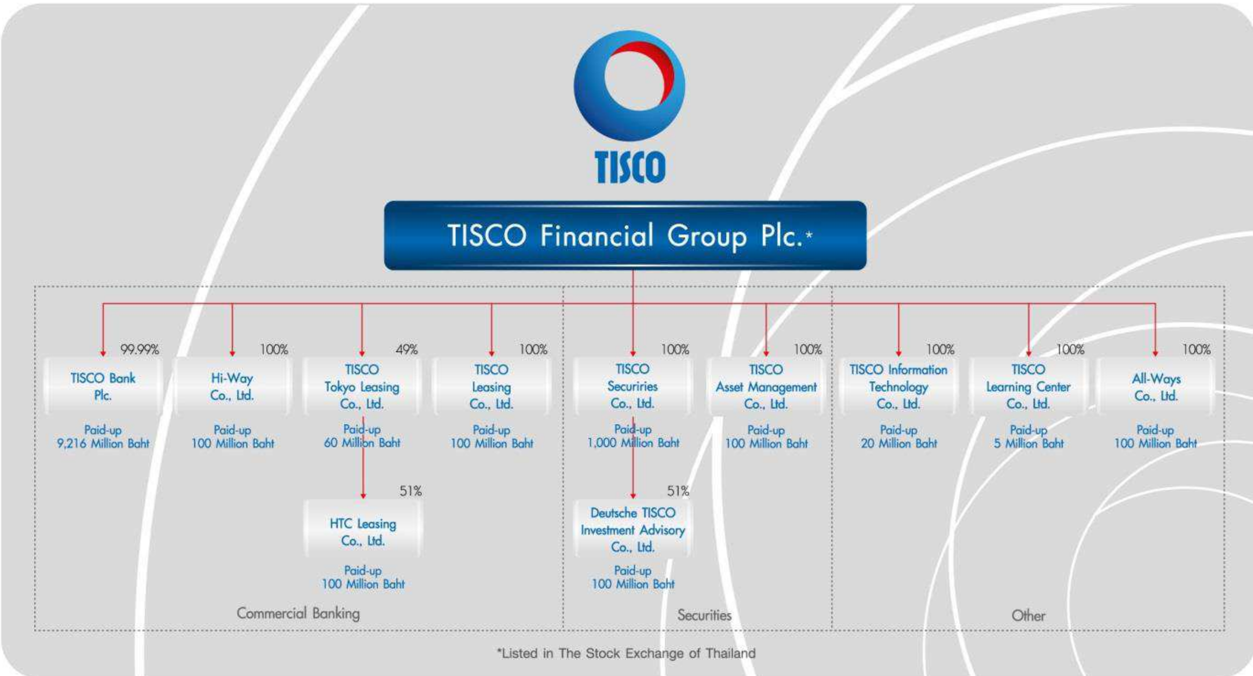
Information Disclosures under Basel III Capital Requirement As of 31 December 2016

Scope of Information Disclosure

TISCO Financial Group Public Company Limited (TISCO) discloses information under Basel III capital requirement based on the full consolidated position and in accordance with the Bank of Thailand's notification SorNorSor 5/2556 on the regulatory disclosure requirement for consolidated financial institutions. The full-consolidation structure of TISCO Financial Group can be shown as follow.



However, TISCO Tokyo Leasing Co., Ltd. is not included in the consolidated financial statements since its shares are held by TISCO Group in a ratio of less than 50% of issued and paid-up shares. In addition, TISCO Group adopts a materiality concept which is in consistent with accounting concept.

Capital Structure

According to the Bank of Thailand's regulation, the regulatory capital for commercial banks registered in Thailand and based on Internal Rating Based Approach (IRB) consists of Common Equity Tier 1 (CET1), Additional Tier 1, and Tier 2 Capital. CET1 capital includes paid up capital, premium (discount) on share capital and warrants, statutory reserve, reserves appropriated from net profits, net profit after appropriation, and other components following the BOT's regulation, which are the net amount after regulatory adjustments such as goodwill and intangible assets, where Additional Tier 1 capital consists of money received from the issuance of non-cumulative preferred stocks and money received from the issuance of debts instruments that are subordinated to depositors, general creditors, and other subordinated debts of the Group, which are the net amount after regulatory adjustments such as reciprocal cross holding in the Additional Tier 1 capital of banking, financial and insurance entities.

Tier 2 capital is the sum of instruments issued by the bank which meet the criteria for inclusion in Tier 2 capital, general provision and surplus of provision, less any deduction from Tier 2 capital.

For TISCO Group, Tier 1 capital primarily comprises of paid-up share capital and cumulative profit after appropriation, while Tier 2 capital mostly consists of long-term subordinated debentures issued. Additionally, the deductions from shortage of reserve are also incorporated in Tier 1 capital.

Table 1 TISCO Financial Group's Capital Structure

Unit : Million Baht

Items	31-Dec-16	31-Dec-15
1. Tier 1 Capital	**25,948.64**	**23,382.88**
1.1 CET 1	**25,948.53**	**23,382.69**
1.1.1 Paid-up share capital	8,006.45	8,006.37
1.1.2 Premium (discount) on share capital	1,018.41	1,018.41
1.1.3 Warrants	-	-
1.1.4 Statutory reserves	709.50	596.30
1.1.5 Reserve appropriated from net profit	-	-
1.1.6 Retained earnings after appropriation	15,729.62	13,574.76
1.1.7 Other components of CET1 and disclosed reserves	1,439.76	1,363.34
1.1.8 Non-controlling interests	-	-
1.1.9 Any adjustments of CET 1	-	-
1.1.10 Deductions from CET 1 *	955.21	1,176.48
1.2 Additional Tier 1	**0.11**	**0.19**
1.2.1 Non-cumulative perpetual preferred stock and non-cumulative perpetual preferred stock warrants	0.11	0.19
1.2.2 Hybrid Tier 1 to be counted as Tier 1 Capital	-	-
1.2.3 Surplus (shortfall) from the issue of instruments in 1.2.1-1.2.2 where the bank receives funds	-	-
1.2.4 Eligible non-controlling interests	-	-
1.2.5 Deductions from Additional Tier 1 Capital **	-	-
2. Tier 2 Capital	**8,639.15**	**6,932.82**
2.1 Cumulative perpetual preferred stock and cumulative perpetual preferred stock warrants	-	-
2.2 Funds received from debt instruments subordinated to depositors and general creditors	7,323.00	6,643.00
2.3 Surplus (shortfall) from the issue of the instruments 2.1-2.2 where the bank receives funds	-	-
2.4 General provision	512.06	289.82
2.5 Surplus of provisions	804.09	-
2.6 Deductions from Tier 2 ***	-	-
3. Total Regulatory Capital	**34,587.79**	**30,315.70**

* e.g. Net losses, goodwill, intangible assets, deferred tax assets, and shortfall of provisions

** Investment in financial instruments which can be counted as Tier 1 Capital of commercial bank

*** Investment in financial instruments which can be counted as Tier 2 Capital of commercial bank

Capital Adequacy under Basel III Capital Accord

Based on minimum capital requirement under Basel III effective since the beginning of 2014, TISCO Group has adopted the Internal Rating Based Approach (IRB) for regulatory capital calculation of credit risk since December 31, 2012. The IRB approach is considered more sophisticated calculation given that it can truly reflect TISCO Group risk profiles as well as assets quality with more prudent than the calculation from the Standardized Approach (SA) which is less comprehensive risk weights subject to quality of assets. The risk parameters relied on determining the capital requirement consists of Probability of Default (PD), Loss Given Default (LGD), and Exposure at Default (EAD).

Capital adequacy of the TISCO Group is still in strong position and adequate to support business expansion into the future. At the end of 2016, the regulatory capital adequacy ratio (BIS ratio) based on IRB approach, after the adjustment of capital floor, stood at 18.31%, remaining higher than 9.125% required by the Bank of Thailand, while Tier-I capital adequacy ratio stood at 13.73%, which remained higher than the minimum requirement at 6.625%.

Table 2 Minimum Capital Requirements for Credit Risk by Asset Classes under SA Approach

Unit : Million Baht

Credit Risk - SA	31-Dec-16	31-Dec-15
Performing	**1,981.26**	**3,168.31**
1. Claims on Financial Institutions and Public Sector Entities treated as Claims on Financial Institutions and Securities Company	127.87	159.49
2. Claims on Corporate and Public Sector Entities treated as Claims on Corporate	1,130.06	1,304.49
3. Claims on Retail	697.94	1,670.17
4. Claims on Residentail Property	25.40	34.15
5. Other Assets	-	-
Non-performing	**58.58**	**52.86**
Total Minimum Capital Requirements for Credit Risk - SA	**2,039.85**	**3,221.17**

Table 3 Minimum Capital Requirements for Credit Risk by Asset Classes under IRB Approach

Unit : Million Baht

Credit Risk - IRB	31-Dec-16	31-Dec-15
Non-Default	**10,874.39**	**9,204.73**
1. Corporate Lending	2,041.25	1,858.15
2. Retail	8,213.58	6,738.15
3. Equity Exposure	237.29	197.72
4. Other Assets	382.27	410.70
Default	**754.12**	**919.27**
Total Minimum Capital Requirements for Credit Risk - IRB	**11,628.51**	**10,123.99**

Table 4 Minimum Capital Requirements for Equity Exposures under IRB Approach

Unit : Million Baht

Minimum Capital Requirements for Equity Exposures under IRB	31-Dec-16	31-Dec-15
Equity Exposure with an Exemption from IRB Calculation	237.29	197.72
Total Minimum Capital Requirements for Operational Risk	**237.29**	**197.72**

Table 5 Minimum Capital Requirements for Market Risk (Standardized Approach / Internal Model Approach)

Unit : Million Baht

Minimum Capital Requirements for Market Risk	31-Dec-16	31-Dec-15
Standardized Approach	45.06	41.95
Internal Model Approach	-	-
Total Minimum Capital Requirements for Market Risk	**45.06**	**41.95**

* Since the transaction amount in trading book of TISCO Group was lower than the minimum thresholds required by the Bank of Thailand, the market risk capital was maintained only for the element that cover price risk of commodities related products.

Table 6 Minimum Capital Requirements for Operational Risk

Unit : Million Baht

Minimum Capital Requirements for Operational Risk	31-Dec-16	31-Dec-15
Standardized Approach	2,345.56	2,287.60
Total Minimum Capital Requirements for Operational Risk	**2,345.56**	**2,287.60**

Table 7 TISCO Bank's Capital Adequacy Ratio

Unit : %

Ratio	31-Dec-16		31-Dec-15	
	TISCO's Capital Ratio	Regulatory Minimum Requirement	TISCO's Capital Ratio	Regulatory Minimum Requirement
1. Total Capital Adequacy Ratio	**18.31%**	**9.125%**	**16.44%**	**8.50%**
2. Total Tier I Capital Adequacy Ratio	13.73%	6.625%	12.68%	6.00%
3. CET 1 Capital Adequacy Ratio	13.73%	5.125%	12.68%	4.50%

Overview of Risk Management

Risk management of TISCO Group is centralized by consolidating all risk exposure to TISCO Financial Group as a parent company. All risk exposures are controlled and managed under the consolidated supervision principle.

Following the risk management policy of TISCO Group, TISCO places great importance on effective risk management and controls. By establishing an overall risk management framework, including policy objectives for all risk-related transactions, TISCO is able to increase awareness, accountability and efficiency in enterprise-wide risk management as well as maintain best practice standards and high-quality corporate governance. In addition, TISCO aims to maximize sustainable risk-adjusted returns over the long run.

Risk Management Policy

The risk management policy of TISCO Group encompasses the following structures:

1. Consolidated and centralized risk management

Risk management infrastructure is centralized by consolidating risk exposure from all subsidiaries under TISCO Financial Group through careful risk assessment and the establishment of appropriate risk guidelines and procedures.

2. Business line accountability, independent risk oversight

Each business line is accountable for managing its own risks in the best interests of the Group while complying with risk management policies, guidelines, and procedures. Independent risk oversight and check-and-balance system have been established to ensure that risks are adequately monitored and controlled.

