Enhanced Disclosure Task Force

Appendix to Progress Report: Examples of Leading Disclosure Practices

July 2013

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Index of disclosure examples by recommendation and source

Notes:

- **Risk disclosures are complex and presentation differs across institutions**. Examples shown are meant to highlight good practice and are neither unique nor comprehensive examples of each recommendation (e.g., the disclosures related to some EDTF recommendations span multiple pages; the examples shown extract only key elements of such disclosures)
- **Examples shown are not exclusive**. The EDTF has highlighted only a subset of the good disclosures available

Section 1
General recommendations

Recommendation 1: Present all risk information together or provide an index to aid in navigation

THEME	DETAIL	ANNUAL REPORT	AUDIT REPORT & ANNUAL ACCOUNTS	IPR
Introduction	Main current and emerging risks	Page 164		
Management principles and corporate governance	Corporate principles of risk management, control and appetite	Page 166	Note 54 (54.1, 54.2, 54.3) and other notes and related information	Section 6
	Corporate governance of the risk function	Page 172		
	Integral control and internal validation of risk	Page 174		
Credit risk	Introduction to the treatment of credit risk	Page 176	Note 54.4 and other notes and related information	Sections 8 & 9
	Main magnitudes and evolution (risk map, evolution, conciliation, geographic distribution, management metrics)	Page 176		
	Detail by countries with the largest concentration: UK, Spain, Brazil	Page 185		
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	Credit risk cycle (pre-sale, sale and after-sale)	Page 199		
	Study of risk and credit rating process, planning and setting limits (analysis of scenarios)	Page 200		
	Decisions on operations (credit risk mitigation techniques)	Page 202		
	Monitoring, measurement and control	Page 204		
Market risk	Activities subject to market risk (market risk factors)	Page 206	Note 54.5 and other notes and related information	Section 10
	Market risks in 2012	Page 208		
	Trading activity (VaR, stress testing, backtesting, etc)	Page 208		
	Structural market risk	Page 216		
	Methodologies	Page 220		
	Management framework (organisational and governance structure, policy of limits)	Page 223		
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Liquidity risk and funding	Introduction and general focus	Page 226	Note 54.6 and other notes and related information	Section 12
	Liquidity management framework. Monitoring and control of liquidity risk (organisational and governance model, analysis of the balance sheet and liquidity risk management, management adapted to business needs)	Page 227		
	Funding strategy and 2012 liquidity evolution	Page 230		
	2013 financing perspectives	Page 236		
Operational risk	Definition and objectives. Corporate governance and organisational model	Page 237	Note 54.7 and other notes and related information	Section 13
	Risk management model. Measurement model and risk assessment	Page 238		
	Evolution of the main metrics. Mitigation measures	Page 240		
	Other aspects of control and monitoring of operational risk	Page 243		
Compliance and reputational risk	Definition and objectives	Page 244	Note 54.8 and other notes and related information	Section 14
	Corporate governance and organisational model	Page 244		
	Risk management model (prevention of money laundering and financing of terrorism, marketing of products and services, compliance with rules)	Page 245		
Capital	Adjustment to the new regulatory framework	Page 250	Notes 54.9 and other notes and related information	Sections 1,3,4 & 5
	Economic capital: analysis of the global risk profile	Page 251		
	RORAC and value creation	Page 253		

Source: Santander Annual Report 2012, p. 165

Risk Overview		Annual Report		Pillar 3 Report
		Risk review	Risk management	
These pages provide a comprehensive overview of Barclays risk factors and approach to risk management.	Risk factors	108-115		
	Barclays risk management strategy		314-320	
	Our risk culture		314	
	Assigning responsibilities		316	
	Principal risks policy		317	
	Risk management in the setting of strategy		317-320	
	Modelling of risk			86-93

Credit Risk		Annual Report		Pillar 3 Report
		Risk review	Risk management	
Credit risk is the risk of suffering financial loss should the Group's customers, clients or market counterparties fail to fulfil their contractual obligations.	Credit risk overview and risk factors	108-110		
	Analysis of Maximum exposure and collateral and other credit enhancement held	116-117	329-330	
	Balance sheet concentrations of Credit risk	118-121	330-331	24-26
	Balance sheet credit quality	122-123	330-331	29-38, 110-116
	Analysis of loans and advances and impairment	124-128	323-325	38-41
	Retail credit risk	129-135	322-327	
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	Barclays Credit Market Exposures	142		
	Exposures to Eurozone countries	143-154		
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	Capital Requirements for Credit Risk			19-20, 23
	Counterparty Credit Risk exposure and RWAs			46-50
	RWAs and Credit Risk exposure by business and Basel asset class			21-23

Market Risk		Annual Report		Pillar 3 Report
		Risk review	Risk management	
Market risk is the risk of the Group suffering financial loss due to the Group being unable to hedge its balance sheet at prevailing market levels.	Market risk overview and risk factors	111	332-333	
	Analysis of traded market risk exposures	155-156	333-336	52-54
	Analysis of non-traded market risk exposures	156-159	336	55
	Foreign exchange risk	160		
	Other market risks	161		102
	Analysis of securitisations			57-63, 103-106
	Capital Requirements for market risk			52

Funding Risk – Capital		Annual Report		Pillar 3 Report
		Risk review	Risk management	
Capital risk is the risk that the Group is unable to maintain appropriate capital ratios.	Funding risk – Capital overview and risk factors	111-112	340-341	
	Capital Composition	163		15-17
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	Risk Weighted Assets by risk type and business	165		8, 23, 47, 52, 65
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	Adjusted Gross Leverage	168-169		
	Implementation of Basel 3 – Leverage Impacts	169-170		74
	Economic capital	171		

Funding Risk – Liquidity		Annual Report		Pillar 3 Report
		Risk review	Risk management	
Liquidity risk is the risk that the Group is unable to meet its obligations as they fall due as a result of a sudden, and potentially protracted, increase in net cash outflows.	Funding risk – Liquidity overview and risk factors	111-112	337-339	
	Liquidity risk stress testing	172-174		
	Liquidity pool	175-176		
	Funding structure	176-179		
	Encumbrance	180-182		
	Credit Ratings	182-183		
	Liquidity Management at Absa Group	183		
	Contractual maturity of financial assets and liabilities	183-186		

Source: Barclays Annual Report 2012, p. 107

Recommendation 2: Define the bank's risk terminology and present key parameter values used

Risks	Arising from	Measurement, monitoring and management of risk
Credit risk		
The risk of financial loss if a customer or counterparty fails to meet an obligation under a contract.	Credit risk arises principally from direct lending, trade finance and leasing business, but also from certain other products such as guarantees and derivatives.	Credit risk: • is measured as the amount which could be lost if a customer or counterparty fails to make repayments. In the case of derivatives, the measurement of exposure takes into account the current mark to market value to HSBC of the contract and the expected potential change in that value over time caused by movements in market rates; • is monitored within limits, approved by individuals within a framework of delegated authorities. These limits represent the peak exposure or loss to which HSBC could be subjected should the customer or counterparty fail to perform its contractual obligations; and • is managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance for risk managers.
Liquidity and funding risk		
The risk that we do not have sufficient financial resources to meet our obligations as they fall due or that we can only do so at excessive cost.	Liquidity risk arises from mismatches in the timing of cash flows. Funding risk arises when the liquidity needed to fund illiquid asset positions cannot be obtained at the expected terms and when required.	Liquidity and funding risk: • is measured using internal metrics including stressed operational cash flow projections, coverage ratio and advances to core funding ratios; • is monitored against the Group's liquidity and funding risk framework and overseen by regional Asset and Liability Management Committees ('ALCO's), Group ALCO and the Risk Management Meeting; and • is managed on a stand-alone basis with no reliance on any Group entity (unless pre-committed) or central bank unless this represents routine established business as usual market practice.

Risks	Arising from	Measurement, monitoring and management of risk
Market risk		
The risk that movements in market factors, including foreign exchange rates and commodity prices, interest rates, credit spreads and equity prices, will reduce our income or the value of our portfolios.	Exposure to market risk is separated into two portfolios: • Trading portfolios comprise positions arising from market-making and warehousing of customer-derived positions • Non-trading portfolios comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, financial investments designated as available for sale and held to maturity, and exposures arising from our insurance operations	Market risk: • is measured in terms of value at risk, which is used to estimate potential losses on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence, augmented with stress testing to evaluate the potential impact on portfolio values of more extreme, though plausible, events or movements in a set of financial variables; • is monitored using measures including the sensitivity of net interest income and the sensitivity of structural foreign exchange which are applied to the market risk positions within each risk type; and • is managed using risk limits approved by the GMB for HSBC Holdings and our various global businesses. These units are allocated across business lines and to the Group's legal entities.
Operational risk		
The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk (along with accounting, tax, security and fraud, people, systems, projects, operations and organisational change risk).	Operational risk arises from day to day operations or external events, and is relevant to every aspect of our business	Operational risk: • is measured using both the top risk analysis process and the risk and control assessment process, which assess the level of risk and effectiveness of controls; • is monitored using key indicators and other internal control activities; and • is primarily managed by global business and functional managers. They identify and assess risks, implement controls to manage them and monitor the effectiveness of these controls utilising the operational risk management framework. The Global Operational Risk and Internal Control function is responsible for the framework and for overseeing the management of operational risks within businesses and functions.

Source: HSBC Annual Report 2012, p. 125

Recommendation 3: Discuss top and emerging risks, including quantitative disclosure and recent changes

RISK DEVELOPMENTS IN 2012

Monitoring exposures and Eurozone developments

The problems in the Eurozone have been a top priority for risk management throughout 2012, and will continue to be a top priority in 2013. ING closely monitors the exposures in debt securities, lending and credit derivatives in the involved countries, and regularly assesses whether the positions still fit with its risk appetite. This assessment is supported by internal stress tests.

Throughout 2012 ING has continued to de-risk its balance sheet, including reducing its positions in especially covered bonds, ABS securities and Real Estate investments for some of the weaker countries as a result of these risk analyses.

Greece, Italy, Ireland, Portugal, Spain and Cyprus

In the first half of 2010 concerns arose regarding the creditworthiness of several southern European countries, which later spread to a few other European countries. As a result of these concerns the fair value of sovereign debt decreased and those exposures were being monitored more closely. With regard to the sovereign debt crisis, ING's main focus is on Greece, Italy, Ireland, Portugal, Spain and Cyprus as these countries have either applied for support from the European Financial Stability Facility ('EFSF') or receive support from the ECB via government bond purchases in the secondary market. Within these countries, ING's main focus is on exposure to Government bonds and Unsecured Financial institutions' bonds. Further details are included in Note 4 'Investments'.

The table below provides information on ING's risk exposure with regard to Greece, Italy, Ireland, Portugal and Spain. Unless otherwise indicated, the amounts represent risk exposure values and exposures are included based on the country of residence of the direct Obligor to which ING has primary recourse of repayment of the obligations, except most RMBS, which exposures are based on country of risk. Cyprus is not included in the table below as the net credit risk linked to Cyprus is not material for ING Bank and ING Insurance/IM has no credit risk linked to Cyprus.

During 2012, ING further improved the scope and the presentation of the disclosures of exposure on Greece, Italy, Ireland, Portugal and Spain. Furthermore, certain definitions have been improved and/or aligned. Comparative figures as per 31 December 2011 have been amended. The changes mainly relate to the inclusion of Pre-settlement exposures, the presentation of trading and banking book CDS exposure, the definitions and scope of Real Estate and ABS exposure (from 'country of residence' to 'country of risk') and the classification of corporate bonds. In total these restatements did not have a material impact on ING's exposure on Greece, Italy, Ireland, Portugal and Spain.

Greece, Italy, Ireland, Portugal and Spain - Total risk exposures [1]

						31 December 2012
	Greece	Italy	Ireland	Portugal	Spain	Total
Residential mortgages and other consumer lending	14	7,531	6	4	9,680	17,235
Corporate Lending	287	8,441	705	1,015	5,733	16,181
Financial institutions Lending	0	227	4	76	626	933
Government Lending	0	203	0	0	35	238
Total Lending	301	16,402	715	1,095	16,074	34,587
RMBS	95	997	267	553	2,846	4,758
CMBS	0	0	12	0	0	12
Other ABS	0	180	218	49	171	618
Corporate Bonds	0	509	642	67	319	1,537
Covered Bonds	0	245	370	153	11,780	12,548
Financial Institutions' bonds (unsecured)	0	527	74	56	84	741
Government Bonds	43	2,474	53	633	1,308	4,511
CDS exposures in banking book [2]	0	0	0	0	–390	–390
Total Debt Securities	138	4,932	1,636	1,511	16,118	24,335
Real Estate [3]	21	380	0	217	610	1,228
Trading excluding CDS exposures	0	450	28	8	454	940
Sold CDS protection	0	1	1	1	7	10
Bought CDS protection	–2	–22	–11	–1	–51	–87
Trading including CDS protection	–2	429	18	8	410	863
Undrawn committed facilities	166	1,287	258	181	2,780	4,672
Pre-settlement exposures [4]	80	516	343	41	953	1,933
Total risk exposure	704	23,946	2,970	3,053	36,945	67,618

Impact of low interest rate environment

Interest rates in the Eurozone but also in the other main home countries decreased from already low levels to unprecedented low levels. Central bank rates are still at very low levels, thereby negatively impacting the short term money market rates, and also long term rates decreased to very low levels last year. The on-going Eurozone crisis in combination with doubts on the growth potential of the world economy were the main reasons for this development.

Impact for ING Bank

The typical interest rate position for ING Bank implies that the duration of the assets is somewhat higher than the duration of the liabilities. Given this mismatch, decreasing interest rates are initially favourable for ING Bank's income: liabilities re-price quicker than assets, and therefore the average coupon of liabilities adapts quicker to lower interest rates. This should support ING Bank's interest rate margin and subsequently our interest income.

However, the current situation of low interest rates levels is there since the eruption of the financial crisis. Therefore interest rates are on a low level for more than 4 years now. A sustained low interest rate environment can put ING Bank's interest income under pressure. New client assets are produced at lower rates, which impacts the average yield in the credit portfolio, but also implies lower prepayment rates and thus lengthening of the portfolio duration. This results in lower yielding assets that reprice more slowly. On the other side of the balance sheet savings coupons do not reflect the low interest rate environment fully. Due to high liquidity spreads as a consequence of the crisis and strong competition in the savings market savings coupons only marginally track lower interest rates. On balance these factors may put ING Bank's interest rate margin under pressure. This situation will endure until structural economic recovery, which will lead to an environment with interest rate increases. As there is much uncertainty when this period of recovery will emerge, ING Bank closely monitors markets in order to be positioned adequately in anticipation of either a prolonged period of a low interest rates or a potential increase of short term and long term interest rates.

Impact ING Insurance Eurasia and US

Since we are mainly a life insurance company with long-term commitments to our clients, a low(er) interest rate will result in a high(er) market value of the liabilities (MVL). The risk of low interest rates combined with other risks, such as longevity, will further increase the MVL and reduce available capital.

The ING Insurance entities have an ALM process where investments are bought such that they match with the duration profile of our liabilities. The remaining interest exposure is closed through a derivative portfolio. Long term guarantees and options are more difficult to hedge and expose ING to further risks. Further, in several countries the interest rate guarantees provided have a maturity significantly longer than asset maturities in the currency of these countries. In these cases ING runs non-hedgeable interest rate risks. These risks are well-known within ING's risk appetite as these risks are part of doing life insurance business in these countries, and within market risk limits defined and monitored on a quarterly basis.

The exact impact of the low interest differs per entity and per products offered. However, in general lower interest rates lead to higher provisions and thus lower available capital. In addition, capital requirements will also go up; the matching quality of the assets that back the liabilities will determine the magnitude. In conclusion, lower interest rates will result in higher capital needs.

Impact ING Group

The impact of the low interest rate environment for Bank and Insurance goes further than earnings and reserves, that are described in the sections above. Low interest rates result in addition to provisions for guarantees that are included in life insurance and variable annuity contracts, as the guarantees become more valuable to policy holders. Thereby the solvency position of the Insurance businesses is negatively impacted, which can also impact the proceeds of the Insurance divestment. The proceeds of the Insurance divestments are to be used to pay back the double-leverage. In case the Insurance proceeds are not sufficient to do so, ING Bank will need to upstream extra dividend to ING Group. EUR 1.0 billion of the November 2012 dividend payment by ING Bank to the Group has been used for this purpose. Note however, that when future Bank earnings and future capital position are negatively impacted such capital up-streams are difficult to establish. And this can be further hampered by the on-going increasing capital requirements for banks in general.

ING highlighted top and emerging risks within the report narrative, including related quantitative disclosures of key risk exposures. The European exposure section spanned 10+ pages and discussed each country exposure and related impact for ING separately. Other "top risks" included the Impact of Low Interest Rate Environment (also shown above)

Source: ING Annual Report 2012, p. 219+

Recommendation 4: Outline plans to meet new regulatory ratios

In January 2013, the Basel Committee on Banking Supervision published a revised standard for the LCR. Compared to the previous version of the standard (published by the Basel Committee in December 2010), these revisions result in significantly lower stress requirements and allow for the inclusion in the liquidity pool of an additional category of high-quality liquid assets (referred to as Level 2B assets). Furthermore, the Basel Committee announced that the LCR requirement will be subject to a phase-in period between January 2015 (60% minimum requirement) and January 2019 (100% minimum requirement). The minimum NSFR requirement is to be introduced in January 2018 at 100%.

Based on the revised Basel standards, as at 31 December 2012, Barclays had a surplus to both of these requirements with an estimated Basel 3 LCR of 126% and an estimated Basel 3 NSFR of 104% (2011: 97%)[a].

Comparing internal and regulatory liquidity stress tests

The LRA stress scenarios, the FSA ILG and Basel 3 LCR are all broadly comparable short term stress scenarios in which the adequacy of defined liquidity resources is assessed against contractual and contingent stress outflows. The FSA ILG and the Basel 3 LCR stress tests provide an independent assessment of the Group's liquidity risk profile.

Stress Test	Barclays LRA	FSA ILG	Basel 3 LCR	Basel 3 NSFR
Time Horizon	1 – 3 months	3 months	30 days	1 year
Calculation	Liquid assets to net cash outflows	Liquid assets to net cash outflows	Liquid assets to net cash outflows	Stable funding resources to stable funding requirements

As at 31 December 2012, the Group held eligible liquid assets significantly in excess of 100% of stress requirements for each of the one month Barclays-specific LRA scenario and the Basel 3 LCR requirement:

Estimated impact of CRD IV

		Pro forma CET1 Transitional	Pro forma CET1 Fully-loaded
	As at 31 December 2012 £bn	As at 1 January 2013 £bn	As at 1 January 2013 £bn
Core Tier 1 capital (FSA 2009 definition)	42.1	42.1	42.1
IFRS 10 impact (introduced on 1 Jan 2013)	–	(0.4)	(0.4)
Core Tier 1 capital post-IFRS 10 (FSA 2009 definition)	42.1	41.7	41.7
Risk Weighted Assets (RWA) (current Basel 2.5 rules)	387	387	387
Core Tier 1 ratio (Basel 2.5)	10.9%	10.8%	10.8%
CRD IV impact on Core Tier 1 capital:			
Adjustments not impacted by transitional provisions			
Conversion from securitisation deductions to RWAs		1.0	1.0
Prudential Valuation Adjustment (PVA)		(1.2)	(1.2)
Other		(0.2)	(0.2)
Adjustments impacted by transitional provisions			
Goodwill and intangibles		7.6	–
Expected losses over impairment		0.6	(1.1)
Deferred tax assets deduction		(0.1)	(1.3)
Excess minority interest		–	(0.9)
Debit Valuation Adjustment (DVA)		–	(0.3)
Pensions		–	(0.1)
Gains on available for sale equity and debt		–	0.7
CET1 capital		49.5	38.4
RWAs (post CRD IV)		468	468
CET1 ratio		10.6%	8.2%

Basis of calculation of the impact of CRD IV

CRD IV, models and waivers

- The proforma ratios, capital computations and RWAs are based on our interpretation of the draft July 2011 CRD IV rules and best expectation of how these draft rules will be updated for subsequent Basel announcements and EU discussions. They assume that all items in the Internal Model Method application to the FSA are approved, and existing FSA waivers, where such discretion is available under CRD IV, will continue.

Capital resources

- Proforma capital numbers at 1 January 2013 are based on 31 December 2012 actuals with an adjustment for IFRS 10 impact (as a result of consolidating some entities that were not previously consolidated and deconsolidating some entities that were previously consolidated);
- Transitional CET1 capital is based on application of the CRD IV transitional provisions and FSA guidance dated 26 October 2012 setting out the minimum pace of transitions with certain exceptions set out in the guidance. In line with this guidance, deferred tax assets deduction is assumed to transition in at 10% in 2013. Other deductions (including goodwill and intangibles, expected losses over impairment and DVA) transition in at 0% in 2013, 20% in 2014, 40% in 2015 and so on;
- PVA was previously assumed to be subject to transitional treatment. Following FSA guidance, the impact of PVA is now factored into CET1 on inception in full. PVA is subject to final rules to be agreed by the EBA and the impact is currently based on methodology agreed with the FSA;
- The draft July 2011 CRD IV rules include the implementation of a capital deduction for financial holdings greater than 10% of CET1 capital, which under Basel 2.5 are subject to equity market risk capital requirements. Under current regulatory rules, the Group's financial holdings net down to £3.3bn exposure after allowing for permitted economic hedging. The current draft of the CRD IV rules applies a further restriction, where the maturity of the hedging instrument is less than one year, which would result in a higher net position of approximately £10.1bn. This would be in excess of 10% of our CET1 and would result in a capital deduction on a fully loaded basis of approximately £4.6bn at CET1 level and a further deduction of approximately £1.4bn at total capital level. However, we have identified management actions that would be taken in the event that the CRD IV draft requirements remain unchanged, and as a result we are highly confident that no capital deduction would be required; and
- Excess minority interest has been calculated on a CRD IV basis and included in our full impact capital base on the assumption that supervisory regimes outside the EU that are implementing Basel 3, and are currently considered equivalent supervisory and regulatory regimes, will continue to be considered equivalent regimes under CRD IV.

Leverage ratio calculation

To provide an indication of the potential impact on Barclays, we have estimated our pro forma CRD IV leverage ratio as at 31 December 2012. The CRD IV requirements, when implemented, will be based upon a three month average.

CRD IV leverage ratio calculation

As at 31 December 2012	Adjusted gross leverage £m	Proforma CRD IV leverage £m
Cash and balances at central banks	86,175	86,175
Trading portfolio assets	145,030	145,030
Financial assets designated at fair value	46,061	46,061
Derivative financial instruments	469,146	469,146
Loans and advances to banks and customers	466,218	466,218
Reverse repurchase agreements and other similar secured lending	176,956	176,956
Available for sale investments	75,109	75,109
Goodwill and intangible assets	7,915	7,915
Other assets	17,711	17,711
Total assets	1,490,321	1,490,321
Netting adjustments for derivatives and SFTs	(387,672)	(394,908)
Collateral on derivatives	(46,855)	na
Net settlement balances and cash collateral	(71,718)	na
Regulatory deductions and other adjustments	(9,409)	(21,665)
Adjusted total tangible assets	974,667	na
Potential future exposure on derivatives		160,550
Undrawn commitments		179,134
End point CRD IV leverage exposure measure		1,413,433
Transitional adjustments to assets deducted from regulatory Tier 1 Capital		490
Transitional CRD IV leverage exposure measure		1,413,923

Leverage ratio

As at 31 December	Tier 1 capital £m	Leverage	Leverage
CRD IV transitional measure	50,282	28x	3.6%
CRD IV adjusted full end point measure	49,578	29x	3.5%
CRD IV full end point measure	39,983	35x	2.8%
Adjusted gross leverage	51,634	19x	5.3%

CRD IV transitional measure is based on Tier 1 capital, allowing for both transitional treatment of deductions from CET1 and transitional relief for grandfathered ineligible Tier 1 instruments. This is the measure of Tier 1 capital that will apply for capital ratio requirements. Leverage ratio requirements will not be mandatory until 2018.

CRD IV adjusted full end point measure is based on Tier 1 capital, not allowing for transitional treatment of deductions from CET1 but adding back ineligible Tier 1 instruments.

CRD IV full end point measure is based on the fully loaded definition of Tier 1 capital, not allowing for either transitional treatment of deductions from CET1 or transitional relief for grandfathered ineligible Tier 1 instruments. In practice, our expectation is that ineligible Additional Tier 1 capital, which qualifies for grandfathering under the transitional relief, will be replaced with eligible capital over time.

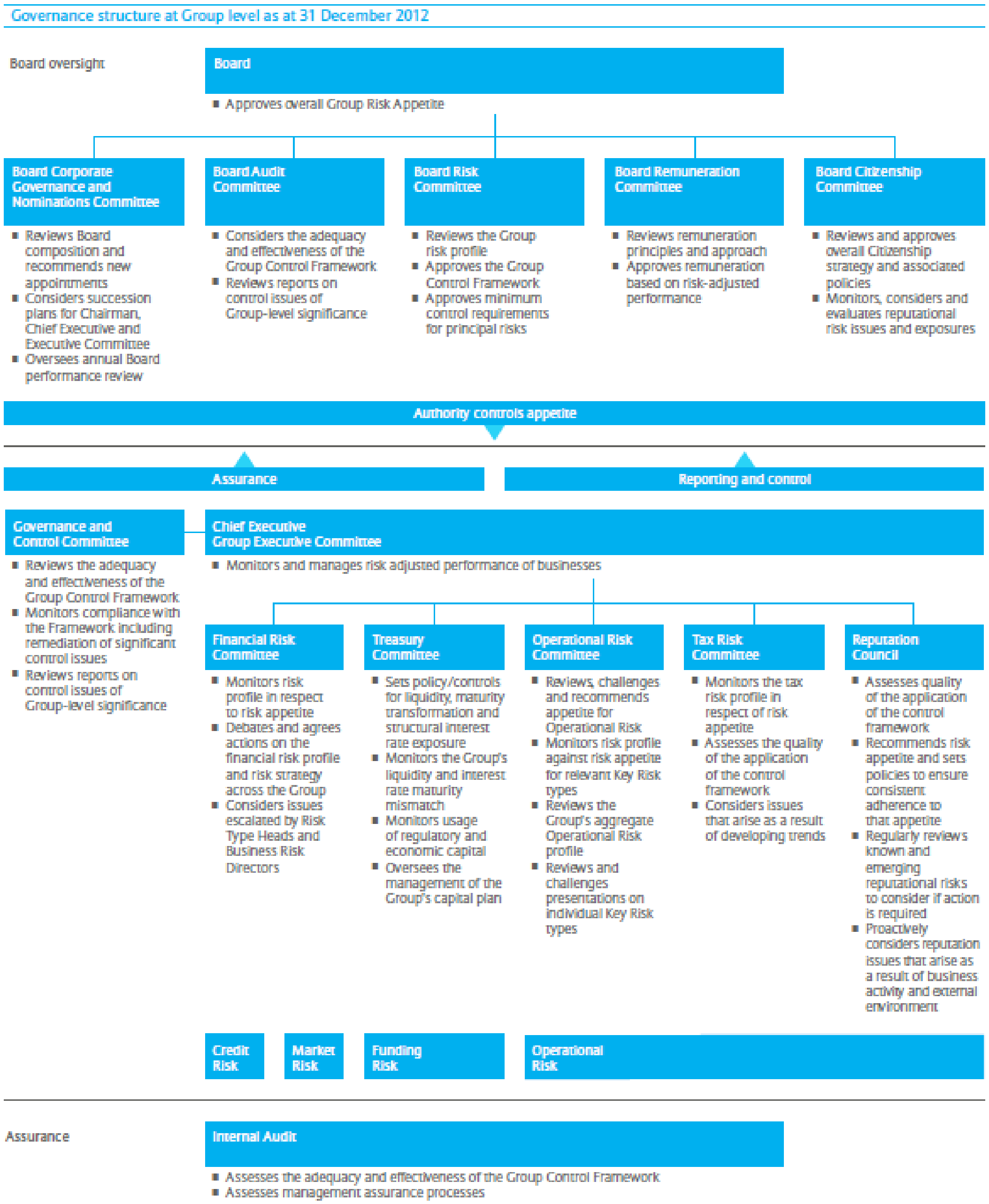
In the event that the July 2011 CRD IV rules relating to maturity restrictions on hedging remain unchanged, the fully loaded Tier 1 capital position would reduce by approximately £4.8bn to £35.2bn, increasing CRD IV leverage to 32x on an adjusted full end point basis and to 40x on a full end point basis. However, we have identified management actions that would be taken in the event that the CRD IV draft requirements remain unchanged, and as a result we are highly confident that no capital reduction would be required.

Source: Barclays Annual Report 2012, p. 170, 174

Section 2

Risk governance and risk management strategies / business model

Recommendation 5: Summarise the bank's risk management organisation, processes and key functions
Example 1 of 2



Source: Barclays Annual Report 2012, p. 274

Barclays risk management strategy (audited)

Barclays has clear risk management objectives and a well-established strategy to deliver them, through core risk management processes.

At a strategic level, our risk management objectives are to:

- Identify the Group's significant risks;
- Formulate the Group's risk appetite and ensure that business profile and plans are consistent with it;
- Optimise risk/return decisions by taking them as closely as possible to the business, while establishing strong and independent review and challenge structures;
- Ensure that business growth plans are properly supported by effective risk infrastructure;
- Manage risk profile to ensure that specific financial deliverables remain possible under a range of adverse business conditions; and
- Help executives improve the control and co-ordination of risk taking across the business.

The Group's approach is to provide direction on: understanding the principal risks to achieving Group strategy; establishing risk appetite; and establishing and communicating the risk management framework. The process is then broken down into five steps: identify, assess, control, report and manage/challenge. Each of these steps is broken down further, to establish end-to-end activities within the risk management process and the infrastructure needed to support it (see panel below). The Group's risk management strategy is broadly unchanged in 2012.

Steps	Activity
Identify	■ Establish the process for identifying and understanding business-level risks.
Assess	■ Agree and implement measurement and reporting standards and methodologies.
Control	■ Establish key control processes and practices, including limit structures, impairment allowance criteria and reporting requirements. ■ Monitor the operation of the controls and adherence to risk direction and limits. ■ Provide early warning of control or appetite breaches. ■ Ensure that risk management practices and conditions are appropriate for the business environment.
Report	■ Interpret and report on risk exposures, concentrations and risk-taking outcomes. ■ Interpret and report on sensitivities and Key Risk Indicators. ■ Communicate with external parties.
Manage and Challenge	■ Review and challenge all aspects of the Group's risk profile. ■ Assess new risk-return opportunities. ■ Advise on optimising the Group's risk profile. ■ Review and challenge risk management practices.

Recommendation 5: Summarise the bank's risk management organisation, processes and key functions
Example 2 of 2

RISK MANAGEMENT

Risk is an inherent part of JPMorgan Chase's business activities. The Firm's risk management framework and governance structure are intended to provide comprehensive controls and ongoing management of the major risks inherent in its business activities. The Firm employs a holistic approach to risk management intended to ensure the broad spectrum of risk types are considered in managing its business activities. The Firm's risk management framework is intended to create a culture of risk awareness and personal responsibility throughout the Firm where collaboration, discussion, escalation and sharing of information are encouraged.

The Firm's overall risk appetite is established in the context of the Firm's capital, earnings power, and diversified business model. The Firm employs a formalized risk appetite framework to integrate the Firm's objectives with return targets, risk controls and capital management. The Firm's Chief Executive Officer ("CEO") is responsible for setting the overall firmwide risk appetite. The lines of business CEOs, Chief Risk Officers ("CROs") and Corporate/ Private Equity senior management are responsible for setting the risk appetite for their respective lines of business or risk limits, within the Firm's limits, and these risk limits are subject to approval by the CEO and firmwide Chief Risk Officer ("CRO") or the Deputy CRO. The Risk Policy Committee of the Firm's Board of Directors approves the risk appetite policy on behalf of the entire Board of Directors.

Risk governance

The Firm's risk governance structure is based on the principle that each line of business is responsible for managing the risks inherent in its business, albeit with appropriate corporate oversight. Each line of business risk committee is responsible for decisions regarding the business' risk strategy, policies as appropriate and controls. There are nine major risk types identified arising out of the business activities of the Firm: liquidity risk, credit risk, market risk, interest rate risk, country risk, principal risk, operational risk, legal risk, fiduciary risk and reputation risk.

Overlaying line of business risk management are corporate functions with risk management-related responsibilities: Risk Management, Treasury and CIO, the Regulatory Capital Management Office ("RCMO") the Firmwide Oversight and Control Group, Legal and Compliance and the Firmwide Valuation Governance Forum.

Risk Management reports independently of the lines of business to provide oversight of firmwide risk management and controls, and is viewed as a partner in achieving appropriate business risk and reward objectives. Risk Management coordinates and communicates with each line of business through the line of business risk committees and CROs to manage risk. The Risk Management function is headed by the Firm's Chief Risk Officer, who is a member of the Firm's Operating Committee and who reports to the Chief Executive Officer and is accountable to the Board of Directors, primarily through the Board's Risk Policy Committee. The Chief Risk Officer is also a member of the line of business risk committees. Within the Firm's Risk Management function are units responsible for credit risk, market risk, country risk, principal risk, model risk and development, reputational risk and operational risk framework, as well as risk reporting and risk policy. Risk Management is supported by risk technology and operations functions that are responsible for building the information technology infrastructure used to monitor and manage risk.

