# Cathay United Bank Co., Ltd. and Subsidiaries

## Consolidated Financial Statements for the Nine Months Ended September 30, 2019 and 2018 and Independent Auditors' Review Report

# INDEPENDENT AUDITORS' REVIEW REPORT

The Board of Directors and Stockholders
Cathay United Bank Co., Ltd.

## Introduction

We have reviewed the accompanying consolidated financial statements of Cathay United Bank Co., Ltd. (the "Bank") and its subsidiaries (collectively, the "Company"), which comprise the consolidated balance sheet as of September 30, 2019, the consolidated statements of comprehensive income for the three months and nine months ended September 30, 2019, the consolidated statements of changes in equity and cash flows for the nine months ended September 30, 2019, and the notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the "consolidated financial statements"). Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Public Banks and International Accounting Standard 34 "Interim Financial Reporting" endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China. Our responsibility is to express a conclusion on the consolidated financial statements based on our reviews.

## Scope of Review

We conducted our reviews in accordance with Statement of Auditing Standards No. 65 "Review of Financial Information Performed by the Independent Auditor of the Entity". A review of consolidated financial statements consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

## Conclusion

Based on our reviews, nothing has come to our attention that caused us to believe that the accompanying consolidated financial statements do not present fairly, in all material respects, the consolidated financial position of the Company as of September 30, 2019, its consolidated financial performance for the three months ended September 30, 2019, and its consolidated financial performance and its consolidated cash flows for the nine months ended September 30, 2019 in accordance with the Regulations Governing the Preparation of Financial Reports by Public Banks and International Accounting Standard 34 "Interim Financial Reporting" endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

**Other Matter**

The consolidated financial statements of the Company as of and for the nine months ended September 30, 2018 were reviewed by other auditors who expressed an unqualified conclusion on those statements on November 2, 2018.

The engagement partners on the reviews resulting in this independent auditors' review report are Li-Chi Chen and Shiuh-Ran Cheng.

Deloitte & Touche
Taipei, Taiwan
Republic of China

November 13, 2019

<u>*Notice to Readers*</u>

*The accompanying consolidated financial statements are intended only to present the consolidated financial position, financial performance and cash flows in accordance with accounting principles and practices generally accepted in the Republic of China and not those of any other jurisdictions. The standards, procedures and practices to review such consolidated financial statements are those generally applied in the Republic of China.*

*For the convenience of readers, the independent auditors' review report and the accompanying consolidated financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors' review report and consolidated financial statements shall prevail.*

## CATHAY UNITED BANK CO., LTD. AND SUBSIDIARIES

**CONSOLIDATED BALANCE SHEETS**
**(In Thousands of New Taiwan Dollars)**

| | September 30, 2019 (Reviewed) | | December 31, 2018 (Audited) | | September 30, 2018 (Reviewed) | |
|---|---|---|---|---|---|---|
| **ASSETS** | **Amount** | **%** | **Amount** | **%** | **Amount** | **%** |
| CASH AND CASH EQUIVALENTS (Notes 6 and 44) | $ 66,871,820 | 2 | $ 67,857,464 | 2 | $ 78,820,944 | 3 |
| DUE FROM THE CENTRAL BANK AND CALL LOANS TO BANKS (Note 7) | 110,869,396 | 4 | 104,223,315 | 4 | 121,969,884 | 4 |
| FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS (Notes 8, 44 and 49) | 293,721,683 | 10 | 250,685,216 | 9 | 274,897,442 | 10 |
| FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (Notes 9, 11, 45 and 49) | 298,363,578 | 10 | 200,572,902 | 7 | 211,727,467 | 8 |
| INVESTMENTS IN DEBT INSTRUMENTS AT AMORTISED COST (Notes 10, 11, 45 and 49) | 407,328,479 | 14 | 421,022,506 | 15 | 325,215,661 | 12 |
| SECURITIES PURCHASED UNDER RESELL AGREEMENTS (Note 12) | 41,642,897 | 2 | 44,612,132 | 2 | 90,784,688 | 3 |
| RECEIVABLES, NET (Notes 13, 15 and 44) | 130,787,148 | 4 | 85,978,726 | 3 | 85,974,660 | 3 |
| DISCOUNTS AND LOANS, NET (Notes 14 and 44) | 1,553,913,927 | 52 | 1,595,323,251 | 56 | 1,569,443,211 | 55 |
| INVESTMENTS MEASURED BY EQUITY METHOD, NET (Note 17) | 1,749,283 | - | 1,768,874 | - | 1,739,439 | - |
| OTHER FINANCIAL ASSETS, NET | 37 | - | 1,271 | - | 1,044 | - |
| PROPERTY AND EQUIPMENT, NET (Note 18) | 25,631,342 | 1 | 25,440,564 | 1 | 25,498,156 | 1 |
| RIGHT-OF-USE ASSETS, NET (Notes 4, 19 and 44) | 4,004,263 | - | - | - | - | - |
| INVESTMENT PROPERTIES, NET (Note 20) | 1,657,086 | - | 1,439,686 | - | 1,461,472 | - |
| INTANGIBLE ASSETS, NET (Note 21) | 8,120,396 | - | 8,020,939 | - | 7,839,361 | - |
| DEFERRED TAX ASSETS | 4,629,410 | - | 1,872,542 | - | 2,117,698 | - |
| OTHER ASSETS, NET (Notes 22 and 44) | 40,380,904 | 1 | 35,061,248 | 1 | 32,848,806 | 1 |
| TOTAL | $ 2,989,671,649 | 100 | $ 2,843,880,636 | 100 | $ 2,830,339,933 | 100 |
| **LIABILITIES AND EQUITY** | | | | | | |
| DEPOSITS FROM THE CENTRAL BANK AND BANKS (Notes 23 and 44) | $ 112,585,730 | 4 | $ 81,432,233 | 3 | $ 87,171,203 | 3 |
| FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS (Notes 8, 44 and 49) | 117,547,266 | 4 | 103,407,778 | 4 | 109,522,447 | 4 |
| NOTES AND BONDS ISSUED UNDER REPURCHASE AGREEMENTS (Note 24) | 25,517,531 | 1 | 55,974,509 | 2 | 62,055,662 | 2 |
| PAYABLES (Notes 25 and 44) | 77,048,454 | 3 | 24,912,970 | 1 | 28,006,806 | 1 |
| CURRENT TAX LIABILITIES | 743,843 | - | 184,817 | - | 126,857 | - |
| DEPOSITS AND REMITTANCES (Notes 26 and 44) | 2,300,476,722 | 77 | 2,227,661,690 | 78 | 2,196,932,894 | 78 |
| FINANCIAL DEBENTURES PAYABLE (Note 27) | 53,900,000 | 2 | 55,600,000 | 2 | 55,600,000 | 2 |
| OTHER FINANCIAL LIABILITIES (Note 28) | 65,673,326 | 2 | 76,509,334 | 3 | 76,491,161 | 3 |
| PROVISIONS (Note 29) | 3,365,569 | - | 3,421,427 | - | 3,356,939 | - |
| LEASE LIABILITIES (Notes 4, 19 and 44) | 4,021,216 | - | - | - | - | - |
| DEFERRED INCOME TAX LIABILITIES | 3,271,712 | - | 1,657,768 | - | 1,893,731 | - |
| OTHER LIABILITIES (Notes 31 and 44) | 7,905,383 | - | 7,311,083 | - | 8,164,854 | - |
| Total liabilities | 2,772,056,752 | 93 | 2,638,073,609 | 93 | 2,629,322,554 | 93 |
| EQUITY ATTRIBUTABLE TO OWNERS OF PARENT (Notes 32) | | | | | | |
| Capital stock | | | | | | |
| Common stock | 96,658,353 | 3 | 91,197,623 | 3 | 91,197,623 | 3 |
| Capital surplus | 33,610,983 | 1 | 33,610,983 | 1 | 33,610,983 | 1 |
| Retained earnings | | | | | | |
| Legal reserve | 57,935,811 | 2 | 51,631,140 | 2 | 51,631,140 | 2 |
| Special reserve | 2,183,978 | - | 2,933,808 | - | 2,933,808 | - |
| Unappropriated earnings | 18,317,918 | 1 | 21,015,571 | 1 | 18,052,554 | 1 |
| Total retained earnings | 78,437,707 | 3 | 75,580,519 | 3 | 72,617,502 | 3 |
| Other equity | 4,818,932 | - | 1,376,421 | - | (213,801) | - |
| Total equity attributable to owners of parent | 213,525,975 | 7 | 201,765,546 | 7 | 197,212,307 | 7 |
| NON-CONTROLLING INTERESTS (Note 32) | 4,088,922 | - | 4,041,481 | - | 3,805,072 | - |
| Total equity | 217,614,897 | 7 | 205,807,027 | 7 | 201,017,379 | 7 |
| TOTAL | $ 2,989,671,649 | 100 | $ 2,843,880,636 | 100 | $ 2,830,339,933 | 100 |

The accompanying notes are an integral part of the consolidated financial statements.

(With Deloitte & Touche review report dated November 13, 2019)

## CATHAY UNITED BANK CO., LTD. AND SUBSIDIARIES

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**
**(In Thousands of New Taiwan Dollars, Except Earnings Per Share)**
**(Reviewed, Not Audited)**

| | For the Three Months Ended September 30 | | | | For the Nine Months Ended September 30 | | | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | | 2018 | | 2019 | | 2018 | |
| | Amount | % | Amount | % | Amount | % | Amount | % |
| NET INTEREST REVENUE (Notes 33 and 44) | | | | | | | | |
| Interest income | $ 14,522,166 | 89 | $ 13,859,504 | 79 | $ 43,463,962 | 89 | $ 39,622,230 | 85 |
| Interest expense | (5,375,188) | (33) | (5,233,752) | (30) | (16,411,223) | (34) | (15,024,234) | (32) |
| Total net interest revenue | 9,146,978 | 56 | 8,625,752 | 49 | 27,052,739 | 55 | 24,597,996 | 53 |
| NET REVENUE OTHER THAN INTEREST | | | | | | | | |
| Net service fee revenue (Notes 34 and 44) | 4,598,833 | 28 | 4,750,676 | 27 | 13,081,727 | 27 | 12,872,958 | 27 |
| Gain on financial assets or liabilities at fair value through profit or loss (Notes 35 and 44) | 986,349 | 6 | 1,869,243 | 11 | 4,815,303 | 10 | 4,837,900 | 10 |
| Realized gain on financial assets at fair value through other comprehensive income (Notes 9 and 36) | 963,783 | 6 | 1,600,286 | 9 | 2,252,830 | 5 | 2,697,499 | 6 |
| Gain (loss) arising from derecognition of financial assets measured at amortised cost (Note 10) | (3,479) | - | - | - | 97,418 | - | - | - |
| Foreign exchange gain | 385,591 | 3 | 483,503 | 3 | 1,029,363 | 2 | 1,297,736 | 3 |
| Reversal of impairment loss (impairment loss) on assets (Note 37) | 1,476 | - | (1,208) | - | (61,736) | - | (113,310) | - |
| Share of profit of associates and joint ventures accounted for using equity method (Note 17) | 27,327 | - | 27,012 | - | 70,305 | - | 68,949 | - |
| Net other revenue other than interest income | 131,545 | 1 | 195,483 | 1 | 451,475 | 1 | 618,321 | 1 |
| Total net revenue other than interest | 7,091,425 | 44 | 8,924,995 | 51 | 21,736,685 | 45 | 22,280,053 | 47 |
| NET REVENUE | 16,238,403 | 100 | 17,550,747 | 100 | 48,789,424 | 100 | 46,878,049 | 100 |
| BAD DEBTS EXPENSE, COMMITMENT AND GUARANTEE LIABILITY PROVISION (Notes 13, 14, 15 and 38) | (633,545) | (4) | (819,883) | (5) | (1,551,032) | (3) | (2,311,743) | (5) |
| TOTAL OPERATING EXPENSES | | | | | | | | |
| Employee benefits expenses (Notes 39 and 44) | (4,006,930) | (25) | (4,007,506) | (23) | (12,588,860) | (26) | (12,183,495) | (26) |
| Depreciation and amortization expense (Notes 18, 19, 21 and 40) | (736,389) | (4) | (385,366) | (2) | (2,172,349) | (5) | (1,105,759) | (2) |
| Other general and administrative expense (Notes 41 and 44) | (3,542,139) | (22) | (3,988,969) | (23) | (10,258,043) | (21) | (9,817,742) | (21) |
| Total operating expenses | (8,285,458) | (51) | (8,381,841) | (48) | (25,019,252) | (52) | (23,106,996) | (49) |

(Continued)

# CATHAY UNITED BANK CO., LTD. AND SUBSIDIARIES

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**
**(In Thousands of New Taiwan Dollars, Except Earnings Per Share)**
**(Reviewed, Not Audited)**

| | For the Three Months Ended September 30 | | | | For the Nine Months Ended September 30 | | | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | | 2018 | | 2019 | | 2018 | |
| | Amount | % | Amount | % | Amount | % | Amount | % |
| PROFIT FROM CONTINUING OPERATIONS BEFORE TAX | $ 7,319,400 | 45 | $ 8,349,023 | 47 | $ 22,219,140 | 45 | $ 21,459,310 | 46 |
| INCOME TAX EXPENSE (Note 42) | (961,334) | (6) | (1,104,997) | (6) | (3,097,393) | (6) | (3,056,163) | (7) |
| INCOME FROM CONTINUING OPERATIONS, NET OF TAX | 6,358,066 | 39 | 7,244,026 | 41 | 19,121,747 | 39 | 18,403,147 | 39 |
| OTHER COMPREHENSIVE INCOME, NET OF TAX (Note 32) | | | | | | | | |
| Components of other comprehensive income that will not be reclassified to profit or loss, net of tax | | | | | | | | |
| Property revaluation surplus | - | - | - | - | 217,619 | 1 | - | - |
| Revaluation gains (losses) on investments in equity instruments measured at fair value through other comprehensive income | (1,212,786) | (7) | 718,833 | 4 | 2,394,296 | 5 | 267,719 | 1 |
| Change in fair value of financial liability attributable to change in credit risk of liability | (1,452,409) | (9) | (463,100) | (2) | (3,231,049) | (7) | 892,630 | 2 |
| Share of other comprehensive income of associates and joint ventures accounted for using equity method | - | - | (472) | - | 1,397 | - | - | - |
| Income tax related to components of other comprehensive income that will not be reclassified to profit or loss (Note 42) | 310,771 | 2 | (74,412) | - | 348,310 | 1 | 26,775 | - |
| Components of other comprehensive income that will be reclassified to profit or loss, net of tax | | | | | | | | |
| Exchange differences on translating the financial statements of foreign operations | (647,720) | (4) | (1,210,273) | (7) | (249,448) | (1) | (830,483) | (2) |
| Share of other comprehensive income of associates and joint ventures accounted for using equity method | - | - | (209,590) | (1) | (24,388) | - | (209,106) | (1) |

(Continued)

## CATHAY UNITED BANK CO., LTD. AND SUBSIDIARIES

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**
**(In Thousands of New Taiwan Dollars, Except Earnings Per Share)**
**(Reviewed, Not Audited)**

| | For the Three Months Ended September 30 | | | | For the Nine Months Ended September 30 | | | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | | 2018 | | 2019 | | 2018 | |
| | Amount | % | Amount | % | Amount | % | Amount | % |
| Gains (losses) from investments in debt instruments measured at fair value through other comprehensive income | $ (1,384,684) | (9) | $ 70,070 | - | $ 3,772,971 | 8 | $ (3,000,638) | (6) |
| Income tax related to components of other comprehensive income that will be reclassified to profit or loss (Note 42) | 152,783 | 1 | 203,901 | 1 | (150,171) | - | 242,368 | 1 |
| Other comprehensive income (loss), net of tax | (4,234,045) | (26) | (965,043) | (5) | 3,079,537 | 7 | (2,610,735) | (5) |
| TOTAL COMPREHENSIVE INCOME, NET OF TAX | $ 2,124,021 | 13 | $ 6,278,983 | 36 | $ 22,201,284 | 46 | $ 15,792,412 | 34 |
| PROFIT ATTRIBUTABLE TO: | | | | | | | | |
| Owners of parent | $ 6,183,707 | 38 | $ 7,069,544 | 40 | $ 18,614,113 | 38 | $ 18,250,254 | 39 |
| Non-controlling interests | 174,359 | 1 | 174,482 | 1 | 507,634 | 1 | 152,893 | - |
| | $ 6,358,066 | 39 | $ 7,244,026 | 41 | $ 19,121,747 | 39 | $ 18,403,147 | 39 |
| COMPREHENSIVE INCOME ATTRIBUTABLE TO: | | | | | | | | |
| Owners of parent | $ 2,083,277 | 13 | $ 6,156,726 | 35 | $ 21,760,429 | 45 | $ 15,549,887 | 33 |
| Non-controlling interests | 40,744 | - | 122,257 | 1 | 440,855 | 1 | 242,525 | 1 |
| | $ 2,124,021 | 13 | $ 6,278,983 | 36 | $ 22,201,284 | 46 | $ 15,792,412 | 34 |
| EARNINGS PER SHARE (Note 43) | | | | | | | | |
| Basic | $ 0.64 | | $ 0.73 | | $ 1.93 | | $ 1.89 | |

The accompanying notes are an integral part of the consolidated financial statements.

(With Deloitte & Touche review report dated November 13, 2019) (Concluded)

## CATHAY UNITED BANK CO., LTD. AND SUBSIDIARIES

**CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY**
**(In Thousands of New Taiwan Dollars)**
**(Reviewed, Not Audited)**

| | Equity Attributable to Owners of Parent | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Retained Earnings | | | Other Equity | | | | | | | | |
| | Capital Stock Common Stock | Capital Surplus | Legal Reserve | Special Reserve | Unappropriated Earnings | Exchange Differences on Translation the Financial Statements of Foreign Operations | Unrealized Gains (Losses) on Financial Assets at Fair Value Through Other Comprehensive Income | Unrealized Gains (Losses) on Available-for-sale Financial Assets | Changes in the Fair Value of Financial Liabilities Attributable to Changes in the Credit Risk | Gains (Losses) on Remeasurements of Defined Benefit | Property Revaluation Surplus | Total | Non-controlling Interests | Total Equity |
| BALANCE AT JANUARY 1, 2018 | $ 78,604,060 | $ 33,610,983 | $ 45,823,601 | $ 1,977,363 | $ 19,302,403 | $ (532,567) | $ - | $ 1,906,796 | $ (1,191,026) | $ (1,340,811) | $ 302,676 | $ (854,932) | $ 3,844,089 | $ 182,307,567 |
| Effect of retrospective application and restatement | - | - | - | - | (492,615) | - | 5,598,353 | (1,906,796) | - | - | - | 3,691,557 | - | 3,198,942 |
| BALANCE AT JANUARY 1, 2018 AS RESTATED | 78,604,060 | 33,610,983 | 45,823,601 | 1,977,363 | 18,809,788 | (532,567) | 5,598,353 | - | (1,191,026) | (1,340,811) | 302,676 | 2,836,625 | 3,844,089 | 185,506,509 |
| Appropriation of 2017 earnings | | | | | | | | | | | | | | |
| Legal reserve | - | - | 5,807,539 | - | (5,807,539) | - | - | - | - | - | - | - | - | - |
| Special reserve | - | - | - | 951,443 | (951,443) | - | - | - | - | - | - | - | - | - |
| Stock dividends | 12,593,563 | - | - | - | (12,593,563) | - | - | - | - | - | - | - | - | - |
| Net income for the nine months ended September 30, 2018 | - | - | - | - | 18,250,254 | - | - | - | - | - | - | - | 152,893 | 18,403,147 |
| Other comprehensive income (loss) for the nine months ended September 30, 2018, net of income tax | - | - | - | - | - | (714,338) | (2,793,813) | - | 757,153 | 48,344 | 2,287 | (2,700,367) | 89,632 | (2,610,735) |
| Total comprehensive income (loss) for the nine months ended September 30, 2018 | - | - | - | - | 18,250,254 | (714,338) | (2,793,813) | - | 757,153 | 48,344 | 2,287 | (2,700,367) | 242,525 | 15,792,412 |
| Change in non-controlling interests | - | - | - | - | - | - | - | - | - | - | - | - | (281,542) | (281,542) |
| Disposals of investments in equity instruments designated as at fair value through other comprehensive income | - | - | - | - | 294,915 | - | (294,915) | - | - | - | - | (294,915) | - | - |
| Others | - | - | - | 5,002 | 50,142 | - | - | - | - | - | (55,144) | (55,144) | - | - |
| BALANCE AT SEPTEMBER 30, 2018 | $ 91,197,623 | $ 33,610,983 | $ 51,631,140 | $ 2,933,808 | $ 18,052,554 | $ (1,246,905) | $ 2,509,625 | $ - | $ (433,873) | $ (1,292,467) | $ 249,819 | $ (213,801) | $ 3,805,072 | $ 201,017,379 |
| BALANCE AT JANUARY 1, 2019 | $ 91,197,623 | $ 33,610,983 | $ 51,631,140 | $ 2,933,808 | $ 21,015,571 | $ (1,008,735) | $ 2,730,681 | $ - | $ 774,084 | $ (1,369,428) | $ 249,819 | $ 1,376,421 | $ 4,041,481 | $ 205,807,027 |
| Appropriation of 2018 earnings | | | | | | | | | | | | | | |
| Legal reserve | - | - | 6,304,671 | - | (6,304,671) | - | - | - | - | - | - | - | - | - |
| Special reserve | - | - | - | (749,830) | 749,830 | - | - | - | - | - | - | - | - | - |
| Cash dividends | - | - | - | - | (10,000,000) | - | - | - | - | - | - | - | - | (10,000,000) |
| Stock dividends | 5,460,730 | - | - | - | (5,460,730) | - | - | - | - | - | - | - | - | - |
| Net income for the nine months ended September 30, 2019 | - | - | - | - | 18,614,113 | - | - | - | - | - | - | - | 507,634 | 19,121,747 |
| Other comprehensive income (loss) for the nine months ended September 30, 2019, net of income tax | - | - | - | - | - | (228,049) | 5,751,679 | - | (2,584,839) | (624) | 208,149 | 3,146,316 | (66,779) | 3,079,537 |
| Total comprehensive income (loss) for the nine months ended September 30, 2019 | - | - | - | - | 18,614,113 | (228,049) | 5,751,679 | - | (2,584,839) | (624) | 208,149 | 3,146,316 | 440,855 | 22,201,284 |
| Change in non-controlling interests | - | - | - | - | - | - | - | - | - | - | - | - | (393,414) | (393,414) |
| Disposals of investments in equity instruments designated as at fair value through other comprehensive income | - | - | - | - | (296,195) | - | 296,195 | - | - | - | - | 296,195 | - | - |
| BALANCE AT SEPTEMBER 30, 2019 | $ 96,658,353 | $ 33,610,983 | $ 57,935,811 | $ 2,183,978 | $ 18,317,918 | $ (1,236,784) | $ 8,778,555 | $ - | $ (1,810,755) | $ (1,370,052) | $ 457,968 | $ 4,818,932 | $ 4,088,922 | $ 217,614,897 |

The accompanying notes are an integral part of the consolidated financial statements.

(With Deloitte & Touche review report dated November 13, 2019)

# CATHAY UNITED BANK CO., LTD. AND SUBSIDIARIES

**CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(In Thousands of New Taiwan Dollars)**
**(Reviewed, Not Audited)**

| | For the Nine Months Ended September 30 | |
|---|---|---|
| | **2019** | **2018** |
| CASH FLOWS FROM OPERATING ACTIVITIES | | |
| Profit before tax | $ 22,219,140 | $ 21,459,310 |
| Adjustments: | | |
| Depreciation expense | 1,836,429 | 864,985 |
| Amortization expense | 335,920 | 240,774 |
| Expected credit loss/bad debt expense | 1,551,032 | 2,311,743 |
| Net gains on financial assets and liabilities at fair value through profit or loss | (4,815,303) | (4,837,900) |
| Interest expense | 16,411,223 | 15,024,234 |
| Net gains arising from derecognition of financial assets measured at amortised cost | (97,418) | - |
| Interest income | (43,463,962) | (39,622,230) |
| Dividend income | (958,946) | (1,525,392) |
| Share of profit of associates and joint ventures accounted for using equity method | (70,305) | (68,949) |
| Loss on disposal of property and equipment | 11,711 | 11,268 |
| Gains on disposal of investment properties | (560) | (14,100) |
| Gains on disposal of investments | (1,293,884) | (1,172,107) |
| Impairment loss on financial assets | 61,736 | 113,310 |
| Loss on fair value adjustment of investment property | 70,900 | - |
| Changes in operating assets and liabilities | | |
| Due from the Central Bank and call loans to banks | (2,810,532) | (4,184,910) |
| Financial assets at fair value through profit or loss | 9,568,912 | 62,899,712 |
| Financial assets at fair value through other comprehensive income | (90,391,367) | (35,828,550) |
| Investments in debt instruments at amortised cost | 13,791,550 | 50,860,140 |
| Receivables | (48,249,663) | (21,235,916) |
| Discounts and loans | 39,943,568 | (136,254,501) |
| Other financial assets | 1,246 | 232 |
| Other assets | (8,380,179) | 669,392 |
| Deposits from the Central Bank and banks | 31,153,497 | (3,204,341) |
| Financial liabilities at fair value through profit or loss | (36,279,339) | 23,009,615 |
| Notes and bonds issued under repurchase agreement | (30,456,978) | (47,885,763) |
| Payables | 48,942,636 | 15,009,607 |
| Deposits and remittances | 72,815,032 | 97,358,665 |
| Other financial liabilities | (10,836,008) | 10,708,184 |
| Provisions | (86,530) | 32,968 |
| Other liabilities | 41,176 | 211,518 |
| Cash generated from (used in) operations | (19,435,266) | 4,950,998 |
| Interest received | 48,170,715 | 39,269,183 |
| Dividends received | 961,996 | 1,547,323 |

(Continued)

## CATHAY UNITED BANK CO., LTD. AND SUBSIDIARIES

**CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(In Thousands of New Taiwan Dollars)**
**(Reviewed, Not Audited)**

| | For the Nine Months Ended September 30 | |
|---|---|---|
| | **2019** | **2018** |
| Interest paid | $ (17,168,037) | $ (14,186,422) |
| Income tax paid | (1,377,663) | (1,982,052) |
| Net cash generated from operating activities | 11,151,745 | 29,599,030 |
| CASH FLOWS FROM INVESTING ACTIVITIES | | |
| Acquisition of property and equipment | (866,292) | (1,587,772) |
| Proceeds from disposal of property and equipment | 12,141 | 1,345 |
| Acquisition of intangible assets | (393,211) | (175,708) |
| Proceeds from disposal of investment properties | 75,260 | 100,000 |
| Other assets | 2,559,587 | (9,230,372) |
| Dividends received | 66,904 | 73,557 |
| Net cash generated from (used in) investing activities | 1,454,389 | (10,818,950) |
| CASH FLOWS FROM FINANCING ACTIVITIES | | |
| Repayments of financial debentures payable | (1,700,000) | (7,750,000) |
| Payments of lease liabilities | (877,891) | - |
| Other liabilities | 551,359 | (1,055,854) |
| Cash dividends paid | (10,393,414) | (291,840) |
| Net cash used in financing activities | (12,419,946) | (9,097,694) |
| EFFECTS OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS | (262,259) | (930,745) |
| NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS | (76,071) | 8,751,641 |
| CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD | 157,478,989 | 223,601,859 |
| CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD | $ 157,402,918 | $ 232,353,500 |

(Continued)

# CATHAY UNITED BANK CO., LTD. AND SUBSIDIARIES

**CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(In Thousands of New Taiwan Dollars)**
**(Reviewed, Not Audited)**

| | September 30 2019 | September 30 2018 |
|---|---|---|
| RECONCILIATIONS OF CASH AND CASH EQUIVALENTS REPORTED IN THE CONSOLIDATED STATEMENTS OF CASH FLOWS WITH THOSE REPORTED IN THE CONSOLIDATED BALANCE SHEETS AS OF SEPTEMBER 30, 2019 AND 2018 | | |
| Cash and cash equivalents reported in the statement of financial position | $ 66,871,820 | $ 78,820,944 |
| Due from the Central Bank and call loans to banks qualifying for cash and cash equivalents under the definition of IAS 7 | 48,888,201 | 62,747,868 |
| Securities purchased under resell agreements qualifying for cash and cash equivalents under the definition of IAS 7 | 41,642,897 | 90,784,688 |
| Cash and cash equivalents at the end of the period | $ 157,402,918 | $ 232,353,500 |

The accompanying notes are an integral part of the consolidated financial statements.

(With Deloitte & Touche review report dated November 13, 2019) (Concluded)

## 1. INFORMATION ON THE BUSINESS

Cathay United Bank Co., Ltd. ("the Bank"), originally named United World Chinese Commercial Bank ("UWCCB"), was established in December 1974 after obtaining approval from the Ministry of Finance, Republic of China ("ROC") and officially started operations on May 20, 1975. The Bank is mainly engaged in the following operations: (1) all commercial banking operations authorized by the ROC Banking Act ("Banking Act"); (2) international banking business and related operations; (3) trust business; (4) off-shore banking business; and (5) other financial operations related to the promotion of investments by overseas Chinese. The Bank's registered office and main business location is at No. 7, Songren Rd., Xinyi District, Taipei City, Republic of China (ROC).

The Bank's stock was originally trading on the Taiwan Stock Exchange (the "TWSE") until December 18, 2002, where it was delisted after becoming a wholly-owned subsidiary of Cathay Financial Holding Co., Ltd. ("Cathay Financial Holdings") on the same date through a share swap. Under the Financial Institutions Merger Act, the Bank merged with the former Cathay Commercial Bank, a wholly-owned subsidiary of Cathay Financial Holdings on October 27, 2003, with UWCCB as the surviving entity and was renamed Cathay United Bank Co., Ltd.

The Bank merged with Lucky Bank on January 1, 2007. The Bank was the surviving entity after this merger and Lucky Bank was the extinguished entity. In addition, the Bank acquired specific assets, liabilities, and business of China United Trust & Investment Corporation ("CUTIC") on December 29, 2007.

Cathay Financial Holdings is the Bank's parent company and ultimate parent company.

## 2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements of the Bank and its subsidiaries ("the Company") were approved by the Bank's board of directors and authorized for issue on November 13, 2019.

## 3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Public Banks and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed and issued into effect by the Financial Supervisory Commission (FSC)

Except for the following, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Public Banks and the IFRSs endorsed and issued into effect by the FSC did not have material impact on the Company's accounting policies:

- IFRS 16 "Leases"

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessee and lessor. It supersedes IAS 17 "Leases", IFRIC 4 "Determining whether an Arrangement contains a Lease", and a number of related interpretations. Refer to Note 4 for information relating to the relevant accounting policies.

Definition of a lease

The Company elects to apply the guidance of IFRS 16 in determining whether contracts are, or contain, a lease only to contracts entered into (or changed) on or after January 1, 2019. Contracts identified as containing a lease under IAS 17 and IFRIC 4 are not reassessed and are accounted for in accordance with the transitional provisions under IFRS 16.

The Company as lessee

The Company recognizes right-of-use assets and lease liabilities for all leases on the balance sheets except for those whose payments under low-value asset and short-term leases are recognized as expenses on a straight-line basis. On the statements of comprehensive income, the Company presents the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the statements of cash flows, cash payments for the principal portion of lease liabilities are classified within financing activities; cash payments for the interest portion are classified within operating activities. Prior to the application of IFRS 16, payments under operating lease contracts, were recognized as expenses on a straight-line basis. Cash flows for operating leases were classified within operating activities on the statements of cash flows.

Lease liabilities were recognized on January 1, 2019 for leases currently classified as operating leases under IAS 17. Lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at an amount equal to the lease liabilities, adjusted by the amount of any prepaid or accrued lease payments. Except for the following practical expedients which are applied, the Company applies IAS 36 to all right-of-use assets.

The Company expects to apply the following practical expedients:

1) The Company also applies a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.

2) The Company accounts for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.

3) The Company excludes initial direct costs from the measurement of right-of-use assets on January 1, 2019.

4) The Company uses hindsight, such as in determining lease terms, to measure lease liabilities.

The lessee's weighted-average incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 0.89%. The difference between the (i) lease liabilities recognized and (ii) operating lease commitments disclosed under IAS 17 on December 31, 2018 is explained as follows:

| | |
|---|---|
| The future minimum lease payments of non-cancellable operating lease commitments on December 31, 2018 | $ 5,544,509 |
| Less: Recognition exemption for short-term leases | (501,288) |
| Less: Recognition exemption for leases of low-value assets | (613,756) |
| Undiscounted amounts on January 1, 2019 | $ 4,429,465 |
| Lease liabilities recognized on January 1, 2019 | $ 4,354,604 |

The Company as lessor

The Company will not make any adjustments for leases in which it is a lessor and will account these leases with the application of IFRS 16 starting from January 1, 2019.

The impact on assets, liabilities and equity as of January 1, 2019 from the initial application of IFRS 16 is set out as follows:

| | **As Originally Stated on January 1, 2019** | **Adjustments Arising from Initial Application** | **Restated on January 1, 2019** |
|---|---|---|---|
| Other assets | $ 35,061,248 | $ (17,660) | $ 35,043,588 |
| Right-of-use assets | - | 4,347,260 | 4,347,260 |
| Total effect on assets | $ 35,061,248 | $ 4,329,600 | $ 39,390,848 |
| Payables | $ 24,912,970 | $ (25,004) | $ 24,887,966 |
| Lease liabilities | - | 4,354,604 | 4,354,604 |
| Total effect on liabilities | $ 24,912,970 | $ 4,329,600 | $ 29,242,570 |

b. The IFRSs endorsed by FSC for application starting from 2020

| **New, Revised or Amended Standards and Interpretations** | **Effective Date Announced by IASB** |
|---|---|
| Amendments to IFRS 3 "Definition of a Business" | January 1, 2020 (Note 1) |
| Amendments to IAS 1 and IAS 8 "Definition of Material" | January 1, 2020 (Note 2) |

Note 1: The Company shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 2: The Company shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the consolidated financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of other standards and interpretations will have on the Company's financial position and financial performance and will disclose the relevant impact when the assessment is completed.

c. The IFRSs issued by IASB but not yet endorsed and issued into effect by FSC

| New, Revised or Amended Standards and Interpretations | Effective Date Announced by IASB (Note) |
|---|---|
| Amendments to IFRS 9, IAS 39 and IFRS 7 "Interest Rate Benchmark Reform" | January 1, 2020 |
| Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture" | To be determined by IASB |
| IFRS 17 "Insurance Contracts" | January 1, 2021 |

Note: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

As of the date the consolidated financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of other standards and interpretations will have on the Company's financial position and financial performance and will disclose the relevant impact when the assessment is completed.

## 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**Statement of Compliance**

The consolidated financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Public Banks and IAS 34 "Interim Financial Reporting" as endorsed and issued into effect by the FSC. Disclosure information included in the consolidated financial statements is less than that required in a complete set of annual financial statements.