3. Comprehensive risk assessment

Risk assessment is performed comprehensively in all key activities. Risk assessment methodologies may range from basic approaches such as expert judgments to more advanced approaches such as quantitative and statistical analysis, depending on the size and complexity of the risks involved. These assessments are in turn supplemented by fundamental risk analysis and stress testing of extreme risk events.

4. Capital management based on standardized risk measure

Capital represents the ultimate interest of the shareholders. Regardless of the methodologies employed, all material risk exposures shall be quantified into a standardized risk measure called Risk Capital. Risk capital is determined according to the Value at Risk concept at potential maximum loss at 99% confidence level with associated holding period but not more than one year. Risk Capital can relate risks to the amount of capital required to protect against them. The process of risk assessment under Risk Capital is considered as part of Internal Capital Adequacy Assessment Process (ICAAP) of TISCO.

Risk Capital enables management and line managers to understand the level of risks being taken in uniform, meaningful, and consistent units comparable across different types of risks. Risks from different levels and sources shall be integrated to produce the overall risk picture of the firm and used for capital adequacy planning and strategic capital allocation.

5. Risk Tolerance Level and Capital Allocation

The Board of Directors mandate the risk tolerance of TISCO Group that the total risk capital shall not be in excess of available capital fund of the Group according to the above definition of Risk Capital in 3.4. The qualitative risk tolerance level shall be applied for non-capital based assessment. Risk Capital shall determine the economic capital adequacy of TISCO group on a consolidated basis. The available capital is also allocated to the business and operating units such that the capital adequacies to undertaken risk are ensured both at the corporate- and business-unit-level.

6. Adequate return for risk and risk-adjusted performance management

To promote shareholder value creation, risk components are incorporated into business performance measurements with the objective of maximizing risk-adjusted returns for shareholders. Product pricing takes into account varying risks to ensure overall profitability. Business expansion is advocated in the areas where marginal risk-adjusted returns are in excess of the marginal risks.

7. Portfolio management, diversification and hedging

Risk diversification is a key risk management principle in all business activities. Diversification is considered and adopted by management and business line managers both at the portfolio and transaction levels as an effective approach to reducing the aggregate level of risks in accordance with certain guidelines and limits.

8. Strong Risk Awareness Culture

Awareness and understanding of risks and risk management are important for the accountability of risk management. Business heads are expected to have a high degree of awareness and understanding of the risks in their accountable areas and how they contribute to the overall risk of the corporate as a whole.

9. Regulatory best practice

The Group has adopted risk management policies and guidelines that comply with all regulations and best practice standards of the Bank of Thailand (BoT), the Securities and Exchange Commission (SEC) and other regulatory bodies.

10. New Business or Product

All new businesses or products shall be approved by the portfolio risk authority and relevant specific-area risk authority according to the procedure outlined in the risk management guideline. New business or product will be evaluated in terms of its risk-reward characteristics, the contributions to the overall corporate risk profile, and the consistency with corporate capital capacity.

11. Related Party Transaction

All business transactions among TISCO Group and related party shall be on a similar basis with same treatment of regular customer. Additionally, the related transaction shall be transparent and auditable. Meanwhile, the proportion of business transaction among TISCO Group shall be controlled under regulatory guideline. This includes exposure limits imposed through regulations such as BOT's Consolidated Supervision, Single Lending Limit and others. All related party transaction shall be monitored and reported in accordance with the Related Party Transaction Policy approved by the Board of Director.

12. Stress Testing

Stress Testing is a procedure to assess the impact on the company's financial status under extreme risk events. Stress testing process is designed to be a complementary tool for the analysis of credit risk, market risk and funding risk.

The Board of Directors through Executive Board and Risk Management Committee, oversee the framework for stress testing. This include setting up of stress testing guidelines and key required assumptions to perform stress testing which are in line with the sophistication of portfolio exposures. Meanwhile, Enterprise Risk Management Function is responsible to facilitate all related business units in order to perform periodically stress testing, and report the stress testing results as well as the recommendations on any important aspects to the Risk Management Committee and the Board of Director in a timely manner.

Stress testing shall take into account the potentially extreme events during the next twelve months, on all critical risk areas. Stress testing assessment and results shall be integrated into setting and evaluating the internal management strategy and capital planning which may involve reviewing the need for limit changes or developing contingency plans in the event that a stress scenario actually happens.

Risk Management Framework

In accordance with enterprise-wide risk management policies and objectives, risk management and internal control have been monitored and controlled by the Board of Directors of TISCO with the delegation to the Executive Board of Directors of TISCO. An effective management process has been established for assessing and managing all firm-wide risk exposures at both the portfolio and transactional levels to ensure the financial soundness and safety of TISCO. Senior Management and relevant business advisory committees oversee the entire risk management framework and strategy for all business areas supported by planning and budgeting function. Risk Management Committee, which supported by enterprise risk management, risk and business analytics, and operational risk management function, is set up to oversee that enterprise-wide risk management of the group is undertaken according to the same standard. Specific-area risk authorities are then established to manage in-depth, transaction-level risks in each particular area, such as the Credit Committee and Problem Loan Committee. These mechanisms are in turn supported by the Office of the Credit Committee and functions governing compliance and internal control and legal office in the parent company. Business lines are fully accountable for managing their own risks within the policy guidelines established by the Risk Management Committee and specific-area risk authorities. All the business operations are under the risk limit approved by the Risk Management Committee including new business analysis in each business line. Additionally, risk limits triggered as well as new businesses shall be reported monthly to the Risk Management Committee for acknowledgement. However, to enhance the overall risk management system, the risk management system shall be audited and reported to the Audit Committee.

The roles and responsibilities of the relevant committees and risk management authorities are described as follows:

- Board of Directors

The Board of Directors has assigned Executive Board the task of overseeing and monitoring risk management activities by reviewing and approving relevant policies and guidelines on an annual basis. This is achieved by setting risk limits and risk appetites, and ensuring the establishment of effective risk management systems and procedures in accordance with the standard practices of risk identification, assessment, monitoring and control, all of which are in line with the Audit Committee standards.

- Risk Management Committee

The Risk Management Committee of TISCO has been delegated from the Board of Directors charge of the formulation and implementation of enterprise-wide risk strategies and action plans in connection with risk management policies and guidelines. The Risk Management Committee meeting is regularly held once a month. Enterprise risk management, Risk and Business Analytics and Operational Risk Management functions in the parent company support the Risk Management Committee in setting up and monitoring risk management policies and guidelines and performing enterprise-wide risk management activities through a risk research and reporting process. Moreover, Risk Management Committee of TISCO has also been established in effective management and control of risks in various business units.

- Specific-Area Risk Authorities

Specific-area risk authorities are set up to address in-depth risk management and controls at the transaction level. Key specific-area risk authorities include the Credit Committee and Problem Loan Committees, which are in turn supported by the Office of the Credit Committee in overseeing credit approval and risk management. In addition, Executive board of Directors of the bank and Board of Directors of other credit-granting subsidiaries shall control and follow up all specific risk areas which are directly reported to the Board of Directors of the bank as well as the Board of Directors of TISCO Financial Group on a monthly basis.

Roles and Responsibilities of Internal Audit

The Audit Committee of TISCO Financial Group independently reviews the assessment of the adequacy of the TISCO Group's internal control system, as annually prepared by the Executive Board, in relation to the group's risks, and also reviews the policy and guidelines for internal audit as well as for the Compliance Committee and the Audit Committee of other subsidiaries to ensure that financial statement reports are transparent and accurate. The committee also effectively assesses that all business operations have adequate internal controls and are in compliance with laws and regulations, and reports the key issues to the Board of Directors of TISCO Financial Group for consideration. For other subsidiaries under the supervision of regulators, the Audit Committee, internal control and internal audit reporting process have been established in each company. The committee also effectively assesses that all business operations have adequate internal controls and are in compliance with laws and regulations.

The Internal Audit function is responsible for regular auditing of business operations in compliance with policies and guidelines, and reporting to the Audit Committee. Internal Audit also coordinates with management and relevant business units to improve the effectiveness of internal control systems.

Credit Risk

Credit Risk is defined as the possibility of an obligor's failure to meet the terms of any contract with TISCO as agreed or by defaulting on a loan agreement. Credit risk, if it occurs without pledged assets, requires the Bank to maintain higher provisions for loan losses, which will then adversely affect net income and TISCO Group's capital.

- Credit Risk Management Framework

The Risk Management Committee is delegated to oversee credit risk management of the corporate portfolio. The committee is responsible for formulating credit risk strategies and establishing guidelines and limits, as well as advising other credit risk authorities and retaining accountability on related issues. It also monitors and reviews credit risks at the portfolio level and reports essential credit risk information to the Board.

For Specific-Area credit risk, credit approval authority lies ultimately with the Executive Board, who delegates its daily decision-making authorities to appropriate Credit Risk Authorities e.g. the Credit Committee and/or Problem Loan Committee. The committees may further delegate parts of its decision-making authorities to suitable bodies or persons, provided that a well-defined credit approval guideline is established, reviewed and endorsed by the Executive Board.

Sound credit risk assessments are key risk practices at TISCO such as credit rating, delinquency analysis, concentration level and risk capital. All credit activities must operate under a sound credit granting process in which an effective credit grading system is employed. Estimated expected losses from credit exposures shall be fully covered with loan loss reserves while capital resource shall be sufficiently available to absorb unexpected credit losses. In consumer lending area, quantitative-oriented approaches to credit grading are advocated, considering its homogenous high-volume characteristics, with emphasis on the use of extensive data mining and analysis. In corporate lending area, qualitative-oriented credit grading approaches shall be employed, taken into account its highly varying risk profiles, with well-defined standard. The credit rating for capital calculation also based on the issuer ratings assigned by credit rating agencies, i.e., Standard & Poor's, Moody's Investors Service, Fitch Ratings, Fitch Ratings Thailand and TRIS Rating.

Concentration risks are also essential in credit portfolio risk management. Appropriate guidelines on concentration risks are set up considering appropriate business practice and company risk capital capacity.

TISCO uses credit risk management guidelines and limits that are comprehensively applied to all credit-related functions both at the portfolio and transaction levels. Credit risk factors are explained in detail as follows:

1. Default Risk

Definition of Default

Whenever one or both of the following events occur, a default is determined:

(1) TISCO deems that debtors are unable to repay fully according to the credit obligations, without consideration on payment that may receive from collateral. The following events constitute the debtor is unlikely to pay:

- (1.1) TISCO stop accrue interests of debtor
- (1.2) TISCO write-off or sets additional provisions as it deems that debtor is unable to repay or credit quality of debtor significantly deteriorates
- (1.3) TISCO have sold the credit obligation at a material credit-related economic loss.

(1.4) TISCO consent to a debt restructuring by material forgiveness or postponing principal, interest or fees as it deems that financial condition of debtor deteriorates

(1.5) TISCO have filed litigation against debtor

(1.6) Debtor has filed for protection under Bankruptcy law or other creditors have file bankruptcy against debtor, therefore delaying debt repayment to TISCO or

(2) Debtor has more than 90 day past due (principal or interest), or debtor is classified as substandard or lower according to the Notification of the Bank of Thailand Re: Criteria for Assets Classification and Provision of Commercial Bank.

TISCO has prudently managed non-performing loans (NPLs) with effective risk management tools and stringent practice of loan collection, debt restructuring and write-off process. TISCO has applied Collective Approach for loan loss provisioning to the car hire-purchase portfolio. The loan loss reserve was derived from the best estimate of expected credit losses from the portfolio over the next 12 months, based historical loss data incorporating with adjustment for the forecasted economic condition. Loan loss reserve of TISCO consists of specific reserve for classified loan and general reserve reflecting the prudent provisioning policy to mitigate potential risk.

2. Concentration Risk

Most of TISCO portfolio consists of hire purchase portfolio, of which concentration is very low. For the commercial loan portfolio, it was diversified into three different sectors: manufacturing and commerce, real estate and construction, and public utilities and services. There is slight concentration in real estate sector which has been managed under risk management procedure. However, commercial loan portfolios are almost fully collateralized. In loan approval process, appropriate proportion of collateral value and financing amount is maintained to ensure that risks were kept within a manageable level. Additionally, collateral values will be regularly appraised and effective loan drawdown procedure has been implemented. Portfolio credit quality was closely monitored.

