

2012 The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch

Pillar 3 Disclosures at 31 December 2012

Cautionary statement regarding forward-looking statements	2
Introduction	3
Pillar 3 disclosures 2012	3
Scope of Basel II permissions	3
Capital	4
Capital management	4
Risk exposure and assessment	6
Risk management objectives and policies	6
Overview	6
Risk culture	6
Risk governance	6
Risk appetite	7
Risk measurement and reporting systems	7
Internal assessment of capital adequacy	7
Credit risk	9
General information on credit risk exposure	9
Ratings from External Credit Assessment Institutions	16
Credit risk mitigation	18
Market risk	20
Sensitivity analysis	20
Value at risk	20
Stress testing	21
Interest rate risk	21
Foreign exchange risk	21
Specific issuer risk	22
Interest rate risk in the banking book	23
Equity exposures in the banking book	24
Operational risk	25
	25
Objective	25 25
Organisation and responsibilities	25 25
Measurement and monitoring	23
Glossary	26

### Tables

Table 1	Capital Structure	4
Table 2	Capital Adequacy	5
Table 3	Credit risk exposure of significant on-balance sheet and off-balance sheet exposures before recognised credit risk mitigation	9
Table 4	Credit risk exposure of significant on-balance sheet and off-balance sheet exposures before recognised credit risk mitigation – analysis by country or geographical area	10
Table 5	Credit risk exposure of significant on-balance sheet and off-balance sheet exposures before recognised credit risk mitigation – analysis by residual maturity	11
Table 6	Outstanding loans including accrued interest receivable and investments in debt securities classified as doubtful loss before recognised credit risk mitigation – analysis by country or geographical area and asset classification as prescribed by the Bank of Thailand	11
Table 7	General provision, specific provision and bad debt written-off during the year against loans including accrued interest receivable and investments in debt securities – analysis by country or geographical area	13
Table 8	Outstanding loans including accrued interest receivable before recognised credit risk mitigation – analysis by type of business and asset classification as prescribed by the Bank of Thailand	13
Table 9	General provision, specific provision and bad debt written -off during the year against loans including accrued interest receivable – analysis by type of business	14
Table 10	Reconciliation of the movement in the general provision and specific provision against loans including accrued interest receivable	15
Table 11	Net exposure of on-balance sheet and credit equivalent amount of off-balance sheet before recognised credit risk mitigation classified by type of assets under the Standardised Approach	15
Table 12	Net exposure of on-balance sheet and credit equivalent amount of off-balance sheet after recognised credit risk mitigation for each type of assets, classified by risk weight under the Standardised Approach.	17
Table 13	Exposure value under the Standardised Approach covered by collateral classified by type of assets and collateral	19
Table 14	Market risk information by Internal Model Approach	22
Table 15	Backtesting result (considering loss side of Hypothetical P&L vs. Value at Risk)	22
Table 16	The effect of changes in interest rates to net interest income in the banking book	23
Table 17	Equity exposures in the banking book	24

# Cautionary statement regarding forward-looking statements

The *Pillar 3 Disclosures 2012* contains certain forward-looking statements with respect to the financial condition of The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch ('the Bank'), results of operations and business.

Statements that are not historical facts, including statements about the Bank's beliefs

and expectations, are forward-looking statements. Words such as 'expects', 'anticipates', 'intends', 'plans', 'believes', 'seeks', 'estimates', 'potential' and 'reasonably possible', variations of these words and similar expressions are intended to identify forward-looking statements. These statements are based on current plans, estimates and projections, and therefore undue reliance should not be placed on them. Forward-looking statements speak only as of the date they are made. The Bank makes no commitment to revise or update any forwardlooking statements to reflect events or circumstances occurring or existing after the date of any forward-looking statements.

Forward-looking statements involve inherent risks and uncertainties. Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement. These factors include changes in general economic conditions in the markets in which we operate, changes in government policy and regulation and factors specific to the Bank.

### Introduction

The Bank calculates capital according to the announcement of the Bank of Thailand ('the BoT') regarding a capital adequacy framework based on the 'International Convergence of Capital Measurement and Capital Standards' (commonly known as 'Basel II') issued by the Basel Committee on Banking Supervision ('BCBS').

The supervisory objectives of Basel II are to promote safety and soundness in the financial system and maintain an appropriate level of capital in the system, enhance competitive equality, constitute a more comprehensive approach to addressing risks, and focus on internationally active banks. Basel II is structured around three 'pillars': pillar 1, 'minimum capital requirements', pillar 2, 'supervisory review' and pillar 3, 'market discipline'.

### Pillar 3 disclosures 2012

Basel II is structured around three 'pillars'. The Pillar 1 minimum capital requirements and Pillar 2 supervisory review process are complemented by Pillar 3: market discipline. The aim of Pillar 3 is to produce disclosures which allow market participants to assess the scope of application by banks of the Basel framework and the rules in their jurisdiction, their capital condition, risk exposures and risk assessment processes, and hence their capital adequacy. Pillar 3 requires all material risks to be disclosed, enabling a comprehensive view of a bank's risk profile.

### Frequency

In accordance with the BoT's requirements, we published comprehensive Pillar 3 disclosures annually with an update of certain quantitative

capital requirement disclosures, including market risk information, at the half year.

### Media and location

The *Pillar 3 Disclosures 2012* on a standalone basis are available on our website: <u>www.hsbc.co.th</u>, whereas the Pillar 3 Disclosures 2012 of HSBC Holdings plc and its subsidiaries ('HSBC' or 'Group') on a consolidated level and other information on HSBC are available on HSBC Group's website: <u>www.hsbc.com</u>.

### Verification

Whilst the *Pillar 3 Disclosures 2012* are not required to be externally audited, the document has been verified internally in accordance with the Group's policies on disclosure and its financial reporting and governance processes.

### Scope of Basel II permissions

### Credit risk

Basel II applies three approaches of increasing sophistication to the calculation of pillar 1 credit risk capital requirements. The most basic level, the standardised approach ('SA'). requires banks to use external credit ratings to determine the risk weightings applied to rated counterparties. Other counterparties are grouped into broad categories and standardised risk weightings are applied to these categories. The next level, the internal ratings-based ('IRB') foundation approach. allows banks to calculate their credit risk capital requirements on the basis of their internal assessment of a counterparty's probability of default ('PD'), but subjects their quantified estimates of exposure at default ('EAD') and loss given default ('LGD') to standard supervisory parameters. Finally, the IRB advanced approach allows banks to use their own internal assessment in both determining PD and quantifying EAD and LGD.

For credit risk, with the BoT's approval, we have adopted the standardised approach.

Counterparty credit risk in both the trading and non-trading books is the risk that the counterparty to a transaction may default before completing the satisfactory settlement of the transaction. Three approaches to calculating counterparty credit risk and determining exposure values are defined by Basel II: standardised, mark-to-market and internal model method ('IMM'). These exposure values are used to determine capital requirements under one of the credit risk approaches; standardised, IRB foundation and IRB advanced. Internally, we use the mark-to-market and IMM approaches for managing and monitoring ours counterparty credit risk.

### Marketrisk

Market risk is the risk that movements in market risk factors, including foreign exchange rates, commodity prices, interest rates, credit spreads and equity prices will reduce the Bank's income or the value of its portfolios.

We have obtained approval from the BoT to apply a combined approach for market risk assessment to determine capital requirement. The standardised approach is used for Specific Interest Rate Risk and the Value at Risk ('VaR') model is used for general market, foreign exchange and interest rate risk.

### **Operational risk**

Basel II also includes capital requirements for operational risk, again utilising three levels of sophistication. The capital required under the basic indicator approach is a simple percentage of gross revenues, whereas under the standardised approach it is one of three different percentages of gross revenues allocated to each of eight defined business lines. Both these approaches use an average of the last three financial years' revenues. Finally, the advanced measurement approach uses banks' own statistical analysis and modelling of operational risk data to determine capital requirements.

