

## Part 1

### Business Operations

#### 1. Policy and Overview of TISCO's Business

After the enactment of the Financial Institutions Business Act, B.E. 2551 on August 3, 2008, TISCO Bank Public Company Limited ("the Bank" or "TISCO Bank") submitted an application to the Bank of Thailand to establish a Financial Group by setting up TISCO Financial Group Public Company Limited, a non-bank public company limited, as a holding company and parent company of the Group, in place of TISCO Bank.

TISCO Financial Group Public Company Limited ("The Company"), with TISCO Bank Plc. as its core subsidiary, operates as a shareholder of the companies under the Group and is involved in no other major businesses. TISCO Group provides a broad range of financial services across two primary business lines: commercial banking/lending and capital markets.

##### 1.1 Vision, Mission, Values for Business Operations and Business Strategy

To align the goals and direction of the business units with those of TISCO Group, the Company has put into writing clearly defined statements outlining its Vision, Mission, and Values. Vision encompasses the ultimate goal of TISCO Group whereas Values are intrinsic attributes that management and staff apply to achieve goals and objectives.

Our Vision is encapsulated in the motto "Wealth of Possibilities".

Our Mission statement is as follows: "TISCO is a quality growth organization with strong customer priority, committed to delivering valuable financial services with mastery and professionalism. Our promise is to provide financial services that address customer needs across all geographies, to focus on creative financial solutions, and to advise on financial opportunities suitable for the various life stages of our customers. Continuous human capital development and leading-edge technological investments are keys to our keeping our service efficient and reliable. TISCO also seeks to foster a culture of integrity, fairness, and transparency that creates sustainable value for our customers, shareholders, staff, and society".

Our Values are the essence of the services we offer our customers and the qualities we cultivate in our people. Through induction, training, and comprehensive corporate guidelines, these values are instilled in the TISCO culture and shape our professional attitude. TISCO's values consist of:

- |                      |   |
|----------------------|---|
| 1) Customer Priority | Customers are our primary focus. Their needs are our priority. We construct professional and practical solutions that fulfill our customers' requirements.  |
| 2) Mastery           | Our staffs are obligated to continually learn and develop themselves in order to build an outstanding skillset that maximizes customer satisfaction.  |
| 3) Integrity         | All employees must conduct themselves with honesty and follow a code of ethics of the highest standards.  |
| 4) Creativity        | Our expertise is forged in knowledge, experience, and creativity. We provide advice that is not only accurate, but also creative, helping customers see a wider swath of financial possibilities.   |
| 5) Reliability       | The organization adds value to our financial services through the professional skills and reliable performance of our team.   |
| 6) Guidance          | Because our staff members have a wide range of financial expertise, we can provide our customers with sound financial advice in a friendly and open-minded way, understanding their specific needs in order to help them achieve their goals. |

## **Strategic Plan**

In formulating a 3-year business plan, TISCO considers both the external business environment and internal factors. The external business environment includes economic conditions, regulations, and government policies while internal factors are the Group's strengths, weaknesses, opportunities, risks, critical success factors as well as priority issues. Management takes all of these issues into consideration in determining a Corporate Theme. The Corporate Strategy Map, in accordance with the Corporate Theme, is then crafted along with the Vision.

In addition to strategic planning, TISCO Group has cascaded strategic plan to action plan by integrating four perspectives covering financial, customer, internal process, and learning. Key Performance Indicators will be determined for all business areas and linked to performance management so as to gauge employee performance and ensure staffs are awarded fair compensation based on merit. Business performance is also monitored via Performance Dashboard sessions. TISCO has deployed modern management tools such as design thinking which helps TISCO to understand our customers' demands and offer service that match with their needs together with Agile way of working to transform working procedure and stand ready to deliver service in more efficiency manner.

## **Implementation of Strategic Action**

To achieve the organization's goals and align with the Vision and Mission framework, TISCO Group carried out the following strategic actions in 2020:

- Expanded geographical coverage through the microfinance branch network of the auto refinancing brand "Somwang Ngern Sang Dai". During the year, 60 Somwang branches were opened nationwide, raising the total to 347, catering to rising demand for loans against auto license.
- Emphasized more investment advisory and financial planning services through an Open Architecture investment and protection platform, thereby enhancing the ability of wealth managers to effectively provide professional financial planning, investment, and asset allocation. TISCO Group's fund selling agent service covered mutual funds of 12 asset management companies, while 83 wealth relationship managers held AFPT/CFP certification. In terms of new products, TISCO was the leader in selection and launch of various thematic mutual funds amidst the heightened risk market environment arising from both economic slowdown and the COVID-19 pandemic. These funds align with a long-term investment horizon and mega trends. In 2020, these thematic funds received a broad positive response from customers and generated satisfactory returns. TISCO also introduced a comprehensive health protection advisory service in which health insurance plans are selected from leading insurance companies and strategic advice is offered, focusing on comparison of benefits for customers and after-sales services.
- Explored and leveraged business partners for client acquisition and market access. TISCO has also developed innovative services on a digital platform that suits customer lifestyle and supports existing business expansion.
- Enhanced IT capabilities and cyber security are coupled with deployment of technology and innovations to increase efficiency while also improving human resource capabilities and driving overall digital transformation.
- Pursued corporate sustainability development in accordance with the sustainable banking and responsible lending framework. TISCO is also committed to corporate governance to build confidence and trust in customers and all stakeholders.

## **1.2 Important Changes and Developments During the Past Three Years**

- In 2018, TISCO Bank Public Company Limited and All-Ways Company Limited, subsidiaries under TISCO Group, entered into agreements for the sale of the personal loan portfolio and credit card business to Citibank N.A. (Bangkok Branch). The personal loan portfolio was successfully transferred from TISCO Bank on June 4, 2018 while the credit card business was successfully transferred from All-Ways Co., Ltd. on September 23, 2018.
- In 2019, TISCO Financial Group Public Company (Limited) and TISCO Securities Company Limited, a subsidiary of TISCO Group, signed an agreement to terminate "Deutsche TISCO Investment Advisory Company Limited", a

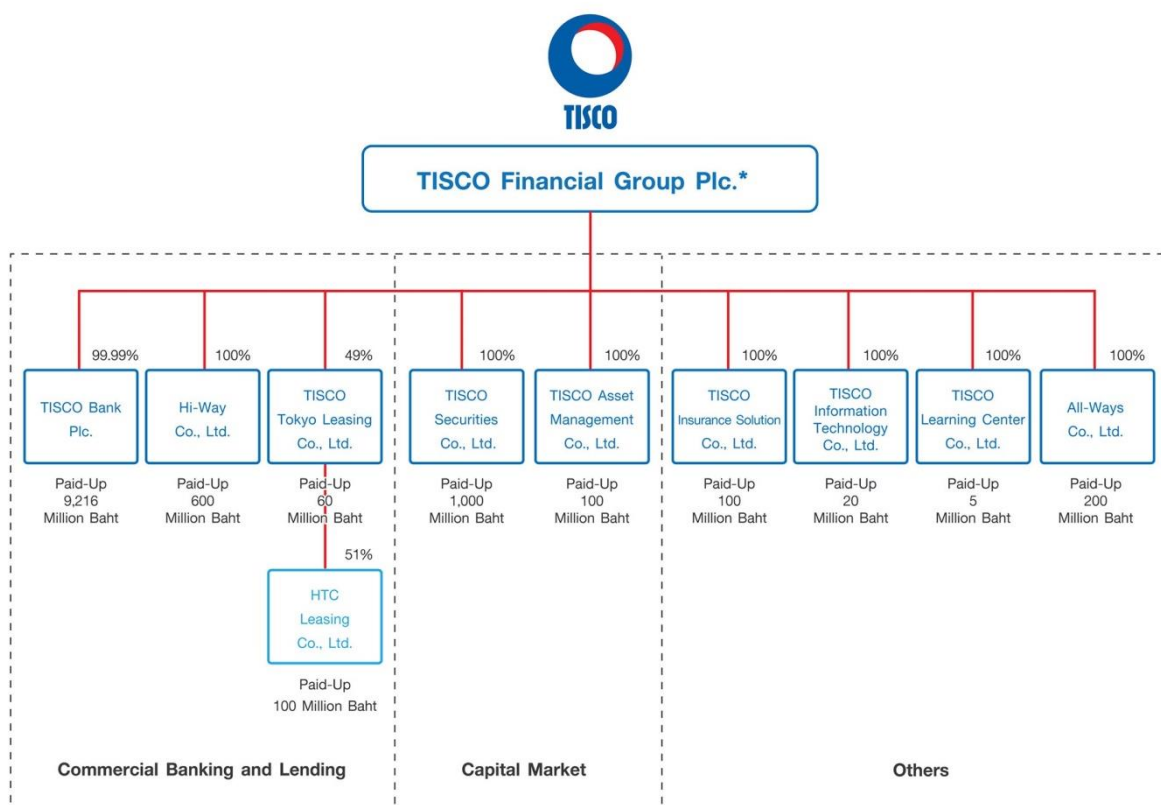
joint venture between TISCO Securities and Deutsche Bank that operated under an investment advisory license in Thailand. The agreement was effective from 9 September 2019 onward.

- In 2020, TISCO Securities announced a co-brand alliance with Jefferies Hong Kong Limited. Under this agreement, TISCO Securities aims to develop and provide equity research of Thai listed companies, as well as offer investment advisory, trading facilities and corporate access services to institutional investors of Jefferies worldwide. The co-brand alliance with Jefferies was effective from October 21, 2020 onwards.

Amidst the spread of COVID-19 pandemic, TISCO developed an online application for the financial relief program to help affected customer in the most effective manner. TISCO has provided credit assistance to borrowers through liquidity provision support to ease their financial burden since March 2020 in compliance with the Bank of Thailand guidelines.

### 1.3 Shareholding Structure and Business Operations of the Companies in TISCO Group

As TISCO Financial Group Public Company Limited operates as a shareholder in its subsidiaries and engages in no other major business, its competitive position is best examined through the business operations of the companies in TISCO Group. These companies operate in commercial banking and lending as well as capital markets and offer various financial services that satisfy a diverse range of customer needs. TISCO Group's structure as of December 31, 2020 is shown below.



\*Listed in The Stock Exchange of Thailand

## Details of juristic persons in which TISCO Financial Group Plc. directly held more than 10% of issued shares as of December 31, 2020:

Company/Head Office Address	Type of Business	Type of Shares	Registered Capital	Paid-up Capital	Issued and paid-up shares	Group Shareholding	
						Number of shares held	Percentage of ownership (%)
<b>TISCO Bank Public Company Limited<sup>1/1</sup></b> 1 <sup>st</sup> Fl., TISCO Tower, 48/2 North Sathorn Road, Silom, Bangrak, Bangkok 10500 Tel. (66) 2633 6000 Fax. (66) 2633 6800	Commercial Bank	Common	9,215,676,920	9,215,676,920	921,567,588	921,452,713	99.99
		Preferred			104	-	
		Total			921,567,692	921,452,713	
<b>Hi-Way Company Limited</b> 2046/16 New Petchaburi Road, Bangkapi, Huankwang, Bangkok 10310 Tel. (66) 2319 1717 Fax. (66) 2308 7405	Hire Purchase and Leasing	Common	600,000,000	600,000,000	5,994,500	5,994,496	100.0
		Preferred			5,500	5,500	
		Total			6,000,000	5,999,996	
<b>TISCO Tokyo Leasing Company Limited</b> 16 <sup>th</sup> Fl., TISCO Tower, 48/30 North Sathorn Road, Silom, Bangrak, Bangkok 10500 Tel. (66) 2638 0900 Fax. (66) 2638 0913	Hire Purchase and Leasing	Common	60,000,000	60,000,000	60,000	29,400	49.0
<b>TISCO Insurance Solution Company Limited</b> 22 <sup>th</sup> Fl., TISCO Tower, 48/51 North Sathorn Road, Silom, Bangrak, Bangkok 10500 Tel. (66) 2633 6060 Fax. (66) 2633 4400	Insurance Sales Agent	Common	100,000,000	100,000,000	1,000,000	999,965	100.0
<b>TISCO Securities Company Limited</b> 4 <sup>th</sup> Fl., TISCO Tower, 48/8 North Sathorn Road, Silom, Bangrak, Bangkok 10500 Tel. (66) 2633 6999 Fax. (66) 2633 6660	Securities	Common	1,000,000,000	1,000,000,000	100,000,000	99,999,998	100.0
<b>TISCO Asset Management Company Limited</b> 9 <sup>th</sup> Fl., TISCO Tower, 48/16-17 North Sathorn Road, Silom, Bangrak, Bangkok 10500 Tel. (66) 2633 6000 Ext. 4 Fax. (66) 2633 7300	Asset Management	Common	100,000,000	100,000,000	1,000,000	999,994	100.0
<b>TISCO Information Technology Company Limited</b> 6 <sup>th</sup> Fl., TISCO Tower, 48/12 North Sathorn Road, Silom, Bangrak, Bangkok 10500 Tel. (66) 2633 4299 Fax. (66) 2633 7600	Service Support	Common	20,000,000	20,000,000	200,000	199,994	100.0
<b>TISCO Learning Center Company Limited</b> 12 <sup>th</sup> Fl., Zone A, TISCO Tower, 48/20 North Sathorn Road, Silom, Bangrak, Bangkok 10500 Tel. (66) 2633 7154 Fax. (66) 2633 7155	Service Support	Common	5,000,000	5,000,000	50,000	49,997	100.0
<b>All-Ways Company Limited</b> 7 <sup>th</sup> Fl., Zone A, TISCO Tower, 48/13 North Sathorn Road, Silom, Bangrak, Bangkok 10500 Tel. (66) 2633 7129 Fax. (66) 2633 7150	E-marketplace platform	Common	200,000,000	200,000,000	2,000,000	1,999,997	100.0
<b>Primus Leasing Company Limited<sup>2/2</sup></b> 22 <sup>nd</sup> Fl., Zone A, TISCO Tower, 48/50 North Sathorn Road, Silom, Bangrak, Bangkok 10500 Tel. (66) 2633 7766 Fax. (66) 2633 7600	Liquidation Processing	Common	3,000,000	3,000,000	30,000	29,998	100.0

<sup>1/1</sup> Core company of TISCO Group

<sup>1/2</sup> in the liquidation process

In addition, TISCO Bank Plc., the core company of TISCO Group, held 10% of issued shares in other companies, all of which are non-listed companies. The investments in such companies are classified as Financial assets measured at fair value through profit or loss. Details are provided in the notes to the consolidated financial statement, section 4.4.