The Risk Management organization maintains a Risk Operating Committee and the Risk Management Business Control Committees. The Risk Operating Committee focuses on risk management, including setting risk management priorities, escalation of risk issues, talent and resourcing, and other issues brought to its attention by line of business CEOs, CROs and cross-line of business risk officers (e.g., Country Risk, Market Risk and Model Risk). This committee meets bi-weekly and is led by the CRO or deputy-CRO. There are three business control committees within the Risk Management function (Wholesale Risk Business Control Committee, Consumer Risk Business Control Committee and the Corporate Risk Business Control Committee) which meet at least quarterly and focus on the control environment, including outstanding action plans, audit status, operational risk statistics (such as losses, risk indicators, etc.), compliance with critical control programs, and risk technology.

The Model Risk and Development unit, within the Risk Management function, provides oversight of the firmwide Model Risk policy, guidance with respect to a model's appropriate usage and conducts independent reviews of models.

Treasury and CIO are predominantly responsible for measuring, monitoring, reporting and managing the Firm's liquidity, funding, capital and structural interest rate and foreign exchange risks. RCMO is responsible for measuring, monitoring, and reporting the Firm's capital and related risks.

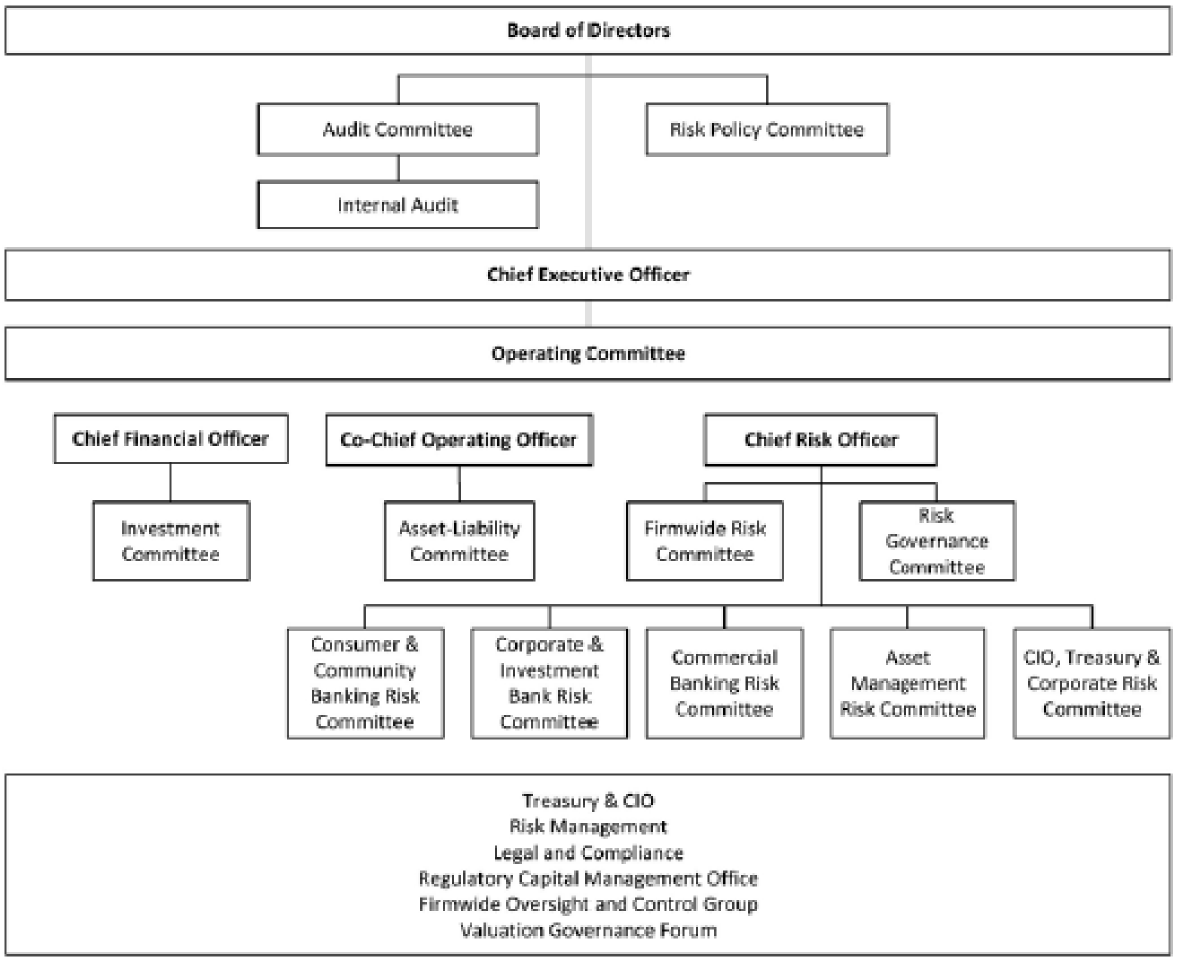
Legal and Compliance has oversight for legal risk. In January 2013, the Compliance function was moved to report to the Firm's co-COOs in order to better align the function, which is a critical component of how the Firm manages its risk, with the Firm's Oversight and Control function. Compliance will continue to work closely with Legal, given their complementary missions. The Firm's Oversight and Control group is dedicated to enhancing the Firm's control framework, and to looking within and across the lines of business and the Corporate functions (including CIO) to identify and remediate control issues.

In addition, the Firm has a firm-wide Valuation Governance Forum ("VGF") comprising senior finance and risk executives to oversee the management of risks arising from valuation activities conducted across the Firm. The VGF is chaired by the firm-wide head of the valuation control function, and also includes sub-forums for the CIB, MB, and certain corporate functions including Treasury and CIO.

In addition to the risk committees of the lines of business and the above-referenced risk management functions, the Firm also has numerous management level committees focused on measuring, monitoring and managing risk. All of these committees are accountable to the CEO and Operating Committee. The membership of these committees is composed of senior management of the Firm; membership varies across the committees and is based on the objectives of the individual committee. Typically membership includes representatives of the lines of business, CIO, Treasury, Risk Management, Finance, Legal and Compliance and other senior executives. The committees meet regularly to discuss a broad range of topics including, for example, current market conditions and other external events, risk exposures, and risk concentrations to ensure that the effects of risk issues are considered broadly across the Firm's businesses.

Source: JPMorgan Annual Report 2012, p. 123

Recommendation 5: Summarise the bank's risk management organisation, processes and key functions
Example 2 of 2 (cont.)



Source: JPMorgan Annual Report, 2012 p. 124

Recommendation 6: Provide a description of the bank's risk culture
Example 1 of 2

2.2. Risk culture

The importance and attention attached by senior management to risk management is deeply rooted in Santander's DNA. This risk culture is based on the principles of Santander's risk management model and is transmitted to all business and management units and is supported, among other things, by the following drivers:

- **Santander's risk function is independent of the business units.** This enables their criteria and opinions to be taken into account in the various instances where businesses are developed.

- **Santander's structure for delegating powers** requires a large number of operations to be submitted to the risk committees of the bank's central services, be it the global committee of the risk division, the board's risk committee or the Group's executive committee. The high frequency with which these approval and risk monitoring bodies meet (twice a week in the case of the board's risk committee; once a week for the executive committee) guarantees great agility in resolving proposals while ensuring senior management's intense participation in the daily management of risks.

- Santander has detailed **risk management manuals and policies.** Risk and business teams hold regular meetings about the business, which produce actions in accordance with the Group's risk culture. In addition, the risk and business executives participate in the different bodies for resolving operations of the Group's central services, and this facilitates transmission of criteria and focuses that emanate from senior management, both to the teams of executives as well as the rest of the risk committees. The lack of powers in any one individual means that all the decisions are resolved by collegiate bodies. This confers greater rigour and transparency on decisions.

- Risk limits plan. Santander has established a full system of risk limits which is updated at least annually and covers both credit risk as well as the different market risk exposures, including trading, liquidity and structural (for each business unit and risk factor). Credit risk management is supported by credit management programmes (individuals and small businesses), rating systems (exposures to medium and large companies) and pre-classification (large corporate clients and financial counterparties).

- Santander's information systems and aggregation of exposures' systems enable daily monitoring of exposures, verifying systematic compliance with the limits approved, as well as adopting, where necessary, the pertinent corrective measures.

- Main risks are not only analysed at the time of their origination or when irregular situations arise in the process of ordinary recovery. They are overseen permanently for all clients. In addition, the Group's main portfolios are monitored systematically during the month of August.

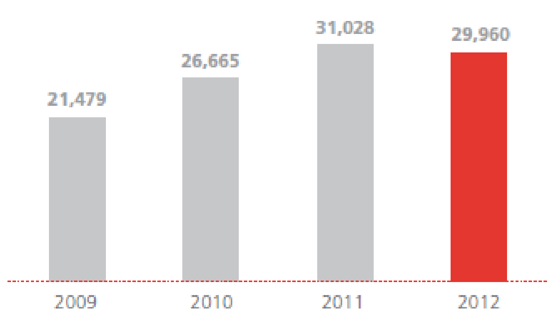
- Other procedures supporting the dissemination of Santander's risk culture are the training sessions carried out by the risks corporate school, the remuneration and incentives policy, which includes performance variables that take into account the quality of risk and the bank's results over the long term, strict compliance by staff with the general codes of conduct and systematic and independent action by the internal auditing services.

Risk training activities

Santander's corporate school of risk management aim is to help consolidate the risk management culture and ensure that all employees in the risks area are trained under the same criteria.

The school, which gave a total of 29,960 hours of training to 4,078 employees in 2012 in 100 activities, is considered a key element to enhance Santander's leadership in this sphere and strengthen the skills of our staff.

TRAINING HOURS



Furthermore, the risks corporate school trains professionals from other business areas, particularly retail banking, so as to align the demanding risk management criteria to business goals.

Source: Santander Annual Report 2012, p. 168

Recommendation 6: Provide a description of the bank's risk culture

Example 2 of 2

ONE OF THE GROUP'S CORE FOUNDING PRINCIPLES

The BNP Paribas Group has a strong risk culture.

Front-line responsibility for managing risks lies with the divisions, business lines and functions that propose the underlying transactions. They are expected to develop a sense of risk among their employees and to be fully aware of and understand both current and potential future trends in their risks.

Executive Management has chosen to include the risk culture in two of its key corporate culture documents:

- Responsibility Charter

In 2012, Executive Management drew up a formal Responsibility Charter based on four strong commitments, inspired by the Group's core values, management principles and code of conduct. One of the four commitments is "Being prepared to take risks, while ensuring close risk control".

Financing the economy, supporting projects, helping clients to manage their currency or interest rate exposure – all this means accepting a degree of risk. One of BNP Paribas' great strengths is precisely this expertise in managing risk.

The Group believes that tight risk control is its clear responsibility, not only towards its clients but also towards the financial system as a whole. The Bank's decisions on the commitments it makes are reached after a rigorous and concerted process, based on a strong shared risk culture which is present across all levels of the Group. This is true both for credit risk arising from lending activities, where loans are granted only after in-depth analysis of the borrower's position and the project to be financed, and for market risks arising from transactions with clients, which are assessed on a daily basis, tested against stress scenarios and governed by a system of limits.

As a highly diversified Group, both in terms of geography and business activity, BNP Paribas is able to balance risks and their consequences as soon as they materialise. The Group is organised and managed in such a way that any difficulties arising in one business area will not jeopardise the Bank's other business activities.

- Management Principles

One of the Group's four key management principles is «Risk-Aware Entrepreneurship», which highlights the importance of the risk culture:

Risk-aware entrepreneurship means:

- being fully accountable,
- acting interdependently and cooperatively with other entities to serve the global interest of the Group and its clients,
- being constantly aware of the risks involved in our area of responsibility,
- and empowering our people to do the same.

SPREADING THE RISK CULTURE

Strict risk management is an integral part of the Bank's makeup. A culture of risk management and control has always been one of its top priorities.

The Group is striving to spread this culture yet further given its strong growth over the past few years and the current climate of crisis. In May 2010, BNP Paribas launched the Risk Academy, a cross-functional Group initiative, to help spread and promote its risk management culture.

The Risk Academy is an open, group-wide venture, involving all business lines and functions and sponsored by the Bank's Executive Committee. Designed for the benefit of all staff and organised around a progressive, participative framework, its main aims are:

- help strengthen and spread the risk culture within the Group;
- promote training and professional development in the area of risk management;
- run the Bank's risk management communities.

The Risk Academy therefore offers the following products and services under a single umbrella:

- Core Risk Practices, the basic principles forming the underlying theme of the Risk Academy, advocating sound risk management practices;
- e-learning risk awareness module, providing an introduction to the various risks managed by the Bank;
- risk training catalogue for employees involved in risk-related activities;
- online library of documents to help share knowledge about risk management;
- interactive presentations by BNP Paribas risk's experts, implemented in main sites of the Group.

Lastly, the risk culture is also spread throughout the Group by linking compensation to performance and risk (see chapter 7, section entitled "A competitive compensation policy in line with international rules").

Source: BNP Paribas Annual Report 2012 , p. 239

Recommendation 7: Describe key risks that arise from the bank's business model and activities

Example 1 of 2

Exposure to risks arising from the business activities of global businesses

HSBC — Other (including Holding Company)

	RBWM	CMB	GB&M	GPB	Other (including Holding Company)
Global business	RBWM	CMB	GB&M	GPB	
Business activities	• Deposits • Accounts services • Credit and lending • Asset management • Wealth solutions and financial planning • Broking • Life insurance manufacturing	• Deposits • Payments and cash management • Credit and lending • International trade and receivables finance • Commercial insurance and investments	• Deposits • Payments and cash management • Balance sheet management • Credit and lending • Asset and trade finance • Corporate finance • Markets • Securities services	• Deposits • Account services • Credit and lending • Asset management • Financial advisory • Broking • Corporate finance (via GB&M) • Alternative investments	• HSBC holding company and central operations
Balance sheet[22] (US$bn)	• Assets 535 • Customer accounts 562	• Assets 363 • Customer accounts 338	• Assets 1,859 • Customer accounts 332	• Assets 118 • Customer accounts 106	• Assets 187 • Customer accounts 2
RWAs (US$bn)	• Credit risk 232 • Operational risk 45	• Credit risk 366 • Operational risk 31	• Credit risk 259 • Counterparty credit risk 48 • Operational risk 41 • Market risk 55	• Credit risk 18 • Operational risk 4	• Credit risk 25 • Operational risk –
Risk profile	Liquidity and funding risk, Pension risk, Fiduciary risk, Reputational risk, Compliance risk, Sustainability risk and Insurance risk, which is predominantly in RBWM and CMB.				

Description of risks

Risks	Arising from	Measurement, monitoring and management of risk
Credit risk		
The risk of financial loss if a customer or counterparty fails to meet an obligation under a contract.	Credit risk arises principally from direct lending, trade finance and leasing business, but also from certain other products such as guarantees and derivatives.	Credit risk: • is measured as the amount which could be lost if a customer or counterparty fails to make repayments. In the case of derivatives, the measurement of exposure takes into account the current mark to market value to HSBC of the contract and the expected potential change in that value over time caused by movements in market rates; • is monitored within limits, approved by individuals within a framework of delegated authorities. These limits represent the peak exposure or loss to which HSBC could be subjected should the customer or counterparty fail to perform its contractual obligations; and • is managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance for risk managers.
Liquidity and funding risk		
The risk that we do not have sufficient financial resources to meet our obligations as they fall due or that we can only do so at excessive cost.	Liquidity risk arises from mismatches in the timing of cash flows. Funding risk arises when the liquidity needed to fund illiquid asset positions cannot be obtained at the expected terms and when required.	Liquidity and funding risk: • is measured using internal metrics including stressed operational cash flow projections, coverage ratio and advances to core funding ratios; • is monitored against the Group's liquidity and funding risk framework and overseen by regional Asset and Liability Management Committees ('ALCO's), Group ALCO and the Risk Management Meeting; and • is managed on a stand-alone basis with no reliance on any Group entity (unless pre-committed) or central bank unless this represents routine established business as usual market practice.

Note: "Description of risks" is not exhaustive as the full disclosure includes sections on market, operational, compliance, insurance, fiduciary, reputational, pension and sustainability risk. Several of these are outlined in the example for Recommendation 2

Source: HSBC Annual Report 2012, p. 20; 124-126

Recommendation 7: Describe key risks that arise from the bank's business model and activities
Example 2 of 2

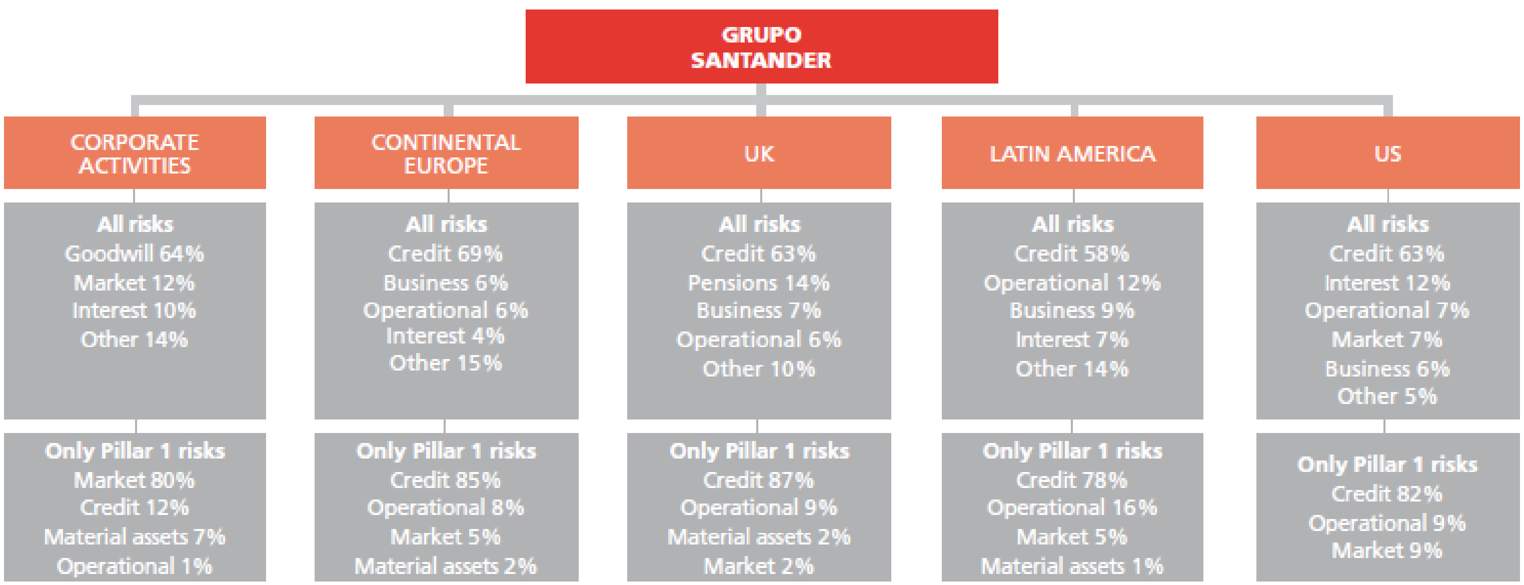
Grupo Santander's banking business model from the risk standpoint

The Group's risk management and control systems are adapted to the risk appetite framework approved by its top governance bodies and to its banking business model:

- Santander focuses on retail banking, ensuring an internationally diversified presence characterised by high market shares (more than 10%) in the main markets where it operates. Wholesale banking is carried out particularly in core markets.
- Santander operates through subsidiaries which are autonomous in terms of capital and liquidity, with corporate control. The corporate structure has to be simple, minimising the use of instrumental companies.
- The business model enables a high degree of recurrence in results and its development is backed by a strong capital and liquidity base.
- Santander develops its operational and technological integration model via corporate platforms and tools. This allows information to be steadily aggregated.
- All the Group's activity is conducted within its social and reputational commitment, in accordance with its strategic objectives.

The economic capital distribution among the Group's businesses reflects the diversified nature of Santander's activity. The risk of corporate activities mainly emanates from the capital assigned to goodwill and, to a lesser extent, market risk (structural exchange rate and non-trading portfolio of equities). The operating areas account for most of the credit risk, as befits the nature of the Group's retail banking.

DISTRIBUTION OF RISKS BY BUSINESSES (DIVERSIFIED ECONOMIC CAPITAL)



Source: Santander Bank Financial Report 2012, p. 166-167

Recommendation 8: Describe the use of stress testing within the bank's risk governance and capital frameworks
Example 1 of 2

Stress testing

Group-wide stress tests are an integral part of the annual MTP process and annual review of risk appetite to ensure that the Group's financial position and risk profile provide sufficient resilience to withstand the impact of severe economic stress.

The Board Risk Committee agrees the range of scenarios to be tested and the independent Group Risk function leads the process. Macroeconomic stress test scenarios are designed to be both severe and plausible and are tested against the FSA's scenario framework to ensure that they are appropriately conservative.

The following diagram summarises the process for designing and agreeing the scenarios to be run. The process includes Group Risk consultation with economists in the businesses. This ensures relevance of scenarios to our businesses and a consistent interpretation of the scenarios across the Group.

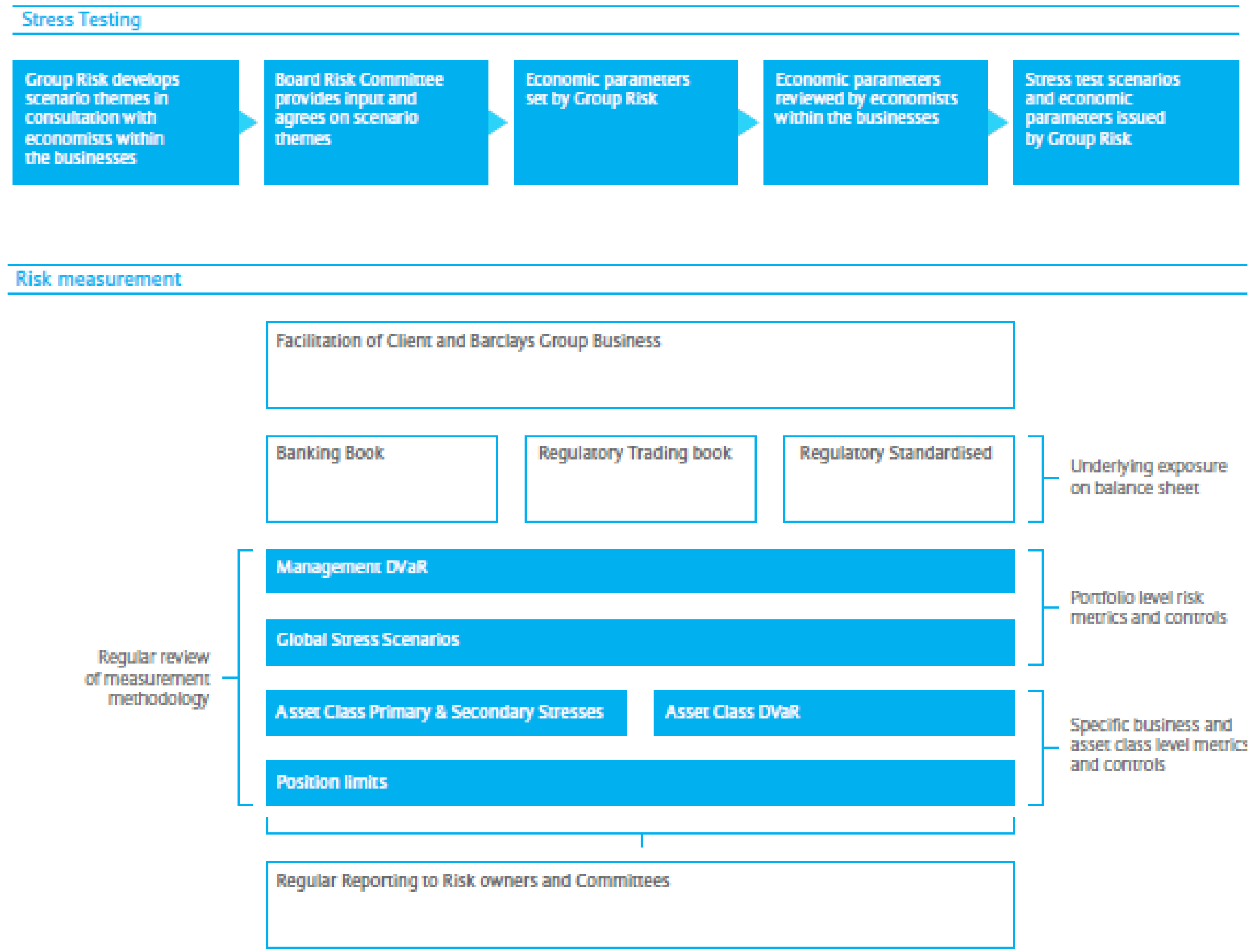
At the Group level, stress test scenarios capture a wide range of macroeconomic variables that are relevant to assess the impact of the stress scenario on our portfolios. This includes for example, GDP, unemployment, asset prices, foreign exchange rates and interest rates. Economic parameters are set using expert judgement and historical and quantitative analysis to ensure coherence and appropriate severity.

The stress testing process is detailed and comprehensive using bottom-up analysis performed by each of Barclays businesses. It includes all aspects of the Group's balance sheet across all risk types and is forward looking over a five year period. Our stress testing approach combines running statistical models with expert judgement to ensure the results accurately reflect the impact of the stress.

The businesses' stress test methodologies and results are subject to a detailed review and challenge both within the businesses (including review and sign-off by business Chief Risk Officers) and by Head Office Functions. The stress test results are presented for review by the Executive Committee and Board Risk Committee, and are also shared with the Board and the FSA. The results of our H2 2012 internal Group-wide stress test exercise show that the Group's profit before tax remains positive under the modelled severe global stress scenario, with the Group remaining well capitalised above the required regulatory minimum level.

A key objective of the Group-wide stress test process is to identify and document management actions that would be taken to mitigate the impact of stress. The bottom-up process ensures all levels of management are informed of the impact of the stress scenarios and are aware of appropriate management actions to be taken when a stress event occurs.

In addition, the framework also includes reverse stress testing techniques which aim to identify the circumstances under which our business model would become no longer viable, leading to a significant change in business strategy. Examples include extreme macroeconomic downturn scenarios (such as a break-up of the Euro area) or specific idiosyncratic events.



Source: Barclays Annual Report 2012, p. 279 - 280

Recommendation 8: Describe the use of stress testing within the bank's risk governance and capital frameworks

Example 2 of 2

Stress Test Methodology: Overview

To project its Capital Position, Citi estimated the economic impacts to PPNR and Stress Losses under the required hypothetical stressed scenarios, including the Supervisory Severely Adverse Scenario

Pre-Provision Net Revenue (PPNR)

- PPNR is defined as net interest income plus non-interest income less non-interest expense, which includes Policyholder Benefits & Claims

Stress Losses

- Stress Losses include losses arising from loans (including the net change in reserves), AFS and HTM securities, trading and counterparty activities, and other losses arising from adverse economic conditions

Capital Position

- Reflects Basel I regulatory capital, inclusive of Stress Losses and PPNR, adjusted for (a) the adoption of the final U.S. market risk rules (Basel II.5) in 1Q13, and (b) the phase-out from Tier I capital of certain trust preferred securities beginning in 1Q13, as required by the FRB's instructions

Stress Test Methodology: Capital Position

In addition to the inclusion of estimated Stress Losses and PPNR, Citi's Capital Position is impacted by the following items:

Final U.S. Market Risk Rules – Basel II.5

- Consistent with the FRB's instructions, Citi's projections reflect the adoption of the final U.S. market risk rules (otherwise referred to as Basel II.5) beginning in 1Q13
- This results in an increase in risk-weighted assets for certain market exposures and reduces corresponding regulatory ratios

Deferred Tax Asset (DTA) Position

- Citi conservatively assumes that the incremental DTA accrued on its balance sheet resulting from stress loss projections is limited; as such, pre-tax stress loss estimates are largely equivalent to post-tax loss estimates
- The net change in the estimated DTA disallowance further lowers Citi's regulatory capital ratios

Collins Amendment

- Consistent with FRB's instructions, certain trust preferred securities begin a gradual 4-year phase out from Tier I Capital, beginning in the 1Q13

Other Items Impacting Capital Position

- Movements in foreign exchange impacts Citi's capital position through changes to Other Comprehensive Income (OCI)
- Annual common stock awards from incentive compensation programs increase common equity, offset by compensation expense over the corresponding vesting period

Stress Test Methodology: PPNR

Citi projects the three components of PPNR as described below:

Net Interest Income

- Loan balances, deposit balances, and other key inputs to net interest income are modeled using regression analyses, linking the outputs to economic variable projections (including but not limited to GDP, inflation, house price indices, and unemployment)
- These balances, combined with the scenario-specific interest rate and foreign exchange rate projections, are used to calculate net interest income

Non-Interest Income

- Non-interest income is primarily composed of fees and commissions from client activity
- Consumer segments are modeled using the observed and expected relationship between fee revenue and deposit and loan balances
- Institutional segments are modeled using a regression-based approach linking revenue to macroeconomic variables

Non-Interest Expense

- Projections of balances, headcount, and other specific expense drivers are used in the projection of non-interest expenses
- Additionally, certain management actions are considered, including but not limited to reduction of investments, lower marketing spending and reductions in headcount based on historical experience
- Operational loss expenses, including litigation expenses, are modeled using historically observed relationships between operational losses and macroeconomic variables (primarily credit spreads, unemployment rates and equity prices)

Stress Test Methodology: Stress Losses

Provision for Loan Losses

- Loan losses are projected based on product-specific approaches which use historical and expected relationships between credit performance and relevant macroeconomic variables

Domestic Mortgages	Commercial & Industrial and Commercial Real Estate	Credit Cards	Other Consumer	Other Loans
• Includes First and Junior Liens; Closed-End and Revolving • Primarily driven by HPI, interest rates, and unemployment	• Includes C&I loans to obligors globally and domestic CRE loans • Projections consider obligor, collateral, industry, country, seniority, and local GDP	• Includes bank and charge cards both domestically and internationally • Loss projections consider vintage, credit score, country, and unemployment	• Includes global personal loans, student loans, auto loans, and other consumer loans • Driven by a variety of variables depending on product type and country	• Includes international CRE and mortgages and a variety of non-retail loans • Primarily driven by local GDP; real estate loans also driven by HPI, interest rates, and unemployment

Realized Gains/Losses on Securities

- The inherent credit risk is primarily modeled using historical and expected relationships with local GDP and considers security characteristics (including but not limited to country, collateral, and seniority)
- Loss estimates for the AFS and HTM portfolios are recognized in accordance with Citi's established accounting methodology

Trading and Counterparty Losses

- Trading and counterparty losses represent losses on Citi's trading portfolios, CVA and other mark-to-market assets, inclusive of default losses
- Losses are calculated by applying the instantaneous Global Market Shock to Citi's exposures in 4Q12
- Consistent with the FRB's instructions, there is no associated reduction of risk-weighted assets, GAAP assets, or compensation expenses

Other Losses/Gains

- Primarily reflects losses on loans which are held for sale or under a fair value option
- Consistent with the FRB's instructions, loans are stressed using the same Global Market Shock which is used to calculate trading and counterparty losses on a similar instantaneous basis

Note: Citi disclosure represents a good example of stress testing process, but does not fully address integration with risk governance and capital

Source: Citi 2013 Annual Stress Testing Disclosure, p. 7 -9

Section 3

Capital adequacy and risk-weighted assets

Recommendation 9: Provide minimum Pillar 1 capital requirements

3.4. Regulatory capital requirements

The table below presents the minimum regulatory credit risk capital requirements, including counterparty credit risk, as at 31 December 2012, calculated as 8 per cent of RWA based on the approaches described above in sections 3.1 and 3.2. The regulatory credit risk capital requirement below of $19,731 million is substantially lower, even with the inclusion of market risk $1,956 million (Table 31) and operational risk $2,461 million (Table 34), than total capital resources of $52,688 million in Table 2.

Table 12: Regulatory capital requirements

	2012			2011		
Credit Risk Capital	Regulatory Capital Requirement $million	Risk weighted assets $million	EAD before the effect of CRM $million	Regulatory Capital Requirement $million	Risk weighted assets $million	EAD before the effect of CRM $million
IRB Exposure Class						
Central governments or central banks	1,383	17,282	128,587	917	11,462	107,446
Institutions	1,400	17,506	105,794	1,301	16,264	98,779
Corporates	8,731	109,143	166,920	7,919	98,986	158,646
Retail, of which	2,385	29,812	97,214	2,001	25,022	90,240
Secured by real estate collateral	643	8,033	62,654	620	7,752	60,674
Qualifying revolving retail	593	7,413	18,379	555	6,942	17,607
Retail SME	71	890	1,629	39	486	1,179
Other retail	1,078	13,476	14,552	787	9,842	10,780
Securitisation positions	290	3,627	26,057	248	3,105	20,827
Non-credit obligation assets	53	660	660	26	321	321
Total IRB	14,242	178,030	525,232	12,412	155,160	476,259
Standardised Exposure Class						
Central governments or central banks	47	587	1,664	87	1,089	1,625
Multilateral Development Banks	-	-	7,849	-	-	4,910
Institutions	108	1,355	3,123	56	700	2,030
Corporates	1,017	12,715	20,980	985	12,318	19,443
Retail	1,064	13,300	19,277	906	11,329	16,555
Secured on real estate property	751	9,391	18,226	724	9,051	18,701
Past due items	103	1,288	1,211	107	1,337	1,203
Items belonging to regulatory high risk categories	63	782	573	40	498	342
Other items[1]	1,198	14,980	17,803	1,100	13,756	16,323
Total Standardised	4,351	54,398	90,706	4,005	50,078	81,132
Counterparty credit risk capital component (credit risk in the trading book)	1,138	14,222	56,447	1,213	15,156	54,284
Concentration risk capital component[2]	-	-	-	-	-	-
Total	19,731	246,650	672,385	17,630	220,394	611,675

[1] Other items include cash, equity holdings, fixed assets, prepayments and accrued income.

