ไทยพาณิชย์ SCB

Pillar III Disclosures

December 2016

Contents

Index of Tables

Index of Figures

1. Introduction

Starting from January 1, 2013, **Siam Commercial Bank PCL (SCB) and its Financial Group** adopted Basel III, the latest global regulatory framework for assessing bank capital adequacy and liquidity, to further strengthen its risk measurement and risk management practice. The Bank's implementation of Basel III closely follows guidelines by the Basel Committee on Banking Supervision as well as strictly complies with the Bank of Thailand (BOT)'s regulations. Throughout 2016, the Bank maintained its minimum Common Equity Tier 1 (CET1), Tier 1 capital, and total CAR at 5.125%, 6.625%, and 9.125%, respectively, in response to the BOT's adoption of the capital conservation buffer of up to 2.5% of CET1. This additional capital buffer requirement is being phased in over a 4-year period at 0.625% p.a. from the beginning of 2016.

The current Basel Capital Accord comprises three pillars, each of which is vital for promoting the stability of financial institutions:

Pillar I provides guidelines on minimum capital requirements for credit risk, market risk and operational risk.

Pillar II addresses the key principles of supervisory review processes and relevant internal risk assessment beyond Pillar I, with an emphasis on the bank's internal capital adequacy assessment process (ICAAP).

Pillar III aims to reinforce market discipline through guidelines for public disclosure of key information on capital adequacy and risk exposure as well as risk assessment and management.

This document presents detailed information on capital adequacy and risk-weighted asset calculations for credit risk, market risk in the trading book, and operational risk per the BOT's guidelines for both SCB (referred to as 'Bank-only') and its Financial Group (referred to as 'Consolidated'). Conforming to the Basel III framework, disclosure of information on risk management guidelines and frameworks, risk components, and measurement methodologies for risk monitoring and reporting, including capital adequacy requirements which encompass both quantitative and qualitative aspects. Qualitative information is updated annually, or when there is any material change to the underlying policy in which disclosure is warranted.

The BOT requires Pillar III disclosure to be reported as of June 30 and December 31 and made available to market participants within four months of the report dates. The report is published on the Bank's website under the Investor Relations section at *http://www.scb.co.th/en/about-scb/investor-relations/financial-information/pillar*.

Although there is no external audit requirement for this report, the Bank has an internal verification and approval process to ensure that the contents are consistent with the Bank's Pillar III disclosure policy and that there is no discrepancy from the information used internally by management and what was submitted to the BOT.

Note that quantitative disclosure in this report follows the Pillar III principles under the Basel III framework which was adopted by the BOT, rather than the convention of Thai Accounting Standards. Therefore, Pillar III disclosure is not directly comparable with SCB's Financial Statements. For example, this disclosure includes undrawn portions of committed line as part of credit risk assets computation whereas Thai Accounting Standards do not require such consideration.

2. Scope of Application

Standardized Approach

SCB and its Financial Group have adopted the Standardized Approach (SA), which is in line with the BOT's guidelines for measuring credit risk, market risk, and operational risk, as a computational framework for regulatory capital requirements.

Accounting Consolidation

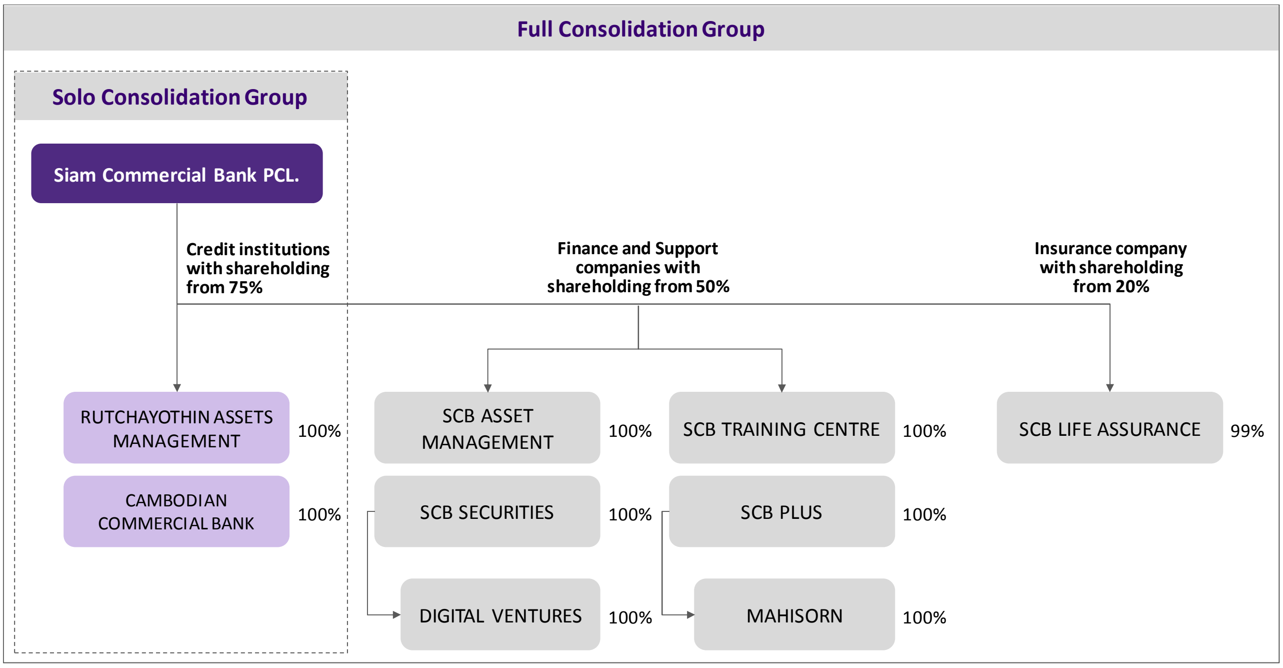
The consolidated financial statements present consolidated information on the assets and liabilities of SCB and all its subsidiaries. The accounting justification for consolidating financial statements in accordance with the Thai Accounting Standards can be found in the SCB Annual Report for 2016.

Regulatory Consolidation[1/]

Regulatory consolidation consists of solo consolidation, which considers only financial entities for which SCB holds more than 75% of the company shares, and full consolidation (referred to as 'Consolidated'), which includes all entities within the Financial Group. In this context, entities involved in the insurance business or other financial operations are excluded from the regulatory consolidation provided, in the latter case, that SCB has more than 10% but less than 50% of shareholding. Under Basel III, investment in these two types of entities is considered 'investment outside the scope of consolidation'[2/] and shall be calculated in accordance with the BOT's guidelines.

Quantitative information in this document is presented in both a Bank-only basis and Consolidated basis.

Figure 1: List of Companies and Business Types within the SCB Financial Group



1/ See more details on regulatory consolidation in Appendix.

2/ The treatment of investment outside the scope of consolidation, i.e. insurance companies, is determined by the proportion of issued common share capital held by the Bank with 10% being the threshold level:

- The Bank's investment does not exceed 10%. If the aggregate holding exceeds 10% of the Bank's net common equity Tier 1 capital (CET1), then the amount above 10% is required to be deducted from the corresponding tier of capital. The portion under 10% is assigned a risk weight according to the BOT's guidelines.
- The Bank owns significant investments (more than 10% of the issued common share capital of the entity or a threshold approach). If the aggregate holding exceeds 10% of the Bank's net common equity, then the amount above 10% is required to be deducted from the corresponding tier of capital. If there is a shortfall, the remaining amount will be deducted from the next higher tier of capital, whereas the amount under the 10% of net CET1 will be assigned a risk weight of 250%.

3. Regulatory Capital

3.1 Capital Management

Cognizant that capital is the most critical resource for the banking business, SCB and its Financial Group have adopted the Internal Capital Adequacy Assessment Process (ICAAP) to assess significant risks and capital adequacy to support the businesses under both normal and stress conditions. Moreover, policies and procedures have been developed and put in place to ensure that SCB and its Financial Group's capital:

- Provides a cushion to absorb unexpected losses and builds market confidence in the Bank's financial strength by maintaining capital in excess of the minimum regulatory requirements at all times.
- Matches the risk profile of SCB and its Financial Group and facilitates growth based on their business strategies, as well as to withstand potential risks arising from economic downturns or other adverse scenarios.
- Achieves the right balance between maximizing shareholders' returns and sustaining long-term stability for other stakeholders with a sound capital position.

Senior management is responsible for reviewing capital adequacy periodically, taking into account business needs and any imminent regulatory changes.

3.2 Capital Structure and Adequacy

3.2.1 Capital Structure

Regulatory capital under Basel III is based on a more stringent definition of capital and also a higher requirement for minimum capital ratios. The components of Basel III regulatory capital are as follows:

(1) Common Equity Tier 1 Capital (CET1) represents the highest-quality component of capital that allows banks to enter into financial commitments without any restriction, which includes:

- Fully paid-up common shares
- Premium on common shares
- Appropriated retained earnings
- Legal reserves
- Other comprehensive income, i.e., revaluation surplus on land and premises, and revaluation surplus on AFS investment

Note: Minimum regulatory requirement for common equity Tier 1 capital including the capital buffer is currently 5.125% of total risk-weighted assets.

(2) Additional Tier 1 Capital consists of high-quality capital, which includes:

- Fully paid-up non-cumulative preferred shares
- Premium on the abovementioned preferred shares
- Perpetual subordinated debt

Note: Minimum regulatory requirement for the combined CET1 and additional Tier 1 capital including the capital buffer is currently 6.625% of total risk-weighted assets.

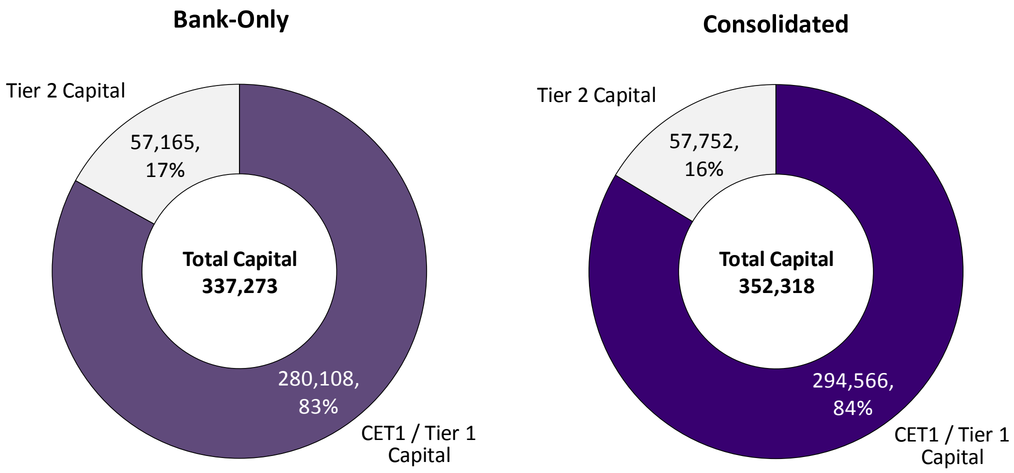
(3) Tier 2 Capital consists of less-permanent capital, which includes:

- Long-term subordinated liabilities
- General provisions (eligibility limited to 1.25% of credit risk-weighted assets)

Note: Minimum regulatory requirement of capital adequacy ratio including the capital buffer is currently 9.125%.

Figure 2: Basel III Capital Structure as of December 31, 2016

(In Baht million)



Continued Strong Capital Base

Common Equity Tier 1 Capital (CET1) is considered the highest quality of capital. For SCB, CET1 represents the major component, accounting for approximately 84% of Consolidated total capital as of December 31, 2016 (83% for Bank-only). CET1 capital has grown significantly and continuously in recent years on the strength of the Bank's retained earnings. This high level of capital underscores the soundness of the Bank's capital position and ensures the Bank's ability to absorb losses in the event of an economic downturn or other adverse circumstances.

3.2.2 Capital Adequacy

Maintaining adequate capital is a business imperative for financial institutions. Therefore, SCB and its Financial Group identify and manage risk by setting internal control procedures, conducting stress tests, as well as assessing and managing risk impact with the capital planning process. Scenario analysis and stress tests are employed to assess the sensitivities of regulatory capital to business plans as well as to adverse shocks from extreme yet plausible events. These analysis and tests provide important mechanisms for SCB and its Financial Group to anticipate potential financial impacts on their business plans and capital needs. Armed with the analytical results, SCB and its Financial Group can then consider and formulate management action plans for impact mitigation should such adverse events, or similar circumstances, occur.

