



**STRONG FOR ENTREPRENEURS**

# **DISCLOSURE REPORT**

as at 31 December 2013 according to  
section 26a of the German Banking Act (KWG)

# CONTENT

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|             |  |           |
|-------------|--|-----------|
| <b>1.</b>   | <b>INTRODUCTION</b>  | <b>6</b>  |
| <b>2.</b>   | <b>SCOPE OF APPLICATION</b>  | <b>7</b>  |
| <b>2.1.</b> | <b>CONSOLIDATION</b>   | <b>7</b>  |
| <b>2.2.</b> | <b>PRINCIPLE OF MATERIALITY</b>  | <b>8</b>  |
| <b>2.3.</b> | <b>WAIVER RULE</b>   | <b>8</b>  |
| <b>3.</b>   | <b>REGULATORY CAPITAL AND REGULATORY CAPITAL REQUIREMENTS</b>                                    | <b>9</b>  |
| <b>3.1.</b> | <b>GUARANTEE FACILITY</b>  | <b>9</b>  |
| <b>3.2.</b> | <b>STRUCTURE OF REGULATORY CAPITAL</b>   | <b>10</b> |
| <b>3.3.</b> | <b>TERMS AND CONDITIONS OF REGULATORY CAPITAL</b>  | <b>11</b> |
| <b>3.4.</b> | <b>REGULATORY CAPITAL REQUIREMENTS</b>   | <b>12</b> |
| <b>3.5.</b> | <b>ADEQUACY OF REGULATORY CAPITAL</b>  | <b>14</b> |
| <b>4.</b>   | <b>RISK MANAGEMENT</b>   | <b>16</b> |
| <b>4.1.</b> | <b>RISK MANAGEMENT IN RELATION TO RISK TYPES</b>   | <b>16</b> |
| <b>4.2.</b> | <b>BASIC PRINCIPLES REGARDING THE HEDGING OR REDUCTION OF RISK</b>                               | <b>16</b> |
| <b>4.3.</b> | <b>RISK REPORTING</b>  | <b>16</b> |
| <b>5.</b>   | <b>DEFAULT RISK</b>  | <b>18</b> |
| <b>5.1.</b> | <b>REPORTS ON DEFAULT RISK</b>   | <b>18</b> |
| <b>5.2.</b> | <b>COUNTERPARTY DEFAULT RISK: GENERAL DISCLOSURE REQUIREMENTS FOR ALL FINANCIAL INSTITUTIONS</b> | <b>20</b> |
| <b>5.3.</b> | <b>COUNTERPARTY DEFAULT RISK: CRSA AND/OR IRBA EXPOSURE CLASSES</b>                              | <b>25</b> |
| <b>5.4.</b> | <b>DERIVATIVE COUNTERPARTY DEFAULT RISKS</b>   | <b>27</b> |
| <b>5.5.</b> | <b>LONG-TERM EQUITY HOLDING PORTFOLIO</b>  | <b>30</b> |
| <b>5.6.</b> | <b>RISK MEASUREMENT FOR IRBA PORTFOLIOS</b>  | <b>33</b> |
| <b>5.7.</b> | <b>CREDIT RISK MITIGATION TECHNIQUES</b>   | <b>45</b> |
| <b>6.</b>   | <b>SECURITISATIONS</b>   | <b>49</b> |
| <b>6.1.</b> | <b>AIM, FUNCTIONS AND SCOPE OF SECURITISATION ACTIVITIES</b>                                     | <b>49</b> |
| <b>6.2.</b> | <b>TYPES AND EXTENT OF RISKS</b>   | <b>50</b> |
| <b>6.3.</b> | <b>DETERMINATION OF RISK-WEIGHTED EXPOSURES FOR SECURITISATION TRANSACTIONS TO BE CONSIDERED</b> | <b>51</b> |
| <b>6.4.</b> | <b>ACCOUNTING AND VALUATION METHODS FOR SECURITISATIONS</b>                                      | <b>52</b> |
| <b>6.5.</b> | <b>RATING AGENCIES USED FOR SECURITISATION</b>   | <b>53</b> |
| <b>6.6.</b> | <b>EXPOSURE VALUES AND REGULATORY CAPITAL REQUIREMENTS OF SECURITISED RECEIVABLES</b>            | <b>53</b> |
| <b>6.7.</b> | <b>NON-PERFORMING AND DELAYED SECURITISATIONS AND ACTUAL LOSSES</b>                              | <b>57</b> |
| <b>6.8.</b> | <b>SECURITISATION ACTIVITIES IN THE REPORTING YEAR AND IMPORTANT CHANGES</b>                     | <b>58</b> |
| <b>6.9.</b> | <b>PLANNED SECURITISATION ACTIVITIES</b>   | <b>58</b> |
| <b>7.</b>   | <b>MARKET RISK INCLUDING INTEREST RATE RISK</b>  | <b>59</b> |
| <b>7.1.</b> | <b>REPORTS ON MARKET RISK</b>  | <b>59</b> |
| <b>7.2.</b> | <b>REGULATORY CAPITAL REQUIREMENT FOR MARKET RISK</b>  | <b>59</b> |
| <b>7.3.</b> | <b>INTEREST RATE RISK IN THE BANKING BOOK</b>  | <b>60</b> |

|              |  |           |
|--------------|--|-----------|
| <b>8.</b>    | <b>OPERATIONAL RISK</b>  | <b>61</b> |
| <b>8.1.</b>  | <b>REPORTS ON OPERATIONAL RISK</b>   | <b>61</b> |
| <b>8.2.</b>  | <b>REGULATORY CAPITAL REQUIREMENTS ON OPERATIONAL RISK</b>                         | <b>61</b> |
| <b>9.</b>    | <b>LIQUIDITY RISK</b>  | <b>62</b> |
| <b>9.1.</b>  | <b>REPORTS ON LIQUIDITY RISK</b>   | <b>62</b> |
| <b>10.</b>   | <b>NOTES</b>   | <b>64</b> |
| <b>10.1.</b> | <b>CONSOLIDATION MATRIX</b>  | <b>64</b> |
| <b>10.2.</b> | <b>ALTERNATIVE CALCULATIONS WITHOUT TAKING THE GUARANTEE FACILITY INTO ACCOUNT</b> | <b>67</b> |

## LIST OF TABLES

---

|  |    |
|--|----|
| Table 1: Structure of regulatory capital in € m  | 11 |
| Table 2: Terms and conditions of equity instruments  | 12 |
| Table 3: Regulatory capital requirements in € m  | 13 |
| Table 4: Capital ratios of the HSH Nordbank Group and of the HSH Nordbank AG   | 15 |
| Table 5: Significant reports on the overall risk   | 17 |
| Table 6: Significant reports on default risk   | 19 |
| Table 7: Significant reports on country risk   | 19 |
| Table 8: Exposure values by risk-bearing instruments in € m  | 20 |
| Table 9: Exposure values by main regions in € m  | 21 |
| Table 10: Exposure values by main sectors in € m   | 21 |
| Table 11: Exposure values by contractual residual terms in € m   | 21 |
| Table 12: Division of receivables into non-performing and defaulting   | 23 |
| Table 13: Development of loan loss provisions in € m   | 23 |
| Table 14: Non-performing or defaulting receivables by main sector in € m   | 24 |
| Table 15: Non-performing or defaulting receivables by main region in € m   | 25 |
| Table 16: Rating agencies by receivables category  | 26 |
| Table 17: CRSA/IRBA exposure values by regulatory risk weight in € m   | 27 |
| Table 18: Positive replacement costs in € m  | 29 |
| Table 19: Derivative counterparty default risk in € m  | 29 |
| Table 20: Nominal value of credit derivatives eligible for collateral in € m   | 29 |
| Table 21: Nominal values of credit derivatives in € m  | 30 |
| Table 22: Valuation of equity holding instruments in € m   | 32 |
| Table 23: Realised/hidden gains and losses from equity holding instruments in € m  | 33 |
| Table 24: Rating modules of HSH Nordbank approved by the supervisory authorities   | 35 |
| Table 25: Internal allocation of exposures and borrowers to rating classifications and external ratings                              | 36 |
| Table 26: Avg. PD, avg. LGD, avg. RW and exposure values in € m by rating ranges   | 41 |
| Table 27: Assessment basis in € m and avg. exposure value of undrawn loan commitments and of non-derivative off-balance sheet assets | 43 |
| Table 28: Exposure values and capital requirements for investment funds or funds-like certificates in € m                            | 43 |
| Table 29: Actual losses in the lending business in € m   | 44 |
| Table 30: Expected losses and actual losses in the lending business in € m   | 45 |
| Table 31: Total amount of collateralised CRSA exposure values (without securitisations) in € m                                       | 47 |
| Table 32: Total amount of collateralised IRBA exposure values (without securitisations) in € m                                       | 48 |
| Table 33: Determination of risk-weighted exposure for receivables securitised as originators   | 52 |
| Table 34: Accounting policies for receivables securitised as originators   | 52 |
| Table 35: Securitisation transactions initiated by HSH Nordbank  | 53 |
| Table 36: Exposure values of securitised receivables in € m  | 54 |
| Table 37: Exposure values of retained or purchased securitisation exposures in € m   | 54 |
| Table 38: Exposure values and capital requirements for retained or purchased securitisation items acc. to risk weight ranges in € m  | 55 |
| Table 39: Securitisation positions to be deducted from equity or to be taken into account with a risk weight of 1,250% in € m        | 56 |
| Table 40: Re-securitisation related hedge transactions in € m  | 56 |
| Table 41: Securitised trading book risk positions in € m   | 57 |
| Table 42: Non-performing and delayed securitisations, actual losses on securitised receivables in € m                                | 57 |
| Table 43: Reports on market risk   | 59 |
| Table 44: Regulatory capital requirements for market risks in € m  | 59 |
| Table 45: Interest rate risks in the banking book in € m   | 60 |
| Table 46: Reports on operational risk  | 61 |
| Table 47: Regulatory capital requirements for operational risk in € m  | 61 |
| Table 48: Main reports on liquidity risk   | 63 |
| Table 49: Consolidation matrix   | 66 |

|   |    |
|---|----|
| Table 50: Exposure values by risk-bearing instrument in € m (alternative calculation without taking the guarantee facility into account)  | 67 |
| Table 51: Exposure values by main region in € m (alternative calculation without taking the guarantee facility into account)  | 67 |
| Table 52: Exposure values by main sector in € m (alternative calculation without taking the guarantee facility into account)  | 67 |
| Table 53: Exposure values by contractual residual term in € m (alternative calculation without taking the guarantee facility into account)  | 68 |
| Table 54: CRSA/IRBA exposure values by regulatory risk weight in € m (alternative calculation without taking the guarantee facility into account)   | 68 |
| 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)   | 70 |
| 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) | 72 |
| Table 57: Expected losses and actual losses in the lending business in € m (alternative calculation without taking the guarantee facility into account)   | 72 |
| Table 58: Expected losses and actual losses in the lending business in € m (alternative calculation without taking the guarantee facility into account)   | 73 |
| Table 59: Total amount of collateralised CRSA exposure values in € m (alternative calculation without taking the guarantee facility into account)   | 73 |
| Table 60: Total amount of collateralised IRBA exposure values in € m (alternative calculation without taking the guarantee facility into account)   | 74 |
| Table 61: Exposure values of securitised receivables in € m (alternative calculation without taking the guarantee facility into account)  | 74 |
| Table 62: Exposure values of retained or purchased securitisation exposures in € m (alternative calculation without taking the guarantee facility into account)   | 75 |
| 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)       | 75 |
| Table 64: Securitisation positions to be deducted from equity or to be taken into account with a risk weight of 1.250% in € m (alternative calculation without taking the guarantee facility into account)        | 76 |
| Table 65: Non-performing and delayed securitisations, actual losses on securitised receivables in € m (alternative calculation without taking the guarantee facility into account)                                | 76 |

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 2013

## of HSH NORDBANK

### 1. INTRODUCTION

The disclosure requirements<sup>1</sup> under the German Solvency Regulation (Solvabilitätsverordnung - SolvV)<sup>2</sup> 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 Disclosure Report prepared in accordance with the requirements of the Basel III framework (CRR/CRD IV) that came into effect as at 1 January 2014 will be published for the first time as at the 31 December 2014 reporting date.

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. The guarantee was replenished in the middle of 2013 by the federal states of Hamburg and Schleswig-Holstein from € 7 billion to the original facility of € 10 billion.

The guarantee facility reduces required regulatory capital, in that the Bank is protected from secondary losses up to € 10 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 decreased to 20% (minimum risk weight for re-securitisations) as at the reporting date.

The capital ratios of the Bank benefited from the replenishment of the guarantee facility by the federal states of Hamburg and Schleswig-Holstein in the first half of the year, which resulted in a clear decrease in the capital requirements. The reduction in risk positions, which was considerably stepped up in the past year and is also reflected in the decrease in risk assets, also had a positive effect. As at the reporting date, the Tier 1 capital ratio amounted to 15.9% (31 December 2012: 11.4%) and the overall key ratio reached 24.2% (31 December 2012: 17.8%).

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 medium of publication will be communicated to the supervisory authorities and announced electronically in the Federal Gazette.

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

<sup>2</sup> Regulations governing the capital adequacy of institutions, groups of institutions and financial holding groups (Solvency Regulation in the respective version valid until 31 December 2013).

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## 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 for the financial year ending 31 December 2013 differs from the regulatory consolidation group.

In Table 49 (Notes, Chapter 0) 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, 59 are fully consolidated and 8 are consolidated at-equity.

Those subsidiaries and equity holdings deducted from the equity capital of the HSH Nordbank Group are also shown in the table. There are no capital deficits at subsidiaries not included in the consolidation under Section 10a KWG within the meaning of 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 57 entities. The financial accounting consolidation group comprises 67 entities. The reason for the significant reduction in the number of companies included in the regulatory scope of consolidation compared to the previous year is the sale of HSH Real Estate GmbH together with its affiliated companies. Furthermore 27 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 only to the HSH Security GmbH, Kiel, and does not include this entity 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.

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, 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 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 that have to be taken into account.

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## **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.

In this report the solvency ratios according to Section 325 (2) No. 5 SolvV are disclosed for the HSH Nordbank Group and HSH Nordbank AG (see Section 3.5). HSH Nordbank AG is classified on the basis of the internal analysis of the Group companies to be included in the consolidation as the only material company for individual presentation in the Disclosure Report. Therefore, provided that data from the accounting systems is pre-

sented 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, 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 on 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 conditions include a prohibition on the payment of dividends until the financial year 2014 (including the financial year ending on 31 December 2014). The guarantee of the federal states is split into two partial guarantees for financial reporting purposes. Partial guarantee 1 relates to structured financial instruments, in particular those that are full or partial derivatives in nature and equity instruments. Partial guarantee 1 is recognised in the consolidated financial statements as a financial guarantee contract in accordance with IAS 39.9. Partial guarantee 2 is recognised as a credit derivative.

The guarantor guarantees actual rating-related defaults on financial instruments selected based on certain defined criteria that form part of the assets of HSH Nordbank AG.

The amount of default on a specific commitment is determined by the amount outstanding, taking into account the specific loan loss provision 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 be-

tween 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. The guarantee facility was replenished as at 30 June 2013 by € 3 billion to the original amount of € 10 billion. The guarantee agreement was adjusted by way of an appropriate amendment agreement. Under this agreement the fee provisions for the replenished guarantee remain essentially unchanged. A one-off payment of € 275 million becomes payable, however, on the coming into force of the amendment agreement. Through this the guarantor is put in a position as if the guarantee had never been reduced. The one-off payment represents a fee for a time-related service and is amortised over the period of the expected benefit in accordance with IAS 18. In 2013 € 69 million has been recognised through profit or loss in the Expenses for government guarantees line item. The EU Commission provisionally approved the replenishment of the guarantee and at the same time initiated a formal review process, which will probably be concluded in 2014.

Additional details on the contractual arrangement, the hedging effect as well as the balance sheet treatment of the guarantee facility are presented in Note 2 "Provision of the guarantee facility" of the consolidated financial statements contained in the 2013 Annual Report.

##### 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 20% (minimum risk weight for re-securitisations) 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 o) 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, 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 approval of the 2012 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 in accordance with Section 10 (3b) KWG. The capital deduction item as at the reporting date amounts to € 1,847 million after taking the replenishment of the guarantee facility into account (previous year: € 0 million) and thereby made a key contribution to the reduction in Tier 1 and regulatory capital. The capital deduction item offsets the debt waiver relating to the additional premium that was the result of the capital protection clause that came into effect as at the 2012 year end and resulted in a substantial increase in the Section 340g HGB reserves to €2,032 million (previous year: €1,052 million). The decrease in the supplementary capital is attributable to the reduced eligibility of longer-term subordinated liabilities due to their falling below the minimum residual maturity of two years in accordance with Section 10 (5a) sentence 2 KWG. If the claim to repayment falls due within less than two years, only 40% of the liabilities can be counted as part of liable equity capital. The reduction in Tier 3 capital is also due to the decrease in the supplementary capital.

