes both AIRB portfolios; Excludes securitisations, equities and ONCOA.

Excludes revaluations made directly through the equity account

The table above represents the weighted average LGD for each of the represented combination of PD Grade and Exposure Class. For example, the weighted average LGD for an AAA rated corporate is 34%, while the weighted average LGD for a BBB rated corporate is 29%. LGD percentages are influenced by the transactional structure of the financial obligation, the related collateral or covers provided, and the country in which the collateral (if any) would have to be recovered.

In certain cases, the portfolio size is relatively small, which can also have an effect on the weighted average LGD in a given PD Grade and Exposure Class. Therefore, this table should be read in conjunction with the previous table (Exposures (EAD) by PD grade)

Undrawn Commitments						
	Central governments and central			Residential		
2008	banks	Institutions	Corporate	mortgages	Other retail	Total
Standardized Approach	4	228	2,625	454	7,208	10,519
AIRB Approach	208	2,403	55,310	10,439	7,818	76,178
Total	212	2,631	57,935	10,893	15,026	86,697

• includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

Excludes revaluations made directly through the equity account

These figures represent the potential exposure that may be drawn by ING's obligors under committed facilities. In most cases, the obligors have the right to make use of these facilities unless an event of default has occurred, or another defined event within the associated credit risk agreement has occurred. In most cases, the obligor pays a commitment fee to ING on the unused portion of these facilities. Pre-Settlement, Money Market and Investment limits are generally not committed.

If all of the unused commitments were called upon at the same time, ING's credit risks (in terms of outstandings) would increase by 12%. As part of its Exposure at Default (EAD) models, ING makes an estimate of how much of these unused commitments would be drawn under normal circumstances. The effect is included in the calculation of RWA, together with a similar effect applied to uncommitted facilities, albeit at a lower rate.

Exposures secured by third party guarantees received						
	Central governments and central			Residential		
2008	banks	Institutions	Corporate	mortgages	Other retail	Total
Standardised Approach	0	0	481	0	2	483
AIRB Approach	8,689	7,922	120,253	574	6,006	143,444
Total	8,689	7,922	120,734	574	6,008	143,927

includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

• Excludes revaluations made directly through the equity account

From time to time, ING extends loans for which it receives a specific financial guarantee from a non-related counterparty or obligor. The figures in this table represent the EAD that has been guaranteed by these non-related parties. It does not include non-guaranteed amounts. For example, if a given credit risk is only partially guaranteed by a third party then only the portion of the amount which is guaranteed is included in the figures above. These figures exclude any guarantees which are received from a party related to the obligor, such as a parent or sister company. The figures also exclude any guaranteed as part of a government-sponsored mortgage program are also excluded. The figures above do include amounts that are guaranteed through an unfunded risk participation construction.

Counterparty credit risk (EAD) from derivatives (SA and AIRB)						
2008	Central governments and central banks	Institutions	Corporate	Residential mortgages	Other retail	Total
Credit Derivatives	22	2,681	1,540		-	4,243
Derivatives	-	3	55		6	64
Equity Derivatives	-	757	812		28	1,597
Foreign Exchange Derivatives	529	5,282	4,814		69	10,694
Interest Rate Derivatives	2,239	13,586	7,412		52	23,289
Total	2,790	22,309	14,633		155	39,887

includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

• Excludes revaluations made directly through the equity account

The figures in above table are calculated using the mark-to-market plus (regulatory) add-on methodology used for calculating Basel II RWA and are shown after adjustments for compensation and legal netting. This methodology allows ING to classify virtually all of its derivatives exposures under the AIRB approach.

Counterparty credit risk (EAD) from derivatives (SA and AIRB)						
2008	Central governments and central banks	Institutions	Corporate	Residential mortgages	Other retail	Total
Gross MTM plus regulatory add-on	2,861	96,664	30,086		156	129,767
Amount after compensation	2,790	25,750	15,174		155	43,869
Amount after compensation, netting and collateral	2,790	22,309	14,633		155	39,887

includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

Excludes revaluations made directly through the equity account

As part of its normal securities financing and derivatives trading activities, ING enters into master agreements such as ISDAs, GMRAs, etc. Under the terms contained in sections related to Minimum Threshold Amounts and Minimum Transfer Amounts of Collateral Support Annexes (CSAa) or other similar clauses, both ING and it counterparties may agree to pledge additional collateral to each other in the event that either party is downgraded by one of the established rating agencies. ING Bank has determined that under prevailing market conditions, a one notch downgrade would only have a limited effect on the amount of additional collateral that ING would be required to pledge under these agreements. However, the actual amount that ING may be required to pledge in the future may vary based on ING's portfolio composition of both derivatives and securities pledged in securities financing transactions, market circumstances, the number of downgrade notches as well as the terms and conditions of future CSAs or other similar agreements entered into.

# Counterparty credit risk (EAD) from securities financing (SA and AIRB)

	Central governments and central			Residential		
2008	banks	Institutions	Corporate	mortgages	Other retail	Total
Bond Financing Given	213	1,625	242	0	0	2,080
Equity Financing Given	6,619	1,815	3,330	0	0	11,764
Bond Financing Taken	0	237	993	0	0	1,230
Stock Financing Taken	0	658	1,634	0	0	2,292
Total	6,832	4,335	6,199	0	0	17,366

includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

• Excludes revaluations made directly through the equity account

# Counterparty credit risk (EAD) from securities financing (SA and AIRB)

2008	Central governments and central banks	Institutions	Corporate	Residential mortgages	Other retail	Total
Gross MTM plus regulatory add-on	11,944	7,552	9,976			29,472
Amount after compensation	6,832	6,746	8,965			22,543
Amount after compensation, netting and collateral	6,832	4,336	6,198			17,366

• includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

• Excludes revaluations made directly through the equity account

The previous four tables are calculated using the mark-to-market plus (Regulatory) add-on methodology used for calculating Basel II RWA for determining the gross exposures. In order to determine the amount of credit risk applicable, ING first matches the trades with similar characteristics to determine their eligibility for offsetting. This offsetting effect is called "compensation". Subsequently, ING reduces the amount by any legal netting that may be permitted under various types of Master Agreements, such as ISDAs, GMRAs, GMSLAs, etc. Lastly, the amount is further reduced by any collateral that is held by ING under CSAs or other similar agreements.

# **CREDIT RISK MITIGATION**

# Credit derivatives (notional amounts)

2008	Total
Credit derivatives used for hedging purposes	
- credit protection bought	2,019
- credit protection sold	
Credit derivatives used for trading activities	
- credit protection bought	50,092
- credit protection sold	45,395

• includes both AIRB and SA portfolios; Excludes securitisations, equities and ONCOA.

Excludes revaluations made directly through the equity account

ING actively participates in the credit risk derivative (CDS) trading market, as a net purchaser of credit risk protection from other counterparties. ING has purchased a small amount of credit risk protection for hedging purposes, usually in order to reduce concentration on certain "legal one obligor groups" without having to reduce ING's relationship banking activities. ING does not actively sell credit default swaps for hedging or investment purposes. Although Basel II rules permit a reduction of credit risk capital under certain circumstances where ING has purchased CDS protection, ING does not currently make use of this provision in determining its Basel II capital base.

The figures above represent the notional amount of credit risk default swaps that ING has entered into for the represented purpose. The credit risk on the counterparties associated with credit default swap protection bought is included in the pre-settlement risk calculations for the given counterparty, and not in the figures above. For credit default protection sold, ING incurs synthetic issuer risk, on which capital is calculated, depending on its purpose, either hedging or trading.

# **SECURITISATIONS**

# Scope

The following information is prepared taking into account the 'Industry Good Practice Guidelines on Pillar 3 disclosure requirements for securitisations' (the Guidelines) issued by the European Banking Federation and other industry associations on 18 December 2008. It includes qualitative and quantitative disclosures addressing both the exposure

securitised as well as securitisations positions held. While quantitative disclosures are limited to those securitisations that are used for the purpose of calculating the regulatory capital requirements under the CRD, qualitative information have a broader scope and give a view on ING Bank's entire securitisation activity.

Depending on ING's role as investor, originator, or sponsor the objectives, the involvement and the rules applied may be different. ING is primarily engaged in securitisation transactions in the role of investor (in securitisations arranged by others). To a lesser extent, ING is also an originator or sponsor of securitisations that are usually traded in the public markets

# Valuation and accounting policies

ING's activities regarding securitisations are described in Note 27 "Special Purpose Entities" in the annual accounts. The applicable accounting policies are included in the section "Accounting policies for the consolidated balance sheet and profit and loss account of ING Group/Bank" in the annual accounts. The most relevant accounting policies for ING's own originated securitisation programmes are "derecognition of financial assets" and "consolidation". Where ING acts as investor in securitisation positions, the most relevant accounting policy is "classification of financial instruments."

# **Regulatory capital method used and Rating Agencies**

ING has implemented the AIRB approach for credit risk. As a consequence, ING uses the Rating Based Approach (RBA) for investments in tranches of asset-backed securities (ABS) and mortgage-backed securities (MBS) which have been rated by external rating agencies. Rating agencies which are used by ING under the RBA include: Standard & Poor's, Fitch, Moody's and DBRS.

Under the RBA, the risk-weighted assets (RWA) are determined by multiplying the amount of the exposure by the appropriate regulatory risk weights, which depend on:

- the external rating or an available inferred rating
- the seniority of the position.

ING uses the Internal Assessment Approach (IAA) for the support facilities it provides to Asset Backed Commercial Paper (ABCP) conduit Mont Blanc Capital Corp., based on externally published rating agency methodologies.

# **ING as Investor**

ING Direct is the primary investor in securitisation transactions within ING Bank. ING Direct's core strategy is gathering customer deposits and reinvesting them in its investment portfolio and retail assets, mainly mortgages. The difference between retail liabilities (the savings product is typically the first product to be launched in a country) and retail assets (the mortgage product is typically the second product launched) is invested in high quality debt. The execution of this business model in a cost-efficient manner is ING Direct's competitive advantage. Given ING Direct's business model as a liability driven operation with a focus on cost efficiency, ING Direct invests with a view to minimise credit risk, while ensuring sufficient liquidity. Hence, ING Direct accumulates highly rated debt securities with minimal credit risk thereby capitalising on its economies of scale.

Securitisation markets provide investment opportunities in highly rated (generally AAA), liquid and discountable bonds and are therefore an important asset class in ING Direct's investment portfolio. At ING Direct, the investment policies define eligible product types, minimum ratings, maximum tenors and exposure amounts both at issue and issuer levels as well as for the portfolio. The dominant product classes in the investment portfolio are RMBS, Agency RMBS, Covered Bonds, and Senior Unsecured Debt issued by Banks, Other Financial Institutions as well as Sovereigns or Quasisovereign entities. Prior to purchase, each investment proposal from a Treasury Centre is analysed by Credit Risk Management and decided upon at the appropriate level by a treasury officer and a credit risk manager under delegated approval authorities.

# Purchased Securitisation Exposures

The following table gives the break down of purchased exposures by weight bands. The amount of securitisation positions purchased from third parties are based on the regulatory exposure values calculated according to the CRD after consideration of credit conversion factors (CCFs) where applicable as used for the purpose of Pillar 1, but prior to the application of credit risk mitigants on securitisation positions.

# Exposures per risk weight band (ING as Investor)

	Purchased Exposures	
Risk weight band 1 <= 10%	64,678	
Risk weight band 2 >10% and >= 18%	11,381	
Risk weight band 3 >18% and >= 35%	1,008	
Risk weight band 4 >35% and >= 75%	764	
Risk weight band 5 >75%	933	
Risk weight 1250%	1,336	
Total	80,100	

# **ING as Originator**

ING originates own securitisation transactions for economic and regulatory capital purposes, as well as liquidity and funding purposes.

Economic and Regulatory Capital Seven synthetic securitisations of mortgages, small and medium enterprise (SME) and corporate exposures have been issued since ING began actively undertaking the securitisation of its own assets in 2003. Upon the closer alignment of transfer and regulatory capital solvency rules at year end 2007, the most senior tranches of ING's own securitisations have been called and are now retained by ING. ING also retains the first loss tranches. The mezzanine tranches are still transferred to third parties.

The first transactions (Moon and Memphis 2003) were repaid in 2008 with no loss for the investors. As of 31 December 2008, five transactions totalling approximately EUR 15 billion (Mars 2004, Mars 2006 and BEL SME 2006 on SME exposures, Memphis 2005 and Memphis 2006 on residential mortgages) remain outstanding, as further detailed below. Memphis 2006 transfers risk on high Loan to Value (LTV) Dutch mortgages.

Securitisations of residential mortgages release less capital under Basel II than under Basel I because the capital required for this type of exposure has been reduced under Basel II rules.

Liquidity/Funding Although the most senior tranches in securitisations are no longer efficient to release regulatory capital under Basel II, they may still be used to obtain funding and improve liquidity. To be eligible as collateral for central banks securitised exposures must be sold to a Special Purpose Vehicle (SPV) which, in turn, issues securitisation notes ('traditional securitisations') in two tranches, one subordinated tranche and one senior tranche, rated AAA by a rating agency. The AAA tranche can then be used by ING as collateral in the money market for secured borrowings.

ING Bank has created a number of these securitisations with a 31 December 2008 position of approximately EUR 70 billion of AAA rated notes. The underlying exposures are residential mortgages in the Netherlands, Canada, Germany and Australia.

As long as the securitisation exposures created are not transferred to third parties, the regulatory capital remains unchanged. These are not detailed hereunder. Apart from the structuring and administration costs of these securitisations these securitisations are profit / loss neutral.

**Exposures securitised as originator:** All securitisations reported in this section are synthetic securitisations used to transfer risk to third parties. Transactions for liquidity/funding purpose are not included. The determination of impairments and losses occurs at least every quarter at the cut-off date applicable to each specific transaction. Figures as of 31 December 2008 are used whenever available.

#### **Exposures securitised**

	Cut off Date	Initial Pool	Outstandings	Credit Events	Past due Assets	Losses
Residential Mortgages						
Memphis 2005	31 Oct 2008	3,000	2,351	3	62	< 1
Memphis 2006	31 Oct 2008	4,000	3,750	11	207	2
		7,000	6,101			
SME						
Mars 2004	31 Oct 2008	2,000	1,995	3	25	< 1
Mars 2006	31 Dec 2008	4,500	4,202	12	32	2
BEL SME 2006	30 Nov 2008	2,500	2,406	11	5	1
Total		9,000	8,603			

Notes:

Cut-Off Date	Most recent date in respect of which determination and allocation of losses have been made pursuant to the legal documentation of the transaction. Information on the performance of ING's securitized exposures is published regularly.
Outstandings	EAD on 31 December 2008 of assets that were performing on the Cut-off date.
Credit Events	Aggregate outstandings of assets subject to a credit event reported in the twelve months period ending on the Cut-off date.
Past Due Assets	Outstandings on the Cut-off date of assets that are past due, but not in credit event on that date, as more fully detailed in the quarterly reports. Past due for residential mortgage transactions means "more than 1 monthly payment in arrears". Past due for SME deals means "reference entities that are rated 20-22".
Losses	Aggregate losses recognised on securitised assets and reported in the twelve months period ending on the Cut-off date. 17

# **Retained Securitization Exposures**

Retained exposures on securitisation of ING's own assets include the most senior tranches and the equity piece (first loss). Economically, on a total of about EUR 15 billion underlying exposures in the five transactions mentioned below, ING has retained approximately EUR 204 million of first loss exposure and has transferred approximately EUR 1.1 billion of mezzanine tranches (second loss) to third parties

Securitizations originated by a company may only be considered for balance sheet derecognition when the requirements for significant credit risk transfer have been fulfilled. However, for a securitisation transaction to be recognized as for RWA reduction, risk transfer alone is insufficient due to the increasing impact of the maturity mismatch formula. The RWA of the retained tranches for four of the transactions in the table above would be higher than the total RWA of the underlying pool before securitisation, and therefore these transactions are treated for RWA purposes as if they were not securitised. The total RWA for the fifth transaction calculated under Pillar 1 rules is EUR 230 million (retained senior and super senior tranches). In addition EUR 28 million (retained first loss) is deducted from capital.

# **ING as Sponsor**

In the normal course of business, ING Bank structures financing transactions for its clients by assisting them in obtaining sources of liquidity by selling the clients' receivables or other financial assets to an SPV. The transactions are funded by the ING Administered Multi Seller Asset Backed Commercial Paper (ABCP) conduit Mont Blanc Capital Corp (rated A-1+/P-1). Despite the conditions in the international money markets Mont Blanc Capital Corp continues to fund itself externally in the ABCP markets.

In its role as administrative agent, ING facilitates these transactions by providing structuring, accounting, funding and operations services. ING Bank also provides support facilities (liquidity and program wide enhancement) backing the transactions funded by the conduit.

The types of asset currently in the Mont Blanc Conduit are trade receivables, consumer finance receivables, credit card receivables, auto loans, RMBS, wrapped future cashflow transactions and CDOs/CLOs.

# **Exposures Securitised as Sponsor**

The total liquidity facilities, including programme wide enhancements, provided to the Mont Blanc conduit are EUR 4,867 million. The total drawn liquidity amount as of 31 December 2008 is EUR 972 million.

# Securitisation in the trading book

The exposures involved are mainly synthetic Collateralized Debt Obligations (CDOs) in which the underlying credit exposures are taken on using a credit default swap rather than a vehicle buying physical assets.

The CDO's are a form of securitisation where payments from a portfolio of fixed-income assets are pooled together and passed on to different classes of owners in various tranches. The assets/loans are divided in different tranches according to their seniority: senior tranches (rated AAA), mezzanine tranches (AA to BB) and equity tranches (unrated). Losses are applied in reverse order of seniority. The CDO's in trading books are valued mark-to-market. The underlying assets are a pool of mostly Corporate Investment Grade names.

# **EQUITY IN THE BANKING BOOK**

Total exposure under the Simple Risk Weight Approach at the 31 December 2008 is EUR 1,042 million resulting in EUR 194 million of capital requirement.

# **Equities Unrealised Gains and Losses**

2008	Amount in EUR million
Gross unrealised gains	874
Gross unrealised losses	-211
Total	663

Above table shows the unrealised gains and losses for the equity holdings. Please refer to the Market Risk segment in the Risk Management section for a description of the equity holdings and accounting methodology.

# **OTHER NON CREDIT OBLIGATION ASSETS**

Other Non Credit Obligation Assets (ONCOA) represent assets of non credit obligation character that are not included in the SA or A-IRB calculations. Capital requirement for ONCOA as of 31 December 2008 is EUR 2,166 million.

# MARKET RISK

The general description of market risk in ING Bank can be found in the Risk Management section, where the organisation, measurement and management of market risk is explained. Further, contrary to the Risk Management section where several banking books are governed by the trading risk process, for Pillar 3 non-trading exposures are excluded from the trading governance. As a result the figures for both trading and non-trading books differ from the risk paragraph.

# **CAPITAL REQUIREMENTS**

# **Capital requirements**

2008	Standardised approach	Internal Model Approach	Total
Interest rate risk	255	456	711
Equity position risk	0	80	80
Foreign exchange risk <sup>1</sup>	194	51	245
Total	449	587	1036

<sup>1</sup>The FX exposure under the Standardised Approach contains FX exposures on both trading and banking books

# MODEL APPROACH

VeR Velues for IMA Portfeli

According to the Dutch regulation, regulatory capital for trading portfolios can be calculated using the standardised approach (CAD1) or an internal model approach (CAD2). In 1998, ING received approval from the Dutch Central Bank (DNB) to use an internal Value-at-Risk (VAR) model to determine the regulatory capital for the market risk in the trading book of ING Bank. Market risk capital of CAD2 trading books is calculated according to the internal VaR model, where correlations and volatilities are taken into account. On the other hand, market risk capital of CAD1 books is calculated using standardised fixed risk weights.

In 2008, ING applied the CAD2 model for most of its trading activities. The standard CAD1 model is used for some trading books in smaller locations and / or products for which the internal model is not yet CAD2 compliant. The aim of ING is to receive CAD2 status for all its trading books. It should be noted that due to the conservative nature of the CAD1 model the capital charge for the standardised approach is much larger than for the internal model approach.

Var values for INA Portionos				
	Over the reporting Period 2008			31 dec 2008
2008	High	Mean	Low	Period-end
Interest rate risk	50	37	22	40
Equity position risk	11	7	4	7
Foreign exchange risk	8	5	2	6
Diversification effect		5		3
Total		44		50

For a summary of the Value-at-Risk measurement applicable to the internal model approach please refer to the Market Risk segment in the Risk Management section. It should be noted that the VaR figures in the above table only relate to the CAD2 trading books for which the internal model approach is applied. The VaR figures reported in the Risk management section relate to all books under trading governance.

# **OPERATIONAL RISK**

The Operational Risk Capital model of ING is based on a Loss Distribution Approach (LDA). The Loss Distribution is based on both external and internal loss data exceeding EUR 1 million. The model is adjusted for the scorecard results, taking into account the specific quality of control in a business line and the occurrence of large incidents ('bonus/malus'). This provides an incentive to local (operational risk) management to better manage operational risk. The capital calculation meets industry standards and was approved in April 2008 by DNB. Originally, the model was designed for Economic Capital (99.95% confidence level) and the Financial Risk Dashboard (90% confidence level). From 2008 onwards, the model is used for regulatory capital reporting purposes as well (AMA approach). Insurance reduction because of risk mitigation by insurance has not been applied to the AMA capital of 2008.

The Operational Risk Capital using AMA significantly increased to EUR 3,368 million in 2008 (as stated in the operational risk part of the risk management section) due the periodic update of the external loss data, which reflected the increased uncertainty/turmoil in the financial market. Two acquisitions took place that impacted capital and the related diversification benefit as well: ING Turkey and ING Direct Interhyp.

# INTEREST RATE RISK IN THE BANKING BOOKS

# Earnings at Risk

	2008
by line of business	
ING Wholesale Banking	-132
ING Retail Banking	-101
ING Direct	5
ING Bank Corporate Line	46
Total	-182
By Currency	
Euro	-221
US Dollar	36
Pound Sterling	3
Other	0
Total	-182

# Net Present Value at Risk

	2008
by line of business	-710
ING Wholesale Banking	-100
ING Retail Banking	-232
ING Direct	-232
ING Bank Corporate Line	-1,388
Total	-2,430
By Currency Euro US Dollar Pound Sterling Other Total	-2,140 -238 -41 -11 -2,430

The Earnings at Risk and the Net Present Value at Risk are based on a 1% instantaneous upward shock.

In the Risk Management section a detailed description is given on the interest rate risk in the Banking book. Contrary to Pillar 3, in the Risk Management section several non-trading books are governed by the trading risk process. As a result the figures above differ from the figures in the Risk Management section.

# STRUCTURE OF RISK MANAGEMENT SECTION

- Risk Management in 2008
- ING Group
  - Risk Governance ING Group Risk Profile
- ING Bank
  - ING Bank Risk Profile ING Bank – Credit risks ING Bank – Market risks ING Bank – Liquidity risk
- ING Insurance
  - ING Insurance Risk Profile ING Insurance – Market risks ING Insurance – Insurance risks ING Insurance – Credit risks
- ING Group Non-financial Risks Operational risks Compliance risk
- Model Disclosures

# **RISK MANAGEMENT IN 2008**

Taking measured risks is part of ING Group's business. As a financial services company active in banking, investments, life insurance and retirement services ING Group is naturally exposed to a variety of risks. To ensure measured risk-taking ING Group has integrated risk management in its daily business activities and strategic planning. Risk Management assists with the formulation of risk appetite, strategies, policies and limits and provides a review, oversight and support function throughout the Group on risk-related issues. The main financial risks ING Group is exposed to are credit risk (including transfer risk), market risk (including interest rate, equity, real estate, and foreign exchange risks), insurance risk and liquidity risk. In addition, ING Group is exposed to non-financial risks, e.g. operational and compliance risks. The way ING Group manages these risks on a day-to-day basis is described in this risk management section.

Despite the fact that the ongoing crisis claims most of the management attention on a daily basis throughout the risk management organisation, ING Group continued its long-term investments in risk management, including investments in people, governance, processes, measurement tools and systems. The Non-Financial Risk Dashboard, which was introduced internally and piloted in 2007 was implemented and presented to the Executive Board and the Audit Committee for the first time in November 2008.

# **MARKET DEVELOPMENTS 2008**

Although the whole of 2008 was characterised by significant turmoil, it was in the second half of the year, after the default of Lehman Brothers, Washington Mutual and three Icelandic banks, that volatility in financial markets intensified. Throughout the world the prices of most major asset classes fell sharply. Equity markets came down significantly: year on year the S&P 500 declined 38% and the Dutch Amsterdam Exchange Index (AEX) declined 52%. Real estate prices were also under pressure. At 31 December 2008 the most prominent real estate index in the United States, the S&P Case-Shiller Index, was 18.6% lower than at the end of 2007. Moreover, credit spreads in the financial and corporate sector widened materially, both in the US and in Europe. The second half of 2008 showed a steep increase in corporate credit spreads which was for a major part driven by the auto and industrial sectors. Both short and long term interest rates dropped in Europe and more profoundly in the United States.

In response to these movements governments all over the world stepped in with rescue plans to buy pressurised assets, deposit guarantee programmes, capital injections or full nationalisations. In October 2008 ING Group and the Dutch state announced that an agreement had been reached on a EUR 10 billion capital injection from the Dutch State. See Note 12 Shareholders' equity (parent) / non-voting equity securities for details.

# **Risk mitigation**

To counter the implications of the financial crisis ING Group decided to take several measures over the course of the year to reduce risk:

– Deleveraging

ING is working to reduce the bank balance sheet by 10% by decreasing the non-lending part by 25%. ING intends to reduce the available for sale portfolio over time as proceeds from maturing securities will be used to fund ING-originated loans. Reducing trading activities, deposits at other banks and reverse-repos are expected to make up most of the remaining reduction. At the same time, lending activities will be maintained with focus on the Corporate and Retail business.

- Reduction of credit risk

In January 2009, ING Group entered into an Illiquid Assets Back-up Facility term sheet with the Dutch State covering ING's Alt-A residential mortgage backed securities (RMBS) portfolio. Through this transaction, which is expected to close in the first quarter of 2009, subject to final documentation and regulatory approval, the Dutch State will become the economic owner of 80% of the Alt-A RMBS portfolio. This transaction is expected to be concluded at 90% of the par value with respect to the 80% portion of the portfolio of which the Dutch State will become the economic owner. Par value of the portfolio is approximately EUR 30 billion. Following the deteriorated economic outlook in the third and fourth quarter market prices for these securities had become depressed as liquidity dried up, which had an impact on ING's results and equity far in excess of estimated credit losses. The transaction with the Dutch State is expected to significantly reduce the uncertainty regarding the impact on ING of any future losses in the portfolio. As condition to the Facility ING committed to support the growth of the Dutch lending business for an amount of EUR 25 billion at market-conforming conditions. The Dutch State will also acquire certain consent rights with respect to the sale or transfer of the 20% proportion of the Alt-A RMBS portfolio that is retained by ING.