[2] The concentration risk capital component is the additional capital requirement to be held where exposures in the Trading Book to a counterparty exceeds 25 per cent of capital resources.

The growth in credit risk capital requirements during 2012 was driven mainly by increased exposures to central governments or central banks, due to an increase in liquid balances, and to corporates, due to asset growth in Wholesale Banking, in particular within transaction banking and corporate finance in the Americas, UK and Europe region.

IRB other retail growth was mainly driven by an increase in personal loans in Korea, due in part to foreign currency translation differences. Overall, qualifying revolving retail exposure increased during 2012 due to growth in credit card balances in Hong Kong and Singapore.

The increase in standardised retail exposures results from asset growth in Hong Kong Private Banking and the SME portfolios in Malaysia, India and Indonesia.

Source: Standard Chartered 2012 Pillar 3 Disclosures, p.22

Recommendation 10: Summarise information contained in the composition of capital templates adopted by the Basel Committee
Example 1 of 2

Table 6: Reconciliation between gross assets per IFRS and for regulatory reporting purposes

This table details the reconciliation between Barclays PLC balance sheet for statutory versus regulatory purposes. Please note that the amount shown under the regulatory scope of consolidation is not a risk-weighted asset measure; it is an accounting measure and cannot be reconciled to other tables in this report.

As at 31.12.12	Accounting balance sheet per published financial statements £m	Deconsolidation of insurance/other entities £m	Consolidation of banking associates/other entities £m	Balance sheet per regulatory scope of consolidation £m
Assets				
Cash and balances at central banks and items in the course of collection from other banks	87,631	(1)	184	87,814
Trading portfolio assets	145,030	-	-	145,030
Financial assets designated at fair value	46,061	(1,252)	-	44,809
Derivative financial instruments	469,146	(212)	-	468,934
Available for sale investments	75,109	(2,878)	-	72,231
Loans and advances to banks	40,489	(1,247)	132	39,374
Loans and advances to customers	425,729	(2,976)	1,303	424,056
Reverse repurchase agreements and other similar secured	176,956	(24)	-	176,932
Other assets	24,170	(1,883)	(189)	22,098
Total assets	1,490,321	(10,473)	1,430	1,481,278
Liabilities				
Deposits from banks and items in the course of collection due to other banks	78,583	(5)	1,200	79,778
Customer accounts	385,707	(524)	-	385,183
Repurchase agreements and other similar secured borrowing	217,342	(23)	-	217,319
Trading portfolio liabilities	44,794	-	-	44,794
Financial liabilities designated at fair value	78,280	(451)	-	77,829
Derivative financial instruments	462,468	-	-	462,468
Debt securities in issue	119,581	(5,425)	-	114,156
Subordinated liabilities	24,018	-	-	24,018
Other liabilities	16,591	(3,922)	239	12,908
Total Liabilities	1,427,364	(10,350)	1,439	1,418,453
Shareholders' equity				
Shareholders' equity excluding non-controlling interests	53,586	(118)	(9)	53,459
Non-contolling interests	9,371	(5)	-	9,366
Total shareholders' equity	62,957	(123)	(9)	62,825
Total liabilities and shareholders' equity	1,490,321	(10,473)	1,430	1,481,278

See EDTF report, Figure 9: Example reconciliation of regulatory capital to balance sheet

Source: Barclays Basel 2 Pillar 3 Consolidated Disclosures 2012, p. 12

Recommendation 10: Summarise information contained in the composition of capital templates adopted by the Basel Committee

Example 2 of 2

Reconciliation of shareholders' equity to regulatory capital

in € m.	Dec 31, 2012	Dec 31, 2011
Total shareholders' equity per accounting balance sheet	54,003	53,390
Common shares	2,380	2,380
Additional paid-in capital	23,778	23,695
Retained earnings	29,198	30,119
Therein: Actuarial gains (losses) rel. to defined benefit plans, net of tax/CTA	198	650
Therein: Net income attributable to Deutsche Bank Shareholders	237	4,132
Common shares in treasury, at cost	(60)	(823)
Equity classified as obligation to purchase common shares	–	–
Accumulated other comprehensive income, net of tax	(1,293)	(1,981)
Prudential filters	(261)	719
Own credit spread of liabilities designated at fair value	(2)	(128)
Unrealized gains and losses	(259)	847
Regulatory adjustments to accounting basis	(15,785)	(17,796)
Dividend accrual	(697)	(697)
Goodwill	(8,583)	(10,156)
Per balance sheet	(9,297)	(10,973)
Goodwill from at-equity investments	(30)	(29)
Goodwill relating to non-regulatory consolidation circle	745	846
Intangibles	(2,996)	(2,753)
Per balance sheet	(4,922)	(4,829)
Deferred tax liability	583	676
Intangibles relating to non-regulatory consolidation circle	1,343	1,399
Noncontrolling interests	124	999
Per balance sheet	407	1,270
Noncontrolling interests relating to non-regulatory consolidation circle	(283)	(271)
Securitization positions	(953)	(2,863)
Shortfall of provisions to expected loss	(440)	(508)
Free-deliveries outstanding	–	–
Significant investments in the capital of financial sector entities	(1,493)	(1,332)
Other, including consolidation and regulatory adjustments	(748)	(486)
Common Equity Tier 1 capital	37,957	36,313
Additional Tier 1 capital	12,526	12,734
Hybrid capital securities	12,526	12,734
Per balance sheet	12,091	12,344
Regulatory adjustments	435	390
Deductions from Additional Tier 1 capital	–	–
Tier 1 capital	50,483	49,047
	–	–
Tier 2 capital	6,532	6,179
Subordinated debt	9,362	10,813
Per balance sheet	11,282	12,083
Amortization	(2,283)	(1,213)
Regulatory adjustments	364	(57)
Deductions from Tier 2 capital	(2,885)	(4,703)
Other	55	70
Total Regulatory capital	57,015	55,226

See EDTF Report, Figure 10: Reconciliation of regulatory capital to the balance sheet

Source: Deutsche Bank Financial Report 2012, p. 177

Recommendation 11: Present a flow statement of movements in regulatory capital
Example 1 of 2

Capital management continued

Capital resources*

Flow statement (Basel 2.5)

The table below analyses the movement in Core Tier 1, Other Tier 1 and Tier 2 capital during the year.

Core Tier 1 capital	£m
At 1 January 2012	46,341
Attributable loss net of movements in fair value of own credit	(2,647)
Ordinary shares issued	120
Share capital and reserve movements in respect of employee share schemes	821
Foreign exchange reserve movements	(867)
Decrease in non-controlling interests	(24)
Decrease in capital deductions including APS first loss	4,307
Decrease in goodwill and intangibles	1,313
Defined pension fund movement (net of prudential filter adjustment)	(977)
Other movements	(1,067)
At 31 December 2012	47,320
Other Tier 1 capital	
At 1 January 2012	10,649
Foreign currency reserve movements	(189)
Decrease in Tier 1 deductions	(252)
Other movements	(393)
At 31 December 2012	9,815
Tier 2 capital	
At 1 January 2012	8,546
Dated subordinated debt issued	4,167
Dated subordinated debt redeemed/matured	(3,582)
Foreign exchange movements	(643)
Decrease in capital deductions including APS first loss	4,649
Other movements	(985)
At 31 December 2012	12,152
Supervisory deductions	
At 1 January 2012	(4,828)
Decrease in deductions	2,341
At 31 December 2012	(2,487)
Total regulatory capital at 31 December 2012	66,800

Source: RBS Annual Report 2012, p. 130

Recommendation 11: Present a flow statement of movements in regulatory capital
Examples 2 of 2

Development of regulatory capital

in € m.	Dec 31, 2012	Dec 31, 2011
Common Equity Tier 1 Capital	37,957	36,313
Opening amount	36,313	29,972
Common shares, net effect/(+) issued (–) retirement	–	–
Additional paid-in capital	83	181
Retained earnings	(232)	4,834
Therein: Actuarial gains (losses) rel. to defined benefit plans, net of tax/CTA	(452)	666
Therein: Net income attributable to Deutsche Bank Shareholders	237	4,132
Common shares in treasury, net effect/(+) sales (–) purchase	763	(373)
Movements in accumulated other comprehensive income	(423)	1,166
Foreign currency translation, net of tax	(423)	1,166
Dividend accrual	(697)	(697)
Removal of gains/losses resulting from changes in own credit standing in liabilities designated at fair value (net of tax)	126	(76)
Goodwill and other intangible assets (deduction net of related tax liability)	1,330	(518)
Noncontrolling interest	(875)	72
Deductible investments in banking, financial and insurance entities	(161)	(381)
Securitization positions not included in risk-weighted assets	1,911	1,987
Excess of expected losses over risk provisions	69	(81)
Other, including regulatory adjustments	(250)	227
Closing amount	37,957	36,313
Additional Tier 1 Capital	12,526	12,734
Opening amount	12,734	12,593
New Additional Tier 1 eligible capital issues	–	–
Buybacks	–	–
Other, including regulatory adjustments	(208)	141
Closing amount	12,526	12,734
Tier 1 capital	50,483	49,047
Tier 2 capital:	6,532	6,179
Opening amount	6,179	6,123
New Tier 2 eligible capital issues	–	–
Buybacks	(179)	(251)
Amortization	(1,071)	(747)
Other, including regulatory adjustments	1,603	1,054
Closing amount	6,532	6,179
Total Regulatory capital	57,015	55,226

The increase of € 1.6 billion in Common Equity Tier 1 capital in the year 2012 was primarily the result of a € 1.9 billion reduction of the capital deduction item for securitization positions not included in risk-weighted assets. Another positive impact of € 0.8 billion resulted from the reduced position of Common shares in treasury, partially offset by a negative impact of € 0.4 billion from foreign currency translation. The positive change of € 1.3 billion shown under the deduction-item “Goodwill and other intangible assets” is primarily the result of Common Equity Tier 1 capital-neutral impairments in the fourth quarter of 2012 which are offset by corresponding effects in our Retained earnings.

Common shares consist of Deutsche Bank AG’s common shares issued in registered form without par value. Under German law, each share represents an equal stake in the subscribed capital. Therefore, each share has a nominal value of € 2.56, derived by dividing the total amount of share capital by the number of shares. As of December 31, 2012, 929,499,640 shares were issued and fully paid, of which we held 315,742 shares, leaving 929,183,898 shares outstanding. There are no issued ordinary shares that have not been fully paid. Related share premium is included in additional paid-in capital.

Source: Deutsche Bank Financial Report 2012, p. 172

Recommendation 12: Qualitatively and quantitatively discuss capital planning within a more general discussion of management's strategic planning

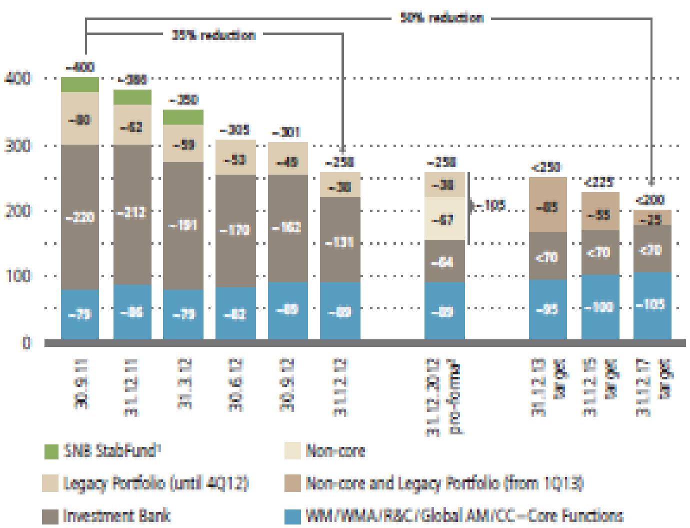
Acceleration of our strategic transformation

Since presenting our strategy at our Investor Day in November 2011, we have successfully executed on our plans to improve our already strong capital position and reduce Basel III risk-weighted assets (RWA) and costs. Just over one year into the transformation of our firm, our Basel III capital ratios remain among the highest in our peer group, and we have reduced Basel III RWA[1] by 35%. Furthermore, we are on track with our CHF 2.0 billion cost reduction program announced in August 2011.

In October 2012, from this position of strength, we announced a significant acceleration in the implementation of our strategy.

Basel III – Risk-weighted assets

Significant reduction in Basel III RWA



1 RWA associated with UBS's option to purchase the SNB StabFund's equity (treated as a participation with full deduction from CET1 capital starting from the second quarter of 2012). 2 In 1Q13, we transferred approximately CHF 67 billion of RWA from the Investment Bank to the Corporate Center. On a pro-forma basis as of year-end, the RWA for the Non-core and Legacy Portfolio would have represented approximately CHF 105 billion, while for the Investment Bank it would have been CHF 64 billion.

This announcement underlined our commitment to transform our Group into a less capital- and balance-sheet-intensive business that is more focused on serving clients and capable of maximizing value for shareholders. We are transforming our Investment Bank, focusing on its traditional strengths in advisory, research, equities, foreign exchange and precious metals, and we are taking additional action to reduce costs and improve efficiency across the Group.

We are exiting certain business lines, predominantly those in fixed income, that have been rendered less attractive by changes in regulation and market developments. After transferring the non-core businesses and positions to be exited to the Corporate Center, we have retained limited credit and rates trading in our Investment Bank, along with structured financing capabilities, to support its solutions-focused businesses. Our leading equities and foreign exchange businesses, including our emerging markets foreign exchange capabilities, continue to be cornerstones of our Investment Bank's services. We have not significantly altered our advisory and capital markets businesses, but have reorganized our existing business functions to better serve our clients. As a result of the abovementioned transfers and additional RWA reductions, our Investment Bank started 2013 operating with approximately CHF 64 billion of Basel III RWA, within its target RWA of CHF 70 billion or less. We are convinced that our new Investment Bank is capable of delivering returns well in excess of its cost of capital, and we are targeting a pre-tax return on attributed equity of greater than 15% starting in 2013 in this division.

Our Corporate Center is tasked with managing non-core assets, previously part of the Investment Bank, in the most value-accretive way for shareholders. These diversified assets will be reported within our "Non-core and Legacy Portfolio" unit within the Corporate Center from the first quarter of 2013. At the end of 2012, this portfolio represented approximately CHF 105 billion in Basel III RWA, which we aim to reduce progressively to approximately CHF 25 billion by the end of 2017. As a result, we are targeting Group RWA of less than CHF 200 billion on a fully applied Basel III basis by the end of 2017.

Maintaining cost discipline is critical to our long-term success and is a key element of the cost reduction plans we announced in October 2012. To this end, we announced measures to achieve additional annual costs savings of CHF 3.4 billion by 2015 that include reducing our Investment Bank's complexity and size, improving organizational effectiveness, primarily in our Corporate Center, and introducing lean front-to-back processes across our Group. These savings come in addition to the CHF 2.0 billion annual cost reduction program that we announced in 2011 and expect to complete by the end of 2013. As a consequence of our measures to support the long-term efficiency of our firm, we expect our headcount to be around 54,000 in 2015 compared with approximately 63,000 at the end of 2012. Our investment in these initiatives is reflected in restructuring charges of CHF 258 million in the fourth quarter of 2012 and expectations of further incremental charges of approximately CHF 1.1 billion in 2013, CHF 0.9 billion in 2014 and CHF 0.8 billion in 2015.

Our efficiency programs will free up resources to make investments over the next three years to support growth across our firm and enable us to service our clients with greater agility and effectiveness, improving quality and speed to market. These investments are expected to reach CHF 1.5 billion over the next three years.

2013 and 2014 will be key years of transition for our Investment Bank and our Group as we work through our plans to restructure our businesses and reduce our cost base. As a result, during these years we expect our Group to deliver a return on equity in the mid-single digits as we transform our business. We believe the changes we are making will enable us to deliver improved returns and thus we have set a Group return on equity target of more than 15% from 2015 onwards. We are also targeting a Group cost/income ratio of 60% to 70% from 2015 onwards.

We are well prepared for the future with a clear strategy and a solid financial foundation. We are firmly committed to returning capital to our shareholders and plan to continue our program of progressive returns to shareholders with a proposed 50% increase in dividends to CHF 0.15 per share for the financial year 2012. Once we have achieved our capital targets, we are aiming for a total payout ratio of 50%, consisting of a baseline dividend and supplementary returns. We intend to set a baseline dividend at a sustainable level, taking into account normal economic fluctuations. The supplementary capital returns will be balanced with our need for investment and any buffer we choose to maintain for a more challenging economic environment or other stress scenarios. Through the successful implementation of our strategy, we believe we can sustain and grow our business and maintain a prudent capital position.

Source: UBS Annual Report 2012, p. 24 - 25

Recommendation 13: Provide granular information to explain how RWAs relate to business activities Example 1 of 2

Table 2: Detailed segmentation of BIS Basel 2.5 risk-weighted assets

	31.12.12				31.12.11
	Net EAD	RWA			RWA
CHF million		Advanced IRB approach	Standardized approach	Total	Total
Credit risk	566,505	73,847	21,733	95,580	116,129
Sovereigns	*142,150*	*3,205*	*222*	*3,427*	*9,290*
Banks	*54,580*	*8,654*	*2,083*	*10,737*	*14,006*
Corporates	*154,433*	*43,250*	*16,312*	*59,562*	*75,385*
Retail	*215,342*	*18,737*	*3,116*	*21,854*	*17,447*
Residential mortgages	128,676	13,888	1,362	15,250	11,164
Lombard lending	82,271	4,111		4,111	3,345
Other retail	4,396	739	1,754	2,493	2,937
Securitization / Re-securitization exposures[1]	21,448	7,136		7,136	7,287
Banking book exposures	*14,995*	*5,497*		*5,497*	*4,147*
Trading book exposures	*6,453*	*1,639*		*1,639*	*3,139*
Non-counterparty related risk	26,610		6,248	6,248	6,050
Settlement risk (failed trades)	141	28	91	118	79
Equity exposures outside trading book[2]	798	2,972		2,972	3,310
Market risk		27,173		27,173	49,241
Value-at-risk (VaR)		*5,686*		*5,686*	*7,935*
Stressed value-at-risk (sVaR)		*7,367*		*7,367*	*13,117*
Incremental risk charge (IRC)		*5,192*		*5,192*	*19,564*
Comprehensive risk measure (CRM)		*8,928*		*8,928*	*8,625*
Operational risk[3]		53,277		53,277	58,867
Total BIS	**615,501**	**164,434**	**28,071**	**192,505**	**240,962**
Additional RWA according to FINMA regulations[4]				15,190	15,475
Total FINMA RWA[5]				207,695	256,437

1 On 31 December 2012, CHF 2.9 billion of the securitization exposures, including CHF 2.1 billion for the option to acquire the SNB StabFund's equity, were deducted from capital and therefore did not generate RWA (on 31 December 2011, a total of CHF 5.3 billion of securitization exposures were deducted from capital, which included CHF 1.6 billion for the option to acquire the equity of the SNB StabFund). 2 Simple risk weight method. 3 Advanced measurement approach. 4 Reflects an additional charge of 10% on credit risk RWA for exposures treated under the standardized approach, a surcharge of 200% for RWA of non-counterparty related assets and additional requirements for market risk. 5 As of 31 December 2012, the FINMA tier 1 ratio amounts to 19.7% (15.0% for 31 December 2011) and the FINMA total capital ratio to 23.4% (16.2% for 31 December 2011).

Source: UBS Annual Report 2012, p. 188

Recommendation 13: Provide granular information to explain how RWAs relate to business activities Example 2 of 2

Risk Profile

Our mix of various business activities implies diverse risk taking by our business divisions. The key risks inherent in their respective business models are best measured through the undiversified Total Economic Capital metric, which mirrors each business division's risk profile before cross-risk effects on group level.

Risk profile of our corporate divisons as measured by total economic capital

Dec 31, 2012

in % (unless stated otherwise)	Corporate Banking & Securities	Global Transaction Banking	Asset & Wealth Management	Private & Business Clients	Non-Core Operations Unit	Consolidation & Adjustments	Total in € m.	Total in %
Credit Risk	17	5	1	13	8	0	12,574	44
Market Risk	14	1	5	11	10	5	13,185	46
Operational Risk	7	0	2	1	7	–	5,018	17
Diversification Benefit	(5)	(0)	(1)	(2)	(6)	(0)	(4,435)	(15)
Business Risk	8	–	0	–	–	–	2,399	8
Total EC in € m.	11,788	1,434	2,016	6,720	5,452	1,331	28,741	100
in %	41	5	7	23	19	5	100	

Corporate Banking & Securities' (CB&S) risk profile is dominated by its trading activities, in particular market risk from position taking and credit risk primarily from derivatives exposure. Further credit risks originate from lending to corporates and financial institutions. The remainder is divided equally between operational risks and business risk, primarily from potential legal and earnings volatility risks, respectively. Global Transaction Banking (GTB) has the lowest risk (as measured by economic capital) of all our segments. GTB's focus on trade finance implies that the vast majority of its risk originates from credit with a small portion from market risk mainly in derivatives positions.

The main risk driver of Asset & Wealth Management's (AWM) business are guarantees on investment funds, which we report as nontrading market risk. Otherwise AWM's advisory and commission focused business attracts primarily operational risk.

In contrast to this, Private & Business Client's (PBC) risk profile divides equally between credit risk from retail and SME lending and nontrading market risk from Postbank's investment portfolio.

Risk-weighted Assets by Model Approach and Business Division

Dec 31, 2012

in € m.	Corporate Banking & Securities	Global Transaction Bank	Asset & Wealth Management	Private & Business Clients	Non-Core Operations Unit	Consolidation & Adjustments and Other	Total
Credit Risk	70,590	26,398	6,134	67,511	40,329	18,235	229,196
Advanced IRBA	63,727	18,464	2,823	38,637	19,501	573	143,725
Central Governments	2,440	818	11	76	266	151	3,762
Institutions	5,686	1,607	93	200	1,333	27	8,946
Corporates	49,258	15,610	2,589	2,796	10,999	395	81,646
Retail	217	20	130	34,529	1,150	0	36,046
Other	6,125	409	1	1,037	5,753	0	13,325
Foundation IRBA	–	–	–	8,726	1,813	–	10,539
Central Governments	–	–	–	32	2	–	35
Institutions	–	–	–	2,217	939	–	3,156
Corporates	–	–	–	6,477	872	–	7,349
Retail	–	–	–	–	–	–	–
Other	–	–	–	–	–	–	0
Other IRBA	2,487	261	455	9,042	8,027	2,321	22,592
Central Governments	–	–	–	–	–	–	–
Institutions	–	–	–	–	–	–	–
Corporates	1,341	240	–	5,574	3,802	–	10,957
Retail	–	–	–	–	–	–	–
Other	1,146	20	455	3,467	4,225	2,321	11,635
Standardized Approach	4,376	7,673	2,856	11,105	10,988	15,340	52,340
Central Governments	2	68	0	87	222	1	379
Institutions	13	16	9	112	77	3	230
Corporates	3,070	7,125	1,038	2,733	4,273	401	18,640
Retail	16	392	134	5,991	2,758	1	9,292
Other	1,275	73	1,675	2,183	3,658	14,935	23,799
Market Risk	35,656	365	1,166	360	15,512	–	53,058
Internal Model Approach	31,280	365	1,166	–	13,761	–	46,571
Standardized Approach	4,376	–	–	360	1,751	–	6,487
Operational Risk	19,221	331	4,904	4,530	22,609	–	51,595
Advanced measurement approach	19,221	331	4,904	4,530	22,609	–	51,595
Total	124,939	27,093	12,451	72,695	80,295	16,377	333,849

Within credit risk, the line item "Other" in Advanced IRBA predominately reflects RWA from securitization positions in the banking book. The Other IRBA mainly contains equity positions as well as non-credit obligation assets in the category "Other". Within the Standardized Approach, about half of the line item "Other" includes RWAs from banking book securitizations with the remainder being exposures assigned to the further exposure classes in the Standardized Approach apart from central governments, institutions, corporate and retail.

Source: Deutsche Bank Financial Report 2012, p. 54-55; 179

Recommendation 14: Present a table showing the capital requirements for each method used for calculating RWAs

TABLE 6: PILLAR 1 RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENTS

In millions of euros	31 December 2012 Risk-weighted assets	31 December 2012 Capital Requirement	31 December 2011 Risk-weighted assets	31 December 2011 Capital Requirement	Variation Risk-weighted assets	Variation Capital Requirement
Credit risk	411,151	32,892	446,674	35,734	(35,523)	(2,842)
Credit risk - IRB approach	**172,409**	**13,793**	**192,852**	**15,428**	**(20,443)**	**(1,635)**
Central governments and central banks	3,244	260	4,310	345	(1,066)	(85)
Corporates	121,986	9,759	136,889	10,951	(14,903)	(1,192)
Institutions	10,326	826	13,391	1,071	(3,065)	(245)
Retail	36,749	2,940	38,127	3,050	(1,378)	(110)
Real estate loans	*10,772*	*862*	*10,311*	*825*	*461*	*37*
Revolving exposures	*5,851*	*468*	*6,530*	*522*	*(679)*	*(54)*
Other exposures	*20,126*	*1,610*	*21,286*	*1,703*	*(1,160)*	*(93)*
Other non credit-obligation assets	104	8	134	11	(30)	(3)
Credit risk - Standardised approach	**238,742**	**19,099**	**253,822**	**20,306**	**(15,080)**	**(1,207)**
Central governments and central banks	3,742	299	3,458	277	284	22
Corporates	112,909	9,033	117,083	9,367	(4,174)	(334)
Institutions	8,508	681	7,282	582	1,226	99
Retail	80,589	6,447	82,922	6,634	(2,333)	(187)
Real estate loans	*26,276*	*2,102*	*26,818*	*2,145*	*(542)*	*(43)*
Revolving exposures	*3,137*	*251*	*4,295*	*344*	*(1,158)*	*(93)*
Other exposures	*51,176*	*4,094*	*51,810*	*4,145*	*(634)*	*(51)*
Other non credit-obligation assets	32,994	2,639	43,077	3,446	(10,083)	(807)
Securitisation positions	19,076	1,526	24,376	1,950	(5,300)	(424)
Securitisation positions - IRB approach	17,153	1,372	22,665	1,813	(5,512)	(441)
Securitisation positions - Standardised approach	1,923	154	1,712	137	211	17
Counterparty risk	20,533	1,643	23,624	1,890	(3,091)	(247)
Counterparty risk - IRB approach	**18,633**	**1,491**	**20,863**	**1,669**	**(2,230)**	**(178)**
Central governments and central banks	222	18	180	14	42	4
Corporates	15,117	1,209	16,344	1,308	(1,227)	(99)
Institutions	3,294	264	4,339	347	(1,045)	(83)
Counterparty risk - Standardised approach	**1,900**	**152**	**2,761**	**221**	**(861)**	**(69)**
Central governments and central banks	27	2	1	0	26	2
Corporates	1,610	129	2,426	194	(816)	(65)
Institutions	254	20	320	26	(66)	(6)
Retail	9	1	14	1	(5)	0
Other exposures	*9*	*1*	*14*	*1*	*(5)*	*0*
Equity risk	24,377	1,950	25,775	2,062	(1,398)	(112)
Internal model	21,496	1,720	23,461	1,877	(1,965)	(157)
Listed equities	*7,734*	*619*	*8,670*	*694*	*(395)*	*(32)*
Other equity exposures	*7,321*	*586*	*8,576*	*686*	*(1,796)*	*(143)*
Private equity exposures in diversified portfolios	*6,441*	*515*	*6,215*	*497*	*226*	*18*
Simple weighting method	1,733	138	1,248	100	485	38
Listed equities	*21*	*2*	*14*	*1*	*7*	*1*
Other equity exposures	*468*	*37*	*125*	*10*	*343*	*27*
Private equity exposures in diversified portfolios	*1,244*	*99*	*1,109*	*89*	*135*	*10*
Standardised approach	1,148	92	1,066	85	82	7
Market risk	25,548	2,044	38,501	3,080	(12,953)	(1,036)
Internal model	22,633	1,811	35,338	2,827	(12,705)	(1,016)
VaR	*5,440*	*435*	*8,230*	*659*	*(2,790)*	*(224)*
Stressed VaR	*11,179*	*894*	*16,605*	*1,328*	*(5,426)*	*(434)*
Incremental Risk Charge	*3,421*	*274*	*6,440*	*515*	*(3,019)*	*(241)*
Comprehensive Risk Measure	*2,593*	*208*	*4,063*	*325*	*(1,470)*	*(117)*
Standardised approach	2,652	212	2,386	191	266	21
Trading book securitisation positions	263	21	777	62	(514)	(41)
Operational risk	51,154	4,092	54,617	4,369	(3,463)	(277)
Advanced Measurement Approach (AMA)	35,586	2,847	38,628	3,090	(3,042)	(243)
Standardised approach	9,518	761	9,470	758	48	3
Basic indicator approach	6,050	484	6,519	521	(471)	(37)
TOTAL	551,839	44,147	613,567	49,085	(61,728)	(4,938)

Source: BNP Paribas Annual Report 2012, p. 233

Regulatory Capital Requirements and Risk-weighted Assets

in € m.	Dec 31, 2012 Capital requirements	Dec 31, 2012 RWA	Dec 31, 2011 Capital requirements	Dec 31, 2011 RWA
Counterparty credit risk				
Advanced IRBA				
Central governments	301	3,762	207	2,586
Institutions	716	8,946	1,018	12,727
Corporates	6,532	81,646	8,049	100,609
Retail (excluding Postbank)	1,727	21,583	1,718	21,480
Retail (Postbank)	1,157	14,462	912	11,405
Other non-credit obligation assets	343	4,283	1,144	14,304
Total advanced IRBA	10,775	134,683	13,049	163,112
Foundation approach				
Central governments	3	35	3	37
Institutions	252	3,156	323	4,044
Corporates	1,465	18,306	1,391	17,382
Other non-credit obligation assets	152	1,897	228	2,850
Total foundation approach	1,872	23,394	1,945	24,312
Standardized approach				
Central governments	0	1	1	15
Regional governments and local authorities	4	55	8	100
Other public sector entities	26	323	52	654
Multilateral development banks	–	–	–	–
International organizations	–	–	–	–
Institutions	18	230	47	583
Covered bonds issued by credit institutions	1	8	8	98
Corporates	1,491	18,640	1,840	22,998
Retail	525	6,564	882	11,029
Claims secured by real estate property	218	2,728	252	3,152
Collective investment undertakings	196	2,444	220	2,755
Other items	1,176	14,702	8	94
Past due items	130	1,625	156	1,944
Total standardized approach	3,786	47,320	3,474	43,424
Risk from securitization positions				
Securitizations (IRBA)	1,066	13,325	1,340	16,753
Securitizations (standardized approach)	117	1,457	157	1,961
Total risk from securitization positions	1,183	14,782	1,497	18,714
Risk from equity positions				
Equity positions (grandfathered)	281	3,517	282	3,522
Equity positions (IRBA simple risk-weight approach)	436	5,455	760	9,503
Exchange-traded	51	632	81	1,016
Non-exchange-traded	369	4,616	647	8,088
Non-exchange-traded but sufficiently diversified	17	207	32	399
Total risk from equity positions	718	8,971	1,042	13,024
Settlement risk	4	46	14	178
Total counterparty credit risk	18,336	229,196	21,021	262,764
Market risk in the trading book				
Internal model approach	3,726	46,571	4,819	60,241
VaR	761	9,510	972	12,150
Stressed VaR	1,641	20,518	2,151	26,892
Incremental Risk Charge	761	9,509	758	9,475
Comprehensive Risk Measurement (Correlation Trading)	563	7,035	938	11,724
Standardized approach	519	6,487	628	7,854
Interest rate risk – Non-Securitization	2	26	142	1,780
Interest rate risk – Securitization and nth-to-default derivatives	443	5,533	399	4,986
Equity risk	–	–	–	–
FX risk	42	524	55	688
Commodity risk	–	–	–	–
Other market risk	32	404	32	401
Total market risk in the trading book	4,245	53,058	5,448	68,095
Operational risk				
Advanced measurement approach (excluding Postbank)	3,866	48,325	3,772	47,148
Advanced measurement approach (Postbank)	262	3,270	284	3,547
Total operational risk	4,128	51,595	4,056	50,695
Total regulatory capital requirements and RWA	26,708	333,849	30,524	381,554

Source: Deutsche Bank Financial Report 2012, p. 180

Recommendation 15: Tabulation of credit risk in the banking book for major Basel asset class portfolios Example 1 of 2

Key points

- In general, standardised RWA densities show a greater consistency across regions and exposure classes than advanced IRB, as the advanced IRB approach reflects the relative risks of the different portfolios to a greater extent.
- RWA densities for retail lending secured on real estate property are higher in North America due to challenging conditions in the US mortgage market and extended foreclosure timelines.
- RWA densities are lower in the home markets because of the resilience of the residential property sector in those markets which warrants the application of lower LGDs to our exposures.
- Central government RWA densities are higher in MENA reflecting the recent political upheaval and in Latin America due to economic uncertainty in the region.
- The RWA density for the US cards business sold in the year was higher than our other credit card portfolios, and so the sale contributed towards the overall reduction.
- The residual maturity profile of the book lengthened slightly during the year mainly due to the increased mortgage lending, which tends to have a longer term than other exposures, in Europe and Hong Kong and other Asia-Pacific sites.