**Basis of Preparation**

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments and investment property which are measured at fair value.

The fair value measurements are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

a. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

b. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

c. Level 3 inputs are unobservable inputs for the asset or liability.

## Basis of Consolidation

Principles for preparing consolidated financial report

Since the operating cycle in the banking industry cannot be reasonably identified, accounts included in the consolidated financial statements of the Company were not classified as current or non-current. Nevertheless, accounts were properly categorized in accordance with the nature of each account and sequenced by their liquidity.

The consolidated financial statements incorporate the financial statements of the Bank and the entities controlled by the Bank (Indovina Bank, CUBC Bank and CUBCN Bank).

The accounting policies of the Company are same.

All intra-bank transactions, balances, income and expenses are eliminated in full upon consolidation. Total comprehensive income of subsidiaries is attributed to the owners of the Bank and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Company’s ownership interests in subsidiaries that do not result in the Company losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the interests of the Company and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to the owners of the Bank.

Entities included in consolidated financial reports

See Note 16 for detailed information on subsidiaries (including percentages of ownership and main businesses).

## Foreign Currencies

In preparing the financial statements of each group entity, transactions in currencies other than the Company’s functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period in which they arise except for: Exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investments.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising from the retranslation of non-monetary items are included in profit or loss for the period except for exchange differences arising from the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which cases, the exchange differences are also recognized in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

For the purposes of presenting the consolidated financial statements, the assets and liabilities of the Company's foreign operations (including subsidiaries, associates, joint ventures and branches in other countries that use currencies which are different from the currency of the Company) are translated into the presentation currency, the New Taiwan dollars, as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; and income and expense items are translated at the transacting exchange rate or the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income (attributed to the owners of the Bank and non-controlling interests as appropriate).

**Investments in Associates**

An associate is an entity over which the Company has significant influence and which is neither a subsidiary nor an interest in a joint venture.

The Bank uses the equity method to account for its investments in associates. Under the equity method, investments in an associate are initially recognized at cost and adjusted thereafter to recognize the Bank's share of the profit or loss and other comprehensive income of the associate. The Bank also recognizes the changes in the Bank's share of the equity of associates attributable to the Bank.

Any excess of the cost of acquisition over the Bank's share of the net fair value of the identifiable assets and liabilities of an associate at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Bank's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition is recognized immediately in profit or loss.

When the Bank subscribes for additional new shares of an associate at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Bank's proportionate interest in the associate. The Bank records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus - changes in capital surplus from investments in associates and joint ventures accounted for using the equity method. If the Bank's ownership interest is reduced due to its additional subscription of the new shares of the associate, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate is reclassified to profit or loss on the same basis as would be required had the investee directly disposed of the related assets or liabilities. When the adjustment should be debited to capital surplus, but the capital surplus recognized from investments accounted for using the equity method is insufficient, the shortage is debited to retained earnings.

When the Bank's share of losses of an associate equals or exceeds its interest in that associate (which includes any carrying amount of the investment accounted for using the equity method and long-term interests that, in substance, form part of the Bank's net investment in the associate), the Bank discontinues recognizing its share of further loss, if any. Additional losses and liabilities are recognized only to the extent that the Bank has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate.

The entire carrying amount of an investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Bank discontinues the use of the equity method from the date on which its investment ceases to be an associate. Any retained investment is measured at fair value at that date, and the fair value is regarded as the investment's fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate. The Bank accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required had that associate directly disposed of the related assets or liabilities. If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the Bank continues to apply the equity method and does not remeasure the retained interest.

Profits or losses resulting from downstream transactions are eliminated in full only in the Bank's financial statements. Profits and losses resulting from upstream transactions and transactions between associates are recognized only in the Bank's financial statements only to the extent of interests in the associates that are not related to the Bank.

**Cash and Cash Equivalents**

In the consolidated balance sheet, cash and cash equivalents comprise cash on hand, demand deposits, and short-term, highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. In the consolidated statements of cash flows, cash and cash equivalents comprise cash and cash equivalents defined in the consolidated balance sheets, due from the Central Bank, call loans to other banks and securities purchased under resale agreements that correspond to the definition of cash and cash equivalents under IAS 7 - "Statement of Cash Flows," as endorsed and issued into effect by the FSC.

**Financial Instruments**

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

a. Financial assets

   All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis.

   1) Measurement category

      Financial assets are classified into the following categories: Financial assets at FVTPL, financial assets at amortized cost, and investments in debt instruments and equity instruments at FVTOCI.

      a) Financial asset at FVTPL

         A financial asset is classified as at FVTPL when the financial asset is mandatorily classified or it is designated as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at FVTOCI and debt instruments that do not meet the amortized cost criteria or the FVTOCI criteria.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividend or interest earned on the financial asset.

Fair value is determined in the manner described in Note 49.

b) Financial assets at amortized cost

Financial assets that meet the following conditions are subsequently measured at amortized cost:

i. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets at amortized cost, including cash and cash equivalents, due from the Central Bank and call loans to other banks, Investments in debt instruments at amortised cost, receivables and discounts and loans, are measured at amortized cost, which equals the gross carrying amount determined by the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for:

i. Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of the financial asset; and

ii. Financial assets that have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of the financial asset.

c) Investments in debt instruments at FVTOCI

Debt instruments that meet the following conditions are subsequently measured at FVTOCI:

i. The financial asset is held within a business model whose objective is achieved by both the collecting of contractual cash flows and the selling of the financial assets; and

ii. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Investments in debt instruments at FVTOCI are subsequently measured at fair value. Changes in the carrying amounts of these debt instruments relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and impairment losses or reversals are recognized in profit or loss. Other changes in the carrying amount of these debt instruments are recognized in other comprehensive income and will be reclassified to profit or loss when the investment is disposed of.

d) Investments in equity instruments at FVTOCI

On initial recognition, the Company may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation as at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments; instead, they will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Company’s right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

2) Impairment of financial assets

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost, investments in debt instruments that are measured at FVTOCI.

The Company always recognizes lifetime expected credit losses (ECLs) for accounts receivable and lease receivables. For all other financial instruments, the Company recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

For receivables that do not contain a significant financing component, the allowance for losses is recognized at the lifetime expected credit losses.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. A 12-month ECL represents the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument.

The Company recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and does not reduce the carrying amount of such a financial asset.

According to the Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans, the Bank assesses the customers' financial position, the overdue payments of the principal and interest, and the value of collaterals to classify credit assets into normal credit assets (excluding loans to the ROC government) and unsound assets which should be further classified by special mention, substandard, doubtful and losses, for which minimum provisions are 1%, 2%, 10%, 50%, and 100% of the outstanding balance, respectively. Furthermore, the FSC stipulates that banks should recognize the provision by at least 1.5% of normal credit assets in mainland China (including short-term advances for trade finance) and loans for the mortgage and construction loans that have been classified as normal assets, and further determine the allowance for losses based on the higher of the above-mentioned provision and the assessment of the expected credit losses.

The Company writes off credits deemed uncollectable after the write-off is proposed and approved by the board of directors. Recoveries of credits written off are recognized as a reversal of loss provision in current period.

3) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in a debt instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income is recognized in profit or loss. However, on derecognition of an investment in an equity instrument at FVTOCI, the cumulative gain or loss that had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

b. Equity instruments

The Company classifies the debt and equity instruments issued either as financial liabilities or as equity in accordance with the substance of the contractual agreements and the definitions of a financial liability or an equity instrument.

Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

c. Financial liabilities

1) Subsequent measurement

Except for the cases stated below, all financial liabilities are measured at amortized cost using the effective interest method:

a) Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either held for trading or designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any interest paid on the financial liability.

A financial liability is classified as designated as at FVTPL upon initial recognition if:

i. Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

ii. The financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

iii. The contract contains one or more embedded derivatives so that the entire hybrid (combined) contract can be designated as at fair value through profit or loss.

For a financial liability designated as at fair value through profit or loss, the amount of changes in fair value attributable to changes in the credit risk of the liability is presented in other comprehensive income, and it will not be subsequently reclassified to profit or loss. The gain or loss accumulated in other comprehensive income will be transferred to retained earnings when the financial liabilities are derecognized. The change in fair value of the outstanding liabilities are recognized in profit or loss. If this accounting treatment related to credit risk would create or enlarge an accounting mismatch, all changes in fair value of the liability are presented in profit or loss.

Fair value is determined in the manner described in Note 49.

b) Financial guarantee contracts

Financial guarantee contracts issued by the Company, if not designated as at FVTPL, are subsequently measured at the higher of:

i. The amount of the loss allowance reflecting expected credit loss; and

ii. The amount initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with the revenue recognition policies.

2) Derecognition of financial liabilities

The difference between the carrying amount of the financial liability derecognized and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

d. Derivatives

Derivatives are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the balance sheet date. The resulting gain or loss is recognized in profit or loss immediately. If the fair value of a derivative is a positive number, the derivative is recognized as an asset and if the fair value is a negative number, the derivative is recognized as a liability.

Derivatives embedded in hybrid contracts that contain financial asset hosts within the scope of IFRS 9 are not separated; instead, the classification is determined in accordance with the entire hybrid contract. Derivatives embedded in non-derivative host contracts that are not financial assets within the scope of IFRS 9 (e.g. financial liabilities) are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

**Nonperforming Loans**

Under the “Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Nonperforming/Nonaccrual Loans” issued by the authorities, loans and other credits (including the accrued interest) that remain unpaid on their maturity are transferred immediately to nonperforming loans if the transfer is approved by the board of directors.

Nonperforming loans transferred from loans are recognized as discounts and loans, and those transferred from other credits are recognized as other financial assets.

**Repurchase and Resale Transactions**

Securities purchased under resale agreements and securities sold under repurchase agreements are generally treated as collateralized financing transactions. Interest earned on reverse repurchase agreements or interest incurred on repurchase agreements is recognized as interest income or interest expense over the life of each agreement.

**Property and Equipment**

Property and equipment are stated at cost less accumulated depreciation and accumulated impairment loss.

Freehold land is not depreciated.

Depreciation of property and equipment is recognized using the straight-line method. Each significant part is depreciated separately. If the lease term of an item of property and equipment is shorter than its useful life, such asset is depreciated over its lease term. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effects of any changes in the estimates accounted for on a prospective basis.

On derecognition of an item of property and equipment, the difference between the sales proceeds and the carrying amount of the asset is recognized in profit or loss.

**Investment Properties**

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties also include land held for a currently undetermined future use.

Investment properties are measured initially at cost, including transaction costs, and are subsequently measured using the fair value model. Changes in the fair value of investment properties are included in profit or loss for the period in which they arise.

On derecognition of an investment property, the difference between the net disposal proceeds and the carrying amount of the asset is included in profit or loss.

The Company decides to transfer in or out investment property based on the actual use of assets.

**Goodwill**

Goodwill arising from the acquisition of a business is carried at cost as established at the date of acquisition of the business less accumulated impairment loss.

For the purposes of impairment testing, goodwill is allocated to each of the Company’s cash-generating units or groups of cash-generating units (referred to as “cash-generating units”) that are expected to benefit from the synergies of the combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually or more frequently when there is an indication that the unit may be impaired, by comparing its carrying amount, including the attributed goodwill, with its recoverable amount. However, if the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit shall be tested for impairment before the end of the current annual period. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then pro rata to the other assets of the unit based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. Any impairment loss recognized on goodwill is not reversed in subsequent periods.

If goodwill has been allocated to a cash-generating unit and the entity disposes of an operation within that unit, the goodwill associated with the operation which is disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal and is measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained.

**Foreclosed Collateral**

Collaterals assumed (recorded in other assets) are recognized at cost, which includes the assumed prices and any necessary repairs to make the collaterals saleable, and evaluated at the lower of cost or net realizable value as of the balance sheet date.

**Intangible Assets (Excluding Goodwill)**

Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis. The estimated useful lives, residual values, and amortization methods are reviewed at the end of each reporting period, with the effect of any changes in the estimates accounted for on a prospective basis.

Derecognition

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

**Impairment of Tangible and Intangible Assets (Excluding Goodwill)**

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered any impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. Corporate assets are allocated to cash-generating units on a reasonable and consistent basis of allocation.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the resulting impairment loss is recognized in profit or loss. When an impairment loss is subsequently reversed, the reversal of an impairment loss is recognized in profit or loss. But only to the extent of the carrying amount (net of depreciation or amortization) that would have been determined had no impairment loss been recognized for the asset.

**Leasing**

2019

At the inception of a contract, the Company assesses whether the contract is, or contains, a lease.

a. The Company as lessor

    Leases are classified as finance leases whenever the terms of a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

    Lease payments (less any lease incentives payable) from operating leases are recognized as income on a straight-line basis over the terms of the relevant leases. Initial direct costs incurred in obtaining operating leases are added to the carrying amounts of the underlying assets and recognized as expenses on a straight-line basis over the lease terms.

Variable lease payments that do not depend on an index or a rate are recognized as income in the periods in which they are incurred.

When a lease includes both land and building elements, the Company assesses the classification of each element separately as a finance or an operating lease based on the assessment as to whether substantially all the risks and rewards incidental to ownership of each element have been transferred to the Company. The lease payments are allocated between the land and the building elements in proportion to the relative fair values of the leasehold interests in the land element and building element of the lease at the inception of a contract. If the allocation of the lease payments can be made reliably, each element is accounted for separately in accordance with its lease classification. When the lease payments cannot be allocated reliably between the land and building elements, the entire lease is generally classified as a finance lease unless it is clear that both elements are operating leases; in which case, the entire lease is classified as an operating lease.

b. The Company as lessee

The Company recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease, except for short-term leases and low-value asset leases accounted for applying a recognition exemption where lease payments are recognized as expenses on a straight-line basis over the lease terms.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities. Right-of-use assets are presented on a separate line in the consolidated balance sheets.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms.

Lease liabilities are initially measured at the present value of the lease payments, which comprise fixed payments, in-substance fixed payments, variable lease payments which depend on an index or a rate, residual value guarantees, the exercise price of a purchase option if the Company is reasonably certain to exercise that option, and payments of penalties for terminating a lease if the lease term reflects such termination, less any lease incentives receivable. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Company uses the lessee’s incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, a change in the amounts expected to be payable under a residual value guarantee, a change in the assessment of an option to purchase an underlying asset, or a change in future lease payments resulting from a change in an index or a rate used to determine those payments, the Company remeasures the lease liabilities with a corresponding adjustment to the right-of-use-assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. Lease liabilities are presented on a separate line in the consolidated balance sheets.

Variable lease payments that do not depend on an index or a rate are recognized as expenses in the periods in which they are incurred.

2018

Leases are classified as finance leases whenever the terms of a lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

a. The Company as lessor

   Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and amortized on a straight-line basis over the lease term.

   Lease incentives included in an operating lease are recognized as an asset. The aggregate cost of incentives is recognized as a reduction of rental income on a straight-line basis.

   Contingent rentals are recognized as income in the period in which they are incurred.

b. The Company as lessee

   Operating lease payments are recognized as expenses on a straight-line basis over the lease term.

   Lease incentives received under operating leases are recognized as liabilities. The aggregate benefit of incentives is recognized as a reduction of rental expenses on a straight-line basis.

   Contingent rentals are recognized as expenses in the period in which they are incurred.

c. Leasehold land for own use

   When a lease includes both land and building elements, the Company assesses the classification of each element separately as a finance or an operating lease based on the assessment as to whether substantially all the risks and rewards incidental to ownership of each element have been transferred to the Company. The minimum lease payments are allocated between the land and the building elements in proportion to the relative fair values of the leasehold interests in the land element and building element of the lease at the inception of the lease.

   If the allocation of the lease payments can be made reliably, each element is accounted for separately in accordance with its lease classification. When the lease payments cannot be allocated reliably between the land and building elements, the entire lease is generally classified as a finance lease unless it is clear that both elements are operating leases; in which case, the entire lease is classified as an operating lease.

**Provisions**

Provisions are recognized when the Bank has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Provisions is the best estimate of the consideration required to settle a present obligation at the consolidated balance sheet date, taking the risks and uncertainties into account on the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying its the present value of those cash flows. (If the time value of currency affects materially.)

**Employee Benefits**

a. Short-term employee benefits

   Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related services.

b. Retirement benefits

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered services entitling them to the contributions.

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost and past service cost) and net interest on the net defined benefit liabilities (assets) are recognized as employee benefits expense in the period in which they occur. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in other equity and will not be reclassified to profit or loss.

Net defined benefit liabilities (assets) represent the actual deficit (surplus) in the Company's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

Pension cost for defined benefit retirement plans of interim period is calculated on a year-to-date basis by using the actuarially determined pension cost rate at the end of prior financial year, adjusted for significant market fluctuations since that time and for significant plan amendments, settlements, or other significant one-off events.

c. Termination benefits

A liability for a termination benefit is recognized at the earlier of when the Bank can no longer withdraw the offer of the termination benefit and when the Bank recognizes any related restructuring costs.

d. Employee preferential interest rate deposits

The Bank offers its employees preferential deposits, including providing finite amount preferential interest rate deposits to current employees and providing the preferential interest rate deposits to current employees and retired employees after their retirement. The difference between the interest rate of preferential deposits and the market rate is recognized as employee benefits.

The finite amount preferential deposits that the Bank paid to its current employees are calculated monthly on accrual basis. The difference between the interest rate of preferential deposits and the market rate is recorded as "Employee benefits expenses". In accordance with Article 30 of the "Regulations Governing the Preparation of Financial Reports by Public Banks", when the interest incurred from preferential interest rate deposits exceeds the interest generated from the market rate, it should be considered the actuarial amount according to the defined benefit plan regulations under IAS 19 "Employee Benefits" since the employee's retirement date.

**Income Tax**

Income tax expense represents the sum of the tax currently payable and deferred tax. Interim period income taxes are assessed on an annual basis and calculated by applying to an interim period's pre-tax income the tax rate that would be applicable to expected total annual earnings. The effect of a change in tax rate resulting from a change in tax law is recognized consistently with the accounting for the transaction itself which gives rise to the tax consequence, and immediately recognized in profit or loss, other comprehensive income or directly in equity when the change in tax rate occurs.

a. Current tax

According to the Income Tax Law, an additional tax of unappropriated earnings is provided for as income tax in the year the stockholders approve to retain earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

Since 2002, in accordance with Article 49 of the Financial Holding Company Act, the Bank elect Financial Holding Company to be the tax payer, and jointly declare and report profit-seeking enterprise income tax and the tax surcharge on surplus retained earnings of a profit-enterprise in accordance with the relevant provisions of the Income Tax Law. Addition tax payable or receivable due to the joint declaration of income tax is recognized under the payables or receivables for allocation of integrated income tax systems account.

b. Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused loss carryforwards to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates and interests in joint ventures, except where the Bank can control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are recognized only to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and these differences are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liabilities are settled or the assets are realized, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets should reflect the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

c. Current and deferred taxes for the period

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity; in which case, the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively.

### Recognition of Interest Revenue and Expense

Except for the financial assets and liabilities at fair value through profit or loss, the interest revenue and interest expense arising from all interest-bearing financial instruments are calculated using the effective interest method in accordance with the relevant provisions and recognized in the consolidated statement of profit or loss under "interest revenue" and "interest expense" items.

### Recognition of Service Fee Revenue and Expense

The service fee revenue and expense are recognized once after the completion of the provision of the loan or other services; if the service fee earned by the execution of the major project is recognized at the completion of the major project, service fee revenue and expense related to subsequent lending services are either amortized over the service period or included in the calculation of the effective interest rate on loans and receivables.

### Customer Loyalty Program

The points earned by customers under loyalty programs are treated as multiple-element revenue arrangements, in which consideration is allocated to the goods or services and the award credits based on fair value through the eyes of the customer. The consideration is not recognized as earnings at the time of the original sales transaction but at the time when the points are redeemed and the Company's obligation is fulfilled.

## 5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Company's accounting policies, the Company's management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

a. Estimated impairment of financial assets

   The provision for impairment of trade receivables, investments in debt instruments, and financial guarantee contracts is based on assumptions about risk of default and expected loss rates. The Company uses judgment in making these assumptions and in selecting the inputs to the impairment calculation, based on the Company's historical experience, existing market conditions as well as forward looking estimates as of the end of each reporting period. For details of the key assumptions and inputs used, see Note 50. Where the actual future cash inflows are less than expected, a material impairment loss may arise.

b. Impairment of goodwill

   Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating units to which goodwill has been allocated. The calculation of the value in use requires management to estimate the future cash flows expected to arise from the cash-generating units and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, a material impairment loss may arise.

## 6. CASH AND CASH EQUIVALENTS

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Cash on hand | $ 17,899,160 | $ 17,003,482 | $ 17,093,643 |
| Checks for clearance | 2,917,743 | 7,060,146 | 6,535,975 |
| Due from banks | 46,072,091 | 43,812,218 | 55,197,051 |
| | 66,888,994 | 67,875,846 | 78,826,669 |
| Less: Allowance for impairment loss | (17,174) | (18,382) | (5,725) |
| | $ 66,871,820 | $ 67,857,464 | $ 78,820,944 |

Reconciliations of cash and cash equivalents reported in the consolidated statements of cash flows with those reported in the consolidated balance sheets as of September 30, 2019 and 2018 are shown in the consolidated statements of cash flows. Reconciliations as of December 31, 2018 are shown below:

| | December 31, 2018 |
|---|---|
| Cash and cash equivalents, balance in the consolidated balance sheets | $ 67,857,464 |
| Due from the Central Bank and call loans to other banks that meet the definition of cash and cash equivalents under IAS 7 | 45,009,393 |
| Securities purchased under resale agreements that meet the definition of cash and cash equivalents under IAS 7 | 44,612,132 |
| Cash and cash equivalents, ending balance in the consolidated statements of cash flows | $ 157,478,989 |

## 7. DUE FROM THE CENTRAL BANK AND CALL LOANS TO BANKS

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Deposit reserves - general account | $ 56,726,884 | $ 53,222,764 | $ 53,853,940 |
| Deposit reserves - foreign currency account | 5,333,513 | 6,038,018 | 5,432,342 |
| Deposits in the Central Bank - general account | 26,326,165 | 28,491,195 | 20,755,425 |
| Call loans and overdrafts | 22,562,036 | 16,518,198 | 41,992,442 |
| | 110,948,598 | 104,270,175 | 122,034,149 |
| Less: Allowance for impairment loss | (79,202) | (46,860) | (64,265) |
| | $ 110,869,396 | $ 104,223,315 | $ 121,969,884 |

The Bank

As provided by the Central Bank of the ROC, NTD-denominated deposit reserves are determined monthly at prescribed rates on the average balances of customers' NTD-denominated deposits, and the deposit reserves account B is subject to withdrawal restrictions.

In addition, the foreign-currency deposit reserves are determined at prescribed rates on balances of additional foreign-currency deposits. These non-interest bearing reserves may be withdrawn at any time. As of September 30, 2019, December 31, 2018 and September 30, 2018, the balances of foreign-currency deposit reserves were $1,328,141 thousand, $1,683,601 thousand and $1,513,173 thousand, respectively.

Indovina Bank

In accordance with the relevant local laws and regulations governing credit institutions, the amounts of compulsory reserves for the State Bank of Vietnam were $712,432 thousand, $705,341 thousand and $1,217,763 thousand as of September 30, 2019, December 31, 2018 and September 30, 2018, respectively.

CUBC Bank

In accordance with the relevant local laws and regulations governing credit institutions, the amounts of compulsory reserves for the National Bank of Cambodia were $1,359,058 thousand, $1,437,362 thousand and $1,415,363 thousand as of September 30, 2019, December 31, 2018 and September 30, 2018, respectively.

CUBCN Bank

In accordance with the relevant local laws and regulations governing credit institutions, the amounts of compulsory reserves for the People's Bank of China were $1,933,882 thousand, $2,211,714 thousand and $1,286,043 thousand as of September 30, 2019, December 31, 2018 and September 30, 2018, respectively.

## 8. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Financial assets mandatorily classified as at fair value through profit or loss | | | |
| Commercial paper | $ 118,434,679 | $ 99,829,344 | $ 118,817,557 |
| Government bonds | 41,601,294 | 25,763,954 | 26,418,755 |
| Corporate bonds | 8,584,336 | 4,908,033 | 7,409,395 |
| Financial debentures | 10,219,142 | 7,958,565 | 7,318,783 |
| Time deposits (including NCD) | 52,127,071 | 62,649,171 | 57,462,017 |
| Stock investments | 63,393 | 3,657 | 29,567 |
| Fund beneficiary certificates | 97,783 | 96,786 | - |
| | 231,127,698 | 201,209,510 | 217,456,074 |
| Derivative financial instruments | | | |
| Foreign exchange forward contracts | 19,800,651 | 21,078,912 | 27,201,542 |
| Interest rate swap | 39,335,335 | 26,800,296 | 29,107,108 |
| Options | 2,800,213 | 884,544 | 311,697 |
| Others | 657,786 | 711,954 | 821,021 |
| | 62,593,985 | 49,475,706 | 57,441,368 |
| | $ 293,721,683 | $ 250,685,216 | $ 274,897,442 |
| Financial liabilities designated as at fair value through profit or loss | | | |
| Bonds | $ 60,075,661 | $ 51,441,482 | $ 51,470,506 |
| Financial liabilities held for trading | | | |
| Bonds | 148,580 | - | 98,850 |

(Continued)

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Derivative financial instruments | | | |
| Foreign exchange forward contracts | $ 19,297,229 | $ 21,124,958 | $ 26,510,193 |
| Interest rate swaps | 32,166,006 | 25,440,315 | 27,167,273 |
| Options | 4,979,561 | 4,450,003 | 3,526,265 |
| Others | 880,229 | 951,020 | 749,360 |
| | 57,323,025 | 51,966,296 | 57,953,091 |
| | $ 117,547,266 | $ 103,407,778 | $ 109,522,447 |

(Concluded)

The Company engages in derivative transactions mainly to accommodate customers' needs, and manage its exposure positions. The financial risk management objective of the Company is to minimize risk due to changes in fair value or cash flows.

The contract amounts (nominal amounts) of derivative transactions for accommodating customers' needs and managing its exposure positions as of September 30, 2019, December 31, 2018 and September 30, 2018 were as follows:

**(Unit: Thousands of U.S. Dollars)**

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Foreign exchange forward contracts | $ 86,606,848 | $ 89,265,988 | $ 86,932,558 |
| Interest rate swaps | 67,832,433 | 93,366,752 | 87,044,422 |
| Cross currency swaps | 1,344,150 | 1,461,149 | 1,484,026 |
| Options | 6,595,510 | 5,275,165 | 4,517,481 |
| Futures | 1,571,669 | 1,731,998 | 646,929 |

As of September 30, 2019, none of the financial assets at fair value through profit or loss was sold under repurchase agreements. As of December 31, 2018 and September 30, 2018, certain financial assets at fair value through profit or loss with notional amounts of $583,927 thousand and $995,963 thousand were sold under repurchase agreement, respectively. Such sold financial assets amounting to $523,342 thousand and $913,548 thousand were recognized under the "Securities sold under repurchase agreements" and were repurchased for $523,725 thousand and $913,833 thousand before the end of January 2019 and October 2018, respectively.

**Financial Liabilities Designated at Fair Value through Profit or Loss**

In September 2014, the Bank was authorized to issue subordinated financial debentures amounting to US$990 million; as of October 8, 2014, the issued subordinated financial debentures were US$660 million (perpetual) and US$330 million (fifteen years) with a fixed interest rate of 5.10% and 4.00%, respectively, and the interest is payable annually. The Bank is authorized by the authorities to redeem the US$660 million of bonds at book value after 12 years and after fulfilling the specified conditions.

In December 2014, the Bank was authorized to issue unsubordinated financial debentures amounting to US$180 million (thirty years), which were subsequently issued on March 30, 2015. In addition to the redemption of bonds by the exercise of call options, the bonds are redeemable on maturity; the bonds were issued in the form of zero-coupon bonds, and the internal rate of return is 4.20%.

In March 2017, the Bank was authorized to issue unsubordinated financial debentures amounting to US$195 million (thirty years), which were subsequently issued on April 11, 2017. In addition to the redemption of bonds by the exercise of call options, the bonds are redeemable on maturity; the bonds were issued in the form of zero-coupon bonds, and the internal rate of return is 4.30%.

In March 2017, the Bank was authorized to issue unsubordinated financial debentures amounting to US$300 million (thirty years), which were subsequently issued on November 24, 2017. In addition to the redemption of bonds by the exercise of call options, the bonds are redeemable on maturity; the bonds were issued in the form of zero-coupon bonds, and the internal rate of return is 4.10%.

The Bank converted fixed interest rates into floating interest rates with interest rate swap contracts to hedge against the fair value risk resulting from interest rate fluctuations. For the nine months ended September 30, 2019 and 2018, such interest rate swaps were valued with a net gain of $6,252,545 thousand and net loss of $2,253,566 thousand, respectively.

## 9. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Investments in equity instruments at FVTOCI | | | |
| Domestic listed shares | $ 7,582,977 | $ 4,214,066 | $ 8,501,932 |
| Overseas stock investments | 7,693,672 | 4,505,813 | 4,780,997 |
| Domestic unlisted shares | 4,085,044 | 3,367,271 | 3,535,086 |
| | 19,361,693 | 12,087,150 | 16,818,015 |
| Investments in debt instruments at FVTOCI | | | |
| Corporate bonds | 53,029,841 | 42,711,025 | 41,355,705 |
| Financial debentures | 84,843,415 | 75,905,600 | 74,438,093 |
| Asset-based securities | 25,396,788 | 3,191,683 | 5,436,017 |
| Government bonds | 115,731,841 | 66,677,444 | 73,679,637 |
| | 279,001,885 | 188,485,752 | 194,909,452 |
| | $ 298,363,578 | $ 200,572,902 | $ 211,727,467 |

These investments in equity instruments are held for medium to long-term strategic purposes. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Company's strategy of holding these investments for long-term purposes.

For investment strategy, the Company sold the investments in equity instruments at FVTOCI with the fair value of $23,601,317 thousand and $26,272,419 thousand during the nine months ended September 30, 2019 and 2018, respectively, and the related unrealized loss of $296,195 thousand and gain of $294,915 thousand were transferred from other equity to retained earnings, accordingly.

Dividends of $958,946 thousand and $1,525,392 thousand were recognized during the nine months ended September 30, 2019 and 2018, respectively. Those related to investments held as of September 30, 2019 and 2018 were $410,894 thousand and $648,440 thousand, respectively, and the remaining amounts were related to investments derecognized during the nine months ended September 30, 2019 and 2018.

As at September 30, 2019, December 31, 2018 and September 30, 2018, certain financial assets at fair value through other comprehensive income with notional amounts of $25,804,732 thousand, $46,355,590 thousand and $53,149,767 thousand were sold under repurchase agreement, respectively. Such sold financial assets amounting to $25,236,750 thousand, $42,613,744 thousand and $46,113,710 thousand were recognized under the "Securities sold under repurchase agreements", and were repurchased for $25,764,203 thousand, $42,764,361 thousand and $46,311,723 thousand before the end of March 2020, March 2019 and December 2018, respectively.

Refer to Note 45 for information relating to financial assets at fair value through other comprehensive income pledged as security.

## 10. INVESTMENTS IN DEBT INSTRUMENT AT AMORTISED COST

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Short-term bills | $ 343,824,498 | $ 348,485,689 | $ 255,594,914 |
| Government bonds | 2,687,677 | 2,313,920 | 2,403,803 |
| Corporate bonds | 856,348 | 2,745,468 | 3,618,209 |
| Financial debentures | 18,513,368 | 16,462,146 | 16,155,248 |
| Structured notes | 3,509,239 | 3,073,300 | 3,055,100 |
| Asset-based bonds | 37,968,769 | 47,973,170 | 44,440,418 |
| | 407,359,899 | 421,053,693 | 325,267,692 |
| Less: Allowance for impairment loss | (31,420) | (31,187) | (52,031) |
| | $ 407,328,479 | $ 421,022,506 | $ 325,215,661 |

For the nine months ended September 30, 2019, the Bank disposed of certain asset-based bonds in advance due to the expected increase in credit risk, and recognized the gain arising from derecognition of financial assets measured at amortized cost amounted to $97,418 thousand.

As of September 30, 2019, December 31, 2018 and September 30, 2018, certain financial assets measured at amortized cost with notional amounts of $352,637 thousand, $19,718,692 thousand and $25,638,808 thousand were sold under repurchase agreements, respectively. Such sold financial assets amounting to $280,781 thousand, $11,447,258 thousand and $14,824,026 thousand were recognized under the "Securities sold under repurchase agreements" and were repurchased for $282,253 thousand, $11,477,549 thousand and $14,886,110 thousand before the end of October 2019, March 2019 and November 2018, respectively.

Refer to Note 45 for information relating to investments in debt instruments at amortised cost pledged as security.

## 11. CREDIT RISK MANAGEMENT FOR INVESTMENTS IN DEBT INSTRUMENTS

The credit risk management of the Company's financial assets at FVTOCI and investments in debt instruments at amortised cost is described as follows:

September 30, 2019

| | Financial Assets at FVTOCI | Investments in Debt Instruments at Amortised Cost | Total |
|---|---|---|---|
| Gross carrying amount | $ 275,130,762 | $ 407,359,899 | $ 682,490,661 |
| Less: Allowance for impairment loss | (111,853) | (31,420) | (143,273) |
| Adjustment to fair value | 3,982,976 | - | 3,982,976 |
| | $ 279,001,885 | $ 407,328,479 | $ 686,330,364 |

December 31, 2018

| | Financial Assets at FVTOCI | Investments in Debt Instruments at Amortised Cost | Total |
|---|---|---|---|
| Gross carrying amount | $ 188,582,733 | $ 421,053,693 | $ 609,636,426 |
| Less: Allowance for impairment loss | (314,633) | (31,187) | (345,820) |
| Adjustment to fair value | 217,652 | - | 217,652 |
| | $ 188,485,752 | $ 421,022,506 | $ 609,508,258 |

September 30, 2018

| | Financial Assets at FVTOCI | Investments in Debt Instruments at Amortised Cost | Total |
|---|---|---|---|
| Gross carrying amount | $ 196,435,028 | $ 325,267,692 | $ 521,702,720 |
| Less: Allowance for impairment loss | (47,490) | (52,031) | (99,521) |
| Adjustment to fair value | (1,478,086) | - | (1,478,086) |
| | $ 194,909,452 | $ 325,215,661 | $ 520,125,113 |

The Company monitors the external credit rating information and price movements of their investments in debt instruments in order to assess whether there has been a significant increase in credit risk since initial recognition.

The Company takes into consideration the multi-period default probability table for each credit rating supplied by external rating agencies, the current financial condition of debtors, industry forecasts, rating of securities issued by credit rating agencies and recovery rates of different types of bonds to assess the 12-month or lifetime expected credit losses.