3. Collateral Risk

Most of the total lending portfolio in TISCO was asset backed or with collateral. For the hire purchase portfolio, the underlying asset under the loan agreement itself is still owned by TISCO. In case the borrowers of hire purchase loans cannot meet the terms and conditions, TISCO can follow up and seize the underlying assets immediately. After repossession, the process of asset liquidation can be completed within one month.

A major risk factor in the hire purchase business depends on the market value of used cars. A substantial decrease in the market value of a used vehicle results in credit loss, which directly affects the net income and capital of TISCO. Market prices for used cars depend on such diverse factors as market demand, type, brand and tax regulations.

However, judging by past records, the recovery rate for asset liquidation in the secondary market was somewhat high at 70-90% of the remaining net financing amount, which helped in absorbing losses from defaulted loans. TISCO has attempted to minimize credit risk by regularly updating its information regarding trends in the used car market, requiring high-value collateral, sufficient down payment, and favoring well-known brands in the secondary market.

For commercial and mortgage loans, most collateral extended as loan guarantees was in the form of real estate, of which the value could be deducted for the purposes of loan loss provisioning. Collateral values were appraised according to BoT rules and regulations.

Generally, the risk of real estate value changes depends on economic conditions. A recession in the Thai economy might result in lower values, which would require TISCO to reserve higher loan loss provisions. Moreover, the legal process of collateral acquisition through related laws and enforcement is both costly and time consuming. However, all pending cases are closely monitored on a regular basis.

4. Property Risk from Foreclosed Assets

Property risk from foreclosed assets is the impairment of assets transferred from loans, hire purchase receivable on which debtors had defaulted on their repayment obligations under the loan contracts or restructured receivables.

Definition of Assets Impairment

Impairment of Assets means an exceeding of the carrying amount of an asset over its recoverable amount. TISCO assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, TISCO estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's fair value less costs to sell and its value in use. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by a valuation model that based on information available, reflects the amount that TISCO could obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the costs of disposal.

Impairment losses are recognized in the income statement. For assets other than goodwill, an assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, TISCO estimates the asset's recoverable amount. An impairment loss recognized in prior periods for an asset other than goodwill shall be reversed.

Credit Risk Exposures under Standardized Approach

In order to maintain the minimum capital requirement under Standardized Approach, External Credit Assessment Institution Rating (ECAI) has been applied for the corporate portfolio in 2010 in order to better reflect risk of client comparing with the risk weight of 100% has been applied for all TISCO corporate loans.

Credit Risk Exposures under Internal Rating Based Approach

Internal Rating Based (IRB) Phase Rollout Plan

As Basel II capital requirement has been effective since the end of June 2010, TISCO Group has adopted standardized approach (SA) for credit risk capital calculation in the first year and has been permitted from Bank of Thailand to rollout internal rating based approach (IRB) for credit risk capital calculation from the period of December 31, 2012. The detail of phase rollout plan which is approved from Bank of Thailand is as follow.

Credit Portfolio	Implementation Period
1. Hire Purchase Portfolio	Period of 31 December 2009
2. Corporate Loan Portfolio	Period of 31 December 2012
3. Auto Cash Portfolio	Period of 31 January 2016
4. Floor Plan Financing	Period of 31 January 2017
5. Other Commercial Lending	Period of 31 December 2020

Scope of Internal Rating System Implementation

TISCO Group has adopted IRB approach for the calculation of credit risk-weighted assets for hire purchase portfolio which is the major portfolio of TISCO Group since the period of 31 December 2009. The credit scoring systems are developed from statistical modeling and validated performance by independent unit.

TISCO Group regularly performs the credit scoring model validation process on quarterly basis to ensure the performance and consistency of scoring system, regarding to the market environment and risk characteristics of current customers. The validation result is reported to Risk Management Committee.

The credit grades resulted from the credit scoring models shall be used in credit risk-weighted assets following IRB approach. Moreover, the credit grades shall also be used in credit approval process, portfolio performance monitoring, loan loss provisioning and business strategic planning.

Furthermore, TISCO Group has also adopted foundation IRB approach for the calculation of credit risk-weighted assets for corporate loan portfolio since the period of 31 December 2012. The credit rating systems are developed from the cooperation of Credit Analyst and Risk Management functions and validated performance by independent unit.

TISCO Group regularly performs the validation process of corporate credit rating model on annual basis to ensure the integrity and consistency of rating system, regarding to the economic situation and firm-specific risk of current customers. The validation result is reported to Risk Management Committee.

The credit ratings resulted from the credit rating models shall be used in credit risk-weighted assets, employed the IRB function under Basel III. Additionally, the credit ratings shall also be used as the supplementary tool for credit approval process, portfolio performance monitoring and business strategic planning.

For year 2016, TISCO Group has adopted IRB approach for the calculation of credit risk-weighted assets for auto cash portfolio since the period of 31 January 2016. The credit scoring systems are developed following the frameworks as used in hire purchase portfolio. The credit scoring model validation process is performed on quarterly basis and the validation result is reported to Risk Management Committee.

The credit grades resulted from the credit scoring models shall be used in credit risk-weighted assets following IRB approach. Moreover, the credit grades shall also be used in credit approval process, portfolio performance monitoring, loan loss provisioning and business strategic planning.

Internal Rating Structure

Hire purchase and auto cash portfolios are retail credit portfolio which is managed as a portfolio pool. The credit scoring system is developed as a tool for portfolio management. The internal credit scorings for hire purchase and auto cash businesses comprise of two main scoring systems which are Application Credit Scoring to be used in loan origination process, and Behavior Credit Scoring to assess and monitor portfolio quality, maintain loan loss reserve, and calculate credit risk-weighted assets.

In loan origination process, the customer shall be generated the credit score and corresponding credit grade based on the customer’s characteristics data, combined with requested loan facilities. Meanwhile, the customer’s payment behavior shall be incorporated with customer characteristics and loan facilities to produce credit score and corresponding credit grade for portfolio monitoring and credit risk-weighted asset calculation. The behavior credit scoring system is classified into two major groups which are non-defaulted group and defaulted group. For non-defaulted group including Pass and Special Mention loan, credit grade of can be divided into 12 grades from 1 to 12 for hire purchase portfolio and divided into 8 grades from 1 to 8 for auto cash portfolio where an obligor of loan has credit worthiness and payment behavior to meet its financial commitments respectively from exceptional credit to poor credit, while for defaulted group including Sub-standard Doubtful and Doubt to Loss loan, credit grade can be divided into N2 which represents defaulted accounts with 4-6 overdue installments and N3 which represents defaulted accounts with overdue installments greater than 6.

Corporate loan portfolio is managed under the individual basis and the credit rating is applied to large corporate client applying all loan which portfolio managed based on individual client treatment. The internal credit rating for corporate loan portfolio comprises of two main rating systems which are Corporate Credit Rating to be applied to all corporate clients, and Specialized Credit Rating to be applied to the entity associated with the financing of individual projects where the repayment is highly dependent on the performance of the underlying collateral. Both Corporate and Specialized Credit Ratings shall be used in loan origination process and to monitor portfolio quality, and calculate credit risk-weighted assets.

For corporate credit rating, for non-defaulted group, the credit rating can be divided into 7 ratings from A1 to A7 where an obligor of loan has credit worthiness and payment behavior to meet its financial commitments respectively from exceptional credit to poor credit. Meanwhile, the credit rating of non-defaulted group under specialized credit rating can be divided into 4 ratings from S1 to S4 following the definition under the supervisory slotting criteria published by Bank of Thailand. For defaulted group of both corporate and specialized credit ratings, the credit rating can be divided into N2 and N3 under the same definition as described in the behavior credit scoring system of hire purchase portfolio.

Rating Assignment Process

For rating assignment of hire purchase and auto cash customers in credit approval process, customers shall be generated the credit score and corresponding credit grade based on the application credit scoring model through the loan origination system. Loan approval procedure and credit result is primarily based on credit grade results by loan origination system. For rating assignment to use in portfolio monitoring, provisioning and the calculation of credit risk-weighted asset, customers shall be generated credit score and corresponding credit grade based on the payment behavior using behavior credit scoring model.

For portfolio monitoring and provisioning, all hire purchase and auto cash customers shall be managed as a portfolio pool under the same management framework and credit scoring model. However, the hire purchase and auto cash customers, which are applied IRB approach to calculate credit risk-weighted assets using behavior credit scoring model, must be complied with BOT’s definition of retail exposures. For hire purchase and auto cash customers who are not qualified to the definition of retail exposures under IRB approach shall be adopted standardized approach (SA) for the calculation of credit risk-weighted assets.

For rating assignment of corporate loan customers, the credit rating shall be generated to the customer as a part of credit analysis process as done by the credit analysts The corporate loan customers which are applied IRB approach to calculate credit risk-weighted assets must be assigned the credit rating. The customers who are not required to be assigned the credit rating as defined regarding to the internal guideline shall be adopted standardized approach (SA) for the calculation of risk-weighted assets.

PD and LGD Estimation and Validation

TISCO Group clearly defines the definition of defaulted account for hire purchase and auto cash portfolios which is the account with overdue more than 3 installments or 90 days, repossessed account and legal account. Moreover, the definition of defaulted account also includes the account which classified in non-performing loan definition as sub-standard class, doubtful class or doubtful to loss class, according to the Bank of Thailand's notification.

For the estimation of Probability of Default (PDs) of hire purchase and auto cash portfolios, PD estimates are the long-term average of the historical one-year default rates and adding by a volatility rate of historical default rates as a margin of conservatism. The data range of historical one-year default rates used for PD estimation must be covered at least 5 years.

For the estimation of Loss Given Default (LGDs) of hire purchase and auto cash portfolios, LGD estimates must be the worst loss that can be happened under the worst but potential business environment under the sufficient conservative confidence level. The LGD estimates are derived based on the historical loss rates with the range of data to be at least 5 years.

PD and LGD estimates of hire purchase and auto cash portfolios must be regularly validated on quarterly basis. The estimates are validated through back-testing by comparing the estimates of each reporting period with the actual default rate and loss rate occurred in that reporting period.

For the validation of PD estimates, TISCO considers if the actual default rates are greater than the PD estimates, exceeding the acceptable limit. Should the back-testing result exceeded the defined limit, PD estimates shall be reviewed accordingly.

For the validation of LGD estimates, the actual loss rate shall not exceed the LGD estimates. Should the actual loss rate exceeded LGD estimates, the LGDs shall be reviewed immediately.

For corporate loan portfolio, the definition of defaulted account is defined as the client classified in nonperforming loan, according to the Bank of Thailand notification. Furthermore, the definition of default client also includes the restructured client whose lending terms has been modified because of a deterioration in the financial condition to reduce and renegotiate its delinquent debts in order to improve or restore liquidity and rehabilitate so that it can continue its operations.

Due to the low defaulted client data availability of corporate loan portfolio of TISCO Group, the statistical method for low default portfolio that can be used to estimate long run PDs with the conservative buffer under the limitation of the available default data has been adopted to estimate PDs with conservative cushion.

For the estimation of LGDs of corporate loan portfolio, TISCO Group has adopted the foundation IRB approach to calculate the risk-weighted assets. Thus, the LGDs used in the calculation must be the standard LGDs provided by the Bank of Thailand.

PD estimates of corporate loan portfolio must be regularly validated on annual basis. The estimates are validated through back-testing by comparing the average portfolio PD of each reporting period with the actual default for the portfolio occurred in that reporting period. The PD estimates, and credit rating systems if needed, shall be reviewed if the actual default rate of the portfolio is greater than the average portfolio PD, exceeding the acceptable limit.