We have adopted the standardised approach in determining our operational risk capital requirements.

### Capital

### Capital management

Our approach to capital management is driven by our strategic and organisational requirements, taking into account the regulatory, economic and commercial environment in which we operate. We aim to maintain a strong capital base to support the risk inherent in our business and to meet regulatory capital requirements at all times.

Our capital management process is set out in the annual Group capital plan, which is approved by the Group Management Board ('GMB'). HSBC Holdings is the primary provider of equity capital to its subsidiaries and also provides them with non-equity capital where necessary. These investments are substantially funded by HSBC Holdings' own capital is suance and profit retention.

We manage our own capital to support our planned business growth and meet our local regulatory requirements within the context of the Group capital plan. Capital generated by us in excess of planned requirements is returned to HSBC Holdings, normally by way of dividends, in accordance with the Group's capital plan.

At 31 December 2012, 30 June 2012 and 31 December 2011, we have an allocated and registered capital fund with the BoT of Baht 11,649 million. The detail can be summarised as follows:

	31 December 2012 THBm	30 June 2012 THBm	31 December 2011 THBm
Assets maintained under Section 32	12,165	12,130	12,116
Sum of net capital for maintenance of assets under Section 32 and net balance of inter-office accounts			
Capital for maintenance of assets under Section 32 Net balance of inter-office accounts where the branch is the debtor to the head office and other branches located in other countries,	11,649	11,649	11,649
the parent company and subsidiaries of the head office	15,090	10,625	14,032
Total	26,739	22,274	25,681
Total Capital Fund	11,649	11,649	11,649

#### Table 1 : Capital Structure

### Table 2 : Capital Adequacy

Minimum capital requirement for credit risk classified by type of assets under the Standardised Approach

	31 December 2012 THBm	30 June 2012 THBm	31 December 2011 THBm
Performing claims			
Claims on sovereigns and central banks, and multilateral			
development banks (MDBs) Claims on financial institutions, non-central government public	44	24	22
sector entities (PSEs) treated as claims on financial institutions,	_		
and securities firms	667	835	762
Claims on corporates, non-central government public sector entities (PSEs) treated as claims on corporates	3,581	4,005	3,878
Claims on retail portfolios	10	11	925
Claims on housing loans	20	27	93
Other assets	30	36	70
Non-performing claims	5	8	39
Total minimum capital requirement for credit risk	4,357	4,946	5,789

Minimum capital requirement for market risk for positions in the trading book

	31 December 2012 THBm	30 June 2012 THBm	31 December 2011 THBm
Standardised approach - specific interest rate risk	6	4	-
Internal model approach	288	375	248
Total minimum capital requirement for market risk	294	379	248

#### Remark:

- We have approval from the BoT to apply a combined approach for market risk. The standardised approach is applied for specific interest rate risk and the internal model approach is applied for general interest rate risk and foreign exchange rate risk.
- Capital requirements for specific interest rate risk at 31 December 2012 and 30 June 2012 arise from the holding of corporate bonds. At 31 December 2011, we hold only THB Government bonds and the total amount of the portfolio is less than the Bank's THB liability, a zero percent risk weight was applied according to the BoT regulations. Therefore, there is no capital requirement for the specific interest rate risk under the standardised approach at 31 December 2011.

#### Minimum capital requirement for operational risk

	31 December 2012 THBm	30 June 2012 THBm	31 December 2011 THBm
Standardised approach	957	948	926
Total minimum capital requirement for operational risk	957	948	926
Capital ratio	31 December 2012 %	30 June 2012 %	31 December 2011 %
Total capital to risk-weighted assets	15.6	13.9	12.6

### **Risk exposure and assessment**

### Risk management objectives and policies

### Overview

All our activities involve to varying degrees the measurement, evaluation, acceptance and management of risks. As risk is not static, our risk profile continually alters as a result of change in the scope and impact of a wide range of factors, from geopolitical to transactional. Our risk management framework is designed for the continuous monitoring of the risk environment and an integrated evaluation of risks and their interactions.

The objective of risk management, shared across the organisation, is to support Group strategies to build sustainable, profitable business in the long-term interests of our shareholders and other stakeholders. We aim to ensure that risk management is embedded in how we run our business.

- a historically strong risk culture, with personal accountability for decisions;
- a formal governance structure, with a clear, well understood framework of risk ownership, standards and policy;
- the alignment of risk and business objectives, with integration of risk appetite into business planning and capital management; and
- an independent, and expert Global Risk function.

### Risk culture

HSBC has long recognised the importance of a strong risk culture, the fostering of which is a key responsibility of senior executives. Our global standards set the tone from the top, and are central to our approach to balancing risk and reward. All employees are accountable for identifying, assessing and managing risks within the scope of their as signed responsibilities. We have a system of personal, not collective, authorities for lending decisions. Personal accountability, reinforced by our HSBC Values, helps sustain a disciplined and constructive culture of risk management and control throughout HSBC. This is reinforced by our approach to remuneration.

### Risk governance

The Group Risk Committee ('GRC') is responsible for advising the Board on highlevel risk-related matters and risk governance and for non-executive oversight of risk management and internal controls (other than over financial reporting).

The Board, advised by the Committee, requires and encourages a strong risk governance culture which shapes the Group's attitude to risk. The Board and the Committee oversee the maintenance and development of a strong risk management framework by continually monitoring the risk environment, top and emerging risks facing the Group and mitigating actions planned and taken.

Risk management objectives are integrated into the performance scorecards of the heads of regions, global businesses and key functions from the GMB down, and cascaded through the organisation. The objectives of Global Risk are also aligned through this process with strategic business objectives.

The Global Risk function, headed by the Group Chief Risk Officer ('GCRO'), is mandated to provide an expert, integrated and independent assessment of risks Group-wide:

- supporting our regions and global businesses in the development and achievement of strategic objectives;
- partnering the business in risk appetite planning and operation;
- carrying out central approvals, controls, risk systems leadership and the analysis and reporting of management information;
- fostering development of the Global Risk, a conservative but constructive Group risk culture;
- addressing risk is sues in dealings with external stakeholders including regulators and analysts; and
- In addition to 'business as usual' operations, engages with business development activities such as new product approval and post-implementation review, and acquisition due diligence.

In Thailand, the Risk Management Committee ('RMC') is chaired by the Chief Executive Officer ('CEO') with membership made up of senior managers. The RMC is the Bank's senior designated risk management committee as defined by the HSBC Regional Office in Hong Kong which is responsible for setting risk appetite and approving definitive risk policies and controls.

The members of Risk Management Committee are the Chief Risk Officer, Chief Financial Officer, Chief Technology and Services Officer, Treasurer, Head of Global Banking, Head of Commercial Banking and Head of Retail Banking and Wealth Management. The RMC meeting is chaired by CEO and convened on a monthly basis.

### Risk appetite

Risk appetite is a key component of our management of risk. Our approach is designed to reinforce the integration of risk considerations into key business goals and planning processes. The risk appetite statement, which is approved annually by the Board under advice from the GRC, and whose implementation is overseen by the GMB, describes the quantum and types of risks that we are prepared to take in executing our strategy.

Our risk appetite framework is underpinned by the following core characteristics:

- Risk must be commensurate with sustainable returns
- Strong balance sheet
- Healthy capital position
- Conservative liquidity management
- Strong brand
- Robust Group structure of separate legal entities
- The global businesses should produce sustainable long-termearnings growth
- Risk diversification

### Risk measurement and reporting systems

The purpose of our risk measurement and reporting systems is to ensure that, as far as possible, risks are comprehensively captured, with all the attributes necessary to support well-founded decisions, that those attributes are accurately assessed and that information is delivered in a timely for those risks to be successfully managed and mitigated.