To comply with the regulatory requirements, SCB and its Financial Group must maintain their capital above the minimum level at 8.5% of total risk-weighted assets to cover credit risk, market risk, and operational risk, of which at least 4.5% must be CET1 capital and 6% must be Tier 1 capital. Moreover, starting from January 2016, conservation buffer will be gradually added to the previous minimum capital level in the amount that would annually increase at the rate of 0.625% per annum until reaching 2.5% of CET1 in January 2019. Banks that fail to meet this minimum requirement may face restrictions on their earning distribution, i.e., dividend payouts, discretionary bonus payments, share buybacks, etc.

The Bank's compliance with capital adequacy requirements is evident from Figure 3. As of December 31, 2016, the Bank's total CAR stood at 17.73% on a Consolidated basis and 17.44% on a Bank-only basis while CET1 capital stood at 14.83% on a Consolidated basis and 14.48% on a Bank-only basis.

Note: In compliance with the BOT guidelines, the ratios as of December 31, 2016 excluded net profit after dividend payment for 2H2016; otherwise, the capital would have been 14.9% and 17.8% for CET1/Tier 1 and CAR respectively on a Bank-only basis and 15.2% and 18.1% on a Consolidated basis.

Figure 3: Capital Adequacy Ratios under the Standardized Approach (SA) of SCB and its Financial Group

(In % of RWAs)

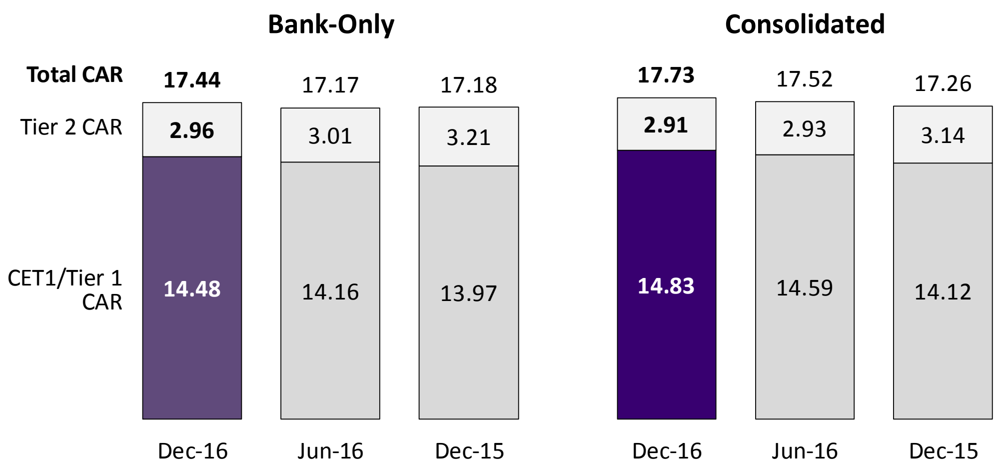


Table 1: Comprehensive Regulatory Capital and Capital Adequacy

(In Baht million)

	Bank-only		Consolidated	
	31 Dec 16	**30 Jun 16**	**31 Dec 16**	**30 Jun 16**
Tier 1 capital	**280,108**	**265,721**	**294,566**	**282,959**
Common Equity Tier 1 (CET1)	**280,108**	**265,721**	**294,566**	**282,959**
Paid-up capital - common shares	33,992	33,992	33,992	33,992
Surplus (deficit) net worth	11,124	11,124	11,124	11,124
Legal reserve	7,000	7,000	7,000	7,000
Net profit after appropriation	218,192	202,272	236,110	220,191
Disclosed reserves				
Other comprehensive income	16,672	17,251	16,709	20,020
Others owner changes items	-	-	(2,364)	(2,364)
Regulatory deduction to CET1 capital	(6,872)	(5,918)	(8,005)	(7,004)
Additional Tier 1	**-**	**-**	**-**	**-**
Tier 2 capital	**57,165**	**56,299**	**57,752**	**56,927**
Proceeds from issuing subordinated debt securities	36,000	36,000	36,000	36,000
General provision	21,165	20,299	21,752	20,927
Total Regulatory Capital	**337,273**	**322,020**	**352,318**	**339,886**
Risk-weighted assets				
Credit risk	1,693,215	1,623,897	1,740,156	1,674,165
Market risk	43,214	56,531	43,321	63,907
Operational risk	197,419	195,569	203,450	201,713
Total Risk-Weighted Assets	**1,933,848**	**1,875,997**	**1,986,927**	**1,939,785**
Total capital/ Total risk-weighted assets	**17.44%**	**17.17%**	**17.73%**	**17.52%**
Total Tier 1 capital/ Total risk-weighted assets	**14.48%**	**14.16%**	**14.83%**	**14.59%**
Total CET1 capital/ Total risk-weighted assets	**14.48%**	**14.16%**	**14.83%**	**14.59%**
Capital after deducting capital add-on from Single Lending Limit	336,083	320,474	351,110	338,217
CAR after deducting capital add-on from Single Lending Limit	17.38%	17.08%	17.67%	17.44%
Minimum regulatory capital adequacy ratios:				
Minimum total capital/ Total risk-weighted assets	8.50%	8.50%	8.50%	8.50%
Minimum Tier 1 capital/ Total risk-weighted assets	6.00%	6.00%	6.00%	6.00%
Minimum CET1 capital/ Total risk-weighted assets	4.50%	4.50%	4.50%	4.50%
Capital conservation buffer requirements[1/]	0.625%	0.625%	0.625%	0.625%
Total minimum CAR including capital conservation buffer[1/]	9.125%	9.125%	9.125%	9.125%

1/ Capital conservation buffer requires additional CET1 of 0.625% per annum from January 1, 2016 onwards until reaching 2.50% in 2019.

Table 2: Capital Requirements by Risk Type

(In Baht million)

	Bank-only		Consolidated	
	31 Dec 16	30 Jun 16	31 Dec 16	30 Jun 16
Risk Types				
Credit risk - Standardized Approach				
Performing				
Governments, Central Banks, MDBs[1/] and PSEs[2/] treated as Sovereign	441	314	664	546
Banks and PSEs[2/] treated as banks	3,139	3,366	3,222	3,445
Corporates[3/] and PSEs[2/] treated as corporates	84,113	78,929	84,399	79,192
Retail	29,732	29,797	29,786	29,836
Retail mortgage loans	15,604	15,325	15,604	15,325
Other assets [4/]	8,294	8,150	11,604	11,778
Non-performing	2,600	2,150	2,634	2,183
First-to-default credit derivatives and securitization	-	-	-	-
Minimum capital requirements for credit risk	**143,923**	**138,031**	**147,913**	**142,304**
Market risk - Standardized Approach				
Interest rate risk	3,108	3,978	3,110	3,979
Equity position risk	-	-	7	624
Foreign exchange risk	565	827	565	829
Commodity risk	-	-	-	-
Minimum capital requirements for market risk	**3,673**	**4,805**	**3,682**	**5,432**
Operational risk - Standardized Approach				
Minimum capital requirements for operational risk	**16,781**	**16,623**	**17,293**	**17,146**
Total minimum capital requirements[5/]	**164,377**	**159,460**	**168,888**	**164,882**

1/ Multilateral development banks

2/ Public sector entities

3/ Including claims on individuals and their related parties when aggregated limits exceed conditions of claims on retail

4/ Other assets under Basel III include investment outside the scope of consolidation which carries a 250% risk-weight

5/ The minimum capital requirements are calculated based on the minimum regulatory capital adequacy ratio at 8.5%. If capital conservation buffer of 0.625% for 2016 had been included, total capital requirements at end of December 2016 would have been Baht 176,464 million on a Bank-only basis and Baht 181,307 million on a Consolidated basis.

Table 3: Main Features of Regulatory Capital Instruments

	Ordinary share	Subordinated debt 1/2012	Subordinated debt 2/2012
Issuer	Siam Commercial Bank PCL.	Siam Commercial Bank PCL.	Siam Commercial Bank PCL.
Unique identifier	ISIN Code: TH0015010000	ISIN Code: TH0015032202	ISIN Code: TH0015034901
Regulatory treatment			
Instrument type	Common Equity Tier 1 capital	Tier 2 capital	Tier 2 capital
Qualified or non-qualified Basel III	Qualified	Non-qualified	Non-qualified
Non-qualified Basel III features	-	No Basel III loss absorption	No Basel III loss absorption
Phased-out or full amount	Full amount	Phased-out (at 10% p.a.)[2/]	Phased-out (at 10% p.a.)[2/]
Eligible at Solo / Group / Group & Solo	Group & Solo	Group & Solo	Group & Solo
Amount recognized in regulatory capital (Unit: Baht million)	33,992[1/]	20,000[2/]	20,000[2/]
Par value of instrument (Unit: Baht)	10	1,000	1,000
Accounting classification	Shareholder's equity	Amortized debt	Amortized debt
Original date of issuance	Multiple	February 24, 2012	September 17, 2012
Perpetual or dated	Perpetual	Dated	Dated
Original maturity date	No maturity	February 24, 2022	September 17, 2024
Issuer's authority to call prior to supervisory approval	No	No	No
Optional call date, contingent call date and redemption amount	N/A	February 24, 2017 / Full redemption amount	September 17, 2019 / Full redemption amount
Subsequent call dates, if applicable	N/A	At any coupon payment dates, 5 years after original issue	At any coupon payment dates, 7 years after original issue
Coupons / dividends			
Fixed or floating dividend/coupon	Discretionary dividend amount	Fixed rate	Fixed rate
Coupon rate and any related index	The ordinary shares receive distributable profit that has been declared as dividend.	4.50% p.a.	4.65% p.a.
Existence of a dividend stopper	No	No	No
Fully discretionary, partially discretionary or mandatory	Fully discretionary	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No	No
Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible
Write-down feature	No	No	No
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	The ordinary shares shall receive the return of capital in a winding-up, allowing the holders the rights to participate in any surplus profit or assets of the company after all senior obligations have been paid off.	The subordinated notes rank pari passu with all subordinated debt (Basel II) issued by the issuer.	The subordinated notes rank pari passu with all subordinated debt (Basel II) issued by the issuer.

1/ The preferential rights of the Bank's preferred shares (Baht 39 million) expired on May 10, 2009. Since that, the rights of such preferred shares are the same as holders of ordinary shares.

2/ Total amount of subordinated debt 1/2012 and 2/2012 was Baht 40,000 million. As the non-Basel III compliant capital instruments have to be phased-out, the remaining value of capital instruments that are qualified to be included as Tier 2 capital in 2016 was Baht 36,000 million.

Table 4: Reconciliation of Capital from Consolidated Financial Statement

(In Baht million)

Capital related items as of December 2016	Balance sheet as per the published financial statements [1/]	Balance sheet under the regulatory scope of consolidation [2/]	References
Assets			
Cash	40,489	40,486	-
Interbank and money market items, net	257,256	248,609	-
Claim on securities	-	-	-
Derivative assets	58,591	59,325	-
Investments, net	590,587	365,396	-
Investments in subsidiaries and associates, net	334	30,413	-
Investments exclude embedded goodwill and regulatory capital deduction		25,539	-
Embedded goodwill		3,805	L
Investment in shares and warrants of CET1 capital of financial institutes or financial groups		1,069	O
Loans to customers and accrued interest receivables, net			
Loans to customers	1,962,605	1,955,255	-
Accrued interest receivables	4,128	3,531	-
Total loans to customers and accrued interest receivables	1,966,733	1,958,786	-
Less Deferred revenue	(23,557)	(23,557)	-
Less Allowance for doubtful accounts	(73,354)	(73,354)	-
General provision		(21,752)	Q
Specific provision		(51,602)	-
Less Revaluation allowance for debt restructuring	(4,003)	(4,004)	-
Total loans to customers and accrued interest receivables, net	1,865,819	1,857,872	-
Customers' liabilities under acceptances	35	35	-
Properties for sale, net	11,604	11,604	-
Premises and equipment, net	40,888	40,783	-
Goodwill and other intangible assets, net	13,514	4,372	-
Goodwill	10,135	1,270	M
Other intangible assets	3,379	3,102	-
Phase-in at 20% p.a. during a transitional period of 2014 – 2018		1,861	N
Remaining portion		1,241	-
Deferred tax assets	410	80	-
Other assets, net	33,496	31,494	-
Total assets	**2,913,023**	**2,690,470**	-
Liabilities			
Deposits	2,026,272	2,026,390	-
Interbank and money market items	100,953	102,573	-
Liabilities payable on demand	10,526	10,526	-
Liabilities to deliver securities	51	51	-
Financial liabilities designated at fair value	-	-	-
Derivative liabilities	54,192	54,156	-
Debt issued and borrowings	106,838	107,567	-
Debt instruments that are qualified as capital		36,000	P
Debt instruments that are non-qualified as capital		71,567	-
Bank's liabilities under acceptances	35	35	-
Provisions	7,462	7,353	-
Deferred tax liabilities	2,328	2,329	-
Other liabilities	270,068	49,528	-
Total liabilities	**2,578,725**	**2,360,507**	-

Table 4 (cont.)

