### **Unaudited Supplementary Financial Information**

#### 1. 信貸、市場及操作風險監管資本

就信貸風險、市場風險及操作風險計算監管資本的基準已於 本財務報表附註4.4中描述。

由於自2013年1月1日及2013年6月30日起分別採納《2012年銀行業(資本)(修訂)規則》及《2013年銀行業(資本)(修訂)規則》,2013年的資本披露不應與2012年的資本披露作直接比較。

本補充財務資料乃根據《銀行業(資本)規則》及按金管局就 監管規定要求以綜合基準編製,當中包括本銀行及其指定之 附屬公司。不納入按監管要求計算資本比率的綜合基礎內之 附屬公司載於本財務報表附註4.4(A)。

下表概述於該綜合基礎上計算之信貸、市場及操作風險監管資本。

#### 1. REGULATORY CAPITAL CHARGE FOR CREDIT, MARKET AND OPERATIONAL RISKS

The bases of regulatory capital calculation for credit risk, market risk and operational risk are described in Note 4.4 to the Financial Statements.

As a result of the adoption of Banking (Capital) (Amendment) Rules 2012 and Banking (Capital) (Amendment) Rules 2013 since 1 January 2013 and 30 June 2013 respectively, the capital disclosure for 2013 are not directly comparable to those 2012.

The financial information contained in these supplementary notes has been prepared on a consolidated basis that comprises the positions of the Bank and certain subsidiaries specified by the HKMA for its regulatory purposes and in accordance with the Banking (Capital) Rules. Subsidiaries that are not included in the consolidation for regulatory purposes in respect of calculation of capital ratios are set out in Note 4.4(A) to the Financial Statements.

The table below summarises the regulatory capital computed on the same consolidation basis for credit, market, and operational risks.

	2013 港幣千元 HK\$'000	2012 港幣千元 HK\$′000
信貸風險 Credit risk	13,485,328	11,494,335
市場風險 Market risk	77,209	53,509
操作風險 Operational risk	775,167	658,454
	14,337,704	12,206,298

有關本集團之資本管理及資本比率詳情,請見本財務報表附 註4.4。 For details of capital management and capital ratios of the Group, please refer to Note 4.4 to the Financial Statements.

## **Unaudited Supplementary Financial Information**

#### 2. 信貸風險資本規定

下表列示《銀行業(資本)規則》就各類別和子類別的信貸風險承擔的資本規定。

## 2. CAPITAL REQUIREMENTS FOR CREDIT RISK

The tables below show the capital requirements for each class and subclass of credit risk exposures as specified in the Banking (Capital) Rules.

		港幣千元 HK\$'000
內部評級基準計算法下的風險承擔所需資本	Capital required for exposures under the IRB approach	
企業	Corporate	
監管分類準則計算法下的專門性借貸	Specialised lending under supervisory slotting criteria approach	
<ul><li>項目融資</li></ul>	– Project finance	76,474
中小企業	Small-and-medium sized corporate	1,201,437
其他企業	Other corporates	6,853,958
銀行	Bank	2,222,222
銀行	Banks	3,294,819
證券公司	Securities firms	674
零售	Retail	0,4
住宅按揭貸款	Residential mortgages	
— 個人	– Individuals	56,135
- 空殼公司	Property-holding shell companies	5,347
合資格循環零售	Qualifying revolving retail	3,347
零售小企業	Small business retail	22,470
其他個人零售		
其他,	Other retail to individuals Others	166,376
現金項目	o theis	
其他項目	Cash items	-
	Other items	706,400
信貸估值調整	Credit valuation adjustment	8,245
內部評級基準計算法下的風險承擔所需資本規定總額	Total capital requirements for exposures under the IRB approach	12,392,335
標準(信貸風險)計算法下的風險承擔	Capital required for exposures under the standardised	
所需資本	(credit risk) approach	
資產負債表內風險承擔	On-balance sheet exposures	
官方實體	Sovereigns	8,208
公營單位	Public sector entities	4,500
多邊發展銀行	Multilateral development banks	-
銀行	Banks	2,398
證券公司	Securities firms	-
企業	Corporate	539,825
監管零售	Regulatory retail	105,337
住宅按揭貸款	Residential mortgage loans	341,461
不屬逾期風險承擔的其他風險承擔	Other exposures which are not past due	55,176
逾期風險承擔	Past due exposures	2,816
	'	
資產負債表外風險承擔	Off-balance sheet exposures	
除證券融資交易及衍生工具 合約外的資產負債表外風險承擔	Off-balance sheet exposures other than securities financing	
	transactions and derivative contracts	31,404
證券融資交易及衍生工具合約	Securities financing transactions and derivative contracts	1,868
標準(信貸風險)計算法下的風險承擔 所需資本規定總額	Total capital requirements for exposures under the	4 000 555
	standardised (credit risk) approach	1,092,993
信貸風險承擔所需資本規定總額	Total capital requirements for credit risk exposures	13,485,328

## **Unaudited Supplementary Financial Information**

#### 信貸風險資本規定(續) 2.

#### CAPITAL REQUIREMENTS FOR CREDIT RISK (Cont'd) 2.

2012 港幣千元 HK\$'000

	HK\$.000
Capital required for exposures under the IRB approach	
Corporate	
Specialised lending under supervisory slotting criteria approach	
– Project finance	114,846
Small-and-medium sized corporate	997,910
Other corporates	6,849,776
Bank	
Banks	1,867,574
Securities firms	-
Retail	
Residential mortgages	
– Individuals	42,467
<ul> <li>Property-holding shell companies</li> </ul>	5,190
Qualifying revolving retail	-
Small business retail	29,100
Other retail to individuals	84,296
Others	,
Cash items	-
Other items	628,756
Total capital requirements for exposures under the IRB approach	10,619,915
Capital required for exposures under the standardised	
(credit risk) approach	
On-balance sheet exposures	
Sovereigns	30,366
Public sector entities	4,958
Multilateral development banks	_
Banks	1,762
Securities firms	_
Corporate	536,152
	27,531
- · · · · · · · · · · · · · · · · · · ·	230,177
5 5	17,759
	1,611
·	1,011
transactions and credit derivative contracts	23,478
OTC derivative transactions	626
Total capital requirements for exposures under the	
iotal capital requirements for exposures under the	
standardised (credit risk) approach	874,420
	Corporate Specialised lending under supervisory slotting criteria approach Project finance Small-and-medium sized corporate Other corporates Bank Banks Securities firms Retail Residential mortgages Individuals Property-holding shell companies Qualifying revolving retail Small business retail Other retail to individuals Others Cash items Other items  Total capital requirements for exposures under the IRB approach Capital required for exposures under the standardised (credit risk) approach On-balance sheet exposures Sovereigns Public sector entities Multilateral development banks Banks Securities firms Corporate Regulatory retail Residential mortgage loans Other exposures which are not past due Past due exposures Off-balance sheet exposures Off-balance sheet exposures Off-balance sheet exposures Off-balance sheet exposures

### **Unaudited Supplementary Financial Information**

#### 3. 內部評級基準計算法下的信貸風險

#### 3.1 內部評級系統及風險組成部份

為計算監管資本規定,本集團對大部份企業和銀行的風險承擔使用基礎內部評級基準計算法,對專門性借貸的項目融資使用監管分類準則計算法,對個人和小企業的零售風險承擔使用零售內部評級基準計算法。下表列出本集團各資產分類及子分類之風險承擔(除證券化風險承擔外)所採用的資本計算方法。

## 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH

## 3.1 The internal rating systems and risk components

The Group adopts the FIRB approach to calculate the regulatory capital requirements for most of the corporate and bank exposures, and adopts the supervisory slotting criteria approach to project finance exposures under "specialised lending". The Group adopts retail IRB approach for retail exposures to individuals and small business. The following is the table showing the Group's different capital calculation approaches to each asset class and sub-classes of exposures (other than securitisation exposures).