Risk measurement and reporting systems are also subject to a governance framework

designed, to ensure that their build and implementation are fit for purpose and that they are functioning properly. Risk information technology ('IT') systems development is a key responsibility of the risk function globally, while the development and operation of risk rating and management systems and processes are ultimately subject to the oversight of the Board.

We invest significant resources in IT systems and processes in order to maintain and improve our risk management capabilities. Group policy promotes the deployment of preferred technology where practicable. Group standards govern the procurement and operation of systems used in the Group, processing risk information within business lines and risk functions.

### Internal capital adequacy assessment

We assess the adequacy of our capital by considering the resources necessary to cover unexpected losses arising from discretionary risks, such as credit risk and market risk, or nondiscretionary risks, such as operational risk and reputational risk. The framework, together with related policies, define the Internal Capital Adequacy Assessment Process ('the ICAAP') by which GMB examines our risk profile from both regulatory and economic capital viewpoints, aiming to ensure that capital resources:

- Remain sufficient to support our risk profile and outstanding commitments;
- exceed the formal minimum regulatory capital Resources Floor target and Capital Planning Buffer requirements by an agree margin;
- allow the bank to remain adequately capitalised in the event of a severe economic downturn stress scenario; and
- remains consistent with our strategic and operational goals.

Preserving our strong capital position remains a priority, and the level of integration of our risk and capital management helps to optimise our response to business demand for regulatory and economic capital.

We identify and manage the risks we face through defined internal control procedures and stress testing. We as sess and manage certain risks outlined below via a capital planning process.

### Credit, market and operational risk

We assess capital requirements for these risk types by utilising the embedded operational infrastructure used for the pillar 1 capital calculation, together with an additional suite of models that take into account, in particular, internal assessments of diversification of risks within our portfolios and, similarly, any concentrations of risk that arise.

Our capital assessment operates alongside the regulatory capital process and consistently demonstrates a lower overall capital requirement for credit risk than the regulatory equivalent, reflecting the benefits of global diversification. However, we maintain a prudent stance on capital coverage, ensuring that any model risk is mitigated.

### Interest rate risk in the banking book

Interest Rate Risk in the Banking Book ('IRRBB') is defined as the exposure of our non-trading products to interest rates.

This risk arises principally from mismatches between the future yield on assets and their funding costs as a result of interest rate changes. Analysis of this risk is complicated by having to make assumptions on embedded optionality within certain product areas such as the incidence of mortgage prepayments, and from behavioural assumptions regarding the economic duration of liabilities which are contractually repayable on demand, such as current accounts.

### Liquidity risk

Liquidity risk arises from mismatches in the timing of cash flows. Funding risk (a form of liquidity risk) arises when the liquidity needed to fund illiquid asset positions cannot be obtained at the expected terms and when required.

The objective of our liquidity and funding management framework is to ensure that all foreseeable funding commitments can be met when due, and that access to the wholesale markets is co-ordinated and cost-effective. We use cash-flow stress testing as part of our control processes to as sess liquidity risk. We do not manage liquidity through the explicit allocation of capital as, in common with standard industry practice, this is not considered to be an appropriate or adequate mechanism for managing these risks. However, we recognise that a strong capital base can help to mitigate liquidity risk both by providing a capital buffer to allow an entity to raise funds and deploy themin liquid positions, and by serving to reduce the credit risk taken by providers of funds to the Group.

### Reputational risk

As a banking group, our good reputation depends upon the way in which we conduct our business, but it can also be affected by the way in which clients, to whom we provide financial services, conduct themselves.

HSBC in Thailand manages and monitors our reputational risk via the RMC. We monitor reputational risk on a daily basis and inform local senior management in a timely manner if there are occurrences of any reputational risk events.

### Business risk

Business risk is the potential negative impact on profits and capital as a result of the Bank not meeting our strategic objectives, as a result of unforeseen changes in the business and regulatory environment, exposure to economic cycles and technological changes.

We manage and mitigate business risk through our business planning and stress testing processes, so that our business model and planned activities are resourced and capitalised consistent with the commercial, economic and risk environment in which the Group operates and that the potential vulnerability of our business plans are identified at an early stage so that mitigating actions can be taken.

### Credit risk

### General information on credit risk exposure

Credit risk is the risk of financial loss if a customer or counterparty fails to meet a payment obligation under a contract. It arises principally from direct lending and trade finance, but also from off-balance sheet products such as guarantees and derivatives, and from the holdings of debt and other securities. Credit risk represents our largest regulatory capital requirement. This includes a capital requirement for counterparty credit risk in the banking and trading books.

The principal objectives of our credit risk management are:

- to maintain a strong culture of responsible lending, and a robust credit risk policy and control framework;
- to both partner and challenge our businesses in defining and implementing and continually re-evaluating our credit risk appetite under actual and stress scenario conditions; and

• to ensure there is independent, expert scrutiny of credit risks, their costs and their mitigation.

We use the Standardised Approach to calculate capital requirement for credit risks. Nonperforming claims represent classified as sets/loans under substandard, doubtful, doubtful loss and loss accounts according to the BoT's guideline. The specific provision has been provided for non-performing as sets/loans based on the estimated losses which were calculated by discounting expected future cash flows (inclusive of the value of security). The general provision has been calculated based on collective impairment for which historical loss rate experience, time value and economic factors have been taken into account.

The following tables set out credit risk exposure value according to regulatory requirement at 31 December 2012 and 2011.

### Credit risk

General information on credit risk exposure

 Table 3 :
 Credit risk exposure of significant on-balance sheet and off-balance sheet exposures before recognised credit risk mitigation at 31 December 2012 and 2011

	31 Decen	nber 2012	31 Decem	ber 2011
	Average exposure value THBm	Exposure value THBm	Average exposure value THBm	Exposuæ value THBm
On-balance sheet				
Loans and advances, net	120,759	109,483	153,278	142,412
Investments in debt securities, net	59,958	55,956	30,135	41,728
Deposits (including accrued interest receivable)	3,088	1,335	2,310	1,840
Total	183,805	166,774	185,723	185,980
Off-balance sheet				
Aval, guarantees and letter of credit	27,438	29,952	27,483	23,330
OTC derivatives	3,930,514	3,781,961	3,055,518	3,384,086
Undrawn commitment	74,524	70,040	99,761	108,430
Total	4,032,476	3,881,953	3,182,762	3,515,846

Remark:

• Investments in debt securities are measured at fair value excluding accrued interest receivable and net of any loss on impairment.

• Off-balance sheet represents the notional amounts before the application of a credit conversion factor.

• Loans and advances at 31 December 2011 included retail loan portfolios net of provisions of approximately THB 13,109 million classified as assets held for sale in the audited financial statements as they were included under the Sale and Purchase Agreement with Bank of Ayudhya Public Company Limited.

<sup>•</sup> Loans and advances represent loans to customers and interbank and money market placements including accrued interest receivable and net of deferred revenue and allowances for doubtful accounts.

### Table 4: Credit risk exposure of significant on-balance sheet and off-balance sheet exposures before recognised credit risk mitigation – analysis by country or geographical area at 31 December 2012 and 2011

Exposure values are allocated to region based on the country of incorporation where the exposure was originated.

