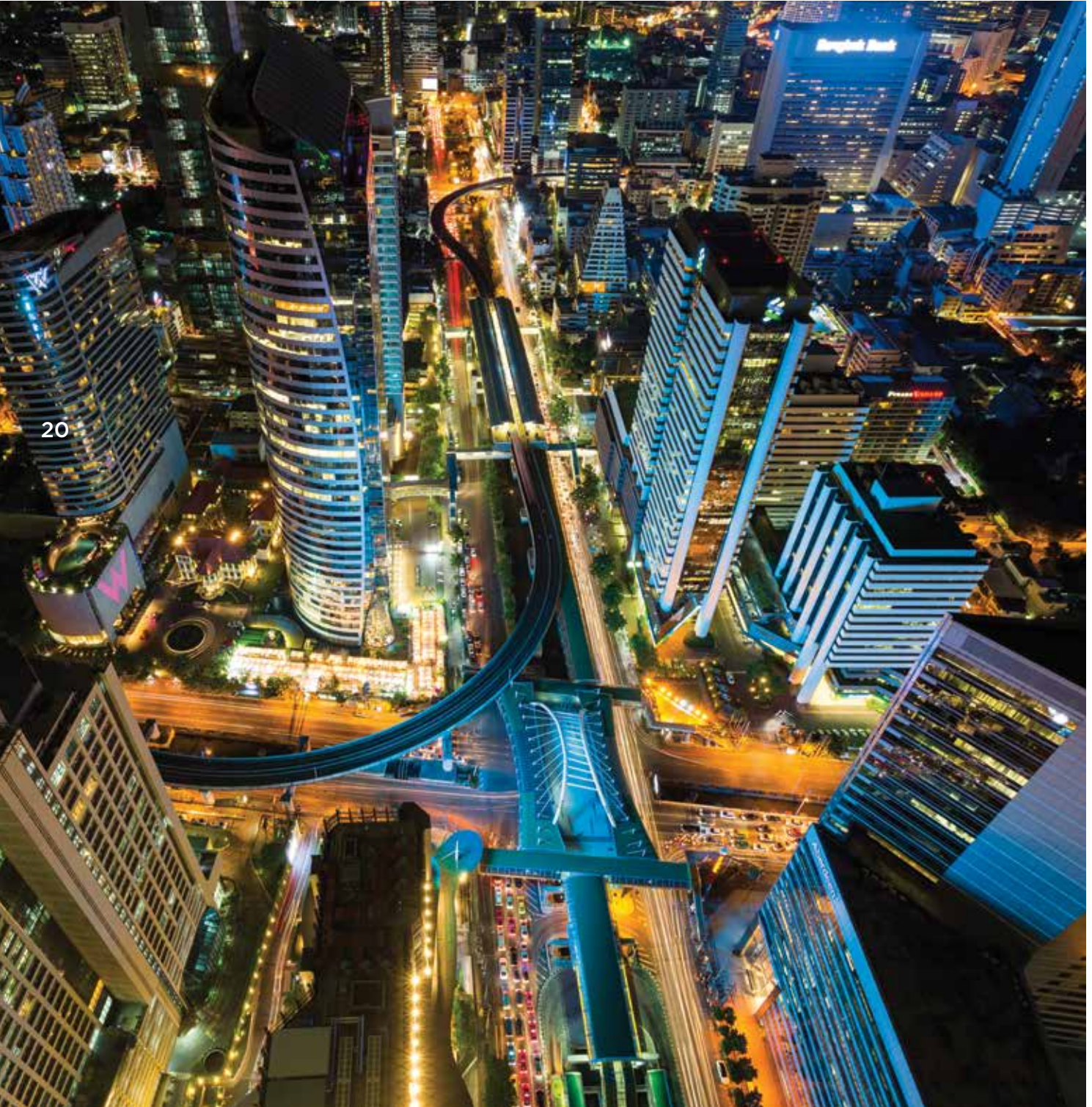


# MANAGEMENT DISCUSSION AND ANALYSIS



## OVERVIEW OF THE ECONOMY AND BANKING INDUSTRY

### THAI ECONOMY IN 2019

In 2019, the Thai economy grew by 2.4 percent year-on-year, down from 4.2 percent in 2018. Against the backdrop of a global trade slowdown and US-China trade uncertainty, merchandise exports and imports for the year contracted by 2.7 and 4.7 percent from 2018, respectively. Private investment slowed to 2.8 percent from 4.1 percent in 2018 while manufacturing production declined 3.7 percent, in line with a low capacity utilization rate of 66.3 percent, below the five-year average of 68.0 percent. Consequently, employment contracted by 0.7 percent. Private consumption slightly softened due to slower farm and non-farm income growth. Moreover, household debt, which rose by 5.5 percent to Baht 13.2 trillion (79.1 percent of GDP) as of the third quarter of 2019, weighed on household purchasing power. However, in the second half of the year, the government rolled out stimulus policies worth Baht 464 billion to support domestic spending, the property market and grassroots economy. Meanwhile, tourist arrivals rose by 4.2 percent, softening from 7.3 percent in 2018. A combination of the weak global economy and strong baht capped tourism and spending. In response to a slowdown in tourism, visa fee waivers were extended twice to end on April 30, 2020.

Headline inflation weakened from 1.1 percent in 2018 to 0.7 percent in 2019, largely due to a fall in energy prices, especially in the third quarter. Core inflation was 0.5 percent, down from 0.7 percent in 2018. In December 2019, the Bank of Thailand adjusted the inflation target for 2020 and the medium term to a range of 1-3 percent from 2.5 ± 1.5 percent.

The Bank of Thailand lowered the policy rate twice at the August and November Monetary Policy Committee meetings, taking the

*The evolving business environment required commercial banks in Thailand to accelerate their business transformation*

rate down from 1.75 percent to 1.25 percent. The Bank of Thailand also eased foreign exchange regulations to curb the strong baht and encourage domestic capital outflows. At the end of 2019, the Thai baht was 30.15 to the US dollar, an appreciation of 7.1 percent from the end of 2018.

Global financial markets experienced volatility amid the uncertainties around global trade and supply chains between major economies such as the US and China, the UK and EU, as well as geopolitical tensions in the Middle East. Nevertheless, Thailand continued to maintain its strong economic fundamentals, with a current account surplus of USD 37.3 billion, approximately 6.8 percent of GDP, and international reserves standing at 1.3 times its total foreign-currency-denominated debt.

