



STRONG FOR ENTREPRENEURS

DISCLOSURE REPORT

as at 31 December 2012 according to
section 26a of the German Banking Act (KWG)

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Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

DISCLOSURE REPORT 2012

of HSH NORDBANK

1. INTRODUCTION

The disclosure requirements¹ under the German Solvency Regulation (Solvabilitätsverordnung - SolvV)² and the third pillar of the Basel Framework Agreement supplement the minimum regulatory capital requirements (Pillar 1) and the regulatory monitoring process (Pillar 2). The objective is to strengthen the market discipline of credit institutions. This is to be achieved through a series of disclosure requirements which enable market participants to assess core information on the scope of application of the SolvV, equity, risk exposure, risk management procedures and, based on this information, the capital adequacy of the institution. In general, disclosures are on a Group level. Under Section 321 (1) SolvV, annual disclosures are required.

The rules resulting from the implementation of the Capital Requirements Directive III (CRD III), including re-securitisations, have been taken into account since the publication of the last Disclosure Report. Additional regulatory changes resulting from Basel III are to be applied based on the current status commencing in 2014.

Amongst others, a guarantee facility was provided to HSH Nordbank in 2009 in connection with a capitalisation implemented by the shareholders, the Federal State of Schleswig-Holstein and the Free and Hanseatic City of Hamburg. In 2011 the guarantee was reduced by a total of € 3 billion to € 7 billion now. No reduction occurred in the year under review. In April 2013 the federal states of Hamburg and Schleswig-Holstein reached an agreement with the European Commission on the further steps to be taken regarding the approval of the re-increase of the guarantee in favour of HSH Nordbank from € 7 to 10 billion.

The guarantee facility reduces required regulatory capital, in that the Bank is protected from secondary losses up to € 7 billion in the guaranteed portfolio, as soon as the risks in the collateralised portfolios exceed the agreed first loss piece of € 3.2 billion held by the Bank (so-called

second loss guarantee). The first loss piece is taken into account when determining the modified available equity capital under Section 266 (1) SolvV and, therefore no longer contributes to required regulatory capital. Whereas the risk weight for the second loss piece is still 0% due to the guarantee facility, the risk weight for the senior tranche has increased to 43.1% as at the reporting date.

In the previous year a one-off payment of € 500 million payable to the issuer of the second loss guarantee was imposed on HSH Nordbank. This amount has in the meantime been re-invested in the Bank in the form of a capital increase.

The increase in the capital requirements, which was only partly offset by measures implemented to strengthen the capital base and the continued reduction of the portfolio, resulted in lower capital ratios at HSH Nordbank. As at the reporting date, the Tier 1 capital ratio amounted to 11.4% (31 December 2011: 13.8%) and the overall key ratio reached 17.8% (31 December 2011: 21.0%).

The changes in capital requirements between 31 December 2011 and the current reporting date presented in the report mainly result from a deterioration in the risk parameters (e.g. higher probabilities of default) due to the deterioration in the economic environment, particularly in the shipping industry.

This report and all the information contained therein are generally based on the accounting principles laid down in the German Commercial Code (HGB). Any exceptions are explicitly stated in the report. All representations in this report take the effects of the guarantee facility into account. To the extent it is useful with respect to individual tables, an alternative calculation, which does not take the guarantee facility into account, is presented in the Notes for informational purposes.

The Disclosure Report will be published in accordance with Section 320 (1) SolvV on HSH Nordbank's website under Investor Relations. The date and communication medium of publication will be communicated to the supervisory authorities and announced electronically in the Federal Gazette.

¹ Section 26a of the German Banking Act (KWG), in conjunction with Part 5 of SolvV, constitutes the national statutory basis of disclosure in Germany.

² Regulations governing the capital adequacy of institutions, groups of institutions and financial holding groups (Solvency Regulation - SolvV) as at 31 December 2011, Sections 319 to 337.

2. SCOPE OF APPLICATION

2.1. CONSOLIDATION

HSH Nordbank AG is the parent company of the HSH Nordbank Group (hereafter HSH Nordbank) as defined in Section 1 (7a) KWG. The disclosures reflect those entities belonging to the Group which form part of the regulatory consolidation group pursuant to Section 10a (1) and (2) KWG. The consolidation group recognised for financial accounting/reporting purposes under International Financial Reporting Standards (IFRS) as described in the Annual Report of the HSH Nordbank Group for the financial year ending 31 December 2012 differs from the regulatory consolidation group.

In Table 49 (Notes, Chapter 11) the consolidation principle pursuant to Section 323 (1) No. 2 SolvV as well as the difference between the regulatory and IFRS consolidations are described. All entities to be consolidated and their allocation to the regulatory and/or financial accounting consolidation group are listed. The entities are allocated to entity types for the purposes of the regulatory consolidation on the basis of the definitions set out in Section 1 KWG. Of the companies listed in Table 49 included in the consolidation group recognised for financial accounting purposes, 75 are fully consolidated and 8 are consolidated at-equity.

Those subsidiaries deducted from the equity capital of the HSH Nordbank Group are also shown in the table. The Bürgschaftsbank Schleswig-Holstein GmbH is the only subsidiary defined as a financial institution in accordance with Section 1 (1) KWG. With reference to Section 26a (2) KWG the Bürgschaftsbank is classified as immaterial. In addition, the commitment is not a subsidiary. A possible capital shortfall is therefore not determined in accordance with Section 323 (2) SolvV. A capital shortfall is the amount by which the actual capital is lower than the regulatory capital required.

Apart from the parent institution HSH Nordbank AG, the regulatory consolidation group includes 109 entities. The financial accounting consolidation group comprises 83 entities. Furthermore 26 entities and/or portfolios are included in the financial accounting consolidation report but not in the regulatory consolidation group due to their business activities. These are taken into account as risk-weighted positions for regulatory purposes.

HSH Nordbank applies Section 31 (3) KWG to the entities listed below and does not include these in the consolidation under the exemption pursuant to Section 10a (6) to (12), Section 12a (1) Sentence 1 and Section 13b (3) and (4) KWG:

- ▶ HSH Security GmbH, Kiel
- ▶ Verwaltungs- und Treuhandgesellschaft von 1963 mbH, Kiel

The concept underlying all qualitative and quantitative information to be disclosed is the regulatory group of institutions per Section 10a KWG. Exceptions to this are indicated at the relevant points in this report. The accounting principles of the German Commercial Code (HGB) are applied in determining the capital adequacy of HSH Nordbank. Accordingly, this report and all the information contained therein are generally based on the HGB requirements. Any exceptions are explicitly stated in the report.

With regard to the regulatory capital adequacy of subsidiaries in which there are other shareholders in addition to the HSH Nordbank Group, a change in capital and/or own funds requires the approval of the co-shareholders and their respective bodies.

In the case of subsidiaries which are also institutions, changes in capital must be approved where necessary by the appropriate banking supervisory authorities. This applies, for example, to subsidiaries in the USA in which the HSH Nordbank Group has an equity holding of more than 5% and which are subject to the regulations of the US banking supervisory authorities. Statutory restrictions such as, for example, the capital maintenance regulations as defined in the Limited Liability Companies Act (GmbHG) and the German Stock Corporation Act (AktG), under which it is difficult to transfer funds from a free capital reserve in the course of the fiscal year, must be adhered to by domestic subsidiaries.

With the exception of the above-mentioned restrictions as well as the statutory and regulatory requirements there are no other restrictions based on contractual agreements within the HSH Nordbank Group that have to be taken into account.

2.2. PRINCIPLE OF MATERIALITY

In accordance with Section 26a (2) KWG all information disclosed within this report is subject to the principle of materiality. Information which is legally protected or confidential is not part of the Disclosure Report.

Changes were made in the reporting year regarding the classification of material subsidiaries. HSH Nordbank Private Banking S.A. was merged with the fully consolidated subsidiary HSH Nordbank Securities S.A. on 15 May 2012. Based on the internal analysis of the group entities to be consolidated HSH Nordbank decided for disclosure purposes that both HSH Nordbank Securities S.A. and HSH Real Estate GmbH (converted from an AG to a GmbH in the fourth quarter of the reporting year) are not classified as material subsidiaries. The solvency ratios according to Section 325 (2) No. 5 SolvV are there-

fore disclosed for the HSH Nordbank Group and HSH Nordbank AG (see Section 3.5). Furthermore, provided that data from the accounting systems is presented in the Disclosure Report, only data for HSH Nordbank AG as the primary bank is disclosed. This relates primarily to information provided on loan loss provisions (Section 327 SolvV).

2.3. WAIVER RULE

Pursuant to Section 2a KWG the waiver rule is not currently being exercised. As at the reporting date there are no other domestic institutions within the regulatory consolidation group of the HSH Nordbank Group, apart from HSH Nordbank AG, that meet the conditions pursuant to Section 2a KWG.

3. REGULATORY CAPITAL AND REGULATORY CAPITAL REQUIREMENTS

3.1. GUARANTEE FACILITY

3.1.1. Provision of a guarantee facility

On 2 June 2009 the Federal State of Schleswig-Holstein and the Free and Hanseatic City of Hamburg granted HSH Nordbank AG a guarantee facility in the amount of € 10 billion via the HSH Finanzfonds AöR as the guarantor in order to secure the future of the Bank. This agreement regarding the provision of a guarantee facility as well as a related recapitalisation of the Bank are subject to approval by the European Commission in accordance with the law regarding state aid. The EU Commission concluded these state aid proceedings at the end of September 2011 and entered into an agreement on commitments with all the parties involved and imposed conditions.

The guarantor guarantees actual rating-related defaults on debt instruments selected based on certain defined criteria that form part of the assets of HSH Nordbank AG and two consolidated subsidiaries. A first loss piece in the amount of € 3.2 billion remains with the Bank as the guarantee holder. HSH Nordbank AG and the guarantor can jointly agree to reduce the Bank's first loss piece.

The amount of default on a specific commitment is determined by the amount outstanding, taking into account the existing specific loan loss provision (SLLP) existing as at 31 March 2009. The amount outstanding is at the most the amount repayable as at 31 March 2009, plus all interest owed and other ancillary payments. Losses may only be allocated under the guarantee once the guarantee case has been examined and approved by the guarantor.

The guarantee expires when it is returned to the guarantor after the last reference commitment in the hedged portfolio has been met irrevocably and in full or has resulted in a guarantee case for the full amount. HSH Nordbank AG may reduce the guarantee to € 4 billion between 1 January 2010 and the end of 2013 through partial cancellations of no more than € 3 billion per year. The guarantee may be cancelled in full from 2014 onwards.

In 2011 the guarantee was reduced by a total of € 3 billion to € 7 billion now. No reduction occurred in the year under review.

At the beginning of 2013 HSH Nordbank was in close contact with its shareholders to again replenish the capital relief guarantee (second loss guarantee) to the original amount of € 10 billion. In April 2013 the federal states of Hamburg and Schleswig-Holstein reached an agreement with the European Commission on the further steps to be taken regarding the approval of the re-increase of the guarantee in favour of HSH Nordbank from € 7 to € 10 billion. More information on the planned replenishment of the guarantee is illustrated in the Group Management Report of the 2012 Annual Report.

In exchange for the guarantee HSH Nordbank AG pays a contractually agreed base premium of 4% p. a. on the guarantee volume outstanding at the time. Drawdowns do not reduce the calculation basis of the premium. The recurring base premium payable is recognised through profit or loss on an accrual basis in the expense for public guarantees line item.

As long as and insofar as a cash drawdown of the guarantee is not yet made through the invoicing of losses that in total exceed the first loss piece of € 3.2 billion to be borne by the Bank, a claim for compensation against HSH Finanzfonds AöR cannot be recognised. Against this background the hedging effect of the guarantee recognised in the balance sheet is accounted for on a net basis. The Bank initially determines specific and general loan loss provisions without taking the hedging effect of the second loss guarantee into account and then recognises the balance sheet hedging effect through a compensation item that reduces total loan loss provisions accordingly.

The compensation item is reduced by the additional premium imposed by the EU Commission in the amount of 3.85% p. a. on the losses actually invoiced. This additional premium is only paid in cases of an actual drawdown of the guarantee. Accordingly, the right to dispose on the part of the HSH Finanzfonds AöR with respect to this claim is first applicable at that time. Until an actual drawdown of the guarantee it only represents a contingent liability of the Bank with a corresponding right of recourse to HSH Finanzfonds AöR. In the event of a drawdown, this additional premium bears interest at the

3-month EURIBOR rate (so-called claim for compensation of interest). The additional premium plus any interest is payable until 31 December 2019 at the latest.

The obligation resulting from this additional premium is calculated based on the outstanding guarantee facility not yet cancelled. Drawdowns do not reduce the calculation basis of the premium. The premium of 3.85% on the currently existing guarantee volume of € 7 billion is payable retrospectively with effect from 1 April 2009 and is to be paid to a blocked account held by HSH Finanzfonds AöR at HSH Nordbank. As long as the invoiced losses do not exceed € 3.2 billion, HSH Finanzfonds AöR is not entitled to payment. Payments totalling € 752 million were made on the due dates for 2009 to 2011. An amount of € 274 million with a payment date of 7 March 2013 was recognised for 2012.

Insofar as the obligation to pay the additional premium would have the effect of decreasing the Tier 1 capital ratio without hybrid capital (common equity ratio) of HSH Nordbank to below 10% (minimum common equity ratio) or of increasing an already existing shortfall, the guarantor is obliged to waive the portion of the entitlement that would result in the ratio falling below the minimum common equity ratio against the issue of a debtor warrant (so-called capital protection clause).

The probability of an actual drawdown of the second loss guarantee as determined by the Bank specifies the probability that actual losses will exceed the first loss piece of the Bank by at least one Euro. If it is more likely than not that the guarantee will be drawn down, the premiums to be paid in the future also need to be recognised (on a present value basis) as loan collateral expense, as, according to the guarantee agreement, drawdowns do not reduce the basis for calculating the guarantee premiums.

The hedging effect of the guarantee facility granted by the Free and Hanseatic City of Hamburg and the Federal State of Schleswig-Holstein via HSH Finanzfonds AöR, which was reported on the face of the balance sheet for the first time as at 31 December 2010, amounted to € 2,807 million as at 31 December 2012 (previous year: € 1,525 million). Further details on the hedging effect as well as its consideration in the financial statements are presented in the section "Provision of a guarantee facility" of the group financial statements contained in the 2012 HSH Nordbank Annual Report.

The guarantee from the federal states is recognised in the consolidated financial statements as a financial guarantee contract in accordance with IAS 39.9. If, during the restructuring and workout programme, measures consistent with the guarantee are implemented in respect of hedged commitments that conflict with recognition of the hedging instrument in the financial statements as a financial guarantee under IAS 39.9, commitments may be transferred to a partial guarantee under the framework agreement that falls under the definition of a credit derivative under IFRS, subject to approval from the trustee appointed by the guarantor. The maximum guarantee amount is not altered by the creation of the partial guarantee 2, as the sum of the individual amounts remains the same.

Furthermore, HSH Nordbank AG was obliged to make a one-off payment in the amount of € 500 million to the guarantor of the second loss guarantee that had to be recovered by means of a contribution in kind. The payment was made in 2011. The Annual General Meeting in an extraordinary meeting held on 18 January 2012 resolved to increase capital by means of a mixture of cash and non-cash contributions. This increase became effective on the entry of the capital increase in the commercial registers on 20 February 2012.

3.1.2. Effects of the capital measures on the regulatory capital requirements

The HSH Finanzfonds AöR guarantee facility constitutes eligible credit protection in accordance with Section 162 et seqq. SolvV. As it possesses the necessary characteristics, such as for example division into tranches and ranking (waterfall), it is treated as a securitised position under the Advanced IRB Approach in accordance with Section 226 (1) and (5) SolvV. The risk weight of the senior tranche is determined using the Supervisory Formula Approach in accordance with Section 258 SolvV.

This secondary, loss-based, risk-shielding function of the guarantee facility is designated within HSH Nordbank as Sunrise or the Sunrise Transaction. This risk shield is structured as a synthetic securitisation transaction which is recognised by the supervisory authorities so that assets remain on HSH Nordbank's balance sheet.

Due to its structure, a corresponding easing of the strain on regulatory capital requirements may be achieved

through the HSH Finanzfonds AöR guarantee facility starting on 30 June 2009.

Based on the securitisation regulations in SolvV, there is a choice for the first loss piece between a capital deduction and an allowance with a risk weight of 1,250%.

For reporting dates prior to 30 June 2010 HSH Nordbank backed the first loss piece as a risk-weighted position with equity. The first loss piece is now deducted from equity, as of the 30 June 2010 reporting date. This means that the total amount of the first loss piece is taken into account in determining the modified available equity capital under Section 266 (1) SolvV and, therefore, no longer represents required regulatory capital. The risk weight for the second loss piece is 0%. The risk-weight for the senior tranche was 43.1% at the reporting date.

All representations in this report take the effects of the guarantee facility into account. Regulatory capital requirements continue to be determined without taking the guarantee facility into account, in the form of an alternative calculation, and are reported to the Federal Financial Supervisory Authority (BaFin) and the Deutsche Bundesbank in the form of an alternative presentation. To the extent it is useful, with respect to individual representations or tables contained in this report, the appropriate alternative calculations and/or presentations are contained in the Notes (Chapter 11) for informational purposes.

Additional information on the features of the Sunrise Transaction (e.g. treatment of currency mismatches) is set out in Chapter 6.

3.2. STRUCTURE OF REGULATORY CAPITAL

The following presentation of the capital structure is based on Section 10a KWG in conjunction with Section 10 KWG. The consolidated regulatory capital of the

Group is determined using the aggregation method in accordance with Section 10a (6) KWG. The regulatory capital consists of core capital (Tier 1 capital), supplementary capital (Tier 2 capital) and subordinated capital (Tier 3 capital).

The components of Tier 1 capital within the meaning of Section 10 (2a) KWG are disclosed in detail in Table 1 in accordance with Section 324 (2) No. 1 SolvV. In accordance with the foregoing, assets contributed by silent partners are to be stated under Other equity under Section 10 (2a) Sentence 1 No. 10 KWG. Equity instruments, for which repayment incentives have been agreed, are not included in Tier 1 capital.

HSH Nordbank's Tier 2 capital consists of longer-term subordinated liabilities, unallocated loss provisions under Section 340 f HGB, capital under Section 10 (5) KWG (profit participation capital) and the eligible portion of the loan loss provision excess for positions determined under the Advanced IRB Approach in accordance with Section 10 (2b) Sentence 1 No. 9 KWG.

Tier 3 funds comprise subordinated liabilities that cannot be classified as Tier 2 capital for regulatory purposes because Section 10 (2) Sentence 7 KWG stipulates a cap.

The capital adequacy of HSH Nordbank remains at a solid level. Changes in reserves as well as changes in capital deductions under Section 10 (6) and (6a) KWG were primarily attributable to the capital increase (see Section 3.1.1) and the approval of the 2011 annual financial statements. Furthermore, the risk relating to the reimbursement claim in respect of the additional premium for the second loss guarantee imposed by the EU Commission has been reflected as a capital deduction item since 31 December 2011. The capital deduction item is zero as at the reporting date due to the capital protection clause. Further details on the guarantee premium and capital protection clause are presented in Section 3.1.1.

Structure of regulatory capital

Regulatory capital item	2012	2011
Subscribed capital	3,076	2,779
Reserves (capital reserve and other allocable reserves)	1,388	1,254
Capital under Section 10 (2a) Sentence 1 No. 8 KWG	-	-
Interim profit (or interim loss)	-	-
Special reserves for general banking risks in accordance with Section 340 g HGB	1,052	1,052
Other country-specific core capital components	1,635	1,764
Of which: other capital in accordance with Section 10 (2a) Sentence 1 No. 10 KWG	(1,613)	(1,761)
Of which: positive difference in accordance with Section 10a (6) Sentences 9 and 10 KWG	(22)	(3)
less other positions to be deducted under Section 10 (2a) Sentence 2 KWG	-129	-88
Total core capital in accordance with Section 10 (2a) Sentences 1 and 2 Nos. 1-5 KWG	7,022	6,761
Total amount of Tier 2 capital in acc. with Section 10 (2b) Sentence 1 KWG	3,687	3,490
Total amount of Tier 3 funds as per Section 10 (2c) KWG	231	221
Total of the positions to be deducted in accordance with Section 10 (6) and (6a) KWG	-94	-828
Including value adjustment shortfalls and expected losses in accordance with Section 10 (6a) Nos. 1 and 2 KWG	(-37)	(-114)
Total amount of modified available capital in accordance with Section 10 (1d) Sentence 1 KWG and of allocable Tier 3 funds in accordance with Section 10 (2c) KWG	10,846	9,644

Table 1: Structure of regulatory capital in € m

3.3. TERMS AND CONDITIONS OF REGULATORY CAPITAL

As at the reporting date the regulatory capital instruments of the HSH Nordbank Group primarily comprise the following:

- ▶ The subscribed capital amounts to € 3,076 million. The entities to be consolidated in the regulatory consolidation group have different types of subscribed share capital depending on the legal form.
- ▶ The reserves of € 1,388 million consist of capital reserves (€ 1,073 million) and other allocable reserves (€ 315 million). Other capital in accordance with Section 10 (2a) Sentence 1 No. 10 KWG in conjunction with Section 10 (4) KWG (silent participations) was allocated in the amount of € 1,613 million. An annual distribution is payable on assets contributed by silent partners, which, according to the structure of the agreement, is dependent either on the annual net income for the year or the distributable profit. In the year under review no distribution was made on silent participations as a result of the net loss for the year and insufficient distributable profit. Silent participations share in the net loss for the year (see the 2012 financial report of HSH Nordbank AG) of € 153 million, of which € 146 million are allocated to silent participations allocable under regulatory requirements. For the most part, the silent participations are for an indefinite period and cannot be terminated by the investors. HSH Nordbank regularly has the right to terminate after the expiry of an agreed minimum period of time that is subject to the approval of the Federal Financial Supervisory Authority.
- ▶ The Tier 2 capital amounts to € 3,687 million and comprises long-term subordinated liabilities (€ 3,511 million), unallocated loss provisions under Section 340 f HGB (€ 68 million), capital in accordance with Section 10 (5) KWG (profit participation capital, € 39 million) and the eligible portion of the loan loss provision excess for IRBA positions (€ 69 million) in accordance with Section 10 (2b) Sentence 1 No. 9 KWG. € 4 million of the net loss for the year is allocated to profit participation certificates eligible for regulatory capital purposes.
- ▶ Subordinated liabilities were issued in the form of loan notes, registered or bearer bonds and are denominated in Euro, US Dollar and Japanese Yen. The original maturities range from seven to 40 years. The interest rates payable are between 0.4%

p. a. and 6.5% p.a. In total there are subordinated liabilities in the amount of € 4,112 million, of which € 3,511 million was included in supplementary capital as at the reporting date.

- ▶ Tier 3 funds in the amount of € 231 million consist solely of subordinated liabilities that were not taken into account for regulatory purposes.

More detailed information on the terms and conditions on the allocable components of equity capital are set out in Table 2.

Terms and conditions of equity instruments

	Allocable total amount in € m		Residual maturity < 5 years in € m		Residual maturity >= 5 years in € m		Avg. residual maturity in years		Avg. interest rate in % ¹	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Core capital										
Ordinary shares of HSH Nordbank AG	3,018	2,635	-	-	-	-	-	-	-	-
Allocable share capital of other entities included in the regulatory consolidation group	58	144	-	-	-	-	-	-	-	-
Other capital, convertible in a stress situation	-	-	-	-	-	-	-	-	-	-
Other capital, indefinite and without a payment trigger	897	978	-	-	-	-	-	-	-	-
Other capital, limited or with payment triggers	-	-	-	-	-	-	-	-	-	-
Core capital instruments with limited al- locability, subject to transitional rules, in- definite and without payment triggers	697	763	-	-	-	-	-	-	-	-
Core capital instruments with limited al- locability, subject to transitional rules, lim- ited or with payment triggers)	19	20	-	-	19	20	10	11	-	-
Supplementary capital										
Preference shares	-	-	-	-	-	-	-	-	-	-
Profit participation certificates (capital in accordance with Section 10 (5) KWG)	39	42	39	22	-	20	3	4	-	-
Subordinated liabilities (before utilisation of Section 10 (2) Sentence 7 KWG)	4,112	5,008	3,079	2,117	1,032	2,891	7	8	2.3	3.0

¹ Information on interest rates relate to interest payments actually made

Table 2: Terms and conditions of equity instruments

3.4. REGULATORY CAPITAL REQUIREMENTS

Since the beginning of 2008, HSH Nordbank has determined the amount of regulatory capital required to be held for counterparty default, market and operational risks on the basis of SolvV. Following approval from the supervisory authority, the counterparty default risk positions are determined using the Advanced IRB Approach. Consequently the Bank basically applies the same parameters already used internally in risk management and counterparty default risk management for regulatory reporting. The amounts allocated to market risk positions

are determined in accordance with the Standardised Approach. Operational risk is taken into account under the Standardised Approach. For the procedures used to calculate the regulatory capital requirement for counterparty default risks see Section 3.4.1.

The total regulatory capital requirement of € 4,882 million is the sum of the amounts allocated to credit risk, market risk and operational risk (see Table 3, pursuant to Section 325 (2) SolvV).

Regulatory capital requirements

	2012	2011
Counterparty default risk		
Credit Risk Standardised Approach (CRSA)		
Central governments	-	-
Regional governments and local municipalities	0	0
Other public institutions	0	0
Multilateral development banks	-	-
International organisations	-	-
Institutions	5	2
Covered bonds issued by credit institutions	1	1
Corporates	85	110
Retail banking	2	4
Positions secured by real estate	1	1
Investment certificates	1	1
Other positions	3	2
Past due positions	42	11
Advanced Internal Rating Based Approach (IRBA)		
Central governments	27	15
Institutions	88	103
Retail banking	-	-
Corporates	1,200	1,215
Other non-credit related assets	54	43
Risks from securitisation positions		
Securitisations under the CRSA	6	8
Securitisations under the Advanced IRB Approach	2,630	1,460
Risks arising on equity holdings		
Equity holdings based on the continued use of the old methodology/grandfathering (CRSA)	28	33
Equity holdings excluded from the IRBA on a permanent basis or for a limited period (CRSA)	0	0
Simple risk weight approach (IRBA)	36	33
Listed equity holdings	0	2
Not listed, but belonging to a sufficiently diversified portfolio	22	21
Other equity holdings	14	10
Equity holdings in accordance with the PD-LGD approach (IRBA)	38	16
Subtotal counterparty default risk	4,248	3,058
Market risk		
Market risk in accordance with the Standardised Approach ¹	324	309
Settlement risk		
Settlement risk	-	-
Operational risk		
Operational risk in accordance with the Standardised Approach	310	307
Total	4,882	3,674

¹ Including "Other market risk positions"

Table 3: Regulatory capital requirements in € m

3.4.1. Credit risk

HSH Nordbank determines all the risk parameters required to calculate risk weight internally using the Advanced IRB Approach (see Section 5.8.1). However, as part of the temporary and/or permanent partial use, the Credit Risk Standardised Approach (CRSA) is applied to individual portfolios as well as to subsidiaries that are to be consolidated (see Chapter 2). For this reason, the information on the regulatory capital requirement for credit risk is broken down between the Advanced IRB Approach and the CRSA as well as into exposure classes in accordance with the approaches applied.

Due to the special treatment applied to equity holdings and securitisations, the regulatory capital requirements for these portfolios are separately disclosed. In the case of equity holdings, HSH Nordbank determines the regulatory capital backing using the PD-LGD approach and the simple risk weight method. Furthermore, the equity holdings already held prior to 1 January 2008 and consequently “grandfathered” (portfolio protection) pursuant to Section 338 (4) SolvV are excluded from the Advanced IRB Approach until 31 December 2017 and are treated in accordance with the rules applicable to the CRSA.