	31 December 2012							
		On-bala	ince sheet			Off-bala	nce sheet	
Country or geographical area	Loans Investments and in debt Total advances securities Deposits THBm THBm THBm THBm			Total THBm	Aval, guarantees and letter of credit THBm	OTC derivatives THBm	Undrawn commitment THBm	
Thailand	165,984	109,421	55,956	607	1,328,658	23,893	1,238,274	66,491
Asia Pacific (excluding Thailand)	27	3	-	24	1,580,194	3,021	1,576,082	1,091
North America and Latin America	561	2	-	559	416,891	2,220	412,259	2,412
Europe	202	57		145	556,210	818	555,346	46
Total	166,774	109,483	55,956	1,335	3,881,953	29,952	3,781,961	70,040

		31 December 2011						
		On-balance sheet				Off-bala	ance sheet	
Country or geographical area	Total THBm	Loans and advances THBm	Investments in debt securities THBm	Deposits THBm	Total THBm	Aval, guarantees and letter of credit THBm	OTC derivatives THBm	Undrawn commitment THBm
Thailand	184,874	141,363	41,728	1,783	1,179,860	17,211	1,056,520	106,129
Asia Pacific (excluding Thailand)	474	464	-	10	1,435,229	2,649	1,432,128	452
North America and Latin America	184	182	-	2	285,373	2,991	281,709	673
Europe	448	403	-	45	615,384	479	613,729	1,176
Total	185,980	142,412	41,728	1,840	3,515,846	23,330	3,384,086	108,430

31 D	ecember	2011	l
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### Table 5: Credit risk exposure of significant on-balance sheet and off-balance sheet exposures before recognised credit risk mitigation – analysis by residual maturity at 31 December 2012 and 2011

		31 December 201	2	31 December 2011		
	Less than 1 year THBm	Over 1 year THBm	Total THBm	Less than 1 year THBm	Over 1 year THBm	Total THBm
On-balance sheet						
Loans and advances, net	98,235	11,248	109,483	130,984	11,428	142,412
Investments in debt securities, net	34,870	21,086	55,956	27,791	13,937	41,728
Deposits (including accrued interest receivable)	1,335		1,335	1,840		1,840
Total	134,440	32,334	166,774	160,615	25,365	185,980
Off-balance sheet						
Aval, guarantees and letter of credit	28,084	1,868	29,952	22,372	958	23,330
OTC derivatives	2,072,109	1,709,852	3,781,961	1,813,757	1,570,329	3,384,086
Undrawn commitment	67,732	2,308	70,040	104,733	3,697	108,430
Total	2,167,925	1,714,028	3,881,953	1,940,862	1,574,984	3,515,846

### Table 6: Outstanding loans including accrued interest receivable and investments in debt securities classified as doubtful loss before recognised credit risk mitigation – analysis by country or geographical area and asset classification as prescribed by the Bank of Thailand at 31 December 2012 and 2011

	31 December 2012						
		Loans including accrued interest receivable					Investments
Country or geographic area		Special mentioned THBm	Substandard THBm	Doubtful THBm	Doubtful loss THBm	Total THBm	in debt securities classified as doubtful loss THBm
Thailand	109,230	586	5	277	247	110,345	5
Asia Pacific (excluding Thailand)	-	-	3	-	-	3	-
North America and Latin America	2	-	-	-	-	2	-
Europe	57				2	59	
Total	109,289	586	8	277	249	110,409	5

	31 December 2011							
		Loans including accrued interest receivable						
Country or geographic area	Normal THBm	Special mentioned THBm	Substandard THBm	Doubtful THBm	Doubtful loss THBm	Total THBm	in debt securities classified as doubtful loss THBm	
Thailand	140,898	1,055	186	376	453	142,968	28	
Asia Pacific (excluding Thailand)	457	12	-	-	-	469	-	
North America and Latin America	173	11	-	-	-	184	-	
Europe	407	-	-	-		407	-	
Total	141,935	1,078	186	376	453	144,028	28	

Remark:

- Loans represent loans to customers, interbank and money market, including accrued interest receivable and net of deferred revenue.
- Investments in debt securities classified as doubtful loss represent unrealised losses on revaluation according to the definition of the BoT's Notification RE: Classification and Provision of the Financial Institutions.
- The classification of assets shown above is in accordance with BoT notification No. 31/2551 dated 3 August 2008 Re: Classification and Provision of the Financial Institutions.
- Loans at 31 December 2011 included retail loans portfolio of approximately THB 13,622 million which classified as disposal assets held for sale in the audited financial statements as they were under the Sale and Purchase Agreement with Bank of Ayudhya Public Company Limited.

Table 7:General provision, specific provision and bad debt written-off during the year against loans including<br/>accrued interest receivable and investments in debt securities – analysis by country or geographic area at<br/>31 December 2012 and 2011

	31 December 2012						
	Loans includ	Loans including accrued interest receivable					
Country or geographic area	General provision THBm	Specific provision THBm	Bad debt written-off during the year THBm	provision for investments in debt securities THBm			
Thailand		515	58	5			
Asia Pacific (excluding Thailand)		-	-	-			
North America and Latin America		-	-	-			
Europe		2		-			
Total	408	517	58	5			

#### 31 December 2011

	Loans includi	rest receivable	Specific	
Country or geographic area	General provision THBm	Specific provision THBm	Bad debt written-off during the year THBm	provision for investments in debt securities THBm
Thailand		688	611	28
Asia Pacific (excluding Thailand)		-	-	-
North America and Latin America		-	-	-
Europe			-	-
Total	928	688	611	28

Remark:

- The information for the year ended 31 December 2011 included provisions and bad debt written -off for retail loan portfolios classified as assets held for sale in the audited financial statements.
- The provisions for loans and advances for the year ended 31 December 2011 represent only provisions against loans to customers as there were no provisions against interbank and money market transactions.
- Specific provisions for investments in debt securities represent unrealised losses on the revaluation of debt securities at the year end.

# Table 8: Outstanding loans including accrued interest receivable before recognised credit risk mitigation – analysis by type of business and asset classification as prescribed by the Bank of Thailand at 31 December 2012 and 2011

	31 December 2012							
Type of business	Special Normal mentioned Substanda THBm THBm THBm			1000				
Agriculture and mining	112	-	-	-	-	112		
Financial sector	78,614	-	-	-	-	78,614		
Manu facturing and commerce	21,107	447	-	177	247	21,978		
Real estate business and construction	754	-	-	100	-	854		
Public utilities and services	7,323	68	-	-	-	7,391		
Housing loan	308	-	-	-	-	308		
Others	1,071	71	8		2	1,152		
Total	109,289	586	8	277	249	110,409		

21 December 2012

	31 December 2011							
Type of business	Normal THBm	Special mentioned THBm	Substandard THBm	Doubtful THBm	Doubtful loss THBm	Total THBm		
Agriculture and mining	233	-	-	-	-	233		
Financial sector	90,755	-	-	-	-	90,755		
Manufacturing and commerce	25,655	251	-	364	394	26,664		
Real estate business and construction	1,277	-	-	-	-	1,277		
Public utilities and services	10,788	256	-	-	-	11,044		
Housing loan	1,348	31	5	9	3	1,396		
Others	11,879	540	181	3	56	12,659		
Total	141,935	1,078	186	376	453	144,028		

Remark: The classification of assets shown above is in accordance with BoT notification No. 31/2551 dated 3 August 2008 Re: Classification and Provision of the Financial Institutions.

### Table 9: General provision, specific provision and bad debt written-off during the year against loans including accrued interest receivable – analysis by type of business at 31 December 2012 and 2011

Type of business	General provision THBm	Specific provision THBm	Bad debt written-off during the year THBm
Agriculture and mining		-	-
Financial sector		-	-
Manu facturing and commerce		414	58
Real estate business and construction		100	-
Public utilities and services		-	-
Housing loan		-	-
Others		3	-
Total	408	517	58

Type of business	General provision THBm	Specific provision THBm	Bad debt written-off during the year THBm
Agriculture and mining		-	-
Financial sector		-	-
Manufacturing and commerce		684	42
Real estate business and construction		-	-
Public utilities and services		-	-
Housing loan		1	-
Others		3	569
Total	928	688	611

Remark: Bad debt written off during the year ended 31 December 2011 of Baht 567 million is in respect of the retail portfolio.