### ECONOMIC OUTLOOK FOR 2020

In 2020, Thailand's economic growth will likely slow to the range of 1.9-2.3 percent on account of several challenges. External factors include a sharp drop in tourist arrivals due to the Coronavirus Disease 2019 (COVID-19) outbreak and slowing Chinese economy. Meanwhile, domestic factors include severe droughts and the delay on government budget approval. Nevertheless, merchandise exports are expected to improve on the back of a modest global trade recovery due to recent progress in the US-China trade negotiations. World trade volume growth is forecast to improve from 1.0 percent in 2019. Private consumption will likely remain subdued by the elevated household debt. Fiscal stimulus, an accommodative monetary stance and clarity in the government's implementation of infrastructure investment, such as the Eastern Economic Corridor (EEC), mass transit trains and high-speed railways, will bolster business sentiment. Moreover, there are indications that suggest foreign firms are looking to relocate production activities to, and expand production in, Thailand in response to trade conflicts, particularly in sectors such as electronics and automotive parts.

It is also likely that the Bank of Thailand could further lower the policy rate in 2020 on the back of a deteriorating economic outlook.

## THAI BANKING INDUSTRY IN 2019

In 2019, commercial banks in Thailand remained stable. Capital funds and reserves were at a high level and were able to support the challenges of uncertain economic conditions. The performance of the Thai banking system improved, mainly due to the recognition of special profits, while loan growth and credit quality were affected by the economic slowdown. The combined net profit of the commercial banking system was Baht 270.9 billion, a 30.8 percent increase from last year, due to the recognition of special profits from the sale of investments.

At the end of 2019, loan growth in the Thai commercial banking system decreased to 2.0 percent. Total business loans (64.1 percent of all loans) shrank by 0.8 percent due to the economic slowdown and debt repayments in many business sectors. Corporate loans (excluding financial businesses) shrank by 1.9 percent and SME loans (excluding financial businesses) contracted by 2.1 percent. Consumer loans (35.9 percent of all loans) grew by 7.5 percent, decelerating from the previous year, with growth mainly coming from home loans and car loans. Meanwhile, credit card loans and personal loans continued to expand.

Deposits grew by 4.2 percent from the end of 2018. The ratio of loans to deposits dropped from 98.3 percent at the end of 2018 to 96.3 percent. The Liquidity Coverage Ratio (LCR) stood at 187.5 percent. For liquidity management, commercial banks are placing great emphasis on deposit restructuring and cost management as well as reserve requirements to comply with LCR guidelines under Basel III.

In terms of loan quality, non-performing loan (NPL) stood at Baht 465 billion or a ratio of 2.98 percent of gross NPL to total loans. However, the level of capital reserves and loan loss reserves remained high and adequate to cushion against NPL in the banking system. At the end of 2019, the total Capital Adequacy Ratio (CAR) and Common Equity Tier 1 ratio (CET1) stood at 19.6 percent and 16.0 percent, respectively.

The evolving business environment in 2019 required commercial banks in Thailand to accelerate their business transformation. Thailand's economic growth was subdued. Shrinking export growth led to higher unemployment and slower private investment growth, while private consumption was constrained by high

household debt. Fierce competition continued and each bank attempted to develop products and services to serve customers through digital channels. New business models, together with insights from data analytics, enabled banks to target, attract and engage customers using more sophisticated techniques. Banks cooperated with potential partners across industries to gain new opportunities and generate new sources of revenue. Banking operations were also continuously improved to reduce costs. On the regulatory front, the Bank of Thailand implemented a macroprudential policy to regulate mortgage loans which led to a decline in bank lending to the real estate sector. The Bank of Thailand also implemented policies to encourage commercial banks to focus on sustainable banking.

## THAI BANKING INDUSTRY IN 2020

In 2020, the global financial system will still face a number of uncertainties. Throughout 2020 central banks in major developed economies are expected to continue with the monetary policies of 2019. Trade tensions between the US and China appeared to ease after an agreement was reached on the US-China Phase 1 trade deal in early 2020. However, the next steps in the ongoing trade negotiations could take longer than with the Phase 1 deal. Meanwhile, the Thai economy has expanded at a slower rate due to emerging downside risks. Tourism could potentially be badly affected by the COVID-19 outbreak. However, export growth is expected to improve, resulting from easing trade tensions between the US and China.

Given this highly uncertain economic environment, the growth of commercial bank lending will likely slow. Banks will closely and continuously monitor loan portfolios and adopt cautious lending policies. This, coupled with the Bank of Thailand's macroprudential measures, will help reduce risky loans. Increasing bank reserves and relatively high levels of capital will continue to help banks to face challenges. Additionally, commercial banks will need to manage liquidity in line with the Bank of Thailand's requirements to comply with the LCR and the Net Stable Funding Ratio (NSFR) guidelines, which require banks to hold sufficient liquid assets to ensure their resilience to liquidity shocks.



## FACTORS AFFECTING BANKING INDUSTRY PERFORMANCE

Thai commercial banks may encounter challenges from rapid changes in government policies and in the business environment that will affect their operations over the next two to three years. These challenges are as follows.

1. **Demographic shifts** – Thailand is expected to become an aging society in 2021 when 20 percent of the population will be 60 or older and 14 percent will be older than 65. This demographic shift will affect the economy as follows: (1) The labor force will continually decrease which will affect labor intensive industries such as textiles and garments, apparel, leather products and wooden products and furniture. Businesses operating in these sectors must increase their productivity to survive. They may need to shift to automated production processes and/or focus more on research and development to create higher value-added products and services. They will also need to improve training to develop the skills of their employees. (2) Consumers will change the value and nature of their consumption patterns. Normally, people consume less as they get older but products and services that are designed specifically for the elderly may become more popular such as wellness, food supplements and health and beauty products. In the future, older people will have more influence within the consumer market. There will be opportunities for businesses that focus on the needs of older people such as anti-aging products and services, medical services, pharmaceuticals, pilgrimage tourism and spiritual development.

2. **Eastern Economic Corridor** – The EEC is being developed in three Thai provinces, namely Chachoengsao, Chonburi, and Rayong, focusing on designated industries which are targeted to increase investment potential. The government has been investing in key infrastructure in the designated promotional zones, beginning with six projects:

- (1) U-Tapao International Airport and Aerotropolis
- (2) High-speed railways to connect three international airports (Suvarnabhumi – Don Mueang – U-Tapao)
- (3) Phase III Laem Chabang seaport
- (4) Phase III Map Ta Phut seaport
- (5) Sattahip Commercial deep seaport
- (6) Railway networks providing a seamless connection between the three seaports

The government is developing integrated transportation systems to strengthen Thailand's role as a major global economic hub, and to support the development of regional supply chains. The tensions created by the trade war between the US and China have led some supply chains to shift out of China to the ASEAN region. Even though there are major competitors such as Vietnam, Indonesia and other countries in the region, many companies are deciding to move their production bases to Thailand. Factors attracting them include Thailand's strategic location, the EEC project, investments in transport and logistics infrastructure, the promotion of 10 targeted industries, policies that promote advances in production capability and the domestic supply chain, the focus on technological and innovation development, and the upgrading of labor skills to support the new targeted industries.