- Reduction of equity exposure (available for sale)

Direct public exposure was reduced from EUR 15.8 billion at the end of 2007 to EUR 5.8 billion at year-end 2008. The reduction in exposure was due to negative revaluations, and sales. ING Insurance holds EUR 3.9 billion balance sheet exposure which was partially hedged against further market losses. In addition, a temporary hedging programme was put in place to reduce earnings volatility resulting from potential DAC (Deferred Acquisition Cost) unlocking.

- Reduction of interest rate risk

ING sold ING Life Taiwan which resulted into a significant reduction of its interest rate risk exposure. This divestment was in line with the strategy to allocate capital to those businesses that generate the highest return. In addition, ING lengthened its asset duration in order to mitigate the impact of declining interest rates, herewith further reducing its interest rate risk exposure.

A more detailed disclosure of outstanding risk factors facing ING and the financial industry is given in the Risk Factor section in the Additional Information part of the Annual Report.

# Impact of financial crisis

# Impact on pressurised asset classes

As a result of the deteriorating market conditions throughout 2008 ING Group incurred negative revaluations on its investment portfolio, which impacted shareholders' equity. Furthermore, ING Group incurred impairments, fair value changes and trading losses, which impacted its profit and loss account (P&L).

The table below shows the exposures and negative revaluations and losses taken on US sub-prime and US Alt-A residential mortgage backed securities (RMBS), Collateralised Debt Obligations (CDOs) and Collateralised Loan Obligations (CLOs) during 2008.

US Subprime RMBS, US Alt-A RMBS, CDOs/CLOs exposures, revaluations and losses						
	31 December 2008		Change in 2008		31 Decen	nber 2007
	Market Value	Revaluation through Equity (pre-tax)	Write-downs through P&L (pre-tax)	Other changes	Market value	Revaluations through Equity (pre-tax)
US Subprime RMBS	1,778	-839	-120	-52	2,789	-307
US Alt-A RMBS	18,847	-6,538	-2,064	-33	27,482	-936
CDOs/CLOs	3,469	-218	-394	2,186	1,895	-134
Total	24,094	-7,595	-2,578	2,101	32,166	-1,377

- ING Group's total EUR 1.8 billion exposure to US sub-prime assets relates to non originated loans acquired as investments in RMBS and represents 0.1% of total assets. At 31 December 2008 approximately 77% of ING's US sub-prime portfolio was rated AA or higher. ING Group does not originate sub-prime mortgages. The vast majority of the total mortgage backed securities (MBS) are (residential) mortgages that are not classified as sub-prime.
- ING Group's total US Alt-A RMBS exposure at 31 December 2008 was EUR 18.8 billion. About 65% of this portfolio
  was AAA rated. The majority of the exposure (EUR 16.3 billion) was held by ING Direct. ING's Available-for-Sale
  Alt-A investments are measured at fair value in the balance sheet. The substantial amount of negative pre-tax
  revaluation and impairments on this portfolio are mainly caused by the illiquid market.
- Net investments in CDOs/CLOs at 31 December 2008 were 0.3% of total assets. The vast majority of the CDOs/CLOs has investment grade corporate credit as underlying assets, only EUR 1 million has US subprime mortgages underlying. Other changes includes purchases and sales of CDOs/CLOs, as well as foreign currency effects.

EUR 23.7 billion of the EUR 24.1 billion exposure on US Subprime RMBS, US Alt-A RMBS and CDOs/CLOs is booked at fair value. An analysis of the method applied in determining the fair values of financial assets and liabilities is provided in Note 33 'Fair value of Financial Assets and Liabilities'. At 31 December 2008 the fair value of US Subprime RMBS, US Alt-A RMBS and CDOs/CLOs was as follows:

Fair value of US subprime RMBS, US Alt-A RMBS and CDOs/CLOs				
2008	Reference to published price quotations in active markets	Valuation technique supported by market inputs	Valuation technique not supported by market inputs	Total
US Subprime RMBS	20	26	1,732	1,778
US Alt-A RMBS	0	244	18,244	18,488
CDOs/CLOs	3,273	162	34	3,469
Total	3,293	432	20,010	23,735

Fair value of US subprime RMBS, US Alt-A RMBS and CDOs/CLOs				
2007	Reference to published price quotations in active markets	Valuation technique supported by market inputs	Valuation technique not supported by market inputs	Total
US Subprime RMBS	2,636	153	0	2,789
US Alt-A RMBS	23,312	4,170	0	27,482
CDOs/CLOs	281	1,597	17	1,895
Total	26,229	5,920	17	32,166

An amount of EUR 25 billion of mortgage backed securities in the United States was reclassified from Reference to published price quotations in active markets to Valuation technique not supported by market inputs in the third quarter of 2008. Reference is made to Note 33 'Fair value of financial assets and liabilities'.

# Impact on Real Estate

By the end of 2008 ING Group's total exposure to real estate was EUR 15.5 billion of which EUR 9.8 billion was subject to revaluation through the profit and loss account. In 2008, ING recorded EUR 1,184 million pre-tax negative revaluations and impairments. ING's real estate portfolio has high occupancy rates and is diversified over sectors and regions, but is clearly affected by the negative real estate markets throughout the world.

# Impact on Equity securities – available for sale

Direct equity exposure at 31 December 2008 in this caption was EUR 5.8 billion (public) and EUR 0,4 billion (private)... During 2008 ING booked EUR 1,707 million of pre-tax impairments on this direct public equity exposure. ING generally decides to impair a listed equity security based on two broad guidelines: when the fair value of the security is below 75% of the cost price or when the market price of the security is below the cost price for longer than six months.

#### Impact on other asset classes

Negative impact on results 2008 (pre-tax) from private equity and alternative assets amounted to EUR 399 million. Negative impact on results 2008 (pre-tax) from debt securities other than mentioned above amounted to EUR 292 million.

# Impact on counterparty risk

In the third quarter a number of financial institutions were no longer expected to fulfil their obligations. ING incurred EUR 483 million pre-tax losses (excluding loan losses) on Lehman Brothers, Washington Mutual and the Icelandic banks. The loss included impairments of debt securities, trading losses and derivative positions, including the costs to replace derivatives on which the banks were counterparty.

#### Impact on Liquidity profile

Due to the financial crisis liquidity became scarce and central banks around the world provided funding to prevent the interbank market drying up. ING's liquidity position remained within internally set limits. ING Bank has a favourable funding profile as the majority of the funding stems from client deposits.

# Ongoing volatility in the financial markets

The impacts have arisen primarily as a result of the deterioration of the US housing market which caused real estate prices to decline. This caused valuation issues in connection with ING's exposure to US mortgage-related structured investment products, including sub-prime and Alt-A RMBS, CDOs and CLOs. In many cases, the markets for such instruments have become highly illiquid, and issues relating to counterparty credit ratings and other factors have exacerbated pricing and valuation uncertainties. Valuation of such instruments is a complex process involving the consideration of market transactions, pricing models, management judgement and other factors, and is also impacted by external factors such as underlying mortgage default rates, interest rates, rating agency actions and property valuations.

While we continue to monitor our exposures in this area, in the light of the ongoing market environment and the resulting uncertainties concerning valuations, there can be no assurances that we will not experience further negative impacts on our shareholders' equity or profit and loss accounts from such assets in future periods.

The financial crisis has demonstrated the importance of having a robust risk management organisation in place. Although ING's risk management organisation and liquidity profile have helped it to limit the impact and manage the company through the turmoil, ING will continue to further strengthen its risk management organisation. The lessons learned in this crisis will contribute to this continuous process.

The following paragraphs provide a high level overview of the risk management governance and risk profile from an ING Group perspective. This is followed by a more detailed overview, split into the different risk types (credit, market, liquidity, insurance, operational and compliance risk) both for ING Bank and ING Insurance. The section concludes with disclosures on models for Earnings at Risk (EaR), Capital at Risk (CaR) and Economic Capital (EC).

# **ING GROUP**

To ensure measured risk-taking throughout the organisation, ING Group operates through a comprehensive risk management framework. This ensures the identification, measurement and control of risks at all levels of the organisation so that ING Group's financial strength is safeguarded.

The mission of ING Group's risk management function is to build a sustainable competitive advantage by fully integrating risk management into daily business activities and strategic planning. This mission is fully embedded in ING Group's business processes.

The following principles support this objective:

- Products and portfolios are structured, underwritten, priced, approved and managed appropriately and compliance with internal and external rules and guidelines is monitored;
- ING Group's risk profile is transparent, has 'no surprises', and is consistent with delegated authorities;
- Delegated authorities are consistent with the overall Group strategy and risk appetite;
- Transparent communication to internal and external stakeholders on risk management and value creation.

# **RISK GOVERNANCE**

ING's risk management framework is based on the 'three lines of defence' concept which ensures that risk is managed in line with the risk appetite as defined by the Executive Board and is cascaded throughout the Group. This concept provides a clear allocation of responsibilities for the ownership and management of risk, to avoid overlaps and/or gaps in risk governance. Business line management and the regional and local managers have primary responsibility for the day-to-day management of risk and form the first line of defence. The risk management function, both at corporate and regional/local level, belongs to the second line of defence and has the primary responsibility to align risk taking with strategic planning e.g. in limit setting. Risk managers in the business lines have a functional reporting line to the Corporate Risk General Managers described below. The internal audit function provides an ongoing independent (i.e. outside of the risk organisation) and objective assessment of the effectiveness of internal controls, including financial and operational risk management and forms the third line of defence.

#### **Group Risk Management Function**

The risk management function is embedded in all levels of the ING Group organisation.

#### Chief Risk Officer

The Chief Risk Officer (CRO), who is a member of the Executive Board, bears primary overall responsibility for the Group risk management function. The CRO is responsible for the management and control of risk on a consolidated level to ensure that ING's group risk profile is consistent with its financial resources and the risk appetite defined by the Executive Board. The CRO is also responsible for establishing and maintaining a robust organisational basis for the management of risk throughout the ING organisation.

# Group Risk Organisation

The organisation chart below illustrates the functional reporting lines within the ING Group risk organisation.



The risk organisation is structured independently from the business lines and is organised through five risk departments:

- Corporate Credit Risk Management (CCRM) is responsible for the credit risk management of ING Bank and ING Insurance;
- Corporate Market Risk Management (CMRM) is responsible for the market risk management and liquidity risk management of ING Bank;
- Corporate Insurance Risk Management (CIRM) is responsible for the insurance, market and liquidity risk
  management of ING Insurance.
- Corporate Operational Risk Management (CORM) is responsible for the operational risk management of ING Bank and ING Insurance;

 Group Compliance Risk Management (GCRM) supports and advises management in fulfilling its compliance responsibilities, advises employees on their (personal) compliance obligations and oversees and reports on the embedding of Compliance policies in both ING Bank and ING Insurance.

The heads of these departments (Corporate Risk General Managers) report to the CRO and bear direct responsibility for risk (mitigating) decisions at the Group level. The Corporate Risk General Managers and the CRO are responsible for the harmonisation and standardisation of risk management practices.

In addition two staff departments report to the CRO:

- The Risk Integration and Analytics department is responsible for inter-risk aggregation processes and for providing group-wide risk information to the CRO and Executive Board.
- The Model Validation department reviews the performance of all material risk models applied within ING. This
  department carries out periodic model validations of all material risk models used by ING. To ensure independence
  from the business and the other risk departments, the head of this department reports directly to the CRO.

The risk management function assists with the formulation of risk appetite, strategies, policies and limits. It also provides a review, oversight and support function throughout the Group on risk related issues.

# Group Risk Committees

The Group risk committees described below are also part of the second line of defence. They act within the overall risk policy and delegated authorities granted by the Executive Board and have an advisory role to the CRO. To ensure a close link between the business lines and the risk management function, the business line heads and the respective General Managers Corporate Risk are represented on each committee (except for the ORRC were the business is not represented).

- ING Group Credit Committee Policy (GCCP): Discusses and approves policies, methodologies and procedures related to credit, country and reputation risks within ING Group. The GCCP meets on a monthly basis;
- ING Group Credit Committee Transaction Approval (GCCTA): Discusses and approves transactions which entail taking credit risk (including issuer investment risk). The GCCTA meets two times a week;
- ING Group Investment Committee (GIC): Discusses and approves investment proposals for ING Real Estate. The GIC meets on a monthly basis;
- Asset and Liability Committee ING Bank (ALCO Bank): Discusses and approves the overall risk profile of all ING Bank's market risks that occur in its Wholesale Banking, Retail Banking and ING Direct activities. ALCO Bank defines the policy regarding funding, liquidity, interest rate mismatch and solvency for ING Bank. ALCO Bank meets on a monthly basis;
- Asset and Liability Committee ING Insurance (ALCO Insurance): Discusses and approves all risks associated with ING's Insurance activities. This includes volatility (affecting earnings and value), exposure (required capital and market risk) and insurance risks. ALCO Insurance meets six times a year.
- Operational and Residual Risk Committee (ORRC): Discuss and approve issues related to Methods, Models and Parameters related to Operational risk, Business risk in Banking, inter-risk diversification and consistency across risk types and businesses. The committee meets at least twice a year.

In addition, the Finance and Risk Committee (F&RC) is a platform for the CRO and the CFO, along with their respective direct reports, to discuss and decide on issues that relate to both the finance and risk domains. F&RC meets every two weeks.

ING Group uses risk assessment and risk measurement to guide decision making. As a result, the quality of risk models is important. The governance process for approval of risk models, methods and parameters ensures business and regulatory requirements, via a clear assignment of responsibility and accountability.

# **Board level risk oversight**

At the highest level of the ING organisation, there are board committees which oversee risk taking, and have ultimate approval authority. ING Group has a two-tier board structure consisting of the Executive Board and the Supervisory Board; both tiers play an important role in managing and monitoring the risk management framework.

- The Executive Board is responsible for managing risks associated with the activities of ING Group. Its responsibilities include ensuring that internal risk management and control systems are effective and that ING Group complies with relevant legislation and regulations. On a regular basis, the Executive Board reports on these issues and discusses the internal risk management and control systems with the Supervisory Board. On a quarterly basis, the Executive Board reports on the Group's risk profile versus its risk appetite to the Audit Committee, explaining changes in the risk profile.
- The Audit Committee is a sub-committee of the Supervisory Board. It assists the Supervisory Board in reviewing and assessing ING Group's major risk exposures and the operation of internal risk management and control systems. Audit Committee membership is such that specific business know-how and expertise relating to the activities of ING is available. The CRO attends the Audit Committee meetings.

The CRO makes sure that the board committees are well informed and understand ING Group's risk position at all times. Every quarter the CRO reports to the board committees on ING's risk appetite levels and on ING Group's risk profile. In addition the CRO briefs the board committees on developments in internal and external risk related issues and makes sure the board committees understand specific risk concepts. ING has integrated risk management into the annual strategic planning process. This process aligns strategic goals, business strategies and resources throughout ING Group. The process is such that the Executive Board issues a Planning Letter which provides the organisation with the corporate strategic direction, and addresses key risk issues. Based on this Planning Letter the business lines and business units develop their business plans which align with the Group's strategic direction. The process includes a qualitative and quantitative assessment of the risks involved in the plans. It is part of the process to explicitly discuss strategic limits and group risk appetite levels. At each level, strategies and metrics are identified to measure success in achieving objectives and to assure adherence to the strategic plan. Based on the business unit and line of business plans, the Executive Board formulates the Group Strategic Plan which is submitted to the Supervisory Board for approval.

# **Group risk policies**

ING has a framework of risk management policies, procedures and standards in place to create consistency throughout the organisation, and to define minimum requirements that are binding on all business units. The governance framework of the business units aligns with the Group level framework and meets local (regulatory) requirements. Senior Management is responsible to ensure policies, procedures and standards are implemented and adhered to. Employees globally have access to the Group's governance framework through an internal website. Policies, procedures and standards are regularly reviewed and updated via the relevant risk committees to reflect changes in markets, products and emerging best practices.

# **ING GROUP RISK PROFILE**

ING Group uses an integrated risk management approach. The risk dashboard captures the risks in all Banking and Insurance business lines in terms of Earnings at Risk and Capital at Risk, and shows the impact of diversification across the Group. The Executive Board uses the risk dashboard to monitor and manage the actual risk profile in relation to the Group risk appetite. It enables the Executive Board to identify possible risk concentrations and to support strategic decision making. The risk dashboard is reported to the Executive Board on a quarterly basis and is subsequently presented to the Audit Committee.

ING Group's risk appetite is defined by the Executive Board as part of the strategic planning process. Strict boundaries are established with regard to acceptable risk types and levels. ING's 'three lines of defence' governance framework ensures that risk is managed in line with the risk appetite as defined by the EB. Risk appetite is cascaded throughout the Group, thereby safeguarding controlled risk taking. The role of the business lines is to maximise the value within established risk boundaries. Each quarter, the Executive Board monitors that the financial and non-financial risks are within the boundaries of the risk appetite as set in the strategic planning process.

# **ING Group risk metrics**

The Group's risk appetite is captured in three different metrics which are disclosed below:

- Earnings at Risk; the potential reduction in IFRS earnings over the next year relative to expected IFRS earnings, during a moderate (i.e. '1 in 10') stress scenario. Maintaining a high quality of earnings helps ING to safeguard against being downgraded by the rating agencies;
- Capital at Risk; the potential reduction of the current net asset value (based on fair values) over the next year relative to the expected value during a moderate (i.e. '1 in 10') stress scenario;
- Economic Capital; the amount of capital that is required to absorb unexpected losses in times of severe stress given ING Group's 'AA' target rating.

ING Group's risk metrics cover the most important aspects in terms of different severities (moderate vs. extreme stress) and performance measures where risk can materialise (value vs. earnings). The Earnings and Capital at Risk metrics are important metrics from a shareholder point of view since they provide insight in the level of risk ING takes under 'moderate stress' market expectations to generate return. From the debt and policy holder point of view, Economic Capital is more important since it is the buffer against extreme losses.

The main differences and similarities between the risk metrics are illustrated below;

	Earnings at Risk	Capital at Risk	Economic Capital
Confidence interval	90%	90%	99.95% (based on AA target rating)
Stressed metric	IFRS earnings	Value	Value
Deviation from	Expected IFRS earnings (over next year)	Current net asset value based on fair values (over next year)	Current net asset value based on fair values (over next year)
Interpretation	Potential IFRS earnings reduction against expectation during a 'moderate' stress scenario (i.e. 1 in 10)	Potential value reduction of net value during a 'moderate' stress scenario (i.e. 1 in 10)	Potential value reduction of net value during an 'extreme' stress scenario (i.e. 1 in 2000)

When interpreting the Earnings and Capital at Risk metrics it is important to note that these are not loss estimates of a specific adverse scenario. Further, the metrics do not take into account discretionary management intervention in a specific crisis situation, and are based on instantaneous shock scenarios.
# **Risk types**

ING's risk profile measures the following main types of risks that are associated with its business activities:

- Credit risk: the risk of potential loss due to default by ING's debtors (including bond issuers) or trading counterparties;
- Market risk: the risk of potential loss due to adverse movements in market variables, such as equity prices, real
  estate prices, interest rates and foreign exchange rates. These four market risks cover all market risks identified in
  ING's businesses;
- Insurance risk: risks such as mortality, morbidity and property and casualty associated with the claims under insurance policies it issues/underwrites; specifically, the risk that premium rate levels and provisions are not sufficient to cover insurance claims.

Operational and business risk are summarised as other risks in the risk profile:

- Operational risk is the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. It includes the risk of reputation loss, as well as legal risk; whereas strategic risks are not included;
- Business risk: the exposure to value loss due to fluctuations in volumes, margins and costs. These fluctuations can
  occur because of internal, industry, or wider market factors. It is the risk inherent to strategy decisions and internal
  efficiency.

The above risk metrics do not cover liquidity risk: the risk that ING or one of its subsidiaries cannot meet its financial liabilities when they fall due, at reasonable cost and in a timely manner. ING has a separate liquidity management framework in place to manage this risk. This framework is discussed in the respective Liquidity Risk section below.

A description of the models, and underlying assumptions and key principles used by ING for calculating Earnings at Risk, Capital at Risk and Economic Capital is provided in the Model Disclosure section below.

Given the October 2008 announced sale of ING Life Taiwan to Fubon Financial Holdings Co Ltd, this business is excluded from all 2008 risk disclosures in this section. The sale has been finalised on 11 February 2009.

#### **Earnings at Risk**

The level of Earnings at Risk (EaR) provides insight into the level of risk ING can absorb relative to its earnings capacity. The risk appetite set by the Executive Board defines the maximum potential reduction in IFRS earnings over the next year during a moderate (i.e. '1 in 10') stress scenario as a percentage of forecast (pre tax) earnings over the next 12 months. Since ING does not disclose forecast earnings, the table below provides the Earnings at Risk per risk type compared to actual full year underlying earnings.

Earnings at Risk by risk type (Group diversified)										
	Credit and Transfer		Marke	et		Insurance	Other risks	Total	Earnings 2008	EaR/ Earnings 2008
2008		Interest Rate	Equity	Real Estate	FX					
ING Bank	2,034	247	168	291	35	0	265	3,040	449	677%
ING Insurance	282	27	395	321	86	13	149	1,273	-1,235	-103%
Total ING Group	2,316	274	563	612	121	13	414	4,313	-786	-549%

#### Earnings at Risk by risk type (Group diversified)

	Credit and Transfer		Mark	et		Insurance	other risks	Total	Earnings 2007	EaR/ Earnings 2007
2007		Interest Rate	Equity	Real Estate	FX					
ING Bank	1,140	233	112	475	22		223	2,205	4,967	44%
ING Insurance	62	93	328	405	113	34	154	1,189	6,110	19%
Total ING Group	1,202	326	440	880	135	34	377	3,394	11,077	31%

Looking back at 2008, ING undershot its expected earnings by more than the Earnings-at-Risk number. The reason for this is twofold. First, the market events that we have seen in the second half of the year clearly surpassed the '1 in 10' confidence level, hence resulting in higher losses.

Second, specific impairment rules on the available for sale debt securities, whereby securities are written down to market value, even if credit losses are much smaller, are not reflected in the dashboard. This concerns especially the impairments taken on the ALT-A portfolio where impairments amounts were significantly higher than estimated underlying credit losses.

Over 2008, ING's Earnings at Risk profile increased. The increase is mainly driven by equity and credit risk. The increase in credit risk is driven by credit migration and expected addition of provisions for defaulted loans. The increase in equity risk is caused by higher impairment risk: due to sustained low stock prices more equities are approaching the impairment thresholds. This means that despite the substantial reduction in Capital-at-Risk (next paragraph), earnings at the end of 2008 were more exposed to further stock market declines. The January 2009 divestment of ING Canada was taken into account for the determination of EaR, since the dashboard is forward looking.

# **Capital at Risk**

The level of Capital at Risk (CaR) measured against ING's financial position provides understanding as to whether ING can maintain a sound financial position under a 'moderate' (i.e. 1 in 10) stress scenario. The risk appetite set by the Executive Board defines the maximum potential value reduction over the next year during a (non extreme) stress scenario as a percentage of Available Financial Resources (AFR) (the definition of AFR is provided in the Capital Management section below). The tables below show the Capital at Risk per risk type.

#### Capital at Risk by risk type (Group diversified) CaR/ Available Available Credit and Other financial financial Transfer Market Insurance risks Total resources resources Interest Real 2008 FX Rate Equity Estate **ING Bank** 2,145 1,110 405 504 164 0 213 4,541 34,849 13% **ING Insurance** 534 1,464 893 308 240 70 173 3,682 14,456 25% **Total ING Group** 2,574 1,298 812 404 70 386 8,223 42,135<sup>(1)</sup> 20% 2.679

<sup>(1)</sup> Total ING Group is comprised of ING Bank and ING Insurance, excluding core debt of EUR 7,170 million within ING Group.

# Capital at Risk by risk type (Group diversified)

	Credit and Transfers		Marke	et		Insurance	Other risks	Total	Available financial resources	CaR/ Available financial resources
2007		Interest Rate	Equity	Real Estate	FX					
ING Bank	1,282	716	675	505	81		169	3,428	31,733	11%
ING Insurance	307	3,365	2,439	378	169	273	172	7,103	22,710	31%
Total ING Group	1,589	4,081	3,114	883	250	273	341	10,531	49,715 <sup>(1)</sup>	21%

<sup>(1)</sup> Total ING Group is comprised of ING Bank and ING Insurance, excluding core debt of EUR 4,728 million within ING Group.

The Capital at Risk figure substantially decreased over 2008 as ING initiated several de-risking initiatives. Group CaR decreased because increased credit risk was more than offset by lower interest rate and equity risk.

In 2007 the Capital at Risk figure was dominated by ING Insurance, mainly due to interest rate risk related to long-term client guarantees and equity risk. Although these risks are still dominant for ING Insurance in the overall ING risk profile these risks have decreased significantly, while increased credit risk became the largest contributor to CaR during 2008.

The credit and transfer risk increase is mainly due to downgrades and lower initial ratings for unrated facilities. These increases will be only partially offset by the risk reducing impact of the Illiquid Asset Back-up Facility through which the Dutch State will become the economic owner of 80% of the Alt-A Portfolio. This transaction is expected to close in the first quarter of 2009 subject to final documentation and regulatory approval. The effect of this deal has already been included since the dashboard is forward looking.

Total CaR for interest rate risk decreased. The large decrease in interest rate CaR for ING Insurance is primarily caused by the sale of ING Life Taiwan, which is also the main reason for the decrease in Insurance risk. The ING Bank interest rate risk increase is primarily caused by increased volatility in the market.

The decrease in equity risk is the result of the declining equity markets and de-risking activities and hedges put in place near the end of 2008.

# Capital at Risk and Earnings at Risk by line of business (Group diversified)

	Ear	nings at Risk	C	apital at Risk
	2008	2007	2008	2007
Wholesale Banking	1,937	1,551	2,321	1,634
Retail Banking	581	438	1,055	939
ING Direct	453	158	893	566
Corporate Line Bank	69	58	272	289
ING Bank	3,040	2,205	4,541	3,428
Insurance Americas	571	430	1,855	2,022
Insurance Asia/Pacific	137	183	502	2,258
Insurance Europe	442	469	910	2,004
Corporate Line Insurance	122	107	415	819
ING Insurance	1,273	1,189	3,682	7,103
ING Group	4,313	3,394	8,223	10,531

Earnings at Risk increased considerably on group level with the rise of ING Bank and ING Insurance similar in magnitude. For ING Bank this was mainly caused by credit migration and clearly visible in ING Direct and Wholesale Banking. For ING Insurance the EaR impact is caused by higher impairment risk for listed equity and therefore most notable in the corporate line.

Overall Capital at Risk decreased with a significant decrease in ING Insurance and an increase in ING Bank.

Credit migration explains most of the increase in CaR Wholesale Banking and in ING Direct.

CaR Insurance Americas goes down slightly due to a significant decrease in equity risk (due to lower exposures and derisking activities).

The sharp decrease in Insurance Asia/Pacific CaR was almost completely the result of the decrease in interest rate risk due to the sale of ING Life Taiwan. CaR Insurance Europe decreased due to a decrease in equity risk resulting from lower exposures and hedging activities.