資產分類	子分類風險承擔	資本計算方法
Asset class	Exposure sub-class	Capital calculation approach
企業風險承擔	監管分類準則計算法下的專門性借貸(項目融資)	監管分類準則計算法
Corporate exposures	Specialised lending under supervisory slotting criteria	Supervisory Slotting Criteria Approach
	approach (project finance)	
	中小企業	基礎內部評級基準計算法
	Small-and-medium sized corporates	FIRB Approach
	其他企業	
	Other corporates	
官方實體風險承擔	官方實體	標準(信貸風險)計算法 (STC Approach)
Sovereign exposures	Sovereigns	Standardised (credit risk) Approach
	屬官方實體非本地公營單位	
	Sovereign foreign public sector entities	
	多邊發展銀行	
	Multilateral development banks	
銀行風險承擔	銀行	基礎內部評級基準計算法
Bank exposures	Banks	FIRB Approach
	證券公司	
	Securities firms	
	公營單位(不包括屬官方實體非本地公營單位)	標準(信貸風險)計算法(STC Approach)
	Public sector entities (excluding sovereign foreign public	Standardised (credit risk) Approach
	sector entities)	
零售風險承擔	個人住宅按揭貸款	零售內部評級基準計算法
Retail exposures	Residential mortgages to individuals	Retail IRB Approach
	空殼公司住宅按揭貸款	
	Residential mortgages to property-holding shell companies	
	合資格循環零售	
	Qualifying revolving retail	
	零售小企業	
	Small business retail	
	其他個人零售	
	Other retail to individuals	
股權風險承擔		標準(信貸風險)計算法 (STC Approach)
Equity exposures		Standardised (credit risk) Approach
其他風險承擔	現金項目	特定風險權重計算法
Other exposures	Cash items	Specific Risk-weight Approach
	其他項目	
	Other items	

### **Unaudited Supplementary Financial Information**

- 3. 內部評級基準計算法下的信貸風險(續)
- 3.1 內部評級系統及風險組成部份(續)
- (A) 內部評級系統結構及內部評級與外部評級對應關係

本集團使用的內部評級系統是一個兩維評級系統,分別提供 借款人及交易特性的評估。於企業和銀行組合中,債務人評 級維度反映借款人的違約風險,授信評級維度反映債務人一 旦違約時影響損失嚴重程度的特定交易因素。

本集團開發了統計模型以自行估算企業、銀行和零售債務人的違約概率(PD),以及使用零售內部評級基準計算法下零售風險承擔的違約損失率(LGD)和違約風險承擔(EAD)。

本集團使用內部評級系統評估所有內部評級基準計算法下借款人的違約可能性。違約概率估算借款人一年期內的違約風險。借款人信貸評級反映在特定的具體評級標準下對某些信貸能力相似的借款人的分類,從而推算出違約概率平均值以計算風險加權資產。

在確定債務人評級的過程中,會對每個債務人最新的財務表現的變數、管理層質素、行業風險、關聯集團和預警性負面因素影響進行評估,並據此作為關鍵因素以預測在不同經濟條件下履行其合約責任的能力和意願。

企業和銀行債務人及零售違約概率組別分為8個債務人評級,包括7個非違約債務人級別且細分至26個信貸級別和1個違約級別。而根據金管局指引規定,使用監管分類準則計算法的項目融資風險承擔,分為4個非違約級別和1個違約級別。對於零售內部評級基準計算法組合的分組估算,按債務人性質、授信類型、抵押品種類和逾期狀況分為不同違約概率、違約風險承擔和違約損失率組別。分組過程為個人住宅按揭貸款和空殼公司住宅按揭貸款、合資格循環零售風險承擔、其他個人零售風險承擔和零售小企業風險承擔的違約概率、違約損失率和違約風險承擔準確及一致的估算奠定了都需。根據金管局指引規定,所有企業和銀行的信貸交易都需訂立授信評級(按照違約損失率程度)。違約損失率與違約概率相乘產出預期損失(EL),用以對信貸風險進行量化評估。

- 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)
- 3.1 The internal rating systems and risk components (Cont'd)
- (A) The structure of internal rating systems and the relationship between internal ratings and external ratings

The Group's internal rating system is a two dimensional rating system that provides separate assessment of borrower and transaction characteristics. For corporate and bank portfolios, the obligor rating dimension reflects exclusively the risk of borrower default and the facility rating dimension reflects transaction specific factors that affect the loss severity in the case of borrower default.

The Group uses statistical models to provide own estimated probability of default ("PD") for its corporate, bank and retail borrowers, and loss given default ("LGD") and exposure at default ("EAD") for retail exposures under retail IRB approach.

The Group uses internal rating system to assess the borrower's likelihood of default for all IRB portfolios. PD estimates the risk of borrower default over a one-year period. A borrower credit grade means a grouping of similar credit-worthiness to which borrowers are assigned on the basis of specified and distinct set of rating criteria, from which the average PD are derived for RWA calculation.

In the process of obligor rating assignment, variables of latest financial performance, management quality, industry risks, group connection and negative warning signals of each obligor are assessed as critical factors to predict borrower's ability and willingness to meet with the contractual obligations under different economic conditions.

The obligors for corporate and bank, and retail PD pools are assigned into eight broad obligor ratings including seven grades for non-defaulted obligors with sub-divisions into 26 minor credit grades and one for defaulted obligors. In the supervisory slotting criteria approach for the project finance exposures, there are four grades for non-defaulted borrowers and one for defaulted borrowers in accordance with the HKMA guidance. The estimates for retail IRB portfolios are pooled by nature of obligors, facility types, collateral types and delinquency status into different PD, EAD and LGD pools. This pooling process provides the basis of accurate and consistent estimation for PD, LGD and EAD at the pool level for exposures arising from residential mortgages to both individuals and property-holding shell companies, qualifying revolving retail exposures and other retail exposures to individuals and small business retail exposures. All credit transactions for corporates and banks are assigned facility ratings (in terms of LGD) in accordance with the HKMA guidance. LGD estimates multiplied by the PD estimates produce the expected loss ("EL") estimates, which are used to assess credit risk quantitatively.

## **Unaudited Supplementary Financial Information**

- 內部評級基準計算法下的信貸風險(續) 3.
- 3.1 內部評級系統及風險組成部份(續)
- (A) 內部評級系統結構及內部評級與外部評級對應關係

每個內部評級按違約風險程度和外部評級對應如下:

- 3. **CREDIT RISK UNDER THE INTERNAL** RATINGS-BASED APPROACH (Cont'd)
- 3.1 The internal rating systems and risk components (Cont'd)
- The structure of internal rating systems and (A) the relationship between internal ratings and external ratings (Cont'd)

For each internal rating, the equivalent external rating in terms of default risk is as below:

內部信貸 評級級別 Internal Credit Grades	內部評級定義	Definition of Internal Ratings	對應標準 普爾評級 Standard & Poor's Equivalent
1	債務人級別「1」和「2」表示極低的違約風險。	The obligors in grades "1" and "2" have extremely low default risk.	AAA
2	債務人履行債務責任的能力非常強。	The obligor's capacity to meet its financial commitment on the obligation is extremely strong.	AA+
		obligation is externely strong.	AA
			AA-
3	情務人級別「3」表示低違約風險,但在一定程度上有 五代系不利之根標準和經濟條件影響。展行情激素在	The obligors in grade "3" have low default risk but are somewhat	A+
	可能受不利市場環境和經濟條件影響,履行債務責任的能力尚強。	susceptible to the adverse effects of changes in circumstances and economic conditions. However, the obligor's capacity to meet its	А
	33-11321	financial commitment on the obligation is very strong.	A-
4	債務人級別「4」表示相對較低的違約風險且現在仍有 足夠保障,但可能受不利經濟條件或環境變化影響而		
	削弱其履行債務責任的能力。		
5	債務人級別「5」表示中度違約風險,相對其他投機級別債務人較少出現脱期還款。	The obligors in grade "5" have medium default risk which are less vulnerable to nonpayment than other speculative obligors.	BB+
	   但面對重大、持續不確定性或不利業務、財務、經濟	However, they face major ongoing uncertainties or exposure to adverse	ВВ
	條件影響時,可能導致債務人償還能力不足以履行債 務責任。	business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.	BB-
6	債務人級別「6」表示顯著至很高違約風險及容易出現	The obligors in grade "6" have significant to very high default risk and	B+
	脱期還款。	are vulnerable to nonpayment.	В
	債務人目前至短期內尚有能力履行償債責任,但不利的業務、財務或經濟條件變化將極可能導致無力或不 願履行債務責任。	The obligors currently and in the near term have the capacity to meet its financial commitment on the obligation but adverse business, financial, or economic conditions will very likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.	В-
7	債務人級別「7」表示極高違約風險且目前相當容易出 現脱期還款:債務人能否履行債務責任,取決於是否	The obligors in grade "7" have very high default risk and are currently quite vulnerable to nonpayment. The obligors' ability to meet their	CCC
	有有利的業務、財務或經濟條件配合:一旦這些條件 發生不利變化,即很可能無法履行債務責任。	financial commitment and obligation are dependent upon favorable business, financial, and economic conditions. In the event of adverse	СС
business, financial, or economic conditions, these		business, financial, or economic conditions, these obligors are not likely to have the capacity to meet its financial commitment on the obligation.	С
8	債務人級別「8」表示還款違約。	Obligors rated "8" are in payment default.	D

### **Unaudited Supplementary Financial Information**

#### 3. 內部評級基準計算法下的信貸風險(續)

#### 3.1 內部評級系統及風險組成部份(續)

#### (B) 內部估算值的用途

本集團除使用違約概率估算值於計算企業及銀行風險承擔的 監管資本外,為加強日常所有信貸業務的管理,集團採用違 約概率、違約損失率及違約風險承擔的估算結果,應用於信 貸審批、信貸監控、信貸風險報告及分析等。

#### (C) 信貸風險緩釋工具之管理及確認程序

對於資本管理項下認可的抵押品,本集團在抵押品評估和管理上已制定明確的政策和程序,並符合《銀行業(資本)規則》對信貸風險緩釋認可抵押品的操作要求。

對於採用基礎內部評級基準計算法計算資本的信貸風險承擔,其認可擔保包括由風險權重較交易對手低的銀行、企業以及證券公司所提供的擔保。本集團在考慮認可抵押品的信貸風險緩釋作用後,確定淨信貸風險承擔和有效的違約損失率。

對於零售內部評級基準計算法計算的信貸風險承擔,信貸風險緩釋的作用按擔保和抵押品性質包含在違約概率或違約損失率的內部風險參數之中。

本集團所用信貸風險緩釋工具(用作資本計算的認可抵押品和認可擔保)的信貸風險集中性和市場風險集中性處於低水平。

截至報告日,在計算資本時,本集團並無使用任何認可信貸 衍生工具合約或表內、表外認可淨額計算作為信貸風險緩釋 工具。

## 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)

## 3.1 The internal rating systems and risk components (Cont'd)

#### (B) Use of internal estimates

Besides using PD estimates for regulatory capital calculation in corporate and bank exposures, the Group uses the PD together with the LGD and EAD estimates in the credit approval, credit monitoring, reporting and analysis of credit risk information, etc., for the purpose of strengthening the daily management on all credit related matters.