3. **Digital disruption** – Digital technology will have many impacts on commercial banking. The use of smartphones and tablets is growing rapidly and easy access to digital media is changing how consumers use financial services. This is in line with the country’s move towards a cashless society. Technology innovations make it easier to make payments, transfer and raise funds, provide loans and manage financial assets. Digital finance helps to enhance the quality of life of retail customers and the efficiency of businesses. Meanwhile, retail customers need services that are fast and seamless through non-branch channels on a 24/7 basis, while entrepreneurs need integrated financial service solutions.

Advances in information technology and digital analysis enable banks to use Big Data analytics and Artificial Intelligence (AI) to develop marketing strategies suited to each customer group along with more sophisticated products and end-to-end solutions to better meet customer needs.

4. **National e-Payment Master Plan Phase 4 (2019-2021)** – The master plan aims to create an ecosystem that promotes digital payments as the primary option within a system that is efficient, safe, and low in cost. It must meet the needs of the general public, as well as private and government sectors in line with the development framework in five areas:

- 1) **Interoperable Infrastructure** – To increase the efficiency of the payment infrastructure to meet international standards. This will be achieved by using ISO 20022 to support business data transmission, payment information and payment links to other countries. An e-KYC biometrics system will also serve future payment innovation and increase efficiency in cash management while reducing the cost of payment systems.
- 2) **Innovation** – To promote the development of payment service innovation to increase the efficiency of digital payment and PromptPay services. This will also involve

the development of convenient and low-cost international money transfers to achieve end-to-end digital business processes, including purchase, payment and tax documents. This will create an environment conducive to innovation development by adopting good processes in issuing and reviewing criteria to promote innovations. This will reduce service providers’ burden and increase their competitiveness as well as supporting the development of innovation in the regulatory “sandbox”.

- 3) **Inclusion** – To promote access to and encourage the use of digital payments.
  - 4) **Immunity** – To maintain stability and good risk management as well as to monitor and protect users in line with international security standards.
  - 5) **Information** – To develop integrated payment information by exchanging information with approved agencies, using tools and in-depth analysis to develop financial innovations and policies.
5. **Development of fifth generation (5G) cellular network technology** – 5G technology is expected to significantly enhance the capability of Thailand’s mobile network, providing more and quicker connections across the economy. Enhanced connectivity will unlock potential in various industries by enabling them to improve their performance. 5G technology is expected to be a key driver for the Internet of Things (IoT) and increase the country’s economic potential. It will do this by facilitating rapid communication and interaction across machines with implanted electronic circuits, software, sensors and communication networks. The implementation of 5G will support Thailand’s 4.0 policy and the development of the digital economy, facilitate Blockchain technology and smart contracts, and will have many applications to support daily business. Thailand is expected to start commercializing 5G technology in 2020.

6. **Sustainable Banking** – The Bank places importance on caring for and enhancing the quality of the environment and society. Apart from the traditional role of financial intermediaries to support economic growth and stability, the Bank has adopted the concept of sustainability in our business operations by establishing four sustainability guidelines as follows:
- 1) Caring for society and environment
  - 2) Conducting business with ethics
  - 3) Building business security
  - 4) Caring for employees and creating customer satisfaction.
- These guidelines are integrated into the Bank's business strategies so that the Bank can grow steadily and sustainably while creating value for all stakeholders and striving to achieve the UN Sustainable Development Goals (UN SDGs).
7. **The high level of household debt in Thailand** – The burden of high debt accumulation is an obstacle to the expansion of household spending, as a proportion of income must be put towards debt repayments, and has caused an increased risk of defaults on payments. In addition, low interest rates encourage people to save less and spend more. According to personal loan statistical data from the National Credit Bureau (NCB), there are three concerning signs:
- 1) Thai people are getting in debt faster – one out of five 30-year-old people have NPL
  - 2) Thai people have more debts
  - 3) Thai people are in debt longer meaning that they enter retirement while their debt remains high.
8. **SME competitiveness.** Many Thai SME have problems with their ability to compete due to outdated production systems, labor quality, and lack of innovation and product development. Some SME are highly competitive but have not increased their production efficiency. In the past, location was the main factor of survival of businesses. However, today, mobile access, e-commerce and logistics are important factors. Traditional SME are mostly family businesses that have difficulty adapting to business disruption, both in terms of products and business models. Technological changes have affected the behavior of consumers as they increasingly consume news from social media and websites, and order products from e-commerce or social commerce platforms.
- SME located in secondary cities face further issues as their markets are smaller than big cities, due to limitations in market size, quality, labor, cost of transportation and public utilities. Large corporations have increasingly expanded into the secondary cities and this creates more competition for SME there.
- These factors above will underpin the transformation of Thailand's economy through a combination of government policies and changes in private sector business conduct, as well as changes in consumer behavior. Therefore, Thai commercial banks must be ready to cope with these changes in order to move forward in a sustainable way.



## EMERGING RISKS

We face many challenges in our business. Environmental changes, the laws and regulations of authorities, economic and political uncertainty, climate change and rapid technological advancements may have consequences which are difficult to anticipate. It is therefore prudent for the Bank to identify emerging risks that might affect the business in the long run so it can prepare for the changes and manage their impacts efficiently. The main emerging risks comprise changes in Global Economic Issues, Climate Change, and Cyber Security.

### 1. Global Economic Issues

One of the major risks to the world's economy comes from uncertainties surrounding global trade, especially from US and China trade policies. On January 15<sup>th</sup>, the US and China signed the Phase One trade agreement. China agreed to increase its purchases of US exports by USD 200 billion over the next two years. The US agreed to halve existing tariffs on USD 120 billion of Chinese goods from 15 percent to 7.5 percent. The agreement also outlines China's structural reforms in areas such as intellectual property, forced technology transfer and dispute resolution systems.

The development will support global economic growth and trade conditions, and reduce uncertainties surrounding global trade relationships. However, downside risks from future escalations persist. Despite rollbacks, tariffs in the two countries will still be far higher than prevailing rates prior to the trade war. Furthermore, investment and output decisions by US producers are unlikely to improve given the uncertainty of long-term Chinese demand. Tensions will likely continue given the fundamental differences between the two countries and unresolved issues such as forced technology transfer and China's industrial policies.

Apart from the US and China, trade barriers have also broadened for other major economies. The US, for example, recently restored tariffs on steel and aluminum from Brazil and Argentina and threatened duties on French wine. Japan and South Korea have strengthened export controls with one another following disputes over compensation for wartime forced labor. Furthermore, a possibility of a no-deal Brexit is once again threatening to disrupt cross-border trade and investment flows.

Disruption to normal trade patterns arising from uncertain trade policies globally hurts business and investor confidence worldwide. Manufacturing firms have, therefore, held back on equipment and machinery investment. This trend is especially evident in East Asia, where economies are more exposed to global trade and supply chain risks.