## Structure of regulatory capital

| Regulatory capital item   | 2013         | 2012          |
|---|--------------|---------------|
| Subscribed capital  | 3,024        | 3,076         |
| Reserves (capital reserve and other reserves)   | 1,077        | 1,388         |
| Adjustment item in accordance with Section 10 (3b) KWG  | -1,847       | -             |
| 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   | 2,032        | 1,052         |
| Other country-specific core capital components  | 1,454        | 1,635         |
| Of which: other capital in accordance with Section 10 (2a) Sentence 1 No. 10 KWG  | (1,454)      | (1,613)       |
| Of which: positive difference in accordance with Section 10a (6) Sentences 9 and 10 KWG   | (0)          | (22)          |
| less other positions to be deducted under Section 10 (2a) Sentence 2 KWG  | -50          | -129          |
| <b>Total core capital in accordance with Section 10 (2a) Sentences 1 and 2 Nos. 1-5 KWG</b>   | <b>5,690</b> | <b>7,022</b>  |
| Total amount of Tier 2 capital in acc. with Section 10 (2b) Sentence 1 KWG  | 2,965        | 3,687         |
| Total amount of Tier 3 funds as per Section 10 (2c) KWG   | 45           | 231           |
| Total of the positions to be deducted in accordance with Section 10 (6) and (6a) KWG<br>Including value adjustment shortfalls and expected losses in accordance with Section 10 (6a) Nos. 1 and 2 KWG | -88<br>(-39) | -94<br>(-37)  |
| <b>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</b>                              | <b>8,612</b> | <b>10,846</b> |

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 primarily comprise the following:

- ▶ The subscribed capital amounts to € 3,024 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 € 1,077 million consist of capital reserves (€ 722 million) and other reserves (€ 355 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 € 1,454 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 of € 155 million. 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 € 2,965 million and comprises long-term subordinated liabilities (€ 2,845 million), capital in accordance with Section 10 (5) KWG (profit participation capital, € 17 million) and the eligible portion of the loan loss provision excess for IRBA positions (€ 103 million) in accordance with Section 10 (2b) Sentence 1 No. 9 KWG. Profit participations account for € 4 million of the net loss for the year 2013. € 2 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. After taking Section 10 (5a) sentence 2 KWG into account subordinated liabilities totalling € 2,890 million are allocable to liable equity capital, of which € 2,845 million is included in supplementary capital as at the reporting date after capping pursuant to Section 10a (2) sentence 7 KWG.

- Tier 3 funds in the amount of € 45 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<br>in € m |       | Residual maturity <<br>5 years in € m |       | Residual maturity >=<br>5 years in € m |       | Avg. residual maturi-<br>ty in years |      | Avg. interest rate<br>in % <sup>1</sup> |      |
|--|----------------------------------|-------|---------------------------------------|-------|--|-------|--------------------------------------|------|---|------|
|  | 2013                             | 2012  | 2013                                  | 2012  | 2013                                   | 2012  | 2013                                 | 2012 | 2013                                    | 2012 |
| <b>Core capital</b>  |                                  |       |                                       |       |  |       |                                      |      |   |      |
| Ordinary shares of HSH Nordbank AG   | 3,018                            | 3,018 | -                                     | -     | -                                      | -     | -                                    | -    | -                                       | -    |
| Allocable share capital of other entities<br>included in the regulatory consolidation<br>group                                       | 6                                | 58    | -                                     | -     | -                                      | -     | -                                    | -    | -                                       | -    |
| Other capital, convertible in a stress<br>situation  | -                                | -     | -                                     | -     | -                                      | -     | -                                    | -    | -                                       | -    |
| Other capital, indefinite and without a<br>payment trigger   | 810                              | 897   | -                                     | -     | -                                      | -     | -                                    | -    | -                                       | -    |
| Other capital, limited or with payment<br>triggers   | -                                | -     | -                                     | -     | -                                      | -     | -                                    | -    | -                                       | -    |
| Core capital instruments with limited al-<br>locability, subject to transitional rules, in-<br>definite and without payment triggers | 627                              | 697   | -                                     | -     | -                                      | -     | -                                    | -    | -                                       | -    |
| Core capital instruments with limited al-<br>locability, subject to transitional rules, lim-<br>ited or with payment triggers)       | 17                               | 19    | -                                     | -     | 17                                     | 19    | 9                                    | 10   | -                                       | -    |
| <b>Supplementary capital</b>   |                                  |       |                                       |       |  |       |                                      |      |   |      |
| Preference shares  | -                                | -     | -                                     | -     | -                                      | -     | -                                    | -    | -                                       | -    |
| Profit participation certificates (capital in<br>accordance with Section 10 (5) KWG  | 17                               | 39    | 17                                    | 39    | -                                      | -     | 3                                    | 3    | -                                       | -    |
| Subordinated liabilities (before utilisation<br>of Section 10 (2) Sentence 7 KWG)  | 2,890                            | 4,112 | 1,864                                 | 3,079 | 1,026                                  | 1,032 | 8                                    | 7    | 1.9                                     | 2.3  |

<sup>1</sup> 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 € 2,848 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

|   | 2013         | 2012         |
|---|--------------|--------------|
| <b>Counterparty default risk</b>  |              |              |
| <b>Credit Risk Standardised Approach (CRSA)</b>   |              |              |
| Central governments   | -            | -            |
| Regional governments and local municipalities   | 0            | 0            |
| Other public institutions   | 5            | 0            |
| Multilateral development banks  | -            | -            |
| International organisations   | -            | -            |
| Institutions  | 5            | 5            |
| Covered bonds issued by credit institutions   | -            | 1            |
| Corporates  | 56           | 85           |
| Retail banking  | 1            | 2            |
| Positions secured by real estate  | 1            | 1            |
| Investment certificates   | 1            | 1            |
| Other positions   | 0            | 3            |
| Past due positions  | 21           | 42           |
| <b>Advanced Internal Rating Based Approach (IRBA)</b>   |              |              |
| Central governments   | 35           | 27           |
| Institutions  | 91           | 88           |
| Retail banking  | -            | -            |
| Corporates  | 1,049        | 1,200        |
| Other non-credit related assets   | 50           | 54           |
| <b>Risks from securitisation positions</b>  |              |              |
| Securitisations under the CRSA  | 6            | 6            |
| Securitisations under the Advanced IRB Approach   | 877          | 2,630        |
| <b>Risks arising on equity holdings</b>   |              |              |
| <b>Equity holdings based on the continued use of the old methodology/grandfathering (CRSA)</b>    | 23           | 28           |
| <b>Equity holdings excluded from the IRBA on a permanent basis or for a limited period (CRSA)</b> | -            | 0            |
| <b>Simple risk weight approach (IRBA)</b>   | 16           | 36           |
| Listed equity holdings  | 0            | 0            |
| Not listed, but belonging to a sufficiently diversified portfolio                                 | -            | 22           |
| Other equity holdings   | 16           | 14           |
| <b>Equity holdings in accordance with the PD-LGD approach (IRBA)</b>                              | 35           | 38           |
| <b>Subtotal counterparty default risk</b>   | <b>2,272</b> | <b>4,248</b> |
| <b>Market risk</b>  |              |              |
| <b>Market risk in accordance with the Standardised Approach <sup>1</sup></b>                      | 324          | 324          |
| <b>Settlement risk</b>  |              |              |
| Settlement risk   | -            | -            |
| <b>Operational risk</b>   |              |              |
| <b>Operational risk in accordance with the Standardised Approach</b>                              | 222          | 310          |
| <b>Total</b>  | <b>2,848</b> | <b>4,882</b> |

<sup>1</sup> 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 5.6.1). 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 decreased as at the reporting date compared to the prior year – from € 4,248 million to € 2,272 million.

The reduction in the regulatory capital requirements is primarily attributable to the replenishment of the guarantee facility. This results in particular in a lower risk weight for the senior tranche of the Sunrise transaction of 20% (minimum risk weight for re-securitisations) and is reflected in lower capital requirements for securitisations in the IRB Approach exposure class securitisations. The reduction in risk positions also has a positive effect on the capital requirements.

### 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 € 354 million (see Section 7.2).

### 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 € 222 million (see Section 8.2).

## 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 capital ratios of the Bank benefited from the replenishment of the guarantee facility by the federal states of Hamburg and Schleswig-Holstein in the first half of the year, which resulted in a clear decrease in the capital requirements. The reduction in risk positions, which was considerably stepped up in the past year and is also reflected in the decrease in risk assets, also had a positive effect.

## Capital ratios of the HSH Nordbank Group and of the HSH Nordbank AG

| Company                   | Regulatory capital ratio in % |             | Tier 1 capital ratio in % |             |
|---------------------------|-------------------------------|-------------|---------------------------|-------------|
|                           | 2013                          | 2012        | 2013                      | 2012        |
| <b>HSH Nordbank Group</b> | <b>24.2</b>                   | <b>17.8</b> | <b>15.9</b>               | <b>11.4</b> |
| HSH Nordbank AG           | 21.9                          | 16.9        | 14.4                      | 11.0        |

Table 4: Capital ratios of the HSH Nordbank Group and of the HSH Nordbank AG



## 4. RISK MANAGEMENT

### 4.1. RISK MANAGEMENT IN RELATION TO RISK TYPES

Under Section 322 SolvV institutions are to describe among other things the strategies and processes as well as the structure and organisation of risk management for each category of risk including counterparty default risk, market risk, operational risk and interest rate risk in the banking book in terms of the risk management objectives and principles. The strategies and processes as well as the structure and organisation of the risk management system in line with the qualitative requirements imposed by Section 322 No. 1 and 2 SolvV are described in the Risk Report section of the Annual Report of HSH Nordbank.

Among other material risk types of HSH Nordbank are strategic risk and reputation risk. This qualitative information is also disclosed in the Risk Report of the Annual Report.

Under Section 325 (1) SolvV an institution shall disclose qualitative information in the form of a summary of the approach adopted to assess the adequacy of its internal (economic) capital to back current and future activities. Consequently, the internal procedures used to assess the adequacy of capital resources available in relation to the risk profile as well as the strategy for maintaining the level of equity are to be described. Details regarding this are set out in the sections on the risk-bearing capacity in the Risk Report of the Annual Report.

The qualitative requirements as defined in Section 322 No. 3 (nature and scope of risk reports) and No. 4 SolvV (hedging or mitigating risks) are disclosed in the following sections of this report.

### 4.2. 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.

### 4.3. 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, Finance as well as Strategic Treasury 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, SolvV and MaSan 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 based on the planned development of all material business activities and taking into account ensuring the Bank's risk-bearing capacity and liquidity in particular.   |
| Disclosure Report according to Section 26a of the German Banking Act (KWG) | Management Board, Supervisory Board, the public, investors, rating agencies, Supervisory Authority | 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 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 (inter alia under IFRS).  |
| 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.<br><br>Information on MaSan restructuring and early warning indicators. | 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 in line with the requirements imposed by the recipients and the supervisory authorities. |
| 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   | Group Risk Committee   | Monthly                  | Total NPNM process portfolio for existing and new business, status and information regarding MaRisk violations (NPNM), release of products   | 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  | Heads of divisions (Core Bank and Restructuring Unit), sales management                            | Monthly                  | Important management information (key income and profitability figures for the existing portfolio and new business)  | Management of the divisions  |
| MaSan-Reporting  | Asset Liability Committee, Supervisory Authority, Supervisory Board                                | Monthly and/or quarterly | Periodic information on the restructuring and early warning indicators defined in the recovery plan  | Implementation of a warning system that enables a foreseeable threat to the portfolio to be identified by the Bank on a timely basis and overcome from own resources as a result of proactive overall bank management  |

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. A counterparty default risk exists in the case of derivatives and refers to the risk that a counterparty defaults during the term of a transaction and the Bank must cover the shortfall for the residual term by means of a new contract on the market at the price prevailing at that time which might be less favourable. Issuer risk denotes the risk that a loss is incurred on a financial transaction as a result of the default or deterioration in the creditworthiness of the issuer. 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 equity capital management. For risk concentrations and equity holding risks additional management measures are in place.

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 5.5.

The strategies and processes as well as the structure and organisation of default risk management system in line with the qualitative requirements imposed by Section 322 No. 1 and 2 SolvV are described in the Risk Report section of the Annual Report of HSH Nordbank.

The qualitative requirements for default risk as defined in Section 322 No. 3 SolvV (nature and scope of risk reports) are disclosed in the following section of this report.

### 5.1. 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 4.3). 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, 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                     | Group Risk Committee, Supervisory Authority                           | Annual (following the completion of the update) | Default risk (IRBA rating module from RSU Rating Service Unit GmbH & Co. KG and SR, LGD and CCF)   | Fulfilment of the regulatory requirements  |
| Portfolio Batch Reports               | Group Risk Committee, Risk Committee (RC)                             | in general Quarterly                            | Presentation and commentary on the risk content of all customer loan portfolios incl. future-directed market- and portfolio assessments  | Comprehensive information provided to the Management Board and Supervisory Board on all customer loan portfolios regarding portfolio trends, concentration risk and recommendations for action derived from this |
| Limit reporting                       | Asset Liability Committee, divisions                                  | Monthly   | Utilisation of regulatory and economic default risk limits as well as balance sheet limits for each division   | Strict management of default risk limits set for the divisions as part of the annual planning as well as balance sheet limits for the purposes of complying with the undertakings given to the EU                |
| New business and pipeline report      | Management Board, market division heads (Core Bank), sales management | Monthly   | New business and prolongations by division for the current year with presentation of key income and profitability figures; overview of business in the acquisition phase; description of decisions made by the Transaction Committee | Transparency of the scope and structure of new business and new business in the acquisition phase for the coming months  |

Table 6: Significant reports on default risk

## Significant reports on country risk

| Report                          | Recipient   | Interval  | Content   | Objective  |
|---------------------------------|---|-----------|---|--|
| Country Risk Update             | Market departments, division-heads, staff divisions and operative level | 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) | 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             | Group Risk Committee  | 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 Group Risk Committee on the country exposure, country limit utilisation as well as major changes in the country risk assessment   |

Table 7: Significant reports on country risk

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

### 5.2.1. Exposure values of receivables sorted by risk-bearing instruments

Exposure values of the portfolio of the HSH Nordbank 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 5.5.

As at the reporting date, exposure values from risk-bearing instruments amount to € 50 billion (previous year: € 49 billion). In addition, there are receivables from miscellaneous assets amounting to € 0.5 billion. These cannot be allocated to risk-bearing instruments and are therefore not presented in the following tables.

The slight increase in the exposure values between 31 December 2012 and the reporting date is attributable mainly to two opposing effects. The exposure values were increased by the renewed growth in new business. This was offset by the Bank reducing its balances held at central banks by € 1.9 billion. Both the new business and higher balances held at central banks are not covered by the second loss guarantee. Both are therefore reflected in the figures in the following tables.

Further progress was also made in reducing the high risk legacy portfolios in the Restructuring Unit. Positions were primarily wound down in the hedged portfolio which is why this is reflected particularly in the positions excluding the effect of the guarantee facility. These have decreased from € 123 billion to € 106 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 |       |
|-------------------------------|---------------|--------|------------------|-------|---|------|---------------|--------|------------------------|-------|
|                               | 2013          | 2012   | 2013             | 2012  | 2013  | 2012 | 2013          | 2012   | 2013                   | 2012  |
| <b>Exposure value (total)</b> | <b>24,519</b> | 23,855 | <b>2,304</b>     | 2,018 | <b>956</b>                                    | 916  | <b>16,280</b> | 14,397 | <b>5,483</b>           | 8,010 |

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 |              |
|----------------------------|---------------|---------------|------------------|--------------|---|------------|---------------|---------------|------------------------|--------------|
|                            | 2013          | 2012          | 2013             | 2012         | 2013  | 2012       | 2013          | 2012          | 2013                   | 2012         |
| Western Europe             | 19,867        | 21,897        | 2,229            | 1,875        | 922   | 578        | 13,142        | 10,898        | 4,334                  | 6,293        |
| Nord America               | 3,313         | 829           | 17               | 36           | 5   | 309        | 2,170         | 2,671         | 858                    | 1,236        |
| Asian Pacific Region       | 963           | 910           | 33               | 52           | 10  | 21         | 7             | 7             | 83                     | 154          |
| Latin America              | 40            | 10            | -                | 0            | 3   | 5          | 0             | 0             | 10                     | 11           |
| Central and Eastern Europe | 202           | 80            | 16               | 45           | 11  | 1          | 0             | 0             | 93                     | 153          |
| Middle East                | 52            | 93            | 8                | 5            | 4   | 1          | -             | -             | 104                    | 165          |
| African countries          | 81            | 35            | -                | 6            | 1   | 1          | -             | -             | 0                      | -            |
| Int. Organisations         | -             | -             | -                | -            | -   | -          | 960           | 819           | -                      | -            |
| Other                      | -             | -             | -                | -            | -   | -          | -             | -             | -                      | -            |
| <b>Total</b>               | <b>24,519</b> | <b>23,855</b> | <b>2,304</b>     | <b>2,018</b> | <b>956</b>                                    | <b>916</b> | <b>16,280</b> | <b>14,397</b> | <b>5,483</b>           | <b>8,010</b> |

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 |              |
|------------------------------|---------------|---------------|------------------|--------------|---|------------|---------------|---------------|------------------------|--------------|
|                              | 2013          | 2012          | 2013             | 2012         | 2013  | 2012       | 2013          | 2012          | 2013                   | 2012         |
| Credit institutions          | 1,270         | 1,038         | 89               | 35           | 89  | 377        | 5,681         | 5,318         | 1,686                  | 2,474        |
| Other financial institutions | 510           | 568           | 14               | 25           | 306   | 3          | 1,139         | 848           | 474                    | 562          |
| Public sector                | 6,608         | 8,386         | 91               | 86           | 14  | 14         | 7,233         | 5,293         | 199                    | 293          |
| Private households           | 982           | 678           | 69               | 36           | 67  | 43         | -             | -             | 25                     | 44           |
| Properties and flats         | 3,420         | 2,931         | 442              | 288          | 64  | 55         | 0             | 0             | 936                    | 1,324        |
| Shipping                     | 2,837         | 2,899         | 297              | 343          | 51  | 90         | 293           | 415           | 637                    | 1,174        |
| Industry                     | 4,153         | 3,322         | 620              | 550          | 208   | 178        | 1             | 1             | 435                    | 673          |
| Trade and transport          | 2,430         | 2,090         | 482              | 512          | 108   | 81         | -             | -             | 430                    | 592          |
| Other service activities     | 2,308         | 1,902         | 200              | 143          | 49  | 74         | 1,934         | 2,522         | 660                    | 873          |
| Other                        | 1             | 41            | -                | -            | -   | -          | -             | -             | -                      | -            |
| <b>Total</b>                 | <b>24,519</b> | <b>23,855</b> | <b>2,304</b>     | <b>2,018</b> | <b>956</b>                                    | <b>916</b> | <b>16,280</b> | <b>14,397</b> | <b>5,483</b>           | <b>8,010</b> |

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 |              |
|-----------------------|---------------|---------------|------------------|--------------|---|------------|---------------|---------------|------------------------|--------------|
|                       | 2013          | 2012          | 2013             | 2012         | 2013  | 2012       | 2013          | 2012          | 2013                   | 2012         |
| ≤ 1 day               | 6,531         | 8,607         | 90               | 55           | 0   | 0          | 227           | 209           | -                      | 1            |
| > 1 day ≤ 3 months    | 1,503         | 1,197         | 119              | 126          | 1   | 15         | 499           | 768           | 52                     | 52           |
| > 3 months ≤ 6 months | 324           | 419           | 31               | 71           | 0   | 8          | 1,324         | 1,341         | 28                     | 23           |
| > 6 months ≤ 1 year   | 992           | 807           | 212              | 289          | 59  | 14         | 1,413         | 1,075         | 81                     | 112          |
| > 1 year ≤ 5 years    | 5,968         | 4,795         | 903              | 840          | 386   | 410        | 6,184         | 6,718         | 1,443                  | 1,720        |
| > 5 years             | 9,200         | 8,030         | 950              | 637          | 510   | 468        | 6,632         | 4,286         | 3,878                  | 6,102        |
| <b>Total</b>          | <b>24,519</b> | <b>23,855</b> | <b>2,304</b>     | <b>2,018</b> | <b>956</b>                                    | <b>916</b> | <b>16,280</b> | <b>14,397</b> | <b>5,483</b>           | <b>8,010</b> |

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

### **5.2.2. 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. The portfolio valuation allowances are determined on the basis of the regu-

latory 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 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. These general loan loss provisions are 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.