# **Economic Capital ING Group**

Since 1999 ING Bank has been disclosing Economic Capital information externally, whereas ING Insurance disclosed Economic Capital information for the first time in 2007. Although the fundamental principles are the same, ING Bank and ING Insurance Economic Capital information is currently calculated based on (partly) separately developed models (see Model Disclosure section below) that may differ in the calculation and aggregation approach due to different market practices and standards used in the banking and insurance industries.

ING's Group Economic Capital is determined by applying one common aggregation approach to bank and insurance. ING Group Economic Capital is 15% lower than the sum of the parts (bank and insurance). Three different factors contribute to this consolidation benefit:

- 1. offsetting positions between bank and insurance : especially on the interest rate risk side, where the long duration assets of the bank are offset by the long duration liabilities of Insurance
- 2. diversification between bank and insurance asset classes based on observed correlations : e.g. less than 1 correlation between insurance equity positions and bank real estate positions
- diversification between bank and insurance risk drivers based on expert opinion correlations : e.g. less than perfect correlation between operational risk incidents at the bank and interest rate risk in insurance

ING has calculated this consolidation benefit to be 15% (2007: 15%). The table below shows the contribution of the different risk drivers to the consolidation benefit:

Contribution to consolidated Benefit	
Interest Rate risk	60%
Equity risk	7%
Foreign Exchange risk	1%
Real Estate risk	4%
Credit risk	3%
Other risks*	25%
Total	100%
* Other risks includes operational risk as well as business risk.	

The table below shows the build up of ING Group Economic Capital. Please refer to the bank and insurance paragraphs below for further explanation on the respective EC numbers.

Group Economic Capital (in EUR billion)	2008	2007*			
ING Bank	22.4	18.7			
ING Insurance	13.7	23.2			
Consolidated Benefit	-5.4	-5.9			
Total ING Group Economic Capital	30.7	36.0			
* In 2007 a group add-on of EUR 0.8 billion related to investments backing Bank Equity was added at Group Level and is now included					

\* In 2007 a group add-on of EUR 0.8 billion related to investments backing Bank Equity was added at Group Level and is now includ in Bank EC. The remaining EUR 0.2 billion add-on in 2007 is no longer applicable in 2008 (for comparison it was included in the diversification benefit)

The potential risk capital impact for ING Group of the ING employee pension liability is currently not included in the aggregated group risk metrics. The standalone Economic Capital impact for ING employee pension liabilities is calculated separately, and from a capital management perspective there is currently no need to reserve any additional capital for ING pension liabilities.

## **Risk measurement ING Bank and ING Insurance**

The overall ING Group risk appetite is translated into specific limits which are cascaded down into the organisation, e.g.

- Credit risk limits for bank and insurance business;
- Market Value at Risk limits for the insurance business;
- ALM/Value at Risk limits for bank operations.
- Mortality and concentration limits for insurance operations.

The following risk disclosures provide more insight into how the risk measures used by the risk organisation are linked to the Group risk dashboard and Economic Capital.

# **ING BANK**

ING Bank is engaged in selling a broad range of products. The financial risks that arise from selling these products are managed by the Corporate Credit and Market Risk departments. Operational risks are managed by the Corporate Operational Risk department.

# ING BANK RISK PROFILE

#### **Economic Capital ING Bank**

One of the main risk management tools for ING Bank is Economic Capital which is used to determine the amount of capital that a transaction or business unit requires to support the economic risks it faces. ING Bank implemented Economic Capital for internal use in 1998. Since 1999 ING Bank has been disclosing Economic Capital information externally. The tables below provide ING Bank's Economic Capital by risk type and business line. Figures shown reflect all diversification effects within ING Bank, including risk reduction between the risk categories. Diversification effects that arise as a result of combining ING Bank and ING Insurance activities are not taken into account. Business risk is included in the other risks category to cover unexpected losses that may arise as a result of changes in volumes, margins and costs.

The ING Bank Economic Capital model is described in more detail in the Model Disclosure section.

The following table provides the Economic Capital break down by risk category including diversification benefits proportionally allocated to the risk types:

# Economic Capital (Bank diversified only) by risk category

	2008	2007
Credit risk (including Transfer risk)	8,686	7,503
Market risk	10,349	7,407
Other risks*	3,372	3,017
Total banking operations	22,407	17,927

\* Other risks includes operational risk as well as business risk.

The overall increase in Economic Capital is mainly due to the inclusion of the core equity investments in market risk Economic Capital Bank, whereas previously it was taken as an add-on at Group level. Furthermore the increased Economic Capital can be explained by credit migrations, increased market volatility and model enhancements.

The following table provides the Economic Capital break down by business line including diversification benefits proportionally allocated to the risk types:

#### Economic Capital (Bank diversified only) by Line of Business

	2008	2007
Wholesale Banking	9,849	8,646
Retail Banking	6,169	5,360
ING Direct	4,050	2,831
Corporate Line Bank *	2,339	1,090
Total banking operations	22,407	17,927

\* Corporate Line includes funding activities at ING Bank level, internal transactions between business units and the Corporate Line, and is managed by Capital Management.

The growth of the Economic Capital figure for the Wholesale Banking business line can be mainly explained by the credit migrations, market volatility and model enhancements. The Retail Banking Economic Capital figure increased predominantly due to the finalisation of the acquisition of Oyak Bank in the risk systems. The material increase in ING Direct is due to credit migration, model enhancements and increased market volatility.

The increase of the Economic Capital allocated to the Corporate Line can be explained by the inclusion of the core equity investments in Economic Capital Bank, previously taken as an add-on at Group level.

# **ING BANK – CREDIT RISKS**

Credit risk is the risk of loss from default by debtors (including bond issuers) or trading counterparties. Credit risks are split into five principal risk categories: a) lending (including guarantees and letters of credit); b) investments; c) presettlement (derivatives, securities financing and foreign exchange trades); d) money markets and e) settlement. Corporate Credit Risk Management (CCRM) is responsible for the measurement and management of credit risk incurred by all ING Group entities, including country-related risks. CCRM is organised along the three business lines of ING Bank (e.g. Retail Banking, Wholesale Banking and ING Direct) and ING Insurance. The CCRM General Manager is functionally responsible for the global network of credit risk staff, while the heads of the credit risk management functions for the business lines report directly to him.

Credit risk management is supported by dedicated credit risk information systems and internal credit risk measurement methodologies for debtors, issuers and counterparties. CCRM creates consistency throughout the credit risk organisation by providing common credit risk policies, methodologies, manuals and tools across the Group.

ING Group's credit policy is to maintain an internationally diversified loan and bond portfolio, while avoiding large risk concentrations. The emphasis is on managing business developments within the business lines by means of top-down concentration limits for countries, individual borrowers and borrower groups. The aim within the banking sector is to expand relationship-banking activities, while maintaining stringent internal risk/return guidelines and controls.

Credit analysis is risk/reward-oriented in that the level of credit analysis is a function of the risk amount, tenor, structure (e.g. covers received) of the facility, and the risks entered into. For credit risk management purposes, financial obligations are classified into lending, investments, pre-settlement, money market and settlement. ING Bank applies a Risk Adjusted Return on Capital framework (RAROC) which measures the performance of different activities and links to shareholder value creation. The use of RAROC increases focus on risks versus rewards in the decision making process, and consequently stimulates the use of scarce capital in the most efficient way. More sophisticated RAROC-based tools are used internally to ensure a proper balance of risk and reward within the portfolio and concentration parameters. ING's credit analysts make use of publicly available information in combination with in-house analysis based on information provided by the customer, peer group comparisons, industry comparisons and other quantitative techniques.

# Lending risk

Lending risk arises when ING grants a loan to a customer, or issues guarantees on behalf of a customer. This is the most common risk category, and includes term loans, mortgages, revolving credits, overdrafts, guarantees, letters of credit, etc. The risk is measured at the notional amount of the financial obligation that the customer has to repay to ING, excluding any accrued and unpaid interest, discount/premium amortisations or impairments.

# **Investment risk**

Investment risk is the credit default and risk rating migration risk that is associated with ING's investments in bonds, commercial paper, securitisations, and other similar publicly traded securities. Investment risk arises when ING purchases a (synthetic) bond with the intent to hold the bond for a longer period of time (generally through maturity). Bonds that are purchased with the intent to re-sell in a short period of time are considered to be trading risks, which are measured and monitored by the Corporate Market Risk Management department. For credit risk purposes, Investment risk is measured at original cost (purchase price) less any prepayments or amortisations and excluding any accrued and unpaid interest or the effects of any impairment.

## Money market risk

Money market risk arises when ING places short term deposits with a counterparty in order to manage excess liquidity, as such, money market deposits tend to be short term in nature (1-7 days is common). In the event of a counterparty default, ING may lose the deposit placed. Money market risk is therefore measured simply as the notional value of the deposit, excluding any accrued and unpaid interest or the effect of any impairment.

# **Pre-settlement risk**

Pre-settlement risk arises when a counterparty defaults on a transaction before settlement and ING has to replace the contract by a trade with another counterparty at the then prevailing (possibly unfavourable) market price. The pre-settlement risk (potential or expected risk) is the cost of ING replacing a trade in the market. This credit risk category is associated with dealing room products such as options, swaps, and securities financing transactions. Where there is a mutual exchange of value, the amount of credit risk outstanding is generally based on the replacement value (mark-to-market) plus a potential future volatility concept, using an historical 7 year time horizon and a 99% confidence level.

#### Settlement risk

Settlement risk arises when there is an exchange of value (funds, instruments or commodities) for the same or different value dates and receipt is not verified or expected until ING has paid or delivered its side of the trade. The risk is that ING delivers, but does not receive delivery from the counterparty. Settlement risk can most commonly be contained and reduced by entering into transactions with delivery-versus-payment (DVP) settlement methods, as is common with most clearing houses, or settlement netting agreements.

For those transactions where DVP settlement is not possible, ING establishes settlement limits through the credit approval process. Settlement risk is then monitored and managed by the credit risk management units. Risk is further mitigated by operational procedures requiring trade confirmations to counterparties with all transaction details, and by entering into internationally accepted documentation, such as International Swaps and Derivatives Association (ISDA) Master Agreements for derivative transactions. Additionally, ING regularly participates in projects with other financial institutions to improve and develop new clearing systems and clearing mechanisms to further reduce the level of settlement risk. Due to the very short term nature of settlement exposure (daily), settlement risks do not attract economic or regulatory capital and are excluded from risk reporting disclosures.

# **Country risk**

Country risk is the risk specifically attributable to events in a specific country (or group of countries). It can occur within each of the five above described risk categories. All transactions and trading positions generated by ING include country risk which is further divided into economic and transfer risk. Economic risk is the concentration risk relating to any event in the risk country which may affect transactions and any other exposure in that country, regardless of the currency. Transfer risk is the risk incurred through the inability of ING or its counterparties to meet their respective foreign currency obligations due to a specific country event.

In countries where ING is active, the relevant country's risk profile is regularly evaluated, resulting in a country rating. Country limits are based on this rating and ING's risk appetite. Exposures derived from lending, investment presettlement and money market activities are then measured and reported against these country limits on a daily basis. Country risk limits are assigned for transfer risk mainly for emerging markets.

# **Determination of credit risk outstandings**

Figures associated with Money Market and Lending activities are generally the nominal amounts, while amounts associated with Investment activities are based on the original amount invested less repayments. Off-Balance Sheet exposures include the letters of credits and guarantees, which are associated with the Lending Risk Category. Additionally, Off-Balance Sheet exposures include a portion of the unused limits, associated with the statistically expected use of the unused portion of the limit between the moment of measurement and the theoretical moment of statistical default. Collectively, these amounts are called "credit risk oustandings".

Exposures associated with Securitisations (Asset Backed Financing, Commercial/Residential Mortgage Backed Securities and Covered Bonds) are shown separately. These amounts also relate to the amount invested prior to any impairment activity or mark-to-market adjustments. This amount is also considered to be "outstandings".

# **Collateral policies**

As with all financial institutions and banks in particular, ING is in the business of taking credit risks in an informed and measured fashion. As such, the creditworthiness of our customers, trading partners and investments is continually evaluated for their ability to meet their financial obligations to ING. During the assessment process of creating new loans, trading limits, or making investments, as well as reviewing existing loans trading positions and investments, ING determines the amount and type of collateral, if any, that a customer may be required to pledge to ING. Generally, the lower the perceived creditworthiness of a borrower or financial counterparty, the more collateral the customer or counterparty will have to provide. Within counterparty trading activities, ING actively enters into various legal arrangements whereby ING and/or counterparties may have to post collateral to one another to cover market fluctuations of their relative positions. Laws in various jurisdictions also affect the type and amount of collateral that ING can receive or pledge. Additionally, ING will sometimes enter into credit default swaps, and other similar instruments, in order to reduce the perceived credit risk on a given borrower or portfolio. The type of collateral which is held as security is determined by the structure of the loan or position. Consequently, since ING's portfolio is diversified, the profile of collateral it receives is also diversified in nature and does not reflect any particular collateral type more than others.

# ING BANK CREDIT RISK PROFILE

ING Bank's credit exposure is mainly related to traditional lending to individuals and businesses followed by investments in bonds and other securitised assets. Loans to individuals are mainly mortgage loans secured by residential property. Loans (including guarantees issued) to businesses are often collateralised, but can be unsecured based on internal analysis of the borrowers' creditworthiness. Bonds in the investment portfolio are generally unsecured. Securitised assets such as Mortgage Backed Securities (MBS) and Asset Backed Securities (ABS) are secured by the pro rata portion of the underlying diversified pool of assets (commercial or residential mortgages, car loans and other assets) held by the issuer of the security. The last major area of credit risk involves pre-settlement credit exposures which arise from trading activities, including derivatives, repurchase transactions and securities lending/borrowing and foreign exchange transactions.

For the banking operations, ING uses various market pricing and measurement techniques to determine the amount of credit risk on pre-settlement activities. These techniques estimate ING's potential future exposure on individual and portfolios of trades. Master agreements and collateral agreements are frequently entered into to reduce these credit risks.

# Problem loans

# Renegotiated Loans

ING's credit restructuring activities focus on managing the client relationships, improving the borrower's risk profile, maximising collection opportunities and, if possible, avoiding foreclosure or repossession. These activities are proactively pursued and primarily relate to Wholesale and Small and Medium Enterprise (SME) borrowers ('Business'), which are not yet in default. Common actions taken include, but are not limited to, revising or extending repayment arrangements, assisting in financial reorganisation and/or turnaround management plans, deferring foreclosure, modifying loan conditions and deferring certain payments pending a change in circumstances. For consumer and residential mortgage loans ('Consumer') the approach is more portfolio oriented.

Restructuring activities for Business borrowers normally start with a watch list indication. Borrowers on the watch list maintain their rating (1-19). A watch list indication may develop into a restructuring status (15-19) or even a recovery status (20-22). Most borrowers with a watch list indication return to a regular status. For Consumer clients the watch list of 'potential problem loan' status is usually caused by payment arrears (more than 1 month) which are subsequently reflected in the risk rating of 18-19 (or comparable status based on an increased probability of default). Following restructuring relationship management is either transferred to the regular commercial banking departments or terminated.

ING's renegotiated loans that would otherwise be past due or impaired are reflected below:

#### ING Bank renegotiated loans that would otherwise be past due or impaired (outstandings)

	2008	2007
From restructuring (18-19) to regular (1-17) status	1,183	1,414
From recovery (20-22) to regular or restructuring		
status (1-19)	3,556	3,123
Total of renegotiated loans	4,739	4,537

This total is broken down by Business and Consumer clients as follows:

#### Renegotiated business loans that would otherwise be past due or impaired (outstandings)

	2008	2007
From restructuring (18-19) to regular (1-17) status	1,183	1,414
From recovery (20-22) to regular or restructuring		
status (1-19)	978	1,170
Total of renegotiated Business loans	2,161	2,584

For Business clients, ING has taken a proactive approach to restructuring loans that may have otherwise experienced financial difficulties, which has led to an increase in the level of restructuring loans returning to a regular status. Restructuring is generally a time consuming process that can take several years. Through early 2008, ING's inventory of problem loans and restructuring clients declined at a steady pace which is then reflected in the level of restructured Business Loans in 2008.

#### Renegotiated consumer and mortgage loans that would otherwise be past due or impaired (outstandings)

	2008	2007
From recovery (20-22) to regular or restructuring		
status (1-19)	2,578	1,953
Total of renegotiated consumer and mortgages loans		
('Consumer')	2,578	1,953

The increase in the total amount of renegotiated consumer and mortgage loans is a reflection of the growth of the portfolio and of ING's proactive (portfolio) management approach involving the automation of reminder and warning letters to Consumer borrowers who may otherwise be facing financial difficulties. Consumer borrowers do not have a restructuring status.

#### Past-due obligations

ING continually measures its portfolio in terms of payment arrears. Particularly the retail portfolios are closely monitored on a monthly basis to determine if there are any significant changes in the level of arrears. Generally, an obligation is considered 'past-due' if a payment of interest or principal is more than one day late. In practice, the first 5-7 days after an obligation becomes past due are considered to be operational in nature for the retail loans and small businesses. After this period, letters are sent to the obligor reminding the obligor of its (past due) payment obligations. If the arrear still exists after 90 days, the obligation is transferred to one of the 'problem loan' units. In order to reduce the number of arrears, ING banking units encourage their obligors to set up automatic debits from their (current) accounts to ensure timely payments.

# Credit quality: ING Bank portfolio, outstandings

	2008	2007
Neither past due nor impaired	817,069	750,049
Past due but not impaired (1-90 days) <sup>(1)</sup>	7,224	5,416
Impaired	8,592	5,219
	832.885	760.684

<sup>(1)</sup> Based on lending (consumer loans and residential mortgages only).

Aging analysis (past due but not impaired): ING Bank portfolio, outstandings <sup>(1, 2)</sup>

	2008	2007
Past due for 1-30 days	5,844	4,709
Past due for 31-60 days	1,223	633
Past due for 61-90 days	157	74
	7.224	5.416

<sup>(1)</sup> Based on lending (consumer loans and residential mortgages only).

<sup>(2)</sup> The amount of past due but not impaired financial assets in respect of non-lending activities was not material.

There is no significant concentration of a particular type of loan structure in the past due or the impaired loan portfolio.

ING tracks past due but not impaired loans most closely for the consumer loan and residential mortgage portfolios. Generally, all loans with past due financial obligations of more than 90 days are automatically reclassified as impaired. For the wholesale lending portfolios and securities obligations, there are generally reasons for declaring a loan impaired prior to being 90 days past due. These include, but are not limited to, ING's assessment of the customer's perceived inability to meet its financial obligations, or the customer filing for bankruptcy or bankruptcy protection. In some cases, a material breach of financial covenants will also trigger a reclassification of a loan to the impaired category.

#### Repossession policy

It is ING's general policy not to take possession of assets of defaulted debtors. Rather, ING attempts to sell the assets from within the legal entity that has pledged these assets to ING, in accordance with the respective collateral or pledge agreements signed with the obligors. In those cases where ING does take possession of the collateral, ING generally attempts to sell the assets as quickly as possible to prospective buyers. Based on internal assessments to determine the highest and quickest return for ING, the sale of repossessed assets could be the sale of the obligor's business as a whole (or at least all of its assets), or the assets could be sold piecemeal.

## Impaired Loans: ING Bank portfolio, outstandings by economic sector

	2008	2007
Private individuals	3,718	2,356
Construction, Infrastructure and Real Estate	1,770	635
General Industries	1,036	270
Food, Beverages and Personal Care	397	264
Financial Institutions	372	538
Automotive	322	200
Services	270	219
Retail	176	131
Other	531	606
Total	8,592	5,219

The table above represents the economic sector breakdown of credit risk outstandings (including impaired amounts) for loans and positions that have been classified as problem loans and for which provisions have been made. Against this portfolio, ING holds specific and collective provisions of EUR 1,067 million and EUR 799 million, respectively (2007 EUR 711 million and EUR 680 million respectively), representing the difference between the amortised cost of the portfolio and the estimated recoverable amount discounted at the effective rate of interest.

# **Provisions**

The credit portfolio is under constant review. A formal analysis takes place quarterly to determine the provisions for possible bad debts, using a bottom-up approach. Conclusions are discussed by the ING Provisioning Committee (IPC), which advises the Executive Board on specific provisioning levels. ING Bank identifies as impaired loans those loans for which it is probable, based on current information and events that the principal and interest amounts contractually due will not be collected in accordance with the contractual terms of the loan agreements.

# Provisions: ING Bank portfolio

	Wholesal	e Banking	Reta	Retail Banking		NG Direct	Total	ING Bank
	2008	2007	2008	2007	2008	2007	2008	2007
Opening balance	921	1,610	771	741	309	291	2,001	2,642
Changes in the composition of the								
group	2	2	0	95	0	1	2	98
Write-offs	-260	-593	-399	-302	-69	-57	-728	-952
Recoveries	24	30	63	26	4	3	91	59
Increase/(decrease) in loan loss								
provision	596	-115	401	172	283	68	1,280	125
Exchange differences	-17	-23	-36	5	3	-1	-50	-19
Other changes	-242	10	270	34	-13	4	15	48
Closing balance	1,024	921	1,070	771	517	309	2,611	2,001

After three years of declining annual risk costs, the trend turned in 2008 as a result of the global credit crisis. Other changes includes a provision reclassification of mid-sized corporates and wholesale SME from Wholesale Banking to Retail Banking.

#### Collateral

As part of its securities financing business, ING entities actively enter into agreements to sell and buy back marketable securities. These transactions can take many legal forms. Repurchase and reverse repurchase agreements, buy/sellback and sell/buyback agreements, and securities borrowing and lending agreements are the most common. The amount of marketable securities that ING held as collateral under these types of agreements was EUR 82.1 billion at 31 December 2008 and EUR 120.2 billion at 31 December 2007. The reduction is commensurate with the overall decline in open securities financing trades at year end 2008 compared to year end 2007. These amounts exclude the cash leg of the respective transactions, as well as any pledges of securities under Tri-Party agreements (as the underlying is not directly pledged to or owned by ING). As a general rule, the marketable securities that have been received under these transactions are eligible to be resold or repledged in other (similar) transactions. ING is obliged to return equivalent securities in such cases.

Risk classes are defined based upon the quality of the exposures in terms of creditworthiness, varying from investment grade to problem grade expressed in S&P equivalents.

Kisk classes into Bank portiono by business line, as % of total outstandings								
	Wholesal	Wholesale Banking		Retail Banking		G Direct (2)	Total ING Bank	
	2008	2007	2008	2007	2008	2007	2008	2007
1 (AAA)	9.3%	5.6%	1.3%	0.2%	27.6%	31.5%	<b>12.6%</b>	12.8%
2-4 (AA)	19.3%	26.2%	5.7%	4.8%	17.1%	19.3%	14.5%	18.6%
5-7 (A)	16.7%	14.5%	4.0%	3.4%	15.6%	14.4%	12.5%	11.8%
8-10 (BBB)	23.2%	21.4%	34.3%	35.3%	22.2%	21.0%	26.2%	24.7%
11-13 (BB)	23.3%	24.5%	<b>42.9%</b>	46.0%	14.8%	12.3%	26.6%	25.8%
14-16 (B)	5.8%	5.9%	6.9%	6.3%	1.5%	0.8%	4.8%	4.3%
17-22 (CCC & Problem Grade)	2.4%	1.9%	4.9%	4.0%	1.2%	0.7%	2.8%	2.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

<sup>(1)</sup> Based on credit risk measurement contained in lending, pre-settlement, money market and investment activities.

Risk classes ING Bank portfolio by business line as % of total outstandings <sup>(1)</sup>

The ratings reflect probabilities of default and does not take collateral into consideration.

(2) Covered bonds are presented on the basis of the external credit rating of the issuer in question. Covered bond issues generally possess a better external credit rating than the issuer standalone, given structural features of such covered bonds.

## Risk classes ING Bank portfolio, as % of total outstandings <sup>(1)</sup>

		Lending	1	nvestment	Mon	ey Market	Pre-	settlement	Tota	I ING Bank
	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007
1 (AAA)	1.3%	1.9%	49.8%	48.4%	7.1%	5.9%	8.1%	5.4%	12.6%	12.8%
2-4 (AA)	4.2%	6.0%	28.8%	35.2%	57.3%	61.4%	48.3%	58.2%	14.5%	18.6%
5-7 (A)	10.2%	9.5%	1 <b>5.0%</b>	13.7%	26.3%	16.8%	21.5%	22.3%	12.5%	11.8%
8-10 (BBB)	36.1%	35.7%	3.6%	1.5%	4.8%	8.2%	11.2%	7.1%	26.2%	24.7%
11-13 (BB)	37.8%	37.7%	1.5%	0.9%	4.4%	7.1%	7.2%	5.3%	26.6%	25.8%
14-16 (B)	6.6%	6.3%	0.6%	0.1%	<b>0.1%</b>	0.3%	2.7%	1.2%	4.8%	4.3%
17-22 (CCC & Problem										
Grade)	3.8%	2.9%	0.7%	0.2%	0.0%	0.3%	1.0%	0.5%	2.8%	2.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

<sup>(1)</sup> Based on credit risk measurement contained in lending, pre-settlement, money market and investment activities.

The ratings reflect probabilities of default and does not take collateral into consideration.

ING Bank experienced a modest downward migration in terms of risk classes, in particular from the AA class to lesser quality classes. The principle driver was the downgrading of many securitisations, particularly at ING Direct. Additionally problem grades also increased during the year. These negative effects were modestly offset by a shift to higher quality counterparties for Money Market and Pre-Settlement activities.

#### Risk concentration: ING Bank portfolio, by economic sector <sup>(1)</sup>

	Wholesa	le Banking	Retail Banking			ING Direct		ING Bank
	2008	2007	2008	2007	2008	2007	2008	2007
Private Individuals	0.2%	0.4%	<b>68.4%</b>	83.7%	44.1%	39.8%	34.5%	33.9%
Non-Bank Financial Institutions	13.5%	14.9%	2.0%	2.5%	29.9%	31.9%	15.0%	17.7%
Commercial Banks	20.4%	22.6%	1.2%	1.1%	15.4%	19.5%	13.1%	16.2%
Central Governments	12.8%	7.5%	1.5%	1.4%	2.7%	3.0%	6.2%	4.5%
Real Estate	12.5%	9.6%	3.9%	1.5%	0.6%	0.7%	6.2%	4.6%
Natural Resources	6.9%	6.2%	0.7%	0.2%	0.0%	0.0%	2.9%	2.7%
Central Banks	2.4%	3.9%	1.6%	0.0%	4.5%	2.4%	2.8%	2.4%
Transportation & Logistics	5.4%	4.7%	1.6%	0.5%	0.0%	0.0%	2.6%	2.1%
Services	3.5%	4.7%	3.1%	1.7%	0.0%	0.0%	2.3%	2.4%
Food Beverage and Personal Care	3.6%	3.4%	2.5%	1.6%	0.0%	0.1%	2.2%	1.9%
General Industries	3.4%	3.8%	2.6%	1.1%	0.0%	0.0%	2.1%	1.9%
Builders & Contractors	2.9%	3.7%	2.8%	0.9%	0.1%	0.1%	2.0%	1.8%
Other	12.5%	14.6%	8.1%	3.8%	2.7%	2.5%	8.1%	7.9%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

<sup>(1)</sup> Based on the total amount of credit risk in the respective column using ING's internal credit risk measurement methodologies.