In total, the regulatory capital requirements for counterparty default risk increased as at the reporting date compared to the prior year – from € 3,058 million to € 4,248 million.

The increase in the capital requirements resulted from a deterioration in the risk parameters (e.g. higher probabilities of default) due to the economic downturn, particularly in the shipping industry. This development could only be partially offset by the continued winding down of high risk legacy portfolios as well as the depreciation of the US dollar exchange rate compared to the previous reporting date. This resulted in particular in a higher risk weight for the senior tranche (43.1%) and is reflected in higher capital requirements for securitisations under the Advanced IRB Approach.

3.4.2. Market risk

HSH Nordbank currently applies the Standardised Approach for purposes of determining the regulatory capital requirement for market risk, pursuant to Section 294 et

seqq. SolvV. An own risk model as defined in Section 313 SolvV is not used and there is no correlation trading portfolio. The regulatory capital requirement for market risk amounts to € 324 million (see Section 7.4).

3.4.3. Operational risk

HSH Nordbank applies the Standardised Approach pursuant to Section 272 et seqq. SolvV for purposes of determining the regulatory capital requirement for operational risk. In total, there is a regulatory capital requirement for the Group of € 310 million (see Section 8.4).

3.5. ADEQUACY OF REGULATORY CAPITAL

Regulatory capital adequacy is determined on the basis of the equity structure described above and the risk-weighted assets (RWA). The regulatory capital ratio is defined in Section 3 (1) SolvV in conjunction with Section 2 (6) SolvV, and shows the ratio of regulatory capital (numerator) and the total for RWA of counterparty risk and amounts for market and operational risks (denominator), expressed as a percentage. The regulatory capital used in the calculation is the total of the modified available equity and Tier 3 capital used. The required minimum regulatory capital ratio is 8.0%. The Tier 1 capital ratio is the ratio between core capital (Section 10 (2a) KWG) and the total from RWA for counterparty risks and amounts for market and operational risks.

The regulatory capital ratios of both the HSH Nordbank Group as well as the HSH Nordbank AG, were always in excess of the prescribed minimum-regulatory capital ratio.

In addition to the overall figures for the Group the solvency ratios for HSH Nordbank AG at the individual entity level pursuant to Section 325 (2) No. 5 SolvV are disclosed in Table 4.

The decrease in the capital ratios compared to the 2011 year end is mainly attributable to an increase in the capital requirements during the course of the year, which was only partially offset by measures implemented to strengthen the capital base as well as the continued winding down of the portfolio.

Capital ratios of the HSH Nordbank Group

Company	Regulatory capital ratio in %		Tier 1 capital ratio in %	
	2012	2011	2012	2011
HSH Nordbank Group	17.8	21.0	11.4	13.8
HSH Nordbank AG	16.9	18.9	11.0	12.5

Table 4: Capital ratios of the HSH Nordbank Group

4. RISK MANAGEMENT

4.1. STRATEGIES AND PROCESSES

Adjustments to the business model well advanced

During the past year we continued to drive forward the fundamental reorganisation of HSH Nordbank, which was initiated in 2011 in the course of the concluded state aid proceedings regarding the Bank. With the consistent implementation of our strategy programme we have moved a good deal closer to achieving our objective of transforming HSH Nordbank into a focussed and sustainably profitable Bank for medium-sized enterprises (“Bank for Entrepreneurs”). At the same time the prerequisites essential for a sustained successful future of the Bank have thereby been created.

Through the restructuring of the Bank we want to, firstly, increase the profitability of the client business by leveraging the potential in the business fields and, secondly, to create efficient operating structures and thereby cut costs. Optimisation of the funding and bank management functions was also focussed on in 2012. We are implementing the strategy programme as part of projects, which were well advanced by the end of 2012.

On adjusting the business model the Bank had to comply with the agreements reached with the EU Commission that had been linked to the conclusion of the EU proceedings in September 2011. These include, inter alia, the placing of a limit of € 120 billion on total assets until 2014, the focussing on core activities, disposals of equity holdings and the closing of offices abroad. The implementation of individual conditions and commitments has been monitored since the start of 2012 by an independent trustee on behalf of the EU Commission.

In the past year we further aligned our organisational structure to the focussed business model. We had already bundled the responsibility for product development in 2011 and launched an integrated relationship approach with the loan divisions. Together with intensified sales efforts, this has already had a positive impact on sales of our product range. In 2012 we concentrated previously decentralised administrative functions into central divisions of the Bank in order to further increase the efficiency and effectiveness of the entire organisation of the

Bank. This applies for example to the divisions of controlling and portfolio management. A so-called lean management programme was also initiated, under which we are implementing measures to further optimise quality and processes in the divisions.

In addition, we have further developed the Bank’s management processes and thereby increased their effectiveness. Through the integration of standardised key performance indicators into the Bank’s systems we want to ensure a consistent operational and strategic management of the Bank at individual transaction level, at segment and at Group level in the future. An integrated controlling database was created as the basis for the comprehensive management of portfolios. The Bank set up in 2012 a central steering committee, the so-called Business Review Meeting, under the direction of the Management Board, which periodically monitors the achievement of targets by the divisions with regard to new business, income, risk, costs, liquidity and capital as well as compliance with the EU requirements. The committee also monitors the implementation status of operational measures.

We are on track to achieve our objective of significantly reducing administrative expenses in the Group by 2014 as a result of the restructuring undertaken and increases in efficiency realised last year. Advanced staff reductions in the Bank made a significant contribution to this. Headcount continued to decrease significantly and by the 2012 year-end it was possible to reduce the number of staff by more than three quarters of the total number planned. Operating expenses were also reduced as planned due to savings made in various cost items. The closing of foreign branches also eased the burden on the cost side of the Bank. Implementation of the cost targets is reviewed on an on-going basis as part of an active cost management process.

The risk-conscious expansion of client business was also successful in 2012. Despite the difficult market conditions we were able to substantially increase new business compared to the previous year. The volume increases achieved as well as cross-selling successes in new business as well as stable margins became increasingly evident in the income of the Core Bank over the course of the year. We carried out targeted initiatives in the market over the past year in order to exploit the business poten-

tial and optimised the interaction between the product and sales divisions. In addition, the quality in the Core Bank has been further improved by focussing on low-risk new commitments and the reduction of the portfolio by means of portfolio adjustments. The positive trend in the new business reflects the progress made in adjusting the business model and the repositioning of the divisions in the markets.

Bank-wide internal control system

The Management Board of HSH Nordbank bears the overall responsibility for ensuring that a proper business organisation is in place at the HSH Nordbank Group, including an appropriate and effective internal control system (ICS).

The ICS of HSH Nordbank is based on a bank-wide main and sub-process structure (process map), which also includes the domestic and foreign branches. A person responsible for the process is designated for all main processes. Furthermore, a so-called ICS cycle was implemented, which is regularly gone through and includes the following levels:

- ▶ prioritisation of processes to be revised (annually)
- ▶ updating of the process, risk and control documentation
- ▶ assessment of the appropriateness of the controls
- ▶ assessment of the effectiveness of the controls (testing)
- ▶ determination of measures to be taken with regard to weakness identified in the controls
- ▶ final assessment after implementation of the measure (re-testing)

The top priority of this ICS assessment is the structured and systematic examination of potential or known weaknesses in processes together with the definition of and the decision on measures to be taken to eliminate them. The ICS cycle also ensures that the ICS is continuously enhanced with respect to its correctness and functionality. Central responsibility for the management and monitoring of the ICS lies with the ICS office of the Organisation division.

Principles of risk management

Active risk management represents a core component of the overall bank management at HSH Nordbank. Against this backdrop the Bank has developed the risk culture and the methods and procedures applied in risk management further on a systematic basis.

HSH Nordbank defines risk as the threat that unfavourable future developments may adversely affect the Bank's assets, earnings or liquidity position. Material risks within the meaning of MaRisk are default risk, market risk, operational risk, liquidity risk, strategic risk and reputation risk. The individual elements of risk management constitute a system in their entirety to identify, analyse, evaluate, manage, continuously monitor and report on risks.

There are clear rules in the Bank concerning risk management responsibilities. The overall responsibility for risk management in the Bank lies with the Overall Management Board. This also includes the methods and procedures to be employed for purposes of risk measurement, management and monitoring.

In order to identify material risks as defined by MaRisk HSH Nordbank conducts an annual risk inventory. This includes a review of the existing quantitative and qualitative criteria for determining materiality taking due account of the Bank's risk tolerance and if necessary such criteria are amended. Among the material risk types at HSH Nordbank that can be quantified are default risk, market risk, liquidity maturity transformation as a type of liquidity risk as well as operational risk, which also includes legal and compliance risks. These risk types are taken into account in the calculation of the risk-bearing capacity. In addition to the risk of insolvency as a second type of liquidity risk other material risk types of the Bank also include strategic risk and reputation risk that are managed using stringent procedural rules.

The major rules on the methods, processes and internal organisation used for risk management are documented in the Credit Manual of HSH Nordbank, in separate process descriptions for the individual risk types as well as in individual illustrations of the internal organisation and are published throughout the Bank. The Management Board and the Risk Committee are informed of the

risk situation of the Group by means of a comprehensive quarterly Risk Report. As an internal winding down unit, the Restructuring Unit is fully integrated into the Group's risk management process. The risk methods and processes of the Core Bank apply to the Restructuring Unit accordingly.

Risk Strategy

Taking the material risk types into account, the risk strategy presents the organisational and strategic orientation of risk management of HSH Nordbank. It includes the development of all material business activities planned in the business strategy from a strategic risk perspective and taking particular account of the risk-bearing capacity and liquidity. It is set out in more detail in specific strategies for default risk, liquidity risk, market risk and operational risk. The Risk Strategy is reviewed at least once a year, adjusted where necessary and approved by the Management Board. It is also discussed with the Risk Committee, a body of the Supervisory Board. The Risk Strategy is supplemented by guidelines for granting loans (Credit Standards) and Investment Guidelines which contain detailed rules and regulations concerning the individual business areas of the Bank.

Risk-bearing capacity

HSH has integrated a capital adequacy process (ICAAP) into its risk management pursuant to MaRisk in order to monitor and safeguard its risk-bearing capacity on a sustained basis. Risk-bearing capacity is managed in conjunction with equity capital and the contribution margin.

The economic capital required to cover expected and unexpected losses (overall risk) is regularly compared to the available amount of risk coverage potential. This comparison is made within an integrated limit system that forms the basis of Group-wide economic limits on all types of risk material for the Bank. HSH Nordbank analyses its risk-bearing capacity comprehensively on a quarterly basis as well as within the framework of its annual planning process.

The basis for our calculation of risk-bearing capacity is a liquidation approach which focusses on protection of creditors (so-called "gone concern" approach). In addition to equity capital modified for economic purposes the risk coverage potential takes into account, amongst other

things, unrealised gains and losses arising on securities, derivatives, equity holdings and the lending business as well as effects from the second loss guarantee provided by the Free and Hanseatic City of Hamburg and the Federal State of Schleswig-Holstein. The risk coverage potential has been reduced by the second loss guarantee by the amount retained by HSH Nordbank of € 3.2 billion.

In the first quarter of 2012 capital was increased by € 500 million as planned by the Free and Hanseatic City of Hamburg and the Federal State of Schleswig-Holstein, which resulted in a corresponding increase in the risk coverage potential. This measure allowed the one-off payment made to the federal states in 2011 in accordance with the EU conditions to be reinvested into the Bank as the same amount of capital. The successful repurchase in February 2012 of two subordinated bonds issued by HSH Nordbank resulted in a reduction in the risk coverage potential.

The risk tolerance of HSH Nordbank is determined as part of the annual preparation of the risk strategy. Amongst other things, this includes the level of the buffer between the risk coverage potential and the maximum accepted overall risk (global limit). The buffer serves to cover any potential increase in the capital required in the event of adverse developments for the Bank as well as any non-quantified risks. The global limit is broken down into limits for individual risk types within the framework of the risk strategy.

The overall risk takes into account default risk, market risk, operational risk as well as the liquidity maturity transformation risk as an element of liquidity risk. Economic capital required for unexpected losses is determined monthly for default, liquidity and market risks in a methodical consistent manner with a confidence level of 99.9% and a risk horizon of one year. Operational risks are determined in accordance with the Standardised Approach as defined in the German Solvency Regulation (SolvV). The economic capital requirements for the individual risk types are aggregated to an overall economic risk. In doing so, no risk-reducing correlations are utilised.

We regularly conduct a macro-economic stress test across all risk types in order to be in a better position to assess the effects of potential crises on the overall risk

position of HSH Nordbank in addition to the normal case assessment. Lower risk coverage potential is assumed, on the one hand, for purposes of computing risk-bearing capacity, which in particular results from the assumption of an increased expected loss. On the other hand, we simulate the increase in the economic capital required that would arise on special scenarios for default, market and liquidity risks, which assume a massive deterioration in the risk parameters compared to the actual situation in each case. As at the reporting date, economic capital required was supported by sufficient risk coverage potential even in this stress scenario.

4.2. STRUCTURE AND ORGANISATION

The organisation of risk management at HSH Nordbank is aligned to the requirements of the business model and takes regulatory requirements into account.

The Overall Management Board adopts the risk strategy of the Group on an annual basis as part of its overall responsibilities. As a member of the Management Board, the Chief Risk Officer (CRO) is responsible for risk controlling, including risk monitoring, as well as for the back office functions of the Core Bank. In this context, he is responsible for the divisions Group Risk Management, Credit Risk Management, Loan and Collateral Management, Restructuring and Operations, into which the tasks of the back office are integrated, as well as for the Compliance division.

Group Risk Management develops the methods and procedure for measuring, managing and monitoring risks and is responsible for a significant number of tasks of operative portfolio management. In so doing, it ensures that the material risks of the Group are transparent and manageable. The methods and procedures applied as well as the key ratios determined are periodically reviewed by Group Risk Management for appropriateness and plausibility.

Among the tasks of Credit Risk Management are the preparation of the risk analysis, including the determination of the internal rating and the drawing up of the credit applications for Core Bank business as well as the structuring of the processes and regulations for the lending business of the whole Bank. Loan and Collateral Management is responsible in particular for the settle-

ment and administration of the lending business as well as for loan collateral. Responsibility for the restructuring cases of the Core Bank lies with the Restructuring division.

Trading transactions are settled and checked in the Operations and Group Risk Management divisions.

The Restructuring Unit (RU), which is established as a back office department in terms of structure and procedures, is responsible for the positions of the non-strategic business areas and for specific risk positions. Central responsibility for the risk-oriented and loss-minimising winding down of the credit investment portfolio is also included among its tasks. The Restructuring Unit independently takes all decisions necessary in respect of the positions transferred to it. This responsibility also includes restructuring and workout cases. The Restructuring Unit is also responsible for the processing and taking of decisions regarding workout cases in the Core Bank.

Risk reporting for the Restructuring Unit is generally carried out by means of the management and reporting systems of the Group Risk Management division. In addition to the regular risk reporting, an extended winding down and management reporting at portfolio level takes place for the Restructuring Unit.

The CRO and the board member responsible for the Restructuring Unit make decisions independently of the members of the Management Board responsible for the market or trading divisions. In this way the separation of functions required under the regulatory rules between the market and trading divisions on the one hand and risk controlling, settlement and control as well as back office on the other is taken into account at all levels of the Bank from an organisational perspective. The CRO provides the Overall Management Board as well as the Risk Committee with information on the risk situation of the Group.

The market and trading divisions are directly responsible for risks and income within the scope of their business activities and thereby make an active contribution to risk management in the Core Bank.

The Group Finance and Financial Controlling division is responsible for the overall management of the Bank including the overall planning activities.

The Compliance division monitors compliance with the requirements of the Bank with respect to securities compliance, anti-money laundering, financial sanctions and prevention of fraudulent activities under Section 25c of the German Banking Act (KWG). Compliance reports to the Management Board and to the Audit Committee as the responsible body of the Supervisory Board on the results of its control and monitoring activities on an annual basis.

The Legal division monitors the legal risks of the Bank as an independent department and is the contact point for all legal questions. It provides the Management Board with information on material legal risks and disputes on a regular basis.

Internal Audit reviews the effectiveness and appropriateness of risk management and the internal control system from a risk-oriented and process-independent perspective as well as the correctness in principle of all activities and processes. It includes the Core Bank, the Restructuring Unit, outsourcing and equity holdings in its review. It plays an accompanying role in important projects while maintaining its independence and avoiding any conflicts of interest.

Business areas are managed in line with uniform Group standards on the basis of a global head principle. Based on this the heads of the individual divisions as the respective Global Heads are responsible on a worldwide basis for the strategy of the business areas, administrative functions and services assigned to them. The Global Heads are supported by the head of the respective foreign branch in the implementation of the strategy on site in the foreign branch. The global head principle also applies to risk controlling to ensure that a Group-wide coordinated risk controlling process is in place.

The Bank has stipulated rules under which formalised audit processes are gone through prior to entering into transactions in new products or new markets. This should ensure that the products are properly considered under risk aspects in the relevant systems and reflected in the relevant processes and that transactions in new

products or new markets are only entered into with the approval of the Management Board.

Portfolio management by a central committee structure

One of the tasks of the Asset Liability Committee (ALCO) is the management of the risk-bearing capacity, limiting of risk concentrations as well as the management of the use of the limited resources liquidity / funding, balance sheet volume, RWA and economic capital. The ALCO is composed of the Overall Management Board as well as the heads of divisions Strategic Treasury (Management), Group Risk Management, Group Finance and Financial Controlling and Capital Markets. The basis for decision-making are, among other things, the current and expected business development for the Bank, the current utilisation of the relevant management limits as well as the liquidity development report, which is prepared in a manner consistent with the Bank's business planning and is updated periodically. This places the Bank in the position to react flexibly to market trends and to allocate resources as needed.

Business area analyses regularly performed by Group Risk Management form an important basis for the central credit portfolio management at HSH Nordbank. Detailed expectations regarding the possible movement in individual asset classes and sub-portfolios are developed up on the basis of thorough analyses of past trends and forwardlooking market and portfolio assessments. In this context, particular importance is attached to risk concentrations. The recommended course of action derived from the results of the analyses is submitted to the Board for a decision. Implementation of these recommendations supports the achievement of the Bank's business objectives. The implementation of the decisions is backed up by appropriate controlling procedures.

The central early warning system used to identify adverse trends for the Bank on a timely basis is another component of portfolio management.

Since 2012 the so-called "business review meeting" under the direction of the Management Board and with management involvement has been monitoring on a quarterly basis the achievement of targets by the business units with regard to new business, income, risk, costs, capital and liquidity as well as compliance with the EU require-

ments. The analysis is used as a basis for identifying any plan variances and initiating any possible measures at an early stage such as the strategic reallocation of resources.

The Transaction Committee is responsible for the operational management of the use of resources in the lending business at the level of material individual transactions. It decides independently on the allocation of these resources. In doing so, the focus is also placed on the continuous improvement in the portfolio quality through the active management of new business. Members of this committee entitled to vote are the heads of Group Risk Management (chair) and Strategic Treasury in addition to the heads of the market departments and the management level of the Restructuring Unit. Decisions can only be made unanimously. In individual cases – for example, in relation to the use of resources or utilisation of management limits – transactions together with a corresponding risk assessment are forwarded to the ALCO for a decision.

Early warning system

The bank-wide early warning system for credit risk was also enhanced in this reporting period from a functional and procedural perspective. The extension of account monitoring to all relevant accounts is to be highlighted in particular in this regard. The coverage ratio of the early warning system in relation to the loan portfolio relevant for monitoring is reviewed periodically and is at a high level. The early warning signals are incorporated in aggregated form in the business field analyses prepared by Portfolio Management.

4.3. BASIC PRINCIPLES REGARDING THE HEDGING OR REDUCTION OF RISK

At HSH Nordbank the assumption of risk is subject to the overriding principle of risk-bearing capacity (see above). The hedging or reduction of risk as well as the continuous monitoring of measures taken to hedge or reduce risk are managed at the individual risk type level. Details on the measures taken for each relevant risk type are set out in the following chapters.

4.4. RISK REPORTING

The manner and scope of risk reporting is geared to the risk strategy and follows a uniform concept. This overall concept creates conditions under which reporting is aimed at the recipient. In this manner it is ensured that resources are utilised optimally, and inefficiencies and any overlapping in reporting as well as management errors caused by inconsistent data are avoided.

Reports are produced at different intervals. Reports produced monthly enable information relevant to the management process to be forwarded promptly to the recipients. Reports produced quarterly and annually support the management, planning processes and the strategy. The Group Risk Management and Group Finance and Financial Controlling divisions are responsible for the content and dissemination of the reports on the overall risk and the individual risk types as well.

In Table 5 reports on overall risk pursuant to the requirements of MaRisk, ICAAP and SolvV are listed. The recipients of the Group-wide risk reports are as a rule the Overall Management Board and the Risk Committee as well as, to a restricted extent, the Heads of the divisions and the Supervisory Board. The reports are supplemented by specialised, internal reports.

The Risk Report constitutes the core element of risk reporting in particular to the Management Board and the Risk Committee. It is prepared quarterly and shows the overall risk position of HSH Nordbank together with detailed information on the default, market, operational and liquidity risk types. Furthermore, as part of MaRisk-compliant reporting it contains, amongst others, statements on the development of the loan portfolio, the available risk coverage potential as well as the degree of utilisation of economic and regulatory capital in both regular and stress cases, the scope and development of new business as well as the movement in the loan loss provisions.

In addition to reports on the overall risk there are reporting tools based on the risk type, which are described in the following chapters.

Significant reports on the overall risk

Report	Recipient	Interval	Content	Objective
Risk Strategy	Management Board, Supervisory Board/ Risk Committee, overall bank	Annually	Overall bank perspective of all types	Description of the organisational and strategic direction of risk management; presentation of the planned development of all material business activities from a risk strategy perspective and taking into account the risk-bearing capacity in particular.
Risk Report in the Annual Report	The public, investors, rating agencies	Annually	Risk management; risk-bearing capacity; methods, key ratios for the material risk types	Presentation of the risk situation of the Bank and the adequacy of its management; compliance with accounting law and risk related disclosure requirements (e.g. under IFRS).
Disclosure Report according to Section 26a of the German Banking Act (KWG)	Management Board, Supervisory Board, the public, investors, rating agencies	Annually	Information on equity, risk exposure, risk management procedures, and, based on this information, the capital adequacy of the institution under SolvV	Meeting the disclosure requirements of the SolvV
Risk Report in the Interim Report	The public, investors, rating agencies	Semi-annually	Risk bearing capacity, significant changes in methods and instruments as well as selected key ratios for material risk types	Presentation of the material changes to the risk position of the Bank and the adequacy of its management compared to the last report.
Risk Report	Management Board, Supervisory Board/ Risk Committee	Quarterly	Overall view (availability / utilisation of economic and regulatory capital under normal and stress scenarios), Default risks, Market risks, Liquidity risks, Operational risks	Core element of the reporting of risk to the Management Board and the Risk Committee; reporting medium for adhering to the risk strategy, also contains analyses of individual risks in addition to portfolio analyses; consolidated presentation of contents relevant for the management process which are derived from the internal and external reporting objectives (e.g. utilisation of the global limit and the Principle 1 ratio); ongoing enhancement of the internal management process in line with the requirements of the capital.
Finance and Risk Report	Management Board	Monthly	The earnings, liquidity and risk situation of the Bank	Summarised current presentations if the Bank's overall position regarding earnings, liquidity and risk, with the goal of reporting plan variances as well as providing tax related information.
NPNM MaRisk Report	Management Board	Monthly	Total NPNM process portfolio for existing and new business, status and information regarding MaRisk violations (NPNM), release of products, transactions from Operations divisions subject to a MaRisk reporting obligation	Presentation of status and processing of NPNM MaRisk violations and forwarding of information to the Management Board. Management Board has delegated the product approval competence and is informed of the results via the report
Profit Centre Calculation	Market departments (Core Bank/ Restructuring Unit), Heads of divisions, decentralised controllers	Monthly	Important management information	Management of the divisions

Table 5: Significant reports on the overall risk

5. DEFAULT RISK

HSH Nordbank breaks down its default risk into credit, country, equity holding and settlement risk. In addition to the traditional credit risk, credit risk also includes counterparty and issuer risk. Settlement risk consists of clearing risk and advance performance risk. Clearing risk arises in the case of possible loss of value if delivery or acceptance claims pertaining to a transaction that is already due, have not been met by both parties. Advance performance risk arises where the Bank has performed its contractual obligations but consideration from the contracting party is still outstanding. All elements of default risk referred to are taken into account within the context of the management of equity capital. For risk concentrations and equity holding risks additional management measures are in place.

The organisation of and methods applied in default risk management are being constantly improved in order to reflect changes in market conditions and new regulatory requirements.

5.1. ORGANISATION OF DEFAULT RISK MANAGEMENT

The organisational structure of HSH Nordbank reflects the functional separation of duties in the lending business between market and back office departments and / or risk controlling, also at Management Board level.

The Credit Risk Management division is responsible for the risk analysis for the lending business of the Core Bank including the preparation and setting of the internal rating and drafting of the credit applications. This does not include the risk analysis for the highly structured business which is performed by the respective market department – closely supported by back office departments. Furthermore, the organisation of the bodies of rules for the lending business, including the related processes, is the responsibility of the Credit Risk Management division. The Loan Collateral Management division is responsible in particular for the settlement of new lending business, the administration of the existing portfolio as well as the valuation and monitoring of collateral.

Lending decisions in the Core Bank are made jointly by the respective market department and back office. A de-

cision cannot be made without back office approval. As a back office department of the Core Bank, the Restructuring division independently makes its decisions based on the dual control principle. As a matter of principle, the competence levels are based on nominal amounts and the internal rating category.

HSH Nordbank makes use of the option to dispense with the involvement of the back office within the meaning of the MaRisk opening clause for lending transactions in certain types of business and below certain amounts classified as not material in terms of risk.

The Group Risk Management division is responsible for the independent analysis and monitoring of risks at the portfolio level, independent reporting and the management of country risk for both the Core Bank and the Restructuring Unit. Portfolio Management ensures portfolio transparency and is responsible for the independent business area analysis (including scenario simulations) and the operation of an early warning system for identifying loan exposures on a timely basis that are beginning to show signs of increased risk.

The expertise for winding down the portfolios is consolidated in the Restructuring Unit, which is set up as a back office unit from an organisational and processing perspective. The Restructuring Unit independently takes all decisions necessary in respect of the positions transferred to it. This responsibility also includes restructuring and workout cases. It is also responsible for the processing and taking of decisions regarding workout cases in the Core Bank.

The principles and regulations contained in the Credit Manual of HSH Nordbank, in particular on lending competencies, the determination of the rating, the treatment of collateral and loan monitoring, form the basis for the operating activities within the lending business. Credit risks, which fall under the broader definition of the term loan as set out in Section 19 (1) of the German Banking Act (KWG) are considered and treated differently based on collateral, loan type, rating category and type of credit risk. The basis is HSH Nordbank Group's aggregate exposure per borrower unit in accordance with Section 19 (2) of the KWG, whereby the bearer of the economic risk is always to be regarded as the relevant borrower.

The Bank has defined valuable collateral in order to differentiate between collateralised and non-collateralised loans. The focus is placed on meeting the requirements of the German Solvency Regulation (e. g. availability of a market value, realisation options, non-correlation to the collateralised loan, legal enforceability, maturity match). The range of approved collateral can be expanded following an assessment carried out by a team independent of the market divisions consisting of specialists from the Credit Risk Management, Group Risk Management and Legal divisions.

Credit risk management for single risks is supplemented in particular by instructions on loan monitoring and early identification of risks.

5.2. DEFAULT RISK MANAGEMENT

Default risks account for the major part of the risk potential of HSH Nordbank. The Bank has developed an advanced range of instruments for their analysis, assessment and proactive management.