### 31 December 2011

31 December 2012

 Table 10: Reconciliation of the movement in the general provision and specific provision against loans including accrued interest receivable at 31 December 2012 and 2011

	31 December 2012				
	General provision THBm	Specific provision THBm	Total THBm		
Provisions at the beginning of year	928	688	1,616		
Bad debts written-off during the year	-	(58)	(58)		
Provisions charge (reversal) during the year	(520)	(113)	(633)		
Provisions at the end of year	408	517	925		

	31 December 2011				
	General provision THBm	Specific provision THBm	Total THBm		
Provisions at the beginning of year	781	805	1,586		
Bad debts written-off during the year	(567)	(44)	(611)		
Provisions charge (reversal) during the year	714	(73)	641		
Provisions at the end of year	928	688	1,616		

Remark: The above information also includes interbank and money market transactions.

 Table 11: Net exposure of on-balance sheet and credit equivalent amount of off-balance sheet before recognised credit risk mitigation classified by type of assets under the Standardised Approach at 31 December 2012 and 2011

	31 December 2012			
	On-balance sheet THBm	Off-balance sheet THBm	Total THBm	
Performing claims				
Claims on sovereigns and central banks, and MDBs	40,032	42,912	82,944	
Claims on financial institutions, PSEs treated as claims on financial institutions,				
and securities firms	3,230	62,116	65,346	
Claims on corporate, PSEs treated as claims on corporate	34,045	19,976	54,021	
Claims on retail portfolios	134	-	134	
Claims on housing loans	310	-	310	
Other assets	23,689	-	23,689	
Non-performing claims	18	77	95	
Total	101,458	125,081	226,539	

	31 December 2011				
	On-balance sheet THBm	Off-balance sheet THBm	Total THBm		
Performing claims					
Claims on sovereigns and central banks, and MDBs Claims on financial institutions, PSEs treated as claims on financial institutions,	35,074	73,826	108,900		
and securities firms	405	47.811	48.216		
Claims on corporate, PSEs treated as claims on corporate	40,757	19,284	60,041		
Claims on retail portfolios	12,390	-	12,390		
Claims on housing loans	1,376	-	1,376		
Other assets	28,751	-	28,751		
Non-performing claims	361	78	439		
Total	119,114	140,999	260,113		

Remark:

• The above information has been presented net of specific provision.

• Off-balance sheet amounts have been adjusted by the credit conversion factor and also included repo style transactions.

## Ratings from External Credit Assessment Institutions

Credit risk under the Standardised Approach has been calculated based on the external credit ratings from External Credit Assessment Institutions ('ECAI'). The Bank uses external credit ratings from the following ECAIs which are approved by the BoT.

- Standard & Poor's Ratings Service;
- Moody's Investors Services;
- Fitch Ratings;
- Fitch Ratings (Thailand);
- TRIS Rating

Data files of external ratings from the nominated ECAIs are matched with the customer records in the centralised credit database.

When calculating the risk-weighted value of an exposure using ECAI risk assessments, risk systems identify the customer in question and look up in the available ratings in the central database, according to the BoT's rating selection rules as prescribed in the appendix4 of the BoT's guideline on Minimum Capital Requirement for Credit Risk under the Standardised Approach. The systems then apply the BoT's prescribed credit quality step mapping to derive from the rating the relevant risk weight.

### Table 12 : Net exposure of on-balance sheet and credit equivalent amount of off-balance sheet after recognised credit risk mitigation for each type of assets, classified by risk weight under the Standardised Approach at 31 December 2012 and 2011

					3	31 December 2012					
	Net ex	posures after rec	cognised credit 1	risk mitigation -	- Rated	Net exposures after recognised credit risk mitigation – Unrated				l	
Risk weight	0%	20%	50%	100%	150%	0%	20%	50%	35%	75%	100%
	THBm	THBm	THBm	THBm	THBm	THBm	THBm	THBm	THBm	THBm	THBm
Performing claims											
Claims on sovereigns and central											
banks, and MDBs	114,592	-	1,177	-	-			-			-
Claims on financial institutions,											
PSEs treated as claims on financial institutions, and											
securities firms Claims on corporate, PSEs	-	29,740	944	2,479	-						-
treated as claims on corporate		819	2,489	4,614	1						41,720
Claims on retail portfolios										-	134
Claims on housing loans									72	-	238
Other assets						26,460	55				397
Risk weight			50%	100%	150%					75%	
Non-performing claims			-	5	31					-	

					3	1 December 2011					
	Net e	xposures after re	cognised credit	risk mitigation –	- Rated		Net exposures a	fter recognised c	redit risk mitig	ation – Unrated	l
Risk weight	0%	20%	50%	100%	150%	0%	20%	50%	35%	75%	100%
	THBm	THBm	THBm	THBm	THBm	THBm	THBm	THBm	THBm	THBm	THBm
Performing claims Claims on sovereigns and central banks, and MDBs	122,065	-	576	-	-						-
Claims on financial institutions, PSEs treated as claims on financial institutions, and											
securities firms Claims on corporate, PSEs	-	29,588	692	3,898	-						-
treated as claims on corporate Claims on retail portfolios		1,123	3,671	1,360	1					-	48,284 12,330
Claims on housing loans									202	-	1,174
Other assets						33,225	59				923
Risk weight Non-performing claims			<b>50%</b> 5	<b>100%</b> 64	<b>150%</b> 300			_		75%	

Remark: Off-balance sheet represents the notional amounts after applied credit conversion factor.

### Credit risk mitigation

Our approach when granting credit facilities is to do so on the basis of capacity to repay rather than place primary reliance on credit risk mitigation. Depending on a customer's standing and the type of product, facilities may be provided unsecured. Mitigation of credit risk is nevertheless a key aspect of effective risk management and, in a diversified financial services organisation, takes many forms.

Our general policy is to promote the use of credit risk mitigation, justified by commercial prudence and good practice as well as capital efficiency. Specific, detailed policies cover the acceptability, structuring and terms of various types of business with regard to the availability of credit risk mitigation, for example in the form of collateral security. These policies, together with the determination of suitable valuation parameters, are subject to regular review to ensure that they are supported by empirical evidence and continue to fulfil their intended purpose.

The most common method of mitigating credit risk is to take collateral. Usually, in our residential and commercial real estate businesses, a mortgage over the property is taken to help secure claims. In the commercial and industrial sectors, charges are created over business as sets such as premises, stock and debtors. Facilities to Small and Medium Enterprises are commonly granted against guarantees given by their owners and/or directors. Guarantees from third parties can arise where the Bank extends facilities without the benefit of any alternative form of security, e.g. where it is sues a bid or performance bond in favour of a non-customer at the request of another bank.

In the institutional sector, trading facilities are supported by charges over financial instruments such as cash, debt securities and equities. Financial collateral in the form of marketable securities is used in much of the Bank's over-the-counter ('OTC') derivatives activities and in securities financing trans actions ('SFT') such as repos, reverse repos, securities lending and borrowing. Netting is used extensively and is a prominent feature of market standard documentation.

Our Global Banking and Markets business utilises credit risk mitigation to manage the credit risk of its portfolios, with the goal of reducing concentrations in individual names, sectors or portfolios. The techniques in use include credit default swaps ('CDS') purchases, structured credit notes and securitisation structures. Buying credit protection creates credit exposure against the protection provider.

Policies and procedures govern the protection of our position from the outset of a customer relationship, for instance in requiring standard terms and conditions or specifically agreed documentation permitting the offset of credit balances against debt obligations and through controls over the integrity, current valuation and, if necessary, realisation of collateral security.