### 2. Climate Change

Over the past decades, rapid economic development has resulted in a rise in greenhouse gas emissions and degradation of natural resources. Thailand has experienced floods and droughts as well as environmental issues that have had negative effects on people's health and ways of life, farmer income and productivity, and the operating results of various businesses, especially those in tourism and agriculture related sectors. These factors cause operational and credit risks for the Bank.

Ongoing efforts to control and reduce the amount of greenhouse gases at domestic and international levels have directly or indirectly affected banks and other businesses. These efforts include the Paris Agreement to establish greenhouse gas emission targets for 187 member countries including Thailand, as well as the carbon taxation and establishment of carbon trading schemes in the European Union (EU) and various other countries. There are also important initiatives in the financial sector, such as the establishment of the Task Force on Climate-Related Financial Disclosures (TCFD), the EU Action Plan for Financing Sustainable Growth, the green credit policy in China, as well as the Sustainable Banking Network (SBN) and the United Nations Environment Program Financial Initiative (UNEP FI) that encourage countries to develop sustainable finance practices which take into account the environmental impacts of banks' business operations.

With the support of the Bank of Thailand, the Bank has signed a Memorandum of Understanding (MOU) on Sustainable Banking regarding responsible lending and is in the process of upgrading its credit policy and credit approval processes in accordance with the responsible lending guidelines attached to the MOU. The Bank closely monitors policy and technological changes during the country's transition to a low-carbon economy in order to look for new business opportunities and facilitate a careful assessment of risks and impacts related to the Bank and our domestic and overseas customers, in order to build a portfolio resilient to climate risk. In addition, the Bank has organized training for our employees at all levels to provide knowledge and understanding about the risks and impacts of climate change.

### 3. Cyber Security

The proliferation of technology use has caused a tremendous increase in cyber risks, which come in various forms and with many complications. These have the potential to cause damage and affect the confidence of customers, service providers and all stakeholders, while also imposing costs on the Bank – both in financial and management terms.

Accordingly, the Bank places great importance on cyber security, while also recognizing that our processes for cyber security, and for coping with rapid changes in the business environment and technology, must be flexible enough to provide the necessary organizational resilience.

In current business operations, it is necessary to use data for analysis to formulate strategies and design services for customers' needs. Information increasingly becomes an extremely important asset requiring greater safeguards, while many countries have added regulations and laws to protect customers' personal information. The Bank makes continuous efforts to maintain the security of the personal information and protect it from manipulation, forgery and irresponsible access and disclosure. The Bank has likewise stepped up measures to protect its customers' personal information as well as the Bank's own information.

Our large and loyal customer base has been one of the key drivers of our success, allowing us to expand our business alongside our customers' increasing financial needs.

We have six business units: Corporate, Commercial, Business, Consumer, International Banking and Investment Banking.

Our key subsidiaries include our locally incorporated banks in Malaysia and China — Bangkok Bank Berhad and Bangkok Bank (China) — Bualuang Securities (BLS), BBL Asset Management (BBLAM), and Bualuang Ventures (BV). BLS provides brokerage, investment banking and fund management services; BBLAM offers mutual funds, private funds and provident fund products in Thailand; and BV is a venture capital company.

We provide a wide range of financial services for both business and individual customers in Thailand and abroad. Our business lending products include long-term and short-term loans, trade finance, working capital, letters of guarantee and aval / acceptance as well as other banking products and services, such as deposits, funds transfers, cash management, bancassurance, investment banking, foreign exchange and debt securities. These services generate fee and service income for the Bank. Our banking facilities cater to both Thai and international customers.

## BANGKOK BANK OVERVIEW

### DESCRIPTION

Bangkok Bank was founded on December 1, 1944 and became the first Thai bank listed on the Stock Exchange of Thailand in 1975. As at December 31, 2019, we had Baht 3,216,743 million in total assets, Baht 2,061,309 million in total loans, Baht 2,370,792 million in total deposits and Baht 428,116 million in total shareholders' equity.

In 2019, we received many awards such as the "Bank of the Year 2019" award from Money and Banking, "Best Bank in Thailand" from Global Finance magazine, "Best Managed Bank in Thailand", "Best Trade Finance Bank in Thailand", "Custodian Bank of the Year in Thailand" and "Best Payment Bank in Thailand" from The Asian Banker.

For more than seven decades, our business has been guided by the philosophy of aspiring to be a trusted partner and reliable close friend. This emphasizes the value we place on partnership and developing long-term relationships with our customers that are sustained over the decades and across the generations, including our environmental, social and governance responsibilities.

### SERVICE CHANNELS

Our extensive distribution channel network includes branches and business centers, ATMs and other self-service machines; digital banking services, such as mobile and internet banking (Bualuang mBanking and Bualuang iBanking); payments via QR codes for individual customers; online services such as BIZ iBanking, Corporate iCash and Bualuang iTrade for business customers; and our Bualuang Phone banking service with an interactive voice system.

Our domestic branch network consisted of 1,148 domestic branches across Thailand, as at December 31, 2019. To serve business customers, we have 117 business centers and 126 business desks nationwide, staffed by relationship managers and officers providing a full range of services. We also have 92 trade-finance centers nationwide.

Our international network is the largest of all Thai banks and comprises 31 locations in 14 economies: Cambodia, China, Hong Kong, Indonesia, Japan, Laos, Malaysia, Myanmar, Philippines, Singapore, Taiwan, United Kingdom, United States and Vietnam.



## BUSINESS AND OPERATIONS OF BANGKOK BANK AND ITS SUBSIDIARIES

### BUSINESS BANKING

#### Corporate

Throughout 2019 the Thai economy continued to be weighed down by the global economic slowdown, and uncertainty about domestic policies as the country headed into a March election. These pressures were compounded by the strength of the Thai baht which reduced competitiveness in Thailand's key industries. On the plus side the election and formation of a new government brought more policy certainty and there was progress on major infrastructure projects. In 2020 the outlook for private investment is expected to increase in line with the growing pace of infrastructure investment and the development of the Eastern Economic Corridor (EEC).

The EEC, which is being developed as a regional hub of technology, manufacturing and services, is the centerpiece of the government's Thailand 4.0 policy, which aims to transform the economy with the development of innovative technology-based manufacturing and services.

In support of this strategy the government has embarked on a multi-year program of infrastructure development covering areas such as transport, energy and telecommunications. Most of these developments will be in the form of public-private partnerships. Bangkok Bank, as Thailand's leading corporate bank, is working with many clients wishing to participate in these activities, including providing financial support to extend mass transit routes in Bangkok and building a high-speed rail link connecting three international airports, Suvarnabhumi, Don Mueang and U-Tapao, together with expanding the dual track rail network across Thailand.

Throughout the year the Bank financed the development of electricity generation to increase production capacity in Thailand and support the stability of the national grid. This included increasing energy production for the development of the EEC with the generation of an environmentally-friendly gas-fired plant power in Rayong with a capacity of 2,500 megawatts. With more infrastructure projects underway, such as the expansion of Map Ta Phut port, Suvarnabhumi and U-Tapao airports, and the building of the new Pattaya-Map Ta Phut motorway, we expect to be involved in financing other major infrastructure projects in 2020 and 2021.