Table 9: Credit risk – summary

	At 31 December 2012				At 31 December 2011			
	Exposure value US$bn	Average exposure value US$bn	RWAs US$bn	Capital required US$bn	Exposure value US$bn	Average exposure value US$bn	RWAs US$bn	Capital required US$bn
Credit risk analysis by exposure class								
IRB advanced approach	1,470.0	1,551.2	513.6	41.1	1,575.4	1,532.9	577.6	46.2
Retail:								
– secured on real estate property	317.4	310.7	130.8	10.5	300.0	298.5	153.6	12.3
– qualifying revolving retail	64.0	95.6	16.2	1.3	142.6	143.9	55.5	4.4
– SMEs[1]	13.1	13.1	6.8	0.5	13.0	13.4	7.0	0.6
– other retail	60.1	60.3	17.2	1.4	63.0	67.0	23.0	1.8
Total retail	454.6	479.7	171.0	13.7	518.6	522.8	239.1	19.1
Central governments and central banks	355.8	407.4	36.8	2.9	408.0	343.8	40.3	3.2
Institutions	131.1	141.5	27.0	2.2	145.4	169.1	27.7	2.2
Corporates	479.1	465.0	251.6	20.1	444.2	435.0	240.7	19.3
Equity	0.3	0.4	0.9	0.1	0.4	0.2	1.6	0.1
Securitisation positions[2]	49.1	57.2	26.3	2.1	58.8	62.0	28.2	2.3
IRB foundation approach	19.4	17.7	10.3	0.8	16.5	11.4	8.5	0.7
Corporates	19.4	17.7	10.3	0.8	16.5	11.4	8.5	0.7
Standardised approach	681.5	630.2	374.5	30.0	591.2	563.0	372.1	29.8
Central governments and central banks	177.4	117.1	0.9	0.1	104.6	91.9	1.3	0.1
Institutions	57.5	56.4	19.4	1.6	41.9	42.5	14.0	1.1
Corporates	254.5	259.9	237.3	19.0	250.1	230.9	233.9	18.7
Retail	52.9	53.9	40.1	3.2	55.5	55.8	41.9	3.4
Secured on real estate property	45.3	47.4	24.0	1.9	47.1	42.4	25.6	2.0
Past due items	4.4	4.3	6.0	0.5	4.0	4.0	5.3	0.4
Regional governments or local authorities	1.2	1.2	1.0	0.1	1.0	1.5	0.8	0.1
Equity	2.8	5.7	2.8	0.2	6.5	6.4	8.4	0.7
Other items[3]	85.5	84.3	43.0	3.4	80.5	87.6	40.9	3.3
	2,170.9	2,199.1	898.4	71.9	2,183.1	2,107.3	958.2	76.7

1 *The FSA allows exposures to small and medium-sised enterprises ('SME's) to be treated under the Retail IRB approach, where the total amount owed to the Group by the counterparty is less than EUR 1m and the customer is not managed individually as a corporate counterparty.*
2 *Excludes trading book securitisation positions and positions deducted from regulatory capital (that would be risk-weighted at 1,250%).*
3 *Primarily includes such items as fixed assets, prepayments, accruals and Hong Kong Government certificates of indebtedness.*

Table 14: Wholesale IRB exposure – by obligor grade[1]

		Central governments and central banks						
	CRR	PD range %	Exposure value[2] US$bn	Average PD[3] %	Average LGD[3] %	RWA density[3] %	RWAs US$bn	Mapped external rating
At 31 December 2012								
Default risk								
Minimal	0.1	0.000 to 0.010	110.7	0.01	11.0	1	1.2	AAA to AA+
	1.1	0.011 to 0.028	116.6	0.02	13.2	3	3.6	AA to AA–
	1.2	0.029 to 0.053	34.5	0.04	22.6	7	2.3	A+
Low	2.1	0.054 to 0.095	60.6	0.07	33.4	15	9.0	A
	2.2	0.096 to 0.169	9.0	0.13	37.5	28	2.5	A–
Satisfactory	3.1	0.170 to 0.285	6.9	0.22	44.3	38	2.6	BBB+
	3.2	0.286 to 0.483	3.3	0.37	41.8	56	1.9	BBB to BBB–
	3.3	0.484 to 0.740	4.9	0.63	45.0	64	3.1	BBB–
Fair	4.1	0.741 to 1.022	0.8	0.87	35.0	66	0.5	BB+
	4.2	1.023 to 1.407	0.3	1.20	37.8	98	0.3	BB
	4.3	1.408 to 1.927	0.7	1.65	45.0	62	0.4	BB–
Moderate	5.1	1.928 to 2.620	1.5	2.25	45.0	110	1.6	BB–
	5.2	2.621 to 3.579	3.9	3.05	45.0	124	4.9	B+
	5.3	3.580 to 4.914	1.6	4.20	45.1	134	2.2	B+
Significant	6.1	4.915 to 6.718	0.4	5.75	35.2	118	0.5	B
	6.2	6.719 to 8.860	0.1	7.85	45.0	168	0.2	B–
High	7.1	8.861 to 11.402	–	–	–	–	–	B–
	7.2	11.403 to 15.000	–	–	–	–	–	CCC+
Special management	8.1	15.001 to 22.000	–	–	–	–	–	CCC
	8.2	22.001 to 50.000	–	–	–	–	–	CCC–
	8.3	50.001 to 99.999	–	–	–	–	–	CC to C
Default[4]	9/10	100.000	–	–	–	–	–	Default
			355.8	0.13	19.6	10	36.8	
At 31 December 2011								
Default risk								
Minimal		0.000 to 0.053	302.1	0.02	13.5	3	7.8	
Low		0.054 to 0.169	82.8	0.07	38.0	17	13.9	
Satisfactory		0.170 to 0.740	13.6	0.39	43.7	52	7.1	
Fair		0.741 to 1.927	4.1	1.27	43.6	95	3.9	
Moderate		1.928 to 4.914	4.8	3.20	45.0	125	6.0	
Significant		4.915 to 8.860	0.2	7.46	45.0	150	0.3	
High		8.861 to 15.000	0.3	9.74	88.0	367	1.1	
Special management		15.001 to 99.999	0.1	53.88	61.2	200	0.2	
			408.0	0.11	20.3	10	40.3	

For footnotes, see page 34.

Key points

- The reclassification of exposures to central banks in EEA member states to the standardised approach had an adverse impact on the risk grade profile of the portfolio which was offset by improvements in portfolios outside the EEA.
- We continue to concentrate our exposures on minimal and low risk categories, which account for 93% of total exposures (2011: 94%).

[Repeated for other IRBA categories]

Source: HSBC Pillar 3 Disclosures at December 31, 2012, p. 23-28; 32-38

Recommendation 15: Tabulation of credit risk in the banking book for major Basel asset class portfolios Example 2 of 2

Exposures (READ) per internal rating grade and corresponding PD, LGD and RWA (amounts in EUR million)

Internal rating grade	PD range for each grade	READ in each grade	Average RPD	Average RLGD	RWAs in each grade (or band)	Total RRW	External Rating Equivalent
Performing							
1	0.00-0.01	25,532	0.03*	23.97	733	0.03	AAA
2	0.01-0.02	43,385	0.02	20.83	789	0.02	AA+
3	0.02-0.04	41,726	0.04	19.77	904	0.02	AA
4	0.04-0.05	15,328	0.04	25.81	1,375	0.09	AA-
5	0.05-0.06	26,274	0.05	30.14	2,461	0.09	A+
6	0.06-0.08	45,981	0.07	22.72	4,031	0.09	A
7	0.08-0.11	44,129	0.11	29.01	6,505	0.15	A-
8	0.11-0.17	50,381	0.15	22.55	7,282	0.14	BBB+
9	0.17-0.29	89,193	0.22	21.9	13,314	0.15	BBB
10	0.29-0.51	106,880	0.37	20.27	20,625	0.19	BBB-
11	0.51-0.89	101,638	0.64	19.91	25,313	0.25	BB+
12	0.89-1.54	49,123	1.14	18.94	16,754	0.34	BB
13	1.54-2.67	36,461	1.92	20.37	16,751	0.46	BB-
14	2.67-4.62	22,753	3.34	20.33	12,449	0.55	B+
15	4.62-8.01	15,811	6.55	19.8	10,464	0.66	B
16	8.01-13.88	6,127	10.88	21.07	4,997	0.82	B-
17	13.88-20.00	6,162	18.58	20.45	6,154	1	CCC
18	20.00-30.00	5,820	25.02	16.29	5,157	0.89	CC
19	>30%	4,301	40.48	21.68	4,453	1.04	C
Non-Performing							
20	100%	10,352	100	25.63	9,523	0.92	Default
21	100%	2,667	100	18.11	2,625	0.98	Default
22	100%	2,158	100	25.01	1,347	0.62	Default
Total		752,182	3.28	21.79	174,006	0.23	

Includes the AIRB portfolio only; excludes securitisations, equities and ONCOA.
* For non-sovereign exposures there is a RPD floor of 3 BPS, hence the RPD in the first three grades might look counterintuitive, due to the mixture of sovereign and non-sovereign exposures.

Model approaches per exposure class (amounts in EUR million)

	Sovereigns	Institutions	Corporate	Residential mortgages	Other retail	Total 2012	Total 2011
Average PD	0.08%	1.24%	5.55%	2.35%	7.32%	3.28%	2.89%
Average LGD	20.67%	23.22%	23.88%	17.04%	44.34%	21.79%	20.83%
EAD	84,463	85,995	252,650	292,650	36,424	752,182	857,302
RWA	2,710	14,014	97,157	44,047	16,079	174,006	203,444
RWA density	3.2%	16.3%	38.5%	15.1%	44.1%	23.1%	23.7%

Includes the AIRB portfolio only and non-performing loans; excludes securitisations, equities and ONCOA.

The relatively low RWA density for Sovereigns and central banks is because of sovereign entities, which are rated between 1-4 and whose exposures are denominated in local currencies, and therefore receive a regulatory risk weight of 0%.

AIRB changes (amounts in %)

	Sovereigns	Institutions	Corporate	Residential mortgages	Other retail	Total 2012
Average PD	–16%	23%	23%	–10%	7%	14%
Average LGD	1%	21%	–2%	6%	2%	5%
READ	–22%	–14%	–7%	–14%	–3%	–12%
RWA	–7%	–12%	–10%	–27%	–1%	–14%
RWA density	18%	3%	–3%	–15%	2%	–3%

Includes the AIRB portfolio only; excludes securitisations, equities and ONCOA.

Over the course of 2012, both average PD and average LGD increased. This was due to general decrease in credit quality and mostly house prices as several markets experienced economic difficulties. Nonetheless, credit quality remained stable for Belgium and ING Vysya and improved for the Australian Residential mortgages portfolio. Next to that, the relative shift in portfolio composition from higher risk weight exposure classes to lower risk weight exposure classes led to a slight decrease in the overall AIRB risk weight. The low risk density decrease combined with a significant reduction in READ led to a reduction in RWA over 2012.

Source: ING Annual Report 2012/Pillar 3, p. 203 – 204

Recommendation 16: Flow statement of Risk Weighted Assets, by risk type Example 1 of 2

RWA movement by key driver – credit risk – IRB only
(Unaudited)

	Europe US$bn	Hong Kong US$bn	Rest of Asia-Pacific US$bn	MENA US$bn	North America US$bn	Latin America US$bn	Total US$bn
RWAs at 1 January 2012	156.5	68.0	82.3	12.9	254.5	12.0	586.2
Foreign exchange movement	4.7	0.1	0.8	(0.2)	0.7	0.1	6.2
Acquisitions and disposals	–	–	(0.1)	(0.7)	(40.3)	(0.9)	(42.0)
Book size	(1.8)	3.6	5.4	1.0	(7.6)	(0.6)	–
Book quality	(6.6)	1.5	(1.1)	(0.3)	(17.9)	0.1	(24.3)
Model updates	0.4	–	–	0.1	–	–	0.5
Portfolios moving onto IRB approach	1.4	–	–	0.1	–	–	1.5
New/updated models	(1.0)	–	–	–	–	–	(1.0)
Methodology and policy	(2.5)	(3.0)	4.8	(0.2)	(2.3)	0.5	(2.7)
Internal updates	(1.3)	(3.0)	4.8	(0.2)	(2.3)	0.5	(1.5)
External updates	(1.2)	–	–	–	–	–	(1.2)
Total RWA movement	(5.8)	2.2	9.8	(0.3)	(67.4)	(0.8)	(62.3)
RWAs at 31 December 2012	150.7	70.2	92.1	12.6	187.1	11.2	523.9

Counterparty credit risk and market risk RWAs
(Unaudited)

Trading portfolio movements for the modelled approaches to market risk and counterparty credit risk ('CCR') RWAs are outlined in the tables below. For the basis of preparation, see the Appendix to Capital on page 295.

RWA movement by key driver – counterparty credit risk – IRB only
(Unaudited)

	US$bn
RWAs at 1 January 2012	50.6
Book size	(0.8)
Book quality	0.1
Model updates	(0.2)
Methodology and policy	(4.0)
Internal updates	(4.0)
External updates	–
Total RWA movement	(4.9)
RWAs at 31 December 2012	45.7

CCR RWAs decreased by US$4.9bn during the year, primarily due to methodology and policy changes in GB&M. The main drivers of the change arose through the increased application of counterparty netting within the calculation and from counterparty data refinement which allowed us to apply lower potential future exposure add-on factors. There were reductions in book size in North America, due to a decrease in the GB&M legacy credit portfolio and from maturing trades, and in Latin America due to reduced repo activity with central banks and lower exposure in respect of derivative transactions.

RWA movement by key driver – market risk – internal model based
(Unaudited)

	US$bn
RWAs at 1 January 2012	54.7
Foreign exchange movement and other	(0.4)
Movement in risk levels	(7.4)
Model updates	–
Methodology and policy	(2.4)
Internal updates	(2.4)
External updates	–
Total RWA movement	(10.2)
RWAs at 31 December 2012	44.5

Market risk RWAs decreased by US$10bn in 2012 with the main driver being a reduction in risk levels of US$11bn in GB&M, primarily as a result of decreasing VAR due to reductions in exposure and improvements in market conditions. The factors affecting the reductions in VAR also drove the reductions in the levels of stressed VAR. The effect was partly offset by a US$4.0bn risk level increase in the incremental risk charge as a result of a recalibration of the sovereign correlation matrix. RWA changes due to methodology and policy of US$2.4bn were due to a reduction in the VAR multiplier in France.

Source: HSBC Annual Report 2012, p. 282;284

Movement in risk-weighted assets

	Wholesale Banking credit risk $million	Consumer Banking credit risk $million	Total credit risk $million	Market risk $million
Opening risk-weighted assets at 1 January 2012	157,538	62,856	220,394	21,354
Assets growth	10,236	3,763	13,999	2,000
Credit migration	4,940	1,164	6,104	–
Risk-weighted assets efficiencies	(2,800)	(1,000)	(3,800)	–
Model, methodology and policy changes	5,324	2,713	8,037	(700)
Foreign currency translation differences	(69)	1,985	1,916	–
Stressed VaR	–	–	–	1,796
Closing risk-weighted assets at 31 December 2012	175,169	71,481	246,650	24,450

Source: Standard Chartered Annual Report 2012, p. 120

Recommendation 16: Flow statement of Risk Weighted Assets, by risk type
Example 2 of 2

The table below provides an analysis of key drivers for RWA movements on a Basel 2.5 basis observed for credit and market risk in the reporting period.

Development of Risk-weighted Assets for Credit Risk and Market Risk

	Dec 31, 2012	
in € m.	Counterparty credit risk	thereof: derivatives and repo-style transactions
Credit risk RWA balance, beginning of year	262,764	50,973
Book Quality/Growth	3,400	3,283
Operating Model Improvements	(13,534)	(12,800)
Advanced Model Roll out	(7,325)	(4,180)
Asset Sale/Hedging	(14,470)	(1,567)
Foreign exchange movements	(1,639)	(436)
Credit risk RWA balance, end of year	229,196	35,274

in € m.	Dec 31, 2012
Market risk RWA balance, beginning of year	68,095
Movement in risk levels	(322)
Market data changes and recalibrations	(2,577)
Model updates	(707)
Methodology and policy	(11,215)
Acquisitions and disposals	–
Foreign exchange movements	(216)
Market risk RWA balance, end of year	53,058

The decrease in RWA for counterparty credit risk by 13 % since December 31, 2011 mainly reflects the successful RWA reduction efforts focusing on de-risking as well as model and process enhancements.

The category Asset Sale/Hedging mainly includes de-risking activities through disposals, restructuring and additional hedging. Regular process and data enhancements including further migration of derivatives into the internal model method as well as continuing usage of master netting and collateral agreements are considered in the category Operating Model improvements. The Advanced Model Roll-out category primarily shows the impact from BaFin approvals received for certain advanced IRBA models which we continued to roll out in light of the German regulatory requirement to achieve an IRBA coverage ratio of 92 % on an EAD- and RWA-basis by December 31, 2012. The category Book Quality/Growth includes organic changes in the book size as well as the effects from portfolio rating migrations.

The analysis for market risk covers movements in our internal models for value-at-risk, stressed value-at-risk, incremental risk charge and comprehensive risk measure as well as results from the market risk standardized approach, e.g. for trading securitizations and nth-to-default derivatives or trading exposures for Postbank.

The 22 % RWA decrease for market risk since December 31, 2011 is mainly due to the significant reduction of our BaFin-defined, internal model multiplier from 5.5 to 4.0 for value-at-risk and stressed value-at-risk resulting from model enhancements and process improvements. The impact is reflected exclusively in the "Methodology and policy" category which provides regulatory-driven changes to our market risk RWA models. The market risk RWA movements due to changes in market data levels, volatilities, correlations, liquidity and ratings are included under the market data changes category. In 2012 we saw a benefit in market risk RWA due to lower levels of volatility within the historical market data used in the calculation. Changes to our market risk RWA internal models, such as methodology enhancements or risk scope extensions, are included in the category of "Model updates". Further details on the market risk methodologies and their refinements are provided in the section "Trading Market Risk – Market Risk Measurement". Market risk RWA movements in Risk levels are interpreted as organic changes in portfolio size and composition resulting from the normal course of business. In this category we also consider re-allocations between the regulatory trading and banking book which occur in rare cases. Significant new businesses and disposals would be assigned to the line item Acquisition and disposal, which was not applicable in this reporting period.

Note: Deutsche Bank does not breakout the impacts of Book Quality and Growth separately in the disclosure above, as requested by the EDTF

Source: Deutsche Bank Financial Report 2012, p. 181

Recommendation 17: Narrative placing Basel Pillar 3 back-testing requirements into context

Default Definition and Model Validation

A prerequisite for the development of rating methodologies and the determination of risk parameters is a proper definition, identification and storage of the default event of a customer. We apply a default definition in accordance with the requirements of Section 125 SolvV as confirmed by the BaFin as part of the IRBA approval process.

As an important element of our risk management framework we regularly validate our rating methodologies and credit risk parameters. Whereas the rating methodology validation focuses on the discriminatory power of the models, the risk parameter validation for PD, LGD and EAD analyzes the predictive power of those parameters when compared against historical default experiences.

According to our standards, and in line with the SolvV-defined minimum requirements, the parameters PD, LGD and EAD are reviewed annually. The validation process for parameters as used by us excluding Postbank is coordinated and supervised by a validation working group composed of members from Finance, Risk Analytics and Instruments and Credit Risk Management. Risk parameter validations consist of quantitative analyses of internal historical data and are enriched by qualitative assessments in case data for validation is not sufficient for getting reliable results. A recalibration of specific parameter settings is triggered based on validation results if required. In addition to annual validations, ad hoc reviews are performed where appropriate as a reaction to quality deterioration at an early stage due to systematic changes of input factors (e.g. changes in payment behavior) or changes in the structure of the portfolio. The reviews conducted in 2012 for advanced IRBA rating systems triggered recalibrations as shown in the table below. 26 new risk parameters are applied due to newly approved rating systems or due to increased granularity in existing risk parameter settings. None of the recalibrations individually nor the impact of all recalibrations in the aggregate materially impacted our regulatory capital requirements.

Analogously at Postbank the allocation mechanism of the master scale to the probabilities of default as well as the results of the estimations of the input parameters PD, CCF and LGD are reviewed annually. Postbank's model validation committee is responsible for supervising the annual validation process of all models. Via a cross committee membership Deutsche Bank senior managers join in Postbank committees and vice versa, to ensure a joint governance.

Validation results for risk parameters used in our advanced IRBA

						Dec 31, 2012
	PD		LGD		EAD	
	Count	EAD in %	Count	EAD in %	Count	EAD in %
Appropriate	104	91.4	100	89.8	40	79.5
Overly conservative	6	1.8	18	4.1	29	15.9
Progressive	16	6.8	11	6.1	5	4.6
Total	126	100.0	129	100.0	74	100.0
Thereof already recalibrated and introduced in 2012						
Overly conservative	1	0.1	17	3.5	24	15.3
Progressive	1	0.1	7	2.0	5	4.6
Total	2	0.2	24	5.5	29	19.9

Above table summarizes the outcome of the model validations for risk parameters PD, LGD and EAD used in our advanced IRBA including Postbank. Individual risk parameter settings are classified as appropriate if no recalibration was triggered by the validation and thus the application of the current parameter setting is continued since still sufficiently conservative. A parameter classifies as overly conservative or progressive if the validation triggers a recalibration leading to a decrease or increase of the setting, respectively. The breakdown for PD, LGD and EAD is presented in counts as well as in the relative EAD attached to the respective parameter as of December 31, 2012.

Comparison of EL estimates for loans, commitments and contingent liabilities with actual losses recorded by regulatory exposure class

in € m.	Dec 31, 2011 Expected loss	2012 Actual loss	Dec 31, 2010 Expected loss[1]	2011 Actual loss[1]	Dec 31, 2009 Expected loss	2010 Actual loss	Dec 31, 2008 Expected loss	2009 Actual loss	Dec 31, 2007 Expected loss	2008 Actual loss[2]
Central governments	1	–	2	–	2	–	2	–	2	–
Institutions	7	14	22	2	16	1	21	16	13	55
Corporates	445	393	449	363	471	358	591	1,665	320	251
Retail exposures secured by real estate property	294	337	222	359	118	101	120	140	127	125
Qualifying revolving retail exposures	23	17	2	30	2	5	2	7	2	4
Other retail exposures	418	348	390	301	301	282	311	315	226	223
Total expected loss and actual loss in the advanced IRBA	1,188	1,109	1,088	1,055	910	747	1,047	2,143	690	658

[1] The 2010 Expected Loss and 2011 Actual Loss figures have been restated to limit disclosure to Postbank's advanced IRBA exposure only.
[2] Losses related to assets reclassified into loans under IAS 39 amendments were excluded from the actual loss for 2008 since, as of December 31, 2007, the related assets were not within the scope of the corresponding expected loss calculation for loans.

The actual loss in 2012 was 7 % lower than the expected loss and was primarily driven by the lower level of provisions in our Other retail portfolios.

The increase in expected loss as of December 31, 2011 and as of December 31, 2010 in comparison to December 31, 2009 as well as the higher actual losses in 2012 and 2011 is primarily related to the inclusion of Postbank.
In 2010 the actual loss was 18 % below the expected loss as the actual loss and was positively influenced by lower provisions taken for assets reclassified in accordance with IAS 39.

The decrease of the expected loss for 2010 compared to the expected loss for 2009 reflected the slightly improved economic environment after the financial crisis.

In 2009 actual losses exceeded the expected loss by 104 % driven mainly by material charges taken against a small number of exposures, primarily concentrated in Leveraged Finance, as well as the further deteriorating credit conditions not reflected in the expected losses for our corporate exposures at the beginning of the year.

The following table provides a year-to-year comparison of the actual loss by regulatory exposure class. Postbank is firstly included in the reporting period 2011.

Year-to-year comparison of the actual loss by IRBA exposure class

in € m.	2012	2011	2010	2009	2008
Central governments	–	–	–	–	73
Institutions	14	2	1	16	55
Corporates	393	363	358	1,665	295
Retail exposures secured by real estate property	337	359	101	140	125
Qualifying revolving retail exposures	17	30	5	7	4
Other retail exposures	348	301	282	315	223
Total actual loss by IRBA in the advanced IRBA	1,109	1,055	747	2,143	775

Our actual loss increased by € 54 million or 5 % in 2012 compared to previous year. The drivers of this increase were primarily higher actual losses in the IRBA exposure classes Other retail exposures as well as Corporates excluding Postbank partly being offset by reduction throughout Postbank's advanced IRBA exposure classes.

Note: Model validation disclosure spans additional pages. The above excerpt focuses on the results of the validation process for PD, LGD and EL over time
Source: Deutsche Bank Financial Report 2012, p. 100-104

Section 4

Liquidity

Recommendation 18: Qualitative and quantitative analysis of liquidity reserve

Example 1 of 2

Comparing internal and regulatory liquidity stress tests

The LRA stress scenarios, the FSA ILG and Basel 3 LCR are all broadly comparable short term stress scenarios in which the adequacy of defined liquidity resources is assessed against contractual and contingent stress outflows. The FSA ILG and the Basel 3 LCR stress tests provide an independent assessment of the Group's liquidity risk profile.

Stress Test	Barclays LRA	FSA ILG	Basel 3 LCR	Basel 3 NSFR
Time Horizon	1 – 3 months	3 months	30 days	1 year
Calculation	Liquid assets to net cash outflows	Liquid assets to net cash outflows	Liquid assets to net cash outflows	Stable funding resources to stable funding requirements

As at 31 December 2012, the Group held eligible liquid assets significantly in excess of 100% of stress requirements for each of the one month Barclays-specific LRA scenario and the Basel 3 LCR requirement:

Compliance with internal and regulatory stress tests

As at 31 December 2012	Barclays LRA (one month Barclays specific requirement)[a] £bn	Estimated Basel 3 LCR (revised text January 2013) £bn
Total eligible liquidity pool	150	155
Asset inflows	–	18
Stress outflows		
Retail and commercial deposit outflows	(29)	(36)
Wholesale funding	(45)	(47)
Net secured funding	(11)	(12)
Derivatives	(10)	(10)
Contractual credit rating downgrade exposure	(13)	(14)
Drawdowns of loan commitments	(6)	(22)
Other	(2)	–
Total stress net cash flows	(116)	(123)
Surplus	34	32
Liquidity pool as a percentage of anticipated net cash flows	129%	126%

Barclays plans to maintain its surplus to the internal and regulatory stress requirements at an efficient level. Barclays will continue to monitor the money markets closely, in particular for early indications of the tightening of available funding. In these conditions, the nature and severity of the stress scenarios are reassessed and appropriate action taken with respect to the liquidity pool. This may include further increasing the size of pool or monetising the pool to meet stress outflows.

Liquidity pool (audited)

The Group liquidity pool is held unencumbered against contractual and contingent stress outflows in the LRA stress tests and is not used to support payment or clearing requirements. As at 31 December 2012, the Group liquidity pool was £150bn (2011: £152bn). During 2012 the month-end liquidity pool ranged from £150bn to £173bn and the month-end average balance was £162bn (2011: £156bn).

Barclays does not include any own-name securities in its liquidity pool.

Composition of the Group liquidity pool as at 31 December 2012 (audited)

	Liquidity pool £bn	Liquidity pool of which FSA eligible £bn	Liquidity pool of which Basel 3 LCR eligible: Level 1 £bn	Liquidity pool of which Basel 3 LCR eligible: Level 2A[a] £bn
Cash and deposits with central banks[b]	85	82	82	–
Government bonds[c]				
AAA rated	40	39	40	–
AA+ to AA- rated	5	4	5	–
A+ to A- rated	1	–	–	1
Total government bonds	46	43	45	1
Other				
Supranational bonds and multilateral development banks	4	4	4	–
Agencies and agency mortgage-backed securities	7	–	5	2
Covered bonds (rated AA- and above)	5	–	–	5
Other	3	–	–	–
Total Other	19	4	9	7
Total	150	129	136	8

The Group liquidity pool is well diversified by major currency and the Group monitors LRA stress scenarios for major currencies.

Liquidity pool by currency

	USD £bn	EUR £bn	GBP £bn	Other £bn	Total £bn
Liquidity pool	26	66	25	33	150

Management of the Group liquidity pool (audited)

The composition of the Group liquidity pool is efficiently managed. The maintenance of the liquidity pool increases the Group's costs as the interest expense paid on the liabilities used to fund the liquidity pool is greater than the interest income received on liquidity pool assets. This cost can be reduced by investing a greater portion of the Group liquidity pool in highly liquid assets other than cash and deposits with central banks. These assets primarily comprise government bonds and their inclusion in the liquidity pool does not compromise the liquidity position of the Group.

The composition of the liquidity pool is subject to limits set by the Board, Treasury Committee and the independent credit risk and market risk functions. In addition, the investment of the liquidity pool is monitored for concentration risk by issuer, currency, asset type and country. Given the incremental returns generated by these highly liquid assets, the risk and reward profile is continuously managed.

As at 31 December 2012 the portion of the Group liquidity pool comprised of cash and deposits with central banks reduced to £85bn (2011: £105bn) as a result of a reallocation to government bonds and other highly liquid assets.

Barclays manages the liquidity pool on a centralised basis. As at 31 December 2012, 90% of the liquidity pool was located in Barclays Bank PLC (2011: 94%) and was available to meet liquidity needs across the Group. The residual liquidity pool is held predominantly within Barclays Capital Inc. (BCI). The portion of the liquidity pool outside of Barclays Bank PLC is held against entity-specific stressed outflows and regulatory requirements. To the extent the use of this portion of the liquidity pool is restricted due to regulatory requirements, it is assumed to be unavailable to the rest of the Group.

For more information on the governance framework for investing the Group liquidity pool see page 337.

Source: Barclays Annual Report 2012, p. 138

Recommendation 18: Qualitative and quantitative analysis of liquidity reserve Example 2 of 2

Liquidity Reserves

Liquidity Reserves comprise available cash and cash equivalents, highly liquid securities (includes government, agency and government guaranteed) as well as other unencumbered central bank eligible assets. The volume of the Liquidity Reserves is a function of the expected stress result, both at an aggregate level as well as at an individual currency level. To the extent we receive incremental short-term wholesale liabilities which attract a high stress roll-off, we will largely keep the proceeds of such liabilities in cash or highly liquid securities as a stress mitigant. As such, the total volume of Liquidity Reserves will fluctuate according to the level of short-term wholesale liabilities held, although this has no material impact on our overall liquidity position under stress. Liquidity Reserves only include assets that are freely transferable within the group, or can be applied against local entity stress outflows. These reserves are held across major currencies and key locations in which the bank is active. The vast majority of our Liquidity Reserves are centrally held at our parent level or at our foreign branches. Size and composition are subject to regular senior management review. The haircuts applied reflect our assumption of the actual liquidity value that could be obtained, primarily through secured funding, and take into account the experience observed in secured funding markets at times of stress.

The following table presents the composition of our Liquidity Reserves for the dates specified. As of December 31, 2012, Liquidity Reserves were € 232 billion (now including Postbank with € 26 billion following integration). The December 31, 2011 comparative amounts do not include Postbank. Excluding Postbank, we saw a decrease in our Liquidity Reserves of € 16 billion. The primary driver of this was a reduction of € 40 billion in our discretionary wholesale funding during the year, offset by growth in more stable funding sources. Excluding Postbank, our average Liquidity Reserves during the year were € 211 billion.

Composition of our liquidity reserves by parent company (including branches) and subsidiaries

	Dec 31, 2012		Dec 31, 2011
in € bn.	Carrying Value	Liquidity Value	Carrying Value
Available cash and cash equivalents (held primarily at central banks)	128	128	140[1]
Parent (incl. foreign branches)	112	112	133
Subsidiaries	16	16	7
Highly liquid securities (includes government, government guaranteed and agency securities)	91	82	65
Parent (incl. foreign branches)	56	52	56
Subsidiaries	35	30	9
Other unencumbered central bank eligible securities	13	10	18
Parent (incl. foreign branches)	12	9	18
Subsidiaries	1	1	0
Total liquidity reserves	232	220	223[1]
Parent (incl. foreign branches)	180	173	207
Subsidiaries	52	47	16

[1] Amounts previously disclosed for December 31, 2011 have been adjusted to include also liquidity reserves which cannot be freely transferred across the group, but which are available to mitigate stress outflows in the entities in which they are held.

The above represents those assets that are unencumbered and which could most readily be used as a source of liquidity over a short-term stress horizon. Carrying value represents market value of Liquidity Reserves. Liquidity value represents the value we give to our Liquidity Reserves, post haircut, under our combined stress scenario assumptions. For an analysis of the pledged assets on the balance sheet, please refer to Note 22 "Assets Pledged and Received as Collateral".

