HSBC
The world's local bank

2009

The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch

Pillar 3 Disclosures
as at 31 December 2009

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Introduction

In November 2008, the Bank of Thailand ('BoT') announced a new capital adequacy framework which referred to the International Convergence of Capital Measurement and Capital Standards (commonly known as 'Basel II') 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 2009

Pillar 3 complements the minimum capital requirements and the supervisory review process. Its aim is to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess certain specified information on the scope of application of Basel II, capital, particular risk exposures, risk assessment processes, and hence the capital adequacy of the institution. Disclosures consist of both quantitative and qualitative information.

Frequency

In accordance with the BoT's requirements, The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch ('the Bank') intends to publish 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 2009* of the Bank on a standalone basis are available on the Bank's website: www.hsbc.co.th, whereas the Pillar 3 Disclosures 2009 of HSBC Holdings and its subsidiaries ('HSBC' or 'Group') on a consolidated level and other information on HSBC are available on HSBC Group's website: www.hsbc.com.

Verification

The *Pillar 3 Disclosures 2009* have been appropriately verified internally but have not been audited by the external auditors.

Scope of Basel II permissions

Credit risk

Basel II provides three approaches of increasing sophistication to the calculation of pillar 1 credit risk capital requirements. The most basic, the standardised approach ('SA'), requires banks to use external credit ratings to determine the risk weightings applied to rated counterparties, group other counterparties into broad categories and apply standardised risk weightings 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 the probability that a counterparty will 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, the Bank has adopted the standardised approach with effect from 31 December 2008.

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. These exposure values are used to determine capital requirements under one of the credit risk approaches; standardised, IRB foundation and IRB advanced.

Internally, the Bank uses the mark-to-market and internal model method, IRB advanced approaches, for managing and monitoring its counterparty credit risk.

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

The Bank has obtained an 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 introduces 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.

The Bank has adopted the standardised approach in determining its operational risk capital requirements.

Capital

Capital management and allocation
HSBC's capital management approach is driven by its strategy and organisational requirements, taking into account the regulatory, economic and commercial environment in which it operates. It is HSBC's objective to maintain a strong capital base to support the development of its business and to meet regulatory capital requirements at all times. The Group's policy is underpinned by the Capital Management Framework which enables HSBC to manage its capital in a consistent and aligned manner. The Capital Management Framework, which has been approved by the Group Management Board ('GMB'), incorporates a number of different capital measures and includes market capitalisation, invested capital, economic capital and regulatory capital. HSBC's strategy is to allocate capital to businesses based on their economic profit generation and, within this process, regulatory and economic capital requirements and the cost of capital are key factors.

As at 31 December 2009 and 2008, the Bank has an allocated and registered capital fund with the BoT of Baht 10,349 million. The detail can be summarised as follows:

Table 1 : The Bank's Capital Structure as at 31 December 2009 and 2008

	2009	**2008**
	(in million Baht)	
Assets maintained under Section 32	**10,891**	**10,967**
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	10,349	10,349
Net balance of inter-office accounts which the branch is the debtor (the creditor) to the head office and other branches located in other countries, the parent company and subsidiaries of the head office	13,869	979
Total	**24,218**	**11,328**
Total Capital Fund	**10,349**	**10,349**

Table 2 : The Bank's Capital Adequacy as at 31 December 2009 and 2008

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

	2009	2008
	(in million Baht)	
Performing claims		
Claims on sovereigns and central banks, and multilateral development banks (MDBs)	4	7
Claims on financial institutions, non-central government public sector entities (PSEs) treated as claims on financial institutions, and securities firms	626	764
Claims on corporate, non-central government public sector entities (PSEs) treated as claims on corporate	2,727	4,032
Claims on retail portfolios	833	1,013
Claims on housing loans	62	63
Other assets	79	98
Non-performing claims	72	62
Total minimum capital requirement for credit risk	**4,403**	**6,039**

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

	2009	2008
	(in million Baht)	
Standardised approach	-	-
Internal model approach	392	368
Total minimum capital requirement for market risk	**392**	**368**

Minimum capital requirement for operational risk

	2009	2008
	(in million Baht)	
Standardised approach	979	956
Total minimum capital requirement for operational risk	**979**	**956**

The Bank's capital ratio

	2009	2008
	(%)	
Total capital to risk-weighted assets	**13.44**	**10.54**

Risk exposure and assessment

Risk management objectives and policies

Overview

All HSBC's activities involve, to varying degrees, the measurement, evaluation, acceptance and management of risks or combinations of risks.

As risk is not static, the risk profiles of the Bank change continually as the scope and impact of a range of factors, from transactional to geopolitical, change. The risk environment requires continual monitoring and assessment in an integrated manner in order to understand and manage the complex risk interactions across the Bank. The risk management framework that HSBC has put in place is designed to meet these challenges and is described below in terms of its organisational structure, governance, risk strategies and appetite, and supporting monitoring and reporting processes.

Organisational structure

Principal governing bodies

An established risk governance and ownership structure ensures oversight and accountability for the effective management of risk at Group, regional, customer group and operating entity levels.

The Board is the Group's senior 'governing body'. It approves the Group's risk appetite framework, plans and performance targets for the Group and its principal operating subsidiaries, the appointment of senior officers, the delegation of authorities for credit and other risks and the establishment of effective control procedures.