The carrying values of financial assets at FVTOCI and investments in debt instruments at amortised cost sorted by credit rating of the Company are as follows:

| Credit Rating | Definition | Basis for Recognizing ECLs | Gross Carrying Amount at September 30, 2019 |
|---|---|---|---|
| Low credit risk | Low credit risk at reporting date | 12-month ECLs | $ 682,490,661 |
| Significant increase in credit risk | Credit risk has increased significantly since initial recognition | Lifetime ECLs (not credit-impaired) | - |
| Default | Objective evidence of impairment at the reporting date | Lifetime ECLs (credit-impaired) | - |

| Credit Rating | Definition | Basis for Recognizing ECLs | Gross Carrying Amount at December 31, 2018 |
|---|---|---|---|
| Low credit risk | Low credit risk at reporting date | 12-month ECLs | $ 609,636,426 |
| Significant increase in credit risk | Credit risk has increased significantly since initial recognition | Lifetime ECLs (not credit-impaired) | - |
| Default | Objective evidence of impairment at the reporting date | Lifetime ECLs (credit-impaired) | - |

| Credit Rating | Definition | Basis for Recognizing ECLs | Gross Carrying Amount at September 30, 2018 |
|---|---|---|---|
| Low credit risk | Low credit risk at reporting date | 12-month ECLs | $ 521,702,720 |
| Significant increase in credit risk | Credit risk has increased significantly since initial recognition | Lifetime ECLs (not credit-impaired) | - |
| Default | Objective evidence of impairment at the reporting date | Lifetime ECLs (credit-impaired) | - |

The changes in balances of loss allowance of financial assets at FVTOCI and investments in debt instruments at amortised cost sorted by credit rating of the Company are as follows:

| | Credit Rating | | |
|---|---|---|---|
| | Low Credit Risk (12-month ECLs) | Doubtful (Lifetime ECLs - Not Credit-impaired) | In Default (Lifetime ECLs - Credit-impaired) |
| Balance as of January 1, 2019 | $ 345,820 | $ - | $ - |
| New debt instruments purchased | 58,990 | - | - |
| From performing to in default | (266,962) | - | 266,962 |
| Derecognition | (25,253) | - | (266,962) |
| Effect of exchange rate changes and others | 30,678 | - | - |
| Balance as of September 30, 2019 | $ 143,273 | $ - | $ - |

(Continued)

| | Credit Rating | | |
|---|---|---|---|
| | Low Credit Risk (12-month ECLs) | Doubtful (Lifetime ECLs - Not Credit-impaired) | In Default (Lifetime ECLs - Credit-impaired) |
| Balance as of January 1, 2018 | $ 39,035 | $ - | $ - |
| New debt instruments purchased | 81,778 | - | - |
| Derecognition | (26,350) | - | - |
| Effect of exchange rate changes and others | 5,058 | - | - |
| Balance as of September 30, 2018 | $ 99,521 | $ - | $ - |

(Concluded)

## 12. SECURITIES PURCHASED UNDER RESELL AGREEMENTS

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Foreign bonds | $ 268,230 | $ 2,263,810 | $ 695,410 |
| Corporate bonds | 8,447,439 | 14,034,493 | 40,145,615 |
| Government bonds | 25,505,574 | 24,004,355 | 43,452,816 |
| Financial debentures | 7,426,640 | 4,314,168 | 6,501,684 |
| | 41,647,883 | 44,616,826 | 90,795,525 |
| Less: Allowance for impairment loss | (4,986) | (4,694) | (10,837) |
| | $ 41,642,897 | $ 44,612,132 | $ 90,784,688 |

As of September 30, 2019, none of the securities purchased under resell agreements were sold under repurchase agreements. As of December 31, 2018 and September 30, 2018, certain securities purchased under resell agreements were sold under repurchase agreements with notional amounts of $1,505,917 thousand and $226,077 thousand, respectively. Such repurchase agreements amounting to $1,390,165 thousand and $204,378 thousand, were recognized under the "securities sold under agreements to repurchase" account on the consolidated balance sheets. Repurchase agreements were settled at $1,394,432 thousand and $205,638 thousand before the end of April 2019 and October 2018, respectively.

## 13. RECEIVABLES, NET

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Notes and accounts receivables | $ 110,303,998 | $ 71,947,102 | $ 70,892,166 |
| Interest receivable | 5,593,910 | 9,480,747 | 8,397,481 |
| Acceptance | 963,768 | 1,591,399 | 1,602,833 |
| Factoring receivable | 2,723,799 | 2,607,455 | 4,275,306 |
| Others | 13,530,567 | 2,413,972 | 2,856,890 |
| | 133,116,042 | 88,040,675 | 88,024,676 |
| Less: Allowance for impairment loss | (2,328,894) | (2,061,949) | (2,050,016) |
| | $ 130,787,148 | $ 85,978,726 | $ 85,974,660 |

Refer to Note 50 the for impairment loss analysis of receivables.

The changes in the gross carrying amounts of the Company's receivables for the nine months ended September 30, 2019 and 2018 were as follows:

For the nine months ended September 30, 2019

| | 12-month ECLs | Lifetime ECLs (Collectively Assessed) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Total |
|---|---|---|---|---|
| Balance, beginning of the period | $ 83,956,813 | $ 1,660,989 | $ 2,422,873 | $ 88,040,675 |
| Transferred to Lifetime ECLs | (604,232) | 610,555 | (6,323) | - |
| Transferred to credit-impaired financial assets | (88,450) | (27,621) | 116,071 | - |
| Transferred to 12-month ECLs | 544,241 | (539,485) | (4,756) | - |
| Derecognition of financial assets in the period | (47,349,653) | (1,073,213) | (307,007) | (48,729,873) |
| New financial assets purchased or originated | 93,019,947 | 858,280 | 360,006 | 94,238,233 |
| Effects of exchange rate changes and others | (81,568) | 6,587 | (4,532) | (79,513) |
| Recovery of written-off receivables | - | - | (353,480) | (353,480) |
| Balance, end of the period | $ 129,397,098 | $ 1,496,092 | $ 2,222,852 | $ 133,116,042 |

For the nine months ended September 30, 2018

| | 12-month ECLs | Lifetime ECLs (Collective Assessed) | Lifetime ECLs (Individual) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Total |
|---|---|---|---|---|---|
| Balance, beginning of the period | $ 74,426,480 | $ 2,069,732 | $ 354 | $ 2,915,898 | $ 79,412,464 |
| Transferred to Lifetime ECLs | (624,308) | 626,856 | - | (2,548) | - |
| Transferred to credit-impaired financial assets | (81,144) | (10,667) | - | 91,811 | - |
| Transferred to 12-month ECLs | 300,837 | (296,201) | - | (4,636) | - |
| Derecognition of financial assets in the period | (39,798,811) | (1,807,202) | - | (557,364) | (42,163,377) |
| New financial assets purchased or originated | 50,027,186 | 802,991 | - | 353,870 | 51,184,047 |
| Effects of exchange rate changes and others | (82,426) | 678 | 9 | 262 | (81,477) |
| Recovery of written-off receivables | - | - | - | (326,981) | (326,981) |
| Balance, end of the period | $ 84,167,814 | $ 1,386,187 | $ 363 | $ 2,470,312 | $ 88,024,676 |

The changes in the allowance for doubtful accounts of the Company's receivables for the nine months ended September 30, 2019 and 2018 were as follows:

For the nine months ended September 30, 2019

| | 12-month ECLs | Lifetime ECLs (Collective Assessed) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Impairment Loss under IFRS 9 | Difference of Impairment Loss under Regulations | Total |
|---|---|---|---|---|---|---|
| Balance, beginning of the period | $ 126,022 | $ 116,965 | $ 1,768,492 | $ 2,011,479 | $ 50,470 | $ 2,061,949 |
| Changes of financial instruments recognized at the beginning of the current reporting period | | | | | | |
| Transferred to Lifetime ECLs | (2,554) | 77,187 | (4,305) | 70,328 | - | 70,328 |
| Transferred to credit-impaired financial assets | (556) | (2,496) | 77,699 | 74,647 | - | 74,647 |
| Transferred to 12-month ECLs | 2,229 | (49,325) | (2,945) | (50,041) | - | (50,041) |
| Derecognition of financial assets in the period | (92,441) | (50,138) | (132,171) | (274,750) | - | (274,750) |
| New financial assets purchased or originated | 520,326 | 53,781 | 207,917 | 782,024 | - | 782,024 |
| Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/ Non-accrual Loans" | - | - | - | - | 2,272 | 2,272 |
| Recovery of written-off receivables | - | - | (353,480) | (353,480) | - | (353,480) |
| Effects of exchange rate changes and others | 9,486 | (12,430) | 18,889 | 15,945 | - | 15,945 |
| Balance, end of the period | $ 562,512 | $ 133,544 | $ 1,580,096 | $ 2,276,152 | $ 52,742 | $ 2,328,894 |

For the nine months ended September 30, 2018

| | 12-month ECLs | Lifetime ECLs (Collective Assessed) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Impairment Loss under IFRS 9 | Difference of Impairment Loss under Regulations | Total |
|---|---|---|---|---|---|---|
| Balance, beginning of the period | $ 78,157 | $ 63,923 | $ 2,106,749 | $ 2,248,829 | $ 14,830 | $ 2,263,659 |
| Changes of financial instruments recognized at the beginning of the current reporting period | | | | | | |
| Transferred to Lifetime ECLs | (1,953) | 64,936 | (1,806) | 61,177 | - | 61,177 |
| Transferred to credit-impaired financial assets | (410) | (837) | 63,824 | 62,577 | - | 62,577 |
| Transferred to 12-month ECLs | 1,224 | (21,453) | (2,998) | (23,227) | - | (23,227) |
| Derecognition of financial assets in the period | (52,065) | (35,125) | (341,625) | (428,815) | - | (428,815) |
| New financial assets purchased or originated | 80,506 | 43,197 | 220,015 | 343,718 | - | 343,718 |
| Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/ Non-accrual Loans" | - | - | - | - | 34,661 | 34,661 |
| Recovery of written-off receivables | - | - | (326,981) | (326,981) | - | (326,981) |
| Effects of exchange rate changes and others | 18,431 | (7,944) | 53,268 | 63,755 | (508) | 63,247 |
| Balance, end of the period | $ 123,890 | $ 106,697 | $ 1,770,446 | $ 2,001,033 | $ 48,983 | $ 2,050,016 |

## 14. DISCOUNTS AND LOANS, NET

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Discounts and overdrafts | $ 2,319,444 | $ 2,031,672 | $ 2,126,019 |
| Short-term loans | 398,428,368 | 447,675,391 | 440,557,025 |
| Medium-term loans | 409,313,882 | 373,978,341 | 370,545,862 |
| Long-term loans | 765,292,364 | 793,036,173 | 776,665,839 |
| Export negotiations | 1,725,253 | 1,722,435 | 2,320,809 |
| Overdue loans | 3,836,755 | 2,306,480 | 2,486,260 |
| | 1,580,916,066 | 1,620,750,492 | 1,594,701,814 |
| Less: Allowance for impairment loss | (27,002,139) | (25,427,241) | (25,258,603) |
| | $ 1,553,913,927 | $ 1,595,323,251 | $ 1,569,443,211 |

As of September 30, 2019, December 31, 2018 and September 30, 2018, the loan and credit balances of nonaccrual loans were $3,836,755 thousand, $2,306,480 thousand and $2,486,260 thousand, respectively. The Company wrote off certain credits after completing the required legal procedures.

Refer to Note 50 for the impairment loss analysis of discounts and loans.

The changes in the gross carrying amounts of the Company's discounts and loans for the nine months ended September 30, 2019 and 2018 were as follows:

For the nine months ended September 30, 2019

| | 12-month ECLs | Lifetime ECLs (Collectively Assessed) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Total |
|---|---|---|---|---|
| Balance, beginning of the period | $ 1,549,705,049 | $ 59,275,734 | $ 11,769,709 | $ 1,620,750,492 |
| Transferred to Lifetime ECLs | (32,774,057) | 32,969,697 | (195,640) | - |
| Transferred to credit-impaired financial assets | (1,973,322) | (1,003,916) | 2,977,238 | - |
| Transferred to 12-month ECLs | 24,678,934 | (24,361,598) | (317,336) | - |
| Derecognition of financial assets in the period | (426,706,029) | (21,847,750) | (1,446,315) | (450,000,094) |
| New financial assets purchased or originated | 396,799,005 | 13,487,454 | 1,010,126 | 411,296,585 |
| Effects of exchange rate changes and others | (91,044) | (11,043) | (77,536) | (179,623) |
| Recovery of written-off receivables | - | - | (951,294) | (951,294) |
| Balance, end of the period | $ 1,509,638,536 | $ 58,508,578 | $ 12,768,952 | $ 1,580,916,066 |

For the nine months ended September 30, 2018

| | 12-month ECLs | Lifetime ECLs (Collective Assessed) | Lifetime ECLs (Individual) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Total |
|---|---|---|---|---|---|
| Balance, beginning of the period | $ 1,399,416,842 | $ 47,415,416 | $ 558,373 | $ 10,407,468 | $ 1,457,798,099 |
| Transferred to Lifetime ECLs | (22,699,827) | 22,362,169 | 396,277 | (58,619) | - |
| Transferred to credit-impaired financial assets | (1,666,951) | (374,023) | (553,139) | 2,594,113 | - |
| Transferred to 12-month ECLs | 22,096,914 | (21,695,340) | (5,037) | (396,537) | - |
| Derecognition of financial assets in the period | (365,031,563) | (12,117,710) | (4,439) | (1,978,492) | (379,132,204) |
| New financial assets purchased or originated | 500,093,528 | 12,425,749 | 256,180 | 1,458,937 | 514,234,394 |
| Effects of exchange rate changes and others | 2,575,073 | 214,219 | (301,744) | (11,256) | 2,476,292 |
| Recovery of written-off receivables | - | - | - | (674,767) | (674,767) |
| Balance, end of the period | $ 1,534,784,016 | $ 48,230,480 | $ 346,471 | $ 11,340,847 | $ 1,594,701,814 |

The changes in the allowance for doubtful accounts of the Company's discounts and loans for the nine months ended September 30, 2019 and 2018 were as follows:

For the nine months ended September 30, 2019

| | 12-month ECLs | Lifetime ECLs (Collective Assessed) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Impairment Loss under IFRS 9 | Difference of Impairment Loss under Regulations | Total |
|---|---|---|---|---|---|---|
| Balance, beginning of the period | $ 3,914,449 | $ 1,667,321 | $ 4,912,617 | $ 10,494,387 | $ 14,932,854 | $ 25,427,241 |
| Changes of financial instruments recognized at the beginning of the current reporting period | | | | | | |
| Transferred to Lifetime ECLs | (148,909) | 1,045,159 | (32,288) | 863,962 | - | 863,962 |
| Transferred to credit-impaired financial assets | (8,517) | (45,700) | 659,424 | 605,207 | - | 605,207 |
| Transferred to 12-month ECLs | 71,468 | (705,266) | (35,991) | (669,789) | - | (669,789) |
| Derecognition of financial assets in the period | (1,306,015) | (374,520) | (403,805) | (2,084,340) | - | (2,084,340) |
| New financial assets purchased or originated | 1,166,166 | 251,536 | 1,097,207 | 2,514,909 | - | 2,514,909 |
| Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/ Non-accrual Loans" | - | - | - | - | 2,339,464 | 2,339,464 |
| Recovery of written-off receivables | - | - | (951,294) | (951,294) | - | (951,294) |
| Effects of exchange rate changes and others | (976,844) | (382,354) | 321,250 | (1,037,948) | (5,273) | (1,043,221) |
| Balance, end of the period | $ 2,711,798 | $ 1,456,176 | $ 5,567,120 | $ 9,735,094 | $ 17,267,045 | $ 27,002,139 |

For the nine months ended September 30, 2018

| | 12-month ECLs | Lifetime ECLs (Collective Assessed) | Lifetime ECLs (Individual) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Impairment Loss under IFRS 9 | Difference of Impairment Loss under Regulations | Total |
|---|---|---|---|---|---|---|---|
| Balance, beginning of the period | $ 3,724,645 | $ 1,036,509 | $ - | $ 4,690,540 | $ 9,451,694 | $ 13,788,238 | $ 23,239,932 |
| Changes of financial instruments recognized at the beginning of the current reporting period | | | | | | | |
| Transferred to Lifetime ECLs | (112,809) | 1,111,931 | 7,421 | (12,787) | 993,756 | - | 993,756 |
| Transferred to credit-impaired financial assets | (4,858) | (16,854) | (27,949) | 831,693 | 782,032 | - | 782,032 |
| Transferred to 12-month ECL | 113,319 | (571,969) | (8) | (75,769) | (534,427) | - | (534,427) |
| Derecognition of financial assets in the period | (1,216,671) | (101,718) | (8) | (509,804) | (1,828,201) | - | (1,828,201) |
| New financial assets purchased or originated | 1,933,807 | 538,138 | 2 | 945,558 | 3,417,505 | - | 3,417,505 |
| Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans" | - | - | - | - | - | 190,452 | 190,452 |
| Recovery of written-off receivables | - | - | - | (674,767) | (674,767) | - | (674,767) |
| Effects of exchange rate changes and others | (150,315) | (175,540) | 28,118 | (334,738) | (632,475) | 304,796 | (327,679) |
| Balance, end of the period | $ 4,287,118 | $ 1,820,497 | $ 7,576 | $ 4,859,926 | $ 10,975,117 | $ 14,283,486 | $ 25,258,603 |

## 15. RESERVES FOR LOSSES ON GUARANTEES, LETTER OF CREDIT RECEIVABLE AND FINANCING COMMITMENTS

The changes in the Company's guarantee liability provisions, letter of credit receivable and provision of commitments for the nine months ended September 30, 2019 and 2018 were as follows:

For the nine months ended September 30, 2019

| | 12-month ECLs | Lifetime ECLs (Collective Assessed) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Impairment Loss under IFRS 9 | Difference of Impairment Loss under Regulations | Total |
|---|---|---|---|---|---|---|
| Balance, beginning of the period | $ 251,972 | $ 73,536 | $ 5,118 | $ 330,626 | $ 71,327 | $ 401,953 |
| Changes of financial instruments recognized at the beginning of the current reporting period | | | | | | |
| Transferred to Lifetime ECLs | (7,907) | 62,582 | (72) | 54,603 | - | 54,603 |
| Transferred to credit-impaired financial assets | (43) | (53) | 5,999 | 5,903 | - | 5,903 |
| Transferred to 12-month ECLs | 2,569 | (37,986) | (520) | (35,937) | - | (35,937) |
| Derecognition of financial assets in the period | (108,467) | (14,603) | (1,067) | (124,137) | - | (124,137) |
| New financial assets purchased or originated | 82,997 | 17,769 | 3,360 | 104,126 | - | 104,126 |
| Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/ Non-accrual Loans" | - | - | - | - | 58,585 | 58,585 |
| Effects of exchange rate changes and others | (14,286) | (13,156) | (4,998) | (32,440) | - | (32,440) |
| Balance, end of the period | $ 206,835 | $ 88,089 | $ 7,820 | $ 302,744 | $ 129,912 | $ 432,656 |

For the nine months ended September 30, 2018

| | 12-month ECLs | Lifetime ECLs (Collective Assessed) | Lifetime ECLs (Neither Purchased Nor Originated Credit-impaired Financial Assets) | Impairment Loss under IFRS 9 | Difference of Impairment Loss under Regulations | Total |
|---|---|---|---|---|---|---|
| Balance, beginning of the period | $ 114,406 | $ 21,997 | $ 23,394 | $ 159,797 | $ 52,952 | $ 212,749 |
| Changes of financial instruments recognized at the beginning of the current reporting period | | | | | | |
| Transferred to Lifetime ECLs | (1,022) | 23,240 | (24) | 22,194 | - | 22,194 |
| Transferred to credit-impaired financial assets | (17) | (27) | 5,506 | 5,462 | - | 5,462 |
| Transferred to 12-month ECLs | 618 | (11,900) | (362) | (11,644) | - | (11,644) |
| Derecognition of financial assets in the period | (25,209) | (8,877) | (14,260) | (48,346) | - | (48,346) |
| New financial assets purchased or originated | 90,267 | 57,182 | 1,010 | 148,459 | - | 148,459 |
| Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/ Non-accrual Loans" | - | - | - | - | 10,973 | 10,973 |
| Effects of exchange rate changes and others | 806 | (1,366) | (4,411) | (4,971) | (79) | (5,050) |
| Balance, end of the period | $ 179,849 | $ 80,249 | $ 10,853 | $ 270,951 | $ 63,846 | $ 334,797 |

## 16. SUBSIDIARIES

### Subsidiaries Included in the Consolidated Financial Statement

The subsidiaries included in the consolidated financial statements are as follows:

| | | | Proportion of Ownership (%) | | | |
|---|---|---|---|---|---|---|
| Investor | Subsidiary | Nature of Activities | September 30, 2019 | December 31, 2018 | September 30, 2018 | Description |
| The Bank | Indovina Bank Limited (Indovina Bank) | Bank business | 50% | 50% | 50% | Incorporated in Vietnam on November 21, 1990 |
| | Cathay United Bank (Cambodia) Corporation Limited (CUBC Bank) | Bank business | 100% | 100% | 100% | SBC Bank was incorporated in Cambodia on July 5, 1993, and renamed as CUBC as of January 14, 2014 |
| | Cathay United Bank (China) Co., Ltd. (CUBCN Bank) (Notes 1 and 2) | Bank business | 100% | 100% | 100% | Incorporated in China on September 3, 2018 |

Note 1: Upon approval by the authorities, the Shanghai Branch, Qingdao Branch and Shenzhen Branch of Cathay United Bank merged into CUBCN. Please refer to Table 3 for the relevant investment information.

Note 2: As a major subsidiary, its financial statements were reviewed.

## 17. INVESTMENTS MEASURED BY EQUITY METHOD, NET

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Associates that are not individually material | | | |
| Taiwan Real-estate Management Corp. | $ 101,190 | $ 103,185 | $ 102,068 |
| Taiwan Finance Corp. | 1,648,093 | 1,665,689 | 1,637,371 |
| | $ 1,749,283 | $ 1,768,874 | $ 1,739,439 |

Aggregate information on the Bank's associates that are not individually material is as follows:

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| The Bank's share of | | | | |
| Net profit | $ 27,327 | $ 23,707 | $ 70,305 | $ 65,644 |
| Other comprehensive income | - | (7,436) | (22,991) | (6,480) |
| Total comprehensive income for the period | $ 27,327 | $ 16,271 | $ 47,314 | $ 59,164 |

Investments accounted for using the equity method and the Bank's share of profit and loss and other comprehensive income are calculated based on the financial statements which were not reviewed; however, management believes there is no material impact on the equity method of accounting or the calculation of the share of profit or loss and other comprehensive income from the financial statements which have not been reviewed.

## 18. PROPERTY AND EQUIPMENT, NET

| | Land | Buildings | Equipment | Transportation Equipment | Other Equipment | Leasehold Improvements | Construction in Progress and Prepayment for Equipment | Total |
|---|---|---|---|---|---|---|---|---|
| Cost | | | | | | | | |
| Balance at January 1, 2019 | $ 15,379,376 | $ 10,311,364 | $ 4,875,823 | $ 109,873 | $ 7,712,030 | $ 63,049 | $ 489,005 | $ 38,940,520 |
| Additions | - | - | 328,063 | 3,878 | 128,233 | 136 | 405,982 | 866,292 |
| Disposals | - | (1,767) | (482,573) | (11,057) | (344,710) | (1,446) | - | (841,553) |
| Reclassification | 339,011 | (73,548) | 95,530 | 10,417 | 143,165 | 112,736 | (368,208) | 259,103 |
| Others (Note) | (1,800) | - | - | - | - | - | - | (1,800) |
| Exchange differences | 1,647 | 3,411 | 4,841 | 1,095 | 4,850 | (2,688) | (1,377) | 11,779 |
| Balance at September 30, 2019 | 15,718,234 | 10,239,460 | 4,821,684 | 114,206 | 7,643,568 | 171,787 | 525,402 | 39,234,341 |
| Accumulated depreciation and impairment | | | | | | | | |
| Balance at January 1, 2019 | - | 4,355,181 | 3,103,465 | 81,073 | 5,934,810 | 25,427 | - | 13,499,956 |
| Depreciation | - | 154,013 | 410,497 | 11,143 | 374,776 | 7,057 | - | 957,486 |
| Disposals | - | (1,767) | (474,070) | (10,703) | (329,801) | (1,360) | - | (817,701) |
| Reclassification | - | (41,113) | 2,381 | 1,249 | (90,150) | 87,770 | - | (39,863) |
| Exchange differences | - | 1,103 | (9,993) | 796 | 1,024 | 10,191 | - | 3,121 |
| Balance at September 30, 2019 | - | 4,467,417 | 3,032,280 | 83,558 | 5,890,659 | 129,085 | - | 13,602,999 |
| Net | | | | | | | | |
| Balance at September 30, 2019 | $ 15,718,234 | $ 5,772,043 | $ 1,789,404 | $ 30,648 | $ 1,752,909 | $ 42,702 | $ 525,402 | $ 25,631,342 |

(Continued)

| | Land | Buildings | Equipment | Transportation Equipment | Other Equipment | Leasehold Improvements | Construction in Progress and Prepayment for Equipment | Total |
|---|---|---|---|---|---|---|---|---|
| Cost | | | | | | | | |
| Balance at January 1, 2018 | $ 15,377,939 | $ 10,303,217 | $ 4,234,054 | $ 108,381 | $ 7,707,438 | $ 59,762 | $ 532,452 | $ 38,323,243 |
| Additions | - | - | 862,867 | 1,530 | 199,836 | 1,800 | 523,539 | 1,589,572 |
| Disposals | - | (1,217) | (465,199) | (1,955) | (557,117) | - | - | (1,025,488) |
| Reclassification | - | (447) | 109,638 | - | 267,512 | 576 | (479,413) | (102,134) |
| Others (Note) | (1,800) | - | - | - | - | - | - | (1,800) |
| Exchange differences | 3,048 | 7,802 | 4,693 | 2,434 | 6,710 | 1,404 | 1,916 | 28,007 |
| Balance at September 30, 2018 | 15,379,187 | 10,309,355 | 4,746,053 | 110,390 | 7,624,379 | 63,542 | 578,494 | 38,811,400 |
| Accumulated depreciation and impairment | | | | | | | | |
| Balance at January 1, 2018 | - | 4,137,330 | 3,118,151 | 75,243 | 6,099,041 | 20,180 | - | 13,449,945 |
| Depreciation | - | 161,783 | 330,323 | 5,892 | 360,803 | 6,184 | - | 864,985 |
| Disposals | - | (548) | (464,610) | (1,955) | (545,762) | - | - | (1,012,875) |
| Reclassification | - | - | (17,069) | - | 16,887 | - | - | (182) |
| Exchange differences | - | 2,418 | 3,959 | 1,789 | 2,612 | 593 | - | 11,371 |
| Balance at September 30, 2018 | - | 4,300,983 | 2,970,754 | 80,969 | 5,933,581 | 26,957 | - | 13,313,244 |
| Net | | | | | | | | |
| Balance at September 30, 2018 | $ 15,379,187 | $ 6,008,372 | $ 1,775,299 | $ 29,421 | $ 1,690,798 | $ 36,585 | $ 578,494 | $ 25,498,156 |

(Concluded)

Note: The urban renewal demolition and resettlement compensation fees.

Depreciation of the above-mentioned items of property and equipment is calculated on a straight-line basis over their estimated useful lives as follows:

| | |
|---|---|
| Buildings | |
| Main buildings | 50 to 60 years |
| Buildings renovation | 5 years |
| Equipment | 3 to 8 years |
| Transportation equipment | 3 to 7 years |
| Miscellaneous equipment | 3 to 15 years |
| Leasehold improvements | 5 years |

## 19. RENTAL AGREEMENTS

a. Right-of-use assets - 2019

| | September 30, 2019 |
|---|---|
| Carrying amount of right-of-use assets | |
| Land and buildings | $ 3,975,076 |
| Equipment | 3,035 |
| Transportation equipment | 26,152 |
| | $ 4,004,263 |

| | For the Three Months Ended September 30, 2019 | For the Nine Months Ended September 30, 2019 |
|---|---|---|
| Additions of right-of-use assets | | $ 410,946 |
| Depreciation expense of right-of-use assets | | |
| Land and buildings | $ 300,405 | $ 867,052 |
| Equipment | 325 | 826 |
| Transportation equipment | 4,254 | 11,065 |
| | $ 304,984 | $ 878,943 |

b. Lease liabilities - 2019

| | September 30, 2019 |
|---|---|
| Carrying amount of lease liabilities | $ 4,021,216 |

The discount rate intervals of lease liabilities are as follows:

| | September 30, 2019 |
|---|---|
| Land and buildings | 0.35%-5.22% |
| Equipment | 0.70%-4.13% |
| Transportation equipment | 0.70%-5.38% |

c. Other lease information

| | For the Three Months Ended September 30, 2019 | For the Nine Months Ended September 30, 2019 |
|---|---|---|
| Short-term rental expense | $ 190,625 | $ 609,416 |
| Low value assets rental expense | $ 40,998 | $ 254,760 |
| Variable lease payment expense not included in measurable lease liabilities | $ 131 | $ 330 |
| Gross cash outflow for leases | | $ 1,742,397 |

The Company leases certain assets which qualify as short-term leases and certain assets which qualify as low-value asset leases. The Company has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

2018

The Bank

The total future minimum lease payments for non-cancellable operating leases are as follows:

| | December 31, 2018 | September 30, 2018 |
|---|---|---|
| Within a year | $ 1,435,798 | $ 1,388,649 |
| Over one year and up to five years | 3,501,147 | 3,129,407 |
| Over five years | 277,120 | 231,835 |
| | $ 5,214,065 | $ 4,749,891 |

Indovina Bank

As of December 31, 2018 and September 30, 2018, Indovina Bank has signed an effective tenancy operating lease agreement, and the estimated rent payable for the future lease period is as follows:

| | December 31, 2018 | September 30, 2018 |
|---|---|---|
| Within a year | $ 35,813 | $ 29,259 |
| Over one year and up to five years | 70,604 | 59,241 |
| Over five years | 9,342 | 12,022 |
| | $ 115,759 | $ 100,522 |

CUBC Bank

As of December 31, 2018 and September 30, 2018, CUBC Bank has signed an effective tenancy operating lease agreement, and the estimated rent payable for the future lease period is as follows:

| | December 31, 2018 | September 30, 2018 |
|---|---|---|
| Within a year | $ 2,912 | $ 15,826 |
| Over one year and up to five years | 23,114 | 38,750 |
| Over five years | 49,341 | 8,878 |
| | $ 75,367 | $ 63,454 |

CUBCN Bank

As of December 31, 2018 and September 30, 2018, CUBCN Bank has signed an effective tenancy operating lease agreement, and the estimated rent payable for the future lease period is as follows:

| | December 31, 2018 | September 30, 2018 |
|---|---|---|
| Within a year | $ 114,211 | $ 108,347 |
| Over one year and up to five years | 25,107 | 33,271 |
| Over five years | - | - |
| | $ 139,318 | $ 141,618 |

## 20. INVESTMENT PROPERTIES, NET

| | Land | Buildings | Total |
|---|---|---|---|
| January 1, 2019 | $ 1,311,785 | $ 127,901 | $ 1,439,686 |
| Transfer from property and equipment | 283,729 | 79,271 | 363,000 |
| Disposal | (60,511) | (14,189) | (74,700) |
| Loss on fair value adjustment | (66,538) | (4,362) | (70,900) |
| September 30, 2019 | $ 1,468,465 | $ 188,621 | $ 1,657,086 |
| January 1, 2018 | $ 1,414,476 | $ 132,896 | $ 1,547,372 |
| Disposal | (85,900) | - | (85,900) |
| September 30, 2018 | $ 1,328,576 | $ 132,896 | $ 1,461,472 |

a. As of September 30, 2019, December 31, 2018 and September 30, 2018, no investment property was pledged.

b. Part of the purpose of holding certain real estate of the Bank is to earn rent or capital surplus, the other part is for self-use. When the part held for self-use is less than 5% of the individual real estate, the real estate is classified as investment properties.

c. The Bank’s investment properties were appraised by qualified real estate appraisers in Taiwan, according to the “Technical Rules for Real Estate Valuation.” The valuation dates were June 30, 2019, December 31, 2018 and June 30, 2018, respectively. The appraisers had reviewed the original valuation reports issued on the aforementioned valuation dates and clarified that the valuation reports were in effect on September 30, 2019 and 2018, respectively.

| Appraiser Firm | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| REPro Valuation and Professional Services | Hong-Xu, Wu; You-Xiang Cai | Hong-Xu, Wu; Zhi-Hao, Wu; Fu-Xue, Shi | Hong-Xu, Wu; Zhi-Hao, Wu; Fu-Xue, Shi |

The fair value is supported by observable evidence in the market. The main appraisal approaches applied include the income approach (such as discounted cash flow model and direct capitalization approach), comparison approach and cost approach. The significant unobservable inputs mainly include discount rates and the related adjustments, and categorized as level 3 of fair value hierarchy.

1) As office buildings have market liquidity and their rent levels are similar to comparable properties in the same neighborhood, their fair values have been determined using the comparison approach and the income approach.

   Net rental income is based on current market practices, assuming an annual rent increase of between 0% to 1.5% to extrapolate the total income of the underlying property, excluding losses as a result of idle and other reasons and related operation costs.

   According to the ROC Real Estate Appraisers Association Gazette No. 5, the house tax is based on the actual payment data. If there is no payment data, the house tax is based on the reference tables of current house values from each city to estimate the total current house value, including the area of the subject property and related public utilities, and then calculated with tax rates according to House Tax Act.

Land value tax is based on the changes in the announced land value of the underlying property in the past few years and the actual payment data, to further extrapolate the announced land value in the future.

According to the ROC Real Estate Appraisers Association Gazette No. 5, replacement allowance for significant renovation costs is calculated based on 10% of construction costs and amortized over 20 years as assumed useful life.