## (C) Process of managing and recognising credit risk mitigation

For those collaterals recognised under capital management, the Group has well-defined policies and procedures for collateral valuation and management which are compliant with the operational requirements for recognised collateral of credit risk mitigation as stated in the Banking (Capital) Rules.

For the credit exposures adopting FIRB approach for capital calculation purpose, the recognised eligible guarantees include the guarantees provided by banks, corporates and securities firms with a lower risk weights than the counterparty. The Group takes into account the credit risk mitigation effect of recognised collaterals through its determination of the net credit exposures and the effective LGD.

For retail IRB approach, the effect of the credit risk mitigation is incorporated into the internal risk parameters of PD or LGD depending on the nature of the guarantees and collaterals for calculating the risk exposures.

The credit and market risk concentrations within the credit risk mitigation (recognised collateral and guarantees for capital calculation) used by the Group are under a low level.

Up to the date of report, for capital calculation, the Group has not used any recognised credit derivative contracts, on- or off-balance sheet recognised netting for credit risk mitigation yet.

### **Unaudited Supplementary Financial Information**

- 3. 內部評級基準計算法下的信貸風險(續)
- 3.1 內部評級系統及風險組成部份(續)
- (D) 內部評級系統控制機制

本集團已建立了一套完善的控制機制,以確保評級系統(包括在日常業務流程使用風險組成部份以評估信貸風險)的完整性、準確性和一致性。

信貸管理委員會及董事會轄下的風險管理委員會審批所有內 部評級基準計算法的風險計量模型。

為使風險評級結果達到合理、準確的程度,本集團建立了獨立於營銷和市場推廣單位的評級審批程序。由於內部評級是信貸決策的重要因素,故已實施監控機制以確保評級的完整性、準確性和一致性。對於批發類(企業及銀行)信貸組合,內部評級結果通常由獨立於營銷和市場推廣的信貸審核人員負責審批。個別交易在金額小和信貸風險低的情況下,信貸評級則由銷售和市場推廣單位負責評級核定及批准,並由風險管理單位定期推行貸後檢查。

零售組合的評級確定和風險量化過程高度自動化。作為日常 信貸評估過程的組成部份,自動評級所需輸入數據的準確性 和完整性由獨立於業務拓展功能的單位負責核實。

根據本集團信貸風險政策,債務人評級至少每年進行重檢。 在債務人發生信貸事件的情況下,根據本集團信貸風險政 策,須立即進行評級重檢。

## 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)

- 3.1 The internal rating systems and risk components (Cont'd)
- (D) The control mechanisms used for internal rating systems

The Group has established a comprehensive control mechanism to ensure the integrity, accuracy and consistency of the rating systems including the processes for using the risk components in the day-to-day business to assess credit risk.

All of IRB risk models are approved by the Credit and Loans Management Committee and Risk Management Committee of the Board.

In order to achieve reasonably accurate risk ratings assignment, the Group has established a rating approval process which is independent of the sales and marketing units. Since internal rating is one of the key inputs to credit decision making, a control mechanism is put in place to ensure the integrity, accuracy and consistency of the rating assignment. For the wholesale (corporate and bank) credit portfolio, internal ratings are normally approved by credit officers who are functionally separated from the sales and marketing units. In some cases where the transactions are in small amount and of very low risk, the credit ratings can be assigned and approved by staff within the sales and marketing units, subject to periodic post-approval review of ratings by risk management unit.

The rating assignment and risk quantification process of retail portfolio are highly automated. As an integral part of the daily credit assessment process, the accuracy and completeness of data input for automatic rating assignment are verified by units independent from business development function.

The obligor rating is reviewed at least annually as required by the Group's credit risk policy. When credit events occur to the obligor, rating review is triggered promptly in accordance with the Group's credit risk policy.

### **Unaudited Supplementary Financial Information**

#### 3. 內部評級基準計算法下的信貸風險(續)

#### 3.1 內部評級系統及風險組成部份(續)

#### (D) 內部評級系統控制機制(續)

本集團設定了評級推翻程序,允許信貸分析員考慮評級模型中未能包括的其他相關信貸信息,但從保守及謹慎原則出發,通過評級推翻程序調低債務人評級的幅度不設下限,但調升評級的幅度則有限制,最多不超過2個子級別,且調升理據須限制在事先設定的適當理由清單之內。所有推翻評級需由更高一級的信貸審批授權人簽認。內部評級政策設定評級推翻觸動點為評級個案的10%。評級推翻的使用和推翻原因的分析作為檢查內部評級模型表現的一部份。

本集團對內部評級系統的表現進行持續定期監察。管理層定期審查內部評級系統的表現及預測能力。內部評級系統及程序的有效性由獨立管控單位負責。模型維護單位對內部評級系統的識別能力、準確性及穩定性進行評估,而模型驗證單位對內部評級系統作全面檢查。內部審計對內部評級系統和相關的信貸風險管控部門的運作進行檢討,檢查結果定期向董事會和管理層匯報。

模型驗證團隊獨立於模型開發單位和評級單位,定期利用定性和定量分析進行模型驗證。並制定了模型驗收標準以確保評級系統的識別能力、準確性和穩定性符合監管及管理要求。如模型的表現能力大幅下降至超出預設容忍限度,則會啓動評級模型重檢。

#### (E) 減值準備方法

減值準備方法與本集團會計政策一致,詳情請見本財務報表 附註2.14「金融資產減值」。

## 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)

## 3.1 The internal rating systems and risk components (Cont'd)

## (D) The control mechanisms used for internal rating systems (Cont'd)

Rating override is designed to allow the credit analyst to include any other relevant credit information that has not yet been captured in the rating models. For reasons of conservatism and prudential considerations, overrides are unlimited in terms of downgrades but more restricted for upgrades. All upgrades will be limited to a maximum of two sub-grades supported by a very narrowly pre-defined list of appropriate reasons. All overrides need to be signed off by a higher level of credit approval authority. The internal rating policy sets a trigger point of 10% overrides on rating cases. The use of overrides and override reasons are analysed as part of performance review on IRB rating models.

The performance of internal rating system is put under ongoing periodic monitoring. The Management periodically reviews the performance and predictive ability of the internal rating system. The effectiveness of the internal rating system and processes are reviewed by independent control functions. The model maintenance unit conducts assessment on the discriminatory power, accuracy and stability of the rating systems while the validation unit performs comprehensive review of the internal rating system. Internal audit reviews the internal rating system and the operations of the related credit risk control units. The results of the review are reported to the Board and the Management regularly.

A model validation team which is independent from the model development unit and rating assignment units, conducts periodic model validations using both qualitative and quantitative analysis. Model acceptance standards are established to ensure the discriminatory power, accuracy and stability of the rating systems meet regulatory and management requirements. Review of a rating model will be triggered if the performance of the model deteriorates materially against pre-determined tolerance limits.

#### (E) Approach for determining provisions

The approach in determining provisions is in line with the Group's accounting policies. For details, please refer to Note 2.14 "Impairment of financial assets" to the Financial Statements.

## **Unaudited Supplementary Financial Information**

#### 3. 內部評級基準計算法下的信貸風險(續)

#### 3.2 內部評級基準計算法下的風險承擔

下表列示本集團除證券化風險承擔外採用各種內部評級基準計算法計算的風險承擔(包括資產負債表內及資產負債表外的違約風險承擔):

## 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)

#### 3.2 Exposures by IRB calculation approach

The tables below show the Group's exposures other than securitisation exposures (including the EAD of on-balance sheet exposures and off-balance sheet exposures) by each IRB calculation approach.