ING Direct continued to increase its diversifications into residential mortgages, while proportionally reducing its securitisation and bond portfolios. During 2008, ING reclassified the Mid-Corporate portfolio from Wholesale Banking to Retail Banking, which proportionally decreased the Retail Banking concentration in Private Individuals and created a wider distribution across other economic sectors. This was partially offset by the purchase of EUR 4.5 billion in residential mortgages from Nationale Nederlanden Hypotheek Bedrijf (NNHB, residential mortgages). All other industries not shown in the table above have less than 2.0% concentrations.

# Largest economic exposures: ING Bank lending portfolio, by country (1)(2)

	Wholesal	e Banking	Reta	il Banking	1	NG Direct	Total	ING Bank
amounts in EUR billion	2008	2007	2008	2007	2008	2007	2008	2007
Netherlands	56.2	68.7	171.9	141.1	1.0	1.6	229.1	211.4
United States	35.3	28.9	0.2	0.2	63.6	58.2	99.1	87.3
Belgium	25.6	44.4	52.6	27.5	1.1	1.4	79.3	73.3
Germany	12.5	9.4	0.2	0.2	61.5	54.8	74.2	64.4
Spain	15.2	12.4	0.4	0.4	40.1	38.5	55.7	51.3
United Kingdom	15.8	19.4	0.2	0.1	13.5	17.3	29.5	36.8
France	23.4	17.0	0.7	0.6	4.2	4.1	28.3	21.7
Italy	14.7	12.6	0.5	0.5	12.8	12.2	28.0	25.3
Australia	4.3	5.0	0.0		23.0	25.4	27.3	30.4
Canada	1.4	1.7	0.0	0.1	17.4	15.7	18.8	17.5
Poland	9.7	7.0	2.1	2.5	0.0	0.0	11.8	9.5
Turkey	0.8	6.2	8.6	2.7	0.0	0.0	9.4	8.9

(1) Only covers total exposures in excess of EUR 9 billion, including intercompany exposure with ING Insurance.

The growth in most countries presented above followed the growth pattern of the portfolio as a whole. The growth at ING Direct in Germany, the United States and Spain was principally driven by own originated mortgages (Germany + EUR 6.3 billion, USA + EUR 7.3 billion, Spain + EUR 1.4 billion). Retail Banking in the Netherlands, Belgium and Turkey grew through organic growth as well as the shift of Mid-Corporates from Wholesale Banking to Retail Banking. The decline in the United Kingdom is driven by exchange rate effects.

## **ING BANK – MARKET RISKS**

Market risk is the risk that movements in market variables, such as interest rates, equity prices, foreign exchange rates and real estate prices, negatively impact the bank's earnings, market value or liquidity position. Market risk either arises through positions in trading books or through the banking book positions. The trading positions are held for the purpose of benefiting from short-term price movements, while the banking book positions are intended to be held in the long term (or until maturity) or for the purpose of hedging other banking book positions. Within ING Bank, market risk (including liquidity risk) falls under the supervision of the ALCO function with ALCO Bank as the highest approval authority. ALCO Bank determines the overall risk appetite for market risk. The ALCO function is regionally organised with the exception of ING Direct, which has a separate ALCO. The business lines Retail Banking and Wholesale Banking are represented within the respective regional and local ALCO's. The ALCO structure within ING Bank facilitates top-down risk management, limit setting and the monitoring and control of market risk. This ensures a correct implementation of the ING Bank risk appetite.

The Corporate Market Risk Management department (CMRM) is the designated independent department that is responsible for the design and execution of the bank's market risk management functions in support of the ALCO function. The CMRM structure recognises that risk management to a large extent occurs at the regional/local level. Bottom-up reporting allows each management level to fully assess the market risk relevant at the respective levels.

CMRM is responsible for determining adequate policies and procedures for managing market risk and for monitoring the compliance with these guidelines. An important element of the market risk management function is the assessment of market risk in new products and businesses. Furthermore CMRM maintains an adequate limit framework in line with ING Bank's risk appetite. The businesses are responsible for adhering to the limits that ultimately are approved by ALCO Bank. Limit breaches are reported to senior management on a timely basis and the business is required to take the appropriate actions to reduce the risk position.

# **Market Risk in Trading Portfolios**

# Organisation

Within the trading portfolios, positions are maintained in the professional financial markets for the purpose of benefiting from short term price movements. Market risk arises in the trading portfolios through the exposure to various market risk factors, including interest rates, equity prices and foreign exchange rates.

The Financial Markets Risk Committee (FMRC) is a market risk committee that, within the guidelines set by ALCO Bank, sets market risk limits both on an aggregated level and on a desk level, and approves new products. CMRM advises both the FMRC and ALCO Bank on the market risk appetite of Wholesale Banking activities.

CMRM Trading focuses on the management of market risks in the trading portfolios of Wholesale Banking (mainly Financial Markets) as this is the only business line where significant trading activities take place. Trading activities include facilitation of client business, market making and proprietary position taking in cash and derivatives markets. CMRM Trading is responsible for the development and implementation of trading risk policies and risk measurement methodologies, the reporting and monitoring of risk exposures against approved trading limits and the validation of pricing models. CMRM also reviews trading mandates and limits, and performs the gatekeeper role in the product review process. The management of trading market risk is performed at various organisational levels, from CMRM Trading overall down to specific business areas and trading offices.

# Measurement

CMRM uses the Value-at-Risk (VaR) methodology as its primary risk measure. The VaR for market risk quantifies, with a one-sided confidence level of 99%, the maximum overnight loss that could occur due to changes in risk factors (e.g. interest rates, foreign exchange rates, equity prices, credit spreads, implied volatilities) if positions remain unchanged for a time period of one day. The impact of historical market movements on today's portfolio is estimated, based on equally weighted observed market movements of the previous year. ING uses VaR with a 1-day horizon for internal risk measurement, control and backtesting, and VaR with a 10-day horizon for determining regulatory capital. ING's VaR model has been approved by the Dutch Central Bank to be used for the regulatory capital calculation of its most important trading activities.

Market risk management for the fixed income and equity markets is split into two components: general market risk and specific market risk. The general market risk component estimates the VaR resulting from general market-value movements (e.g. interest rate movements). The specific market risk component estimates the VaR resulting from market-value movements that relate to e.g. the underlying issuer of securities in the portfolios. This specific risk relates to all value movements not related to general market movements.

The VaR for linear portfolios is calculated using a variance – covariance approach. The market risk of all the important option portfolios within ING is measured by Monte Carlo and historical simulation methods.

# Limitations

VaR as a risk measure has some limitations. VaR quantifies the potential loss under the assumption of normal market conditions. This assumption may not always hold true in reality, especially when market events occur, and therefore could lead to an underestimation of the potential loss. VaR also uses historical data to forecast future price behaviour. Future price behaviour could differ substantially from past behaviour. Moreover, the use of a one-day holding period (or ten days for regulatory calculations) assumes that all positions in the portfolio can be liquidated or hedged in one day. In periods of illiquidity or market events, this assumption may not hold true. Also, the use of 99% confidence level means that VaR does not take into account any losses that occur beyond this confidence level.

# Backtesting

Backtesting is a technique for the ongoing monitoring of the plausibility of the VaR model in use. Although VaR models estimate potential future results, estimates are based on historical market data. In a backtest, the actual daily result is compared with the 1-day VaR. In addition to using actual results for backtesting, ING also uses hypothetical results, which measure results excluding the effect of intraday trading, fees and commissions. When the actual or hypothetical loss exceeds the VaR an 'occurrence' has taken place. Based on ING's one-sided confidence level of 99% an occurrence is expected once in every 100 business days. In 2008, there was no occurrence (2007: none) where a daily trading loss exceeded the daily consolidated VaR of ING Wholesale Banking. ING reports the results of this backtesting to the Dutch Central Bank on a quarterly basis.

#### **Stress testing**

Stress tests are used for the monitoring of market risks under extreme market conditions. Since VaR in general does not produce an estimate of the potential losses that can occur as a result of extreme market movements, ING uses structured stress tests for monitoring the market risk under these extreme conditions. Stress scenarios are based on historical and hypothetical extreme events. The result of the stress testing is an event risk number, which is an estimate of the profit and loss account effect caused by a potential event and its world-wide impact for ING Wholesale Banking. The event risk number for the ING Wholesale Banking trading activity is generated on a weekly basis. Like VaR, event risk is limited by ALCO Bank. The event-risk policy (and its technical implementation) is specific to ING as there is no event risk calculation method that is generally accepted by other banks and regulators (like the Value-at-Risk model). ING's event risk policy basically consists of defined stress parameters per country and per market (fixed income, equity, foreign exchange, credit and related derivative markets). The scenarios and stress parameters are back-tested against extreme market movements that actually occurred in the markets. The market developments in 2008 will be taken into account in the definition of scenarios and stress parameters during 2009. If and when necessary, ING evaluates specific stress scenarios, as an addition to its structured stress tests. These specific scenarios relate to current concerns, like political instability in certain regions, terrorist attacks or extreme movements in energy prices.

#### Other trading controls

VaR and event risk limits are the most important limits to control the trading portfolios. Furthermore, ING uses a variety of other limits to supplement VaR and event risk. Position and sensitivity limits are used to prevent large concentrations in specific issuers, sectors or countries. In addition to this, other risk limits are set with respect to the activities in exotic derivatives trading. The market risk of these products is controlled by product specific limits and constraints.

#### **Development of trading market risks**

The following chart shows the development of the overnight VaR under a 99% confidence interval and a 1-day horizon. The overnight VaR is presented for the ING Wholesale Banking trading portfolio which was risk managed by CMRM Trading during 2007 and 2008. Several banking books are governed by the trading risk process and are therefore excluded from the non-trading risk table and included in the trading risk graph and table below.



During 2007 and 2008 the overnight VaR for the ING Wholesale Banking trading portfolio ranged from EUR 29 to EUR 72 million.

The average exposure over 2008 was substantially higher than 2007 (average VaR 2008: EUR 53 million and average VaR 2007: EUR 34 million). This increase is to a large extent related to the increase of volatility in the different financial markets, as well as the changes in the correlation between different markets and products. As a result, the consolidated trading VaR exceeded the EUR 60 million limit in the fourth quarter. ALCO Bank approved a temporary increase of the limit to 66 million to accommodate the changed market circumstances and a gradual reduction of the exposure. The consolidated trading VaR peaked at a level of EUR 72 million on October 24th. The management of CMRM and Wholesale Banking / Financial Markets have taken further actions to bring back the exposure within the limit. As the VaR decreased during the last two months of the year, the limit was reduced to its original level of EUR 60 million per mid December.

More details on the VaR of the ING Wholesale Banking trading portfolio for 2008 and 2007 are provided in the table below.

Consolidated trading VaR: ING Wholesale Bank									
	Minir	mum	Max	imum	Ave	Average		rend	
	2008	2007	2008	2007	2008	2007	2008	2007	
Foreign exchange	4	2	9	7	5	4	7	4	
Equities	5	5	13	13	8	9	7	6	
Interest rate	33	22	58	43	45	27	43	43	
Diversification <sup>(1)</sup>					-5	-6	-3	-5	
Total VaR				-	53	34	54	48	

<sup>(1)</sup> The total VaR for the columns Minimum and Maximum can not be calculated by taking the sum of the individual components since the observations for both the individual markets as well as total VaR may occur on different dates.

Note: the above captions are consistent with those used for internal risk management purposes and do not relate to financial statement captions.

In general, the level of the trading VaR was not only higher in 2008, but also showed larger movements. The interest rate market, which includes both the general interest rate and credit spread exposures, provided the largest contribution to the trading VaR.

The following table shows the largest trading positions in foreign exchange, interest rate and corporate credit spread positions. The corporate credit spread sensitivities are furthermore split in different risk classes and sectors.

#### Most important foreign exchange, interest rate and credit spread positions (year end 2008)

	2008
Foreign exchange	
Singapore dollar	-91
Mexican peso	69
South Korean won	-68
US dollar	55
Chinese yuan	46
Interest Rate (Bpv <sup>(1)</sup> )	
Eurozone	-1.272
Mexico	-0.289
United States	0.241
South Korea	-0.111
Taiwan	0.060
Credit Spread (Bpv <sup>(1)</sup> )	
Eurozone	-0.247
United States	-0.187
Mexico	-0.097
Japan	-0.056
United Kingdom	-0.032

<sup>(1)</sup> Bpv (or basis point value) refers to profit and loss account sensitivity per 1bp increase in the interest rate or credit spread.

#### Credit spread sensitivities per risk class and sector (year end 2008)

In EUR thousands Credit Spread (Bpv <sup>(1)</sup> )	Corporate	Financial
Risk classes		
1 (AAA)	-20	-40
2-4 (AA)	-19	-115
5-7 (A)	4	-88
8-10 (BBB)	-75	-103
11-13 (BB)	-37	-54
14-16 (B)	-6	-18
17-22 (CCC and Problem Grade)	-21	-2
No rating	-19	-28

<sup>(1)</sup> Bpv (or basis point value) refers to profit and loss account sensitivity per 1bp increase in the credit spread.

#### Market risk in Non-Trading Portfolios Organisation

Within ING Bank, positions are either labelled as trading or non-trading (banking book) positions. The most important aspect in segregating the banking from the trading books is the intent of the positions held in these books. The banking book positions are intended to be held for the long-term (or until maturity) or for the purpose of hedging other banking positions emerging from commercial business, as for instance in the mortgage book.

## Interest rate risk in banking books

The interest rate risk of the banking books is the risk that ING Bank's earnings or market value resulting from the nontrading positions is negatively impacted by movements in interest rates. To assign clear responsibilities for risk and return within the banking book structure an Asset and Liability Management (ALM) framework has been implemented by ALCO Bank. This framework enables a clear separation of three types of activities: the investment of own capital, the commercial business and the management of the bank's strategic interest rate risk position in the designated ALM books. The figure below presents the ALM framework of ING Bank within which the interest rate risk is measured and monitored:



ING Bank's capital management positions, i.e. the own funds (core capital) and the investments of these own funds, are isolated in the ING Bank corporate line. ALCO Bank determines the target maturity profile over which ING Bank's own funds must be invested. This maturity profile reflects the long term nature of the rate of return required by ING Bank's investors and aims for both earnings maximisation and stabilisation. ALCO Bank considers a well balanced portfolio of long-dated fixed income investments as the risk neutral position in its internal risk transfer framework.

The risk transfer principle forms the basis of ING Bank's ALM framework. This refers to the principle whereby the outright interest rate risk resulting from the commercial business is transferred to the ALM books. The interest rate risk from the commercial business arises from the fact that own originated assets and liabilities do not reprice simultaneously with respect to interest rate characteristics. The transfer of the outright interest rate risk is to a large degree based on modelling client behaviour. Within CMRM, extensive research is being done in order to optimise this modelling. For this purpose, several methods are in place to replicate the interest rate risk, taking into account both the contractual and behavioural characteristics of demand deposits, saving accounts and mortgages. All models and assumptions are back-tested regularly and results are presented to the designated ALCO.

For the determination of the interest rate sensitivity of savings accounts and current accounts, several methods depending on the focus of the risk analysis have been developed, e.g. historical simulation, Earnings at Risk analysis and valuation models. Pricing strategies, outstanding volumes and the level and shape of the yield curve are taken into account in these models. Based on these analyses, investment rules are determined for the various portfolios.

The hedging of the embedded prepayment options within mortgage portfolios is based on prepayment prediction models. These models include the incentive for clients to prepay. The parameters of these models are based on historical data and are regularly updated. The interest sensitivity of the embedded offered rate options is determined as well for the mortgage portfolio and a hedging process is in place to minimise the resulting interest rate risk.

After transferring the outright interest rate risk position to the ALM books, the residual interest rate risk that remains in the commercial banking books is caused by basis risk and optionality. The commercial business units bear responsibility for these residual interest rate risks that result from banking products of which future cash flows depend on client behaviour (e.g. optionality in mortgages) and from banking products of which the client rate earned and paid imperfectly correlate with the changing market rates (basis risk). Examples of products in which these risks are inherent are current accounts, saving accounts and mortgages.

Within ING Direct the interest rate risk is managed and measured at the level of the local ING Direct entities. The interest rate risk that remains in the ING Direct entities also largely results from basis risk and optionality as the outright interest rate risk is to a large extent hedged.

The ALM books are managed within ING Wholesale Banking and contain the strategic interest rate risk position of ING Bank. The main objective is to maximise the economic value of the book and to generate adequate and stable yearly earnings within the risk appetite boundaries of ING Bank.

In the following sections, the risk figures for interest rate risk in the banking books are presented. In line with the group risk metrics, ING Bank uses several risk measures to manage interest rate risk both from an earnings and a value perspective. Earnings-at-Risk (EaR) is used to provide the earnings perspective and the Net Present Value (NPV)-at-Risk and Basis Point Value (BPV) figures provide the value perspective. Several banking books are governed by the trading risk process and are therefore excluded from the following non-trading risk tables and are included in the trading risk graph and table under 'Market Risk in Trading Books'.

# Earnings at Risk (EaR)

EaR measures the impact on (pre tax) IFRS earnings resulting from changes of market rates over a time period of one year. Changes in balance sheet dynamics and management interventions are not incorporated in these calculations. The EaR figures in the table below are determined on the basis of an instantaneous upward 1% parallel shock in market rates. This shock is assumed to take place at the beginning of the year and the market rates are assumed to remain stable for the remainder of the year. For the ALM books EaR measures the potential loss of earnings due to the structural mismatch in interest rate positions. The calculations for the ALM books capture the EaR resulting from the current positions. For the commercial banking books the EaR captures the interest rate risks resulting from savings, current accounts and the main mortgage portfolios. The impact of new business is included in the EaR calculations for the savings and demand deposits portfolios, as it is most relevant for these portfolios. The EaR of the Corporate Line, i.e. the investment of ING Bank's own funds, reflects the interest risk profile of the investments only. This is in line with the accounting based definition of (pre tax) EaR.

## Earnings at Risk (1% instantaneous upward shock to interest rates)

	2008	2007
By Business Line		
ING Wholesale Banking	-91	-87
ING Retail Banking	-102	-121
ING Direct	5	-5
ING Bank Corporate Line	46	26
ING Bank Total	-142	-187
By Currency		
Euro	-220	-125
US dollar	80	9
Pound sterling	5	-13
Other	-7	-58
Total	-142	-187

Note: Compared to EaR figures in the group risk dashboard, the above figures exclude diversification with other bank risk types and group/insurance risks

The total EaR figure, as result of an upward shock of the market rates of 1%, improved compared to last year by EUR 45 million to EUR -142 million. Especially the last quarter in 2008 was dominated by a decreasing interest rate environment due to substantial interest rate cuts of central banks. This was of strong influence on the lower EaR under this scenario as several units within Retail Banking and ING Direct invested assets more short term and, as a consequence, will benefit more from increasing interest rates.

This dynamic in mainly non-EUR units is also the main driver for the strong increase in the positive EaR generated by USD exposure to EUR 80 million (from EUR 9 million) and the strong improvement in negative EaR in other currencies to EUR -7 million (from EUR -58 million). The negative EaR based on the EUR exposure substantially increased by EUR 95 million to EUR -220 million mainly driven by Wholesale Banking ALM positions that were, in comparison to year end 2007, more positioned to benefit from interest rate decreases.

#### Net Present Value-at-Risk (NPV)

The Net Present Value (NPV)-at-Risk figures represent the full value impact (i.e. including convexity) to the banking books resulting from changing interest rates. This full value impact cannot be linked directly to the balance sheet or profit and loss account as the fair value movements in banking books are generally not reported through the profit and loss account or through equity. The largest part, namely the value mutations of the amortised cost balances, is neither recognised in the balance sheet nor directly in the profit and loss account. These mutations would be expected to materialise over time in e.g. the profit and loss account, if interest rates develop according to forward rates throughout the remaining maturity of the portfolio. The NPV-at-Risk figures in the table below are determined on the basis of an instantaneous upward 1% parallel shock of market rates in line with the EaR calculations. For the ALM books the NPV-at-Risk figures again capture the potential change of value due to the structural mismatch in interest rate positions. For the commercial banking books the NPV-at-Risk calculations capture the convexity resulting from the optionality in the main mortgage portfolios, e.g. the option for clients to prepay in case of moving house. In these calculations it is assumed that savings and other demand deposits of Retail and Wholesale Banking are perfectly represented via the replicating methods and therefore are fully hedged. The NPV-at-Risk of the Corporate Line again only reflects the interest risk profile of the investments of the bank's own funds.

#### NPV-at-Risk (1% instantaneous upward shock to interest rates)

	2008	2007
By Business Line		
ING Wholesale Banking	-674	-442
ING Retail Banking	-100	-222
ING Direct	-232	-234
ING Bank Corporate Line	-1,388	-892
ING Bank Total	-2,394	-1,790
By Currency		
Euro	-2,105	-1,498
US dollar	-238	-439
Pound sterling	-40	74
Other	-11	73
Total	-2,394	-1,790

The end-of-year overall NPV-at-Risk figure as result of an upward shock of market rates of 1% is on a higher level compared to last year. This is mainly driven by Wholesale Banking's ALM positions and the Corporate Line that increased in line with ING Bank's higher capital position after the capital injection from the Dutch State in October 2008.

## **Basis Point Values (BPV)**

The Basis Point Value (BPV) figures below represent the value impact to the banking books resulting from a change in interest rates of 1 basis point. The BPV figures represent the directional position under a small upward shift in interest rates and do not capture the convexity resulting from the optionality in mortgages under larger interest rate movements.

BPvs per currency		
In EUR thousands Currency	2008	2007
Euro	-19,176	-15,165
US dollar	337	-2,055
Pound sterling	-582	778
Other	-373	706
Total	-19,794	-15,736

The outright interest rate risk that is represented through the BPV positions in the table above is mainly caused by the investments of the Bank's core capital. This only holds under the view that this capital is not sensitive to interest movements but ignores ALCO Bank's assumption that its shareholders expect ING Bank to invest the funds in such a way that it produces a long-term and stable income. The remaining outright risk is mainly maintained in the Bank's ALM books in which the strategic position is maintained.

#### Foreign exchange risk in non-trading books

Foreign exchange (FX) exposures in non-trading books result from commercial banking business (business units doing business in other currencies than their base currency), realised non-EUR results and FX translation risk on foreign currency investments. The policy regarding these exposures is briefly explained below.

#### Commercial banking business

Every business unit hedges the FX risk as result of their commercial activities into the base currency of the unit. Consequently assets and liabilities are matched in terms of currency.

#### Realised results

Every unit hedges realised results to the base currency of the unit. On a monthly basis the central Capital Management department hedges the non-EUR results to EUR. ING does not hedge the future EUR value of projected results in non-EUR currency.

#### FX Translation result

ING's strategy is to protect its Tier-1 ratio against unfavourable currency fluctuations. The protection is largely achieved by the issuance of USD and GBP denominated Tier-1 capital and furthermore by taking structural foreign currency positions. In general, open positions are deliberately taken in order to achieve protection of the Tier-1 ratio by establishing the right ratio of non-EUR denominated capital and risk weighted assets in these currencies. The US dollar, Pound sterling, Polish zloty, Australian dollar and Turkish lira are the main currencies in this respect. For other currencies the objective is to substantially mitigate the translation risk.

The following tables present the non-trading currency exposures of the central Capital Management department. As a consequence of the layered hedging policy described above, the net position of Capital Management in principle equals the aggregated non-trading currency exposure of the entire bank. Exception is the 2008 US dollar exposure which will be explained below. Note: all amounts are in EUR millions (equivalents).

#### Overnight non-trading currency exposures ING bank

2008	Foreign invest- ments	Tier-1	Gross exposure	Hedges	Net position
US dollar	9,061	-3,757	5,304	-745	4,559
Pound sterling	-1,132	-628	-1,760	1,741	-19
Polish zloty	1,027		1,027	-490	537
Australian dollar	1,031		1,031	-700	331
Turkish lira	1,687		1,687	-193	1,494
Other currency	4,897		4,897	-3,794	1,103
Total	16,571	-4,385	12,186	-4,181	8,005

# **Overnight non-trading currency exposures ING Bank**

	Foreign invest-		Gross		
2007	ments	Tier-1	exposure	Hedges	Net position
US dollar	2,644	-3,630	-986	-483	-1,469
Pound sterling	-848	-817	-1,665	1,635	-30
Polish zloty	1,076		1,076	-656	420
Australian dollar	1,228		1,228	-136	1,092
Turkish lira	1,848		1,848		1,848
Other currency	5,719		5,719	-3,871	1,848
Total	11,667	-4,447	7,220	-3,511	3,709

The US dollar position at the end of 2007 was adjusted (reduced) in order to match with lower risk-weighted assets under the new Basel II rules starting January 1 2008. As a result of changing market circumstances this reduction was undone and the net position in US dollars increased significantly in 2008, for two reasons. Firstly, on the back of the credit crisis, the (credit) risk-weighted assets in US dollars increased significantly. The second reason is because of negative market value revaluations of Alt-A RMBS positions within ING Direct US, US dollar funding of ING Direct Holding was converted to EUR in order to avoid P/L volatility. As a consequence, a (net) long US dollar position emerged at ING Direct Holding level which has been added to the Capital Management position in the 2008 table above.

The net position in Australian dollar dropped by EUR 762 million. This is a consequence of a large drop in risk-weighted assets under Basel II (compared to Basel I).

The drop in the Turkish lira position is caused by a depreciation of the currency. The position in local currency did not change significantly.

The FX risk in the non-trading books is measured by using the Value-at-Risk methodology as explained in the trading risk section. The VaR for FX quantifies with a one-sided confidence interval of 99%, the maximum overnight loss in 99% of the cases that could occur due to changes in foreign exchange rates.

Consolidated non-trading FX VaR ING Bank								
	Low		Hig	jh	Avera	age	Year	end
	2008	2007	2008	2007	2008	2007	2008	2007
FX VaR	36	14	135	62	72	22	112	62

During 2008, the FX VaR increased significantly. The major contributor was the long position in US dollars.

# **Equity Price Risk in Banking Books**

Equity price risk arises from the possibility that equity security prices will fluctuate, affecting the value of equity securities and other instruments whose price reacts similarly to a particular security, a defined basket of securities, or a securities index. ING Bank maintains a strategic portfolio with substantial equity exposure in its banking books. This equity exposure mainly consists of the investments in associates of EUR 1,813 million (2007: EUR 2,010 million) and equity securities held in the Available-for-Sale portfolio of EUR 1,863 million (2007: EUR 3,627 million). The value of equity securities held in the Available-for-Sale portfolio is directly linked to equity security prices with increases/decreases being recognised (except in the case of impairment) in the revaluation reserve. During the year ended 31 December 2008 the revaluation reserve relating to equity securities held in the Available-for-Sale portfolio (2007: EUR 518 million) and a high amount of EUR 1,969 million (2007: EUR 2,580 million). Investments in associates are measured in accordance with the equity method of accounting and the balance sheet value is therefore not directly linked to equity security prices.

#### **Real Estate**

Real estate price risk arises from the possibility that real estate prices will fluctuate affecting both the value of real estate assets and earnings related to real estate activities.