The main parameters are as follows:

| | June 30, 2019 | December 31, 2018 | June 30, 2018 |
|---|---|---|---|
| Direct capitalization rate | 1.96%-5.74% | 1.98%-5.73% | 2.05%-5.85% |
| Overall capital interest rate | 0.76%-2.89% | 0.76%-2.89% | 0.76%-2.89% |

2) The fair value has been determined by the method of land development analysis and comparison. Reserved area in hillside land, scenic land site, areas for agriculture, animal husbandry and forestry had fewer market transactions as their uses are restricted by law, and will not have significant changes in the market in the near future.

| | June 30, 2019 | December 31, 2018 | June 30, 2018 |
|---|---|---|---|
| Rate of return | 15.00% | 15.00% | 15.00% |
| Overall capital interest rate | 2.10% | 2.11% | 2.11% |

Operating expenses directly related to investment properties

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Investment properties generating rental income | $ - | $ - | $ - | $ - |
| Investment properties not generating rental income | 375 | 451 | 2,221 | 2,183 |
| | $ 375 | $ 451 | $ 2,221 | $ 2,183 |

## 21. INTANGIBLE ASSETS, NET

| | Computer Software | Goodwill | Other | Total |
|---|---|---|---|---|
| Cost | | | | |
| Balance at January 1, 2019 | $ 2,434,377 | $ 6,997,944 | $ 22,170 | $ 9,454,491 |
| Additions | 389,315 | - | 3,896 | 393,211 |
| Disposal | (148,209) | - | - | (148,209) |
| Reclassification | 58,385 | - | (26,274) | 32,111 |
| Exchange differences | (10,488) | 3,266 | 208 | (7,014) |
| Balance at September 30, 2019 | 2,723,380 | 7,001,210 | - | 9,724,590 |

(Continued)

| | Computer Software | Goodwill | Other | Total |
|---|---|---|---|---|
| Accumulated amortization and impairment | | | | |
| Balance at January 1, 2019 | $ 1,433,552 | $ - | $ - | $ 1,433,552 |
| Amortization | 335,920 | - | - | 335,920 |
| Disposal | (148,209) | - | - | (148,209) |
| Exchange differences | (17,069) | - | - | (17,069) |
| Balance at September 30, 2019 | 1,604,194 | - | - | 1,604,194 |
| Net | | | | |
| Balance at September 30, 2019 | $ 1,119,186 | $ 7,001,210 | $ - | $ 8,120,396 |
| Cost | | | | |
| Balance at January 1, 2018 | $ 1,996,800 | $ 6,988,589 | $ 20,043 | $ 9,005,432 |
| Additions | 165,058 | - | 10,650 | 175,708 |
| Disposal | (76,540) | - | - | (76,540) |
| Reclassification | 108,460 | - | - | 108,460 |
| Exchange differences | (4,267) | 7,431 | 454 | 3,618 |
| Balance at September 30, 2018 | 2,189,511 | 6,996,020 | 31,147 | 9,216,678 |
| Accumulated amortization and impairment | | | | |
| Balance at January 1, 2018 | 1,219,448 | - | - | 1,219,448 |
| Amortization | 240,774 | - | - | 240,774 |
| Disposal | (76,540) | - | - | (76,540) |
| Exchange differences | (6,365) | - | - | (6,365) |
| Balance at September 30, 2018 | 1,377,317 | - | - | 1,377,317 |
| Net | | | | |
| Balance at September 30, 2018 | $ 812,194 | $ 6,996,020 | $ 31,147 | $ 7,839,361 |

(Concluded)

The Bank acquired China United Trust & Investment Corporation on December 29, 2007 and recognized goodwill amounting to $6,673,083 thousand.

The Bank acquired 70% of the shares of CUBC Bank on December 13, 2012 and recognized goodwill amounting to US$10,570 thousand, then further acquired the remaining 30% of shares on September 16, 2013.

During impairment testing for goodwill, the Bank treated individual business units as cash-generating units (CGUs). Goodwill resulting from the merger was allocated to the relevant CGUs. The recoverable amount was determined by the value in use of each CGU and was calculated at the present values of the cash flow forecast for the next five years based on the going-concern assumption. Future cash flows were estimated on the basis of present operations and will be adjusted depending on the business outlook and economic trends.

## 22. OTHER ASSETS, NET

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Prepayments | $ 1,133,779 | $ 1,290,579 | $ 1,663,339 |
| Temporary payments and suspense accounts | 6,694,153 | 262,216 | 284,622 |
| Interbank clearing funds | 7,992,902 | 6,388,757 | 3,171,310 |
| Refundable deposits, net | 23,876,432 | 26,380,549 | 26,965,835 |
| Operating deposits, net | 592,462 | 647,932 | 650,988 |
| Others | 91,176 | 91,215 | 112,712 |
| | $ 40,380,904 | $ 35,061,248 | $ 32,848,806 |

## 23. DEPOSITS FROM THE CENTRAL BANK AND BANKS

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Call loans from banks | $ 66,327,252 | $ 38,548,992 | $ 47,391,360 |
| Due to Chunghwa Post Co., Ltd. | 17,709,405 | 18,044,685 | 18,057,626 |
| Banks overdrafts | 3,843,841 | 250,092 | 1,825,632 |
| Deposits from the Central Bank and banks | 24,705,232 | 24,588,464 | 19,896,585 |
| | $ 112,585,730 | $ 81,432,233 | $ 87,171,203 |

## 24. NOTES AND BONDS ISSUED UNDER REPURCHASE AGREEMENTS

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Asset-based securities | $ 280,781 | $ 9,190,302 | $ 13,185,711 |
| Corporate bonds | 1,170,155 | 8,797,043 | 9,040,061 |
| Mortgage backed securities | 1,338,482 | - | - |
| Asset collateral guarantee securities | - | 529,543 | - |
| Government bonds | 10,590,873 | 22,326,980 | 26,453,275 |
| Financial debentures | 12,137,240 | 15,130,641 | 13,376,615 |
| | $ 25,517,531 | $ 55,974,509 | $ 62,055,662 |

## 25. PAYABLES

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Accounts payable | $ 45,574,372 | $ 7,412,232 | $ 6,954,482 |
| Accrued expenses | 7,735,356 | 7,615,684 | 6,947,663 |
| Interest payable | 5,027,166 | 4,625,435 | 4,676,823 |
| Payable on bonds trade settle | 3,032,766 | 69,289 | 1,660,961 |
| Receipts under custody | 1,802,912 | 424,823 | 2,187,617 |
| Banker's acceptances | 969,474 | 1,600,282 | 1,643,394 |
| Others | 12,906,408 | 3,165,225 | 3,935,866 |
| | $ 77,048,454 | $ 24,912,970 | $ 28,006,806 |

## 26. DEPOSITS AND REMITTANCES

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Checking deposits | $ 14,209,447 | $ 16,283,818 | $ 13,482,088 |
| Demand deposits | 503,248,695 | 532,446,775 | 498,113,444 |
| Demand savings deposits | 928,000,367 | 847,465,305 | 852,294,063 |
| Time deposits | 463,315,396 | 457,517,789 | 460,923,578 |
| Time savings deposits | 383,253,959 | 367,920,662 | 366,785,379 |
| Negotiable certificates of deposits | 3,145,900 | 4,313,300 | 3,366,736 |
| Outward remittances and remittances payable | 5,302,958 | 1,714,041 | 1,967,606 |
| | $ 2,300,476,722 | $ 2,227,661,690 | $ 2,196,932,894 |

## 27. FINANCIAL DEBENTURES

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| 2nd issue of subordinated financial debentures in 2009; fixed rate at 2.6%; maturity: July 2019 | $ - | $ 1,500,000 | $ 1,500,000 |
| 1st issue of subordinated financial debentures in 2011; fixed rate at 1.72%; maturity: March 2021 | 1,500,000 | 1,500,000 | 1,500,000 |
| 2nd issue of subordinated financial debentures in 2011; fixed rate at 1.72%; maturity: June 2021 | 2,500,000 | 2,500,000 | 2,500,000 |
| 1st issue of subordinated financial debentures in 2012; fixed rate at 1.48%; maturity: June 2019 | - | 200,000 | 200,000 |
| 1st issue of subordinated financial debentures in 2012; fixed rate at 1.65%; maturity: June 2022 | 4,200,000 | 4,200,000 | 4,200,000 |
| 2nd issue of subordinated financial debentures in 2012; fixed rate at 1.65%; maturity: August 2022 | 5,600,000 | 5,600,000 | 5,600,000 |
| 1st issue of subordinated financial debentures in 2013; fixed rate at 1.55%; maturity: April 2020 | 100,000 | 100,000 | 100,000 |

(Continued)

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| 1st issue of subordinated financial debentures in 2013; fixed rate at 1.7%; maturity: April 2023 | $ 9,900,000 | $ 9,900,000 | $ 9,900,000 |
| 1st issue of subordinated financial debentures in 2014; fixed rate at 1.7%; maturity: May 2021 | 3,000,000 | 3,000,000 | 3,000,000 |
| 1st issue of subordinated financial debentures in 2014; fixed rate at 1.85%; maturity: May 2024 | 12,000,000 | 12,000,000 | 12,000,000 |
| 2nd issue of subordinated financial debentures in 2017; fixed rate at 1.85%; maturity: April 2027 | 12,700,000 | 12,700,000 | 12,700,000 |
| 2nd issue of subordinated financial debentures in 2017; fixed rate at 1.5%; maturity: April 2024 | 2,400,000 | 2,400,000 | 2,400,000 |
| | $ 53,900,000 | $ 55,600,000 | $ 55,600,000 |

(Concluded)

## 28. OTHER FINANCIAL LIABILITIES

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Principal of structured products | $ 65,673,326 | $ 76,509,334 | $ 76,491,161 |

## 29. PROVISIONS

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Reserve for employee benefits | | | |
| Defined benefit plan | $ 2,326,066 | $ 2,401,044 | $ 2,432,002 |
| Preferential interest rate deposits | 584,167 | 595,751 | 567,460 |
| Reserve for losses on guarantees | 163,262 | 163,715 | 120,855 |
| Reserve for finance commitments | 264,806 | 233,938 | 205,753 |
| Other operating reserve | 22,680 | 22,680 | 22,680 |
| Other reserve - letter of credit | 4,588 | 4,299 | 8,189 |
| | $ 3,365,569 | $ 3,421,427 | $ 3,356,939 |

## 30. RETIREMENT BENEFIT PLANS

a. Defined contribution plan

The Bank adopted a pension plan under the Labor Pension Act (the “LPA”), which is a state-managed defined contribution plan. Under the LPA, the Bank makes monthly contributions equal to 6% of each employee’s monthly salary to employees’ pension accounts in the Bureau of Labor Insurance.

For the nine months ended September 30, 2019 and 2018, the Company recognized expenses of $298,354 thousand and $277,514 thousand in the consolidated statements of comprehensive income in accordance with the defined contribution plan, respectively.

b. Defined benefit plan

The Bank adopted the defined benefit plan under the Labor Standards Law operated by the government of the ROC. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the six months before retirement.

The Bank contributes a fixed proportion of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name.

For the nine months ended September 30, 2019 and 2018, pension expenses under the defined benefit plan recognized in the consolidated statements of comprehensive income amounted to $147,536 thousand and $153,712 thousand, respectively.

c. Employee preferential interest rate deposit plan

For the nine months ended September 30, 2019 and 2018, employee preferential interest rate deposit plan expenses amounted to $263,719 thousand and $250,383 thousand, respectively.

## 31. OTHER LIABILITIES

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Advance receipts | $ 621,333 | $ 592,919 | $ 528,881 |
| Temporary receipts and suspense accounts | 2,022,838 | 1,917,586 | 2,114,736 |
| Guarantee deposits received | 3,969,617 | 3,418,257 | 4,216,815 |
| Contract liabilities | 1,291,592 | 1,382,319 | 1,304,422 |
| Others | 3 | 2 | - |
| | $ 7,905,383 | $ 7,311,083 | $ 8,164,854 |

## 32. EQUITY

a. Capital stock

Common stock

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Number of shares authorized (in thousands) | 9,665,835 | 9,119,762 | 9,119,762 |
| Amount of shares authorized | $ 96,658,353 | $ 91,197,623 | $ 91,197,623 |
| Number of shares issued and fully paid (in thousands) | 9,665,835 | 9,119,762 | 9,119,762 |
| Amount of shares issued | $ 96,658,353 | $ 91,197,623 | $ 91,197,623 |

Common stock issued has a par value of $10. Each share has one voting right and the right to receive dividends.

On April 26, 2018, the Bank's board of directors resolved on behalf of the shareholders to transfer the retained earnings of $12,593,563 thousand to capital and issued 1,259,356 thousand common shares. After the capital increase, the authorized and paid-in capital was $91,197,623 thousand.

On May 3, 2019, the Bank's board of directors resolved on behalf of the shareholders to transfer the retained earnings of $5,460,730 thousand to capital and issued 546,073 thousand common shares. After the capital increase, the authorized capital was $96,658,353 thousand. The record date of the capitalization was July 3, 2019.

In response to the "Domestic systemically important banks (D-SIBs)" policy announced by the FSC and the business growth, on August 15, 2019, the Bank's board of directors resolved on behalf of the shareholders to issue common stock for cash by private placement. The common stock price is $20 per share and the upper limit is 500,000 thousand shares. The issue is expected to raise funds up to $10,000,000 thousand, and the issue will be made once within one year from the date of resolution in the shareholders' meeting.

b. Capital surplus

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Capital surplus from the merger | $ 10,949,303 | $ 10,949,303 | $ 10,949,303 |
| Additional paid in capital | 22,648,873 | 22,648,873 | 22,648,873 |
| Others | 12,807 | 12,807 | 12,807 |
| | $ 33,610,983 | $ 33,610,983 | $ 33,610,983 |

c. Legal reserve

A legal reserve should be appropriated until it equals the Company's paid-in-capital. The legal reserve may be used to offset deficit. If the Company has no deficit and the legal reserve has exceeded 25% of its paid-in capital, the excess may be transferred to capital or distributed in cash. In addition, based on the Banking Act, if the legal reserve is less than the Company's paid-in capital, the amount that may be distributed in cash should not exceed 15% of the Company's paid-in-capital. In the event that the accumulated legal reserve equals or exceeds the Company's paid-in capital or the Company is sound in both its finance and business operations and have set aside legal reserve in compliance with the Company Law, the restrictions stipulated in the preceding paragraph shall not apply.

d. Special reserve

According to Rule No. 1030006415 issued by the FSC, on the first-time adoption of the fair value model for investment properties, the Bank shall set aside the same amount of special reserve as the net fair value increment transferred to retained earnings. After transferring the fair value increment of investment properties to retained earnings, if the Bank could not set aside a sufficient amount to the special reserve, the Bank could only set aside the amount according to the retained earnings balance, and the special reserve that is not enough to be set aside would not be counted in the accumulated fair value increment of investment properties. When the Bank adopts the fair value model for subsequent measurement of investment properties, the Bank shall set aside an equal amount of special reserve when transferring the fair value increment of investment properties to retained earnings. For any subsequent reversal of accumulated fair value increment of investment properties or disposal of investment properties, the amount reversed may be distributed.

According to Rule No. 1010012865, Rule No. 1010047490 issued by the FSC and the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs," the Bank should appropriate to or reverse from its special reserve certain specified amounts. Any special reserve appropriated may be reversed to the extent that the net debit balance reverses and is thereafter distributed.

The above special reserve may be used to offset a deficit; if the reserve has reached at least 50% of the paid-in capital, half of this special reserve may be capitalized.

According to Rule No. 10510001510 issued by the FSC, the Bank should appropriate between 0.5% and 1% of net income after tax to special reserve when it appropriates earnings of 2016 through 2018. Since 2017, the Company is allowed to reverse special reserve at the amount of the costs of employee transfer and arrangement in connection with the development of financial technology.

The changes in the special reserve of the Bank for the nine months ended September 30, 2019 and 2018 were as follows:

| | Investment Properties | Others | Total |
|---|---|---|---|
| Balance at January 1, 2019 | $ 1,625,296 | $ 1,308,512 | $ 2,933,808 |
| Decrease | - | (749,830) | (749,830) |
| Balance at September 30, 2019 | $ 1,625,296 | $ 558,682 | $ 2,183,978 |
| Balance at January 1, 2018 | $ 1,620,294 | $ 357,069 | $ 1,977,363 |
| Increase | 5,002 | 951,443 | 956,445 |
| Balance at September 30, 2018 | $ 1,625,296 | $ 1,308,512 | $ 2,933,808 |

e. Retained earnings and dividends policy

According to the Bank’s Articles of Incorporation, if the Bank made a profit in a fiscal year, the profit shall be first utilized for paying taxes and offsetting deficits of prior years, if any. If the legal reserve is less than the paid-in capital, the legal reserve and the special reserve shall be appropriated in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Bank’s board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders’ meeting for the distribution of dividends and bonuses to shareholders.

In response to a competitive environment and business growth while considering capital adequacy, the Bank adopts a residual dividend policy. According to the Bank's business plan, except for a necessary amount of capital to be reserved for dividend distribution, the remainder shall be distributed as cash dividends as a principle. However, the maximum cash dividend may not exceed the regulatory limit.

The appropriations of earnings for 2018 and 2017 which were approved by the board of directors on behalf of the shareholders in accordance with the Company Act on May 3, 2019 and April 26, 2018, respectively, were as follows:

| | Appropriation of Earnings | | Dividends Per Share (NT$) | |
|---|---|---|---|---|
| | 2018 | 2017 | 2018 | 2017 |
| Legal reserve | $ 6,304,671 | $ 5,807,539 | | |
| Special reserve | (749,830) | 951,443 | | |
| Cash dividends | 10,000,000 | - | $ 1.1 | $ - |
| Stock dividends | 5,460,730 | 12,593,563 | 0.6 | 1.6 |

f. Other equity items

1) Exchange differences on translating the financial statements of foreign operations

| | For the Nine Months Ended September 30 | |
|---|---|---|
| | 2019 | 2018 |
| Balance, beginning of the period | $ (1,008,735) | $ (532,567) |
| Exchange differences generated from translating the net assets of foreign operations | (285,061) | (916,985) |
| Tax effects | 57,012 | 202,647 |
| Other comprehensive income | (228,049) | (714,338) |
| Balance, end of the period | $ (1,236,784) | $ (1,246,905) |

2) Unrealized gains (losses) on financial assets at FVTOCI

| | For the Nine Months Ended September 30 | |
|---|---|---|
| | 2019 | 2018 |
| Balance, beginning of the period | $ 2,730,681 | $ 5,598,353 |
| Recognized for the period | | |
| Unrealized gains (losses) | | |
| Debt instruments | 5,259,997 | (1,851,867) |
| Equity instruments | 2,394,296 | 267,719 |
| Net remeasurement of loss allowance | (90,750) | 20,206 |
| Share from associates accounted for using equity method | (22,367) | (209,106) |
| Reclassification adjustments | | |
| Disposal of investment in debt instruments | (1,293,884) | (1,172,107) |
| Tax effect | (495,613) | 151,342 |
| Other comprehensive income | 5,751,679 | (2,793,813) |
| Cumulated unrealized gain of equity instruments transferred to retained earnings due to disposal | 296,195 | (294,915) |
| Balance, end of the period | $ 8,778,555 | $ 2,509,625 |

3) Remeasurement of the defined benefit plans

| | For the Nine Months Ended September 30 | |
|---|---|---|
| | 2019 | 2018 |
| Balance, beginning of the period | $ (1,369,428) | $ (1,340,811) |
| Share from associates accounted for using equity method | (624) | - |
| Tax effect | - | 48,344 |
| Other comprehensive income | (624) | 48,344 |
| Balance, end of period | $ (1,370,052) | $ (1,292,467) |

4) Property revaluation surplus

| | For the Nine Months Ended September 30 | |
|---|---|---|
| | 2019 | 2018 |
| Balance, beginning of the period | $ 249,819 | $ 302,676 |
| Gains on property revaluation | 217,619 | - |
| Tax effect | (9,470) | 2,287 |
| Other comprehensive income | 208,149 | 2,287 |
| Transferred to retained earnings | - | (55,144) |
| Balance, end of period | $ 457,968 | $ 249,819 |

5) Changes in the fair value of financial liabilities attributable to changes in the credit risk

| | For the Nine Months Ended September 30 | |
|---|---|---|
| | 2019 | 2018 |
| Balance, beginning of the period | $ 774,084 | $ (1,191,026) |
| Change in fair value attribute to changes in credit risk | (3,231,049) | 892,630 |
| Tax effect | 646,210 | (135,477) |
| Other comprehensive income | (2,584,839) | 757,153 |
| Balance, end of period | $ (1,810,755) | $ (433,873) |

g. Non-controlling interests

| | For the Nine Months Ended September 30 | |
|---|---|---|
| | 2019 | 2018 |
| Balance, beginning of the period | $ 4,041,481 | $ 3,844,089 |
| Net income attributable to non-controlling interests | 507,634 | 152,893 |
| Exchange differences on translating the financial statements of foreign entities | 35,613 | 86,502 |
| Change in non-controlling interests | (393,414) | (281,542) |
| Gains from investments in debt instruments measured at fair value through other comprehensive income | (102,392) | 3,130 |
| Balance, end of the period | $ 4,088,922 | $ 3,805,072 |

## 33. NET INTEREST REVENUE

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Interest income | | | | |
| Discounts and loans | $ 10,222,233 | $ 9,930,812 | $ 30,626,286 | $ 28,133,730 |
| Securities | 2,940,927 | 2,357,415 | 8,512,790 | 7,026,559 |
| Revolving credit | 591,647 | 571,772 | 1,742,528 | 1,685,967 |
| Due from banks and call loans to banks | 565,839 | 743,212 | 1,912,577 | 2,130,911 |
| Others | 201,520 | 256,293 | 669,781 | 645,063 |
| | 14,522,166 | 13,859,504 | 43,463,962 | 39,622,230 |
| Interest expense | | | | |
| Deposits | 3,871,882 | 3,496,625 | 11,378,447 | 9,854,558 |
| Financial debentures | 237,376 | 248,592 | 725,892 | 783,308 |
| Structured products | 546,477 | 619,541 | 1,830,778 | 1,714,555 |
| Due to the Central Bank and other banks | 531,480 | 423,855 | 1,620,910 | 1,229,019 |
| Others | 187,973 | 445,139 | 855,196 | 1,442,794 |
| | 5,375,188 | 5,233,752 | 16,411,223 | 15,024,234 |
| | $ 9,146,978 | $ 8,625,752 | $ 27,052,739 | $ 24,597,996 |

## 34. NET SERVICE FEE REVENUE

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Service fee income | | | | |
| Credit card business | $ 2,416,081 | $ 2,271,874 | $ 5,784,664 | $ 5,365,336 |
| Trust business | 992,658 | 789,741 | 2,514,220 | 2,453,236 |
| Loan business | 153,646 | 511,192 | 883,828 | 991,085 |
| Cross-selling marketing | 1,281,910 | 1,507,147 | 5,215,206 | 4,953,878 |
| Others | 717,357 | 574,242 | 2,069,434 | 1,631,088 |
| | 5,561,652 | 5,654,196 | 16,467,352 | 15,394,623 |
| Service fee expenses | | | | |
| Credit card business | 663,899 | 618,580 | 2,481,288 | 1,711,072 |
| Others | 298,920 | 284,940 | 904,337 | 810,593 |
| | 962,819 | 903,520 | 3,385,625 | 2,521,665 |
| | $ 4,598,833 | $ 4,750,676 | $ 13,081,727 | $ 12,872,958 |

The Bank also engaged in the business for online pay services. For the nine months ended September 30, 2019 and 2018, service fee revenue were $747 thousand and $465 thousand, respectively, and the yield from online pay services and other income were both $0 thousand.

## 35. GAIN (LOSS) ON FINANCIAL ASSETS OR LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Stock | $ 21,588 | $ 115,061 | $ 92,726 | $ 137,978 |
| Short-term bills | 272,402 | 285,401 | 830,494 | 873,231 |
| Fund beneficiary certificates | 3,052 | 9,143 | 29,632 | (60,001) |
| Investment in debt instrument | (874,050) | 799,650 | (4,457,968) | 307,800 |
| Derivative financial instruments | 1,563,357 | 659,988 | 8,320,419 | 3,578,892 |
| | $ 986,349 | $ 1,869,243 | $ 4,815,303 | $ 4,837,900 |
| Realized gain (loss) | | | | |
| Gain (loss) on disposal | $ 607,358 | $ 983,848 | $ 2,349,190 | $ 442,605 |
| Interest income | 496,407 | 561,148 | 1,264,908 | 2,459,715 |
| Dividend income | 10,027 | 25,265 | 13,523 | 55,463 |
| Interest expense | (718,663) | (429,899) | (1,880,728) | (1,282,020) |
| Unrealized gain (loss) | | | | |
| Valuation gain | 591,220 | 728,881 | 3,068,410 | 3,162,137 |
| | $ 986,349 | $ 1,869,243 | $ 4,815,303 | $ 4,837,900 |

## 36. REALIZED GAIN OR LOSS ON FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Net gain on disposal - debt instruments | $ 341,311 | $ 284,051 | $ 1,293,884 | $ 1,172,107 |
| Dividend income | 622,472 | 1,316,235 | 958,946 | 1,525,392 |
| | $ 963,783 | $ 1,600,286 | $ 2,252,830 | $ 2,697,499 |

## 37. IMPAIRMENT LOSS ON ASSETS (REVERSAL)

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Debt instruments at FVTOCI | $ 5,020 | $ (3,050) | $ 61,840 | $ 76,414 |
| Debt instruments at amortised cost | (6,496) | 4,258 | (104) | 36,896 |
| | $ (1,476) | $ 1,208 | $ 61,736 | $ 113,310 |

## 38. BAD DEBTS EXPENSE, COMMITMENT AND GUARANTEE LIABILITY PROVISION (REVERSAL)

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Discounts and loans | $ 632,801 | $ 754,959 | $ 1,465,756 | $ 2,012,376 |
| Receivables | (31,318) | 79,355 | 12,588 | 161,379 |
| Guarantee liability provisions | 8,101 | 1,403 | 109 | 29,989 |
| Financial commitment provisions | 13,535 | (19,738) | 30,469 | 87,217 |
| Others | 10,426 | 3,904 | 42,110 | 20,782 |
| | $ 633,545 | $ 819,883 | $ 1,551,032 | $ 2,311,743 |

## 39. EMPLOYEE BENEFITS EXPENSES

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Salaries | $ 3,502,636 | $ 3,538,363 | $ 11,055,836 | $ 10,758,638 |
| Insurance | 259,078 | 240,916 | 780,507 | 712,094 |
| Post-employment benefits | 169,503 | 165,655 | 512,904 | 495,498 |
| Remuneration of directors | 936 | 1,071 | 3,085 | 3,238 |
| Others | 74,777 | 61,501 | 236,528 | 214,027 |
| | $ 4,006,930 | $ 4,007,506 | $ 12,588,860 | $ 12,183,495 |

For the nine months ended September 30, 2019 and 2018, the average number of the Company’s employees were 12,040 and 12,045, including 17 and 14 non-executive directors, respectively.

As of September 30, 2019 and 2018, the number of employees in the Company were 11,975 and 12,059, respectively.

Under the Articles of Incorporation of the Bank, the Bank accrued employees’ compensation and remuneration of directors at the rates of 0.05% and no higher than 0.1%, respectively, of net profit before income tax, employees’ compensation, and remuneration of directors (after offsetting accumulated deficits). For the nine months ended September 30, 2019 and 2018, employees’ compensation and the remuneration of directors were as follows:

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Employees’ compensation - cash | $ 3,300 | $ 3,963 | $ 10,700 | $ 10,536 |
| Remuneration of directors - cash | $ 1,014 | $ 1,071 | $ 3,349 | $ 3,238 |

If there is a change in the amounts after the annual consolidated financial statements were authorized for issue, the differences are recorded in the next fiscal year as a change in the accounting estimate.

Employees' compensation and the remuneration of directors for the years ended December 31, 2018 and 2017 which have been approved by the Bank's board of directors on March 21, 2019 and March 15, 2018, respectively, were as follows:

| | 2018 | | 2017 | |
|---|---|---|---|---|
| | Cash | Shares | Cash | Shares |
| Employees' compensation | $ 12,022 | $ - | $ 10,922 | $ - |
| Remuneration of directors | 6,300 | - | 7,000 | - |

There was no difference between the actual amounts of employees' compensation and remuneration of directors paid and the amounts recognized in the consolidated financial statements for the years ended December 31, 2018 and 2017, respectively.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2019 and 2018 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

## 40. DEPRECIATION AND AMORTIZATION EXPENSES

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Depreciation expense | | | | |
| Property and equipment | $ 320,639 | $ 298,188 | $ 957,486 | $ 864,985 |
| Right-of-use assets | 304,984 | - | 878,943 | - |
| Amortization expense | | | | |
| Intangible assets | 110,766 | 87,178 | 335,920 | 240,774 |
| | $ 736,389 | $ 385,366 | $ 2,172,349 | $ 1,105,759 |

## 41. OTHER GENERAL AND ADMINISTRATIVE EXPENSE

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Rental expenses | $ 216,758 | $ 572,337 | $ 806,476 | $ 1,643,332 |
| Tax expenses | 568,728 | 573,326 | 1,712,500 | 1,675,570 |
| Product promotion expenses | 1,435,025 | 1,304,673 | 3,243,648 | 2,574,878 |
| Insurance expenses | 185,877 | 176,244 | 549,436 | 523,800 |
| Others | 1,135,751 | 1,362,389 | 3,945,983 | 3,400,162 |
| | $ 3,542,139 | $ 3,988,969 | $ 10,258,043 | $ 9,817,742 |

## 42. INCOME TAX

a. Income tax recognized in profit or loss

Main components of income tax expense were as follows:

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Current tax | | | | |
| In respect of the period | $ 1,397,624 | $ 635,530 | $ 3,458,543 | $ 2,443,966 |
| Adjustment for prior year | - | (43,143) | 79,548 | 15,837 |
| Deferred tax | | | | |
| In respect of the period | (506,624) | 296,312 | (756,091) | 392,700 |
| Effect of change in tax rate | - | - | - | (35,504) |
| Income tax of overseas subsidiaries | 70,334 | 216,298 | 315,393 | 239,164 |
| Income tax expense recognized in profit or loss | $ 961,334 | $ 1,104,997 | $ 3,097,393 | $ 3,056,163 |

In 2018, it was announced that the Income Tax Act in the ROC was amended and the corporate income tax rate was adjusted from 17% to 20%. The effect of the change in tax rate on deferred tax expense has been fully recognized in the period of tax rate change. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings has been reduced from 10% to 5%.

According to the Ministry of Finance's Taiwan Finance Tax No. 910458039, "The joint declaration of business income tax by profit-seeking enterprises in accordance with Article 49 of the Financial Holding Company Act and Article 40 of the Business Mergers and Acquisitions Act" released on February 12, 2012, where a Financial Holding Company holds more than or equal to 90% of the outstanding issued shares of a domestic subsidiary, and the period of shareholdings in the subsidiary has reached 12 months of the tax year, the Financial Holding Company may elect to be the taxpayer and jointly declare profit-seeking enterprise tax. The Bank elected to jointly declare the profit-seeking enterprise income tax since 2003 and the undistributed retained earnings since 2002 with its parent company Cathay Financial Holdings Co., Ltd. and its subsidiaries. Additional tax payable or receivable due to the joint declaration of income tax is recognized under the receivables (payables) for allocation of integrated income tax systems account.

b. Income tax recognized in other comprehensive income

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Deferred tax | | | | |
| Recognized in other comprehensive income | | | | |
| Remeasurement of defined benefit plans | $ - | $ - | $ - | $ 48,344 |
| Revaluation gain (loss) on property | - | - | (9,470) | 2,287 |

(Continued)

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Changes of financial liabilities designated at fair value through profit or loss resulting from credit risk | $ 290,481 | $ 92,620 | $ 646,210 | $ (135,477) |
| Exchange differences resulting from translating the financial statements of foreign operations | 128,720 | 243,145 | 57,012 | 202,647 |
| Unrealized gain (loss) on financial assets at fair value through other comprehensive income | 44,353 | (206,276) | (495,613) | 151,342 |
| Income tax benefits recognized in other comprehensive income | $ 463,554 | $ 129,489 | $ 198,139 | $ 269,143 |

(Concluded)

c. Assessment of income tax returns

The Bank's income tax returns through 2014 had been assessed; however, the Bank has invoked the administrative remedy for cases on employee benefits from 2011 to 2014.