(In Baht million)

Capital related items as of December 2016	Balance sheet as per the published financial statements 1/	Balance sheet under the regulatory scope of consolidation 2/	References
Owner's Equity			
Share capital			
Issued and paid-up share capital			
Preferred shares	39	39	A
Common shares	33,953	33,953	B
Premium on share capital			
Premium on preferred shares	15	15	C
Premium on common shares	11,109	11,109	D
Disclosed reserves			
Surplus on revaluation of land and premises	16,604	16,604	-
Qualified as capital		14,942	G3/
Non-qualified as capital		1,662	-
Surplus (deficit) on remeasuring available-for-sale investments	1,188	1,188	-
Qualified as capital		1,803	H3/
Non-qualified as capital		(615)	-
Others			
Foreign currency translation differences	(126)	(126)	-
Phase-in at 20% p.a. during a transitional period of 2014 - 2018		(76)	I
Remaining portion		(50)	-
Other owner changes items	(2,364)	(2,364)	K
Surplus (deficit) from value of cash flow hedge reserve	40	40	J
Retained earning			
Appropriated retained earning			
Legal reserve	7,000	7,000	E
Unappropriated retained earning	266,631	262,505	
Net profit after appropriation to capital		236,110	F4/
Net profit unappropriated to capital		26,394	-
Total shareholders' equity	334,298	329,963	-
Non-controlling interest	209	-	-
Total owner's equity	**334,298**	**329,963**	**-**
Total liabilities and owner's equity	**2,913,023**	**2,690,470**	**-**

1/ Balance sheet per the published financial statements means audited financial statements on a consolidated basis as reported to the Stock Exchange of Thailand.

2/ Balance sheet under the regulatory scope of consolidation means financial statements on a consolidated basis under the BOT's regulation which excludes subsidiaries operating in the insurance business or other financial industry entities whose shares are held by the Bank in a ratio of between 10% - 50% of issued and paid-up shares.

3/ Surplus on assets revaluation can be counted as capital subject to the BOT approval.

4/ Net profit after appropriation from resolution of the shareholder's meeting.

Table 4 (cont.)

(In Baht million)

Component of regulatory capital as of December 2016	Regulatory capital reported by financial group	References based on balance sheet under the consolidated supervision
Tier 1 capital		
CET1 capital		
Paid-up common shares after deducting treasury shares	33,992	**A + B**
Surplus (deficit) net worth	11,124	**C + D**
Legal reserve	7,000	**E**
Net profit after appropriation	236,110	**F**
Disclosed reserves		
Revaluation surplus on land and building appraisal	14,942	**G**
Revaluation surplus (deficit) of equity and debt securities for sales	1,803	**H**
Gain (loss) from converting foreign currency operation to the Bank	(76)	**I**
Gain (loss) from fair valued cash flow hedge reserve	40	**J**
Other owner changes items	(2,364)	**K**
Total CET1 capital before regulatory adjustments and deduction	302,571	-
Regulatory adjustments on CET1	-	-
Regulatory deductions on CET1		
Goodwill	5,075	**L + M**
Other intangible assets	1,861	**N**
Deferred tax assets	-	-
Investment in shares and warrants of CET1 capital of other financial institutes or financial groups	1,069	**O**
Total regulatory deduction on CET1	8,005	-
Total CET1 capital	**294,566**	-
Additional Tier 1 capital		
Total Additional Tier 1	-	-
Total Tier 1 capital	**294,566**	-
Tier 2 capital		
Proceeds from issuing subordinated debt securiities	36,000	**P**
General provision	21,752	**Q**
Total Tier 2 capital before regulatory adjustments and deduction	57,752	-
Regulatory adjustment and deduction on Tier 2 capital	-	-
Total Tier 2 capital	**57,752**	-
Total regulatory capital	**352,318**	-

Table 5: Capital Position During Transitional Period

(In Baht million)

	Bank-only		Consolidated	
	Capital amount as of December 2016	Net value of items with transitional phase subject to Basel III	Capital amount as of December 2016	Net value of items with transitional phase subject to Basel III
Tier 1 capital				
CET1 capital				
CET1 capital before regulatory adjustments and deduction	286,980	(17) 1/	302,571	(665) 1/
Regulatory adjustments on CET1	-		-	
Regulatory deduction on CET1	(6,872)	(1,198) 2/	(8,005)	(1,241) 2/
Total CET1 capital	280,108		294,566	
Additional Tier 1 capital				
Additional Tier 1 capital before regulatory adjustments and deduction	-		-	
Regulatory adjustments and deduction on additional Tier 1	-		-	
Total additional Tier 1 capital	-		-	
Total Tier 1 capital	**280,108**		**294,566**	
Tier 2 capital				
Tier 2 capital before regulatory adjustments and deduction	57,165	(36,000) 3/	57,752	(36,000) 3/
Regulatory adjustments and deduction on Tier 2	-		-	
Total Tier 2 capital	**57,165**		**57,752**	
Total regulatory capital	**337,273**		**352,318**	

1/ Revaluation surplus of debt securities for sales and foreign currency translation differences, phase-in at 20% p.a. during a transitional period of 2014-2018.

2/ Other intangible assets e.g. software licenses, phase-out at 20% p.a. during a transitional period of 2014-2018.

3/ Non-Basel III compliant capital instruments will be phased-out at 10% p.a. starting from January 1, 2013.

4. Risk Management

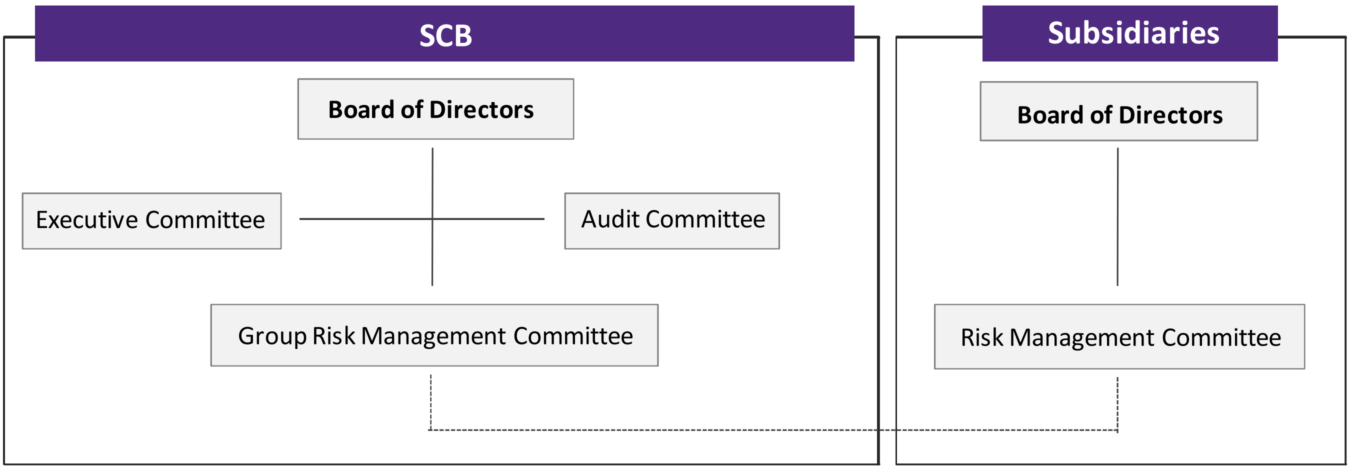
With many consecutive years of strong performance, SCB is committed to sustain and excel beyond this current track record. To further build on this success requires ongoing prudence and responsiveness, especially because the Bank's presence continues to grow in terms of assets, customers, and staff. Not only do the Bank's operations continue to grow in complexity and size, the Bank also faces higher expectations from stakeholders as well as an increasingly complex and turbulent business environment. Faced with all these challenges, SCB places a high emphasis on risk management as a key responsibility and top priority.

Therefore, a robust risk management framework, consisting of four major parts (identification, measurement, monitoring and control, and reporting), has been put in place and overseen by a transparent and rigorous governance structure. To enhance the effectiveness of its risk management, the Bank classifies its key risk factors into seven categories, each of which has corresponding risk management procedures. More details on risk management framework and risk categories are provided in the rest of this section.

By continually strengthening the Bank's risk management framework and governance, SCB will be well-prepared to respond appropriately to any current and emerging economic conditions, whether favorable or otherwise.

An overview of the Bank's risk management structure, risk management policy and risk management system is as follows.

4.1 Risk Management Structure



The Board of Directors has the authority and responsibility to delegate its risk management authority, including credit approval and underwriting decisions based on the underlying risk level (risk-based authority), to the management and other committees. Three following committees have been appointed to oversee the Bank's risk management implementation:

1. The Executive Committee is responsible for, among other matters, reviewing the Bank's risk management policies and making recommendations to the Board of Directors for approval, as well as directly approving certain policies when delegated/authorized by the Board of Directors. In addition, the Executive Committee is authorized to approve loans and investments and to administer related functions as assigned by the Board of Directors.

2. The Audit Committee comprises independent members of the Board who are responsible for reviewing the adequacy of the Bank's risk management policies and internal control as well as the effectiveness of risk management policy implementation by the Bank and SCB Group.

3. The Risk Management Committee is responsible for reviewing risk management policies and making recommendations to the Executive Committee and the Board of Directors for approval, formulating risk management strategies based on guidance by the Board of Directors, and managing the overall risk of the Bank.

In addition to the above committees, the Bank also set up other committees to manage specific areas of risk.

- **The Assets and Liabilities Management Committee** is responsible for managing market risk, interest rate risk, and liquidity risk.
- **The Equity Investment Management Committee** is responsible for managing risk from the Bank's equity investment portfolio.
- **The Credit Committee, the Retail Credit Committee, and the Special Assets Committee** are authorized to approve credits within the specified amounts which vary by each committee's approval authority level. Any loan amount exceeding the authorized level must be approved by the Executive Committee or by the Board of Directors. In addition, if a loan is granted to a Bank-related business, a major shareholder, a party related to a Board member, or to a sensitive / highly complicated case which may have material impact to the Bank's reputation, the credit approval authority rests solely with the Board of Directors.
- **The Underwriting Risk Committee** is responsible for considering, reviewing, and approving security underwriting limits based on the market risk perspective, as well as making recommendations to the Executive Committee or the Board of Directors for consideration in cases that underwriting risk limits exceed its approval authority or for any high-risk transactions.
- Other committees, such as the Investment Committee

Chief Risk Office

The Chief Risk Office reports to the President and is responsible for setting the risk management framework, making risk policy recommendations, as well as monitoring and reporting on major types of risk. The Chief Risk Office has the responsibility to bring the Bank's risk management policies and practices up to the international standards and relevant regulator, and to ensure that the Bank and its subsidiaries have a comprehensive and integrated risk management framework. Moreover, other relevant functions are responsible for specific risks; for example, the Group Treasury Function is responsible for liquidity risk and interest rate risk in the banking book (IRRBB).

4.2 Risk Management Policy

For the risk management of SCB Financial Group, the Bank as the core entity has the responsibility to govern the risk management for subsidiary companies. The Bank's subsidiaries are responsible for establishing risk and internal control policies and practices to ensure effective risk management at a level that is compatible with the Bank and consistent with the consolidated supervision policy of the Bank of Thailand.

SCB and its Financial Group have established and applied the Risk Management Policy Framework at both level:

- As the parent company, SCB's Board of Directors of the Bank has the responsibility for determining strategies and approving the SCB Financial Group's risk management policy. Where appropriate, each of the Bank's subsidiaries shall: formulate a risk management policy; implement an appropriate organizational structure; set risk tolerance limits; establish risk management methods; and prepare risk reports in accordance with the Bank's risk management guidelines. Each subsidiary is required to implement this policy framework. The level and complexity of implementation depends on the nature of its business. Such the policy shall be reviewed and agreed before approval by those who are more directly responsible in the supervision of overall risks, namely the Group Risk Management Committee, Audit Committee, and Executive Committee of the Bank.