## 2. Nature of Business

Through its subsidiaries, TISCO Financial Group Public Company Limited (“the Company”), the parent company of TISCO Group (“the Group”), operates two main businesses: commercial banking & lending and capital markets.

**Commercial banking and lending:** TISCO Group conducts commercial banking and lending services under the Financial Institution Business Act and related regulations. Financial services are offered through the Company’s headquarters and the nationwide branch network of TISCO Bank Plc. and subsidiaries.

**Capital Markets:** TISCO Group provides securities and asset management services under the Securities and Exchange Act.

### Revenue structure of TISCO Group

For 2020, the Company and its subsidiaries had net interest income and non-interest income at a ratio of 69.3 percent and 27.2 percent, respectively. Interest on loans held the largest proportion at 88.6 percent of total income. Details are as follows.

(Unit: Million baht)

	2020		2019		2018	
	Amount	%	Amount	%	Amount	%
<b>Interest Income</b>						
- TISCO Bank Plc.	15,446	81.7	16,716	86.0	16,728	83.5
- Hi-Way Co., Ltd.	1,274	6.7	1,069	5.5	871	4.4
- Other Subsidiaries	37	0.2	96	0.5	91	0.4
<b>Total Interest Income</b>	<b>16,757</b>	<b>88.6</b>	<b>17,881</b>	<b>92.0</b>	<b>17,690</b>	<b>88.3</b>
Total Interest Expenses	(3,659)	(19.4)	(5,089)	(26.2)	(5,075)	(25.3)
<b>Net Interest Income</b>	<b>13,098</b>	<b>69.3</b>	<b>12,792</b>	<b>65.8</b>	<b>12,615</b>	<b>63.0</b>
<b>Fee and Service Income</b>						
- TISCO Bank Plc.	1,862	9.9	2,716	14.0	3,181	15.9
- TISCO Asset Management Co., Ltd.	1,546	8.2	1,757	9.0	1,523	7.6
- TISCO Securities Co., Ltd.	944	5.0	785	4.0	944	4.7
- Other Subsidiaries	1,108	5.9	1,253	6.4	691	3.4
<b>Fees and Service Income</b>	<b>5,460</b>	<b>28.9</b>	<b>6,511</b>	<b>33.5</b>	<b>6,339</b>	<b>31.6</b>
Fee and Service Expenses	(314)	(1.7)	(326)	(1.7)	(244)	(1.2)
<b>Net Fee and Service Income</b>	<b>5,146</b>	<b>27.2</b>	<b>6,185</b>	<b>31.8</b>	<b>6,095</b>	<b>30.4</b>
Other Operating Income	660	3.5	459	2.4	1,323	6.6
<b>Total Operating Income</b>	<b>18,904</b>	<b>100.0</b>	<b>19,436</b>	<b>100</b>	<b>20,033</b>	<b>100.0</b>

### 2.1 Areas of Service

Given that the Company operates as a shareholder of other companies (Holding Company) with no other major business, the areas of service can be categorized by the business operations of its subsidiaries, namely the commercial banking business and the securities business. In accordance with a client centric approach, the service operations of TISCO Group are divided into four business pillars: 1) Retail Banking, 2) Corporate Banking, 3) Wealth & Asset Management, and 4) Corporate Affairs & CSR. Details for each service follow below.

#### 1. Retail Banking

The Retail Banking group provides loan services to retail customers and SME customers, including retail loans, commercial lending, and bancassurance.

In 2020, the COVID-19 pandemic severely affected the Thai economy, weighing on the revenue and debt service capability of both individuals and small and medium-sized enterprises (SMEs) customers. With an aim to ease financial burdens, TISCO Group has continually provided credit assistance to borrowers through liquidity provision support, especially to individual borrowers - our major customer group. In compliance with the Bank of Thailand guidelines, the financial relief program consists of loan repayment holiday up to 6 months, debt restructuring, interest ceiling reduction of auto title loans as well as soft loans to small and medium-sized enterprises (SMEs). Moreover, TISCO Group developed an online

application for the financial relief program, allowing customers to apply for the program anywhere, in accordance with social distancing.

### 1.1 Retail Loans

Retail loans consist of loan services offered to individuals seeking funding for specific consumption purposes. This segment can be classified by loan purpose as follows:

- **Hire-Purchase Financing**

Hire-purchase financing is operated by TISCO Bank Plc, Hi-Way Co., Ltd, TISCO Tokyo Leasing Co., Ltd and HTC Leasing Co., Ltd and allows borrowers to buy assets under hire-purchase terms. The buyer makes a down payment at a predetermined proportion of asset value and pays equal installment amounts over a contract period. Ownership of the asset is then transferred to the buyer after all installments are paid. Contract periods range from 1 to 8 years. A fixed interest rate is charged, in line with the market rate on the contract date. TISCO Group provides hire-purchase loans for all types and models of new and used automobiles. This includes passenger cars, multipurpose vehicles, motorcycles, and commercial vehicles such as sedans, trucks, excavators, and trailers. In addition, hire-purchase financing also offers loans for buying machinery and equipment for commercial purposes such as printing machines, medical equipment, construction equipment, etc.

In 2020, TISCO Bank granted hire purchase loans for new cars at a proportion of 28.5% Ford, 27.7% Mazda, and 43.8% other brands. The proportion of hire purchase loans for new cars and used cars was 90% and 10%. Amidst high market demand for hire-purchase loans, TISCO Group has focused on expanding the business by enhancing service quality, offering a greater variety of services, and engaging in effective asset control rather than price competition.

- **Consumer Loans** mainly offered by TISCO Bank, are in accordance with market needs and have a strong focus on acceptable risk-adjusted return on capital (RAROC). The consumer loans segment has four main categories as follows:

- **Mortgage Loans** are granted to acquire residential property and for refinancing. The repayment terms vary from 3 to 30 years with full collateral. The interest rates of mortgage loans are either a floating rate or combination of fixed and floating rate which shall be used as a fixed interest rate for a pre-defined period, such as 1-3 years. Moreover, TISCO provides home equity loans which are multi-purpose loans using real estate as collateral. The maximum credit line is 80% of appraised value with an installment period of up to 15 years. In 2020, TISCO focused on increasing awareness of home equity loans through digital channels.

- **Consumption Loans** are operated by TISCO Bank Plc, and Hi-Way Co., Ltd. Multipurpose loans are provided to individuals and business owners in need of cash under the brands TISCO Auto Cash and Somwang Ngern Sang Dai. The loans against vehicle registration cover various types of vehicles, including cars, trucks and motorcycles. Key features include repayment periods of up to 72 months without transfer of vehicle registration. In 2020, the pandemic impacted all business sectors, in particular the tourism, fairs & exhibitions, and commerce sectors and in general disrupted business activities. TISCO therefore focused on improving service convenience and after sales services through the TISCO My Car application. Example of services included information of product details, loan installment, and QR Code/Bar Code generation for payment, E-receipt. TISCO has also been developing a digital loan application. Physical branches remain crucial to growth; TISCO continues to expand its branch network of loans against vehicle registration nationwide under Somwang to enhance customer access to service. At the end of 2020, there were 347 Somwang branches nationwide. Somwang also offers delivery service for greater customer convenience.

### 1.2 Commercial Lending

Commercial lending provides commercial credit facilities, mainly to small and medium-sized businesses such as inventory financing for car dealers, working capital loans, project finance, hire-purchase loans for commercial assets such as commercial trucks, bus, machinery, and medical instruments, as well as commercial loans with a credit guarantee by the Thai Credit Guarantee Corporation (TCG). In 2020, the Bank signed a memorandum of understanding for the Portfolio Guarantee Scheme-phase 9 project aimed at supporting liquidity provision for SME customers. In addition, TISCO joined the



BOT's soft loan scheme to offer loans for SME customers who meet the BOT's criteria with interest rate charged at 2% per annum.

### 1.3 Bancassurance

TISCO Bank Plc. TISCO Insurance Solution, and Hi-Way Co., Ltd. have Insurance Broker licenses for both life and non-life, covering various types of insurance from the Department of Insurance under the Ministry of Commerce and the Office of Insurance Commission. TISCO has put more emphasis on selecting and developing both life and non-life insurance products to suit customer needs and risk profile by working in collaboration with many well-known insurance companies who have strong financial positions and product expertise in different areas. The Open Architecture platform enables TISCO to select and develop best-in-class insurance products for customers, including life and non-life insurance, particularly healthcare and critical illness insurance for customers.

In 2020, TISCO's bancassurance strategy utilized an Open Architecture approach while considering the needs, age, and lifestyle of each customer segment. TISCO increased on-shelf products for two main customer segments: individual and private banking. For the individual customer segment, TISCO launched Somwang Gun Pai which focused on developing products, including car & motorcycle insurance and personal accident protection, through Somwang branches. For the wealth customer segment, TISCO extended service offerings from investment advisory to health protection advisory (TISCO Health Protection Advisory), offering best-in-class protection products from leading insurance companies. TISCO will provide valuable advice on insurance benefits and recommend health insurance policies that suit the customer. TISCO provides effortless after-sales support to ensure the customer's best interest is met, in conjunction with continued product development. Emergence of the COVID-19 pandemic has fueled growth in digital transactions. In response, TISCO has focused more on digital services by offering insurances products through [www.tiscoinsure.com](http://www.tiscoinsure.com) which enables customer to access our service with greater convenience. Furthermore, TISCO has added an after-sales service channel through its official Line account, "TISCO Insure", with "Ford Ensure" and "Mazda MPI" for Ford and Mazda owners. TISCO's determination as a financial institution to support medical researchers in improving healthcare and quality of life in Thai society can be seen in its philanthropic efforts. These include donating part of its income from selling healthcare and critical illness insurance to the Ramathibodi Foundation.

## 2. Corporate Banking

The Corporate Banking group provides fund raising services to corporate clients, as well as corporate lending and investment banking services. Details are provided as follows:

### 2.1 Corporate Lending

Operated by TISCO Bank. Commercial finance facilities are provided to large corporate clients for commercial purposes, including loans and related services such as guarantees, aval, loan arrangement services and loan restructuring. Commercial lending is classified by the following service types:

- **Working Capital Loans**

These fill needs for business liquidity and cash flow, especially for industrial and seasonal businesses, by facilitating loans for buying raw materials and inventory, and loans for accounts payable repayments. The revolving loans have repayment terms set for within one year. The terms and conditions of such loans are subject to credit review annually.

- **Project and Term Loans**

These fill the specific needs of medium or long-term business development projects. The project funding, as the ultimate source of funds for loan repayment, must be traceable in terms of project progress. This segment mainly consists of term loans which have a repayment schedule in line with the timeline, progress, and cash flow of the project. The Bank's policy is to support industry and manufacturing in all business areas, especially those that support national development. Project and term loans are generally offered for building factories, offices or business expansion, property development, infrastructure construction, and project bids, such as for power plants, or for buying industrial machinery.



- **Other Commercial Loans**

The Bank also provides credit for other commercial purposes such as loans against deposits or liquid assets with short or medium terms, using liquid assets as collateral. This segment includes loans for investment, specifically medium or long-term funds which investors use to buy assets, such as property, which they then use as collateral, with the terms and conditions of the loan set according to the assets earning ability.

- **Guarantee and Aval Services**

The Bank provides guarantees and aval services for our clients' business partners by issuing project bidding bonds, performance bonds and purchase guarantee letters to manufacturers. Terms of the letters of guarantee are flexible and made to suit the beneficiary's needs.

- **Loan Consultancy and Related Services**

The Bank provides full-service loan consultation services in such areas as financial structuring and debt restructuring, and is also a syndicated loan arranger, facility agent, and security agent.

## **2.2 Investment Banking**

TISCO Securities Co., Ltd. is a leader in investment banking with more than 50 years of providing superior service to both corporate and government-related clients. Staffed by highly experienced professionals, TISCO Securities Co., Ltd. specializes in analysis of many essential industries such as energy & utilities, petrochemicals, telecommunications, transportation & logistics, health care, banking & financial institutions, media & entertainment, and manufacturing while boasting a wealth of experience in the equity and debt markets, both domestically and internationally. TISCO Securities Co., Ltd. has been approved by the SEC to provide financial advisory services and has been granted an underwriting license from the Ministry of Finance. The full range of financial advisory and underwriting services cover various types of instruments, including equity, debt, and convertible instruments. Moreover, TISCO Securities Co., Ltd. provides financial advisory services for mergers & acquisitions, privatization advisory and implementation, project financing, debt restructuring, feasibility study, project valuation, and general advisory.

In 2020, TISCO's investment banking arm provided customers with various financial advisory services, including issuance & offering of equity securities, mergers & acquisitions, and project valuation in various industries, such as energy & alternative energy, leasehold rights of warehouses and factories, and leasehold rights of office space and commercial. Transactions of note in 2020 include financial advisory in a rights offering for an alternative energy company, tender agent for a copper pipe company, and initial public offerings for a warehouses and factories REIT. In addition, the investment banking team currently provides acquisitions advisory for a property development company, project valuation for a construction company, and rights offering advisory for a large energy company.

## **3. Wealth & Asset Management**

Aiming to be a top advisory house, TISCO offers a full range of financial and investment advisory services under the brand TISCO Wealth. TISCO Wealth provides comprehensive wealth management services, including banking, securities brokerage, and asset management to deliver investment solutions that meet the savings and investment goals of our clients. TISCO Wealth clients are serviced by our professional relationship managers who provide unbiased advice on both onshore and offshore investment instruments as well as protection products. To elevate its service ability, TISCO has introduced a one stop service for mutual fund trading and insurance through an Open Architecture platform. The platform enables customers to invest in various mutual funds from 12 leading asset management companies, including TISCO Asset Management, and to purchase protection plans from 8 leading insurance companies, with fund selection and comprehensive wealth advisory services offered at TISCO Bank's branches.