## 43. EARNINGS PER SHARE

The numerator and denominator used in calculating earnings per share are as follows:

**Unit: Dollar Per Share**

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Basic earnings per share | $ 0.64 | $ 0.73 | $ 1.93 | $ 1.89 |

The number of shares outstanding was retrospectively adjusted to reflect the effects of the stock dividends distributed in the year following earnings appropriation. The earnings and weighted average number of ordinary shares outstanding used in the computation of earnings per share were retrospectively adjusted as follows:

Net income

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Net income for calculating basic earnings per share | $ 6,183,707 | $ 7,069,544 | $ 18,614,113 | $ 18,250,254 |

Number of shares

**Unit: In Thousands**

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | **2019** | **2018** | **2019** | **2018** |
| Weighted average number of ordinary shares used for calculating basic earnings per share | 9,665,835 | 9,665,835 | 9,665,835 | 9,665,835 |

## 44. RELATED-PARTY TRANSACTIONS

Transactions between the Company and its related parties are summarized as follows:

a. Related parties and relationships

| Related Party | Relationship with the Company |
|---|---|
| Cathay Financial Holding Co., Ltd. | Parent company |
| Taiwan Real-estate Management Corp. | Associate |
| Taiwan Finance Corp. | Associate |
| Cathay Life Insurance Co., Ltd. | Other related party |
| Cathay Century Insurance Co., Ltd. | Other related party |
| Cathay Securities Co., Ltd. | Other related party |
| Cathay Securities (Hong Kong) Ltd. | Other related party |
| Cathay Venture Inc. | Other related party |
| Cathay Securities Investment Trust Co., Ltd. | Other related party |
| Cathay Securities Investment Consulting Co., Ltd. | Other related party |
| Conning Asia Pacific Ltd. | Other related party |
| Cathay Life Insurance (Vietnam) Co., Ltd. | Other related party |
| Cathay Insurance (Vietnam) Co., Ltd. | Other related party |
| Cathay Futures Co., Ltd. | Other related party |
| Symphox Information Co., Ltd. | Other related party |
| Seaward Card Co., Ltd. | Other related party |
| Cathay Dragon Fund etc. | Other related party |
| Cathay United Bank Culture and Charity Foundation | Other related party |
| Cathay Life Insurance Employees' Welfare Committee | Other related party |
| Cathay Real Estate Development Employees' Welfare Committee | Other related party |
| Cathay Private Equity Co., Ltd. | Other related party |
| Vietinbank | Other related party |
| Cathay Real Estate Development Co., Ltd. | Other related party |
| Lin Yuan Property Management and Maintenance Co., Ltd. | Other related party |
| Lin Yuan (Shanghai) Real Estate Co., Ltd. | Other related party |
| CCH REIM Co., Ltd. | Other related party |
| Cathay Hospitality Management Co., Ltd. | Other related party |
| Cathay Healthcare Management Co., Ltd. | Other related party |
| Neo Cathay Co., Ltd. | Other related party |
| PSS Co., Ltd | Other related party |
| Kao-Yi International Investment Co., Ltd. | Other related party |
| Yua-Yung Marketing (Taiwan) Co., Ltd. | Other related party |
| Directors, managers, and their relatives and affiliates | Other related party |

b. Significant transactions between the Company and related parties

1) Loans and deposits

Loans

September 30, 2019

| Type | Account Volume or Name of Related Party | Highest Balance | Ending Balance | Loan Classification | | Collaterals | Differences in Terms of Transaction with Those for Unrelated Parties | Bad debt Expense 01.01-09.30 | Allowance for Bad Debt Expense - Ending Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Normal Loans | Nonperforming Loans | | | | |
| Consumer loans | 23 | $ 63,544 | $ 7,881 | V | $ - | None | None | $ 9 | $ 157 |
| Self-used housing mortgage loans | 246 | 9,847,741 | 1,726,406 | V | - | Real estate and stock | None | 2,530 | 22,157 |
| Others | Cathay Real Estate Development Co., Ltd. | 2,040,000 | 250,000 | V | - | Real estate | None | (1,500) | 2,500 |
| Others | Taiwan Real-estate Management Corp. | 33,000 | 33,000 | V | - | Real estate | None | (69) | 330 |
| Others | Yua-Yung Marketing (Taiwan) Co., Ltd. | 10,000 | 10,000 | V | - | Real estate | None | 100 | 100 |

December 31, 2018

| Type | Account Volume or Name of Related Party | Highest Balance | Ending Balance | Loan Classification | | Collaterals | Differences in Terms of Transaction with Those for Unrelated Parties | Bad debt Expense 01.01-12.31 | Allowance for Bad Debt Expense - Ending Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Normal Loans | Nonperforming Loans | | | | |
| Consumer loans | 11 | $ 18,875 | $ 3,107 | V | $ - | None | None | $ 157 | $ 31 |
| Self-used housing mortgage loans | 208 | 1,762,016 | 1,455,805 | V | - | Real estate | None | (1,046) | 18,481 |
| Others | Cathay Real Estate Development Co., Ltd. | 400,000 | 210,000 | V | - | Real estate | None | 4,000 | 4,000 |
| Others | Taiwan Real-estate Management Corp. | 32,000 | 30,000 | V | - | Real estate | None | 79 | 399 |
| Others | Cathay Securities Co., Ltd. | 423,000 | - | V | - | Stock | None | - | - |
| Others | PSS Co., Ltd. | 5,000 | - | V | - | Real estate | None | - | - |

September 30, 2018

| Type | Account Volume or Name of Related Party | Highest Balance | Ending Balance | Loan Classification | | Collaterals | Differences in Terms of Transaction with Those for Unrelated Parties | Bad debt Expense 01.01-09.30 | Allowance for Bad Debt Expense - Ending Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Normal Loans | Nonperforming Loans | | | | |
| Consumer loans | 10 | $ 18,275 | $ 2,835 | V | $ - | None | None | $ 155 | $ 28 |
| Self-used housing mortgage loans | 201 | 1,709,997 | 1,428,469 | V | - | Real estate | None | (784) | 18,812 |
| Others | Taiwan Real-estate Management Corp. | 32,000 | 30,000 | V | - | Real estate | None | 241 | 561 |
| Others | Cathay Securities Co., Ltd. | 20,000 | - | V | - | Stock | None | - | - |

| | Interest Revenue | | | |
|---|---|---|---|---|
| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
| | 2019 | 2018 | 2019 | 2018 |
| Associates | | | | |
| Taiwan Real-estate Management Corp. | $ 149 | $ 144 | $ 439 | $ 428 |
| Other related parties | | | | |
| Cathay Real Estate Development Co., Ltd. | 327 | - | 797 | - |
| Cathay Securities Co., Ltd. | - | - | - | 3 |
| Yua-Yung Marketing (Taiwan) Co., Ltd. | 44 | - | 64 | - |
| Others | 6,934 | 4,957 | 20,501 | 18,695 |
| | 7,305 | 4,957 | 21,362 | 18,698 |
| | $ 7,454 | $ 5,101 | $ 21,801 | $ 19,126 |

Deposits

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Parent company | | | |
| Cathay Financial Holding Co., Ltd. | $ 80,683 | $ 139,920 | $ 379,679 |
| Other related parties | | | |
| Cathay Life Insurance Co., Ltd. | 18,636,931 | 30,744,095 | 20,469,169 |
| Cathay Century Insurance Co., Ltd. | 1,948,855 | 2,724,193 | 2,022,388 |
| Cathay Securities Co., Ltd. | 3,293,071 | 2,550,090 | 2,657,821 |
| Cathay Securities (Hong Kong) Ltd. | 65 | 66 | 65 |
| Cathay Futures Co., Ltd. | 1,385,577 | 1,345,519 | 1,300,544 |
| Cathay Venture Inc. | 52,787 | 113,380 | 69,996 |
| Cathay Securities Investment Trust Co., Ltd. | 127,270 | 149,076 | 120,453 |
| Cathay Securities Investment Consulting Co., Ltd. | 148,340 | 187,533 | 141,795 |
| Cathay Real Estate Development Co., Ltd. | 416,668 | 199,127 | 655,076 |
| Cathay Hospitality Management Co., Ltd. | 3,746 | 16,523 | 10,144 |
| Cathay Life Insurance (Vietnam) Co., Ltd. | 662,996 | 1,809,689 | 2,441,792 |
| Cathay Insurance (Vietnam) Co., Ltd. | 201,447 | 147,705 | 182,761 |
| Cathay Dragon Fund etc. | 119,151 | 137,823 | 66,793 |
| Symphox Information Co., Ltd. | 161,126 | 122,139 | 111,072 |
| Conning Asia Pacific Ltd. | 80,583 | 78,721 | 77,887 |
| Cathay Private Equity Co., Ltd. | 22,851 | 33,114 | 33,981 |
| Cathay United Bank Culture and Charity Foundation | 545,517 | 541,888 | 548,107 |
| Cathay Life Insurance Employees' Welfare Committee | 2,138,613 | 2,221,665 | 2,244,063 |
| Cathay Real Estate Development Employees' Welfare Committee | 406,023 | 386,529 | 401,708 |
| Neo Cathay Co., Ltd. | 42,638 | 137,979 | 203,928 |
| Lin Yuan (Shanghai) Real Estate Co., Ltd. | 931,624 | 623,035 | 547,130 |
| CCH REIM Co., Ltd. | 10,288 | - | - |
| Others | 8,849,289 | 7,457,000 | 7,765,173 |
| | 40,185,456 | 51,726,889 | 42,071,846 |
| | $ 40,266,139 | $ 51,866,809 | $ 42,451,525 |

| | Interest Expense | | | |
|---|---|---|---|---|
| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
| | 2019 | 2018 | 2019 | 2018 |
| Parent company | | | | |
| Cathay Financial Holding Co., Ltd. | $ (176) | $ (329) | $ (650) | $ (627) |
| Other related parties | | | | |
| Cathay Life Insurance Co., Ltd. | (8,522) | (11,418) | (32,785) | (37,035) |
| Cathay Century Insurance Co., Ltd. | (2,089) | (2,022) | (6,373) | (5,702) |
| Cathay Securities Co., Ltd. | (1,262) | (887) | (3,509) | (3,568) |
| Cathay Futures Co., Ltd. | (1,992) | (1,902) | (5,865) | (5,616) |
| Cathay Venture Inc. | (5) | (20) | (7) | (53) |
| Cathay Securities Investment Trust Co., Ltd. | (46) | (45) | (126) | (147) |
| Cathay Securities Investment Consulting Co., Ltd. | (118) | (131) | (446) | (475) |
| Cathay Real Estate Development Co., Ltd. | (17) | (20) | (50) | (36) |
| Cathay Hospitality Management Co., Ltd. | (1) | (4) | (3) | (20) |
| Cathay Life Insurance (Vietnam) Co., Ltd. | (17,927) | (20,920) | (67,681) | (21,111) |
| Cathay Insurance (Vietnam) Co., Ltd. | (10,895) | (1,844) | (14,904) | (4,968) |
| Cathay Oragon Fund etc. | (1) | (1) | (1) | (2) |
| Symphox Information Co., Ltd. | (199) | (166) | (573) | (498) |
| Conning Asia Pacific Ltd. | (362) | (143) | (1,097) | (503) |
| Cathay Private Equity Co., Ltd. | (4) | (5) | (11) | (14) |
| Cathay United Bank Culture and Charity Foundation | (1,413) | (1,417) | (4,209) | (4,188) |
| Cathay Life Insurance Employees' Welfare Committee | (5,588) | (5,613) | (16,629) | (17,215) |
| Cathay Real Estate Development Employees' Welfare Committee | (1,084) | (1,070) | (3,140) | (3,011) |
| Neo Cathay Co., Ltd. | (5) | (19) | (29) | (76) |
| Lin Yuan (Shanghai) Real Estate Co., Ltd. | (6,587) | (4,746) | (16,956) | (4,773) |
| CCH REIM Co., Ltd. | (24) | - | (29) | - |
| Others | (16,340) | (14,988) | (57,313) | (47,762) |
| | (70,125) | (67,381) | (231,832) | (156,773) |
| | $ (70,301) | $ (67,710) | $ (232,482) | $ (157,400) |

| Accounts/Related Parties | Account Balance September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Due from commercial banks | | | |
| Other related parties | | | |
| Vietinbank | $ 5,368,858 | $ 5,309,375 | $ 5,288,469 |
| Due to commercial banks | | | |
| Other related parties | | | |
| Vietinbank | 5,423,619 | 5,360,670 | 5,292,805 |

| | Interest Income (Expense) | | | |
|---|---|---|---|---|
| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
| Accounts/Related Parties | 2019 | 2018 | 2019 | 2018 |
| Due from commercial Banks | | | | |
| Other related parties | | | | |
| Vietinbank | $ 1,383 | $ 1,258 | $ 4,096 | $ 3,841 |
| Due to commercial banks | | | | |
| Other related parties | | | | |
| Vietinbank | (1,360) | (1,253) | (4,011) | (3,807) |

Transactions terms with related parties are similar to those with third parties, expect for the preferential interest rates set by the employees' interest rates on deposits and loans within prescribed limits.

2) Guarantees

September 30, 2019

| Related Parties | Highest Balance | Ending Balance | Balance of Guarantee Liability Provisions | Rate Interval | Collaterals |
|---|---|---|---|---|---|
| Other related party Yua-Yung Marketing (Taiwan) Co., Ltd. | $ 54,440 | $ 54,440 | $ 6 | 0.65-0.8% | Securities |

3) Derivatives

September 30, 2019

| Related Parties | Derivative Contracts | Contract Period | Nominal Principal | Evaluation (Loss) Gain | Balance Sheet Amount | |
|---|---|---|---|---|---|---|
| | | | | | Account | Balance |
| Cathay Life Insurance Co., Ltd. | SWAP - exchange between customers (USD) | 2018.12.04-2020.05.12 | $ 103,525,070 | $ 3,414,884 | Valuation adjustment for FVTPL financial assets | $ 1,179,688 |
| | | | | | Valuation adjustment for FVTPL financial liabilities | (237,981) |
| Cathay Century Insurance Co., Ltd. | SWAP - exchange between customers (USD) | 2019.02.12-2020.05.11 | 2,629,257 | 80,776 | Valuation adjustment for FVTPL financial assets | 38,748 |
| | | | | | Valuation adjustment for FVTPL financial liabilities | (1,075) |
| | SWAP - exchange between customers (EUR) | 2019.08.20-2020.02.24 | 25,455 | (742) | Valuation adjustment for FVTPL financial assets | - |
| | | | | | Valuation adjustment for FVTPL financial liabilities | (699) |

December 31, 2018

| Related Parties | Derivative Contracts | Contract Period | Nominal Principal | Evaluation (Loss) Gain | Balance Sheet Amount | |
|---|---|---|---|---|---|---|
| | | | | | Account | Balance |
| Cathay Life Insurance Co., Ltd. | SWAP - exchange between customers (USD) | 2018.01.18-2019.12.09 | $ 115,310,216 | $ 3,885,814 | Valuation adjustment for FVTPL financial assets | $ 1,852,498 |
| | | | | | Valuation adjustment for FVTPL financial liabilities | (64,937) |
| Cathay Century Insurance Co., Ltd. | SWAP - exchange between customers (USD) | 2018.05.07-2019.05.28 | 2,726,017 | 85,529 | Valuation adjustment for FVTPL financial assets | 21,757 |
| | | | | | Valuation adjustment for FVTPL financial liabilities | (3,143) |
| | SWAP - exchange between customers (EUR) | 2018.10.18-2019.01.22 | 26,402 | (1,011) | Valuation adjustment for FVTPL financial assets | - |
| | | | | | Valuation adjustment for FVTPL financial liabilities | (302) |

September 30, 2018

| Related Parties | Derivative Contracts | Contract Period | Nominal Principal | Evaluation (Loss) Gain | Balance Sheet Amount | |
|---|---|---|---|---|---|---|
| | | | | | Account | Balance |
| Cathay Life Insurance Co., Ltd. | SWAP - exchange between customers (USD) | 2018.01.18-2019.08.21 | $ 3,237,000 | $ 3,338,332 | Valuation adjustment for FVTPL financial assets | $ 1,635,612 |
| | | | | | Valuation adjustment for FVTPL financial liabilities | (165,927) |
| Cathay Century Insurance Co., Ltd. | SWAP - exchange between customers (USD) | 2018.01.08-2019.05.09 | 88,700 | 111,186 | Valuation adjustment for FVTPL financial assets | 70,334 |
| | | | | | Valuation adjustment for FVTPL financial liabilities | (1,088) |
| | SWAP - exchange between customers (EUR) | 2018.09.18-2018.10.22 | 750 | (1,091) | Valuation adjustment for FVTPL financial assets | - |
| | | | | | Valuation adjustment for FVTPL financial liabilities | (388) |

4) Lease agreement

| Accounts/Related Parties | | For the Nine Months Ended September 30 2019 |
|---|---|---|
| Acquisition of right-of-use assets | | |
| Other related parties | | |
| Cathay Real Estate Development Co., Ltd. | $ | 25,777 |
| Cathay Life Insurance Co., Ltd. | | 30,072 |

The lease period and contract method are in accordance with the contract provisions, the general lease terms are two to five years and the payments are mainly made on a monthly basis.

| Related Parties | | September 30, 2019 |
|---|---|---|
| Other related parties | | |
| Cathay Life Insurance Co., Ltd. | $ | 1,960,331 |
| Cathay Real Estate Development Co., Ltd. | | 25,812 |

| Accounts/ Related Parties | For the Three Months Ended September 30 | | | | For the Nine Months Ended September 30 | | | | Payment Term |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | | 2018 | | 2019 | | 2018 | | |
| Rental expense | | | | | | | | | |
| Other related parties | | | | | | | | | |
| Cathay Life Insurance Co., Ltd. | $ | 52,801 | $ | 174,007 | $ | 156,292 | $ | 509,207 | Monthly |
| Cathay Real Estate Development Co., Ltd. | | - | | 5,577 | | 2,502 | | 14,767 | Monthly |

| Related Parties | Refundable Deposits | | | | | |
|---|---|---|---|---|---|---|
| | September 30, 2019 | | December 31, 2018 | | September 30, 2018 | |
| Other related parties | | | | | | |
| Cathay Life Insurance Co., Ltd. | $ | 175,220 | $ | 189,738 | $ | 187,119 |
| Cathay Real Estate Development Co., Ltd. | | 4,625 | | 4,608 | | 4,608 |

5) Rental agreement

| Accounts/ Related Parties | For the Three Months Ended September 30 2019 | For the Three Months Ended September 30 2018 | For the Nine Months Ended September 30 2019 | For the Nine Months Ended September 30 2018 | Payment Term |
|---|---|---|---|---|---|
| Rental income | | | | | |
| Other related parties | | | | | |
| Cathay Life Insurance Co., Ltd. | $ 12,314 | $ 12,147 | $ 36,425 | $ 41,092 | Monthly |
| Cathay Century Insurance Co., Ltd. | 2,279 | 2,282 | 6,784 | 6,823 | Monthly |
| Cathay Securities Co., Ltd. | 2,419 | 2,421 | 7,255 | 7,261 | Monthly |
| Cathay United Bank Culture and Charity Foundation | 1,158 | 1,158 | 3,474 | 3,474 | Monthly |

| Related Parties | Guarantee Deposits Received September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Other related parties | | | |
| Cathay Life Insurance Co., Ltd. | $ 12,019 | $ 12,019 | $ 12,019 |
| Cathay Century Insurance Co., Ltd. | 2,247 | 2,247 | 2,247 |
| Cathay Securities Co., Ltd. | 2,610 | 2,610 | 2,610 |

The lease period and contract method are in accordance with the provisions, the general lease terms are one to three years and the payments are mainly monthly.

6) Others

| Accounts/Related Parties | For the Three Months Ended September 30 2019 | For the Three Months Ended September 30 2018 | For the Nine Months Ended September 30 2019 | For the Nine Months Ended September 30 2018 |
|---|---|---|---|---|
| Commissions and handling fees income | | | | |
| Other related parties | | | | |
| Cathay Life Insurance Co., Ltd. | $ 1,570,671 | $ 1,765,601 | $ 5,687,772 | $ 5,354,893 |
| Cathay Century Insurance Co., Ltd. | 39,459 | 36,372 | 113,487 | 121,100 |
| Cathay Securities Co., Ltd. | 23,456 | 18,082 | 57,687 | 52,190 |
| Cathay Securities Investment Trust Co., Ltd. | 10,256 | 10,038 | 26,970 | 32,132 |

(Continued)

| Accounts/Related Parties | For the Three Months Ended September 30 2019 | For the Three Months Ended September 30 2018 | For the Nine Months Ended September 30 2019 | For the Nine Months Ended September 30 2018 |
|---|---|---|---|---|
| Cathay Securities Investment Consulting Co., Ltd. | $ 4,041 | $ 4,381 | $ 11,683 | $ 13,156 |
| Cathay Real Estate Development Co., Ltd. | 2,252 | 1,499 | 4,513 | 4,191 |
| Insurance claims received | | | | |
| Other related parties | | | | |
| Cathay Century Insurance Co., Ltd. | 24,516 | - | 24,517 | - |
| Insurance expenses paid | | | | |
| Other related parties | | | | |
| Cathay Life Insurance Co., Ltd. | 26,268 | 11,690 | 51,842 | 39,503 |
| Cathay Century Insurance Co., Ltd. | 28,462 | 27,683 | 112,432 | 104,624 |
| Commissions and handling fees expense | | | | |
| Other related parties | | | | |
| Cathay Life Insurance Co., Ltd. | 36,778 | 43,511 | 120,352 | 136,336 |
| Symphox Information Co., Ltd. | 135,381 | 175,896 | 410,906 | 470,289 |
| Lin Yuan Property Management and Maintenance Co., Ltd. | 2,271 | 1,949 | 7,183 | 7,152 |
| Seaward Card Co., Ltd | 54,420 | 53,687 | 169,433 | 157,168 |
| Cathay Securities Investment Trust Co., Ltd. | 1,800 | 1,800 | 5,400 | 5,400 |
| Cathay Real Estate Development Co., Ltd. | 1,268 | 1,269 | 3,779 | 3,770 |
| Cathay Healthcare Management Co., Ltd. | 7,869 | 1,330 | 17,874 | 13,619 |

(Concluded)

| Accounts/Related Parties | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Receivable for allocation of integrated income tax systems | | | |
| Parent company | | | |
| Cathay Financial Holding Co., Ltd. | $ - | $ 485,773 | $ - |
| Receivables | | | |
| Other related parties | | | |
| Cathay Securities Investment Trust Co., Ltd. | 3,534 | 3,356 | 9,403 |
| Receivables for commission of collecting insurances | | | |
| Other related parties | | | |
| Cathay Life Insurance Co., Ltd. | 339,336 | 89,605 | 368,730 |
| Refundable deposit | | | |
| Other related parties | | | |
| Cathay Futures Co., Ltd. | 119,434 | 78,095 | 81,601 |
| Accrued expenses | | | |
| Other related parties | | | |
| Seaward Card Co., Ltd. | 33,573 | 34,034 | 30,452 |
| Accounts payable | | | |
| Other related parties | | | |
| Cathay Century Insurance Co., Ltd. | 19,413 | 51,461 | 9,747 |
| Symphox Information Co., Ltd. | 161,701 | 19,680 | 97,683 |
| Payables for allocation of integrated income tax systems account | | | |
| Parent company | | | |
| Cathay Financial Holding Co., Ltd. | 1,532,949 | - | 848,486 |

The Bank paid construction planning and design maintenance services fees to Lin Yuan Property Management and Maintenance Co., Ltd. in the amount of $12,414 thousand and $11,672 thousand during the nine months ended September 30, 2019 and 2018, respectively.

The Bank purchased bonus points in exchange for merchandise for the Bank's customer from Symphox Information Co., Ltd. As of September 30, 2019, December 31, 2018 and September 30, 2018, the unconverted bonus points amounted to $20,805 thousand, $15,150 thousand and $25,198 thousand, respectively.

The terms of the foregoing transactions with related parties are similar to those with third parties.

Combined disclosures have been made for transactions with related parties that are under a certain percentage of the total amount of all transactions with related parties and non-related parties.

c. Compensation of directors, supervisors and management personnel

| | For the Three Months Ended September 30 | | For the Nine Months Ended September 30 | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Short-term employment benefits | $ 67,072 | $ 75,149 | $ 225,952 | $ 211,473 |
| Post-employment benefits | 1,183 | 1,251 | 5,479 | 3,781 |
| Others | - | - | 34 | 26 |
| | $ 68,255 | $ 76,400 | $ 231,465 | $ 215,280 |

The key management personnel of the Company includes the chairman, vice chairman, directors, president and vice president.

## 45. PLEDGED ASSETS

The Company had been used as collaterals to apply for loans, Central Bank overdraft and apply for provisional seizure of certain assets were as follows:

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Financial assets at FVTOCI | $ 6,579 | $ 14,353 | $ 253,701 |
| Investments in debt instruments at amortised cost | 57,512,824 | 64,423,052 | 64,169,571 |

## 46. CONTINGENCIES AND COMMITMENTS

In addition to those mentioned in other notes, the contingencies and commitments were as follows:

a. The Bank

1) Entrusted items and guarantees:

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Trust and security held for safekeeping | $ 749,654,465 | $ 750,988,804 | $ 756,992,142 |
| Travelers checks for sale | 268,980 | 299,765 | 327,809 |
| Bills for collection | 36,624,560 | 36,044,907 | 38,546,180 |
| Book-entry for government bonds and depository for short-term marketable securities under management | 406,287,783 | 400,999,309 | 417,507,259 |
| Entrusted financial management business | 9,560,330 | 21,016,659 | 10,843,321 |
| Guarantees on duties and contracts | 13,505,393 | 13,534,956 | 8,578,417 |
| Unused commercial letters of credit | 5,413,454 | 4,217,682 | 4,639,987 |
| Irrevocable loan commitments | 151,976,389 | 154,605,389 | 197,550,766 |
| Unused credit card line commitments | 615,626,869 | 591,612,472 | 584,940,748 |
| Underwritten securities | 316,628 | 1,000,000 | 2,320,000 |

2) As of September 30, 2019, the Bank's significant lawsuits and proceedings arising due to normal business relationships are as follows:

Lee & Li, Attorneys-at-Law and SanDisk Corporation of USA alleged that the embezzlement case of Liu Wei-Chieh (an employee of Lee & Li), which occurred in October 2003 was caused by the negligence of the Bank in its operation, and the plaintiffs claimed damages from the Bank in the amount of approximately $991,002 thousand. The case has been pending in the court since July 2007, and the Bank won favorable decisions in both the first and second instances. The proceedings are currently pending in the Supreme Court. Both the Bank and its attorneys hold that this case will not have a material adverse effect on the financial position of the Bank.

b. Indovina Bank

Entrusted item and guarantees:

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Financial guarantee contracts | $ 1,389,371 | $ 2,262,842 | $ 2,840,524 |
| Unused commercial letters of credit | 836,415 | 1,017,801 | 1,083,014 |
| Irrevocable loan commitments | 667 | - | - |

c. CUBC Bank

Entrusted item and guarantees:

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Financial guarantee contracts | $ 24,388 | $ 78,161 | $ 61,878 |
| Credit card line commitments | 323,110 | 447,040 | 439,718 |

d. CUBCN Bank

Entrusted item and guarantees:

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Financial guarantee contracts | $ 467,859 | $ 170,835 | $ 283,329 |
| Unused commercial letters of credit | 180,717 | 773,078 | 796,103 |
| Irrevocable loan commitments | 792,519 | 623,837 | 591,990 |

## 47. ASSETS AND LIABILITIES MANAGED UNDER THE BANK'S TRUST IN ACCORDANCE WITH THE TRUST ENTERPRISE ACT

As of September 30, 2019, December 31, 2018 and September 30, 2018, the trust assets (liabilities) were in the amount of $501,845,277 thousand, $503,895,252 thousand and $473,741,664 thousand, respectively.

## 48. IMPLEMENTATION OF CROSS-SELLING MARKETING STRATEGIES BETWEEN THE BANK, CATHAY FINANCIAL HOLDING CO., LTD., AND ITS SUBSIDIARIES

The Bank has entered into cross-selling marketing contracts with Cathay Life Insurance Co., Ltd., Cathay Century Insurance Co., Ltd. and Cathay Securities Co., Ltd. The contracts cover joint use of operation sites and facilities as well as cross-selling marketing personnel. Remuneration apportionment and expenses allocation for cross-selling marketing personnel follow the "Cathay Financial Company Scope of Cross-selling Marketing and Rules for Reward".

The Bank has entered into cooperation contracts with Cathay Financial Holding Co., Ltd., Cathay Life Insurance Co., Ltd., Cathay Century Insurance Co., Ltd., and Cathay Securities Co., Ltd. for the joint use of information equipment and the development, operation, maintenance and management of information systems. Calculation methodologies for expenses allocation have been established.

## 49. FINANCIAL INSTRUMENTS

a. Information on fair value hierarchy

Fair value is the price that a market participant can receive from selling an asset or charge from transferring a liability in an orderly transaction on a measurement date.

Financial instruments are accounted for at fair value when they are originally recognized, and in many cases, usually refer to the transaction price. After the measurement, except for some financial instruments that are measured by amortized cost, they are measured at fair value. The best evidence of fair value is the open quote for the active market. If the market for financial instruments is not active, the Bank uses an evaluation model or a reference to Bloomberg, Reuters or counterparty quotes to measure the fair value of financial instruments.

b. The definitions of each level of the fair value hierarchy are shown below:

1) Level 1

Level 1 financial instruments are traded in an active market in which there are quoted prices for identical assets and liabilities. An active market has the following characteristics:

a) All financial instruments in the market are homogeneous.

b) There are willing buyers and sellers in the market all the time.

c) The public can access the price information easily.

The products in this level, such as listed stock and beneficial securities, usually have high liquidity or are traded in the futures market or exchanges.

2) Level 2

The products in this level have fair values that can be inferred from either directly or indirectly observable inputs other than quoted prices in an active market. The observation inputs were as follows:

a) Quoted prices from similar products in an active market. This means the fair value can be derived from the current trading prices of similar products, and whether they are similar products should be judged on the characteristics and trading rules. The fair price valuation in this circumstance may be adjusted due to time differences, trading rule differences, interested parties' prices, and the correlation of price between itself and similar goods;

b) Quoted prices for identical or similar financial instruments in inactive markets;

c) For the marking-to-model method, the inputs to this model should be observable (such as interest rates, yield curves and volatilities). The observable inputs mean that they can be obtained from the market and can reflect the expectation of market participants;

d) Inputs that are derived from observable market data through correlation or other means.

The fair values of products categorized in this level are usually calculated using a valuation model generally accepted by the market, such as forward contracts, cross-currency swap contracts, simple interest bearing bonds, convertible bonds and commercial paper.

3) Level 3

The fair values of the products in this level are typically based on management assumptions or expectations other than the direct market data. For example, historical volatility used in valuing options is an unobservable input because it cannot represent the entire market participants' expectation on future volatility.

The products in this level are complex derivate financial instruments or products with prices that are provided by brokers, such as complex foreign exchange options.

c. Measured at fair value on a recurring basis

1) The fair value hierarchies of the Company's financial instruments, which measured at fair value on a recurring basis, were as follows:

| Items | September 30, 2019 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| Measured at fair value on a recurring basis | | | | |
| Non-derivative financial instruments | | | | |
| Assets | | | | |
| Financial assets at fair value through profit or loss | | | | |
| Financial assets mandatorily classified as at fair value through profit or loss | | | | |
| Stocks | $ 63,393 | $ 49,351 | $ - | $ 14,042 |
| Bonds | 60,404,772 | 10,019,642 | 50,385,130 | - |
| Others | 170,659,533 | - | 170,659,533 | - |
| Financial assets at fair value through other comprehensive income | | | | |
| Stocks | 19,361,693 | 15,082,838 | - | 4,278,855 |
| Bonds | 279,001,885 | 165,217,083 | 113,784,802 | - |
| Liabilities | | | | |
| Financial liabilities at fair value through profit or loss | | | | |
| Designated as at fair value through profit or loss | | | | |
| Bonds | 60,075,661 | - | 60,075,661 | - |
| Held for trading | | | | |
| Bonds | 148,580 | 148,580 | - | - |
| Derivative financial instruments | | | | |
| Assets | | | | |
| Financial assets at fair value through profit or loss | 62,593,985 | 86,296 | 62,157,440 | 350,249 |
| Liabilities | | | | |
| Financial liabilities at fair value through profit or loss | 57,323,025 | 109,396 | 56,863,380 | 350,249 |

| Items | December 31, 2018 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| Measured at fair value on a recurring basis | | | | |
| Non-derivative financial instruments | | | | |
| Assets | | | | |
| Financial assets at fair value through profit or loss | | | | |
| Financial assets mandatorily classified as at fair value through profit or loss | | | | |
| Stocks | $ 3,657 | $ - | $ - | $ 3,657 |
| Bonds | 38,630,552 | 10,621,146 | 28,009,406 | - |
| Others | 162,575,301 | - | 162,575,301 | - |
| Financial assets at fair value through other comprehensive income | | | | |
| Stocks | 12,087,150 | 8,529,100 | - | 3,558,050 |
| Bonds | 188,485,752 | 80,964,720 | 107,521,032 | - |
| Liabilities | | | | |
| Financial liabilities at fair value through profit or loss | | | | |
| Designated as at fair value through profit or loss | | | | |
| Bonds | 51,441,482 | - | 51,441,482 | - |
| Derivative financial instruments | | | | |
| Assets | | | | |
| Financial assets at fair value through profit or loss | 49,475,706 | 43,421 | 37,348,068 | 12,084,217 |
| Liabilities | | | | |
| Financial liabilities at fair value through profit or loss | 51,966,296 | 81,433 | 39,800,646 | 12,084,217 |

| Items | September 30, 2018 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| Measured at fair value on a recurring basis | | | | |
| Non-derivative financial instruments | | | | |
| Assets | | | | |
| Financial assets at fair value through profit or loss | | | | |
| Financial assets mandatorily classified as at fair value through profit or loss | | | | |
| Stocks | $ 29,567 | $ 25,287 | $ - | $ 4,280 |
| Bonds | 41,146,933 | 13,770,141 | 27,376,792 | - |
| Others | 176,279,574 | - | 176,279,574 | - |
| Financial assets at fair value through other comprehensive income | | | | |
| Stocks | 16,818,015 | 13,092,048 | - | 3,725,967 |
| Bonds | 194,909,452 | 101,530,552 | 93,378,900 | - |
| Liabilities | | | | |
| Financial liabilities at fair value through profit or loss | | | | |
| Designated as at fair value through profit or loss | | | | |
| Bonds | 51,470,506 | - | 51,470,506 | - |
| Held for trading | | | | |
| Bonds | 98,850 | - | 98,850 | - |
| Derivative financial instruments | | | | |
| Assets | | | | |
| Financial assets at fair value through profit or loss | 57,441,368 | 6,022 | 45,086,223 | 12,349,123 |
| Liabilities | | | | |
| Financial liabilities at fair value through profit or loss | 57,953,091 | 6,121 | 45,675,140 | 12,271,830 |

2) Financial instruments measured at fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between willing market participants with full understanding of the sale or transfer transaction. The fair values of financial instruments at fair value, financial assets at fair value through other comprehensive income and hedging derivative financial instruments with quoted prices in an active market are based on their market prices; financial instruments with no quoted prices in an active market are estimated by valuation methods.

a) Marking to market

This method should be considered first when determining fair value. The following are the principles to follow when marking to market:

i. Ensure the consistency and integrity of market data.

ii. The source of market data should be transparent and easy to access and can be referred to by independent resources.

iii. Listed securities with tradable prices should be valued at closing prices.

iv. Evaluating unlisted securities that lack tradable closing prices should use quoted prices from independent brokers.

b) Marking to model

The use of marking to model is suggested if marking to market is infeasible. This valuation methodology is based upon model inputs that are used to derive the value of the trading positions. The Bank uses the same estimations and assumptions as those used by market participants to determine the fair value.

The Company uses the forward rates provided by Reuters to estimate the fair values of forward contracts, foreign exchange swap contracts, interest rate swap and cross-currency swap contacts and the discounted cash flow method to calculate the fair values of each contract. For foreign exchange option transactions, the Company uses the option pricing models which are generally used by other market participants (e.g., the Black-Scholes model) to calculate the fair value of the contracts.

3) Fair value adjustments

Credit risk valuation adjustments

Credit risk evaluation adjustment refers to the fair value of the Over The Counter (OTC) derivative financial commodity contracts, which also reflects the credit risk of both parties. It can be mainly divided into “credit evaluation adjustment” and “debit evaluation adjustment”:

a) Credit value adjustments (CVA): A transaction in a non-concentrated trading market, that is, the adjustment of the derivatives contract evaluation in the OTC transaction, which reflects the possibility that the Company may not be able to collect the full market value or the counterparty may default on the repayment on the fair value.

b) Debit value adjustments (DVA): It refers to the transactions of the non-concentrated trading market, that is, the adjustment of the derivatives contract evaluation in the OTC transaction, which reflects the possibility that the Company may not be able to collect the full market value or the counterparty may default on the repayment of the fair value.

Both CVA and DVA are concepts of estimated loss, calculated as the probability of default (PD) multiplied by the default loss rate (LGD) and multiplied by the exposure at default (EAD).

For customers with external credit ratings, the default probability is based on the default probability corresponding to the external rating; for customers without external credit ratings, the impairment rate calculated according to the Bank’s loan and receivable impairment assessment and the average incidence of impairment is taken as the default probability.

The Bank uses the fair value of OTC derivatives to calculate the amount of default risk (EAD).

The Company uses 60% as the default loss rate based on the recommendation of "IFRS 13 CVA and DVA Related Disclosure Guidelines" of the Stock Exchange.

The Company incorporates the credit risk assessment adjustment into the fair value calculation of financial instruments to reflect the counterparty's credit risk and the Company's credit quality.

4) Transfers between Level 1 and Level 2 during the period

There were no transfers between Level 1 and Level 2 for the nine months ended September 30, 2019 and 2018.