Stress tests

HSH Nordbank carries out regular stress tests to determine the economic capital required for default risk. For this, the risk parameters used to calculate the economic capital required are varied, for example by changing the expected probability of default and the default ratios. The existing macroeconomic scenarios were refined in the reporting year.

In 2012 inverse stress tests were also carried out as planned on default risk. On the one hand, the scenario-based approach applied in the previous year was retained for this purpose and on the other hand additional sensitivity analyses were carried out.

Risk concentrations

Within the framework of regular business area analyses potential risk concentrations regarding regions, industrial sectors and borrower units for example and their systematic reduction are monitored among other things.

In addition, limits are set for risk concentrations at the country level, which are explained in the following "Country risk" section. In the event that a limit is fully utilised the decision regarding each new business trans-

action rests with the Overall Management Board. The Management Board was informed within the framework of the quarterly Risk Report of all cases where the limit was exceeded at the level of borrower units and countries and of the status of the key measures introduced.

Risk concentrations at the counterparty level are limited under supervisory law within the framework of large exposures in accordance with Section 13a and 13b KWG. The regulatory limits for borrower and risk units are monitored in accordance with Section 19 (2) KWG by the internal large risk management, which also includes internal lines in addition to drawdowns and external commitments outstanding.

In addition, there are limits on classic lending and trading transactions. In managing and setting limits for counterparty risk as part of the monitoring of trading lines the potential future exposure on currency and interest rate derivatives is recalculated daily for each client on the basis of a 95% quantile and compared to the respective trading limit.

A surcharge to be applied to the economic capital required for default risk is also determined in order to reflect concentrations in the risk-bearing capacity (so-called granularity adjustment).

Country risk

HSH Nordbank understands country risk as the risk that agreed payments are not made or only made in part or delayed due to government imposed restrictions on crossborder payments (transfer risk). The risk is not related to the debtor's credit rating.

Country risk limitation is an additional management dimension within the management of risk concentrations. Main parameters for recording country risk are the rating and the LGD of the transfer risk-relevant country. Country ratings and country LGDs are based on a methodology that was developed by the RSU Rating Service Unit GmbH & Co. KG (RSU) as part of the joint project of the Landesbanken.

Country limits are set for country risk concentrations at the Group level. Utilisation of the limits is monitored continuously and centrally by the country risk management.

Due to the deterioration in their fiscal and economic data, a number of European countries are subject to increased monitoring. These include in particular the Euro member states Greece, Ireland, Italy, Portugal and Spain.

Equity holding risk

The equity holding risk is the danger of financial loss due to the impairment of equity holdings. The risks and rewards associated with an equity holding are analysed extensively prior to the conclusion of the transaction. Equity holdings are only acquired if they meet the strategic objectives of the Bank.

The Bank's equity holding portfolio is described in detail in Section 5.7.

5.3. REPORTS ON DEFAULT RISK

In general, reporting of HSH Nordbank on default risk is integrated in the reports on the overall exposure of the Bank (see Section 4.4). In addition HSH Nordbank uses different regular reporting tools to report exclusively on counterparty default risks (see Table 6). These reports are supplemented with information on the monitoring and management of country risk (Table 7).

Significant reports on default risk

Report	Recipient	Interval	Content	Objective
Problem Loan Report	Management Board, Supervisory Authority, selected divisions	Quarterly	Comprehensive information on the problem loan portfolio	Comprehensive information on the development of intensive, restructuring and wind-down cases within the problem loan portfolio
Basel II Capital Adequacy under SolvV	Management Board, Supervisory Authority	Quarterly	Presentation and commentary on SolvV ratios and their changes including partial use reporting and selected SolvV-related data quality issues	Information to Management Board on regulatory ratios, partial use ratios and SolvV-related data quality issues
Validation Result	Management Board, Supervisory Authority	Annual (within 6 months of the completion of the update)	Default risk (IRBA rating module from RSU Rating Service Unit GmbH & Co. KG and SR, LGD and CCF)	Fulfillment of the regulatory requirements
Portfolio Batches	Asset Liability Committee (ALCO), Risk Committee (RC)	Quarterly	Presentation and commentary on the risk content of individual sub-portfolios incl. future-directed market- and portfolio assessments	Comprehensive information to the Management Board regarding individual sub-portfolios with regard to risk / return concentrations and recommended actions based thereon

Table 6: Significant reports on default risk

Significant reports on country risk

Report	Recipient	Interval	Content	Objective
Country Risk Update	CRO, market department, divisionheads (version A), staff divisions and operative level (version B)	Quarterly	Country Risk Monitor; Country Risk Ticker; HSH Nordbank Foreign Exposure	Current information on specific country risk and cross-border commitment of HSH Nordbank
Country Risk Watchlist	Division Credit Risk Management (risk assessment)	Monthly	Country risks	Condensed practical guidelines for so-called B countries with overdrafts of the so-called first come, first served limit (based on the overall or maturity limit) as well as countries of category C (ban on new business)
Country Limit List (category B)	Management Board, market departments, staff divisions	Biweekly	Utilisation of country limits for so-called category B countries (limited, new business possible)	Information for market departments, limit monitoring tool
Country Risk Report (ALCO)	Management Board (ALCO)	Quarterly	Country exposure of categories A, B and C, communication of the limit specifications (overall as well as maturity limits), major changes in the country risk assessment	Information of the Management Board (ALCO) on the country exposure, country limit utilisation as well as major changes in the country risk assessment

Table 7: Significant reports on country risk

5.4. COUNTERPARTY DEFAULT RISK: GENERAL DISCLOSURE REQUIREMENTS FOR ALL FINANCIAL INSTITUTIONS

5.4.1. Exposure values of receivables sorted by risk-bearing instruments

Exposure values of the portfolio of the HSH Nordbank Group are presented below, divided into the main types of receivables (risk-bearing instruments), main regions, main sectors and contractual terms to maturity, in accordance with Section 327 (2) No. 1 to 4 of the SolvV. The residual maturity of "1 day" includes all transactions due within one day, which also means transactions callable daily with indefinite maturity. Receivables which generally do not have fixed terms to maturity, like investment certificates, are included in the last maturity range with a flat residual maturity of 10 years.

The exposure values are calculated after the application of CCFs in accordance with Sections 48 and 99 SolvV. However, with respect to the requirements stipulated in Section 327 (2) No. 1 SolvV, in Table 8 to Table 11 credit risk minimisation techniques are not included in the calculation. The credit equivalent value is shown for derivative instruments. IRBA and CRSA exposure values are combined. The division does not include equity holdings and securitisations. Securitisations are presented in Chapter 6 and equity holdings are presented in Section 5.7.

As at the reporting date, exposure values from risk-bearing instruments amount to € 49 billion (previous year: € 41 billion). In addition, there are receivables from miscellaneous assets amounting to € 0.6 billion. These cannot be allocated to risk-bearing instruments and are therefore not presented in the following tables. The allocation to major receivables types was refined during the reporting year, whereby there was a slight shift from the lending to the securities business.

On the one hand, the increase in the positions between 31 December 2011 and the reporting date is attributable to the growth in new business. On the other hand, the Bank has increased its balances held at central banks by € 4.8 billion in order to improve its liquidity position. This was offset by the further progress made in winding down portfolios through the targeted reduction of businesses no longer considered strategic as part of the realignment of the Bank. Both the new business and higher balances held at central banks are not covered by the second loss guarantee. These are therefore the main reason for the increase in the positions. However, positions were primarily wound down in the hedged portfolio and this is reflected particularly in the positions excluding the effect of the guarantee facility. These have decreased from € 127 billion to € 123 billion.

For informational purposes, the exposure values of the following tables without taking into account the guarantee facility are presented in the Notes (Table 50 to Table 53).

Exposure values by risk-bearing instruments

	Loans		Loan commitments		Other non-derivative off-balance sheet assets		Securities		Derivative instruments	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Exposure value (total)	23,855	20,060	2,018	1,998	916	655	14,397	9,484	8,010	8,342

Table 8: Exposure values by risk-bearing instruments in € m

Exposure values by main regions

	Loans		Loan commitments		Other non-derivative off-balance sheet assets		Securities		Derivative instruments	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Western Europe	21,897	16,115 ¹	1,875	1,848	578	586	10,898	9,016 ¹	6,293	6,492
Nord America	829	2,544	36	73	309	44	2,671	121	1,236	1,362
Asian Pacific Region	910	930	52	51	21	15	7	9	154	150
Latin America	10	44	0	1	5	6	0	4	11	3
Central and Eastern Europe	80	90	45	5	1	2	0	4	153	169
Middle East	93	111	5	14	1	1	-	-	165	166
African countries	35	0	6	6	1	0	-	0	-	-
Int. Organisations	-	227 ¹	-	-	-	-	819	330 ¹	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	23,855	20,060	2,018	1,998	916	655	14,397	9,484	8,010	8,342

¹ Corrected value against the report as at 31 December 2011

Table 9: Exposure values by main regions in € m

Exposure values by main sectors

	Loans		Loan commitments		Other non-derivative off-balance sheet assets		Securities		Derivative instruments	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Credit institutions	1,038	2,962	35	42	377	63	5,318	3,667	2,474	2,474
Other financial institutions	568	828	25	73	3	3	848	2,030	562	615
Public sector	8,386	3,403	86	87	14	37	5,293	3,258	293	290
Private households	678	447	36	14	43	10	-	-	44	34
Properties and flats	2,931	2,101	288	173	55	62	0	-	1,324	1,312
Shipping	2,899	3,399	343	306	90	57	415	314	1,174	1,439
Industry	3,322	2,369	550	698	178	247	1	1	673	648
Trade and transport	2,090	1,818	512	398	81	112	-	-	592	596
Other service activities	1,902	2,724	143	207	74	64	2,522	215	873	875
Other	41	10	-	-	-	-	-	-	-	60
Total	23,855	20,060	2,018	1,998	916	655	14,397	9,484	8,010	8,342

Table 10: Exposure values by main sectors in € m

Exposure values by contractual residual terms

	Loans		Loan commitments		Other non-derivative off-balance sheet assets		Securities		Derivative instruments	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
≤ 1 day	8,607	3,360	55	85	0	2	209	15	1	0
> 1 day ≤ 3 months	1,197	2,215	126	96	15	3	768	1,862	52	63
> 3 months ≤ 6 months	419	320	71	129	8	13	1,341	35	23	38
> 6 months ≤ 1 year	807	3,057	289	280	14	79	1,075	450	112	415
> 1 year ≤ 5 years	4,795	3,661	840	704	410	74	6,718	4,484	1,720	1,694
> 5 years	8,030	7,448	637	705	468	484	4,286	2,638	6,102	6,132
Total	23,855	20,060	2,081	1,998	916	655	14,397	9,484	8,010	8,342

Table 11: Exposure values by contractual residual terms in € m

5.4.2. Procedure for creating loan loss provisions for the purposes of financial reporting

In order to provide for possible loan losses, we make valuation allowances in accordance with the following principles. These adjustments are set off against the corresponding items in the balance sheet. For off-balance sheet business this is achieved by means of provisions. In order to ensure that our loan loss provisions cover all identifiable counterparty default and country risks, risk is determined in three steps:

Our loan exposures are monitored on an on-going basis. We make individual valuation allowances in the amount of the anticipated loss for all counterparty default risks identifiable when examined individually. We calculate the exposure at default from the carrying amount of loans and advances less the net present value of all payments still expected to be received. The expected incoming payments comprise in particular all expected interest and redemption payments as well as payments from the liquidation of collateral, with any liquidation costs taken into account.

In addition, we set up country-specific general loan loss provisions (CLLP) for exposures related to borrowers domiciled in countries rated as non-investment grade. The valuation allowance rates are scaled according to rating grades in 5% steps. Transactions in countries with a default rating (16-18, see Table 25) are 100% value-adjusted. In determining the basis for calculation, we take no account of any transactions of clients and banks in respect of which counterparty-related loan loss provisions have already been created. Similarly, other risk-mitigating factors (such as valuable collateral, for example) are taken into account.

Finally, we create general loan loss provisions (GLLP) in accordance with the German commercial law for the remaining loan exposures not accounted for in the first two steps, but still involving latent risks. We have changed the method used to determine general loan loss provisions during the reporting period. We have determined general loan loss provisions since 31 December 2012 taking due account of current developments in the economic environment using the expected loss approach, as the la-

tent risks are appropriately taken into account on this basis. The portfolio valuation allowances are determined on the basis of the regulatory calculation parameters under Basel II, i.e. probability of default (PD) and loss given default (LGD). The loss identification period factor (LIP) used in the calculation represents the interval between the occurrence of a loss event and its announcement becoming known and serves to derive the losses that actually occurred from the expected loss. We recognise general loan loss provisions for loans and advances, contingent liabilities and irrevocable loan commitments to customers. As a result of this change in methodology the general loan loss provisions increased by € 373 million compared to the previous methodology applied. However, they continue to be determined for tax purposes in accordance with the bulletin of the Federal Ministry of Finance dated 10 January 1994.

Provided the credit risk no longer exists or is reduced, all three types of loan loss provisions mentioned above are reversed accordingly. We thereby comply with the obligation to reverse impairments in accordance with tax law and with the provisions of the German Commercial Code.

If the Bank determines that a receivable must be classified as unrecoverable (in whole or in part), its derecognition is initiated.

The appropriateness of specific loan loss provisions (SLLP) and of general loan loss provisions is monitored as part of problem loan processing. The expected need for risk provisioning for the financial year resulting from this process is determined on a quarterly basis and reported to the Management Board.

5.4.3. Definition of “non-performing” and “defaulting” for financial reporting purposes

For financial reporting purposes, both current assets and the receivables portfolio of the Bank must be written down to fair value if lower than the carrying amount. The fair value of a receivable is determined by assessing the creditworthiness of the borrower, i.e. the ability to comply with the contractual terms for the receivable, together with interest and principal repayments. The loans are then divided into the following categories depending on the creditworthiness of the borrower:

Division of receivables into non-performing and defaulting

No SLLP or reserves created	Loans without identifiable default risks. As at the reporting date these loans do not show any risk; no SLLPs are created for these credits, only GLLPs.	
	A loan is in default when the counterparty has not made a contractually agreed-upon payment. For this purpose, a default of even a single day is taken into account.	defaulting
Creation of SLLPs or reserves and/or direct write-off	Non-performing loans On the basis of objective criteria, for these loans (partial) default is expected; hence the creation of an adequate SLLP is required. No (additional) GLLP are created for these loans.	non-performing
	Non-recoverable loans Such receivables can no longer be collected. No recoverable collateral available. These loans need to be written-off.	

Table 12: Division of receivables into non-performing and defaulting

5.4.4. Development of risk provisions in the lending business

Consistent with Section 327 (2) No. 6 SolvV, Table 13 lists the overall portfolio as well as the changes in risk provision types in the reporting. Additions, changes due to exchange rate fluctuations as well as other changes to impairments are disclosed separately.

This trend reflects the impact of the weak macroeconomic environment and worsening crisis in the shipping industry. Accordingly, higher valuation allowances had to be recognised primarily in the shipping portfolios. In ad-

dition, higher loan loss provisions were required in the Restructuring Unit primarily for real estate loans, mainly in the Netherlands.

Existing individual valuation allowances and provisions as at the reporting date amounted to € 5,441 million. Of this amount, € 4,719 million are attributable to the Sunrise Transaction. This represents loan loss provisions (including use) for the Sunrise Transaction reference portfolio formed after 31 March 2009. Resulting actual defaults are allocated to the financial guarantee as described in Section 3.1.

Development of loan loss provisions

	SLLP		Reserves		GLLP		CLLP	
	2012	2011	2012	2011	2012	2011	2012	2011
Portfolio at the beginning of the reporting year	4,461	4,100	320	373	204	216	99	105
Addition	2,104	1,775	214	112	361	-	22	1
Reversal	706	702	143	165	-	12	0	7
Utilisation	527	576	5	11	-	-	-	-
Utilisation	236	196	-5	-8	-	-	-	-
Changes due to exchange rate fluctuations and other changes	-43	60	-3	2	-	-	-	-
Portfolio at the closing date	5,053	4,461	388	320	565	204	121	99

Table 13: Development of loan loss provisions in € m

5.4.5. Non-performing and defaulting receivables in the lending business by main sectors and main regions

Table 14 and Table 15 show the non-performing and defaulting receivables broken down by the main sector and main region consistent with Section 327 (2) No. 5 SolvV.

As at the reporting date, receivables from non-performing loans (needing value adjustments, i.e. individual value reserves or loan loss provisions) totalled € 13,830 million, and receivables on loans in arrears (not needing value adjustments) totalled € 3,046 million. Of which, € 12,783 million and € 2,926 million respectively come within the Sunrise Transaction reference portfolio.

Non-performing or defaulting receivables by main sector

Main sector	Non-performing ¹	Portfolio				Net additions/reversals of					Re-ceipts ³	in de-fault ⁴	2012
		SLLP	GLLP	CLLP	Allow.	SLLP	GLLP	CLLP	Allow.	DW ²			
Credit institutions	150	128			0	-3			0				-
Other financial institutions	833	175			27	40			4				59
Public sector	125	58			0	-22			-				7
Private households	157	93			-	3			0				152
Properties and flats	3,712	1,156			3	367			-9				383
Shipping	5,211	1,756			294	756			139				2,225
Industry	1,723	769			42	77			-47				144
Trade and transport	683	343			10	45			-4				47
Other services	1,238	574			13	136			-12				29
Other	-	-			-	-			-				-
Total	13,830	5,053	565	121	388	1,398	361	22	71	33	159		3,046

Non-performing or defaulting receivables by main sector

Main sector	Non-performing ¹	Portfolio				Net additions/reversals of					Re-ceipts ³	in de-fault ⁴	2011
		SLLP	GLLP	CLLP	Allow.	SLLP	GLLP	CLLP	Allow.	DW ²			
Credit institutions	206	181			-	-1			-				15
Other financial institutions	969	218			27	-2			25				22
Public sector	118	54			0	7			-1				31
Private households	192	110			0	32			0				70
Properties and flats	3,283	942			12	226			-12				294
Shipping	3,767	1,167			153	397			-15				1,168
Industry	2,380	845			89	242			-66				346
Trade and transport	916	394			14	49			2				41
Other services	1,095	544			24	107			14				154
Other	6	6			-	16			-				-
Total	12,933	4,461	204	99	320	1,073	-12	-6	-53	24	93		2,140

¹ Non-performing loans (with need for loan loss provisions)² Direct write-offs³ Recoveries on receivables written off⁴ Defaulting loans (without need for loan loss provisions)

Table 14: Non-performing or defaulting receivables by main sector in € m

Non-performing or defaulting receivables by main region

Main region	Non-performing ¹		SLLP portfolio		GLLP portfolio		CLLP portfolio		Reserves portfolio		in default ²	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Western Europe	10,996	9,227	4,181	3,451			8	2	355	255	2,685	1,876
North America	1,250	1,818	336	501			-	-	23	43	59	27
Asia Pacific Region	275	313	132	106			38	47	-	17	211	0
Latin America	214	179	122	92			1	2	2	2	5	2
Central and Eastern Europe	590	668	91	99			60	40	8	0	87	157
Middle East	469	728	185	211			13	8	-	2	-	77
African countries	37	-	4	-			1	1	-	-	0	-
Int. organisations	-	-	-	-			-	-	-	-	-	-
Other	-	-	-	-			-	-	-	-	-	-
Total	13,830	12,933	5,053	4,461	565	204	121	99	388	320	3,046	2,140

¹ Non-performing loans (with need for loan loss provisions)² Defaulting loans (without need for loan loss provisions)

Table 15: Non-performing or defaulting receivables by main region in € m

5.5. COUNTERPARTY DEFAULT RISK: CRSA AND/OR IRBA EXPOSURE CLASSES

5.5.1. Names of nominated rating agencies

Under CRSA the required risk weight for the calculation of regulatory capital is stipulated by the supervisory authority. The risk weight depends on the type of receivable, its external rating and any collateral. If external ratings are being used, HSH Nordbank takes only those into account which are issued by agencies approved by the Supervisory Board (Section 44 SolvV). Different rating or export insurance agencies can be appointed for each category of receivables. The CRSA or IRBA exposure class Securitisation allows rating agencies to be appointed at the transaction level; for all other CRSA exposures they are appointed per receivables category related to credit assessment.

If an external rating from a recognised rating agency is used this external rating must be converted to a rating on the rating master scale. A check should be made for each of the recognised rating agencies if an external rating is available. If there is more than one external rating available, of the two ratings leading to the lowest CRSA risk weights, the rating with the higher CRSA risk weight is decisive. The issuer rating should always be used, except for ABS transactions where the external rating for the transaction is used.

HSH Nordbank has appointed the following rating agencies.

Rating agencies by receivables category

Receivables category	Exposure class	Rating agency
States	Central governments Regional governments Other public sector entities Institutions Covered bonds issued by banks	Fitch Moody's S & P
Banks	Multilateral development banks	External ratings not used
Corporates	Corporates	External ratings not used
Investment certificates	Investment certificates	External ratings not used
Securitisations	IRBA exposures in acc. with Section 85 (6) 1 No. 1 SolvV CRSA securitisation exposures IRBA securitisation exposures	Fitch Moody's S & P

Table 16: Rating agencies by receivables category

5.5.2. Transfer of ratings from issues to receivables

Issuer ratings are necessary to determine the CRSA and IRBA risk weight for securitisations as well as the amounts of eligible collateral for CRSA and IRBA exposures. In addition, issuer ratings may have to be provided for the exposure class Investment certificates. The emission ratings employed in HSH Nordbank are taken from the rating agencies Fitch, Moody's and S & P. The listed rating agencies were specifically nominated to the regulatory authorities by HSH Nordbank. Generally, the ratings for the corresponding positions are maintained in the internal IT systems.

HSH Nordbank does not use the creditworthiness assessment via comparable exposures and borrower creditworthiness due to the minor relevance of the low exposure.

5.5.3. CRSA and IRBA exposure values when applying regulatory risk weight

In order to determine the equity capital requirements, both the CRSA and the Advanced IRB Approach require risk-weighted exposure values (the product of risk weight and exposure value) to be created. For CRSA the risk weights are set globally by the supervisory authority by exposure class and external rating. Table 17 shows the

CRSA exposure values before and after credit risk reduction measures in accordance with Section 328 (2) SolvV. Substitution effects mean that exposure values with risk weights that were originally higher are replaced with those with a lower risk weight.

In contrast, the Advanced IRB Approach always calculates the risk weights using parameters assessed internally. The IRBA exposure class Equity holdings and IRBA Special Financing positions are exceptions. In these cases it is possible to determine risk weight using the "simple risk weight" methodology. Risk weighting is set by the supervisory authorities depending on fixed criteria. However, within the HSH Nordbank Group the simple risk weight approach is only used partially for equity holdings at present. Depending on whether the equity holding exposure is not quoted on the stock exchange but diversified sufficiently, is quoted on the stock exchange or is another equity holding exposure, it is assigned a risk weight of 190%, 290% and/or 370%. These exposure values are also listed in Table 17 in accordance with Section 329 (2) SolvV. This classification does not include securitisations since they are separately disclosed in Chapter 6.

The figures in the following table take into account the Sunrise Transaction. The figures excluding the effect of the guarantee are shown for information purposes in the Notes (Table 54).

CRSA/IRBA exposure values by regulatory risk weight

Risk weight in %	CRSA before credit risk reduction		CRSA after credit risk reduction		Advanced IRBA	
	2012	2011	2012	2011	2012	2011
0	254	179	254	179	-	-
10	135	86	135	86	-	-
20	117	104	298	121	-	-
35	-	-	36	46	-	-
50	0	-	6	6	-	-
70	-	-	1	1	-	-
75	63	85	36	53	-	-
90	-	-	-	-	-	-
100	1,728	1,846	1,448	1,793	-	-
115	-	-	-	-	-	-
150	307	61	301	53	-	-
190	-	-	-	-	148	138
200	0	-	0	-	-	-
250	18	12	11	4	-	-
290	-	-	-	-	0	8
350	-	-	-	-	-	-
370	-	-	-	-	47	33
1,250	0	1	0	1	-	-
Capital deduction	10	19	10	19	0	0
Other risk weights	241	258	244	262	-	-
Total	2,873	2,650	2,780	2,622	194	179

Table 17: CRSA/IRBA exposure values by regulatory risk weight in € m

5.6. DERIVATIVE COUNTERPARTY DEFAULT RISKS

5.6.1. Nominal value of derivative transactions

Derivative financial instruments are used to a considerable degree in order to hedge risk efficiently, to take advantage of market opportunities and to cover special customer financing needs.

The nominal volume of derivative transactions amounted to € 326 billion as at the balance sheet date (previous year: € 419 billion). The derivatives business of HSH Nordbank Group is predominantly transacted with banks based in OECD countries.

5.6.2. Internal capital allocation and assignment of upper limits for credits to counterparties

The usual credit approval procedures must be complied with when creating derivative counterparty default risk exposures. The risk classification, limitation and monitoring processes of the classic lending business apply accordingly (see Section 4.1) supplemented by the daily monitoring of derivative exposures in accordance with MaRisk requirements. The eligible sums for derivative counterparty default risk exposures are included in the Bank-wide economic management, capital allocation and limitation together with the other exposures subject to credit risk.

5.6.3. Procedure for receiving collateral

Derivative transactions for hedging interest rate, foreign exchange and other similar risks are generally concluded with single counterparties and governed by existing master agreements. A differentiation should be made between the German Master Agreement for Financial Transactions and the international Master Agreement of the International Swaps and Derivatives Association (ISDA) in the 1992 or 2002 versions respectively.

In addition, collateral agreements supplementing a number of master agreements were concluded, mostly with major banks in Germany and abroad, but also with other companies in individual instances. This involves the Credit Support Annex to the German master agreement and the ISDA Credit Support Annex to the ISDA Master Agreement (English Law - Transfer respectively State of New York law - Pledge). The following information applies equally to both Master Agreements and the associated collateral agreements.

The collateral agreements include agreements on thresholds which are unsecured, eligible collateral, other collateral arrangements and the scope of the collateral agreement. The agreed collateral is generally cash, plus in several cases as an exception interest-bearing securities from G10 nations or other EU states with good ratings, which may be received or delivered through (generally daily) margining.

Cash collateral amount in convertible and freely transferable currencies (normally Euro or US dollars).

The Master Agreements and the collateral agreements are entered in the Legal Database Information System (LeDIS). A review is conducted via LeDIS for each individual derivative transaction as to eligibility for netting under supervisory law, the inclusion in a collateral agreement as well as the legal basis for use as collateral as to each individual derivative transaction.

HSH Nordbank has joined the London Clearing House (LCH) as a client in anticipation of the upcoming obligations under the European Market Infrastructure Regulation (EMIR) for central clearing. Since the start of 2012 OTC interest rate swaps and forward rate agreements can be settled via this system.

5.6.4. Evaluation of derivatives and creation of loan loss provisions

Counterparty risk is calculated using the market valuation method in accordance with Section 18 et seqq. SolvV.

Derivatives are recognised and measured in accordance with German commercial law. Internal transactions are required to comply with uniformly determined conditions. In particular, they must be conducted on arms-length terms. To the extent purchased / written options are assigned to the non-trading portfolio, the option premium paid / received is stated on the balance sheet under other assets / other liabilities. If necessary we conduct write downs or create provisions to comply with the lower-of-cost-or-market principle and the recognition-of-loss principle. If purchased / written options are assigned to the trading portfolio, the fair value less VaR discount are stated under trading portfolio assets / liabilities. To the extent that a margin system is applied in the case of innovative financial instruments not assigned to the trading portfolio, the margin payments are recognised as assets and liabilities as appropriate. We comply with the recognition-of-loss principle by setting up provisions as necessary. Margin payments related to financial instruments assigned to the trading portfolio are recognised in realised gain or loss. For further information on recognition and measurement of derivatives, see the 2012 Annual Report, chapter "Accounting policies".