TISCO intends to continue expanding its individual client base, enlarging assets under management, enhancing staff service abilities, and improving its digital services. In 2020, TISCO Wealth continued to focus on service excellence as a customer-centric Holistic Financial Advisory. Under this theme, TISCO's Economic Strategy Unit publishes the TISCO Investment Portfolio Strategy or TIPS, a comprehensive report with in-depth analysis of the global economy and portfolio investment strategies. To deliver the best wealth solutions for clients, TISCO has developed various types of foreign

investment funds which introduce long-term investment in mega trends, such as healthcare innovation and new lifestyle businesses, including online education and e-commerce. Meanwhile, TISCO has also focused on enhancing staff quality by aiming to hire Certified Financial Planners (CFP). Finally, TISCO Wealth has developed mobile applications, including TISCO My Funds for mutual fund clients and TISCO Guru Plus for brokerage clients with an aim to enhance customer experience and service accessibility.

Wealth & Asset Management group provides 8 service types, as follow:

### **3.1 Private Banking**

TISCO Group provides comprehensive global financial and investment advisory services across multiple asset classes with professional assistants for high net-worth clients with deposit and investment portfolios of more than 20 million baht.

### **3.2 Retail Deposit**

TISCO Bank offers a variety of deposit products and related financial transaction services. In 2020, TISCO expanded the individual client base for TISCO My Savings, a savings account with a monthly interest payment at a maximum deposit rate of 2.00% p.a. The distinguishing features of TISCO My Savings are unlimited deposits, withdrawals, and transfers. Customers can also make transactions on the TISCO Mobile Banking application anytime, anywhere. TISCO My Savings has received positive feedback from customers, leading to it generating the highest growth in terms of number of accounts and deposit amount among TISCO's savings accounts.

### **3.3 Private Sales Brokerage**

Private Sales Brokerage is operated by TISCO Securities Co., Ltd ("TISCO Securities") and is member number two on the Stock Exchange of Thailand, offering brokerage services to retail clients through the head office in Bangkok and four other branches upcountry: Chiang Mai, Nakhon Pathom, Nakhon Ratchasima, and Udon Thani. The Thai stock market in 2020 was highly volatile with a downward trend, which weighed on retail investors. In response, TISCO Securities developed TISCO Guru Investment, which has received positive feedback from clients, to provide investment service under the terms and conditions of investment policy. TISCO Guru Investment service also provides investment strategies, stock selection, and portfolio monitoring by TISCO's professional team. TISCO Securities also provides a fund sales agent service with an Open Architecture approach, enabling customers to invest in various funds from leading asset management companies through the Streaming for Fund Application. TISCO Securities taps investment advisors' knowledge to offer the best services to customers, including fund information and asset allocation aligned with the Thai and global economic situations. Apart from domestic investment, TISCO Securities also provides international brokerage services through TISCO Global Trade. The service provides investment opportunities for customers seeking to invest in world-class companies in five leading markets: the United States of America, United Kingdom, Japan, Hong Kong, and Singapore. Moreover, TISCO has developed and improved online after-sales service through both its PC and mobile application, enhancing customer convenience.

To broaden access to research for retail investors, TISCO Securities developed TISCO Guru Plus, a stock investment application in which investors can search for stocks according to their investment style with a model portfolio function. The application also provides real time research publications which the investor can be notified of as desired. TISCO Securities has continually promoted marketing activities and provided seminars which provide investment knowledge to investors as well as our marketing staff to provide the best possible service for customers.

### **3.4 Institutional Brokerage**

TISCO Securities Co., Ltd offers brokerage services to both local and foreign institutional investors through an experienced and professional team which specialize in comprehensive equity research and world-class investment strategy. Amid the COVID-19 pandemic in 2020, TISCO Securities continuously carried out proactive marketing activities while adjusting operational processes. For example, providing financial seminars and bringing representatives of leading corporations and global investors together through e-meetings. In 2020, the market share of the TISCO Securities Institutional business was 1.2%. TISCO Securities also announced a co-brand alliance with Jefferies Hong Kong Limited on

October 21, 2020. Under this agreement, TISCO Securities will provide equity research of Thai listed companies, as well as offer investment advisory services to institutional investors of Jefferies worldwide.

### 3.5 Asset Management

TISCO Asset Management Co., Ltd. operates provident funds, private funds, and mutual fund management as permitted under mutual fund and private fund management licenses granted by the Ministry of Finance. Details are as follow:

- **Provident funds**

TISCO Asset Management Co., Ltd provides provident fund management and advisory services for establishment of provident funds and registrar and advisory services for provident fund committees. Fund investments cover multiple asset classes, including bonds, debentures, equities, and ETFs. Amid the economic downturn in 2020 from the spread of COVID-19, TISCO Asset Management was trusted by 200 companies to manage provident funds, including Aeronautical Radio of Thailand Ltd., Government Saving Bank and Thai Yamaha Motor Co., Ltd., which have a total fund size of over 10,000 million baht.

As of December 31, 2020, 60 provident funds were accounted for with assets under management of 205,994 million baht, up 11.8% (YoY). In total, TISCO Asset Management has been trusted by 4,599 companies and 646,936 members to manage provident funds. Meanwhile, the market share of TISCO's provident fund business was 16.5%, holding first place in the overall market.

- **Private funds**

TISCO Asset Management Co., Ltd provides private fund management services for individuals and legal entities. The services take into account client risk-return profile and include a wide range of investment alternatives, including equities, fixed income, and mutual funds. Clients receive reports which summarize fund performance on a regular basis.

As of December 31, 2020, there were 206 private funds accounted for, with assets under management expanded by 4.3% (YoY) to 59,240 million baht, ranking fifth in the private fund market.

- **Mutual funds**

In response to the global economic recession caused by the COVID-19 pandemic, TISCO Asset Management Co., Ltd, as a leading of Theme Fund issuer, strategically offers various types of funds to suit the higher market risk with a focus on long-term investment funds and mega trends. This strategy was reflected in the launch of new funds, including the TISCO Biotechnology Healthcare Fund, TISCO Cloud Computing Equity Fund, TISCO Next Generation Internet Fund, and TISCO China Technology Equity Fund. Moreover, TISCO Asset Management continued to launch new Retirement Mutual Funds (RMF) and Super Saving Funds (SSF) with tax deduction benefits for investors. During the year, TISCO Asset Management launched one trigger fund, which was triggered within a month.

For the digital channel, TISCO Asset Management launched the first version of the TISCO My Fund application in 2019, which provides customers with greater convenience when doing transactions and updating their investment portfolio. In 2020, TISCO My Fund was further developed, leading to the mid-year launch of an online mutual fund account opening service. This has seen a growing positive response from new customers in Bangkok and other provinces.

Although it was a difficult year amid the spread of COVID-19, TISCO Asset still generated satisfactory performance, growing assets under management by 8.5% (YoY) to 53,334 million baht, in stark contrast to the industry's average contraction of 6.9% from 2019. The mutual fund business held a market share of 1.1% and ranked 14th in the overall mutual fund market. Indeed, TISCO Asset Management has gained wide recognition for outstanding fund performance and excellent fund management. For their outstanding fund performance, TISCO Mid / Small Cap Equity Fund (TISCOMS) and TISCO Strategic Fund (TSF) were granted the "Best Equity Fund Award 2020 for Medium and Small Equity Funds" from Morningstar Thailand at the Fund Awards 2020 and "Best Mutual Fund of the Year Award 2020" in the Equity general category, respectively. Moreover, TISCO Asset Management received the "Outstanding Asset Management Company Award 2020" from the Stock Exchange of Thailand for the second consecutive year.

### 3.6 Mutual Fund Sales Agent

Mutual Fund Sales Agent is operated by TISCO Bank Co., Ltd and offers advice on mutual fund products and services via an Open Architecture platform. The platform allows clients to enjoy benefits from 12 asset management companies, 500 funds, including TISCO Asset Management, and our expertise in wealth advisory. TISCO helps customers maintain healthy return with a competitive choice of investments and robust asset allocation strategy. In 2020, the Open Architecture business had 10,072 million baht of fund inflow.

### 3.7 Cash Management Services

The Bank's Cash Management Services include cash inflow and cash outflow management for corporate clients, which is aimed at increasing the operational efficiency and reducing operating costs for clients. Cash Management Services are across three business areas: TISCO Collection, TISCO Payment, and TISCO Liquidity Management. Additionally, TISCO E-Cash Management was introduced to facilitate business transactions and consolidated account information enquiries for customers.

### 3.8 Custodian Service

The Bank provides custodian services which range from the safekeeping of client assets and securities, payment and delivery, and fiduciary duties such as acting as custodian for provident funds, private funds, juristic persons, and individuals, including confirmation of net asset value for provident funds.

## 4. Corporate Affairs & CSR

Corporate Affairs & CSR aim to promote business operational efficiency while ensuring that business ethics and a strong sense of social responsibility are incorporated into corporate core values. Aiming for sustainable value creation for all stakeholders, TISCO has placed great emphasis on building a strong support network among our stakeholders to promote long-term social development, environmental awareness, and arts & cultural programs. Furthermore, all governance and support functions are centralized at the Company while subsidiary companies shall outsource all such activities back to the Company. These include, but are not limited to, the following functions:

- Enterprise Risk Management, Risk & Business Analytics, Corporate Accounting, Planning & Budgeting, Credit Control, Appraisal & Valuation, Corporate Communication,
- Internal Audit, Corporate Compliance, Operational Risk Management, Legal Office, Credit Review, IT Risk Management
- Economic Strategy Unit, Treasury & Investment, Corporate Services & Procurement
- Human Resources Management, Human Resources Services

In addition, TISCO has a Treasury Department unit under the Bank which is responsible for asset and liability management activities, including the procurement of funding sources from local and foreign financial institutions, and investing and trading of bonds in order to maximize return under the corporate guidelines and risk policy and in compliance with all related rules and regulations. The unit also manages liquidity in accordance with BoT regulations.

TISCO Securities Co., Ltd handles the securities trading business and trades equity securities for company accounts, with an aim to maximize investment return. Securities trading volume was small as TISCO Securities maintained its investment policy of long-term return rather than short-term trading gain and tends to be less active with securities trading when stock market conditions are unfavorable. TISCO Securities Co., Ltd only invests in securities which offer performance backed by strong fundamentals to minimize market risk.

## 2.1 Market and Competition

### Commercial Banking Business

#### • Market

As of December 31, 2020, there were 30 commercial banks in Thailand's entire commercial banking system, comprising 19 domestically-registered commercial banks and 11 subsidiaries and branches of foreign banks. At the end of 2020, TISCO Bank ranked eleventh in asset size among the domestically-registered commercial banks with market shares of assets, deposits, and net loans of 1.3%, 1.4% and 1.7%, respectively.

As of December 31, 2020, net loans of the 19 domestically-registered commercial banks totaled 12,781,864 million baht, up by 6.1% (YoY) due partly to debt relief programs for retail and SME borrowers affected by COVID-19. At the end of 2020, the average minimum lending rate (MLR) decreased from 6.01% to 5.31% (YoY). The average minimum overdraft rate (MOR) declined from 6.84% to 5.85% (YoY), and the average minimum retail rate (MRR) was reduced from 6.87% to 5.98% (YoY). TISCO Bank's net loans totaled 213,802 million baht, declined by 6.7 (YoY)

Total industry deposits were at 14,632,146 million baht, up by 10.9% (YoY). At the end of 2020, the average 3-month fixed deposit rates of Top-4 commercial banks decreased from 0.86% to 0.37% (YoY) while all lending rates of the Top-4 commercial banks also declined from the previous year. During the year, the Bank of Thailand reduced its policy rate 3 times to 0.50% and cut the rate of contribution from financial institutions to the FIDF, from 0.46% to 0.23% of deposit base per annum, for two years in order to pass on the lower interest rate to bank clients. TISCO Bank's deposits totaled 204,859 million baht, declined by 6.2% (YoY)

#### Comparison of assets, deposits and net loans as of December 31, 2020

(Unit: Million baht)

Commercial Banks	Assets	Market Share (%)	Deposits	Market Share (%)	Net Loans	Market Share (%)
1. Bangkok Bank Plc.	3,384,961	16.9%	2,485,597	17.0%	1,896,205	14.8%
2. Siam Commercial Bank Plc.	3,280,442	16.4%	2,429,780	16.6%	2,125,942	16.6%
3. Krung Thai Bank Plc.	3,226,987	16.1%	2,466,780	16.9%	2,124,250	16.6%
4. Kasikorn Bank Plc.	3,061,407	15.3%	2,340,470	16.0%	2,066,638	16.2%
5. Bank of Ayudhya Plc.	2,460,731	12.3%	1,819,223	12.4%	1,609,830	12.6%
6. TMB Bank Plc.	1,205,404	6.0%	815,678	5.6%	693,775	5.4%
7. Thanachart Bank Plc.	811,183	4.1%	557,957	3.8%	649,686	5.1%
8. UOB Bank Plc.	632,342	3.2%	491,560	3.4%	421,662	3.3%
9. CIMB Thai Bank Plc.	404,421	2.0%	194,150	1.3%	217,576	1.7%
10. Kiatnakin Phatra Bank Plc.	354,468	1.8%	252,067	1.7%	262,643	2.1%
11. TISCO Bank Plc.	264,921	1.3%	204,859	1.4%	213,802	1.7%
12. Land & House Bank Plc.	240,085	1.2%	182,735	1.2%	155,838	1.2%
13. ICBC (Thai) Plc.	225,413	1.1%	147,053	1.0%	111,933	0.9%
14. Standard Chartered Bank (Thai) Plc.	167,167	0.8%	84,329	0.6%	28,800	0.2%
15. The Thai Credit Retail Bank Plc.	80,721	0.4%	64,626	0.4%	66,823	0.5%
16. Sumitomo Mitsui Bank (Thai) Plc..	78,454	0.4%	21,719	0.1%	51,280	0.4%
17. Bank of China (Thai) Plc	68,562	0.3%	47,094	0.3%	45,455	0.4%
18. ANZ Bank (Thai) Plc.	49,406	0.2%	10,052	0.1%	18,960	0.1%
19. Mega International Commercial Bank Plc.	25,120	0.1%	16,417	0.1%	20,766	0.2%
<b>Total</b>	<b>20,022,198</b>	<b>100.0%</b>	<b>14,632,146</b>	<b>100.0%</b>	<b>12,781,864</b>	<b>100.0%</b>

Source: Summary of Assets and Liabilities Statement (C.B. 1.1) Bank of Thailand

### • Competition

The banking sector in 2020 experienced substantial macro challenges. The COVID-19 pandemic drove economic activities into a severe contraction. Some business sectors could not normally operate, slowed down or temporarily halted operations. As a result, the payment capabilities of both businesses and individuals were heavily impacted. The commercial bank industry focused on maintaining revenue from the core business and controlling operating expenses and asset quality. On parallel, commercial banks provided debt relief programs for retail and corporate customers to ease debt burdens amidst the economic uncertainty and impact of the pandemic.