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		基礎內部評級 基準計算法 Foundation IRB Approach 港幣千元 HK\$'000	監管分類 準則計算法 Supervisory Slotting Criteria Approach 港幣千元 HK\$'000	2013 零售內部評級 基準計算法 Retail IRB Approach 港幣千元 HK\$'000	特定風險 權重計算法 Specific Risk-weight Approach 港幣千元 HK\$'000	總風險承擔 Total exposures 港幣千元 HK\$'000
<del></del> 企業	Corporate	137,287,288	851,200	-	-	138,138,488
銀行	Bank	86,657,273	-	-	-	86,657,273
零售	Retail					
個人及空殼公司	Residential mortgages to individuals and			14 570 063		44 570 062
住宅按揭貸款 合資格循環零售	property-holding shell companies Qualifying revolving retail	_	_	11,570,062	_	11,570,062
其他個人零售及	Other retail to individuals and	_		_	_	_
零售小企業	small business retail	-	-	8,782,927	_	8,782,927
其他	Others	-	-	-	12,746,845	12,746,845
總計	Total	223,944,561	851,200	20,352,989	12,746,845	257,895,595
企業	Corporate	基礎內部評級 基準計算法 Foundation IRB Approach 港幣千元 HK\$'000	監管分類 準則計算法 Supervisory Slotting Criteria Approach 港幣千元 HK\$'000	2012 零售內部評級 基準計算法 Retail IRB Approach 港幣千元 HK\$'000	特定風險 權重計算法 Specific Risk-weight Approach 港幣千元 HK\$'000	總風險承擔 Total exposures 港幣千元 HK <b>\$</b> '000
銀行	Bank	72,331,164	1,390,972	_		72,331,164
零售	Retail	72,331,104				72,551,104
個人及空殼公司 住宅按揭貨零售 合資格循環零售 其他個人零售小企業 其他	Residential mortgages to individuals and property-holding shell companies Qualifying revolving retail Other retail to individuals and small business retail Others	- - -	-	12,662,501 - 7,757,612 -	- - - 8,065,560	12,662,501 - 7,757,612 8,065,560
總計	Total	195,279,786	1,390,972	20,420,113	8,065,560	225,156,431

### **Unaudited Supplementary Financial Information**

#### 3. 內部評級基準計算法下的信貸風險(續)

#### 3.3 內部評級基準計算法下監管規定的估算風險承擔

下表列示本集團採用內部評級基準計算法下受監管規定估算的總違約風險承擔(包括監管分類準則計算法下的專門性借貸):

## 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)

## 3.3 Exposures subject to supervisory estimates under the IRB approach

The table below shows the total EAD of the Group's exposures subject to supervisory estimates under the use of IRB approach (including the specialised lending subject to the supervisory slotting criteria approach).

		2013 港幣千元 HK\$'000	2012 港幣千元 HK\$'000
 企業	Corporate	138,138,488	124,339,594
銀行	Bank	86,657,273	72,331,164
其他	Others	12,746,845	8,065,560
		237,542,606	204,736,318

#### 3.4 受信貸風險緩釋工具保障的風險承擔

#### (A) 受認可抵押保障的風險承擔

下表列示本集團按照《銀行業(資本)規則》的規定作出扣減 後受認可抵押保障的風險承擔(已計及任何資產負債表內或 資產負債表外認可淨額計算法的影響)。於2013年12月31日 的風險承擔不包括證券融資交易及衍生工具合約,而於2012 年12月31日的風險承擔則並不包括場外衍生工具交易及回購 形式交易。

## 3.4 Exposures covered by credit risk mitigation used

#### (A) Exposures covered by recognised collateral

The table below shows the Group's exposures (after the effect of any on-balance sheet or off-balance sheet recognised netting) which are covered by recognised collateral after the application of haircuts required under the Banking (Capital) Rules. The exposures as at 31 December 2013 exclude securities financing transactions and derivative contracts while those as at 31 December 2012 exclude OTC derivative transactions and repo-style transactions.

		2013 港幣千元 HK\$'000	2012 港幣千元 HK\$'000
企業銀行	Corporate Bank	28,007,658 452	25,658,272 10,290
其他	Others	28,008,110	25,668,562

### **Unaudited Supplementary Financial Information**

#### 3. 內部評級基準計算法下的信貸風險(續)

#### 3.4 受信貸風險緩釋工具保障的風險承擔(續)

#### (B) 受認可擔保保障的風險承擔

下表列示本集團按照《銀行業(資本)規則》的規定作出扣減後受認可擔保保障的風險承擔(已計及任何資產負債表內或資產負債表外認可淨額計算法的影響)。於2013年12月31日的風險承擔不包括證券融資交易及衍生工具合約,而於2012年12月31日的風險承擔則並不包括場外衍生工具交易及回購形式交易。

# 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)

## 3.4 Exposures covered by credit risk mitigation used (Cont'd)

#### (B) Exposures covered by recognised guarantees

The table below shows the Group's exposures (after the effect of any on-balance sheet or off-balance sheet recognised netting) which are covered by recognised guarantees after the application of haircuts required under the Banking (Capital) Rules. The exposures as at 31 December 2013 exclude securities financing transactions and derivative contracts while those as at 31 December 2012 exclude OTC derivative transactions and repo-style transactions.

		2013 港幣千元 HK\$'000	2012 港幣千元 HK\$'000
企業	Corporate	27,280,949	3,264,083
銀行	Bank	5,173,810	4,685,877
零售	Retail	_	-
其他	Others	-	-
		32,454,759	7,949,960

#### 3.5 內部評級基準計算法下企業及銀行風險承擔的 風險評估

下表列示本集團於12月31日各債務人等級的風險承擔加權平均風險權重及風險承擔加權平均違約概率之企業及銀行總違約風險承擔。

以下企業及銀行之違約風險承擔及違約概率已計及認可抵押、認可淨額計算及認可擔保的影響,而本集團並無認可信貸衍生工具合約。

有關各債務人等級的定義,請見第232頁。

## 3.5 Risk assessment for corporate and bank exposures under IRB approach

The tables below detail the Group's total EAD of corporate and bank exposures by exposure-weighted average risk-weight and exposure-weighted average PD for each obligor grade as at 31 December.

The EAD and PD disclosed below in respect of corporate and bank exposures have taken into account the effect of recognised collateral, recognised netting and recognised guarantees. The Group did not have recognised credit derivative contracts.

For definition of each obligor grade, please refer to page 232.

## **Unaudited Supplementary Financial Information**

- 3. 內部評級基準計算法下的信貸風險(續)
- 3.5 內部評級基準計算法下企業及銀行風險承擔的 風險評估(續)
- (A) 企業風險承擔(不包括採用監管分類準則計算法的專 門性借貸)
- 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)
- 3.5 Risk assessment for corporate and bank exposures under IRB approach (Cont'd)
- (A) Corporate exposures (other than specialised lending under supervisory slotting criteria approach)

		арргоаспу		
內部信貸級別	Internal Credit Grades	違約風險承擔 Exposure at default 港幣千元 HK\$'000	2013 風險承擔加權 平均風險權重 Exposure- weighted average risk-weight	風險承擔加權 平均違約概率 Exposure- weighted average PD
級別1 級別2 級別3 級別4 級別5 級別6 級別7 級別8/違約	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 6 Grade 7 Grade 8/Default	1,069,155 18,189,567 27,793,369 61,570,944 28,140,949 108,677 414,627	0.00% 18.47% 24.17% 44.33% 72.90% 115.44% 215.78% 113.42%	0.00% 0.03% 0.07% 0.24% 1.09% 4.50% 31.20% 100.00%
內部信貸級別	Internal Credit Grades	違約風險承擔 Exposure at default 港幣千元 HK\$'000	2012 風險承擔加權 平均風險權重 Exposure- weighted average risk-weight	風險承擔加權 平均違約概率 Exposure- weighted average PD %
級別1 級別2 級別3 級別4 級別5 級別6 級別7 級別8/違約	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 6 Grade 7 Grade 8/Default	1,416,071 14,550,465 20,724,203 55,925,400 29,612,068 398,911 321,504	0.00% 17.04% 23.33% 41.86% 76.95% 120.47% 231.94% 186.02%	0.00% 0.04% 0.07% 0.25% 1.16% 5.41% 18.05% 100.00%

240

### **Unaudited Supplementary Financial Information**

- 3. 內部評級基準計算法下的信貸風險(續)
- 3.5 內部評級基準計算法下企業及銀行風險承擔的 風險評估(續)
- (B) 企業風險承擔(採用監管分類準則計算法的專門性 借貸)
- 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)
- 3.5 Risk assessment for corporate and bank exposures under IRB approach (Cont'd)
- (B) Corporate exposures (specialised lending under supervisory slotting criteria approach)

		違約 風險承擔 Exposure	D13 風險承擔加權 平均風險權重 Exposure- weighted average	違約 風險承擔 Exposure	12 風險承擔加權 平均風險權重 Exposure- weighted average
監管評級級別	Supervisory Rating Grades	at default 港幣千元 HK\$'000	risk-weight %	at default 港幣千元 HK\$'000	risk-weight %
優 良 尚可 欠佳 違約	Strong Good Satisfactory Weak Default	171,262 - 679,938 - - - 851,200	70.00% 0.00% 115.00% 0.00% 0.00%	15,791 952,775 422,406 - - - 1,390,972	70.00% 90.00% 115.00% 0.00% 0.00%

專門性借貸的監管評級級別及風險權重乃根據《銀行業(資本)規則》第158條的規定而釐定。

The supervisory rating grades and risk-weights of specialised lending are determined in accordance with section 158 of the Banking (Capital) Rules.