  The Risk Management Policy Framework generally covers seven major risks, namely credit risk, market risk, operational risk, liquidity risk, interest rate risk in the banking book, strategic risk, and reputational risk, and identify major risk types of each business within the SCB financial Group. The policy also establishes guidelines for managing and controlling risks for each business, and provides formats for reporting in order to efficiently control and monitor risks of the entire SCB Financial Group by applying the same standard to each business.

- Companies in the SCB Financial Group with significant operations are responsible for establishing a risk management policy covering the risks that have been identified as significant risk in the Group Risk Management Policy. Risk management policies of the SCB Financial Group companies must be approved by the Board of Directors of the respective companies and also be concurred by the Group Risk Management Committee.

Thus, the Board of Directors has the responsibility to review and approve the Bank's major risk management policies, e.g., Risk Management Policy of the SCB Financial Group, Intra-SCB Financial Group Transaction Policy, Credit Policy Guide, Internal Capital Adequacy Assessment Process Policy (ICAAP Policy), Stress Testing Policy, Market Risk Policy, Trading Book Policy, Interest Rate Risk in the Banking Book Management Policy, Liquidity Risk Management Policy, Operational Risk Policy, Business Continuity Management Policy, Strategic Risk Management Policy and Reputation Risk Management Guidelines.

4.3 Risk Management System

SCB and its Financial Group aim to develop a unified risk management system that is applicable throughout the organization. As the focal point for risk management within its Financial Group, SCB has the responsibility to establish the risk management framework together with setting guidelines and supervising risk management of all group companies to facilitate sustainable growth and strengthen its short-term and long-term competitiveness, while incorporating good governance concepts.

SCB's risk management system has four major parts:

4.3.1 Risk Identification

The risk management system identifies seven types of risk in the Bank's overall operations including transactions and activities with customers and counterparties.

- **Credit risk** refers to the risk arising from failure of either debtors to make the required principal and interest payment, or counterparties to honor the agreed conditions or contracts, which might result in loss of revenue and decreased capital for SCB and its Financial Group. Credit risk may arise from either inability or unwillingness to pay on the part of debtors or counterparties. Credit risk covers both on- and off-balance sheet items, including loans, investments, commitments, obligations, and similar transactions.
- **Market risk** refers to the risk from changes in the value of on- or off-balance sheet positions due to the movement of market risk factors, such as exchange rates, interest rates, stock prices, credit spreads, and commodity prices, which might affect the revenue and capital of SCB and its Financial Group.
- **Operational risk** refers to the risk from inadequacy or failure of internal processes, personnel, systems, or external events. This definition also includes legal risk and reputational impacts from operational risk, but excludes strategic risk. Operational risk can be influenced by both internal and external factors, such as changes in personnel, organizational structure, procedures, systems, products, customers, business landscape or operational standards, and activities organized by business units.
- **Liquidity risk** means risks arising from the inability of SCB to repay any debts and contingent liabilities due to a lack of sufficient funds or because SCB will experience high costs or losses from the sale of assets.
- **Interest rate risk in the banking book (IRRBB)** refers to the risk of loss in net interest income and/or economic value for the on- and off-balance sheet positions in the banking book as a result of interest rate movements.
- **Strategic risk** refers to the risks of a current and/or prospective impact on the Bank and its Financial Group's earnings, capital, and business

viability from factors such as changes in business environment, inappropriate strategic decisions, ineffective implementation of significant projects, or lack of responsiveness to industry, economic, and technological changes.

- **Reputation risk** can arise from negative public perception of the Bank. This type of risk is difficult to identify or assess because it is driven by changing political, economic, and social conditions, including specific public expectations of the Bank which might affect the revenue and capital of SCB and its Financial Group.

4.3.2 Risk Measurement

To measure each type of risk, the Bank applies a variety of quantitative and qualitative methods based on internal ratings-based approaches and/or other appropriate internal models:

- For **credit risk**, the measures include Borrower Risk Rating to gauge the probability of default (PD), credit scoring such as application scores, and behavioral scores to construct risk profiles of retail clients. Moreover, risk models are used to estimate loss given default (LGD) and exposure at default (EAD). For derivative products, the Bank relies upon the potential future exposure (PFE) methodology to measure credit risk exposure.
- For **market risk**, the measurements include both statistical tools, such as value at risk (VaR), and non-statistical methods, including risk-factor sensitivity analysis, position measures, and stress testing for trading book exposures.
- For **operational risk** measurement, the Bank uses risk and control self-assessments as well as loss incident data to quantify risk and to assess the effectiveness of the control environment by applying both measures within each business unit. Moreover, as part of its risk mitigation process, the Bank has established a business continuity plan (BCP) to ensure continuity of key activities during any crises or disasters that may cause business disruption. The Bank's operational risk management approach requires regular reviews of risk profiles of all new products and material changes to existing products, as well as oversees the Bank's insurance management framework to reduce the impact from potential operational risk events.
- For **liquidity risk**, the measures cover balance-sheet structure, cash flows of assets and liabilities, and off-balance sheet items. The liquidity risk measurement framework includes liquidity ratio, maximum cumulative outflow (MCO), and the liquidity coverage ratio (LCR).
- For **interest rate risk in the banking book (IRRBB)**, the Bank quantifies the risk of interest rate fluctuations by measuring the impact on net interest income and economic value of equity (EVE) under various interest rate assumptions in normal and stress situations.
- For **strategic risk and reputation risk**, the Bank relies and develops an assessment using primarily qualitative risk factors and quantitative economic indicators.

To implement risk management that is more forward-looking, the Bank utilizes an increasing number of stress testing approaches, particularly for market risk, credit risk and liquidity risk.

4.3.3 Risk Monitoring and Control

The Bank's Board of Directors and top executives establish the Bank's acceptable risk level or risk appetite statement (RAS) in order to meet SCB's long-term financial targets as well as monitor and manage its risks, including review of regulatory capital adequacy.

The Bank monitors and controls risk by setting key risk indicators and risk limits for different levels of exposure: organization, customer, product, transaction, and others. The Bank has put in place a variety of internal control mechanisms to manage, contain or eliminate risks in accordance with the Bank's policies and procedures.

4.3.4 Risk Reporting

SCB and its Financial Group have established schedules and formats for risk reporting, which must be submitted by relevant units to senior executives on a comprehensive and timely basis in order to effectively control and manage risk. Reports are aggregated to highlight risk levels and changes thereto by the Chief Risk Office for reporting regularly to the Group Risk Management Committee, Audit Committee, Executive Committee, and the Board of Directors.

5. Credit Risk Management

5.1 Credit Risk Management Structure

For effective and efficient credit risk management, SCB and its Financial Group have established specific functions with clearly defined credit risk management roles and responsibilities which are separated from business origination functions. Specifically, the Bank has established the following credit risk-related management units under the Chief Risk Office:

- **The Credit Risk Management Function** takes a major role in approving loans that fall within its designated authority and making independent recommendations to higher levels of approval authority for loan consideration and approval based on the credit policy guide and related underwriting standards.
- **The Credit Policies and Procedures Division** is responsible for making recommendations on credit risk management policies of the SCB Financial Group companies, formulating and revising SCB credit policy guides, related credit risk management policies and procedures, including the credit manual and credit approval authorities.
- **The Retail and Small SME Portfolio Management Function** is responsible for controlling and overseeing retail lending policies by issuing the Credit Policy Guide and by setting the approval authority for retail lending as well as for product programs and risk programs of all retail lending products. This function also sets policy and direction for tapping into targeted customer segments, risk-based pricing, increasing/reducing credit lines, and measuring risk by product and customer segment. In addition, the Retail Credit Portfolio Management Unit within this Function jointly sets the collection strategy with the Retail Collection Unit of SCB.
- **The Credit Risk Analytics Function** has the responsibility to analyze credit portfolios of SCB and its Financial Group and to develop, validate, and adopt models for analyzing credit risk, together with credit scoring for retail lending.

5.2 Credit Risk Management Policy and Guidelines

The Group's Risk Management Policy applies to SCB and all companies in its Financial Group whose businesses are related to banking, finance, leasing, securities, asset management, fund management, and life insurance that are exposed to material levels of credit risk. SCB and these subsidiaries must carry out the following credit risk policy implementation:

- Formulate a credit risk management policy
- Determine and document risk-based limits and approval authorities
- Implement credit approval processes with checks and balances to ensure both transparency and thorough validation under the 'four-eyes' principle
- Set a concentration limit for SCB where the limit is established based on debtor and industry characteristics.

5.2.1 Collateral and Credit Risk Mitigation Policy

Credit risk mitigation reduces losses from default on repayment obligations by disposing of collateral and/or claiming payment from guarantors.

SCB and its Financial Group have adopted the Standardized Approach for the calculation of credit risk. Accordingly, collateral that qualifies for credit risk mitigation falls within one of these two following categories:

1. Financial collateral comprises items that can be easily liquidated for cash with clear mark-to-market values, such as cash, deposits, bonds, securities, and unit trusts.
2. Guarantees and credit derivatives

SCB issues the Collateral and Non-Performing Asset Appraisal Policy to serve as a guideline for collateral management to ensure that appraised collateral value is in line with fair market value both before and after acceptance of the collateral.

For near-cash collateral, SCB and its Financial Group have established the following broad principles to optimize the value of collateral:

- Minimize concentration of any type of collateral or issuer
- Exclude, any material positive correlation between collateral value and default risk of debtors.
- Avoid, as much as possible, any currency mismatch between an obligation and collateral. To the extent that such mismatch is unavoidable, the value of collateral shall be discounted to reflect the underlying currency risk.
- Avoid, as much as possible, any maturity mismatch between the contractual terms of an obligation and collateral. If such mismatch exists, loan renewal must be monitored and actions shall be taken prior to the maturity date to ensure that the collateral remains valid throughout the term of the loan.
- Ensure that all contracts meet the standards, as far as possible, and are reviewed for enforceability and continuous validity.

Appraisal of financial collateral is typically reviewed at least once a month using the latest bid price for the appraised value. Guarantees can be used to mitigate credit risk which results in a lower risk weight assignment than the stand-alone risk weight assigned to debtors. Specifically, a private entity acting as a guarantor must have a higher credit rating than the debtor based on ratings from external credit bureaus.

For other types of collateral, the Bank's Collateral and Non-Performing Asset Appraisal Policy serves as a guideline to ensure that collateral and NPA values, prior to loan approval and in subsequent updates, reflect fair market value.

5.2.2 On- and Off-Balance-Sheet Netting Policy and Process

SCB and its Financial Group will be able to mitigate credit risk by netting as long as such action is permissible by the underlying contracts. The contracts must meet the minimum standards set forth by the Bank of Thailand and must be approved by the relevant legal unit of SCB and, if applicable, of the SCB Group company. The contracts must be regularly reviewed to identify any impact on enforceability from changes in regulatory requirements and/or laws. In addition, SCB and its Financial Group must have a system to monitor and control the risk from maturity mismatch especially for all compliance, monitoring and control must be on a netting basis. Non-compliance with the above principles will result in the obligation losing its eligibility for netting.

5.2.3 Definition of Default

The SCB Financial Group defines default and loss based on the occurrence of either or both of the following events:

- The debtor is deemed unable to make full payments according to his/her contractual obligation prior to any recoverable payment from collateral disposal. Examples of this case are consent for debt restructuring with a significant haircut or postponement of principal, interest, or fee payments due to the deteriorated financial status of the debtor.
- Delinquency on repayment (principal and interest) for more than 90 days past the due date, or the debtor's rating being reclassified as substandard or lower based on the Bank of Thailand's notification on Debt Classification and Reserves Criteria for Financial Institutions.

In the event of asset impairment, SCB and its solo consolidation companies are required to adopt the BOT's asset classification criteria which classify loans into: pass, special mention, substandard, doubtful, doubtful loss, and loss. Moreover, loans are also required to be classified by debtors' ratings. However, retail debtors are classified by account for both secured loans and unsecured loans. In addition to the classification by the number of days of delinquency, SCB also adopts the qualitative credit review process to enhance the accuracy of loan classification and to ensure adequate loan loss provisions.

5.2.4 Classification and Provisioning Policy

The Bank's approach on debt classification, loss provision, and write-offs for bad debt or bad debt recovery complies with the regulations of the Bank of Thailand or other related regulators. The Bank sets aside an adequate amount of provision to provide a cushion against expected losses from asset impairment, particularly from loans.

Loans are typically classified based on the borrower's ability to generate sufficient cash flow to meet his/her debt service obligations and to ensure that the Bank sets aside adequate provision based on both quantitative and qualitative criteria. The Bank shall apply the same debt classification in the case of a single source of repayment from multiple debtors or related parties. In all cases, the underlying goal is to ensure the adequacy of the provisions.