### **5.2.3. 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<br>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<br>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

**5.2.4. 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.

The development of total loan loss provisions reflects our expectations, that the crisis in the shipping industry will be resolved more slowly than previously expected. The loan loss provisions in the shipping portfolio were increased to take appropriate account of the resultant risks.

## Development of loan loss provisions

|   | SLLP         |              | Reserves   |            | GLLP       |            | CLLP       |            |
|---|--------------|--------------|------------|------------|------------|------------|------------|------------|
|   | 2013         | 2012         | 2013       | 2012       | 2013       | 2012       | 2013       | 2012       |
| Portfolio at the beginning of the reporting year            | 5,053        | 4,461        | 388        | 320        | 565        | 204        | 121        | 99         |
| Addition  | 2,660        | 2,104        | 68         | 214        | 2          | 361        | 9          | 22         |
| Reversal  | 427          | 706          | 326        | 143        | 137        | -          | 0          | 0          |
| Utilisation   | 640          | 527          | 27         | 5          | -          | -          | -          | -          |
| Utilisation   | 219          | 236          | -5         | -5         | -          | -          | -          | -          |
| Changes due to exchange rate fluctuations and other changes | -151         | -43          | -2         | -3         | -          | -          | -          | -          |
| Portfolio at the closing date                               | <b>6,276</b> | <b>5,053</b> | <b>107</b> | <b>388</b> | <b>431</b> | <b>565</b> | <b>130</b> | <b>121</b> |

Table 13: Development of loan loss provisions in € m

**5.2.5. 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.

Existing individual valuation allowances and provisions as at the reporting date amounted to € 6,383 million. Of this amount, € 5,958 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.

As at the reporting date, receivables from non-performing loans (needing value adjustments, i.e. individual value reserves or loan loss provisions) totalled € 15,525 million, and receivables on loans in arrears (not needing value adjustments) totalled € 3,149 million. Of which, € 14,235 million and € 2,825 million respectively come within the Sunrise Transaction reference portfolio.

## Non-performing or defaulting receivables by main sector

| Main sector                  | Non-performing <sup>1</sup> | Portfolio    |            |            |            | Net additions/reversals of |             |          |             |                 | 2013                   |                          |
|------------------------------|-----------------------------|--------------|------------|------------|------------|----------------------------|-------------|----------|-------------|-----------------|------------------------|--------------------------|
|                              |                             | SLLP         | GLLP       | CLLP       | Allow.     | SLLP                       | GLLP        | CLLP     | Allow.      | DW <sup>2</sup> | Re-ceipts <sup>3</sup> | in de-fault <sup>4</sup> |
| Credit institutions          | 143                         | 127          |            |            | 0          | 4                          |             |          | -           |                 |                        | -                        |
| Other financial institutions | 787                         | 205          |            |            | 5          | 73                         |             |          | 4           |                 |                        | 146                      |
| Public sector                | 83                          | 50           |            |            | 0          | 9                          |             |          | -           |                 |                        | 12                       |
| Private households           | 220                         | 109          |            |            | 0          | 25                         |             |          | 0           |                 |                        | 74                       |
| Properties and flats         | 3,811                       | 1,130        |            |            | 3          | 141                        |             |          | 0           |                 |                        | 424                      |
| Shipping                     | 7,574                       | 3,189        |            |            | 47         | 1,756                      |             |          | -250        |                 |                        | 1,735                    |
| Industry                     | 1,359                       | 670          |            |            | 27         | 115                        |             |          | -15         |                 |                        | 492                      |
| Trade and transport          | 492                         | 237          |            |            | 13         | 50                         |             |          | 3           |                 |                        | 95                       |
| Other services               | 1,056                       | 559          |            |            | 12         | 60                         |             |          | 1           |                 |                        | 95                       |
| Other                        | -                           | -            |            |            | -          | -                          |             |          | -           |                 |                        | 75                       |
| <b>Total</b>                 | <b>15,525</b>               | <b>6,276</b> | <b>431</b> | <b>130</b> | <b>107</b> | <b>2,233</b>               | <b>-135</b> | <b>9</b> | <b>-258</b> | <b>76</b>       | <b>4</b>               | <b>3,149</b>             |

## Non-performing or defaulting receivables by main sector

| Main sector                  | Non-performing <sup>1</sup> | Portfolio    |            |            |            | Net additions/reversals of |            |           |           |                 | 2012                   |                            |
|------------------------------|-----------------------------|--------------|------------|------------|------------|----------------------------|------------|-----------|-----------|-----------------|------------------------|----------------------------|
|                              |                             | SLLP         | GLLP       | CLLP       | Allow.     | SLLP                       | GLLP       | CLLP      | Allow.    | DW <sup>2</sup> | Re-ceipts <sup>3</sup> | in de-fault <sup>4,5</sup> |
| Credit institutions          | 150                         | 128          |            |            | 0          | -3                         |            |           | 0         |                 |                        | -                          |
| Other financial institutions | 833                         | 175          |            |            | 27         | 40                         |            |           | 4         |                 |                        | 62                         |
| Public sector                | 125                         | 58           |            |            | 0          | -22                        |            |           | -         |                 |                        | 15                         |
| Private households           | 157                         | 93           |            |            | -          | 3                          |            |           | 0         |                 |                        | 188                        |
| Properties and flats         | 3,712                       | 1,156        |            |            | 3          | 367                        |            |           | -9        |                 |                        | 455                        |
| Shipping                     | 5,211                       | 1,756        |            |            | 294        | 756                        |            |           | 139       |                 |                        | 2,852                      |
| Industry                     | 1,723                       | 769          |            |            | 42         | 77                         |            |           | -47       |                 |                        | 176                        |
| Trade and transport          | 683                         | 343          |            |            | 10         | 45                         |            |           | -4        |                 |                        | 83                         |
| Other services               | 1,238                       | 574          |            |            | 13         | 136                        |            |           | -12       |                 |                        | 52                         |
| Other                        | -                           | -            |            |            | -          | -                          |            |           | -         |                 |                        | 0                          |
| <b>Total</b>                 | <b>13,830</b>               | <b>5,053</b> | <b>565</b> | <b>121</b> | <b>388</b> | <b>1,398</b>               | <b>361</b> | <b>22</b> | <b>71</b> | <b>33</b>       | <b>159</b>             | <b>3,883</b>               |

<sup>1</sup> Non-performing loans (with need for loan loss provisions)<sup>2</sup> Direct write-offs<sup>3</sup> Recoveries on receivables written off <sup>4</sup> Defaulting loans (without need for loan loss provisions)<sup>5</sup> Corrected figures compared with the report prepared as at 31 December 2012

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



## Non-performing or defaulting receivables by main region

| Main region                | Non-performing <sup>1</sup> |               | SLLP portfolio |              | GLLP portfolio |            | CLLP portfolio |            | Reserves portfolio |            | in default <sup>2</sup> |                   |
|----------------------------|-----------------------------|---------------|----------------|--------------|----------------|------------|----------------|------------|--------------------|------------|-------------------------|-------------------|
|                            | 2013                        | 2012          | 2013           | 2012         | 2013           | 2012       | 2013           | 2012       | 2013               | 2012       | 2013                    | 2012 <sup>3</sup> |
| Western Europe             | 12,788                      | 10,996        | 5,264          | 4,181        |                |            | 5              | 8          | 89                 | 355        | 2,884                   | 3,491             |
| North America              | 770                         | 1,250         | 199            | 336          |                |            | -              | -          | 0                  | 23         | 13                      | 59                |
| Asia Pacific Region        | 562                         | 275           | 263            | 132          |                |            | 22             | 38         | -                  | -          | 68                      | 211               |
| Latin America              | 215                         | 214           | 137            | 122          |                |            | 1              | 1          | 0                  | 2          | -                       | 5                 |
| Central and Eastern Europe | 562                         | 590           | 128            | 91           |                |            | 75             | 60         | 0                  | 8          | 108                     | 117               |
| Middle East                | 598                         | 469           | 278            | 185          |                |            | 26             | 13         | 17                 | -          | -                       | -                 |
| African countries          | 30                          | 37            | 8              | 4            |                |            | 0              | 1          | -                  | -          | -                       | 0                 |
| Int. organisations         | -                           | -             | -              | -            |                |            | -              | -          | -                  | -          | -                       | -                 |
| Other                      | -                           | -             | -              | -            |                |            | -              | -          | -                  | -          | 75                      | 0                 |
| <b>Total</b>               | <b>15,525</b>               | <b>13,830</b> | <b>6,276</b>   | <b>5,053</b> | <b>431</b>     | <b>565</b> | <b>130</b>     | <b>121</b> | <b>107</b>         | <b>388</b> | <b>3,149</b>            | <b>3,883</b>      |

<sup>1</sup> Non-performing loans (with need for loan loss provisions)<sup>2</sup> Defaulting loans (without need for loan loss provisions)<sup>3</sup> Corrected figures compared with the report prepared as at 31 December 2012

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

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

#### 5.3.1. 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 Securitisations 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<br>Regional governments<br>Other public sector entities<br>Institutions<br>Covered bonds issued by banks | Fitch<br>Moody's<br>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<br>CRSA securitisation exposures<br>IRBA securitisation exposures   | Fitch<br>Moody's<br>S & P |

Table 16: Rating agencies by receivables category

### 5.3.2. 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.

### 5.3.3. 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 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 |            |
|--------------------|-----------------------------------|--------------|----------------------------------|--------------|---------------|------------|
|                    | 2013                              | 2012         | 2013                             | 2012         | 2013          | 2012       |
| 0                  | 254                               | 254          | 254                              | 254          | -             | -          |
| 10                 | -                                 | 135          | -                                | 135          | -             | -          |
| 20                 | 445                               | 117          | 627                              | 298          | -             | -          |
| 35                 | -                                 | -            | 29                               | 36           | -             | -          |
| 50                 | -                                 | 0            | 4                                | 6            | -             | -          |
| 70                 | -                                 | -            | 1                                | 1            | -             | -          |
| 75                 | 39                                | 63           | 22                               | 36           | -             | -          |
| 90                 | -                                 | -            | -                                | -            | -             | -          |
| 100                | 1,314                             | 1,728        | 1,118                            | 1,448        | -             | -          |
| 115                | -                                 | -            | -                                | -            | -             | -          |
| 150                | 32                                | 307          | 30                               | 301          | -             | -          |
| 190                | -                                 | -            | -                                | -            | -             | 148        |
| 200                | -                                 | 0            | -                                | 0            | -             | -          |
| 250                | 21                                | 18           | 19                               | 11           | -             | -          |
| 290                | -                                 | -            | -                                | -            | 0             | 0          |
| 350                | -                                 | -            | -                                | -            | -             | -          |
| 370                | -                                 | -            | -                                | -            | 56            | 47         |
| 1,250              | 0                                 | 0            | 0                                | 0            | -             | -          |
| Capital deduction  | 3                                 | 10           | 3                                | 10           | -             | 0          |
| Other risk weights | 212                               | 241          | 214                              | 244          | -             | -          |
| <b>Total</b>       | <b>2,321</b>                      | <b>2,873</b> | <b>2,321</b>                     | <b>2,780</b> | <b>56</b>     | <b>194</b> |

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

## 5.4. DERIVATIVE COUNTERPARTY DEFAULT RISKS

### 5.4.1. 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 € 295 billion as at the balance sheet date (previous year: € 326 billion). The derivatives business of HSH Nordbank is predominantly transacted with banks based in OECD countries.

### 5.4.2. 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.

### 5.4.3. 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.

In the beginning of 2012 HSH Nordbank has joined the London Clearing House (LCH) as a client in anticipation of the obligations under the European Market Infrastructure Regulation (EMIR) for central clearing to comply with in future. It is therefore possible for HSH Nordbank to also settle OTC interest swaps and forward rate agreements centrally via a clearing system.

### 5.4.4. 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 2013 Annual Report, chapter "Accounting policies".

### 5.4.5. 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.

### 5.4.6. 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 € 22 million

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

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

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

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 |              |
|------------------------------------|--|---------------|-----------------|--------------|---------------------|--------------|---|--------------|
|                                    | 2013   | 2012          | 2013            | 2012         | 2013                | 2012         | 2013  | 2012         |
| Interest-related contracts         | 6,662  | 11,439        |                 |              |                     |              |   |              |
| Currency-related contracts         | 178  | 318           |                 |              |                     |              |   |              |
| Securities/index-related contracts | 148  | 140           |                 |              |                     |              |   |              |
| Loan derivatives                   | 43   | 63            |                 |              |                     |              |   |              |
| Goods-related contracts            | 48   | 40            |                 |              |                     |              |   |              |
| Other contracts                    | 985  | 1,209         |                 |              |                     |              |   |              |
| <b>Total</b>                       | <b>8,064</b>   | <b>13,208</b> | <b>3,777</b>    | <b>6,327</b> | <b>1,244</b>        | <b>1,630</b> | <b>3,042</b>  | <b>5,251</b> |

Table 18: Positive replacement costs in € m

#### Derivative counterparty default risk

|   | Market assessment method |       |
|---|--------------------------|-------|
|   | 2013                     | 2012  |
| Derivative counterparty default risk exposure | 5,483                    | 8,010 |

Table 19: Derivative counterparty default risk in € m

#### 5.4.8. Credit derivatives

Credit derivatives purchased to hedge the loan portfolio of HSH Nordbank are shown in accordance with Section 326 (2) No. 3 SolvV in Table 20. The nominal amount of

the hedging for hedge instruments with credit derivatives remained unchanged at zero as at the reporting date.

#### Nominal value of credit derivatives eligible for collateral

|                                    | Nominal value of collateral |      |
|------------------------------------|-----------------------------|------|
|                                    | 2013                        | 2012 |
| Credit derivatives (secured party) | -                           | -    |

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

HSH Nordbank acts as both buyer and seller of credit derivatives (see Table 21 in accordance with Section 326 (2)

No. 4 SolvV). There were still no brokerage transactions as at the reporting date.

Nominal values of credit derivatives

|                      | Use for own credit portfolio |            |            |            |                    |          |
|----------------------|------------------------------|------------|------------|------------|--------------------|----------|
|                      | bought                       |            | sold       |            | Brokerage activity |          |
|                      | 2013                         | 2012       | 2013       | 2012       | 2013               | 2012     |
| Credit Default Swaps | 131                          | 188        | 376        | 406        | -                  | -        |
| Total Return Swaps   | -                            | -          | -          | -          | -                  | -        |
| Credit Options       | -                            | -          | -          | -          | -                  | -        |
| Other contracts      | -                            | -          | -          | -          | -                  | -        |
| <b>Total</b>         | <b>131</b>                   | <b>188</b> | <b>376</b> | <b>406</b> | <b>-</b>           | <b>-</b> |

Table 21: Nominal values of credit derivatives in € m

## 5.5. 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 further numerous divestments. A further decrease is also to be expected in the 2014 financial year.

The equity holdings from the banking book are explained below.

### 5.5.1. Objectives of equity holdings

The equity holding portfolio of the HSH Nordbank 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 former strategic equity holdings and/or equity holdings which previously supported a business segment equity holdings, 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

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allocated to the banking book, they come under the separate sub-portfolio “Equity holdings contained in investment funds or certificates similar to funds”.

#### **5.5.2. 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.

#### **5.5.3. Overview of equity holdings in the banking book**

The equity holding portfolio of the banking book of HSH Nordbank as defined by Section 332 No. 2a and 2b SolvV is shown in Table 22.