#### (C) 銀行風險承擔

#### (C) Bank exposures

內部信貸級別	Internal Credit Grades	違約風險承擔 Exposure at default 港幣千元 HK\$'000	2013 風險承擔加權 平均風險權重 Exposure- weighted average risk-weight	風險承擔加權 平均違約概率 Exposure- weighted average PD
級別1	Grade 1	-	0.00%	0.00%
級別2	Grade 2	6,419,624	23.37%	0.04%
級別3	Grade 3	39,500,694	31.72%	0.07%
級別4	Grade 4	36,515,469	58.83%	0.24%
級別5	Grade 5	4,221,486	79.36%	0.68%
級別6	Grade 6	-	0.00%	0.00%
級別7	Grade 7	-	0.00%	0.00%
級別8/違約	Grade 8/Default	-	0.00%	0.00%
		86,657,273		

## **Unaudited Supplementary Financial Information**

- 3. 內部評級基準計算法下的信貸風險(續)
- 3.5 內部評級基準計算法下企業及銀行風險承擔的 風險評估(續)
- (C) 銀行風險承擔(續)

- 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)
- 3.5 Risk assessment for corporate and bank exposures under IRB approach (Cont'd)

2012

(C) Bank exposures (Cont'd)

			2012	
			風險承擔加權	
			平均風險權重	風險承擔加權
			Exposure-	平均違約概率
		違約風險承擔	weighted	Exposure-
		Exposure	average	weighted
內部信貸級別	Internal Credit Grades	at default	risk-weight	average PD
		港幣千元		
		HK\$'000	%	%
級別1	Grade 1	-	0.00%	0.00%
級別2	Grade 2	4,224,072	17.18%	0.04%
級別3	Grade 3	42,329,222	22.76%	0.06%
級別4	Grade 4	24,350,909	43.79%	0.22%
級別5	Grade 5	1,426,961	70.14%	0.52%
級別6	Grade 6	-	0.00%	0.00%
級別7	Grade 7	-	0.00%	0.00%
級別8/違約	Grade 8/Default		0.00%	0.00%
		72,331,164		

#### 3.6 內部評級基準計算法下零售風險承擔的風險評估

下表列示於12月31日按預期損失百分比組合的零售風險承擔:

## 3.6 Risk assessment for retail exposures under IRB approach

The tables below show breakdown of retail exposures on a pool basis by expected loss percentage (EL%) range as at 31 December.

住宅按揭	Residential mortgages	2013 港幣千元 HK\$'000	2012 港幣千元 HK\$'000
最多至1%	Up to 1%	11,506,539	12,620,692
>1%	>1%	59,100	32,586
違約	Default	4,423	9,223
		11,570,062	12,662,501

## **Unaudited Supplementary Financial Information**

- 3. 內部評級基準計算法下的信貸風險(續)
- 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)
- 3.6 內部評級基準計算法下零售風險承擔的風險評估 (續)
- 3.6 Risk assessment for retail exposures under IRB approach (Cont'd)

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合資格循環零售	Qualifying revolving retail	2013 港幣千元 HK\$′000	2012 港幣千元 HK\$′000
最多至10% >10% 違約	Up to 10% >10% Default	=	- - -
		-	_
其他零售	Other retail	<b>2013</b> 港幣千元 HK\$′000	2012 港幣千元 HK\$′000
最多至2% >2% 違約	Up to 2% >2% Default	6,038,363 111,983 2,274	4,750,375 10,370 2,662
		6,152,620	4,763,407
零售小企業	Small business retail	2013 港幣千元 HK\$′000	2012 港幣千元 HK\$'000
最多至1% >1% 違約	Up to 1% >1% Default	2,547,797 52,392 30,118	2,888,452 89,464 16,289
		2,630,307	2,994,205

### **Unaudited Supplementary Financial Information**

#### 3. 內部評級基準計算法下的信貸風險(續)

#### 3.7 實際損失及估算值的分析

下表按風險承擔類別列示實際損失。實際損失是指年內內部 評級基準計算法下各個風險承擔類別提撥的淨撥備(包括撇 銷及個別評估減值準備):

# 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)

#### 3.7 Analysis of actual loss and estimates

The table below shows the actual losses broken down by class of risk exposure, which represent the net charges (including write-offs and individually assessed impairment allowances) made by each class of exposures under the internal ratings-based approach for the year.

		2013 港幣千元 HK\$′000	2012 港幣千元 HK\$'000
	Corporate	195,492	138,901
銀行	Bank	-	-
個人及空殼公司住宅按揭貸款	Residential mortgages to individuals and		
	property-holding shell companies	1,166	4,865
其他個人零售	Other retail to individuals	698	1,053
零售小企業	Small business retail	13,260	7,125
		210,616	151,944

企業暴露貸款減值的增加,主要因數個企業客戶逾期而引致 降級。

下表按風險承擔類別列示預期損失。預期損失是指債務人就 有關風險承擔於一年期內可能因違約引致的估計損失。

Increase in the loan impairment charge of corporate exposures was mainly caused by loan overdue of a few corporate customers leading to loans downgraded.

The table below shows the expected loss broken down by class of risk exposure, which is the estimated loss likely to be incurred arising from the potential default of the obligors in respect of the exposure over a one-year period.

	2012年	2011年
	12月31日	12月31日
	預期損失	預期損失
	Expected loss	Expected loss
	at 31 December	at 31 December
	2012	2011
	港幣千元	港幣千元
	HK\$'000	HK\$'000
企業 Corporate	1,046,174	910,265
銀行 Bank	64,038	40,003
個人及空殼公司住宅按揭貸款 Residential mortgages to individuals and		
property-holding shell companies	6,249	5,162
其他個人零售 Other retail to individuals	25,832	10,987
零售小企業 Small business retail	19,598	5,604
	1,161,891	972,021

244

### 未經審核之補充財務資料

### **Unaudited Supplementary Financial Information**

#### 3. 內部評級基準計算法下的信貸風險(續)

#### 3.7 實際損失及估算值的分析(續)

下表是各組合的實際違約概率與估算違約概率的對比。

# 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)

## 3.7 Analysis of actual loss and estimates (Cont'd)

The tables below set out the actual default rate compared against the estimated PD of the respective portfolio.

		2013年間 實際違約率 Actual default rate during 2013 %	2012年 12月31日估 算違約概率 Estimated PD at 31 December 2012 %
企業 銀行 個人及空殼公司住宅按揭貸款	Corporate Bank Residential mortgages to individuals and	0.62% 0.00%	2.03% 0.19%
其他個人零售 零售小企業	property-holding shell companies Other retail to individuals Small business retail	0.02% 0.07% 1.44%	0.53% 0.73% 1.51%
		2012年間	2011年 12月31日
		實際違約率	估算違約概率
		Actual default	Estimated PD
		rate during 2012	at 31 December 2011
		%	%
	Corporate	0.90%	2.02%
銀行	Bank	0.00%	0.28%
個人及空殼公司住宅按揭貸款	Residential mortgages to individuals and property-holding shell companies	0.06%	0.69%
其他個人零售	Other retail to individuals	0.10%	0.69%
零售小企業	Small business retail	0.46%	1.30%

預期損失和實際損失採用不同的方法進行量度和計算,以符合相關的監管規定和會計準則,因此未必可作直接相比較。此限制主要源於對「損失」的定義的基本差異。預期損失在巴塞爾資本協定是測算債務人違約的潛在經濟損失,並已考慮金錢的時間值及包括催收過程中與收回信貸風險承擔相關的直接及間接成本:而實際損失是指於年度內根據會計準則按個別評估計算的減值準備淨撥備及核銷。

It should be noted that expected loss and actual loss are measured and calculated using different methodologies compliant with relevant regulatory and accounting standards, which therefore may not be directly comparable. The limitation arises mainly from the fundamental differences in the definition of "loss". The expected loss under Basel Accord which estimates the economic loss arising from the potential default of the obligor by taking into account the time value of money and including the direct and indirect costs associated with the recoveries on the credit exposures during the workout process, while actual loss is the net charge of individually assessed impairment allowances and write-offs made during the year in accordance with the accounting standards.