Table 8 Assets Exposures and Off Balance Sheet Items before Credit Risk Mitigation

Unit : Million Baht

Items	31-Dec-16	31-Dec-15
1. Assets Exposures	**265,622.36**	**274,737.70**
1.1 Total Net Loan [1/]	256,674.94	262,403.92
1.2 Net Fixed Income Investment [2/]	5,636.64	10,514.67
1.3 Deposits (Including Accrued Interest)	3,310.78	1,819.11
2. Off Balance Sheet Items [3/]	**4,509.86**	**5,936.20**
2.1 Aval and Guarantee	992.95	1,103.42
2.2 OTC Derivative	1,200.00	1,200.00
2.3 Undrawn Committed Line	2,316.91	3,632.78

[1/] Including Accrued Interest and after Netting Unearned Income and Provision and Including Interbank and Money Market

[2/] Not Including Accrued Interest and after Netting of Impairment

[3/] Before Credit Conversion Factor

Table 9 Assets Exposures and Off Balance Sheet Items before Credit Risk Mitigation Classified by Country or Region

31-Dec-16

Unit : Million Baht

Country or Region	Assets Exposures				Off Balance Sheet Items 3/			
	Total	Total Net Loan 1/	Net Fixed Income Investment 2/	Deposits (Including Accrued Interest)	**Total**	Aval and Guarantee	OTC Derivative	Undrawn Committed Line
Thailand	**259,297.29**	251,166.60	5,222.48	2,908.22	**4,209.86**	992.95	900.00	2,316.91
Asia Pacific	**6,324.80**	5,508.35	414.16	402.28	-	-	-	-
America	**0.14**	-	-	0.14	-	-	-	-
Europe	**0.14**	-	-	0.14	**300.00**	-	300.00	-
TOTAL	**265,622.36**	**256,674.94**	**5,636.64**	**3,310.78**	**4,509.86**	**992.95**	**1,200.00**	**2,316.91**

31-Dec-15

Unit : Million Baht

Country or Region	Assets Exposures				Off Balance Sheet Items 3/			
	Total	Total Net Loan 1/	Net Fixed Income Investment 2/	Deposits (Including Accrued Interest)	**Total**	Aval and Guarantee	OTC Derivative	Undrawn Committed Line
Thailand	**268,634.88**	257,653.34	9,885.86	1,095.68	**5,636.20**	1,103.42	900.00	3,632.78
Asia Pacific	**6,102.54**	4,750.58	628.81	723.15	-	-	-	-
America	**0.10**	-	-	0.10	-	-	-	-
Europe	**0.18**	-	-	0.18	**300.00**	-	300.00	-
TOTAL	**274,737.70**	**262,403.92**	**10,514.67**	**1,819.11**	**5,936.20**	**1,103.42**	**1,200.00**	**3,632.78**

1/ Including Accrued Interest and after Netting Unearned Income and Provision and Including Interbank and Money Market

2/ Not Including Accrued Interest and after Netting of Impairment (but including unsettlement)

3/ Before Credit Conversion Factor

Table 10 Assets Exposures and Off Balance Sheet Items before Credit Risk Mitigation Classified by Remaining Maturity

Unit : Million Baht

Items	**31-Dec-16**			**31-Dec-15**		
	≤ 1 Year	> 1 Year	**Total**	≤ 1 Year	> 1 Year	**Total**
1. Assets Exposures			**265,622.36**			**274,737.70**
1.1 Total Net Loan 1/	51,976.49	204,698.46	**256,674.94**	44,286.74	218,117.19	**262,403.92**
1.2 Net Fixed Income Investment 2/	4,532.07	1,104.56	**5,636.64**	8,456.27	2,058.39	**10,514.67**
1.3 Deposits (Including Accrued Interest)	3,310.78		**3,310.78**	1,819.11	-	**1,819.11**
2. Off Balance Sheet Items 3/			**4,509.86**			**5,936.20**
2.1 Aval and Guarantee	503.92	489.04	**992.95**	632.12	471.30	**1,103.42**
2.2 OTC Derivative	-	1,200.00	**1,200.00**	-	1,200.00	**1,200.00**
2.3 Undrawn Committed Line	189.03	2,127.88	**2,316.91**	76.35	3,556.43	**3,632.78**

1/ Including Accrued Interest and after Netting Unearned Income and Provision and Including Interbank and Money Market, General Provision is netted in the total

2/ Not Including Accrued Interest and after Netting of Impairment (but including unsettlement)

3/ Before Credit Conversion Factor

Table 11 Loan Exposures including Accrued Interest and Fixed Income Investment before Credit Risk Mitigation Classified by Country or Region following BoT Asset Classification

31-Dec-16

Unit : Million Baht

Country or Region	Loan Exposures including Accured Interest [1/]						Fixed Income Investmnet
	Pass	Special-Mentioned	Sub-Standard	Doubtful	Doubtful of Loss	Total	Doubtful of Loss
Thailand	202,776.00	16,968.00	2,775.00	1,546.00	1,389.00	225,454.00	1.46

31-Dec-15

Unit : Million Baht

Country or Region	Loan Exposures including Accured Interest [1/]						Fixed Income Investmnet
	Pass	Special-Mentioned	Sub-Standard	Doubtful	Doubtful of Loss	Total	Doubtful of Loss
Thailand	214,003.00	17,098.00	2,989.00	2,158.00	2,554.00	238,802.00	1.46

[1/] Including Interbank and Money Market Exposures with Accrued Interest

Table 12 Provision (General Provision and Specific Provision) and Write-Off Amount during The Year for Loan including Accrued Interest and Fixed Income Investment Classified by Country or Region

31-Dec-16

Unit : Million Baht

Country or Region	Loan Exposures including Accured Interest [1/]			Fixed Income Investmnet
	General Provision	Specific Provision	Write-Off Amount during The Year	Specific Provision
Thailand		4,910.00	4,285.00	1.46
Total	**3,074.00**	**4,910.00**	**4,285.00**	**1.46**

31-Dec-15

Unit : Million Baht

Country or Region	Loan Exposures including Accured Interest [1/]			Fixed Income Investmnet
	General Provision	Specific Provision	Write-Off Amount during The Year	Specific Provision
Thailand		5,037.00	7,870.00	1.46
Total	**1,131.00**	**5,037.00**	**7,870.00**	**1.46**

[1/] Including Provision and Write-Off Account for Interbank and Money Market with Accrued Interest

Table 13 Loan Exposures including Accrued Interest* before Credit Risk Mitigation Classified by Type of Business and BoT Asset Classification

31-Dec-16

Unit : Million Baht

Type of Business	Pass	Special-Mentioned	Sub-Standard	Doubtful	Doubtful of Loss	**Total**
- Agricultural and Mining	428.00	31.00	12.00	7.00	1.00	**479.00**
- Manufacturing and Commerce	18,428.00	1,126.00	155.00	66.00	117.00	**19,892.00**
- Real Estate and Construction	13,418.00	123.00	38.00	23.00	22.00	**13,624.00**
- Public Utilities and Services	27,904.00	351.00	320.00	86.00	146.00	**28,807.00**
- Housing Loan	840.00	50.00	26.00	16.00	49.00	**981.00**
- Hire Purchase	120,298.00	13,358.00	1,864.00	1,169.00	1,023.00	**137,712.00**
- Others	21,461.00	1,929.00	361.00	179.00	30.00	**23,960.00**
Total	**202,777.00**	**16,968.00**	**2,776.00**	**1,546.00**	**1,388.00**	**225,455.00**

31-Dec-15

Unit : Million Baht

Type of Business	Pass	Special-Mentioned	Sub-Standard	Doubtful	Doubtful of Loss	**Total**
- Agricultural and Mining	547.00	11.00	7.00	1.00	1.00	**567.00**
- Manufacturing and Commerce	21,062.00	307.00	137.00	66.00	898.00	**22,470.00**
- Real Estate and Construction	13,404.00	105.00	33.00	29.00	42.00	**13,613.00**
- Public Utilities and Services	25,511.00	328.00	191.00	86.00	81.00	**26,197.00**
- Housing Loan	1,091.00	54.00	17.00	8.00	56.00	**1,226.00**
- Hire Purchase	133,611.00	14,543.00	2,227.00	1,782.00	1,418.00	**153,581.00**
- Others	18,804.00	1,723.00	377.00	186.00	58.00	**21,148.00**
Total	**214,030.00**	**17,071.00**	**2,989.00**	**2,158.00**	**2,554.00**	**238,802.00**

* Including Interbank and Money Market with Accrued Interest

Table 14 Provision (General Provision and Specific Provision) and Write-Off Amount during The Year for Loan including Accrued Interest* Classified by Type of Business

Unit : Million Baht

Type of Business	31-Dec-16			31-Dec-15		
	General provision	Specific provision	Write-Off Amount during The Year	General provision	Specific provision	Write-Off Amount during The Year
- Agricultural and Mining		19.00			8.00	
- Manufacturing and Commerce		590.00			573.00	
- Real Estate and Construction		71.00			74.00	
- Public Utilities and Services		428.00			247.00	
- Housing Loan		27.00			27.00	
- Hire Purchase		3,012.00			3,286.00	
- Others		763.00			822.00	
Total	**3,074.00**	**4,910.00**	**4,285.00**	**1,131.00**	**5,037.00**	**7,870.00**

* Including Interbank and Money Market with Accrued Interest

Table 15 Reconciliation of Change in Provision for Asset Classification

Unit : Million Baht

Items	31-Dec-16			31-Dec-15		
	General provision	Specific provision	**Total**	General provision	Specific provision	**Total**
Balance - Beginning of Year	1,131.00	5,037.00	**6,168.00**	2,826.00	4,124.00	**6,950.00**
Bad Debt Written-Off		- 4,285.00	**- 4,285.00**		- 7,870.00	**- 7,870.00**
Increase (Decrease) in Provision during The Year	1,943.00	4,158.00	**6,101.00**	- 1,695.00	8,783.00	**7,088.00**
Balance - End of Year	**3,074.00**	**4,910.00**	**7,984.00**	**1,131.00**	**5,037.00**	**6,168.00**

Table 16 Assets Exposures and Credit Equivalent Amount of Off Balance Sheet Items* Classified by Asset Classes under SA Approach

Unit : Million Baht

Assets Type	31-Dec-16			31-Dec-15		
	On Balance Sheet	Off Balance Sheet**	Total	On Balance Sheet	Off Balance Sheet**	Total
1. Performing						
1.1 Claims on Sovereign and Central Bank and Multilateral Development Bank and Public Sector Entities treated as Claims on Sovereign	6,579.62	-	**6,579.62**	10,649.96	-	**10,649.96**
1.2 Claims on Financial Institutions and Public Sector Entities treated as Claims on Financial Institutions and Securities Company	36,285.73	60.00	**36,345.73**	30,816.97	60.00	**30,876.97**
1.3 Claims on Corporate and Public Sector Entities treated as Claims on Corporate	16,419.13	64.54	**16,483.67**	18,431.49	436.59	**18,868.08**
1.4 Claims on Retail	11,126.02	1.54	**11,127.56**	26,209.58	16.34	**26,225.92**
1.5 Claims on Residentail Property	818.21	-	**818.21**	1,092.78	0.06	**1,092.84**
1.6 Other Assets	-	-	-	-	-	-
2. Non-performing	733.45	-	**733.45**	710.60	-	**710.60**
Total	**71,962.14**	**126.08**	**72,088.23**	**87,911.39**	**513.00**	**88,424.38**

* After Credit Conversion Factor and Specific Provision

** Including Repo-Style Transaction and Reverse repo

Table 17 Assets Exposures and Credit Equivalent Amount of Off Balance Sheet items* Classified by Asset Classes under IRB Approach

Unit : Million Baht

Assets Type	31-Dec-16			31-Dec-15		
	On Balance Sheet	Off Balance Sheet**	Total	On Balance Sheet	Off Balance Sheet**	Total
1. Non-Default	**198,952.48**	**2,295.20**	**201,247.68**	**193,019.49**	**3,019.55**	**196,039.04**
1.1 Corporate Lending	34,530.29	2,295.20	**36,825.49**	31,477.27	3,019.55	**34,496.82**
1.2 Hire Purchase	155,906.14	-	**155,906.14**	153,042.81	-	**153,042.81**
1.3 Equity Exposures	2,127.57	-	**2,127.57**	1,899.98	-	**1,899.98**
1.4 Other Assets	6,388.48	-	**6,388.48**	6,599.43	-	**6,599.43**
2. Default	**3,223.78**	-	**3,223.78**	**4,516.79**	-	**4,516.79**
Total	**202,176.26**	**2,295.20**	**204,471.46**	**197,536.28**	**3,019.55**	**200,555.83**