Source: Deutsche Bank Financial Report 2012, p. 163-164

Section 5

Funding

Recommendation 19: Tabular summary of unencumbered and unencumbered assets by balance sheet category Example 1 of 2

Encumbered and unencumbered assets

(Unaudited)

The objective of this disclosure is to facilitate an understanding of available and unrestricted assets that could be used to support potential future funding and collateral needs.

An asset is defined as encumbered if it has been pledged as collateral against an existing liability, and as a result is no longer available to the bank to secure funding, satisfy collateral needs or be sold to reduce the funding requirement. An asset is therefore categorised as unencumbered if it has not been pledged against an existing liability. Unencumbered assets are then further analysed into four separate sub-categories; 'readily realisable assets', 'other realisable assets', 'reverse repo/stock borrowing receivables and derivative assets' and 'cannot be pledged as collateral'.

The disclosure is not designed to identify assets which would be available to meet the claims of creditors or to predict assets that would be available to creditors in the event of a resolution or bankruptcy.

The table below summarises the total on and off-balance sheet assets that are capable of supporting future funding and collateral needs and shows the extent to which these assets are currently pledged for this purpose.

Summary of assets available to support potential future funding and collateral needs (on and off-balance sheet)

(Unaudited)

	2012 US$bn
Total on-balance sheet assets	2,693
Less:	
Reverse repo/stock borrowing receivables and derivative assets	562
Other assets that cannot be pledged as collateral	247
Total on-balance sheet assets that can support funding and collateral needs	1,884
Add off-balance sheet assets:	
Fair value of collateral received from reverse repo/stock borrowing that is available to sell or repledge	296
Fair value of collateral received from derivatives that is available to sell or repledge	6
Total assets that can support funding and collateral needs (on and off-balance sheet)	2,186
Less:	
On-balance sheet assets pledged	233
Off-balance sheet collateral received from reverse repo/stock borrowing which has been repledged or sold	203
Off-balance sheet collateral received from derivative transactions which has been repledged or sold	1
Assets available to support funding and collateral needs	1,749

The effect of active collateral management

Collateral is managed on an operating entity basis, consistent with the operating entity management of liquidity and funding. The available collateral held by each operating entity is managed as a single collateral pool. In managing this collateral and deciding which collateral to pledge, each operating entity will seek to optimise the use of the available collateral pool, within the confines of the LFRF, irrespective of whether the collateral pledged is recognised on-balance sheet or was received in respect of reverse repo, stock borrowing or derivative transactions.

As a result of managing collateral in this manner, in terms of asset encumbrance presentation, we may encumber on-balance sheet holdings while maintaining available unencumbered off-balance sheet holdings, even though we are not seeking to directly finance the on-balance sheet holdings pledged.

In quantifying the level of encumbrance of negotiable securities, the encumbrance has been analysed on an individual security basis. In doing so where a particular security has been encumbered and HSBC has holdings of the security both on-balance sheet and off-balance sheet with the right to repledge, it is assumed for the purpose of this disclosure that the off-balance sheet holding is encumbered ahead of the on-balance sheet holding.

An on balance-sheet encumbered and off-balance sheet unencumbered asset will occur, for example, if we receive a specific security as a result of a reverse repo/stock borrow transaction, but finance the cash lent by pledging a generic collateral basket, even if the security received is eligible for the collateral basket pledged. This will also occur if we receive a generic collateral basket as a result of a reverse repo transaction but finance the cash lent by pledging specific securities, even if the securities pledged are eligible for the collateral basket.

Off-balance sheet collateral received and pledged for reverse repo and stock borrowing transactions

The fair value of assets accepted as collateral that HSBC is permitted to sell or repledge in the absence of default was US$296bn at 31 December 2012 (2011: US$302bn). The fair value of any such collateral that has been sold or repledged was US$203bn (2011: US$189bn). HSBC is obliged to return equivalent securities. These transactions are conducted under terms that are usual and customary to standard reverse repo and stock borrowing transactions.

The fair value of collateral received and repledged in relation to reverse repo and stock borrowing are reported on a gross basis. The related balance sheet receivables and payables are reported on a net basis where required under IFRS netting criteria.

As a result of reverse repo and stock borrowing transactions where the collateral received can be sold or re-pledged, but has not been sold or re-pledged, we held US$93bn of unencumbered collateral available to support potential future funding and collateral needs at 31 December 2012.

Off-balance sheet non-cash collateral received and pledged for derivative transactions

The fair value of assets accepted as collateral related to derivative transactions that we are permitted to sell or repledge in the absence of default was US$6.0bn. The fair value of any such collateral that has been sold or repledged was US$0.8bn. We are obliged to return equivalent securities. These transactions are conducted under terms that are usual and customary to derivative transactions.

Analysis of on-balance sheet encumbered and unencumbered assets

The table on page 213 presents an analysis of on-balance sheet holdings only, and shows the amounts of balance sheet assets that are encumbered. The table therefore excludes any available off-balance sheet holdings received in respect of reverse repo, stock borrowing or derivatives.

Source: HSBC Annual Report 2012, p. 211-212

Recommendation 19: Tabular summary of unencumbered and unencumbered assets by balance sheet category Example 1 of 2 (cont.)

Analysis of on-balance sheet encumbered and unencumbered assets
(Unaudited)

	Encumbered	Unencumbered		Unencumbered – cannot be pledged as collateral		
	Assets pledged as collateral US$m	Readily realisable assets US$m	Other realisable assets US$m	Reverse repo/stock borrowing receivables & derivative assets US$m	Cannot be pledged as collateral US$m	Total US$m
At 31 December 2012						
Cash and balances at central banks	–	139,963	220	–	1,349	141,532
Items in the course of collection from other banks	–	–	–	–	7,303	7,303
Hong Kong Government certificates of indebtedness	–	–	–	–	22,743	22,743
Trading assets	143,019	116,395	10,330	134,752	4,315	408,811
– Treasury and other eligible bills	2,309	23,973	–	–	–	26,282
– debt securities	97,157	47,311	205	–	4	144,677
– equity securities	5,592	35,420	622	–	–	41,634
– loans and advances to banks	20,588	1,909	2,582	50,376	2,816	78,271
– loans and advances to customers	17,373	7,782	6,921	84,376	1,495	117,947
Financial assets designated at fair value	–	447	610	–	32,525	33,582
– Treasury and other eligible bills	–	14	–	–	40	54
– debt securities	–	431	128	–	11,992	12,551
– equity securities	–	2	482	–	20,384	20,868
– loans and advances to banks	–	–	–	–	55	55
– loans and advances to customers	–	–	–	–	54	54
Derivatives	–	–	–	357,450	–	357,450
Loans and advances to banks	1,191	4,722	81,802	35,461	29,370	152,546
Loans and advances to customers	40,792	85,626	827,903	34,664	8,638	997,623
Financial investments	46,678	300,255	7,990	–	66,178	421,101
– Treasury and other eligible bills	2,024	84,991	156	–	379	87,550
– debt securities	44,654	214,545	4,112	–	64,451	327,762
– equity securities	–	719	3,722	–	1,348	5,789
Assets held for sale	–	–	19,269	–	–	19,269
Other assets	1,600	18,601	11,621	–	22,894	54,716
Current tax assets	–	–	–	–	515	515
Prepayments and accrued income	–	–	–	–	9,502	9,502
Interest in associates and joint ventures	–	–	17,480	–	354	17,834
Goodwill and intangible assets	–	–	–	–	29,853	29,853
Property, plant and equipment	–	–	6,772	–	3,816	10,588
Deferred tax	–	–	–	–	7,570	7,570
	233,280	666,009	983,997	562,327	246,925	2,692,538

Cash collateral posted to satisfy margin requirements on derivatives, is reported as encumbered under trading assets within loans or advances to banks and loans and advances to customers.

The US$41bn of loans and advances to customers reported in the table above as encumbered have been pledged predominantly to support the issuance of secured debt instruments, such as covered bonds and ABSs including asset-backed commercial paper issued by consolidated multi-seller conduits. It also includes those pledged in relation to any other form of secured borrowing.

In total, the Group has pledged US$152bn of negotiable securities, predominantly as a result of market-making in securities financing to our clients.

Additional contractual obligations

Under the terms of our current collateral obligations under derivative contracts, we estimate based on the positions as at 31 December 2012 that HSBC could be required to post additional collateral of up to US$1.5bn (2011: US$3bn) in the event of a one notch downgrade in credit ratings, which would increase to US$2.5bn (2011: US$3.8bn) in the event of a two notch downgrade.

Source: HSBC Annual Report 2012, p. 213

Recommendation 19: Tabular summary of unencumbered and unencumbered assets by balance sheet category Example 2 of 2

Encumbered assets

Encumbered assets represent those on-balance sheet assets pledged or used as collateral in respect of certain of the Group's liabilities. Hong Kong government certificates of indebtedness, which secure the equivalent amount of Hong Kong currency notes in circulation, and cash collateral pledged against derivatives are included within other assets. Taken together, these encumbered assets represent 3.7 per cent (2011: 4.0 per cent) of total assets, continuing the Group's historical low level of encumbrance.

The following table provides a reconciliation of the Group's encumbered assets to total assets.

	2012			2011		
	Unencumbered assets $million	**Encumbered assets $million**	**Total assets $million**	Unencumbered assets $million	Encumbered assets $million	Total assets $million
Cash and balances at central banks	**51,480**	**227**	**51,707**	37,403	–	37,403
Restricted balances at central banks	**–**	**9,336**	**9,336**	–	9,961	9,961
Derivative financial instruments	**49,496**	**–**	**49,496**	58,524	–	58,524
Loans and advances to banks[1]	**68,432**	**723**	**69,155**	66,549	–	66,549
Loans and advances to customers[1]	**286,485**	**2,378**	**288,863**	269,551	2,227	271,778
Investment securities[1]	**119,147**	**1,598**	**120,745**	101,776	2,779	104,555
Other assets	**19,559**	**9,259**	**28,818**	18,387	8,899	27,286
Current tax assets	**215**	**–**	**215**	232	–	232
Prepayments and accrued income	**2,581**	**–**	**2,581**	2,521	–	2,521
Interests in associates	**953**	**–**	**953**	903	–	903
Goodwill and intangible assets	**7,312**	**–**	**7,312**	7,061	–	7,061
Property, plant and equipment	**6,646**	**–**	**6,646**	5,078	–	5,078
Deferred tax assets	**691**	**–**	**691**	835	–	835
Total	**612,997**	**23,521**	**636,518**	568,820	23,866	592,686

1 Includes assets held at fair value through profit or loss

In addition to the above, the Group received $10,517 million (2011: $7,076 million) as collateral under reverse repurchase agreements that was eligible for repledging. Of this, the Group repledged $1,378 million (2011: $1,005 million) under repurchase agreements.

Source: Standard Chartered Annual Report 2012, p. 104

Recommendation 20: Consolidated total assets, liabilities and off-balance sheet commitments by remaining contractual maturity

34 Maturity analysis of assets, liabilities and off-balance sheet commitments

The table on page 486 provides an analysis of consolidated total assets, liabilities and off-balance sheet commitments by residual contractual maturity at the balance sheet date. Asset and liability balances are included in the maturity analysis as follows:

- except for reverse repos, repos and debt securities in issue, trading assets and liabilities (including trading derivatives) are included in the 'Due less than one month' time bucket, and not by contractual maturity because trading balances are typically held for short periods of time;
- financial assets and liabilities with no contractual maturity (such as equity securities) are included in the 'Due over five years' time bucket. Undated or perpetual instruments are classified based on the contractual notice period which the counterparty of the instrument is entitled to give. Where there is no contractual notice period, undated or perpetual contracts are included in the 'Due over five years' time bucket;
- non financial assets and liabilities with no contractual maturity (such as property, plant and equipment, goodwill and intangible assets, current and deferred tax assets and liabilities and retirement benefit liabilities) are included in the 'Due over five years' time bucket;
- financial instruments included within assets and liabilities of disposal groups held for sale are classified on the basis of the contractual maturity of the underlying instruments and not on the basis of the disposal transaction; and
- liabilities under insurance contracts are included in the 'Due over five years' time bucket. Liabilities under investment contracts are classified in accordance with their contractual maturity. Undated investment contracts are classified based on the contractual notice period investors are entitled to give. Where there is no contractual notice period, undated contracts are included in the 'Due over five years' time bucket.

Loan and other credit-related commitments are classified on the basis of the earliest date they can be drawn down.

Source: HSBC Annual Report 2012, p. 485

Recommendation 20: Consolidated total assets, liabilities and off-balance sheet commitments by remaining contractual maturity (cont.)

HSBC

Maturity analysis of assets and liabilities

	At 31 December 2012								
	Due less than 1 month US$m	Due between 1 and 3 months US$m	Due between 3 and 6 months US$m	Due between 6 and 9 months US$m	Due between 9 months and 1 year US$m	Due between 1 and 2 years US$m	Due between 2 and 5 years US$m	Due over 5 years US$m	Total US$m
Financial assets									
Cash and balances at central banks	141,532	–	–	–	–	–	–	–	141,532
Items in the course of collection from other banks	7,303	–	–	–	–	–	–	–	7,303
Hong Kong Government certificates of indebtedness	22,743	–	–	–	–	–	–	–	22,743
Trading assets	382,654	12,506	9,829	248	3,169	405	–	–	408,811
– Reverse repos	92,525	12,506	9,829	248	3,169	405	–	–	118,682
– Other trading assets	290,129	–	–	–	–	–	–	–	290,129
Financial assets designated at fair value	437	576	425	526	239	2,462	3,545	25,372	33,582
Derivatives	354,222	65	252	22	227	596	1,127	939	357,450
– Trading	353,803	–	–	–	–	–	–	–	353,803
– Non-trading	419	65	252	22	227	596	1,127	939	3,647
Loans and advances to banks	104,397	22,683	5,859	2,292	5,032	6,238	2,027	4,018	152,546
– Reverse repos	28,833	3,101	2,071	356	963	138	–	–	35,462
– Other loans and advances to banks	75,564	19,582	3,788	1,936	4,069	6,100	2,027	4,018	117,084
Loans and advances to customers	221,242	69,709	47,507	29,659	71,928	59,100	194,147	304,331	997,623
– Personal	49,042	8,578	7,242	6,763	9,547	17,696	66,684	241,329	406,881
– Corporate and commercial	138,999	49,166	35,463	19,334	53,766	38,070	119,330	55,910	510,038
– Financial	33,201	11,965	4,802	3,562	8,615	3,334	8,133	7,092	80,704
Of which:									
– Reverse repos	19,847	10,640	2,310	1,050	554	250	–	–	34,651
Financial investments	28,085	51,339	33,996	14,072	26,478	61,443	93,127	112,561	421,101
Assets held for sale	4,953	298	515	125	669	519	1,079	9,964	18,122
Accrued income	2,776	2,325	739	493	542	164	217	1,284	8,540
Other financial assets	13,383	3,486	1,759	337	745	332	372	3,170	23,584
Total financial assets	1,283,727	162,987	100,881	47,774	109,029	131,259	295,641	461,639	2,592,937
Non financial assets	–	–	–	–	–	–	–	99,601	99,601
Total assets	1,283,727	162,987	100,881	47,774	109,029	131,259	295,641	561,240	2,692,538

Note: *comparatives were also provided (not included here due to space constraints)*

Source: HSBC Annual Report 2012, p. 486

Recommendation 20: Consolidated total assets, liabilities and off-balance sheet commitments by remaining contractual maturity (cont.)

	At 31 December 2012								
	Due less than 1 month US$m	Due between 1 and 3 months US$m	Due between 3 and 6 months US$m	Due between 6 and 9 months US$m	Due between 9 months and 1 year US$m	Due between 1 and 2 years US$m	Due between 2 and 5 years US$m	Due over 5 years US$m	Total US$m
Financial liabilities									
Hong Kong currency notes in circulation	22,742	–	–	–	–	–	–	–	22,742
Deposits by banks	79,100	12,029	1,957	437	2,155	1,695	9,440	616	107,429
– Repos	6,593	4,645	711	–	–	–	–	–	11,949
– Other deposits by banks	72,507	7,384	1,246	437	2,155	1,695	9,440	616	95,480
Customer accounts[1]	1,193,736	67,638	34,010	11,939	16,019	7,034	8,985	653	1,340,014
– Personal	539,792	35,260	21,939	7,900	11,100	4,687	3,916	307	624,901
– Corporate and commercial	473,370	24,018	9,044	2,925	3,354	1,069	1,193	305	515,278
– Financial	180,574	8,360	3,027	1,114	1,565	1,278	3,876	41	199,835
Of which: repos	22,446	3,869	1,047	345	567	344	–	–	28,618
Items in the course of transmission to other banks	7,131	7	–	–	–	–	–	–	7,138
Trading liabilities	240,212	29,003	4,707	1,820	5,197	3,867	9,736	10,021	304,563
– Repos	96,690	27,002	3,319	985	2,227	–	–	–	130,223
– Debt securities in issue	380	2,001	1,388	835	2,970	3,867	9,736	10,021	31,198
– Other trading liabilities	143,142	–	–	–	–	–	–	–	143,142
Financial liabilities designated at fair value	427	81	2,068	2,163	1,605	2,916	28,902	49,558	87,720
– Debt securities in issue: covered bonds	–	–	–	–	–	–	4,633	–	4,633
– Debt securities in issue: otherwise secured	–	8	2,023	–	22	2,040	228	221	4,542
– Debt securities in issue: unsecured	392	49	1	2,117	1,357	690	23,495	15,933	44,034
– Subordinated liabilities and preferred securities	–	–	–	–	–	–	21	21,538	21,559
– Other	35	24	44	46	226	186	525	11,866	12,952
Derivatives	352,696	75	43	29	2,408	628	1,212	1,795	358,886
– Trading	352,195	–	–	–	–	–	–	–	352,195
– Non-trading	501	75	43	29	2,408	628	1,212	1,795	6,691
Debt securities in issue	23,738	12,368	6,355	2,840	27,992	11,992	29,100	5,076	119,461
– Covered bonds	–	–	1,133	422	757	2,328	1,920	486	7,046
– Otherwise secured	14,598	1,894	–	184	753	1,634	5,779	950	25,792
– Unsecured	9,140	10,474	5,222	2,234	26,482	8,030	21,401	3,640	86,623
Liabilities of disposal groups held for sale	2,475	242	433	254	188	166	45	–	3,803
Accruals	3,369	4,173	907	521	1,200	232	419	842	11,663
Subordinated liabilities	32	44	–	10	–	1,481	1,516	26,396	29,479
Other financial liabilities	19,837	4,881	2,115	519	867	599	1,409	2,190	32,417
Total financial liabilities	1,945,495	130,541	52,595	20,532	57,631	30,610	90,764	97,147	2,425,315
Non financial liabilities	–	–	–	–	–	–	–	84,094	84,094
Total liabilities	1,945,495	130,541	52,595	20,532	57,631	30,610	90,764	181,241	2,509,409

Source: HSBC Annual Report 2012, p. 487

Recommendation 20: Consolidated total assets, liabilities and off-balance sheet commitments by remaining contractual maturity (cont.)

Maturity analysis of off-balance sheet commitments received

	Due less than 1 month US$m	Due between 1 and 3 months US$m	Due between 3 and 6 months US$m	Due between 6 and 9 months US$m	Due between 9 months and 1 year US$m	Due between 1 and 2 years US$m	Due between 2 and 5 years US$m	Due over 5 years US$m	Total US$m
At 31 December 2012									
Loan and other credit-related commitments	**2,455**	**3**	**8**	**5**	**8**	**25**	**75**	**98**	**2,677**
At 31 December 2011									
Loan and other credit-related commitments	5,280	2	36	3	6	19	508	143	5,997

Maturity analysis of off-balance sheet commitments given

	Due less than 1 month US$m	Due between 1 and 3 months US$m	Due between 3 and 6 months US$m	Due between 6 and 9 months US$m	Due between 9 months and 1 year US$m	Due between 1 and 2 years US$m	Due between 2 and 5 years US$m	Due over 5 years US$m	Total US$m
At 31 December 2012									
Loan and other credit-related commitments	**408,815**	**43,394**	**8,389**	**5,191**	**37,751**	**11,598**	**45,910**	**18,421**	**579,469**
Of which:									
– Personal	**153,255**	**6,999**	**704**	**185**	**19,049**	**1,216**	**1,616**	**8,159**	**191,183**
– Corporate and commercial	**225,899**	**34,368**	**6,365**	**4,951**	**15,412**	**9,488**	**37,179**	**8,593**	**342,255**
– Financial	**29,661**	**2,027**	**1,320**	**55**	**3,290**	**894**	**7,115**	**1,669**	**46,031**
At 31 December 2011									
Loan and other credit-related commitments	373,426	47,187	20,076	35,673	38,368	32,230	78,831	29,113	654,904
Of which:									
– Personal	246,570	7,569	2,124	4,848	4,431	7,507	12,262	7,706	293,017
– Corporate and commercial	114,741	36,866	15,289	19,589	25,890	20,767	57,853	18,281	309,276
– Financial	12,115	2,752	2,663	11,236	8,047	3,956	8,716	3,126	52,611

Source: HSBC Annual Report 2012, p. 490

Recommendation 21: Discussion of bank's funding strategy Example 1 of 2

Funding Diversification

Diversification of our funding profile in terms of investor types, regions, products and instruments is an important element of our liquidity risk management framework. Our most stable funding sources are capital markets and equity, retail, and transaction banking clients. Other customer deposits and borrowing from wholesale clients are additional sources of funding. Discretionary wholesale funding represents unsecured wholesale liabilities sourced primarily by our Global Markets Finance business. Given the relatively short-term nature of these liabilities, they are primarily used to fund cash and liquid trading assets.

To ensure the additional diversification of our refinancing activities, we hold a Pfandbrief license allowing us to issue mortgage Pfandbriefe.

In 2012 we continued to focus on increasing our most stable funding components, and we have seen increases of € 12.2 billion (4.4 %) and € 21.4 billion (12.4 %) from retail and transaction banking clients respectively. We maintain access to short-term wholesale funding markets, on both a secured and unsecured basis.

Discretionary wholesale funding comprises a range of unsecured products e.g. Certificates of Deposit (CDs), Commercial Paper (CP) as well as term, call and overnight deposits across tenors primarily up to one year. In addition, included within Financing Vehicles, is € 8.6 billion of asset-backed commercial paper (ABCP) issued through conduits.

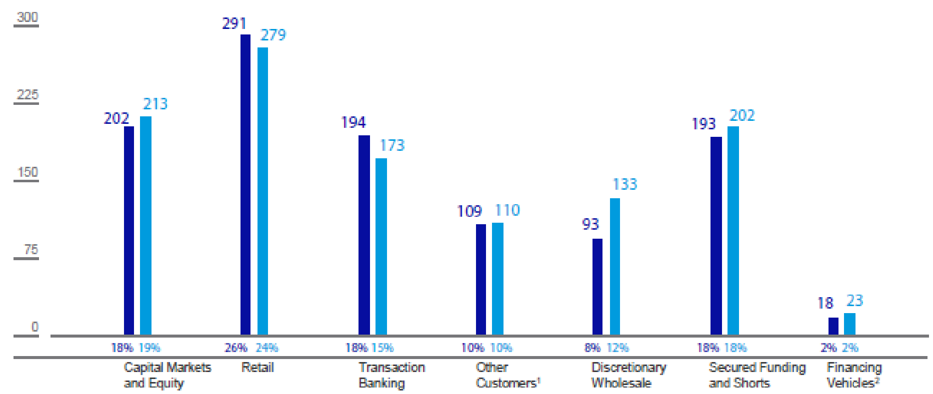
The overall volume of discretionary wholesale funding and secured funding fluctuated between reporting dates based on our underlying business activities. Higher volumes, primarily in secured funding transactions, are largely driven by increased client related securities financing activities as well as intra quarter growth in liquid trading inventories. We reduced the volume of discretionary wholesale funding during the year by € 40.0 billion. This reduction was a consequence of the increase in more stable funding sources combined with a decrease, on a like for like basis, in Liquidity Reserves.

To avoid any unwanted reliance on these short-term funding sources, and to ensure a sound funding profile at the short end, which complies with the defined risk tolerance, we have implemented limit structures (across tenor) to these funding sources, which are derived from our stress testing analysis.

The following chart shows the composition of our external funding sources that contribute to the liquidity risk position as of December 31, 2012 and December 31, 2011, both in EUR billion and as a percentage of our total external funding sources.

Composition of external funding sources

In € bn.



December 31, 2012: total € 1,101 billion
December 31, 2011: total € 1,133 billion

[1] Other includes fiduciary, self-funding structures (e.g. X-markets), margin / Prime Brokerage cash balances (shown on a net basis)
[2] Includes ABCP-Conduits.

Reference: Reconciliation to total balance sheet: Derivatives & settlement balances € 786 billion (€ 899 billion), add-back for netting effect for Margin & Prime Brokerage cash balances (shown on a net basis) € 70 billion (€ 73 billion), other non-funding liabilities € 54 billion (€ 59 billion) for December 31, 2012 and December 31, 2011 respectively; figures may not add up due to rounding.

The following table shows the contractual maturity of our short-term wholesale funding (comprising discretionary wholesale funding plus asset-backed commercial paper), as well as our capital markets issuance (of which 33 % is to retail customers).

Maturity of wholesale funding and capital markets issuance

Dec 31, 2012

in € m.	Not more than 1 month	Over 1 month but not more than 3 months	Over 3 months but not more than 6 months	Over 6 months but not more than 1 year	Sub-total less than 1 year	Over 1 year but not more than 2 years	Over 2 years	Total
Deposits from banks	24,627	5,820	2,542	870	33,859	25	214	34,098
Deposits from other customers	20,776	1,996	779	465	24,015	185	294	24,495
CDs and CP	9,978	14,880	5,329	3,625	33,812	283	183	34,277
ABCP	4,552	3,721	376	–	8,649	–	–	8,649
Senior unsecured vanilla debt	1,972	4,921	5,101	4,489	16,483	6,929	37,419	60,832
Senior unsecured structured debt	969	1,271	1,331	2,640	6,210	4,611	21,184	32,005
Covered bonds/ABS	1,501	1,120	–	11	2,631	3,555	25,316	31,502
Subordinated liabilities	2,180	4,704	1,750	1,262	9,898	1,069	11,940	22,906
Other	7	33	12	6	58	18	227	303
Total[1]	**66,563**	**38,465**	**17,220**	**13,368**	**135,616**	**16,675**	**96,777**	**249,068**
Of which secured	6,053	4,841	376	11	11,281	3,555	25,316	40,152
Of which unsecured	60,509	33,625	16,844	13,357	124,335	13,120	71,461	208,917

[1] Liabilities with call features are shown at earliest legally exercisable call date. No assumption is made as to whether such calls would be exercised.

The total volume (€ 135.6 billion) of maturing wholesale liabilities and capital markets issuance maturing within one year should be viewed in the context of our total Liquidity Reserves of € 232.2 billion.

Source: Deutsche Bank Financial Report 2012, p. 160-162

Recommendation 21: Discussion of bank's funding strategy Example 2of 2

Funding and Liquidity Risk Management

We define liquidity risk as the potential inability to meet our contractual and contingent financial obligations, on- or off-balance sheet, as they come due. Our primary liquidity objective is to provide adequate funding for our businesses throughout market cycles, including periods of financial stress. To achieve that objective, we analyze and monitor our liquidity risk, maintain excess liquidity and access diverse funding sources including our stable deposit base. We define excess liquidity as readily available assets, limited to cash and high-quality, liquid, unencumbered securities that we can use to meet our funding requirements as those obligations arise.

Global funding and liquidity risk management activities are centralized within Corporate Treasury. We believe that a centralized approach to funding and liquidity risk management enhances our ability to monitor liquidity requirements, maximizes access to funding sources, minimizes borrowing costs and facilitates timely responses to liquidity events.

The Enterprise Risk Committee approves the Corporation's liquidity policy and contingency funding plan, including establishing liquidity risk tolerance levels. The ALMRC monitors our liquidity position and reviews the impact of strategic decisions on our liquidity. ALMRC is responsible for managing liquidity risks and maintaining exposures within the established tolerance levels. ALMRC delegates additional oversight responsibilities to the CFORC, which reports to the ALMRC. The CFORC reviews and monitors our liquidity position, cash flow forecasts, stress testing scenarios and results, and implements our liquidity limits and guidelines. For more information, see Board Oversight of Risk on page 68. Under this governance framework, we have developed certain funding and liquidity risk management practices which include: maintaining excess liquidity at the parent company and selected subsidiaries, including our bank and broker/dealer subsidiaries; determining what amounts of excess liquidity are appropriate for these entities based on analysis of debt maturities and other potential cash outflows, including those that we may experience during stressed market conditions; diversifying funding sources, considering our asset profile and legal entity structure; and performing contingency planning.

Global Excess Liquidity Sources and Other Unencumbered Assets

We maintain excess liquidity available to Bank of America Corporation, or the parent company, and selected subsidiaries in the form of cash and high-quality, liquid, unencumbered securities. These assets, which we call our Global Excess Liquidity Sources, serve as our primary means of liquidity risk mitigation. Our cash is primarily on deposit with the Federal Reserve and central banks outside of the U.S. We limit the composition of high-quality, liquid, unencumbered securities to U.S. government securities, U.S. agency securities, U.S. agency MBS and a select group of non-U.S. government and supranational securities. We believe we can quickly obtain cash for these securities, even in stressed market conditions, through repurchase agreements or outright sales. We hold our Global Excess Liquidity Sources in entities that allow us to meet the liquidity requirements of our global businesses, and we consider the impact of potential regulatory, tax, legal and other restrictions that could limit the transferability of funds among entities.

Our Global Excess Liquidity Sources were $372 billion and $378 billion at December 31, 2012 and 2011 and were maintained as presented in Table 17.

Table 17 Global Excess Liquidity Sources

(Dollars in billions)	December 31 2012	December 31 2011	Average for Three Months Ended December 31 2012
Parent company	$ 103	$ 125	$ 99
Bank subsidiaries	247	222	264
Broker/dealers	22	31	25
Total global excess liquidity sources	**$ 372**	$ 378	**$ 388**

As shown in Table 17, parent company Global Excess Liquidity Sources totaled $103 billion and $125 billion at December 31, 2012 and 2011. The decrease in parent company liquidity was primarily due to reductions in long-term debt, partially offset by dividends and capital repayments from subsidiaries. Typically, parent company cash is deposited overnight with BANA.

Global Excess Liquidity Sources available to our bank subsidiaries totaled $247 billion and $222 billion at December 31, 2012 and 2011. These amounts are distinct from the cash deposited by the parent company. The increase in liquidity available to our bank subsidiaries was primarily due to an increase in deposits, partially offset by capital returns to the parent company and reductions in debt. In addition to their Global Excess Liquidity Sources, our bank subsidiaries hold other unencumbered investment-grade securities that we believe could also be used to generate liquidity. Our bank subsidiaries can also generate incremental liquidity by pledging a range of other unencumbered loans and securities to certain Federal Home Loan Banks (FHLBs) and the Federal Reserve Discount Window. The cash we could have obtained by borrowing against this pool of specifically-identified eligible assets was approximately $194 billion and $189 billion at December 31, 2012 and 2011. We have established operational procedures to enable us to borrow against these assets, including regularly monitoring our total pool of eligible loans and securities collateral. Eligibility is defined by guidelines outlined by the FHLBs and the Federal Reserve and is subject to change at their discretion. Due to regulatory restrictions, liquidity generated by the bank subsidiaries can only be used to fund obligations within the bank subsidiaries and can only be transferred to the parent company or nonbank subsidiaries with prior regulatory approval.

Global Excess Liquidity Sources available to our broker/dealer subsidiaries totaled $22 billion and $31 billion at December 31, 2012 and 2011. Our broker/dealers also held other unencumbered investment-grade securities and equities that we believe could also be used to generate additional liquidity. Liquidity held in a broker/dealer subsidiary is available to meet the obligations of that entity and can only be transferred to the parent company or to any other subsidiary with prior regulatory approval due to regulatory restrictions and minimum requirements.

Time to Required Funding and Stress Modeling

We use a variety of metrics to determine the appropriate amounts of excess liquidity to maintain at the parent company and our bank and broker/dealer subsidiaries. One metric we use to evaluate the appropriate level of excess liquidity at the parent company is "Time to Required Funding." This debt coverage measure indicates the number of months that the parent company can continue to meet its unsecured contractual obligations as they come due using only its Global Excess Liquidity Sources without issuing any new debt or accessing any additional liquidity sources. We define unsecured contractual obligations for purposes of this metric as maturities of senior or subordinated debt issued or guaranteed by Bank of America Corporation or Merrill Lynch. These include certain unsecured debt instruments, primarily structured liabilities, which we may be required to settle for cash prior to maturity. The Corporation has established a target for Time to Required Funding of 21 months. Our Time to Required Funding was 33 months at December 31, 2012. For purposes of calculating Time to Required Funding at December 31, 2012, we have also included in the amount of unsecured contractual obligations the $8.6 billion liability related to the BNY Mellon Settlement. The BNY Mellon Settlement is subject to final court approval and certain other conditions, and the timing of payment is not certain.

We utilize liquidity stress models to assist us in determining the appropriate amounts of excess liquidity to maintain at the parent company and our bank and broker/dealer subsidiaries. These models are risk sensitive and have become increasingly important in analyzing our potential contractual and contingent cash outflows beyond those outflows considered in the Time to Required Funding analysis. We evaluate the liquidity requirements under a range of scenarios with varying levels of severity and time horizons. The scenarios we consider and utilize incorporate market-wide and Corporation-specific events, including potential credit rating downgrades for the parent company and our subsidiaries, and are based on historical experience, regulatory guidance, and both expected and unexpected future events.