### **Unaudited Supplementary Financial Information**

#### 3. 內部評級基準計算法下的信貸風險(續)

#### 3.7 實際損失及估算值的分析(續)

實際違約率的量度是使用違約的債務人數目(批發風險承擔) 或賬戶數目(零售風險承擔);而估算違約率則是一個經濟週 期的長期平均違約率的估算,並從評級日預計一年期內的預 期違約概率。

因此,由於經濟情況圍繞週期性平均水平而上下波動,某年的(「特定時點」)實際違約率通常會不同於貫穿週期的估算違約概率。

各資產類別的估算違約概率較實際違約率保守。

#### 4. 標準(信貸風險)計算法下的信貸風險

#### 4.1 外部信貸評估機構(ECAI)評級的使用

本集團繼續採用標準(信貸風險)計算法並以外部信用評級 為依據,確定經金管局審批同意豁免使用基礎內部評級基準 計算法之小部份信貸風險承擔以及以下資產分類之風險承擔 的信貸風險權重:

- 一官方實體
- 公營單位
- 多邊發展銀行

本集團按《銀行業(資本)規則》第4部份規定的對應標準,使用外部信貸評估機構發行人評級對應銀行賬的風險承擔。 本集團認可外部信貸評估機構包括標準普爾、穆迪和惠譽。

#### 4.2 信貸風險緩釋

對於採用標準(信貸風險)計算法的信貸風險承擔,非逾期風險承擔的主要認可抵押品類型包括現金存款、債務證券及股票。此外,房地產可作為逾期信貸風險承擔的認可抵押品。本集團對認可押品的處理符合《銀行業(資本)規則》中綜合法計算信貸風險緩釋效應的要求。按標準(信貸風險)計算法計算信貸風險承擔資本要求時,認可擔保人包括由風險權重較交易對手低的官方實體、公營單位、多邊發展銀行或已被豁免使用基礎內部評級基準計算信貸風險承擔範圍內的銀行及具有外部信貸評估機構發行人評級的企業。

## 3. CREDIT RISK UNDER THE INTERNAL RATINGS-BASED APPROACH (Cont'd)

## 3.7 Analysis of actual loss and estimates (Cont'd)

The actual default rate is measured by using the number of obligors (for wholesale exposures) or number of accounts (for retail exposures) defaulted whereas the estimated probability of default is an estimate of the long run average default rate over an economic cycle and is the estimated one-year forward-looking PD from the date of rating assignment.

Hence, actual default rate in a particular year ("point-in-time") will typically differ from the estimated probability of default which is the "through-the-cycle" estimates as economies move above or below the cyclical norms.

The estimated probability of default is more conservative than the actual default rate for all asset classes.

# 4. CREDIT RISK UNDER THE STANDARDISED (CREDIT RISK) APPROACH

## 4.1 Use of ratings from External Credit Assessment Institutions ("ECAI")

The Group continues to adopt STC approach based on external credit rating to determine the risk weight of the small residual credit exposures that were approved by HKMA to be exempted from FIRB approach and the following asset classes of exposures:

- Sovereign
- Public sector entity
- Multilateral development bank

The Group performs the ECAI issuer ratings mapping to its exposures in banking book in accordance with Part 4 of the Banking (Capital) Rules. The ECAIs recognised by the Group include Standard & Poor's, Moody's and Fitch.

#### 4.2 Credit risk mitigation

For credit exposures adopting STC approach, the main types of recognised collaterals include cash deposits, debt securities and equities for non-past due exposures. In addition, real estate collateral is also recognised for past due exposures. The treatment of recognised collateral is compliant with the comprehensive approach for credit risk mitigation as mentioned in the Banking (Capital) Rules. For credit exposures under STC approach, the recognised guarantees for capital calculation include the guarantees given by sovereigns, public sector entities, multilateral development banks, or banks and those corporates with ECAI issuer ratings both exempted from FIRB approach for credit exposures, that have lower risk weights than the counterparty.

## **Unaudited Supplementary Financial Information**

- 4. 標準(信貸風險)計算法下的信貸風險
- **4.3** 除證券化風險承擔外標準(信貸風險)計算法下的信貸風險承擔
- 4. CREDIT RISK UNDER THE STANDARDISED (CREDIT RISK)
  APPROACH (Cont'd)
- 4.3 Credit risk exposure other than securitisation exposure under the standardised (credit risk) approach

		風險承擔總額	信貸風險緩 Exposures a	fter CRM*	2013 風險加 Risk-weight	ed amount	認可抵押品 涵蓋部份 Total exposures covered by	認可擔保或認可 信貸衍生工具 合約涵蓋部份 Total exposures covered by recognised guarantees or recognised credit
		Total Exposures	獲評級 Rated	不獲評級 Unrated	獲評級 Rated	不獲評級 Unrated	recognised collateral	derivative contracts
		港幣千元	港幣千元	港幣千元	港幣千元	港幣千元	港幣千元	港幣千元
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
資產負債表內風險承擔 官方實體	On-balance sheet exposures Sovereign	27,595,960	27,622,626	-	102,605	-	-	-
公營單位 多邊發展銀行	Public sector entity	664,230	638,986	-	56,253	-	-	26,667
夕燈贺辰	Multilateral development bank Bank	324,836 143,969	324,836 143,969	_	29,976	_	_	_
證券公司	Securities firm	-	-	_	-	_	_	_
企業	Corporate	6,757,537	116,331	6,631,485	116,331	6,631,485	9,721	-
現金項目	Cash item	599	-	599	-	-	-	-
監管零售	Regulatory retail	1,819,295	-	1,755,612	-	1,316,709	63,683	-
住宅按揭貸款	Residential mortgage loans	8,537,942	-	8,536,519	-	4,268,259	-	1,423
不屬逾期風險承擔的	Other exposures which are	COE 330		F00 764		500 705	405.040	
其他風險承擔 逾期風險承擔	not past due Past due exposures	695,770 33,467	-	589,761 33,467	-	689,706	106,010 30,000	-
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	205.455	35,200	<u> </u>	
資產負債表內風險承擔總額	Total for on-balance sheet exposures	46,573,605	28,846,748	17,547,443	305,165	12,941,359	209,414	28,090
資產負債表外風險承擔 除證券融資交易及 衍生工具合約外的	Off-balance sheet exposures Off-balance sheet exposures other than securities financing transactions							
資產負債表外風險承擔	and derivative contracts	625,438	429,175	196,264	224,736	167,817	-	5,171
證券融資交易及 衍生工具合約	Securities financing transactions and derivative contracts	20.620		20.620		22.250		
		29,638	420.475	29,639		23,350		
資產負債表外風險承擔總額	<u>'</u>	655,076	429,175	225,903	224,736	191,167	-	5,171
非證券化風險承擔總額	Total for non-securitisation exposures	47,228,681	29,275,923	17,773,346	529,901	13,132,526	209,414	33,261
1,250%風險權重的 風險承擔總額	Exposures that are risk-weighted at 1,250%	-						

## **Unaudited Supplementary Financial Information**

- 4. 標準(信貸風險)計算法下的信貸風險
- **4.3** 除證券化風險承擔外標準(信貸風險)計算法下的信貸風險承擔(續)
- 4. CREDIT RISK UNDER THE STANDARDISED (CREDIT RISK) APPROACH (Cont'd)
- 4.3 Credit risk exposure other than securitisation exposure under the standardised (credit risk) approach (Cont'd)

2012

		風險承擔總額	信貸風險緩 Exposures ai		風險加權 Risk-weighter		認可抵押品 涵蓋部份 Total exposures covered by	認可擔保或認可 信貸衍生工具 合約涵蓋部份 Total exposures covered by recognised guarantees or recognised credit
		Total	獲評級	不獲評級	獲評級	不獲評級	recognised	derivative
		Exposures	Rated	Unrated	Rated	Unrated	collateral	contracts
		港幣千元	港幣千元	港幣千元	港幣千元	港幣千元	港幣千元	港幣千元
		HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
資產負債表內風險承擔	On-balance sheet exposures							
官方實體	Sovereign	28,437,822	28,464,488	-	379,580	-	-	-
公營單位	Public sector entity	570,774	544,985	-	61,979	-	-	26,667
多邊發展銀行	Multilateral development bank	172,127	172,127	-	-	-	-	-
銀行	Bank	104,886	104,886	-	22,030	-	-	-
證券公司	Securities firm	-	-	-	-	-	-	-
企業	Corporate	7,134,247	869,193	6,250,606	451,275	6,250,606	14,447	-
監管零售	Regulatory retail	493,222	-	458,854	-	344,141	34,368	-
住宅按揭貸款	Residential mortgage loans	5,755,312	-	5,754,434	-	2,877,217	-	878
不屬逾期風險承擔的	Other exposures which are not past due							
其他風險承擔		398,876	-	221,989	-	221,989	176,888	-
逾期風險承擔	Past due exposures	18,419	-	18,419	-	20,132	14,993	
資產負債表內風險承擔總額	Total for on-balance sheet exposures	43,085,685	30,155,679	12,704,302	914,864	9,714,085	240,696	27,545
資產負債表外風險承擔 除場外衍生工具交易及 信貸衍生工具合約外的	Off-balance sheet exposures Off-balance sheet exposures other than OTC derivative transactions							
資產負債表外風險承擔	and credit derivative contracts	353,159	89,906	263,254	64,488	228,988	488,347	12,313
場外衍生工具交易	OTC derivative transactions	9,733	-	9,733	-	7,827	-	-
資產負債表外風險承擔總額	Total for off-balance sheet exposures	362,892	89,906	272,987	64,488	236,815	488,347	12,313
非證券化風險承擔總額	Total for non-securitisation exposures	43,448,577	30,245,585	12,977,289	979,352	9,950,900	729,043	39,858
從核心資本或附加資本 扣除的風險承擔總額	Exposures deducted from Core Capital or Supplementary Capital	53,473						

<sup>\*</sup> 認可信貸風險緩釋符合《銀行業(資本)規則》訂定的要求及條件。

Recognised credit risk mitigation satisfying the requirements and conditions set out in the Banking (Capital) Rules.