ING Bank has three different categories of real estate exposure on its banking books. First, ING Bank owns buildings it occupies. Second, ING Bank has a Real Estate Development company for which results are dependent on the overall real estate market, although the general policy is to mitigate risk by pre-sale agreements where possible.

Third, ING Bank is one of the largest real estate investment management companies in the world in terms of assets under management. For various real estate funds, ING Bank has co-invested seed capital and bridge capital to support the launch of new funds. A decrease in real estate prices will cause the value of this seed and bridge capital to decrease and will lower the level of third party assets under management, which in turn will reduce the fee income from this activity.

The crisis in the financial markets could lead to a further slowdown of the world economy in general. These global economic factors could also have future negative consequences for the value of real estate assets.

For the third category mentioned above real estate price shocks will have a direct impact on reported net profit. As of Q4 2008 ING Bank has EUR 7.0 billion of real estate related investments (corrected for Canadian minority stake). ING Bank's real estate exposure (i.e. including leverage and committed purchases) is EUR 8.9 billion of which EUR 4.9 billion is revalued through P&L and EUR 4.0 billion is not revalued through P&L, but is either booked at cost or is revalued through equity.

Real Estate expo	sure revalued through	P&L				
	Residential	Office	Retail	Industrial	Other	Total
Europe	1	893	454	133	98	1,579
Americas	237	172	234	1,199	295	2,137
Australia	3	93	261	126	51	534
Asia	244	99	278	7	19	647
Total	485	1,257	1,227	1,465	463	4,897
Real Estate expo	sure not revalued thro	ugh P&L				
	Residential	Office	Retail	Industrial	Other	Total
Europe	644	1,500	853	81	359	3,437
Americas	78	158	7		24	267
Australia	22	1	87		147	257
Asia						
Total	744	1,659	947	81	530	3,961

# **ING BANK – LIQUIDITY RISK**

As with other bank market risks, liquidity risk falls under the supervision of the ALCO function within ING Bank with ALCO Bank as the highest approval authority.

# Definition

Liquidity risk is the risk that ING Bank or one of its subsidiaries cannot meet its financial liabilities when they come due, at reasonable cost and in a timely manner. Liquidity risk can materialise both through trading and non-trading positions. Within ING Bank the liquidity risk framework has been determined by ALCO Bank, which bears the overall responsibility for liquidity risk. The liquidity risk framework is further cascaded down the organisation under the responsibility of the regional and local ALCOs. The main objective of ING's liquidity risk framework is to maintain sufficient liquidity in order to ensure safe and sound operations. For this purpose liquidity risk is considered from three different angles namely from a structural, tactical and a contingency point of view.

# Structural liquidity risk

Structural liquidity risk is the risk that the structural, long term balance sheet can not be financed timely or at a reasonable cost. In this view of liquidity risk the total on and off balance sheet positions are considered from a structural asset and liability management perspective. For this purpose ALCO Bank established a working group consisting of Corporate Market Risk Management, Capital Management and Financial Markets that focuses on liquidity risk aspects from a going concern perspective. The main objective of the working group is to maintain a sound liquidity profile through:

- Maintaining a well diversified mix of funding sources in terms of instrument types (e.g. unsecured deposits, commercial paper, long term bonds or repurchase agreements), fund providers (e.g. professional money market players, wholesale or retail clients), geographic markets and currencies;
- Actively managing access to the capital markets by regularly issuing public debt in all material markets and the maintenance of investor relations;
- Holding a broad portfolio of highly marketable assets that can be used to obtain secured funding;
- Maintaining an adequate structural liquidity gap taking into account the asset mix and both the secured and unsecured funding possibilities of ING Bank;
- Maintaining a funds transfer pricing methodology in which ING Bank's cost of liquidity is adequately reflected both under a going concern and a contingency perspective.

# **Tactical liquidity risk**

From a tactical, short-term perspective the liquidity risk resulting from the short term cash and collateral positions is managed. ALCO Bank has delegated day-to-day liquidity management to Financial Markets Amsterdam, which is responsible for managing the overall liquidity risk position of ING Bank, while regional and local Financial Markets departments are responsible for managing liquidity in their respective regions and locations.

Within Financial Markets the focus is mainly on the daily and intraday cash and collateral positions and it is policy to sufficiently spread day-to-day funding requirements. For this purpose the Treasury function monitors all maturing cash flows along with expected changes in core business funding requirements.

The liquidity risk management function is delegated to CMRM, which bears the responsibility for liquidity risk stress testing and for the identification, measurement and monitoring of the liquidity risk position. For the measurement and monitoring of the actual liquidity position the focus is on the daily cash and collateral position. For stress testing purposes the liquidity risk positions are calculated in line with the regulatory reporting requirements for liquidity risk of the Dutch Central Bank. For this purpose ING Bank's weekly and monthly liquidity positions are stress tested under a scenario that is a mix between a market event and an ING specific event. The resulting liquidity positions are corrected for liquidity surpluses in inconvertible currencies and in locations with restrictions on capital transfer.

## **Contingency liquidity risk**

Contingency liquidity risk relates to the organisation and planning for liquidity management in times of stress. Within ING a specific crisis team is responsible for the liquidity management in times of crisis. This crisis team consists of the CRO, the CFO, the Executive Board member responsible for Wholesale Banking, the Directors of CMRM and Capital Management and all the main treasurers of both ING Bank and ING Insurance. Within ING it is policy to have adequate and up-to-date contingency funding plans in place throughout the organisation. The main objective of ING's contingency funding plans is to enable senior management to act effectively and efficiently at times of crisis. The contingency funding plans are established for addressing temporary and long-term liquidity disruptions caused by a general event in the market or an ING specific event. These plans ensure that all roles and responsibilities are clearly defined and all necessary management information is in place. The contingency funding plans are regularly tested both on consolidated and local level in order to be best prepared for potential liquidity risk issues.

#### **ING INSURANCE**

ING is engaged in selling a broad range of life and non-life insurance products. Risks from these products arise with respect to the adequacy of insurance premium rate levels and provisions for insurance liabilities and capital position, as well as uncertainty as to the future returns on investments of the insurance premiums. Risks are classified as insurance risk (actuarial and underwriting), market risk, liquidity risk, credit risk, business risk and operational risk.

The responsibility for measurement and management of credit risk and operational risk resides with Corporate Credit Risk Management (CCRM) and Corporate Operational Risk Management (CORM) respectively. Corporate Insurance Risk Management (CIRM) is responsible for insurance risk (actuarial and underwriting) market risk and liquidity risk measurement and management, business risk measurement, as well as ensuring that investment mandates adequately address credit portfolio risk.

#### **Risk management governance**

ING's Insurance Risk Management (IRM) is organised along a functional line comprising three levels within the organisation: the corporate, business line and business unit levels. The General Manager of CIRM, the Chief Insurance Risk Officer, heads the functional line and reports to the Corporate CRO. Each of the business lines and business units has a similar function headed by a Chief Insurance Risk Officer (business line and business unit CIRO). This layered, functional approach ensures consistent application of guidelines and procedures, regular reporting and appropriate communication vertically through the risk management function, as well as providing ongoing support for the business. The scope, roles, responsibilities and authorities of the risk management function at different levels are clearly described in an Insurance Risk Management Governance Framework to which all consolidated business units and business lines must adhere.

The objective of the insurance risk management function is to provide the business a sustainable competitive advantage by fully integrating risk management into the tactical daily business activities as well as ING's broader business strategy. Insurance Risk Management accomplishes this through four core activities. First, the IRM function ensures that products and portfolios are structured, underwritten, priced, approved and managed appropriately in compliance with internal and external rules and guidelines. Second, IRM ensures that the ING Insurance risk profile is transparent and well understood by management and stays within delegated authorities, with a 'no surprises' approach to reporting and monitoring risks. Third, IRM ensures that both risk and reward are adequately considered in the development of business strategy, for example by supporting the planning and allocation of Economic Capital and limits during the strategic planning process. Finally, IRM ensures that these steps are understood by ING's stakeholders, including shareholders, rating agencies, regulators and policy holders.

#### **Risk management policies and tools**

To ensure appropriate risk management, CIRM in close co-operation with the business line CIROs, has developed Standards of Practice guidelines and tools to manage risks. While these standards are principle based, they include mandatory requirements to which the business unit CIRO must adhere.

A critical aspect of risk management is that all new products are designed, underwritten and priced appropriately. This is explicitly covered by the Standard of Practice for the Product Approval and Review Process (PARP). This standard includes requirements related to risk profile, traditional and value-oriented pricing metrics and targets, and documentation. In addition to insurance and market risks, the requirements refer to operational risk, legal and compliance risk, etc. For these risks, the IRM network works closely together with the other relevant risk departments. The PARP also includes requirements to assess sensitivities to changes in financial markets, insurance risk (e.g. mortality and claims development), compliance risks and operational risks, as well as assessment of the administration and accounting aspects of the product.

Other standards prescribe quarterly insurance risk reporting, ALM procedures and reporting, actuarial and economic assumption setting, reserve adequacy testing and embedded value measurement and reporting, amongst others.

ING Insurance has developed an Economic Capital approach similar to that used within ING Bank as one of its core risk measurement tools. More details on the Economic Capital model are described below. In 2007, ING Insurance introduced ECAPS, a new intranet-based Economic Capital reporting system which is based on replicating portfolio techniques. The ECAPS system provides a well controlled and automated basis for Economic Capital and risk reporting, and also provides greatly enhanced market risk analysis tools for business units and corporate reporting purposes. ECAPS relies on an innovative replicating portfolio methodology. CIRM expects this system to be the foundation of its internal fair value and solvency model, including the calculation of capital requirements following the introduction of Solvency II. Through 2008 the system has been enhanced and functionality expanded.

To further manage risk, ING Insurance has implemented several limit structures. Examples include but are not limited to the following:

- Market Value at Risk (MVaR) limits that provide the fundamental framework to manage the market and credit risks
  resulting from the Insurance operations' asset / liability mismatch;
- Credit risk concentration limits;
- Mortality concentration limits;
- Catastrophe and mortality exposure retention limits for its insurance risk; and
- Investment and derivative guidelines.

More information on some of these limits is included in the sections below.

#### **Reserve adequacy**

CIRM instructs and supervises all ING entities to ensure that the total insurance liabilities of ING Insurance (both reserves and capital) are tested for adequacy taking into account the insurance premium rate levels and the uncertainty of future returns on investments. This is done by evaluating insurance liabilities on current best estimate actuarial assumptions plus a risk margin, ensuring that the reserves remain adequate based on current assumptions. The assumed investment earnings are a combination of the run-off of portfolio yields on existing assets and new money and reinvestment rates. For new money and reinvestments long-term best estimate assumptions are taken into account, although current new money rates are used for the short-term reinvestments. For most products stochastic testing is required, taking the 90% point as the testing outcome. In the case where deterministic testing is used the 90% confidence level is achieved by subtracting risk margins of 20% of the best-estimate interest rates or 1%, whichever is higher.

ING's policy for reserve adequacy testing is disclosed in the 'Principles of valuation and determination of results' section. As of 31 December 2008 (and 31 December 2007), reserves for ING's insurance businesses in aggregate are adequate at a 90% confidence level. All business lines are adequate on a stand alone basis at a 90% confidence level as well. However, as a result of the severe economic downturn during late 2008 and its effects on products that are sensitive to interest and equity markets movements, the net insurance liabilities for US retail annuity products and ING Life Japan were insufficient at both the 90th percentile and 50th percentile level of the stochastic test. For US retail annuity the inadequacy was EUR 1.6 billion (90th percentile) and EUR 0.6 billion (50th percentile). For ING Life Japan the inadequacy was EUR 0.4 billion at the 90<sup>th</sup> percentile and less than EUR 0.1 billion at the 50<sup>th</sup> percentile. In both cases management is investigating various actions to improve the reserve adequacy, including de-risking the variable annuity products.

# ING INSURANCE RISK PROFILE

#### **Economic Capital ING Insurance**

The objective of the ING Insurance Economic Capital framework is to achieve an advanced risk and capital measurement and management structure that:

- Covers all the risks in the business units and is applied consistently across all risks and business units;
- Facilitates and encourages adequate risk and capital management, including the proper pricing of products and sound capital allocation decisions.

The ING Insurance Economic Capital model is based on a 99.95% one-year Value at Risk framework. It is important to note that since industry practice relating to Economic Capital is still evolving and moreover Solvency II standards are still under discussion, ING Insurance models are expected to evolve as a result. Solvency II currently calls for a 99.5% Value at Risk standard for internal models which is a lower risk threshold than used in ING's model.

The ING Insurance Economic Capital model is described in more detail in the Model Disclosure section.

Economic Capital disclosures relating to ING Insurance include diversification benefits that arise within ING Insurance. The following table provides an Economic Capital break down by risk category with diversification benefits proportionally allocated to the risk types:

Economic capital break-down ING Insurance by risk category<sup>(1)</sup>

	2008	2007
Credit risk (including Transfer risk)	891	1,021
Market risk	8,455	15,258
Insurance risk	1,557	3,293
Other risks <sup>(2)</sup>	2,779	3,627
Total insurance operations	13,682	23,199

(1) The Economic Capital outcomes do not reflect any potential tax benefit resulting from the loss that occurs under the specified circumstances.

<sup>(2)</sup> Other risk includes operational risk as well as business risk (covering expense risk and lapse risk).

Total diversification across these risk types is 34% for 2008 (31% for 2007).

The Economic Capital for ING Insurance is mostly related to market risks, both hedgeable and non-hedgeable. Overall, Economic Capital and risk profile reduced significantly during 2008. The primary change came from selling the Taiwan business (EUR 5.7 billion). In addition there were several changes to the risk profile in various businesses from derisking, which included selling and hedging equity exposures, closing interest rate positions by investing longer, and entering (forward starting) receiver swaps and swaptions.

Also the EC model has been changed to reflect the illiquidity in the insurance portfolios resulting from current dislocated markets. The change is described in more detail in the model disclosure section.

The following table provides the Economic Capital breakdown by business line with diversification benefits proportionally allocated to the business lines.

## Economic Capital break-down by ING Insurance business line

	2008	2007
Insurance Americas	6,049	6,541
Insurance Asia/Pacific	2,817	7,033
Insurance Europe	2,985	5,890
Corporate Line Insurance (1)	1,831	3,735
Total insurance operations	13,682	23,199

<sup>(1)</sup> Corporate Line includes funding activities at ING Insurance level, explicit internal transactions between business unit and Corporate Line, managed by Capital Management, and corporate reinsurance. The responsibility (and risk) of free assets located within the business line for which there is no explicit transfer via a Corporate Line transaction remain at the business unit level.

While the figures above are shown by business line, the diversification of risks across ING businesses is calculated across business units. Total diversification between ING Insurance's business units and the Corporate Line Insurance is 39% for 2008 (33% in 2007).

The sale of ING Life Taiwan and recent developments in the financial markets have distorted last years balance between the regions. The Taiwan sale decreases capital needs in both Asia/Pacific (EUR 4.0 billion) and Corporate Line (EUR 1.7 billion). Americas is now the largest user of Economic Capital. De-risking measures brought Americas otherwise increased capital need down by EUR 1 billion. Europe saw some substantial de-risking over the year. Most listed direct equity exposures are now sold or mostly hedged, and interest rate risk was reduced substantially. Economic Capital in Asia/Pacific and Europe has now an equal balance for financial and non-financial risks, while capital in Americas is still primarily driven by interest rate, credit spread and client fund related equity risk.

The corporate line risk relates mostly to foreign exchange translation risk related to the potential loss of market value surplus in non-EUR denominated business units.

## ING INSURANCE – MARKET RISKS

ING Insurance is exposed to market risk to the extent to which the market value of surplus can be adversely impacted due to movements in financial markets; these include interest rates, equity prices, implied volatilities of options, foreign exchange rates and real estate prices. Changes in financial market prices impact the market value of ING's current asset portfolio and hedging derivatives directly as well as the calculated market value of ING's insurance liabilities. The following table provides information on Economic Capital split by risk category:

# Economic Capital insurance market risks

	2008	2007
Interest rate risk	2,739	6,021
Credit spread risk	880	1,012
Equity risk	1,293	3,357
Real estate risk	252	669
Implied volatility risk	1,857	2,108
Foreign exchange risk	1,434	2,091
Total	8,455	15,258

Interest rate risks are the largest market risks for ING Insurance. Interest rate risks are most significant in the United States and Europe. In general, the primary risk is to falling interest rates. The table shows a notable decrease in the interest rate risk during 2008 as a consequence of the divestment of ING Life Taiwan.

Credit spread risk relates to potential increases in credit spreads from investments in fixed income securities. Real estate risk exists mostly in the Netherlands and relates in a large part to direct real estate investments. Implied volatility risk is the risk that market values of assets or liabilities change due to movements in market option prices. In general, ING is exposed to increases in implied volatility as the guarantees provided to customers become more expensive. Foreign exchange risk is small in the business units. Hence, most of the exposure relates to the risk of change in the market value surplus of non-EUR businesses.

The equity risk has become less dominant due to risk reduction and hedging activities, relating to both direct and indirect exposure. Direct exposure relates to the holding of shares and is most significant for ING in the Netherlands. Indirect exposure relates to the potential loss of fee income from unit linked, variable annuity, and pension fund business across all regions. Direct exposure represents approximately 20% of the equity risk, after taking the hedge positions into account.

ING continued to manage the market and credit risks resulting from its global Insurance operations by setting Market Value at Risk (MVaR) limits. On at least an annual basis, ALCO Insurance sets an aggregate MVaR limit for ING Insurance and sub-limits for each of the business lines, which are ultimately allocated to the business units. The MVaR limit is measured in a manner consistent with the Economic Capital measure, i.e. based on a 99.95% confidence level over a one-year horizon.

The MVaR limits are managed by ALCO Insurance at the relevant organisational level. The Group Insurance ALCO determines the aggregate limit and ensures that the Group stays within the limit and allocates the sub-limits to business lines, with similar roles for the business line and business unit ALCO's. Limit breaches by business lines are reported to ALCO Insurance and resolved in accordance with the policy within the next quarter.

CIRM consolidates and monitors the MVaR exposures of the business lines including diversification effects on a quarterly basis. Together with ING Capital Management, MVaR is managed within the limits. In 2008 and 2007 there were no breaches of the overall ING Insurance MVaR limit.

#### **Real Estate**

Real Estate price risk arises from the possibility that real estate prices will fluctuate affecting the value of real estate assets.

ING Insurance has two different categories of real estate exposure on its insurance books. First, ING Insurance owns buildings it occupies. Second, ING Insurance has invested capital in several real estate funds and direct real estate assets. A decrease in real estate prices will cause the value of this capital to decrease and as such ING Insurance is exposed to real estate price shocks.

The crisis in the financial markets could lead to a further slowdown of the world economy in general. These global economic factors could also have future negative consequences for the value of real estate assets

The second category can be divided in minority stakes in real estate assets that are revalued through equity and stakes in funds managed by ING and direct real estate revalued through P&L. Only for the last category real estate price shocks will have a direct impact on reported net profit.

As of Q4 2008 ING Insurance has EUR 4.1 billion of real estate related investments. ING Insurance' real estate exposure (i.e. including leverage) is EUR 6.6 billion of which EUR 4.9 billion is revalued through P&L and EUR 1.7 billion is not revalued through P&L, but is either booked at cost or is revalued through equity.

Real Estate exposu	ire revalued through	P&L				
	Residential	Office	Retail	Industrial	Other	Total
Europe Americas Asia	438	1,609	2,207	522	28 93	4,804 93
Total	438	1,609	2,207	522	121	4,897
Real Estate exposu	ire not revalued thro	ugh P&L				
	Residential	Office	Retail	Industrial	Other	Total
Europe	781	250	9	20	469	1,529
Americas		149				149
Asia		21				21
Total		420	9	20	469	1,699

# Earnings at Risk (EaR)

Complementing Economic Capital, which is based on a market value analysis, ING Insurance also measures risk based on IFRS earnings. More specifically, using scenario analysis, ING Insurance measures the potential sensitivity of realised pre tax earnings of the insurance operations to an increase/decrease of different risk factors over a full year. These earnings sensitivities are used as input into the ING Group Earnings at Risk measure, where these sensitivities are fully diversified with the Bank. Interpretation of the underlying earnings sensitivities must be done individually as ING does not assume that all of the scenarios presented below will happen concurrently.

Earnings sensitivities are defined on a shock scenario at the 90% confidence level on pre tax IFRS earnings, projected one year forward from the calculation date. Therefore the table below provides earnings sensitivities to an instantaneous shock at the 90% confidence level projected through to 31 December 2009. The EaR information does not include ING Canada which was divested in January.

# Earnings sensitivities for insurance market risks

	2008	2007
Interest rate (1% up)	-67	-161
Interest rate (1% down)	82	125
Equity (15% down)	-795	-613
Real Estate (8% down)	-525	-570
Foreign Exchange (10% worst case)	-224	-338

The table presents figures before diversification between risks. For interest rate risk, we present the effect of a parallel shock of 1% across all regions and take the sum of the shocks. For the Japan business, a shock of 0.5% is applied since this business operates in a lower interest rate environment. Foreign exchange risk includes the sum of both local business currency risk plus translation risk for earnings of non-Euro business units.

The table shows that real estate fluctuations can have a relatively large impact on earnings since all price volatility is fully reflected in earnings for real estate investments. The impact on earnings of interest rates and equity price changes are normally lower than the economic and shareholder's equity impact given current accounting rules. The sensitivity results do reflect the impacts of asymmetric accounting whereby the hedges must be marked-to-market through the earnings while the liability value is not.

Earnings at Risk is an indicator of future earnings at risk in case markets deteriorate. Earnings can deteriorate significantly when certain thresholds have been reached for impairment and DAC unlocking. At the moment the increase in equity Earnings at Risk - despite de-risking - is driven by DAC unlocking and negative revaluations being close to or at hitting impairment triggers. Offset from the hedging programs existing at year end is taken into account. Further hedges have been put in place since 31 December 2008.

# **ING Insurance - Liquidity risk**

As with other ING Insurance market risk, liquidity risk falls under the supervision of the ALCO function. Liquidity risk is the risk that ING Insurance or one of its subsidiaries cannot meet its financial liabilities when they come due, at reasonable cost and in a timely manner. ING Insurance monitors structural, tactical and contingency liquidity risk and tests adverse scenarios to measure its resiliency against these risks. The severe economic downturn in late 2008 has caused liquidity risk to increase substantially. To manage these risks, ING Insurance has increased its allocation to liquid assets

# **ING INSURANCE – INSURANCE RISKS**

#### General

Actuarial and underwriting risks are risks such as mortality, longevity, morbidity, adverse motor or home claims development, etc., which result from the pricing and acceptance of insurance contracts. In general, these risks cannot be hedged directly in the financial markets and tend to be mitigated by diversification across large portfolios. They are therefore primarily managed at the contract level through standard underwriting policies, product design requirements as set by ING's IRM function, independent product approval processes and risk limitations related to insurance policy terms and conditions agreed with the client.

#### Measurement

For portfolio risks which are not mitigated by diversification, the risks are managed primarily through concentration and exposure limits and through reinsurance and/or securitisation. Aggregate portfolio level limits and risk tolerance levels are set in reference to potential losses stemming from adverse claims in ING's insurance portfolios which are reviewed annually by the ING Group Executive Board. ING Group has established actuarial and underwriting risk tolerance levels in specific areas of its insurance operations as described below. For non-life insurance, risk tolerance levels are set by line of business for catastrophic events (e.g. natural perils such as storms, earthquakes and floods) and for individual risks.

For the main non-life units (in the Benelux and Canada) the risk tolerance for property and casualty (P&C) business is generally set at 2.5% of the Group's expected after-tax earnings. For 2008, this translated into an aggregated (pre-tax) risk tolerance level of EUR 265 million for the Benelux (2007: EUR 235 million). For Canada the pre-tax risk tolerance level is set at EUR 244 million (derived from the above mentioned EUR 265 million, but allowing for outside interests) (2007: EUR 214 million). For the first half of 2008 the risk tolerance limit of EUR 265 million also applied to Mexico.

In order to determine how much reinsurance protection is required in each of the regions, these risk tolerance limits are compared to the estimated maximum probable loss resulting from catastrophic events with a 1 in 250 probability of occurrence which is in line with industry practice. The maximum probable loss estimates for Fire business are based on risk assessment models that are widely accepted in the industry.

For the smaller non-life units, the (pre-tax) risk tolerance level for catastrophe related events for 2008 was set at EUR 5 million (2007: EUR 5 million) per event per business unit.

With respect to life business, ING Group's (pre-tax) risk tolerance level for 2008 was set at EUR 22 million (2007: EUR 22 million) per insured life for mortality risk. While life insurance risks are considered to be naturally diversifiable by virtue of each life being a separate risk, group contracts may result in significant exposures. For potential losses, resulting from significant mortality events (e.g. pandemics or events affecting life insurance contracts involving multiple lives), ING applies a separate risk tolerance level which equalled EUR 1,100 million in 2008 (2007: EUR 750 million). The potential impact of pandemics continues to be modelled by ING based on studies published by respected international organisations.

Overall exposures and concentrations are actively managed within limits and risk tolerance levels through the purchase of external reinsurance from approved reinsurers in accordance with ING's reinsurance credit risk policy. Particularly for the property and casualty portfolio, ING purchases protection which substantially mitigates ING's exposure due to natural catastrophes. ING believes that the credit risks to which it is exposed under reinsurance contracts are minor, with exposures being monitored regularly and limited by a reinsurance credit risk policy.

For catastrophic losses arising from events such as terrorism, ING believes that it is not possible to develop models that support inclusion of such events in underwriting in a reliable manner. The very high uncertainty in both the frequency and severity of these events makes them, in ING's opinion, uninsurable. For the non-life business, losses that result from these events are generally not covered unless required by law. In various countries industry pools have been established to mitigate the terrorism risk to which the individual insurers are nevertheless still exposed. ING participates in such pools.

The following table provides an overview of the Economic Capital for insurance risks, split into mortality risk, morbidity risk and risk related to P&C products:

## **Economic Capital Insurance risks**

	2008	2007
Mortality	781	803
Morbidity	483	2,141
P&C	293	349
Total	1,557	3,293

The mortality risk relates to the potential for increasing deaths (life risk) or decreasing deaths (longevity risk). This risk relates to a potential mortality catastrophe or to changes in long term mortality rates. As noted, ING manages these risks via limits and external reinsurance. Morbidity risk relates to disability products in the Netherlands and some health riders sold in Asia. The decrease in morbidity risk capital relates to the sale of ING Life Taiwan, which had a block of guaranteed health riders providing benefits for 30-60 years into the future. Finally, property and casualty risk exists primarily in Canada and the Benelux

Through scenario analyses, ING Insurance measures the sensitivity of pre-tax earnings of the insurance operations to an increase/decrease of the insurance risk factors over a one year period. These changes to earnings can relate to realised claims or any other profit item that would be affected by these factors. ING assumes that not all the shifts presented below will happen at the same time.

Earnings sensitivities are defined on a shock scenario at the 90% confidence level on pre-tax IFRS earnings, projected one year forward from the calculation. Therefore the table below provides earnings sensitivities to an instantaneous shock at the 90% confidence level projected through to 31 December 2008. The EaR information does not include ING Canada which was divested in January.