To create value for our customers we are developing solutions that digitalize day-to-day processes that can be integrated with their ecosystems including customers and supply chains. This will help enhance their productivity and generate more insights that enable both us and our customers to develop better products and services.

An example of this is a payment solution we developed for Kerry Express (Thailand) Limited, a major logistics provider and e-commerce leader. Historically, e-commerce buyers prefer to pay with cash at the point of delivery, otherwise known as “cash on delivery”. Bangkok Bank developed the first QR-on-Delivery payment system in Thailand to provide the customers of Kerry Express with the convenience of paying with a QR code using the mobile banking application of any bank. This not only saves cash handling costs for Kerry Express but enables the company to reconcile receipts more efficiently and provide faster refunds or payment cancellations to their own customers. In addition to a QR-on-Delivery service we offer a credit line to Kerry Express’ e-commerce merchants, further supporting customers within their ecosystem.

The planned introduction of our new cash management and trade finance digital platforms in 2020 will be another step forward for all our business customers. These platforms will deliver an enhanced client experience in a highly secure environment, providing value across all aspects of their businesses, from dealing with suppliers to distribution of products and services to customers. The underlying technology architecture will also give us the flexibility we need to respond more quickly to changing client needs and market practices.

As a founding member and investor in the R3 consortium, we are developing Enterprise Blockchain solutions for our customers, beginning with trade finance clients in key industries such as electronics, agribusiness, petrochemicals and automotive.

In 2019 we successfully studied and developed the first intra-ASEAN trade finance transaction on R3’s CORDA platform using Enterprise Blockchain to issue a Letter of Credit (L/C) sent from Indonesia to Thailand. The L/C process was digitized from end to end. The breakthrough cut processing time and paperwork by more than half and removed the need for reconciliation as all related parties maintained the same set of data and were updated simultaneously about status changes. We expect to be able to extend Enterprise Blockchain services to other trade finance customers in 2020.

## SME

The economic slowdown affected small and medium-sized enterprises (SME) which must also adjust to disruptive technologies, e-commerce, increasing regional competition and changing consumer trends such as urban lifestyles, an aging society, and growing interest in health and environmental issues. To help our customers adapt to the changing business environment we held educational events, connected them with innovative partners and provided new financial products and services.

We partnered with technical specialists and innovators from universities, government agencies, food production and agriculture companies to provide knowledge to customers in areas such as product development, marketing, farm management and smart agriculture. This aligned with the government’s emphasis on S-Curve industries which are expected to be future high-growth areas. This was supported by SME Clinics throughout the year led by experts on topics such as e-commerce and financial management. These were also shared on Facebook and YouTube (Bangkok Bank SME) and our website ([www.bangkokbank.com/en/Business-Banking/SMEs](http://www.bangkokbank.com/en/Business-Banking/SMEs)).

As the Single Account scheme mandated by the Bank of Thailand came into effect in 2019, we continued to provide Single Account training to assist customers to adapt to new lending requirements. To help our clients meet the required standards we have been working with startups from the Bangkok Bank InnoHub program to develop a cloud-based accounting system to help small businesses manage their finances more efficiently. Other technology solutions for SME included digital commerce, cloud computing and online security.

We joined programs to extend loans to SME operators which meet the requirements of the Thai Credit Guarantee Corporation (TCG). To assist customers affected by serious flooding in the monsoon season we provided three relief measures — easing debt repayment conditions, supporting short-term liquidity and offering additional loans.

As the trend toward digital and online payments continues, we also introduced the BeMerchant application and extended our QR Code Payment on EDC service to enable sellers to accept QR code payments from mobile banking services, Visa, Mastercard, UnionPay as well as WeChat and Alipay. Sellers can easily keep track of payments with less need to handle cash and greater business efficiency.

We continue to seek to increase financial inclusion for smaller enterprises with the ability to repay their loans by providing finance to micro enterprises through our customers' supply chains, such as franchise operators and e-commerce merchants using our customers' delivery networks. We are also building alternative credit models to suit the needs of micro enterprises.

To extend financial inclusion to micro enterprises the Bank expanded QR code services to small merchants nationwide. The service provides a convenient and secure alternative to cash and enables them to offer greater choice to customers. The move toward cashless payments means the Bank has richer customer data that will enable us to expand the availability of credit to smaller businesses and micro enterprises through information-based lending.

## International

While the US-China trade war has created global economic headwinds and presented challenges for businesses around the world, it has led a number of China companies to expand into Southeast Asia which offers unique growth opportunities, resulting in the growing value of net foreign direct investment applications from China. Meanwhile our international customer base was increasingly interested in investing in Southeast Asia, particularly Indonesia, Vietnam, Cambodia, Myanmar and Laos.

ASEAN's growing connectivity is also attracting investment as infrastructure developments such as roads, ports, bridges,

airports and railways gather pace, including in Thailand's EEC which aims to be a transport and logistics hub for the region. New power grids and digital networks are also being built to support the region's development, with both transport and energy networks improving connectivity across ASEAN and encouraging the establishment of regional supply chains.

Bangkok Bank, with our comprehensive ASEAN network, has a unique role to play in facilitating international companies across the region. In addition to financing, we provide local knowledge and experience, as well as connections to other customers across our network.

We reinforced our position as Thailand's leading regional bank with an agreement to purchase an 89.12% stake in Permata, the 12<sup>th</sup> largest commercial bank by total assets in Indonesia. This will support our direction as a leading and well-diversified ASEAN bank with a strong presence in Southeast Asia's two largest economies, which aligns with our strategy of creating value through regionalization.

Synergies across the network are an important part of our support for customers as they can tap into local knowledge while accessing specialist expertise in areas such as energy, infrastructure development, industry and finance. We are a major lender to the energy sector regionally and we are facilitating many energy development projects through our international network including renewable energy projects. The percentage of our loans granted to the alternative energy industry has grown continuously





as we finance projects for customers in ASEAN, Japan and China. To help our customers operating in different markets we are upgrading our core banking and transaction banking platforms to provide more seamless and convenient services to international customers as well as to facilitate their businesses in diversified market conditions.

In 2019 we launched our integrated suite of international trade finance products and services Asia Trade Fast Track to better serve our customers. The services leverage our network in Asia and comprise International Inward and Outward Fund Transfers, and opening and advising Letters of Credit and Bills.

The Bank continued to hold many regionally-focused events including sponsoring the Bloomberg ASEAN Business Summit in June and the AEC Business Forum in November. These shared the latest regional developments with our customers and other interested parties with the aim of assisting them to tap into new opportunities. We joined the ASEAN Payment Connectivity

meeting in Chiang Rai in conjunction with the ASEAN Central Bank Governors' meeting where we showcased regional connectivity initiatives such as Enterprise Blockchain for trade finance and BeWallet cross-border QR code payments which are available in ASEAN and China, including Hong Kong and Macau, as well as South Korea, Japan and Taiwan.