### **Unaudited Supplementary Financial Information**

#### 5. 交易對手信貸風險相關承擔

本集團在交易賬及銀行賬下來自衍生工具合約及證券融資交易之交易對手信貸風險的風險管理架構,與財務報表附註4所述一致。本集團通過一般信貸批核程序核定交易對手之信貸額度以控制衍生工具交易結算前風險,及結算額度以控制在交易賬及銀行賬下與外匯交易有關的結算風險。本集團採用現行風險承擔及潛在風險承擔方法監察因市場變動產生風險承擔。風險管理單位密切和及時地識別與監控任何例外及超額情況。

交易對手信貸風險承擔的信貸等值數額及資本要求按監管資本規定而決定。目前,本集團採用現行風險承擔方法計量相關信貸等值數額,包括現行風險承擔和潛在風險承擔。相關交易對手違約風險資本要求按基礎內部評級基準計算法/標準(信貸風險)計算法計算。另外,本集團採用標準信貸估值調整方法,計算相關交易對手信貸估值調整資本要求。

本集團已為證券融資交易下之抵押債務證券制定審慎的認可 準則及抵押折扣率。

本集團根據交易對手的違約概率及逾期時間制定了授信資產 分類政策。若有客觀證據證明一項資產減值損失已出現,將 根據香港財務報告準則及監管要求進行資產減值準備。

在錯向風險(交易對手的違約概率與由交易市價帶動的信貸 風險承擔呈正向關係的風險)的管理與監察上,原則上不允 許敘做存在特定錯向風險的交易,並制定措施監控透過壓力 測試識別的潛在一般錯向風險的交易對手。

#### 5. COUNTERPARTY CREDIT RISK-RELATED EXPOSURES

The Group's counterparty credit risk arising from derivative contracts and securities financing transactions both in trading and banking book is subject to the same risk management framework as mentioned in Note 4 to the Financial Statements. The Group establishes credit limit through formal credit approval procedures to control the presettlement credit risk arising from derivative transactions and settlement limit to control the settlement risk arising from foreign exchange-related transactions for counterparties in both the trading book and banking book. The Group monitors the risk exposure due to fluctuations in the market by using the current exposure and the potential exposure value of the transactions. Exceptions or excesses are timely and closely identified and monitored by risk management unit.

Credit equivalent amount and capital charge for the relevant counterparty credit exposures are determined following the regulatory capital requirements. Currently, the Group has adopted the Current Exposure Method to measure the relevant credit equivalent amount, which comprises current exposures and potential future exposures. The relevant counterparty default risk capital charge is calculated under the FIRB/STC approach. In addition, the Group has adopted standardised credit valuation adjustment ("CVA") method to calculate the relevant counterparty CVA capital charge.

The Group establishes prudent eligibility criteria and haircut policy of debt securities being pledged as collateral for securities financing transactions.

The Group formulates policy for classification of credit assets according to the PD of counterparties and the period of overdue. If there is objective evidence that an impairment loss has been incurred, impairment allowance will be provided according to HKFRS and regulatory requirements.

In controlling and monitoring of wrong-way risk (risk of existence of positive correlation between the PD of a counterparty and credit exposures driven by mark-to-market value of the underlying transactions), specific wrong-way risk transactions are generally not allowed and monitoring measures have been formulated for those counterparties identified by stress testing that would be exposed to potential general wrong-way risk.

## **Unaudited Supplementary Financial Information**

#### 5. 交易對手信貸風險相關承擔(續)

#### 5.1 內部評級基準計算法下的交易對手信貸風險承擔

下表概述本集團採用現行風險承擔方法計算與對手進行證券 融資交易及衍生工具合約所產生的風險承擔,並且沒有有效 跨產品淨額結算協議的影響。

#### 5. COUNTERPARTY CREDIT RISK-RELATED EXPOSURES (Cont'd)

## 5.1 Counterparty credit risk exposures under the internal ratings-based approach

The following table summarises the Group's exposures to counterparty credit risk arising from securities financing transactions and derivative contracts calculated using the Current Exposure Method. There is no effect of valid bilateral and cross-product netting agreements on these exposures.

		2013	
		證券融資交易 Securities financing transactions 港幣千元 HK\$'000	衍生工具合約  Derivative contracts 港幣千元 HK\$'000
總正數公平值	Gross total positive fair value		107,654
違約風險的風險承擔 減:認可抵押品 一債券 一其他	Default risk exposures Less: Value of recognised collateral – debt securities – others	1,282,671 – (1,262,875)	476,445 - -
違約風險的扣減認可抵押品後風險承擔	Default risk exposures net of recognised collateral	19,796	476,445
以交易對手類別分類之違約風險 的風險承擔 企業 銀行 零售 其他	Default risk exposures by counterparty type  Corporate Banks Retail Others	- 1,282,671 - - 1,282,671	138,480 337,965 - - 476,445
	Risk-weighted amounts by counterparty type	1,202,071	770,443
企業 銀行 零售 其他	Corporate  Banks Retail Others	_ 5,304 _ _	184,443 113,139 –
		5,304	297,582

### **Unaudited Supplementary Financial Information**

#### 5. 交易對手信貸風險相關承擔(續)

## **5.1** 內部評級基準計算法下的交易對手信貸風險承擔(續)

下表概述本集團與對手達成的場外交易衍生工具所產生的風險承擔。相關信貸等值數額並無有效雙邊淨額結算協議的影響。

#### 5. COUNTERPARTY CREDIT RISK-RELATED EXPOSURES (Cont'd)

## 5.1 Counterparty credit risk exposures under the internal ratings-based approach (Cont'd)

The following table summarises the Group's exposures to counterparty credit risk arising from OTC derivative. There is no effect of valid bilateral netting agreements on the credit equivalent amounts.

2012 場外交易 衍生工具 OTC derivative 港幣千元 HK\$'000

總正數公平值	Gross total positive fair value	223,464
信貸等值數額	Credit equivalent amounts	592,012
減:認可抵押品	Less: Value of recognised collateral	
- 債券	<ul><li>debt securities</li></ul>	-
一其他	– others	-
信貸等值淨額	Net credit equivalent amounts	592,012
以交易對手類別分類之違約風險承擔	Exposure at default by counterparty type	
企業	Corporate	155,844
銀行	Banks	436,168
零售	Retail	-
其他	Others	-
		592,012
以交易對手類別分類之風險加權數額	Risk weighted amounts by counterparty type	
企業	Corporate	177,909
銀行	Banks	101,054
零售	Retail	_
其他	Others	_
		278,963

於2012年12月31日,在內部評級基準計算法下並無尚未完 結回購形式交易。

There were no outstanding repo-style transactions under the internal ratings-based approach as at 31 December 2012.

## **Unaudited Supplementary Financial Information**

#### 5. 交易對手信貸風險相關承擔(續)

#### **5.2** 標準(信貸風險)計算法下的交易對手信貸風險 承擔

下表概述本集團採用現行風險承擔方法計算與對手進行衍生工具合約所產生的風險承擔,並且沒有有效跨產品淨額結算協議的影響。

#### 5. COUNTERPARTY CREDIT RISK-RELATED EXPOSURES (Cont'd)

## 5.2 Counterparty credit risk exposure under the standardised (credit risk) approach

The following table summarises the Group's exposures to counterparty credit risk arising from derivative contracts calculated using the Current Exposure Method. There is no effect of valid cross-product netting agreements on these exposures.

		2013 衍生工具合約 Derivative contracts 港幣千元 HK\$'000
總正數公平值	Gross total positive fair value	25,593
違約風險的風險承擔 減:認可抵押品 一 債券 一 其他	Default risk exposures Less: Value of recognised collateral – debt securities – others	29,639 _ _
違約風險的扣減認可抵押品後風險承擔	Default risk exposures net of recognised collateral	29,639
以交易對手類別分類之違約風險的風險承擔官方實體 公營單位 銀行 企業 監管零售 不屬逾期風險承擔的其他風險承擔 逾期風險承擔	Default risk exposures by counterparty type Sovereign Public sector entity Bank Corporate Regulatory retail Other exposures which are not past due exposures Past due exposures	- - 4,484 25,155 - -
		29,639
以交易對手類別分類之風險加權數額 官方實體 公營單位 銀行 企業 監管零售 不屬逾期風險承擔的其他風險承擔 逾期風險承擔	Risk-weighted amounts by counterparty type Sovereign Public sector entity Bank Corporate Regulatory retail Other exposures which are not past due exposures Past due exposures	- - 4,484 18,866 - -
		23,350

於2013年12月31日,在標準(信貸風險)計算法下並無尚未 完結的證券融資交易。

There were no outstanding securities financing transactions under the standardised (credit risk) approach as at 31 December 2013.

### **Unaudited Supplementary Financial Information**

#### 5. 交易對手信貸風險相關承擔(續)

#### **5.2** 標準(信貸風險)計算法下的交易對手信貸風險 承擔(續)

下表概述本集團與對手達成的場外交易衍生工具所產生的風險承擔。相關信貸等值數額並無有效雙邊淨額結算協議的影響。

#### 5. COUNTERPARTY CREDIT RISK-RELATED EXPOSURES (Cont'd)

## 5.2 Counterparty credit risk exposure under the standardised (credit risk) approach (Cont'd)

The following table summarises the Group's exposures to counterparty credit risk arising from OTC derivative. There is no effect of valid bilateral netting agreements on the credit equivalent amounts.