## Earnings sensitivities for Insurance risks

	2008	2007
Mortality	-61	-54
Morbidity	-105	-124
P&C	-49	-132

The table above presents figures after diversification between insurance risks and diversification across business units of ING Insurance. The largest earnings sensitivity to P&C claims relates to health and P&C claims in the Netherlands.

# **ING INSURANCE – CREDIT RISKS**

The credit risks in the general accounts portfolio within ING Insurance are subject to the same principles, policies, definitions and measurement as those of the banking operations. The credit risks are measured and monitored by Corporate Credit Risk Management (CCRM) as well as local credit risk managers within the various locations where credit risk is taken within ING Insurance and ING Investment Management. Within ING Insurance, the goal is to maintain a low risk, well diversified credit risk portfolio that meets or exceeds market based benchmark returns.

ING Insurance's credit exposure arises from the investment of insurance premiums in assets subject to credit risk, largely in the form of unsecured bond investments, and smaller amounts of residential mortgages and structured finance products. In addition, credit exposure also arises from derivatives, sell/repurchase transactions, securities lending/borrowing and reinsurance contracts used to hedge the portfolio. ING Insurance has a policy of maintaining a high quality investment grade portfolio.

Overall portfolio credit risk limits are established and integrated into investment mandates by ALCO Insurance based on asset or investment category and risk classes. Individual issuer limits are determined based on the obligor's rating. These limits are managed by the region where the parent company is domiciled but may be sub-allocated to regional or local portfolios. In addition, each Insurance company has one or more investment mandates that may differ by insurance portfolio specify credit risk appetite by issuer type and quality.

The credit risk classification of issuers, debtors and counterparties within the Insurance companies' credit risk portfolios continues its transition to the methodology used by the banking operations. Similar to ING Bank, ING Insurance uses risk classes which are calibrated to the probability of default of the underlying issuer, debtor or counterparty. These ratings are defined based upon the quality of the issuer in terms of creditworthiness, varying from investment grade to problem grade expressed in S&P equivalents.

#### Risk classes: ING Insurance portfolio, as % of total outstandings<sup>(1)</sup>

		Insurance	Insurance Americas Insurance Europe		ce Europe	A	Insurance Asia/Pacific		Total ING Insurance	
		2008	2007	2008	2007	2008	2007	2008	2007	
1	(AAA)	27.5%	27.9%	34.8%	28.8%	5.3%	10.7%	27.2%	25.5%	
2-4	(AA)	19.6%	18.5%	20.2%	26.9%	<b>29.6%</b>	37.3%	<b>21.1%</b>	24.6%	
5-7	(A)	18.9%	22.3%	23.5%	21.7%	43.1%	32.8%	23.7%	23.8%	
8-10	(BBB)	20.0%	18.4%	9.3%	11.1%	9.6%	6.9%	14.8%	13.9%	
11-13	(BB)	5.2%	2.9%	10.7%	10.0%	0.9%	3.4%	6.6%	5.5%	
14-16	(B)	5.0%	5.0%	1.2%	1.0%	9.4%	6.1%	4.2%	3.7%	
17-22	(CCC & Problem Grade)	3.8%	5.0%	0.3%	0.5%	2.1%	2.8%	2.4%	3.0%	
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

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The ratings reflect probabilities of default and does not take collateral into consideration.

ING Insurance risk class distribution remained fairly stable during 2008. The shift from AA to AAA at Insurance Europe is the result of data quality improvements. The deterioration in Asia/Pacific is due to the divestment of ING Life Taiwan.

# Risk concentration: ING Insurance portfolio, by economic sector<sup>(1)</sup>

	Insurance	Insurance Americas		Insurance Europe		Insurance Asia/Pacific		Total ING Insurance	
	2008	2007	2008	2007	2008	2007	2008	2007	
Non-Bank Financial Institutions	53.3%	52.3%	<b>26.4%</b>	19.6%	18.7%	16.8%	39.1%	34.7%	
Central Governments	3.2%	1.7%	33.7%	35.8%	22.7%	38.7%	16.6%	20.1%	
Commercial Banks	6.2%	11.0%	12.8%	8.1%	23.7%	16.2%	10.8%	10.8%	
Private Individuals	3.5%	3.5%	10.5%	13.9%	11.8%	7.8%	7.1%	7.9%	
Real Estate	8.7%	7.9%	1.7%	1.6%	2.0%	1.6%	5.4%	4.6%	
Utilities	4.0%	4.0%	1.7%	1.4%	4.0%	2.9%	3.2%	2.9%	
Natural Resources	3.5%	3.5%	0.6%	1.1%	1.6%	1.4%	2.2%	2.3%	
Other	17.6%	16.1%	12.6%	18.5%	15.5%	14.6%	15.6%	16.7%	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

<sup>(1)</sup> Based on credit risk measurement contained in lending, pre-settlement, money market and investment activities.

The ratings reflect probabilities of default and does not take collateral into consideration.

Overall risk concentrations remained stable in 2008 for ING Insurance with a small shift towards Commercial Banks as a result of increased equity derivatives trading business at Insurance Europe. Private Individuals in Europe decreased, due to the sale of EUR 4.5 billion in residential mortgages to Retail Banking (Nationale Nederlanden Hypotheek Bedrijf). Food, Beverages and Personal Care accounted for 2.5% in 2007, but fell below the 2.0% threshold in 2008. All other industries not shown in the table above have less than 2.0% concentrations.

## Largest economic exposures: ING Insurance portfolio, by country <sup>(1)</sup>

	Insurance	Insurance Americas Insurance		ce Europe	Insurance Asia/ Pacific		Total ING Insurance	
amounts in EUR billion	2008	2007	2008	2007	2008	2007	2008	2007
United States	58.6	56.2	2.0	1.7	1.1	2.3	61.7	60.2
Netherlands	0.8	0.7	14.6	22.0	0.2	0.3	15.6	23.0
France	0.3	0.4	6.8	5.9	0.1	0.5	7.2	6.8
Italy	0.3	0.3	5.9	6.4	0.2	0.2	6.4	6.9
South Korea	0.1	0.1	0.0	0.0	6.2	6.6	6.3	6.7
United Kingdom	1.8	1.9	3.5	3.1	0.4	0.4	5.7	5.4
Germany	0.3	0.3	5.3	6.1	0.1	0.3	5.7	6.7
Canada	5.5	6.0	0.1	0.1	0.0	0.0	5.6	6.1

(1) Only covers total exposures in excess of EUR 5 billion, including intercompany exposure with ING Bank.

The portfolio in the Netherlands decreased principally due to the sale of residential mortgages to Retail Banking (Nationale Nederlanden Hypotheek Bedrijf). There were no other significant shifts in the portfolio concentration.

# **ING Group - NON-FINANCIAL RISKS**

In addition to the above financial risks (credit, market, insurance and liquidity risk) the next paragraphs describe the nonfinancial risks, being operational and compliance risks.

## **OPERATIONAL RISKS**

Operational risk is the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. It includes the related risk of reputation loss, as well as legal risk whereas strategic risks are not included. Effective operational risk management leads to more stable business processes (including IT systems) and lower operational risk costs.

ING recognises the following operational risk areas:

- Control risk is the risk of loss due to non-adherence to business policies or guidelines. Control risks can lead to losses incurred due to non-compliance with controls established in connection with items such as governance procedures, new product approval procedures, and/or project management methods. Control risk can stem from improper or insufficient monitoring of entities or activities.

- The risk of a loss caused by unauthorised employee activities, including -but not limited to- unauthorised approvals or overstepping of authority are considered *unauthorised activity risk*.

- Processing risk deals with the risk of losses due to failed transaction processing or process management. These events are normally not intentional and usually involve documenting or completing current business transactions.

- Employment practice risk is the risk of loss due to actions which are consistent with employment, health or safety laws, or agreements, from payment of personal injury claims or from diversity /discrimination events. Managing this risk means: meeting health and workplace regulations; preventing discrimination and harassment; and in case this does happen, taking adequate counter measures.

- Personal and physical security risk is the risk of criminal and environmental threats that might endanger the security of ING personnel (within and outside ING locations, while travelling or being expatriated) and ING assets or might have an impact on the ING organisation.

- Information (Technology) risk is the risk of loss due to inadequate information security, resulting in a loss of information confidentiality and/or integrity and/or availability. Aspects of information (technology) risks are user access controls, platform security controls, change management controls, sourcing controls, security monitoring controls and fundamental information security controls.

- Continuity risk is the risk of events (e.g. natural disasters, power outages, terrorism) leading to a situation that threatens the continuation of business (including people and assets).

- Internal and external fraud risk is the risk of loss due to deliberate abuse of procedures, systems, assets, products and/or services of ING by those who intend to deceitfully or unlawfully benefit themselves or others.

Clear and accessible policies and minimum standards are embedded in ING business processes in all business lines. An infrastructure is in place to enable management to track incidents and operational risk issues. A comprehensive system of internal controls creates an environment of continuous improvement in managing operational risk. ING uses this knowledge (including lessons learned from incidents) to improve the control of key processes.

# **Organisation of Operational Risk Management**

The General Manager Corporate Operational Risk management (CORM) reports directly to the CRO and is responsible for managing operational risks and developing and establishing the Operational Risk Framework within ING Group, ING Bank and ING Insurance. The General Manager Corporate ORM also establishes and approves the Minimum Standards, and assists and supports the Executive Board in managing ING's operational risks. The ORM function is organised along functional reporting lines. The Business Line operational risk managers report functionally to the General Manager CORM.

The CORM function consists of functional departments for operational risks & risk reporting, for Information (Technology) risks, for Security & Investigations and for SOX testing. The CORM function is responsible for developing and communicating ING's operational risk framework, policies, minimum standards and guidelines. The corporate function advises the business line ORM staff, monitors the quality of operational risk management and co-ordinates the group-wide reporting of operational risks to the Executive Board.

ORM uses a layered functional approach within business lines to ensure systematic and consistent implementation of the group-wide ORM framework, policies and minimum standards. The local and regional/division ORM Officer has the responsibility to assist local and regional/division management in managing operational risk. The business line ORM officer has a monitoring role in the operational risk management process and manages and supervises all functional activities of the ORM officers in the business line and region/division.

To avoid potential conflicts of interests, it is imperative that the ORM officer is impartial and objective when advising business management on operational risk matters in their business unit or business line. To facilitate this, a strong functional reporting line to the next higher level ORM officer is in place. The functional reporting line has clear accountabilities with regard to objective setting, remuneration, performance management and appointment of new ORM staff.

## **Operational risk framework**

ING has developed a comprehensive framework supporting and governing the process of identifying, mitigating, measuring and monitoring operational risks thus reflecting the stages described in the COSO model (Committee of Sponsoring Organisations of the Treadway Commission). Generic mandatory controls are described in the ORM policy house. The policies have been refreshed in 2008 and are structured in line with the risk areas. Each policy has one or more minimum standards.



At all levels in the organisation Operational Risk Committees (ORCs) are established that identify, measure and monitor the operational risks of the region or business unit with appropriate quality of coverage (granularity) and to ensure that appropriate management action is taken by the responsible line managers at the appropriate level of granularity. ORCs, chaired by the business management, steer the risk management activities of the first and second line of defence in their entities. On a group level the Operational & Residual Risk Committee approves the operational risk capital model.

The operational risk appetite within ING is defined as the acceptable and authorised maximum level of risk, in each of the operational risk areas that must be adhered to in order for ING to achieve its business plan within approved budgets. This risk appetite is monitored quarterly through the Non-Financial Risk Dashboard which reports the key risk exposures.

Processes are in place to identify key threats, vulnerabilities and the associated risks which might cause adverse events. Event identification is performed proactively and precedes a risk assessment. Different techniques for event identification exist within ING, e.g. the Integrated Risk Assessment (IRA), scenario analysis, external events inventories, internal event analysis (e.g. based on information from incident reporting), key risk indicator events and threat scans.

At least once a year all business units perform an integrated risk assessment with involvement of other risk departments such as Compliance and Legal.

Based on the results of the risk assessment, response measures must be determined for the identified risks. Risk response actions balance the expected cost for implementing these measures with the expected benefits regarding the risk reduction. Risk response can be achieved through several combinations of mitigation strategies, for example reducing likelihood of occurrence, reducing impact, risk avoidance, risk acceptance or through the transfer of risk. Tracking takes place through the global Audit Outstanding scan system.

Certain operational risks can best be transferred to the insurance market if risks are high but difficult to mitigate internally. In order to protect ING against financial consequences of uncertain operational events ING has acquired insurance policies issued by third-party insurers with world-wide cover for (Computer) Crime, Professional Liability, Directors and Officers Liability, Employment Practices Liability and Fiduciary Liability. The portion of the risks that ING retains is of a similar magnitude to the risk retained for casualty business-related catastrophe exposures.

Control activities are defined as the control measures that have been implemented and are maintained. Generic mandatory controls are described in the ORM policy house.

Management at all levels in the organisation periodically need information on their key operational risks (including compliance and legal risks) and mitigating actions. In order to make it easier for management to access this kind of information, the Non-Financial Risk Dashboard (NFRD) was developed and rolled out in 2008 to all business units.

To ensure robust operational risk management ORM develops and communicates the ORM framework, policies and guidance throughout ING Group and monitors the key risks of ING Group to ensure that ING's risk policies and Minimum Standards are fully implemented. Business units have to demonstrate that the appropriate steps have been taken to control their operational risk. ING applies scorecards to measure the quality of management of the operational risk processes within a business unit. Scoring is based on the ability to demonstrate that the required risk management processes are in place with the business units. The scorecards indicate the level of control within the business units. These scorecards are integral part of ING's Dutch Central Bank approved regulatory capital model (AMA).

The Operational Risk Capital model of ING is based on a Loss Distribution Approach (LDA). The Loss Distribution is based on both external and internal loss data exceeding EUR 1 million. The model is adjusted for the scorecard results taking into account the specific quality of control in a business line and the occurrence of large incidents ('bonus/malus'). This provides an incentive to local (operational risk) management to better manage operational risk. From 2008 onwards, the model is used for regulatory capital reporting purposes as well. ING received approval for its Advanced Measurement Approach (AMA) from the Dutch Central Bank.

#### **Developments in 2008**

#### Enhancements of the Non-financial Risk Dashboard

The introduction of a Non-financial Risk Dashboard (NFRD) was given priority by the Chief Risk Officer (CRO) with the aim to keep focus on the key risk exposures when looking at the risk faced by business. The objective of the NFRD is to deliver comprehensive and integrated risk information on Operational, Compliance and Legal Risk, using a consistent approach and risk language at all levels in the organisation. It gives management an overview of all key risks within their jurisdiction with forced ranking and a clear description of the risks and responses so that they can balance priorities. This supports the ING strategy for making things "easier" whereby management is better able to manage risk and give priority where it is necessary.

Corporate Operational Risk Management, in close coordination with Group Compliance Risk Management and Corporate Legal, has been rolling out the NFRD in the ING organisation. The NFRD covers all BUs in the ING organisation. A number of existing risk reports, e.g. the IT Risk & Control report, Compliance report and the Incident report, have been integrated into the NFRD.

The NFR Dashboard was presented to the Executive Board and the Audit Committee in November 2008. As of the fourth quarter 2008 report, the quarterly NFRD will be a recurring agenda point in Executive Board and Audit Committee meetings.

#### Product Approval Process

ING has revised the Product Approval Process (PAP) Minimum Standard to ensure that adequate risk assessment procedures are executed prior to the development and/or launch of new or modified products. The PAP ensures that adequate controls are put in place to manage the inherent risks associated with new products, related processes and system implementation, and other initiatives.

#### IT Risk forecasting

An IT risk forecasting model is introduced to represent the expected IT risk profile after implementation of defined mitigating actions. Through the model, management can determine if additional mitigation projects are necessary to reduce or to maintain the IT risks at an acceptable level.

#### Continuity risk

As a risk response to mitigate the risk of power supply failure in one of the data centres ING accelerated an improvement programme for the business continuity and disaster recovery capability and platform security of its data centres.

## Fraud risks

Based on the Corporate Anti-Fraud policy each business unit had to conduct a fraud-risk assessment and translated this into an anti-fraud implementation plan (to prevent both internal and external fraud). In reaction to the SocGen incident ING initiated a project aiming to further mitigate all trading risk related fraud risks.

# Refreshment of policies and standards

ORM policies and Minimum Standards have been further enhanced to fully encompass the integrated approach of Operational, Compliance and Legal risks (between risk departments and along functional lines). All major IT risk policies and standards have been re-assessed against the current internal and external threats and adapted consequently.

# **COMPLIANCE RISK**

Compliance Risk is defined as the risk of damage to ING's integrity as a result of failure (or perceived failure) to comply with relevant laws, regulations, internal policies and procedures or ethical standards. In addition to reputational damage, failure to effectively manage Compliance Risk can expose financial institutions to fines, civil and criminal penalties, payment of damages, court orders and suspension or revocation of licenses. A failure (or perceived failure) can adversely impact customers, staff and shareholders of ING.

ING believes that fully embedded Compliance Risk Management preserves the trust its customers, shareholders and staff have in ING and is important for the way ING does business. Managing Compliance Risk is fundamental to driving value. The pursuit of long term business sustainability requires proper conduct of business activities in accordance with the high ethical standards of ING's Business Principles. These principles not only reflect laws and regulations, but are also based on ING's core values: integrity, entrepreneurship, professionalism, responsiveness and teamwork.

Clear and accessible policies and procedures are required to be implemented in ING business processes in all Business Lines. An infrastructure is in place to enable management to track current and emerging Compliance Risk issues, to communicate these to internal and external stakeholders, and to drive continuous improvement. ING understands that good Compliance Risk Management involves understanding and delivering on the expectations of customers and other stakeholders, thereby improving the quality of key relationships based on honesty, integrity and fairness.

# The Scope of the Compliance Risk Management function

The Compliance Risk Management function focuses on managing the risks arising from laws, regulations and standards which are specific to the financial services industry and which are issued by legislative and regulatory bodies relevant to ING's businesses, or by ING Corporate Compliance Risk Management. The Compliance Risk Management function actively educates and supports the business in managing areas such as anti-money laundering, preventing terrorist financing, conflicts of interest management, sales and trading conduct and customer interest and protection.

ING separates Compliance Risk into four conduct-related integrity risk areas, shown below with examples of sub-risks in each risk area:

Client Related Integrity Risk	Personal Conduct Related Integrity Risk	Organisational Conduct Related Integrity Risk	Financial Services Conduct Related Integrity Risk	
<ul> <li>Money laundering</li> <li>Terrorist financing</li> <li>Political or reputational exposed person</li> <li>Client engagements or transactions with sanctioned countries</li> </ul>	<ul> <li>Market abuse &amp; personal trading</li> <li>Breaches of the ING Business Principles or local code of conduct</li> <li>Outside positions by ING officers</li> <li>Gifts or entertainment given or received; bribery.</li> <li>External incident reporting</li> </ul>	<ul> <li>Organisational conflicts of interest, market abuse and insider trading.</li> <li>Anti-trust/competition law</li> <li>New or modified products and services (e.g. customer base, design) and governance changes</li> <li>Agreed sector /industry standards.</li> <li>Regulatory registration and reporting requirements</li> </ul>	<ul> <li>Marketing, sales &amp; trading conduct</li> <li>Conduct of advisory business</li> <li>Complaint handling</li> <li>Transparency of product offerings (e.g. costs, disclosures).</li> <li>Data protection/privacy</li> <li>Third party intermediaries as representatives of ING</li> </ul>	

To ensure that staff is protected when raising issues and to help identify Compliance Risks, ING has a Whistleblower procedure which encourages staff to speak up if they know of or suspect a breach of external regulations or internal policies or business principles.

## The organisation of Compliance Risk Management

The Chief Compliance Officer (CCO) reports directly to the CRO and is responsible for developing and establishing the company-wide Compliance Risk Management Charter & Framework. The CCO also establishes the Minimum Standards for managing Compliance Risks and assists and supports the Executive Board in managing ING's Compliance Risks. The Compliance Risk Management function is organised hierarchically at the Corporate Level and along functional reporting lines in the Business Lines. It is part of the second line in ING's three lines of defence model.

The Group Compliance Risk Management function is made up of Corporate Compliance Risk Management and Business Line Compliance with the CCO and a Reporting and Analytics team overseeing both areas. Corporate Compliance Risk Management is responsible for developing and communicating ING's Group Compliance Risk Management Charter and Framework, policies and guidance for key areas of Compliance Risk and provides advice to Business Line Compliance staff on Group policy matters.

ING uses a functional approach within Business Lines to ensure systematic and consistent implementation of the company-wide Charter & Framework and Minimum Standards and related policies and procedures. The local Compliance Officer has the responsibility to assist local management in managing Compliance Risk within that business unit. The regional or division Compliance Officer has a management and supervisory role of all functional activities of the Compliance Officers in the respective region or division. The Business Line Compliance Officers perform this task for their Business Line and also provide leadership and overall direction to the regional or divisional Compliance Officers.

To avoid potential conflicts of interests, it is imperative that the Compliance Officer is impartial and objective when advising business management on Compliance Risk in their Business Unit, region, division or Business Line. To facilitate this, a strong functional reporting line to the next higher level Compliance Officer is in place. The functional reporting line has clear accountabilities relating to objective setting, remuneration, performance management and the appointment of new Compliance Risk Management staff as well as vetoing and escalation.

# **Compliance Risk Management Policies and Tools**

The responsibility of the Compliance Risk Management function is, in accordance with the Charter and Framework, to proactively:

- Identify, assess, monitor and report on the Compliance Risks faced by ING;
- Assist, support and advise management in fulfilling its responsibilities to manage Compliance Risks;
- Advise any employee or officer with respect to their (personal) obligations to manage Compliance Risks.

The Framework consists of three key components: the Compliance Chart, an Advisory component and the Scorecard as illustrated below



# A. The Chart

The Chart is an output from five key activities carried out in accordance with the requirements of the Framework:

- 1. Identification of Compliance Risk Obligations;
- Risk Assessment;
- 3. Compliance Risk Mitigation (includes Training and Education);
- 4. Compliance Risk Monitoring (includes Action Tracking);
- 5. Compliance Risk Reporting (includes Incident Management).

# **B.** Advisory

Compliance Officers proactively advise their CEO, Management, local boards and committees, the next higher level Compliance Officer, and employees on Compliance Risk, responsibilities, obligations and concerns.

# C. Scorecard

The Compliance Risk Management function works with the Operational Risk Management Scorecard process to evaluate how well the Compliance Risk Management Framework is embedded in each business. Scoring is based on the ability of the business unit to demonstrate that the required policies and procedures are implemented. The scoring indicates the level of control within the business units and the result is integrated with the Operational Risk Management results into ING's Dutch Central Bank approved regulatory capital model (AMA).

# **Developments in 2008**

# - ING Compliance Risk Management's revised Charter and Framework

In August the Executive Board of ING issued the ING Group Compliance Risk Management Charter and Framework ('Charter and Framework') to help businesses more effectively manage their Compliance Risks expectations. The fundamental requirements of the 2005 "Compliance Policy and Minimum Standards" remain and are enhanced in terms of changing Board and stakeholder expectations. The Charter states the roles and responsibilities for managing Compliance Risk.

The Charter and Framework and the supporting documentation were produced in close collaboration with the Business Lines, Legal and Compliance Risk Management and business leaders.

# - Updated FEC Policy and Guidance

The ING Group Financial Economic Crime (FEC) Policy provides a clear statement on Financial Economic Crime in order to guard against any involvement in criminal activity, and to participate in international efforts to combat money laundering and the funding of terrorist and criminal activities. The FEC Policy has been updated in 2008 explicitly recognising the differences between business lines and their inherent FEC related risk, without lowering existing standards. A risk-based approach allows each Business Line to identify the criteria to measure potential money laundering risks and implement proportionate measures and controls to mitigate these risks. Managing Compliance Risk in accordance with the ING Group FEC Policy and Minimum Standards is required.

The FEC Minimum Standards are the basis for (local) procedures covering

- Customer Due Diligence and Know Your Customer
- Anti-Money Laundering and Anti-Terrorist Financing.

# - Compliance Risk Management Training and Education

In 2008, Compliance Risk Management has developed and is executing several global training programmes, including:

- "Managing Compliance Risk in your Business". This programme targets the top four echelons of management (approximately 13,500) worldwide during 2008/2009. Managers attending the training will not only gain a deeper understanding of the effective embedding of ING's three lines of defence model and the strategic value of Compliance Risk Management, but also learn practically what actions they can take to strengthen the management of Compliance Risk as well as how to apply the Framework and tools.
- 2 "MLRO Master Class". This new training programme targeted approximately 200 Money Laundering Reporting Officers. The course aims to strengthen our MLROs' understanding of the enhanced FEC and regulatory policy requirements.
- 3: "Compliance Officer Training". This programme is designed for all Compliance Officers worldwide (approximately 750), across, and in cooperation with, all Business Lines. The training programme has sections on technical knowledge, personal effectiveness and skills.

Additionally, the e-Learning course "Compliance, more than money" created in 2006 and made mandatory by the Netherlands Board for all ING employees in the Netherlands was refreshed. The follow-up course named "Compliance, part of our business" takes into account changes in financial services laws and regulation and internal ING policies and procedures.

# - Enhanced Business Aligned Communications

To ensure continued awareness of the importance of effectively managing Compliance Risk a campaign entitled "Play to Win, Know the Rules" was launched. The key message of the campaign is that managing Compliance Risk is an integral part of managing business and must be embedded into daily practice and business strategy. The campaign helps further drive understanding and behaviours relating to the management of Compliance Risk. It includes a one-pager with key messages for business teams, as well as a PowerPoint presentation and short videos by each Executive Board member stating why they believe managing Compliance Risk is integral to building sustainable businesses.

The four key messages defining good Compliance Risk Management are:

- knowing, understanding and applying the rules;
- a culture where people are trusted and accountable;
- effectively managing Compliance Risk in our businesses, and
- vital for sustainable profitable growth our licence to operate.

Discussions with regulators and implementation of enhanced compliance and risk management procedures ING Bank N.V. has continued discussions with its Dutch bank regulator De Nederlandsche Bank (DNB) related to transactions involving persons in countries subject to sanctions by the EU, the US and other authorities and its earlier review of transactions involving sanctioned parties. In connection with that review and related discussions ING Bank has undertaken to complete the global implementation of enhanced compliance and risk management procedures, and to monitor the implementation of such procedures on an ongoing basis, as instructed by DNB. ING Bank also remains in discussions with authorities in the US and in other jurisdictions concerning these matters, including with respect to ongoing information requests, and it is not possible to predict at this time the outcome thereof. Financial institutions continue to experience close scrutiny by regulatory authorities, governmental bodies, shareholders, rating agencies, customers and others to ensure they comply with the relevant laws, regulations, standards and expectations. Bank and insurance regulators and other supervisory authorities in Europe, the US and elsewhere continue to oversee the activities of financial institutions to ensure that they operate with integrity and conduct business in an efficient, orderly and transparent manner. ING seeks to meet the standards and expectations of regulatory authorities and other interested parties through a number of initiatives and activities, including scrutinizing account holder information, payment processing and other transactions to support compliance with regulations governing money-laundering, economic and trade sanctions, bribery and other corrupt practices. The failure or perceived failure by ING to meet applicable standards in these areas could result in, among other things, suspension or revocation of ING's licenses, cease and desist orders, fines, civil or criminal penalties and other disciplinary action which could materially damage ING's reputation and financial condition, and accordingly ING's primary focus is to support good business practice through its Business Principles and group policies.