Bangkok Bank signed a business collaboration agreement with Japan External Trade Organization (JETRO) to support and promote business collaboration between Thailand and Japan. The collaboration will support economic and industrial development in four areas, namely investment, trade, tourism-related business, and human resource development worldwide. The agreement also strengthens the good relationship and cooperation between Bangkok Bank and JETRO Bangkok as partners in driving trade and investment between the two countries. Ongoing activities include seminars to share investment information and knowledge, business networking and business-matching, and providing trade and investment advice.

## Consumer Banking

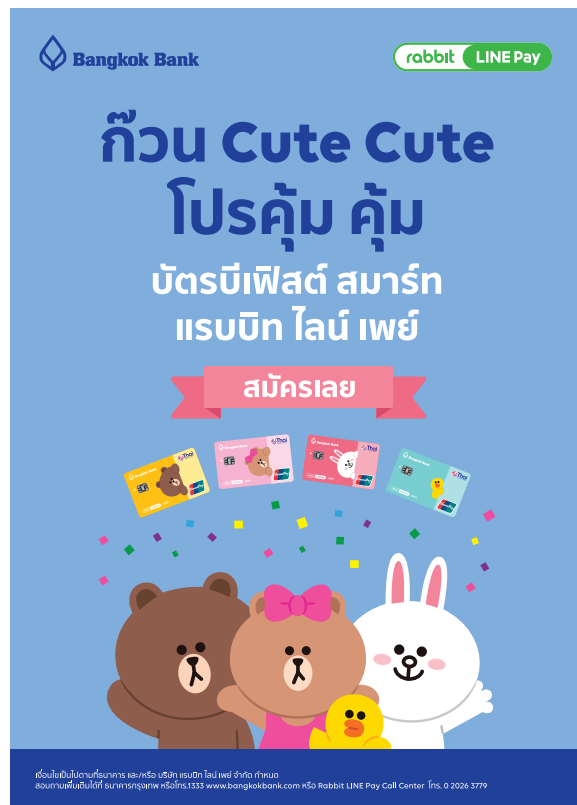
Urbanization and digitalization trends continue to drive change across all aspects of Thai society including banking. Most customers now prefer to manage their finances using mobile banking and more people are making payments online. Many buyers are opting to use debit cards, credit cards, e-wallets or QR codes when making in-store purchases and we are introducing new services to meet these needs.

As Thailand transitions into an aging society, demand is increasing for bancassurance and wealth management products and we are developing our service offerings to meet these needs. Although average incomes are rising, so is household debt. In line with our commitment to ethical banking we carefully perform our loan approval process before extending loans to our customers, give advice on financial management, and educate the public about financial literacy.

The use of our mobile banking application Bualuang mBanking grew more than 2.5 times in the past three years. To meet current, and increasingly diverse future needs, in 2019 we developed our new Bualuang mBanking app which will be launched in early

2020. This will provide a rich customer experience on a dynamic platform which will be regularly updated with new features and functions to suit customers' evolving lifestyles. We also enhanced Bualuang mBanking to be a channel for online applications for products and services, while storing and analyzing customers' data to understand them better so we can target and personalize the right products and services for them. We aim to provide customers with an omni-channel experience with seamless usage across channels including mobile banking, ATMs, our contact center and our website.

In 2019 we trialed electronic know-your-customer (e-KYC) in the Bank of Thailand's sandbox using facial recognition software which will enable us to expand our digital banking services in areas such as opening accounts, applying for loans and credit cards via mobile applications, while increasing customer security. This will increase convenience for customers while helping to expand financial inclusion by making it easier for people to open an account without having to travel to a branch.



As more transactions migrate from over-the-counter to online channels the roles of our branch staff are evolving with a focus on providing financial advisory services and needs-based selling. Our branches are also being redesigned to support a more flexible customer-focused format with an emphasis on providing consultancy services. We have been developing a pool of specialists in areas such as life insurance planning, personal investment, financial planning and property. They are based in regional hubs or branches and provide support and expert advice to both branch staff and customers.

To support our branch staff, we have also expanded our research and IT capabilities to equip employees with information and consumer insights that will enable them to build stronger relationships with consumers, offer the most appropriate advice and services, and improve the customer experience through every touchpoint.

Our greater emphasis on financial advisory services and needs-based selling is yielding good results with increasing fee income from both mutual funds and bancassurance. We introduced various life insurance products from our partners, namely Bangkok Life Assurance (BLA) and AIA. In 2019, we introduced new life insurance products and offered AIA products in our branches and business centers nationwide.

In terms of mortgage lending, the property market was challenged by the strong Thai baht, which meant less interest from foreign buyers, as well as the change in maximum loan-to-value regulations by the Bank of Thailand, which restrained speculative property investments. However, our “puen koo kit mit koo baan” ethos enabled us to serve our customers effectively even in this challenging market. Real demand for properties like single-detached homes, townhouses and condominiums continued to grow as our applications from leading developers showed a consistent uptrend.

We refreshed our sales channels by expanding the number of home loan specialists who work with customers and developers, enabling us to connect with more customers, especially those wishing to invest in Bangkok and high-growth areas such as the EEC and Chiang Mai.

We launched the Be1<sup>st</sup> Smart Rabbit LINE Pay card, targeting the younger generation and their lifestyles with benefits for travel and incorporating the e-wallet feature of Rabbit LINE Pay. It joins our portfolio of other products targeting specific lifestyles such as the JD Central e-wallet Dolfin for online shopping, the Bangkok Bank Platinum Sawadee credit card for traveling and booking accommodation, and the smart university solution under BeDigiPass. In 2019 we launched the KMUTT Mod D Pass, a virtual student card for King Mongkut’s University of Technology Thonburi. This provides services that meet lifestyle needs in the university such as checking grades, receiving important news and announcements, checking class attendance and ordering official academic documents.

The Bank also signed a Memorandum of Understanding (MOU) with the British embassy to provide Bangkok Bank Visa Infinite cardholders with access to special services and privileges when applying for a UK visa. The cardholder can conveniently apply for a visa with their passport and Bangkok Bank Visa Infinite credit card without having to provide evidence of their financial status or other documents. In addition, they can access the Visa Facilitation Services (VFS) VIP Lounge without having to make a reservation or fill in online forms in advance.



## INVESTMENT BANKING

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Global interest rates around the world hit record lows as central banks cut rates to support their economies. The Bank of Thailand followed suit in the second half of 2019, cutting the policy rate by 0.25 percentage points in both August and November. Businesses in Thailand reacted to the low interest rate environment by issuing a number of bonds, with a combined value of more than Baht 1 trillion. Bangkok Bank was one of the top underwriters in the debt capital markets thanks to our expert knowledge and commitment to creating value for clients.