General Provision

According to the definition of a Financial Group under the solo consolidation basis, a general provision refers to the surplus reserves set aside for possible impairment of loans in the future. Although general provision are not earmarked for specific debtors, SCB and its Financial Group maintain such reserves at an appropriate level to cover possible future loan loss. The amount of reserves to be set aside will depend on a variety of factors, such as the economic conditions that might impact borrowers' ability to make payment, quality and characteristics of the loan portfolio, regulatory requirements, and accounting standards.

Specific Provision

SCB and its Financial Group determine specific provisions based on asset classification according to the BOT's regulations, or even stricter criteria in some cases. For example, for NPLs with an outstanding balance of less than Baht 20 million and with collateral quality assessed as fair or lower, the Bank applies the present value of cash flow from collateral disposal, which is more conservative than the criteria specified by the BOT. Furthermore, the credit review process takes debtor's rating into account and, if necessary, a special provision may be considered to ensure that the Bank has adequate reserves to cushion against future losses and that net loans are fairly stated.

5.3 Credit Approval Process

SCB and its Financial Group have implemented an effective separation of duties between business origination and credit approval units. Although the SCB retail credit approval unit is part of a business unit, the unit is independent from the marketing, product, and business origination functions within this business. Specifically, the credit approval process is carried out under the risk/product program framework and the credit scoring model approved by the Executive Committee or the Retail Credit Committee with clear specification of approval authorities and criteria, including the exception granting process.

Approval Authority

As approved by the respective Boards of Directors, all SCB Financial Group companies have established credit approval authority which may be delegated to committees and further to individuals at different corporate levels. Any credit request that deviates from the policy or the underwriting standard must be escalated to the top of the authorization chain for approval.

SCB has divided the credit approval authority into two levels: a committee level and an individual level. The three committees that have credit approval authority are the Credit Committee, Executive Committee, and the Board of Directors. Individual approval authority starts from credit officers and goes up to the Chairman of the SCB Executive Committee. In addition, the Bank also grants individual approval authority with prespecified conditions to business units, starting at the sector/regional manager level for the Multi-Corporate, Corporate and SME Segment Function and the branch manager level for the Retail Segment Function, for specific industries or circumstances up to a pre-determined limit.

Approval authority is determined by the risk level or expected loss, which will depend on the credit line, borrower risk rating, and severity class. Approval authority for group exposure is determined after considering shareholding and controlling authority in accordance with Section 4 of the Financial Institution Act.

5.4 Credit Risk Measurement

Characteristics of credit risk can differ by type of borrower's type, facility, and collateral. Therefore, different risk measurement approaches ranging from simple to sophisticated statistical tools are employed to appropriately capture the multi-facet aspects of credit risk.

For commercial loans, credit risk is assessed at the borrower level by considering the following factors:

- **Probability of default (PD)**: For corporate and business customers, risk rating will be assessed at the individual borrower level to evaluate the debtor's ability to pay. The assigned risk ratings must be reviewed annually or whenever there is any material change that affects the debtor's risk behavior. For small businesses and retail customers, risk measurement will be performed at the pooled level, such as by a PD pool. This approach requires creating homogenous pools of customers by considering a variety of factors, such as customer profile, facility usage, and payment behavior.
- **Loss given default (LGD)**: This factor is used to estimate the loss level when the event of default occurs. LGD is calculated from losses given three recovery paths: cure, restructuring, and liquidation. The riskiness of collateral is reflected through the adjustment of discount factors used for calculating the discounted collateral value for a particular path.
- **Exposure at default (EAD)**: EAD is calculated from the current outstanding balance and the potential use of the unused limit which varies by product type. All off-balance sheet items must be converted to on-balance items by using a credit conversion factor (CCF).

For small business and retail loans, similar methods are adopted but on a pool-level basis by considering PD, LDG and EAD as well as the following factors:

- **The percentage of non-performing loans** will be measured from the ratio of debtors in a portfolio who are delinquent for 90 or more days. For retail customers, this ratio will be calculated by product and customer segment. For a given portfolio, this ratio reflects the underlying credit quality.
- **The percentage of write-off** will be measured from the ratio of debtors in a portfolio who fail to meet their payment obligations and benefit from a haircut. For retail customers, this ratio will be measured by product and customer segment. For a given portfolio, this ratio reflects the underlying credit quality.

The above measures serve as inputs into the credit approval process, such as determining approval authority, pricing, as well as other conditions, such as collateral conditions, to ensure that credit decisions are always made on a risk-based basis.

5.4.1 Credit Risk Measurement under the Standardized Approach

SCB and its Financial Group adopted the Standardized Approach for measuring credit risk assets. This approach requires using external credit ratings to measure credit risk with Standard & Poor's ratings being applied for sovereign and financial institutions and TRIS Ratings and/or Fitch Ratings (Thailand) for corporate borrowers.

In the event that the debtor is rated by multiple rating agencies, SCB and its Financial Group will follow the Bank of Thailand's regulations on the rating selection. Specifically, if two ratings are assigned, the rating with a higher risk weight will be adopted. For non-rated companies, SCB will use the Bank of Thailand's guidelines to determine the appropriate risk weights.

5.5 Credit Risk Monitoring and Control

5.5.1 Risk Monitoring Guidelines

Credit risk monitoring is an important element of the credit risk management process. SCB and its Financial Group have adopted a monitoring process to ensure that credit risk assessment will be accurate, appropriate, unbiased, complete, and monitored regularly in order to assess credit risk in a timely manner.

The credit risk monitoring process of SCB and its Financial Group consists of three parts:

- **The first part** is to monitor credit risk with risk management tools, such as credit scoring or borrower risk rating, and other similar tools.

These risk management tools have been validated to ensure that they can accurately reflect the risk level and customer behaviors at an acceptable confidence level to SCB and its Financial Group. The models are regularly reviewed to ensure their continued validity.

- **The second part** is to monitor credit risk by imposing limits on approval authority, transaction volume and credit concentration. SCB and its Financial Group have established limits for financial transactions with customers and for intra-group transactions, as well as concentration limit for each industry.
- **The third part** is portfolio monitoring under retail credit risk management, which includes portfolio analysis together with payment behavior measured against the established benchmark to ensure that the risk policy is consistent with and reflects the retail portfolio quality.

At the individual borrower level, SCB and its Financial Group have established credit review as a priority process. SCB reviews credit rating, credit strategies, and next-year business plans of every corporate borrower with credit lines of Baht 20 million and SME borrower with credit lines of Baht 50 million or above at least once a year or when there is a significant decline in the borrower's credit worthiness. SME customers with credit lines below Baht 50 million are normally reviewed on a pooled basis, except for those classified as high default risk which shall be reviewed individually.

At the portfolio level, credit risk is monitored to assess the trajectory of credit quality to ensure that it remains within the target set at the beginning of the year. Loan monitoring enables SCB to analyze trends in loan growth and identify future problem loans, as well as assess the effectiveness of its credit-related strategies. For retail credit, SCB also analyzes payment behavior and monitors credit quality by targeting key indicators.

The Bank also monitors credit risk by utilizing SCB historical and industry data to analyze credit trends and form comparison benchmarks for current outstanding loans and non-performing loans. In addition, the Bank also performs credit risk stress testing with predetermined scenarios for a variety of risk factors to forecast losses and capital adequacy in the event of economic stress. Test results are used for risk mitigation and capital planning as well as for formulating loss minimization approaches in adverse situations.

5.5.2 Risk Control Guidelines

Lending, investment, contingent liabilities, and lending-like transactions with major borrowers are controlled at two levels as per the BOT's regulations as follows:

1. **Bank level**: Concentration shall not exceed 25% of the Bank's total capital. Additionally, for all major borrowers whose total debts exceed 10% of the Bank's total capital, the aggregate debt should not exceed three times of the Bank's total capital.
2. **Full consolidation level**: Concentration must not exceed 25% of the full consolidation capital.

Lending, investment, contingent liabilities, and lending-like transactions involving major shareholders or businesses with interests in the Bank are controlled in accordance with the Bank of Thailand's regulations at both the SCB and at the solo consolidation level.

SCB places a high priority on developing a process to monitor and control limits for lending, investment, and contingent liabilities of major borrower groups. A Primary Account Manager (PAM) is designated to control limits on lending, investment, and contingent liabilities for each major borrower to comply with the Bank of Thailand's regulations and is responsible for allocating limits to companies in the solo consolidation group. Full consolidation companies are also required to submit a report on credit lines and outstanding debts for such groups on a monthly basis, while the PAM controls the aggregate limit on a consolidated level.

The Bank has a target to limit lending concentration in any particular industry with the limit being determined by industry trends, share of the banking industry, probability of loss, and probability of default. Statistical tools such as the Herfindahl-Hirschman Index (HHI) are used to measure industry concentration and determine industry lending limits.

Lending under specific risk programs and product programs is determined by objective-specific credit line, type of credit line, customer qualifications, criteria, and standard conditions. Moreover, guidance for monitoring and achievement of credit objective evaluation should be in place.

5.5.3 Counterparty Credit Risk and Country Risk

SCB and its Financial Group control the credit risk of counterparties by setting credit lines for each counterparty group to limit potential losses to be below the maximum acceptable level to the Bank if a counterparty defaults.

In addition, SCB also controls country risk by setting limits on lending, investment, and contingent liabilities for each country. SCB's Country Risk Management Policy requires that both direct and indirect country-specific exposure from transactions with the Bank's clients and counterparties be included when calculating the country-risk limits.

5.6 Credit Risk Report

SCB and its Financial Group are required to regularly report their credit risk. Each relevant unit prepares a monthly report to be used for managing risk. Credit risk reports of SCB and its Financial Group are submitted to the Group Risk Management Committee on a monthly basis with contents covering loan growth, credit quality, credit concentration, investment diversification, etc.

SCB and its Financial Group's Credit Risk Report incorporates information on outstanding assets on the balance sheet and important off-balance sheet items. The report also shows loss items that have been written off during the accounting period without credit risk adjustment (Table 6-13), such as outstanding debts by geographical area, either country or region. Moreover, exposures by risk type and risk weights under the Standardized Approach are also reflected in Table 14 - 16.

Table 6: Significant On- and Off-Balance Sheet Exposure Items

(In Baht million)

	Bank-only		Consolidated	
	31 Dec 16	**31 Dec 15**	**31 Dec 16**	**31 Dec 15**
On-balance-sheet items	**2,511,807**	**2,392,744**	**2,521,320**	**2,411,116**
Net loans[1/]	2,063,688	1,962,588	2,067,417	1,967,866
Net investment in debt securities[2/]	354,128	325,465	355,514	334,046
Deposits	34,356	46,132	39,064	51,777
Derivative assets	59,635	58,559	59,325	57,427
Off-balance-sheet items[3/]	**4,002,469**	**3,634,614**	**3,987,131**	**3,636,129**
Contingent	83,739	52,762	85,099	54,027
Credit derivatives[4/]	3,895,204	3,546,268	3,878,506	3,546,518
Undrawn committed lines	23,526	35,584	23,526	35,584

1/ Including accrued interest receivables and net of deferred income, allowance for doubtful accounts and allowance for revaluation from debt restructuring and including net loans of interbank and money market

2/ Excluding accrued interest receivables and net of allowances for revaluation and impairment of securities

3/ Before using credit conversion factor

4/ Including equity-related derivatives

Table 7: Exposures Classified by Geographical Area

(In Baht million)

Bank-only	31 Dec 16 Thailand	31 Dec 16 Foreign Countries	31 Dec 16 Total	31 Dec 15 Thailand	31 Dec 15 Foreign Countries	31 Dec 15 Total
On-balance-sheet items	**2,487,176**	**24,631**	**2,511,807**	**2,347,205**	**45,539**	**2,392,744**
Net loans[1/]	2,043,380	20,308	2,063,688	1,938,399	24,189	1,962,588
Net investment in debt securities[2/]	350,612	3,516	354,128	324,598	867	325,465
Deposits	33,563	793	34,356	25,650	20,482	46,132
Derivative assets	59,621	14	59,635	58,558	1	58,559
Off-balance-sheet items[3/]	**4,000,818**	**1,651**	**4,002,469**	**3,631,862**	**2,752**	**3,634,614**
Contingent	83,109	630	83,739	50,977	1,785	52,762
Credit derivatives[4/]	3,894,183	1,021	3,895,204	3,545,301	967	3,546,268
Undrawn committed lines	23,526	-	23,526	35,584	-	35,584