## Valuation of equity holding instruments

| Equity holding portfolio  | Carrying amount |            | Fair value |            | Stock market value |          |
|---|-----------------|------------|------------|------------|--------------------|----------|
|   | 2013            | 2012       | 2013       | 2012       | 2013               | 2012     |
| Strategic equity holdings   | 2               | 51         | 2          | 51         | -                  | -        |
| 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  | 2               | 51         | 2          | 51         | -                  | -        |
| Business field-related equity holdings  | 1               | 148        | 1          | 148        | -                  | -        |
| Items traded on the stock exchange  | -               | 1          | -          | 1          | -                  | 1        |
| Not listed on the stock exchange but belonging to a sufficiently diversified equity holding portfolio | -               | -          | -          | -          | -                  | -        |
| Other equity holding exposures  | 1               | 146        | 1          | 146        | -                  | -        |
| Wind-down equity holdings   | 207             | 217        | 207        | 217        | -                  | -        |
| 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        | -          | 216        | -                  | -        |
| Other equity holding exposures  | 206             | -          | 206        | -          | -                  | -        |
| Bail-out purchases  | 26              | 25         | 26         | 25         | -                  | -        |
| Items traded on the stock exchange  | 1               | -          | 1          | -          | 1                  | -        |
| Not listed on the stock exchange but belonging to a sufficiently diversified equity holding portfolio | -               | -          | -          | -          | -                  | -        |
| Other equity holding exposures  | 25              | 25         | 25         | 25         | -                  | -        |
| Other equity holdings   | 275             | 270        | 289        | 248        | -                  | -        |
| Items traded on the stock exchange  | 39              | 38         | 53         | 16         | 53                 | 16       |
| Not listed on the stock exchange but belonging to a sufficiently diversified equity holding portfolio | -               | -          | -          | -          | -                  | -        |
| Other equity holding exposures  | 236             | 232        | 236        | 232        | -                  | -        |
| Investment exposures contained in investment funds or funds-like certificates                         | -               | 1          | -          | 1          | -                  | -        |
| <b>Total</b>  | <b>511</b>      | <b>712</b> | <b>525</b> | <b>690</b> | <b>-</b>           | <b>-</b> |

Table 22: Valuation of equity holding instruments in € m

#### 5.5.4. 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

|   | Hidden revaluation gains/losses                 |           |           |            |   |          |
|---|---|-----------|-----------|------------|---|----------|
|   | Realised gains or losses from sales and workout |           | Overall   |            | of which amounts included in Tier 1 or Tier 2 capital |          |
|   | 2013  | 2012      | 2013      | 2012       | 2013  | 2012     |
| Equity holding items  | 26  | 25        | 14        | -22        | -   | -        |
| Equity holding items contained in investment funds or funds-like certificates | 0   | 0         | 0         | 0          | -   | -        |
| <b>Total</b>  | <b>26</b>                                       | <b>25</b> | <b>14</b> | <b>-22</b> | <b>-</b>  | <b>-</b> |

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

## 5.6. RISK MEASUREMENT FOR IRBA PORTFOLIOS

### 5.6.1. 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.

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

HSH Nordbank 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 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.

### 5.6.2. 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.

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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. 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 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 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 approved by the supervisory authorities

| Borrower, bearer of economic risk, asset or project      | Rating module   | Rating method                      |
|--|---|------------------------------------|
| Corporates   | Corporates<br>Sparkassen-StandardRating   | Scorecard                          |
| Real estate  | Sparkassen-Immobilien­geschäftsRating<br>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<br>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 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 indirectly). HSH Nordbank has the main responsibility for the rating modules ship financing and leveraged finance. 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 are used.

### 5.6.3. 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 Credit Risk Management division and 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 less than € 750,000 per borrower unit or less than € 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 (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 according default guidelines.

As long as the person or entity to be rated is classified in a default class (rating level 16-18), regular re-rating is not necessary. The default reasons are to be updated in the rating, if there is a change within the default rating classes based on new information received. This does not apply to the rating procedures for ship, aviation and project financings, for which ratings – also in the case of default - are to be generally updated once within 12 months.

The guidelines in the Credit Manual explain 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 could not have been rated using a recognised IRBA rating method but have an internal expert rating are treated as CRSA (Section 5.3.1).

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

The rating process is described in detail in the Credit Manual. In addition the respective specialised rating manuals are to be observed with the regard to the specific module requirements.

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 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%.

#### 5.6.4. 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 supporters, 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. 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 suit-able 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.

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

HSH Nordbank 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 on-going scenario calculations and in the planning and strategy process.

#### **5.6.6. 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 5-5.

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 € 10.0 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 |               |
|---|--------------|------------|---------------|-------------|--------------|--------------|----------------|---------------|
|   | 2013         | 2012       | 2013          | 2012        | 2013         | 2012         | 2013           | 2012          |
| <b>Rating range 1: 1(AAAA) – 1(AA+)</b> |              |            |               |             |              |              |                |               |
| Central governments                     | 0.0          | 0.0        | 24.1          | 28.9        | 0.5          | 0.1          | 23,459         | 19,875        |
| Institutions                            | -            | -          | -             | -           | -            | -            | -              | -             |
| Corporates                              | -            | -          | -             | -           | -            | -            | -              | -             |
| Equity holding exposures <sup>1</sup>   | -            | -          | -             | -           | -            | -            | -              | -             |
| <b>Subtotal</b>                         | <b>0.0</b>   | <b>0.0</b> | <b>24.1</b>   | <b>28.9</b> | <b>0.5</b>   | <b>0.1</b>   | <b>23,459</b>  | <b>19,875</b> |
| <b>Rating range 2: 1(AA) – 1(A-)</b>    |              |            |               |             |              |              |                |               |
| Central governments                     | 0.0          | 0.0        | 29.3          | 29.7        | 15.7         | 17.0         | 997            | 1,050         |
| Institutions                            | 0.0          | 0.0        | 17.9          | 20.1        | 9.3          | 11.1         | 6,715          | 7,195         |
| Corporates                              | 0.1          | 0.1        | 27.0          | 27.5        | 14.9         | 16.6         | 5,427          | 5,611         |
| Equity holding exposures <sup>1</sup>   | -            | -          | -             | -           | -            | -            | -              | -             |
| <b>Subtotal</b>                         | <b>0.1</b>   | <b>0.1</b> | <b>22.6</b>   | <b>23.8</b> | <b>12.1</b>  | <b>13.8</b>  | <b>13,140</b>  | <b>13,855</b> |
| <b>Rating range 3: 2 – 5</b>            |              |            |               |             |              |              |                |               |
| Central governments                     | 0.2          | 0.2        | 100.0         | 71.3        | 142.2        | 102.3        | 14             | 25            |
| Institutions                            | 0.2          | 0.2        | 26.5          | 19.8        | 25.1         | 18.5         | 1,491          | 925           |
| Corporates                              | 0.2          | 0.3        | 36.0          | 38.9        | 44.5         | 52.3         | 9,059          | 8,767         |
| Equity holding exposures <sup>1</sup>   | -            | 0.4        | -             | 90.0        | -            | 191.9        | -              | 2             |
| <b>Subtotal</b>                         | <b>0.2</b>   | <b>0.3</b> | <b>34.8</b>   | <b>37.2</b> | <b>41.9</b>  | <b>49.2</b>  | <b>10,563</b>  | <b>9,720</b>  |
| <b>Rating range 4: 6 – 9</b>            |              |            |               |             |              |              |                |               |
| Central governments                     | -            | -          | -             | -           | -            | -            | -              | -             |
| Institutions                            | 1.2          | 1.4        | 21.8          | 14.1        | 51.9         | 33.6         | 127            | 149           |
| Corporates                              | 1.0          | 1.1        | 35.1          | 37.1        | 77.7         | 83.2         | 6,299          | 5,499         |
| Equity holding exposures <sup>1</sup>   | 1.8          | 1.9        | 90.0          | 90.0        | 300.3        | 308.7        | 106            | 105           |
| <b>Subtotal</b>                         | <b>1.0</b>   | <b>1.1</b> | <b>35.8</b>   | <b>37.4</b> | <b>80.8</b>  | <b>86.0</b>  | <b>6,532</b>   | <b>5,752</b>  |
| <b>Rating range 5: 10 - 12</b>          |              |            |               |             |              |              |                |               |
| Central governments                     | -            | 3.0        | -             | 50.0        | -            | 187.2        | -              | 50            |
| Institutions                            | 4.4          | 4.0        | 64.8          | 32.7        | 192.3        | 100.8        | 3              | 11            |
| Corporates                              | 5.0          | 4.7        | 37.3          | 37.6        | 129.6        | 131.1        | 876            | 1,248         |
| Equity holding exposures <sup>1</sup>   | 4.4          | 4.4        | 90.0          | 90.0        | 369.5        | 369.5        | 20             | 3             |
| <b>Subtotal</b>                         | <b>4.9</b>   | <b>4.6</b> | <b>38.6</b>   | <b>38.2</b> | <b>135.2</b> | <b>133.5</b> | <b>899</b>     | <b>1,311</b>  |



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 |               |
|--|--------------|--------------|---------------|-------------|--------------|--------------|----------------|---------------|
|  | 2013         | 2012         | 2013          | 2012        | 2013         | 2012         | 2013           | 2012          |
| <b>Rating range 6: 13 - 15</b>           |              |              |               |             |              |              |                |               |
| Central governments                      | 10.6         | 15.0         | 51.3          | 70.0        | 271.6        | 410.5        | 53             | 5             |
| Institutions                             | 20.0         | 20.0         | 30.5          | 20.0        | 166.3        | 124.2        | 6              | 1             |
| Corporates                               | 15.1         | 16.0         | 33.7          | 40.0        | 171.1        | 210.5        | 653            | 1,019         |
| Equity holding exposures <sup>1</sup>    | -            | 11.9         | -             | 90.0        | -            | 479.6        | -              | 21            |
| <b>Subtotal</b>                          | <b>14.8</b>  | <b>15.9</b>  | <b>35.0</b>   | <b>41.2</b> | <b>178.6</b> | <b>216.8</b> | <b>712</b>     | <b>1,047</b>  |
| <b>Rating range 7 (Default): 16 - 18</b> |              |              |               |             |              |              |                |               |
| Central governments                      | 100.0        | -            | 79.4          | -           | 73.5         | -            | 0              | -             |
| Institutions                             | 100.0        | 100.0        | 61.8          | 75.8        | 70.2         | 86.2         | 83             | 70            |
| Corporates                               | 100.0        | 100.0        | 46.9          | 47.2        | 53.3         | 53.7         | 2,106          | 2,092         |
| Equity holding exposures <sup>1</sup>    | 100.0        | 100.0        | 90.0          | 88.7        | 102.3        | 100.8        | 42             | 39            |
| <b>Subtotal</b>                          | <b>100.0</b> | <b>100.0</b> | <b>48.3</b>   | <b>48.9</b> | <b>54.9</b>  | <b>55.5</b>  | <b>2,231</b>   | <b>2,201</b>  |
| <b>Total (without default)</b>           |              |              |               |             |              |              |                |               |
| Central governments                      | 0.0          | 0.0          | 24.4          | 29.1        | 1.8          | 1.6          | 24,523         | 21,005        |
| Institutions                             | 0.1          | 0.1          | 19.5          | 20.0        | 13.0         | 12.5         | 8,342          | 8,280         |
| Corporates                               | 1.0          | 1.4          | 33.6          | 35.5        | 53.7         | 62.7         | 22,314         | 22,144        |
| Equity holding exposures <sup>1</sup>    | 2.2          | 3.6          | 90.0          | 90.0        | 311.4        | 336.3        | 126            | 131           |
| <b>Total</b>                             | <b>0.5</b>   | <b>0.6</b>   | <b>27.5</b>   | <b>30.6</b> | <b>25.1</b>  | <b>30.4</b>  | <b>55,305</b>  | <b>51,560</b> |

<sup>1</sup> 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

### 5.6.7. 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 <sup>1</sup> |      | Total |       |
|--|---------------------|------|--------------|------|------------|-------|---------------------------------------|------|-------|-------|
|  | 2013                | 2012 | 2013         | 2012 | 2013       | 2012  | 2013                                  | 2012 | 2013  | 2012  |
| <b>Rating range 1: 1(AAAA) – 1(AA+)</b>                    |                     |      |              |      |            |       |                                       |      |       |       |
| Basis for evaluation of loan commitments                   | 1                   | 1    | -            | -    | -          | -     | -                                     | -    | 1     | 1     |
| Basis for evaluation of non-derivative assets not reported | 0                   | 0    | -            | -    | -          | -     | -                                     | -    | 0     | 0     |
| Avg. Exposure value of loan commitments                    | 0                   | 0    | -            | -    | -          | -     | -                                     | -    | 0     | 0     |
| Avg. Exposure value of non-derivative assets not reported  | 0                   | 0    | -            | -    | -          | -     | -                                     | -    | 0     | 0     |
| <b>Rating range 2: 1(AA) – 1(A-)</b>                       |                     |      |              |      |            |       |                                       |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 290          | 354  | 637        | 619   | -                                     | -    | 928   | 973   |
| Basis for evaluation of non-derivative assets not reported | -                   | -    | 71           | 67   | 69         | 423   | -                                     | -    | 140   | 490   |
| Avg. Exposure value of loan commitments                    | -                   | -    | 7            | 3    | 9          | 5     | -                                     | -    | 8     | 4     |
| Avg. Exposure value of non-derivative assets not reported  | -                   | -    | 4            | 5    | 3          | 214   | -                                     | -    | 4     | 185   |
| <b>Rating range 3: 2 - 5</b>                               |                     |      |              |      |            |       |                                       |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 52           | 0    | 3,388      | 2,825 | -                                     | -    | 3,440 | 2,825 |
| Basis for evaluation of non-derivative assets not reported | -                   | 2    | 395          | 52   | 542        | 356   | -                                     | -    | 936   | 408   |
| Avg. Exposure value of loan commitments                    | -                   | -    | 21           | 0    | 11         | 12    | -                                     | -    | 11    | 12    |
| Avg. Exposure value of non-derivative assets not reported  | -                   | 2    | 235          | 48   | 8          | 5     | -                                     | -    | 104   | 10    |
| <b>Rating range 4: 6 - 9</b>                               |                     |      |              |      |            |       |                                       |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 26           | 0    | 3,176      | 2,170 | -                                     | -    | 3,202 | 2,170 |
| Basis for evaluation of non-derivative assets not reported | -                   | -    | 58           | 4    | 683        | 650   | -                                     | -    | 741   | 655   |
| Avg. Exposure value of loan commitments                    | -                   | -    | 7            | 0    | 11         | 10    | -                                     | -    | 11    | 10    |
| Avg. Exposure value of non-derivative assets not reported  | -                   | -    | 3            | 1    | 7          | 7     | -                                     | -    | 7     | 7     |
| <b>Rating range 5: 10 – 12</b>                             |                     |      |              |      |            |       |                                       |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | -            | 3    | 133        | 133   | -                                     | -    | 133   | 137   |
| Basis for evaluation of non-derivative assets not reported | -                   | -    | -            | -    | 162        | 195   | -                                     | -    | 162   | 195   |
| Avg. Exposure value of loan commitments                    | -                   | -    | -            | 0    | 4          | 3     | -                                     | -    | 4     | 3     |
| Avg. Exposure value of non-derivative assets not reported  | -                   | -    | -            | -    | 2          | 5     | -                                     | -    | 2     | 5     |
| <b>Rating range 6: 13 – 15</b>                             |                     |      |              |      |            |       |                                       |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 5            | -    | 92         | 50    | -                                     | -    | 97    | 50    |
| Basis for evaluation of non-derivative assets not reported | 3                   | 6    | 6            | 1    | 24         | 76    | -                                     | -    | 34    | 82    |
| Avg. Exposure value of loan commitments                    | -                   | -    | 5            | -    | 4          | 1     | -                                     | -    | 4     | 1     |
| Avg. Exposure value of non-derivative assets not reported  | 3                   | 6    | 1            | 1    | 2          | 6     | -                                     | -    | 2     | 6     |

## 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 <sup>1</sup> |      | Total |       |
|--|---------------------|------|--------------|------|------------|-------|---------------------------------------|------|-------|-------|
|  | 2013                | 2012 | 2013         | 2012 | 2013       | 2012  | 2013                                  | 2012 | 2013  | 2012  |
| <b>Rating range 7 (Default): 16 – 18</b>                   |                     |      |              |      |            |       |                                       |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 1            | 1    | 84         | 189   | -                                     | -    | 85    | 190   |
| Basis for evaluation of non-derivative assets not reported | -                   | -    | -            | -    | 32         | 44    | -                                     | -    | 32    | 44    |
| Avg. Exposure value of loan commitments                    | -                   | -    | 0            | 0    | 0          | 5     | -                                     | -    | 0     | 5     |
| Avg. Exposure value of non-derivative assets not reported  | -                   | -    | -            | -    | 1          | 1     | -                                     | -    | 1     | 1     |
| <b>Total</b>   |                     |      |              |      |            |       |                                       |      |       |       |
| Basis for evaluation of loan commitments                   | 1                   | 1    | 374          | 358  | 7,511      | 5,987 | -                                     | -    | 7,886 | 6,346 |
| Basis for evaluation of non-derivative assets not reported | 3                   | 5    | 530          | 124  | 1,512      | 1,744 | -                                     | -    | 2,046 | 1,873 |
| Avg. Exposure value of loan commitments                    | 0                   | 0    | 9            | 3    | 10         | 10    | -                                     | -    | 10    | 9     |
| Avg. Exposure value of non-derivative assets not reported  | 3                   | 5    | 176          | 23   | 6          | 56    | -                                     | -    | 50    | 54    |

<sup>1</sup> 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 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 provided 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 |      |
|------------------------|----------------|------|--|------|
|                        | 2013           | 2012 | 2013                                       | 2012 |
| 0 ≤ 10                 | -              | -    | -  | -    |
| > 10 ≤ 20              | -              | -    | -  | -    |
| > 20 ≤ 50              | -              | -    | -  | -    |
| > 50 ≤ 100             | -              | -    | -  | -    |
| > 100 ≤ 350            | -              | 0    | -  | 0    |
| > 350 ≤ 650            | -              | 1    | -  | 0    |
| > 650 > 1,250          | -              | -    | -  | -    |
| 1,250                  | -              | -    | -  | -    |
| Capital deduction      | -              | -    | -  | -    |
| <b>Total</b>           | -              | 1    | -  | 0    |

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

### 5.6.8. 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 losses in the lending business

| Exposure class                        | 2013                                    | 2012                                    | Difference  |
|---------------------------------------|---|---|-------------|
|                                       | Actual loss<br>01.01.2013 to 31.12.2013 | Actual loss<br>01.01.2012 to 31.12.2012 |             |
| Central governments                   | -                                       | 1                                       | -1          |
| Institutions                          | -                                       | 47                                      | -47         |
| Corporates                            | 447                                     | 177                                     | +270        |
| Equity holding exposures <sup>1</sup> | -                                       | -                                       | -           |
| <b>Total</b>                          | <b>447</b>                              | <b>225</b>                              | <b>+222</b> |

<sup>1</sup> 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

= actual loss in the lending business

Compared to the previous year the actual losses in the lending business (IRBA) have increased in the reporting period from € 225 million to € 447 million. The factors influencing the loss history in the reporting period pursuant to Section 335 (2) No. 5 are described below. The increase of € 222 million is characterised by offsetting movements in the exposure classes institutions and corporates, whereby the principal effect is attributable to the exposure class corporates. An increase in the number of company insolvencies concluded in particular in the sectors industry, trade and transport, land and apartments as well as shipping made an impact here.