5.6.5. Dealing with correlations of market and counterparty risk

The management of derivative counterparty default risks includes determining both market and counterparty risks and providing capital. A reduction due to correlations of both these types of risks is not applied at present.

5.6.6. Effect of the collateral amount which the Bank must provide when the rating is downgraded

The collateral agreements to these Master Agreements include individual clauses which could require the HSH Nordbank to supply collateral or additional collateral in the event that an external rating of the Bank is downgraded. As at the reporting date, a ratings downgrade of one notch by the rating agencies Moody's or Fitch would have resulted in additional collateral of € 1 million which

would not have affected HSH Nordbank's risk-bearing capacity.

5.6.7. Positive replacement value before and after application of credit risk reduction

Table 18 shows to what extent HSH Nordbank Group is committed to different types of counterparty as defined by Section 326 (2) No. 1 SolvV and to what extent deriva-

tive netting agreements and collateral netting is used. The derivative counterparty default risk according to the approach used (regulatory market assessment approach) is given in Table 19 in accordance with Section 326 (2) No. 2 SolvV. Derivatives forming part of securitisations are not shown in the following table as they are described separately in the next chapter.

Positive replacement costs

	Positive replacement value before netting and collateral		Netting options		Nettable collateral		Positive replacement value after Netting and collateral	
	2012	2011	2012	2011	2012	2011	2012	2011
Interest-related contracts	11,439	11,573						
Currency-related contracts	318	536						
Securities/index-related contracts	140	87						
Loan derivatives	63	48						
Goods-related contracts	40	48						
Other contracts	1,209	903						
Total	13,208	13,195	6,327	5,879¹	1,630	960	5,251	6,356¹

¹ Corrected value against the report as at 31 December 2011

Table 18: Positive replacement costs in € m

Derivative counterparty default risk

	Market assessment method	
	2012	2011
Derivative counterparty default risk exposure	8,010	8,245

Table 19: Derivative counterparty default risk in € m

5.6.8. Credit derivatives

Credit derivatives purchased to hedge the loan portfolio of HSH Nordbank Group are shown in accordance with Section 326 (2) No. 3 SolvV in Table 20. As at the 2011

reporting date, HSH Nordbank did not hold any derivatives eligible for collateral. Credit derivatives forming part of securitisations are not shown in the following table as they are described in the next chapter separately.

Nominal value of credit derivatives eligible for collateral

	Nominal value of collateral	
	2012	2011
Credit derivatives (secured party)	-	-

Table 20: Nominal value of credit derivatives eligible for collateral in € m

HSH Nordbank Group acts as both buyer and seller of credit derivatives (see Table 21 in accordance with Sec-

tion 326 (2) No. 4 SolvV). There were no brokerage transactions as at the reporting date.

Nominal values of credit derivatives

	Use for own credit portfolio protection buyer		Use for own credit portfolio protection seller		Brokerage activity	
	2012	2011	2012	2011	2012	2011
Credit Default Swaps	188	904	406	112	-	-
Credit Linked Notes	-	-	-	-	-	-
Total Return Swaps	-	-	-	-	-	-
Credit Options	-	-	-	-	-	-
Other contracts	-	-	-	-	-	-
Total	188	904	406	112	-	-

Table 21: Nominal values of credit derivatives in € m

5.7. LONG-TERM EQUITY HOLDING PORTFOLIO

The regulatory authorities state that equity holdings must be consolidated, deducted from equity or backed with equity capital in the exposure class Equity Holdings. In this context regulatory law considers equity holding risk to be a sub-class of the counterparty default risk.

A key objective of the Bank is to wind down the equity holdings not relevant to the core business. In the past year the equity holding portfolio has been reduced as planned through numerous disposals. In the reporting year, moreover, several sales processes for non-strategic equity holdings of the Bank were initiated, so that it was possible to achieve an additional reduction in the total volume of the equity holding portfolio in the year 2012. Additionally, the equity-holding portfolio was re-structured for the purpose of creating meaningful categories.

The equity holdings from the banking book are explained below.

5.7.1. Objectives of equity holdings

The equity holding portfolio of the HSH Nordbank Group is divided essentially into six sub-portfolios. Each sub-portfolio has a different objective.

a) Strategic equity holdings

Strategic equity holdings are all those which have a strategic importance for the Group and/or promote the economic interests of the region.

b) Equity holdings to support business segments

Equity holdings to support business segments are oriented towards expanding existing customer relationships or creating new ones.

c) Wind-down equity holdings

Wind-down equity holdings are equity holdings which previously supported a business segment, as well as bail-out purchases, which must be wound-down in light of the decision of the EU Commission to conclude the state aid proceedings or for strategic reasons in accordance with decisions of the Bank.

d) Bail-out purchases

Bail-out purchases are equity exposures which are entered into as part of the restructuring of a loan.

e) Other equity holdings

In contrast to the regulations of the German Commercial Code all items that contain a subordinated residual claim to the assets or income of the issuer are classified as equity holding under supervisory law. Equity holdings which are considered as an equity holding under supervisory aspects (in accordance with SolvV) but mostly are allocated to the item "Shares and other non-fixed-income securities" (in accordance with the German Commercial Code) do not therefore belong to the under a) to d) described divisions and instead are treated as other equity holdings.

f) Equity holdings contained in investment funds or funds-like certificates

Special funds of domestic or foreign banks and certificates which under HGB must be recognised under the heading “Bonds and other fixed-interest securities” can also include equity holdings within the meaning of SolvV under supervisory law. If these equity holdings have to be allocated to the banking book, they come under the separate sub-portfolio “Equity holdings contained in investment funds or certificates similar to funds”.

5.7.2. Accounting policies for equity holdings

Regular business valuations represent an important instrument for monitoring and managing equity holding risks in the case of both strategic and business segment relevant and wind-down equity holdings and bail-out purchases. The processes have been designed to ensure that the recoverability of all HSH Nordbank’s direct equity holdings and relevant indirect equity holding are assessed at least once a year. Significant equity holdings are subject to a detailed assessment using the relevant standards of the Institute of Public Auditors in Germany

(“Institut der Wirtschaftsprüfer”). All other equity holdings undergo a risk-oriented assessment.

Equity holdings which are allocated to the sub-portfolios “Other equity holdings” and “Equity holdings contained in investment funds or funds-like certificates” also represent a long-term commitment due to their allocation to the Bank’s investment portfolio. Hence these partial portfolios are also assessed on the moderate lower of cost or market principle and the corresponding exposures are reported with their historical costs. This means that reporting of profit and loss volatilities, which would not be economically justified due to the short-term nature of the underlying fluctuations in value, is avoided. If long-term reductions in value are foreseeable – generally related to creditworthiness – write-downs are made to the lower share price, market price or fair value.

5.7.3. Overview of equity holdings in the banking book

The equity holding portfolio of the banking book of HSH Nordbank Group is shown in Table 22.

Valuation of equity holding instruments

Equity holding portfolio	Carrying amount		Fair value		Stock market value	
	2012	2011	2012	2011	2012	2011
Strategic equity holdings	51	89	51	89	-	-
Items traded on the stock exchange	-	-	-	-	-	-
Not listed on the stock exchange but belonging to a sufficiently diversified equity holding portfolio	-	-	-	-	-	-
Other equity holding exposures	51	89	51	89	-	-
Business field-related equity holdings	148	27	148	25	-	-
Items traded on the stock exchange	1	6	1	4	1	4
Not listed on the stock exchange but belonging to a sufficiently diversified equity holding portfolio	-	-	-	-	-	-
Other equity holding exposures	146	21	146	21	-	-
Wind-down equity holdings	217	240	217	240	-	-
Items traded on the stock exchange	1	1	1	1	1	1
Not listed on the stock exchange but belonging to a sufficiently diversified equity holding portfolio	216	239	216	239	-	-
Other equity holding exposures	-	-	-	-	-	-
Bail-out purchases	25	77	25	77	-	-
Items traded on the stock exchange	-	-	-	-	-	-
Not listed on the stock exchange but belonging to a sufficiently diversified equity holding portfolio	-	-	-	-	-	-
Other equity holding exposures	25	77	25	77	-	-
Other equity holdings	270	287	248	273	-	-
Items traded on the stock exchange	38	50	16	36	16	36
Not listed on the stock exchange but belonging to a sufficiently diversified equity holding portfolio	-	-	-	-	-	-
Other equity holding exposures	232	237	232	237	-	-
Investment exposures contained in investment funds or funds-like certificates	1	1	1	1	-	-
Total	712	721	690	704	-	-

Table 22: Valuation of equity holding instruments in € m

5.7.4. Realised profits and losses and hidden revaluation gains for equity holdings

Table 23 shows in accordance with Section 332 No. 2c SolvV the accumulated gains from sales. It also shows in accordance with Section 332 No. 2d SolvV the amount of hidden revaluation gains (or losses); these hidden gains

(or losses) are not recognised in the statement of financial position or statement of comprehensive income. They are also not included in Tier 1 or Tier 2 capital. Un-realised revaluation gains (or losses) are not disclosed, as HSH Nordbank applies HGB accounting principles to determine the regulatory capital adequacy and consequently also for disclosure purposes.

Realised/hidden gains and losses from equity holding instruments

	Realised gains or losses from sales and workout		Hidden revaluation gains/losses			
			Overall		of which amounts included in Tier 1 or Tier 2 capital	
	2012	2011	2012	2011	2012	2011
Equity holding items	25	61	-22	-16	-	-
Equity holding items contained in investment funds or funds-like certificates	0	-3	0	0	-	-
Total	25	58	-22	-16	-	-

Table 23: Realised/hidden gains and losses from equity holding instruments in € m

5.8. RISK MEASUREMENT FOR IRBA PORTFOLIOS

5.8.1. Procedures and transition rules permitted by the Federal Supervisory Authority as part of IRBA

HSH Nordbank determines all parameters required to determine the risk-weighted exposure value internally, i.e. probability of default (PD), loss given default (LGD), exposure at default (EaD), credit conversion factor (CCF) and maturity (M), and hence complies with the requirements of the Advanced IRB Approach of the SolvV.

There is a detailed description of the approved rating module used by HSH Nordbank in Table 24.

The regulatory reference point of 80% indicates the degree of coverage of the positions with internal rating systems which must be achieved by the middle of the maximum five-year term for an institution approved for the Advanced IRB Approach. As at the relevant reporting date of 30 June 2010, HSH Nordbank had significantly exceeded this degree of coverage. At this point in time, the different degrees of coverage in accordance with Section 67 SolvV amounted to over 85% in each case.

Based on the IRBA positions calculated in accordance with Section 67 (3) Sentence 1 SolvV the coverage ratios as at the reporting date reached a regulatory benchmark figure of over 92% both at the institution and Group level. The coverage ratio calculated on the basis of the risk-weighted IRBA positions in accordance with Section 67 (3) Sentence 2 SolvV also reached a regulatory benchmark figure of over 92% at the institution level and over 91% at the Group level.

As part of the strategic realignment of HSH Nordbank and in order to increase the degree of coverage an analysis is performed to determine whether positions are permanent or are temporarily in partial use or are not to be included in determining the coverage ratio as they belong to business areas that are being discontinued. Furthermore, a reduction in the regulatory benchmark figure can be applied for at the Federal Financial Supervisory Authority in accordance with Section 66 SolvV. This approach is currently being reviewed by the Bank.

HSH Nordbank Group applies the following transitional rules in accordance with Sections 338 and 339 SolvV:

- ▶ The Bank excludes equity holdings held before 1 January 2008 from application of the Advanced IRBA, using CRSA instead to determine the capital requirement (grandfathering).
- ▶ For investment certificates in accordance with Section 294 (6) Sentences 1-8 SolvV, HSH Nordbank Group is waiving prorated treatment in line with the actual foreign currency composition, provided that the share of the special fund denominated in foreign currency or gold does not exceed 10% of the total value of the special fund.

5.8.2. Structure of internal rating systems and internal allocation of exposures or borrowers to rating classes or risk pools and external credit ratings

The rating procedures for the individual portfolio segments were developed early on in cooperation with nine Landesbanks (Landesbank project) based on a scorecard and a simulation model. This cooperation between the Landesbanks led in 2003 to the founding of RSU Rating Service Unit GmbH & Co. KG (RSU). Since 2004 this

company has assumed responsibility for the methodological maintenance and development of the rating systems. The individual Landesbanks provide their expertise in the form of competence or support centres. Currently 13 of the rating modules developed by the participating banks are provided by RSU. In addition, RSU has integrated two rating modules from SR und Risikosysteme GmbH (SR), a subsidiary of Deutscher Sparkassen- und Giroverband (DSGV), into the central LB-Rating application. With a single exception (rating of funds), these rating modules are all rating procedures recognised at HSH Nordbank for the purposes of reporting under SolvV.

In addition, during the year 2009 the LGD and CCF methodology developed by HSH Nordbank and approved by the supervisory authorities was transferred to RSU. HSH Nordbank now plays the role of centre of competence.

Rating methods

The rating procedures distinguish between scorecard and cash flow approaches. The scorecard approach identifies characteristics and factors that are able to differentiate between good and bad borrowers. Their validity is first verified with a single factor model. Subsequently, several characteristics, which each have high significance in a single factor model, are combined to create a multi-factor model. The scores determined using the multi-factor model are translated to default probabilities. A precondition for the application of a scorecard approach is that a sufficient number of relatively homogeneous borrowers is available.

The cash flow approach simulates cash flows of the asset in various scenarios. These vary depending on macro-economic and sector-based conditions. A simulation engine (SimEngine) is used to create numerous scenarios which differ according to macro-economic conditions before the data enter the corresponding rating modules. A

sector-based model uses these scenarios to calculate scenarios for future changes in sector-related factors such as rents, vacancies or charter rates. The values are then fed into the calculation of scenarios for the cash flow of the corresponding asset. Subsequently scenarios are selected where the borrower must be considered to be defaulting. The default probability is calculated as a ratio from the number of scenarios where a default was recorded to the total number of scenarios.

Both the scorecard and the cash flow approaches include quantitative as well as qualitative factors. Once these factors have been taken into consideration, warning signals and the company background are examined. There are also regular override opportunities, allowing ratings to be moved up to a limited extent and down to an unlimited extent. The rating result, the local currency rating or LCR, is only finalised once all these aspects have been taken into consideration. As a result, an individual PD is obtained for each borrower, enabling assignment to a specific credit rating class. When measuring borrower risk, the risk of foreign currency transfer restrictions has to be considered, as well as default risk.

The rating result is calibrated on a standard rating master scale. This master scale is the DSGV master scale which contains 22 live and 3 default categories. Each rating class on the rating master scale is assigned a one-year default probability. This standard rating scale allows for immediate comparison of exiting ratings separately from the portfolio segment. The scale also includes mapping of external ratings to the internal categories.

The rating modules and methods used at HSH Nordbank Group at the reporting date for the purposes of reporting under SolvV are shown in Table 24. Capital backing is calculated using the Advanced IRB Approach.

Rating modules of HSH Nordbank Group approved by the supervisory authorities

Borrower, bearer of economic risk, asset or project	Rating module	Rating method
Corporates	Corporates Sparkassen-StandardRating	Scorecard
Real estate	Sparkassen-Immobilien­geschäftsRating Internationale Immobilienfinanzierungen	Cash flow and Scorecard
Ships	Ship financing	Cash flow
Banks	Banks	Scorecard
Insurance companies	Insurance companies	Scorecard
International regional authorities	International regional authorities	Scorecard
Leasing companies SPC real estate leasing	Leasing	Scorecard with cash flow component
Projects	Project financing	Cash flow and Scorecard
Single-airline-financing	Aircraft financing	Cash flow
LBO financing	Leveraged finance	Scorecard
Individuals, self-employed, craftsmen, corporate clients	Sparkassen-StandardRating or Sparkassen-Immobilien­geschäftsRating (depending on the primary origin of capital)	Scorecard or cash flow
States	Country and transfer risk	Scorecard
DSGV guarantee system	DSGV guarantee system	Scorecard with simulation part

Table 24: Rating modules of HSH Nordbank Group approved by the supervisory authorities

The Landesbanks participating in the development of rating procedures are divided into competence and support centres and participants. The competence centre bank assumes the lead for the development and maintenance of modules where it can offer special expertise. It is supported by experts from the support banks while the remaining banks act as participants (collaborating indi-

rectly). HSH Nordbank has the main responsibility for the rating modules ship financing and leveraged finance and until the end of the reporting year for the module aircraft financing. HSH Nordbank is also co-responsible for the modules international real estate financing and country and transfer risk.

Internal allocation of exposures and borrowers to rating classifications and external ratings

Rating classification per the master scale rating	Moody's	S & P	Fitch
1(AAAA)	-	-	-
1(AAA)	Aaa, Aa1	AAA, AA+	AAA
1(AA+)	Aa2, Aa3	AA, AA-	AA+, AA
1(AA)	A1	A+	AA-
1(AA-)	-	-	-
1(A+)	A2	A	A+
1(A)	A3	A-	A
1(A-)	-	-	-
2	Baa1	BBB+	A-
3	Baa2	BBB	BBB+
4	Baa3	-	BBB
5	-	BBB-	-
6	Ba1	BB+	BBB-
7	Ba2	BB	BB+
8	-	-	BB
9	Ba3	BB-	BB-
10	B1	B+	-
11	-	-	B+
12	B2	B	B
13	-	-	-
14	B3	B-	B-
15	Caa1 – Caa3	CCC+ - C	CCC+ - C
16 – 18	Default Rating	Default Rating	Default Rating

Table 25: Internal allocation of exposures and borrowers to rating classifications and external ratings

LGD method

The LGD calculation method was developed successively by HSH Nordbank for each rating segment, and is continuously reviewed and refined in the course of the annual validation process. Since the transition to the RSU Association in 2009, validation has been done jointly with other Landesbanks. In this context, HSH Nordbank assumes the Competence Centre function. The results were estimation methods for recovery rates regarding specific collateral and specific borrowers (proceeds of the assets in bankruptcy). LGD calculation takes into account the current data in the legacy systems.

When determining LGD (overall LGD) three possible default scenarios are considered. In addition to processing, restructuring of the defaulted commitment is possible. In the best case scenario recovery is possible. LGD estimation is based on observation of the workout. In order to draw up a forecast for the loss ratio, the proceeds of the sale of collateral (the product of the market value of the collateral asset and a recovery rate specific to that asset)

and proceeds from the bankruptcy estate (the product of non-collateralised exposure and a borrower-specific recovery rate) are used.

Modelling is based on historical losses, which are collected together with other Landesbanks and analysed using statistical and econometric techniques. For data capture, HSH Nordbank uses the Credit Loss Database (CLD). Historical loss data is used to identify macroeconomic and microeconomic factors influencing LGDs, which in turn are used to create models for predicting LGDs in future loss events. In accordance with Section 132 (3) Sentence 1 SolvV, the effects of an economic downturn were taken into account, and “downturn LGDs” calculated. Information from external studies was also used as a benchmark.

CCF method

In contrast to assets on the balance sheet, where future exposure can be calculated from the loan agreements, receivables from the classic off-balance-sheet business

must have the exposure at default (EaD) calculated using a credit conversion factor (CCF). This is assessed annually on a joint basis as part of the RSU association together with other Landesbanks. For transactions with unlimited future absorption, different product categories - and hence varying estimation procedures for the CCF - are used.

5.8.3. Internal process for allocation of exposures or borrowers to rating classes or risk pools divided according to exposure classes

The rating process is divided into a creation and a determination process. The business units Credit Risk Management and Restructuring, respectively the Restructuring Unit exercise responsibility for the release of the ratings.

The rating guidelines in the Credit Manual specify for all exposure classes (except the retail portfolio and risks with total lending of € 750,000 per borrower unit or € 75,000 at business partner level) that internal rating methods recognised under supervisory law must be used. An individual rating must be prepared,

- ▶ for borrowers, bearers of economic risk, rating issuers (for special financing projects: for the item or the project). This applies also to the purchase of receivables without recourse;
- ▶ for persons who act exclusively as support in the rating modules;
- ▶ as a precondition in order to include specific collateral (e.g. personal collateral) provided as a risk reduction to the benefit of HSH Nordbank.

Each borrower subject to rating is given only one rating for local currency rating (LCR) and, if need be, foreign currency rating (FCR). The LCR determines the counterparty default risk without considering a foreign currency transfer risk. The foreign currency transfer risk is incorporated when the FCR is determined.

The exact triggers for the rating are also specified in the Credit Manual. Each rating must be updated according to risk aspects – but at the latest within twelve months – and verified and confirmed by the back office department. Special risk aspects which require updating before the end of the 12 month period are specifically:

- ▶ significant expansion of the counterparty default risk
- ▶ knowledge of significant new risk-related information
- ▶ commitments where a currency transfer risk exists if the risk country migrates to rating class 9 or worse
- ▶ defaults and recoveries.

The Working Instruction in the Credit Manual explains the requirements for creating a rating unit. It sets out when the rating of the legal borrower is waived as part of the rating and the loan decision process and the rating of the bearer of economic risk and/or the rating donor is to be applied instead.

Positions which have not been rated using a recognised IRBA rating method but have an internal expert rating are treated as CRSA (Section 5.5.1).

To ensure comprehensive rating for the exposure for which risk classification is required by SolvV, the Bank has process quality controlling (PQC) and data quality management (DQM).

Assignment of borrowers requiring a rating to the rating methods is done on the basis of the module-specific rating process instructions in the Credit Manual, taking into account the module-specific applications manuals and expert rating manuals.

IRBA exposures and borrowers are allocated to IRBA exposure classes or IRBA exceptions based on a customer systematic key in accordance with Section 70 (1) SolvV. The customer system classifies business partners according to various characteristics. The most important are: entity groups (banks/public authorities/companies and organisations), location of the entity (domestic or foreign according to the country list of the Deutsche Bundesbank), industry and legal form and differentiation between economically independent and economically dependent entities.

Specific models are developed for the various rating segments in order to determine the collateral-specific recovery rate for the non-collateralised part of the EaD. Therefore the allocation of borrower to the various partial LGD models is based on the allocation performed as part of a

rating procedure. The CCF is selected according to the product so that an allocation to rating systems is not required.

Retail banking

Within HSH Nordbank Group receivables from retail banking are handled in the CRSA.

Equity positions

For equity holdings covered by the grandfathering provisions of Section 338 (4) SolvV, which are given a risk weight of 100% in CRSA, no rating is required under supervisory law before 31 December 2017. However, ratings are required for positions entered into since 1 January 2008. The rating methods are used for these default risks. If none of the rating modules recognised under supervisory law can be used for an equity holding, the simple risk weighting method is used, i.e. the risk weight specified in supervisory law is assigned.

For investments in funds and the underlying risk of near-fund listed certificates in the banking book the risk weight and expected loss (EL) is determined using the "look-through treatment" as described in Section 83 SolvV. If an assessment of the underlying assets is not possible, HSH Nordbank uses a risk weight of 370%.

5.8.4. Control mechanisms for reviewing the rating system

A validation of all rating modules and of the LGD and CCF models of HSH Nordbank is performed annually within the meaning of Section 106 No. 5 and Section 147 SolvV. This includes the following steps:

- ▶ analysis of portfolio and market performance (e.g. description of the portfolio according to region and relevant customer types)
- ▶ analysis of rating distributions
- ▶ backtesting (comparison with actual default rates) and/or benchmarking (comparison with external ratings)
- ▶ calibration (verification of the extent of allocated default probabilities)
- ▶ examination of selectivity (ability of the rating module to differentiate between good and bad borrowers)

- ▶ review of the model structure and design (e.g. significance and weighting of individual factors and partial models, inclusion of support factors, analysis of the frequency with which data were overwritten and the reasons for this, inclusion of the transfer risk)
- ▶ examination of the application of ratings (e.g. analysis of data quality, verification of standard application by carrying out duplicate analyses)

The process of validation involves two steps:

- ▶ The first step involves validation based on the pooled data of all Landesbanks and/or Landesbanks and savings banks under the lead management of RSU and/or SR. Data are pooled specifically to create the largest possible and hence statistically most significant database. In cooperation with the relevant competence centre and support centre, RSU performs the validation and, if necessary, the recalibration and further development of the modules on the basis of the pooled data. For the modules of SR, pooling is carried out on the basis of data from participating savings banks and participating Landesbanks. Updates are made by SR.
- ▶ As the validation is done on the basis of the pooled data, it is necessary to demonstrate that the results can also be applied to HSH Nordbank Group. This is done in a second step in cooperation with RSU and/or SR. In addition further internal analyses to complete the validation and proof that the rating modules are suitable for use at HSH Nordbank are performed.

The role of HSH Nordbank during the updating phase on the basis of the pooled data depends on whether it has assumed one of the functions of competence and/or support centre in respect of the module in question.

The LGD and CCF methods are also validated annually in accordance with the provisions of the German Solvency Regulation, similar to validation of the rating modules. Until 2008 the validation procedures were carried out internally. With the transition of the methods to the RSU Association, since 2009 validation has been done jointly with other Landesbanks.

A similar procedure exists for SR modules in collaboration with SR.

5.8.5. Utilisation of internal estimates for purposes other than determination of risk weighted exposures in accordance with IRBA

HSH Nordbank Group uses parameters determined internally in many areas of the Group. For example, all risk parameters EaD, PD, LGD and CCF are used actively for the overall management of the Bank. The risk parameters in particular are embedded into risk-adjusted pricing of loan applications, the procedure to create loan loss provisions as well as into the profit centre calculation. With their inception the rating systems and the corresponding risk parameters are used in the following steering systems of the Bank:

- ▶ loan approval procedures/determination of competences
- ▶ a priori and ex-post calculation of individual transactions
- ▶ limit setting
- ▶ reporting
- ▶ commitment monitoring
- ▶ intensified loan management/restructuring

In addition the parameters are used for ongoing scenario calculations and in the planning and strategy process.

5.8.6. Exposure values according to rating ranges (excluding retail banking) under IRBA

The rating results determined using the rating modules described above are calibrated to a standard rating scale, whereby rating classes 16 to 18 represent default classes. The individual rating classes are summarised in seven

Rating ranges for greater clarity. As most of the receivables have a good rating and there are relatively few receivables in the poorer rating ranges, the assignment of rating ranges for better grades has been refined.

Table 26 shows the breakdown as at the reporting date in accordance with Section 335 (2) No. 1 and No. 2 SolvV. Table 26 to Table 28 do not include securitisations, which are shown separately (see Chapter 6). In the case of equity holdings, only equity holdings under the PD-LGD approach are shown. The overall long-term equity holding portfolio is described in more detail in Section 5.7.

The following table shows the figures in accordance with Section 99 SolvV allowing for credit risk reduction techniques. It also shows the average probability of default (average PD), average LGD and average risk weight within a rating range for the individual exposure classes. All presentations in accordance with Section 335 (2) SolvV are based on the figures in the reports in accordance with Bundesbank Circular B 40-5 / B 410-1 65.2.229.13.

The figures in the following table take into account the Sunrise Transaction. In the course of credit risk minimisation, the second loss piece as a financial guarantee is substituted in the IRBA central government class. As a result, the figures include the second loss piece totalling € 7.0 billion of the Sunrise Transaction, but exclude the first loss piece and senior tranche. The figures excluding the effect of the guarantee are shown for information purposes in the Notes (Table 55).