The domestically-registered commercial banks recorded a fall in net profit of 46.0 % (YoY) as banks set aside a high level of expected credit loss to cushion against potential weakening in asset quality from impact of COVID-19 and lower net interest income, in line with the lower policy rate. Net interest margin (NIM) was at 2.75% as commercial banks focused on maintaining NIM levels or managing them within a limited boundary while fee-based income contracted following lower economic activities. Many commercial banks boosted income from the capital markets business to replace revenue forgone from remittance and ATM fees. Total outstanding loans expanded by 5.1% (YoY), mainly from corporate and housing loans. Meanwhile, NPL ratio rose to 3.12%, affected by deterioration in quality of SMEs and consumer loans. Many banks put more caution on loan approval, especially for vulnerable groups of customers who are highly sensitive to economic conditions. Nonetheless, the banking industry remained resilient with robust capital funds and loan loss provision to withstand uncertainty in asset quality.

In response to continuous growth in banking transactions through digital channels, accelerated during the periods of economic lockdown, many banks have downsized their physical branches to cut operating costs and focused on investing and adopting new financial innovations to strengthen service abilities. Commercial banks are also carrying out digital transformations to cope with intensified competition from both incumbents and new market players from the technological sector.

### Securities and investment banking business operated by TISCO Securities Co., Ltd.

### • Market

At the end of 2020, 44 companies held brokerage business licenses and 75 companies<sup>1</sup> held financial advisory service licenses granted by the Securities and Exchange Commission. For the equity market in 2020, the SET index closed at 1,449.35 points, decreased by 130.49 points (8.3% YoY) from 1,579.84 points at the end of 2019. Meanwhile, average daily turnover was 67,335 million baht, up by 28.3% (YoY). Derivatives market saw total trading volume increase by 15.0% (YoY) to 120.2 million contracts. Average daily volume increased to 494,624 contracts per day, improved by 15.5% from 428,369 contracts per day in 2019. In the primary market, there were 26 newly listed companies in the SET and MAI markets, 1 real estate investment trust (REITs) and 1 infrastructure fund (IFF). Total offering size of newly listed securities was 136,044 million baht, up by 49.8% (YoY).

Capital markets in 2020 were highly volatile and investor confidence was dampened by the COVID-19 situation and economic downturn, especially in Thailand where the economy is heavily dependent on the tourism and export sectors. In the first quarter of 2020, the SET index drastically dropped to 968.08 points, declined by 610.76 points from 1,579.84 points in 2019. The index subsequently rose gradually to close at 1,449.35 points at the end of 2020, driven by economic stimulus as well as the reduction of policy rates from central banks around the world. As a result of lower return in bond market and higher liquidity, most investors turned from the bond market to invest in capital markets to search for higher yield. In the first nine months of 2020, foreign investors were net sellers with net sell value of 277,673.99 million baht, before switching to net buyers with a net buy value of 13,288.20 million baht in the last quarter of 2020. Meanwhile, retail investors were net buyers with net buy value of 216,708.69 million baht during the year. For the proportion of market trading value in 2020, local and foreign institutional sectors declined from 25.2% to 20.8% and 41.9% to 36.5% (YoY), respectively. Meanwhile, the proportion of retail investors to total market trading value increased to 42.7% from 32.9% a year earlier.

<sup>1</sup> Source: [www.sec.or.th](http://www.sec.or.th)



### **Capital market conditions**

	2020	2019	2018
SET index (points)	1,449.35	1,579.84	1,563.88
Market capitalization (million baht)	16,107,633	16,747,455	15,978,252
Trading turnover (million baht)	16,362,358	12,802,090	13,820,220
Average daily turnover (million baht)	67,335	52,467	56,409
Dividend yield (%)	3.32	3.14	3.22
Price to earnings ratio (times)	28.84	19.40	14.75
Number of listed companies on the SET	568	556	545
Derivative contract volume (contracts)	120,193,573	104,521,995	104,422,200

Source: The Stock Exchange of Thailand

#### • **Competition**

In 2020, brokerage market competition remained fierce as most market players adopted price cutting strategies. As a result, brokerage commission income continued to decline, especially from foreign investors which saw the lowest commission margin as most transactions were from direct market access. Some market players adopted revenue diversification strategies, tapping new sources of income, including proprietary trading, derivatives warrants, derivatives trading, margin loans and securities borrowing and lending, fund sales, and global equity market services to offset declining revenue from commission fees. Moreover, the trading service of brokerage firms changed from Execution-only service to Portfolio Advisory with Execution service whereby the client receives advice on investment allocation or investment strategy, in accordance with their goals and risk appetite. In addition, TISCO has commenced an Open Architecture service to provide mutual fund services which enhance investment opportunities for clients. TISCO Securities Co., Ltd has no policy for aggressive price cutting, focusing instead on serving fundamental investors rather than speculative investors by producing high quality research that serves both local and foreign institutional investors. Furthermore, TISCO Securities Co., Ltd provides investment advisory services as an alternative for investors. As of December 31, 2020, the market share of TISCO Securities Co., Ltd (excluding proprietary trading) was 1.5%.

For the investment banking market, competition is intense as there are numerous players while demand is limited. The players compete on price and quality of services. In response, TISCO Securities focuses on quality of team, experience, and expertise in financial advisory as well as long-term relationships with customers.

### **Asset Management business operated by TISCO Asset Management Co., Ltd.**

#### • **Market**

For the asset management industry, there are 28 players, including asset management companies, commercial banks, securities companies, and insurance companies. As of December 31, 2020, the assets under management of the asset management market totaled 8,235,945 million baht, increased by 6.8% (YoY), with the biggest contribution coming from the private fund business. Furthermore, provident funds totaled 1,248,314 million baht, increased by 2.1% (YoY) while private funds totaled 1,993,221 million baht, increased by 77.2% (YoY). Meanwhile, mutual funds totaled 4,994,410 million baht, contracted by 6.9% (YoY). TISCO Asset Management's market share in provident funds, private funds, and mutual funds is 16.5%, 3.0%, and 1.1%, respectively.





### • Competition

In 2020, the provident fund business slowed, mainly due to the pandemic situation which affected the economy and investment market. Affected employers and employees needed to temporarily halt their provident fund contribution while some companies withdrew from provident funds. Nevertheless, TISCO Asset Management Co., Ltd continued to generate outstanding long-term fund performance despite the volatile market situation, especially in comparison to the leading asset management companies which carried out aggressive marketing campaigns highlighting attractive prices, greater variety of funds, and fund performance to attract customers. Moreover, TISCO Asset Management has encouraged members to recognize the importance of retirement savings by recommending members contribute funds at a maximum of 15% of their wages. As a result, in 2020, TISCO's provident fund business grew by 11.8% (YoY), compared with industrial growth of 2.1% from 2019.

TISCO Asset Management Co., Ltd was named Pension Fund of the Year Thailand 2020 for the third consecutive year by Global Banking and Finance Review, one of the world's leading financial magazines, reflecting its excellent fund performance and high customer service standards.

The private fund business has retained highly competitive pricing, especially in the institutional market, in order to win bidding. Instead of price competition, individual clients have focused on serving and building relationships with customers, giving consideration to organization creditability, investment advisory services, as well as fund management team. In 2020, assets under management of the private fund industry were at 1,993,211 million baht, up 77.2% mainly due to the addition of a new asset management company, a subsidiary of a life insurance company. This company accounted for more than 40% of the industry's total assets under management.

In 2020, the mutual fund industry saw 6.9% (YoY) contraction in assets under management, driven by lower investor confidence in the bond market amid concerns on the low market interest rate and economic downturn from the spread of COVID-19. As a result, most investors moved from fixed income funds to invest in equity markets, led by the U.S. capital market, especially in the healthcare and technology sectors. Likewise, in Thailand, there was higher fund inflow, mainly from Foreign Investment Funds (FIF), which invested in the technology sector. During the year, most asset management companies launched new mutual funds focusing on technology and mega trends. After long-term equity fund (LTF) tax privileges expired at the end of 2019, the government launched super savings fund (SSF) and super saving fund extra (SSFX) as new tax deduction funds with investment holding periods of not less than 10 years from the subscription date. However, SSF and SSFX have not been as popular as the LTF program and thus have failed to compensate for lack of LTF fund inflow in the past year.

## 2.2 Arrangement of Products or Services

### Sources of Funds

Apart from the Group's capital, most of the funds from the Group and its subsidiaries are sourced from deposits, the interbank and money markets, and short and long-term borrowing. The details of sources of funds are as follows:

(Unit: Million baht)

<b>Fund Sources</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
Deposits <sup>1</sup>	203,509.74	216,121.47	198,985.23
Interbank and Money Market Items	5,807.65	4,656.13	4,374.67
Debentures	12,789.00	24,980.00	49,680.00
Other Liabilities	13,874.74	13,350.38	11,675.28
<b>Total Sources of Funds from Liabilities</b>	<b>235,981.13</b>	<b>259,107.98</b>	<b>264,715.18</b>
Capital	39,462.08	39,196.11	37,829.45
<b>Total Sources of Funds</b>	<b>275,443.21</b>	<b>298,304.09</b>	<b>302,544.63</b>

## Lending

### • Credit granting policy

#### Commercial loans

TISCO Group (specified for TISCO Bank and credit granting companies) has a policy to emphasize prudent growth in commercial and retail lending. For each new credit approval, the Bank thoroughly considers the borrower's business potential, opportunities, ability to repay, collateral, and the rate of return that justifies the risk of each borrower. TISCO Group focuses on expanding its business into markets with acceptable risk/return and in which it has sufficient expertise. TISCO Group performs analysis of key risk characteristics prior to entering new markets.

Collateral policies vary by type of credit and are employed with effective procedures to stabilize collateral values under the specified conditions and to minimize potential losses. However, TISCO Group may selectively grant loans without collateral to certain borrowers judged to have high creditworthiness, on a case-by-case basis. For the appraisal of collateral values, the Bank has a policy to have the collateral appraised by an independent appraiser or the internal asset appraisal unit before any loan can be drawn. TISCO Group's Appraisal Sub-Committee is responsible for approving the appraisal value proposed by the internal unit and independent appraisers under the company's guidelines, in compliance with the regulations of the BoT.

TISCO Group has established prudent procedures for all credit approval to ensure high credit quality while maintaining customer satisfaction. Approved credit is reviewed and controlled, in compliance with overall credit policies.

The maximum credit terms are set in accordance with the regulations of the BoT. TISCO Group has constructed a pricing policy aligned with current market conditions and credit exposure as well as cost of funds without any price undercutting strategy.

#### Retail loans

The hire-purchase business covers a large portion of the retail credit portfolio. TISCO Group has a policy to aggressively expand its hire-purchase business in this market with justified risk-adjusted returns. TISCO Group has established a standard approval process for the hire-purchase portfolio and other retail loan portfolios which includes a credit-scoring system developed from an internal database to effectively control and shorten the loan approval process.

Credit policies are regularly reviewed to reflect the current market situation and support loan expansion in a prudent manner, while maintaining appropriate risk-adjusted return. Meanwhile, TISCO Group has a policy to maintain highly competitive credit quality without resorting to a price-cutting policy. In this respect, focus is on enhancing quality of service and good business relationships as vital competitive tools. For the collateral policy, hire-purchase assets are supported by adequate secondary markets and appropriate insurance strategies.

For mortgage loans, approved credit does not exceed 90% of the collateral value with terms and conditions varying by type of collateral. Meanwhile other retail loans without collateral require higher interest rates to offset the higher risk assumed.

<sup>1</sup> Total deposits including short-term borrowings

### • Credit Approval Limits and Authorities

The Credit Committee is responsible for overseeing the credit approval process under the credit policies and guidelines set forth by the Executive Board.

Credit approval policies are clearly stated, specifying terms of credit limits and delegation of authority. All corporate loan transactions must be reviewed and approved by the Credit Committee while loan facilities which are considered material in size must be approved by the Executive Board.

For the retail credit portfolio which covers small transaction sizes, the credit approval process and delegation of authority varies by the credit limit and is controlled by the overall credit policies. Large retail credit must be approved by the Credit Committee or the Executive Board after reviewing the type and purpose of the loan, on a case-by-case basis.

For the hire purchase business, TISCO has implemented a credit-scoring system to assist the loan approval process, in which customer characteristics and loan terms and conditions are taken into consideration for computation of a credit score.

### • Credit Risk Management

The Risk Management Committee of TISCO Group, comprised of senior management from key business lines, has been delegated the authority to set up policies, guidelines, and procedures for overall credit risk management, in compliance with the Consolidated Supervision principle of the Bank of Thailand. Meanwhile, the Credit Committee and Chief Credit Officer, who are in charge of the loan approval processes of each credit transaction, have set up guidelines for the delegation of approval authority at different levels for different types of facilities. The Problem Loan Committee is set up to monitor and follow up on problem loans and to set appropriate provisions for potential loan losses.