* After Credit Conversion Factor and Specific Provision

** Including Repo-Style Transaction and Reverse repo

Table 18 Assets Exposures and Off Balance Sheet Items* after Credit Risk Mitigation in each Assets Type Classified by Risk Weight under Standardised Approach

Unit : Million Baht

Assets Type	**31-Dec-16**													
	Exposures with Rating					Exposures without Rating								
Risk Weight (%)	0	20	50	100	150	0	20	50	35	75	100	625	937.5	100/8.5%
Performing														
1 Claims on Sovereign and Central Bank and Multilateral Development Bank and Public Sector Entities treated as Claims on Sovereign	6,235.68		-	414.16										
2 Claims on Financial Institutions and Public Sector Entities treated as Claims on Financial Institutions and Securities Company	30.30	1,430.30	1,608.23											
3 Claims on Corporate and Public Sector Entities treated as Claims on Corporate	934.69		0.93								13,294.31			
4 Claims on Retail						408.62				9,993.24	716.10			
5 Claims on Residentail Property									799.03	-	19.17			
6 Other Assets														
Risk Weight (%)	0	20	50	100	150					75				
Non-performing [1/]			166.55	488.80	78.10									
Exposures to be Deducted from Capital	-													

Unit : Million Baht

Assets Type	**31-Dec-15**													
	Exposures with Rating					Exposures without Rating								
Risk Weight (%)	0	20	50	100	150	0	20	50	35	75	100	625	937.5	100/8.5%
Performing														
1 Claims on Sovereign and Central Bank and Multilateral Development Bank and Public Sector Entities treated as Claims on Sovereign	11,081.90		628.81											
2 Claims on Financial Institutions and Public Sector Entities treated as Claims on Financial Institutions and Securities Company	182.18	1,746.40	2,405.03											
3 Claims on Corporate and Public Sector Entities treated as Claims on Corporate	630.16		2.35								15,345.81			
4 Claims on Retail						317.75				25,036.27	871.89			
5 Claims on Residentail Property									1,063.24	0.06	29.54			
6 Other Assets														
Risk Weight (%)	0	20	50	100	150					75				
Non-performing [1/]			202.19	483.62	24.80									
Exposures to be Deducted from Capital	-													

* After Credit Conversion Factor

[1/] For Non Credit Risk Mitigation, Risk Weight is based on the Provision Set up

Table 19 Credit Risk Assessment Information under IRB Approach for Corporate Exposures

31-Dec-16 Unit : Million Baht

Type of Retail Exposures	Non-Defaulted Group			Default Group		
	EAD[1/] (MM)	Ø PD[2/] (%)	Ø RW[3/] (%)	EAD[1/] (MM)	Ø PD[2/] (%)	Ø RW[3/] (%)
Corporate Lending	21,988.59	2.17%	56.28%	-	100.00%	0.00%
Specialized Lending	15,351.39	N.A.	75.82%	-	N.A.	0.00%
Total	**37,339.97**		**64.31%**	-		

31-Dec-15 Unit : Million Baht

Type of Retail Exposures	Non-Defaulted Group			Default Group		
	EAD[1/] (MM)	Ø PD[2/] (%)	Ø RW[3/] (%)	EAD[1/] (MM)	Ø PD[2/] (%)	Ø RW[3/] (%)
Corporate Lending	19,087.83	1.98%	50.69%	821.36	100.00%	0.00%
Specialized Lending	15,557.88	N.A.	78.32%	-	N.A.	0.00%
Total	**34,645.71**		**63.10%**	**821.36**		

[1/] The net amount after CRM of total outstanding amount of on-balance sheet items and credit converted amount of off-balance sheet items

[2/] Ø PD is EAD-weighted average of PD, Downturn PD based on IRB capital calculation

[3/] Ø RW is EAD-weighted average of risk weighted asset

Table 20 Credit Risk Assessment Information under IRB Approach for Hire Purchase (Pooled basis)

31-Dec-16 Unit : Million Baht

Type of Retail Exposures	Non-Defaulted Group				Defaulted Group			
	EAD[1/] (MM)	Ø PD[2/] (%)	Ø RW[3/] (%)	Ø LGD [4/] (%)	EAD[1/] (MM)	Ø PD[2/] (%)	Ø RW[3/] (%)	Ø LGD [4/] (%)
Hire Purchase	140,591.79	4.41%	59.23%	45.99%	3,909.11	100.00%	208.40%	47.19%
Auto Cash	17,524.13	8.09%	76.20%	49.58%	386.52	100.00%	187.67%	49.58%
Total	**158,115.92**	**4.81%**	**61.11%**	**46.39%**	**4,295.64**	**100.00%**	**206.53%**	**47.40%**

31-Dec-15 Unit : Million Baht

Type of Retail Exposures	Non-Defaulted Group				Defaulted Group			
	EAD[1/] (MM)	Ø PD[2/] (%)	Ø RW[3/] (%)	Ø LGD [4/] (%)	EAD[1/] (MM)	Ø PD[2/] (%)	Ø RW[3/] (%)	Ø LGD [4/] (%)
Hire Purchase	154,761.23	4.04%	51.22%	42.75%	5,182.34	100.00%	208.69%	44.42%
Total	**154,761.23**	**4.04%**	**51.22%**	**42.75%**	**5,182.34**	**100.00%**	**208.69%**	**44.42%**

[1/] The net amount after CRM of total outstanding amount of on-balance sheet items and credit converted amount of off-balance sheet items

[2/] Ø PD is EAD-weighted average of PD, Downturn PD based on IRB capital calculation which is conservatively bias
, PD under capital calculation is much higher than the long-term average PD or actual PD

[3/] Ø RW is EAD-weighted average of risk weighted asset

[4/] Ø LGD is EAD-weighted average of LGD, Downturn LGD based on IRB capital calculation which is conservatively bias
and much higher than the actual LGD

Table 21 The Net Amount after CRM of Total Outstanding Amount and Off-balance Sheet Amount after CCF under IRB Approach Classified by Expected Loss Rating

Type of Retail Exposures	31-Dec-16				31-Dec-15			
	Non-Defaulted Group		Defaulted Group		Non-Defaulted Group		Defaulted Group	
	EAD	EL[1/] (%)	EAD	EL[1/] (%)	EAD	EL[1/] (%)	EAD	EL[1/] (%)
Hire Purchase	140,591.79	2.10%	3,909.11	30.52%	154,761.23	1.81%	5,182.34	27.72%
Auto Cash	17,524.13	4.01%	386.52	34.57%				
Total	**158,115.92**	**2.31%**	**4,295.64**	**30.88%**	**154,761.23**	**1.81%**	**5,182.34**	**27.72%**

[1/] $\Sigma EL_i \div \Sigma EAD_i$

EL is estimated based on capital calculation under IRB approach, Downturn EL, which is conservatively bias and higher than the estimated EL under normal situation

Table 22 The Net Amount after CRM of Total Outstanding Amount of Specialized Lending under IRB Approach adopting Supervisory Slotting Criteria Classified by %Risk Weight

Unit : Million Baht

Supervisory Grade	%Risk Weight	EAD[1/] (MM)	
		31-Dec-16	31-Dec-15
Excellent	70%	10,325.42	9,232.28
Excellent*	50%	-	-
Good	90%	4,527.04	5,227.61
Good*	75%	-	-
Satisfactory	115%	292.68	884.16
Weak	250%	-	-
Default	0%	-	-
Total		**15,145.15**	**15,344.04**

[1/] The net amount after CRM of total outstanding amount of specialized lending

Table 23 Actual Loan Losses of IRB Bank Classified by Asset Type

Unit : Million Baht

Assets Type	Actual Loss	
	31-Dec-16	31-Dec-15
Hire Purchase	1,485.02	1,669.20
Auto Cash	175.63	290.26
Total	**1,660.65**	**1,959.47**

Table 24 Comparison of Expected Loss and Actual Loan Losses

Unit : Million Baht

Assets Type	31-Dec-16		31-Dec-15	
	Expected loss[1/]	Actual Loss	Expected loss	Actual Loss
Hire Purchase	4,150.00	1,485.02	4,239.40	1,669.20
Auto Cash	836.13	175.63		290.26
Total	**4,986.13**	**1,660.65**	**4,239.40**	**1,959.47**

[1/] Expected loss is estimated based on Basel II - IRB approach, Downturn EL

Which is incredibly higher than the Actual Loss as well as its Historical Average

Credit Risk Mitigation

Based on the Basel III minimum capital requirement under Standardized Approach and Foundation Internal Rating Based Approach, Credit Risk Mitigation (CRM) has become effective in obtaining capital relief. Currently in TISCO, only financial collateral and guarantee are considered applied eligible collaterals following the Bank of Thailand's rules and regulation under CRM process. In addition, TISCO still has no policy to adopt netting agreements in both on and off balance sheet under CRM process.

Table 25 Assets Exposures Covered with Collateral under Standardised Approach Classified by Type of Collateral

Unit : Million Baht

Assets Type	31-Dec-16		31-Dec-15	
	Financial Collateral [1/]	Guarantee and Credit Derivative	Financial Collateral [1/]	Guarantee and Credit Derivative
1. Performing				
1.1 Claims on Financial Institutions and Public Sector Entities treated as Claims on Financial Institutions and Securities Company	70.22	-	1,060.75	-
1.2 Claims on Corporate and Public Sector Entities treated as Claims on Corporate	1,129.97	1,123.76	1,457.19	1,432.57
1.3 Claims on Retail	9.60	-	-	-
2. Non-performing	-	-	-	-
Total	**1,209.79**	**1,123.76**	**2,517.94**	**1,432.57**

[1/] Eligible Financial Collateral after Haircut

Table 26 Assets Exposures Covered with Collateral under IRB Approach Classified by Type of Collateral

Unit : Million Baht

Assets Type	31-Dec-16		31-Dec-15	
	Financial Collateral [1/]	Guarantee and Credit Derivative	Financial Collateral [1/]	Guarantee and Credit Derivative
Performing				
1 Corporate Lending	2,782.25	-	2,573.91	5.52
2 Specialized Lending	-	206.24	0.37	213.47
Total	**2,782.25**	**206.24**	**2,573.91**	**218.99**

[1/] Eligible Financial Collateral after Haircut

Most of TISCO's eligible collateral applied under CRM process consists of Government Bond, TISCO's Negotiable Certificate of Deposit (NCD) and Bill of Exchange (BE), and Listed Equity where the appraisal value has been performed regularly following the Bank of Thailand guideline. Moreover, positive correlation of the collateral shall be assessed and reviewed in order to ensure the effectiveness of credit risk mitigation.

Market Risk

An effective market risk management has been established by adopting the risk management policy approved by the Risk Management Committee, supported by enterprise risk management function in order to ensure appropriate application of the policy in all functions.

In accordance with the market risk capital requirement based on the Bank of Thailand's rules and regulations, since the trading book position of TISCO is still below the minimum thresholds, TISCO is required to maintain its capital to support the market risk only for the element that cover the price risk of commodities related product. However, internal market risk assessments including all positions related to price and interest rate change has been performed to ensure the effective market risk management still in place.

Table 27 Minimum Capital Requirement for Market Risk under Standardised Approach

Unit : Million Baht

Minimum Capital Requirement for Market Risk under SA	31-Dec-16	31-Dec-15
1. Interest Rate Risk	-	-
2. Equity Price Risk	-	-
3. Foreign Exchange Rate Risk	-	-
4. Commodity Price Risk	45.06	41.95
Total	**45.06**	**41.95**

Equity Exposures in Banking Book

Market risk of equity in banking book stems from adverse changes in securities prices, which directly affect net income, capital, asset value, and liabilities of TISCO.

- Market Risk Management in Equity Framework

Risk Management Committee is responsible to oversee the portfolio risk management and control of market risks. The business lines are accountable to manage market risks in their portfolios within the guidelines and limits set by the Risk Management Committee. Specific-Purpose Risk Authorities have been established in high-risk areas to oversee all aspects of transaction-level risks, such as setting investment guidelines, authorizing investment transactions and trade counterparties etc.

Market exposures shall be grouped appropriately according to the nature and characteristics of risks involved. Suitable risk treatment framework shall be implemented to effectively manage each class of market exposures. Portfolio market risks of all assets and liabilities shall be assessed and quantified using the Value-at-Risk (VaR) concept employing methodologies and techniques appropriate to the nature of risks involved. Back-testing has been prudently performed to validate internal value-at-risk model. In addition, Stress testing in place as a supplement to VaR is performed under various extreme scenarios. The risk assessment and corresponding risk treatment has taken into account the transaction intent as well as the market liquidity of the securities.