Avg. PD, avg. LGD, avg. RW and exposure values by rating ranges

IRBA exposure class	Avg. PD in %		Avg. LGD in %		Avg. RW in %		Exposure value	
	2012	2011	2012	2011	2012	2011	2012	2011
Rating range 1: 1(AAAA) – 1(AA+)								
Central governments	0.0	0.0	28.9	22.9	0.1	0.1	19,875	13,159
Institutions	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	-	-	-
Equity holding exposures ¹	-	-	-	-	-	-	-	-
Subtotal	0.0	0.0	28.9	22.9	0.1	0.1	19,875	13,159
Rating range 2: 1(AA) – 1(A-)								
Central governments	0.0	0.0	29.7	20.4	17.0	9.9	1,050	787
Institutions	0.0	0.0	20.1	28.7	11.1	11.4	7,195	7,615
Corporates	0.1	0.1	27.5	44.7	16.6	22.6	5,611	4,394
Equity holding exposures ¹	-	-	-	-	-	-	-	-
Subtotal	0.1	0.0	23.8	33.7	13.8	15.1	13,855	12,796
Rating range 3: 2 – 5								
Central governments	0.2	0.2	71.3	90.1	102.3	132.5	25	21
Institutions	0.2	0.1	19.8	10.6	18.5	8.6	925	2,480
Corporates	0.3	0.3	38.9	38.4	52.3	49.0	8,767	6,852
Equity holding exposures ¹	0.4	0.4	90.0	90.0	191.9	191.9	2	2
Subtotal	0.3	0.2	37.2	31.2	49.2	38.5	9,720	9,355
Rating range 4: 6 – 9								
Central governments	-	-	-	-	-	-	-	-
Institutions	1.4	0.6	14.1	13.8	33.6	34.0	149	47
Corporates	1.1	1.1	37.1	41.3	83.2	92.3	5,499	4,925
Equity holding exposures ¹	1.9	1.4	90.0	90.0	308.7	273.8	105	10
Subtotal	1.1	1.0	37.4	41.1	86.0	92.1	5,752	4,981
Rating range 5: 10 - 12								
Central governments	3.0	3.0	50.0	20.0	187.2	74.9	50	50
Institutions	4.0	3.0	32.7	26.2	100.8	70.7	11	86
Corporates	4.7	4.5	37.6	47.1	131.1	162.9	1,248	1,185
Equity holding exposures ¹	4.4	4.0	90.0	90.0	369.5	354.9	3	24
Subtotal	4.6	4.3	38.2	45.5	133.5	157.2	1,311	1,345

Avg. PD, avg. LGD and avg. RW and exposure values by rating ranges (continuation)

IRBA exposure class	Avg. PD in %		Avg. LGD in %		Avg. RW in %		Exposure value	
	2012	2011	2012	2011	2012	2011	2012	2011
Rating range 6: 13 - 15								
Central governments	15.0	15.0	70.0	70.0	410.5	410.5	5	6
Institutions	20.0	20.0	20.0	20.0	124.2	110.9	1	3
Corporates	16.0	16.4	40.0	43.2	210.5	223.4	1,019	1,286
Equity holding exposures ¹	11.9	10.0	90.0	65.2	479.6	314.1	21	0
Subtotal	15.9	16.4	41.2	43.2	216.8	223.9	1,047	1,295
Rating range 7 (Default): 16 - 18								
Central governments	-	100.0	-	50.8	-	57.7	-	19
Institutions	100.0	100.0	75.8	80.8	86.2	91.8	70	146
Corporates	100.0	100.0	47.2	55.9	53.7	63.5	2,092	2,335
Equity holding exposures ¹	100.0	100.0	88.7	88.7	100.8	100.8	39	95
Subtotal	100.0	100.0	48.9	58.5	55.5	66.5	2,201	2,595
Total (without default)								
Central governments	0.0	0.0	29.1	22.9	1.6	1.3	21,005	14,023
Institutions	0.1	0.1	20.0	24.3	12.5	11.3	8,280	10,230
Corporates	1.4	1.8	35.5	41.5	62.7	73.5	22,144	18,642
Equity holding exposures ¹	3.6	3.1	90.0	90.0	336.3	323.9	131	36
Total	0.6	0.8	30.6	31.4	30.4	35.3	51,560	42,931

¹ Only equity holdings under the PD-LGD approach; with regulatory LGD of 65% or 90%; CCF = 100%

Table 26: Avg. PD, avg. LGD, avg. RW and exposure values in € m by rating ranges

5.8.7. Undrawn loan commitments and average exposure values under IRBA

Based on the rating ranges described above the assessment basis for undrawn loan commitments and the average exposure values weighted by commitment for each portfolio are given in Table 27.

The figures in the following table take into account the Sunrise Transaction. The figures excluding the effect of the guarantee are shown for information purposes in the Notes (Table 56).

Assessment basis and avg. exposure value of undrawn loan commitments and of non-derivative off-balance sheet assets

IRBA exposure class	Central governments		Institutions		Corporates		Equity holding exposures ¹		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Rating range 1: 1(AAAA) – 1(AA+)										
Basis for evaluation of loan commitments	1	10	-	-	-	-	-	-	1	10
Basis for evaluation of non-derivative assets not reported	0	1	-	-	-	-	-	-	0	1
Avg. Exposure value of loan commitments	0	1	-	-	-	-	-	-	0	1
Avg. Exposure value of non-derivative assets not reported	0	1	-	-	-	-	-	-	0	1
Rating range 2: 1(AA) – 1(A-)										
Basis for evaluation of loan commitments	-	-	354	358	619	802	-	-	973	1,160
Basis for evaluation of non-derivative assets not reported	-	-	67	48	423	86	-	-	490	134
Avg. Exposure value of loan commitments	-	-	3	3	5	6	-	-	4	5
Avg. Exposure value of non-derivative assets not reported	-	-	5	3	214	3	-	-	185	3
Rating range 3: 2 - 5										
Basis for evaluation of loan commitments	-	-	0	1	2,825	2,472	-	-	2,825	2,472
Basis for evaluation of non-derivative assets not reported	-	2	52	52	356	437	-	-	408	491
Avg. Exposure value of loan commitments	-	-	0	0	12	11	-	-	12	11
Avg. Exposure value of non-derivative assets not reported	-	2	48	48	5	3	-	-	10	8
Rating range 4: 6 - 9										
Basis for evaluation of loan commitments	-	-	0	0	2,170	1,798	-	-	2,170	1,798
Basis for evaluation of non-derivative assets not reported	-	-	4	2	650	666	-	-	655	668
Avg. Exposure value of loan commitments	-	-	0	0	10	9	-	-	10	9
Avg. Exposure value of non-derivative assets not reported	-	-	1	1	7	6	-	-	7	6
Rating range 5: 10 – 12										
Basis for evaluation of loan commitments	-	-	3	12	133	155	-	-	137	167
Basis for evaluation of non-derivative assets not reported	-	-	-	-	195	159	-	-	195	159
Avg. Exposure value of loan commitments	-	-	0	0	3	10	-	-	3	10
Avg. Exposure value of non-derivative assets not reported	-	-	-	-	5	8	-	-	5	8
Rating range 6: 13 – 15										
Basis for evaluation of loan commitments	-	-	-	-	50	93	-	-	50	93
Basis for evaluation of non-derivative assets not reported	5	6	1	1	76	74	-	-	82	81
Avg. Exposure value of loan commitments	-	-	-	-	1	12	-	-	1	12
Avg. Exposure value of non-derivative assets not reported	5	6	1	1	6	5	-	-	6	5

Assessment basis and avg. exposure value of undrawn loan commitments and of non-derivative off-balance sheet assets (continuation)

IRBA exposure class	Central governments		Institutions		Corporates		Equity holding positions ¹		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Rating range 7 (Default): 16 – 18										
Basis for evaluation of loan commitments	-	-	1	1	189	300	-	-	190	301
Basis for evaluation of non-derivative assets not reported	-	-	-	-	44	105	-	-	44	105
Avg. Exposure value of loan commitments	-	-	0	0	5	59	-	-	5	58
Avg. Exposure value of non-derivative assets not reported	-	-	-	-	1	2	-	-	1	2
Total										
Basis for evaluation of loan commitments	1	10	358	371	5,987	5,620	-	-	6,346	6,001
Basis for evaluation of non-derivative assets not reported	5	9	124	103	1,744	1,526	-	-	1,873	1,639
Avg. Exposure value of loan commitments	1	1	3	3	10	12	-	-	9	12
Avg. Exposure value of non-derivative assets not reported	5	4	23	26	56	5	-	-	54	6

¹ Only equity holdings under the PD-LGD approach; with regulatory LGD of 65% or 90%; CCF = 100%

Table 27: Assessment basis in € m and avg. exposure value of undrawn loan commitments and of non-derivative off-balance sheet assets

In the case of investment funds and funds-like certificates purchased by HSH Nordbank Group and included under the Advanced IRB Approach using the look-through approach (Section 83 (4) SolvV), an average risk weight is determined mostly based on information pro-

vided on a regular basis by the fund management companies. It is not possible to include this in the rating ranges, therefore disclosure of equity holding exposures contained in investment funds or funds-like certificates is made by means of Table 28.

Exposure values and capital requirements for investment funds or funds-like certificates

Risk weight range in %	Exposure value		Regulatory Capital Requirements under IRBA	
	2012	2011	2012	2011
0 ≤ 10	-	-	-	-
> 10 ≤ 20	-	-	-	-
> 20 ≤ 50	-	-	-	-
> 50 ≤ 100	-	-	-	-
> 100 ≤ 350	-	0	-	0
> 350 ≤ 650	1	1	0	0
> 650 > 1,250	-	-	-	-
1,250	-	-	-	-
Capital deduction	-	-	-	-
Total	1	1	0	0

Table 28: Exposure values and capital requirements for investment funds or funds-like certificates in € m

5.8.8. Loss estimates and actual losses in the lending business (IRBA)

The actual losses realised in the lending business in the current reporting period, the previous reporting period as well as changes between the periods are disclosed in Table 29 in accordance with Section 335 (2) No. 4 SolvV. Table 30 shows a comparison of loss estimates with actual losses in the lending business in accordance with Section 335 (2) No. 6 SolvV. Loss estimates correspond to the expected loss (EL) after minimisation of the credit risk. The EL for non-defaulting risk assets in the traditional lending business is shown (e.g. excluding securities in the banking book and derivatives). Actual loss is defined as follows:

	Utilisation of SSLP (for balance sheet transactions)
+	Utilisation of reserves (for loan commitments and off-balance sheet assets)
+	direct write-offs
./.	recoveries on receivables written off
=	actual loss in the lending business

Compared to the previous year the actual losses in the lending business (IRBA) have decreased in the reporting period from € 276 million to € 225 million. The factors influencing the loss history in the reporting period pursuant to Section 335 (2) No. 5 are described below. The reduction of € 51 million is characterised by offsetting movements in the exposure classes institutions and corporates, whereby the principal effect is attributable to the exposure class corporates. This was affected by a reduction in the number of company insolvencies concluded. In the exposure class institutions the conclusion of insolvency proceedings in connection with the collapse of Lehman Brothers, the US investment bank, and the default of Icelandic banks were the reasons for the increase in the actual losses.

The figures in the following tables take into account the Sunrise Transaction. For this reason EL from this transaction and actual losses which have been reported to the guarantor for review and approval or already have been settled are not included in the figures. The figures excluding the effect of the guarantee are shown for information purposes in the Notes (Table 57 and Table 58).

Actual losses in the lending business

Exposure class	2012	2011	Difference
	Actual loss 01.01.2012 to 31.12.2012	Actual loss 01.01.2011 to 31.12.2011	
Central governments	1	-	+1
Institutions	47	3	+44
Corporates	177	264	-87
Equity holding exposures ¹	-	10	-10
Total	225	276	-51

¹ Only equity holdings under the PD-LGD approach; with regulatory LGD of 65% or 90%; CCF = 100%

Table 29: Actual losses in the lending business in € m

Expected losses and actual losses in the lending business

Exposure class	2012		2011	
	Expected loss (EL) as at 31.12.2012	Actual loss 01.01.2012 to 31.12.2012	Expected loss (EL) as at 31.12.2011	Actual loss 01.01.2011 to 31.12.2011
Central governments	1	1	1	-
Institutions	0	47	1	3
Corporates	64	177	88	264
Equity holding exposures ¹	2	-	1	10
Total	69	225	91	276

Exposure class	2010		2009	
	Expected loss (EL) as at 31.12.2010	Actual loss 01.01.2010 to 31.12.2010	Expected loss (EL) as at 31.12.2009	Actual loss 01.01.2009 to 31.12.2009
Central governments	0	0	0	-
Institutions	2	72	2	-
Corporates	138	228	215	250
Equity holding exposures ¹	2	-	2	4
Total	142	300	219	255

¹ Only equity holdings under the PD-LGD approach; with regulatory LGD of 65% or 90%; CCF = 100%

Table 30: Expected losses and actual losses in the lending business in € m

5.9. CREDIT RISK MITIGATION TECHNIQUES

5.9.1. Strategy, procedures and scope of balance sheet and off-balance sheet netting agreements

Banks are able to utilise netting agreements when determining their required equity capital which lead to a reduction in the evaluation basis and hence the equity capital required.

In contrast to balance sheet netting which is not used by HSH Nordbank, off-balance sheet netting within the framework of netting agreements for derivatives is applied (see Section 5.6.7). The market assessment method is used to determine the required net assessment basis. As at the reporting date HSH Nordbank Group recorded a counterparty risk exposure to the amount of € 8 billion (see Table 19).

5.9.2. Processes for management and approval of credit risk mitigation techniques

The Collateral and LGD Guideline issued by the Management Board defines the collateral approved by HSH Nordbank as recoverable and hence minimising default risk as well as the qualitative requirements for such collateral. Hence it also defines the benchmarks for collateral management within HSH Nordbank Group and is supplemented by detailed instructions in the process

regulations for the lending business in order to ensure comprehensive collateral management. The provisions of SolvV are an integral part of the Collateral Guideline.

Qualitative requirements for collateral are in particular legal enforceability (especially for foreign collateral), the absence of a correlation between the creditworthiness of the borrower and the value of the collateral, matching maturities of loan and collateral agreement and the existence of an objective market value.

For this collateral the Bank has identified collateral-specific recovery values based on historical recovery cases, which are used with recognised collateral in calculating the LGD. In 2009 the LGD method was transferred to the RSU Association, and since then recovery rates have been validated there together with other Landesbanks (see Section 5.8.2). The collateral guidelines establish what assets (e.g. real estate, moveable assets, receivables) and – particularly for foreign jurisdictions – which collateral instruments (e.g. mortgage, land charge, assignment) are recognised. In addition, the responsible front office department must ensure on a case by case basis that the individual collateral and associated collateral agreement meet requirements in terms of enforceability and recoverability. In the risk-relevant lending business, the recoverability of the individual collateral is

reviewed for plausibility as part of the loan decision process.

The decision whether an asset or collateral instrument can be recognised as minimising risk is taken by a team of specialists from the divisions Credit Risk Management, Group Risk Management and Legal department.

5.9.3. Strategy and procedures for assessing and managing collateral

Valuation and administration of collateral is integrated into the process of managing and recognising credit risk reduction techniques. As SolvV is the basis for the collateral guidelines, collateral is only treated as reducing risk for the purpose of calculating capital requirements if all SolvV requirements are satisfied.

For each item of collateral to be offset against risk, an objective market value is determined. This is done on the basis of HSH Nordbank Group's Valuation Guideline through a process of review and determination by market-independent appraisers or a market-independent entity. The recoverability of an item of collateral is ensured by recognising it as reducing risk only up to the specific recovery rate for that collateral. The legal validity and enforceability of the collateral is ensured in the loan and collateral agreements. There is a standard instruction on regular monitoring and revaluation of collateral. Besides the annual review of collateral, there is a review and revaluation of the market value of the individual items of collateral every three years. The results of the annual monitoring can lead to a direct revaluation of the individual collateral in individual cases or for a segment. For certain types of collateral, there is an annual review and revaluation of the value (e.g. ships). Recognised collateral is documented and maintained in a central collateral system. This enables regular reporting to monitor and evaluate collateral. The recoverability of and options for realising an item of collateral are regularly reviewed as part of the regular credit monitoring process, and more frequently in the event of wide fluctuations in market value.

In the event of permanent impairment of collateral rights, e.g. impairment in value or a change in the legal position, additional collateral is sought and/or a monitoring file may be opened in accordance with the guide-

lines for exposure monitoring. In the event of a borrower's default, all collateral and possibly further collateral of a borrower unit involved are revalued. All relevant information on an item of collateral is documented and updated in the IT system. Only collateral which is recognised as compliant with the guidelines and accordingly maintained is retained in the HSH Nordbank.

Back office specialists are available for prompt and competent realisation of security in the event of a borrower's default. Experience with realising security is incorporated into optimising collateral management.

5.9.4. Material collateral

HSH Nordbank takes into account all the forms of collateral listed in SolvV (financial collateral, guarantees, physical collateral, other IRBA collateral) and netting agreements. Based on the portfolio and customer structure, essentially the following types of collateral are held by HSH Nordbank:

- ▶ Real estate and movable assets, e.g. ships, aircraft, railway wagons
- ▶ Receivables and rights
- ▶ Guarantees

In addition, securities, shareholder rights, gold and some credit derivatives serve as collateral. Collateral can only be taken into account in calculating LGD if its risk-reducing effect has not been taken into account in establishing a rating (PD). This means, for example, that a guarantee or assigned receivable which has already been taken into account in a rating tool or through the rating of the guarantor as the bearer of economic risk cannot in addition be netted against risk as collateral.

5.9.5. Guarantors and counterparties for credit derivatives and their rating

For a guarantee (or credit derivative) to be recognised as reducing risk there must be a current internal rating for the guarantor comparable with at least a Fitch or S&P BB- or Moody's Ba3.

Within HSH Nordbank Group, the main types of guarantors under these internal rules are guarantees by central governments, German local and regional administrative authorities, banks and parent companies with first class

ratings. The main counterparties for credit derivatives are internationally active banks and German regional banks.

5.9.6. Market or credit cluster risk within collateral instruments

Management of potential cluster risks from eligible collaterals is done for portfolios at the level of the Bank as a whole, e.g. by reporting and monitoring these risks in the Risk Report. In addition, it is integrated into strategic planning and limiting by adding a further limit on the collateral typically associated with the business areas involved to the planning and limiting for typical business area related collateral (specifically tangible assets e.g. ships).

5.9.7. Total amount of secured CRSA and IRBA positions

The two following tables in accordance with Section 336 (2) SolvV show the credit risk reduction techniques for CRSA and advanced IRBA, broken down by exposure class. Securitisations are omitted as they are shown separately (see Chapter 6). In the case of CRSA, both financial and tangible security and guarantees are taken into account. Under advanced IRBA financial, tangible and other collateral is included in LGD calculation. Guarantees and credit derivatives can be taken into account either in LGD calculation or through PD substitution. Here, the secured part of the receivables is given the guarantor's PD. However, collateral taken into account in calculating the PD is not shown here. Life insurance is accounted for in accordance with Section 170 SolvV.

The figures in the following tables take into account the Sunrise Transaction. The figures excluding the effect of the guarantee are shown for information purposes in the Notes (Table 59 and Table 60).

Total amount of collateralised CRSA exposure values (without securitisations)

Exposure class CRSA	Financial collateral		Other and physical collateral		Guarantees/ derivatives		Life insurance	
	2012	2011	2012	2011	2012	2011	2012	2011
Central governments	-	-	-	-	-	-	-	-
Regional governments	-	-	-	-	-	-	-	-
Other public sector entities	-	-	-	-	0	0	-	-
Multilateral development banks	-	-	-	-	-	-	-	-
International organisations	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	-	-	-
Collateralised Notes issued by banks	-	-	-	-	-	-	-	-
Corporates	71	4	-	-	181	16	1	2
Retail banking	1	2	-	-	1	0	2	3
Items collateralised by real estate	-	-	41	51	-	-	-	-
Investment certificates	-	-	-	-	-	-	-	-
Equity holdings	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-
Overdue items	22	21	7	11	0	-	0	1
Total	94	27	48	62	182	16	3	6

Table 31: Total amount of collateralised CRSA exposure values (without securitisations) in € m

Total amount of collateralised IRBA exposure values (without securitisations)

Exposure class IRSA	Financial collateral		Other and physical collateral		Guarantees/ derivatives		Life insurance	
	2012	2011	2012	2011	2012	2011	2012	2011
Central governments	-	-	-	-	-	-	-	-
Banks	457	168	1	87	136	156	-	-
Retail banking	-	-	-	-	-	-	-	-
Equity holding	-	-	-	-	-	-	-	-
Corporates	445	280	4,274	4,829	420	235	6	12
Other assets not related to loans	-	-	-	-	-	-	-	-
Total	902	448	4,275	4,916	556	391	6	12

Table 32: Total amount of collateralised IRBA exposure values (without securitisations) in € m

6. SECURITISATIONS

6.1. AIM, FUNCTIONS AND SCOPE OF SECURITISATION ACTIVITIES

Securitisations are an important instrument for banks in refinancing, capital relief and risk management. Banks can play different roles in a securitisation transaction, transferring credit risk themselves as originators, managing the portfolio to be securitised as sponsors, or acquiring securities from the securitisation as investors. HSH Nordbank is involved in various activities which have securitisation structures. In this process, HSH Nordbank can take on the roles of originator, investor and sponsor.

Securitisation transactions in which HSH Nordbank acts as originator are used for risk management as well as to reduce credit risk and obtain liquidity. Overall risk is managed through strategic sales of selected receivables (traditional or true sale securitisation) by eliminating or reducing cluster risk.

In addition to its role as originator, HSH Nordbank acts as investor in securitisations sponsored by third parties by investing in tranches of securitisations issued by third parties (e.g. residential mortgage backed securities, commercial mortgage backed securities, collateralised debt obligations) or by providing liquidity or credit enhancement.

HSH Nordbank assumes the role of sponsor in order to satisfy the demand for financing alternatives in the small- and medium-sized customer segment.

As part of its securitisation programme HSH Nordbank assumes the role of sponsor for the special purpose vehicle, Smartfact. HSH Nordbank undertakes activities of an advisory and administrative nature in this connection and acts as an intermediary for the receivables purchased by Smartfact. Furthermore, HSH Nordbank supports the special purpose vehicle through the provision of a credit line.

A part of the securitisation transactions as at the reporting date is hedged by the Sunrise Transaction. As a result, these are not recognised separately. To the extent it is appropriate, the quantitative information from this chapter is presented for informational purposes in the

Notes (Table 61 to Table 65) as an alternative presentation excluding the effect of the guarantee.

In calculating the figures in this chapter, credit risk minimisation techniques involving substitution are generally ignored. As a result, the figures include the second loss piece of € 7.0 billion in the Sunrise Transaction. In the course of credit risk minimisation, the second loss piece as a financial guarantee is substituted in the IRBA exposure class Central governments. This guarantee is presented in Table 40.

The securitised portfolio which underlies the Sunrise Transaction includes foreign currency positions with a share of around 50% in the total portfolio. This means that there is a mismatch in currencies between the guarantee in Euro and part of the hedged portfolio. The currency fluctuation factor is been applied to the entire Sunrise Transaction in accordance with Section 189 SolvV and the second loss piece is measured based on the nominal value of the guarantee. As at the reporting date the Sunrise Transaction has a value of € 85.6 billion. This is divided into the senior tranche (€ 75.7 billion), the second loss piece (€ 7.0 billion) and the first loss piece (after deducting invoiced losses in the amount of € 0.3 billion: € 2.9 billion).

Overall, the CRSA and IRBA value of all securitisation positions retained or sold by HSH Nordbank (including Sunrise) as at the reporting date total € 85.8 billion.

HSH Nordbank held no securitisations in its trading book as at the reporting date.

6.2. TYPES AND EXTENT OF RISKS

Default risk

HSH Nordbank's securitisation transactions are subject to the credit monitoring processes (in addition to market risk monitoring by Group Risk Management) with regard to their credit risks (change in performance and composition of the underlying transactions). By far the largest share of securitisation transactions are found within the Restructuring Unit. Credit analysis of the divestment positions is performed by the external service provider Blackrock in cooperation with Divestments. Blackrock acts as the supplier for monitoring required documentation and models the intrinsic values of the individual po-

sitions. The records are reviewed and subject to quality assurance in the subsequent process. Finally, decisions are made with respect to the completed monitoring forms on the basis of the dual control principle pursuant to loan competences which have been fixed and which have been published in the Credit Manual.

For purposes of calculating intrinsic values, the cash flow structure of the underlying assets is first modelled and then applied to the repayment structure of the securitisation transactions. These values are calculated quarterly.

The process described for credit monitoring is likewise suitable for re-securitisations and securitisations, which is why no further differentiation is made. By means of regularly updating repayment cash flows and on-going monitoring, changes in value of the securitised receivables are generally reflected directly in the value of the securitisation positions.

Market risk

HSH Nordbank's securitisation transactions are subject to market risk management with regard to their interest rate risks (changes in interest rates and credit spreads) and foreign exchange risks. By far the largest share of securitisation transactions are found within the Restructuring Unit. Market risks of securitisation transactions are limited by the superimposed market risk limit of the Restructuring Unit. The same applies in the case of the small number of HSH Nordbank's own securitisations in the business unit Products. The repayment structure of the securitisation transactions taking into account termination rights is first modelled for purposes of determining market risks. Interest rate and foreign exchange risks are then calculated using the same method applicable to all trading transactions after taking into account hedge transactions. The credit spread risks are determined on the basis of credit spread curves which are purchased from providers of market data and which are broken down by asset class, rating class and country.

The process described for market risk monitoring is likewise suitable for re-securitisations and securitisations, which is why no further differentiation is made. By means of regularly updating repayment cash flows and credit spread curves, changes in value of the securitised receivables are generally reflected directly in the value of

the securitisation positions to the extent there are no other hedge relationships.

Liquidity risk

The following distinction is made for purposes of liquidity risk monitoring in relation to securitisations:

- ▶ Accounting-related liquidity risks may arise in the form of time lags (mismatch) between incoming and outgoing cash flows.
- ▶ Market-related liquidity risks may arise, for example in cases where issued bonds cannot be fully placed on the market or where price losses are realised on the liquidation of assets.

Accounting-related liquidity risks are avoided by coordinating the fixed / determinable payments over the course of the transactions. If this cannot be accomplished (e.g. via short-term refinancing via asset backed commercial paper (ABCP) programmes), the market-related liquidity risks are hedged via liquidity facilities.

Risks in terms of seniority of underlying securitisation positions

The synthetic securitisation transaction Sunrise meets the requirements for classification as a re-securitisation as the majority share of HSH Nordbank's securitisation transactions was hedged. The primary securitisation transactions underlying the Sunrise Transaction mainly involve securitisations of corporate financings in Europe and the US, of student loans in the US and residential and commercial property in Europe, the US and Australia which are allocated to the Restructuring Unit.

HSH Nordbank has invested primarily in senior and/or high-ranked tranches of securitisations. The underlying assets likewise consist primarily of senior loans.

For example, the student loans in the US are largely subject to a 99% government guarantee. In the case of the residential properties in the US, investments were made almost exclusively, and in the case of European residential properties a significant but not predominant share, in junior loans which are characterised by borrowers with low creditworthiness. However, the share of these securitisations amounts to only 15% of the entire securitisation portfolio.

In addition, there are small re-securitisation portfolios including the first loss tranche of the Carrera transaction.

Furthermore, HSH Nordbank holds re-securitisation positions as an investor which are not secured under Sunrise.

6.3. DETERMINATION OF RISK-WEIGHTED EXPOSURES FOR SECURITISATION TRANSACTIONS TO BE CONSIDERED

The methods to be used in calculating the regulatory capital for securitisation positions are stated in SolvV. Under the IRB securitisation rules, HSH Nordbank uses the ratings-based approach, if ratings by external providers are available in the market. The Bank uses the external ratings from S&P, Moody's or Fitch. For securities positions which do not have an eligible external rating HSH Nordbank applies the alternative approaches established in SolvV (Section 243 (2-4) SolvV for CRSA securitisation positions and Sections 255-260 SolvV for IRBA securitisation positions).