To ensure independence in carrying out the credit approval process and reporting to the Risk Management Committee, credit quality control functions are clearly separated from marketing functions. Moreover, credit review functions assigned by the Internal Control function and the Audit Committee are responsible for reviewing ongoing credit approval processes and ensuring transparency in overall credit granting procedures.

A credit grading system has been adopted for credit risk assessment in both the corporate and retail credit portfolios, in accordance with the implementation of the Internal Ratings Based approach (IRB), resulting in greater efficiency in capital utilization in the long term.

To mitigate credit concentration risk, TISCO Group has set a concentration limit which defines the maximum credit exposure for each individual borrower or borrowing group. Moreover, concentration in a single sector is also controlled within an acceptable level and considered in combination with the sector's exposure to equity investment. TISCO Group complies with the regulations of the BOT concerning single lending limits.

### • Credit Collection

TISCO Group regularly performs credit reviews of the loan portfolio and monitors problem accounts. The Credit Committee closely co-ordinates with credit departments and promptly follows up on accounts with potential problems after a missing payment is reported. In addition, Problem Loan Committee meetings are arranged to review the status of borrowers, set up debt collection schedules and follow-up procedures, pursue legal actions, and set aside provisions for loan losses. As part of the follow-up procedure, the credit officer reports to the Problem Loan Committee all restructured cases on a regular basis.

For the retail credit portfolio, TISCO Group strives to continuously improve the strategies and procedures for debt collection and follow-up, in line with the economic conditions and related laws and regulations, particularly with regard to notification from the Office of Consumer Protection. The primary collection and follow-up process includes collection, follow-up and asset repossession, legal process, and enforcement.

### • Debt restructuring

The objective of debt restructuring is to resolve problem loans which have been affected by economic downturns or the borrower's financial difficulties. TISCO Group's procedures for debt restructuring involve various methods, such as

relaxing of payment conditions, debt-to-asset conversion, debt-to-financial-instrument conversion, and debt-to-equity conversion.

Debt restructuring can be conducted with every borrower, regardless of status. The corporate lending function is responsible for the debt restructuring process, including the decision to select borrowers for restructuring. The delegated officers will evaluate the borrower's credit qualities and related financial and operating environment and perform projections on repayment possibilities.

For debt restructuring cases related to, both directly and indirectly, Bank directors or persons related to TISCO Group directors or management, the borrower's status, repayment ability and cash flow status must be evaluated by an independent financial institution or third party to ensure no conflict of interest with the Bank and the borrower. Under the regulations of the Bank of Thailand, all restructured loans are reclassified, provisioned for, and recalculated for impairment loss.

### **Capital Adequacy**

The Group has a policy to maintain capital that is adequate to safeguard against company risks in the long run, taking into account long-term solvency amid economic uncertainties and the adequacy of regulatory capital-to-risk asset ratios, as required by law. The Bank of Thailand's current capital adequacy ratio for banks registered in Thailand is 11.0%, whereas Tier-I Capital must be maintained at a level equal to at least 8.5% of risk assets.

The capital base of the Group remains strong with the Capital Adequacy Ratio exceeding the requirements of the BOT and sufficient to support forthcoming regulations concerning debt reclassification and provisions.

### **Liquidity Management Policy**

The Risk Management Committee is responsible for monitoring and determining assets-to-liabilities direction and funding structure details. The Committee also establishes various liquidity limits to serve as early warning triggers, such as liquid assets, contractual maturity mismatch, funding concentration, and daily deposit/withdrawal levels. Furthermore, a liquidity contingency plan has been established to outline clear procedures and responsibilities for liquidity management in times of crisis.

Meanwhile, the Treasury function is responsible for daily liquidity management and securing of sources and the use of funds as required. The Treasury function is also responsible for managing the Bank's liquidity position to comply with internal guidelines and the regulatory requirements of the BOT.

### **Asset Classification, Provisions and Write-offs**

TISCO Group classifies financial assets into three groups (three-stage approach) in order to measure the allowance for expected credit loss, with the classification of the financial assets determined on the basis of the change in credit quality since the initial transaction date. Details are provided as follows:

- Group 1: Financial assets with no significant increase in credit risk (Performing)

For financial assets with no significant increase in credit risk since the initial recognition date, the Group recognizes allowance for expected credit loss at an amount equal to a 12-month expected credit loss. For financial assets with maturity of less than 12 months, the Group uses a probability of default that corresponds to the remaining terms of the contract.

- Group 2: Financial assets with significant increase in credit risk (Under-performing)

For financial assets with significant increase in credit risk since the initial recognition date but that are not credit-impaired, the Group recognizes expected credit loss at an amount equal to expected credit loss over the expected lifetime of the financial asset.

- Group 3: Financial assets that are credit-impaired (Non-performing)

Financial assets are assessed as credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that asset occur. The Group recognizes expected credit loss at the amount equal to expected credit loss over the expected lifetime of the financial assets. Our asset classification policies are presented in item 14.3 of Part 3, Section 14: Asset Quality Expected Credit Loss.

The Securities Business operated by TISCO Securities Co., Ltd is detailed as follows:

#### **Sources of funds**

The sources of funds are mainly equity, operational cash flow, and loans from financial institutions for working capital purposes.

#### **Credit approval and authorization**

TISCO Securities Co., Ltd. has a credit approval policy to screen qualified customers and provide customers with a solid understanding of securities trading. Credit lines for particular customers are based on the customer's financial status and collateral. The Executive Board of Directors has granted credit approval authority to the Credit Committee. The Credit Committee alone approves high-volume credit lines and has granted lesser authority to management to approve general credit lines which comply with the Credit Committee's guidelines and policy.

#### **Margin trading accounts**

All clients of securities brokerages are cash accounts.

#### **Investment Policy**

For listed equities, TISCO Securities Co., Ltd. has a policy to invest in businesses with strong fundamentals, taking into consideration liquidity, risk and return on securities, and the diversification of its portfolio. As for non-listed equities, the Company has no policy to enlarge this portfolio, but will exploit market opportunities for selling existing securities at the highest price. For debentures, TISCO Securities Co., Ltd. holds them only for liquidity reserve purposes. The Company holds unit trusts as short-term and long-term investments, depending on their investment policy and fund performance. Moreover, the company has a policy to invest in derivative instruments to earn trading gains and for risk management purposes, depending on the investment climate in the stock market.

Investment policy complies with the guidelines and policies of the Risk Management Committee, which consist of key executives. This committee determines the investment policy, size of the investment portfolio, maximum limits for daily securities trading, and the loss limit.

#### **Capital Adequacy Ability**

The Net Capital Rule (NCR) ratio of TISCO Securities Co., Ltd. as of December 31, 2020 was 43.47%, well above the 7.0% regulatory requirement of the SEC.

### 3. Risk Factors

#### Overview of Risk Management

TISCO Group 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 Group is able to increase awareness, accountability, and efficiency in enterprise-wide risk management while maintaining best practice standards and high-quality corporate governance. In addition, TISCO Group aims to maximize sustainable risk-adjusted return for shareholders over the long run.

#### Risk Management Policy

Overall risk management policy, as a standardized operation for TISCO Group's risk management, encompasses the following structure:

1. Consolidated and centralized risk management

Risk management infrastructure is centralized by consolidating risk exposure from all subsidiaries under the Company through careful risk assessment and 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 TISCO Group while complying with risk management policies, guidelines, and procedures. Independent risk oversight and a checks-and-balances 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 tools

Capital represents the ultimate interests of the shareholders. All risk exposures are quantified through the Risk Capital based on Value-at-Risk (VaR) standardized risk measure which can relate risks to the amount of capital required to protect against them, in accordance with predefined risk limits. The process of risk assessment under Risk Capital is considered part of the Internal Capital Adequacy Assessment Process (ICAAP) of TISCO. Risk capital enables management and business line managers to understand the level of risks being taken in a meaningful manner. Risks from different levels are integrated to produce an overall risk picture of the Group, which is used for capital adequacy planning and strategic capital allocation both at the corporate and business unit levels.

5. Risk tolerance level and capital allocation

Total risk capital shall not be in excess of the available capital funds of the Group while qualitative risk tolerance level shall be applied for non-capital based assessment. Risk Capital shall determine the economic capital adequacy of TISCO; the available capital is also allocated to the business and operating units such that the capital adequacies to undertake risk are ensured both at the corporate and business-unit levels.

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 the key risk management principle for 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 risk, 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 corporation.

#### 9. Effective risk modeling and validation

Risks shall be modeled as forward-looking measures that reflect potential likelihood and impact on the intrinsic value of TISCO assets, liabilities, or businesses. Mark-to-market practice shall be adopted in all portfolios as appropriate, while independent validation from risk management shall be adopted in the case of high complexity in valuation. Key risk models with sufficient information shall be validated through a systematic back-testing process or other prudent statistical tools.

#### 10. Regulatory best practices

TISCO 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 authorities.

#### 11. New businesses or products

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

#### 12. Related party transactions

All business transactions among TISCO Group and related parties shall be on a similar basis with the treatment of regular customers. Additionally, related transactions shall be transparent and auditable. Meanwhile, the proportion of business transactions among TISCO Group shall be controlled under regulatory guidelines.

#### 13. Stress testing

Stress testing is a procedure to assess the impact on the company's financial status of extreme risk events. The stress testing process is designed to be a supplementary tool for the analysis of credit risk, market risk and funding risk. The Risk Management Committee is responsible for overseeing the framework for stress tests. The Committee will establish guidelines and key required assumptions to perform stress tests based on the appropriate framework. Meanwhile, Risk Management Functions are responsible for facilitating all related business units in order to perform periodic stress tests, and for reporting the stress test results as well as the recommendations on any important aspects to the Risk Oversight Committee as well as the Risk Management Committee. Stress test assessment and results shall be integrated into the development and evaluation of the internal management strategy which may involve reviewing the need for limit changes or developing contingency plans.

#### 14. Risk management for foreign exposure

Risk from foreign exposure arises from changes in the value of foreign exposure due to country-specific sovereign and economic conditions including political risk and capital flow risk. TISCO Group shall ensure that credit granting or investment activities in foreign countries are carried out in alignment with business strategy and well-controlled within a manageable level. The risk management of foreign exposure shall take into account the monitoring of economic and political risk factors that may adversely affect the value of foreign exposure positions, as well as the country-specific liquidity, market and correlation risks. In case the foreign exposure is substantial and



exceeds the threshold limit of 50% of regulatory Tier-I capital, TISCO Group will establish detailed guidelines for managing such risk in accordance with the BOT's regulations.

#### 15. Policy for recovery plan

Past global financial crises have demonstrated the necessity of financial institution preparation to deal with financial distress. Development of a Recovery Plan is the preparation of mechanisms in advance to deal with potential stress conditions that may arise so as to ensure that commercial banks have a framework that can be adopted as appropriate to the circumstances at the time of the actual stress. The Recovery Plan shall, at a minimum, cover key processes and provide necessary information as set out in the BOT's guidelines on Recovery Planning. The plan includes a set of tools and procedures to enable the recovery or continuation of TISCO Group under extreme risk events. The Board of Directors through the Executive Board and Risk Oversight Committee oversee the Recovery Plan framework, whereby the Risk Management Committee formulates the actual Recovery Plan with support from the Enterprise Risk Management function in facilitating involvement of all related business units, consolidating all necessary information, and defining appropriate recovery triggers and recovery options, in accordance with possible economic conditions and market environment. Moreover, the Recovery Plan will be reviewed at least once a year or when there is a material change that may affect the Plan and the effective implementation of recovery options. The recovery trigger event result and option in the Recovery Plan will be reviewed by the Risk Oversight Committee and approved by the Executive Board.

### **Risk Management Framework**

In accordance with enterprise-wide risk management policies and objectives, risk management and internal control are monitored and controlled by the Board of Directors of the Company with delegation to the Executive Board of Directors of the Company. 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 Group. Senior management and relevant business advisory committees oversee the entire risk management framework and strategy for all business areas, supported by the planning and budgeting function. The Risk Oversight Committee is set up to advise the Board of Directors on risk governance framework to ensure that top management and heads of risk management functions follow the risk management policy, strategies, and risk appetites, as well as to ensure that capital and liquidity management strategies are consistent with risk appetite. The Risk Oversight Committee also reviews the sufficiency and effectiveness of overall risk management policy and strategies, and reports risk exposures, effectiveness of the risk management system and the risk governance culture of the organization, as well as any significant factors or required improvements to the Board of Directors and advises or participates in the evaluation of the heads of the risk management functions. Moreover, the Risk Management Committee, supported by enterprise risk management, risk and business analytics, IT risk management, and the operational risk management functions, is set up to ensure 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, Problem Loan Committee, and Compliance & Operation Control Committee. These mechanisms are in turn supported by the credit control and other supporting functions, including governing compliance and the legal office. 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 business operations are under the risk limits approved by the Risk Management Committee, including new business analysis in each business line; triggered risk limits as well as new businesses shall be reported monthly to the Risk Management Committee for acknowledgement. Additionally, the Risk Oversight Committee shall review the sufficiency and effectiveness of overall risk management policy and strategies, and shall report risk exposures, effectiveness of risk management system and the risk governance culture of the organization, as well as any significant factors or required improvements to the Board of Directors. The Committee shall also advise or participate in the evaluation of the heads of risk management functions. To enhance the overall risk management system, the risk management system shall be audited and reported to the Audit Committee which reports directly to the Board of Directors.

At the present, Information Technology (IT) is an integral part of the business, serving the business needs and supporting customer channels in accessing information and services known as Financial Technology (FinTech), in addition to several laws and regulations which have been announced for IT good governance. TISCO Group set up the

IT Risk Management function to manage in-depth and transaction-level IT risks and to support the Risk Oversight Committee as well as the Risk Management Committee with IT risk while acting as an integral part of operational risk and IT Risk Committee for specific-area risk authorities.

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

- Board of Directors

The Board of Directors of the Company shall ensure the institution of an effective risk management system for the Bank and ensure that the Company has adopted and adhere to TISCO Group Risk Management Policy. The Board has assigned the Executive Board the task of overseeing and monitoring risk management activities. 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.