The types of potential contractual and contingent cash outflows we consider in our scenarios may include, but are not limited to, upcoming contractual maturities of unsecured debt and reductions in new debt issuance; diminished access to secured financing markets; potential deposit withdrawals and reduced rollover of maturing term deposits by customers; increased draws on loan commitments, liquidity facilities and letters of credit, including Variable Rate Demand Notes; additional collateral that counterparties could call if our credit ratings were downgraded further; collateral, margin and subsidiary capital requirements arising from losses; and potential liquidity required to maintain businesses and finance customer activities. Changes in certain market factors, including, but not limited to, credit rating downgrades, could negatively impact potential contractual and contingent outflows and the related financial instruments, and in some cases these impacts could be material to our financial results.

We consider all sources of funds that we could access during each stress scenario and focus particularly on matching available sources with corresponding liquidity requirements by legal entity. We also use the stress modeling results to manage our asset-liability profile and establish limits and guidelines on certain funding sources and businesses.

Source: Bank of America Annual Report 2012, p. 75 - 76

Section 6

Market risk

Recommendation 22: Linkages between line items in the balance sheet and the income statement with positions included in the traded market risk disclosures

6.2.1.6. Linkage with balance sheet items. Other alternative risk measures

Below are the parts of the balance sheet of the Group's consolidated position that are subject to market risk, showing the positions whose main risk metric is the VaR and where monitoring is also carried out with other metrics.

For activity managed with metrics different to the VaR, alternative measures are used, mainly: sensitivity to different risk factors (interest rates, credit spread, etc).

In the case of the trading portfolio. the securitisations and "level III" exposures (those in which not observable market data constitutes significant inputs in their corresponding internal models of valuation) are excluded from VaR measurement.

Securitisations are mainly treated as if they were credit risk portfolio (in terms of default, recovery rate, etc). For "level III" exposures, which are not very significant in Santander (basically derivatives linked to the home price index (HPI) in the activity of markets in Santander UK, and the not very significant portfolio of illiquid CDOs in the activity of markets of the parent bank), as well as in general for inputs that cannot be observed in the market (correlation, dividends, etc), a very conservative policy is followed, reflected in valuation adjustments as well as sensitivity.

RELATION OF RISK METRICS TO BALANCE SHEET OF GROUP'S CONSOLIDATED POSITION
Million euros

		Main market risk metrics		
	Balance	**VaR**	**Others**	**Main risk factor for balance in "others"**
Assets subject to market risk	**310,929**	**204,668**	**106,261**	
Trading portfolios	177,917	176,781	1,136	Interest rate, credit spread
Other financial assets at reasonable value	28,356	27,887	469	Interest rate, credit spread
Financial assets available for sale	92,266	-	92,266	Interest rate, equities
Equities	4,454	-	4,454	Equity stakes
Hedging derivatives	7,936	-	7,936	Interest rate, exchange rate
Liabilities subject to market risk	**195,104**	**194,754**	**621**	
Trading portfolio	143,242	143,242	271	Interest rate, credit spread
Other financial liabilities at reasonable value	45,418	45,068	350	Interest rate, credit spread
Hedging derivatives	6,444	6,444	-	

Source: Santander Annual Report 2012, p. 215

Recommendation 23: Qualitative and quantitative breakdowns of significant trading and non trading market risk factors that may be relevant (beyond interest rates, foreign exchange, commodity and equity measures)

Risk by factor

The minimum, average, maximum and year-end 2012 values in VaR terms are shown below:

VaR STATISTICS BY RISK FACTOR[1,2]

Million euros. VaR at 99%, with a time frame of one day

		2012				2011		2010	
		Minimum	Average	Maximum	Year-end	Average	Year-end	Average	Year-end
Total trading	**Total VaR**	**9.4**	**14.9**	**22.4**	**18.5**	**22.4**	**15.9**	**28.7**	**29.6**
	Diversification effect	(9.1)	(15.2)	(25.8)	(13.5)	(21.8)	(16.7)	(29.1)	(27.8)
	Interest rate VaR	7.4	11.8	23.3	12.0	14.8	14.6	16.4	19.0
	Equity VaR	4.1	7.0	11.2	7.1	4.8	3.7	8.0	8.8
	FX VaR	1.9	5.0	12.2	3.5	9.0	4.2	11.4	13.9
	Credit spread VaR	2.2	6.1	13.0	9.1	15.0	9.6	20.9	14.7
	Commodities VaR	0.2	0.4	0.7	0.3	0.6	0.4	1.3	1.0
Latin America	**Total VaR**	**5.0**	**10.1**	**20.5**	**8.9**	**11.7**	**10.7**	**18.2**	**13.9**
	Diversification effect	(3.1)	(6.4)	(12.5)	(3.8)	(6.4)	(8.7)	(8.3)	(12.6)
	Interest rate VaR	5.2	8.8	20.0	8.8	11.2	10.5	14.5	14.8
	Equity VaR	0.7	3.1	9.7	1.6	3.5	2.2	5.8	5.3
	FX VaR	0.5	3.1	9.8	1.3	3.7	1.2	7.1	6.5
US and Asia	**Total VaR**	**0.5**	**0.9**	**2.0**	**0.8**	**1.2**	**0.9**	**1.3**	**0.9**
	Diversification effect	(0.2)	(0.5)	(1.1)	(0.3)	(0.5)	(0.4)	(0.7)	(0.3)
	Interest rate VaR	0.4	0.7	1.3	0.6	0.9	0.9	1.2	0.9
	Equity VaR	0.0	0.2	0.8	0.1	0.1	0.1	0.2	0.0
	FX VaR	0.1	0.6	1.7	0.4	0.6	0.4	0.6	0.3
Europe	**Total VaR**	**7.2**	**11.0**	**16.5**	**16.4**	**15.5**	**10.1**	**14.8**	**25.1**
	Diversification effect	(7.7)	(12.9)	(20.6)	(9.9)	(15.1)	(13.0)	(18.9)	(14.6)
	Interest rate VaR	5.4	7.9	15.4	6.8	11.5	11.9	8.9	12.5
	Equity VaR	4.1	6.2	9.9	6.3	3.9	3.6	6.7	6.5
	FX VaR	1.0	4.1	13.1	4.0	8.5	3.9	9.8	9.6
	Credit spread VaR	2.1	5.4	10.0	8.9	6.0	3.3	7.0	9.0
	Commodities VaR	0.2	0.4	0.7	0.3	0.6	0.4	1.3	2.1
Global activities	**Total VaR**	**0.8**	**2.7**	**10.2**	**1.2**	**10.5**	**9.7**	**16.1**	**10.7**
	Diversification effect	(0.2)	(0.6)	(5.0)	(0.3)	(1.1)	(0.9)	(1.1)	(1.2)
	Interest rate VaR	0.2	0.3	0.6	0.2	0.4	0.5	0.6	0.5
	Credit spread VaR	0.6	2.6	10.4	1.3	10.3	8.4	16.0	10.5
	FX VaR	0.0	0.4	1.9	0.1	0.9	1.8	0.6	0.9

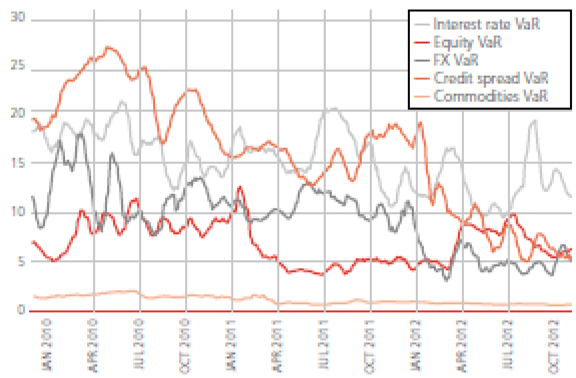
[1] The VaR of global activities includes operations that are not assigned to any particular country.

[2] In Latin America, the US and Asia, the VaR levels of the spread credit and commodity factors are not shown separately because of their scant or zero materiality.

The average VaR declined again in 2012 by EUR 7.5 million over 2011. The reduction occurred in all risk factors except for equities, which increased from EUR 4.8 million to EUR 7 million. Of note was the drop in the average VaR of interest rates and exchange rates in Europe and the credit spread in global activities.

VaR BY RISK FACTOR

Million euros. VaR at 99% with a time frame of one day (15-day moving average)



The VaR evolution by risk factor in general also declined, with peaks and troughs sharper in the case of the VaR by credit spread, partly due to the exclusion of the risk spread of securitisations and credit correlation which by BIS 2.5 is considered as banking book for the purposes of regulatory capital as of 15 November 2011. The temporary changes in the VaR of various factors was due more to the temporary rises in the volatility of market prices than to significant changes in positions.

6.2.1.2. Distribution of risks and management results[13]

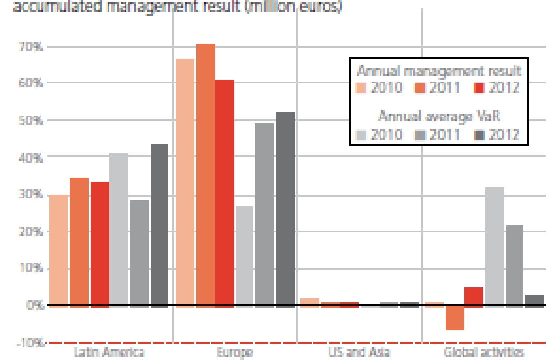
6.2.1.2.1. Geographic distribution

In trading activity. the average contribution of Latin America to the Group's total VaR in 2012 was 44% compared with a contribution of 33.3% in economic results. Europe, with 52.6% of global risk, contributed 60.6% of results, as its treasury activity was more focused on providing service to professional and institutional clients compared with that of Latin America. However, there was a gradual homogenisation in the profile of activity in the Group's different units.

Below is the geographic contribution (by percentage), both in risks, measured in VaR terms, as well as in results (economic terms).

VaR BINOMIAL-MANAGEMENT RESULTS: GEOGRAPHIC DISTRIBUTION

Average VaR (at 99%, with a time frame of one day) and annual accumulated management result (million euros)



6.2.1.2.2. Monthly distribution of risks and results

The next chart shows the risk assumption profile, in terms of VaR, compared to results in 2012. The average VaR remained stable, while results evolved in a more irregular way during the year. January and July were positive months, particularly January, and August to October negative, with results below the annual average.

Source: Santander Annual Report 2012, p. 209 - 211

Recommendation 24: Qualitative and quantitative disclosures describing significant market risk measurement model features (e.g. model limitations, assumptions, back testing) and how these are used to enhance the parameters of the model

4.2. Internal independent validation of risk models

As well as being a regulatory requirement, the function of internal validation of risk models constitutes a fundamental support for the risk committee, and for local and corporate risk committees, in their responsibilities of authorisation of the use (management and regulatory) of models and their regular review.

Internal validation of models consists of a specialised unit, with sufficient independence, obtaining a technical opinion on the adequacy of the internal models for the purposes used, whether they be internal management and/or of a regulatory nature (calculation of the regulatory capital, levels of provisions, etc), concluding on their robustness, use and effectiveness.

Santander's internal validation of models covers credit risk models, market risk models and those for setting the price of financial assets as well as the economic capital model. The scope of validation includes not only the most theoretical or methodological aspects but also the technological systems and the quality of the data that enable and support their effective functioning and, in general, all relevant aspects (controls, reporting, uses, involvement of senior management, etc.).

The function is global and corporate, in order to ensure homogeneous application, and is conducted via four regional centres in Madrid, London, Sao Paulo and New York. These centres have full functional and hierarchical dependence on the corporate centre, which ensures uniformity in the development of its activities. This facilitates implementation of a corporate methodology that is supported by a series of tools developed internally in Santander, which provide a robust corporate framework for all the Group's units, computerising certain verifications in order to ensure that the reviews are carried out efficiently.

This corporate framework of internal validation is fully aligned with the criteria on internal validation of the advanced models issued by the Bank of Spain and by the rest of supervisors to whom the Group is subjected. In this respect, the criterion is maintained of separating functions between the units of internal validation and internal auditing, which is the last layer of control in the Group charged with reviewing the methodology, tools and work conducted by internal validation and expressing its opinion on its degree of effective independence.

6.2.1.4. Gauging and contrasting measures

In 2012, the Group continued to regularly conduct analysis and contrasting tests on the effectiveness of the Value at Risk (VaR) calculation model, obtaining the same conclusions that enable us to verify the model's reliability. The objective of these tests is to determine whether it is possible to accept or reject the model used to estimate the maximum loss of a portfolio for a certain level of confidence and a specific time frame.

The most important test is backtesting, analysed at the local and global levels by the market risk control units. The methodology of backtesting is implemented in the same way for all the Group's portfolios and sub-portfolios.

Backtesting consists of comparing the forecast VaR measurements, with a certain level of confidence and time frame, with the real results of losses obtained in a same time frame.

Santander calculates and evaluates three types of backtesting:

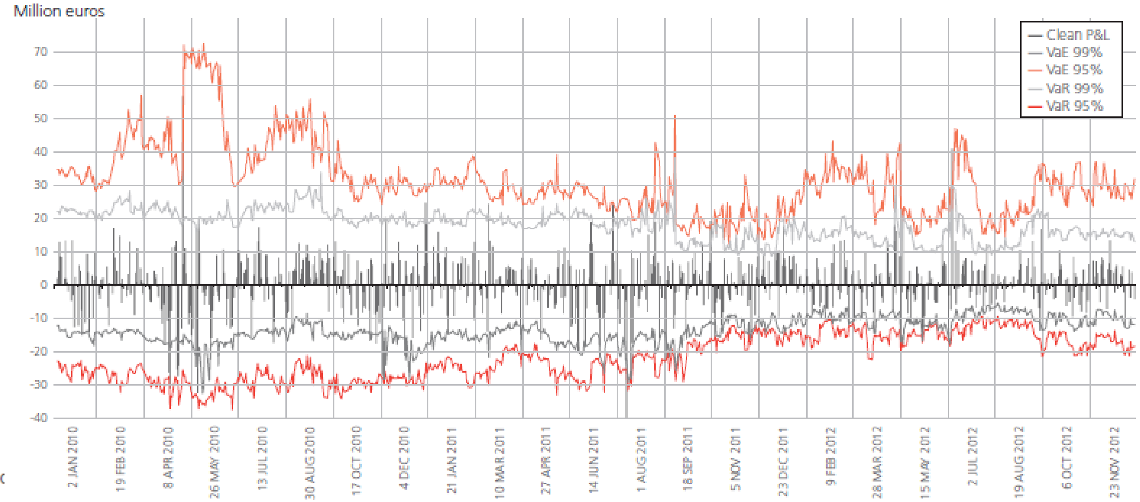
- "Clean" backtesting: the daily VaR is compared with the results obtained without taking into account the intraday results or the changes in the portfolio's positions. This method contrasts the effectiveness of the individual models used to assess and measure the risks of the different positions.
- "Dirty" backtesting: the daily VaR is compared with the day's net results, including the results of the intraday operations and those generated by commissions.
- "Dirty" backtesting without mark-ups or commissions: the daily VaR is compared with the day's net results from intraday operations but excluding those generated by mark-ups and commissions. This method aims to give an idea of the intraday risk assumed by the Group's treasuries.

For the first case and the total portfolio, there were three exceptions in 2010 of VaR at 99% (days when the daily loss was higher than the VaR): two in May - the first due to a more than usually high rise in the Brazilian currency inflation-indexed curve after the publication of a higher than expected inflation figure, and the second because of higher than normal increases in Spain's and Mexico's interest rate curves -, and one in June, due to the sudden widening of credit spreads, falls in stock markets and the depreciation of most currencies against the US dollar as a result of the deterioration of expectations on the outcome of the summit of EU heads of state (June 29).

The number of exceptions responded to the expected performance of the VaR calculation model, which works with a confidence level of 99% and an analysis period of one year (over a longer period of time, an average of two or three exceptions a year is expected).

BACKTESTING OF BUSINESS PORTFOLIOS: DAILY RESULTS VERSUS PREVIOUS DAY'S VALUE AT RISK

Million euros



The backtesting exercises are regularly conducted for each relevant portfolio or strategy of the Group, and its main objective (as in the rest of contrasting tests) is to detect anomalies in the VaR model of each portfolio (for example, shortcomings in the parametrisation of the valuation models of certain instruments, not very adequate proxies, etc.). This is a dynamic process contextualised in the framework of the procedure for reviewing and validating the model.

Source: Santander Annual Report 2012, p. 175; 213-214

Recommendation 25: Description of the primary risk management techniques employed to measure and assess the risk of loss (beyond reported risk measures and parameters, such as VaR) through methods such as stress tests, expected shortfall, economic capital, scenario analysis, stressed VaR or other alternative approaches

Risk Profile/Risk Appetite

We considered the following matters in 2012:

- We considered and approved the scenarios for Barclays internal stres testing exercise, including a reverse stress test, and later reviewed th results. The stress tests included a potential Eurozone break-up scenario. As in previous years, the stress testing exercises demonstrated that Barclays remains well-capitalised and profitable in a stress scenario; and
- We considered risk appetite for 2013 and recommended it to the Board for approval. Taking a 1 in 7 scenario and a 1 in 25 scenario, we assessed the performance of agreed financial volatility parameters in those scenarios to establish if there are any potential constraints. While the financial volatility parameters are largely unchanged from the prior year, some were recalibrated. The proposed risk appetite for 2013 also allows for a higher level of non-credit losses, given the impact in 2012 of such losses, for example, product mis-selling redress. The Committee will monitor risk appetite for 2013 and may revisit it in light of the Transform Programme.

Analysis of traded market risk exposures

Following a volatile beginning to the year, markets steadily improved through the second half of the year with momentum gaining in the fourth quarter of 2012, even as some wider concerns persisted. The Investment Bank's focus on market risk exposures centred on limiting illiquid risk exposures when possible. Primary risk metrics showed a fall in market risk from 2011 levels.

The three main contributors to total Daily Value at Risk (DVaR) were credit, spread and interest rate risk. From 2011 levels, average credit risk DVaR fell by £3m (11%), spread DVaR fell by £2m (8%) and interest rate DVaR fell by £3m (18%). Total management DVaR fell by £19m (33%) reflecting the sharp reduction in the DVaR measure.

Tail risk measures also indicate a similar decline in risk profile, with a particularly sharp fall in 3W. However, some of this decline can be attributed to the rolling of the time period within the historical simulation.

The daily average, maximum and minimum values of DVaR, Expected Shortfall and 3W (audited)

For the year ended 31 December	2012			2011		
DVaR (95%)	Average £m	High[a] £m	Low[a] £m	Average £m	High[a] £m	Low[a] £m
Interest rate risk	14	23	7	17	48	8
Inflation risk	3	7	2	4	9	2
Spread risk	23	31	17	25	40	17
Credit risk	26	44	18	29	48	17
Basis risk	11	21	5	6	6	6
Foreign exchange risk	6	10	2	5	8	2
Equity risk	9	19	4	18	34	9
Commodity risk	6	9	4	12	18	7
Diversification effect[b]	(60)	na	na	(54)	na	na
Total DVaR	38	75	27	57	88	33
Expected Shortfall[c]	47	91	30	71	113	43
3W[d]	77	138	44	121	202	67

- Interest rate risk measures the impact of changes in interest (swap) rates and volatilities on cash instruments and derivatives;
- Inflation risk measures the impact of changes in inflation rates and volatilities on cash instruments and derivatives;
- Spread risk measures the impact of changes to the swap spread, i.e. the difference between swap rates and government bond yields;
- Credit risk measures the impact of changes to the credit spread of credit risky sovereign bonds, corporate bonds, securitised products or credit derivatives such as Credit Default Swaps;
- Basis risk measures the impact of changes in Interest rate tenor basis (e.g. the basis between swaps vs. 3M LIBOR and swaps vs. 6M LIBOR) and cross currency basis;
- Foreign exchange risk measures the impact of changes in foreign exchange rates and volatilities;
- Equity risk measures the impact of changes in equity prices, volatilities and dividend yields;
- Commodity risk measures the impact of changes in commodity prices and volatilities, including the basis between related commodities; and
- Diversification effect reflects the fact the risk of a diversified portfolio is smaller than the sum of the risks of its constituent parts. It is measured as the sum of the individual asset class DVaR estimates less the total DVaR.

Analysis of stress testing

Stress tests and scenario analysis also indicate a fall in market risk levels from 2011, in line with the trend in DVaR. Combined stress scenarios show that a sharp and rapid slowdown in global economic activity is the largest threat to the trading exposures. The scenario assumes an extreme and instant sell off across all risky assets coupled with a contraction in credit, and limited gains in safe havens. The calculation assumes an instant shock to positions, without any opportunity to hedge immediately, and assumes an appropriate holding period where the firm may be unable to unwind its trading positions.

Source: Barclays Annual Report 2012, p. 57; 155

Section 7

Credit risk

Recommendation 26: Provide Information that facilitates users' understanding of credit risk profile Example 1 of 3

Corporate credit risk disclosure in READ

		2012	2011	Delta %
Corporate	**Rating**	**265,335**	286,599	–7.4%
	Performing	**255,715**	278,807	–8.2%
	Impaired/Non-performing	**9,620**	7,792	23.5%
Corporate	**Geography/business units**	**265,335**	286,599	–7.4%
	Africa	**731**	1,017	–28.1%
	America	**37,065**	45,841	–19.1%
	Asia	**23,194**	23,314	–0.5%
	Australia	**3,334**	4,348	–23.3%
	Europe	**201,010**	212,078	–5.2%
	Europe	**201,010**	212,078	–5.2%
	Netherlands	**71,454**	74,639	–4.2%
	Belgium	**32,429**	32,232	0.7%
	Germany	**6,173**	6,471	–4.6%
	Rest of Europe	**90,953**	98,736	–7.8%
Corporate	**Industry**	**265,335**	286,599	–7.4%
	Real Estate	**51,374**	53,920	–4.7%
	Natural Resources	**41,665**	40,955	1.8%
	Non-Bank Financial Institutions (NBFI)	**33,292**	44,985	–26.0%
	Transportation & Logistics	**22,060**	23,763	–7.1%
	Food, Beverages & Personal Care	**18,084**	17,351	4.3%
	Other	**98,860**	105,625	–6.4%
Corporate	**PD Bands**	**265,335**	286,599	–7.4%
	<0.05%	**13,989**	14,345	–2.4%
	0.05% to 0.5%	**114,214**	132,720	–13.9%
	0.5% to 5%	**104,606**	107,906	–3.0%
	5% to 10%	**9,059**	10,530	–13.9%
	10% to 20%	**7,026**	7,989	–12.0%
	20% to 50%	**6,820**	5,317	28.3%
	more than >50%	**9,620**	7,792	23.5%

Includes both AIRB and SA portfolios; excludes equities and ONCOA.

Retail credit risk disclosure in READ

		2012	2011	Delta %
Retail	**Rating**	**353,007**	400,064	–11.7%
	Performing	**347,508**	394,262	–11.8%
	Impaired/Non-performing	**5,499**	5,802	–5.2%
Retail	**Customer Segment**	**353,007**	400,064	–11.7%
	Private Persons	**321,384**	366,529	–12.3%
	Small Mid-sized Enterprises	**22,281**	24,539	–9.2%
	Private Banking	**3,553**	2,514	41.4%
	Other	**5,790**	6,483	–10.7%
Retail	**Geography/business units**	**353,007**	400,064	–11.7%
	Africa	**57**	53	7.6%
	America	**146**	55,279	–99.7%
	Asia	**1,684**	1,528	10.2%
	Australia	**34,438**	34,243	0.6%
	Other	**30**	925	–96.8%
	Europe	**316,652**	308,035	2.8%
	Europe	**316,652**	308,035	2.8%
	Netherlands	**164,777**	165,534	–0.4%
	Belgium	**39,703**	38,051	4.4%
	Germany	**68,457**	64,292	6.5%
	Rest of Europe	**43,715**	40,158	8.9%
Retail	**PD Bands**	**353,007**	400,064	–11.7%
	<0.05%	**22,009**	11,556	90.5%
	0.05% to 0.5%	**192,850**	217,225	–11.2%
	0.5% to 5%	**113,563**	133,863	–15.1%
	5% to 10%	**8,525**	18,010	–52.7%
	10% to 20%	**6,792**	7,824	–13.2%
	20% to 50%	**3,769**	5,784	–34.8%
	more than >50%	**5,499**	5,802	–5.2%

Includes both AIRB and SA portfolios; excludes equities and ONCOA.

Source: ING Annual Report 2012, p. 354+

Recommendation 26: Provide Information that facilitates users' understanding of credit risk profile Example 2 of 3

Maximum Exposure to Credit Risk

Dec 31, 2012

in € m.[1]	Maximum exposure to credit risk[2]	Netting	Collateral	Guarantees and Credit derivatives[3]	Total credit enhancements
		Credit Enhancements			
Due from banks	27,885	–	–	1	1
Interest-earning deposits with banks	119,548	–	2	35	37
Central bank funds sold and securities purchased under resale agreements	36,570	–	36,341	–	36,341
Securities borrowed	23,947	–	23,308	–	23,308
Financial assets at fair value through profit or loss[4]	1,119,100	657,826	211,397	3,968	873,191
Financial assets available for sale[4]	47,110	–	1,287	703	1,990
Loans[5]	401,975	–	208,529	37,841	246,370
Other assets subject to credit risk	85,806	69,546	6,653	12	76,211
Financial guarantees and other credit related contingent liabilities[6]	68,361	–	7,810	8,444	16,254
Irrevocable lending commitments and other credit related commitments[6]	129,657	–	4,771	10,558	15,329
Maximum exposure to credit risk	2,059,959	727,372	500,098	61,562	1,289,032

1 All amounts at carrying value unless otherwise indicated.
2 Does not include credit derivative notional sold (€ 1,274,960 million) and credit derivative notional bought protection. Interest-earning deposits with banks mainly relate to Liquidity Reserves.
3 Credit derivatives are reflected with the notional of the underlying.
4 Excludes equities, other equity interests and commodities.
5 Gross loans less (deferred expense)/unearned income before deductions of allowance for loan losses.
6 Financial guarantees, other credit related contingent liabilities and irrevocable lending commitments (including commitments designated under the fair value option) are reflected at notional amounts.

Credit Quality of Financial Instruments neither Past Due nor Impaired

Dec 31, 2012

in € m.[1]	iAAA-iAA	iA	iBBB	iBB	iB	iCCC and below	Total
Due from banks	24,957	1,528	989	193	171	47	27,885
Interest-earning deposits with banks	110,051	7,238	1,369	746	79	65	119,548
Central bank funds sold and securities purchased under resale agreements	1,605	32,560	1,332	877	140	56	36,570
Securities borrowed	14,668	7,322	1,213	438	306	–	23,947
Financial assets at fair value through profit or loss[2]	348,329	551,300	98,274	90,853	23,260	7,084	1,119,100
Financial assets available for sale[2]	30,077	8,303	4,076	1,913	515	1,964	46,848
Loans[3]	51,853	52,568	99,683	129,516	38,935	13,110	385,665
Other assets subject to credit risk	6,469	40,113	2,687	35,128	1,299	110	85,806
Financial guarantees and other credit related contingent liabilities[4]	9,064	19,192	21,304	11,460	4,886	2,455	68,361
Irrevocable lending commitments and other credit related commitments[4]	20,233	37,456	37,754	22,631	10,068	1,515	129,657
Total	617,306	757,580	268,681	293,755	79,659	26,406	2,043,387

1 All amounts at carrying value unless otherwise indicated.
2 Excludes equities, other equity interests and commodities.
3 Gross loans less (deferred expense)/unearned income before deductions of allowance for loan losses.
4 Financial guarantees, other credit related contingent liabilities and irrevocable lending commitments (including commitments designated under the fair value option) are reflected at notional amounts.

Corporate Credit Exposure

Main corporate credit exposure categories according to our internal creditworthiness categories of our counterparties.

in € m. — Dec 31, 2012

Ratingband	Probability of default	Loans[1]	Irrevocable lending commitments[2]	Contingent liabilities	OTC derivatives[3]	Debt securities available for sale	Total
iAAA-iAA	0.00-0.04 %	48,992	20,233	9,064	23,043	30,054	131,386
iA	0.04-0.11 %	43,047	37,456	19,192	22,308	8,186	130,189
iBBB	0.11-0.5 %	53,804	37,754	21,304	7,713	3,788	124,363
iBB	0.5-2.27 %	45,326	22,631	11,460	5,778	1,749	86,944
iB	2.27-10.22 %	17,739	10,068	4,886	2,415	227	35,335
iCCC and below	10.22-100 %	13,062	1,515	2,455	1,187	151	18,370
Total		221,970	129,657	68,361	62,444	44,155	526,587

1 Includes impaired loans mainly in category CCC and below amounting to € 6.1 billion as of December 31, 2012.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 10.4 billion as of December 31, 2012.
3 Includes the effect of netting agreements and cash collateral received where applicable.

in € m. — Dec 31, 2011

Ratingband	Probability of default	Loans[1]	Irrevocable lending commitments[2]	Contingent liabilities	OTC derivatives[3]	Debt securities available for sale	Total
iAAA-iAA	0.00-0.04 %	51,321	21,152	6,535	37,569	22,753	139,330
iA	0.04-0.11 %	45,085	37,894	24,410	17,039	8,581	133,009
iBBB	0.11-0.5 %	59,496	36,659	21,002	12,899	5,109	135,165
iBB	0.5-2.27 %	50,236	21,067	13,986	7,478	2,303	95,071
iB	2.27-10.22 %	17,650	9,152	6,051	3,007	263	36,123
iCCC and below	10.22-100 %	18,148	2,071	1,669	1,632	371	23,891
Total		241,936	127,995	73,653	79,624	39,381	562,589

1 Includes impaired loans mainly in category CCC and below amounting to € 6.3 billion as of December 31, 2011.
2 Includes irrevocable lending commitments related to consumer credit exposure of € 9.2 billion as of December 31, 2011.
3 Includes the effect of netting agreements and cash collateral received where applicable.

Our corporate credit exposure has declined by 6 % since December 31, 2011 to € 526.6 billion. Reductions have been primarily recorded for Loans (€ 20.0 billion) and OTC derivatives (€ 17.2 billion). Overall, the quality of corporate credit exposure has improved with 73 % rated investment grade compared to 72 % as of December 31, 2011. The loan exposure shown in the table above does not take into account any collateral, other credit enhancement or credit risk mitigating transactions. After consideration of such credit mitigants, we believe that our loan book is well-diversified. The decrease in our OTC derivatives exposure, primarily took place in relation to investment grade counterparties. The OTC derivatives exposure does not include credit risk mitigants (other than master agreement netting) or collateral (other than cash). Taking these mitigants into account, the remaining current credit exposure was significantly lower, adequately structured, enhanced or well-diversified and geared towards investment grade counterparties. The increase in our debt securities available for sale exposure in comparison to December 31, 2011 is mainly to the strongest counterparties in the rating band iAAA-iAA.

The 90 days or more past due ratio in Germany declined in 2012 driven mainly by a sale of non-performing loans, in addition to benefiting from the favourable economic environment. Apart from the economic development in the rest of Europe the increase in the ratio outside Germany is mainly driven by changes in the charge-off criteria for certain portfolios in 2009. Loans, which were previously fully charged-off upon reaching 270 days past due (180 days past due for credit cards), are now provisioned based on the level of historical loss rates, which are derived from observed recoveries of formerly charged off similar loans. This leads to an increase in 90 days or more past due exposure as the change increased the time until the respective loans are completely charged-off. Assuming no change in the underlying credit performance, the effect will continue to increase the ratio until the portfolio has reached a steady state, which is expected approximately 5 years after the change.

The reduction of net credit costs as a percentage of total exposure is mainly driven by the aforementioned sale of nonperforming loans, but also due to the favourable economic developments in the German market.

Consumer mortgage lending exposure grouped by loan-to-value buckets[1]

	Dec 31, 2012
≤ 50 %	71 %
> 50 ≤ 70 %	16 %
> 70 ≤ 90 %	8 %
> 90 ≤ 100 %	2 %
> 100 ≤ 110 %	1 %
> 110 ≤ 130 %	1 %
> 130 %	1 %

1 When assigning the exposure to the corresponding LTV buckets, the exposure amounts are distributed according to their relative share of the underlying assessed real estate value

Source: Deutsche Bank Financial Report 2012, p. 67-68; 82-84

Recommendation 26: Provide Information that facilitates users' understanding of credit risk profile

Example 3 of 3

5.2.2. Performance of magnitudes in 2012

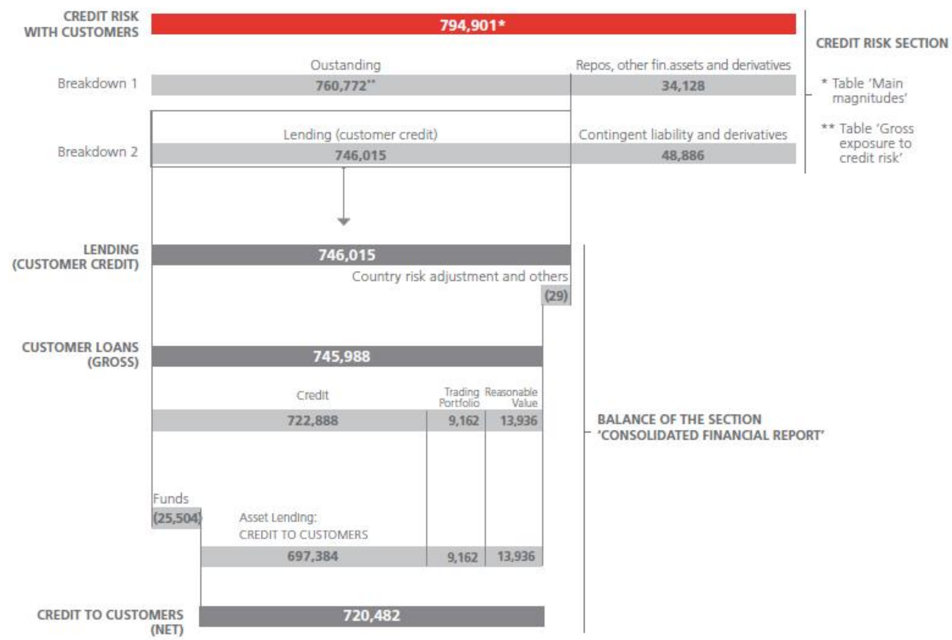
The table below sets out the main items related to credit risk derived from our activity with customers.