The Board delegates authority for the day-to-day management of the Group to GMB, the Group's senior executive committee. Chaired by the Group Chief Executive, GMB's members include the Chief Financial Officer and Executive Director Risk and Regulation, the Group Chief Technology and Services Officer, the Group Chief Risk Officer ('GCRO') and other executives appointed by the Board. GMB exercises the powers and authorities of the Board in so far as they concern the management and day-to-day running of the Group in accordance with policies and directions determined by the Board. GMB's performance is assessed against the achievement of HSBC's strategy, medium-term outlook and rolling operating plans, building sustainable business and brand value around its customers, and a strong competitive performance in earnings per share growth and efficiency.

When considering risk matters, GMB convenes as the Risk Management Meeting ('RMM'), chaired by the Chief Financial Officer and Executive Director Risk and Regulation. RMM has responsibility for setting risk appetite and approving definitive risk policies and controls. It formulates high-level Group risk management policy, exercises delegated risk authorities and oversees the implementation of risk appetite and controls. It monitors all categories of risk, receives reports on actual performance and emerging issues, determines action to be taken and reviews the efficacy of HSBC's risk management framework.

In Thailand, the Bank has established a Risk Management Committee ('RMC') which 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 risk function

Primary responsibility for managing risk at operating entity level lies with the CEO, as custodians of the balance sheets and, at the most senior level, members of RMC. In their oversight and stewardship of risk management at the Bank level, however, RMC are supported by a dedicated Risk function, headed by the Chief Risk Officer, who reports to the Chief Executive Officer and Regional Chief Risk Officer.

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

Risk has functional responsibility for the principal financial risk types, namely: retail and wholesale credit, market, operational, security and fraud risks. For these it establishes policy and provides reporting and analysis of portfolio composition/ trends to senior management. Group Risk works closely with its functional colleagues across the Group to develop and communicate global strategies and to guide the setting of consistent performance measures, targets and key performance indicators. It also co-ordinates the continued development of the Group's risk appetite, economic capital and stress testing frameworks and participates in discussions with regulators and in industry forums on risk and regulatory policy developments, assesses their implications and makes recommendations accordingly.

The Risk function also works closely with the Asset and Liability Committees to harmonise capital management disciplines across risk types.

<u>Geographical regions, global businesses and customer groups</u>
The Group is organised into six geographical regions: Europe, Hong Kong, Rest of Asia-Pacific, Middle East, North America and Latin America, within which country managers are the Group's principal representatives in their respective jurisdictions.

Regional heads and country managers are responsible for growing and controlling Group businesses in line with Group standards, policies and procedures, and for ensuring that the Group's corporate responsibilities are met in the communities in which it operates.

The Bank manages its business around its customers through two global businesses according to the Group policy, Global Banking and Markets and Private Banking, and two customer groups, Personal Financial Services, which incorporates the Group's consumer finance businesses, and Commercial Banking.

Group policy
HSBC's risk management policies, encapsulated in the Group Standards Manual and cascaded through a hierarchy of policy manuals across the Group, are designed to support the formulation of risk appetite, guide employees and establish procedures for monitoring and controlling risks, with timely and reliable reporting to management.

The principal risk categories to which the Group is exposed have each been assigned to 'risk owners' within Group Management Office ('GMO') functions for the purposes of general oversight and the development of risk measures, key risk indicators and stress testing processes at Group level, to ensure that the Group's risk appetite is adhered to and that RMM is kept abreast of emerging risk issues. Risk ownership extends to Group policies and procedures documented in the policy manuals which all Group offices must observe, subject to dispensations agreed by the risk owner and reviewed by internal audit.

The Bank regularly reviews and updates its risk management policies, systems and methodologies to reflect changes in law, regulation, markets, products and emerging best practice.

It is a prime responsibility of the Bank's management to identify, assess and manage the broad spectrum of risks to which the Bank is subject. All employees moreover are expected to manage risk within the scope of their assigned responsibilities. Personal accountability, reinforced by the Bank's governance structure and instilled by training and experience, helps to foster a disciplined and constructive culture of risk management and control.

Risk appetite
HSBC's risk appetite framework describes the quantum and types of risk that HSBC is prepared to take in executing its strategy. It is central to an integrated approach to risk, capital and business management and supports the Group in achieving its return on equity objectives, as well as being a key element of meeting the Group's obligations under pillar 2 of Basel II.

The formulation of risk appetite considers HSBC's risk capacity, its financial position, the strength of its core earnings and the resilience of its reputation and brand. It is expressed both qualitatively, describing which risks are taken and why, and quantitatively. HSBC's senior management attaches quantitative metrics to individual risk types to ensure that:

- underlying business activity may be guided and controlled so it continues to be aligned to the risk appetite framework;

- key assumptions underpinning risk appetite can be monitored and, as necessary, adjusted through subsequent business planning cycles; and
- business decisions anticipated to be necessary to mitigate risk are flagged and acted upon promptly.

The risk appetite framework, governed by the Board and overseen in its implementation on an ongoing basis by GMB and RMM, is also maintained at regional and customer group levels. It operates through two key mechanisms:

- the framework itself defines the governance bodies, processes, metrics and other features of how HSBC addresses risk appetite as part of its ongoing business; and
- periodic risk appetite statements define, at various levels in the business, the desired level of risk commensurate with return and growth targets and in line with the corporate strategy and stakeholder objectives.

The risk appetite framework covers both the beneficial and adverse aspects of risk. Within it, economic capital is the common currency through which risk is measured and used as the basis for risk evaluation, capital allocation and performance measurement across regions and customer groups. Risk appetite is executed through the operational limits that control the levels of risk run by the Group, regions and customer groups and is measured using risk-adjusted performance metrics.

Scope and nature of risk measurement and reporting systems

The purpose of HSBC's risk measurement and reporting systems is to ensure that 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 way to the right points in the organisation for those risks to be successfully managed and mitigated.