Consolidated	31 Dec 16 Thailand	31 Dec 16 Foreign Countries	31 Dec 16 Total	31 Dec 15 Thailand	31 Dec 15 Foreign Countries	31 Dec 15 Total
On-balance-sheet items	**2,489,227**	**32,093**	**2,521,320**	**2,355,912**	**55,204**	**2,411,116**
Net loans[1/]	2,044,213	23,204	2,067,417	1,939,578	28,288	1,967,866
Net investment in debt securities[2/]	351,998	3,516	355,514	333,175	871	334,046
Deposits	33,705	5,359	39,064	25,733	26,044	51,777
Derivative assets	59,311	14	59,325	57,426	1	57,427
Off-balance-sheet items[3/]	**3,983,668**	**3,463**	**3,987,131**	**3,632,484**	**3,645**	**3,636,129**
Avals to bills, guarantees and LC	83,109	1,990	85,099	51,349	2,678	54,027
Credit derivatives[4/]	3,877,033	1,473	3,878,506	3,545,551	967	3,546,518
Undrawn committed lines	23,526	-	23,526	35,584	-	35,584

1/ Including accrued interest receivables and net of deferred income, allowance for doubtful accounts and allowance for revaluation from debt restructuring and including net loans of interbank and money market

2/ Excluding accrued interest receivables and net of allowances for revaluation and impairment of securities

3/ Before using credit conversion factor

4/ Including equity-related derivatives

Table 8: Exposures Classified by Residual Maturity

(In Baht million)

Bank-only	31 Dec 16 Less than 1 year	31 Dec 16 Within 1-5 years	31 Dec 16 More than 5 years	31 Dec 15 Less than 1 year	31 Dec 15 Within 1-5 years	31 Dec 15 More than 5 years
On-balance-sheet items	**1,163,355**	**745,956**	**602,496**	**1,157,910**	**695,034**	**539,800**
Net loans1/	871,251	633,912	558,525	851,623	605,911	505,054
Net investment in debt securities2/	242,497	90,571	21,060	245,209	64,367	15,889
Deposits	34,356	-	-	46,132	-	-
Derivative assets	15,251	21,473	22,911	14,946	24,756	18,857
Off-balance-sheet items3/	**1,819,190**	**1,519,496**	**663,783**	**1,625,804**	**1,385,180**	**623,630**
Contingent	44,051	39,688	-	33,172	19,584	6
Credit derivatives4/	1,774,667	1,474,600	645,937	1,590,248	1,360,200	595,820
Undrawn committed lines	472	5,208	17,846	2,384	5,396	27,804

Bank-only	31 Dec 16 Less than 1 year	31 Dec 16 Within 1-5 years	31 Dec 16 More than 5 years	31 Dec 15 Less than 1 year	31 Dec 15 Within 1-5 years	31 Dec 15 More than 5 years
On-balance-sheet items	**1,168,569**	**748,484**	**604,267**	**1,174,652**	**697,696**	**538,768**
Net loans1/	872,484	636,408	558,525	854,287	608,573	505,007
Net investment in debt securities2/	242,286	90,603	22,625	253,778	64,367	15,901
Deposits	38,858	-	206	51,633	-	144
Derivative assets	14,941	21,473	22,911	14,954	24,756	17,716
Off-balance-sheet items3/	**1,815,561**	**1,517,258**	**654,312**	**1,627,573**	**1,384,926**	**623,630**
Contingent	45,411	39,688	-	34,431	19,590	6
Credit derivatives4/	1,769,678	1,472,362	636,466	1,590,758	1,359,940	595,820
Undrawn committed lines	472	5,208	17,846	2,384	5,396	27,804

1/ Including accrued interest receivables and net of deferred income, allowance for doubtful accounts and allowance for revaluation from debt restructuring and including net loans of interbank and money market

2/ Excluding accrued interest receivables and net of allowances for revaluation and impairment of securities

3/ Before credit conversion factor

4/ Including equity-related derivatives

Table 9: Loans and Investment in Debt Securities Classified by Geographical Area and Asset Classification

(In Baht million)

Bank-only	31 Dec 16			31 Dec 15		
	Thailand	Foreign Countries	Total	Thailand	Foreign Countries	Total
Total loans [1/]	**2,119,406**	**21,097**	**2,140,503**	**2,001,911**	**24,432**	**2,026,343**
Normal	2,020,202	19,115	2,039,317	1,911,206	24,432	1,935,638
Special mention	44,437	181	44,618	33,435	-	33,435
Substandard	19,561	1,137	20,698	24,985	-	24,985
Doubtful	9,707	-	9,707	14,629	-	14,629
Doubtful loss	25,499	664	26,163	17,656	-	17,656
Investment in debt securities	**1,976**	-	**1,976**	**339**	-	**339**
Doubtful loss	1,976	-	1,976	339	-	339

Consolidated	31 Dec 16			31 Dec 15		
	Thailand	Foreign Countries	Total	Thailand	Foreign Countries	Total
Total loans [1/]	**2,120,939**	**24,023**	**2,144,962**	**2,003,795**	**29,062**	**2,032,857**
Normal	2,020,680	22,041	2,042,721	1,912,029	28,258	1,940,287
Special mention	44,437	181	44,618	33,435	60	33,495
Substandard	19,561	1,137	20,698	24,985	-	24,985
Doubtful	9,707	-	9,707	14,629	180	14,809
Doubtful loss	26,554	664	27,218	18,717	564	19,281
Investment in debt securities	**1,976**	-	**1,976**	**599**	-	**599**
Doubtful loss	1,976	-	1,976	599	-	599

1/ Including outstanding amounts of loans and accrued interest receivables, interbank and money market (excluding allowance of doubtful accounts)

Table 10: Provisions and Bad Debts Written-Off on Loans and Investment in Debt Securities, Classified by Geographical Area

(In Baht million)

Bank-only	**31 Dec 16**			**31 Dec 15**		
	Thailand	**Foreign Countries**	**Total**	**Thailand**	**Foreign Countries**	**Total**
Total loans[1/]						
General provisions			22,462			19,140
Specific provisions	53,771	582	54,353	44,372	243	44,615
Bad debts written-off	11,779	-	11,779	26,566	-	26,566
Investment in debt securities						
Specific provisions	1,976	-	1,976	339	-	339

Consolidated	**31 Dec 16**			**31 Dec 15**		
	Thailand	**Foreign Countries**	**Total**	**Thailand**	**Foreign Countries**	**Total**
Total loans[1/]						
General provisions			22,462			19,140
Specific provisions	54,472	611	55,083	45,582	269	45,851
Bad debts written-off	11,779	-	11,779	26,594	-	26,594
Investment in debt securities						
Specific provisions	1,976	-	1,976	599	-	599

1/ Including outstanding amounts of loans and accrued interest receivables, interbank and money market (excluding allowance of doubtful accounts)

Table 11: Loans[1/] Classified by Type of Business and Asset Classification

(In Baht million)

Bank-only	31 Dec 16						31 Dec 15					
	Normal	Special mention	Sub-standard	Doubtful	Doubtful loss	Total	Normal	Special mention	Sub-standard	Doubtful	Doubtful loss	Total
Agriculture and mining	14,652	171	87	62	172	15,144	15,337	344	146	78	44	15,949
Manufacture and commerce	766,571	16,645	8,289	3,709	18,060	813,274	749,416	7,965	14,134	10,000	10,938	792,453
Real estate and construction	125,625	2,202	1,547	882	1,683	131,939	137,629	864	503	164	1,481	140,641
Infrastructure and services	320,303	611	2,481	626	1,777	325,798	249,377	962	1,601	317	1,866	254,123
Housing loans	501,966	10,725	4,746	3,128	2,493	523,058	477,709	9,862	4,711	2,648	1,366	496,296
Others	310,200	14,264	3,548	1,300	1,978	331,290	306,170	13,438	3,890	1,422	1,961	326,881
Total	**2,039,317**	**44,618**	**20,698**	**9,707**	**26,163**	**2,140,503**	**1,935,638**	**33,435**	**24,985**	**14,629**	**17,656**	**2,026,343**

Consolidated	31 Dec 16						31 Dec 15					
	Normal	Special mention	Sub-standard	Doubtful	Doubtful loss	Total	Normal	Special mention	Sub-standard	Doubtful	Doubtful loss	Total
Agriculture and mining	14,708	171	87	61	172	15,199	15,750	367	146	78	206	16,547
Manufacture and commerce	769,210	16,645	8,290	3,709	18,060	815,914	752,290	7,966	14,134	10,180	11,121	795,691
Real estate and construction	125,626	2,202	1,546	882	2,673	132,929	137,629	899	503	164	2,542	141,737
Infrastructure and services	320,487	611	2,481	626	1,777	325,982	249,895	963	1,601	317	2,021	254,797
Housing loans	502,012	10,725	4,746	3,129	2,493	523,105	477,730	9,862	4,711	2,648	1,366	496,317
Others	310,678	14,264	3,548	1,300	2,043	331,833	306,993	13,438	3,890	1,422	2,025	327,768
Total	**2,042,721**	**44,618**	**20,698**	**9,707**	**27,218**	**2,144,962**	**1,940,287**	**33,495**	**24,985**	**14,809**	**19,281**	**2,032,857**

1/ including outstanding amounts of loans and accrued interest receivables, interbank and money market (excluding allowance of doubtful accounts)

Table 12: Provisions and Bad Debts Written-Off for Loans[1/] Classified by Type of Business

(In Baht million)

Bank-only	31 Dec 16			31 Dec 15		
	General provisions[2/]	Specific provisions	Bad debts written-off	General provisions[2/]	Specific provisions	Bad debts written-off
Agriculture and mining		732	39		698	11
Manufacture and commerce		31,275	1,745		26,311	14,905
Real estate and construction		1,986	121		1,387	42
Infrastructure and services		2,868	161		2,113	399
Housing loans		6,749	2,323		6,056	2,627
Others		10,743	7,390		8,050	8,582
Total	**22,462**	**54,353**	**11,779**	**19,140**	**44,615**	**26,566**

Consolidated	31 Dec 16			31 Dec 15		
	General provisions[2/]	Specific provisions	Bad debts written-off	General provisions[2/]	Specific provisions	Bad debts written-off
Agriculture & mining		733	39		833	11
Manufacture & commerce		31,301	1,745		26,516	14,905
Real estate and construction		2,622	121		2,074	70
Infrastructure & services		2,870	161		2,258	399
Housing loans		6,750	2,323		6,056	2,627
Others		10,807	7,390		8,114	8,582
Total	**22,462**	**55,083**	**11,779**	**19,140**	**45,851**	**26,594**

1/ Including outstanding amounts of loans and accrued interest receivables of interbank and money market

2/ Disclosed in total amounts

Table 13: Reconciliation of Change in Provisions for Loans[1/]

(In Baht million)

Bank-only	31 Dec 16			31 Dec 15		
	General provisions[2/]	Specific provisions	Bad debts written-off	General provisions[2/]	Specific provisions	Bad debts written-off
Balance, beginning of year	19,140	44,615	63,755	17,835	40,652	58,487
Charge-offs during period	-	(11,779)	(11,779)	-	(26,566)	(26,566)
Increase/decrease in provisions	3,322	21,517	24,839	1,305	30,529	31,834
Balance, end of year	**22,462**	**54,353**	**76,815**	**19,140**	**44,615**	**63,755**

Consolidated	31 Dec 16			31 Dec 15		
	General provisions[2/]	Specific provisions	Bad debts written-off	General provisions[2/]	Specific provisions	Bad debts written-off
Balance, beginning of year	19,140	45,851	64,992	17,856	41,393	59,249
Charge-offs during period	-	(11,779)	(11,779)	-	(26,594)	(26,594)
Increase/decrease in provisions	3,322	21,011	24,333	1,284	31,052	32,336
Balance, end of year	**22,462**	**55,083**	**77,546**	**19,140**	**45,851**	**64,991**

1/ Including outstanding amounts of loans including accrued interest receivables of interbank and money market

2/ Disclosed in total amounts

Table 14: Exposures Classified by Asset Type under the Standardized Approach (SA)

(In Baht million)