5) Reconciliation of Level 3 fair value measurements

a) Reconciliation of Level 3 fair value measurements

For the nine months ended September 30, 2019

| Items | Beginning Balance | Valuation Gains (Losses) | | Amount of Increase | | Amount of Decrease | | Effects of Exchange | Ending Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | In Net Income | In Other Comprehensive Income | Purchase or Change in Fair Value | Transferred to Level 3 | Sale or Change in Fair Value | Transferred from Level 3 | | |
| Financial assets at fair value through profit or loss | | | | | | | | | |
| Stocks | $ 3,657 | $ 10,385 | $ - | $ - | $ - | $ - | $ - | $ - | $ 14,042 |
| Derivative financial instruments | 12,084,217 | (10,942,346 ) | - | 23,000 | - | 814,622 | - | - | 350,249 |
| Financial assets at fair value through other comprehensive income | | | | | | | | | |
| Stocks | 3,558,050 | - | 696,749 | 32,085 | - | 8,036 | - | 7 | 4,278,855 |

For the nine months ended September 30, 2018

| Items | Beginning Balance | Valuation Gains (Losses) | | Amount of Increase | | Amount of Decrease | | Effects of Exchange | Ending Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | In Net Income | In Other Comprehensive Income | Purchase or Change in Fair Value | Transferred to Level 3 | Sale or Change in Fair Value | Transferred from Level 3 | | |
| Financial assets at fair value through profit or loss | | | | | | | | | |
| Stocks | $ - | $ - | $ - | $ - | $ 4,280 | $ - | $ - | $ - | $ 4,280 |
| Derivative financial instruments | 8,720,347 | 5,425,539 | - | 48,128 | - | (1,846,454 ) | - | 1,563 | 12,349,123 |
| Financial assets at fair value through other comprehensive income | | | | | | | | | |
| Stocks | 3,397,135 | - | 1,966,757 | 193,798 | - | (209,539 ) | (1,622,203 ) | 19 | 3,725,967 |

Total gains or losses recognized in the table above that contain unrealized gains and losses related to assets on hand as of September 30, 2019 and 2018 amounted to losses of $10,931,961 thousand and gains of $5,425,539 thousand, respectively.

b) Reconciliation of Level 3 fair value measurement of financial liabilities

For the nine months ended September 30, 2019

| Items | Beginning Balance | Valuation Gains (Losses) | | Amount of Increase | | Amount of Decrease | | Ending Balance |
|---|---|---|---|---|---|---|---|---|
| | | In Net Income | In Other Comprehensive Income | Purchase or Change in Fair Value | Transfer to Level 3 | Sale or Change in Fair Value | Transfer from Level 3 | |
| Financial liabilities at fair value through profit or loss | | | | | | | | |
| Derivative financial instruments | $ 12,084,217 | $ (10,942,346 ) | $ - | $ 23,000 | $ - | $ 814,622 | $ - | $ 350,249 |

For the nine months ended September 30, 2018

| Items | Beginning Balance | Valuation Gains (Losses) | | Amount of Increase | | Amount of Decrease | | Effects of Exchange Rate | Ending Balance |
|---|---|---|---|---|---|---|---|---|---|
| | | In Net Income | In Other Comprehensive Income | Purchase or Change in Fair Value | Transfer to Level 3 | Sale or Change in Fair Value | Transfer from Level 3 | | |
| Financial liabilities at fair value through profit or loss | | | | | | | | | |
| Derivative financial instruments | $ 8,822,872 | $ 5,246,992 | $ - | $ 48,128 | $ - | $ (1,846,454 ) | $ - | $ 292 | $ 12,271,830 |

Total gains or losses recognized in the table above that contain unrealized gains and losses related to liabilities on hand as of September 30, 2019 and 2018 amounted to gains of $10,942,346 thousand and losses of $5,246,992 thousand, respectively.

6) Information on significant unobservable inputs for Level 3 fair value measurement

Description of significant unobservable inputs to valuation of recurring fair value measurements categorized within Level 3 of the fair value hierarchy was as follows:

September 30, 2019

| Items | Product | Fair Value at September 30, 2019 | Valuation Techniques | Significant Unobservable Inputs | Interval (Weighted Average) | Relationship between Inputs and Fair Value |
|---|---|---|---|---|---|---|
| Measured at fair value on a recurring basis | | | | | | |
| Financial assets | | | | | | |
| Financial assets at fair value through profit or loss | Stock | $ 14,042 | Market approach | Discount for lack of marketability | 15%-20% | The higher the discount for lack of marketability, the lower the fair value of the stock |
| Financial assets at fair value through other comprehensive income | Stock | 3,181,808 | Market approach | Discount for lack of marketability | 15%-20% | The higher the discount for lack of marketability, the lower the fair value of the stock |
| | | 46,563 | Income approach | Cost of equity rate | 6%-7% | The higher the cost of equity rate, the lower the fair value of the stock |
| | | 1,050,484 | Value of net assets approach | Value of net assets | Not applicable | The higher the value of net assets, the higher the fair value of the stock |

December 31, 2018

| Items | Product | Fair Value at December 31, 2018 | Valuation Techniques | Significant Unobservable Inputs | Interval (Weighted Average) | Relationship between Inputs and Fair Value |
|---|---|---|---|---|---|---|
| Measured at fair value on a recurring basis | | | | | | |
| Financial assets | | | | | | |
| Financial assets at fair value through profit or loss | Stock | $ 3,657 | Market approach | Discount for lack of marketability | 15%-20% | The higher the discount for lack of marketability, the lower the fair value of the stock |
| Financial assets at fair value through other comprehensive income | Stock | 2,616,122 | Market approach | Discount for lack of marketability | 15%-20% | The higher the discount for lack of marketability, the lower the fair value of the stock |
| | | 38,864 | Income approach | Cost of equity rate | 6%-7% | The higher the cost of equity rate, the lower the fair value of the stock |
| | | 903,064 | Value of net assets approach | Value of net assets | Not applicable | The higher the value of net assets, the higher the fair value of the stock |

September 30, 2018

| Items | Product | Fair Value at September 30, 2018 | Valuation Techniques | Significant Unobservable Inputs | Interval (Weighted Average) | Relationship between Inputs and Fair Value |
|---|---|---|---|---|---|---|
| Measured at fair value on a recurring basis | | | | | | |
| Financial assets | | | | | | |
| Financial assets at fair value through profit or loss | Stock | $ 4,280 | Market approach | Discount for lack of marketability | 15%-20% | The higher the discount for lack of marketability, the lower the fair value of the stock |
| Financial assets at fair value through other comprehensive income | Stock | 2,759,706 | Market approach | Discount for lack of marketability | 15%-20% | The higher the discount for lack of marketability, the lower the fair value of the stock |
| | | 39,712 | Income approach | Cost of equity rate | 6%-7% | The higher the cost of equity rate, the lower the fair value of the stock |
| | | 926,549 | Value of net assets approach | Value of net assets | Not applicable | The higher the value of net assets, the higher the fair value of the stock |

7) Valuation process used for fair value measurements categorized within Level 3 of the fair value hierarchy

The Company’s risk management department is responsible for validating the fair value measurements and ensuring that the results of the valuation are in line with market conditions, based on independent and reliable inputs which are consistent with other information, and represent exercisable prices. The department analyses the movements in the values of assets and liabilities which are required to be re-measured or re-assessed as per the Company’s accounting policies at each reporting date.

d. Financial instrument that were not measured at fair value

1) Information on fair value

Except as detailed in the following table, the management considers the carrying amounts of financial assets and financial liabilities recognized in the consolidated financial statements approximate their fair values or that the fair values cannot be reasonably measured.

| | September 30, 2019 | | December 31, 2018 | | September 30, 2018 | |
|---|---|---|---|---|---|---|
| | Carrying Amount | Fair Value | Carrying Amount | Fair Value | Carrying Amount | Fair Value |
| Financial assets | | | | | | |
| Investments in debt instruments at amortised cost | $ 407,328,479 | $ 407,301,116 | $ 421,022,506 | $ 417,858,953 | $ 325,215,661 | $ 323,491,116 |

2) Information on fair value hierarchy

| Items | September 30, 2019 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| Financial assets | | | | |
| Investments in debt instruments at amortised cost | $ 407,301,116 | $ 36,695,312 | $ 365,505,502 | $ 5,100,302 |

| Items | December 31, 2018 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| Financial assets | | | | |
| Investments in debt instruments at amortised cost | $ 417,858,953 | $ 46,326,059 | $ 365,471,606 | $ 6,061,288 |

| Items | September 30, 2018 | | | |
|---|---|---|---|---|
| | Total | Level 1 | Level 2 | Level 3 |
| Financial assets | | | | |
| Investments in debt instruments at amortised cost | $ 323,491,116 | $ 39,130,622 | $ 272,096,187 | $ 12,264,307 |

3) Valuation techniques

The methods and assumptions used by the Company to estimate financial instruments that are not measured at fair value are as follows:

a) Cash and cash equivalents, due from the Central Bank and call loans to other banks, securities purchased under resale agreements, receivables, certain other financial assets, due to the Central Bank and other banks, call loans from the Central Bank and other banks, securities sold under repurchase agreements, payables, deposits and remittances whose maturity date is very close or the future payment price is similar to the carrying amount, so the fair value of the book is calculated based on the amount of the book on the balance sheet date.

b) Discounts and loans, deposits, financial debentures and structured commodity principals are all interest-bearing financial assets/liabilities whose book value is similar to the current fair value. The book value of the collection is deducted from the estimated recoverable amount after the allowance for bad debts, so the book value is the fair value.

c) If an investment in a debt instrument at amortized cost has a public quoted price in an active market, the market price is the fair value; if no market price is available for reference, the evaluation method is used to estimate the fair value. The estimates and assumptions used by the Bank in the use of the valuation method are consistent with the information used by market participants in the estimation of financial products and the assumptions.

## 50. FINANCIAL RISK MANAGEMENT

The Bank’s risk control and hedging strategy follows the requirement of customer service-oriented banking industry and regulatory environment. In order to comply with the above requirements, the Bank adopted different risk management methods to identify its risks and the Bank followed the spirit and regulation of the “Basel Accord” to keep strengthening its assets and the practices of capital management to maintain the best capital adequacy ratio.

The Bank setup the risk management committee, whose responsibilities are as follows:

a. To amend the risk management policies, risk appetite or risk tolerance and report the above issues to board of directors for approval.

b. To manage and decide the strategy about the Bank’s credit risk, market risk and operational risk.

c. To report the significant risk management issues, such as credit ratings, market assessment and risk indicators.

d. To analyze the issues that the Bank’s business unit brought up for discussion.

e. Other issues.

The Bank organized a risk management group to monitor, lead, develop, and establish the integral risk management framework.

a. Credit risk

Credit risk represents the risk of loss that the Bank would incur if counterparty fails to perform its contractual obligations. Sources of credit risk cover both on and off balance sheet accounts.

The Bank, Indovina Bank and CUBCN Bank

To centralize risk management functions currently handled by different departments, the Bank, Indovina Bank and CUBCN Bank board of directors resolved that a risk management department would be established to manage the credit risk. The objectives of a credit risk management are to improve asset quality and to generate stable profits while reducing risk through a diversified and balanced loan portfolio. The Bank, Indovina Bank and CUBCN Bank board of directors sets the counterparty credit limits, which are then implemented by the credit committee. The credit committee also monitors current and potential credit exposure to individual counterparties and on an aggregate basis to counterparties and their affiliates. The Bank and Indovina Bank perform periodic and systematic detailed reviews of its lending portfolios to identify credit risks and to assess the overall collectability of those portfolios.

The Bank, Indovina Bank and CUBCN Bank maintain a strict policy to evaluate customers’ credit ratings when providing loan commitments and commercial letters of credit transactions. Certain customers are required to provide appropriate collateral for the related loans, and the Bank, Indovina Bank and CUBCN Bank retains the legal right to foreclose on or liquidate the collateral. The disclosure of the maximum credit exposure shall not take account of any collateral held or other enhancements.

CUBC Bank

CUBC Bank board of directors resolved that a risk management department would be established to manage the credit risk. CUBC Bank board of directors sets the counterparty credit limits, which are then implemented by the credit committee.

Loan Committee is the top lending authority within CUBC Bank. It is in charged with approval of all credit in excess of CUBC Bank lending authorities. Certain customers are required to provide appropriate collateral for the related loans, and CUBC Bank retains the legal right to foreclose on or liquidate the collateral. The disclosure of the maximum credit exposure shall not take account of any collateral held or other enhancements.

<u>The judgement of significant increase in credit risk after initial recognition</u>

<u>The Bank and CUBCN Bank</u>

The Bank and CUBCN Bank assess the movement in default risk during the expected lifetime of various types of credit assets at each reporting date to determine if the credit risk has increased significantly since the initial recognition. To make this assessment, the Company has considered to show the reasonable and corroborative information (including prospective information) on the significant increase in credit risk after the initial recognition. The key indicators for consideration include:

1) Quantitative indicators

    a) Changes on credit rating

        When the credit rating at the reporting date has decreased to some extent compared with that on initial recognition and the credit rating has not met the investment grade, it is determined that the credit risk has increased significantly since the initial recognition.

    b) Information on the overdue status of the contract

        When the contract payment was overdue for more than 30 days as at the reporting date, it is determined that the credit risk has increased significantly since the initial recognition.

2) Qualitative indicators

    When the information observed at the reporting date meets the following conditions, it is determined that the credit risk has increased significantly since the initial recognition.

    a) The refund records are reported.

    b) Accountants have expressed significant doubt on its ability to continue as a going concern.

    c) Other internal or external information on judging the credit quality changes.

<u>Indovina Bank</u>

Indovina Bank assesses the movement in default risk during the expected lifetime of various types of financial assets at each reporting date to determine if the credit risk has increased significantly since the initial recognition:

1) Notch downgrade

    A notch downgrade of obligor’s internal or external ratings between the current grade and the grade at initial recognition greater than specific threshold would be classified as a significant increase in credit risk since initial recognition.

2) Low credit risk criteria

An exposure rated below Moody's investment grade (i.e. the credit rating is lower than the credit rating Baa3 of Moody's, an international credit rating agency) at the reporting date would be classified as a significant increase in credit risk since initial recognition.

3) Past due information

The contract payment over 30 days past due would be classified as a significant increase in credit risk since initial recognition.

4) Internal credit assessment indicators

The indicators with credit quality information that is weaker than upon initial recognition would be classified as a significant increase in credit risk since initial recognition.

<u>CUBC Bank</u>

CUBC Bank assesses the movement in default risk during the expected lifetime of various types of financial assets at each reporting date to determine if the credit risk has increased significantly since the initial recognition

1) Past due information

The contract payment over 30 days past due would be classified as a significant increase in credit risk since initial recognition.

2) Loan classification from National Bank of Cambodia

A loan contract with special mention position at reporting date would be classified as a significant increase in credit risk since initial recognition.

3) Internal credit assessment indicators

The indicators with credit quality information that is weaker than upon initial recognition would be classified as a significant increase in credit risk since initial recognition.

<u>Default and credit impairment of financial asset</u>

<u>The Bank and CUBCN Bank</u>

The Bank and CUBCN Bank definition of default on financial assets is the same with the one of judging the credit impairment of financial assets. Where one or more of the following conditions are met, the Bank determines the financial assets to be subject to default and credit impairment.

1) Quantitative indicator

   a) Changes on credit rating

   When the credit rating at the reporting date fell into the default level, it is determined as credit impairment.

   b) Information on the overdue status of the contract

   When the contract payment was overdue for more than 90 days as at the reporting date, it is determined as credit impairment.

2) Qualitative indicator

When the information observed at the reporting date meets the following conditions, it is determined as credit impairment.

a) Bailout, reorganization, individual agreement due to debtor's financial difficulties.

b) Lawsuit action has been taken.

c) Debt settlement, debt negotiation.

d) Other internal or external information on judging the deterioration in credit quality.

The aforementioned definition of default and credit impairment applies to all financial assets held by the Bank, and is consistent with the definition applied on the significant financial assets for the purpose of internal credit risk management, and is also applied in the relevant impairment assessment model.

Indovina Bank

Indovina Bank assesses the movement in default risk during the expected lifetime of various types of financial assets at each reporting date to determine if the credit risk subjected to default:

1) Notch downgrade

An obligor who has failed to pay one or more of its financial obligations or is rated as default at the reporting date is considered to be credit-impaired.

2) Past due information

The contract payment over 90 days past due would be classified as a credit-impaired loan.

3) Internal credit assessment indicators

The indicators with credit deterioration information used for internal credit risk management purpose at the reporting date would be recognized as credit-impaired assets.

CUBC Bank

CUBC Bank assesses the movement in default risk during the expected lifetime of various types of financial assets at each reporting date to determine if the credit risk subjected to default:

1) Past due information

The contract payment over 90 days past due would be classified as a credit-impaired loan.

2) Loan classification from National Bank of Cambodia

A loan contract with specific positions, such as substandard, doubtful and loss, at reporting date would be classified as a significant increase in credit risk since initial recognition.

3) Internal credit assessment indicators

The indicators with credit deterioration information used for internal credit risk management purpose at the reporting date would be recognized as credit-impaired assets.

The measurement of expected credit loss

The Bank and CUBCN Bank

For the purpose of assessing the expected credit losses, the Bank and CUBCN Bank classify the credit assets into the following groups based on credit category, credit rating, risk characteristics, enterprise size, product category and so on.

| Credit Category | Definition |
|---|---|
| Enterprise loan | Grouped by risk characteristics, enterprise size and internal/external credit rating |
| Consumer loan | Grouped by product category and internal credit rating |
| Credit card | Grouped by product category and internal credit rating |

When the credit risk of the financial instrument has not increased significantly after the initial recognition (Stage 1), the allowance for losses should be measured at the expected credit losses over 12 months by the Bank and CUBCN Bank. When the credit risk of the financial instrument has increased significantly (Stage 2) or the credit impairment has existed (Stage 3) after the initial recognition, the allowance for losses should be measured at the expected credit losses over the life time by the Bank and CUBCN Bank.

For the measurement of the expected credit losses, the Bank and CUBCN Bank calculate its expected credit losses over 12 months and the life time respectively by multiplying three factors, i.e. probability of default (“PD”), loss given default (“LGD”) and exposure at default (“EAD”) of the borrower over the next 12 months and the life time, also considering the effect of the life time value of money.

The PD and LGD applied in the impairment assessment of the credit business of the Bank and CUBCN Bank are adjusted and calculated based on the internal and external information of each group as well as the currently observable data and the forward-looking macroeconomic information (such as economic growth rate, etc.).

The Bank and CUBCN Bank assessed the EAD of loan at the reporting date. According to internal and external information, the Bank and CUBCN Bank consider the portion of the loan commitment that is expected to be drawn on over 12 months after the reporting date and the lifetime, to determine the EAD for calculating the expected credit losses.

The PD used in the impairment assessment of the Bank and CUBCN Bank debt instrument measured at fair value through other comprehensive income and measured at amortized cost, represents the PD of the issuer, guarantee agency or borrower. The LGD represents the loss rate resulted from the default of the issuer, guarantee agency or borrower. The LGD used in the Bank and CUBCN Bank relevant impairment assessment is based on the information regularly published by Moody's, an international credit rating agency; the PD is based on the information regularly published by Taiwan Ratings and Moody's, and calculated after adjusting the historical data based on the currently observable data and the looking-forward macroeconomic information (e.g., gross domestic product and economic growth rate, etc.). The EAD is measured at the amortized cost of financial assets and interests receivable.

The valuation techniques or significant assumptions for assessing the expected credit losses have no significant change in 2019.

Indovina Bank

Indovina Bank has grouped their exposures on the basis of shared credit risk characteristic, including product and counterparty types as follows.

| Category | Description |
|---|---|
| Loan portfolio | Grouped by counterparty type and enterprise size, such as large corporate, SME and retail loans. |
| Bond portfolio | Grouped by product class, external credit rating and payment ranks, such as sovereign and corporate bonds. |

1) Loan portfolio

The segmentation of Indovina Bank's loan portfolio is based on its risk characteristics, such as product class, counterparty type and enterprise size. The measurement of expected credit loss is estimated by three main parameters, including probability of default, loss given default and exposure at default. The probability of default and loss given default were built by the bank's historical delinquent information and recovery data and calibrated by selected macroeconomic factors for forward-looking adjustment. The estimated amounts of exposure at default were calculated by the amortized cost and interest receivable. At each financial reporting date, the above criteria for a significant increase in credit risk since initial recognition are not hit, the allowance loss shall be measured on the basis of the 12-month expected credit loss method. If financial assets meet the foregoing conditions of significant increases in credit risk or credit deterioration since initial recognition, the allowance losses shall be estimated according to the respective methods on the basis of lifetime expected credit losses.

2) Bond portfolio

The segmentation of Indovina Bank's bond portfolio is based on its product class, external rating and payment rank. The measurement of expected credit loss is estimated by three main parameters, including probability of default, loss given default and exposure at default. The probability of default and loss given default were built by external information with sufficient historical default data and recovery rates and calibrated by selected macroeconomic factors for forward-looking adjustment. The estimated amounts of exposure at default were calculated by the amortized cost and interest receivable. At each financial reporting date, the above criteria for a significant increase in credit risk since initial recognition are not hit, the allowance loss shall be measured on the basis of the 12-month expected credit loss method. If financial assets meet the foregoing conditions of significant increases in credit risk or credit deterioration since initial recognition, the allowance losses shall be estimated according to the respective methods on the basis of lifetime expected credit losses.

CUBC Bank

CUBC Bank measures their expected credit losses by the following segments.

| Category | Description |
|---|---|
| Loan | Grouped by product, counterparty types and loan classification by NBC, such as retail annuity and non-retail annuity. |
| Credit Card | Grouped as a whole by product characteristic |

The segmentation of CUBC Bank's loan portfolio is based on its risk characteristics, such as product class, counterparty type and loan classification by NBC. The measurement of expected credit loss is estimated by three main parameters, including probability of default, loss given default and exposure at default. The probability of default and loss given default were built by the internal and external historical delinquent information, default rates and written-off amounts and calibrated by selected macroeconomic factors for forward-looking adjustment. The estimated amounts of exposure at default were calculated by the amortized cost and interest receivable. At each financial reporting date, the above criteria for a significant increase in credit risk since initial recognition are not hit, the allowance loss shall be measured on the basis of the 12-month expected credit loss method. If financial assets meet the foregoing conditions of significant increases in credit risk or credit deterioration since initial recognition, the allowance losses shall be estimated according to the respective methods on the basis of lifetime expected credit losses.

Write-off policy

If any of the following conditions apply, the Company writes off its non-performing and nonaccrual loans as uncollectible, less the estimated recoverable amount.

The Company can't expect reasonably to collected the financial assets that including the following index:

1) The recovery activity has stopped.

2) Assessed the borrower doesn't have sufficient assets or sources of income to pay the overdraft.

Financial assets have been written-off by the Company may still have ongoing recovery activity, and continue to follow the relevant policies to litigation proceedings.

The consideration of forward-looking information

The Bank and CUBCN Bank

The Bank and CUBCN Bank use historical data to analyze and identify the significant economic factors that affect the credit risks and expected credit losses of each group of assets, and use the regression model or imputation adjustment method to estimate the impairment parameter after the prospective adjustment. The significant economic factors and their impact on PD and LGD differ depending on the type of financial instruments.

The significant economic factors identified by the Bank and CUBCN Bank in 2019 are as follows:

<table>
<tr><th>Credit Category</th><th>Probability of Default (PD)</th><th>Loss Given Default (LGD)</th></tr>
<tr><td>Enterprise loan</td><td>Consumer Price Index<br>Government Expenditures<br>GDP %<br>Proportion of investment in GDP (%)</td><td rowspan="3">GDP %</td></tr>
<tr><td>Consumer loan</td><td>Proportion of investment in GDP (%)<br>Proportion of savings in GDP (%)<br>Unemployment rate %<br>Price Index</td></tr>
<tr><td>Credit Card</td><td>Price Index<br>Proportion of government revenue in GDP (%)</td></tr>
</table>

Indovina Bank

Based on the qualitative and quantitative analysis of historical default data and macroeconomic factors, Indovina Bank applies the selected local and global economic factors in different portfolios. Regression models and interpolation adjustment were used to estimate the forward-looking parameters complied with regulatory requirements. The selected economic factors and their effects on PDs and LGDs varied from different types of portfolios.

The macroeconomic factors selected by the bank for the forward-looking adjustments in 2019 are as follows.

| Segment | Selected Factors |
|---|---|
| Loan portfolio | Vietnam GDP growth rate |
| Bond portfolio | Global GDP growth rate<br>Global inflation index |

CUBC Bank

Based on the qualitative and quantitative analysis of historical default data and regional macroeconomic factors, CUBC Bank chooses the local macroeconomic factor for parameter adjustments. The weighted average method and interpolation adjustment were used to estimate the forward-looking parameters complied with regulatory requirements. The selected economic factors and their effects on PDs varied from different groups of products.

The macroeconomic factors selected by CUBC Bank for the forward-looking adjustments in 2019 are as follows.

| Segment | Selected Factors |
|---|---|
| Retail loan | Cambodia GDP growth rate |
| Non-retail loan | |
| Credit Card | |

The category of credit asset and the grade of credit quality were narrated as follow:

1) Category of credit risk

   The credit risk of the Bank was classified into five categories. Normal credit assets shall be classified as “Category One.” The remaining unsound credit assets shall be evaluated based on the status of the loan collaterals and the length of time overdue. Assets that require special mention shall be classified as “Category Two,” assets that are substandard shall be classified as “Category Three,” assets that are doubtful shall be classified as “Category Four,” and assets for which there is loss shall be classified as “Category Five”. For managing the default credits, the Bank established the regulations governing the procedure to deal with non-performing loans, non-accrual loans and bad debts.

2) Grade of credit quality

   The Bank sets the level of credit quality based on the characteristics and scale of business (such as establishing the internal rating model of credit risk, setting the credit rating table or relevant rules to classify) to proceed with risk management.

   In order to measure the credit risk of the clients, the Bank employs the statistic methods and the professional judgment from the experts. The Bank develops the rating model of business credit after considering the clients’ relevant information. The model shall be reviewed periodically to verify if the calculated results conform to the reality and revise every parameter to optimize the results.

With respect to consumer credit assets such as mortgages, credit cards, and small-amount credit loans, the Bank also evaluates default risk of clients by using the credit rating scores developed by the Bank and the external due diligence services.

The credit quality of the Bank's corporate borrowers is classified as excellent, good, average, and bad.

To ensure the reasonable estimated values of credit rating system's design, process, and relevant risk factors, the Bank executes the relevant verification and tests the model according to the actual default every year so that the calculated results will be close to actual default.

The Bank evaluates the counterparties' credit quality before transactions and refers to the domestic and foreign credit rating agencies, when rendering different lines of credit based on the credit quality.

3) Hedge of credit risk and easing policy

a) Collateral

The Bank adopts a series of policies to lower the credit risk, and one of the frequently-used methods is requesting borrowers to provide collaterals. To ensure the creditor's rights, the Bank sets the scope available as collaterals and the procedures of appraising, managing, and disposing the collaterals. In addition, a credit contract is in place to provide the credit claim preservation, collaterals, and offset provisions to stipulate when a credit trigger event occurs, the Bank may reduce the limit, cut down the payback period, or deem all debts mature. Also, the Bank will use the deposits that the borrowers saved in the Bank to offset the liabilities to lower the credit risk.

Other non-credit business collaterals shall depend on the characteristics of the financial instruments. Only the asset-backed securities and other similar financial instruments are secured by an asset pool of financial instruments.

b) Limit of credit risk and control of credit risk concentration

To avoid the excessive risk concentration, the Bank limits the credit amounts of single counterparties and groups; the Bank also sets the investment guide and regulation of risk control of equity investment to restrict the investment limits of single person (company) or related company (group). Furthermore, the Bank establishes relevant regulations to control the concentration risk of assets, and sets the credit limits by industry, group, country, and stock types to monitor the credit concentration risk.

c) Net settlement agreement

The Bank usually settles by the gross balance, but signs contract with some counterparties to settle by net balance. If a default happens, the Bank will terminate all transactions with the counterparty and settle by net balance in order to lower the credit risk.

4) Maximum exposures to credit risk

Without taking into account the collateral or other credit enhancement instrument, the maximum credit risk exposure of on-balance-sheet financial assets equals their carrying values. The maximum credit risk exposure of off-balance-sheet items (without considering the collaterals or other credit enhancement is irrevocable) are as follows:

a) The Bank

| Off Balance Sheet Items | Maximum Exposure to Credit Risk | | |
|---|---|---|---|
| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
| Irrevocable loan commitments | $ 151,976,389 | $ 154,605,389 | $ 197,550,766 |
| Credit card commitments | 692,991,384 | 669,232,204 | 653,775,721 |
| Unused commercial letters of credit | 5,413,454 | 4,217,682 | 4,639,987 |
| Guarantees on duties and contracts | 13,505,393 | 13,534,956 | 8,578,417 |

b) Indovina Bank

| Off Balance Sheet Items | Maximum Exposure to Credit Risk | | |
|---|---|---|---|
| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
| Financial guarantee contracts | $ 1,389,371 | $ 2,262,842 | $ 2,840,524 |
| Unused commercial letters of credit | 836,415 | 1,017,801 | 1,083,014 |
| Irrevocable loan commitments | 667 | - | - |

c) CUBC Bank

| Off Balance Sheet Items | Maximum Exposure to Credit Risk | | |
|---|---|---|---|
| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
| Financial guarantee contracts | $ 24,388 | $ 78,161 | $ 61,878 |
| Credit card commitments | 323,110 | 447,040 | 439,718 |

d) CUBCN Bank

| Off Balance Sheet Items | Maximum Exposure to Credit Risk | | |
|---|---|---|---|
| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
| Financial guarantee contracts | $ 467,859 | $ 170,835 | $ 283,329 |
| Unused commercial letters of credit | 180,717 | 773,078 | 796,103 |
| Irrevocable loan commitments | 792,519 | 623,837 | 591,990 |

To reduce the risk from any businesses, the Bank conducts an overall assessment and takes appropriate risk reduction measures, such as obtaining collateral and guarantors. For obtaining of collateral, the Bank has Guidelines Governing Collateral, to ensure that collateral meet the specific criteria and has the effect of reducing the business risk.

The management deems the Company is able to control and minimize the credit risk exposures in off-balance-sheet items as the Company uses more strict rating procedures when extending credits and conduct reviews regularly.

The carrying amount of the maximum credit risk exposure of on-balance-sheet items were as follow:

## September 30, 2019

| | Discounts and Loans | | | | |
|---|---|---|---|---|---|
| | Stage 1 12-month Expected Credit Losses | Stage 2 Lifetime Expected Credit Losses | Stage 3 Lifetime Expected Credit Losses | Difference of Impairment Loss under Regulations | Total |
| Total carrying amount | $ 1,509,638,536 | $ 58,508,578 | $ 12,768,952 | $ - | $ 1,580,916,066 |
| Less: Allowance impairment | (2,711,798) | (1,456,176) | (5,567,120) | - | (9,735,094) |
| Less: Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans" | - | - | - | (17,267,045) | (17,267,045) |
| | $ 1,506,926,738 | $ 57,052,402 | $ 7,201,832 | $ (17,267,045) | $ 1,553,913,927 |

| | Receivable | | | | |
|---|---|---|---|---|---|
| | Stage 1 12-month Expected Credit Losses | Stage 2 Lifetime Expected Credit Losses | Stage 3 Lifetime Expected Credit Losses | Difference of Impairment Loss under Regulations | Total |
| Total carrying amount | $ 129,397,098 | $ 1,496,092 | $ 2,222,852 | $ - | $ 133,116,042 |
| Less: Allowance impairment | (562,512) | (133,544) | (1,580,096) | - | (2,276,152) |
| Less: Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans" | - | - | - | (52,742) | (52,742) |
| | $ 128,834,586 | $ 1,362,548 | $ 642,756 | $ (52,742) | $ 130,787,148 |

## December 31, 2018

| | Discounts and Loans | | | | |
|---|---|---|---|---|---|
| | Stage 1 12-month Expected Credit Losses | Stage 2 Lifetime Expected Credit Losses | Stage 3 Lifetime Expected Credit Losses | Difference of Impairment Loss under Regulations | Total |
| Total carrying amount | $ 1,549,705,049 | $ 59,275,734 | $ 11,769,709 | $ - | $ 1,620,750,492 |
| Less: Allowance impairment | (3,914,449) | (1,667,321) | (4,912,617) | - | (10,494,387) |
| Less: Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans" | - | - | - | (14,932,854) | (14,932,854) |
| | $ 1,545,790,600 | $ 57,608,413 | $ 6,857,092 | $ (14,932,854) | $ 1,595,323,251 |

| | Receivable | | | | |
|---|---|---|---|---|---|
| | Stage 1 12-month Expected Credit Losses | Stage 2 Lifetime Expected Credit Losses | Stage 3 Lifetime Expected Credit Losses | Difference of Impairment Loss under Regulations | Total |
| Total carrying amount | $ 83,956,813 | $ 1,660,989 | $ 2,422,873 | $ - | $ 88,040,675 |
| Less: Allowance impairment | (126,022) | (116,965) | (1,768,492) | - | (2,011,479) |
| Less: Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans" | - | - | - | (50,470) | (50,470) |
| | $ 83,830,791 | $ 1,544,024 | $ 654,381 | $ (50,470) | $ 85,978,726 |

## September 30, 2018

| | Discounts and Loans | | | | |
|---|---|---|---|---|---|
| | Stage 1 12-month Expected Credit Losses | Stage 2 Lifetime Expected Credit Losses | Stage 3 Lifetime Expected Credit Losses | Difference of Impairment Loss under Regulations | Total |
| Total carrying amount | $ 1,534,784,016 | $ 48,576,951 | $ 11,340,847 | $ - | $ 1,594,701,814 |
| Less: Allowance impairment | (4,287,118) | (1,828,073) | (4,859,926) | - | (10,975,117) |
| Less: Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans" | - | - | - | (14,283,486) | (14,283,486) |
| | $ 1,530,496,898 | $ 46,748,878 | $ 6,480,921 | $ (14,283,486) | $ 1,569,443,211 |

| | Receivable | | | | |
|---|---|---|---|---|---|
| | Stage 1 12-month Expected Credit Losses | Stage 2 Lifetime Expected Credit Losses | Stage 3 Lifetime Expected Credit Losses | Difference of Impairment Loss under Regulations | Total |
| Total carrying amount | $ 84,167,814 | $ 1,386,550 | $ 2,470,312 | $ - | $ 88,024,676 |
| Less: Allowance impairment | (123,890) | (106,697) | (1,770,446) | - | (2,001,033) |
| Less: Differences of Impairment Loss under the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans" | - | - | - | (48,983) | (48,983) |
| | $ 84,043,924 | $ 1,279,853 | $ 699,866 | $ (48,983) | $ 85,974,660 |

5) Credit concentration risk of the Company

When the counterparties are obviously the same party, or there are several counterparties but engaging in similar business activities and sharing similar economic characteristics, and vulnerable to the same economic impacts or other changes, the credit concentration risk is apparent.