Risk measurement and reporting systems are therefore themselves subject to a robust governance framework, to ensure that their design is fit for purpose and that they are functioning properly. Group risk IT systems development is a key responsibility of the GCRO, while the operation and development of risk rating and management systems and processes are ultimately subject to the oversight of RMM and the Board.

HSBC invests significant resources in information technology systems and processes to maintain and improve its 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. The measurement and monitoring of the major risks encountered by the Group, including credit, market and operational risks, are increasingly delivered by central systems or, where this is for sound business reasons not the case, through structures and processes that nevertheless support comprehensive oversight by senior management. Much of this is being progressed within the formalised structure of a wide reaching transformation programme ('One HSBC') which looks to integrate products, processes and systems.

Internal assessment of capital adequacy

HSBC defines capital as the resources necessary to cover unexpected losses arising from discretionary risks, being those which it accepts such as credit risk and market risk, or non-discretionary risks, being those which arise by virtue of its operations, such as operational risk and reputational risk. The HSBC Capital Management Principles and related policies define the Internal Capital Adequacy Assessment Process ('the ICAAP') by which GMB examines the risk profile from both regulatory and economic capital viewpoints and ensures that the level of capital:

- remains sufficient to support the risk profile and outstanding commitments;
- exceeds the formal minimum regulatory capital requirements;
- is capable of withstanding a severe economic downturn stress scenario; and
- remains consistent with the Group's strategic and operational goals.

The Bank identifies and manages the risks it faces through defined internal control procedures and stress testing. It assesses and manages certain risks outlined below via a capital planning process.

Credit, market and operational risk
The Bank assesses capital requirements for these risk types 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 diversification of risks within the portfolios and, similarly, any concentrations of risk that arise.

The Bank capital assessment operates alongside the regulatory capital assessment and consistently demonstrates a substantially lower overall capital requirement for credit risk than the regulatory equivalent, reflecting the empirical evidence of the benefits of global diversification. However, the Bank maintains a prudent stance on capital coverage, ensuring that any model risk is mitigated. Capital requirements are the basis upon which the Bank's risks are monitored against its risk appetite.

Interest rate risk in the banking book
Interest Rate Risk in the Banking Book ('IRRBB') is defined as the exposure of the non-trading products of the Bank to interest rates. Non-trading portfolios include positions that arise from the interest rate management of the Bank's retail and commercial banking assets and liabilities, and financial investments designated as available-for-sale and held-to-maturity. IRRBB arises principally from mismatches between the future yields 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 optionality in certain product areas, for example, mortgage prepayments, and from behavioural assumptions regarding the economic duration of liabilities which are contractually repayable on demand.

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 the Bank's liquidity and funding management framework is to ensure that all foreseeable funding commitments can be met when due. Therefore, the Bank is required to maintain strong liquidity positions and to manage the liquidity profiles of assets, liabilities and commitments with the objective of ensuring that cash flows are balanced appropriately and that all anticipated obligations can be met when due.

The Bank also uses cash-flow stress testing as part of its control processes to assess liquidity risk. The Bank does 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, HSBC recognises that a strong capital base can help mitigate liquidity risk both by providing a capital buffer to allow an entity to raise funds and deploy them in liquid positions and by serving to reduce the credit risk taken by providers of funds to the Group.

Reputational risk
As a banking group, HSBC's reputation depends upon the way in which it conducts its business, but it can also be affected by the way in which clients to whom it provides financial services conduct themselves. HSBC in Thailand manages and monitors its reputational risk via the RMC. The Public Affair Department monitors the reputational risk on a daily basis and informs local senior management in a timely manner if there are occurrences of any reputational risks events.

Strategic risk
Strategic risk is the potential negative impact on profits and capital as a result of the Bank not meeting its strategic objectives, as set out in the rolling operating plan, caused by unforeseen changes in the business and regulatory environment, exposure to economic cycles and technological changes. The Bank does not explicitly set aside capital against business risk as a distinct category as it believes that the capital requirements for such risks are effectively covered within the capital set aside for other major risks such as credit risk, market risk and operational risk.

Scenario analysis and stress testing
Scenario analysis and stress testing are important mechanisms in understanding the sensitivities of the Capital and Business plans to the adverse impacts of extreme, but plausible, events. As well as considering the potential financial impact upon plans, a key output of this tool is the consideration and establishment of management action plans for mitigating such events should they, or similar events, arise.

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 credit derivatives. Among the risks the Bank engages in, credit risk generates the largest regulatory capital requirement. This includes a capital requirement for counterparty credit risk in the banking and trading books.

The aims of credit risk management, underpinning sustainably profitable business, are principally:

- to maintain a strong culture of responsible lending, supported by a robust risk policy and control framework;
- to both partner and challenge business originators effectively in defining and implementing risk appetite, and its re-evaluation under actual and scenario conditions; and
- to ensure independent, expert scrutiny and approval of credit risks, their costs and their mitigation.

The Bank uses the Standardised Approach to calculate capital requirement for credit risks. Non-performing claims represent assets/loans with overdue period more than 90 days. The specific provision has been provided for non-performing assets/loans based on the estimated losses which were calculated by discounting the expected future cash flows (inclusive of the value of security). The general provision has been calculated based on collective impairment for both corporate and retail loans portfolio 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 as at 31 December 2009 and 2008.