Sophisticated market risk positions, such as derivatives securities, shall be handled with special attention. Derivative risks must be decomposed into basic risks and analyzed such that the inherent risk profile is clearly understood. In addition, derivative risk management policy has been set up in order to effectively control and manage risks from derivative transactions with appropriation to complexity of the derivative. Important market risk factors are provided as follows:

(1) Listed Equity Risk

The vulnerability of market price will directly affect listed equity investment portfolio in available-for-sale book in which a change in its value would impact the equity through unrealized gains or losses and would impact the net profit once the equity sold.

TISCO calculates VaR for risk assessment purposes and files reports to management in charge as well as to the Risk Management Committee on a daily basis. VaR is a maximum potential loss at a predefined confidence level at 99% and time horizon. For effective risk management and control, trigger limits have been set up to monitor the overall market risk profile according to internal guidelines, such as concentration trigger limit, stop-loss trigger limit, etc.

(2) Non-Listed Equity Risk

Presently, our investment strategy is not to increase the size of the non-listed equity portfolio. TISCO is instead seeking opportunities to liquidate them, while at the same time closely monitoring portfolio quality on a regular basis.

Policy in Determining Fair Value of Financial Instruments

A fair value is the amount for which an asset can be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction.

In determining the fair value of financial instruments that are not actively traded and for which quoted market prices are not readily available, the business units exercise judgment, using a variety of valuation techniques and models. The input to these models is taken from observable markets, and includes consideration of liquidity, correlation and long-term volatility of financial instruments.

In determining the fair value of financial instruments, the estimate fair value will be adjusted by reserve with respective risk. For financial instruments with duration of one year or less, the book value represents a reasonable estimate of fair value. For financial instruments with duration greater than one year, fair value was determined based on the quoted market prices, where available, or otherwise based on present values of contractual cash flows, discounted using rates at which financial instruments with similar features and maturities could be issued as of the balance sheet date.

The methods and assumptions used by TISCO in estimating the fair value of financial instruments are as follows:

- For financial assets and liabilities which have short-term maturities or carry interest at rates approximating the market rate, including cash, interbank and money market items (assets), securities and derivatives business receivables, receivable from clearing house, deposits, interbank and money market items (liabilities), liabilities payable on demand, payable to clearing house, and securities and derivative business payables, the carrying amounts in the balance sheet approximate their fair value.
- The fair value of debts and equity securities is generally derived from quoted market prices, or based on generally accepted pricing models when no market price is available.
- Loans and accrued interest, except for hire purchase receivables and other retail loans, are presented at fair value which is the book value less allowance for doubtful accounts, since most loans carry interest at floating rates. Hire purchase receivable and other retail loans are presented at fair value, which is the present value of future cash inflows, discounted by the current interest rate for new loans.
- The fair value of debentures and borrowings is estimated by discounting expected future cash flow by the current market interest rates of the borrowings with similar terms and conditions.
- The fair value of derivatives is based on the market price, or a formula which is generally accepted in cases where there is no market price.

The fair value of the other off balance sheet items cannot be reasonably determined and thus it has not been disclosed.

Table 28 Equity Exposures in Banking Book

Unit : Million Baht

Equity Exposures	31-Dec-16	31-Dec-15
1. Equity Exposures		
1.1 Listed Equity Exposures (Both Domestic and Foreign)		
- Cost Value	320.30	311.00
- Market Value	405.00	335.00
1.2 Other Equity Exposures (Both Domestic and Foreign)	1,247.00	1,248.00
2. Profit (Loss) from Sale of Equity during The Period	1.00	105.00
3. Revaluation Surplus (Deficit) from Available for Sale of Equity	137.00	197.00
4. Minimum Capital Requirement for Equity Exposures under IRB	237.29	197.72
5. Equity Exposure under IRB with Exemption to Calculate under Standardised Approach	2,127.57	1,899.98

Interest Rate Risk in Banking Book

Interest rate risk in banking book is considered an impact to the vulnerability of earnings and economic value including assets and liabilities profile whenever there is a change in interest rate both on and off balance sheet position.

- Interest Rate Risk in Banking Book Management Framework

Interest rate risk occurs whenever there is a mismatch in the re-pricing period of assets and liabilities. A movement in the level of interest rates may lead to higher borrowing costs when compared to earnings, resulting in lower interest rate income, which in turn influences TISCO's income and capital. The Risk Management Committee also acts as the Assets and Liabilities Management Committee (ALCO), which is responsible for managing and maintaining interest rate risk at an appropriate level.

Under the TISCO internal model in assessing interest rate risk in banking book, the risk has been measured on a monthly basis by applying the appropriate assumptions in order to estimate the interest rate movement and applying the concept of Value at Risk to calculate the possible impact to TISCO earnings at confident level of 99%.

Table 29 Impact from Change in Interest Rate* to Earnings

Unit : Million Baht

Currency	Impact to Earnings	
	31-Dec-16	31-Dec-15
Baht	10.29	(287.99)
USD	-	-
EURO	-	-
Others	-	-
Total Impact to Earnings	**10.29**	**(287.99)**

* Change in Interest Rate of 100 bps

Operational Risk

Reference is made to the definition given by Basel Committee on Banking Supervision of the Bank for International Settlements and in accordance with the Policy Statement of the Bank of Thailand in regard to the Operational Risk Management. Operation Risk is defined as the vulnerability of earnings, capital, or business continuity due to inadequate or deficient or failed internal processes, people, technology or external factors including the legal risk and fraud risk. The impact can be classified into financial loss and non-financial loss as reputational damage and business opportunity losses. TISCO Group well realizes that the operational risk is one of the risks those may significantly impact to the business undertaking of TISCO Group. Thereby, TISCO Group puts more emphasis on the operational risk management and continuously develops the operational risk management programs and processes with an aim to minimize the possible operational risks.

- Operational Risk Management Framework

The operational risk management policy is set by TISCO Financial Group Public Company Limited and coherently adopted across all subsidiary companies in TISCO Group. Operational Risk Management function performs duties in supporting and impelling all functions in proceeding operations in accordance with the framework stipulated in the operational risk management policy as well as providing assurance on the adequate control systems established for each business under risk-return perspectives. Compliance functions shall have duty in overseeing all functions to operate in compliance with the rules and regulations of the supervisory authorities. Internal Audit function shall independently conduct audit process and provide assurance on the internal control system and whole risk management processes under the supervision of the Audit Committee.

Pursuant to the operational risk management process of the TISCO Group, it starts from the establishment of operational risk management culture by building control awareness to all business units and educating them in regard to the stipulations according to the operational risk management framework for thorough understanding and perception. For practicing as risk owner, all functions shall have to participate and take accountabilities in managing operational risk of functions under their supervision. Operational Risk Assessment is annually conducted by relevant functions with the participation and support of Operational Risk Management function. According to this process, the key operational risk would be identified together with the assessment on the control effectiveness. The remedial action plan would be subsequently determined in order to mitigate the revealed residual risks or prevent the incurrence of possible risks for probably containing them within the acceptable risk level appropriate to each business (Risk and Control Self-Assessment). The result of the risk assessment in corporate level would be reported to the Risk Management Committee and the Audit Committee for acknowledgement.

In regard to the incident management process, TISCO Group has arranged the supporting system to log and track the incidents. The purpose of the system arrangement is aimed to have the systematic and integrated remedial process with monitoring control for timely response. Other than that, the incident and loss database would be gathered to make analysis for mitigating repeated risks for monitoring purpose in order to minimize the error rate or enhance the operational efficiency. The overall results of the incident incurrence within TISCO Group as well as the notable operational incidents would be reported to the relevant committees for acknowledgement and determination of remedial actions as deemed appropriate.

In current environment, the trend of fraud incurrence including cyber-crime attack is dramatically increasing. TISCO Group has always alerted and proactively prepared to properly respond any threats including but not limited to the various patterns of possible fraud those may possibly impact to business either in form of the financial or reputational losses or whatever impacts. Thereby, the fraud risk management process has been set up. Pursuant to this fraud risk management process, all possible fraud risk scheme shall be identified to assess the occurrence possibility and the impact level to the TISCO Group. The effectiveness of control systems those being implemented for risk mitigation shall be measured to evaluate the residual risks and determine the proper fraud response plan to mitigate risks to be in the acceptable level. Additionally, TISCO has also established the suspicious transaction monitoring process that cover all irregularities possibly incurred in each single business unit in order to have prudent investigation on the appropriateness of transactional execution. In regard to cyber-crime attack, the TISCO Group has studied the potential cyber-crime attack possibly impacted to the business undertaking or damage to the assets of the organization, educated all related employees to build awareness and understanding on cyber-attack and prepare readiness for incident handling as well as the determination of preventive measures and the supporting plan when TISCO got impact from such event.

Whereas the TISCO Group undertakes financial businesses and provides financial services to customers, the continuity of business undertaking in order not to disrupt the services provision to the customers is crucial. TISCO has well developed and proactively prepared readiness for every system and process relating to critical businesses in order to ascertain the continuous business operations (Business Continuity Plan) without disruption. Within the Business Continuity Plan, it also covers the process for recovering the system especially for critical systems. The risk from business disruption shall be managed as business continuity management instead of contingency management with the development or enhancement of IT infrastructure or platform. The actions according to the Business Continuity Plan is subject to regular test to make all relevant business units perceive and understand their roles and responsibilities and actions required to be taken whenever disaster incurs. In addition, TISCO has realized the severity of several impacts those may affect the safety of employees, customers, counterparties or other relevant parties, thereby, the Emergency Plan has been established as an integral part of the Business Continuity Plan to determine appropriate action plans for managing various emergency situations exposed from external events with the primary objective to secure the safety and minimize possible losses. In order to support and enhance the efficiency of the proceeding in accordance with the Business Continuity Plan, TISCO Group has determined communication plan and channels for communication between managements and employees including the communicating channels with the external parties in order to convey the situation updates and the corporate action plans to all relevant persons in the timely manner.

Besides, TISCO Group has expanded its businesses into various aspects in both extending the existing businesses as well as setting up new businesses resulting in increase in operational risk. The risks inherent in new businesses and significant changes were analyzed and managed to assure that any possible risks were contained within acceptable level in compliance with TISCO New Business Guideline.