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).

## Expected losses and actual losses in the lending business

| Exposure class                        | 2013                                |                                      | 2012                                |                                      |
|---------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|
|                                       | Expected loss (EL) as at 31.12.2013 | Actual loss 01.01.2013 to 31.12.2013 | Expected loss (EL) as at 31.12.2012 | Actual loss 01.01.2012 to 31.12.2012 |
| Central governments                   | 3                                   | -                                    | 1                                   | 1                                    |
| Institutions                          | 1                                   | -                                    | 0                                   | 47                                   |
| Corporates                            | 59                                  | 447                                  | 64                                  | 177                                  |
| Equity holding exposures <sup>1</sup> | 1                                   | -                                    | 2                                   | -                                    |
| <b>Total</b>                          | <b>64</b>                           | <b>447</b>                           | <b>69</b>                           | <b>225</b>                           |

  

| Exposure class                        | 2011                                |                                      | 2010                                |                                      |
|---------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|
|                                       | Expected loss (EL) as at 31.12.2011 | Actual loss 01.01.2011 to 31.12.2011 | Expected loss (EL) as at 31.12.2010 | Actual loss 01.01.2010 to 31.12.2010 |
| Central governments                   | 1                                   | -                                    | 0                                   | 0                                    |
| Institutions                          | 1                                   | 3                                    | 2                                   | 72                                   |
| Corporates                            | 88                                  | 264                                  | 138                                 | 228                                  |
| Equity holding exposures <sup>1</sup> | 1                                   | 10                                   | 2                                   | -                                    |
| <b>Total</b>                          | <b>91</b>                           | <b>276</b>                           | <b>142</b>                          | <b>300</b>                           |

<sup>1</sup> 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

## 5.7. CREDIT RISK MITIGATION TECHNIQUES

### 5.7.1. 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 5.4.7). The market assessment method is used to determine the required net assessment basis. As at the reporting date HSH Nordbank recorded a counterparty risk exposure to the amount of € 5.5 billion (see Table 19).

### 5.7.2. 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 and is supplemented by detailed instructions in the process regula-

tions 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 5.6.2). 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.

### **5.7.3. 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'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 individual collateral objects, 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.

### **5.7.4. 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. The proportion of real estate and ships to total collateral amounts to about one third in each case. The remaining collateral types account for a further third. Commercial properties in turn account for about three quarters of the real estate collateral. Ship collateral is dominated by container ships which account for just under half. Other collateral is composed primarily of cash collateral and guarantees.

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 or third party debtor cannot in addition be netted against risk as collateral.

### 5.7.5. 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, 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.

### 5.7.6. Management of potential 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).

### 5.7.7. 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 |          |
|--------------------------------------|----------------------|-----------|-------------------------------|-----------|-------------------------|------------|----------------|----------|
|                                      | 2013                 | 2012      | 2013                          | 2012      | 2013                    | 2011       | 2013           | 2012     |
| Central governments                  | -                    | -         | -                             | -         | -                       | -          | -              | -        |
| Regional governments                 | -                    | -         | -                             | -         | -                       | -          | -              | -        |
| Other public sector entities         | -                    | -         | -                             | -         | 0                       | 0          | -              | -        |
| Multilateral development banks       | -                    | -         | -                             | -         | -                       | -          | -              | -        |
| International organisations          | -                    | -         | -                             | -         | -                       | -          | -              | -        |
| Banks                                | -                    | -         | -                             | -         | -                       | -          | -              | -        |
| Collateralised Notes issued by banks | -                    | -         | -                             | -         | -                       | -          | -              | -        |
| Corporates                           | 0                    | 71        | -                             | -         | 180                     | 181        | 2              | 1        |
| Retail banking                       | 0                    | 1         | -                             | -         | 0                       | 1          | 1              | 2        |
| Items collateralised by real estate  | -                    | -         | 33                            | 41        | -                       | -          | -              | -        |
| Investment certificates              | -                    | -         | -                             | -         | -                       | -          | -              | -        |
| Equity holdings                      | -                    | -         | -                             | -         | -                       | -          | -              | -        |
| Other items                          | -                    | -         | -                             | -         | -                       | -          | -              | -        |
| Overdue items                        | -                    | 22        | 5                             | 7         | -                       | 0          | 1              | 0        |
| <b>Total</b>                         | <b>1</b>             | <b>94</b> | <b>38</b>                     | <b>48</b> | <b>180</b>              | <b>182</b> | <b>3</b>       | <b>3</b> |

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 |          |
|-----------------------------------|----------------------|------------|-------------------------------|--------------|-------------------------|------------|----------------|----------|
|                                   | 2013                 | 2012       | 2013                          | 2012         | 2013                    | 2012       | 2013           | 2012     |
| Central governments               | -                    | -          | -                             | -            | -                       | -          | -              | -        |
| Banks                             | 408                  | 457        | 6                             | 1            | 174                     | 136        | -              | -        |
| Retail banking                    | -                    | -          | -                             | -            | -                       | -          | -              | -        |
| Equity holding                    | -                    | -          | -                             | -            | -                       | -          | -              | -        |
| Corporates                        | 207                  | 445        | 7,056                         | 4,274        | 360                     | 420        | 7              | 6        |
| Other assets not related to loans | -                    | -          | -                             | -            | -                       | -          | -              | -        |
| <b>Total</b>                      | <b>616</b>           | <b>902</b> | <b>7,062</b>                  | <b>4,275</b> | <b>480</b>              | <b>556</b> | <b>7</b>       | <b>6</b> |

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. Furthermore, HSH Nordbank in its role as originator performs advisory and administrative functions amongst other things for the special purpose entities Mare Baltic (Scandinotes securitisation transaction), Prime, Poseidon as well as Carrera and also provides credit lines for these entities.

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 funding required for the purchase by means of a credit line or bearer debenture respectively.

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 € 10.0 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 55% 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 € 66.1 billion. This is divided into the senior tranche (€ 53.6 billion), the second loss piece (€ 10.0 billion) and the first loss piece (after deducting invoiced losses in the amount of € 0.8 billion: € 2.4 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 € 66.5 billion. Receivables securitised where the Bank acts as originator account for the largest proportion at € 66.1 billion, whereas the share of receivables securitised where the Bank is the investor and sponsor amounts to € 0.2 billion, respectively.

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 positions is performed by the external service provider Blackrock in cooperation with the divisions Wind-down Assets and Credit Assessment & Decision. Blackrock acts as the supplier for monitoring required documentation and models the intrinsic values of the individual positions. 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 termi-

nation 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 9% 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 of the transaction is to generate collateral objects eligible for refinancing with the European Central Bank.

As at the reporting date, all securitisation transactions – other than Promise and parts of Prime 2006-1 as well as 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) <sup>2</sup>  | Traditional securitisation | IRBA     | Backing of pool assets                            |
| Promise                                | Traditional securitisation | IRBA     | Backing of pool assets                            |
| Poseidon (ABCP-Programme) <sup>2</sup> | Traditional securitisation | CRSA     | Cap-regularisation                                |
| Rasmus 9 <sup>2</sup>                  | Traditional securitisation | CRSA     | CRSA look-through approach                        |
| Prime 2006-1 <sup>1</sup>              | Traditional securitisation | CRSA     | Risk weight in line with external rating          |
| Scandinotes III <sup>1</sup>           | Traditional securitisation | IRBA     | Risk weight in line with external rating          |
| Scandinotes IV <sup>1</sup>            | Traditional securitisation | IRBA     | Risk weight in line with external rating          |
| Sunrise                                | Synthetic securitisation   | IRBA     | Formula approach under supervisory law            |

<sup>1</sup> Partly hedged as part of the Sunrise Transaction. <sup>2</sup> Fully hedged as part of the Sunrise Transaction.

Table 33: Determination of risk-weighted exposure for receivables securitised as originators

#### 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 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             | Treatment under supervisory law |          | Treatment under financial accounting |
|--|---------------------------------|----------|--------------------------------------|
|  | True-Sale: Yes/No               | Approach | Disposal: Yes/No                     |
| Carrera (ABCP-Programme) <sup>2</sup>  | -                               | IRBA     | -                                    |
| Promise                                | No                              | IRBA     | No                                   |
| Poseidon (ABCP-Programme) <sup>2</sup> | Yes                             | CRSA     | -                                    |
| Rasmus 9 <sup>2</sup>                  | Yes                             | CRSA     | -                                    |
| Prime 2006-1 <sup>1</sup>              | Yes                             | IRBA     | -                                    |
| Scandinotes III <sup>1</sup>           | Yes                             | IRBA     | Yes                                  |
| Scandinotes IV <sup>1</sup>            | Yes                             | IRBA     | -                                    |
| Sunrise                                | No                              | IRBA     | -                                    |

<sup>1</sup> Partly hedged as part of the Sunrise Transaction. <sup>2</sup> Fully hedged as part of the Sunrise Transaction.

Table 34: Accounting policies for receivables securitised as originators

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.

### 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.

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 the Strategic Treasury division. 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 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) <sup>2</sup>  | Traditional securitisation | ABS  | Fitch, Moody's |
| Poseidon (ABCP-Programme) <sup>2</sup> | Traditional securitisation | ABS, leasing claims                          | Moody's        |
| Prime 2006-1 <sup>1</sup>              | Traditional securitisation | Profit participation rights                  | Fitch, Moody's |
| Scandinotes III <sup>1</sup>           | Traditional securitisation | Receivables from Scandinavian regional banks | Moody's        |
| Scandinotes IV <sup>1</sup>            | Traditional securitisation | Receivables from Danish regional banks       | Moody's        |

<sup>1</sup> Partly hedged as part of the Sunrise Transaction. <sup>2</sup> 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   |           |
|                                    | 2013           | 2012          | 2013       | 2012      |
| <b>Traditional securitisations</b> |                |               |            |           |
| Real estate                        | -              | -             | -          | -         |
| Ships                              | -              | -             | -          | -         |
| Retail banking                     | 9              | 15            | 183        | 26        |
| ABS                                | 6              | 7             | -          | -         |
| Other                              | -              | -             | -          | -         |
| <b>Subtotal</b>                    | <b>15</b>      | <b>22</b>     | <b>183</b> | <b>26</b> |
| <b>Synthetic securitisations</b>   |                |               |            |           |
| Real estate                        | -              | -             | -          | -         |
| Ships                              | -              | -             | -          | -         |
| Retail banking                     | -              | -             | -          | -         |
| ABS                                | -              | -             | -          | -         |
| Other                              | -              | -             | -          | -         |
| Sunrise                            | 66,063         | 85,550        | -          | -         |
| <b>Subtotal</b>                    | <b>66,063</b>  | <b>85,550</b> | <b>-</b>   | <b>-</b>  |
| <b>Total</b>                       | <b>66,078</b>  | <b>85,572</b> | <b>183</b> | <b>26</b> |

Table 36: Exposure values of securitised receivables in € m

**Exposure values of retained of purchased securitisation exposures**

In accordance with Section 334 (2) No. 2 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 |               |
|------------------------------------|---------------------|------------|---------------------|---------------|
|                                    | 2013                | 2012       | 2013                | 2012          |
| <b>Balance-sheet items</b>         |                     |            |                     |               |
| Credit Enhancements <sup>1</sup>   | -                   | -          | -                   | -             |
| Participations in ABS transactions | 58                  | 73         | 192                 | 171           |
| Other balance-sheet items          | 189                 | 29         | -                   | -             |
| Sunrise                            | -                   | -          | 66,063              | 85,550        |
| <b>Subtotal</b>                    | <b>247</b>          | <b>102</b> | <b>66,255</b>       | <b>85,720</b> |
| <b>Off-balance sheet items</b>     |                     |            |                     |               |
| Liquidity facilities               | -                   | -          | -                   | -             |
| Derivatives                        | -                   | -          | -                   | -             |
| Other off-balance sheet items      | -                   | -          | -                   | -             |
| <b>Subtotal</b>                    | <b>-</b>            | <b>-</b>   | <b>-</b>            | <b>-</b>      |
| <b>Total</b>                       | <b>247</b>          | <b>102</b> | <b>66,255</b>       | <b>85,720</b> |

<sup>1</sup> 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 20% as at the reporting date. The guarantee of the Sunrise portfolio was replenished by € 3 billion to the original amount of € 10 billion in the year under review.

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 %                  | Securitisated items retained/purchased |                   |               |               | Capital requirement |                   |            |              |
|---|--|-------------------|---------------|---------------|---------------------|-------------------|------------|--------------|
|   | Exposure value                         |                   |               |               | Capital requirement |                   |            |              |
|   | Securitisation                         | Re-securitisation | Total         |               | Securitisation      | Re-securitisation | Total      |              |
|   | 2013                                   | 2013              | 2013          | 2012          | 2013                | 2013              | 2013       | 2012         |
| <b>CRSA</b>                             |  |                   |               |               |                     |                   |            |              |
| 0 ≤ 10                                  | -                                      | -                 | -             | 15            | -                   | -                 | -          | -            |
| > 10 ≤ 20                               | 197                                    | 8                 | 205           | 41            | 3                   | -                 | 3          | 1            |
| > 20 ≤ 50                               | -                                      | -                 | -             | -             | -                   | -                 | -          | -            |
| > 50 ≤ 100                              | 1                                      | 10                | 12            | 2             | 0                   | 1                 | 1          | -            |
| > 100 ≤ 350                             | -                                      | 6                 | 6             | 11            | -                   | 1                 | 1          | 2            |
| > 350 ≤ 650                             | -                                      | -                 | -             | 6             | -                   | -                 | -          | 3            |
| > 650 < 1,250                           | -                                      | -                 | -             | -             | -                   | -                 | -          | -            |
| 1,250 or capital deduction <sup>1</sup> | 24                                     | 0                 | 24            | 27            | 1                   | -                 | 1          | 0            |
| <b>Total CRSA</b>                       | <b>223</b>                             | <b>25</b>         | <b>247</b>    | <b>102</b>    | <b>4</b>            | <b>2</b>          | <b>6</b>   | <b>6</b>     |
| <b>IRBA</b>                             |  |                   |               |               |                     |                   |            |              |
| 0 ≤ 10                                  | -                                      | 10,000            | 10,000        | 7,001         | -                   | -                 | 0          | 0            |
| > 10 ≤ 20                               | 43                                     | 53,644            | 53,686        | 49            | 0                   | 858               | 859        | 1            |
| > 20 ≤ 50                               | 21                                     | 8                 | 29            | 75,697        | 1                   | 0                 | 1          | 2,612        |
| > 50 ≤ 100                              | 13                                     | 24                | 37            | 37            | 1                   | 2                 | 3          | 2            |
| > 100 ≤ 350                             | 52                                     | -                 | 52            | 1             | 8                   | -                 | 8          | 0            |
| > 350 ≤ 650                             | 1                                      | 2                 | 3             | 21            | 0                   | 1                 | 1          | 8            |
| > 650 < 1,250                           | -                                      | -                 | -             | 1             | -                   | -                 | -          | 0            |
| 1,250 or capital deduction <sup>1</sup> | 21                                     | 2,426             | 2,448         | 2,915         | 5                   | -                 | 5          | 7            |
| <b>Total IRBA</b>                       | <b>151</b>                             | <b>66,104</b>     | <b>66,255</b> | <b>85,720</b> | <b>16</b>           | <b>861</b>        | <b>877</b> | <b>2,630</b> |
| <b>Total</b>                            | <b>374</b>                             | <b>66,129</b>     | <b>66,502</b> | <b>85,822</b> | <b>19</b>           | <b>863</b>        | <b>883</b> | <b>2,636</b> |

<sup>1</sup> 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 | Exposure value <sup>1</sup> |              |
|--------------------------|-----------------------------|--------------|
|                          | 2013                        | 2012         |
| Real estate              | 33                          | 36           |
| Ships                    | -                           | -            |
| Retail banking           | -                           | -            |
| ABS                      | 7                           | 10           |
| Other                    | 12                          | 13           |
| Sunrise                  | 2,419                       | 2,883        |
| <b>Total</b>             | <b>2,472</b>                | <b>2,943</b> |

<sup>1</sup> 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 in accordance with Section 334 (1) No. 7 SolvV as at the reporting date.