Valuation strategies are established to monitor collateral mitigants to ensure that they will continue to provide the anticipated secure secondary repayment source. Where collateral is subject to high volatility, valuation is frequent; where stable, less so. Market trading activities such as collateralised OTC derivative and SFT's typically carry out daily valuations in support of margining arrangements. In the residential and commercial real estate business, Group policy prescribes re-valuation at intervals of up to three years, or more frequently as the need arises, for example where market conditions are subject to significant change. Residential property collateral values are determined through a combination of professional appraisals, market indices or statistical analysis.

For banking book exposures subject to the standardised approach – covered by eligible guarantees, non-financial collateral, or credit derivatives - the exposure is divided into covered and uncovered portions. The covered portion, which is determined after applying an appropriate 'haircut' for currency and maturity mismatch to the amount of the protection provided, attracts the risk weight applicable to the credit quality step associated with the protection provider, while the uncovered portion attracts the risk weight associated with the credit quality step of the obligor. For trading book exposures fully or partially covered by eligible financial collateral, the value of the exposure is adjusted under the Financial Collateral Comprehensive Method using supervisory volatility adjustments, including those arising from currency mismatch, which are determined by the specific type of collateral (and, in the case of eligible debt securities, their credit quality) and its liquidation period. The adjusted exposure value is subject to the risk weight associated with the credit quality step of the obligor.

### Credit valuation adjustment

The credit valuation adjustment ('CVA') is an adjustment to the value of OTC derivative trans action contracts to reflect, within fair value, the possibility that the counterparty may default, and we may not receive the full market value of the transactions. The adjustment aims to calculate the potential loss arising from the portfolio of derivative transactions against each third party, based upon a modelled expected positive exposure profile, including allowance for credit risk mitigants such as netting agreements and Credit Support Annexes ('CSA').

### **Collateral arrangements**

It is our policy to revalue all traded transactions and associated collateral positions on a daily basis. An independent Collateral Management function manages the collateral process, which includes pledging and receiving collateral, and investigating disputes or nonreceipts.

Eligible collateral types are controlled under a policy which ensures the collateral agreed to be taken exhibits characteristics such as price transparency, price stability, liquidity, enforceability, independence, reusability and eligibility for regulatory purposes. A valuation 'haircut' policy reflects the fact that collateral may fall in value between the date the collateral was called and the date of liquidation or enforcement.

### Table 13 : Exposure value under the Standardised Approach covered by collateral classified by type of assets and collateral at 31 December 2012 and 2011

	31 December 2012		31 December 2011	
	Eligible financial collateral THBm	Guarantee and credit derivatives THBm	Eligible financial collateral THBm	Guarantee and credit derivatives THBm
Performing claims				
Claims on sovereigns and central banks, and MDBs Claims on financial institutions, PSEs treated as claims on	41,062	-	-	-
financial institutions, and securities firms	34,637	-	16,541	-
Claims on corporate, PSEs treated as claims on corporate	1,924	4,417	3,112	2,943
Claims on retail portfolios	-	-	46	14
Non-performing claims	2	57	15	57
Total	77,625	4,474	19,714	3.014

Remark: At 31 December 2012, the collateral value of reversed repo transactions against the central bank have been taken into account of risk weighted assets calculation in order to save the Bank's THB liability.

### Market risk

Market risk is the risk that movements in market factors, including foreign exchange, commodity prices, interest rates, credit spreads and equity prices, will reduce our income or the value of our portfolios.

We separate exposures to market risk into trading and non-trading portfolios. Trading portfolios include positions arising from market-making, from position-taking and others designated as mark-to-market. Nontrading portfolios include positions that primarily arise from the interest rate management of our commercial banking assets and liabilities, financial investments designated as available-for-sale and held-to-maturity.

We apply similar risk management policies and measurement techniques to both trading and non-trading portfolios. Our objective is to manage and control market risk exposures in order to optimise return on risk while maintaining a market profile consistent with the Group's status as one of the world's largest banking and financial services organisations.

The management of market risk is undertaken mainly in Global Markets using risk limits approved by the GMB. Limits are set for portfolios, products and risk types. Market liquidity is an important factor taken in to account when setting limits.

Global Risk, an independent unit, is responsible for our market risk management policies and measurement techniques. The Treasury Administration Department ('TAD'), an independent unit from Global Markets (risk taking unit), is responsible for measuring market risk exposures in accordance with the policies defined by Global Risk, and for monitoring and reporting exposures against the prescribed limits on a daily basis.

Each operating entity is required to assess the market risks arising on each product in its business and to transfer these risks to either its local Global Markets unit for management, or to separate books managed under the supervision of the local Asset and Liability Management Committee ('ALCO'). The aim is to ensure that all market risks are consolidated within operations which have the necessary skills, tools, management and governance to manage such risks professionally. The Bank uses a range of tools to monitor and limit market risk exposures. These include sensitivity analysis, VaR and stress testing.

### Sensitivity analysis

Sensitivity measures are used to monitor the market risk positions within each risk type, for example, present value of a basis point movement in interest rates, for interest rate risk. Sensitivity limits are set for portfolios, products and risk types, with the depth of the market being one of the principal factors in determining the level of limits set.

### Value at risk

VaR is a technique that estimates the potential losses on risk positions in the trading portfolio as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence.

The VaR model used by the Bank is based on predominantly historical simulation. This model derives realistic future scenarios from past series of recorded market rates and prices, taking into account inter-relationships between different markets and factors such as interest and foreign exchange rates. The model als o incorporate the effect of option features embedded in the underlying exposures.

The historical simulation models used incorporate the following features:

- potential market movements are calculated with reference to data from the past two years;
- historical market rates and prices are calculated with reference to foreign exchange and interest rates, commodity prices, equity prices and the associated volatilities; and
- VaR is calculated to a 99 percent confidence level and use a one-day holding period.

TAD is responsible for preparing the VaR report and submitting it to local senior management for their consideration on a daily basis. If there are exceptions, the exception report has to be sent to local senior management and also the regional market risk unit.

We validate the accuracy of our VaR model by back-testing the actual daily profit and loss results, adjusted to remove non-modeled items such as fees and commissions, against the corresponding VaR numbers. The back-testing is performed by TAD on a daily basis. We expect on the average to see losses in excess of VaR for 1 percent of the time over a one-year period. Comparing this to the actual number of excesses over this period can therefore be used to gauge how well the model is performing.

Although a valuable guide to risk, VaR should always be viewed in the context of its limitations, for example:

- the use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature;
- the use of a holding period assumes that all positions can be liquidated or the risk offset during that period. This may not fully reflect the market risk arising at times of severe illiquidity, when the holding period may be insufficient to liquidate or hedge all position fully;
- the use of a 99 percent confidence level by definition does not take into account losses that might occur beyond this level of confidence;
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures; and
- VaR is unlikely to reflect loss potential on exposures that only arise under conditions of significant market movement.

### Stress testing

The risk management framework is augmented with stress testing to evaluate the potential impact on portfolio values of more extreme (but nonetheless realistic) events or movements in a set of financial variables. In such abnormal scenarios, los ses can be much greater than those predicted by VaR modelling. A set of broad stress scenarios is used, as well as scenarios tailored to specific businesses and geographic areas.

The scenarios applied at portfolio and consolidated levels are as follows:

- single risk factor stress scenarios consider the impact of any single risk factor or set of factors that are unlikely to be captured within the VaR model, such as the break of a currency peg;
- technical scenarios, which consider the largest movement in each risk factor without considering any underlying market correlation;

- hypothetical scenarios, which consider potential macroeconomic events, for example, a mainland China slowdown or the effects of a sovereign debt default, including wider contagion effects;
- historical scenarios, which incorporate historical observations of market movements during previous periods of stress, which would not be captured within VaR, for example, Black Monday 1987 for equities, the 1997 Asian crisis and the 2007 global financial crisis; and
- reverse stress test scenarios, which identify scenarios which are beyond normal business conditions and could result in significant losses due to contagion and systemic implications.