Composition of capital disclosure requirements

Attachment 1

Main features of regulatory capital instruments

	Subject	Description						
1	Issuer	TISCO Financial Group Public Company Limited						
2	Unique identifier	TISCO22DA	TISCO223A	TISCO241A	TISCO242A	TISCO256A	TISCO25DA	TISCO268A
	BOT's regulatory treatment							
3	Instrument type (CET 1 / Tier 1 / Tier 2)	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
4	Qualified as capital under Basel III	Not qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
5	If not, specify unqualified feature as per the Basel III regulation	No loss absorption at the point of non-viability, but exempt as per the BOT's notification	-	-	-	-	-	-
6	Recognised as capital partially or in full	partially recognised	Fully regcognised	Fully regcognised	Fully regcognised	Fully regcognised	Fully regcognised	Fully regcognised
7	Eligible at solo/ group / group & solo	Group & Solo	Group & Solo	Group & Solo	Group & Solo	Group & Solo	Group & Solo	Group & Solo
8	Amount recognised in regulatory capital (Unit: million baht)	1,243 MM baht	1,000 MM baht	1,600 MM baht	800 MM baht	1,000 MM baht	1,000 MM baht	680 MM baht
9	Par value of instrument (Unit: baht)	1,000 baht	1,000 baht	1,000 baht	1,000 baht	1,000 baht	1,000 baht	1,000 baht
10	Accounting classification	Financial liabilities stated at amortised cost	Financial liabilities stated at amortised cost	Financial liabilities stated at amortised cost	Financial liabilities stated at amortised cost	Financial liabilities stated at amortised cost	Financial liabilities stated at amortised cost	Financial liabilities stated at amortised cost
11	Original date of issuance	December 19, 2012	March 9, 2012	January 29, 2014	February 19, 2014	June 5, 2015	December 17, 2015	August 10, 2016
12	Perpetual or dated	Dated	Dated	Dated	Dated	Dated	Dated	Dated
13	Original maturity date	December 19, 2022	March 9, 2022	January 29, 2024	February 19, 2024	June 5, 2025	December 17, 2025	August 10, 2026
14	Issuer call subject to prior supervisory approval	Issuer call option with BOT's prior approval	Issuer call option with BOT's prior approval	Issuer call option with BOT's prior approval	Issuer call option with BOT's prior approval	Issuer call option with BOT's prior approval	Issuer call option with BOT's prior approval	Issuer call option with BOT's prior approval
15	Optional call date, contingent call dates and redemption amount	(1) On the 5th anniversary from the issue date or on any coupon dates after the 5th year of issuance if the issuer is able to finance equal or greater quantity of capital instead of the debentures, or the issuer possesses Tier 1 capital larger than the minimum determined by the BOT after redemption; or (2) The issuer is able to demonstrate that interests paid by this debenture can no longer be deducted as expenditure of the issuer for tax benefits; or (3) Any cases or conditions to be specified by the BOT in the future.	(1) On the 5th anniversary from the issue date, or at any coupon dates after the 5th year of issuance; or (2) The issuer is able to demonstrate that interests paid by this debenture can no longer be deducted as expenditure of the issuer for tax benefits; or (3) The issuer is able to finance equal or greater quantity of capital instead of the debentures, or the issuer possesses Tier 1 capital larger than the minimum determined by the BOT after redemption; or (4) Any cases or conditions to be specified by the BOT in the future.	(1) On the 5th anniversary from the issue date or on any coupon dates after the 5th year of issuance if the issuer is able to finance equal or greater quantity of capital instead of the instruments, or the issuer possesses Tier 1 capital larger than the minimum determined by the BOT after redemption; or (2) The issuer is able to demonstrate that interests paid by this instrument can no longer be deducted as expenditure of the issuer for tax benefits; or (3) Any cases or conditions to be specified by the BOT in the future.		(1) On the 5th anniversary from the issue date or at any coupon dates after the 5th year of issuance; or (2) Any change in tax law which affect tax benefits of the issuer; or (3) Any change in regulatory capital requirement that occurs on or after the issue date which disqualifies these debentures to be included in the Tier 2 capital of the issuer; or (4) Any other conditions which the Bank of Thailand may prescribe		
16	Subsequent call dates, if applicable							

	Subject	Description						
	Coupons / Other returns							
17	Fixed or floating dividend / coupon	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
18	Coupon rate and any related index	Fixed at 4.6%	Fixed at 4.85%	Fixed at 6.0%	Fixed at 6.0%	Fixed at 4.5%	Fixed at 4.25%	Fixed at 3.875%
19	Existence of a dividend stopper	No dividend stopper	No dividend stopper	No dividend stopper	No dividend stopper	No dividend stopper	No dividend stopper	No dividend stopper
20	Fully discretionary, partially discretionary or mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No step up interest payment	No step up interest payment	No step up interest payment	No step up interest payment	No step up interest payment	No step up interest payment	No step up interest payment
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	-	-	-	-	-	-	-
25	If convertible, fully or partially	-	-	-	-	-	-	-
26	If convertible, conversion rate	-	-	-	-	-	-	-
27	If convertible, specify instrument type convertible into	-	-	-	-	-	-	-
28	If convertible, specify issuer of instrument it converts into	-	-	-	-	-	-	-
29	Write-down feature	No write-down feature	No write-down feature	Write-down feature	Write-down feature	Write-down feature	Write-down feature	Write-down feature
30	If write-down, write-down trigger(s)	-	-	In case of non-viability and regulatory authorities deciding to provide financial aids to the issuer, these debentures may be written off in proportion not exceed the lowering of par value of common share and preferred share after the lowering of such shares is made.		In case of non-viability and/or regulatory authorities deciding to provide financial aids to the issuer, these debentures may be required to be written off (fully or partially).		
31	If write-down, full or partial	-	-	Full or partial write-down	Full or partial write-down	Full or partial write-down	Full or partial write-down	Full or partial write-down
32	If write-down, permanent or temporary	-	-	Permanent	Permanent	Permanent	Permanent	Permanent
33	if temporary write-down, description of write-up mechanism	-	-	-	-	-	-	-
34	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Hybrid debt capital instrument / Preferred stock / Common stock	Hybrid debt capital instrument / Preferred stock / Common stock	Hybrid debt capital instrument / Preferred stock / Common stock	Hybrid debt capital instrument / Preferred stock / Common stock	Hybrid debt capital instrument / Preferred stock / Common stock	Hybrid debt capital instrument / Preferred stock / Common stock	Hybrid debt capital instrument / Preferred stock / Common stock

Reconciliation Requirements

Unit: MM baht

Items related to capital funds as of December 31, 2016	Balance sheet as in published financial statements (a)	Under regulatory scope of consolidation (b)	References (c)
Assets			
1. Cash	1,149.00	1,149.00	
2. Interbank and money market items - net	38,067.42	38,067.42	
3. Claims on security	-	-	
4. Derivatives assets	-	-	
5. Investments - net	7,188.84	7,188.84	
6. Investment in subsidiaries - net	442.75	475.61	
7. Loans to customers and accrued interest receivables			
7.1 Loans to customers	245,114.24	245,114.24	
7.2 Accrued interest receivables	520.70	520.70	
Total loans to customers and accrued interest receivables	**245,634.95**	**245,634.95**	
7.3 Less Deferred revenue	- 20,180.24	- 20,180.24	
7.4 Less Allowances for doubtful accounts	- 7,973.89	- 7,973.89	
7.5 Less Revaluation allowance for debt restructuring	- 9.75	- 9.75	
Total loans to customers and accrued interest receivables - net	**217,471.07**	**217,471.07**	
8. Customers' liabilities under acceptances	-	-	
9. Property foreclosed - net	7.37	7.37	
10. Premises and equipment - net	2,652.51	2,652.51	
11. Goodwill and intangible assets - net	567.05	567.05	I
12. Deferred tax assets	513.60	513.60	
13. Other assets - net	3,212.78	3,212.78	
Total Assets	**271,272.40**	**271,305.26**	

Items related to capital funds as of December 31, 2016	Balance sheet as in published financial statements (a)	Under regulatory scope of consolidation (b)	References (c)
Liabilities			
14. Deposits	155,067.52	155,100.42	
15. Interbank and money market items - net	5,196.60	5,196.60	
16. Liabilities payable on demand	180.24	180.24	
17. Liabilities to deliver security	-	-	
18. Financial liabilities designated at fair value through profit and loss	-	-	
19. Derivatives liabilities	34.12	34.12	
20. Debts issued and borrowings			
20.1 Subordinated unsecured debentures	7,323.00	7,323.00	K
20.2 Unsubordinated unsecured debentures	57,039.00	57,039.00	
20.3 Unsubordinated guaranteed debentures	-	-	
20.4 Bills of exchange and Promissory notes	5,966.92	5,966.92	
21. Liabilities under acceptances	-	-	
22. Provisions	576.11	576.11	
23. Accrued interest payables	2.58	2.58	
24. Other liabilites	8,560.75	8,560.71	
Total Liabilities	**239,946.86**	**239,979.71**	
25. Shareholders' Equity			
25.1 Share capital			
25.1.1 Registered			
25.1.1.1 Preferred shares	0.34	0.34	
25.1.1.2 Common shares	8,006.69	8,006.69	
25.1.2 Issued and paid-up			
25.1.2.1 Preferred shares	0.11	0.11	J
25.1.2.2 Common shares	8,006.45	8,006.45	A
25.2 Warrants			
25.3 Share premium (discount)			
25.3.1 Share premium (discount) on preferred shares	-	-	
25.3.2 Share premium (discount) on common shares	1,018.41	1,018.41	B.1

Items related to capital funds as of December 31, 2016	Balance sheet as in published financial statements (a)	Under regulatory scope of consolidation (b)	References (c)
25.4 Capital surplus on treasury stock - preferred shares			
25.5 Capital surplus on treasury stock - common shares			
25.6 Other components of shareholders' equity			
25.6.1 Surplus on revaluation of assets	889.26	889.26	E
25.6.2 Revaluation surplus (decifit) of equity investment	-136.82	-136.82	F
25.6.3 Revaluation surplus (decifit) of debt securities investment	18.44	18.44	G
25.6.4 Translation differences	-	-	
25.6.5 Gains (losses) on cash flow hedges	-3.01	-3.01	H
25.6.6 Gains (losses) on hedges of a net investment in foreign operations	-	-	
25.6.7 Share of other comprehensive income of associates	-	-	
25.6.8 Other components from owner changes	679.27	679.27	B.2
25.7 Retained earnings (deficit)			
25.7.1 Appropriated			
25.7.1.1 Statutory reserves	801.00	709.50	C
25.7.1.2 Others		15,729.62	D
25.7.2 Unappropriated	19,951.81	4,222.18	
25.8 Less Treasury stocks - preferred shares			
25.9 Less Treasury stocks - common shares			
Equity attributable to owners of the company			
25.10 Non-controlling interests of the subsidiaries	100.64	100.64	
Total Shareholders' Equity	**31,325.54**	**31,234.04**	
Total Liabilities and Shareholders' Equity	**271,272.40**	**271,213.76**	

Reconciliation requirements related to capital funds

Unit: MM baht

	Capital Funds as of December 31, 2016	Components of capital funds (d)	References under regulatory scope of consolidation (e)
	Common Equity Tier 1 (CET1): Eligible items for Common Equity Tier 1		
1	Paid-up shares capital net of treasury stocks	8,006.45	A
2	Warrants	-	
3	Premium (discount) on common share capital - net	1,018.41	B.1
4	Statutory reserves	709.50	C (The rest is still waiting for Board's approval.)
5	Reserve appropriated from net profit	-	
6	Retained earnings after appropriation	15,729.62	D
7	Accumulated other comprehensive income		
	7.1 Change in incremental from revaluation appraisal of land, buildings, or units of condominium	889.26	E
	7.2 Gain (loss) on revaluation of available for sale equity investment	- 136.82	F
	7.3 Gain (loss) on revaluation of available for sale debt securities	11.06	G (ทยอยนับปีละ 20% เริ่ม ม.ค. 57)
	7.4 Gain (loss) from translation of financial statements of foreign operations	0	
	7.5 Gain (loss) on fair value estimation of derivatives for cash flow hedge reserve	- 3.01	H
	7.6 Gain (loss) on hedges of a net investment in a foreign operation	0	
8	Other items from owner changes	679.27	B.2
9	Non-controlling interest of subsidiaries operating in commercial bank business which can be counted as CET1 of consolidated financial institutions	0	
10	**Total Common Equity Tier 1 (CET1) before regulatory adjustments and deduction items**	26,903.74	
	Common Equity Tier 1 (CET1): Regulatory adjustments		
11	Change in fair value of derivatives for cash flow hedge reserve	-	
12	กำไร (ขาดทุน) สะสมที่เกิดจากการเลือกใช้วิธี Fair value option	-	
13	Other items specified by the Bank of Thailand	-	
14	**Total regulatory adjustments to Common Equity Tier 1**	-	