Re-securitisation related hedge transactions

|  | Exposure Value |               |
|--|----------------|---------------|
|  | 2013           | 2012          |
| Re-securitisation positions prior to hedge       | 66,129         | 85,628        |
| Hedge via guarantee                              | 10,000         | 7,000         |
| Of which: guarantors with ratings AAAA through A | 10,000         | 7,000         |
| Of which: guarantors with s rating below A       | -              | -             |
| Hedging using other collateral                   | -              | -             |
| Re-securitisation positions post-hedge           | <b>56,129</b>  | <b>78,628</b> |

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 |          |
|                          | 2013                       | 2012 | 2013                     | 2012     |
| Real estate              | -                          | -    | -                        | -        |
| Ships                    | -                          | -    | -                        | -        |
| Retail banking           | -                          | -    | -                        | -        |
| ABS                      | -                          | -    | -                        | -        |
| Other                    | -                          | -    | -                        | -        |
| Sunrise                  | -                          | -    | 1                        | 2        |
| <b>Total</b>             | -                          | -    | <b>1</b>                 | <b>2</b> |

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 5.2.4 and 5.2.5) and actual losses (see Section 5.6.8).

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 <sup>1</sup> |                   | Actual losses            |                          |
|--------------------------|---|-------------------|--------------------------|--------------------------|
|                          | 2013  | 2012 <sup>3</sup> | 01.01.2013 to 31.12.2013 | 01.01.2012 to 31.12.2012 |
| Real estate              | -   | -                 | -                        | -                        |
| Ships                    | -   | -                 | -                        | -                        |
| Retail banking           | -   | -                 | -                        | -                        |
| ABS                      | -   | -                 | -                        | -                        |
| Other                    | -   | -                 | -                        | -                        |
| Sunrise <sup>2</sup>     | 17,060  | 16,461            | 465                      | 114                      |
| <b>Total</b>             | <b>17,060</b>                                   | <b>16,461</b>     | <b>465</b>               | <b>114</b>               |

<sup>1</sup> Total non-performing securitisations (needing value adjustment) or delayed securitisations (not needing value adjustment)

<sup>2</sup> 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.

<sup>3</sup> Corrected figures compared with the report prepared as at 31 December 2012

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

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## 6.8. SECURITISATION ACTIVITIES IN THE REPORTING YEAR AND IMPORTANT CHANGES

### Securitisation activities in the reporting year

In the course of the strategic realignment, HSH Nordbank has decided that the loan replacement business is not part of its core business. During the reporting period no securitisation transaction was executed by HSH Nordbank as an originator. New investments were only made to a limited extent as part of a cooperation arrangement with Kreissparkasse Biberach, which provides financing options to medium-sized customers via a securitisation special purpose entity. HSH Nordbank terminated among others its investment in the Sealink transaction.

### Material changes in quantitative information

Under Section 334 (1) No. 13 SolvV significant changes to the quantitative information that occurred during the reporting year are to be explained. The significant changes in the reporting year are mainly attributable to the Sunrise transaction. There were also changes affecting sponsor as well as investment positions.

The cause of the quantitative changes in the Sunrise transaction was the replenishment of the guarantee to the original € 10 billion on the one hand and the reduction in the risk weight for the senior tranche from 43.1% to 20% associated with it. The reduction in the exposure value of the senior tranche is attributable to the reduction in the high risk legacy portfolios in the Restructuring Unit. On the other hand, the increases in the loan loss provisions and losses invoiced had an impact on the quantitative information.

The increase in the exposure values calculated under the CRSA for securitised transactions where the Bank acts as sponsor is attributable to the increase in the credit lines granted for the Smartfact special purpose entity. Despite the offsetting net reduction in investments in securitisations sponsored by third parties the exposure values under the CRSA increased in total as a result.

## 6.9. PLANNED SECURITISATION ACTIVITIES

For the year 2014, 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 as commodity prices (commodity risk) including their volatilities.

The strategies and processes as well as the structure and organisation of market risk management system in line with the qualitative requirements imposed by Section

Reports on market risk

| Report   | Recipient                                       | Interval | Content  | Objective  |
|--|---|----------|--|--|
| Monthly Market Risk Report                       | Group Risk Committee                            | Monthly  | Market risk and earnings trends, sensitivities, stress tests, backtesting, limit monitoring          | Market risk reporting to the Management Board (where required with recommendations for action) |
| Weekly Market Risk Report                        | Asset Liability Committee                       | Weekly   | Market risk and earnings trends, limit monitoring (particularly for Corporate Investment portfolios) | Information of Management Board and trade, overview of risk and profit/loss, limit utilisation |
| Daily Market Risk Report to the Management Board | Management Board and Financial Market divisions | Daily    | Market risk and earnings trends, sensitivities, stress tests, limit monitoring                       | Information of Management Board and trade, overview of risk and profit/loss, limit utilisation |

Table 43: Reports on market risk

## 7.2. REGULATORY CAPITAL REQUIREMENT FOR MARKET RISK

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

Regulatory capital requirements for market risks

| Market risk   | 2013       | 2012       |
|---|------------|------------|
| Interest rate risk                                    | 219        | 218        |
| Including a partial weighting for general price risk  | (174)      | (194)      |
| Including a partial weighting for specific price risk | (6)        | (4)        |
| Equity price risk                                     | 1          | 1          |
| Currency risk   | 117        | 90         |
| Commodity price risk                                  | 13         | 11         |
| Other market risk positions                           | 4          | 4          |
| <b>Total</b>  | <b>354</b> | <b>324</b> |

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

322 No. 1 and 2 SolvV are described in the Risk Report section of the Annual Report of HSH Nordbank.

The qualitative requirements for market risk as defined in Section 322 No. 3 SolvV (nature and scope of risk reports) are disclosed in the following section of this report.

### 7.1. REPORTS ON MARKET RISK

Reporting on market risk of HSH Nordbank is integrated in the reports on overall risk (see Section 4.3). These are supplemented by special market risk reports (see Table 43).

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.

### 7.3. 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 con-

sists 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 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 € -170 million / € +199 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. The interest rate risk in the banking book is broken down by currency as at the reporting date in order to provide greater transparency.

Interest rate risks in the banking book

| Currency     | Change in net present value |            |            |             |
|--------------|-----------------------------|------------|------------|-------------|
|              | +200 bp                     |            | -200 bp    |             |
|              | 2013                        | 2012       | 2013       | 2012        |
| EUR          | -141                        | -72        | 74         | -179        |
| USD          | -21                         | 11         | 120        | 20          |
| CHF          | -2                          | 2          | -4         | -4          |
| JPY          | 3                           | 4          | -12        | 18          |
| GBP          | 4                           | 1          | 9          | 1           |
| DKK          | -2                          | -2         | 2          | 1           |
| Other        | -11                         | -2         | 10         | 1           |
| <b>Total</b> | <b>-170</b>                 | <b>-58</b> | <b>199</b> | <b>-142</b> |

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.

The strategies and processes as well as the structure and organisation of operational risk management system in line with the qualitative requirements imposed by Section 322 No. 1 and 2 SolvV are described in the Risk Report section of the Annual Report of HSH Nordbank.

Reports on operational risk

| Report                                   | Recipient            | Interval  | Content   | Objectives  |
|--|----------------------|-----------|---|---|
| MaRisk Annual Report on Operational Risk | Group Risk Committee | Annually  | Capital required, presentation of the development of the loss events, Information on identified potential loss incl. the addressed management steps decided on, customer complaints | Creation of transparency on all OpRisk procedures and tools used as well as increase in risk consciousness.         |
| Quarterly Report on Operational Risk     | OpRisk Committee     | Quarterly | Description of the development regarding the loss events reported, the control measures decided upon, risk indicators, external loss events (DakOR), customer complaints            | 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

### 8.2. REGULATORY CAPITAL REQUIREMENTS ON OPERATIONAL RISK

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

Regulatory capital requirements for operational risk

| Operational risk                   | 2013       | 2012       |
|------------------------------------|------------|------------|
| According to Standardised Approach | 222        | 310        |
| <b>Total</b>                       | <b>222</b> | <b>310</b> |

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

This also applies to information regarding legal and compliance risk.

The qualitative requirements for operational risk as defined in Section 322 No. 3 SolvV (nature and scope of risk reports) are disclosed in the following section of this report.

#### 8.1. REPORTS ON OPERATIONAL RISK

Reporting on operational risk of HSH Nordbank is integrated in the reports on overall risk (see Section 4.3). 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.

erational risk. On the date of reporting the Group had a regulatory capital requirement to the amount of € 222 million.

## 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 risk that present or future payment obligations cannot be met in part or in full. This is referred to as liquidity risk in the narrower sense. The key driver of this liquidity risk is the cash flow structure in the liquidity development report which is determined by the assets (maturity/currency structure) and liabilities (funding structure by maturity/currency/investor). In this regard the market liquidity risk, i.e. the danger, that transactions cannot be sold or only at unfavourable conditions because of a lack of market depth, is reflected in the liquidity development report as a component of the insolvency risk. Another component of insolvency risk is the refinancing risk, i.e. the danger of not being able to obtain liquidity or not at the expected conditions if required. The refinancing risk is determined by the refinancing structure.

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 the risk-bearing capacity concept of the HSH Nordbank (see Risk Report section of the Annual Report of HSH Nordbank).

The strategies and processes as well as the structure and organisation of liquidity risk management system in line

with the qualitative requirements imposed by Section 322 No. 1 and 2 SolvV are described in the Risk Report section of the Annual Report of HSH Nordbank.

The qualitative requirements for liquidity risk as defined in Section 322 No. 3 SolvV (nature and scope of risk reports) are disclosed in the following section of this report.

### Liquidity Coverage Ratio

As a voluntary participant in an impact study conducted by the Basel Committee on Banking Supervision HSH Nordbank determines the liquidity coverage ratio on a quarterly basis. In January 2013 the Basel Committee published the changed rules for determining the minimum liquidity ratio. Based on this calculation methodology the liquidity coverage ratio was 194% as at the reporting date. The improvement in the ratio compared to the previous year is mainly attributable to the Bank's improved liquidity situation in the short- and medium-term maturity bands. The monthly calculation of the liquidity coverage ratio according to the Capital Requirements Regulation (CRR) will be performed by HSH Nordbank as from 31 March 2014. The maintenance of a liquidity coverage ratio of 60% is mandatory as from 2015.

### 9.1. REPORTS ON LIQUIDITY RISK

In general, liquidity risk reporting of HSH Nordbank is embedded in the reports on overall risk (see Section 4.3). Furthermore regular special reports on liquidity risk are compiled; these have been summarised in Table 48.

## Main reports on liquidity risk

| Report  | Recipient  | Interval | Content   | Objective  |
|---|--|----------|---|--|
| Monthly Group Liquidity Risk Report           | Management Board, Group Risk Committee, Divisions Capital Markets, Group Treasury, Group Risk Management, Internal Audit, Legal division and Finance | Monthly  | Executive summary:<br>Risk analysis incl. key risk figures regarding<br>1. Insolvency risk:<br>normal and stress case, stress scenarios, USD liquidity development report as well as USD stress scenarios, risk concentrations deposits<br>2. Liquidity maturity transformation risk:<br>normal and stress case<br>3. Risk assessment | Regular information to the Management Board, risk calculation / limit utilisation and management information |
| Daily Liquidity Report                        | Management Board, Divisions Capital Markets, Group Risk Management and Internal Audit  | Daily    | Insolvency risk normal case and stress case, analysis of changes in the composition of liquidity risk (changes in product groups/limit components/ changes in methods/ comparisons with previous weeks or months)   | Regular information to the Management Board, risk calculation / limit utilisation and management information |
| Monthly Group Report on Liquidity Risk in USD | Divisions Group Treasury and Group Risk Management   | Monthly  | Insolvency risk USD positions, liquidity gap analysis, analyses   | Regular management information, risk calculation and management information                                  |

Table 48: Main reports on liquidity risk

## 10. NOTES

### 10.1. CONSOLIDATION MATRIX

| Type of company / company   | Treatment under supervisory law |              |                  | Consolidation under IFRS            |      |           |
|---|---------------------------------|--------------|------------------|-------------------------------------|------|-----------|
|   | Consolidation                   | Proportional | Deduction method | Risk-weighted (equity holding/ SPV) | Full | At-equity |
| CI HSH Nordbank Securities S.A.   | X                               |              |                  |                                     | X    |           |
| FSI HSH N Financial Securities LLC  | X                               |              |                  |                                     | X    |           |
| FSI NOBIS Asset Management S.A.   |                                 | X            |                  |                                     |      |           |
| FE AGV Irish Equipment Leasing No. 1 unlimited                              | X                               |              |                  |                                     | X    |           |
| FE AGV Irish Equipment Leasing No. 7 Limited                                |                                 | 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 Asian Capital Investment Opportunities Limited                           | X                               |              |                  |                                     |      |           |
| FE Bach Holdings LLC  | X                               |              |                  |                                     |      |           |
| FE Belgravia Shipping Ltd.  |                                 |              |                  | X                                   |      | X         |
| FE BINNENALSTER-Beteiligungsgesellschaft 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                                 | X                               |              |                  |                                     |      |           |
| FE CAPCELLENCE Erste Fondsbeteiligung GmbH                                  | X                               |              |                  |                                     |      |           |
| FE Capcellence Private Equity Beteiligungen GmbH & Co. KG                   | X                               |              |                  |                                     | X    |           |
| FE Capcellence Vintage Year 05/06 Beteiligungen GmbH & Co. KG               | 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 Vintage Year 13 Beteiligungen GmbH & Co. KG                  | X                               |              |                  |                                     | X    |           |
| FE CAPCELLENCE Zweite Fondsbeteiligung GmbH                                 | X                               |              |                  |                                     |      |           |
| FE CHIOS GmbH   | X                               |              |                  |                                     | X    |           |
| FE DMS Beteiligungs GmbH  | X                               |              |                  |                                     | X    |           |
| FE European Capital Investment Opportunities Limited                        | X                               |              |                  |                                     |      |           |
| FE Feronia GmbH   | X                               |              |                  |                                     | X    |           |
| FE 4Wheels Management GmbH  | X                               |              |                  |                                     |      |           |
| FE GBVI Gesellschaft zur Beteiligungsverwaltung von Immobilien mbH & Co. KG | X                               |              |                  |                                     | X    |           |
| FE GODAN GmbH   | X                               |              |                  |                                     | X    |           |
| FE HSH Auffang- und Holdinggesellschaft mbH & Co. KG                        | X                               |              |                  |                                     | X    |           |
| FE HSH Corporate Finance GmbH   | X                               |              |                  |                                     | X    |           |



| Type of company / company   | Treatment under supervisory law |              |                  |                                     | Consolidation under IFRS |           |
|---|---------------------------------|--------------|------------------|-------------------------------------|--------------------------|-----------|
|   | Consolidation                   |              |                  |                                     | Full                     | At-equity |
|   | Full                            | Proportional | Deduction method | Risk-weighted (equity holding/ SPV) |                          |           |
| FE HSH Facility Management GmbH   | X                               |              |                  |                                     | X                        |           |
| FE HSH N Finance (Guernsey) Limited   | X                               |              |                  |                                     | X                        |           |
| FE HSH N Funding I  | X                               |              |                  |                                     | X                        |           |
| FE HSH N Funding II   | X                               |              |                  |                                     | X                        |           |
| FE HSH N Residual Value Ltd.  |                                 |              | X                |                                     | X                        |           |
| FE HSH Private Equity GmbH  | X                               |              |                  |                                     | 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 (Luxembourg) S.à.r.l.   | X                               |              |                  |                                     |                          |           |
| FE Neptune Ship Finance (Luxembourg) S.à.r.l. & Cie, S.e.c.s                          | X                               |              |                  |                                     | X                        |           |
| FE PLUTON Grundstücks-Verwaltungsgesellschaft mbH & Co. KG                            |                                 | X            |                  |                                     |                          |           |
| FE PRIME 2006-1 Funding Limited Partnership   |                                 |              | X                |                                     |                          | X         |
| FE Railpool Holding GmbH & Co. KG   |                                 | X            |                  |                                     |                          |           |
| FE Relacom Management AB  |                                 | X            |                  |                                     |                          | X         |
| FE RELAT Beteiligungs GmbH & Co Vermietungs-KG  | X                               |              |                  |                                     |                          |           |
| FE RESPARCS Funding Limited Partnership I   | 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 Teukros GmbH   | X                               |              |                  |                                     | X                        |           |
| FE Verwaltungsgesellschaft Gartenstadt Wismar mbH                                     | 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                        |           |
| ABSE SITUS NORDIC SERVICES ApS  |                                 | X            |                  |                                     |                          | X         |
| ABSE Unterstützungs-Gesellschaft 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 Aircraft Leasing No. Two Limited  |                                 |              |                  | X                                   |                          | X         |
| Oth Avia Management S.à.r.l   |                                 |              |                  | X                                   | X                        |           |
| Oth Anthracite Rated Investments (Jersey) Ltd.  |                                 |              |                  | X                                   | X                        |           |
| Oth CPM Luxembourg 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 HSH Care+Clean GmbH   |                                 |              |                  | X                                   | X                        |           |
| Oth HSH Gastro+Event GmbH   |                                 |              |                  | X                                   | X                        |           |

| Type of company / company                       | Treatment under supervisory law |              |                  |                                     | Consolidation under IFRS |           |
|---|---------------------------------|--------------|------------------|-------------------------------------|--------------------------|-----------|
|   | Consolidation                   |              |                  |                                     | Full                     | At-equity |
|   | Full                            | Proportional | Deduction method | Risk-weighted (equity holding/ SPV) |                          |           |
| Oth HSH Move+More GmbH                          |                                 |              |                  | X                                   | X                        |           |
| Oth ISM Agency, LLC                             |                                 |              |                  | X                                   | X                        |           |
| Oth Kontora Family Office GmbH                  |                                 |              |                  | X                                   | X                        |           |
| Oth K/S Angered                                 |                                 |              |                  | X                                   | X                        |           |
| Oth Life Insurance Fund Elite LLC               |                                 |              |                  | X                                   | X                        |           |
| Oth Life Insurance Fund Elite Trust             |                                 |              |                  | X                                   | X                        |           |
| Oth Next Generation Aircraft Finance 2 S.à.r.l. |                                 |              |                  | X                                   | X                        |           |
| Oth Next Generation Aircraft Finance 3 S.à.r.l. |                                 |              |                  | 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