Bank-only	31 Dec 16			31 Dec 15		
	On-balance sheet	Off-balance sheet[1/]	Total	On-balance sheet	Off-balance sheet[1/]	Total
Performing						
Claims on Sovereign & Central Banks, MDBs, PSEs-Sovereign	342,083	185,533	527,617	313,726	166,577	480,303
Claims on Bank, PSEs-Bank	40,046	94,548	134,594	63,270	113,332	176,602
Claims on Corporate, PSEs-Corporate	892,743	168,624	1,061,367	822,061	149,205	971,266
Claims on Retail portfolios	473,896	4,289	478,185	481,058	4,561	485,619
Claims on Retail mortgage loans	486,255	-	486,255	459,289	-	459,289
Other assets	208,059	-	208,059	198,671	-	198,671
Non-Performing loans	28,163	1,066	29,229	23,951	1,027	24,979
First-to-Default credit derivatives and securitisation	-	-	-	-	-	-
Total	**2,471,246**	**454,059**	**2,925,305**	**2,362,026**	**434,702**	**2,796,729**

Consolidated	31 Dec 16			31 Dec 15		
	On-balance sheet	Off-balance sheet[1/]	Total	On-balance sheet	Off-balance sheet[1/]	Total
Performing						
Claims on Sovereign & Central Banks, MDBs, PSEs-Sovereign	344,931	185,533	530,465	326,047	166,577	492,624
Claims on Bank, PSEs-Bank	42,130	94,189	136,319	65,361	113,331	178,692
Claims on Corporate, PSEs-Corporate	895,106	169,869	1,064,976	825,366	150,521	975,887
Claims on Retail portfolios	474,578	4,685	479,263	481,863	4,900	486,763
Claims on Retail mortgage loans	486,255	-	486,255	459,289	-	459,289
Other assets	227,288	-	227,288	229,169	-	229,169
Non-Performing loans	28,518	1,066	29,584	24,558	1,027	25,585
First-to-Default credit derivatives and securitisation	-	-	-	-	-	-
Total	**2,498,807**	**455,342**	**2,954,149**	**2,411,653**	**436,356**	**2,848,009**

1/ Off-balance-sheet exposures (including Repo and Reverse Repo transactions) after multiplying with Credit Conversion Factor (CCF), net of specific provision

Table 15: Exposures After Adjusting for Credit Risk Mitigation Classified by Asset Type and Risk Weights under the Standardized Approach (SA)

(In Baht million)

Bank-only															
31 Dec 16			**Rated exposure**							**Unrated exposure**					
Risk weights (%)	**0**	**20**	**50**	**100**	**150**	**0**	**20**	**35**	**50**	**75**	**100**	**250**	**625**	**937.5**	**100/8.5%**
Performing															
Claims on Sovereign & Central Banks, MDBs, PSEs-Sovereign	328,737	23,105	502	11	199										
Claims on Bank, PSEs-Bank	-	74,591	16,944	13,416	82										
Claims on Corporate, PSEs-Corporate	-	26,519	54,574	48,293	452						908,004				
Claims on Retail portfolios										466,385	-				
Claims on Retail mortgage loans								453,675		30,695	1,769				
Other assets						123,582	-				75,743	8,734			
Risk weights (%)		**20**	**50**	**100**	**150**					**75**					
Non-Performing loans		123	5,912	13,907	9,090					94					

Bank-only															
31 Dec 15			**Rated exposure**							**Unrated exposure**					
Risk weights (%)	**0**	**20**	**50**	**100**	**150**	**0**	**20**	**35**	**50**	**75**	**100**	**250**	**625**	**937.5**	**100/8.5%**
Performing															
Claims on Sovereign & Central Banks, MDBs, PSEs-Sovereign	330,777	-	1	-	379										
Claims on Bank, PSEs-Bank	-	62,040	32,591	19,456	19										
Claims on Corporate, PSEs-Corporate	-	29,479	52,842	31,369	162						829,382				
Claims on Retail portfolios										472,588	-				
Claims on Retail mortgage loans								420,286		37,042	1,816				
Other assets						105,847	-				84,090	8,734			
Risk weights (%)		**20**	**50**	**100**	**150**					**75**					
Non-Performing loans		123	8,301	10,213	6,127					110					

Capital deduction prescribed by the BOT: - None -

Table 15 (cont.)

(In Baht million)

Consolidated															
31 Dec 16			**Rated exposure**							**Unrated exposure**					
Risk weights (%)	**0**	**20**	**50**	**100**	**150**	**0**	**20**	**35**	**50**	**75**	**100**	**250**	**625**	**937.5**	**100/8.5%**
Performing															
Claims on Sovereign & Central Banks, MDBs, PSEs-Sovereign	328,951	23,105	502	2,645	199										
Claims on Bank, PSEs-Bank	-	75,739	16,599	14,338	82										
Claims on Corporate, PSEs-Corporate	-	26,519	54,574	48,293	452						911,372				
Claims on Retail portfolios										467,227	-				
Claims on Retail mortgage loans								453,675		30,695	1,769				
Other assets						127,046	-				76,060	24,182			
Risk weights (%)		**20**	**50**	**100**	**150**					**75**					
Non-Performing loans		123	5,912	14,187	9,165					94					

Consolidated															
31 Dec 15			**Rated exposure**							**Unrated exposure**					
Risk weights (%)	**0**	**20**	**50**	**100**	**150**	**0**	**20**	**35**	**50**	**75**	**100**	**250**	**625**	**937.5**	**100/8.5%**
Performing															
Claims on Sovereign & Central Banks, MDBs, PSEs-Sovereign	339,472	-	1	3,627	379										
Claims on Bank, PSEs-Bank	-	62,721	32,603	20,227	646										
Claims on Corporate, PSEs-Corporate	-	29,479	52,842	31,369	162						833,537				
Claims on Retail portfolios										473,352	34				
Claims on Retail mortgage loans								420,286		37,042	1,816				
Other assets						135,034	-				73,483	20,651			
Risk weights (%)		**20**	**50**	**100**	**150**					**75**					
Non-Performing loans		123	8,301	10,744	6,202					110					

Capital deduction prescribed by the BOT: - None -

Table 16: Exposures Covered by Risk Mitigation Classified by Asset Type and Type of Collateral under the Standardized Approach (SA)[1/]

(In Baht million)

Bank-only	31 Dec 16		31 Dec 15	
	Eligible financial collateral[1/]	Guarantee & credit derivatives	Eligible financial collateral[1/]	Guarantee & credit derivatives
Performing				
Claims on Sovereign & Central Banks, MDBs, PSEs-Sovereign	180,153	-	160,513	-
Claims on Bank, PSEs-Bank	24,528	5,073	53,611	9,010
Claims on Corporate, PSEs-Corporate	23,465	7,299	25,549	10,876
Claims on Retail portfolios	11,800	-	13,031	-
Claims on Retail mortgage loans	116	-	145	-
Other assets	-	-	-	-
Non-Performing	103	1,652	106	1,031
Total	**240,166**	**14,024**	**252,955**	**20,917**

Consolidated	31 Dec 16		31 Dec 15	
	Eligible financial collateral[1/]	Guarantee & credit derivatives	Eligible financial collateral[1/]	Guarantee & credit derivatives
Performing				
Claims on Sovereign & Central Banks, MDBs, PSEs-Sovereign	180,153	-	160,513	-
Claims on Bank, PSEs-Bank	24,528	5,073	53,611	9,010
Claims on Corporate, PSEs-Corporate	23,707	7,299	26,015	10,876
Claims on Retail portfolios	12,036	-	13,377	-
Claims on Retail mortgage loans	116	-	145	-
Other assets	-	-	-	-
Non-Performing	103	1,652	106	1,031
Total	**240,644**	**14,024**	**253,767**	**20,917**

1/ Eligible financial collateral that the BOT allows to use for risk mitigation. For applying the Comprehensive approach, the values after haircut shall be disclosed.

6. Market Risk

6.1 Market Risk Management

SCB and its Financial Group classify market risk positions into trading books and non-trading books. Trading books comprise trading transactions in the financial markets and short-term positions held for sale and/or trading or arbitrage, while non-trading books mainly comprise positions from interest rate risk management in the banking book and from investment risk management.

6.2 Market Risk Management Policy

SCB and its Financial Group companies with material market risk exposures are required to formulate a Market Risk Policy and a Trading Book Policy or Investment Policy for managing market risk. The policies must be proposed to the Group Risk Management Committee for review prior to seeking approval from the boards of directors of the respective companies. These policies must be reviewed at least once a year, or when deemed appropriate and/or upon any significant strategic or market change that has a material policy impact. Companies in the Financial Group with material market risk exposure are required to set up an independent market risk management unit responsible for measuring, evaluating, controlling, monitoring, and reporting market risk, as well as ensuring that market risk exposure stays below the predetermined limits.

6.3 Market Risk Assessment

SCB and its Financial Group have adopted appropriate statistical and non-statistical tools for market risk assessment which depend on individual company's risk characteristics. These tools include stress testing, value at risk (VaR), position size, sensitivity analysis, management action trigger, and others.

SCB and its Financial Group are required to perform stress testing for all material positions held in the portfolio. Stress testing is a methodology to quantify potential loss on a portfolio in case of extreme yet plausible market events. Risks from stress events, although unlikely, can cause substantial losses and may impact the stability of the Bank. The independent Market Risk Management Division has the responsibility to define and review market risk stress methodology, perform stress testing, and monitor stress exposure against the management stress trigger, and to report stress exposure to senior management regularly.

6.4 Market Risk Limits

Market risk limits constitute a key control mechanism to ensure that market risk exposure is aligned with market risk appetite of SCB and its Financial Group. Optimal limits to control market risk exposure of a business is determined in a limit review process by considering key factors, such as business strategy, historical performance, market risk capital requirement, market depth, liquidity, etc. Market risk limits are reviewed and approved by the Board of Directors or delegated committees of the respective companies at least once a year and/or upon any significant strategic or market change. Market risk limits are applied at the close of the business day and are monitored daily. Intraday limits have been imposed on foreign exchange net open position and interest rate sensitivity limits during the course of the trading day.

6.5 Market Risk Monitoring and Reporting

Market risk reports presenting risk exposure against limits are produced and delivered to relevant parties including book owners and senior management daily. Market risk exposures are regularly reported to the Board of Directors or delegated committees of the respective companies. SCB and its Financial Group summarizes the market risk exposure and reports to the Group Risk Management Committee on a monthly basis.

6.6 Capital Adequacy

SCB and its Financial Group are required to comply with the Bank of Thailand's notification on maintaining adequate capital to support market risk using the Standardized Approach. Effective as of December 31, 2013, SCB has obtained the Bank of Thailand's approval to apply the Duration Method for the calculation of market risk capital charges for interest rate risk and the Contingent Loss Method for foreign exchange options. The following table shows the capital required for market risk of the Bank and its Financial Group as of December 31, 2016.

Table 17: Minimum Capital Requirements of Market Risk Under the Standardized Approach (SA)

(In Baht million)

	Bank-only		Consolidated	
	31 Dec 16	31 Dec 15	31 Dec 16	31 Dec 15
Interest rate risk	3,108	2,887	3,110	2,887
Equity position risk	-	-	7	128
Foreign exchange risk	565	879	565	953
Commodity risk	-	-	-	-
Total minimum capital requirements for market risk	**3,673**	**3,765**	**3,682**	**3,968**

7. Operational Risk Management

7.1 Operational Risk Management Principles

SCB and its Financial Group recognize that operational risk arises from business operations and have always considered operational risk management a priority. This priority is more pressing in today's ever-changing environment which ranges from economic uncertainties, increased competition, growing complexity of products, dependency on technology, to frequent occurrence of natural disasters, epidemics, and political/civil unrests.

SCB’s Board of Directors requires all business units to be responsible for assessing their own operational risk, assisted by the operational risk management tools and the framework established by the Group Operational Risk Management. Therefore, every business and support unit within the Bank is responsible for managing its operational risk by identifying and assessing key risks and controls, as well as regularly monitoring and reporting the status of its operational risk to business unit committees and relevant senior committees. Senior management has the duty to manage the operational risk of business units for each specific area of responsibility together with implementing and maintaining a sound internal control environment.

7.2 Governance Framework

SCB and its Financial Group have established a governance framework for operational risk management. The "three lines of defense" principle has been adopted for operational risk management to ensure that SCB and its Financial Group effectively identify, measure, assess, monitor, control, and report exposures to operational risks. The three lines of defense are:

- **1st line of defense** comprises business and support units taking primary responsibilities for identifying and managing risks within their own units and regularly assessing and reporting on the adequacy of internal controls over such risks.
- **2nd line of defense** comprises centralized risk management and control units, e.g., the Operational Risk Management Division, Compliance and Operational Control Function, and other specialized units (e.g., IT Security, Fraud Management, etc.). These units are responsible for making recommendations on policy framework, risk management process and internal control, while also supporting, assisting, and providing guidance to implement the 1st line of defense for operational risk management.
- **3rd line of defense** comprises mainly the internal audit function, which is responsible for conducting independent audits of business processes and operations to ensure the effectiveness of SCB and its Financial Group's internal control system. Audit results are reported to both the Audit Committee and SCB’s Board of Directors.