In accordance with Section 266 (1) SolvV, there is the option for CRSA or IRBA securitisation positions for which a risk weight of 1,250% has been calculated of making a capital deduction or applying this risk weight to determine the total counterparty risk capital charge. In the context of the Sunrise Transaction this option is particularly important for the treatment of the first loss piece and calculating capital ratios. For reporting dates prior to 30 June 2010 HSH Nordbank backed the first loss piece as a risk-weighted position with equity. The first loss piece is deducted from equity starting with the 30 June 2010 reporting date. This means that the total amount of

the first loss piece is taken into account in determining the modified available equity capital under Section 266 (1) SolvV and, therefore, no longer represents required regulatory capital. An internal assessment approach (IAA) in accordance with Section 259 SolvV for the determination of risk weights for exposures from ABCP programmes is not applied by HSH Nordbank at present.

The Carrera transaction is a conduit that issues ABCP. The programme is based on ABSs. A look through at the pool assets is carried out.

ABCP are likewise issued via the Poseidon conduit. The ABCP are used to refinance Notes acquired by Poseidon through the Rasmus 9 acquisition company. Capital requirements are calculated at the level of the acquisition companies (under Section 249 SolvV to determine the maximum risk weighted CRSA position value).

Profit participation rights / liabilities to Scandinavian regional banks are securitised via the transactions Prime 2006-1 as well as Scandinotes III and Scandinotes IV. The risk-weighted exposure values are determined by external ratings.

Through the Promise securitisation transaction no significant and effective transfer of risk under Section 232 SolvV is achieved and there is consequently no reduction in capital requirements. A look-through to the pool assets was performed. The goal is to generate an ECB eligible note.

As at the reporting date, all securitisation transactions – other than Poseidon and parts of Scandinotes III and Scandinotes IV – are hedged by Sunrise.

Determination of risk-weighted exposure for receivables securitised as originators

Securitisation activity	Type of securitisation	Approach	Procedure to determine the risk-weighted exposure
Carrera (ABCP-Programme) ²	Traditional securitisation	IRBA	Backing of poolassets
Promise ¹	Traditional securitisation	IRBA	Backing of poolassets
Poseidon (ABCP-Programme)	Traditional securitisation	CRSA	Cap-regularisation
Rasmus 9	Traditional securitisation	CRSA	CRSA look-through approach
Prime 2006-1 ²	Traditional securitisation	CRSA	Risk weight in line with external rating
Scandinotes III ¹	Traditional securitisation	IRBA	Risk weight in line with external rating
Scandinotes IV ¹	Traditional securitisation	IRBA	Risk weight in line with external rating
Sunrise	Synthetic securitisation	IRBA	Formula approach under supervisory law acc. to Sect. 258 SolvV

¹ Partly hedged as part of the Sunrise Transaction. ² Fully hedged as part of the Sunrise Transaction.

6.4. ACCOUNTING AND VALUATION METHODS FOR SECURITISATIONS

Accounting methods

Acquired securitisation positions which meet the definition of securities in the German Ordinance on the Accounting System for Banks (RechKredV) are recognised and measured in accordance with the standard methods for securities.

Primary receivables of HSH Nordbank AG which the Bank allocates to synthetic securitisations without a significant transfer of risk or with regard to which a transfer is made to Special Purpose Vehicles (SPV) still included in the consolidated financial statements, continue to be reported under the original exposure class. Assumption of risks by third parties is taken into account as collateral when calculating impairments. If the risk has not been transferred through securitisation or if the guarantee is impaired, the receivable is written down.

Accounting policies for receivables securitised as originators

Securitisation transaction	True-Sale: Yes/No	Treatment under supervisory law	
		Approach	Disposal: Yes/No
Carrera (ABCP-Programme) ²	-	IRBA	-
Promise ¹	No	IRBA	No
Poseidon (ABCP-Programme)	Yes	CRSA	-
Rasmus 9	Yes	CRSA	No
Prime 2006-1 ²	Yes	IRBA	-
Scandinotes III ¹	Yes	IRBA	Yes
Scandinotes IV ²	Yes	IRBA	-
Sunrise	No	IRBA	-

¹ Partly hedged as part of the Sunrise Transaction. ² Fully hedged as part of the Sunrise Transaction.

Table 34: Accounting policies for receivables securitised as originators

Valuation methods

The fair value of securitisation transactions booked to the Restructuring Unit is calculated on monthly basis using market prices. However, because the securitisation portfolio is almost exclusively classified as “Loans and receivables,” amortised cost is used for accounting purposes whereas the fair value is merely used in general for purposes of the explanatory notes to the statement of financial position. In the event impairments are needed, write-downs are performed to the fair value of the securitisation.

Receivables transferred under true-sale-securitisations in terms of commercial law are shown as disposals. Risks retained by the Bank are still recognised and measured here in accordance with the standard methods for receivables.

Sales proceed from reference assets (e.g. loans, promissory notes, securities) which are a component of a securitisation are accounted for corresponding to the balance sheet item of the reference asset. In this manner, sales proceeds are accounted for independent of their inclusion in a securitisation.

Financial backing for securitisation transactions is provided in the form of liquidity facilities or guarantees. In the event a draw down is likely, the risk is covered by creating a provision for contingent losses.

Table 34 illustrates the accounting standards.

Various market data providers and quotes from other market participants are used as sources of data. Models are used in cases where no valid market data is available. If price information is available from several providers, a procedure for selecting a valid market price is applied. For quality assurance purposes, all valuation results are validated by experts.

In addition, HSH Nordbank holds a small number of shares in own securitisations which are valued by Treasury. Valuation of such holdings is generally performed on the basis of spread curves.

6.5. RATING AGENCIES USED FOR SECURITISATION

The securitisations issued by the HSH Nordbank Group were externally rated. The rating agencies used and the

type of receivables underlying the securitisation portfolio are shown in Table 35 in accordance with Section 334 (1) No. 11 SolvV. The rating agencies used for investment in third party securitisation transactions are shown in Table 16.

Securitisation transactions initiated by HSH Nordbank

Securitisation transaction	Type of securitisation	Type of receivable	Rating agency
Carrera (ABCP-Programme) ²	Traditional securitisation	ABS	Fitch, Moody's
Poseidon (ABCP-Programme)	Traditional securitisation	ABS, leasing claims	Moody's
Prime 2006-1 ²	Traditional securitisation	Profit participation rights	Fitch, Moody's
Scandinotes III ¹	Traditional securitisation	Receivables from Scandinavian regional banks	Moody's
Scandinotes IV ²	Traditional securitisation	Receivables from Danish regional banks	Moody's

¹ Partly hedged as part of the Sunrise Transaction. ² Fully hedged as part of the Sunrise Transaction.

Table 35: Securitisation transactions initiated by HSH Nordbank

6.6. EXPOSURE VALUES AND REGULATORY CAPITAL REQUIREMENTS OF SECURITISED RECEIVABLES

Exposure values of securitised receivables

For securitisations, a distinction must be made between securitisations with transfer of receivables (traditional or true sale securitisations) and securitisations without transfer of receivables (synthetic securitisations). Depending on the nature of the securitised receivables, securitisations are also allocated to different product classes, which have the characteristics of specific receivables.

In accordance with Section 334 (2) No. 1 SolvV, Table 36 shows the value at the reporting date of the securitised receivables at HSH Nordbank, broken down by securitisation transaction with or without transfer of receivables and the nature of the securitised receivables.

The figures excluding the effect of the guarantee are shown for information purposes in the Notes (Table 61).

Exposure values of securitised receivables

Securitisation portfolio	Exposure value			
	Originators		Sponsors	
	2012	2011 ¹	2012	2011
Traditional securitisations				
Real estate	-	-	-	-
Ships	-	-	-	-
Retail banking	15	52	26	-
ABS	7	2	-	-
Other	-	-	-	-
Subtotal	22	54	26	-
Synthetic securitisations				
Real estate	-	-	-	-
Ships	-	-	-	-
Retail banking	-	-	-	-
ABS	-	-	-	-
Other	-	-	-	-
Sunrise	85,550	100,779	-	-
Subtotal	85,550	100,779	-	-
Total	85,572	100,833	26	-

¹ Corrected values against the report as at 31 December 2011

Table 36: Exposure values of securitised receivables in € m

Exposure values of retained of purchased securitisation exposures

In accordance with Section 334 (2) No. 3 SolvV, Table 37 shows a list of the securitisation positions held by the Bank. This includes retained tranches from the Bank's own securitisation transactions (e.g. for the purpose of

credit enhancement), liquidity facilities provided by the Bank for securitisation transactions and investments in third party securitisation transactions.

The figures excluding the effect of the guarantee are shown for information purposes in the Notes (Table 62).

Exposure values of retained or purchased securitisation exposures

Securitisation items	CRSA exposure value		IRBA exposure value	
	2012	2011	2012	2011
Balance-sheet items				
Credit Enhancements ¹	-	-	-	-
Participations in ABS transactions	73	199	171	250
Other balance-sheet items	29	14	-	-
Sunrise	-	-	85,550	100,779
Subtotal	102	213	85,720	101,028
Off-balance sheet items				
Liquidity facilities	-	-	-	-
Derivates	-	-	-	-
Other off-balance sheet items	-	-	-	-
Subtotal	-	-	-	-
Total	102	213	85,720	101,028

¹ Measures to improve credit quality

Table 37: Exposure values of retained or purchased securitisation exposures in € m

Risk weight ranges and exposure values of securitisations

In accordance with Section 334 (3) No. 1 SolvV, Table 38 shows the Bank's individual securitisation positions (see Table 37) allocated to risk weight bands, and the resulting capital requirements. As at the reporting date, all securitisation positions held by HSH Nordbank as an investor are deducted from equity using a risk weight of 1,250% in accordance with Section 266 (1) SolvV. The Sunrise Transaction is treated correspondingly. These positions accordingly do not constitute a capital requirement.

Changes in the securitisation positions are attributable to sales and repayments, especially in the Sunrise portfolio. In addition, the Sunrise Transaction is classified as re-securitisation transaction since 31 December 2011 and hence a minimum risk weight of 20% has to be applied. The risk weight of the senior tranche determined in accordance with Section 258 SolvV was 43.1% as at the reporting date. The guarantee of the Sunrise portfolio remained at € 7 billion as in the previous year.

The figures excluding the effect of the guarantee facility are shown for information purposes in the Notes (Table 63).

Exposure values and capital requirements for retained or purchased securitisation items acc. to risk weight ranges

Risk weight range in %	Securitisation		Exposure value		Securitisation		Capital requirement	
	Securitisation	Re-securitisation	Total	Securitisation	Re-securitisation	Total		
	2012	2012	2012	2012	2012	2012	2012	
CRSA								
0 ≤ 10	-	15	15	39	-	-	-	-
> 10 ≤ 20	41	-	41	65	1	-	1	1
> 20 ≤ 50	-	-	-	-	-	-	-	-
> 50 ≤ 100	2	-	2	24	0	-	-	2
> 100 ≤ 350	-	11	11	11	-	2	2	2
> 350 ≤ 650	-	6	6	6	-	3	3	3
> 650 < 1,250	-	-	-	-	-	-	-	-
1,250 or capital deduction ¹	27	0	27	67	-	0	0	0
Total CRSA	70	32	102	213	1	5	6	8
IRBA								
0 ≤ 10	1	7,000	7,001	7,022	-	-	0	0
> 10 ≤ 20	49	-	49	90,840	1	-	1	1,454
> 20 ≤ 50	22	75,675	75,697	118	1	2,611	2,612	3
> 50 ≤ 100	12	25	37	18	1	1	2	1
> 100 ≤ 350	1	0	1	0	0	0	0	0
> 350 ≤ 650	19	2	21	5	7	1	8	1
> 650 < 1,250	-	1	1	-	-	0	0	-
1,250 or capital deduction ¹	22	2,893	2,915	3,026	7	-	7	1
Total IRBA	125	85,596	85,720	101,028	17	2,613	2,630	1,460
Total	195	85,627	85,822	101,241	17	2,618	2,636	1,468

¹ Prior to exercise of the election under Section 253 (3) and (4) SolvV

Table 38: Exposure values and capital requirements for retained or purchased securitisation items acc. to risk weight ranges in € m

Securitisation positions to be deducted from equity or to be taken into account with a risk weight of 1,250%

Consistent with Section 334 (2) No. 5 SolvV, Table 39 presents the total of the securitisations positions to be deducted when computing modified available equity

capital under Section 10 (1d) KWG or which are to be given a securitisation risk weight of 1,250%.

The figures excluding the effect of the guarantee are shown for information purposes in the Notes (Table 64).

Securitisation positions to be deducted from equity or to be taken into account with a risk weight of 1,250%

Securitisation portfolio	2012	Exposure value ¹	
		2011	
Real estate	36	26	
Ships	-	-	
Retail banking	-	-	
ABS	10	14	
Other	13	71	
Sunrise	2,883	2,982	
Total	2,943	3,093	

¹ Prior to exercise of the election under Section 253 (3) and (4) SolvV

Table 39: Securitisation positions to be deducted from equity or to be taken into account with a risk weight of 1,250% in € m

Hedge transactions

Consistent with Section 334 (3) No. 2 SolvV, hedge transactions related to re-securitisations are presented in Table 40. In doing so, as part of credit risk minimisation,

the secondary loss tranche is substituted as a financial guarantee contract in the IRBA exposure class Central governments. There were no hedge transactions relating to other securitised positions as at the reporting date.

Re-securitisation related hedge transactions

	Exposure Value	
	2012	2011
Re-securitisation positions prior to hedge	85,628	100,883
Hedge via guarantee	7,000	7,000
Of which: guarantors with ratings AAAA through A	7,000	7,000
Of which: guarantors with s rating below A	-	-
Hedging using other collateral	-	-
Re-securitisation positions post-hedge	78,628	93,883

Table 40: Re-securitisation related hedge transactions in € m

Securitised trading book risk positions

The values depicted in Table 41 represent securitised trading book positions in accordance with Section 334 (4) No. 2 SolvV which were taken into account as trading

book risk positions for purposes of measuring required regulatory capital. These positions are securitised exclusively under Sunrise.

Securitised trading book risk positions

Securitisation portfolio	Exposure value			
	Traditional securitisation		Synthetic securitisation	
	2012	2011	2012	2011
Real estate	-	-	-	-
Ships	-	-	-	-
Retail banking	-	-	-	-
ABS	-	-	-	-
Other	-	-	-	-
Sunrise	-	-	2	8
Total	-	-	2	8

Table 41: Securitised trading book risk positions in € m

6.7. NON-PERFORMING AND DELAYED SECURITISATIONS AND ACTUAL LOSSES

In accordance with Section 334 (4) No. 1 SolvV, Table 42 shows those parts of securitised receivables which are non-performing or in default and the actual losses in the period under review. The securitisation positions shown are those for which HSH Nordbank acts as originator. To ensure comparability of data, the definitions of receiv-

ables and actual losses are based on those for general recognition of non-performing and delayed receivables (see Section 5.4.4 and 5.4.5) and actual losses (see Section 6).

The figures excluding the effect of the guarantee are shown for information purposes in the Notes (Table 65).

Non-performing and delayed securitisations, actual losses on securitised receivables

Securitisation portfolio	Total non-performing or in-arrears ¹		Actual losses	
	2012	2011	01.01.2012 to 31.12.2012	01.01.2011 to 31.12.2011
Real estate	-	-	-	-
Ships	-	-	-	-
Retail banking	-	-	-	-
ABS	-	-	-	-
Other	-	1	-	-
Sunrise ²	15,709	13,436	114	214
Total	15,709	13,437	114	214

¹ Total non-performing receivables (needing value adjustment) or delayed receivables (not needing value adjustment)

² The actual losses in the Sunrise Transaction are loss allocations under the guarantee which have already been reported to the guarantor for review and approval or have already been settled.

Table 42: Non-performing and delayed securitisations, actual losses on securitised receivables in € m

6.8. SECURITISATION ACTIVITIES IN THE REPORTING YEAR

The Promise securitisation transaction was executed by HSH Nordbank as an originator during the reporting period. This securitisation is used to generate liquidity and does not result in a reduction in the capital requirements.

In the course of the strategic realignment, HSH Nordbank has decided that the loan replacement business is not part of its core business. HSH Nordbank has terminated its investment in the Rasmus 5, Northern Blue, Plato, Scandinotes II and V transactions during the reporting year.

6.9. PLANNED SECURITISATION ACTIVITIES

For the year 2013, no securitisation transactions for purposes of a reduction in capital requirements are planned at present.

7. MARKET RISK INCLUDING INTEREST RATE RISK

Market risk represents the potential loss that can arise as a result of adverse changes in market values on positions held in our trading and banking book. Market movements relevant to the Bank are changes in interest rates and credit spreads (interest rate risk), exchange rates (foreign exchange risk), stock prices, indices and fund prices (equity risk) as well commodity prices (commodity risk) including their volatilities.

7.1. ORGANISATION OF MARKET RISK MANAGEMENT

The Management Board determines the methods and processes for measuring, limiting and steering market risk and budgets an overall global limit percentage for market risks. Against the background of this upper loss limit, the risks of all business bearing market risk are limited by a dynamic system of loss and risk limits.

Market risk was actively managed in the Capital Markets division in the year under review. The Asset Liability Committee (ALCO) is responsible for selected large-volume strategic positions exposed to market risk. Daily market risk reports regularly keep the Management Board and the trading divisions informed on the extent of existing market risks and current utilisation of limits.

An organisational division between market risk controlling, settlement and control on the one hand and the trading divisions responsible for positions on the other is ensured at all levels in accordance with MaRisk. All major methodological and operative tasks for risk measurement and monitoring are consolidated in the Group Risk Management division.

Settlement and control, financial controlling and risk controlling for the Core Bank and the Restructuring Unit are managed by the corresponding divisions of the overall bank. The Restructuring Unit processes, amongst others, the positions allocated to it from the capital markets and credit investment businesses.

7.2. MARKET RISK MANAGEMENT

Market risk measurement and limitation

Our system for measuring and managing market risk is based, on the one hand, on the economic daily profit and loss and on the other, on a value-at-risk approach. The economic profit and loss is calculated from change in present values compared to the end of the previous year. The market risk of a position represents the loss in value (in Euro) which will not be exceeded until the position is hedged or realised within a predetermined period with a predetermined probability.

The value-at-risk (VaR) is determined by the Bank using the historical simulation method. It is calculated for the entire Group based on a confidence level of 99.0% and a holding period of one day for a historical observation period of 250 equally weighted trading days.

The main market risks at HSH Nordbank are interest rate risk (including credit spread risk) and foreign exchange risk. In addition to these risk types, the VaR of HSH Nordbank also covers equity and commodity risk for both the trading book and the banking book. The individual market risk types are not restricted by separate limits. Limitation is applied within the VaR limit for the overall market risk of the Bank. Limits are set for the VaR for the different reporting units for the purposes of managing market risk, whereas losses incurred are restricted through stop loss limits. There are clearly defined processes for limit adjustment and breach.

Where necessary, HSH Nordbank enters into hedging transactions to manage or reduce market risk in order to offset the impact of unfavourable market movements (e. g. with regard to interest rates, exchange rates) on its own positions. Derivative financial instruments in particular, such as interest rate swaps, are used as hedging instruments.

Market risks arising from the lending business and liabilities of the Bank are transferred to the trading divisions and taken into account in the corresponding risk positions. There they are managed as part of a proactive portfolio management process and hedged through external transactions.

The VaR model used and continuously enhanced by the Bank contains all of the Bank's significant market risks in an adequate form.

Market risk measurement enhanced

One focus of the enhancements made in the reporting year was on the measurement of credit spread risk. The credit spread of a bond is a premium payable for the default risk of an issuer. The credit spread risk represents the potential unfavourable future development of the value of an item due to a change in the spread. The integration of the credit spread risk on third party issues held in certain valuation units into the daily market risk measurement was progressed in 2012 according to plan and implemented for the most part. This involves valuation units with structured products, in which the underlying is hedged by a hedging transaction. However, the credit spread risk on these hedged items (government bonds) is not hedged and has been taken into account based on a periodic estimate in the course of risk measurement to date. It is planned to progress the integration of these valuation units into the daily VaR calculation further in 2013. The measurement of the credit spread risk on securitisations was also refined.

The periodic estimate of the residual risk for corporate bonds and covered bonds (Pfandbriefe) was updated in 2012 as planned. This showed that the effect of this specific credit spread risk on the overall market risk can still be classified as immaterial.

The basis risk constitutes the risk of a potential loss or profit resulting from changes in the proportion of prices or interest rates on similar financial products within a portfolio. HSH Nordbank identifies material basis risks by means of a regular analysis process. In addition to the interest basis risk the foreign exchange basis risk for the main currencies has also been reflected in the daily market risk measurement since March 2012.

In addition, there were also improvements in the measurement and calculation of risk for certain products in 2012, which, however, did not have any significant effects on the overall VaR.

Backtesting

The Bank performs regular backtests to verify the appropriateness of our VaR forecasts. On the assumption of unchanged positions, the daily profit and loss achieved in theory due to the market developments observed are compared with the VaR values of the previous day, which were forecasted using historical simulation. Based on the assumption of the confidence level of 99% applied by the Bank, up to four outliers indicate that the forecasting quality for market risks is satisfactory. There were more than four outliers from time to time at the start of 2012 due to a methodological change to the backtesting. However, following the change in methodology made in March 2012, the number of outliers was again in the un-critical area in the reporting year, thereby confirming the Bank's market risk model. The results of backtesting are taken into account in the on-going development of our VaR methodology.

Stress tests

In addition to the limit-based management of the daily VaR, at least weakly stress tests are performed that analyse the effects of unusual market fluctuations on the net present value of the Bank's positions. At the start of the reporting year a new stress test concept was implemented against the backdrop of the 3rd MaRisk amendment that is now aimed at taking greater account of the stress test results in risk management and a clear focus on hypothetical scenarios.

HSH Nordbank makes a distinction between standardised, historical and hypothetical scenarios. Whereas standardised scenarios are defined for specific risk types (e. g. shift in or rotation of the interest rate curve), historical and hypothetical stress tests apply across risk types. In this regard historical scenarios actually map correlations between risk factors that occurred in the past, whereas hypothetical scenarios are based on fictitious changes in risk factors. With regard to the hypothetical scenarios it is also distinguished between economic scenarios that simulate a downturn in the macro-economic environment and portfolio-specific scenarios that can represent a potential threat for the value of individual sub-portfolios of the Bank. The hypothetical scenarios are periodically adjusted depending on changes in the market environment.

For special analyses of the interest rate risk of our banking book positions we continually determine the change in present value on an interest rate shock of + / - 200 bps (see Section 7.5). In doing so, the requirements for the determination of the effects of a sudden and unexpected interest rate change were implemented with respect to positions held in the banking book.

Furthermore, the market risks in the reporting year were also an integral part of the inverse stress tests analyses on a regular basis.

7.3. REPORTS ON MARKET RISK

Reporting on market risk of HSH Nordbank is integrated in the reports on overall risk (see Section 4.4). These are supplemented by special market risk reports (see Table 43).

Reports on market risk

Report	Recipient	Interval	Content	Objective
Monthly Market Risk Report	CRO	Monthly	Market risk changes, analysis of market risks acc. to banking book/ trading book, stress tests, backtesting, limit monitoring	Market risk reporting to the Management Board (where required with recommendations for action)
Daily Market Risk Report to the Management Board	Management Board and Financial Market divisions	Daily	Market risk changes, analysis of market risks acc. to banking book/ trading book, stress tests, backtesting, limit monitoring	Information of Management Board and trade, overview of risk and profit/loss, limit utilisation

Table 43: Reports on market risk

7.4. REGULATORY CAPITAL REQUIREMENT FOR MARKET RISK

HSH Nordbank uses the prescribed Standard Approach for determining the required regulatory capital for mar-

ket risk. The regulatory capital required as a result of transactions in the trading book on the reporting date under Section 330 (1) SolvV is listed in Table 44.

Regulatory capital requirements for market risks

Market risk	2012	2011
Interest rate risk	218	219
Including a partial weighting for general price risk	(194)	(183)
Including a partial weighting for specific price risk	(4)	(6)
Equity price risk	1	1
Currency risk	90	67
Commodity price risk	11	18
Other market risk positions	4	4
Total	324	309

Table 44: Regulatory capital requirements for market risks in € m

7.5. INTEREST RATE RISK IN THE BANKING BOOK

Management of the interest rate risk in the banking book is part of market risk management. Interest rate risk is the potential loss of an open interest rate position as a result of a possible change in market or net present value of a stream of payments due to a potential change in yields or discount factors. Discount factors are taken from the corresponding interest rate curve. For single name bonds and Credit Default Swaps (CDS) credit spreads are also taken into account.

The interest rate risk in the banking book is modelled from the strategic holdings in the HSH Nordbank bank book without using model assumptions. There is no modelling of early loan repayments due to special repayment or termination rights or investor behaviour with deposits from customers. Where loans are agreed with optional components, existing termination rights are reported by the front office to Capital Markets for entry in the trading system. Risk measurement and stress testing are done by Group Risk Management based on the transactions entered in the trading and inventory systems.

In addition there is the special feature for interest rate risk in the banking book that management is handled by two units. The Overall Management Board is responsible for the bank's ALCO – Portfolio and regulates the strategic amount of interest rate risk. The interest rate risk for the bank book arising out of the Bank's client business is managed by the business unit Capital Markets. This consists of aggregating the interest rate risk and transferring it directly to the trading book for the most part in order

to manage this risk within the specified market price risk limits.

The interest rate risks on the banking book are measured daily. To calculate the VaR, a confidence level of 99%, a holding period of one day and a data history of 250 trading days are used.

Besides daily calculation of the interest rate risk in the course of the VaR calculation, HSH Nordbank also measures the interest rate risk for the group as a whole in the event of an interest rate shock. For the specific analysis of interest rate risks on banking book positions, the Bank uses net present value analysis, i.e. the net present value change due to defined changes in interest rates. The figures for the year under review have shown that HSH Nordbank Group would lose significantly less than 20% of liable capital in the event of an interest rate shock of +200 and -200 basis points.

The effects of an interest rate shock of +200 and -200 basis points as at the reporting date in accordance with Section 333 (2) SolvV are shown in Table 45.

The total amount of € -58 million / € -142 million represents the balance of changes in present value from the interest rate shocks in the case of the parallel move in yield curves in all currencies and a further improvement compared to 2011. The interest rate risk in the banking book is broken down by currency as at the reporting date in order to provide greater transparency. The change in the present value is negative in both scenarios. This is attributable to the non-linear effects at the current interest rate level.

Interest rate risks in the banking book

Currency	Change in net present value			
	2012	2011	+200 bp 2012	-200 bp 2011
EUR	-72		-179	
USD	11		20	
CHF	2		-4	
JPY	4		18	
GBP	1		1	
DKK	-2		1	
Other	-2		1	
Total	-58	196	-142	-281

Table 45: Interest rate risks in the banking book in € m

8. OPERATIONAL RISK

HSH Nordbank defines operational risk (OpRisk) as the risk of direct or indirect losses caused by the inappropriateness or failure of the internal infrastructure, internal procedures or staff or as a result of external factors (risk categories). This definition includes legal risk and compliance risk.

8.1. ORGANISATION OF OPERATIONAL RISK MANAGEMENT

The management of operational risks at HSH Nordbank is structured in a decentralised manner. This way the risks are identified and managed directly in the individual organisational units of the Bank. Accordingly, the division heads are responsible for the management of operational risk and the quality of such management in their respective areas of responsibility. The operational implementation is supported by decentralised OpRisk officers in the individual divisions.

The central OpRisk Controlling department in the Group Risk Management division defines the basic principles of operational risk management applicable throughout the Bank and develops the central methods and instruments to be used in the identification, measurement, management and monitoring of operational risk.

The “OpRisk Committee”, a Bank-wide steering committee established in the reporting year to deal with operational and other risks, provides support to the Overall Management Board in the implementation of the OpRisk Strategy under the chairmanship of the Chief Risk Officer. The objective of the interdisciplinary OpRisk Committee is to promote dialogue between the persons involved at all hierarchy levels and to determine appropriate measures for reducing operational risk.

8.2. OPERATIONAL RISK MANAGEMENT

The identification, analysis, evaluation and monitoring of operational risk and the promotion of a corresponding risk culture in the Group represents an important success factor for HSH Nordbank. Different procedures and instruments are used in this process.