Credit risk

General information on credit risk exposure

Table 3 : Credit risk exposure of significant on-balance sheet and off-balance sheet before recognised credit risk mitigation as at 31 December 2009 and 2008

	Average exposure value 2009	Exposure value 2009	Exposure value 2008
	(in million Baht)		
On-balance sheet			
Loans and advances, net	104,899	118,535	95,817
Investments in debt securities, net	22,451	26,061	17,884
Deposits (including accrued interest receivable)	1,518	590	1,513
Off-balance sheet			
Aval, guarantees and letter of credit	2,429	2,805	3,310
OTC derivatives	1,752,072	1,932,097	1,623,294
Undrawn commitment	104,438	104,129	107,500

Remark:

- *Loans and advances represent loans to customers and interbank and money market which including accrued interest receivable and net of deferred income and allowance for doubtful account.*
- *Investments in debt securities represent fair value of investments excluding accrued interest receivable and net of any loss on impairment.*
- *Off-balance sheet represents the notional amounts before applied credit conversion factor.*

Table 4 : Credit risk exposure of significant on-balance sheet and off-balance sheet before recognised credit risk mitigation - analysis by country or geographical area as at 31 December 2009 and 2008

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

31 December 2009

	On-balance sheet				Off-balance sheet			
Country or geographical area	**Total**	**Loans and advances**	**Investments in debt securities**	**Deposits**	**Total**	**Aval, guarantees and letter of credit**	**OTC derivatives**	**Undrawn commitment**
	(in million Baht)							
Thailand	144,878	118,273	26,061	544	868,471	2,715	762,794	102,962
Asia Pacific (excluding Thailand)	60	55	-	5	753,659	90	753,142	427
North America and Latin America	120	117	-	3	108,908	-	108,392	516
Middle East	-	-	-	-	-	-	-	-
Europe	128	90	-	38	307,993	-	307,769	224
Total	**145,186**	**118,535**	**26,061**	**590**	**2,039,031**	**2,805**	**1,932,097**	**104,129**

31 December 2008

	On-balance sheet				Off-balance sheet			
Country or geographical area	**Total**	**Loans and advances**	**Investments in debt securities**	**Deposits**	**Total**	**Aval, guarantees and letter of credit**	**OTC derivatives**	**Undrawn commitment**
	(in million Baht)							
Thailand	114,755	95,458	17,884	1,413	814,621	3,228	708,369	103,024
Asia Pacific (excluding Thailand)	53	51	-	2	529,229	82	527,295	1,852
North America and Latin America	246	232	-	14	113,746	-	112,243	1,503
Middle East	-	-	-	-	14	-	-	14
Europe	160	76	-	84	276,494	-	275,387	1,107
Total	**115,214**	**95,817**	**17,884**	**1,513**	**1,734,104**	**3,310**	**1,623,294**	**107,500**

Table 5 : Credit risk exposure of significant on-balance sheet and off-balance sheet before recognised credit risk mitigation – analysis by residual maturity as at 31 December 2009 and 2008

	31 December 2009			**31 December 2008**		
	Less than 1 year	**Over 1 year**	**Total**	**Less than 1 year**	**Over 1 year**	**Total**
			(in million Baht)			
On-balance sheet						
Loans and advances, net	110,053	8,482	118,535	87,579	8,238	95,817
Investments in debt securities, net	12,172	13,889	26,061	5,470	12,414	17,884
Deposits (including accrued interest receivable)	590	-	590	1,513	-	1,513
Off-balance sheet						
Aval, guarantees and letter of credit	2,805	-	2,805	3,310	-	3,310
OTC derivatives	733,362	1,198,735	1,932,097	692,405	930,889	1,623,294
Undrawn commitment	102,391	1,738	104,129	106,171	1,329	107,500

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 as at 31 December 2009 and 2008

	31 December 2009						
	Loans including accrued interest receivable						**Investments in debt securities classified as doubtful loss**
Country or geographic area	**Normal**	**Special mentioned**	**Substandard**	**Doubtful**	**Doubtful loss**	**Total**	
				(in million Baht)			
Thailand	116,210	2,500	380	113	871	120,074	60
Asia Pacific (excluding Thailand)	56	-	-	-	-	56	-
North America and Latin America	118	-	-	-	8	126	-
Middle East	-	-	-	-	-	-	-
Europe	90	-	-	-	-	90	-
Total	**116,474**	**2,500**	**380**	**113**	**879**	**120,346**	**60**

	31 December 2008						
	Loans including accrued interest receivable						**Investments in debt securities classified as doubtful loss**
Country or geographic area	**Normal**	**Special mentioned**	**Substandard**	**Doubtful**	**Doubtful loss**	**Total**	
				(in million Baht)			
Thailand	91,726	4,472	411	8	465	97,082	20
Asia Pacific (excluding Thailand)	45	6	-	-	-	51	-
North America and Latin America	234	-	-	-	9	243	-
Middle East	-	-	-	-	-	-	-
Europe	77	-	-	-	-	77	-
Total	**92,082**	**4,478**	**411**	**8**	**474**	**97,453**	**20**

Remark:

- *Loans represent loans to customers, interbank and money market, including accrued interest receivable and net of deferred income.*
- *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.*

Table 7 : ***General provision, specific provision and bad debt written-off during period against loans including accrued interest receivable and investments in debt securities - analysis by country or geographic area as at 31 December 2009 and 2008***

	31 December 2009			
	Loans including accrued interest receivable			**Specific provision for investments in debt securities**
Country or geographic area	**General provision**	**Specific provision**	**Bad debt written-off during period**	
	(in million Baht)			
Thailand	[redacted]	789	1,330	60
Asia Pacific (excluding Thailand)	[redacted]	-	-	-
North America and Latin America	[redacted]	8	-	-
Middle East	[redacted]	-	-	-
Europe	[redacted]	-	-	-
Total	**1,014**	**797**	**1,330**	**60**