With favorable market conditions, we also supported several leading corporate clients to access financing by issuing subordinated perpetual bonds as an alternative source of funds to help strengthen their capital structure while at the same time supporting their long-term business growth. Subordinated perpetual bonds allow corporates to be able to tap the available liquidity in the financial market where investors seek to diversify their investment opportunities to gain a more attractive return. At the same time, corporate issuers can benefit from a more resilient capital structure as the subordinated perpetual bond will be treated as equity from an accounting and credit rating perspective resulting in an improved debt-to-equity ratio.

In another development, Bangkok Bank was the financial advisor and underwriter in the establishment of SUPEREIF, the first solar

infrastructure fund in Thailand investing in renewable energy. This transaction was the first time the Securities and Exchange Commission (SEC) allowed the establishment of an infrastructure fund by combining Very Small Power Producers (VSPPs) together. SUPEREIF helps pave the way for other VSPPs and prospective sponsors to consider infrastructure funds as an alternative source of financing for their future growth and expansion.

We leveraged our international branch network and local expertise to reach out to our corporate customers in neighboring countries such as Cambodia, Laos, Myanmar and Vietnam and offer fundraising opportunities in Thai capital markets. We facilitated the first Myanmar-focused company, Yoma Strategic Holdings, to successfully raise about Baht 2 billion under the Baht Bond scheme of the Ministry of Finance in Thailand.

We are proud to have played an important role as the joint lead arranger for Baht 13 billion in green bonds of BTS Group Holdings, the first green bonds issuance under the SEC's Green Bond Notification. The bonds were also certified by the Climate Bonds Initiative under the Low Carbon Transport criteria. The proceeds will be used for BTS Group Holdings' mass transit system extension plan. The green bonds received overwhelming demand from investors and were three times oversubscribed.

We also participated in another important initiative by the Thai Bond Market Association and SEC for capital market development using Blockchain technology. Under the SEC's regulatory sandbox, we facilitated the first bond issuance by Toyota Leasing (Thailand) using Blockchain or distributed ledger technology (DLT) to improve data collection and the registration platform. We believe this transaction marked another important milestone in the SEC's core development policies.

In partnership with BBL Asset Management (BBLAM) and K.E. REIT Management as Co-REIT Managers, we were appointed as the financial advisor and lead underwriter for the fund-raising of Bualuang K.E. Retail Leasehold Real Estate Investment Trust (BKER), the first Co-REIT Manager REIT, which was converted from the previous Crystal Retail Growth Leasehold Property Fund. This transaction allows BKER to increase its leverage capacity and diversify its investments into high-quality community and lifestyle malls in other potential locations.

Our treasury services continued to lead the market in foreign exchange, interest rate swaps and cross currency swap, as we helped our clients manage their foreign exchange and interest rate risk exposures for various sectors under different market conditions.

## DIGITAL BANKING

### Banking for the future

On the path to becoming a digital bank we are developing new infrastructure and a data lake and using AI and Big Data to capture, store, access and disseminate data more effectively so we can gain stronger insights with which to better tailor our service offerings for customers. We are also establishing architecture that will accelerate our ability to adopt API, which enables greater integration with our partners' products, applications, platforms and services under a secure, interoperable system. This will help us innovate faster.

### Building ecosystems

The emergence of new technologies and players is leading to a new, more complex financial ecosystem. In this dynamic and disruptive environment, banks have a vital role to play as they facilitate secure identification and transactions for customers and providers, enabling businesses to operate in a digital environment.

Bangkok Bank is a member of BIAN (Banking Industry Architecture Network), an association of banks, technology solutions providers and academic institutions, which has developed a "Coreless Bank" initiative to develop infrastructure suitable for open banking which will help banks more rapidly develop cost-effective services for digital-first customers who prefer digital banking.

Through Bangkok Bank InnoHub Season 2 we provided mentoring and coaching for Thai and international startups and helped them develop viable products, services and solutions.

## Data governance and protection

Protection and security are more important than ever as people are increasingly using mobile devices and applications for all their banking and financial needs.

To protect the privacy and assets of our customers, we have established an Information Security and Cyber Security Strategy. We use multifactor authentication technology, threat intelligence and data and customer behavior analysis to strengthen security and improve convenience, speed and usability for our customers so they can enjoy a frictionless environment along with high levels of security.

Every year we review and revise our cyber security policy and comprehensively assess how we can further protect customer data and privacy. This will help our business customers to build trust with their own customers through high levels of security.

## Infrastructure

To ensure we have an effective digital banking platform for the future, we are enhancing and redeveloping our infrastructure and systems. This includes payment infrastructure, process automation for Straight Through Processing (STP) of transactions and applications and establishing new platforms for our digital delivery channels such as our mobile and transaction banking services.

We are transitioning from a paper-based system to electronic processing with our Image-enabled Workflow (IEWF) project. This is reducing operating costs, increasing standardization, and improving workflow and customer service as it is integrated into our front and back office systems.

We are working with our InnoHub startups on process improvements for our business units including check processing, loan operations and securities. The objective is to reduce processing time, human errors and costs.





Bualuang Securities Public Company Limited (BLS), a subsidiary of Bangkok Bank, is one of Thailand's leading securities companies. Founded in 2001, BLS provides securities brokerage, investment banking, and equity research services. Its investment management unit is managed by Bangkok Capital Asset Management, BLS' wholly-owned subsidiary.

Apart from its comprehensive nationwide network of 30 offices in Bangkok and major cities, BLS draws upon the Bank's nationwide branch network to promote its products and services and expand its client base through account referrals from the Bank.

## PEOPLE DEVELOPMENT

We are developing new ways of working focused on customer experience, agile systems and cross-disciplinary collaboration, while expanding our training programs, both for hard and soft skills and providing more learning options. At the same time, we are seeking to attract and retain the best young talent. We are expanding opportunities for our people to work across multiple areas or rotate through varied jobs that will stretch and expand their capabilities.

We established a Future Skills Academy which teaches future skills necessary for transformation. Staff from each unit are invited to join and are encouraged to use the skills in their unit. To support lifelong learning among staff we also introduced a learning platform that they can use to learn anytime, anywhere and we used design thinking to create digital experiences for customers.

We have developed action learning programs for our staff to promote constructionist learning that focuses on learning by doing, problem solving, systematic thinking and cross-functional teamwork.

To support employees with their finances, health and wellbeing we have established the BeFamily program. This includes training in personal financial management, debt clinics, exercise programs and social activities. In 2020 it will be upgraded to BeFamily Plus to include working together to care for the environment.

## Thai Securities Business

The Thai stock market was lackluster during 2019. The Stock Exchange of Thailand (SET) ended the year at 1,579.84 points, up just 1 percent from the previous year, as slow growth in the local economy and global factors such as the US-China trade dispute and uncertainties surrounding Brexit dampened investor sentiment. The combined average daily trading value for the SET and the Market for Alternative Investment (MAI) was Baht 53,192 million, down 8 percent from 2018.