Loss event data base

The loss events arising from operational risk are consolidated into a central loss event database. The loss events are recorded locally by the divisions affected and forwarded to central risk controlling. The results of the analyses of actual loss events provide a starting point to eliminate existing weaknesses. The Management Board is informed on a quarterly basis regarding loss events and measures undertaken related thereto. The Management Board is immediately informed of material operational risk events.

The central loss event database includes all loss events with a gross loss of at least € 2,500 and since 2012 all material near-loss events. The largest individual gross loss in the year under review occurred in the category Internal processes.

HSH Nordbank participates in the exchange of operational loss event data as part of the Operational Risk Data Pool (DakOR). Thus, HSH Nordbank obtains a more comprehensive data base for the evaluation of risk scenarios and external comparisons.

Risk inventory

HSH Nordbank performs a risk inventory each year for the whole Group. Information about the risk situation of the divisions gained from this inventory supplement the reporting of operational risk and encourage the preventive management and monitoring of operational risk. The Bank performs the risk inventory based on defined scenarios, which take into account both own as well as external loss event data, and derives the loss potential from this.

The 2012 risk inventory was also performed against the backdrop of the restructuring of the Bank and the agreed reduction in staff. In order to counter the resultant operational risk, the Bank has introduced measures which, on the one hand, retain important know-how carriers and on the other hand ensure a proper implementation of the restructuring process.

Control of measures

Based on an analysis of the causes of significant loss events and the results of the risk inventory, suitable measures are established in order to avoid future losses

as far as possible. The measures identified are to be appropriate under cost-benefit aspects. In doing this, the instruments of risk mitigation consist above all of a large number of organisational safeguarding and control measures which are also applied in the context of the internal control system. The central risk controlling function monitors the actual implementation of the measures determined using the measures controlling procedures.

Risk indicators

The Bank started to identify risk indicators and their integration in the OpRisk reporting in the reporting year. The indicators are selected based on the estimated risk situation and are periodically reviewed to ensure that they are up-to-date. The aim is to identify risks at an early stage by means of the on-going and comparative analysis of loss events and risk indicators and their causes are to be prevented.

Legal risk

In accordance with the German Solvency Regulation (SolvV), legal risk also falls under operational risk. Legal risk includes economic risks arising as a result of non-compliance or not full compliance with regulations or with the framework defined by case law, in particular commercial law, tax law and company law. Tax risks mainly result from the fact that the binding interpretation of rules that can be interpreted in specific cases may only be known after several years due to the long period between tax audits. The tax audits have not yet been finalised for the years 2003 to 2012. The Legal and Taxes divisions are responsible for managing these risks. In order to reduce, limit or prevent risk all divisions are given comprehensive legal advice by regularly trained staff. A structured process with clear requirements and responsibilities serves to ensure that the Bank's contracts and agreements are kept up-to-date.

Compliance risk

Compliance risk comprises legal and regulatory sanctions or financial losses caused by non-compliance with certain laws, regulations and guidelines as well as organisational standards and codes of conduct. The Compliance division at HSH Nordbank is responsible for managing risks with regard to the German Securities Trading Act and related standards, the fraud prevention under Section 25c KWG, anti-money laundering and international financial sanctions.

The Code of Conduct summarises all behavioural requirements for compliance, which are set out in detail in internal instructions. It applies to all employees, managers and the Management Board of HSH Nordbank AG, is trained in special sessions and is a mandatory part of the agreement of personal goals. In 2012 the Bank received notification of suspicious cases of misconduct via internal reporting channels and the so-called 'whistleblowing office' and forwarded these to the responsible internal and external bodies. Furthermore, the whistleblowing office is staffed by independent ombudsmen from BDO Deutsche Warentreuhand Aktiengesellschaft Wirtschaftsprüfungsgesellschaft and enables anonymous reporting of suspicious cases.

During the year under review, several enhancements were made with regard to the individual compliance topics.

8.3. REPORTS ON OPERATIONAL RISK

Reporting on operational risk of HSH Nordbank is integrated in the reports on overall risk (see Section 4.4). Furthermore the management level is provided with special reports on operational risk and loss events on a regular basis. These are listed in Table 46.

Reports on operational risk

Report	Recipient	Interval	Content	Objectives
Report on Risk Inventory	Overall Management Board as well as division heads, heads of foreign branches and subsidiaries	Annually	Information on identified potential loss incl. the addressed management steps decided on	Identification of operational potential loss and information on addressed management steps decided on
Report on Loss Events	Division heads, heads of foreign branches and subsidiaries	Quarterly	Request for confirmation of the completeness of the loss events and 'near misses' reported by area of responsibility, including the control measures decided upon	Explicit confirmation by the report addressees of the completeness of the loss events recorded and raising of risk awareness
Report on Operational Risk	Management Board, OpRisk Committee	Quarterly	Description of all developments regarding the loss events reported, the control measures decided upon and material changes in the operational risk categories	Creation of transparency, raising of risk awareness and information on the implementation of risk-reducing measures
Ad hoc Report	Management Board	Ad hoc	Immediate information on loss events and 'near misses' reported from a threshold of € 100,000	Creation of transparency on material loss events reported and control measures decided upon

Table 46: Reports on operational risk

8.4. REGULATORY CAPITAL REQUIREMENTS ON OPERATIONAL RISK

HSH Nordbank applies the Standardised Approach in order to determine the regulatory capital required for op-

erational risk. On the date of reporting the Group had a regulatory capital requirement to the amount of € 310 million.

Regulatory capital requirements for operational risk

	Operational risk	2012	2011
According to Standardised Approach		310	307
Total		310	307

Table 47: Regulatory capital requirements for operational risk in € m

9. LIQUIDITY RISK

HSH Nordbank divides its liquidity risk into risk of insolvency and liquidity maturity transformation risk. The risk of insolvency refers to the danger of the Bank not being able to meet its own payment obligations or refinancing requirements as they fall due, or not to the extent required. Liquidity maturity transformation risk refers to the risk that a loss will result from a mismatch in the contractual maturities of assets and liabilities, the so-called liquidity maturity transformation position, and from the change in the Bank's refinancing surcharge. Liquidity maturity transformation risk is also a component of our risk-bearing capacity concept (see Section 4.1). The Bank uses various instruments to measure, manage and limit its liquidity risks.

9.1. ORGANISATION OF LIQUIDITY RISK MANAGEMENT

Strategic liquidity management is the responsibility of the Strategic Treasury division. The objective of liquidity management is to ensure the solvency of the Bank at all times, in all locations and in all currencies. The Capital Markets division is responsible for funding and marketing.

The Group Risk Management division is responsible for the methods used to measure and limit liquidity risk within the Group. In addition it measures risk and monitors limits as part of the daily reporting of liquidity risk. This supports Strategic Treasury in managing liquidity for all time buckets and enables it to counter possible risks at an early stage.

The Asset Liability Committee assumes the tasks of strategic management of the resources liquidity / funding, balance sheet capacity, RWA and economic capital. The Transaction Committee allocates resources within certain volume limits to individual transactions in the sense of an active portfolio management.

The Bank has a contingency plan which contains a catalogue of measures and regulated procedures and responsibilities should a liquidity crisis occur. Furthermore, early warning indicators are taken into account in the emergency plan.

9.2. LIQUIDITY RISK MANAGEMENT

Measurement of liquidity risk

The transactions of the Bank impacting liquidity are presented as cash flows and the resultant inflows and outflows allocated to time buckets (liquidity development report) for the purposes of measuring insolvency risk or funding requirements. The difference between inflows and outflows represents a liquidity surplus or deficit (gap) in the relevant time buckets. There are two types of gaps: individual gaps for 1 to 14 days that are used to show concentrations of outflows and cumulative gaps from 1 day to 12 months to map future liquidity requirements. They are compared to the respective liquidity potential which is applied to close the cumulative gaps of the individual time buckets and consequently represents the respective limit for insolvency risk. Utilisation of the limits is monitored on a daily basis. The net liquidity position, which shows the extent of the insolvency risk, is determined as the net amount from the gaps and the respective liquidity potential.

Liquidity development reports are prepared. In addition to the total business recorded in the statement of financial position, loan commitments already granted, guarantees, pre-value dated transactions and other off-balance sheet transactions are incorporated in the report. In order to better consider economic maturities flow scenarios are used for some items. In doing so any possible residual amounts from deposits and current accounts as well as the time to liquidate assets and the amounts, for example, are modelled conservatively as a matter of principle. These liquidity development reports reflect the current market situation as a base scenario (normal case assessment). In addition to calculating the liquidity development report in Euro equivalents, a separate liquidity development report is prepared daily for all US dollar transactions. In this way we support adequate management of our US dollar position.

In addition to the normal case liquidity development report, which is compiled on the assumption of business developments in a normal market environment, the Bank also compiles the results of a market liquidity stress test on a daily basis in the form of a stressed liquidity development report (stress case assessment) in order to reflect critical market developments. The stress case includes,

for example, difficult refinancing conditions and additional cash flows under stress assumptions.

HSH Nordbank quantifies its liquidity maturity transformation risk by means of a VaR approach. The liquidity-value-at-risk (LVaR) is calculated through historical simulation (confidence level 99.9%) of the liquidity spread and its present value effect on transactions, which would necessary theoretically in order to immediately close the current maturity transformation position. In doing so, it is assumed that these hypothetical close-out transactions could actually be effected in the market and that full funding is therefore possible.

Limiting and monitoring liquidity risk

Limits are set for the individual gaps as well as the cumulative gaps for the first 14 days as part of insolvency risk management. Furthermore, limits are set for cumulative gaps for numerous other time buckets up to twelve months.

Insolvency risk is in principle limited by the ability of HSH Nordbank to exhaust its total liquidity potential. This liquidity potential comprises different elements, the total of which represents the total limit. The liquidity potential (limit) represents the respective ceiling for cumulative gaps of individual maturities and is composed of a securities portfolio held as a crisis precaution measure (liquidity buffer), further highly liquid and liquid securities, according to how liquid they are, unsecured funding options, secured funding potential from the issue of Pfandbriefe and industrial loans eligible for refinancing with central banks. In addition, the long-term funding potential from illiquid assets used as collateral is also taken into account.

The components of the liquidity potential are monitored continuously and validated in accordance with internal and external minimum requirements. Safety buffers and risk discounts are incorporated into the limits in order to keep the probability of full utilisation or overdrawing the limits as low as possible. These discounts are, for example, haircuts or other safety margins that reflect the uncertainty about the future development of the respective limit component. Permanent market access to the funding sources relevant for the Bank is also monitored on a regular basis. This is achieved firstly through the on-

going market observation of all funding sources by the Bank's market departments. Secondly, Group Risk Management periodically reviews the funding potential based on the expected prolongation ratios for customer deposits and Strategic Treasury also prepares actual / plan analyses regarding long-term funding.

Group Risk Management calculates and monitors limit utilisation daily and reports the results to the Management Board and responsible divisions. In the event that limits are exceeded ALCO determines appropriate measures as proposed by Strategic Treasury that are implemented by the Capital Markets division. Implementation of the measures is monitored by Group Risk Management.

The LVaR for the liquidity maturity transformation risk is determined each month by Group Risk Management and reported to the Management Board and management responsible for it. Limits are set at Group level and are an integral part of the risk-bearing capacity concept.

Group Risk Management informs the Management Board and the responsible divisions on a monthly basis in aggregate form with regard to the overall assessment of the liquidity position of the Group. In addition to information on the market and funding situation this report also contains in particular limit utilisations in the normal case and stress case and in stress scenarios for insolvency risk, as well as analyses on risk concentrations.

An overview of the reports on liquidity risks is shown in Section 9.3 in Table 48.

Liquidity management

The Bank prepares a long-term liquidity plan for the strategic management of the liquidity resource over the long-term. The short-term liquidity base is operationally managed by the Capital Markets division by means of general parameters specified by the Strategic Treasury division. In addition to the regulatory requirements the liquidity development report is used amongst other things as the basis for determining these parameters. Any change to the individual parameters or the framework requirements is decided by the ALCO. This places the Bank in the position to react flexibly to market developments.

The collateral pool consisting of our securities and loans was also managed and enhanced by Strategic Treasury in 2012 in order to be able to utilise the potential for secured funding in the best possible manner.

Backtesting

In our backtesting we review the modelling of products with stochastic cash flows in the liquidity development report on the basis of statistical evaluations of historical cash flows. The selection of the relevant products is based on the product volume and its risk content in terms of uncertainty in previous modelling.

In the year under review, we have carried out backtesting of the funding potential, the liquidity potential relating to securities and the modelling of time deposits with rights of termination inter alia. The increase in the redemption of own issues and promissory notes by the Bank during the course of 2012 resulted in corresponding adjustments being made to the modelling assumptions for these products in the liquidity development reports. Furthermore, we have subjected the modelling assumptions applied to products and limits to another backtest for the stress scenario of a rating downgrade by two notches following the downgrade made by Moody's in November 2011. This showed that the assumptions used in this scenario were selected very conservatively.

Stress tests

Our regular stress tests for insolvency risk include unusual scenarios and their impact on the liquidity situation of the Group in the risk assessment. When determining these scenarios, the risk and significant parameters were determined for all types of transactions included in the liquidity development report, which change the cash flow profile in the respective stress case. For example, inflows are lower or occur later or outflows are higher or occur earlier than expected.

The selection of our stress tests is the result of an analysis of historical events and hypothetical scenarios. As part of the on-going enhancement process the knowledge obtained on the rating downgrade of HSH Nordbank in 2011 was also incorporated into the modelling and / or the definition of parameters in the reporting year. Within the different stress modelling market specific scenarios (e. g. severe economic downturn), institution specific

scenarios (e. g. rating downgrade of HSH Nordbank AG) as well as a combined scenarios (severe economic downturn and rating downgrade) are assessed on the basis of current market developments. In each of these scenarios it is assumed, for example, that new lending business will continue to some extent and that loans and advances to customers maturing must be extended and refinanced on an increasing basis while the rollover of liabilities is partially cut back or is quite impossible and as a result a financing gap is created. Furthermore, increased draw-downs on loan commitments issued and the early redemption of own issues and securitised liabilities among other things are incorporated in the modelling. The stress test results are reported to the Management Board and the responsible divisions on at least a monthly basis.

In addition, the Bank performs a monthly US dollar stress test which is based on the normal case liquidity development report and simulates an immediate as well as a gradual appreciation in the US dollar affecting the US dollar cash flows and the cash collateral for US dollar derivatives. The stress factor for the appreciation is determined based on an analysis of the historical movement of the USD / EUR exchange rate.

Within the framework of a stress test for the liquidity maturity transformation risk we analyse how the LVaR moves on increasing liquidity spreads. The methodology for this stress test was further developed in the reporting year. The change in the liquidity spread resulting from the macroeconomic approach, under which the relevant stress volatilities are derived from the economic forecasts, is now used to derive the scenario parameters. The stress LVaR serves as an indicator for the sensitivity of the LVaR to an increase in the spread / liquidity costs and constitutes an additional piece of management information.

Furthermore, events that could have a critical impact on the Bank's solvency were analysed in the reporting year within the framework of the periodic implementation of inverse stress tests.

Risk concentrations

Risk concentrations occur in liquidity risk in several ways. Concentrations of both asset and liability products can increase liquidity risk. In addition to the existing

management system for concentrations of asset instruments HSH Nordbank has therefore established a monitoring system for concentrations of liability instruments. Special emphasis is placed on deposits that are analysed and reported on with regard to the depositor structure (investor, sectors), maturities (original and residual maturities) and currencies.

Various quantitative measures (e. g. concentration curve, Herfindahl index and relationship ratios) are calculated for the purposes of analysing risk concentrations. Furthermore, an analysis is performed not only of the structure but especially on the risk content in order to be able to derive efficient management incentives from the quantitative measures in combination with a qualitative discussion. For example, the residual maturities of deposits together with historically derived prolongation ratios, which also apply in the liquidity development report, are reflected in the analysis of the largest depositors.

In addition to the analysis of the depositor structure, liquidity concentrations are examined with regard to macroeconomic factors. This shows that liquidity situation is still strongly dependent on the movement in the US dollar. This is due to the large amount of US dollar assets that are refinanced through cross-currency swaps among other things. On depreciation in the EUR / USD exchange rate the increase in the cash collateral to be provided on foreign currency derivatives will represent a burden on liquidity. For the purposes of analysing the dependency on the US dollar, sensitivity analyses are therefore carried out regularly for cash collateral. In addition a US dollar stress test of the liquidity development report is performed.

Stable liquidity situation despite a difficult market environment

Developments in the financial markets were also determined in 2012 by the sustained sovereign debt crisis in Europe. Following a short initial period of stabilisation caused by the additional liquidity provided by the ECB unease returned to the financial markets. This was mainly attributable to concerns regarding the possible exit of Greece from the eurozone but also regarding Spain's banking sector and future economic developments in the eurozone. As a result, the impact of the additional central bank liquidity diminished, and the European sovereign debt crisis came to a head again. Amongst

other things, the programme for purchasing government bonds has convinced many investors that the politicians would like to stick to the eurozone over the long-term. The restructuring of the banking sector in Spain had a positive effect. The adoption of a new rescue package for Greece was the most recent measure that contributed to a significant reduction in the risk premiums for bonds issued by the periphery countries. The relaxing of the monetary policy of the US Federal Reserve Bank over the course of the year also resulted in a significant reduction in the yields on German government bonds.

It was possible to further improve the Bank's liquidity position in the area of short- and medium-term maturities. The measures focussed on increased efforts to obtain new deposits and funding. For example, we successfully placed a five-year and a four-year mortgage Pfandbrief in the year under review in the amount of € 500 million each within the framework of two benchmark issues. In addition to further issues structured as private placements the clear increase in time and demand deposits from corporate clients and institutional investors as well as successes achieved in obtaining receivable based funding also contributed to the improvement in the liquidity situation.

The liquidity position of HSH Nordbank remains stable. The Bank successfully implemented its issuance plan in the reporting year, while deposits displayed a positive trend. The placement of the mortgage Pfandbriefe in the first half of 2012 also contributed to this. Despite this success, access to capital markets remains limited so that the future funding and rating continue to represent some of the significant challenges facing the Bank.

Liquidity ratio of HSH Nordbank AG

The regulatory management parameter for liquidity risks is the liquidity ratio defined by the German Liquidity Regulation. With values between 1.65 and 2.14, our liquidity ratio remained above the regulatory minimum value of 1.00 at all times throughout the reporting period. The average value for 2012 was 1.79 (previous year: 1.79).

Liquidity Coverage Ratio

The new minimum liquidity ratio under Basel III called Liquidity Coverage Ratio amounted to 108% as at the re-

porting date based on the current methodology used. In the beginning of 2013 the bank supervisors agreed to adjust the calculation method. The new method now provides for a more favourable approach to wholesale funding. Taking this new and less strict method into account, HSH Nordbank's Liquidity Coverage Ratio reached 169% as at the reporting date.

Main reports on liquidity risk

9.3. REPORTS ON LIQUIDITY RISK

In general, liquidity risk reporting of HSH Nordbank is embedded in the reports on overall risk (see Section 4.4). Furthermore regular special reports on liquidity risk are compiled; these have been summarised in Table 48.

Report	Recipient	Interval	Content	Objective
Monthly Group Liquidity Risk Report	Management Board, Divisions Capital Markets, Group Treasury, Group Risk Management, Internal Audit, Legal division, Group Finance and Financial Controlling	Monthly	Management summary incl. risk evaluation, central HSH liquidity ratios, insolvency risk normal- and stress case, stress testing, USD LAB normal and stress case, liquidity maturity transformation risk normal and risk case, risk concentration deposits, market situation, funding ratios, analyses	Regular information to the Management Board, risk calculation / limit utilisation and management information
Daily Liquidity Report	Management Board, Divisions Capital Markets, Group Treasury, Group Risk Management	Daily	Insolvency risk normal case (daily) and stress case (weekly), new business funding, market situation, funding and HSH internal indicators, analyses	Regular information to the Management Board, risk calculation / limit utilisation and management information
Daily Group Liquidity Risk Report	Divisions Capital Markets, Group Treasury, Group Risk Management and Internal Audit	Daily	Insolvency risk normal case (daily) and stress case (weekly), liquidity gap analysis, limit calculation, analyses	Ongoing management information, risk calculation/limit utilisation and management information
Daily Group Report on Liquidity Risk in USD	Divisions Group Treasury and Group Risk Management	Daily	Insolvency risk USD positions, liquidity gap analysis, analyses	Ongoing management information, risk calculation and management information

Table 48: Main reports on liquidity risk

10. OTHER MATERIAL RISKS

Among other material risks of HSH Nordbank are strategic risk and reputation risk.

10.1. STRATEGIC RISK

Strategic risk is the risk of a financial loss being incurred as a result of long-term decisions which are erroneous or based on incorrect assumptions, particularly with respect to the performance of individual areas of business or the banking sector as a whole.

The strategic realignment of HSH Nordbank was successfully continued during the year under review against the backdrop of the conclusion of the EU proceedings. The strategic risk of the Bank was further reduced in the year under review through concentrating on the core business areas, the separation and active winding-down of risk-bearing and nonstrategic portfolios in the Restructuring Unit, the consolidation of the international network of locations and with the sale of numerous equity holdings in line with the conditions imposed and the commitments of the Bank.

10.2. REPUTATION RISK

The reputation risk is the risk of direct or indirect loss caused by damage to the Bank's reputation and related opportunity costs. Damage to reputation means a public loss of confidence in the Bank or a loss of esteem of the Bank from the viewpoint of individual stakeholders (e. g. capital markets, clients, shareholders, investors, the general public, employees).

Firstly, damage to reputation can be directly caused by the behaviour of internal staff, external stakeholders or by social environment as a whole. This can give rise to further negative repercussions for the Bank. Secondly, reputation risk in terms of a consequential risk can arise indirectly as a result of the occurrence of a loss in another risk type.

HSH Nordbank manages reputation risk particularly by means of preventive measures via the review of specific transactions on the one hand and via process-related rules on the other in order to prevent the occurrence of reputational damage to the extent possible. Accordingly, reputation risk also forms an integral part of our risk strategy.

11. NOTES

11.1. CONSOLIDATION MATRIX

Type of company / company	Consolidation			Treatment under supervisory law	Consolidation under IFRS	
	Full	Proportional	Deduction method	Risk-weighted (equity holding/ SPV)	Full	At-equity
CI Bürgschaftsbank Schleswig-Holstein GmbH			X			
CI HSH Nordbank Securities S.A.	X				X	
FSI HSH N Financial Securities LLC	X				X	
FSI Int. Fund Services and Asset Management S.A.	X				X	
FSI Nobis Asset Management		X				
FSI SBF II LLC	X				X	
FE AGV Irish Equipment Leasing No. 1 unlimited	X				X	
FE AGV Irish Equipment Leasing No. 7 Ltd.		X				
FE Alliance HC I Limited Partnership	X					
FE Alliance HC I Mezz Limited Partnership	X					
FE Alliance HC III GP, LLC	X					
FE Alliance HC III Saybrooke GP, LLC	X					
FE Alliance HC III Verandahs GP, LLC	X					
FE Amentum Aircraft Leasing No. Five Limited				X		X
FE Amentum Aircraft Leasing No. Six Limited				X		X
FE Amentum Aircraft Leasing No. Three Limited				X		X
FE Arbutus GmbH	X					
FE Ariilus Management GmbH	X					
FE Asian Capital Investment Opportunity Ltd.	X					
FE AVUS Fondsbesitz und Management GmbH	X				X	
FE AVUS Grundstücksverwaltungs- GmbH	X				X	
FE Bach Holdings LLC	X					
FE Belgravia Shipping Ltd.				X		X
FE BIG Anteilsverwaltungs- GmbH		X				
FE BIG BAU Investitionsgesellschaft mbH			X			
FE Brinkhof Holding Deutschland GmbH	X					
FE BTG Beteiligungsgesellschaft Hamburg GmbH			X			
FE Bu Wi Beteiligungsholding GmbH	X				X	
FE Capcellence Dritte Fondsbeteiligung GmbH i.G.	X					
FE Capcellence Erste Fondsbeteiligung GmbH i.G.	X					
FE Capcellence Private Equity Beteiligungen GmbH & Co. KG	X				X	
FE Capcellence Vintage Year 05/06 Beteiligungen GmbH & Co. KG	X				X	
FE Capcellence Vintage Year 06/07 Beteiligungen GmbH & Co. KG	X				X	
FE Capcellence Vintage Year 07/08 Beteiligungen GmbH & Co. KG	X				X	
FE Capcellence Vintage Year 09 Beteiligungen GmbH & Co. KG	X				X	
FE Capcellence Vintage Year 10 Beteiligungen GmbH & Co. KG	X				X	
FE Capcellence Vintage Year 11 Beteiligungen GmbH & Co. KG	X				X	
FE Capcellence Vintage Year 12 Beteiligungen GmbH & Co. KG	X				X	
FE Capcellence Zweite Fondsbeteiligung GmbH i.G.	X					

Type of company / company	Consolidation			Treatment under supervisory law	Consolidation under IFRS	
	Full	Proportional	Deduction method	Risk-weighted (equity holding/ SPV)	Full	At-equity
FE CHIOS GmbH	X				X	
FE DMS Beteiligungs GmbH	X				X	
FE Dol-Zircon Grundstücksverwaltungsgesellschaft mbH & Co., Objekt Hamburg KG		X				
FE Dynamene GmbH	X					
FE Ealing Investments Ltd.	X				X	
FE Einkaufs-Center Plovdiv G.m.b.H. & Co. KG	X				X	
FE European Capital Investment Opportunities Limited	X					
FE Fastlane 1. Real Estate GmbH	X					
FE Fastlane 2. Real Estate GmbH	X					
FE Feronia GmbH	X				X	
FE 4Wheels Management GmbH	X					
FE gardeur Beteiligungs GmbH	X					X
FE GBVI Gesellschaft zur Beteiligungsverwaltung von Immobilien mbH & Co. KG	X				X	
FE Godan GmbH	X				X	
FE Hamburgische Seefahrtsbeteiligung "Albert Ballin" GmbH & Co. KG		X				
FE HGA Asset Management GmbH	X					
FE HGA Aviation Co-Invest I GmbH & Co. KG		X				
FE HGA/Colonia CareConcept 1 Fondsgesellschaft mbH & Co. KG	X					
FE HGA Fondsbeteiligung GmbH	X				X	
FE HGA Mikado I AG & Co. KG	X					
FE HGA Mitteleuropa III GmbH & Co. KG	X					
FE HGA Mitteleuropa IV GmbH & Co. KG	X					
FE HGA Mitteleuropa V GmbH & Co. KG	X					
FE HGA NEW Office CAMPUS-KRONB. GMBH & CO.KG, Ham burg		X				
FE HGA USA V GmbH & Co. KG	X					
FE HGA USA VI GmbH & Co. KG	X					
FE HSH Auffang- und Holdinggesellschaft mbH & Co. KG	X				X	
FE HSH Corporate Finance GmbH	X				X	
FE HSH Facility Management GmbH	X				X	
FE HSH Invest GmbH	X					
FE HSH N Finance (Guernsey) Ltd.	X				X	
FE HSH N Funding I Ltd.	X				X	
FE HSH N Funding II Ltd.	X				X	
FE HSH N Quartett I GmbH & Co. KG	X					
FE HSH N Quartett II GmbH & Co. KG	X					
FE HSH N Residual Value Ltd.			X		X	
FE HSH Private Equity GmbH	X				X	
FE HSH Quartett III GmbH & Co. KG	X					
FE HSH RE 8. Beteiligungs GmbH	X					