	31 December 2008			
	Loans including accrued interest receivable			**Specific provision for investments in debt securities**
Country or geographic area	**General provision**	**Specific provision**	**Bad debt written-off during period**	
	(in million Baht)			
Thailand	[redacted]	384	1,645	20
Asia Pacific (excluding Thailand)	[redacted]	-	15	-
North America and Latin America	[redacted]	9	-	-
Middle East	[redacted]	-	-	-
Europe	[redacted]	-	-	-
Total	**1,244**	**393**	**1,660**	**20**

Remark:

- *The provisions of loans and advances represent provisions against loans to customers, interbank and money market. However, there are no provisions against interbank and money market transactions at the period ended 31 December 2009.*
- *Specific provisions for investments in debt securities represent unrealised losses on revaluation of debt securities at the period 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 as at 31 December 2009 and 2008***

	31 December 2009					
Type of business	**Normal**	**Special mentioned**	**Substandard**	**Doubtful**	**Doubtful loss**	**Total**
	(in million Baht)					
Agriculture and mining	714	-	-	-	-	714
Financial sector	81,986	-	-	-	-	81,986
Manufacturing and commerce	13,053	1,997	41	102	859	16,052
Real estate business and construction	1,182	-	-	-	8	1,190
Public utilities and services	7,816	65	-	-	-	7,881
Housing loan	812	1	-	11	11	835
Others	10,911	437	339	-	1	11,688
Total	**116,474**	**2,500**	**380**	**113**	**879**	**120,346**

Type of business	Normal	Special mentioned	Substandard	Doubtful	Doubtful loss	Total
			31 December 2008			
			(in million Baht)			
Agriculture and mining	280	166	-	-	68	514
Financial sector	46,646	-	-	-	-	46,646
Manufacturing and commerce	19,757	3,572	43	-	366	23,738
Real estate business and construction	3,134	-	-	1	8	3,143
Public utilities and services	8,378	217	-	-	-	8,595
Housing loan	845	2	1	7	31	886
Others	13,042	521	367	-	1	13,931
Total	**92,082**	**4,478**	**411**	**8**	**474**	**97,453**

Table 9 : General provision, specific provision and bad debt written-off during period against loans including accrued interest receivable - analysis by type of business as at 31 December 2009 and 2008

Type of business	General provision	Specific provision	Bad debt written-off during period
		31 December 2009	
		(in million Baht)	
Agriculture and mining	[redacted]	-	-
Financial sector	[redacted]	-	-
Manufacturing and commerce	[redacted]	782	58
Real estate business and construction	[redacted]	8	-
Public utilities and services	[redacted]	-	-
Housing loan	[redacted]	6	7
Others	[redacted]	1	1,265
Total	**1,014**	**797**	**1,330**

Type of business	General provision	Specific provision	Bad debt written-off during period
		31 December 2008	
		(in million Baht)	
Agriculture and mining	[redacted]	68	-
Financial sector	[redacted]	-	-
Manufacturing and commerce	[redacted]	300	247
Real estate business and construction	[redacted]	9	71
Public utilities and services	[redacted]	-	-
Housing loan	[redacted]	14	2
Others	[redacted]	2	1,340
Total	**1,244**	**393**	**1,660**

Remark:

- *Bad debt written off during the period ended 31 December 2009 of Baht 1,265 million (2008 : Baht 1,292 million) is in respect of the retail portfolio.*

Table 10 : Reconciliation of the movement in the general provision and specific provision against loans including accrued interest receivable as at 31 December 2009 and 2008

Type of business	31 December 2009 **General provision**	 **Specific provision**	 **Total**
		(in million Baht)	
Provisions at the beginning of period	1,244	393	1,637
Bad debts written-off during the period	(1,264)	(66)	(1,330)
Provisions charge during the period	1,034	470	1,504
Provisions at the end of period	**1,014**	**797**	**1,811**

Type of business	31 December 2008 **General provision**	 **Specific provision**	 **Total**
		(in million Baht)	
Provisions at the beginning of period	1,429	674	2,103
Bad debts written-off during the period	(1,321)	(339)	(1,660)
Provisions charge during the period	1,136	58	1,194
Provisions at the end of period	**1,244**	**393**	**1,637**

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 as at 31 December 2009 and 2008

Type of assets	31 December 2009 **On-balance sheet**	 **Off-balance sheet**	 **Total**
		(in million Baht)	
Performing claims			
Claims on sovereigns and central banks, and MDBs	19,912	71,251	91,163
Claims on financial institutions, PSEs treated as claims on financial institutions, and securities firms	1,285	35,010	36,295
Claims on corporate, PSEs treated as claims on corporate	27,048	19,993	47,041
Claims on retail portfolios	11,198	4	11,202
Claims on housing loans	825	-	825
Other assets	27,804	-	27,804
Non-performing claims	639	133	772
Total	**88,711**	**126,391**	**215,102**

Type of assets	31 December 2008 **On-balance sheet**	 **Off-balance sheet**	 **Total**
		(in million Baht)	
Performing claims			
Claims on sovereigns and central banks, and MDBs	14,754	43,823	58,577
Claims on financial institutions, PSEs treated as claims on financial institutions, and securities firms	744	30,488	31,232
Claims on corporate, PSEs treated as claims on corporate	39,247	22,550	61,797
Claims on retail portfolios	13,480	36	13,516
Claims on housing loans	845	-	845
Other assets	43,568	-	43,568
Non-performing claims	583	68	651
Total	**113,221**	**96,965**	**210,186**