- Board of Directors of Subsidiaries

Under a consolidated supervision framework, the Board shall ensure that each subsidiary adopts and adheres to the TISCO Group Risk Management Policy approved by the Board of Directors of the parent company. The Board will appoint other committees in accordance with the needs and suitability to carry out specific tasks to ensure that the operations comply with established Corporate Governance Policy and report risk management activities and financial performance to the parent company's Executive Board on a regular basis, in compliance with the Consolidated Supervision Principle of the BOT.

- Risk Oversight Committee

The Risk Oversight Committee is set up to advise the Board of Directors on risk governance framework to ensure that top management and heads of risk management functions follow the Board of Directors' approved risk management policy, strategies, and risk appetites, as well as to ensure that capital and liquidity management strategies are consistent with the approved risk appetites. Moreover, the Risk Oversight Committee has the responsibility of reviewing sufficiency and effectiveness of overall risk management policy and strategies as well as risk appetites at least once a year or when there is a significant change. The Committee also reports on risk exposures, effectiveness of risk management system, the risk governance culture of the organization, and any significant factors or required improvements to the Board of Directors, in addition to advising or participating in the evaluation of the heads of risk management functions.

- Risk Management Committee

The Risk Management Committee of the company, comprising the senior management of TISCO Group, has been appointed by the Group CEO to be in 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 held once a month. Enterprise risk management, risk and business analytics, operational risk management, and IT risk management functions support the Risk Management Committee in setting up and monitoring risk management policies and guidelines and performing enterprise-wide risk management activities through the research, assessment, and reporting process.

- 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 credit control in overseeing credit approval and risk management. In addition, the Executive board of Directors of the bank and Board of Directors of other credit-granting subsidiaries shall control and follow up on all specific risk areas which are directly reported to the Board of Directors of the bank as well as the Board of Directors of the Group on a regular basis.

## Risk Types

Risk management of TISCO Group considers five risk factors: 1) Credit Risk 2) Liquidity Risk 3) Market Risk 4) Operational Risk and 5) Strategic Risk. Details are shown in item 3.1-3.5

The overall risk of TISCO Group is at a manageable level, with capital funds remaining strong for further business expansion as has already been assessed by the BOT. Moreover, TISCO Group has guidelines for risk management according to each type of risk.

*Additional details are shown in Part 3 Section 14: Management Discussion and Analysis*

### 3.1 Credit Risk

Credit Risk is defined as the possibility of an obligor's failure to meet the contract agreement with TISCO Group. Potential for failure requires the Bank to maintain adequate provisions for loan losses. As a result, Credit Risk can adversely impact the net income and capital of TISCO Group.

#### 3.1.1 Default Risk

Default risk corresponds with lower credit quality. As of December 31, 2020, the NPL ratio of TISCO Group had increased from 2.40% at the end of 2019 to 2.50% at the end of 2020, mainly the result of impact from economic slowdown due to the COVID-19 situation. To prevent rising credit risk, an increase in expected loss was absorbed by the expected credit loss (ECL) set up during the year, with prudently managed non-performing loans (NPLs), including advanced risk management tools and stringent loan collection practices, debt restructuring and the write-off process. Additionally, NPL ratio of retail loans increased from 2.84% at the end of 2019 to 3.17% at the end of 2020, while there was no NPLs in corporate loans at the end of 2020. Total NPLs represented 5,618.48 million baht which had decreased by 215.95 million baht or 3.7%, of which the NPLs of the Bank were 4,946.30 million baht and NPLs of other subsidiaries amounted 672.18 million baht.

Since January 1, 2020, TISCO Group has used the Expected Credit Loss framework in place of the provision impairment loss method, in accordance with the new Thai Financial Reporting Standard No. 9 (TFRS 9) which has a different loan classification and impairment model, taking into account the potential credit loss and additional risks from forward looking macroeconomic factors (Forward Looking Model). As of December 31, 2020, total allowance for expected credit loss on loans of TISCO Group was 11,825.54 million baht, of which the allowance for expected credit loss on loans of the Bank amounted to 10,938.18 million baht. Total allowance for expected credit loss on loans of TISCO Group consisted of ECL impairment totaling 10,769.15 million baht and excess reserve of 1,056.40 million baht. Hence, the loan loss coverage ratio stood at 210.5% at the end of 2020, reflecting a prudent provisioning policy to mitigate potential risk.

#### 3.1.2 Concentration Risk

Concentration risk is risk from borrower concentration. As of December 31, 2019, hire purchase and corporate loans represented 56.8% and 15.1% of the total credit portfolio, respectively. The hire purchase portfolio, of which concentration was very low, had 138,126.90 million baht of loans outstanding. Top-10 borrower exposure of the hire purchase portfolio stood at 58.68 million baht or 0.04% of the total hire purchase portfolio, or equal to 0.02% of the total credit portfolio.

The corporate loan portfolio is diversified across four different sectors: manufacturing and commerce, 2,630.54 million baht; real estate and construction, 14,674.57 million baht; and public utilities and services, 19,388.66 million baht. Lending to the above industrial sectors represented 7.2%, 40.0%, and 52.8% of the total corporate loan portfolio, respectively, and represented 1.1%, 6.0%, and 8.0% of the total credit portfolio, respectively. As top-10 borrower exposure stood at 32,226.43 million baht or accounting for 13.3% of the total credit portfolio, there is a slight concentration in public utilities and services as well as the real estate and construction sectors which have been managed under the risk management procedure. Moreover, the corporate loan portfolio is almost fully collateralized. In the loan approval process, an appropriate proportion of collateral value and financing amount is maintained to ensure that risks are kept within a manageable level. Furthermore, collateral values are regularly appraised and an effective loan drawdown procedure has been implemented. Portfolio credit quality is closely monitored.

### 3.1.3 Collateral Risk

Collateral risk involves borrower defaults and value after selling collateral in the debt collection process falling short of the original debt amount. As of December 31, 2020, the lending portfolio of TISCO Group came mostly from TISCO Bank whereby 86.1% of the portfolio was asset backed or with collateral. For the hire purchase portfolio, the underlying assets under the loan agreement itself are still owned by TISCO Group. In case the borrowers of hire purchase loans cannot meet the terms and conditions, TISCO Group 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 is 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 Group. Market prices for used cars depend on such diverse factors as market demand, type, brand, and tax regulations.

According to past records, the recovery rate for asset liquidation in the secondary market is somewhat high at 70% to 90% of the remaining net financing amount, which helps absorb losses from defaulted loans. TISCO Group has attempted to minimize credit risk by regularly updating information regarding trends in the used car market, requiring high-value collateral and sufficient average 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 expected credit loss provisioning. Collateral values are appraised according to regulations of the BOT. The proportion of collateral value used in deducting the provisioning requirements for NPLs was 97.2% of the NPLs of commercial and mortgage loans.

Generally, the risk of real estate value changes depending on economic conditions. A recession in the Thai economy might result in lower values, which would require TISCO Group reserve a higher allowance of expected credit loss and would affect net profit and capital funds. 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.

### 3.1.4 Property Risk from Foreclosed Assets

Property risk from foreclosed assets is the impairment of assets transferred from loans, hire purchase receivables on which debtors had defaulted on their repayment obligations under the loan contracts, or restructured receivables. The value of repossessed assets is stated at the lower of cost and net realizable value. Outstanding assets in the process of liquidation held by TISCO Group as of December 31, 2020 were worth 29.67 million baht, or 0.01% of total assets. Allowance for impairment stood at 2.9% of total foreclosed assets.

#### ▪ Credit Risk Management Framework

The Risk Management Committee is delegated to oversee the 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. In addition, the Risk Oversight Committee shall advise the Board of Directors on risk governance framework to ensure that top management and heads of risk management functions follow the Board of Directors' approved risk management policy, strategies, and risk appetites, while reviewing the sufficiency and effectiveness of overall risk management policy and strategies. The Risk Oversight Committee shall also report on risk exposures, effectiveness of the risk management system and the risk governance culture of the organization, as well as any significant factors or required improvements to the Board of Directors, in addition to advising or participating in the evaluation of the heads of risk management functions.

Credit risk is mainly incurred from subsidiary companies for which loans are the main business. Specific-Area credit risk authorities include the Credit Committee and Problem Loan Committee, which are established to oversee credit risk management and control of in-depth transactions of subsidiary companies. The Credit Committee is responsible for reviewing and granting credit approvals to any single client proposed by lending officers. The Credit Committee may delegate its authority to designated persons for authorizing lower-risk transactions. The Problem Loan Committee was set up to monitor and follow up on overdue payments of problem loan accounts and foreclosed assets on a regular basis.

Sound credit risk assessments are key risk practices at TISCO Group and involve credit analysis, credit ratings, delinquency analysis, concentration level and risk capital. All loan originations must operate under a sound credit granting process in which an effective credit rating system is employed in key business areas. In the retail lending area, quantitative-oriented approaches to credit grading are implemented considering its homogenous high-volume characteristics, with emphasis on the use of extensive data mining and analysis. In the corporate lending area, qualitative-oriented credit grading approaches shall be employed, taking into account highly varied risk profiles with well-defined standards.

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 Group uses credit risk management guidelines and limits that are comprehensively applied to all credit-related functions both at the portfolio and transactional levels, as well as monitoring and managing of problem loans and foreclosed assets.

### **3.2 Liquidity Risk**

Liquidity risk is the possibility that TISCO Group might not be able to meet its obligations to repay debts when they come due, whether as a result of a failure in cash management or an inability to raise funds to meet demand in time. Liquidity risk comes from internal and external factors. Internal factors are maturity mismatches in the assets and liabilities profile which affect the level of liquid assets, while market liquidity and depositor confidence represent external factors affecting liquidity risk.

As of December 31, 2020, the value of liquid assets is 50,552.62 million baht, which is comprised of cash at 1,220.21 million baht compared to 1,102.56 million baht in December 31, 2019, net transactions with interbank and money market at 38,212.03 million baht compared to 45,300.14 million baht as of December 31, 2019 and net current investment at 11,120.38 million baht compared to 9,145.77 million baht as of December 31, 2019.

Currently, liquidity risk from maturity mismatch is moderate once adjustments for the historical behavior of creditors and debtors such as loan defaults or rollovers are taken into account. According to the maturity mismatch profile within 1 year, the cumulative gap shows matured assets over the matured liabilities account for 68,309.30 million baht. In addition, emergency credit lines, cash flow from operations as well as inter-bank borrowing shall be utilized as a cushion against funding risk.

As of December 31, 2020, the Bank reported deposits of 203,472.83 million baht, outstanding long-term debentures (both subordinated and unsubordinated) of 8,840.00 million baht, short-term debentures of 3,949.00 million baht, and bills of exchange amounting to 36.92 million baht.

#### **▪ Liquidity Risk Management Framework**

Funding risk management is overseen by the Risk Management Committee which delegates day-to-day management of liquidity position to the accountable business line, subject to independent oversight and compliance with the approved risk policies and regulatory requirements. In addition, the Risk Oversight Committee shall advise the Board of Directors on risk governance framework to ensure that top management and heads of the risk management functions follow the Board of Directors' approved risk management policy, strategies, and risk appetites.

Key funding risk policies involve the management of cash flow maturity profiles, funding concentration, liquidity coverage ratio, net stable funding ratio, and liquidity contingency plan. Funding risk strategies shall take into account the liquidity status in the market and how unexpected changes would affect the company's risks. A manageable level of maturity mismatches of cash flows from assets and liabilities shall be consistently maintained and regularly monitored with liquidity stress testing, together with the level of liquidity reserve. Funding sources shall be well-planned to optimize risk/return while controlling excess concentration in certain funding sources is crucial. Contingency procedures for liquidity management in times of unexpected financial crisis must be established and made ready for timely activation.

### 3.3 Market Risk

Market risk stems from adverse changes in securities prices and interest rates, which affect the volatility of net income, capital, asset value, and the liabilities of TISCO Group.

#### 3.3.1 Equity Price Volatility

As of December 31, 2020, the equity portfolio stood at 2,173.02 million baht, of which 454.80 million baht was listed equity, 55.60 million baht was unit trust, 890.05 million baht was ETF in current market value, and 772.57 million baht was non-listed equity measured at fair value in accordance with the Thai Financial Reporting Standards No. 9 (TFRS 9).

##### (1) Listed Equity Risk and ETF

TISCO Group is exposed to price risk from the market price volatility of listed equity, unit trust and ETF investments. Investment portfolio measured at fair value through profit or loss (FVTPL) stood at 1,400.45 million baht. As of December 31, 2020, mark-to-market gain from the investment portfolio equaled 310.99 million baht.

TISCO Group calculates Value at Risk (VaR) for risk assessment purposes and files reports to management as well as to the Risk Management Committee on a daily basis. VaR is a maximum potential loss at a predefined confidence level and time horizon. The three month investment horizon VaR at a 99.0% confidence level, excluding unrealized gain/loss, as of December 31, 2020, was 268.29 million baht, increased from 184.00 million baht as of December 31, 2019 mainly due to higher risk volatility and risk exposure via rise in market value. For effective risk management and control, trigger limits were set up to monitor the overall market risk profile, according to internal guidelines, such as concentration trigger limits, stop-loss trigger limits, etc.

##### (2) Non-Listed Equity Risk

Non-listed equity portfolio measured at fair value stood at 772.57 million baht, increased from 217.26 million baht from the end of 2019 due to recognition and measurement of financial assets at fair value through profit or loss (FVTPL), in accordance with Thai Financial Reporting Standards No. 9 (TFRS 9). Presently, the investment strategy of TISCO Group is not to increase the size of the non-listed equity portfolio, but to instead seek opportunities to liquidate, while at the same time closely monitor portfolio quality on a regular basis.

#### 3.3.2 Interest Rate Risk

Interest rate risk can be classified into two types: risk from interest-bearing assets and liabilities profile, and fixed-income risk.

##### (1) Risk from Interest-Bearing Assets and Liabilities Profile

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 Group'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. TISCO Group's interest-bearing assets and liabilities structure, as of December 31, 2020, is provided in the following table.