# Discontinuation of business with certain countries

As a result of our frequent evaluation of all businesses from economic, strategic and risk perspectives ING continues to believe that for business reasons doing business involving certain specified countries should be discontinued, which includes that ING has a policy not to enter into new relationships with clients from these countries and processes remain in place to discontinue existing relationships involving these countries. At present these countries include Myanmar, North Korea, Sudan, Syria, Iran and Cuba. ING Bank N.V. is now in the final stages of liquidating the Netherlands Caribbean Bank, which is since 2007 a 100% owned subsidiary.

# MODEL DISCLOSURES

The risk profile of ING Group, as described in the risk management section is captured by three key risk metrics:

- Earning at Risk;
- Capital at Risk;
- Economic Capital.

The analyses set out in the risk management section provide a valuable guide to investors as to the risk profile of ING Group. Users of the information should bear in mind that the analyses provided are forward looking measures that rely on assumptions and estimates of future events, some of which are considered extreme and therefore unlikely to occur. In the normal course of business ING Group continues to develop, recalibrate and refine the various models that support risk metrics, which may result in changes to the risk metrics as disclosed.

This model disclosure section explains the models applied in deriving these three metrics. The methodology to derive the Earnings at Risk and Capital at Risk metrics, as presented in the ING Group risk dashboard, is described first. Thereafter, the methodologies used to determine Economic Capital for ING Bank, ING Insurance and ING Group are described. The risk models used for the ING Bank and Insurance Economic Capital calculations and the ING Group risk dashboard are reviewed on a periodical basis and validated by the internal Model Validation department. The ING Bank Economic Capital calculation is also used as part of the Basel II Pillar 2 Internal Capital Adequacy Assessment Process (ICAAP) and the Supervisory Review and Evaluation Process (SREP) that is performed regularly by the Dutch Central Bank.

# EARNINGS AND CAPITAL RISK

# Earnings at Risk

Earnings at Risk (EaR) measures the potential reduction in IFRS earnings over the next year relative to expected IFRS earnings. EaR is measured using a 90% confidence level (i.e. '1 in 10' stress scenario). Discretionary management interventions are not explicitly modelled unless their measurement can be based on historical performance tracking (e.g. regular or planned actions). It should be noted that the 90% confidence level used for EaR is not an absolute requirement, but regarded as a general guideline. For each major risk type the earnings sensitivities are calculated based on existing best-practice e.g. 1% instantaneous shock to interest rates. To reflect bottom-line IFRS earnings as close as possible in EaR measurement, the amount is compared to the forecasted earnings to determine risk appetite levels. The ING Bank credit risk component of EaR bank is adjusted for forecasted risk costs (addition to Loan Loss Provision).

The specific accounting treatments for AFS Debt Securities that requires a write down to market value regardless of the underlying estimated credit loss are not reflected under EaR. Also potential goodwill impairments are not included in the EaR determination.

# **Capital at Risk**

The Capital at Risk (CaR) measures the potential reduction of the net asset value (based on fair values) over the next year relative to expected value. CaR is measured using a 90% confidence level (i.e. '1 in 10' stress scenario). Discretionary management interventions are not explicitly modelled unless their measurement can be based on historical performance tracking (e.g. regular or planned actions).

Economic value is defined as the mark-to-market net asset value (assets less liabilities). For each major risk type the value sensitivities are calculated based on the existing Economic Capital methodology, applying the 90% confidence level. CaR risk appetite is measured against Available Financial Resources.

#### Aggregation model risk dashboard

To derive the Earnings at Risk and Capital at Risk figures at an ING Group level, the underlying risk inputs from the ING Bank and ING Insurance business units are aggregated bottom-up, using a combination of the 'variance-covariance' method and Monte Carlo simulation. For aggregation up to Group level, two sets of correlation assumptions are required, namely the Bank-Insurance correlations per risk type and inter-risk correlations.

The basic data input for the group risk dashboard is provided along 13 major risk types (e.g. equity risk Europe; see table below) and diversified within ING Bank or ING Insurance.

The first aggregation step is between ING Bank and ING Insurance for each major risk type. All risk capitals, except for credit risk that is already aggregated for ING Bank and ING Insurance, are delivered on a standalone basis for ING Bank and ING Insurance. These risk capitals are aggregated between ING Bank and ING Insurance using a variance-covariance approach. Depending on the accounting treatment the Bank - Insurance correlation factors used for EaR may differ from CaR correlation factors (e.g. for interest rate risk). The result of this aggregation step are Group diversified EaR and CaR figures for each major risk type.

## Major risk types distinguished

Risk type	Distribution used		
Credit and transfer risk (2)	KMV distribution		
Market risk (8)			
- Interest rate risk Europe, Asia and America			
<ul> <li>Equity risk Europe, Asia and America</li> </ul>			
– FX risk			
<ul> <li>Real estate risk</li> </ul>	Normal distribution		
Insurance risk (1)	Normal distribution		
Business risk (1)	Normal distribution		
Operational risk (1)	Empirical distribution		

(Note numbers in parentheses indicate the number of risk types distinguished (total of 13)).

A second aggregation step exists between these major risk types at an ING Group level. The Group diversified EaR and CaR figure for each major risk type are aggregated using a Monte Carlo simulation in combination with an inter-risk correlation matrix to obtain the overall EaR and CaR figures for ING Group. The outcomes of the simulation represent the potential losses arising from the major risk types, which are summed together to derive the aggregate potential losses. The diversified Group EaR or CaR is then calculated as the 90th percentile of the simulated aggregate potential losses.

# Principal assumptions of EaR and CaR measurement

CaR and EaR figures should always be viewed in the context of principal assumptions made to enable both comparability and updated measurement of ING Group's risk profile:

- Risk dynamics are based on historic observation; historical events are used as a proxy for future risk estimates e.g. price changes, defaults, dependencies of markets;
- Point-in-time risk profile of in-force business is presented; in general risk measurement does not include future volumes and margins;
- Discretionary management interventions are not explicitly modelled unless their measurement can be based on historical performance tracking (e.g. regular or planned actions);
- Correlation factors between risk types used for diversification are based on best estimate assumptions supported by statistical analysis of historical data, ING risk expert judgement, external benchmark studies and common logic;
- Behavioural assumptions for clients are included in risk measurement where applicable e.g. variable savings, embedded mortgage options or lapse ratios.

#### **Reporting Framework**

All data for each risk type and business line, as well as the empirical Group risk distributions, are uploaded to a webbased risk dashboard program. The aggregation and simulation steps, as described above, are performed in a secure server based environment.

# ECONOMIC CAPITAL ING BANK

Economic Capital is defined as the amount of capital that a transaction or business unit requires in order to support the economic risks it originates. In general Economic Capital is measured as the unexpected loss above the expected loss at a given confidence level. Specific measurement by risk type is described in greater detail in the separate risk type sections; i.e. credit and transfer and operational risk as well as market and business risk bank.

This Economic Capital definition is in line with the net market value (or surplus) definition. The process of Economic Capital modelling enables ING Bank to allocate Economic Capital to the business units and support risk-adjusted performance measurement (RAROC). By comparing Economic Capital figures with ING's available financial resources, adequate capital buffers can be ensured.

The following fundamental principles and definitions have been established for the model:

- ING Bank uses a one-sided confidence level of 99.95% consistent with ING's target debt rating (AA) and a oneyear time horizon to calculate Economic Capital;
- It is assumed that all currently known measurable sources of risk are included;
- The best estimate risk assumptions are as objective as possible and based on proper analysis of statistical data. There is one set of best-estimate assumptions for each risk type to be used at ING Bank;
- The Economic Capital calculation is based on fair value principles. Where complete and efficient markets exist, fair value is equal to market value;
- The Economic Capital calculations reflect known embedded options and the influence of client behaviour in banking products;

- The Economic Capital calculations are on a pre-tax basis and do not consider the effect of regulatory accounting and solvency requirements on capital levels;
- The framework does not include any franchise value of the business, discretionary management intervention or future business volumes and margins.

Further details are provided in the relevant model descriptions for each risk area.

#### **Aggregation model**

The main processes executed in the ING Bank Economic Capital aggregation model are depicted in the flowchart below. The white boxes show the processes performed by the model while the shaded box indicates inputs from other corporate risk departments.



As a foundation the correlations in the risk dashboard are applied based on a 90% confidence level, i.e. they correspond to the correlations observed in the 10% largest downward movements (a '1 in 10' event). As shown in the flow-chart, these correlation factors are stressed upwards where necessary to account for potential measurement inaccuracy in extreme events due to limited historic data observations. For aggregating other risk (business and operational), expert opinion is used.

The Economic Capital for ING Bank involves the aggregation of the underlying Economic Capitals of five risk types, namely credit, transfer, market, operational and business risks (latter two also referred to as other risks). These risk types are aggregated to provide a total diversified ING Bank Economic Capital by applying the variance-covariance approach with a 5 x 5 inter-risk correlation matrix.

For allocation of Economic Capital to units and products, diversification factors are calculated for each risk type. These factors are applied consistently throughout ING Bank. The level of diversification benefit is dependent on both the interrisk correlations as well as the relative size of the undiversified Economic Capital exposure for each risk type.

# **Reporting Framework**

For each business unit and product line, the gross Economic Capital for each risk type is delivered to MISRAROC - the financial data warehouse for RAROC and Economic Capital reporting of ING Bank. The net Economic Capital figures are calculated by taking the product of the gross Economic Capital and one minus the diversification factor. Total Economic Capital is calculated as the sum of the net Economic Capital for each risk type at all reporting levels.

# **CREDIT AND TRANSFER RISK**

Economic Capital for credit risk and for transfer risk is the portion of Economic Capital held to withstand unexpected losses inherent in the credit portfolios related to (unexpected) changes in the underlying creditworthiness of debtors or the recovery value of underlying collateral (if any). Credit risk and transfer risk capital are calculated on all portfolios which contain credit or transfer risk, including investment portfolios. The same methodology is used for both the banking and the insurance operations.

Economic Capital for credit risk and for transfer risk are calculated using internally developed models with a 99.95% confidence level and a time horizon of one year, which represents ING's desired credit rating.

ING uses a series of credit risk models that can be grouped into three principal categories: Probability of Default (PD) models, which measure the standalone creditworthiness of individual debtors; Exposure at Default models (EAD) which estimate the size of the financial obligation at the moment of default in the future; and Loss Given Default Models (LGD), which estimate the recovery value of the underlying collateral or guarantees received (if any) and the unsecured part. Collectively, ING uses over 100 models for credit risk. The various models can be grouped into three categories: statistical, expert and hybrid. Each model is individually reviewed and validated annually by the Model Validation department (MV), in order to determine the continued viability or need to adjust each individual model.
The Economic Capital formula for credit and transfer risks relies on seven different risk drivers. In addition to the PD, EAD, and LGD models mentioned above, the formula also considers the industry and the country of the debtor as well as the remaining term of the respective underlying transactions. Lastly, the formula considers the correlation of the individual transactions to the portfolio as a whole. ING uses Monte Carlo simulation tools to determine certain parameters which are then applied to individual transactions in determining the level of Economic Capital related to credit and transfer risk in a bottom up approach. The correlations, which are updated quarterly, are determined at a business line level, and diversification effects are applied at the transactional level.

The underlying formulas and models that are used for determining Economic Capital for credit and transfer risk are the same as those used for determining the level of regulatory capital that is required under Basel II (Pillar 1). Despite the fact that the same underlying formulas are used, (internal) Economic Capital and regulatory capital are not the same, due to various specific rules imposed by Basel II, such as regulatory caps and floors, and the use of the standardised approach for certain portions of ING's portfolio. These differences are permitted under the Basel II guidelines.

The table below summarises different capital measures used for different purposes and shows the difference in key elements and purposes.

Credit Risk Capital Measurements	Methodology	Location	Confidence level	Inputs	Purpose
Regulatory Capital	Basel II Formula	Vortex Basel Engine ('VBE') in the Central Risk Database	99.90%	Basel II model outputs	RWA
Economic Capital	Risk Adjusted Capital (RAC) Closed Algebraic Formula	Vortex Risk Engine ('VRE') in the Central Risk Database	99.95%	Basel II model outputs excluding Basel II caps and floors, maturity, repayment schedules, correlation factors, migration matrix. Some inputs come from EC- MC portfolio calculator but with 99 95% confidence level	Pricing, Economic Capital for credit at transactional level and above
Capital and earnings at risk	Monte Carlo simulation based on aggregate portfolio ('EC-MC portfolio	Stand alone tool using same data from Central Datawarehouse as VRE	90.00%	Basel II model outputs excluding Basel II caps and correlation factors, migration matrix country and industry.	Risk Dashboard at Line of Business Level and

With regard to methodology, the EC-MC Portfolio calculator provides a sophisticated and consistent framework to measure capital numbers for credit risk. Because of its complexity and required calculation time the EC-MC Portfolio calculator is more suited for portfolio calculation, rather than to be implemented in an environment requiring real time reporting at a transactional level for day-to-day management, pricing of new transactions and limit setting. As a result, Economic Capital figures are based on RAC figures that are derived from the EC-MC Portfolio calculator but are not fully equivalent. The main characteristics are:

- RAC is calculated at facility level with closed algebraic formulas rather than from a Monte Carlo Simulation. The RAC algebraic formula includes parameters which incorporate the impact of portfolio dynamics, such as correlations and diversification effects. These parameters are derived through a regression of the outputs of the EC-MC portfolio calculator;
- Due to its proprietary nature the inputs in the EC-MC Portfolio calculator are subject to certain technical caps and floors (LGD/EAD is constant and PD migration matrix is capped) which are not applicable in RAC. Also, due to the implemented mathematical routines the EC-MC portfolio calculator is subject to a minimum Probability of default (PD) and maximum tenor, which are not applicable in RAC.

Additionally the banking operations use the RAC model for determining the optimal pricing on (new) lending transactions in order to ensure that ING meets its desired RAROC returns.

During 2008, the Economic Capital levels for credit and transfer risk were calculated on a weekly basis for most of the Wholesale Bank and ING Direct investment portfolios and for the SME portfolios within the Retail banking operations. For consumer loans, residential mortgages, credit cards, and the insurance portfolios, the calculations are made on a monthly basis. On a quarterly basis, the Economic Capital for credit risk and transfer risk figures are consolidated with the corresponding Economic Capital components from other disciplines.

### Governance of Economic Capital for Credit and Transfer Risk

All PD, EAD and LGD models are approved by the Credit Risk Committee (CRC) after thorough review of documentation by the Model Development Steering Committee (MDSG) and MV. In addition, each model is validated on an annual basis by MV. Each model has both a credit risk and a front office co-sponsor. Both the MDSG and the CRC have participation from both credit risk officers as well as the front office to ensure maximum acceptance by the organisation.

### MARKET RISK BANK

#### General

Economic Capital for market risk is the Economic Capital necessary to withstand unexpected value movements due to changes in model risks and market variables, such as interest rates, equity prices, foreign exchange rates and real estate prices. Economic Capital for market risk is calculated for exposures both in trading portfolios and non-trading portfolios.

#### Measurement

Economic capital for market risk is calculated using internally developed methodologies with a 99.95% confidence interval and a horizon of one year, which represents extreme events and ING's rating. The Economic Capital for market risk for non trading portfolios is calculated for each risk type, while for trading portfolios it is calculated on a portfolio level. The calculations for Economic Capital market risk include real estate risk, foreign exchange rate risk, equity price risk, interest rate risk and model risks.

Real estate price risk includes both the market risks in the investment portfolio and the development risk of ING Real Estate. The real estate price risk for ING Real Estate is calculated by stressing the underlying market variables. The stress scenarios at a portfolio level take into account all diversification effects across regions and real estate sectors. Also, the leverage of participations in the real estate investment funds is taken into account.

For the real estate development process, in addition to price risk, the risk drivers of vacancy rate and construction delays are taken into account. Furthermore the risk model differs for each development phase (i.e., research, development, and construction) to appropriately reflect the risk taken in each phase. Using correlations, all risk drivers, and stages are used to calculate a possible market value loss representing the Economic Capital for market risk for the development portfolio.

For the direct market risks, the actual VaR (measured at a 99% confidence interval, a one day holding period and under the assumption of an expected value of zero) of the trading and non-trading portfolios is taken as a starting point for the Economic Capital calculations for market risk. To arrive at the Economic Capital for market risk, a simulation based model is used which includes scaling to the required confidence interval and holding period. In determining this scaling factor, several other factors are also taken into account like the occurrence of large market movements (events) and management interventions.

Economic Capital for market risk for the large non-trading portfolios within ING Retail Banking and ING Wholesale Banking is calculated for embedded option risk (e.g. the prepayment option in mortgages) and model risk. The model risk is calculated by stressing the underlying assumptions in the models for behavioural assets and liabilities. For example, the hedge for savings portfolios is based on assumptions with respect to developments of volumes and client rates. Deviations in these assumptions can lead to (ex-post) incorrect estimation of the typical interest rate maturity of saving deposits. If there is more outflow than initially modelled, the duration of the savings money may be lower than the duration of the investments, which leads to losses if interest rates go up. The economic capital figures of ING Direct capture the model risk of the behavioural liabilities in line with the model described above.

For the model applied to mortgage portfolios a similar rationale is employed. The quality of the hedge depends on assumptions with respect to prepayment behaviour. If these assumptions are wrong, the funding may be either too long or too short term. Similar to the above, the Economic Capital model for market risk is based on the estimated 99% confidence prepayment model error and the 99% confidence adverse interest rate change.

While aggregating the different Economic Capital market risk figures for the different portfolios, diversification benefits are taken into account as it is not expected that all extreme market movements will appear at the same moment.

The nature of market risk Economic Capital, evaluating the impact of extreme stress with a 99.95% confidence level, can sometimes be difficult to evidence in a statistical sound manner with the available historical data. The Economic Capital figures disclosed by ING Group are a best effort estimate based on available data and expert opinions.

### **OPERATIONAL RISK**

Operational risk is the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. It includes the risk of reputation loss, as well as legal risk, whereas strategic risks are not included. While operational risk can be limited through management controls and insurance, many incidents still have a substantial impact on the profit and loss account of financial institutions.

- The capital model, an actuarial model, consists of a combination of three techniques:
- Loss Distribution approach (LDA), which applies statistical analysis to historical loss data;
- Scorecard approach, which focuses on the quality of risk control measures within a specific business unit;
- 'Bonus/Malus' approach, which focuses on the actual operational incidents of a specific business unit.

### Loss Distribution approach

The main objective of the LDA approach is to derive an objective capital amount based on the size and the risk appetite of an institution and its business units. This approach estimates the likely (fat-tailed) distribution of operational risk losses over some future horizon for each combination of business line and loss event type. The main characteristic of the LDA is the explicit derivation of a loss distribution, which is based on separate distributions for event frequency (Poisson) and severity (Inverse Gaussian). The model uses both external and internal loss data above one million EUR.

The calculation of operational risk capitals for the units follows five basic principles:

- Principle 1: If the world gets riskier, the business units need more Economic Capital;
- Principle 2: If a business unit's size increases, so does its capital;
- Principle 3: If the business of a business unit is more complex, it needs more capital;
- Principle 4: If the level of control of a business unit is higher, it needs less capital;
- Principle 5: If the business units' losses from internal incidents exceed the level of expected loss accounted for in the first four framework principles, it needs more capital.

The capital calculated according to the first three is 'generic': if two business units operate in the same markets and have the same size, the resulting capital will be the same. The specific capital adjustments mentioned below adjust the generic capital of a specific institution to its specific operational risk capital.

### Scorecard approach (principle 4)

The scorecard adjustment reflects the level of quality of control in a specific institution. Scorecards aim to measure the quality of key operational risk management processes. The scorecard procedure concerns questions that require quantitative data, qualitative judgements or simple yes/no questions (e.g. indicating compliance with certain group policies). The scorecards are completed by all business units using self-assessment and reviewed by an expert panel who determines the final score. The set of scorecards then leads to an increase or decrease of the capital of the specific institution.

#### 'Bonus/Malus' approach (principle 5)

Units are assigned additional capital in case losses from internal incidents exceed the level of expected losses that have been accounted for in the LDA. When actual losses are lower than expected, the capital will be decreased. Only internal incidents above one million EUR from the last five years are used. The Bonus/Malus adjustments are capped at + and – 20% to prevent large capital fluctuations in total ING capital.

#### **BUSINESS RISK BANK**

The current calculation method applied within ING Bank defines business risk as the 'residual risk category' that includes all risks that are not covered by the explicitly defined (and managed/measured) credit/transfer, market and operational risk categories. In accordance with the residual risk definition, the measurement of business risk capital is based on a single risk factor; i.e. the volatility of the 'residual' profit and loss figures (for each BU) that are cleansed for the effects of other risk types. As a consequence there is no further gain in insight regarding sub business risks.

The level of the business risk capital is linked to the volatility of (cleansed historical) profit and loss data taking into account observed trends. In practice, this means that more stable earnings over time generally lead to less capital.

Using a T-distribution and the level of confidence, the volatility is then 'capitalised' to obtain a business risk capital. The T-distribution is a theoretical probability distribution, is symmetrical, bell-shaped and similar to the standard normal curve. However, the T-distribution has relatively more scores in its tails than the normal distribution.

As relatively short data series are available, a capital floor and cap are included in order to prevent the business risk capital from being under- or overestimated. The minimum (floor: 20%) and maximum (cap: 80%) are specified as a percentage of the operating costs and as such link business risk capital for units that operate at the floor to cost efficiency.

### ECONOMIC CAPITAL ING INSURANCE

Economic Capital, 'EC', is defined by ING as the amount of assets that needs to be held in addition to the market value of liabilities to assure a non-negative surplus at a 99.95% level of confidence on a 1 year time horizon. ING measures Economic Capital by quantifying the impact on the market value surplus (MVS) as a result of adverse events that occur with a specified probability related to the AA rating. Therefore ING's Economic Capital model is based on a 'Surplus-at-Risk' concept. The confidence level consistent with an AA rating has been defined as the 99.95% one-sided confidence level over a one-year horizon. The change in market value surplus (MVS) is the combined effect of changes in Market Value of Assets (MVA) minus market value of liabilities (MVL) and an adjustment for illiquidity spreads due to current dislocated asset markets. The MVS is adjusted to correct this asymmetry by applying an illiquidity spread to the insurance liability cash flows.

The adjustment of the MVS for the illiquidity of our insurance liabilities impacts the market risk in our Economic Capital model in the following ways:

- Interest Rate Risk: The illiquidity spread applied on our liability cash flows effectively reduces the duration of our liabilities and therefore reduces the duration mismatch between our assets and liabilities resulting in a reduced interest rate risk.

Credit Spread Risk: The Economic Capital model stresses both the asset spreads and the illiquidity spread on our liabilities. The netting of asset spread risk with illiquidity liability spread risk results in a lower credit spread risk.
 Foreign Exchange Risk: The adjustment of the MVS for illiquidity results in a reduced net exposure to foreign currency movements and in particular US dollar. This results in a lower foreign exchange risk"

The MVL consist of the Financial Component of Liabilities (FCL) and a Market Value Margin (MVM) for non-hedgeable risks (e.g. insurance risk). The MVM is calculated using a Cost-of-Capital approach based on an estimate of required shareholder return on Economic Capital.

The following fundamental principles have been established for the model:

- Economic Capital requirements are calculated to achieve a target AA rating for policyholder liabilities;
- All sources of risk should be considered;
- The best estimate actuarial assumptions should be as objective as possible and based on a proper analysis of
  economic, industry, and company-specific statistical data. There is one set of best-estimate assumptions per product
  to be used for all purposes at ING;
- Valuation of assets and liabilities is based on fair value principles. Where complete and efficient markets exist, fair value is equal to market value;
- The Economic Capital and valuation calculations should reflect the embedded options in insurance contracts;
- The Economic Capital and valuation calculations are on a pre-tax basis and do not consider the effect of local regulatory accounting and solvency requirements on capital levels. Capital is assumed to be fully transferable between legal entities;
- The framework does not include any franchise value of the business. It does, however, include the expense risk
  associated with the possibility of reduced sales volume in the coming year.

ING quantifies the impact of the following types of risk in its Economic Capital model:

- Market risk for ING Insurance is the change in value based on changes in interest rates, equity prices, real estate prices, credit spreads, implied volatilities (interest rate and equity), and foreign exchange rates. It occurs when there is less than perfect matching between assets and liabilities. Market risk may exist in the insurance activities as a result of selling products with guarantees or options (guaranteed crediting rates, surrender options, profit sharing, etc.) that cannot be hedged given the assets available in a certain market. Market risk may also occur when there is an intentional mismatch between asset and liability cash flows even when it is possible to match or hedge the cash flows;
- Credit risk is the risk of changes in the credit quality of issuers due to defaults or credit migration of securities (in the
  investment portfolio), counter parties (e.g. on reinsurance contracts, derivative contracts or deposits given) and
  intermediaries to whom ING has an exposure. In addition to credit risk, ING includes a calculation of transfer risk for
  the risk of being unable to repatriate funds when required due to government restrictions;
- Business risk is defined as the exposure to the possibility that experience differs from expectations with respect to
  expenses, the runoff of existing business (persistency) and future premium re-rating;
- Operational risk is defined as the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. Operational risk capital is difficult to quantify, since it is driven by infrequent events of high severity, and can be significantly mitigated or exacerbated by the quality of internal controls and guidelines. It may be partially managed through the purchase of insurance;
- Life risk relates to deviations in timing and amount of the cash flows (premium payments and benefits) due to the
  incidence or non-incidence of death. The risk of non-incidence of death is also referred to as longevity risk to
  distinguish it from the risk associated with death protection products. ING notes risks due to uncertainty of best
  estimate assumptions concerning level and trend of mortality rates, volatility around best estimates, and potential
  calamities and recognises external reinsurance;
- Morbidity risk is the risk of variations in claims levels and timing due to fluctuations in policyholder morbidity (sickness
  or disability) recognising external reinsurance. A wide variety of policy classes are subject to morbidity risk, including
  disability, accidental death and disability, accelerated death benefits, workers compensation, medical insurance, and
  long-term care insurance;
- P&C risk comprises the risk of variability of size, frequency and time to payment of future claims, development of
  outstanding claims and allocated loss adjustment expenses for P&C product lines recognising external reinsurance.

Strategic business risk has been excluded from the EC calculations of ING Insurance.

### **Economic Capital Model**

The ING Economic Capital calculation is calculated based on a 'Surplus-at-Risk' concept. 'Surplus-at-Risk' is calculated based on the steps:

- Calculate the complete balance sheet (all assets and liabilities) on a Market Value basis;
- Generate Monte-Carlo shock scenarios for all of the relevant risk factors (market and non-market);
- Recalculate the complete balance sheet (all assets and liabilities) on a Market Value basis for each shock scenario.
   For practical purposes, the MVM is not recalculated under shock scenarios;
- Calculate the 99.95% worst case decrease in the Market Value Surplus over all the shock scenarios. This value will be the EC. Note that the shock scenario resulting in the Economic Capital will differ by business unit, business line, and at an ING Insurance level.