## 10.2. ALTERNATIVE CALCULATIONS WITHOUT TAKING THE GUARANTEE FACILITY INTO ACCOUNT

|                               | Loans         |               | Loan commitments |              | Other non-derivative off-balance sheet assets |              | Securities    |               | Derivative instruments |              |
|-------------------------------|---------------|---------------|------------------|--------------|---|--------------|---------------|---------------|------------------------|--------------|
|                               | 2013          | 2012          | 2013             | 2012         | 2013  | 2012         | 2013          | 2012          | 2013                   | 2012         |
| <b>Exposure value (Total)</b> | <b>75,762</b> | <b>88,538</b> | <b>2,682</b>     | <b>2,894</b> | <b>1,280</b>                                  | <b>1,420</b> | <b>21,054</b> | <b>22,187</b> | <b>5,484</b>           | <b>8,011</b> |

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 |              |
|----------------------------|---------------|---------------|------------------|--------------|---|--------------|---------------|---------------|------------------------|--------------|
|                            | 2013          | 2012          | 2013             | 2012         | 2013  | 2012         | 2013          | 2012          | 2013                   | 2012         |
| Western Europe             | 61,917        | 74,298        | 2,591            | 2,628        | 1,159   | 926          | 17,301        | 17,753        | 4,334                  | 6,293        |
| North America              | 6,460         | 5,871         | 30               | 97           | 21  | 377          | 2,584         | 3,389         | 858                    | 1,236        |
| Asia Pacific Region        | 3,891         | 4,302         | 34               | 99           | 19  | 37           | 119           | 83            | 83                     | 154          |
| Latin America              | 352           | 402           | 0                | 1            | 4   | 7            | 49            | 69            | 11                     | 11           |
| Central and Eastern Europe | 2,004         | 2,318         | 17               | 52           | 30  | 23           | 43            | 73            | 93                     | 153          |
| Middle East                | 934           | 1,184         | 9                | 6            | 46  | 50           | -             | -             | 104                    | 165          |
| African countries          | 204           | 163           | -                | 11           | 1   | 1            | -             | -             | 0                      | -            |
| Int. Organisations         | -             | -             | -                | -            | -   | -            | 960           | 819           | -                      | -            |
| Other                      | -             | -             | -                | -            | -   | -            | -             | -             | -                      | -            |
| <b>Total</b>               | <b>75,762</b> | <b>88,538</b> | <b>2,682</b>     | <b>2,894</b> | <b>1,280</b>                                  | <b>1,420</b> | <b>21,054</b> | <b>22,187</b> | <b>5,484</b>           | <b>8,011</b> |

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 |              |
|------------------------------|---------------|---------------|------------------|--------------|---|--------------|---------------|---------------|------------------------|--------------|
|                              | 2013          | 2012          | 2013             | 2012         | 2013  | 2012         | 2013          | 2012          | 2013                   | 2012         |
| Credit institutions          | 2,059         | 3,003         | 89               | 80           | 89  | 377          | 7,606         | 9,252         | 1,686                  | 2,474        |
| Other financial institutions | 3,628         | 4,215         | 37               | 38           | 313   | 112          | 1,526         | 1,321         | 475                    | 563          |
| Public sector                | 11,448        | 14,024        | 96               | 127          | 81  | 88           | 9,355         | 8,061         | 199                    | 293          |
| Private households           | 2,363         | 2,515         | 70               | 38           | 73  | 50           | -             | -             | 25                     | 44           |
| Properties and flats         | 14,618        | 17,476        | 467              | 327          | 82  | 78           | 0             | 0             | 936                    | 1,324        |
| Shipping                     | 22,098        | 25,350        | 468              | 669          | 94  | 143          | 293           | 415           | 637                    | 1,174        |
| Industry                     | 8,331         | 9,012         | 667              | 695          | 291   | 282          | 22            | 24            | 435                    | 673          |
| Trade and transport          | 5,688         | 6,596         | 498              | 557          | 197   | 194          | 3             | 3             | 430                    | 592          |
| Other service activities     | 5,527         | 6,307         | 290              | 363          | 60  | 97           | 2,250         | 3,111         | 660                    | 873          |
| Other                        | 1             | 41            | -                | -            | -   | -            | -             | -             | -                      | -            |
| <b>Total</b>                 | <b>75,762</b> | <b>88,538</b> | <b>2,682</b>     | <b>2,894</b> | <b>1,280</b>                                  | <b>1,420</b> | <b>21,054</b> | <b>22,187</b> | <b>5,484</b>           | <b>8,011</b> |

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

|                       | Loans         |               | Loan commitments |              | Other non-derivative<br>off-balance sheet<br>assets |              | Securities    |               | Derivative<br>instruments |              |
|-----------------------|---------------|---------------|------------------|--------------|---|--------------|---------------|---------------|---------------------------|--------------|
|                       | 2013          | 2012          | 2013             | 2012         | 2013  | 2012         | 2013          | 2012          | 2013                      | 2012         |
| ≤ 1 day               | 8,739         | 10,508        | 91               | 57           | 3   | 3            | 227           | 209           | -                         | 1            |
| > 1 day ≤ 3 months    | 3,033         | 4,143         | 125              | 174          | 4   | 26           | 666           | 1,433         | 52                        | 52           |
| > 3 months ≤ 6 months | 1,205         | 1,744         | 35               | 132          | 1   | 11           | 1,448         | 1,647         | 28                        | 23           |
| > 6 months ≤ 1 year   | 3,947         | 4,263         | 235              | 423          | 61  | 21           | 1,604         | 1,483         | 81                        | 112          |
| > 1 year ≤ 5 years    | 25,701        | 30,018        | 1,138            | 1,231        | 490   | 561          | 8,595         | 10,791        | 1,443                     | 1,720        |
| > 5 years             | 33,137        | 37,862        | 1,058            | 877          | 721   | 799          | 8,514         | 6,624         | 3,879                     | 6,103        |
| <b>Total</b>          | <b>75,762</b> | <b>88,538</b> | <b>2,682</b>     | <b>2,894</b> | <b>1,280</b>  | <b>1,420</b> | <b>21,054</b> | <b>22,187</b> | <b>5,484</b>              | <b>8,011</b> |

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

| Risk weighting in % | CRSA before<br>credit risk mitigation |              | CRSA after<br>credit risk mitigation |              | Advanced IRBA<br>approach |            |
|---------------------|---------------------------------------|--------------|--------------------------------------|--------------|---------------------------|------------|
|                     | 2013                                  | 2012         | 2013                                 | 2012         | 2013                      | 2012       |
| 0                   |                                       | 273          | 257                                  | 380          | 370                       | -          |
| 10                  |                                       | -            | 135                                  | -            | 135                       | -          |
| 20                  |                                       | 455          | 129                                  | 658          | 391                       | -          |
| 35                  |                                       | -            | -                                    | 303          | 427                       | -          |
| 50                  |                                       | -            | 0                                    | 43           | 62                        | -          |
| 70                  |                                       | -            | -                                    | 2            | 5                         | -          |
| 75                  |                                       | 348          | 515                                  | 109          | 180                       | -          |
| 90                  |                                       | -            | -                                    | -            | -                         | -          |
| 100                 |                                       | 3,608        | 4,995                                | 2,798        | 4,016                     | -          |
| 115                 |                                       | -            | -                                    | -            | -                         | -          |
| 150                 |                                       | 358          | 795                                  | 212          | 533                       | -          |
| 190                 |                                       | -            | -                                    | -            | -                         | -          |
| 200                 |                                       | -            | -                                    | -            | -                         | -          |
| 250                 |                                       | -            | -                                    | -            | -                         | -          |
| 290                 |                                       | -            | -                                    | -            | -                         | 1          |
| 350                 |                                       | -            | -                                    | -            | -                         | -          |
| 370                 |                                       | -            | -                                    | -            | -                         | 56         |
| 1.250               |                                       | 0            | 0                                    | 0            | 0                         | -          |
| Capital deduction   |                                       | 3            | 10                                   | 3            | 10                        | -          |
| Other risk weights  |                                       | 183          | 205                                  | 183          | 205                       | -          |
| <b>Total</b>        |                                       | <b>5,228</b> | <b>7,042</b>                         | <b>4,689</b> | <b>6,334</b>              | <b>57</b>  |
|                     |                                       |              |                                      |              |                           | <b>195</b> |

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 |               |
|---|--------------|------------|--------------|-------------|--------------|--------------|----------------|---------------|
|   | 2013         | 2012       | 2013         | 2012        | 2013         | 2012         | 2013           | 2012          |
| <b>Rating range 1: 1(AAAA) – 1(AA+)</b> |              |            |              |             |              |              |                |               |
| Central governments                     | 0.0          | 0.0        | 26.4         | 31.0        | 0.7          | 0.2          | 17,617         | 18,151        |
| Institutions                            | -            | -          | -            | -           | -            | -            | -              | -             |
| Corporates                              | -            | -          | -            | -           | -            | -            | -              | -             |
| Equity holding exposures <sup>1</sup>   | -            | -          | -            | -           | -            | -            | -              | -             |
| <b>Subtotal</b>                         | <b>0.0</b>   | <b>0.0</b> | <b>26.4</b>  | <b>31.0</b> | <b>0.7</b>   | <b>0.2</b>   | <b>17,617</b>  | <b>18,151</b> |
| <b>Rating range 2: 1(AA) – 1(A-)</b>    |              |            |              |             |              |              |                |               |
| Central governments                     | 0.0          | 0.0        | 26.5         | 26.8        | 15.5         | 16.4         | 1,701          | 1,763         |
| Institutions                            | 0.0          | 0.0        | 19.1         | 19.6        | 9.4          | 10.0         | 8,464          | 11,449        |
| Corporates                              | 0.1          | 0.1        | 27.1         | 28.9        | 14.6         | 16.6         | 8,608          | 9,945         |
| Equity holding exposures <sup>1</sup>   | -            | -          | -            | -           | -            | -            | -              | -             |
| <b>Subtotal</b>                         | <b>0.1</b>   | <b>0.1</b> | <b>23.5</b>  | <b>24.2</b> | <b>12.3</b>  | <b>13.3</b>  | <b>18,773</b>  | <b>23,157</b> |
| <b>Rating range 3: 2 – 5</b>            |              |            |              |             |              |              |                |               |
| Central governments                     | 0.2          | 0.1        | 35.3         | 35.1        | 40.5         | 42.2         | 736            | 823           |
| Institutions                            | 0.2          | 0.2        | 23.0         | 16.0        | 23.5         | 15.6         | 2,244          | 2,150         |
| Corporates                              | 0.2          | 0.2        | 29.1         | 31.5        | 34.5         | 38.9         | 16,511         | 19,291        |
| Equity holding exposures <sup>1</sup>   | -            | 0.4        | -            | 90.0        | -            | 191.9        | -              | 2             |
| <b>Subtotal</b>                         | <b>0.2</b>   | <b>0.2</b> | <b>28.6</b>  | <b>30.1</b> | <b>33.5</b>  | <b>36.8</b>  | <b>19,491</b>  | <b>22,266</b> |
| <b>Rating range 4: 6 - 9</b>            |              |            |              |             |              |              |                |               |
| Central governments                     | 0.8          | 0.8        | 50.3         | 53.4        | 131.0        | 135.6        | 283            | 299           |
| Institutions                            | 1.3          | 1.1        | 14.1         | 12.3        | 31.2         | 27.6         | 351            | 582           |
| Corporates                              | 1.1          | 1.2        | 28.3         | 30.5        | 61.4         | 69.4         | 15,615         | 18,580        |
| Equity holding exposures <sup>1</sup>   | 1.7          | 1.9        | 90.0         | 90.0        | 299.5        | 308.7        | 111            | 105           |
| <b>Subtotal</b>                         | <b>1.1</b>   | <b>1.2</b> | <b>28.8</b>  | <b>30.6</b> | <b>63.6</b>  | <b>70.5</b>  | <b>16,360</b>  | <b>19,565</b> |
| <b>Rating range 5: 10 - 12</b>          |              |            |              |             |              |              |                |               |
| Central governments                     | 3.0          | 3.0        | 30.4         | 36.4        | 107.3        | 133.9        | 104            | 157           |
| Institutions                            | 4.1          | 4.0        | 49.6         | 32.7        | 148.3        | 100.8        | 4              | 11            |
| Corporates                              | 4.6          | 4.6        | 30.5         | 30.4        | 101.6        | 103.0        | 4,088          | 6,191         |
| Equity holding exposures <sup>1</sup>   | 4.4          | 4.4        | 90.0         | 90.0        | 369.5        | 369.5        | 20             | 3             |
| <b>Subtotal</b>                         | <b>4.5</b>   | <b>4.6</b> | <b>30.8</b>  | <b>30.6</b> | <b>103.1</b> | <b>103.9</b> | <b>4,216</b>   | <b>6,361</b>  |

(Continuation)

| IRBA exposure class                      | Avg. PD in % |              | Avg.LGD in % |             | Avg. RW in % |              | Exposure value |               |
|--|--------------|--------------|--------------|-------------|--------------|--------------|----------------|---------------|
|  | 2013         | 2012         | 2013         | 2012        | 2013         | 2012         | 2013           | 2012          |
| <b>Rating range 6: 13 – 15</b>           |              |              |              |             |              |              |                |               |
| Central governments                      | 10.8         | 13.2         | 51.6         | 62.9        | 274.0        | 341.4        | 54             | 9             |
| Institutions                             | 20.0         | 20.0         | 30.5         | 20.0        | 166.3        | 124.2        | 6              | 1             |
| Corporates                               | 14.5         | 15.0         | 34.1         | 38.0        | 170.2        | 190.8        | 6,226          | 8,164         |
| Equity holding exposures <sup>1</sup>    | -            | 13.4         | -            | 90.0        | -            | 486.6        | -              | 30            |
| <b>Subtotal</b>                          | <b>14.5</b>  | <b>15.0</b>  | <b>34.2</b>  | <b>38.2</b> | <b>171.1</b> | <b>192.0</b> | <b>6,286</b>   | <b>8,204</b>  |
| <b>Rating range 7 (Default): 16 – 18</b> |              |              |              |             |              |              |                |               |
| Central governments                      | 100.0        | 100.0        | 77.0         | 77.0        | 87.5         | 87.5         | 6              | 7             |
| Institutions                             | 100.0        | 100.0        | 58.1         | 70.0        | 66.0         | 79.6         | 121            | 130           |
| Corporates                               | 100.0        | 100.0        | 39.5         | 40.5        | 44.9         | 46.0         | 18,444         | 18,577        |
| Equity holding exposures <sup>1</sup>    | 100.0        | 100.0        | 90.0         | 89.2        | 102.3        | 101.4        | 67             | 64            |
| <b>Subtotal</b>                          | <b>100.0</b> | <b>100.0</b> | <b>39.8</b>  | <b>40.8</b> | <b>45.2</b>  | <b>46.4</b>  | <b>18,638</b>  | <b>18,778</b> |
| <b>Total (without default)</b>           |              |              |              |             |              |              |                |               |
| Central governments                      | 0.1          | 0.0          | 27.1         | 31.2        | 6.4          | 6.2          | 20,495         | 21,202        |
| Institutions                             | 0.1          | 0.1          | 19.8         | 18.8        | 13.1         | 11.6         | 11,069         | 14,192        |
| Corporates                               | 2.6          | 2.9          | 29.2         | 31.5        | 61.3         | 70.8         | 51,048         | 62,170        |
| Equity holding exposures <sup>1</sup>    | 2.2          | 4.4          | 90.0         | 90.0        | 310.2        | 346.6        | 132            | 140           |
| <b>Total</b>                             | <b>1.6</b>   | <b>1.9</b>   | <b>27.5</b>  | <b>29.7</b> | <b>41.7</b>  | <b>48.6</b>  | <b>82,743</b>  | <b>97,703</b> |