(Unit: Million baht)

Interest Bearing Assets and Liabilities	Changed within 1 month	Changed within 2-12 months	Changed within 1-2 years	Changed after 2 years	Total
Assets	102,698.98	64,423.89	45,327.59	71,725.15	284,175.62
Liabilities	(80,510.17)	(130,295.72)	(5,541.32)	(6,855.40)	(223,202.61)
Net Gap	22,188.81	(65,871.83)	39,786.27	64,869.76	60,973.01

Under a change of interest rate within 1 year, TISCO Group had liabilities over assets within 2-12 months at 65,871.83 million baht. Considering the interest rate outlook for a gradual uptrend, the repricing gap structure was still under an acceptable risk level.



## (2) Fixed-Income Risk

Fixed-income risk is the result of a decrease in the value of fixed-income instruments when interest rates increase. As yields in the market go up, the value of fixed-income instruments decreases to maintain overall yield.

TISCO Group's fixed-income portfolio as of December 31, 2020 stood at 9,953.26 million baht, increased from 7,997.03 million baht at the end of 2019. Average duration of the bond portfolio was 0.30 years, increased from 0.19 years from the end of 2019. Fixed-income risk was under an acceptable level and meets the purpose of maintaining liquidity reserves according to the BOT's requirements.

### ▪ Market Risk Management Framework

The Risk Management Committee is responsible for overseeing portfolio risk management and control of market risks. The business lines are accountable for managing 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. In addition, the Risk Oversight Committee shall advise the Board of Directors on risk governance, review the sufficiency and effectiveness of overall risk management policy and strategies.

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 exposure. 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 the internal value-at-risk model. In addition, stress testing as a supplement to VaR is performed under various extreme scenarios. The risk assessment and corresponding risk treatment takes into account the transaction intent as well as the market liquidity of the securities.

Interest rate risk from the banking book is analyzed on the basis of mismatch between the timing of interest rate re-pricing of assets and liabilities and its potential impact on the future net interest income of TISCO Group under simulated scenarios.

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

## 3.4 Operational Risk

Reference is made to the definition given by the Basel Committee on Banking Supervision of the Bank for International Settlements and in accordance with the Policy Statement of the BOT regarding Operational Risk Management. Operational Risk is defined as the vulnerability of earnings, capital, or business continuity to inadequate, deficient or failed internal processes, people, technology or external factors including 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 is well aware that operational risk is one of the risks that may significantly impact the business undertaking of TISCO Group. Thereby, TISCO Group puts more emphasis on operational risk management and continuously develops 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 is concurrently adopted across all subsidiary companies of TISCO Group. The Operational Risk Management function performs duties in supporting and compelling all functions to operate in accordance with the framework stipulated in the operational risk management policy and provides assurance on the adequate control systems established for each business under risk-return perspectives. Compliance functions have a duty to oversee all functions to operate in compliance with the rules and regulations of the supervisory authorities. IT Risk Management function performs IT risk analysis and provides proper recommendations to all IT and business functions for appropriate IT control level as well as



IT compliance. The Internal Audit function shall independently conduct audits and provide assurance on the internal control system and whole risk management processes under the supervision of the Audit Committee.

In 2020, TISCO Group expanded into digitalized service channels and launched new business products for customers; operational risk increased accordingly. Nevertheless, the inherent risks of such new businesses were analyzed and well managed to assure that they were mitigated to acceptable levels with prudent control processes established in compliance with the TISCO New Business Guidelines prior to launch. As a result of this business expansion as well as the increasing trend of complex fraudulent behavior, TISCO has enhanced the capacity of its Transaction Fraud Monitoring System. The system is capable of detecting irregularities for further prudent investigation on the appropriateness of transactional execution and to minimize the possible losses incurred either to customers or TISCO.

The ongoing operational risk management process of TISCO Group starts from the establishment of an operational risk management culture and continues by building control awareness in all business units and educating such units on the stipulations of the operational risk management framework for thorough understanding. For practice as a risk owner, all functions shall have to participate and be accountable for managing the operational risk of functions under their supervision. The Operational Risk Management function shall have a duty to manage overall operational risk in addition to supporting, overseeing and monitoring all functions to proceed in accordance with the determined operational risk management framework. In the process of operational risk assessment, key operational risks are identified together with control effectiveness. A remedial action plan as well as the Key Risk Indicators would be subsequently determined in order to mitigate the revealed residual risks, prevent the incurrence of possible risks and properly contain them within levels appropriate to each business (Risk Appetite). The result of the risk assessment in the corporate level would be reported to the Risk Oversight Committee, the Risk Management Committee, and the Audit Committee for acknowledgement. Due to the fact that information technology is crucial to the business operations of TISCO Group as well as the expansion of digitalized service channels, there has been a dramatic increase in IT risk, including but not limited to cyber threats. The IT Risk Management function shall be responsible for supervising and governing IT risk. The function also has a duty to assess the appropriateness and efficiency of control measures related to IT risk, follow IT risk through the IT KRI for properly mitigating risks, to contain them within acceptable risk levels, and to determine appropriate IT risk management. The IT Risk Committee has been set up with an aim to govern the efficiency of the IT risk management of TISCO Group.

As the incident management process is treated as an integral part of operational risk management, TISCO Group has arranged a supporting system to log and track such incidents. The purpose of the system arrangement is to have a systematic and integrated remedial process with monitoring control for timely responses. Other than that, the incident and loss database would be used to make analysis for mitigating repeated risks and for monitoring purposes in order to minimize the error rate and enhance operational efficiency. In addition, TISCO has formulated guidelines and authority delegation for considering and approving compensation made to customers as part of standardized practices and fair treatment of affected customers. The overall results of incident incurrence within TISCO Group as well as the notable operational incidents and the summarized report of compensation made to customers would be reported to the relevant committees for acknowledgement and determination of remedial actions as deemed appropriate. With respect to the complaint handling and management process, TISCO has arranged various channels for accepting complaints and has determined the measures for handling and resolving such complaints within a determined timeframe. The complaint cases shall be analyzed and the summarized results shall be reported to relevant management so as to improve the effectiveness of operational processes as deemed appropriate.

As TISCO Group undertakes financial businesses and provides financial services to customers, the continuity of business is a crucial matter that TISCO Group places high emphasis on. Thus, TISCO has developed and proactively prepared the readiness of every system and process related to the critical businesses to maintain continuous business operations (Business Continuity Plan) without any disruption. The Business Continuity Plan also covers the process for recovering critical systems within the determined period and the other relevant contingency and backup plans. The actions according to the Business Continuity Plan are tested on a regular basis in order to make all relevant business units understand their roles and responsibilities and the actions required to be taken whenever a crisis occurs. TISCO realizes the severity of impact on the safety of employees, customers, counterparties or other relevant parties, and thereby has established an Emergency Plan as an integral part of the Business Continuity Plan to determine

appropriate actions for managing various emergency situations arising 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 Business Continuity Plan, TISCO Group has determined a communication plan and channels for communication between management and employees, including channels with external parties in order to convey situation updates and corporate action plans to all relevant persons in a timely manner.

Given the current situation, cyber threats are a growing potential risk that could cause damage to the organization's business operations, either in the form of monetary effects, corporate reputation or other forms. TISCO is well aware of the impact of such threats and proactively prepares preventive measures and a proper response plan in the event such impacts occur. To raise awareness among all employees, information on cyber threats is regularly relayed through organizational training, postings in various office places including announcements on the corporate website, with an aim to avoid or reduce the possibility of being affected by cyber threats. Additionally, studies on the potential for a cyber-crime attack, monitoring and assessment of possible IT risks and cyber threats are regularly conducted in order to effectively improve the quality of risk management, appropriately harden security and prepare preventive measures and response plans, including communication plans, both for internal and external parties.

### 3.5 Strategic Risk

Strategic Risk is a form of uncertainty stemming from potential adverse business decisions, improper strategy implementation, or misalignment between strategy, target, organization structure, competition and resources that affects TISCO Group's earnings and capital.

#### 3.5.1 Risk from Economic Conditions and Business Competition

Although TISCO Group diversifies its businesses into areas of high potential, most are still influenced by changes in economic conditions. For the hire purchase businesses, growth and credit quality are directly affected by the state of the economy, levels of competition and growth in public consumption. Strong economic growth results in faster growth in asset size and revenues of TISCO Group, and vice-versa. Strong market share and competitive advantage, however, make TISCO Group less vulnerable to negative economic factors.

For the equity investments in the TISCO Group portfolio, the economic outlook, capital market performance and investor sentiment are crucial to financial performance. In a bullish economy, equity prices tend to increase significantly, resulting in improvement in the Bank's profit and capital. Conversely, unexpected events such as war, terrorist attacks, epidemics, and natural disasters, as well as government policies that affect the confidence of the economy may cause a substantial drop in equity values, adversely affecting TISCO Group's financial performance. While the brokerage and underwriting business also depend on the condition of the stock market, most income is derived from trading volume, and hence the impact of price levels may not be substantial. In effect, TISCO Group has adopted a variable cost structure in the brokerage business, which minimizes the impact of unfavorable market conditions.

The asset management business is dependent only to a minor degree on economic conditions as fee income is based on the net asset value of funds under management. Profit and loss from investments do not directly affect TISCO Group's financial results. However, higher competition in pricing structure is a major risk factor in this business.

#### 3.5.2 Risk from Capital Adequacy

As of December 31, 2020, TISCO Bank's regulatory capital adequacy ratio (BIS ratio) based on the Basel III Internal Rating Based Approach (IRB), stood at 22.78%, remaining higher than the 11% required by the BOT. The Tier-I and Tier-II adequacy ratios stood at 18.07% and 4.71%, respectively, in which the Tier-I adequacy ratio also remained higher than the minimum requirement of 8.5%. For TISCO Group, the BIS ratio, Tier-I and Tier-II ratios stood at 21.86%, 17.48%, and 4.38%, respectively, also higher than the minimum capital requirements. Meanwhile, the net capital rule (NCR) of TISCO Securities Co., Ltd. remained strong at 43.47%, much higher than the minimum required ratio by the SEC of 7.0%.

As an internal risk measurement of capital adequacy (ICAAP), the risk-based capital requirement of TISCO Group stood at 13,024.70 million baht, accounting for 32.2% of total capital base under Basel III - IRB of 40,477.63 million baht, with capital surplus for future risks and business expansion totaling 27,452.93 million baht.

### 3.5.3 Risk from Subsidiary Financial Performance

TISCO Financial Group Plc. was established with the purpose of investing in other companies only. Therefore, the performance of the company depends on the performance of invested companies. Subsidiary risks involve the risk of TISCO Bank's business operations which is a core business of the company and other subsidiaries' business operations. The company holds shares in all 8 subsidiaries including TISCO Bank. While most of the net income comes from dividends received from its subsidiaries, volatile performance of subsidiaries may affect overall Group performance. In effect, the dividend payment to shareholders may also be volatile.

Profit recognition of TISCO Group comes from all subsidiaries, including TISCO Bank. As of December 2020, net profit of TISCO Bank and other subsidiaries was 5,818.97 million baht, where 2,032.66 million baht was from subsidiaries excluding TISCO Bank. Although the subsidiaries experienced outstanding business performance and generated profits for the company, investment strategy is important for the future. Therefore, the Board of Directors has defined an investment policy for TISCO Group where the company will invest in businesses which have the ability to support the competitive efficiency of the Group. Market and industry trends, competitive environment and long-term profit-making capability together with prudent risk management shall be considered.

Net income from subsidiaries, excluding TISCO Bank, accounted for 32.4% of total net income, meaning they have significant impact on TISCO Group's overall income. Net income from brokerage and investment banking are from TISCO Securities while net income from asset management is from TISCO Asset Management.

While subsidiary businesses are influenced by market activity and overall economic conditions, the impact of risk from the securities and asset management businesses has significant effect only on Bank profitability, without having a severe impact on capital. This is because the major focus is on services rather than lending or investment.

Internal control and risk management of subsidiaries is centralized at the Company, applying a universal set of standards and guidelines for all. The Company sends its representatives to serve as directors at subsidiaries for at least half of the total directors and to participate in establishing important business policies, in which the annual business plans of subsidiaries require approval by the company.

#### ▪ Strategic Risk Management Framework

The executive board and senior management directly oversee the strategic risks of TISCO Group, with a policy to employ effective, sound practices in strategic management that enable the Group to respond effectively to changes in the business environment and unexpected external events. Vision and mission statements reflect the company's core direction and how our business is conducted, around which all strategies and policies are formulated. Sufficient processes have been set up to carry out effective corporate strategy formulation, business planning, resource management, performance management, and other essential decision support systems. Strategic audits are then performed at the board level of the company by non-management directors as the ultimate line of protection.

In organization and business practice, the principles and practices of good corporate governance have been adopted to protect the rights and interests of all stakeholders. The corporate governance framework includes a corporate governance policy and strong systems of internal controls, which are subject to regular independent assessment and review.

TISCO Group manages strategic risk by setting up a 3-year strategic plan to provide a clear business direction and operating budgets. The plans are reviewed on an annual rolling basis and are used to compare actual performance on a monthly basis.

## 4. Operating Assets

### 4.1 Major Fixed Assets

#### Land, premises, and equipment – Net

Land, premises, and equipment of TISCO Group as of December 31, 2019 and 2020 are as follows:  
These assets are free from any obligations.