In 2007, ING Insurance has introduced ECAPS as an intranet-based Economic Capital reporting system utilising replicating portfolio techniques. The ECAPS system provides a well controlled and automated basis for Economic Capital and risk measurement. Each business unit enters the risk characteristics of its assets and liabilities into the ECAPS system on a regular basis. These risk characteristics are then translated to a uniform basis in the form of replicating portfolios of standardised financial instruments. Based on the constellation of replicating portfolios (including representations of non-market risks), the ECAPS system then is capable of calculating Economic Capitals at every level of aggregation. The following is a brief description of the model.



### Further details on Economic Capital model

Market Data and Scenario Generation

ING Insurance uses ING Bank's Global Market Database (GMDB) as a provider of market price and risk data for financial risk drivers. All market data is obtained from reputable data providers such as Reuters and Bloomberg. The GMDB operational team then validates the market data and calculates relevant risk parameters. This validated data is then automatically delivered to the ECAPS system.

Since ING Insurance operates in many developing financial markets, extrapolation algorithms are in place for extending beyond observable market data when this is needed for the calculation of the Market Value Liabilities and the Economic Capital. These algorithms are based on comparable data in mature markets.

Based on the market data from GMDB, ING calibrates two economic scenario generators:

- Risk Neutral Economic Scenario Generator (RN ESG): capable of generating multiple equity indices and exchange
  rates, consistent with a multi-currency dynamic term structure model. Scenarios are used in the cash flow projection
  to determine replicating portfolios. RN ESG scenarios are consistent with observed market prices of equity, FX and
  interest options;
- Real World Economic Scenario Generator (RW ESG): capable of jointly simulating all risk types, i.e. all market risks, credit risk, business risk, operational risk, life risk, morbidity risk and P&C risk. Diversification between risks is taken into account through a Gaussian copula, allowing for different marginal probability distributions at the risk driver level. RW ESG scenarios are consistent with historical time series of the market risk drivers using 5 years of weekly data observations. The volatilities are scaled from weekly to quarterly and the weekly correlations are used directly as estimates of quarterly correlations.

### Stochastic Cash Flows and Non-Market Risk Capital

The market risks in assets and liabilities are captured in and represented by stochastic cash flows in 500 scenarios. Business Units are responsible for generating these cash flows, the modelling of embedded options and guarantees and a proper mapping of risk drivers in the scenario set to cash flow determinants such as policyholder behaviour and management actions restricted to dynamic hedge programs and setting of crediting rates/profit sharing. To better capture the behaviour in the tails of the distribution, the set of scenarios consist of 300 Risk Neutral scenarios and 200 'Risk Volatile' scenarios with double volatilities. The average of the 300 Risk Neutral scenarios provides a check on the market value of the replicating portfolio. It should be noted that this serves only as a check, and that the actual market value of liabilities is derived directly from the replicating portfolio. The 200 Risk Volatile scenarios ensure that the replicating portfolio is calibrated against enough extreme scenarios such that it can be used safely in Economic Capital calculations.

Non-market risk Economic Capital is calculated by business units, Corporate Credit Risk Management and Corporate Operational, Information and Security Risk Management and inputted into ECAPS at the sub risk level. ECAPS than aggregates 21 sub-risk types (e.g. mortality and trend risk) to 9 non market risk types using a bottom-up Economic Capital diversification approach based on a matrix of tail correlations. The information inputs relate to 9 sub risk types:

- Credit risk;
- Business risk;
- Operational risk;
- Life risk catastrophe;
- Life risk non-catastrophe;
- Morbidity risk catastrophe;
- Morbidity risk non-catastrophe;
- P&C risk catastrophe;
- P&C risk non-catastrophe.

The inputs are used to calibrate marginal distributions for these risk types. These distributions, in combination with the Gaussian copula, are then used in the Economic Capital Calculation to measure diversification between market and non-market risks.

### **Replicating Portfolios**

To handle the full complexity of calculating diversification by Monte Carlo simulation, ING maps its assets and liabilities to a set of standard financial instruments. The set of standard instruments consists of zero coupon bonds, market indices, equity forwards, swaptions, callable bonds, F/X options and equity options. Assets and the financial components of the liabilities are represented by a portfolio of this standard set of instruments. A user interface allows the selection of different types of replicating instruments for different cash flow types. Then an optimal replicating portfolio is created that matches the risk profile of the stochastically generated cash flows as good as possible. The resulting replicating portfolio is used in the calculation of Economic Capital.

Through the inclusion of equity options, F/X options and swaptions in the set of replicating instruments, ING is able to incorporate implied volatility risk in the considered risk types. The same holds for the credit spread risk through the inclusion of credit risk bearing zero coupon bonds in the set of replicating instruments.

The quality of the replicating portfolio is monitored by several statistical criteria including R-squared and benchmarked against market value sensitivities such as duration, convexity, and changes in value for larger interest rate and equity shocks. High quality replicating portfolios are important in several ways. First, they ensure a good reflection of the actual risk profile and an accurate calculation of Economic Capital. Second, they assist Business Units in hedging strategies and management of Economic Capital. Third, the process of replicating portfolio calculations increases the understanding of the complex nature of insurance liabilities in a market consistent environment.

Replicating portfolios are currently determined from a single factor RN ESG interest rate model. This limits the ability of the replicating portfolios to pick up sensitivity to non-parallel shifts of the term structure of interest rates. Hence RW ESG interest rate scenarios for the Value at Risk calculations are generated using a single factor model as well. However both RN ESG and RW ESG models are consistent with respectively, the RN ESG and RW ESG volatility structure of interest rates.

### **Economic Capital Calculation**

ECAPS uses Monte-Carlo simulation to determine diversification benefits for the complete 'portfolio hierarchy', from business unit level up to an ING Group level. All diversification calculations are done within ECAPS and are driven by the Gaussian copula of all risk drivers using the underlying distributions applicable for each risk type.

For the calculation of Economic Capital ING uses a one-year time horizon. In practice, the model calculates instantaneous quarterly shocks and then annualises the resulting VaR statistic to determine an annualised EC. The quarterly shock is used to stabilise the results, to ensure the shocks are within a range that can be more credibly valued for assets and liabilities, to better capture the impact of dynamic hedge strategies, to more reasonably use weekly correlations of risk factors, and to get closer to actual risk practices and reporting cycles.

Using Monte-Carlo simulation, ING's Economic Capital model generates 20,000 possible 'states-of-the-world', by randomly simulating all risk drivers - simultaneously. For each state-of-the-world, the market value of assets and liabilities are recalculated and the change in value of the Market Value Surplus (MVS) is stored. All these changes in MVS are then sorted, and the 99.95% worst-case change in MVS is identified, to provide the Economic Capital level for the given level of aggregation.

### **ECONOMIC CAPITAL GROUP**

ING's Group Economic Capital and Bank-Insurance diversification benefit is determined by applying one common aggregation approach to the banking and insurance businesses. The starting point is the actual reported Economic Capital figures for ING Bank and ING Insurance, excluding inter-risk diversification. In addition an aligned set of bestestimate correlation assumptions is constructed by applying the weighted average of the Bank and Insurance specific inter-risk correlation assumptions for each of the five major risk types i.e. credit, market, insurance, business, and operational (See also Economic Capital model sections of Bank and Insurance).

The group diversification benefit is calculated by applying a 'Gaussian-copula' simulation approach. Due to the inherent uncertainties around correlation assumptions and changes in risk exposures the results are put to extensive sensitivity tests.

# Capital management amounts in millions of euros, unless stated otherwise

### **OBJECTIVES**

ING Group Capital Management (Capital Management) is responsible for the sufficient capitalisation of ING Group entities at all times in order to manage the risk associated with ING's business activities. This involves the management, planning and allocation of capital within ING Group. ING's Corporate Treasury is part of Capital Management. It executes the necessary capital market transactions, term (capital) funding and risk management transactions. Capital Management monitors and plans capital adequacy on a consolidated basis at three levels: ING Group, ING Insurance and ING Bank. The rating objective for these three entities is AA. Capital Management takes into account the metrics and requirements of regulators (EU Solvency, Tier-1 and BIS ratios and limits for hybrid capital), rating agencies (leverage ratios, Adjusted Equity) and internal risk management models and market value balance sheets (Economic Capital (EC) and Available Financial Resources (AFR)).

ING applies three main capital definitions:

- AFR This is a market value concept, defined as market value of assets (MVA) less the market value of liabilities (MVL) on the balance sheet. The liabilities do not include the hybrid capital and core Tier-1 securities which are included in AFR as equity. The valuation of ING Insurance includes an adjustment for portfolio illiquidity. In the absence of a full market value balance sheet for ING Bank, AFR Bank is defined as IFRS Equity including several adjustments (see table in this section). AFR of ING Group is defined as AFR Bank plus AFR Insurance minus core debt ING Group. AFR is used as the measure of available capital in comparison with EC employed. EC, or Economic Capital, is the amount of capital that is required to absorb unexpected losses in times of severe stress given ING Group's 'AA' target rating.
- Adjusted Equity This rating agency concept is defined as shareholders' equity plus core Tier-1 securities, hybrid capital, prudential filters and an adjustment for Value in Force and Deferred Acquisition Cost. See 'Capital Base' disclosures in this section. This capital definition is applied in comparing available capital to core debt (leverage) for ING Group and ING Insurance.
- Core Tier-1 capital, Tier-1 capital and total BIS capital are regulatory concepts applicable to ING Bank. Tier-1 capital is defined as shareholders' equity plus hybrid capital less certain prudential filters and deductible items. Tier-1 and BIS capital divided by risk weighted assets equals the Tier-1 and BIS ratio respectively. Core Tier-1 capital is equal to Tier-1 capital excluding hybrid capital.

Increasingly Capital Management considers AFR and EC employed when managing capital. AFR should exceed EC and for ING Group as a whole there should be a prudent buffer. The target for the buffer at Group level is 20%.

### POLICIES

The activities of Capital Management are executed on the basis of established policies, guidelines and procedures. The main documents that serve as guidelines for capital planning are the Capital Letter (comprising the approved targets and limits for capital), the Capital Planning Policy, the Dividend Policy and the Capital Request Policy. For the Corporate Treasury there are many policies and limits that guide the management of the balance sheets and the execution of capital market transactions.

The above capital definitions and policies have been approved by the ING Group Executive Board or delegated authorities.

### PROCESSES FOR MANAGING CAPITAL

In addition to measuring capital adequacy, Capital Management also ensures that sufficient capital is available through setting targets and limits relevant to the above mentioned metrics for ING Bank, ING Insurance and ING Group and ensuring adherence to the set limits and targets through planning and executing capital management transactions. The process is supplemented by stress testing and scenario analysis. The ongoing assessment and monitoring of capital adequacy is embedded in Capital Management's capital planning process and results in a quarterly Capital Adequacy Assessment Report which is presented to both the ING Group Finance and Risk Committee and the ING Group Executive and Supervisory Boards. The main objective of the assessment is to ensure that ING Group as a whole has sufficient capital relative to its risk profile both in the short and the medium term.

### CAPITAL ADEQUACY ASSESSMENT

As at 31 December 2008 and 2007, ING Group, ING Bank and ING Insurance met all key target capital ratios and metrics and regulatory requirements. As at 31 December 2008 and 2007, ING Group, ING Bank and ING Insurance were adequately capitalised in relation to their risk profile and strategic objectives.

### **BASEL II**

As of 1 January 2008, ING Bank calculates its capital ratios under Basel II. In 2008, ING Bank published risk weighted assets (RWA), Tier-1 and BIS capital and the accompanying capital ratios based on Basel II data only. In addition, ING publishes the minimum required capital level according to Basel II and according to the Basel I floor. The Basel I floor is a temporary minimum capital requirement based on 90% of Basel I RWA for 2008 and 80% of Basel I RWA for 2009. The minimum requirements according to Basel II and Basel I will both be compared to total BIS available capital according to Basel II.

### AVAILABLE FINANCIAL RESOURCES (AFR)

### **ING Group**

AFR ING Group is computed as follows:

Available Financial Resources – ING Group

	2008	2007
Total AFR Bank and Insurance	49,305	54,443
Less Core debt Group <sup>(1)</sup>	7,170	4,728
Total AFR ING Group	42,135	49,715
		1 1 1

<sup>(1)</sup> Investments in subsidiaries less equity (including core Tier-1 securities) of the Group holding company. This net debt position is provided as equity to ING Insurance and ING Bank.

### **ING Insurance**

AFR insurance is computed as follows:

### Available Financial Resources – ING Insurance

	2008	2007
IFRS Equity <sup>(1)</sup>	11,888	17,911
Plus hybrid capital (2)	2,934	2,202
Plus Mark-to-Market, tax adjustments and illiquidity		
adjustment	-366	2,597
Total AFR ING Insurance	14,456	22,710

<sup>(1)</sup> IFRS Equity 2008 adjusted for EUR 5 million shares of ING Group held by ING Insurance.

<sup>(2)</sup> Hybrid capital at market value.

ING continues to adjust AFR to reflect the illiquidity in its insurance portfolios as reporting AFR with MVLs discounted at the swap rates results in an asymmetry between the assets and liabilities in terms of reflection of illiquidity premiums. In addition to valuing assets at current market values, total portfolio illiquidity risk profile has been proxied by applying a AAA covered bond spread (128 bps over swaps) to the valuation of insurance liabilities cash flows. This adjustment has been applied to all business (excluding mainly unit-linked/variable business) except for the US and Japanese businesses where the AAA covered bond spread is further adjusted by the differential between local AAA corporate bond spreads and AAA European corporate bond spreads (further +72 bps and -21 bps over swaps for the US and Japan respectively). If a similar methodology had been applied at 31 December 2007, AFR at that time would have been EUR 26.7 billion. At year-end 2007 the swap rate was used.

### **ING Bank**

### Available Financial Resources – ING Bank

	2008	2007
IFRS Equity	22,889	25,511
Revaluation Reserve Debt Securities	5,185	1,097
Revaluation Reserve cash flow hedge	128	-428
Goodwill	-1,636	-1,428
Minorities	1,198	1,668
Deduction <sup>(1)</sup>		-1,084
Hybrid capital	7,085	6,397
Total AFR ING Bank	34,849	31,733

<sup>(1)</sup> Difference between loan loss provisions and expected loss is no longer deducted from AFR in 2008.

ING Bank paid dividends to ING Group of EUR 4.25 billion during the year. It received EUR 7.2 billion in capital injections from ING Group. Hybrid capital increased mainly due to the issuance of additional hybrid capital.

### **AFR/EC RATIOS**

AFR should exceed EC, and for ING Group as a whole there should be a prudent buffer. The target for the buffer at Group level is 20%. For details regarding the computation of EC see the section entitled 'Risk management'.

#### **AFR/EC Reconciliation**

	2008	2007
Available Financial Resources ING Group (1)	42,135	49,715
Group EC (2)	30,675	35,000
EC Group <sup>(3)</sup>		1,000
Total ING Group EC	30,675	36,000
AFR/EC Ratio	137%	138%
Surplus/(deficit)	11,460	13,715

(1) AFR ING Bank, amounting to EUR 34,849 million (2007: EUR 31,733 million) plus AFR ING Insurance, amounting to EUR 14,456 million (2007: EUR 22,710 million) less core debt ING Group, amounting to EUR 7,170 million (2007: EUR 4,728 million).

<sup>(2)</sup> EC Insurance plus EC Bank less 15% diversification effect (15% in 2007)

<sup>(3)</sup> EC of the ING Group parent company in 2007 mainly included market risk on share-based payment plans and market risk on the assets backing ING Bank equity. In 2008 the market risk on the assets backing ING Bank equity is included in ING Bank EC, and additional EC for share-based payment plans is zero in 2008.

#### Capital base

		Insurance		Bank		Group
	2008	2007	2008	2007	2008	2007
Shareholders' equity (parent)	11,893	17,911	22,889	25,511	17,334	37,208
Core Tier-1 securities					10,000	
Group hybrid capital <sup>(1)</sup>	4,560	2,202	7,085	6,397	11,655	8,620
Group leverage/core debt <sup>(2)</sup>					7,170	4,728
Total capitalisation	16,453	20,113	29,974	31,908	46,159	50,556
Adjustments to equity:						
Revaluation reserve debt securities	8,271	840	5,185	1,097	13,456	1,937
Revaluation reserve crediting to life policyholders	-2,235	-42	-,	.,	-2,235	-42
Revaluation reserve cashflow hedge	-1,360	-10	128	-428	-1,177	-438
Goodwill	-1,889	-1,076	-1,636	-1,428	-3,275	-2,420
<ul> <li>Revaluation reserves fixed income &amp; other</li> </ul>	2,787	-289	3,677	-759	6,769	-963
<ul> <li>Revaluation reserves excluded from Tier-1 <sup>(3)</sup></li> </ul>			-1,790	-2,952		
<ul> <li>Insurance hybrid capital <sup>(4)</sup></li> </ul>	2,250	2,250				
- Minorities	520	891	1,198	1,668		
Deductions Tier-1 (as of 2007)			-1,040	-93		
Available capital	22,010	22,965	32,019	29,772		
Other qualifying capital <sup>(5)</sup>			11,870	11,792		
DAC/ViF adjustments (50%) <sup>(6)</sup>	1,893	4,070				
Group leverage (core debt)					-7,170	-4,728
Adjusted Equity (a)	23,903	27,035	43,889	41,564	45,758	44,865
Ratios						
Core debt (b)	2,301	4,267			7,170	4,728
Debt/Equity ratio (b/(a+b))	8.78%	13.63%			13.55%	9.53%

 <sup>(1)</sup> Tier-1 instruments issued by ING Group (e.g. perpetual debt securities and preference shares) at nominal value. Group hybrid Tier-1 instruments other than preference shares are provided as hybrid capital to ING Insurance or ING Bank.
 <sup>(2)</sup> Investments in subsidiaries less equity of the Group holding company (including core Tier-1 securities). This net debt position is provided as equity to ING Insurance and ING Bank

 <sup>(3)</sup> Includes mainly EUR –1,019 million (2007: EUR –2,358 million) in participations (e.g. Kookmin, Bank of Beijing) and other equity investments, EUR -615 million (2007: EUR -595 million) for Real Estate for own use. The Dutch banking regulator requires this deduction to be made from Tier-1 capital. This deduction is added back to Tier-2 capital.

<sup>(4)</sup> Dated subordinated debt issued by ING Insurance at nominal value.

<sup>(5)</sup> Includes EUR 12,910 million (2007: EUR 14,199 million) Tier-2 capital and nil (2007: nil) Tier-3, offset by EUR 1,040 million (2007: EUR 2,407 million) of regulatory deductions. These deductions were based on Basel I regulation in 2007 and Basel II regulation in 2008.

(6) Mainly includes 50% of the excess of the present value of future profits generated by policies in force (Value in Force) over the after-tax deferred acquisition costs.

The capitalisation of ING Group was under pressure in the second half of 2008, but thanks to the government capital injection all leverage ratios were within their targets at the end of the year. The debt/equity ratio of ING Group as at year-end 2008 was at 13.55% (2007: 9.53%). The debt/equity ratio of ING Insurance as at year-end 2008 was at 8.78% (2007: 13.63%). The Basel II ING Bank Tier-1 ratio ended at 9.32%, this is a strong increase from the Basel I Tier-1 ratio of 7.39% at December 2007.

### **REGULATORY REQUIREMENTS**

### **ING Bank**

Capital adequacy and the use of regulatory required capital are based on the guidelines developed by the Basel Committee on Banking Supervision (The Basel Committee) and the European Union Directives, as implemented by the Dutch Central Bank (DNB) for supervisory purposes. The minimum Tier-1 ratio is 4% and the minimum total capital ratio (known as the BIS ratio) is 8% of all risk-weighted assets.

#### Capital position of ING Bank

	2008	2007
Shareholders' equity (parent)	22,889	25,511
Minority interests	1,198	1,668
Subordinated loans qualifying as Tier-1 capital (1)	7,085	6,397
Goodwill and intangibles deductible from Tier-1	-1,636	-1,428
Deductions Tier-1 (as of 2007)	-1,040	-93
Revaluation reserve <sup>(2)</sup>	3,523	-2,283
Available capital – Tier-1	32,019	29,772
Supplementary capital – Tier-2 <sup>(3)</sup>	12,910	14,199
Available Tier-3 funds		
Deductions	-1,040	-2,407
BIS capital	43,889	41,564
Risk-weighted assets <sup>(4)</sup>	343,388	402,727
Tier-1 ratio <sup>(4)</sup>	9.32%	7.39%
BIS ratio <sup>(4)</sup>	12.78%	10.32%
Required capital based on Basel I floor <sup>(5)</sup>	34,369	
Required capital based on Basel I floor as at 1/1/09 <sup>(5)</sup>	30,550	
BIS ratio based on Basel I floor	10.22%	
BIS ratio based on Basel I floor as at 1/1/09	11.49%	

<sup>(1)</sup> Subordinated loans qualifying as Tier-1 capital have been placed by ING Groep N.V. with ING Bank N.V.

(2) Includes revaluation debt securities, revaluation reserve cash flow hedge and revaluation reserves equity and real estate (see Capital base table, note 3).

<sup>(3)</sup> Includes eligible lower Tier-2 loans and revaluation reserves equity and real estate revaluations removed from Tier-1 capital.
 <sup>(4)</sup> Based on Basel II as of 2008.

<sup>(5)</sup> 90% of Basel I Risk Weighted Assets in 2008 and 80% in 2009.

#### **ING Insurance**

European Union directives require insurance companies established in member states of the European Union to maintain minimum capital positions. The ING Insurance companies outside the EU have to comply with their respective local requirements. ING Insurance's companies comply with local regulatory requirements. The table below shows the global required capital position of ING Insurance measured on the basis of the European Union requirement. This requirement is compared with ING Insurance consolidated available capital.

### Capital position of ING Insurance

	2008	2007
Available capital <sup>(1)</sup>	22,010	22,965
Required capital	8,582	9,405
Surplus capital	13,428	13,560
Ratio of available versus required capital	256%	244%

<sup>(1)</sup> For breakdown of available capital see Capital base table.

### **ING Group**

ING Group reports to the Dutch Central Bank as required under the Dutch implementation of the financial conglomerates directive. The directive mainly covers risk concentrations in the group, intra-group transactions and an assessment of the capital adequacy of the Group.

In terms of measuring the capital adequacy of the Group, ING prefers to use the AFR/EC framework described earlier, particularly as there continues to be significant differences in the sectoral capital rules between banks and insurance companies and amongst insurance companies in different countries.

In the following table, we show the Group's capital adequacy on the following basis:

- Insurance required capital from applying European Solvency I rules to all of ING Insurance entities globally (regardless of local capital requirements);
- Bank required capital based on applying Basel II with the Basel I floor;
- Group available capital using an approach similar to that used for Bank BIS capital whereby IFRS equity is
  adjusted for certain revaluation reserves, minority interests are added, goodwill and certain intangibles are
  deducted and Group hybrids and qualifying subordinated debt of Bank and Insurance are included.

### **Regulatory required capital ING Group**

	2008	2007
Shareholders' equity (parent)	17,334	37,208
Core Tier-1 securities	10,000	
Excluding: Revaluation reserves (1)	10,044	1,457
Group hybrid capital	11,655	8,620
Goodwill and intangibles deductible from Tier-1	-3,275	-2,420
Minorities	1,593	2,323
Capital base ING Group	47,351	47,188
Subordinated loans ING Bank N.V. (included in Tier-2)	11,879	11,154
Subordinated loans ING Verzekeringen N.V.	2,250	2,250
Capital base including subordinated loans	61,480	60,592
Required capital banking operations <sup>(2)</sup>	34,369	32,218
Required capital insurance operations	8,582	9,405
Total required capital	42,951	41,623
Surplus capital	18,529	18,969
Group capital ratio	143%	146%

<sup>(1)</sup> Revaluation reserves debt securities, crediting to life policyholders and cashflow hedge (see Capital base table).
<sup>(2)</sup> EUR 30,550 million at 1/1/2009.

### Capital adequacy and ratios

### Quantitative disclosures on capital measures and ratios

		Group		Insurance		Bank
	2008	2007	2008	2007	2008	2007
Capital						
Available Financial Resources (AFR)	42,135	49,715	14,456	22,710	34,849	31,733
Required Economic Capital (EC)	30,675	36,000	13,681	23,199	22,407	17,927
Ratio EC vs AFR	137%	138%	1 <b>06%</b>	98%	156%	177%
Target Ratio EC vs AFR	120%	120%	100%	100%	100%	100%
Basel II Tier-1 ratio (Bank)						
Year-end actual Tier-1 ratio					9.32%	7.39%
Regulatory minimum Tier-1 ratio					4.00%	4.00%
Target Tier-1 ratio					7.20%	7.20%
Basel II BIS ratio (Bank)						
Year-end actual BIS ratio					12.78%	10.32%
Regulatory minimum BIS ratio					8.00%	8.00%
Target BIS ratio	_				10.80%	10.80%
EU Solvency ratio (Insurance)						
Year-end actual EU Solvency ratio			256%	244%		
Regulatory minimum EU Solvency ratio			<b>100%</b>	100%		
Target EU Solvency ratio			1 <b>50%</b>	150%		
Debt/Equity ratio						
Debt/Equity ratio	13.55%	9.53%	8.78%	13.63%		
Target Debt/Equity ratio	15.00%	10.00%	15.00%	15.00%		

## Main credit ratings of ING at 31/12/2008 <sup>(1)</sup>

	Standard & Poor's	Moody's	Fitch
ING Group	AA-	Aa3	AA-
ING Insurance			
- short term	A-1+	P-1	
- long term	AA-	A1	AA-
ING Bank			
- short term	A-1+	P-1	F1+
- long term	AA	Aa2	AA
- financial strength		В	

<sup>(1)</sup> The Standard & Poor's and Fitch ratings have a negative outlook and the Moody's ratings have a stable outlook.

### Main credit ratings of ING at 16/02/2009<sup>(1)</sup>

	Standard & Poor's	Moody's	Fitch
ING Group	AA-	A1	A+
ING Insurance			
ING Insurance			
- short term	A-1+	P-1	
- long term	AA-	A2	A+
ING Bank			
- short term	A-1+	P-1	F1+
- long term	AA	Aa3	AA-
- financial strength		C+	

(1) The Standard & Poor's ratings have a negative outlook. The Moody's Bank financial strength rating has a negative outlook. The other Moody's ratings have a stable outlook. The Fitch rating for ING Bank has a stabe outlook, those for ING Insurance and ING Group have a negative outlook.

ING's long-term credit ratings are shown in the table above. Each of these ratings reflects only the view of the applicable rating agency at the time the rating was issued, and any explanation of the significance of a rating may be obtained only from the rating agency.

A security rating is not a recommendation to buy, sell or hold securities and each rating should be evaluated independently of any other rating. There is no assurance that any credit rating will remain in effect for any given period of time or that a rating will not be lowered, suspended or withdrawn entirely by the rating agency if, in the rating agency's judgment, circumstances so warrant. ING accepts no responsibility for the accuracy or reliability of the ratings.