2012 場外交易 衍生工具 OTC derivative 港幣千元 HK\$'000

總正數公平值	Gross total positive fair value	5,524
信貸等值數額	Credit equivalent amounts	9,733
減:認可抵押品	Less: Value of recognised collateral	
- 債券	<ul><li>debt securities</li></ul>	-
- 其他	– others	-
信貸等值淨額	Net credit equivalent amounts	9,733
以交易對手類別分類之信貸等值數額於	Credit equivalent amounts net of recognised collateral	
扣減認可抵押品後淨額	by counterparty type	
官方實體	Sovereign	_
公營單位	Public sector entity	-
銀行	Banks	_
企業	Corporate	2,086
監管零售	Regulatory retails	7,624
不屬逾期風險承擔的其他風險承擔	Other exposures which are not past due exposures	23
逾期風險承擔	Past due exposures	_
		9,733
以交易對手類別分類之風險加權數額	Risk weighted amounts by counterparty type	
官方實體	Sovereign	-
公營單位	Public sector entity	_
銀行	Banks	-
企業	Corporate	2,086
監管零售	Regulatory retails	5,718
不屬逾期風險承擔的其他風險承擔	Other exposures which are not past due exposures	23
逾期風險承擔	Past due exposures	_
		7,827

於2012年12月31日,在標準(信貸風險)計算法下並無尚未 完結的回購形式交易。

於2013年12月31日,並無尚未完結的信貸衍生工具合約(2012年:無)。

There were no outstanding repo-style transactions under the standardised (credit risk) approach as at 31 December 2012.

There were no outstanding credit derivative contracts as at 31 December 2013 (2012: Nil).

### **Unaudited Supplementary Financial Information**

#### 6. 資產證券化

本集團作為一家投資機構,於2013年12月31日並無資產證券化(2012年:無)。

#### 7. 市場風險資本要求

#### 6. ASSETS SECURITISATION

There was no asset securitisation for which the Group is an investing institution at 31 December 2013 (2012: Nil)

## 7. CAPITAL CHARGE FOR MARKET RISK

		2013 港幣千元 HK\$'000	港幣千元 HK\$'000
在標準(市場風險)計算法下	Under the standardised (market risk) approach		
外匯風險承擔(淨額)	Foreign exchange exposures (net)	-	-
利率風險承擔	Interest rate exposures		
- 非證券化風險承擔	<ul> <li>non-securitisation exposure</li> </ul>	10	10
商品風險承擔	Commodity exposures	-	-
股權風險承擔	Equity exposures	-	-
在內部模式計算法下	Under the internal models approach		
外匯及利率的一般風險承擔	General foreign exchange and		
	interest rate exposures	77,199	53,499
市場風險資本要求	Capital charge for market risk	77,209	53,509

為符合《2011年銀行業(資本)(修訂)規則》,市場風險監管資本要求包括計算受壓風險值資本要求。下表詳述本集團以內部模式計算法計算一般市場風險持倉的內部模式計算法風險值及受壓風險值1。

Market risk regulatory capital charge is calculated under the Banking (Capital) (Amendment) Rules 2011 to incorporate capital charge for stressed VAR. The following table sets out the IMM VAR and stressed VAR¹ for the general market risk exposure calculated under the IMM approach of the Group.

		年份 Year	於12月31日 At 31 December 港幣千元 HK\$'000	全年最低數值 Minimum for the year 港幣千元 HK\$'000	全年最高數值 Maximum for the year 港幣千元 HK\$'000	全年平均數值 Average for the year 港幣千元 HK\$'000
外匯及利率風險之	IMM VAR for foreign exchange					
內部模式計算法風險值	and interest rate risk	2013	3,479	3,479	7,502	5,730
		2012	5,324	2,752	6,742	5,618
外匯風險之內部模式	IMM VAR for foreign exchange					
計算法風險值	risk	2013	3,634	3,634	7,552	5,641
		2012	5,122	2,807	6,207	5,432
利率風險之內部模式	IMM VAR for interest rate risk					
計算法風險值		2013	1,658	274	1,688	739
		2012	678	260	1,579	559
外匯率及利率風險之 受壓風險值	Stressed VAR for foreign					
	exchange and interest rate risk	2013	14,085	7,651	31,968	14,556
		2012	14,231	6,075	28,399	12,967
外匯率風險之受壓風險值	Stressed VAR for foreign					
	exchange risk	2013	8,216	5,708	9,207	7,716
		2012	6,979	3,860	8,218	7,444
利率風險之受壓風險值	Stressed VAR for interest rate					
	risk	2013	10,102	2,170	25,053	8,719
		2012	13,653	2,189	22,555	7,474

註:

市場風險監管資本的內部模式計算法風險值及受壓風險值利用了99% 置信水平及10天持有期來計算。受壓風險值採用與風險值模型相同的 方法,利用集團組合在連續12個月壓力市況下的歷史市場數據來計算。 IMM VAR and stressed VAR measures used for market risk regulatory capital purposes are calculated to a 99% confidence level and use a 10-day holding period. The stressed VAR uses the same methodology as the VAR model and is generated with inputs calibrated to the historical market data from a continuous 12-month period of significant financial stress relevant to the Group's portfolio.

Note:

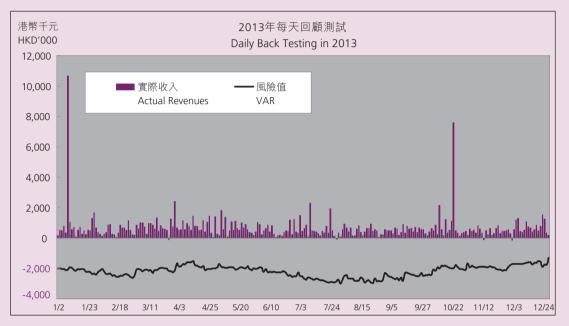
## **Unaudited Supplementary Financial Information**

#### 7. 市場風險資本要求(續)

下圖列示內部模式計算法下的本集團市場風險的監管回顧測試結果。

# 7. CAPITAL CHARGE FOR MARKET RISK (Cont'd)

The graph below shows the regulatory back-testing result of the Group's market risk under IMM approach.





回顧測試結果顯示,本集團並無實際交易損失超過風險值的情況。

There was no actual loss exceeding the VAR for the Group as shown in the back-testing results.

### **Unaudited Supplementary Financial Information**

#### 8. 操作風險資本要求

#### 8. CAPITAL CHARGE FOR OPERATIONAL RISK

		2013	2012
		港幣千元	港幣千元
		HK\$'000	HK\$'000
操作風險資本要求	Capital charge for operational risk	775,167	658,454

本集團採用標準(業務操作風險)計算法計算操作風險資本 要求。

#### 9. 銀行賬的股權風險承擔

持有其他企業的股權乃是根據獲取該等股權的初始意圖入 賬。因關係及策略性理由而持有的股權與因其他理由(包括 資本增值)而持有的股權將以不同的分類入賬。擬持續持有 的股權投資(不包括對附屬公司的投資)歸類為可供出售證 券,並於資產負債表內的「證券投資」列示。

集團採用與詳列於財務報表附註2.9(4)、2.12、2.13及2.14 相同之會計處理及估值方法處理銀行賬中除附屬公司以外的 股權風險承擔,對其估值之進一步資料列示於附註5.1「以 公平值計量的金融工具」。若其後增加對有關股權的投資, 並引致一項股權投資成為聯營公司、共同控制企業或附屬公 司,該項投資將會根據本集團的會計政策重新分類入賬。

與股權承擔有關之收益或虧損概述如下:

The Group uses the standardised (operational risk) approach to calculate its operational risk capital charge.

## 9. EQUITY EXPOSURES IN BANKING BOOK

Equity holdings in other entities are accounted for in accordance with the underlying intentions of holdings at the inception of acquisition. The classifications for equity holdings taken for relationship and strategic purposes will be separated from those taken for other purposes (including capital appreciation). Investments in equity shares which are intended to be held on a continuing basis, but which do not comprise investments in subsidiaries, are classified as available-for-sale securities and are reported in the balance sheet as "Investment in securities".

For equity exposures in banking book other than subsidiaries, the Group applies the same accounting treatment and valuation methodologies as detailed in the Notes 2.9(4), 2.12, 2.13 and 2.14 to the Financial Statements, further details on their valuation are outlined in Note 5.1 "Financial instruments measured at fair value". If additional investment is made subsequently such that an investee becomes an associate, jointly controlled entity or subsidiary, then the investment is reclassified in accordance with the Group's accounting policies.

Gains or losses related to equity exposures are summarised below:

		2013 港幣千元 HK\$′000	2012 港幣千元 HK\$'000
出售產生的已實現收益	Realised gains from sales	-	463
於儲備而非收益表中確認之 未實現重估收益	Unrealised gains on revaluation recognised in reserves but not through income statement	52,775	44,956

截至2012年12月31日止年度包括在附加資本中之未實現收益為港幣20,230,000元。

The unrealised gains included in supplementary capital for the year ended 31 December 2012 were HK\$20,230,000.