GRUPO SANTANDER - RISK, NPLS, COVERAGE, PROVISIONS AND COST OF CREDIT*

	Credit Risk with customers[1] (million euros)			Non-performing loans (million euros)			NPL ratio %		
	2012	2011	2010	2012	2011	2010	2012	2011	2010
Continental Europe	**334,028**	**354,666**	**370,673**	**20,869**	**18,378**	**16,075**	**6.25**	**5.18**	**4.34**
Santander Branch Network	**111,756**	118,060	126,705	**10,787**	10,002	6,994	**9.65**	8.47	5.52
Banesto	**71,976**	78,860	86,213	**4,520**	3,950	3,548	**6.28**	5.01	4.11
Santander Consumer Finance	**59,387**	59,442	67,820	**2,315**	2,361	3,359	**3.90**	3.97	4.95
Portugal	**28,188**	30,607	32,265	**1,849**	1,244	937	**6.56**	4.06	2.90
Poland	**10,601**	9,120	—	**500**	446	—	**4.72**	4.89	—
UK	**255,519**	**259,386**	**244,707**	**5,241**	**4,763**	**4,308**	**2.05**	**1.84**	**1.76**
Latin America	**160,413**	**159,445**	**149,333**	**8,695**	**6,881**	**6,141**	**5.42**	**4.32**	**4.11**
Brazil	**89,142**	91,035	84,440	**6,113**	4,902	4,149	**6.86**	5.38	4.91
Mexico	**22,038**	19,446	16,432	**428**	354	303	**1.94**	1.82	1.84
Chile	**32,697**	28,462	28,858	**1,691**	1,096	1,079	**5.17**	3.85	3.74
Puerto Rico	**4,567**	4,559	4,360	**326**	394	462	**7.14**	8.64	10.59
Argentina	**5,378**	4,957	4,097	**92**	57	69	**1.71**	1.15	1.69
Sovereign	**44,678**	**43,052**	**40,604**	**1,025**	**1,229**	**1,872**	**2.29**	**2.85**	**4.61**
Total Group	**794,901**	**822,657**	**804,036**	**36,100**	**32,036**	**28,522**	**4.54**	**3.89**	**3.55**
Memo item:									
Spain	**249,477**	**271,180**	**283,424**	**16,809**	**14,900**	**12,007**	**6.74**	**5.49**	**4.24**

	Coverage (%)			Spec. provs. net of recovered write- offs[2] (million euros)			Credit cost (% of risk)[3]		
	2012	2011	2010	2012	2011	2010	2012	2011[(4)]	2010[(5)]
Continental Europe	**72.5**	**55.8**	**71.4**	**4.106**	**3.828**	**6.190**	**1.19**	**1.10**	**1.62**
Santander Branch Network	**67.5**	39.9	51.8	**1.545**	1.735	2.454	**1.33**	1.42	1.89
Banesto	**71.3**	53.1	54.4	**948**	778	1.272	**1.28**	0.96	1.52
Santander Consumer Finance	**109.5**	109.3	128.4	**797**	762	1.884	**1.34**	1.43	2.85
Portugal	**53.1**	54.9	60.0	**344**	283	105	**1.17**	0.90	0.30
Poland	**68.3**	65.2	—	**117**	59	—	**1.17**	—	—
UK	**45.4**	**40.2**	**45.8**	**982**	**811**	**826**	**0.36**	**0.32**	**0.34**
Latin America	**87.5**	**97.0**	**103.6**	**7.215**	**5.379**	**4.758**	**4.48**	**3.57**	**3.53**
Brazil	**90.2**	95.2	100.5	**5.939**	4.554	3.703	**6.47**	5.28	4.93
Mexico	**157.3**	175.7	214.9	**459**	293	469	**2.11**	1.63	3.12
Chile	**57.7**	73.4	88.7	**601**	395	390	**1.86**	1.40	1.57
Puerto Rico	**62.0**	51.4	57.5	**86**	95	143	**1.90**	2.25	3.22
Argentina	**143.3**	206.9	149.1	**106**	29	26	**1.99**	0.67	0.72
Sovereign	**105.9**	**96.2**	**75.4**	**284**	**416**	**479**	**0.62**	**1.04**	**1.16**
Total Group	**72.6**	**61.4**	**72.7**	**12.574**	**10.426**	**12.342**	**2.21**	**1.41**	**1.56**
Memo item:									
Spain	**70.6**	**45.5**	**57.9**	**2.993**	**2.821**	**4.352**	**1.23**	**1.04**	**1.53**

The consolidated financial report details the portfolio of customer loans, both gross and net of funds. Credit risk also includes guarantees and derivatives. The following chart shows the relation between the concepts that comprise these magnitudes.



Source: Santander Financial Report 2012, p. 178-179

Recommendation 27: Policies related to impaired, restructured loans and forbearance policies

Example 1 of 2

Identifying Potential Credit Risk Loans

In line with disclosure requirements from the SEC in the US, the Group reports potentially and actually impaired loans as Potential Credit Risk Loans (PCRLs). PCRLs comprise two categories of loans: Potential Problem Loans (PPLs) and Credit Risk Loans (CRLs).

PPLs are loans that are currently complying with repayment terms but where serious doubt exists as to the ability of the borrower to continue to comply with such terms in the near future. If the credit quality of a loan on an EWL or WL deteriorates to the highest category (wholesale) or deteriorates to delinquency cycle 2 (retail), consideration is given to including it within the PPL category.

Should further evidence of deterioration be observed, a loan may move to the CRL category. Events that would trigger the transfer of a loan from the PPL to the CRL category include a missed payment or a breach of covenant. CRLs comprise three classes of loans:

- *Impaired loans:* comprises loans where an individual identified impairment allowance has been raised and also include loans which are fully collateralised or where indebtedness has already been written down to the expected realisable value. This category includes all retail loans that have been charged off to legal recovery. The impaired loan category may include loans, which, while impaired, are still performing;
- *Accruing past due 90 days or more:* comprises loans that are 90 days or more past due with respect to principal or interest. An impairment allowance will be raised against these loans if the expected cash flows discounted at the effective interest rate are less than the carrying value; and
- *Impaired and restructured loans:* comprises loans not included above where, for economic or legal reasons related to the debtor's financial difficulties, a concession has been granted to the debtor that would not otherwise be considered. Where the concession results in the expected cash flows discounted at the effective interest rate being less than the loan's carrying value, an impairment allowance will be raised.

Forbearance

The Group offers forbearance programmes to assist customers and clients in financial difficulty through agreements to accept less than contractual amounts due where financial distress would otherwise prevent satisfactory repayment within the original terms and conditions of the contract. These agreements may be initiated by the customer, Barclays or a third party.

In the retail portfolios, as part of the Group Risk Forbearance Policy, solutions may take a number of forms depending on the extent of the financial dislocation. Short term solutions normally focus on temporary reductions to contractual payments and switches from capital and interest payments to interest only. For customers with longer term financial difficulties, term extensions may be offered, which may include interest rate concessions and a switch to fully amortising balances for card portfolios.

In the wholesale portfolios, Barclays will on occasion participate in debt-for-asset swaps, debt standstills or debt restructuring agreements as part of the business support process. Debt restructuring agreements may include actions to improve security; such as changing an overdraft to a factoring or invoice discounting facility or moving debt to asset owning companies. Consideration is also given to the waiving or relaxing of covenants where this is the optimum strategy for the survival of the client's business. For further detail, see page 139.

Impairment of loans under forbearance

Loans under forbearance programmes are subject to Group Impairment Policy. In both retail and wholesale portfolios, identified impairment is raised for such accounts, recognising the agreement between the Bank and customer to pay less than the original contractual payment and is measured using a future discounted cash flow approach comparing the debt outstanding to the expected repayment on the debt. This results in higher impairment being held for loans under forbearance than for fully performing assets, reflecting the additional credit risk attached to loans subject to forbearance.

Sustainability of loans under forbearance

The Group closely monitors the sustainability of loans for which forbearance has been granted.

In the wholesale portfolios, customers that have been granted forbearance are placed on WL/EWL and therefore subject to increased levels of credit risk oversight. Obligors then remain on WL/EWL for a minimum of 12 months from the date forbearance is applied until satisfactory performance is evidenced. Obligors may only be removed from WL/EWL status in less than 12 months in exceptional circumstances, e.g. full repayment of facilities or significant restructuring that materially improves credit quality.

In retail portfolios, the type of forbearance programme offered should be appropriate to the nature and the expected duration of the customer's financial distress. It is imperative that the solution agreed is both appropriate to that customer and sustainable, with a clear demonstration from the customer of both willingness and ability to repay. Before any programme of forbearance is granted, an affordability assessment is undertaken to ensure suitability of the offer.

For further detail on the Group's impairment policy and the way loans are separated into pools reflecting similar risk characteristics, see pages 323-325.

For disclosure on the Group's accounting policy with respect to impairment, see pages 245-246 and page 323.

Retail forbearance

Retail forbearance is available to customers experiencing financial difficulties. Forbearance solutions take a number of forms depending on individual customer circumstances. Short term solutions focus on temporary reductions to contractual payments and may change from capital and interest payments to interest only. For customers with longer term financial difficulties, term extensions may be offered, which may include interest rate concessions.

When an account is placed into a programme of forbearance, the asset will be classified as such for the remainder of its term, unless after 12 months it qualifies for reclassification, upon which it will be returned to the up to date book and classified as high risk for a further 12 month period. When Barclays agrees to a forbearance programme with a customer, the impairment allowance recognises the impact on cash-flows of the agreement to receive less than the original contractual payments. The Group Retail Impairment Policy prescribes the methodology for impairment of forbearance assets, which is measured by comparing the debt outstanding to the revised expected repayment. This results in higher impairment than for fully performing assets, reflecting the additional credit risk attached to loans subject to forbearance.

During 2012, Barclays continued to assist customers in financial difficulty through the use of forbearance programmes. However, the extent of forbearance offered by the Group to customers and clients remains small in comparison to the overall size of the loan book.

Forbearance on the Group's principal portfolios in US, UK and Europe are presented on pages 134-135. In South Africa, forbearance balances are not published as local practices are in the process of being aligned to the Barclays Group policy.

The level of forbearance extended to customers in other retail portfolios is not material and, typically, does not currently play a significant part in the way customer relationships are managed. However, additional portfolios will be added to this disclosure should the forbearance in respect of such portfolios become material.

Barclays would not consider a retail loan to be renegotiated where the amendment is at the request of the customer, there is no evidence of actual or imminent financial difficulty and the amendment meets with all Barclays underwriting criteria. In this case it would be treated as a new loan. In the normal course of business, customers who are not in financial difficulties frequently apply for new loan terms, for example to take advantage of a lower interest rate or to secure a further advance on a mortgage product. Where these applications meet our underwriting criteria and the loan is made at market interest rates, the loan is not classified as being in forbearance. Only in circumstances where a customer has requested a term extension, interest rate reduction or further advance and there is evidence of financial difficulty is the loan classified as forbearance and included in our disclosures on forbearance.

Wholesale forbearance

Wholesale client relationships are individually managed with lending decisions made with reference to specific circumstances and on bespoke terms.

Forbearance occurs when Barclays, for reasons relating to the actual or perceived financial difficulty of an obligor, grants a concession below current Barclays standard rates (i.e. lending criteria below our current lending terms), that would not otherwise be considered. This includes all troubled debt restructures granted below our standard rates.

Forbearance would typically be evident where the concession(s) agreed impact the ability to repay debt or avoid recognising a default with a lack of appropriate commercial balance and risk mitigation/structural enhancement of benefit to Barclays in return for concession(s).

[...]

Source: Barclays Annual Report 2012, pg. 326

Recommendation 27: Policies related to impaired, restructured loans and forbearance policies Example 2 of 2

Restructured/refinanced portfolio
The general term restructured/refinanced portfolio, in accordance with Bank of Spain circular 6/2012, refers to those operations in which the client has presented, or it is envisaged might present, financial difficulties in meeting their payment obligations in the prevailing contractual terms and, for this reason, it could be advisable to modify, cancel or even formalise a new transaction.

The restructuring/refinancing of debts is part of the usual risk management with clients, although it is at times of economic weakening that it assumes greater importance.

Grupo Santander follows very rigorous definitions and policies in this management process, which is conducted in accordance with the best practices and within the strictest compliance with regulatory requirements.

Grupo Santander has a detailed corporate policy for restructuring/refinancing, which meets the Bank of Spain's rules via circulars 4/2004 and 6/2012 and which is applied to all countries and clients[4]. This policy establishes rigorous criteria that underscore Santander's prudence in assessing these risks, noteworthy among which are those regarding its restricted use and the classification of this type of operation:

- There must be restrictive use of restructurings, which must be accompanied by guarantees or additional efforts by the client, avoiding actions that only postpone recognition of the non-performing loan.
- The aim is to recover all the amounts owed, which entails recognising as soon as possible the amounts that it is estimated cannot be recovered. Delaying immediate recognition of losses would be contrary to good management practices.
- The restructuring must always envisage maintaining the existing guarantees and, wherever possible, improving them and/or increasing the coverage. Effective guarantees not only serve to mitigate the severity, but also can reduce the probability of default.
- This practice should not mean granting additional financing to the client, nor serve to refinance the of debt other banks, nor be used as an instrument of cross-selling.
- It is necessary to assess all the refinancing alternatives and their effects, ensuring that the results would be better than those likely to be achieved in the event of not doing it.
- The new operation cannot mean an improvement in the classification as long as a satisfactory experience with the client does not exist.

All Grupo Santander's institutions apply these principles, adapting them to local needs and rules and always subordinated to complying with any stricter local rule that has to be implemented.

From the management standpoint, taking into account the client's different situation of irregularity at the time of the restructuring/refinancing, there are two types of operation:

- Those that arise from a non-doubtful loan situation. These operations refer to clients who, due to a change in their economic circumstances, are envisaged could experience an eventual reduction in their payment capacity, although at the time they are up to date with payments or have not failed to make payments for more than three months. This contingency can be resolved by adapting the debt conditions to the client's new payment capacity, which facilitates compliance with their obligations. Of the total restructured/refinanced portfolio, 77% corresponds to this type of operation.
- Operations that arise from a doubtful situation whether for subjective or objective reasons, when at least three months have passed since the first non-payment. These operations do not signify a release of provisions, as the doubtful risk classification remains, unless the criteria set out in the regulatory rules based on Bank of Spain circulars are fulfilled (payment of ordinary interest pending and, in all cases, contribution of new effective guarantees or a reasonable certainty of payment capacity), as well as the cautions which, under a criterion of prudence, are set out in the Group's corporate policy (sustained payment during a perioc on the basis of the features of the operation and the type of guarantees existing).

These operations are classified in accordance with their features in the following way:

- Doubtful: those restructurings in a process of normalisation or which, being classified as normal or sub standard, during the life of the operation, present new payment difficulties. In the event of this deterioration intensifying, in accordance with the criterion of corporate prudence, the loan will be considered as a write-off.
- Substandard: those restructurings emanating from doubtful loans which have met sustained payment for a certain period on the basis of the features of the operation and the type of guarantees existing.

  In the particular case of those operations with a grace period on capital payments, the restructuring will be classified as sub standard risk, if it is not already classified as doubtful risk, and must be maintained as such until the grace period ends
- Normal: those restructurings emanating from doubtful or substandard loans which have exceeded a period of observation which shows the re-establishment of the payment capacity in accordance with the periods established in the corporate policy.

According to this policy, the operations in normal situation must be kept under this special watch for a minimum, precautionary period of two years and have amortised 20% of the principal of the loan, except for those articulated via some type of hair cut which will be maintained until its extinction.

The total portfolio stood at EUR 55,714 million at the end of 2012 and was distributed as follows:

RESTRUCTURED/REFINANCED PORTFOLIO
Million euros

	Normal	Substandard		Doubtful		Total	
	Portfolio	Portfolio	Specific coverage	Portfolio	Specific coverage	% of total portfolio	Specific coverage
Operations arising from non-doubtful situation	18,638	13,179	10%	11,117	41%	**77%**	14%
Operations arising from doubtful situation	3,601	2,079	23%	7,100	48%	**23%**	30%
Total	**22,239**	**15,258**	**12%**	**18,217**	**43%**	**100%**	**17%**

A more detailed breakdown of this portfolio can be found in the Auditor's Report and Annual Consolidated Accounts (Note 54).

From the credit classification standpoint, 67% of the total is classified in a non-doubtful status, while the other 33% which was in a doubtful situation, had a specific coverage of 43%.

Preventative risk management in this portfolio shows that **77% comes from a non-doubtful origin**, while that from doubtful situations only accounts for 1.5% of the Group's total credit risk with clients.

From the standpoint of its guarantees, more than 70% of the total portfolio has real guarantees (more than 92% in the case of the portfolio of companies with real estate purpose).

Of the Group's total portfolio, Spain's accounts for 59% (EUR 32,867 million) with the following features:

- The amount corresponding to **companies with a real estate purpose was EUR 11,256 million,** 72% of which is classified as doubtful or sub standard with specific coverage of 46%. Total coverage of this portfolio including the provisions set aside for the normal portfolio which correspond to it is 44%. **Following the provisions made in 2012, the real estate provisioning is effectively completed.**
- Of the total portfolio in Spain, **34% was in a doubtful situation with coverage of 42%.**
- From a management standpoint, it is important to highlight the **preventative management of risk together with the high level of existing guarantees:**
  - 89% (EUR 29,380 million) emanates from operations that come from a non-doubtful situation and 82% have real guarantees.
  - Only the remaining 11% (EUR 3,487 million) emanates from doubtful situation operations and 84% have real guarantees.

In the rest of the countries where the Group operates the restructured/refinanced portfolio does not account in any of them, for more than 1% of the Group's total credit risk with clients.

Management metrics[5]
Credit risk management uses other metrics to those already mentioned, particularly management of non-performing loans variation plus net write-offs (known in Spanish as VMG) and expected loss. Both enable risk managers to form a complete idea of the evolution and future prospects of the portfolio.

Unlike non-performing loans, the VMG refers to the total portfolio deteriorated over a period of time, regardless of the situation in which it finds itself (doubtful loans and write-offs). This makes the metric a main driver when it comes to establishing measures to manage the portfolio.

Source: Santander Financial Report 2012, p. 182-183

Recommendation 28: Reconciliation of non-performing or impaired loans and the allowance for loan losses Example 1 of 3

Table 30: Analysis of Changes in Nonaccrual Loans

	Quarter ended				Year ended Dec. 31,	
(in millions)	Dec. 31, 2012	Sept. 30, 2012	June 30, 2012	Mar. 31, 2012	2012	2011
Commercial nonaccrual loans						
Balance, beginning of period	$ **6,371**	6,924	7,599	8,217	**8,217**	11,351
Inflows	**746**	976	952	1,138	**3,812**	5,980
Outflows:						
Returned to accruing	**(135)**	(90)	(242)	(188)	**(655)**	(1,457)
Foreclosures	**(107)**	(151)	(92)	(119)	**(469)**	(683)
Charge-offs	**(322)**	(364)	(402)	(347)	**(1,435)**	(1,700)
Payments, sales and other (1)	**(729)**	(924)	(891)	(1,102)	**(3,646)**	(5,274)
Total outflows	**(1,293)**	(1,529)	(1,627)	(1,756)	**(6,205)**	(9,114)
Balance, end of period	**5,824**	6,371	6,924	7,599	**5,824**	8,217
Consumer nonaccrual loans						
Balance, beginning of period	**14,673**	13,654	14,427	13,087	**13,087**	14,891
Inflows (2)	**2,943**	4,111	2,750	4,765	**14,569**	14,407
Outflows:						
Returned to accruing	**(893)**	(1,039)	(1,344)	(943)	**(4,219)**	(5,920)
Foreclosures	**(151)**	(182)	(186)	(226)	**(745)**	(985)
Charge-offs	**(1,053)**	(987)	(1,137)	(1,364)	**(4,541)**	(5,828)
Payments, sales and other (1)	**(857)**	(884)	(856)	(892)	**(3,489)**	(3,478)
Total outflows	**(2,954)**	(3,092)	(3,523)	(3,425)	**(12,994)**	(16,211)
Balance, end of period	**14,662**	14,673	13,654	14,427	**14,662**	13,087
Total nonaccrual loans	$ **20,486**	21,044	20,578	22,026	**20,486**	21,304

Table 34: Analysis of Changes in TDRs

	Quarter ended				Year ended Dec. 31,	
(in millions)	Dec. 31, 2012	Sept. 30, 2012	June 30, 2012	Mar. 31, 2012	2012	2011
Commercial TDRs						
Balance, beginning of period	$ 5,378	5,429	5,548	5,349	5,349	1,751
Inflows	542	620	687	710	2,559	5,379
Outflows						
Charge-offs	(66)	(84)	(112)	(119)	(381)	(252)
Foreclosure	(14)	(20)	(24)	(2)	(60)	(64)
Payments, sales and other (1)	(694)	(567)	(670)	(390)	(2,321)	(1,465)
Balance, end of period	5,146	5,378	5,429	5,548	5,146	5,349
Consumer TDRs						
Balance, beginning of period	22,012	17,495	17,447	17,308	17,308	14,929
Inflows (2)	1,247	5,212	762	829	8,050	5,673
Outflows						
Charge-offs (3)	(542)	(244)	(319)	(295)	(1,400)	(1,091)
Foreclosure (3)	(333)	(35)	(25)	(33)	(426)	(144)
Payments, sales and other (1)	(588)	(404)	(392)	(434)	(1,818)	(1,788)
Net change in trial modifications (4)	(28)	(12)	22	72	54	(271)
Balance, end of period	21,768	22,012	17,495	17,447	21,768	17,308
Total TDRs	$ 26,914	27,390	22,924	22,995	26,914	22,657

Allowance for Credit Losses

The allowance for credit losses consists of the allowance for loan losses and the allowance for unfunded credit commitments. Changes in the allowance for credit losses were:

	Year ended December 31,				
(in millions)	2012	2011	2010	2009	2008
Balance, beginning of year	$ **19,668**	23,463	25,031	21,711	5,518
Provision for credit losses	**7,217**	7,899	15,753	21,668	15,979
Interest income on certain impaired loans (1)	**(315)**	(332)	(266)	-	-
Loan charge-offs:					
Commercial:					
Commercial and industrial	**(1,306)**	(1,598)	(2,775)	(3,365)	(1,653)
Real estate mortgage	**(382)**	(636)	(1,151)	(670)	(29)
Real estate construction	**(191)**	(351)	(1,189)	(1,063)	(178)
Lease financing	**(24)**	(38)	(120)	(229)	(65)
Foreign	**(111)**	(173)	(198)	(237)	(245)
Total commercial	**(2,014)**	(2,796)	(5,433)	(5,564)	(2,170)
Consumer:					
Real estate 1-4 family first mortgage	**(3,013)**	(3,883)	(4,900)	(3,318)	(540)
Real estate 1-4 family junior lien mortgage	**(3,437)**	(3,763)	(4,934)	(4,812)	(2,204)
Credit card	**(1,101)**	(1,449)	(2,396)	(2,708)	(1,563)
Other revolving credit and installment	**(1,408)**	(1,724)	(2,437)	(3,423)	(2,300)
Total consumer (2)	**(8,959)**	(10,819)	(14,667)	(14,261)	(6,607)
Total loan charge-offs	**(10,973)**	(13,615)	(20,100)	(19,825)	(8,777)
Loan recoveries:					
Commercial:					
Commercial and industrial	**461**	419	427	254	114
Real estate mortgage	**163**	143	68	33	5
Real estate construction	**124**	146	110	16	3
Lease financing	**19**	24	20	20	13
Foreign	**32**	45	53	40	49
Total commercial	**799**	777	678	363	184
Consumer:					
Real estate 1-4 family first mortgage	**157**	405	522	185	37
Real estate 1-4 family junior lien mortgage	**259**	218	211	174	89
Credit card	**185**	251	218	180	147
Other revolving credit and installment	**539**	665	718	755	481
Total consumer	**1,140**	1,539	1,669	1,294	754
Total loan recoveries	**1,939**	2,316	2,347	1,657	938
Net loan charge-offs (3)	**(9,034)**	(11,299)	(17,753)	(18,168)	(7,839)
Allowances related to business combinations/other (4)	**(59)**	(63)	698	(180)	8,053
Balance, end of year	$ **17,477**	19,668	23,463	25,031	21,711
Components:					
Allowance for loan losses	$ **17,060**	19,372	23,022	24,516	21,013
Allowance for unfunded credit commitments	**417**	296	441	515	698
Allowance for credit losses (5)	$ **17,477**	19,668	23,463	25,031	21,711
Net loan charge-offs as a percentage of average total loans (3)	**1.17 %**	1.49	2.30	2.21	1.97
Allowance for loan losses as a percentage of total loans (5)	**2.13**	2.52	3.04	3.13	2.43
Allowance for credit losses as a percentage of total loans (5)	**2.19**	2.56	3.10	3.20	2.51

Source: Wells Fargo Annual Report 2012, p. 66; 69; 158

Recommendation 28: Reconciliation of non-performing or impaired loans and the allowance for loan losses Example 2 of 3

Movement in impaired loans by geographical region
(Unaudited)

	Europe US$m	Hong Kong US$m	Rest of Asia-Pacific US$m	MENA US$m	North America US$m	Latin America US$m	Total US$m
Impaired loans at 1 January 2012	11,819	608	1,070	2,445	22,758	3,039	41,739
Personal	2,797	190	388	428	21,094	1,646	26,543
Corporate and commercial	8,113	372	667	1,798	1,517	1,391	13,858
Financial[2]	909	46	15	219	147	2	1,338
Classified as impaired during the year	3,482	292	924	648	8,130	4,507	17,983
Personal	933	169	549	73	7,363	2,807	11,894
Corporate and commercial	2,481	123	375	531	739	1,696	5,945
Financial[2]	68	–	–	44	28	4	144
Transferred from impaired to unimpaired during the year	(1,164)	(47)	(85)	(321)	(4,223)	(1,765)	(7,605)
Personal	(279)	(38)	(69)	(32)	(4,124)	(1,124)	(5,666)
Corporate and commercial	(858)	(5)	(15)	(289)	(99)	(640)	(1,906)
Financial[2]	(27)	(4)	(1)	–	–	(1)	(33)
Amounts written off	(1,891)	(217)	(564)	(264)	(3,514)	(2,112)	(8,562)
Personal	(632)	(127)	(373)	(96)	(3,227)	(1,521)	(5,976)
Corporate and commercial	(1,212)	(90)	(191)	(143)	(202)	(590)	(2,428)
Financial[2]	(47)	–	–	(25)	(85)	(1)	(158)
Net repayments and other	(1,101)	(159)	(198)	(34)	(2,806)	(481)	(4,779)
Personal	(353)	(22)	(56)	(5)	(2,380)	(228)	(3,044)
Corporate and commercial	(466)	(133)	(136)	(26)	(363)	(253)	(1,377)
Financial[2]	(282)	(4)	(6)	(3)	(63)	–	(358)
At 31 December 2012	11,145	477	1,147	2,474	20,345	3,188	38,776
Personal	2,466	172	439	368	18,726	1,580	23,751
Corporate and commercial	8,058	267	700	1,872	1,592	1,604	14,093
Financial[2]	621	38	8	234	27	4	932

Further analysis of impairment

Movement in impairment allowances by industry sector and by geographical region
(Unaudited)

	Europe US$m	Hong Kong US$m	Rest of Asia-Pacific US$m	MENA US$m	North America US$m	Latin America US$m	Total US$m
Impairment allowances at 1 January 2012	5,292	581	782	1,731	7,239	2,011	17,636
Amounts written off	(2,375)	(219)	(540)	(305)	(4,181)	(2,192)	(9,812)
Personal	(828)	(128)	(347)	(126)	(3,862)	(1,614)	(6,905)
– first lien residential mortgages	(28)	–	(7)	(2)	(1,952)	(70)	(2,059)
– other personal[1]	(800)	(128)	(340)	(124)	(1,910)	(1,544)	(4,846)
Corporate and commercial	(1,428)	(91)	(193)	(154)	(234)	(577)	(2,677)
– manufacturing and international trade and services	(661)	(91)	(164)	(137)	(59)	(498)	(1,610)
– commercial real estate and other property-related	(377)	–	(8)	(6)	(97)	(18)	(506)
– other commercial[9]	(390)	–	(21)	(11)	(78)	(61)	(561)
Financial[2]	(119)	–	–	(25)	(85)	(1)	(230)
Recoveries of amounts written off in previous years	409	31	150	75	129	352	1,146
Personal	354	30	132	50	88	312	966
– first lien residential mortgages	34	4	2	5	46	49	140
– other personal[1]	320	26	130	45	42	263	826
Corporate and commercial	51	1	18	25	38	39	172
– manufacturing and international trade and services	16	1	5	2	7	28	59
– commercial real estate and other property-related	9	–	11	–	19	2	41
– other commercial[9]	26	–	2	23	12	9	72
Financial[2]	4	–	–	–	3	1	8
Charge to income statement	1,874	84	340	255	3,462	2,145	8,160
Personal	348	96	234	57	3,228	1,399	5,362
– first lien residential mortgages	(56)	(11)	14	7	1,986	(30)	1,910
– other personal[1]	404	107	220	50	1,242	1,429	3,452
Corporate and commercial	1,547	(14)	102	169	252	746	2,802
– manufacturing and international trade and services	670	(12)	32	80	62	625	1,457
– commercial real estate and other property-related	444	7	55	62	94	28	690
– other commercial[9]	433	(9)	15	27	96	93	655
Financial[2]	(21)	2	4	29	(18)	–	(4)
Exchange and other movements[18]	161	(4)	14	55	(1,033)	(154)	(961)
At 31 December 2012	5,361	473	746	1,811	5,616	2,162	16,169
Impairment allowances against banks:							
– individually assessed	40	–	–	17	–	–	57
Impairment allowances against customers:							
– individually assessed	3,781	192	442	1,323	428	406	6,572
– collectively assessed[17]	1,540	281	304	471	5,188	1,756	9,540
At 31 December 2012	5,361	473	746	1,811	5,616	2,162	16,169

Source: HSBC Annual Report 2012, page 163; 172

Recommendation 28: Reconciliation of non-performing or impaired loans and the allowance for loan losses Example 3 of 3

Development of Impaired Loans

in € m.	Dec 31, 2012 Individually assessed	Collectively assessed	Total	Dec 31, 2011[1] Individually assessed	Collectively assessed	Total
Balance, beginning of year	6,262	3,808	10,070	3,564	2,749	6,313
Classified as impaired during the year[2]	2,860	1,912	4,772	4,497	3,475	7,972
Transferred to not impaired during the year[2]	(1,932)	(930)	(2,862)	(1,230)	(1,811)	(3,041)
Charge-offs	(798)	(483)	(1,281)	(553)	(512)	(1,065)
Disposals of impaired loans	(249)	(122)	(371)	(9)	(76)	(85)
Exchange rate and other movements	(14)	21	7	(7)	(17)	(24)
Balance, end of year	6,129	4,206	10,335	6,262	3,808	10,070

[1] Numbers for 2011 adjusted.
[2] Includes repayments.

Our impaired loans increased by € 265 million to € 10.3 billion in 2012 as net new impaired loans of € 1.5 billion were partly offset by € 1.3 billion charge-offs. The overall increase is mainly attributable to a net increase of € 398 million in our collectively assessed impaired loans, predominantly relating to households in Western Europe (excluding Germany). This increase in collectively assessed impaired loans was partly compensated by a € 133 million net decrease in our individually assessed impaired loans, primarily caused by reductions from de-risking through sale or restructuring of exposures in North America which overcompensated increases in the commercial real estate sector and households in Western Europe (excluding Germany).

The impaired loan coverage ratio improved from 41 % to 45 % mainly attributable to Postbank. At change of control, all loans classified as impaired by Postbank were classified as performing by Deutsche Bank and also initially recorded at fair value. Subsequent increases in provisions at the Postbank level resulted in an impairment of the full loan from a Deutsche Bank consolidated perspective, but with an allowance being built for only the incremental provision. Due to the sale of larger impaired commercial real estate financings as part of our de-risking activities the latter effect has been partially reversed. In addition, the overall increased level of our allowance contributed also to the coverage ratio increase.