Credit concentration risk of the Company derives from the assets, liabilities and off-balance-sheet items, and arises from performing obligations or engaging in transactions or cross-line portfolio of risk exposures including credit extension, due from and call loans to other banks, securities investment, receivables and derivatives. The Company does not significantly concentrate on a single client or counterparty, and the transaction amount with a single client or counterparty relative to the Company's total bills discounts and loans and overdue receivables is not significant. Discounts and loans, guarantees, bills purchased, and acceptances receivable of the Company according to industry and country are listed below:

| Industry Type | September 30, 2019 | | December 31, 2018 | | September 30, 2018 | |
|---|---|---|---|---|---|---|
| Items | Amount | % | Amount | % | Amount | % |
| Manufacturing | $ 118,131,808 | 7.40 | $ 117,141,000 | 7.16 | $ 115,206,571 | 7.18 |
| Financial institutions and insurance | 76,799,272 | 4.81 | 74,995,593 | 4.58 | 86,524,195 | 5.39 |
| Leasing and real estate | 142,428,313 | 8.93 | 140,808,012 | 8.60 | 132,515,369 | 8.26 |
| Individuals | 888,894,583 | 55.70 | 900,573,664 | 55.03 | 885,591,064 | 55.19 |
| Others | 369,522,906 | 23.16 | 403,005,618 | 24.63 | 384,833,345 | 23.98 |
| | $ 1,595,776,882 | 100.00 | 1,636,523,887 | 100.00 | $ 1,604,670,544 | 100.00 |

| Geographic Region | September 30, 2019 | | December 31, 2018 | | September 30, 2018 | |
|---|---|---|---|---|---|---|
| Items | Amount | % | Amount | % | Amount | % |
| Domestic | $ 1,307,802,306 | 81.96 | $ 1,360,278,586 | 83.12 | $ 1,332,878,578 | 83.06 |
| Asia | 206,963,646 | 12.97 | 160,134,030 | 9.78 | 138,490,695 | 8.63 |
| America | 45,673,111 | 2.86 | 31,418,258 | 1.92 | 49,987,173 | 3.12 |
| Others | 35,337,819 | 2.21 | 84,693,013 | 5.18 | 83,314,098 | 5.19 |
| | $ 1,595,776,882 | 100.00 | $ 1,636,523,887 | 100.00 | $ 1,604,670,544 | 100.00 |

b. Liquidity risk

1) Source and definition of liquidity risk

Liquidity risk means banks cannot provide sufficient funding for asset size growth and for meeting obligations on matured liabilities or have to make late payments to counterparties or raise emergency funding to cover funding gaps.

2) Liquidity risk management strategy and principles

The purpose of liquidity risk management is to ensure the availability of funds to meet present and future financial obligations. Liquidity risk is also managed by ensuring that the excess of maturing liabilities over maturing assets in any period is kept to manageable levels relative to the amount of funds the Bank believes it can generate within that period. As part of our liquidity risk management, the Bank focuses on a number of components, including tapping available sources of liquidity, preserving necessary funds at reasonable cost and continuous contingency planning.

3) Analysis of financial assets and non-derivative financial liabilities by remaining contractual maturities

a) Financial assets were held to manage liquidity risk

The Company holds highly marketable and diverse financial assets that are assumed to be easily liquidated in the event of an unforeseen interruption of cash flow. The financial assets were held to manage liquidity risk including cash and cash equivalents, due from the Central Bank and call loans to other banks, financial assets at FVTPL, financial assets at FVTOCI, investments in debt instruments at amortised cost, discounts and loans, and securities purchased under resell agreements.

b) Maturity analysis of non-derivative financial liabilities of the Bank

The table below shows the analysis of the cash outflow of non-derivative financial liabilities on time remaining until the contractual maturity date. The amount disclosed is based on the contractual cash flows and may be different from that included in the consolidated balance sheets.

| | September 30, 2019 | | | | |
|---|---|---|---|---|---|
| | 0-30 Days | 31-180 Days | 181 Days-1 Year | Over 1 Year | Total |
| Due to the Central Bank and call loans from banks | $ 57,895,243 | $ 27,047,523 | $ 10,404,878 | $ 172,286 | $ 95,519,930 |
| Non-derivative financial liabilities at fair value through profit or loss | 401,788 | - | 261,218 | 53,298,757 | 53,961,763 |
| Securities sold under agreements to repurchase | 13,339,822 | 1,352,279 | 20 | 7,613,325 | 22,305,446 |
| Payables | 58,440,124 | 6,564,038 | 983,997 | 352,375 | 66,340,534 |
| Deposits and remittances | 318,443,971 | 946,165,199 | 856,369,022 | 126,172,118 | 2,247,150,310 |
| Financial debentures payable | - | 5,568 | 433,877 | 53,800,000 | 54,239,445 |
| Lease liabilities | - | 18,315 | 50,035 | 3,715,275 | 3,783,625 |
| Other capital outflow at maturity | 20,043,647 | 37,857,589 | 5,836,347 | 1,373,431 | 65,111,014 |

Additional information about the maturity analysis for lease liabilities:

| | Less than 1 Year | 1-5 Years | 5-10 Years | Over 10 Years | Total |
|---|---|---|---|---|---|
| Lease liabilities | $ 68,350 | $ 3,350,126 | $ 365,149 | $ - | $ 3,783,625 |

| | December 31, 2018 | | | | |
|---|---|---|---|---|---|
| | 0-30 Days | 31-180 Days | 181 Days-1 Year | Over 1 Year | Total |
| Due to the Central Bank and call loans from banks | $ 33,388,821 | $ 17,227,043 | $ 17,187,533 | $ 147,450 | $ 67,950,847 |
| Non-derivative financial liabilities at fair value through profit or loss | - | - | 610,767 | 51,992,332 | 52,603,099 |
| Securities sold under agreements to repurchase | 30,140,774 | 10,582,338 | - | 15,436,901 | 56,160,013 |
| Payables | 12,118,626 | 6,512,187 | 909,069 | 402,186 | 19,942,068 |
| Deposits and remittances | 353,788,658 | 872,227,988 | 834,010,982 | 116,509,145 | 2,176,536,773 |
| Financial debentures payable | 7,800 | 727,699 | 1,537,213 | 53,900,000 | 56,172,712 |
| Other capital outflow at maturity | 27,116,530 | 40,057,002 | 8,599,063 | 1,251,007 | 77,023,602 |

| | September 30, 2018 | | | | |
|---|---|---|---|---|---|
| | 0-30 Days | 31-180 Days | 181 Days-1 Year | Over 1 Year | Total |
| Due to the Central Bank and call loans from banks | $ 45,817,577 | $ 18,119,833 | $ 10,382,145 | $ 137,889 | $ 74,457,444 |
| Non-derivative financial liabilities at fair value through profit or loss | 495,239 | - | 257,087 | 50,867,415 | 51,619,741 |
| Securities sold under agreements to repurchase | 33,960,130 | 12,673,582 | - | 15,422,289 | 62,056,001 |
| Payables | 17,350,310 | 1,935,316 | 7,119,765 | 517,035 | 26,922,426 |
| Deposits and remittances | 326,043,642 | 930,338,638 | 776,493,354 | 112,200,434 | 2,145,076,068 |
| Financial debentures payable | 14,303 | 1,060 | 2,035,811 | 53,900,000 | 55,951,174 |
| Other capital outflow at maturity | 24,680,826 | 39,402,504 | 11,918,792 | 965,428 | 76,967,550 |

c) Maturity analysis of derivative financial liabilities

Net settled derivatives financial instruments engaged by the Bank include:

i. Foreign exchange derivative instruments: Foreign exchange options, non-delivery forwards;

ii. Interest rate derivative instruments: Swaptions, net settled interest rate swaps and other interest rate agreements.

The table below shows the net settled derivative financial instruments on time remaining until the contractual maturity date. Analysis of contractual maturity date helps to illustrate all derivative financial instruments listed in the consolidated balance sheet. The amount disclosed is based on contractual cash flow and may be different from that included in the consolidated balance sheet. Maturity analysis of net settled derivative financial liabilities was as follows:

| | September 30, 2019 | | | | |
|---|---|---|---|---|---|
| | 0-30 Days | 31-180 Days | 181 Days-1 Year | Over 1 Year | Total |
| Derivative financial liabilities at fair value through profit or loss | | | | | |
| Foreign exchange derivative instruments | $ 134,113 | $ 89,258 | $ 4,432 | $ 61 | $ 227,864 |
| Interest rate derivative instruments | 39,880 | 317,678 | 532,506 | 26,162,208 | 27,052,272 |
| | $ 173,993 | $ 406,936 | $ 536,938 | $ 26,162,269 | $ 27,280,136 |

| | December 31, 2018 | | | | |
|---|---|---|---|---|---|
| | 0-30 Days | 31-180 Days | 181 Days-1 Year | Over 1 Year | Total |
| Derivative financial liabilities at fair value through profit or loss | | | | | |
| Foreign exchange derivative instruments | $ 86,688 | $ 45,095 | $ 229,800 | $ 199 | $ 361,782 |
| Interest rate derivative instruments | 21,092 | 285,082 | 543,248 | 23,522,719 | 24,372,141 |
| | $ 107,780 | $ 330,177 | $ 773,048 | $ 23,522,918 | $ 24,733,923 |

| | September 30, 2018 | | | | |
|---|---|---|---|---|---|
| | 0-30 Days | 31-180 Days | 181 Days-1 Year | Over 1 Year | Total |
| Derivative financial liabilities at fair value through profit or loss | | | | | |
| Foreign exchange derivative instruments | $ 21,006 | $ 14,655 | $ 83,498 | $ 220 | $ 119,379 |
| Interest rate derivative instruments | 4,086,278 | 121,146 | 498,815 | 20,333,274 | 25,039,513 |
| | $ 4,107,284 | $ 135,801 | $ 582,313 | $ 20,333,494 | $ 25,158,892 |

Gross settled derivatives financial instruments engaged by the Bank include:

i. Foreign exchange derivative instruments: Currency swaps;

ii. Interest rate derivative instruments: Cross currency swaps;

iii. Credit derivative instruments: All derivatives shown in gross pay a periodic fee in return for a payment by the protection seller upon the occurrence, if any, of such a credit event.

The contract maturity date is the basic element to understand the Bank's gross settled derivative instruments as at balance sheet dates. The disclosed amounts are based on contract cash flows and part of the disclosed are not in conformity with related items on consolidated balance sheet. Maturity analysis of gross settled derivative financial liabilities was as follows:

| | September 30, 2019 | | | | |
|---|---|---|---|---|---|
| | 0-30 Days | 31-180 Days | 181 Days-1 Year | Over 1 Year | Total |
| Derivative financial liabilities at fair value through profit or loss | | | | | |
| Foreign exchange derivative instruments | | | | | |
| Cash outflow | $ (1,959,588) | $ (4,045,436) | $ (951,360) | $ (150,562) | $ (7,106,946) |
| Cash inflow | 6,059 | 48,705 | 193 | 2 | 54,959 |
| Interest rate derivative instruments | | | | | |
| Cash outflow | (65,457) | (83,449) | - | (548,372) | (697,278) |
| Cash inflow | - | - | - | - | - |
| Cash outflow subtotal | (2,025,045) | (4,128,885) | (951,360) | (698,934) | (7,804,224) |
| Cash inflow subtotal | 6,059 | 48,705 | 193 | 2 | 54,959 |
| Net cash flow | $ (2,018,986) | $ (4,080,180) | $ (951,167) | $ (698,932) | $ (7,749,265) |

| | December 31, 2018 | | | | |
|---|---|---|---|---|---|
| | 0-30 Days | 31-180 Days | 181 Days-1 Year | Over 1 Year | Total |
| Derivative financial liabilities at fair value through profit or loss | | | | | |
| Foreign exchange derivative instruments | | | | | |
| Cash outflow | $ (3,875,082) | $ (4,718,572) | $ (558,507) | $ (296,855) | $ (9,449,016) |
| Cash inflow | 24,170 | 17,928 | 717 | - | 42,815 |
| Interest rate derivative instruments | | | | | |
| Cash outflow | (10,384) | (56,742) | (107,229) | (423,860) | (598,215) |
| Cash inflow | - | - | - | - | - |
| Cash outflow subtotal | (3,885,466) | (4,775,314) | (665,736) | (720,715) | (10,047,231) |
| Cash inflow subtotal | 24,170 | 17,928 | 717 | - | 42,815 |
| Net cash flow | $ (3,861,296) | $ (4,757,386) | $ (665,019) | $ (720,715) | $ (10,004,416) |

| | September 30, 2018 | | | | |
|---|---|---|---|---|---|
| | 0-30 Days | 31-180 Days | 181 Days-1 Year | Over 1 Year | Total |
| Derivative financial liabilities at fair value through profit or loss | | | | | |
| Foreign exchange derivative instruments | | | | | |
| Cash outflow | $ (4,086,601) | $ (7,283,600) | $ (1,415,226) | $ (177,717) | $ (12,963,144) |
| Cash inflow | 7,524 | 16,173 | 562 | - | 24,259 |
| Interest rate derivative instruments | | | | | |
| Cash outflow | (16,195) | (33,398) | (67,786) | (318,952) | (436,331) |
| Cash inflow | - | - | - | - | - |
| Cash outflow subtotal | (4,102,796) | (7,316,998) | (1,483,012) | (496,669) | (13,399,475) |
| Cash inflow subtotal | 7,524 | 16,173 | 562 | - | 24,259 |
| Net cash flow | $ (4,095,272) | $ (7,300,825) | $ (1,482,450) | $ (496,669) | $ (13,375,216) |

d) Maturity analysis of off-balance sheet items

i. Irrevocable commitments: Include the Bank’s irrevocable loan commitments and credit card commitments.

ii. Financial guarantee contracts: The Bank acts as a guarantor or an issuer of credit line in a financing guarantee agreement.

Maturity analysis of off-balance sheet items are shown as follows:

September 30, 2019

| | Not Later Than 1 Year | 1-5 Years | Later Than 5 Years | Total |
|---|---|---|---|---|
| Irrevocable loan commitments | $ 98,318,671 | $ 39,887,880 | $ 13,769,838 | $ 151,976,389 |
| Credit card commitments | 38,899,195 | 236,530,144 | 417,562,045 | 692,991,384 |
| Financial guarantee contracts | 13,340,165 | 5,252,122 | 326,560 | 18,918,847 |

December 31, 2018

| | Not Later Than 1 Year | 1-5 Years | Later Than 5 Years | Total |
|---|---|---|---|---|
| Irrevocable loan commitments | $ 109,990,204 | $ 35,237,143 | $ 9,378,042 | $ 154,605,389 |
| Credit card commitments | 55,543,412 | 237,450,848 | 376,237,944 | 669,232,204 |
| Financial guarantee contracts | 12,492,672 | 4,793,131 | 466,835 | 17,752,638 |

September 30, 2018

| | Not Later Than 1 Year | 1-5 Years | Later Than 5 Years | Total |
|---|---|---|---|---|
| Irrevocable loan commitments | $ 160,921,261 | $ 31,518,574 | $ 5,110,931 | $ 197,550,766 |
| Credit card commitments | 41,687,388 | 235,099,978 | 376,988,355 | 653,775,721 |
| Financial guarantee contracts | 10,160,216 | 3,006,156 | 52,032 | 13,218,404 |

c. Market risk

1) Source and definition of market risk

Market risk is the potential loss arising from adverse movements of market price, such as interest rates, foreign exchange rates and equity securities.

The Bank organized market risk management department and the committee of assets and liabilities management is responsible for monitoring the market risk management. The department and committee periodically examine the Bank's structure of assets and liabilities; plan the pricing principle of deposit and loan and financing and using scheme of medium and long term funding while executing the market risk management, the market risk management department periodically provides the related information of management and reports to the authorized managers of the Bank for the management system, such as valuating position, risk limit management, calculating of profit and loss, pricing model and risk analysis, in order to control the overall market risk.

2) Market risk management strategy and process

<u>Market risk management process</u>

a) Identification and measurement

The operations department and risk management department of the Bank identified the market risk factors of risk exposure position, and measured the market risk further. Market risk factors are the components that could have an impact on value of financial instrument, such as interest rates, foreign exchange rates, equity securities…etc., including position, gain and loss, the loss of stress test, sensitivity (DV01, Delta, Vega, Gamma) and Value at Risk (VaR) etc., to measure the extent of investment portfolio that is influenced by interest risk, foreign exchange risk and equity securities.

b) Monitoring and reporting

The risk management department periodically reports the execution of market risk management target, position and gain/loss control, sensitivity analysis, stress test, and VaR of equity securities to the board of directors, and helps the board of directors to fully understand the status of market risk management. The Bank also establishes a clear reporting process. Each transaction has the requirements about limitation and stop-loss points. If the transaction reaches its stop-loss limitation, stop-loss process will be implemented immediately. If the stop-loss process is not implemented, the transaction department should document the reason of non-implementing stop loss process and responding plan. Furthermore, the department shall report to the executive management for approval and report to the board of directors regularly.

3) Risk management policy of the trading book

The trading book is the portfolio of financial instruments and physical investment for the purpose of trading or the hedge on the trading book. Portfolio is held for trading, which is intended to earn the profit from bid-ask spread. Any positions aside from the above trading book will be in the banking book.

a) Strategy

In order to control market risk effectively and ensure flexibility in operating the transaction strategy, the Bank carries out various assessment and control. The portfolio of trading book has the risk limitation of each investment portfolio which is set according to the transaction strategy, category of investment and the annual profit target.

b) Policy and procedure

The Bank sets the "Rules of Market Risk Management" as the important regulation that should be complied with when holding trading portfolio.

c) Valuation policy

If the financial instruments of trading book have market values, they should be evaluated at least once each day by the information that is from an independent source and easily accessible. If it's evaluated by a model, a mathematical model should be used prudently, and the assumptions and parameters of the valuation model should be regularly reviewed and examined.

d) Method of measurement

i. The assumption and calculation of VaR: See VaR section.

ii. The Bank executes the stress test monthly with the following scenarios: The fluctuation of interest rate at 100bp, equity securities at 15% and foreign exchange rate at 3%, and reports to the risk management committee regularly.

4) Interest risk management of trading book

a) Definition of interest risk

Interest risk is the risk that the trading portfolios suffer losses or the change of its fair value which is caused by the fluctuation of interest rate. The main instruments include the securities and derivatives that relate to interest rates.

b) Interest risk management procedure of trading book

The Bank prudently choose its investment target by studying the credibility and financial position of the securities issuers, their sovereign risk and the trend of interest rates. According to the operating strategy and the circumstances of the market, the Bank sets the transaction limit and stop-loss limit (including the limits of dealing room, traders, and investment…etc.) of the trading book that are reported to the executive management or the board of directors for approval.

c) Method of measurement

i. The assumption and calculation of VaR: See VaR section.
ii. The Bank measures the investment portfolio's interest risk exposure monthly.

5) Interest risk management of banking book

The main objective of interest risk management of the banking book is to enhance the interest risk management, increase the operating efficiency of the fund and strengthen the business operation.

a) Strategy

Interest risk management enhances the Bank's ability take responsive actions to measure, to manage and avoid the risk that the fluctuation of interest rate may cause on the profit and the economic value of assets/liabilities.

b) Management procedure

When undertaking the operations relating to interest rate instruments, the Bank identifies the repricing risk of interest rate, yield curve risk, basis risk and options risk characteristics. In additional, the Bank also measures the potential impact of interest rate changes on the profit and economic value of the Bank. The Bank analyzes and monitors the interest risk limits and each target of interest risk management monthly. The results of analysis and monitoring are regularly reported to not only the risk management committee but also the board of directors.

If any risk management targets is found to exceed the limit during the monitoring process, it will be reported to the risk management committee and a solution should be proposed.

c) Method of measurement

The interest risk of the Bank mainly measures the repricing risk that is caused by the difference between maturity date and repricing date of the assets, liabilities, and off balance sheet items in banking book. To stabilize long-term profitability and ensure business growth, the Bank sets the monitoring indicators of interest sensitivity in major terms and implements stress test. Each interest risk indicator and the result of stress test are reported to the executive management regularly for review.

6) Foreign exchange risk management

a) Definition of foreign exchange risk

Foreign exchange risk is the gain/loss caused by two currencies exchange at different times. The Bank’s foreign exchange risk arises from the derivative instruments, such as spot exchange, forward exchange and foreign exchange option…etc. The Bank’s foreign exchange transactions are implemented daily to offset clients’ position. Thus, the Bank suffers little foreign exchange risk.

b) Policy, procedure and measurement methodology of foreign exchange risk management

In order to control foreign exchange risk, the Bank sets the limits of transaction and stop-loss limits for the dealing room and traders. Meanwhile, the Bank also sets the maximum annual loss limit to control the loss within the tolerable extent. Foreign exchange risk is controlled based on VaR. The assumption and calculation of VaR is described in VaR section.

For foreign exchange risk, the Bank sets the scenario at 3% fluctuation of interest rate of major currencies to execute the stress test quarterly, and reports to the risk management committee.

c) The significant portfolio of foreign currency financial assets and liabilities are as follows:

| | September 30, 2019 | | |
|---|---|---|---|
| | **Foreign Currency** | **Exchange Rate** | **NTD** |
| Financial assets | | | |
| Monetary items | | | |
| USD | $ 15,982,804 | 31.0420 | $ 496,138,202 |
| CNY | 5,873,095 | 4.3603 | 25,608,456 |
| HKD | 10,052,995 | 3.9592 | 39,801,818 |
| Financial liabilities | | | |
| Monetary items | | | |
| USD | 12,805,138 | 31.0420 | 397,497,094 |
| CNY | 8,355,341 | 4.3603 | 36,431,793 |
| AUD | 1,613,598 | 20.9766 | 33,847,800 |

| | December 31, 2018 | | |
|---|---|---|---|
| | Foreign Currency | Exchange Rate | NTD |
| Financial assets | | | |
| Monetary items | | | |
| USD | $ 13,372,308 | 30.7330 | $ 410,971,142 |
| CNY | 5,166,157 | 4.4742 | 23,114,420 |
| HKD | 8,325,249 | 3.9240 | 32,668,277 |
| Financial liabilities | | | |
| Monetary items | | | |
| USD | 12,941,117 | 30.7330 | 397,719,349 |
| CNY | 8,476,523 | 4.4742 | 37,925,659 |
| AUD | 1,808,396 | 21.6775 | 39,201,504 |

| | September 30, 2018 | | |
|---|---|---|---|
| | Foreign Currency | Exchange Rate | NTD |
| Financial assets | | | |
| Monetary items | | | |
| USD | $ 13,852,598 | 30.5510 | $ 423,210,721 |
| CNY | 4,197,001 | 4.4401 | 18,635,104 |
| HKD | 8,695,275 | 3.9053 | 33,957,657 |
| Financial liabilities | | | |
| Monetary items | | | |
| USD | 12,869,482 | 30.5510 | 393,175,545 |
| CNY | 8,150,911 | 4.4401 | 36,190,860 |
| AUD | 1,788,545 | 22.0517 | 39,440,458 |

As the Company has a large variety of foreign currencies, it is not possible to disclose foreign currency exchange gain or loss based on each foreign currency's exposure to major impact. The foreign currency exchange gains were $385,591 thousand, $483,503 thousand, $1,029,363 thousand and $1,297,736 thousand for the three months and nine months ended September 30, 2019 and 2018, respectively.

7) Risk management of equity securities price

a) Definition of risk of equity securities price

The market risk of equity securities held by the Bank includes the individual risk from the fluctuation of individual equity securities' market price and general market risk from the fluctuation of the overall price trend.

b) Purpose of risk management in equity securities prices

To avoid the massive fluctuation of equity securities price to worsen the Bank's financial situation or earnings. Also, to raise the operating efficiency of capital and strengthen the business operation.

c) Procedure of risk management of equity securities prices

The Bank sets investment limit on industries, using the β value to measure the investment portfolio affected by the systemic risk monthly. The stop-loss point must be authorized by the board of directors, and the equity investment should be authorized by the executives if the stop-loss point is reached but the investment is not going to be disposed of.

d) Measured methodology

The risk of equity securities prices in trading book is mainly controlled by VaR.

The Bank's risk of equity securities prices from its non-trading portfolio should be controlled by each bank according to its own business scale to develop a stress test under appropriate scenarios and report to the risk management committee.

The Bank adopts many methodologies to manage its market risk. Value-at-risk (VaR) is one of the methodologies. VaR is a statistical measure that assesses potential losses that might be caused by changes in risk factors over a specified period of time and at a specific level of statistical confidence. The Bank applies historical simulation with a statistic confidence of 99% to extrapolate the VaR of one-year fluctuations. The following form indicates the VaR which is the estimation of potential amount of loss within one day. While the statistic confidence of 99% represents the possible fluctuations that would be included in assumed adverse market changes. Base on the assumption, the VaR may exceed the amounts listed in 1 of 100 days due to the price changes in the market. The overall VaR in the market may be less than the aggregate VaR of individual market risk factors.

| September 30, 2019 | | | | |
|---|---|---|---|---|
| **Factors of Market Risk** | **Average Balance** | **Maximum Balance** | **Minimum Balance** | **Ending Balance** |
| Interest rate | $ 77,746 | $ 212,043 | $ 40,550 | $ 118,285 |
| Foreign exchange | 127,451 | 198,936 | 35,686 | 35,686 |
| Equity securities price | 285,942 | 393,133 | 159,476 | 159,476 |

| December 31, 2018 | | | | |
|---|---|---|---|---|
| **Factors of Market Risk** | **Average Balance** | **Maximum Balance** | **Minimum Balance** | **Ending Balance** |
| Interest rate | $ 307,882 | $ 701,219 | $ 52,816 | $ 57,761 |
| Foreign exchange | 147,353 | 202,948 | 104,364 | 136,066 |
| Equity securities price | 318,530 | 424,067 | 230,176 | 282,533 |

| September 30, 2018 | | | | |
|---|---|---|---|---|
| **Factors of Market Risk** | **Average Balance** | **Maximum Balance** | **Minimum Balance** | **Ending Balance** |
| Interest rate | $ 456,185 | $ 858,800 | $ 73,007 | $ 73,007 |
| Foreign exchange | 141,575 | 202,948 | 104,364 | 116,177 |
| Equity securities price | 296,393 | 424,067 | 206,747 | 342,354 |

Note: Above information about factors of market risks is defined by risk management of the trading book.

The Bank enters into a variety of derivatives transactions for both trading and non-trading purposes. The objectives in using derivative instruments are to meet customers' needs, to manage the Bank's exposure to risks and to generate revenues through trading activities. The Bank trades derivative instruments on behalf of customers and for its own positions. The Bank provides derivative contracts to address customers' demands for customized derivatives and also takes proprietary positions for its own accounts.

8) Stress testing

The stress testing is used to measure the maximum losses of risk asset portfolio under the worst scenario. The Bank's stress testing considers various types of risk factors and reporting the results will be reported to the executive management.

| Stress Test | | | | |
|---|---|---|---|---|
| **Market/Product** | **Scenarios** | **September 30, 2019** | **December 31, 2018** | **September 30, 2018** |
| Stock market | Major stock exchanges + 15% | $ 1,337,011 | $ 990,610 | $ 1,671,285 |
| | Major stock exchanges - 15% | (1,337,011) | (935,918) | (1,671,285) |
| Interest rate/bond market | Major interest rate + 100bp | (1,689,903) | (417,490) | (524,840) |
| | Major interest rate - 100bp | 1,986,134 | 701,613 | 623,280 |
| Foreign exchange market | Major currencies + 3% | 280,845 | 245,686 | 109,381 |
| | Major currencies - 3% | (267,381) | (233,535) | (82,414) |
| Composite | Major Stock Exchanges - 15% | (2,746,069) | (1,107,722) | (2,086,744) |
| | Major Interest Rate + 100bp | | | |
| | Major Currencies + 3% | | | |

The information of stress test is defined by risk management policy of the trading book.

9) Sensitivity analysis

a) Interest rate risk

Interest rate factor sensitivities (the present value of one basis point, or "PVBP") represent the change in the net present value of the interest rate derivatives portfolios caused by a parallel unit shift of 0.01% (1 basis point) in the interest rates in various yield curves affecting the portfolio. The Bank's interest rate-sensitive portfolios include bonds, interest rate swaps and structured products composed of such products.

b) Foreign exchange risk

Foreign exchange rate factor sensitivities ("FX delta") represent the change of the foreign exchange portfolios caused by the underlying currency exchange rate fluctuation.

c) Equity securities price risk

Equity securities price factor sensitivities ("Equity delta") represent the change of the equity securities price portfolio caused by a parallel unit shift of 1% (100 basis points) in the underlying stocks prices fluctuation. The Bank's equity portfolios include stocks and equity index options.

| | | September 30, 2019 | |
|---|---|---|---|
| | | Sensitivity of Profit or Loss | Sensitivity of Equity |
| Foreign exchange rate factor sensitivity (FX Delta) | USD+1% | $ 68,018 | $ - |
| | HKD+1% | (19,490) | - |
| | JPY+1% | 14,461 | - |
| | AUD+1% | (779) | - |
| | CNY+1% | 6,246 | - |
| Interest rate factor sensitivity (PVBP) | Yield curves (USD) parallel shift+1bp | (6,177) | - |
| | Yield curves (HKD) parallel shift+1bp | 11 | - |
| | Yield curves (JPY) parallel shift+1bp | - | - |
| | Yield curves (AUD) parallel shift+1bp | (882) | - |
| | Yield curves (CNY) parallel shift+1bp | (1,059) | - |
| Equity securities price factor sensitivity (Equity Delta) | Equity securities price +1% | 633 | 88,501 |

| | | December 31, 2018 | |
|---|---|---|---|
| | | Sensitivity of Profit or Loss | Sensitivity of Equity |
| Foreign exchange rate factor sensitivity (FX Delta) | USD+1% | $ 108,556 | $ - |
| | HKD+1% | (6,980) | - |
| | JPY+1% | (905) | - |
| | AUD+1% | (354) | - |
| | CNY+1% | 2,563 | - |
| Interest rate factor sensitivity (PVBP) | Yield curves (USD) parallel shift+1bp | 1,347 | - |
| | Yield curves (HKD) parallel shift+1bp | 183 | - |
| | Yield curves (JPY) parallel shift+1bp | (1) | - |
| | Yield curves (AUD) parallel shift+1bp | (359) | - |
| | Yield curves (CNY) parallel shift+1bp | (210) | - |
| Equity securities price factor sensitivity (Equity Delta) | Equity securities price +1% | (1,011) | 66,545 |

| | | September 30, 2018 | |
|---|---|---|---|
| | | Sensitivity of Profit or Loss | Sensitivity of Equity |
| Foreign exchange rate factor sensitivity (FX Delta) | USD+1% | $ 37,861 | $ - |
| | HKD+1% | (6,616) | - |
| | JPY+1% | 4,324 | - |
| | AUD+1% | (42,111) | - |
| | CNY+1% | (15,891) | - |
| Interest rate factor sensitivity (PVBP) | Yield curves (USD) parallel shift+1bp | 848 | - |
| | Yield curves (HKD) parallel shift+1bp | 244 | - |
| | Yield curves (JPY) parallel shift+1bp | - | - |
| | Yield curves (AUD) parallel shift+1bp | (181) | - |
| | Yield curves (CNY) parallel shift+1bp | (359) | - |
| Equity securities price factor sensitivity (Equity Delta) | Equity securities price +1% | 255 | 111,164 |

d. Transfers of financial assets

Financial assets transferred that have not been fully removed

Transferred financial assets that are part of the Bank daily operations that do not meet the criteria for full removal are mostly made up of debt securities used as counterparty collateral for repurchase agreements or equity securities lent out as part of securities lending agreement. The nature of these transactions are secured loans, and reflects the liability where the Bank are obligated to repurchase the transferred financial assets according to a fixed price in future periods. With respect to such transactions, the Bank will not be able to use, sell or pledge such transferred financial assets during the effective period. However the Bank is still exposed to interest rate risk and credit risk, hence they are not removed.

The following table analyses financial assets and financial liabilities that have not been fully removed:

| September 30, 2019 | | | | | |
|---|---|---|---|---|---|
| **Category of Financial Assets** | **Transferred Financial Assets Carrying Value** | **Related Financial Liabilities Carrying Value** | **Transferred Financial Assets Fair Value** | **Related Financial Liabilities Fair Value** | **Net Fair Value** |
| Financial assets at fair value through other comprehensive income | | | | | |
| Repurchase agreements | $ 26,793,197 | $ 25,236,750 | $ 26,793,197 | $ 25,236,750 | $ 1,556,447 |
| Investments in debt instruments measured at amortised cost | | | | | |
| Repurchase agreements | 255,203 | 280,781 | 258,913 | 280,781 | (21,868) |

| December 31, 2018 | | | | | |
|---|---|---|---|---|---|
| **Category of Financial Assets** | **Transferred Financial Assets Carrying Value** | **Related Financial Liabilities Carrying Value** | **Transferred Financial Assets Fair Value** | **Related Financial Liabilities Fair Value** | **Net Fair Value** |
| Financial assets at fair value through profit or loss | | | | | |
| Repurchase agreements | $ 581,159 | $ 523,342 | $ 581,159 | $ 523,342 | $ 57,817 |
| Financial assets at fair value through other comprehensive income | | | | | |
| Repurchase agreements | 44,424,315 | 42,613,744 | 44,424,315 | 42,613,744 | 1,810,571 |
| Investments in debt instruments measured at amortised cost | | | | | |
| Repurchase agreements | 14,649,885 | 11,447,258 | 13,056,317 | 11,447,258 | 1,609,059 |
| Securities purchased under resell agreements | | | | | |
| Repurchase agreements | 1,493,132 | 1,390,165 | 1,493,132 | 1,390,165 | 102,967 |

| September 30, 2018 | | | | | |
|---|---|---|---|---|---|
| Category of Financial Assets | Transferred Financial Assets Carrying Value | Related Financial Liabilities Carrying Value | Transferred Financial Assets Fair Value | Related Financial Liabilities Fair Value | Net Fair Value |
| Financial assets at fair value through profit or loss | | | | | |
| Repurchase agreements | $ 995,963 | $ 913,548 | $ 995,963 | $ 913,548 | $ 82,415 |
| Financial assets at fair value through other comprehensive income | | | | | |
| Repurchase agreements | 49,325,883 | 46,113,710 | 49,325,833 | 46,113,710 | 3,212,123 |
| Investments in debt instruments measured at amortised cost | | | | | |
| Repurchase agreements | 18,134,642 | 14,824,026 | 16,478,723 | 14,824,026 | 1,654,697 |
| Securities purchased under resell agreements | | | | | |
| Repurchase agreements | 212,926 | 204,378 | 212,926 | 204,378 | 8,548 |

e. Offsetting financial assets and liabilities

The Company own financial instruments that do not offset in accordance with IAS 32.42 but it executed enforceable master netting arrangement or other similar agreements with counterparties. Financial instruments subject to enforceable master netting arrangement or other similar agreements could be settled at net amount as chosen by the counterparties, or the financial instruments could be settled at gross amount if not. However, if one of the counterparty defaults, the other party could choose to settle the transaction at net amount.