(Unit: Million baht)

List	Type of Property Right	Contingent Liability	Value	
			2020	2019
<b>Land</b>				
Cost	owner	none	17.51	17.51
<b>Office condominium and building improvements</b>				
Cost	owner	none	800.73	800.46
Revaluation	owner	none	2,490.41	2,488.78
<b>Furniture fixtures computer and equipment</b>				
Cost	owner	none	1,174.93	1,215.00
<b>Motor vehicles</b>				
Cost	owner	none	169.39	174.08
<b>Total</b>			<b>4,652.97</b>	<b>4,695.83</b>
<u>Less</u> Accumulated Depreciation			(1,731.23)	(1,711.68)
<b>Land, premises, and equipment – Net</b>			<b>2,921.74</b>	<b>2,984.15</b>

#### Rental contracts between the Company and its subsidiaries

Office suite rental agreements between the Company and its subsidiaries located at TISCO Tower are based on 1-3 year contracts at normal market prices. These contracts are illustrated as follows:

Type of Assets	Renter	Owner	Area (sq.m.)
TISCO Tower Office	TISCO Securities Co., Ltd	TISCO Financial Group Plc.	3,780.39
TISCO Tower Office	TISCO Information Technology Co., Ltd.	TISCO Financial Group Plc.	3,416.98
TISCO Tower Office	TISCO Bank Plc.	TISCO Financial Group Plc.	1,286.47
TISCO Tower Office	TISCO Learning Center Co., Ltd.	TISCO Financial Group Plc.	110.00
TISCO Tower Office	TISCO Insurance Solution Co., Ltd.	TISCO Financial Group Plc.	948.91

### 4.2 Loans

#### Classification of assets

Asset classification in TISCO group consists of loans and receivables, investments in securities and property foreclosed. Our asset classification policies are in compliance with those set by the BOT and the SEC. The details of asset classification as of December 31, 2020 are shown below:

(Unit: Million baht)

Classification	Interbank and money market items	Debt instruments measured at fair value through other comprehensive income	Debt instruments measured at amortized cost	Loans to customers and accrued interest receivables	Total
Financial assets with no significant increase in credit risk (Performing)	36,962	9,408	-	190,435	236,805
Financial assets with significant increases in credit risk (Under-performing)	-	-	-	29,139	29,139
Financial assets that are credit-impaired (Non-performing)	-	25	12	5,166	5,203
<b>Total</b>	<b>36,962</b>	<b>9,433</b>	<b>12</b>	<b>224,740</b>	<b>271,147</b>

### Provision for Loan Loss Policy

The Group applies the General Approach to calculate expected credit loss on its financial assets, such as deposits at financial institutions, investments in debt instruments measured at amortised cost, investments in debt instruments measured at fair value through other comprehensive income, loans to customers and accrued interest receivables, securities and derivatives business receivables, receivables from clearing house and committed credit lines.

The Group classifies financial assets into three groups (Three-stage approach) in order to measure the allowance for expected credit loss, with the classification of the financial assets determined on the basis of the change in credit quality since the initial transaction date, as follows:

**Group 1: Financial assets with no significant increase in credit risk (Performing)**

For financial assets with no significant increase in credit risk since the initial recognition date, the Group recognises allowance for expected credit loss at an amount equal to 12-month expected credit loss. For financial assets with maturity of less than 12 months, the Group uses a probability of default that corresponds to remaining terms of the contract.

**Group 2: Financial assets with significant increase in credit risk (Under-performing)**

For financial assets with significant increase in credit risk since the initial recognition date but that are not credit-impaired, the Group recognises the expected credit loss at an amount equal to expected credit loss over the expected lifetime of the financial asset.

**Group 3: Financial assets that are credit-impaired (Non-performing)**

Financial assets are assessed as credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that asset occur. The Group recognises the expected credit loss at the amount equal to expected credit loss over the expected lifetime of the financial assets.

At the end of each reporting period, the Group assesses whether the credit risk of financial assets has increased significantly since the initial recognition date, by comparing the risk of expected default on the financial assets as at reporting date with the risk of default as at the initial recognition date. The Group may use internal quantitative or qualitative bases and forward-looking information as a basis for assessing a decrease in credit quality, such as debtors overdue for more than 30 days and credit rating. Evaluations of whether credit risk has increased significantly since the initial recognition date may be conducted individually or collectively for groups of financial assets.

Loans to customers are considered to be credit-impaired when one or more events occur affecting the estimated future contractual cash flows of the counterparties. Evidence that financial assets are credit-impaired includes being overdue for more than 90 days or indications that debtors are facing significant financial difficulties, breaches of contract, the legal status, renegotiation of terms of repayment or debt restructuring.

In subsequent periods, if the credit quality of financial assets improves and it is assessed that there is no longer significant increase in credit risk from the initial recognition date that was assessed in the previous period, the Group will change from recognising expected credit loss over the expected lifetime to recognising the 12-month expected credit loss.

When the terms of repayment of a loan to customer are renegotiated or the terms of the contractual cash flow are modified because the debtors are in financial difficulty, the loan is considered to be a financial asset with a significant increase in credit risk or credit-impaired, unless there is evidence that the risk of that contractual cash flows will not be recoverable has decreased significantly and there are no other indicators of impairment.

Expected credit loss is the probability-weighted estimate of expected credit loss over the lifetime of a financial instrument, taking into account the present value of all cash flows that are expected not to be recoverable. This is determined with reference to historical loss experience data grouped by asset on the basis of shared credit risk characteristics, taking into account type of loan, type of collateral, months on books, and other relevant factors, adjusted for current observable data, as well as forward-looking information that is supportable and reasonable, provided it can be shown to be statistically related. It also involves the appropriate exercise of judgment to estimate the amount of

expected credit loss, using current macroeconomic data and macroeconomic forecasts. The Group determines both current and future economic scenarios and probability-weights each scenario (base scenario, upturn scenario, downturn scenario and stress scenario) for the purpose of calculating expected credit loss. Use of forward-looking data increases the degree of judgment required in evaluating how relevant macroeconomic changes affect expected credit loss. However, the Group has established a process to review and monitor the methodologies, assumptions and forward-looking macroeconomics scenarios on a regular basis. In addition, expected credit loss also includes a management overlay.

For financial assets that are credit-impaired upon initial acquisition (investments in receivables purchased or transferred in), the Group measures allowance for expected credit loss at an amount equal to the outstanding receivable balance because it does not expect to receive cash flows from these receivables.

The measurement of expected credit loss for loan commitments is the present value difference between the contractual cash flows that are due to the Group if the commitment is drawn down and the cash flows that the Group expects to receive. The measurement of expected credit loss for financial guarantees is based on the expected payments to reimburse the holder less any amounts that the Group expects to recover.

The increase (decrease) in an allowance for expected credit loss is recognised as an expense in profit or loss in the statement of comprehensive income. The Group has a policy to write off receivables when they are identified as bad debts.

In addition, the Group has adopted the accounting guidance in determining the staging of loans to customers for debtors meeting the criteria for relief measures in accordance with the BOT's circulars.

#### **Provision of Asset Impairment Policy**

TISCO Group will reserve provisioning in cases of asset impairment by considering impairment indicators based on generally accepted accounting principles (GAAP) and by estimating the receivable value of the assets.

#### **Policy of revenue recognition on interest income**

TISCO Group has recognises interest on loans on an accrual basis, using the effective interest rate method, applied to the outstanding principal amount. The effective interest rate is the discount rate that estimates future cash flows over the expected life of the financial instrument to the net carrying amount of the financial asset. The effective interest rate is calculated by taking into account any discount or premium on acquisition, fees and costs that are an integral part of the effective interest rate. If loans to customers are later credit-impaired, the Group recognises interest income using the effective interest rate method applied to the net carrying value of the loan (the loan amount net of allowance for expected credit loss). Subsequently, if the financial asset is no longer credit-impaired, the Group reverts to calculating interest income on a gross carrying amount.

### **4.3 Investment in Securities**

Details of investment in securities are shown in Notes to Financial Statements, item 4.4 Financial assets measured at fair value through profit or loss and item 4.6 Investments.

#### **Securities Investment Policy**

Securities investment policy is described in Part 1 Section 2: Business Operations by Area, item 2.3

#### **Risk Management of Investment Portfolio**

TISCO Group diversifies its investments in order to avoid high concentrations in single securities. Appropriate investment opportunities are emphasized to ensure a proper risk-return trade-off. In addition, the Group has set up an integrated risk management system to aggregate all investment risks, where the issues of capital adequacy and the prospect of risk-return from each investment are incorporated to enable timely portfolio adjustment if required. Details of risk management are listed in Part 1 Section 3: Risk Factors.



#### 4.4 Policies on investment in subsidiaries and Joint Venture Company

The details on investment in subsidiaries and joint venture company are presented in Notes to Financial Statements item 4.7.1 Investment in subsidiaries and 4.7.2 Investment in joint venture

The subsidiaries and joint venture company has a policy to invest its funds in investment activities that generate sufficient returns in relation to risk, with the objective to maximize value creation for the Company and its shareholders. The Company's investments can be divided into 2 groups Strategic Investment and Financial Investment.

##### 1) Strategic Investment

Strategic Investments are investment in equity of subsidiaries or affiliated companies for the purpose of fulfilling TISCO Group corporate mission, business strategies, and action plans. The Company will invest in strategic investment to the extent that the Company gains managerial control, and thus able to direct the company according to the Group direction and governance.

Strategic Investments shall be made in company with good business prospects, which supplements well with the group businesses. The investments shall also be justified in terms of risk-return in the long run, considering group's overall sustainability and profitability, and shall be free of any conflict of interests.

Subsidiaries companies under strategic investment are required to strictly comply with group's governance policies, which comprehensively constitutes all key strategic & control areas including governance and operating structure, business strategy, management, operations, risk and control, human resource, finance and accounting, corporate affairs, and public and client communications. All decisions for strategic investment required case by case approval by the Executive Board of TISCO Financial Group Plc.

##### 2) Financial Investment

Financial Investments are investment in financial instruments for the purpose of earning financial returns as well as for liquidity management. The investment may be in various types of financial instruments, e.g. fixed income, equities, hybrids, mutual funds, etc.

Financial investments shall be made with good justification of risk and returns, and careful consideration of liquidity, capital adequacy, and risk tolerance.

Financial investments shall also be made only in instruments that the Company has sufficient knowledge of risk and returns, and shall be well supported by good risk management system.

**Table illustrates details of investment in subsidiaries and joint venture company**

(Unit : Million baht)

Company Name	Paid up As of December 31, 2020	Cost Method As of December 31, 2020
TISCO Bank Plc.	9,216	17,641
TISCO Securities Co., Ltd.	1,000	1,075
TISCO Asset Management Co., Ltd.	100	110
Hi-Way Co., Ltd.	600	773
TISCO Information Technology Co., Ltd.	20	22
TISCO Insurance Solution Co., Ltd.	100	137
Primus Leasing Co., Ltd. <sup>/1</sup>	3	33 <sup>/2</sup>
TISCO Learning Center Co., Ltd.	5	5
All-ways Co., Ltd.	200	200
TISCO Tokyo Leasing Co., Ltd. <sup>/3</sup>	60	73
Investment in subsidiaries and joint venture company - net		20,069

<sup>/1</sup> Ceased business operation and proceeding liquidation process

<sup>/2</sup> Deducted impairment in investment

<sup>/3</sup> Joint venture Company



## 5. Legal Disputes

As of December 31, 2020, the Company and its subsidiary companies had 33 unresolved cases from its regular business operations, all of them are cases caused by banking business operation (TISCO Bank Plc.) and asset management business (TISCO Asset Management Co., Ltd.) involving an estimated total amount 391.97 million baht, which was less than 5% of its shareholders' equity, consisting of:

(1) 30 cases that TISCO Bank being sued (estimated total amount of 388 million baht), there were 13 cases involving total amount of 61.95 million baht which were in the tribunal process and not yet reach judgment. Furthermore, there were 8 cases, with a total value of 305.98 million baht that already dismissed by the Court of First Instance and/or the Appeal Court, however, the plaintiffs still appealed to the Appeal Court or Supreme (Dika) Court.; and there were 1 case, with a total value of 1.95 million baht that already reach judgment, however, TISCO Bank still appealed to the Appeal Court and 1 case with a total value of 18.12 million baht which other defendant appealed to the Appeal Court.

(2) 3 cases that TISCO Asset Management Co., Ltd. being sued (estimated total amount of 3.97 million baht) 2 cases was in the tribunal process was not reach judgment (estimated total amount of 3.33 million baht) and 1 case was appealed to the Appeal Court by the plaintiffs (estimated total amount of 0.64 million baht).

Additional details on legal disputes are presented in Notes to Financial Statements; 4.38.2 Litigation. The management of the TISCO Group believes that neither the Company nor its subsidiary companies will suffer material loss as a result of the abovementioned lawsuits. In addition, there is no claim against the Company by the directors, managements or any related person of the Company or its subsidiary companies.



## 6. General Information

### 6.1 General Information

<b>Company Name</b>	: TISCO Financial Group Public Company Limited
<b>Symbol</b>	: TISCO
<b>Type of Business</b>	: Holding Company
<b>Address</b>	: 21 <sup>st</sup> Fl., TISCO Tower, 48/49 North Sathorn Road, Silom, Bangrak, Bangkok 10500
<b>Registration Number</b>	: 0107551000223
<b>Total registered capital</b>	: Baht 8,007,032,950 (Eight thousand and seven million, thirty two thousand and nine hundred and fifty Baht)
<b>Paid-up Capital</b>	: Baht 8,006,554,830 (Eight thousand and six million, five hundred and fifty-four thousand and eight hundred and thirty Baht)  comprising of 800,645,624 common shares and 9,859 preferred shares, both with par value of 10 baht per share
<b>Home Page</b>	: <a href="http://www.tisco.co.th">www.tisco.co.th</a>
<b>Telephone</b>	: (66) 2633 6000
<b>Fax</b>	: (66) 2633 6800
<b>Reference:</b>	
<b>Share Registrar</b>	: Thailand Securities Depository Co., Ltd. 93 Rachadapisek Road, Dindaeng, Dindaeng, Bangkok 10400 Tel. (66) 2009 9000 Fax (66) 2009 9991 SET Contact Center: (66) 2009 9999 Email: SETContactCenter@set.or.th Website : <a href="http://www.set.or.th/tsd">www.set.or.th/tsd</a>
<b>Auditor</b>	: Ms. Somjai Khunapasut CPA License No. 4499 EY Office Limited 33 <sup>rd</sup> Fl., Lake Rajada Office Complex, 193/136-137 Rajadapisek Road, Bangkok 10110 Tel. (66) 2264 0777 Fax. (66) 2264 0789-90

### 6.2 Other Important Information

None