Our impaired loans included € 1.5 billion among the loans reclassified to loans and receivables in accordance with IAS 39. This position is unchanged from prior year, since gross increases of € 0.3 billion were offset by charge-offs.

Impaired loans, provision for loan losses and recoveries by Industry

in € m.	Dec 31, 2012 Total impaired loans	12 months ending Dec 31, 2012 Provision for loan losses before recoveries	Recoveries	Dec 31, 2011[1] Total impaired loans	12 months ending Dec 31, 2011 Provision for loan losses before recoveries	Recoveries
Banks and insurances	53	17	1	118	52	1
Fund management activities	128	(20)	1	917	32	0
Manufacturing	926	110	18	831	156	21
Wholesale and retail trade	554	81	7	468	74	9
Households	3,707	742	138	3,402	982	109
Commercial real estate activities	3,358	357	3	2,945	356	5
Public sector	–	1	–	–	2	0
Other	1,609	633	27	1,389	347	22
Total	10,335	1,922	195	10,070	2,000	168

[1] Numbers for 2011 adjusted.

Allowance for Credit Losses

Development of allowance for credit losses

in € m.	Allowance for Loan Losses Individually assessed	Collectively assessed	Subtotal	Allowance for Off-Balance Sheet Positions Individually assessed	Collectively assessed	Subtotal	2012 Total
Balance, beginning of year	**2,011**	**2,150**	**4,162**	**127**	**98**	**225**	**4,386**
Provision for credit losses	1,115	613	1,728	(7)	0	(7)	1,721
thereof: (Gains)/Losses from disposal of impaired loans	79	(55)	24	–	–	–	24
Net charge-offs:	(762)	(324)	(1,086)	–	–	–	(1,086)
Charge-offs	(798)	(483)	(1,281)	–	–	–	(1,281)
Recoveries	36	158	195	–	–	–	195
Changes in the group of consolidated companies	–	–	–	–	–	–	–
Exchange rate changes/other	(98)	(9)	(107)	(2)	(1)	(3)	(111)
Balance, end of year	**2,266**	**2,430**	**4,696**	**118**	**97**	**215**	**4,911**
Changes compared to prior year							
Provision for credit losses							
absolute	208	(312)	(104)	(26)	12	(14)	(118)
relative	23 %	(34 %)	(6 %)	(137 %)	(103 %)	(191 %)	(6 %)
Net charge-offs							
absolute	(249)	61	(189)	–	–	–	(189)
relative	49 %	(16 %)	21 %	–	–	–	21 %
Balance, end of year							
absolute	255	279	534	(9)	(1)	(10)	524
relative	13 %	13 %	13 %	(7 %)	(1 %)	(4 %)	12 %

In a volatile economic environment our credit standards have kept new provisions for loan losses under control. This included pro-active management of the homogeneous retail portfolios as well as strict underwriting standards in CB&S and continued diligent monitoring of higher risk exposures. With the creation of the NCOU, we have begun actively de-risking higher risk assets, which we intend to continue in 2013.

Our allowance for credit losses was € 4.9 billion as of December 31, 2012, thereof 96 % or € 4.7 billion related to our loan portfolio and 4 % or € 215 million to off-balance sheet positions (predominantly loan commitments and guarantees). Our allowance for loan losses as of December 31, 2012 was € 4.7 billion, 52 % of which is related to collectively assessed and 48 % to individually assessed loan losses. The increase in our allowance for loan losses of € 534 million mainly relates to € 1.7 billion of additional loan loss provisions partly offset by € 1.1 billion of charge-offs. Our allowance for off-balance sheet positions decreased by € 10 million or 4 % compared to the prior year due to releases of previously established allowances overcompensating new provisions in our portfolio for individually assessed off-balance sheet positions.

Provisions for credit losses recorded in 2012 decreased by € 118 million to € 1.7 billion compared to 2011. The overall loan loss provisions decreased by € 104 million or 6 % in 2012 compared to 2011. This decrease was driven by our collectively assessed loan portfolio, where we saw a reduction of € 312 million or 34 % driven by lower levels of provisioning for non-impaired loans within our NCOU mainly as a result of our de-risking measures along with lower provisioning in our homogenous Postbank portfolio. The latter decrease however excludes the effect of Postbank releases related to loan loss allowances recorded prior to consolidation. The impact of such releases is reported as interest income on a group level. The increase in provisions for our individually assessed loans of € 208 million or 23 % is related to assets which had been reclassified in accordance with IAS 39 in North America and United Kingdom now held in the NCOU. Provisions for off-balance

Source: Deutsche Bank Financial Report 2012, p. 92; 94

Recommendation 28: Reconciliation of non-performing or impaired loans and the allowance for loan losses Example 3 of 3 (cont.)

Renegotiated Loans

Breakdown of the Group's renegotiated loans representing our troubled debt restructurings

in € m.	Dec 31, 2012	Dec 31, 2011	Dec 31, 2010	Dec 31, 2009	Dec 31, 2008
Renegotiated loans considered nonimpaired					
German	210	114	65	69	71
Non-German	678	950	753	119	9
Total renegotiated loans considered nonimpaired	888	1,064	818	188	80
Renegotiated loans considered impaired					
German	309	252	96	53	51
Non-German	1,317	1,102	301	228	13
Total renegotiated loans considered impaired	1,626	1,354	397	281	64
Renegotiated loans					
German	519	366	160	121	122
Non-German	1,995	2,052	1,055	348	22
Total renegotiated loans	2,514	2,418	1,215	469	144

Renegotiated loan positions have increased generally in recent years due to the deterioration of the global macroeconomic environment. In 2012, the level of the Group's renegotiated loans increased slightly by € 96 million or 4 % to € 2.5 billion compared to prior year-end, as increases in renegotiated loans considered impaired were only partially compensated by an overall decrease in renegotiated loans considered nonimpaired. In 2011, increases included several large transactions in the Group's commercial real estate activities through the Group's entities in the UK and the Americas as well as in subsidiaries the Group acquired in 2010 in Germany. Renegotiated loans also increased to a lesser extent in Spain due to the deteriorating home finance market.

It should be noted that these renegotiations are not part of a special modification or restructuring program such as the Fannie Mae "Home Affordable Modification Program". Rather, new terms (for example modification of interest rates, principal amounts, interest due, maturities, etc.) were arranged depending on the requirements of the individual renegotiation.

Source: Deutsche Bank Form 20-F 2012, p. S-9

Recommendation 29: Counterparty risk that arises from derivatives transactions Example 1 of 2

Derivatives by product type in READ

	Sovereigns	Institutions	Corporate	Residential mortgages	Other retail	Total 2012	Total 2011
Credit Derivatives	8	404	395			808	801
Derivatives		30	211			241	240
Equity Derivatives		1,190	670		7	1,867	2,197
Foreign Exchange Derivatives	398	2,346	1,464		12	4,219	5,155
Interest Rate Derivatives	1,413	14,508	10,137		64	26,121	25,024
Commodity derivative		48	206			254	272
Exchange Traded Products			194			194	2,852
Total	1,819	18,526	13,278		83	33,705	36,541

* Includes both AIRB and SA portfolios; excludes securitisations, equities and ONCOA.
* Excludes revaluations made directly through the equity account.

The Derivatives portfolio is largely represented by Interest Rate Derivatives provided to Institutions and is mainly seen in the UK, Germany, France and in the Netherlands portfolio. Derivatives which are exchange traded have seen a significant decline in the derivatives traded in the Eurozone exchange market. However, this figure can be volatile as it is based on a single balance sheet date.

Over the counter and exchange traded derivatives

In line with the EDTF recommendations this section provides a quantitative and qualitative analysis of ING's Credit Risk that arises from its derivatives transactions. This quantifies notional derivatives exposure, including whether derivatives are over-the-counter (OTC) or traded on recognised exchanges (ETD). Where the derivatives are OTC, the table shows how much is settled by central counterparties and how much is not, and provides a description of the collateral agreements in place.

Credit risk derivatives

	2012 Notional	2012 MtM
OTC derivatives		
CCP	1,417,454	–4,430
Non-CCP	2,020,068	–3,154
ETD derivatives	24,000	n/a*
Total	3,461,522	–7,584

Includes both AIRB and SA portfolios; excludes securitisations, equities and ONCOA.
* ETD Derivatives settle price movements daily. Therefore there is no MTM build-up that generates exposure.

From the total notional value of OTC derivatives transactions that are not cleared by a CCP, 88% has been documented under bilateral (96%) and unilateral (4%) Collateral Support Annex ('CSA') agreement.

- The notional value of transactions that are done under bilateral CSA agreements relates for 79% to Interest Rate derivatives, for 17% to FX derivatives and for 4% to Credit, Equity and Commodity Derivatives.
- Unilateral CSA agreements relate mainly to agreements that are unilateral against ING and mainly consist of Interest Rate Derivatives.

The remaining 12% of the total notional value of OTC derivatives transactions that are not cleared by a CCP, is not supported by a CSA agreement or a Clearing Agreement and mainly relates to Corporates with small credit limits and mainly consists of Interest Rate Derivatives (58%).

Source: ING Annual Report 2012 / Pillar 3, p. 363

Recommendation 29: Counterparty risk that arises from derivatives transactions
Example 2 of 2

Notional amounts and gross market values of derivative transactions

Dec 31, 2012 in € m.	Notional amount maturity distribution: Within 1 year	> 1 and ≤ 5 years	After 5 years	Total	Positive market value	Negative market value	Net market value
Interest rate related:							
OTC	15,419,788	15,366,636	10,478,308	41,264,732	584,620	554,944	29,676
Exchange-traded	2,899,159	1,169,563	4,114	4,072,836	153	144	9
Total Interest rate related	18,318,947	16,536,199	10,482,422	45,337,568	584,773	555,088	29,685
Currency related:							
OTC	4,290,214	1,188,952	428,949	5,908,115	94,639	101,738	(7,099)
Exchange-traded	19,381	470	–	19,851	8	7	1
Total Currency related	4,309,595	1,189,422	428,949	5,927,966	94,647	101,745	(7,098)
Equity/index related:							
OTC	329,531	261,697	79,088	670,316	22,415	29,027	(6,612)
Exchange-traded	417,334	114,654	3,653	535,641	7,476	6,201	1,275
Total Equity/index related	746,865	376,351	82,741	1,205,957	29,891	35,228	(5,337)
Credit derivatives	499,717	1,914,989	207,623	2,622,329	49,733	46,648	3,085
Commodity related:							
OTC	45,284	56,194	5,417	106,895	10,121	10,644	(523)
Exchange-traded	194,470	107,099	1,659	303,228	4,617	4,173	444
Total Commodity related	239,754	163,293	7,076	410,123	14,738	14,817	(79)
Other:							
OTC	62,890	23,991	399	87,280	2,887	2,818	69
Exchange-traded	12,533	1,278	5	13,816	18	36	(18)
Total Other	75,423	25,269	404	101,096	2,905	2,854	51
Total OTC business	20,647,424	18,812,459	11,199,784	50,659,667	764,415	745,819	18,596
Total exchange-traded business	3,542,877	1,393,064	9,431	4,945,372	12,272	10,561	1,711
Total	24,190,301	20,205,523	11,209,215	55,605,039	776,687	756,380	20,307
Positive market values after netting and cash collateral received	–	–	–	–	70,054	–	–

The notional amount of OTC derivatives settled through central counterparties amounted to € 10.0 trillion as of December 31, 2012, and to € 10.8 trillion as of December 31, 2011.

Source: Deutsche Bank Financial Report 2012, p. 85

EAD and RWA according to the model approaches applied to our credit risk portfolios

Dec 31, 2012 in € m.	Advanced IRBA EAD	Advanced IRBA RWA	Foundation IRBA EAD	Foundation IRBA RWA	Other IRBA EAD	Other IRBA RWA	Standardized Approach EAD	Standardized Approach RWA	Total EAD	Total RWA	Total Capital Require-ments
Central governments	103,199	3,762	112	35	–	–	100,612	379	203,923	4,176	334
Institutions	65,856	8,946	22,658	3,156	–	–	4,619	230	93,133	12,331	987
Corporates	281,190	81,646	11,936	7,349	17,672	10,957	26,392	18,640	337,191	118,593	9,487
Retail exposures secured by real estate property	145,828	20,164	–	–	–	–	6,253	2,728	152,080	22,891	1,831
Qualifying revol-ving retail exposures	4,550	623	–	–	–	–	–	–	4,550	623	50
Other retail exposures	32,716	15,259	–	–	–	–	10,604	6,564	43,320	21,823	1,746
Other exposures	–	–	–	–	9,937	11,635	27,830	22,342	37,767	33,977	2,718
Securitizations	62,549	13,325	–	–	–	–	2,720	1,457	65,269	14,782	1,183
Total	695,887	143,725	34,707	10,539	27,609	22,592	179,030	52,340	937,232	229,196	18,336
Thereof counter-party credit risk from	143,190	32,711	8,471	736	726	636	13,485	1,906	165,872	35,989	2,879
Derivatives	87,857	30,870	1,552	595	726	636	10,658	1,696	100,792	33,797	2,704
Securities financing transactions	55,333	1,841	6,919	140	–	–	2,827	210	65,079	2,191	175

Source: Deutsche Bank Financial Report 2012, p. 98

Recommendation 30: Qualitative disclosures on credit risk mitigation Example 1 of 2

Collateral

Collateral and other credit enhancements held

(Audited)

Loans and advances held at amortised cost

Although collateral can be an important mitigant of credit risk, it is the Group's practice to lend on the basis of the customer's ability to meet their obligations out of cash flow resources rather than rely on the value of security offered. Depending on the customer's standing and the type of product, facilities may be provided unsecured. However, for other lending a charge over collateral is obtained and considered in determining the credit decision and pricing. In the event of default, the bank may utilise the collateral as a source of repayment.

Depending on its form, collateral can have a significant financial effect in mitigating our exposure to credit risk.

The tables below provide a quantification of the value of fixed charges we hold over a borrower's specific asset (or assets) where we have a history of enforcing, and are able to enforce, the collateral in satisfying a debt in the event of the borrower failing to meet its contractual obligations, and where the collateral is cash or can be realised by sale in an established market. The collateral valuation in the tables below excludes any adjustments for obtaining and selling the collateral.

We may also manage our risk by employing other types of collateral and credit risk enhancements, such as second charges, other liens and unsupported guarantees, but the valuation of such mitigants is less certain and their financial effect has not been quantified. In particular, loans shown in the tables below as not collateralised or partially collateralised may benefit from such credit mitigants.

Certain credit mitigants are used strategically in portfolio management activities. While single name concentrations arise in portfolios managed by Global Banking and Corporate Banking, it is only in Global Banking that their size requires the use of portfolio level credit mitigants. Across Global Banking risk limits and utilisations, maturity profiles and risk quality are monitored and managed pro-actively. This process is key to the setting of risk appetite for these larger, more complex, geographically distributed customer groups. While the principal form of risk management continues to be at the point of exposure origination, through the lending decision-making process, Global Banking also utilises loan sales and credit default swap ('CDS') hedges to manage concentrations and reduce risk. These transactions are the responsibility of a dedicated Global Banking portfolio management team. Hedging activity is carried out within agreed credit parameters, and is subject to market risk limits and a robust governance structure. CDS mitigants are held at portfolio level and are not reported in the presentation below.

[Additional qualitative disclosures provided for other retail, commercial, CRE, banks, derivatives, etc.]

Personal lending

Residential mortgage loans including loan commitments by level of collateral

(Audited)

	Europe US\$m	Hong Kong US\$m	Rest of Asia-Pacific US\$m	MENA US\$m	North America US\$m	Latin America US\$m	Total US\$m
At 31 December 2012							
Fully collateralised	141,673	53,478	43,662	2,106	59,799	5,193	305,911
Loan to value ('LTV') ratio:							
– less than 25%	11,733	8,090	4,438	125	3,703	319	28,408
– 25% to 50%	36,038	30,155	12,752	623	10,934	1,522	92,022
– 51% to 75%	60,395	12,770	19,625	1,001	26,582	2,295	122,668
– 76% to 90%	27,118	1,931	6,195	189	12,307	871	48,611
– 91% to 100%	6,389	532	652	168	6,273	186	14,200
Partially collateralised:							
– greater than 100% LTV	2,967	2	376	85	10,210	16	13,656
– collateral value	2,565	1	323	76	8,684	12	11,661
Total residential mortgages	144,640	53,480	44,038	2,191	70,009	5,209	319,567

Commercial real estate loans and advances including loan commitments by level of collateral

(Audited)

	Europe US\$m	Hong Kong US\$m	Rest of Asia-Pacific US\$m	MENA US\$m	North America US\$m	Latin America US\$m	Total US\$m
At 31 December 2012							
Rated CRR/EL 1 to 7							
Not collateralised	7,068	10,790	3,647	569	181	2,083	24,338
Fully collateralised	23,450	17,355	6,106	92	9,054	1,846	57,903
Partially collateralised (A)	3,088	1,476	1,150	33	1,063	903	7,713
– collateral value on A	2,780	1,179	464	29	401	423	5,276
	33,606	29,621	10,903	694	10,298	4,832	89,954
Rated CRR/EL 8 to 10							
Not collateralised	418	–	–	14	34	105	571
Fully collateralised	1,261	2	60	8	408	141	1,880
LTV ratio:							
– less than 25%	34	–	1	–	25	10	70
– 25% to 50%	119	1	55	7	86	8	276
– 51% to 75%	437	–	2	–	69	28	536
– 76% to 90%	501	–	1	–	58	63	623
– 91% to 100%	170	1	1	1	170	32	375
Partially collateralised (B)	1,585	–	51	204	377	24	2,241
– collateral value on B	938	–	15	111	265	13	1,342
	3,264	2	111	226	819	270	4,692
Total commercial real estate loans and advances	36,870	29,623	11,014	920	11,117	5,102	94,646

Source: HSBC Annual Report 2012, p. 163-168

Recommendation 30: Qualitative disclosures on credit risk mitigation
Example 2 of 2

Maximum exposure to credit risk

In line with the EDTF recommendations the following table present our maximum exposure to Credit Risk in the AIRB portfolio and associated collateral held and other credit enhancements (netting and collateral) that do not qualify for offsetting in our financial statements for the periods specified. The netting credit enhancement component includes the effects of legally enforceable netting agreement as well as the offset of negative mark-to-markets from derivatives against pledged cash collateral. The collateral credit enhancement component which is referred to as Cover Values mainly includes real estate, guarantees and collateral in the form of cash. ING records collateral value per facility. For the AIRB portfolio those figures are based on original cover values although some business units attempt to update to current market values. This is inherently difficult in volatile markets. Some facilities will have multiple levels of collateral while others have no collateral. The total figures may not reflect the collateral value per facility.

Maximum Exposure to Credit Risk per 31 December 2012

					Cover Values*	Cover Values	Cover Values	Cover Values
	Gross MtM before netting and collateral	MtM after netting	MtM after netting and collateral	READ	Mortages	Eligible Financial Collateral*	Guarantees*	Other*
AIRB Portfolio								
Sovereigns				84,463	135	3	1,520	73
of which Pre Settlement	4,406	1,138	1,130	1,138				
Institutions				85,995	82	92	13,533	569
of which Pre Settlement	140,132	36,213	24,967	32,532				
Corporates				252,650	84,085	16,870	38,049	73,070
of which Pre Settlement	10,032	9,030	8,868	9,041				
Residential Mortgages				292,650	416,874	n.a	32,917	169
of which Pre Settlement								
Other Retail				36,424	15,527	794	8,193	9,010
of which Pre Settlement	327	327	327	327				
Securitisations				12,101				
of which Pre Settlement								
Total AIRB				764,283	516,703	17,759	94,211	82,890
of which Pre Settlement	154,897	46,708	35,291	43,038				

Includes AIRB portfolio only; excludes securitisations, equities and ONCOA.

The ING Bank portfolio is characterised by significant amounts of secured lending especially in the key areas of residential and commercial mortgages, structured finance and leasing. Amount of collateral often has a significant impact on provisioning and LGD which directly affects risk density.

In 2012, ING Bank changed the way it allocated guarantees by implementing a calculation method that ensures that no guaranteed facility has less RWA allocated than if this facility would be granted to the guarantor directly, on an unsecured base. Previously this calculation was done centrally and allocated by borrower group instead of facility and a maximum of 100% of the facility was used for guarantees. These factors led to a significant increase in guarantees recorded especially for exposure class Corporates. In addition, ING Lease has begun classifying certain purchase obligations as guarantees. For the Residential Mortgages portfolio the guarantees relate to mortgages covered by governmental insurers under the Nationale Hypotheek Garantie (NHG) in the Netherlands.

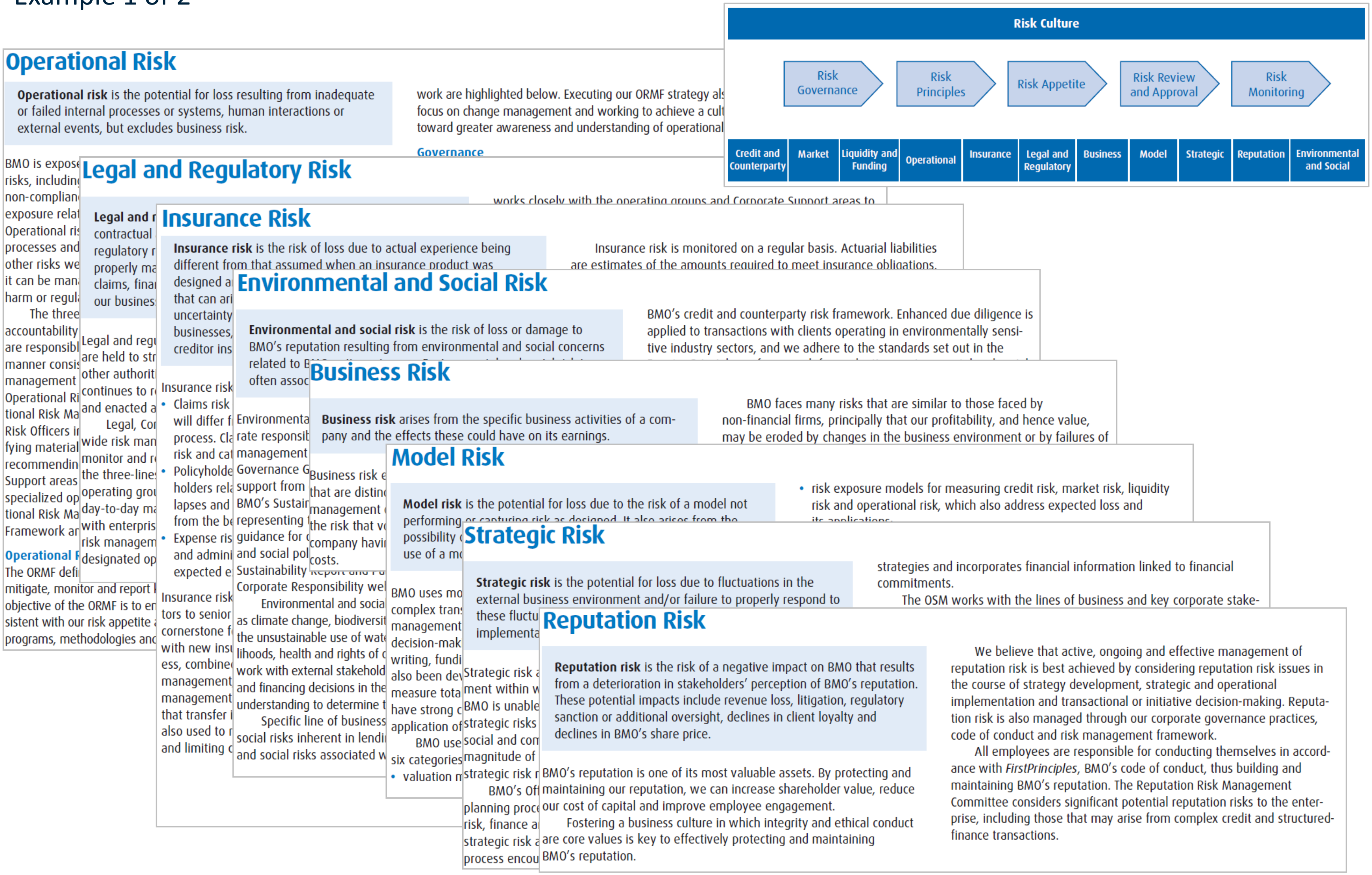
Source: ING Annual Report 2012, p. 364-365

Section 8

Other risks

Recommendation 31: Describe other risks and discuss how each is identified, governed, measured and managed

Example 1 of 2



Source: BMO Annual Report 2012, p. 88 - 92

Recommendation 31: Describe other risks and discuss how each is identified, governed, measured and managed

Example 2 of 2

8. OPERATIONAL RISK

8.1 Definition and objectives

Grupo Santander defines operational risk (OR) as the risk of losses from defects or failures in its internal processes, employees or systems, or those arising from unforeseen circumstances. They are, in general, purely operational events, which makes them different from market or credit risks, although they also include external risks, such as natural disasters.

The objective in control and management of operational risk is to identify, measure/evaluate, control/mitigate and monitor this risk.

The Group's priority, is to identify and eliminate risk focuses, regardless of whether they produce losses or not. Measurement also helps to establish priorities in management of operational risk.

Grupo Santander opted, from the beginning, to use the standard method for calculating regulatory capital by operational risk, envisaged in the BIS II rules. The Group is weighing up the best moment to adopt the focus of advanced models (AMs), bearing in mind that a) the short-term priority in management of operational risk centres on its mitigation; and b) most of the regulatory requirements established for being able to adopt the AMs must be incorporated into the standard model (already achieved in the case of Grupo Santander's operational risk management model).

The report on Prudential Significance/Pillar III in section 11 includes information on calculating the equity requirements by operational risk.

8.2 Corporate governance and organisational model

The organisational model for controlling and managing risks is in line with the Basel guidelines and establishes three levels of control:

- **First level:** control functions conducted by the Group's units. It seeks to ensure that business and the institution as a whole does not incur this type of risks.
- **Second level:** functions carried out by the corporate areas. It establishes rules and controls compliance by the first layer of control.
- **Third level:** integral control functions by the risks division-integral control area and internal validation of risk (CIVIR).

This model is constantly reviewed by the internal auditing division.

In the technology and operations division, the corporate area of technological and operational risk (CATOR) defines the policies and methodology, as well as managing and controlling the technological and operational risks.

The Group believes it is convenient for the first and second layer of control functions to be developed within this division, where operational risk is managed more directly and which has the most appropriate resources and staff to identify, measure, assess and mitigate this risk. All of this is conducted within a recurring supervision of the Group's organs of control, in accordance with its strong risk management culture.

All local areas are responsible for the implementation, integration and local adjustment of the policies and guidelines established by the corporate area, carried out by the operational risk executives in each of the units.

This operation risk management structure is based on the knowledge and experience of the executives of the Group's various areas. Particular importance is given to the role of local executives.

The two committees for managing and controlling technological and operational risk (TOR) are:

- Corporate Committee of TOR, which comprises executives from the various divisions related to management and control of this risk: its objectives are to supply a broad view of operational risk in the Group and establish effective measures and corporate criteria in the spheres of management, measurement, monitoring and mitigation of this risk.
- Corporate Committee of CATOR: it meets twice a month. This committee monitors CATOR's projects and the Group's risk exposure. Local executives and those from integral control of risks also form part of the committee.

Source: Santander Annual Report 2012, p. 237 - 249

Recommendation 32: Discuss operational risk loss events, including impact on businesses and bank response

LIBOR-related settlements

On 19 December 2012, we announced that the Board of Directors had authorized total settlements of approximately CHF 1.4 billion in fines and disgorgement to US, UK and Swiss authorities to resolve LIBOR-related investigations with those regulators. The payments that were agreed with authorities consisted of fines totaling USD 1.2 billion to the US Department of Justice and Commodity Futures Trading Commission, GBP 160 million in fines to the UK Financial Services Authority and CHF 59 million as disgorgement of estimated profits to the Swiss Financial Market Supervisory Authority (FINMA). In addition, UBS Securities Japan Co. Ltd. entered into a plea agreement with respect to one count of wire fraud relating to the manipulation of certain benchmark interest rates, including Yen LIBOR. The settlements stemmed from industry-wide investigations into the setting of certain benchmark rates across a range of currencies. These investigations focused on whether there were improper attempts by banks, acting either on their own or with others, to manipulate LIBOR and other benchmark rates at certain times. UBS cooperated fully with the authorities in their investigations and, as a result of the investigations, has significantly enhanced its control framework for its submissions process for LIBOR and other benchmark interest rates.

Enhancements included changes made throughout 2012 to the governance framework to first combine all components of this submissions process into one functional area within the Investment Bank, to next move the governance and, in November, to move the operation of this process into a new independent function within Group Treasury. In accordance with our segment reporting principles, under which we report performance consistent with the way in which it is evaluated by senior management, the charge booked in the fourth quarter was reported in Corporate Center – Core Functions because the management of the submissions process resides within Group Treasury.

→ Refer to "Note 23b Litigation, regulatory and similar matters" in the "Financial information" section of this report for more information

Note 23 Provisions and contingent liabilities (continued)

a provision, in which case the matter is treated as a contingent liability under the applicable accounting standard or b) we have established a provision but expect disclosure of that fact to prejudice seriously our position with other parties in the matter because it would reveal the fact that UBS believes an outflow of resources to be probable and reliably estimable.

The aggregate amount provisioned for litigation, regulatory and similar matters as a class is disclosed in Note 23a above. It is not practicable to provide an aggregate estimate of liability for our litigation, regulatory and similar matters as a class of contingent liabilities. Doing so would require us to provide speculative legal assessments as to claims and proceedings that involve unique fact patterns or novel legal theories, which have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants.

Provisions for litigation, regulatory and similar matters by segment

CHF million	Wealth Management	Wealth Management Americas	Investment Bank	Global Asset Management	Retail & Corporate	Corporate Center – Core Functions	Corporate Center – Legacy Portfolio	Total 31.12.12	Total 31.12.11
Balance at the beginning of the year	96	206	132	4	17	2	26	482	618
Increase in provisions recognized in the income statement	90	133	304	6	19	1,518	616	2,686	396
Release of provisions recognized in the income statement	(15)	(28)	(32)	(1)	(1)	(3)	0	(81)	(87)
Provisions used in conformity with designated purpose	(40)	(135)	(266)	(1)	(6)	(1,222)	(15)	(1,685)	(455)
Reclassifications	0	0	(95)	0	0	44	95	43	0
Foreign currency translation / unwind of discount	0	(6)	(2)	0	0	(2)	(3)	(13)	10
Balance at the end of the year	130	170	40	7	29	338	720	1,432	482

1. Municipal bonds

In 2011, UBS announced a USD 140.3 million settlement with the US Securities and Exchange Commission (SEC), the Antitrust Division of the US Department of Justice (DOJ), the Internal Revenue Service (IRS) and a group of state attorneys general relating to the investment of proceeds of municipal bond issuances and associated derivative transactions. The settlement resolves the investigations by those regulators which had commenced in November 2006. Several related putative class actions, which were filed in Federal District Courts against UBS and numerous other firms, remain pending. Approximately USD 63 million of the regulatory settlement was made available to potential claimants through a settlement fund, the majority of which has been claimed, thereby reducing the total monetary amount at issue in the class actions for UBS.

2. Auction rate securities

In 2008, UBS entered into settlements with the SEC, the New York Attorney General (NYAG) and the Massachusetts Securities Division whereby UBS agreed to offer to buy back Auction Rate Securities (ARS) from eligible customers, and to pay penalties of USD 150 million. UBS has since finalized settlements with all of the states. The settlements resolved investigations following the industry-wide disruption in the markets for ARS and related auction failures beginning in early 2008. The SEC continues to investigate individuals affiliated with UBS regarding the trading in ARS and disclosures. UBS was also named in (i) several putative class actions, which were thereafter dismissed by the court and/or settled; (ii) arbitration and litigation claims asserted by investors relating to ARS; and (iii) arbitration and litigation claims asserted by ARS issuers, including a pending litigation under state common law and a state racketeering statute seeking at least USD 40 million in compensatory damages, plus exemplary and treble damages, and several pending arbitration claims filed in 2012 and 2013 alleging violations of state and federal securities law that seek compensatory and punitive damages, among other relief. In November 2012, UBS settled a consequential damages claim brought by a former customer for USD 45 million.

3. Inquiries regarding cross-border wealth management businesses

Following the disclosure and the settlement of the US cross-border matter, tax and regulatory authorities in a number of countries have made inquiries and served requests for information located in their respective jurisdictions relating to the cross-border wealth management services provided by UBS and other financial institutions. In France, a criminal investigation into allegations of illicit cross-border activity has been initiated with the appointment of a "Juge d'instruction". We have also received inquiries from German authorities concerning certain matters relating to our cross-border business. UBS is cooperating with these inquiries, requests and investigations within the limits of financial privacy obligations under Swiss and other applicable laws.

4. Matters related to the financial crisis

UBS is responding to a number of governmental inquiries and investigations and is involved in a number of litigations, arbitrations and disputes related to the financial crisis of 2007 to 2009 and in particular mortgage-related securities and other structured trans-

UBS discusses its legal provisions by business unit and over time, with explanatory details relating to specific cases, such as the LIBOR-related settlements shown at left

Source: UBS Annual Report 2012, p. 79; 375+