Information related to offsetting of financial assets and financial liabilities was disclosed as follows:

| September 30, 2019 | | | | | | |
|---|---|---|---|---|---|---|
| Financial Assets Subject to Offsetting, Master Netting Arrangement or Similar Agreement | | | | | | |
| Item | Gross Amount of Recognized Financial Assets (a) | Gross Amount Offset in the Balance Sheet (b) | Amount Presented in the Balance Sheet (c)= (a)-(b) | Amount Not Offset in the Balance Sheet (d) | | Net Amount (e)=(c)-(d) |
| | | | | Financial Instruments (Note) | Cash Collateral Received/Pledged | |
| Derivative financial instruments | $ 62,593,985 | $ - | $ 62,593,985 | $ 57,323,025 | $ 2,983,186 | $ 2,287,774 |

| September 30, 2019 | | | | | | |
|---|---|---|---|---|---|---|
| Financial Liabilities Subject to Offsetting, Master Netting Arrangement or Similar Agreement | | | | | | |
| Item | Gross Amount of Recognized Financial Liabilities (a) | Gross Amount Offset in the Balance Sheet (b) | Amount Presented in the Balance Sheet (c)= (a)-(b) | Amount Not Offset in the Balance Sheet (d) | | Net Amount (e)=(c)-(d) |
| | | | | Financial Instruments (Note) | Cash Collateral Received/Pledged | |
| Derivative financial instruments | $ 57,323,025 | $ - | $ 57,323,025 | $ 57,323,025 | $ - | $ - |

| December 31, 2018 | | | | | | |
|---|---|---|---|---|---|---|
| Financial Assets Subject to Offsetting, Master Netting Arrangement or Similar Agreement | | | | | | |
| Item | Gross Amount of Recognized Financial Assets (a) | Gross Amount Offset in the Balance Sheet (b) | Amount Presented in the Balance Sheet (c)= (a)-(b) | Amount Not Offset in the Balance Sheet (d) | | Net Amount (e)=(c)-(d) |
| | | | | Financial Instruments (Note) | Cash Collateral Received/Pledged | |
| Derivative financial instruments | $ 49,475,706 | $ - | $ 49,475,706 | $ 49,475,706 | $ - | $ - |

| December 31, 2018 | | | | | | |
|---|---|---|---|---|---|---|
| Financial Liabilities Subject to Offsetting, Master Netting Arrangement or Similar Agreement | | | | | | |
| Item | Gross Amount of Recognized Financial Liabilities (a) | Gross Amount Offset in the Balance Sheet (b) | Amount Presented in the Balance Sheet (c)= (a)-(b) | Amount Not Offset in the Balance Sheet (d) | | Net Amount (e)=(c)-(d) |
| | | | | Financial Instruments (Note) | Cash Collateral Received/Pledged | |
| Derivative financial instruments | $ 51,966,013 | $ - | $ 51,966,013 | $ 49,475,706 | $ 2,490,307 | $ - |

| September 30, 2018 | | | | | | |
|---|---|---|---|---|---|---|
| **Financial Assets Subject to Offsetting, Master Netting Arrangement or Similar Agreement** | | | | | | |
| **Item** | **Gross Amount of Recognized Financial Assets (a)** | **Gross Amount Offset in the Balance Sheet (b)** | **Amount Presented in the Balance Sheet (c)= (a)-(b)** | **Amount Not Offset in the Balance Sheet (d)** | | **Net Amount (e)=(c)-(d)** |
| | | | | **Financial Instruments (Note)** | **Cash Collateral Received/Pledged** | |
| Derivative financial instruments | $ 56,542,428 | $ - | $ 56,542,428 | $ 56,542,428 | $ - | $ - |

| September 30, 2018 | | | | | | |
|---|---|---|---|---|---|---|
| **Financial Liabilities Subject to Offsetting, Master Netting Arrangement or Similar Agreement** | | | | | | |
| **Item** | **Gross Amount of Recognized Financial Liabilities (a)** | **Gross Amount Offset in the Balance Sheet (b)** | **Amount Presented in the Balance Sheet (c)= (a)-(b)** | **Amount Not Offset in the Balance Sheet (d)** | | **Net Amount (e)=(c)-(d)** |
| | | | | **Financial Instruments (Note)** | **Cash Collateral Received/Pledged** | |
| Derivative financial instruments | $ 57,478,419 | $ - | $ 57,478,419 | $ 56,542,428 | $ 935,991 | $ - |

Note: Master netting arrangement and non-cash collateral are included.

## 51. CAPITAL MANAGEMENT

a. Capital adequacy maintain strategy

The eligible capital of the Company must conform to the regulatory capital requirements and achieve the minimum adequacy ratio. The calculation of the eligible capital and regulatory capital should comply with the rules issued by the authorities.

b. Capital assessment procedure

To ensure the Company possesses sufficient capital to assume various risk, the Company assesses required capital for the portfolios and characteristics of risk and execute risk management through capital allocation to realize optimization of resources.

## 52. UNCONSOLIDATED STRUCTURED ENTITIES

The Company does not provide financial support or other support to the unconsolidated structured entities. The Company's maximum exposure to loss from its interests in these structured entities is limited to the carrying amount of assets the Company recognized. The information of the recognized unconsolidated structured entities is disclosed as follows:

| Type of Structured Entity | Nature and Purpose | Interests Owned |
|---|---|---|
| Securitization vehicle | Investment in asset-backed securities to receive returns | Investment in securitization vehicles issued by the entity |

The carrying amount of assets recognized by company relating to its interests in unconsolidated structured entities is disclosed as follows:

| | September 30, 2019 | December 31, 2018 | September 30, 2018 |
|---|---|---|---|
| Financial assets at fair value through other comprehensive income | $ 25,396,788 | $ 3,191,683 | $ 5,436,017 |
| Investments in debt instruments measured at amortised cost | 37,966,143 | 47,970,374 | 44,438,687 |
| | $ 63,362,931 | $ 51,162,057 | $ 49,874,704 |

## 53. ASSET QUALITY, CONCENTRATION OF CREDIT EXTENSIONS, INTEREST RATE SENSITIVITY, PROFITABILITY AND MATURITY ANALYSIS OF ASSETS AND LIABILITIES

**The Bank**

a. Credit risk

1) Asset quality: Please refer to Table 2.

2) Concentration of credit extensions

**(In Thousands of New Taiwan Dollars, %)**

| September 30, 2019 | | | |
|---|---|---|---|
| **Rank** | **Company Name** | **Credit Extension Balance** | **% to Net Asset Value** |
| 1 | Group A - real estate development activities | $ 29,320,572 | 13.73 |
| 2 | Group B - packaging and testing of semi-conductors | 17,006,347 | 7.96 |
| 3 | Group C - air transport | 9,551,100 | 4.47 |
| 4 | Group D - other | 8,891,393 | 4.16 |
| 5 | Group E - other financial intermediation | 8,748,828 | 4.10 |
| 6 | Group F - real estate development activities | 6,400,000 | 3.00 |
| 7 | Group G - other financial intermediation | 5,067,522 | 2.37 |
| 8 | Group H - other financial intermediation | 4,630,956 | 2.17 |
| 9 | Group I - wired telecommunications activities | 4,465,128 | 2.09 |
| 10 | Group J - international financial institution | 4,449,095 | 2.08 |

| September 30, 2018 | | | |
|---|---|---|---|
| **Rank** | **Company Name** | **Credit Extension Balance** | **% to Net Asset Value** |
| 1 | Group A - real estate development activities | $ 31,621,214 | 16.03 |
| 2 | Group B - activities of other holding companies | 8,307,912 | 4.21 |
| 3 | Group C - other financial intermediation | 8,040,250 | 4.08 |
| 4 | Group D - air transport | 7,791,308 | 3.95 |
| 5 | Group E - wired telecommunications activities | 6,543,908 | 3.32 |
| 6 | Group F - real estate development activities | 6,435,000 | 3.26 |
| 7 | Group G - manufacture of computers | 4,916,103 | 2.49 |
| 8 | Group H - other financial intermediation | 4,380,880 | 2.22 |
| 9 | Group I - financial leasing | 3,893,469 | 1.97 |
| 10 | Group J - smelting and refining of iron and steel | 3,733,935 | 1.89 |

b. Market risk

**Interest Rate Sensitivity (New Taiwan Dollar)**

**(In Thousands of New Taiwan Dollars, %)**

**September 30, 2019**

| Items | 1 to 90 Days | 91 to 180 Days | 181 Days to One Year | Over One Year | Total |
|---|---|---|---|---|---|
| Interest rate-sensitive assets | $ 1,793,524,378 | $ 5,989,567 | $ 91,012,016 | $ 121,175,025 | $ 2,011,700,986 |
| Interest rate-sensitive liabilities | 210,322,714 | 1,330,455,575 | 246,497,699 | 95,451,402 | 1,882,727,390 |
| Interest rate-sensitive gap | 1,583,201,664 | (1,324,466,008) | (155,485,683) | 25,723,623 | 128,973,596 |
| Net worth | | | | | 213,525,975 |
| Ratio of interest rate-sensitive assets to liabilities | | | | | 106.85% |
| Ratio of interest rate sensitivity gap to net worth | | | | | 60.40% |

**September 30, 2018**

| Items | 1 to 90 Days | 91 to 180 Days | 181 Days to One Year | Over One Year | Total |
|---|---|---|---|---|---|
| Interest rate-sensitive assets | $ 1,848,379,327 | $ 19,203,987 | $ 34,885,755 | $ 100,930,475 | $ 2,003,399,544 |
| Interest rate-sensitive liabilities | 201,482,268 | 1,222,253,712 | 237,844,626 | 93,321,982 | 1,754,902,588 |
| Interest rate-sensitive gap | 1,646,897,059 | (1,203,049,725) | (202,958,871) | 7,608,493 | 248,496,956 |
| Net worth | | | | | 197,212,307 |
| Ratio of interest rate-sensitive assets to liabilities | | | | | 114.16% |
| Ratio of interest rate sensitivity gap to net worth | | | | | 126.00% |

Note 1: The above amounts included only New Taiwan dollar amounts held by the Bank (excluding foreign currency).

Note 2: Interest rate-sensitive assets and liabilities mean the revenues or costs of interest-earning assets and interest-bearing liabilities are affected by interest rate changes.

Note 3: Interest rate sensitivity gap = Interest rate-sensitive assets - Interest rate-sensitive liabilities.

Note 4: Ratio of interest rate-sensitive assets to liabilities = Interest rate-sensitive assets ÷ Interest rate-sensitive liabilities (in New Taiwan dollars).

**Interest Rate Sensitivity (U.S. Dollars)**

**(In Thousands of U.S. Dollars, %)**

**September 30, 2019**

| Items | 1 to 90 Days | 91 to 180 Days | 181 Days to One Year | Over One Year | Total |
|---|---|---|---|---|---|
| Interest rate-sensitive assets | $ 8,302,958 | $ 715,224 | $ 1,025,962 | $ 8,320,963 | $ 18,365,107 |
| Interest rate-sensitive liabilities | 10,041,374 | 2,552,151 | 2,944,735 | 3,406,768 | 18,945,028 |
| Interest rate-sensitive gap | (1,738,416) | (1,836,927) | (1,918,773) | 4,914,195 | (579,921) |
| Net worth | | | | | 6,878,615 |
| Ratio of interest rate-sensitive assets to liabilities | | | | | 96.94% |
| Ratio of interest rate sensitivity gap to net worth | | | | | (8.43%) |

**September 30, 2018**

| Items | 1 to 90 Days | 91 to 180 Days | 181 Days to One Year | Over One Year | Total |
|---|---|---|---|---|---|
| Interest rate-sensitive assets | $ 7,586,307 | $ 716,823 | $ 1,124,893 | $ 6,458,257 | $ 15,886,280 |
| Interest rate-sensitive liabilities | 10,679,315 | 2,769,111 | 2,866,371 | 3,683,412 | 19,998,209 |
| Interest rate-sensitive gap | (3,093,008) | (2,052,288) | (1,741,478) | 2,774,845 | (4,111,929) |
| Net worth | | | | | 6,455,183 |
| Ratio of interest rate-sensitive assets to liabilities | | | | | 79.44% |
| Ratio of interest rate sensitivity gap to net worth | | | | | (63.70%) |

Note 1: The above amounts included only U.S. dollar amounts held by the Bank and excluded contingent assets and contingent liabilities.

Note 2: Interest rate-sensitive assets and liabilities mean the revenues or costs of interest-earning assets and interest-bearing liabilities are affected by interest rate changes.

Note 3: Interest rate sensitivity gap = Interest rate-sensitive assets - Interest rate-sensitive liabilities.

Note 4: Ratio of interest rate-sensitive assets to liabilities = Interest rate-sensitive assets ÷ Interest rate-sensitive liabilities (in U.S. dollars)

c. Liquidity risk

1) Profitability (consolidated information)

**Unit: %**

| Items | | For the Nine Months Ended September 30 | |
|---|---|---|---|
| | | 2019 | 2018 |
| Return on total assets | Before income tax | 0.76 | 0.77 |
| | After income tax | 0.66 | 0.66 |
| Return on equity | Before income tax | 10.50 | 11.10 |
| | After income tax | 9.03 | 9.52 |
| Net income ratio | | 39.19 | 39.26 |

Note 1: Return on total assets = Income before (after) income tax ÷ Average total assets

Note 2: Return on equity = Income before (after) income tax ÷ Average equity

Note 3: Net income ratio = Income after income tax ÷ Total net revenues

Note 4: Income before (after) income tax represents income for the nine months ended September 30, 2019 and 2018.

2) Maturity analysis of assets and liabilities

**Maturity Analysis of Assets and Liabilities (New Taiwan Dollar)**

**(In Thousands of New Taiwan Dollars)**

**September 30, 2019**

| | Total | Remaining Period to Maturity | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0-10 Days | 11-30 Days | 31-90 Days | 91-180 Days | 181 Days to 1 Year | Over 1 Year |
| Main capital inflow on maturity | $ 2,807,289,224 | $ 446,126,532 | $ 379,964,169 | $ 387,817,087 | $ 238,747,268 | $ 334,109,211 | $ 1,020,524,957 |
| Main capital outflow on maturity | 3,290,752,215 | 199,429,803 | 249,889,939 | 517,934,215 | 625,608,022 | 468,505,767 | 1,229,384,469 |
| Gap | (483,462,991) | 246,696,729 | 130,074,230 | (130,117,128) | (386,860,754) | (134,396,556) | (208,859,512) |

**September 30, 2018**

| | Total | Remaining Period to Maturity | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0-10 Days | 11-30 Days | 31-90 Days | 91-180 Days | 181 Days to 1 Year | Over 1 Year |
| Main capital inflow on maturity | $ 2,689,500,726 | $ 428,274,945 | $ 379,114,190 | $ 311,505,592 | $ 239,757,189 | $ 327,386,122 | $ 1,003,462,688 |
| Main capital outflow on maturity | 3,166,409,423 | 137,429,533 | 271,093,071 | 480,544,949 | 551,258,267 | 594,790,071 | 1,131,293,532 |
| Gap | (476,908,697) | 290,845,412 | 108,021,119 | (169,039,357) | (311,501,078) | (267,403,949) | (127,830,844) |

Note: The above amounts included only New Taiwan dollar amounts held by the Bank (excluding foreign currency).

**Maturity Analysis of Assets and Liabilities (U.S. Dollars)**

**(In Thousands of U.S. Dollars)**

**September 30, 2019**

| | **Total** | **Remaining Period to Maturity** | | | | |
|---|---|---|---|---|---|---|
| | | **1-30 Days** | **31-90 Days** | **91-180 Days** | **181 Days-1 Year** | **Over 1 Year** |
| Main capital inflow on maturity | $ 62,474,212 | $ 17,915,337 | $ 13,537,814 | $ 11,037,567 | $ 8,563,949 | $ 11,419,545 |
| Main capital outflow on maturity | 67,174,766 | 16,885,010 | 17,644,200 | 12,422,549 | 13,154,208 | 7,068,799 |
| Gap | (4,700,554) | 1,030,327 | (4,106,386) | (1,384,982) | (4,590,259) | 4,350,746 |

**September 30, 2018**

| | **Total** | **Remaining Period to Maturity** | | | | |
|---|---|---|---|---|---|---|
| | | **1-30 Days** | **31-90 Days** | **91-180 Days** | **181 Days-1 Year** | **Over 1 Year** |
| Main capital inflow on maturity | $ 62,646,380 | $ 16,854,628 | $ 13,245,082 | $ 10,073,352 | $ 12,764,693 | $ 9,708,625 |
| Main capital outflow on maturity | 68,663,327 | 17,380,552 | 15,407,190 | 11,554,640 | 16,508,989 | 7,811,956 |
| Gap | (6,016,947) | (525,924) | (2,162,108) | (1,481,288) | (3,744,296) | 1,896,669 |

Note: The above amounts included only U.S. dollar amounts held by the Bank and excluded contingent assets and contingent liabilities.

## 54. OPERATING SEGMENTS

The information reported to the Company's chief operating decision maker for the assessment of segment performance focuses mainly on operation and profitability. The Company's reportable segments are as follows:

a. Corporate banking unit: Corporate banking, foreign exchange business, debt management and public treasury business;

b. Individual banking unit: Deposits and consumer loans, foreign exchange service, endorsement guarantees business, note discounting, safe deposits boxes, credit card - related products, and trust business;

c. International banking unit: Offshore banking units, overseas branches and representative office; and

d. Other units: These parts contain the Bank's assets, liabilities, revenues and expenses that cannot be attributed to or allocated reasonably to certain operation segments.

Management monitors the operating results of its business units separately for the purpose of making decisions. Segment performance is evaluated based on operating profit or loss.

The analysis of the Bank's operating revenue and results by reportable segment was as follows:

| | For the Nine Months Ended September 30, 2019 | | | | |
|---|---|---|---|---|---|
| | **Corporate Banking** | **Individual Banking** | **International Banking** | **Others** | **Total** |
| Net interest | $ 6,461,081 | $ 8,884,025 | $ 5,900,646 | $ 5,806,987 | $ 27,052,739 |
| Segment revenue (expense) | $ (2,906,231) | $ 9,343,098 | $ (662,228) | $ (5,774,639) | $ - |
| Segment net income | $ 2,884,788 | $ 16,054,462 | $ 3,608,292 | $ (328,402) | $ 22,219,140 |
| Income tax expense | | | | | (3,097,393) |
| Income after income tax | | | | | $ 19,121,747 |

| | For the Nine Months Ended September 30, 2018 | | | | |
|---|---|---|---|---|---|
| | **Corporate Banking** | **Individual Banking** | **International Banking** | **Others** | **Total** |
| Net interest | $ 6,514,199 | $ 9,517,326 | $ 4,978,993 | $ 3,587,478 | $ 24,597,996 |
| Segment revenue (expense) | $ (2,518,789) | $ 8,774,477 | $ (103,266) | $ (6,152,422) | $ - |
| Segment net income | $ 3,792,862 | $ 15,126,993 | $ 2,823,726 | $ (284,271) | $ 21,459,310 |
| Income tax expense | | | | | (3,056,163) |
| Income after income tax | | | | | $ 18,403,147 |

Note 1: No revenue from transactions with a single external customer amounted to 10% or more of the Company total revenue.

Note 2: Operating segments' profit are measured on a pre-tax income basis, the income taxes are not allocated to reporting segments for the purpose of making decisions about resource allocation and performance assessment.

Note 3: As the Company provided the average amount of deposits and loans to measure assets and liabilities, the measured amount of assets and liabilities is not disclosed.

## 55. ADDITIONAL DISCLOSURES

a. Related information of significant transactions and investees and b. Proportionate share in investees:

1) Financing provided: The Bank - not applicable; investee - none

2) Endorsement/guarantee provided: The Bank - not applicable; investee - none

3) Marketable securities held: The Bank - not applicable; investee - none

4) Marketable securities acquired or disposed of at costs or prices of at least $300 million or 10% of the paid-in capital: The Bank - not applicable; investee - none

5) Acquisition of individual real estate at costs of at least $300 million or 10% of the paid-in capital: None

6) Disposal of individual real estate at costs of at least $300 million or 10% of the paid-in capital: None

7) Allowance of service fees to related parties amounting to at least $5 million: None

8) Receivables from related parties amounting to at least $300 million or 10% of the paid-in capital: Table 1 (attached)

9) Sale of nonperforming loans: None

10) Asset securitization under the “Regulations for Financial Asset Securitization”: None

11) Other significant transactions which may affect the decisions of users of financial reports: Table 2 (attached)

12) Related information of investees and proportionate share: Quarterly report is exempt from disclosure.

13) Derivative transactions: Note 8

c. Investments in mainland China: Table 3 (attached)

d. Intercompany relationships and significant intercompany transactions.

For the detailed information of intercompany relationships and significant intercompany transactions, please refer to Table 4 (attached).

TABLE 1

## CATHAY UNITED BANK CO., LTD.

**RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$300 MILLION OR 10% OF THE PAID-IN CAPITAL**
**SEPTEMBER 30, 2019**
**(In Thousands of New Taiwan Dollars)**

| Company Name | Related Party | Relationship | Ending Balance | Turnover Rate | Overdue | | Amounts Received in Subsequent Period | Allowance for Impairment Loss |
|---|---|---|---|---|---|---|---|---|
| | | | | | Amount | Actions Taken | | |
| Cathay United Bank Co., Ltd. | Cathay Life Insurance Co., Ltd. (Note) | Other related party | $ 339,336 | - | $ - | - | $ 339,336 | $ - |

Note: Insurance commission receivable.

## CATHAY UNITED BANK CO., LTD.

**ASSET QUALITY - NONPERFORMING LOANS**
**AS OF SEPTEMBER 30, 2019 AND 2018**
**(In Thousands of New Taiwan Dollars, %)**

| Period | | | September 30, 2019 | | | | | September 30, 2018 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Items | | | Nonperforming Loan (Note 1) | Loan | Ratio of Nonperforming Loan (Note 2) | Allowance for Credit Losses | Coverage Ratio (Note 3) | Nonperforming Loans (Note 1) | Loans | Ratio of Nonperforming Loans (Note 2) | Allowance for Credit Losses | Coverage Ratio (Note 3) |
| Corporate banking | Secured | | $ 571,523 | $ 222,937,429 | 0.26% | $ 2,888,408 | 505.39% | $ 644,195 | $ 227,897,863 | 0.28% | $ 3,766,751 | 584.72% |
| | Unsecured | | 533,586 | 343,190,640 | 0.16% | 7,775,939 | 1,457.30% | 331,466 | 373,235,080 | 0.09% | 6,355,264 | 1,917.32% |
| Consumer banking | Housing mortgage (Note 4) | | 665,780 | 345,493,347 | 0.19% | 5,510,424 | 827.66% | 578,026 | 360,295,667 | 0.16% | 5,659,620 | 979.13% |
| | Cash card | | - | - | - | - | - | - | - | - | - | - |
| | Small-scale credit loans (Note 5) | | 166,509 | 78,947,587 | 0.21% | 2,688,989 | 1,614.92% | 147,936 | 67,099,680 | 0.22% | 1,786,928 | 1,207.91% |
| | Other (Note 6) | Secured | 1,132,714 | 499,438,620 | 0.23% | 6,055,822 | 534.63% | 686,253 | 487,812,126 | 0.14% | 5,523,179 | 804.83% |
| | | Unsecured | 150,548 | 25,586,277 | 0.59% | 443,604 | 294.66% | 122,954 | 22,692,944 | 0.54% | 417,942 | 339.92% |
| Loan | | | $ 3,220,660 | $ 1,515,593,900 | 0.21% | $ 25,363,186 | 787.52% | $ 2,510,830 | $ 1,539,033,360 | 0.16% | $ 23,509,684 | 936.33% |
| | | | Nonperforming Receivables (Note 1) | Receivables | Ratio of Nonperforming Receivables (Note 2) | Allowance for Credit Losses | Coverage Ratio (Note 3) | Nonperforming Receivables (Note 1) | Receivables | Ratio of Nonperforming Receivables (Note 2) | Allowance for Credit Losses | Coverage Ratio (Note 3) |
| Credit cards | | | $ 121,625 | $ 76,791,456 | 0.16% | $ 1,824,486 | 1,500.09% | $ 94,675 | $ 70,829,556 | 0.13% | $ 1,430,027 | 1,510.46% |
| Accounts receivable factored without recourse (Note 7) | | | - | 2,723,799 | - | 42,072 | - | - | 1,918,964 | - | 47,207 | - |

Note 1: Nonperforming loans are reported to the authorities and disclosed to the public, as required by the "Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Nonperforming/Non-accrued Loans." Nonperforming credit card receivables are reported to the authorities and disclosed to the public, as required by the Banking Bureau's letter dated July 6, 2005 (Ref. No. 0944000378).

Note 2: Ratio of nonperforming loans: Nonperforming loans ÷ Outstanding loan balance.
Ratio of nonperforming credit card receivables: Nonperforming credit card receivables ÷ Outstanding credit card receivables balance.

Note 3: Coverage ratio of loans: Allowance for possible losses for loans ÷ Nonperforming loans.
Coverage ratio of credit card receivables: Allowance for possible losses for credit card receivables ÷ Nonperforming credit card receivables.

Note 4: The mortgage loan is for house purchase or renovation and is fully secured by housing that is purchased (owned) by the borrower, the spouse or the minor children of the borrowers.

Note 5: Based on the Banking Bureau's letter dated December 19, 2005 (Ref. No. 09440010950), small-scale credit loans are unsecured, involve small amounts and exclude credit cards and cash cards.

Note 6: Other consumer banking loans refer to secured or unsecured loans that exclude housing mortgage, cash cards, credit cards and small-scale credit loans.

Note 7: As required by the Banking Bureau in its letter dated July 19, 2005 (Ref. No. 094000494), accounts receivable factored without recourse are reported as nonperforming receivables within three months after the factors or insurance companies refuse to indemnify banks for any liabilities on these accounts.

(Continued)

Not reported as nonperforming loans or nonperforming receivables

| Types \ Items | September 30, 2019 | | September 30, 2018 | |
|---|---|---|---|---|
| | Not Reported as Nonperforming Loan | Not Reported as Nonperforming Receivable | Not Reported as Nonperforming Loan | Not Reported as Nonperforming Receivable |
| Amounts of executed contracts on negotiated debts not reported as nonperforming loans and receivables (Note 1) | $ 2,248 | $ 81,460 | $ 2,956 | $ 110,700 |
| Amounts of discharged and executed contracts on clearance of consumer debts not reported as nonperforming loans and receivables (Note 2) | 51,139 | 1,182,524 | 34,583 | 1,176,680 |
| Total | $ 53,387 | $ 1,263,984 | $ 37,539 | $ 1,287,380 |

Note 1: Amounts of executed contracts on negotiated debts that are not reported as nonperforming loans or receivables are reported in accordance with the Banking Bureau’s letter dated April 25, 2006 (Ref. No. 09510001270).

Note 2: Amounts of discharged and executed contracts on clearance of consumer debts that are not reported as nonperforming loans or receivables are reported in accordance with the Banking Bureau’s letter dated September 15, 2008 and September 20, 2016 (Ref. No. 09700318940 and No. 10500134790).

(Concluded)

TABLE 3

## CATHAY UNITED BANK CO., LTD.

**INVESTMENTS IN MAINLAND CHINA**
**FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2019**
**(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)**

| Investee Company Name | Main Businesses and Products | Total Amount of Paid-in Capital | Investment Type | Accumulated Outflow of Investment from Taiwan as of January 1, 2019 (Note 1) | Investment Flows | | Accumulated Outflow of Investment from Taiwan as of September 30, 2019 | Investee Net Income (Loss) | % Ownership of Direct or Indirect Investment | Investment Income | Carrying Value as of September 30, 2019 | Accumulated Inward Remittance of Earnings as of September 30, 2019 | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Outflow | Inflow | | | | | | | |
| Cathay United Bank (China) Limited | Local government approved banking | $ 14,377,562 (CNY 3,000,000) | Direct | $ 14,377,562 (CNY 3,000,000) | $ - | $ - | $ 14,377,562 (CNY 3,000,000) | $ 240,662 | 100% | $ 240,662 | $ 15,869,117 | $ - | |

| Accumulated Investment in Mainland China as of September 30, 2019 | Investment Amount Approved by the Investment Commission, MOEA (Note 2) | Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA (Note 3) |
|---|---|---|
| $ 14,377,562 (CNY 3,000,000) | $ 14,377,562 (CNY 3,000,000) | $ 130,568,938 |

Note 1: The registered capital of Cathay United Bank (China) Limited was CNY3,000,000, which was transferred to the working capital of Cathay United Bank (China) Limited after the merger of Cathay United Bank Shanghai branch, Qingdao branch and Shenzhen branch was approved by the authorities.

Note 2: The Investment Commission of the Ministry of Economic Affairs (“MOEAIC”) authorized the Bank to remit US$60,067,239 (CNY400,000,000). Based on the capital verification report issued by local accountants in mainland China, the Shanghai branch of the Bank was authorized to remit the total amount of working capital of US$59,768,397.46, and the remaining amount of US$298,841.54 was repatriated on November 5, 2010. The Bank reported to MOEAIC to revise the amount of the investment on January 18, 2011, and it was authorized by MOEAIC on January 24, 2011. Also, MOEAIC authorized the Bank to remit US$95,024,128 (CNY600,000,000). Based on the capital verification report issued by local accountants in mainland China, Shanghai branch of the Bank was authorized to remit the total amount of working capital of US$94,929,198.64, and the remaining amount of US$94,929.36 was repatriated on February 1, 2012. The Bank reported to MOEAIC to revise the amount of the investment on March 20, 2012, and it was authorized by MOEAIC on March 26, 2012. MOEAIC agreed to the Bank to increase the working capital of Shanghai branch by US$164,000,000 (CNY1,000,000,000) on February 27, 2014, and was authorized by MOEAIC on July 10, 2014. MOEAIC agreed to the Bank to increase the working capital of the Qingdao branch by US$98,199,673 (CNY600,000,000) on January 21, 2014, and was authorized by MOEAIC on October 30, 2014. The Bank obtained approval from MOEAIC to increase the working capital of Shenzhen branch by US$60,708,160.7 (CNY400,000,000) on January 5, 2015, and was authorized by MOEAIC on December 22, 2016.

Note 3: Based on the Investment Commission’s “Regulation on Examination of Investment or Technical Cooperation in Mainland China” investments are limited to the larger of 60% of the Bank’s net asset value or 60% of the Company’s consolidated net asset value.

TABLE 4

# CATHAY UNITED BANK CO., LTD.

**BUSINESS RELATIONSHIP AND SIGNIFICANT TRANSACTIONS AMONG THE BANK AND SUBSIDIARIES**
**FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2019**
**(In Thousands of New Taiwan Dollars)**

| No. (Note 1) | Transacting Company | Counterparty | Flow of Transaction (Note 2) | Description of Transaction | | | |
|---|---|---|---|---|---|---|---|
| | | | | Financial Statement Account | Amounts | Terms of Transaction | Percentage of Total Revenue or Total Assets (Note 3) |
| 0 | Cathay United Bank | Indovina Bank | a | Due from banks - interest revenue | $ 201 | Note 4 | 0.00% |
| | | Indovina Bank | a | Call loan to banks - interest revenue | 119,922 | Note 4 | 0.25% |
| | | Indovina Bank | a | Due to banks | 74,389 | Note 4 | 0.00% |
| | | Indovina Bank | a | Due from bank | 51,414 | Note 4 | 0.00% |
| | | Indovina Bank | a | Call loan to banks | 6,208,400 | Note 4 | 0.21% |
| 1 | Indovina Bank | Cathay United Bank | b | Due to banks - interest expense | 201 | Note 4 | 0.00% |
| | | Cathay United Bank | b | Call loan from banks - interest expense | 119,922 | Note 4 | 0.25% |
| | | Cathay United Bank | b | Due from bank | 74,389 | Note 4 | 0.00% |
| | | Cathay United Bank | b | Due to banks | 51,414 | Note 4 | 0.00% |
| | | Cathay United Bank | b | Call loan from banks | 6,208,400 | Note 4 | 0.21% |
| 0 | Cathay United Bank | CUBC Bank | a | Call loan to banks - interest revenue | 1,398 | Note 4 | 0.00% |
| | | CUBC Bank | a | Call loan from banks - interest expense | 5,933 | Note 4 | 0.01% |
| | | CUBC Bank | a | Due to banks | 11,893 | Note 4 | 0.00% |
| | | CUBC Bank | a | Due from bank | 63,013 | Note 4 | 0.00% |
| | | CUBC Bank | a | Call loan to banks | 838,134 | Note 4 | 0.03% |
| | | CUBC Bank | a | Interest receivable | 359 | Note 4 | 0.00% |
| 2 | CUBC Bank | Cathay United Bank | b | Call loan from banks - interest expense | 1,398 | Note 4 | 0.00% |
| | | Cathay United Bank | b | Call loan to banks - interest revenue | 5,933 | Note 4 | 0.01% |
| | | Cathay United Bank | b | Due from bank | 11,893 | Note 4 | 0.00% |
| | | Cathay United Bank | b | Due to banks | 63,013 | Note 4 | 0.00% |
| | | Cathay United Bank | b | Call loan from banks | 838,134 | Note 4 | 0.03% |
| | | Cathay United Bank | b | Interest payable | 359 | Note 4 | 0.00% |
| 0 | Cathay United Bank | CUBCN Bank | a | Call loans to banks - interest revenue | 142,119 | Note 4 | 0.29% |
| | | CUBCN Bank | a | Due to banks | 48,685 | Note 4 | 0.00% |
| | | CUBCN Bank | a | Due from bank | 9,596,567 | Note 4 | 0.32% |
| | | CUBCN Bank | a | Call loans to banks | 4,888,840 | Note 4 | 0.16% |
| | | CUBCN Bank | a | Interest receivable | 340,065 | Note 4 | 0.01% |
| 3 | CUBCN Bank | Cathay United Bank | b | Call loan from banks - interest expense | 142,119 | Note 4 | 0.29% |
| | | Cathay United Bank | b | Due from banks | 48,685 | Note 4 | 0.00% |
| | | Cathay United Bank | b | Due to banks | 9,596,567 | Note 4 | 0.32% |
| | | Cathay United Bank | b | Call loan from banks | 4,888,840 | Note 4 | 0.16% |
| | | Cathay United Bank | b | Interest payable | 340,065 | Note 4 | 0.01% |

(Continued)

Note 1: The transacting company is identified in the No. column as follows:

a. 0 for parent company.
b. Sequentially from 1 for subsidiaries.

Note 2: The flow of transactions is as follows:

a. From parent company to subsidiary.
b. From subsidiary to parent company.
c. Between subsidiaries.

Note 3: The percentage is calculated as follows:

a. Assets and liabilities: Ending balance divided by total consolidated assets.
b. Income and expenses: The amount for the year ended divided by consolidated net income.

Note 4: The terms of the transactions between the Bank and related parties were similar to those for unrelated parties.

(Concluded)