In addition to Group's stress testing scenarios, we also perform the stress testing using the scenarios as specified by the BoT, covering parallel and non-parallel shifts in interest rate yield curves and depreciation and appreciation in major currencies.

### Interest rate risk

Interest rate risk arises within the trading portfolios, principally from mismatches, as a result of interest rate changes, between the future yield on assets and their funding cost.

- This is measured, where practical, on a daily basis. We use a range of tools to monitor and limit interest raterisk exposures. These include the present value of a basis point movement in interest rates, VaR, stress testing and sensitivity analysis.
- Through our management of market risk in non-trading portfolios, we mitigate the effect of prospective interest rate movements which could reduce future net interest income, while balancing the cost of such hedging activities on the current net revenue stream.

Analysis of interest rate risk is complicated by having to make assumptions on embedded optionality within certain product areas such as the incidence of mortgage prepayments.

### Foreign exchange risk

Foreign exchange risk arises as a result of movements in the relative value of currencies. In addition to VaR and stress testing, we control the foreign exchange risk within the trading portfolio by limiting the open exposure to individual currencies, and on an aggregate basis.

### Specific issuer risk

Specific issuer (credit spread) risk arises from a change in the value of debt instruments due to a perceived change in the credit quality of the issuer or underlying assets. As well as through VaR and stress testing, we manage the exposure to credit spread movements within the trading portfolios through the use of limits referenced to the sensitivity of the present value of a basis point movement in credit spreads.

Table 14 : Market risk information by Internal Model Approach at 31 December 2012, 30 June 2012 and 31December 2011

	31 December 2012 THBm	30 June 2012 THBm	31 December 2011 THBm
Interest Rate Risk			
Maximum VaR during the period	108	226	127
Average VaR during the period	89	123	82
Minimum VaR during the period	66	70	51
VaR at the end of the period	105	73	126
Foreign Exchange Rate Risk			
Maximum VaR during the period	25	41	34
Average VaR during the period	8	12	14
Minimum VaR during the period	2	2	4
VaR at the end of the period	10	16	5
Total Market Risk			
Maximum VaR during the period	111	234	129
Average VaR during the period	90	125	83
Minimum VaR during the period	69	68	52
VaR at the end of the period	105	77	126

Remark: The period for Maximum VaR, Minimum VaR and Average VaR is 60 days interval. All figures are based on 10 days VaR as used for market risk capital charge calculation.

Table 15 : Backtesting result (considering loss side of Hypothetical P&L vs. VaR)



Remark: There were no Backtesting exceptions for the period of 26 December 2011 to 28 December 2012.

# Interest rate risk in the banking book

Interest rate risk in the banking portfolios arises principally from mismatches between the future yield on assets and their funding cost, as a result of interest rate changes. The prospective change in future net interest income from banking portfolios will be reflected in the current realisable value of these positions, should they be sold or closed prior to maturity.

In order to manage this risk optimally, market risk in banking portfolios is transferred to Global Markets or to separate books managed under the supervision of the local Asset and Liability Management Committee.

The transfer of market risk to books managed by Global Markets or supervised by Asset and Liability Management Committees is usually achieved by a series of internal deals between the business units and these books. When the behavioural characteristics of a product differ from its contractual characteristics, the behavioural characteristics are assessed to determine the true underlying interest rate risk. Behavioural assumptions of a product are as sessed with respect to each local market in which the product is offered. Local As set and Liability Management Committees are required to regularly monitor all such behavioural assumptions and interest rate risk positions to ensure they comply with interest rate risk limits established by RMM.

We aim, through our management of interest rate risk, to mitigate the effect of prospective interest rate movements which could reduce our future net interest income, balanced against the cost of associated hedging activities, on the current net revenue stream.

Interest rate risk arising within the trading portfolios and banking portfolios is measured, where practical, on a daily basis. HSBC uses a range of tools to monitor and limit interest rate risk exposures. These include the present value of a basis point movement in interest rates, VaR, stress testing and sensitivity analysis.

The table below sets out the effect on future net income of an incremental 100 basis points parallel rise in yield curves during the 12 months.

 Table 16 : The effect of changes in interest rates to net interest income in the banking book at 31 December 2012 and 2011

	Effect to net income		
Currency	2012 THBm	2011 THBm	
Baht	290	470	
US Dollar	(141)	(250)	
Euro	-	(3)	
Others	(47)	(52)	
Total effect of changes in interest rates to net interest income	102	165	

# Equity exposures in the banking book

At 31 December 2012, we had equity investments in the banking book of Baht 220 million (2011: Baht 222 million). These are classified as available-for-sale for accounting purposes and held for the purposes maintained as capital fund under Section 32. There are no realised gains or losses on equity securities recognised in the statements of income during the period. Unrealised gains on revaluation of available-for-sale securities at 31 December 2012 of Baht 20 million (2011: Baht 22 million) were recognised directly in other comprehensive income.

Details of the Bank's accounting policy for available-for-sale equity investments are detailed on pages 13, of the Annual financial statements and Audit report of Certified Public Accountant 2012.

### Table 17 : Equity exposures in the banking book at 31 December 2012 and 2011

	At 31 December	
	2012 THBm	2011 THBm
Equity exposures		
Book value	200	200
Fair value	220	222
Unrealised gains on revaluation of available-for-sale equities	20	22
Minimum capital requirements for equity exposures on Standardised Approach	-	-

Remark: At 31 December 2012 and 2011, the Bank holds 200,000 units of The ABF Thailand Bond Index Fund with Net Asset Value of Baht 1,102.8235 per unit and Baht 1,109.7721 per unit, respectively. It should be noted that the major component of The ABF Thailand Bond Index Fund is Government securities with a risk weight of zero.

### **Operational risk**

Operational risk is defined as 'the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk'.

Operational risk is relevant to every aspect of our business and covers a wide spectrum of issues. Losses arising through fraud, unauthorised activities, errors, omission, inefficiency, systems failure or from external events all fall within the definition of operational risk.

### Objective

The objective of our operational risk management is to manage and control operational risk in a cost-effective manner within targeted levels of operational risk consistent with our risk appetite, as defined by GMB.

### Organisation and responsibilities

Operational risk management is primarily the responsibility of management and staff. We are required to maintain oversight over operational risk and internal control, covering all businesses and operational activities for which they are responsible.

The Group Operational Risk function and the Operational Risk Management Framework ('ORMF') assist business management in discharging their responsibility.

The ORMF defines minimum standards and processes, and the governance structure for operational risk and internal control across the Group. Inherent to the ORMF is a 'Three lines of defence' model to the management of risk. The first line of defence is every employee at HSBC, the second consists of the Global Functions and the third is Internal Audit.

### Measurement and monitoring

We have codified our ORMF in a high level standard, supplemented by detailed policies. These policies explain our approach to identifying, assessing, monitoring and controlling operational risk and give guidance on mitigating action to be taken when weaknesses are identified.

Business managers are responsible for maintaining an acceptable level of internal control, commensurate with the scale and nature of operations. They are responsible for identifying and assessing risks, designing controls and monitoring the effectiveness of these controls. The ORMF helps managers to fulfil these responsibilities by defining a standard risk as sessment methodology and providing a tool for the systematic reporting of operational loss data.

# Operational risk and control assessment approach

Operational risk and control assessments are performed by individual business units and functions. The risk and control as sessment process is designed to provide business areas and functions with a forward looking view of operational risks and an assessment of effectiveness of controls, and a tracking mechanism for action plans so that they can proactively manage operational risks within acceptable levels. Risk and control as sessments are review and updated at least annually.