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 any exposure, risk systems identify the customer in question and look up in the central database the available rating, according to the BoT's rating selection rules as prescribed in the appendix 4 of the BoT's guideline on Minimum Capital Requirement for Credit Risk under the Standardised Approach. The system then applies 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 as at 31 December 2009 and 2008

31 December 2009

(in million Baht)

Type of assets	**Net exposures after recognised credit risk mitigation - Rated**					**Net exposures after recognised credit risk mitigation - Unrated**					
Risk weight	**0%**	**20%**	**50%**	**100%**	**150%**	**0%**	**20%**	**50%**	**35%**	**75%**	**100%**
Performing claims											
Claims on sovereigns and central banks, and MDBs	99,913	-	119	-	-			-			-
Claims on financial institutions, PSEs treated as claims on financial institutions, and securities firms	-	26,954	800	2,563	-						-
Claims on corporate, PSEs treated as claims on corporate	-	74	1,311	1,588	-						34,098
Claims on retail portfolios										-	11,108
Claims on housing loans									6	-	819
Other assets						33,223	537				943
Risk weight			**50%**	**100%**	**150%**					**75%**	
Non-performing claims			1	232	479					-	

31 December 2008

(in million Baht)

Type of assets	**Net exposures after recognised credit risk mitigation - Rated**					**Net exposures after recognised credit risk mitigation - Unrated**					
Risk weight	**0%**	**20%**	**50%**	**100%**	**150%**	**0%**	**20%**	**50%**	**35%**	**75%**	**100%**
Performing claims											
Claims on sovereigns and central banks, and MDBs	58,374	-	203	-	-			-			-
Claims on financial institutions, PSEs treated as claims on financial institutions, and securities firms	-	28,654	969	3,978	-						-
Claims on corporate, PSEs treated as claims on corporate	5	128	6,181	574	-						50,074
Claims on retail portfolios										-	13,510
Claims on housing loans									8	-	837
Other assets						43,091	284				1,251
Risk weight			**50%**	**100%**	**150%**					**75%**	
Non-performing claims			68	25	500					-	

Remark:

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

Credit risk mitigation

The Bank's 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. There is no material concentration of credit risk mitigation held.

The Bank's 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, and 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. In residential and commercial real estate businesses, a mortgage over the property is usually taken to help secure claims. In the commercial and industrial sectors, charges are created over business assets 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 issues 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 its securities financing business (securities lending and borrowing or repos and reverse repos). Netting is extensively used and is a prominent feature of market standard documentation.

HSBC's Global Banking and Markets business utilises credit risk mitigation to actively 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, structured credit notes and securitisation structures. Buying credit protection creates credit exposure against the protection provider.

Settlement risk arises in any situation where a payment in cash, securities or equities is made in the expectation of a corresponding receipt of cash, securities or equities. Daily settlement limits are established to cover the aggregate of HSBC's transactions with a counterparty on any single day. Settlement risk on many transactions can be further substantially mitigated by settling through assured payment systems or on a delivery-versus-payment basis.

Policies and procedures govern the protection of the Group's 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.

The valuation of credit risk mitigants seeks to monitor and ensure that they will continue to provide the secure repayment source anticipated at the time they were taken. Where collateral is subject to high volatility, valuation is frequent; where stable, less so. Trading businesses typically carry out daily valuations. In residential mortgage business, on the other hand, Group policy prescribes valuation at intervals of up to three years, or more frequently as the need may arise, at the discretion of the business line, by a variety of methods ranging from use of market indices to individual professional inspection.

For banking book exposures subject to the standardised approach – covered by eligible guarantee, non-financial collateral, or credit derivatives – the exposure is divided into covered and uncovered portions. The covered portion 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 risk adjustment

HSBC incorporates counterparty creditworthiness in the fair value of OTC derivative transactions through adoption of a credit risk adjustment. The adjustment aims to calculate at each HSBC legal entity level some calibration, according to a set of formulae, of 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. The scenario analyses used to generate the exposure profiles are consistent with the analysis tools and methodological approach used to generate the exposure profiles used by the Group's risk functions for exposure management purposes or, where applicable, as the basis for portfolios where exposures are calculated under the internal model method ('IMM').

Collateral arrangements

To calculate a counterparty's net risk position, for counterparty credit risk, HSBC revalues all financial instruments and associated collateral positions on a daily basis. A dedicated Collateral Management function independently monitors counterparties' associated collateral positions and manages a process which ensures that calls for collateral top-ups or exposure reductions are made promptly. Processes exist for the resolution of situations where the level of collateral is disputed or the collateral sought is not received.

Eligible collateral types are documented by a Credit Support Annex ('CSA') of the International Swaps and Derivatives Association ('ISDA') Master Agreement and 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 as at 31 December 2009 and 2008

	31 December 2009		**31 December 2008**	
Type of assets	**Eligible financial collateral**	**Guarantee and credit derivatives**	**Eligible financial collateral**	**Guarantee and credit derivatives**
	(in million Baht)			
Performing claims				
Claims on sovereigns and central banks, and MDBs	-	-	-	-
Claims on financial institutions, PSEs treated as claims on financial institutions, and securities firms	9,332	-	1,470	-
Claims on corporate, PSEs treated as claims on corporate	6,707	3,303	1,052	3,947
Claims on retail portfolios	61	33	6	-
Claims on housing loans	-	-	-	-
Other assets	-	-	-	-
Non-performing claims	1	59	1	56
Total	**16,101**	**3,395**	**2,529**	**4,003**

Market risk

The objective of the Bank's market risk management 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 Bank separates exposures to market risk into trading and non-trading portfolios. Trading portfolios include those positions arising from market-making, position-taking and other marked-to-market positions so designated.