7.3 Risk Management Process and Approaches

SCB and its Financial Group recognize that operational risk is the key source of risk from operating the business and therefore emphasizes the importance of operational risk management with the goal of fostering a strong risk culture in this area over time.

Business and support units within SCB and its Financial Group are responsible for managing their operational risk by deploying appropriate methodologies and approaches. To carry out this responsibility involves risk identification and assessment, evaluation of internal control effectiveness, formulation of risk mitigation or prevention plans, and execution of action plans to ensure that the operational risk is within an acceptable level given the nature of the business.

As part of the risk mitigation effort, SCB and its Financial Group make use of diverse operational risk management methodologies. In addition to the core operational risk framework components, SCB and its Financial Group have strengthened areas such as risk and control self-assessment (RCSA), monitoring key risk indicators (KRI) and incident loss management (ILM).

The Bank also applies international best practices to mitigate the overall operational risk through tools such as business continuity planning (BCP) and business impact analysis (BIA), new product approval (NPA), insurance management, and outsourcing/insourcing management.

7.4 Operational Risk Report

Key units of the Bank and Group companies are required to regularly report operational risk to senior management to flag any key risk issues that warrant management attention. Moreover, Group companies are required to report their operational risks to SCB. The Operational Risk Management Division will analyze this risk information for further reporting to the Group Risk Management Committee on a monthly basis which will then be used as input into the Committee's risk management decisions.

7.5 Capital Adequacy

SCB and its Financial Group have adopted the Standardized Approach to calculate regulatory capital for operational risk. The table below shows capital requirements for operational risk as of December 31, 2016.

Table 18: Minimum Capital Requirements of Operational Risk Under the Standardized Approach (SA)

(In Baht million)

	Bank-only		Consolidated	
	31 Dec 16	**31 Dec 15**	**31 Dec 16**	**31 Dec 15**
Operational risk - Standardized Approach	16,781	16,525	17,293	17,080
Total minimum capital requirements for operational risk	**16,781**	**16,525**	**17,293**	**17,080**

8. Interest Rate Risk in the Banking Book

Interest rate risk in the banking book represents financial instruments or other positions for non-trading purposes which may impact the net interest income and economic value of SCB and its Financial Group with interest rate fluctuations.

8.1 Governance

SCB and its Financial Group manages interest rate risk in the banking book in two following ways:

- **Centralized interest rate risk in the banking book management**: SCB is responsible for interest rate risk management and applies the same policy across all business units within the Bank to manage, evaluate, monitor, report, and control interest rate risk in the banking book.
- **Decentralized interest rate risk management**: Each company in the Financial Group is responsible for managing, evaluating, monitoring, reporting, and controlling interest rate risk under the risk limits established by the Bank. To manage interest rate risk effectively, SCB and its Financial Group classifies companies into two groups: companies with material interest rate risk and those with non-material interest rate risks.

The Group Treasury Function is responsible for managing overall interest rate risk in the banking book while the Balance Sheet Monitoring Unit, Financial Management Division is responsible for monitoring and controlling the impact to net interest income (NII) and economic value of equity (EVE). SCB and its Financial Group have established criteria to measure impacts from interest rate movements on net interest income and economic value of equity using models and simulations of future stress scenarios. Regular risk analysis reports are submitted to the Assets and Liabilities Management Committee, the Risk Management Committee, the Executive Committee, and the Board of Directors.

8.2 Risk Assessment and Control

Because of borrowing and lending activities, SCB and its Financial Group face interest rate risk in the banking book which arises from re-pricing risk, yield curve risk, option risk, and basis risk from the difference in lending interest rates, such as MLR, MOR and MRR, and deposit rates. SCB and its Financial Group measure the impact on net interest income within one year against the Group's net interest income target and the impact on economic value of equity compared with the capital fund on a quarterly basis or more often.

In the event that interest rates rise by 1%, as of the end of December 2016, net interest income of SCB will decrease by Baht 434 million or -0.52% of target net interest income, while the economic value will decrease by Baht 8,085 million or -2.40% of capital fund. In terms of the SCB Financial Group, net interest income will decrease by Baht 405 million or -0.44% of target net interest income, while the economic value will decrease by Baht 8,088 million or -2.30% of capital fund.

Table 19: Impact on Net Interest Income in the Event that Interest Rates Rise by 1%

(In Baht million)

Currency	Bank-only		Consolidated	
	31 Dec 16	31 Dec 15	31 Dec 16	31 Dec 15
THB	(618)	553	(601)	583
USD	(44)	(323)	(31)	(321)
EURO and other foreign currencies	227	96	227	111
Total impact on net interest income	**(435)**	**326**	**(405)**	**373**
% of target net interest income	**-0.52%**	**0.42%**	**-0.44%**	**0.44%**

Table 20: Impact on Economic Value of Equity in the Event that Interest Rates Rise by 1%

(In Baht million)

Currency	Bank-only		Consolidated	
	31 Dec 16	31 Dec 15	31 Dec 16	31 Dec 15
THB	(8,083)	(5,938)	(8,084)	(5,937)
USD	(26)	99	(28)	99
EURO and other foreign currencies	24	24	24	26
Total impact on economic value of equity	**(8,085)**	**(5,815)**	**(8,088)**	**(5,812)**
% of total capital	**-2.40%**	**-1.84%**	**-2.30%**	**-1.79%**

9. Equity Investment in the Banking Book

SCB and its Financial Group maintain long-term equity investments in the banking book, which comprise:

- Equity investment intended mainly for generating dividend yield and/or long-term capital gains from changes in equity prices and/or for strengthening business alliances in some cases.
- Strategic equity investments with growth potential and/or those intended for supporting the business of the SCB Financial Group.

SCB, as the parent company of the Financial Group, has established the Group's Equity Investment Risk Management Policy. The Policy states that equity investment is permissible only to Financial Group companies that engage in the financial business under the regulation of supervisory bodies and those permitted to engage in portfolio management.

9.1 Governance

SCB and its Financial Group have established approval authority for investment at a committee level or individual executive level. The investment approval authority is approved by each Group company's board of directors and/or SCB's Board of Directors. Investment approval authority varies by transaction type, risk attribute and investment value.

The Equity Investment Management Unit, organized under the Finance Function, has a duty to manage the equity investments of the Bank and its Financial Group companies and to ensure compliance with established policies and guidelines. The Equity Investment Management Unit is responsible for monitoring compliance of investment transactions with relevant rules and regulations, including external regulations, seeking approval, and reporting to the Equity Investment Management Committee, the Executive Committee, and/or the Board of Directors in accordance with approval authorities.

Furthermore, SCB and its Financial Group also monitor and control investment risks by setting investment policies and risk ratios related to investment transactions, through either the Group Risk Management Committee or, if applicable, the risk management committees of companies in the Financial Group in accordance with a predetermined risk management structure.

9.2 Risk Assessment and Control

Classification and measurement of equity investments in the banking book follow the Thai Accounting Standards which categorize investments into: available-for-sale investments, general investments, and investments in subsidiaries and associates.

Investments with higher book values than market prices (fair value or recoverable amount) are required to be fully provisioned for any impairment. Relevant accounting standards and the BOT's notifications are used to determine fair value or recoverable amount of an investment.

Lastly, SCB Financial Group has an annual investment portfolio review based on the latest available information of each investment to determine an appropriate investment strategy which includes the possibility of divestment. SCB Financial Group has a policy to set a full provision on any investment with a likelihood of permanent impairment to mitigate any significant the impact from fluctuations in share value on SCB and its Financial Group.

9.3 Capital Adequacy

SCB and its Financial Group have adopted the Standardized Approach to calculate regulatory capital for equity exposures in the banking book. The following table shows SCB and its Financial Group's capital requirements for equity exposures in the banking book as of December 31, 2016.

Table 21: Minimum Capital Requirements of Equity Exposures in the Banking Book

(In Baht million)

	Bank-only		Consolidated	
	31 Dec 16	**31 Dec 15**	**31 Dec 16**	**31 Dec 15**
Equity exposures - Standardized Approach (domestic and foreign)				
Listed equity exposures				
Cost value	5,756	6,223	5,779	6,569
Market value	7,882	8,126	7,903	8,441
Others	20,174	29,734	33,649	28,538
Total gain (loss) arising from sales during the period	963	8,054	980	8,254
Increase (decrease) in value from remeasuring available-for-sale investments	2,134	1,924	2,132	1,922
Total minimum capital requirements	**2,974**	**3,797**	**6,087**	**5,276**

10. Strategic Risk

Strategic risk refers to the risk of a current and/or prospective impact on the Bank's earnings, capital, and business viability from factors such as changes in the business environment, poor strategic decisions, improper implementation of major projects, and inadaptability to industry, economic and technological changes.

The Board of Directors has adopted Strategic Risk Management Guidelines as a framework to formalize and provide structure to manage strategic risk. Strategic risk is managed through the strategy setting process and the strategic risk assessment. The strategy setting process – including strategic planning, business alignment, change management, project implementation, monitoring, performance evaluation, and feedback – ensures adequate input into strategy formulation and implementation. The strategic risk assessment, which is part of the Bank's risk materiality assessment framework, monitors potential strategic risk arising from both external and internal factors.

The Strategy Group currently supports the Board of Directors and senior management in formulating and reviewing the SCB Group's strategies as well as recommending remedial action (if required). Also, the Strategy Group is responsible for conducting the strategic risk assessment on a regular basis.

11. Reputation Risk

Reputation is an integral part of every kind of business, especially for financial businesses, which can only be gradually built by winning confidence and trust for the business over a long period of time. As the old adage says that it takes years to build one's reputation, and only seconds to destroy it.

The Bank recognizes the importance of reputation risk and therefore has developed reputation risk guidelines and process to promote a risk culture that supports proactive risk management. The guidelines and process apply to all companies in SCB Group whereby each company is expected to implement reputation risk management in the business operations to ensure that no internal or external activity (whether revenue generating or not) will impact their reputation.

The reputation risk guidelines shall apply to SCB and SCB Group. Companies in SCB Group with material reputation risk are encouraged to establish risk mitigation and prevention process. Companies assessed with non-material reputation risk must report any incidents that may jeopardize the company's reputation to their senior management for further mitigation and preventive actions.

For any business transactions or issues with potential reputation risk, the management concerned must seek approval from the Chairman of the Executive Committee or the President prior to participating in such transactions. The Executive Committee has the authority to approve the transaction or escalate the matter to the Chairman of the Board.

The CSR and Corporate Communication Function is responsible for coordinating with business and functional units within the Bank and its Group companies to identify and monitor reputation risk factors. This function also conducts an assessment of the overall reputation risk and reports the findings to the Bank's Risk Management Committee and the Executive Committee on a regular basis.

Appendix

Details of company under SCB Financial Group (Solo and Full Consolidation)

Solo Consolidation Group	Business Type
Siam Commercial Bank PCL	Banking
Cambodian Commercial Bank Co., Ltd.	Banking
Rutchayothin Asset Management Co., Ltd.	Asset management

Non-Solo Consolidation Group	Business Type
SCB Securities Co., Ltd.	Securities
SCB Asset Management Co., Ltd.	Asset management
SCB Life Assurance PCL*	Life insurance
Mahisorn Co., Ltd.	Property management
Siam Pithiwat Co., Ltd.	Appraisal services
SCB Training Centre Co., Ltd.	Training center
SCB Plus Co., Ltd.	Collection
Digital Ventures Co., Ltd.	Financial technology

* SCB Life Assurance PCL is not consolidated under Full Consolidation Financial Statements.

The structure of the Consolidated Supervision Group can be divided into two levels:

(1) **Full consolidation** which includes the parent company and subsidiaries categorized as solo and non-solo consolidation subsidiaries whereby

- ***Solo consolidation*** subsidiaries mean any of the Bank's subsidiaries whose businesses involve lending or lending-related transactions and whose shares are directly held by the Bank in a ratio of no less than 75% of issued and paid-up shares.

- ***Non-solo consolidation*** subsidiaries mean any of the Bank's subsidiaries whose businesses involve finance or supporting business and whose shares are held by the Bank in a ratio of no less than 50% of issued and paid-up shares with the Bank having management control over the subsidiary's business. (The Bank is assumed to have management control over a subsidiary's business if its shares are held by the Bank in a ratio of no less than 20% of issued and paid-up shares unless proven otherwise.)

(2) **Solo consolidation** which includes the Bank and its subsidiaries categorized under the solo consolidation group