All appropriate means of mitigation and controls are considered. These include:

- making specific changes to strengthen the internal control environment;
- investigating whether cost-effective insurance cover is available to mitigate the risk; and
- other means of protecting us from loss.

### Recording

We use a centralised database to record the results of our operational risk management process. Operational risk and control assessments are input and maintained by businessunits. Business management and Business Risk and Control Managers monitor and follow up the progress of documented action plans.

### Operational risk loss reporting

To ensure that operational risk losses are consistently reported and monitored at Group level, all Group companies are required to report individual losses when the net loss is expected to exceed US\$10,000 and to aggregate all other operational risk losses under US\$10,000. Losses are entered into the Operational Risk IT system and are reported to the Group Operational Risk function on a quarterly basis.

The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch	
Glossary	

Abbreviation	Brief description
A ALCO	Asset and Liability Management Committee
ALCO	The set and Excome private committee
B Bank	The Hongkong and Shanghai Banking Corporation Limited, Bangkok
BCBS BoT	Branch The Basel Committee on Banking Supervision The Bank of Thailand
_ • -	
C CEO CSA	Chief Executive Officer Credit Support Annex
E EAD ECAI	Exposure at Default External Credit Assessment Institution, such as Moody's Investors
20.12	Services, Standard & Poor's Ratings Service, Fitch Ratings or TRIS Rating
G	
GCRO	Group Chief Risk Officer
GMB	Group Management Board
Group	HSBC Holdings together with its subsidiary undertakings
GRC	Group Risk Committee
н	
HSBC	HSBC Holdings together with its subsidiary undertakings
I	
ICAAP	Internal Capital Adequacy Assessment Process
IMM IRB	Internal Model Method
IRBB	Internal Ratings-Based Interest Rate Risk in the Banking Book
ISDA	International Swaps and Derivatives Association
	International 5 waps and Derivatives rissoeration
L LGD	Loss Given Default
Μ	
MDB	Multilateral Development Bank
0	
ORMF	Operational Risk Management Framework
OTC	Over-the-Counter
Р	
PD	Probability of Default
PSE	Public Sector Entities
R	
RMC	Risk Management Committee
RMM	Risk Management Meeting of the Group Management Board
RWA	Risk-Weighted Asset
S	
S SA	Standardised Approach
SFT	Securities Financing Transactions
Т	
TAD	Treasury Administration Department
V	
v VaR	Value at Risk

Term	Definition
A Available-for-sale ('AFS') financial assets	Those non-derivative financial assets that are designated as available-for- sale or are not classified as a) loans and receivables b) held-to-maturity investments or c) financial assets at fair value through profit or loss.
B Back-testing	A statistical technique used to monitor and assess the accuracy of a model, and how that model would have performed had it been applied in the past.
Basel II	The capital adequacy framework is sued by the Basel Committee on Banking Supervision in June 2006 in the form of the 'International Convergence of Capital Measurement and Capital Standards'.
С	
Commercial real estate	Any real estate investment, comprising buildings or land, intended to generate a profit, either from capital gain or rental income.
Counterparty credit risk	Counterparty credit risk is the risk that the counterparty to a transaction may default before completing the satisfactory settlement of the transaction.
Credit default s wap ('CDS')	A derivative contract whereby a buyer pays a fee to a seller in return for receiving a payment in the event of a defined credit event (e.g. bankruptcy, payment default on a reference asset or as sets, or downgrades by a rating agency) on an underlying obligation (which may or may not be held by the buyer).
Credit quality step	A step in the Bank of Thailand credit quality assessments cale which is based on the credit ratings of ECAIs. It is used to assign risk weights under the standardised approach.
Credit risk	Risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. It arises mainly from direct lending and trade finance, but also from products such as guarantees, derivatives and debt securities.
Credit risk mitigation	A technique to reduce the credit risk associated with an exposure by application of credit risk mitigants such as collateral, guarantees and credit protection.
Credit Support Annex ('CSA')	A legal document that regulates credit support (collateral) for OTC derivative transactions between two parties.
Credit valuation adjustment	An adjustment to the valuation of OTC derivative contracts to reflect the credit worthiness of OTC derivative counterparties.
Ε	
Exposure	A claim, contingent claimor position which carries a risk of financial loss.
Exposure at default ('EAD')	The amount expected to be outstanding after any credit risk mitigation, if and when the counterparty defaults. EAD reflects drawn balances as well as allowance for undrawn amounts of commitments and contingent exposures.
F Fair value	Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.
Funding risk	A form of liquidity risk arising when the liquidity needed to fund illiquid asset positions cannot be obtained at the expected terms and when required.

Term	Definition
G Global Markets	HSBC's treasury and capital markets services in Global Banking and Markets.
Group	HSBC Holdings together with its subsidiary undertakings.
H Haircut	With respect to credit risk mitigation, a downgrade adjustment to collateral value to reflect any currency or maturity mismatches between the credit risk mitigant and the underlying exposure to which it is being applied. Also a valuation adjustment to reflect any fall in value between the date the collateral was called and the date of liquidation or enforcement.
Held-to-maturity	An accounting classification for investments acquired with the intention and ability of being held until they mature.
I Impairment allowances	Management's best estimate of losses incurred in the loan portfolios at the balance sheet date.
Insurance risk	A risk, other than financial risk, transferred from the holder of a contract to the insurance provider. The principal insurance risk is that, over time, the combined cost of claims, administration and acquisition of the contract may exceed the aggregate amount of premiums received and investment income.
Internal Capital Adequacy Assessment Process ('ICAAP')	The Bank's own assessment of the levels of capital that it needs to hold through an examination of its risk profile from regulatory and economic capital viewpoints.
Internal Model Method ('IMM')	One of three approaches defined by Basel II to determine exposure values for counterparty credit risk.
Internal ratings-based ('IRB')	A method of calculating credit risk capital requirements using internal estimates of risk parameters.
ISDA master agreement	Standardised contract developed by ISDA used as an umbrella under which bilateral derivatives contracts are entered into.
L Liquidity risk	The risk that HSBC does not have sufficient financial resources to meet its obligations as they fall due, or will have to do so at an excessive cost. This risk arises from mismatches in the timing of cash flows.
M Marketrisk	The risk that movements in market risk factors, including foreign exchange rates and commodity prices, interest rates, credit spreads and equity prices will reduce income or portfolio values.
Mark-to-market approach	One of three approaches defined by Basel II to determine exposure values for counterparty credit risk.
N Net interest income	The amount of interest received or receivable on assets net of interest paid or payable on liabilities.
O Operational risk	The risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events, including legal risk.
Over-the-counter ('OTC')	A bilateral transaction (e.g. derivatives) that is not exchange traded and that is valued using valuation models.

### The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch Glossary (continued)

Term	Definition
R	
Regulatory capital	The capital which the Bank holds, determined in accordance with rules established by the Bank of Thailand.
Residual maturity	The period outstanding from the reporting date to the maturity or end date of an exposure.
Risk appetite	An assessment of the types and quantum of risks to which HSBC wishes to be exposed.
Risk-weightedassets ('RWA's)	Calculated by assigning a degree of risk expressed as a percentage (risk weight) to an exposure.
S	
Specific issuer risk	Specific is suer (credit spread) risk arises from a change in the value of debt instruments due to a perceived change in the credit quality of the issuer or underlying assets.
Standardised approach ('SA')	In relation to credit risk, a method for calculating credit risk capital requirements using ECAI ratings and supervisory risk weights.
	In relation to operational risk, a method of calculating the operational capital requirement by the application of a supervisory defined percentage charge to the gross income of eight specified business lines.
V	
Value at risk ('VaR')	A measure the loss that could occur on risk positions as a result of adverse movements in market risk factors (e.g. rates, prices, volatilities) over a specified time horizon and to a given level of confidence.