Type of company / company	Consolidation			Treatment under supervisory law	Consolidation under IFRS	
	Full	Proportional	Deduction method	Risk-weighted (equity holding/ SPV)	Full	At-equity
FE HSH Real Estate GmbH	X				X	
FE HSH Real Estate Treuhand GmbH	X					
FE HSH Real Estate US Invest LLC	X				X	
FE Jantar GmbH	X				X	
FE Kaplon GmbH & Co. KG	X				X	
FE Kipper Corporation	X				X	
FE Kontora Family Office GmbH	X				X	
FE Marc Marco Polo Ventures GmbH & Co. KG	X					
FE Milestone Apartments HC GP Inc.	X					
FE NBV Beteiligungs GmbH, Hamburg			X			
FE Neptune Finance Partner S.à.r.l.	X				X	
FE Neptune Finance Partner II S.à.r.l.	X				X	
FE Neptune Ship Finance (Lux.) S.à.r.l.	X					
FE Neptune Ship Finance (Lux.) S.à.r.l. & Cie, SECS	X				X	
FE Niederelbe Beteiligungs GmbH	X					
FE Northern Diabolo (Holdings) S.à.r.l.		X				
FE PL Projekt Anlagen Leasing Beteiligungsgesellschaft- GmbH & Co.		X				
FE PL Projekt - Anlagen Leasing Beteiligungsgesellschaft- GmbH		X				
FE Pluton Grundstücksverwaltungs- GmbH & Co. KG		X				
FE Prime 2006-1 Funding LP			X			X
FE Railpool Holding GmbH & Co. KG		X				X
FE Real Estate Venture Capital Fonds 1 GmbH	X					
FE Relacom Management AB		X				
FE RELAT Beteiligungs GmbH & Co Vermietungs-KG	X					
FE Resparcs Funding I Limited Partnership	X				X	
FE Resparcs Funding II Limited Partnership	X				X	
FE SLK GmbH für Immobilien Leasing & Co. KG Obj. Berlin-Pohlst.		X				
FE Solar Holdings S.à.r.l.	X				X	
FE Sotis S.à.r.l. , Luxemburg	X				X	
FE Swift Capital 1 Europäische Fondsbeteiligungs- GmbH & Co. KG	X				X	
FE Terranum "die Zweite" AG & Co. KG	X				X	
FE Terranum Gewerbebau Verwaltungs- GmbH	X					
FE Teukros GmbH	X				X	
FE Turis 1. Beteiligungs GmbH & Co. KG	X				X	
FE Turis 3. Beteiligungs GmbH & Co. KG	X					
FE Verwaltungsgesellschaft Gartenstadt Wismar	X					
ABSE GmbH Altstadt Grundstücksgesellschaft			X			
ABSE HSH Debt Advisory ApS	X				X	
ABSE HSH Kunden- und Kontenservice GmbH	X				X	
ABSE HSH Restructuring Advisory ApS	X				X	
ABSE HSH Security GmbH				X	X	

Type of company / company		Consolidation			Treatment under supervisory law	Consolidation under IFRS	
		Full	Proportional	Deduction method	Risk-weighted (equity holding/ SPV)	Full	At-equity
ABSE	Situs Nordic Services ApS		X				X
ABSE	Unterstützungs- Ges. d. Hamburgischen Landesbank mit beschränkter Haftung	X				X	
Oth	2200 Victory LLC				X	X	
Oth	Adessa Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs-KG				X	X	
Oth	AGV Irish Equipment Leasing No. 4 Limited				X	X	
Oth	Amentum Lux S.à.r.l.				X	X	
Oth	Anthracite Balanced Company Limited				X	X	
Oth	CPM Luxemburg S.A.				X	X	
Oth	CPM Securitisation Fonds S.A.				X	X	
Oth	DEERS Green Power Development Company, S.L.				X	X	
Oth	DMS Dynamic Micro Systems Semiconductor Equipment GmbH				X	X	
Oth	Enders Holdings LLC				X	X	
Oth	Endor 9. Beteiligungs GmbH & Co. KG				X	X	
Oth	Grundstücksgesellschaft Barstraße GbR (GEHAG-Fonds 18)				X	X	
Oth	Grundstücksgesellschaft Rudow-Süd/Straße 633 GbR (GEHAG-Fonds 20)				X	X	
Oth	HGA Capital Grundbesitz und Anlage GmbH				X	X	
Oth	HGA Objekte Hamburg und Hannover AG & Co. KG				X	X	
Oth	HSH Care+Clean GmbH				X	X	
Oth	HSH Gastro+Event GmbH				X	X	
Oth	HSH Move+More GmbH				X	X	
Oth	Löddeköpinge Handel AB				X	X	
Oth	Senior Assured Investment S.A.				X	X	
Oth	Senior Preferred Investments S.A.				X	X	

Table 49: Consolidation matrix

- CI:** Credit institution (Section 1 (1) German Banking Act)
FSI: Financial services institution (Section 1 (1a) German Banking Act)
FE: Financial enterprise (Section 1 (3) German Banking Act)
ABSE: Ancillary banking services enterprises (Section 1 (3c) German Banking Act)
Oth: Other

11.2. ALTERNATIVE CALCULATIONS WITHOUT TAKING THE GUARANTEE FACILITY INTO ACCOUNT

	Loans		Loan commitments		Other non-derivative off-balance sheet assets		Securities		Derivative instruments	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Exposure value (Total)	88,538	94,864	2,894	3,240	1,420	1,413	22,187	19,374	8,011	8,343

Table 50: Exposure values by risk-bearing instrument in € m (alternative calculation without taking the guarantee facility into account)

	Loans		Loan commitments		Other non-derivative off-balance sheet assets		Securities		Derivative instruments	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Western Europe	74,298	76,094 ¹	2,628	2,854	926	1,088	17,753	17,817 ¹	6,293	6,492
North America	5,871	9,268	97	220	377	190	3,389	920	1,236	1,362
Asia Pacific Region	4,302	4,478	99	131	37	42	83	129	154	150
Latin America	402	494	1	1	7	9	69	99	11	4
Central and Eastern Europe	2,318	2,767	52	7	23	29	73	77	153	169
Middle East	1,184	1,359	6	17	50	55	-	-	165	166
African countries	163	178	11	11	1	0	-	0	-	-
Int. Organisations	-	227 ¹	-	-	-	-	819	330 ¹	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total	88,538	94,864	2,894	3,240	1,420	1,413	22,187	19,374	8,011	8,343

¹ Corrected value against the report as at 31 December 2011

Table 51: Exposure values by main region in € m (alternative calculation without taking the guarantee facility into account)

	Loans		Loan commitments		Other non-derivative off-balance sheet assets		Securities		Derivative instruments	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Credit institutions	3,003	5,576	80	87	377	63	9,252	9,149	2,474	2,474
Other financial institutions	4,215	4,614	38	171	112	114	1,321	2,586	563	616
Public sector	14,024	9,844	127	139	88	96	8,061	6,438	293	290
Private households	2,515	2,740	38	17	50	21	-	-	44	34
Properties and flats	17,476	18,817	327	208	78	85	0	-	1,324	1,312
Shipping	25,350	27,768	669	800	143	136	415	314	1,174	1,439
Industry	9,012	9,492	695	1,033	282	542	24	25	673	648
Trade and transport	6,596	7,741	557	479	194	256	3	6	592	596
Other service activities	6,307	8,160	363	306	97	100	3,111	855	873	875
Other	41	113	-	-	-	-	-	-	-	60
Total	88,538	94,864	2,894	3,240	1,420	1,413	22,187	19,374	8,011	8,343

Table 52: Exposure values by main sector in € m (alternative calculation without taking the guarantee facility into account)

	Loans		Loan commitments		Other non-derivative off-balance sheet assets		Securities		Derivative instruments	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
≤ 1 day	10,508	4,573	57	87	3	6	209	15	1	0
> 1 day ≤ 3 months	4,143	4,659	174	121	26	8	1,433	2,102	52	63
> 3 months ≤ 6 months	1,744	1,812	132	142	11	34	1,647	228	23	38
> 6 months ≤ 1 year	4,263	7,032	423	379	21	130	1,483	1,108	112	415
> 1 year ≤ 5 years	30,018	31,888	1,231	1,565	561	344	10,791	9,673	1,720	1,694
> 5 years	37,862	44,899	877	945	799	890	6,624	6,247	6,103	6,133
Total	88,538	94,864	2,894	3,240	1,420	1,413	22,187	19,374	8,011	8,343

Table 53: Exposure values by contractual residual term in € m (alternative calculation without taking the guarantee facility into account)

Risk weighting in %	CRSA before credit risk mitigation		CRSA after credit risk mitigation		Advanced IRBA approach	
	2012	2011	2012	2011	2012	2011
0	257	182	370	243	-	-
10	135	173	135	173	-	-
20	129	117	391	152	-	-
35	-	-	427	494	-	-
50	0	19	62	93	-	-
70	-	-	5	5	-	-
75	515	702	180	282	-	-
90	-	-	-	-	-	-
100	4,995	5,460	4,016	4,672	-	-
115	-	-	-	-	-	-
150	795	646	533	386	-	-
190	-	-	-	-	148	138
200	-	-	-	-	-	-
250	-	-	-	-	-	-
290	-	-	-	-	0	9
350	-	-	-	-	-	-
370	-	-	-	-	47	33
1.250	0	1	0	1	-	-
Capital deduction	10	19	10	19	-	0
Other risk weights	205	221	205	221	-	-
Total	7,042	7,538	6,334	6,740	195	181

Table 54: CRSA/IRBA exposure values by regulatory risk weight in € m (alternative calculation without taking the guarantee facility into account)

IRBA exposure class	Avg. PD in %		Avg.LGD in %		Avg. RW in %		Exposure value	
	2012	2011	2012	2011	2012	2011	2012	2011
Rating range 1: 1(AAAA) – 1(AA+)								
Central governments	0.0	0.0	31.0	24.9	0.2	0.2	18,151	12,225
Institutions	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	-	-	-
Equity holding exposures ¹	-	-	-	-	-	-	-	-
Subtotal	0.0	0.0	31.0	24.9	0.2	0.2	18,151	12,225
Rating range 2: 1(AA) – 1(A-)								
Central governments	0.0	0.0	26.8	20.0	16.4	11.9	1,763	1,930
Institutions	0.0	0.0	19.6	23.6	10.0	9.9	11,449	13,971
Corporates	0.1	0.1	28.9	34.1	16.6	17.9	9,945	11,345
Equity holding exposures ¹	-	-	-	-	-	-	-	-
Subtotal	0.1	0.0	24.2	27.7	13.3	13.4	23,157	27,245
Rating range 3: 2 – 5								
Central governments	0.1	0.2	35.1	21.3	42.2	27.1	823	691
Institutions	0.2	0.2	16.0	17.9	15.6	18.9	2,150	3,916
Corporates	0.2	0.3	31.5	30.7	38.9	38.9	19,291	20,079
Equity holding exposures ¹	0.4	0.4	90.0	90.0	191.9	191.9	2	2
Subtotal	0.2	0.2	30.1	28.4	36.8	35.2	22,266	24,688
Rating range 4: 6 - 9								
Central governments	0.8	0.7	53.4	55.9	135.6	139.6	299	182
Institutions	1.1	0.7	12.3	18.8	27.6	34.5	582	235
Corporates	1.2	1.1	30.5	30.0	69.4	68.2	18,580	21,216
Equity holding exposures ¹	1.9	1.4	90.0	90.0	308.7	273.8	105	10
Subtotal	1.2	1.1	30.6	30.1	70.5	68.5	19,565	21,643
Rating range 5: 10 - 12								
Central governments	3.0	3.2	36.4	22.2	133.9	83.3	157	54
Institutions	4.0	3.0	32.7	26.7	100.8	72.8	11	276
Corporates	4.6	4.8	30.4	34.9	103.0	122.4	6,191	9,407
Equity holding exposures ¹	4.4	4.0	90.0	90.0	369.5	369.5	3	24
Subtotal	4.6	4.7	30.6	34.7	103.9	121.4	6,361	9,761

(Continuation)

IRBA exposure class	Avg. PD in %		Avg.LGD in %		Avg. RW in %		Exposure value	
	2012	2011	2012	2011	2012	2011	2012	2011
Rating range 6: 13 – 15								
Central governments	13.2	15.0	62.9	70.0	341.4	428.6	9	7
Institutions	20.0	20.0	20.0	20.0	124.2	133.3	1	3
Corporates	15.0	14.9	38.0	38.1	190.8	190.9	8,164	7,145
Equity holding exposures ¹	13.4	10.0	90.0	65.2	486.6	314.1	30	0
Subtotal	15.0	14.9	38.2	38.1	192.0	191.1	8,204	7,155
Rating range 7 (Default): 16 – 18								
Central governments	100.0	100.0	77.0	40.9	87.5	46.7	7	246
Institutions	100.0	100.0	70.0	71.8	79.6	81.5	130	195
Corporates	100.0	100.0	40.5	36.4	46.0	41.4	18,577	17,076
Equity holding exposures ¹	100.0	100.0	89.2	87.2	101.4	99.1	64	102
Subtotal	100.0	100.0	40.8	37.2	46.4	42.3	18,778	17,619
Total (without default)								
Central governments	0.0	0.0	31.2	24.5	6.2	5.1	21,202	15,089
Institutions	0.1	0.1	18.8	22.4	11.6	13.1	14,192	18,400
Corporates	2.9	2.6	31.5	32.4	70.8	71.4	62,170	69,192
Equity holding exposures ¹	4.4	3.1	90.0	90.0	346.6	323.9	140	36
Total	1.9	1.8	29.7	29.4	48.6	51.3	97,703	102,717

¹ Only equity holdings under the PD-LGD approach; with regulatory LGD of 65% or 90%; CCF = 100%

Table 55: Avg. PD, avg. LGD, avg. RW and exposure values in € m according to rating ranges (alternative calculation without taking the guarantee facility into account)

IRBA receivable class	Central governments		Institutions		Corporates		Equity holding exposure ¹		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Rating range 1: 1(AAAA) – 1(AA+)										
Basis for evaluation of loan commitments	1	10	-	-	-	-	-	-	1	10
Basis for evaluation of non-derivative assets not reported	45	47	-	-	-	-	-	-	45	47
Avg. Exposure value of loan commitments	0	1	-	-	-	-	-	-	0	1
Avg. Exposure value of non-derivative assets not reported	22	21	-	-	-	-	-	-	22	21
Rating range 2: 1(AA) – 1(A-)										
Basis for evaluation of loan commitments	-	-	354	358	823	1,009	-	-	1,177	1,367
Basis for evaluation of non-derivative assets not reported	-	-	72	53	457	177	-	-	529	231
Avg. Exposure value of loan commitments	-	-	3	3	18	7	-	-	13	6
Avg. Exposure value of non-derivative assets not reported	-	-	5	3	198	13	-	-	172	11
Rating range 3: 2 - 5										
Basis for evaluation of loan commitments	-	-	0	1	3,172	3,171	-	-	3,172	3,172
Basis for evaluation of non-derivative assets not reported	-	2	52	52	530	692	-	-	582	745
Avg. Exposure value of loan commitments	-	-	0	0	12	13	-	-	12	13
Avg. Exposure value of non-derivative assets not reported	-	2	48	48	10	8	-	-	14	11
Rating range 4: 6 - 9										
Basis for evaluation of loan commitments	-	-	75	75	2,684	2,735	-	-	2,759	2,810
Basis for evaluation of non-derivative assets not reported	0	0	4	2	777	1,012	-	-	781	1,014
Avg. Exposure value of loan commitments	-	-	45	45	12	12	-	-	13	13
Avg. Exposure value of non-derivative assets not reported	0	0	1	1	5	6	-	-	5	6
Rating range 5: 10 – 12										
Basis for evaluation of loan commitments	-	-	3	12	275	529	-	-	278	541
Basis for evaluation of non-derivative assets not reported	-	-	-	-	244	206	-	-	244	206
Avg. Exposure value of loan commitments	-	-	0	0	4	7	-	-	4	7
Avg. Exposure value of non-derivative assets not reported	-	-	-	-	2	3	-	-	2	3
Rating range 6: 13 – 15										
Basis for evaluation of loan commitments	-	-	-	-	147	214	-	-	147	214
Basis for evaluation of non-derivative assets not reported	6	7	1	1	140	168	-	-	147	177
Avg. Exposure value of loan commitments	-	-	-	-	2	6	-	-	2	6
Avg. Exposure value of non-derivative assets not reported	4	5	1	1	6	5	-	-	6	5

(Continuation)

IRBA exposure class	Central governments		Institutions		Corporates		Equity holding exposure ¹		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Rating range (Default): 16 – 18										
Basis for evaluation of loan commitments	-	-	1	1	538	583	-	-	539	583
Basis for evaluation of non-derivative assets not reported	-	-	-	-	252	402	-	-	252	402
Avg. Exposure value of loan commitments	-	-	0	0	24	32	-	-	24	32
Avg. Exposure value of non-derivative assets not reported	-	-	-	-	17	12	-	-	17	12
Total										
Basis for evaluation of loan commitments	1	10	433	446	7,639	8,242	-	-	8,073	8,698
Basis for evaluation of non-derivative assets not reported	51	56	129	108	2,400	2,657	-	-	2,580	2,821
Avg. Exposure value of loan commitments	0	1	10	10	13	13	-	-	13	12
Avg. Exposure value of non-derivative assets not reported	20	18	22	25	44	8	-	-	42	9

¹ Only equity holdings under the PD-LGD approach; with regulatory LGD of 65% or 90%; CCF = 100%

Table 56: Assessment basis in € m and avg. exposure value of undrawn loan commitments and of non-derivative off-balance sheet assets (alternative calculation without taking the guarantee facility into account)

Exposure class	2012	2011	Difference
	Expected loss (EL) 01.01.2012 to 31.12.2012	Actual loss 01.01.2011 to 31.12.2011	
Central governments	1	-	+1
Institutions	48	3	+45
Corporates	242	434	-192
Equity holding exposures ¹	-	10	-10
Total	291	447	-156

¹ Only equity holdings under the PD-LGD approach; with regulatory LGD of 65% or 90%; CCF = 100%

Table 57: Expected losses and actual losses in the lending business in € m (alternative calculation without taking the guarantee facility into account)

Exposure class	2012		2011	
	Expected loss (EL) as at 31.12.2012	Actual loss 01.01.2012 to 31.12.2012	Expected loss (EL) as at 31.12.2011	Actual loss 01.01.2011 to 31.12.2011
Central governments	2	1	1	-
Institutions	1	48	1	3
Corporates	583	242	585	434
Equity holding exposures ¹	4	-	1	10
Total	589	291	589	447

Exposure class	2010		2009	
	Expected loss (EL) as at 31.12.2010	Actual loss 01.01.2010 to 31.12.2010	Expected loss (EL) as at 31.12.2009	Actual loss 01.01.2009 to 31.12.2009
Central governments	0	0	0	-
Institutions	2	72	2	-
Corporates	138	228	215	250
Equity holding exposures ¹	2	-	2	4
Total	142	300	219	255

¹ Only equity holdings under the PD-LGD approach; with regulatory LGD of 65% or 90%; CCF = 100%

Table 58: Expected losses and actual losses in the lending business in € m (alternative calculation without taking the guarantee facility into account)

Exposure class CRSA	Financial collateral		Other and physical collateral		Guarantees / derivatives		Life insurance	
	2012	2011	2012	2011	2012	2011	2012	2011
Central governments	-	-	-	-	-	-	-	-
Regional governments	-	-	-	-	-	-	-	-
Other public sector entities	-	-	-	-	3	2	-	-
Multilateral development banks	-	-	-	-	-	-	-	-
International organisations	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	-	-	-
Collateralised Notes issued by banks	-	-	-	-	-	-	-	-
Corporates	639	709	-	-	360	75	20	26
Retail banking	41	49	-	-	1	1	10	17
Items collateralised by real estate	-	-	469	520	-	-	-	-
Investment certificates	-	-	-	-	-	-	-	-
Equity holdings	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-
Overdue items	28	41	256	263	1	0	1	1
Total	708	798	725	783	365	79	31	44

Table 59: Total amount of collateralised CRSA exposure values in € m (alternative calculation without taking the guarantee facility into account)

Exposure class IRBA	Financial collateral		Other and physical collateral		Guarantees / derivatives		Life insurance	
	2012	2011	2012	2011	2012	2011	2012	2011
Central governments	-	0	-	29	-	90	-	-
Banks	2,025	168	176	257	1,280	1,575	-	-
Retail banking	-	-	-	-	-	-	-	-
Equity holdings	-	-	-	-	-	-	-	-
Corporates	2,504	551	30,392	33,773	1,312	1,474	32	101
Other assets not related to loans	-	-	-	-	-	-	-	-
Total	4,529	720	30,596	34,059	2,591	3,139	32	101

Table 60: Total amount of collateralised IRBA exposure values (without securitisations) in € m (alternative calculation without taking the guarantee facility into account)

Securitisation portfolio	Originators		Exposure value Sponsors	
	2012	2011	2012	2011
Traditional securitisations				
Real estate	-	-	-	-
Ships	-	-	-	-
Retail banking	30	74	26	-
ABS	13	16	-	-
Other	13	15	-	-
Subtotal	56	105	26	-
Synthetic securitisations				
Real estate	-	-	-	-
Ships	-	-	-	-
Retail banking	-	-	-	-
ABS	-	-	-	-
Other	-	-	-	-
Subtotal	-	-	-	-
Total	56	105	26	-

Table 61: Exposure values of securitised receivables in € m (alternative calculation without taking the guarantee facility into account)

Securitisation items	CRSA exposure value		IRBA exposure value	
	2012	2011	2012	2011
Balance-sheet items				
Credit enhancements ¹	-	-	-	-
Equity holdings in ABS transactions	2,144	2,592	3,076	3,673
Other balance-sheet items	40	28	142	473
Subtotal	2,184	2,620	3,219	4,146
Off-balance sheet items				
Liquidity facilities	1	2	0	0
Derivates	-	-	-	-
Other off-balance sheet items	-	-	-	-
Subtotal	1	2	0	0
Total	2,184	2,622	3,219	4,146

¹ Measures to improve credit quality

Table 62: Exposure values of retained or purchased securitisation exposures in € m (alternative calculation without taking the guarantee facility into account)

Risk weight range in %	Securitized items retained / purchased							
	Exposure value				Capital requirement			
	Securiti- sation	Resecuriti- sation	Total	Total	Securiti- sation	Resecuriti- sation	Total	Total
	2012	2012	2012	2011	2012	2012	2012	2011
CRSA								
0 ≤ 10	-	-	-	39	-	-	-	-
> 10 ≤ 20	1,369	-	1,369	1,737	22	-	22	28
> 20 ≤ 50	130	-	130	105	5	-	5	4
> 50 ≤ 100	86	15	101	103	7	1	8	8
> 100 ≤ 350	31	11	42	58	9	2	11	12
> 350 ≤ 650	11	23	33	30	6	12	18	11
> 650 < 1,250	-	-	-	-	-	12	12	-
1,250 or capital deduction	508	1	509	551	3	-	3	-
Total CRSA	2,134	144	2,184	2,622	51	15	66	63
IRBA								
0 ≤ 10	1,375	-	1,375	1,926	10	-	10	12
> 10 ≤ 20	312	319	631	1,326	4	5	9	18
> 20 ≤ 50	347	531	878	503	10	12	21	14
> 50 ≤ 100	97	47	144	152	4	2	6	5
> 100 ≤ 350	-	11	11	27	-	3	3	3
> 350 ≤ 650	84	1	86	61	28	1	29	22
> 650 < 1,250 ¹	-	-	-	-	-	-	-	-
1,250 or capital deduction	69	23	92	152	9	-	9	5
Total IRBA	2,286	933	3,219	4,146	65	22	87	79
Total	4,420	982	5,403	6,768	657	48	152	141

¹ Prior to exercise of the election under Section 253 (3) and (4) SolvV

Table 63: Exposure values and capital requirements for retained or purchased securitisation items by risk weight ranges in € m (alternative calculation without taking the guarantee facility into account)

Securitisation portfolio	Exposure value ¹	
	2012	2011
Real estate	492	445
Ships	-	-
Retail banking	-	-
ABS	61	42
Other	50	214
Total	602	702

¹ Prior to exercise of the election under Section 253 (3) and (4) SolvV

Table 64: Securitisation positions to be deducted from equity or to be taken into account with a risk weight of 1.250% in € m

Securitisation portfolio	Total non-performing or in-arrears ¹			Actual losses
	2012	2011	01.01.2012 to 31.12.2012	01.01.2011 to 31.12.2010
Real estate	-	-	-	-
Ships	-	-	-	-
Retail banking	-	-	-	-
ABS	-	-	-	-
Other	15	5	-	-
Total	15	5	-	-

¹ Total non-performing receivables (needing value adjustment) or in-arrears receivables (not needing value adjustment)

Table 65: Non-performing and delayed securitisations, actual losses on securitised receivables in € m (alternative calculation without taking the guarantee facility into account)

List of Abbreviations

ABCP	Asset Backed Commercial Paper
ABS	Asset Backed Securities
AktG	Aktiengesetz (German Stock Corporation Act)
ALCO	Asset Liability Committee
AöR	Anstalt öffentlichen Rechts (institution incorporated under public law)
ABSE	Ancillary banking services enterprises (Section 1 (3c) German Banking Act)
Avg.	Average
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht (Federal Financial Supervisory Authority)
Basel II	Basel Framework Agreement
CCF	Credit conversion factor
CDS	Credit default swaps
CI	Credit institution (Section 1 (1) German Banking Act)
CLD	Credit Loss Database
CLLP	Country-specific loan loss provisions
CRD	The Capital Requirements Directive
CRO	Chief Risk Officer
CRSA	Credit Risk Standardised Approach
DakOR	Datenkonsortium operationelle Risiken (Operational risk data consortium)
DQM	Data quality management
DSGV	Deutscher Sparkassen- und Giroverband (German Association of Savings Banks and Giro Banks)
EaD	Exposure at default (gross loan volume at the date of default)
ECB	European Central Bank
EL	Expected Loss
EMIR	European Market Infrastructure Regulation
FCR	Foreign currency rating
FE	Financial enterprise (Section 1(3) German Banking Act)
Fitch	Fitch Ratings
FSI	Financial services institution (Section 1(1a) German Banking Act)
GLLP	General loan loss provisions
GmbHG	GmbH-Gesetz (German Limited Liability Companies Act)
HGB	Handelsgesetzbuch (German Commercial Code)
IAA	Internal Assessment Approach
IAS	International Accounting Standards
ICAAP	Internal Capital Adequacy Assessment Process
ICS	Internal Control System
IFRS	International Financial Reporting Standard
IMKS	Integrated market strategy and credit risk strategy
IRB	Internal Rating Based
IRBA	Internal Rating Based Approach
ISDA	International Swaps and Derivatives Association

KWG	Gesetz über das Kreditwesen/Kreditwesengesetz (German Banking Act)
LBO	Leveraged Buyout
LCH	London Clearing House
LCR	Local Currency Rating
LeDIS	Legal Database Information System
LGD	Loss Given Default
LIP	Loss identification period
LLC	Limited Liability Company
LP	Limited Partnership
Ltd	Limited
LVaR	Liquidity Value at Risk
M	Maturity
MaRisk	Mindestanforderungen an das Risikomanagement (Minimum Requirements for Risk Management)
Moody's	Moody's Investors Service
NPNM	New products – new markets
OECD	Organisation of Economic Cooperation and Development
OpRisk	Operational Risk
OTC	Over the Counter
PD	Probability of Default
PQC	Process quality controlling
RechKredV	Kreditinstituts-Rechnungslegungsverordnung
RSU	RSU Rating Service Unit GmbH & Co. KG
RU	Restructuring Unit
RW	Risk weight
RWA	Risk-weighted assets
SLLP	Specific loan loss provisions
SolvV	Solvabilitätsverordnung (German Solvency Regulation)
S & P	Standard & Poor's
SPC	Special purpose company
SPV	Special purpose vehicle
SR	S Rating und Risikosysteme GmbH
VaR	Value-at-Risk



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