	Capital Funds as of December 31, 2016	Components of capital funds (d)	References under regulatory scope of consolidation (e)
	Common Equity Tier 1 (CET1): Deduction items		
15	Net loss	-	
16	Goodwill	-	
17	Intangible assets	340.23	I (ทยอยนับปีละ 20% เริ่ม ม.ค. 57)
18	Deferred tax assets	614.97	
19	Shortfall of provision	-	
20	Securitisation gain on sale	-	
21	Reciprocal cross-holdings in common equity between banks and other financial business companies and other supporting business	-	
22	Investment in equity including warrants of finance companies and credit foncier companies, which are held directly and indirectly	-	
23	Investment in equity including warrants counted as CET 1 of other financial institutions or other consolidated financial institutions other than specified in no. 21 and 22	-	
24	Value of underlying financial instruments countable as Tier 1 capital under shareholders' equity of other financial institutions or financial groups, in case of buying equity derivatives	-	
25	Investment in equity including warrants of joint venture companies	-	
26	Investment in equity including warrants of companies engaged in financial business and supporting business which are held not exceeding 10% of paid-up share in each company	-	
27	Investment in equity including warrants of companies engaged in financial business and supporting business which are held exceeding 10% of paid-up share in each company	-	
28	Other items specified by the Bank of Thailand	-	
29	Deductions from Additional Tier 1 capital, for the remaining amounts in case Additional Tier 1 capital is insufficient to be fully deducted	-	
30	Total regulatory deductions from Common Equity Tier 1	955.21	
31	Total Common Equity Tier 1 (CET1)	25,948.53	
	Additional Tier 1 Capital: Eligible items for Additional Tier 1		
32	Proceeds from issuance of non-cumulative preferred shares, after deducting the repurchase of non-cumulative preferred shares	0.11	J
33	Warrants of non-cumulative preferred shares	-	
34	Proceeds from issuance of subordinated debts, in which the holders' right to receive payment is after depositors, creditors and holders of Tier 2 financial instruments	-	
35	Premium (discount) on the instruments under no. 32 to 34	-	
36	Non-controlling interest of subsidiaries which can be counted as Additional Tier 1 capital	-	
37	Total Additional Tier 1 capital before deduction items	0.11	

	Capital Funds as of December 31, 2016	Components of capital funds (d)	References under regulatory scope of consolidation (e)
	Additional Tier 1 Capital: Deduction items		
38	Treasury financial instruments countable as Tier 1 capial	-	
39	Reciprocal cross-holding in financial instruments qualified as Additional Tier 1 capital between banks and other financial companies or other supporing business	-	
40	Investment in financial instruments qualified as Additional Tier 1 capital of other banks or other financial companies, which are held directly and indirectly	-	
41	Investment in financial instruments qualified as Additional Tier 1 capital of other financial institutions or consolidated financial companies, other than specified in no. 39 and 40	-	
42	Value of underlying financial instruments qualified as Additional Tier 1 capital of other financial institutions or other consolidated financial companies, in case of buying bond / equity derivatives and in case of selling protection of credit derivatives	-	
43	Investment in financial instruments qualified as Additional Tier 1 capital of companies engaged in financial business and supporting business which are held not exceeding 10% of all paid-up shares	-	
44	Investment in financial instruments qualified as Additional Tier 1 capital of companies engaged in financial business and supporting business which are held exceeding 10% of all paid-up shares	-	
45	Other items specified by the Bank of Thailand	-	
46	Deductions from Tier 2 capital, for the remaining amounts in case Tier 2 capital is insufficient to be fully deducted	-	
47	**Total regulatory deductions from Additional Tier 1 capital**	**-**	
48	**Total Additional Tier 1 capital (AT1)**	**0.11**	
49	**Total Tier 1 capital (T1 = CET1+AT1)**	**25,948.64**	
	Tier 2 Capital: Eligible items for Tier 2		
50	Proceeds from issuance of cumulative preferred shares, after deducting the repurchase of cumulative preferred shares	-	
51	Warrants of cumulative preferred shares	-	
52	Proceeds from issuance of subordinated debts, in which the holders' right to receive payment is after depositors and creditors	7,323.00	K
53	Premium (discount) on the instruments under no. 50 to 52	-	
54	General provision	512.06	
55	Surplus of provision	804.09	
56	Non-controlling interest of subsidiaries which can be counted as Tier 2 capital	-	
57	**Total Tier 2 capital before deduction items**	8,639.15	
	Tier 2 Capital: Deduction items		
58	Repurchase of financial instruments qualified as Tier 2 capital	-	
59	Reciprocal cross-holding in financial instruments qualified as Tier 2 capital between banks and other financial companies or other supporing business	-	
60	Investment in financial instruments qualified as Tier 2 capital of other banks or other financial companies, which are held directly and indirectly	-	
61	Investment in financial instruments qualified as Tier 2 capital of other financial institutions or consolidated financial companies, other than specified in no. 59 and 60	-	
62	Value of underlying financial instruments qualified as Tier 2 capital of other financial institutions or other consolidated financial companies, in case of buying bond / equity derivatives and in case of selling protection of credit derivatives	-	
63	Investment in financial instruments qualified as Tier 2 capital of companies engaged in financial business and supporting business which are held not exceeding 10% of all paid-up shares	-	
64	Investment in financial instruments qualified as Tier 2 capital of companies engaged in financial business and supporting business which are held exceeding 10% of all paid-up shares	-	
65	Other items specified by the Bank of Thailand	-	
66	**Total regulatory deductions from Tier 2 capital**	**-**	
67	**Total Tier 2 capital (T2)**	**8,639.15**	
68	**Total Capital (TC = T1+T2)**	**34,587.79**	

Attachment 3

Capital composition during the transitional period under Basel III

Unit: MM baht

No.	Capital Funds as of December 31, 2016		Remaining amount subject to transitional adjustment under Basel III
	Common Equity Tier 1 (CET1): Eligible items for Common Equity Tier 1		
1	Paid-up shares capital net of treasury stocks	8,006.45	
2	Warrants	-	
3	Premium (discount) on common share capital (net)	1,018.41	
4	Statutory reserves	709.50	
5	Reserve appropriated from net profit	-	
6	Retained earnings after appropriation	15,729.62	
7	Accumulated other comprehensive income		
	7.1 Change in incremental from revaluation appraisal of land, buildings, or units of condominium	889.26	
	7.2 Gain (loss) on revaluation of available for sale equity investment	- 136.82	
	7.3 Gain (loss) on revaluation of available for sale debt securities	11.06	7.38
	7.4 Gain (loss) from translation of financial statements of foreign operations	-	
	7.5 Gain (loss) on fair value estimation of derivatives for cash flow hedge reserve	- 3.01	
	7.6 Gain (loss) on hedges of a net investment in a foreign operation	-	
8	Other items from owner changes	679.27	
9	Non-controlling interest of subsidiaries operating in commercial bank business which can be counted as CET1 of consolidated financial institutions	-	
10	**Total Common Equity Tier 1 (CET1) before regulatory adjustments and deduction items**	26,903.74	
	Common Equity Tier 1 (CET1): Regulatory adjustments		
11	Change in fair value of derivatives for cash flow hedge reserve	-	
12	Accumulated gain (loss) on fair value option	-	
13	Other items specified by the Bank of Thailand	-	
14	**Total regulatory adjustments to Common Equity Tier 1**	-	

	Capital Funds as of December 31, 2016		Remaining amount subject to transitional adjustment under Basel III
	Common Equity Tier 1 (CET1): Deduction items		
15	Net loss	-	
16	Goodwill	-	
17	Intangible assets	340.23	226.82
18	Deferred tax assets	614.97	
19	Shortfall of provision	-	
20	Securitisation gain on sale	-	
21	Reciprocal cross-holdings in common equity between banks and other financial business companies and other supporting business	-	
22	Investment in equity including warrants of finance companies and credit foncier companies, which are held directly and indirectly	-	
23	Investment in equity including warrants counted as CET 1 of other financial institutions or other consolidated financial institutions other than specified in no. 21 and 22	-	
24	Value of underlying financial instruments countable as Tier 1 capital under shareholders' equity of other financial institutions or financial groups, in case of buying equity derivatives	-	
25	Investment in equity including warrants of joint venture companies	-	
26	Investment in equity including warrants of companies engaged in financial business and supporting business which are held not exceeding 10% of paid-up share in each company	-	
27	Investment in equity including warrants of companies engaged in financial business and supporting business which are held exceeding 10% of paid-up share in each company	-	
28	Other items specified by the Bank of Thailand	-	
29	Deductions from Additional Tier 1 capital, for the remaining amounts in case Additional Tier 1 capital is insufficient to be fully deducted	-	
30	**Total regulatory deductions from Common Equity Tier 1**	955.21	
31	**Total Common Equity Tier 1 (CET1)**	**25,948.53**	

	Capital Funds as of December 31, 2016		Remaining amount subject to transitional adjustment under Basel III
	Additional Tier 1 Capital: Eligible items for Additional Tier 1		
32	Proceeds from issuance of non-cumulative preferred shares, after deducting the repurchase of non-cumulative preferred shares	0.11	
33	Warrants of non-cumulative preferred shares	-	
34	Proceeds from issuance of subordinated debts, in which the holders' right to receive payment is after depositors, creditors and holders of Tier 2 financial instruments	-	
35	Premium (discount) on the instruments under no. 32 to 34	-	
36	Non-controlling interest of subsidiaries which can be counted as Additional Tier 1 capital	-	
37	**Total Additional Tier 1 capital before deduction items**	0.11	
	Additional Tier 1 Capital: Deduction items		
38	Treasury financial instruments countable as Tier 1 capial	-	
39	Reciprocal cross-holding in financial instruments qualified as Additional Tier 1 capital between banks and other financial companies or other supporing business	-	
40	Investment in financial instruments qualified as Additional Tier 1 capital of other banks or other financial companies, which are held directly and indirectly	-	
41	Investment in financial instruments qualified as Additional Tier 1 capital of other financial institutions or consolidated financial companies, other than specified in no. 39 and 40	-	
42	Value of underlying financial instruments qualified as Additional Tier 1 capital of other financial institutions or other consolidated financial companies, in case of buying bond / equity derivatives and in case of selling protection of credit derivatives	-	
43	Investment in financial instruments qualified as Additional Tier 1 capital of companies engaged in financial business and supporting business which are held not exceeding 10% of all paid-up shares	-	
44	Investment in financial instruments qualified as Additional Tier 1 capital of companies engaged in financial business and supporting business which are held exceeding 10% of all paid-up shares	-	
45	Other items specified by the Bank of Thailand	-	
46	Deductions from Tier 2 capital, for the remaining amounts in case Tier 2 capital is insufficient to be fully deducted	-	
47	**Total regulatory deductions from Additional Tier 1 capital**	-	
48	**Total Additional Tier 1 capital (AT1)**	**0.11**	
49	**Total Tier 1 capital (T1 = CET1+AT1)**	**25,948.64**	

Unit: MM baht

	Capital Funds as of December 31, 2016		Remaining amount subject to transitional adjustment under Basel III
	Tier 2 Capital: Eligible items for Tier 2		
50	Proceeds from issuance of cumulative preferred shares, after deducting the repurchase of cumulative preferred shares	-	
51	Warrants of cumulative preferred shares	-	
52	Proceeds from issuance of subordinated debts, in which the holders' right to receive payment is after depositors and creditors	7,323.00	-1,243.00
53	Premium (discount) on the instruments under no. 50 to 52	-	
54	General provision	512.06	
55	Surplus of provision	804.09	
56	Non-controlling interest of subsidiaries which can be counted as Tier 2 capital	-	
57	**Total Tier 2 capital before deduction items**	8,639.15	
	Tier 2 Capital: Deduction items		
58	Repurchase of financial instruments qualified as Tier 2 capital	-	
59	Reciprocal cross-holding in financial instruments qualified as Tier 2 capital between banks and other financial companies or other supporing business	-	
60	Investment in financial instruments qualified as Tier 2 capital of other banks or other financial companies, which are held directly and indirectly	-	
61	Investment in financial instruments qualified as Tier 2 capital of other financial institutions or consolidated financial companies, other than specified in no. 59 and 60	-	
62	Value of underlying financial instruments qualified as Tier 2 capital of other financial institutions or other consolidated financial companies, in case of buying bond / equity derivatives and in case of selling protection of credit derivatives	-	
63	Investment in financial instruments qualified as Tier 2 capital of companies engaged in financial business and supporting business which are held not exceeding 10% of all paid-up shares	-	
64	Investment in financial instruments qualified as Tier 2 capital of companies engaged in financial business and supporting business which are held exceeding 10% of all paid-up shares	-	
65	Other items specified by the Bank of Thailand	-	
66	**Total regulatory deductions from Tier 2 capital**	-	
67	**Total Tier 2 capital (T2)**	**8,639.15**	
68	**Total Capital (TC = T1+T2)**	**34,587.79**	

Capital instruments which are not qualified under Basel III requirement will be phased out at the rate of 10% each year since 2013, and will no longer be included as capital from 2022 onward. For TISCO Group, the total amount of capital instruments that are not qualified under Basel III was 1,243.00 million baht as of December 31, 2016.