Non-trading portfolios include positions that arise from the interest rate management of the Bank's retail and commercial banking assets and liabilities, financial investments designated as available-for-sale and held-to-maturity.

The management of market risk is principally undertaken in Global Markets using risk limits approved by the Regional Market Risk department. Limits are set for portfolios, products and risk types, with market liquidity being a principal factor in determining the level of limits set. Group Risk, an independent unit within the Group Management Office, develops the Group's 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 Group Risk, and monitoring and reporting these exposures against the prescribed limits on a daily basis.

Each operating entity is required to assess the market risks which arise 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 that could occur on risk positions as a result of movement in market rates and prices over a specified time horizon and to a given level of confidence.

The VaR models used by the Bank are based on historical simulation. These models derive plausible future scenarios from past series of recorded market rates and prices, taking account of inter-relationships between different markets and rates such as interest rates and foreign exchange rates. The models also incorporate the effect of option features on the underlying exposures.

The historical simulation models used by the Bank incorporate the following feature:

- 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 rates and commodity prices, interest rates, equity prices and the associated volatilities; and
- VaR is calculated to a 99 percent confidence level and for 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.

The Bank validates the accuracy of its VaR models 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 bask-testing is performed by TAD on a daily basis. Statistically, the Bank would expect to see losses in excess of VaR only 1 percent of the time over a one-year period. The actual number of excesses over this period can therefore, be used to gauge how well the models are 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 one-day holding period assumes that all positions can be liquidated or the risk offset in one day. This may not fully reflect the market risk arising at times of severe illiquidity, when a one-day 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 significant market moves.

Stress testing

In recognition of the limitation of VaR, the Bank augments it with stress testing to evaluate the potential impact on portfolio values of more extreme, although plausible, events or movements in a set of financial variables.

The process is governed by the Stress Testing Review Group forum. This coordinates the Group's stress testing scenarios in conjunction with regional risk managers, considering actual market risk exposures and market events in determining the scenarios to be applied at portfolio and consolidated levels, as follows:

- sensitivity scenarios, which consider the impact of any single risk factor or set of factors that are unlikely to be captured within the VaR models, such as the break of a currency peg;
- technical scenarios, which consider the largest move in each risk factor, without consideration of any underlying market correlation;
- hypothetical scenarios, which consider potential macro economic events, for example, a global flu pandemic; and
- historical scenarios, which incorporate historical observations of market movements during previous periods of stress which would not be captured within VaR.

Stress testing results provide senior management with an assessment of the financial impact such events would have on the Bank's profit. The daily losses experienced during 2009 were within the stress loss scenarios reported to senior management.

In addition to Group's stress testing scenarios, the Bank 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 between the future yield on assets and their funding cost, 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.

HSBC aims, through its management of interest rate risk, to mitigate the effect of prospective interest rate movements which could reduce its net income, balanced against the cost of associated hedging activities. Interest rate risk arising within the trading 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.

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, HSBC controls 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 VaR and stress testing, HSBC manages 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 : Minimum capital requirements for each type of market risk under the Standardised Approach as at 31 December 2009 and 30 June 2009

Minimum capital requirements for market risk under the Standardised Approach	31 December 2009	30 June 2009
	(in million Baht)	
Specific Interest Rate Risk	-	-
Total Minimum Capital Requirements	-	-

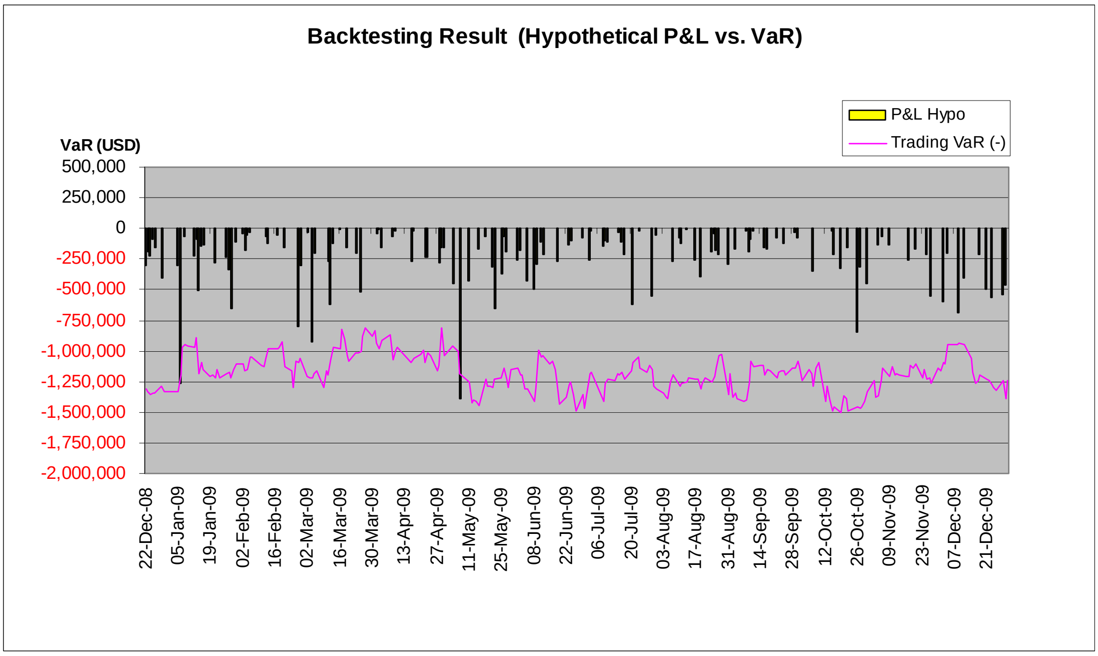
Remark:

- *The Bank has got the approval from the Bank of Thailand to apply a combined approach for market risk. Standardised approach is applied for specific interest rate risk and internal model is applied for interest rate risk and foreign exchange rate risk.*

Table 15 : Market risk information by Internal Model Approach as at 31 December 2009 and 30 June 2009

Type of market risk	31 December 2009	30 June 2009
	(in million Baht)	
Interest Rate Risk		
Maximum VaR during the reporting period	150	160
Average VaR during the reporting period	129	123
Minimum VaR during the reporting period	97	78
VaR during at the end of the period	123	153
Foreign Exchange Rate Risk		
Maximum VaR during the reporting period	63	77
Average VaR during the reporting period	28	41
Minimum VaR during the reporting period	2	-
VaR during at the end of the period	44	61
Total Market Risk		
Maximum VaR during the reporting period	159	160
Average VaR during the reporting period	131	125
Minimum VaR during the reporting period	99	88
VaR during at the end of the period	131	158

Table 16 : Backtesting result (Hypothetical P&L vs. VaR)



Remark:

- *On 7 Jan 2009, the significant unfavorable upward shift of long term THB interest and also THB bond yield curve, by 15 -27 bps and 20-32 bps respectively, contributed to a larger loss than the IR Trading VaR estimation.*
- *On 11 May 2009, an increase in the cross currency swap rate, especially for the two years tenor, contributed to the large amount of loss to our position. In addition, the unfavorable upward shift of THB interest rate and bond yield curve also generated the significant loss. Consequently, our Total Trading loss was greater than the estimated loss from VaR.*

The number of exception presented above is in the acceptable range set by the Bank of Thailand, therefore, there is no further action or any additional charge imposed.

Interest rate risk in the banking book

Interest rate risk in non-trading portfolios arises principally from mismatches between the future yield on assets and their funding cost, 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. The prospective change in future net interest income from non-trading 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 non-trading portfolios is transferred to Global Banking and 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 assessed with respect to each local market in which the product is offered. Local Asset 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.

The Bank aims, through its management of interest rate risk, to mitigate the effect of prospective interest rate movements which could reduce its 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 non-trading 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.

Table 17: The effect of changes in interest rates to net interest income in the banking book at 31 December 2009 and 2008

	Effect to net income	
	2009	**2008**
Currency	*(in million Baht)*	
Baht	287	190
US Dollar	(134)	(5)
Euro	(5)	(3)
Others	(11)	(8)
Total effect of changes in interest rates to net interest income	**137**	**174**

Equity exposures in the banking book

At 31 December 2009, the Bank had equity investments in the banking book of Baht 218 million (2008: Baht 233 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 as at 31 December 2009 of Baht 18 million (2008: Baht 33 million) were recognised directly in a separate component of Head Office's equity.

Details of the Bank's accounting policy for available-for-sale equity investments are detailed on pages 11, of the *Annual financial statements and Audit report of Certified Public Accountant 2009*.

Table 18 : Equity exposures in the banking book as at 31 December 2009 and 2008

	2009	**2008**
	(in million Baht)	
Equity exposures		
Book value	200	200
Fair value	218	233
Unrealised gains on revaluation of available-for-sale equities	18	33
Minimum capital requirements for equity exposures on Standardised Approach	1	1

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 the Bank's 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 HSBC's operational risk management is to manage and control operational risk in a cost-effective manner within targeted levels of operational risk consistent with the Group's risk appetite, as defined by GMB.

Organisation and responsibilities
Operational risk management is primarily the responsibility of employees and business management. The Group Operational Risk function and the operational risk management framework assist business management with discharging this responsibility. Designated Operational Risk Co-ordinators work within key business units and have responsibility for ensuring that the operational risk management framework is effectively implemented in their assigned business units.

Measurement and monitoring
HSBC has codified its operational risk management framework in a high level standard, supplemented by detailed policies. The detailed policies explain HSBC's approach to identifying, assessing, monitoring and controlling operational risk and give guidance on mitigating action to be taken when weaknesses are identified.

HSBC's 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 operational risk management framework helps managers to fulfil these responsibilities by defining a standard risk and control assessment methodology and providing a tool for the systematic reporting of operational loss data.

Operational risk capital requirements are calculated under the Standardised Approach, as a percentage of the average of the last three financial years' gross income.

Operational risk assessment approach
Operational risk self assessments are performed by individual business units and functions. The risk assessment process is designed to support the management rather than total avoidance of risk. Each business and function carries out a risk identification and assessment process at least annually. Where risk is assessed as high, business management either proposes a cost-effective action plan to mitigate the risk or provide a rationale as to why the risk is acceptable at the current level.

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 the Bank from loss.

Recording
HSBC has established a centralised database ('the Group Operational Risk Database') to record the results of its operational risk management processes. Operational risk self-assessments as described above, comprising the identified risks, related scoring, action plans and proposed implementation dates, are inputted and maintained at business unit level in the Group Operational Risk Database. Business management and Operational Risk Business Co-ordinators monitor and follow up the progress of documented action plans.

Operational risk loss reporting
To ensure that operational risk losses can be monitored at a 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 Group Operational Risk Database and are reported to the Group Operational Risk function on a monthly basis.