<sup>1</sup> 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 exposure class  | Central governments |      | Institutions |      | Corporates |       | Equity holding exposure <sup>1</sup> |      | Total |       |
|--|---------------------|------|--------------|------|------------|-------|--------------------------------------|------|-------|-------|
|  | 2013                | 2012 | 2013         | 2012 | 2013       | 2012  | 2013                                 | 2012 | 2013  | 2012  |
| <b>Rating range 1: 1(AAAA) – 1(AA+)</b>                    |                     |      |              |      |            |       |                                      |      |       |       |
| Basis for evaluation of loan commitments                   | 1                   | 1    | -            | -    | -          | -     | -                                    | -    | 1     | 1     |
| Basis for evaluation of non-derivative assets not reported | 44                  | 45   | -            | -    | -          | -     | -                                    | -    | 44    | 45    |
| Avg. Exposure value of loan commitments                    | 0                   | 0    | -            | -    | -          | -     | -                                    | -    | 0     | 0     |
| Avg. Exposure value of non-derivative assets not reported  | 22                  | 22   | -            | -    | -          | -     | -                                    | -    | 22    | 22    |
| <b>Rating range 2: 1(AA) – 1(A-)</b>                       |                     |      |              |      |            |       |                                      |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 290          | 354  | 872        | 823   | -                                    | -    | 1,162 | 1,177 |
| Basis for evaluation of non-derivative assets not reported | -                   | -    | 73           | 72   | 106        | 457   | -                                    | -    | 179   | 529   |
| Avg. Exposure value of loan commitments                    | -                   | -    | 7            | 3    | 16         | 18    | -                                    | -    | 14    | 13    |
| Avg. Exposure value of non-derivative assets not reported  | -                   | -    | 4            | 5    | 3          | 198   | -                                    | -    | 3     | 172   |
| <b>Rating range 3: 2 - 5</b>                               |                     |      |              |      |            |       |                                      |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 52           | 0    | 3,427      | 3,172 | -                                    | -    | 3,480 | 3,172 |
| Basis for evaluation of non-derivative assets not reported | -                   | -    | 395          | 52   | 629        | 530   | -                                    | -    | 1,024 | 582   |
| Avg. Exposure value of loan commitments                    | -                   | -    | 21           | 0    | 10         | 12    | -                                    | -    | 10    | 12    |
| Avg. Exposure value of non-derivative assets not reported  | -                   | -    | 235          | 48   | 7          | 10    | -                                    | -    | 95    | 14    |
| <b>Rating range 4: 6 - 9</b>                               |                     |      |              |      |            |       |                                      |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 26           | 75   | 3,478      | 2,684 | -                                    | -    | 3,504 | 2,759 |
| Basis for evaluation of non-derivative assets not reported | 0                   | 0    | 58           | 4    | 791        | 777   | -                                    | -    | 849   | 781   |
| Avg. Exposure value of loan commitments                    | -                   | -    | 7            | 45   | 12         | 12    | -                                    | -    | 12    | 13    |
| Avg. Exposure value of non-derivative assets not reported  | 0                   | 0    | 3            | 1    | 5          | 5     | -                                    | -    | 5     | 5     |
| <b>Rating range 5: 10 – 12</b>                             |                     |      |              |      |            |       |                                      |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | -            | 3    | 183        | 275   | -                                    | -    | 183   | 278   |
| Basis for evaluation of non-derivative assets not reported | -                   | -    | -            | -    | 186        | 244   | -                                    | -    | 186   | 244   |
| Avg. Exposure value of loan commitments                    | -                   | -    | -            | 0    | 3          | 4     | -                                    | -    | 3     | 4     |
| Avg. Exposure value of non-derivative assets not reported  | -                   | -    | -            | -    | 2          | 2     | -                                    | -    | 2     | 2     |
| <b>Rating range 6: 13 – 15</b>                             |                     |      |              |      |            |       |                                      |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 5            | -    | 151        | 147   | -                                    | -    | 156   | 147   |
| Basis for evaluation of non-derivative assets not reported | 4                   | 6    | 6            | 1    | 63         | 140   | -                                    | -    | 74    | 147   |
| Avg. Exposure value of loan commitments                    | -                   | -    | 5            | -    | 3          | 2     | -                                    | -    | 3     | 2     |
| Avg. Exposure value of non-derivative assets not reported  | 3                   | 4    | 1            | 1    | 2          | 6     | -                                    | -    | 2     | 6     |

(Continuation)

| IRBA exposure class  | Central governments |      | Institutions |      | Corporates |       | Equity holding exposure <sup>1</sup> |      | Total |       |
|--|---------------------|------|--------------|------|------------|-------|--------------------------------------|------|-------|-------|
|  | 2013                | 2011 | 2013         | 2012 | 2013       | 2012  | 2013                                 | 2012 | 2013  | 2012  |
| <b>Rating range 7 (Default): 16 – 18</b>                   |                     |      |              |      |            |       |                                      |      |       |       |
| Basis for evaluation of loan commitments                   | -                   | -    | 1            | 1    | 406        | 538   | -                                    | -    | 407   | 539   |
| Basis for evaluation of non-derivative assets not reported | -                   | -    | -            | -    | 163        | 252   | -                                    | -    | 163   | 252   |
| Avg. Exposure value of loan commitments                    | -                   | -    | 0            | 0    | 16         | 24    | -                                    | -    | 16    | 24    |
| Avg. Exposure value of non-derivative assets not reported  | -                   | -    | -            | -    | 9          | 17    | -                                    | -    | 9     | 17    |
| <b>Total</b>   |                     |      |              |      |            |       |                                      |      |       |       |
| Basis for evaluation of loan commitments                   | 1                   | 1    | 374          | 433  | 8,518      | 7,639 | -                                    | -    | 8,893 | 8,073 |
| Basis for evaluation of non-derivative assets not reported | 48                  | 51   | 532          | 129  | 1,939      | 2,400 | -                                    | -    | 2,519 | 2,580 |
| Avg. Exposure value of loan commitments                    | 0                   | 0    | 9            | 10   | 12         | 13    | -                                    | -    | 11    | 13    |
| Avg. Exposure value of non-derivative assets not reported  | 20                  | 20   | 175          | 22   | 5          | 44    | -                                    | -    | 41    | 42    |

<sup>1</sup> 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                        | 2013   | 2012                                    | Difference  |
|---------------------------------------|--|---|-------------|
|                                       | Expected loss (EL)<br>01.01.2013 to 31.12.2013 | Actual loss<br>01.01.2012 to 31.12.2012 |             |
| Central governments                   | -  | 1                                       | -1          |
| Institutions                          | -  | 48                                      | -48         |
| Corporates                            | 609  | 242                                     | +367        |
| Equity holding exposures <sup>1</sup> | -  | -                                       | -           |
| <b>Total</b>                          | <b>609</b>                                     | <b>291</b>                              | <b>+318</b> |

<sup>1</sup> 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                        | 2013                                   |   | 2012                                   |   |
|---------------------------------------|--|---|--|---|
|                                       | Expected loss (EL)<br>as at 31.12.2013 | Actual loss<br>01.01.2013 to 31.12.2013 | Expected loss (EL)<br>as at 31.12.2012 | Actual loss<br>01.01.2012 to 31.12.2012 |
| Central governments                   | 4                                      | -                                       | 2                                      | 1                                       |
| Institutions                          | 1                                      | -                                       | 1                                      | 48                                      |
| Corporates                            | 408                                    | 609                                     | 583                                    | 242                                     |
| Equity holding exposures <sup>1</sup> | 1                                      | -                                       | 4                                      | -                                       |
| <b>Total</b>                          | <b>414</b>                             | <b>609</b>                              | <b>589</b>                             | <b>291</b>                              |

| Exposure class                        | 2011                                   |   | 2010                                   |   |
|---------------------------------------|--|---|--|---|
|                                       | Expected loss (EL)<br>as at 31.12.2011 | Actual loss<br>01.01.2011 to 31.12.2011 | Expected loss (EL)<br>as at 31.12.2010 | Actual loss<br>01.01.2010 to 31.12.2010 |
| Central governments                   | 1                                      | -                                       | 0                                      | 0                                       |
| Institutions                          | 1                                      | 3                                       | 2                                      | 72                                      |
| Corporates                            | 585                                    | 434                                     | 138                                    | 228                                     |
| Equity holding exposures <sup>1</sup> | 1                                      | 10                                      | 2                                      | -                                       |
| <b>Total</b>                          | <b>589</b>                             | <b>447</b>                              | <b>142</b>                             | <b>300</b>                              |

<sup>1</sup> 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 |           |
|--------------------------------------|----------------------|------------|-------------------------------|------------|--------------------------|------------|----------------|-----------|
|                                      | 2013                 | 2012       | 2013                          | 2012       | 2013                     | 2012       | 2013           | 2012      |
| Central governments                  | -                    | -          | -                             | -          | -                        | -          | -              | -         |
| Regional governments                 | -                    | -          | -                             | -          | -                        | -          | -              | -         |
| Other public sector entities         | -                    | -          | -                             | -          | 3                        | 3          | -              | -         |
| Multilateral development banks       | -                    | -          | -                             | -          | -                        | -          | -              | -         |
| International organisations          | -                    | -          | -                             | -          | -                        | -          | -              | -         |
| Banks                                | -                    | -          | -                             | -          | -                        | -          | -              | -         |
| Collateralised Notes issued by banks | -                    | -          | -                             | -          | -                        | -          | -              | -         |
| Corporates                           | 493                  | 639        | -                             | -          | 303                      | 360        | 9              | 20        |
| Retail banking                       | 45                   | 41         | -                             | -          | 1                        | 1          | 6              | 10        |
| Items collateralised by real estate  | -                    | -          | 332                           | 469        | -                        | -          | -              | -         |
| Investment certificates              | -                    | -          | -                             | -          | -                        | -          | -              | -         |
| Equity holdings                      | -                    | -          | -                             | -          | -                        | -          | -              | -         |
| Other items                          | -                    | -          | -                             | -          | -                        | -          | -              | -         |
| Overdue items                        | 0                    | 28         | 150                           | 256        | -                        | 1          | 1              | 1         |
| <b>Total</b>                         | <b>539</b>           | <b>708</b> | <b>483</b>                    | <b>725</b> | <b>307</b>               | <b>365</b> | <b>16</b>      | <b>31</b> |

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 |           |
|-----------------------------------|----------------------|--------------|-------------------------------|---------------|--------------------------|--------------|----------------|-----------|
|                                   | 2013                 | 2012         | 2013                          | 2012          | 2013                     | 2012         | 2013           | 2012      |
| Central governments               | -                    | -            | -                             | -             | -                        | -            | -              | -         |
| Banks                             | 1,379                | 2,025        | 23                            | 176           | 778                      | 1,280        | -              | -         |
| Retail banking                    | -                    | -            | -                             | -             | -                        | -            | -              | -         |
| Equity holdings                   | -                    | -            | 7                             | -             | -                        | -            | -              | -         |
| Corporates                        | 1,761                | 2,504        | 27,086                        | 30,392        | 1,108                    | 1,312        | 36             | 32        |
| Other assets not related to loans | -                    | -            | -                             | -             | -                        | -            | -              | -         |
| <b>Total</b>                      | <b>3,139</b>         | <b>4,529</b> | <b>27,115</b>                 | <b>30,596</b> | <b>1,885</b>             | <b>2,591</b> | <b>36</b>      | <b>32</b> |

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

| Securitisation portfolio           | Exposure value |           |            |           |
|------------------------------------|----------------|-----------|------------|-----------|
|                                    | Originators    |           | Sponsors   |           |
|                                    | 2013           | 2012      | 2013       | 2012      |
| <b>Traditional securitisations</b> |                |           |            |           |
| Real estate                        | -              | -         | -          | -         |
| Ships                              | -              | -         | -          | -         |
| Retail banking                     | 17             | 30        | 183        | 26        |
| ABS                                | 9              | 13        | -          | -         |
| Other                              | 1              | 13        | -          | -         |
| <b>Subtotal</b>                    | <b>27</b>      | <b>56</b> | <b>183</b> | <b>26</b> |
| <b>Synthetic securitisations</b>   |                |           |            |           |
| Real estate                        | -              | -         | -          | -         |
| Ships                              | -              | -         | -          | -         |
| Retail banking                     | -              | -         | -          | -         |
| ABS                                | -              | -         | -          | -         |
| Other                              | -              | -         | -          | -         |
| <b>Subtotal</b>                    | <b>-</b>       | <b>-</b>  | <b>-</b>   | <b>-</b>  |
| <b>Total</b>                       | <b>27</b>      | <b>56</b> | <b>183</b> | <b>26</b> |

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 |              |
|-------------------------------------|---------------------|--------------|---------------------|--------------|
|                                     | 2013                | 2012         | 2013                | 2012         |
| <b>Balance-sheet items</b>          |                     |              |                     |              |
| Credit enhancements <sup>1</sup>    | -                   | -            | -                   | -            |
| Equity holdings in ABS transactions | 1,810               | 2,144        | 2,267               | 3,076        |
| Other balance-sheet items           | 184                 | 40           | 47                  | 142          |
| <b>Subtotal</b>                     | <b>1,994</b>        | <b>2,184</b> | <b>2,314</b>        | <b>3,219</b> |
| <b>Off-balance sheet items</b>      |                     |              |                     |              |
| Liquidity facilities                | -                   | 1            | -                   | 0            |
| Derivatives                         | -                   | -            | -                   | -            |
| Other off-balance sheet items       | -                   | -            | -                   | -            |
| <b>Subtotal</b>                     | <b>-</b>            | <b>1</b>     | <b>-</b>            | <b>0</b>     |
| <b>Total</b>                        | <b>1,994</b>        | <b>2,184</b> | <b>2,314</b>        | <b>3,219</b> |

<sup>1</sup> 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-<br>sation                    | Re-securiti-<br>sation | Total        |              | Securiti-<br>sation | Re-securiti-<br>sation | Total      |            |
|                            | 2013                                   | 2013                   | 2013         | 2012         | 2013                | 2013                   | 2013       | 2012       |
| <b>CRSA</b>                |  |                        |              |              |                     |                        |            |            |
| 0 ≤ 10                     | -                                      | -                      | -            | -            | -                   | -                      | -          | -          |
| > 10 ≤ 20                  | 1,197                                  | -                      | 1,197        | 1,369        | 19                  | -                      | 19         | 22         |
| > 20 ≤ 50                  | 210                                    | -                      | 210          | 130          | 4                   | -                      | 4          | 5          |
| > 50 ≤ 100                 | 83                                     | 10                     | 93           | 101          | 5                   | 1                      | 6          | 8          |
| > 100 ≤ 350                | 83                                     | 6                      | 90           | 42           | 20                  | 1                      | 21         | 11         |
| > 350 ≤ 650                | -                                      | 12                     | 12           | 33           | -                   | 6                      | 6          | 18         |
| > 650 < 1,250              | 48                                     | -                      | 48           | -            | 14                  | -                      | 14         | 12         |
| 1,250 or capital deduction | 335                                    | 8                      | 344          | 509          | 7                   | -                      | 7          | 3          |
| <b>Total CRSA</b>          | <b>1,956</b>                           | <b>37</b>              | <b>1,994</b> | <b>2,184</b> | <b>69</b>           | <b>8</b>               | <b>78</b>  | <b>66</b>  |
| <b>IRBA</b>                |  |                        |              |              |                     |                        |            |            |
| 0 ≤ 10                     | 712                                    | -                      | 712          | 1,375        | 5                   | -                      | 5          | 10         |
| > 10 ≤ 20                  | 361                                    | 182                    | 543          | 631          | 3                   | 3                      | 6          | 9          |
| > 20 ≤ 50                  | 265                                    | 317                    | 583          | 878          | 5                   | 7                      | 12         | 21         |
| > 50 ≤ 100                 | 109                                    | 28                     | 136          | 144          | 6                   | 2                      | 8          | 6          |
| > 100 ≤ 350                | 142                                    | 1                      | 143          | 11           | 22                  | 0                      | 22         | 3          |
| > 350 ≤ 650                | 47                                     | -                      | 47           | 86           | 18                  | -                      | 18         | 29         |
| > 650 < 1,250 <sup>1</sup> | 48                                     | -                      | 48           | -            | 17                  | -                      | 17         | -          |
| 1,250 or capital deduction | 87                                     | 15                     | 102          | 92           | 6                   | -                      | 6          | 9          |
| <b>Total IRBA</b>          | <b>1,771</b>                           | <b>543</b>             | <b>2,314</b> | <b>3,219</b> | <b>82</b>           | <b>13</b>              | <b>95</b>  | <b>87</b>  |
| <b>Total</b>               | <b>3,728</b>                           | <b>580</b>             | <b>4,308</b> | <b>5,403</b> | <b>151</b>          | <b>21</b>              | <b>172</b> | <b>152</b> |

<sup>1</sup> 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 <sup>1</sup> |            |
|--------------------------|-----------------------------|------------|
|                          | 2013                        | 2012       |
| Real estate              | 360                         | 492        |
| Ships                    | -                           | -          |
| Retail banking           | -                           | -          |
| ABS                      | 33                          | 61         |
| Other                    | 53                          | 50         |
| <b>Total</b>             | <b>446</b>                  | <b>602</b> |

<sup>1</sup> 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 (alternative calculation without taking the guarantee facility into account)

| Securitisation portfolio | Total non-performing or in-arrears <sup>1</sup> |           | Actual losses            |                          |
|--------------------------|---|-----------|--------------------------|--------------------------|
|                          | 2013  | 2012      | 01.01.2013 to 31.12.2013 | 01.01.2012 to 31.12.2012 |
| Real estate              | -   | -         | -                        | -                        |
| Ships                    | -   | -         | -                        | -                        |
| Retail banking           | -   | -         | -                        | -                        |
| ABS                      | -   | -         | -                        | -                        |
| Other                    | 13  | 15        | -                        | -                        |
| <b>Total</b>             | <b>13</b>                                       | <b>15</b> | <b>-</b>                 | <b>-</b>                 |

<sup>1</sup> 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   |
| CRR      | Capital Requirements Regulation  |
| 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)                                |
| MaSan     | Mindestanforderungen an die Ausgestaltung von Sanierungsplänen (Minimum Requirements for the Design of Recovery Plans) |
| 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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