Foreign investors increased their activity in the market accounting for about 40 percent of total trading value, outpacing local retail investors. Brokerage fee income continued to decrease while facing greater pressure as a result of the increased activity from foreign investors.

In terms of fund-raising activities, during the year there were 34 Initial Public Offerings (IPO) for a combined market capitalization of Baht 90.84 billion, up from last year's tally of 23 IPOs worth Baht 81.57 billion. The increase was mainly driven by a few large corporates getting listed on the SET in the second half of the year.

About 52 percent of securities companies' revenue continued to be from brokerage businesses with 16 percent, 12 percent, and 9 percent respectively from fees, trading and interest.



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## Performance and Highlights

BLS grew its customer base by 11 percent during the year, to more than 400,000 accounts, representing about 15 percent of the industry and maintaining its leading position in the market by a number of accounts.

BLS continued to deliver innovative investment experiences through our premium investment services. The company collaborated with Korea’s Daishin Financial Group to launch the Trader Master trading application. The app delivers a variety of professional trading features needed for automated stock trading.

BLS successfully launched its Global Investing service enabling customers to invest in stocks listed in the US, Hong Kong and Vietnam. Moreover, the depository receipt (DR), launched in December 2018, continued to enjoy strong performance doubling in size to Baht 1,443 million this year.

Bangkok Capital Asset Management launched the Global Wealth Funds, mutual funds designed as primary funds for wealth management which facilitate diversification of investment in domestic and overseas assets. Investors can choose from five risk levels to select an investment appropriate to their risk profile.

BLS maintained its position as the market leader in the numbers of issuance of Derivative Warrants (DW). In 2019 BLS issued 720 DWs, representing about 39 percent of DW trading volume on the SET, with warrants based on 80 underlying stocks in the SET100 Index.

BLS took a lead role in the successful execution of the IPO for Index Living Mall and Veranda Resort, raising more than Baht 3,060 million. It was joint-lead brokerage for the IPO of Asset World Corp Plc which at Baht 48 billion was Thailand’s largest IPO for an individual company. BLS also acted as a financial advisor for the rights offering for Jasmine Broadband Internet Infrastructure Fund of new investment units worth Baht 38 billion.

BLS continued its commitment to educating investors. BLS launched the Bualuang Wealthcast podcast in October which provides useful news and information on investing, available for free to subscribers. BLS also increased its engagement with investors in the provinces through regular “pop-up” investor education sessions held in coffee shops. BLS continued to work closely with various universities for The Stock Master University program in which students are encouraged to learn finance and investment principles. In 2019 more than 1,600 students took part in the program.

Various community programs were undertaken, including organizing the Moral School Project for five schools in Bangkok, cleaning up river banks in Nakhon Nayok, tree planting in Bang Krajao and supporting conservation efforts at a mangrove forest in Samut Songkhram.

BLS received three awards in 2019: “Thailand Capital Market Deal” from IFR Asia; “Best Thailand Deal” from FinanceAsia Magazine; and “Best Capital Markets Thailand” and “Best Investment Banking Company Thailand” from International Business Magazine.



BBL Asset Management Company Limited (BBLAM) has remained true to its philosophy as a trusted financial institution, guided by its core values of “Prudence, Integrity and Excellence”. It has placed the interests of clients as its top priority since its founding in 1992.

The company’s mission is to strengthen the financial wellbeing of Thai families. BBLAM distributes its house-branded mutual fund products through the nationwide branch network of Bangkok Bank, its parent company, and online banking services along with selling agents such as Bangkok Life Assurance and Bualuang Securities. BBLAM also manages provident funds, private funds, infrastructure funds, property funds and real estate investment trust (REITs).

BBLAM pursues an active investment philosophy supported by its in-house research and investment capabilities. The Bualuang Fund brand has built a strong reputation and proven track record. Our BF Knowledge Center, established in 2018, has continued to provide financial and investment knowledge to the Thai public.

In 2019, the global economy slowed due to several factors, including the US-China trade war and protests in Hong Kong. This affected Thailand’s capital market as investors shifted into low-risk assets, including bonds, infrastructure and property funds. Investment sentiment was also dampened by a tax hike imposed in August 2019, which levies a 15 percent withholding tax on interest earned from investment in debt securities through mutual funds.

Despite these uncertainties, the asset management industry in Thailand witnessed 7.9 percent growth bringing assets under management (AUM) to Baht 7.7 trillion.

## Performance and Highlights

To year-end 2019, BBLAM’s total AUM grew by Baht 9,778 million, or 1.1 percent, to Baht 875,345 million. AUM of its mutual fund business<sup>1</sup> increased by Baht 16,820 million, or 2.3 percent, to Baht 762,076 million, representing a market share of 14.1 percent and safeguarding BBLAM’s position as one of the top three asset management companies in the mutual fund industry.

BBLAM’s provident fund business ranked sixth in the industry, with a market share of 7.7 percent and AUM of Baht 93,881 million. The company had a 1.7 percent share of the private fund business, with AUM of Baht 19,388 million.

In response to the market trends, BBLAM expanded its product offerings to include more foreign funds and complex products. New funds included BKER: Bualuang K.E. Retail Leasehold Real Estate Investment Trust, and SUPEREIF: Super Energy Power Plant Infrastructure Fund, in addition to a recapitalization for JASIF: Jasmine Broadband Internet Infrastructure Fund.

In April BBLAM launched the “All Gen Enjoy” campaign to encourage Thai people of all ages to invest in mutual funds to improve their financial security. This reinforced the company’s motto “Allied. Alongside. Always.” and enabled the company to expand its customer base, especially with younger people. BBLAM targeted four major segments of the investing public.

**Baby Boomers:** Those aged 56 and over. Key messages focused on health, wellbeing and financial stability during retirement. Funds targeting this group were B-SENIOR, B-SENIOR-X and B-INCOME.

**Generation X:** Those aged 40-55 years. This group may be both raising families and caring for parents and require steady income to support their expenses. Funds geared toward this group were BKD, BSIRICG and mixed funds such as B-INCOME as well as RMF and LTF.

**Generation Y:** Those aged 31-39 years. This group generally looks for higher-risk and higher-return products. Funds for this segment included BTP, B-INNOTECH, B-FUTURE, B-INCOME and RMF and LTF.

<sup>1</sup> Due to the valuation date for the REIT category, the fund size of BKER (launched in late Q4 2019) was not included in AIMC MF December 2019 report. Its NAV was Baht 8,600 million.



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Generation Y and Z: Up to 30 years of age. Many in this group seek extra income from online trading or selling goods via online platforms. Funds that meet the needs of this generation of investors are BTP, B-INNOTECH, B-FUTURE and mixed funds such as B-INCOME.

In 2019 BBLAM continued to hold many educational workshops and seminars on financial planning. These were conducted in association with the SET and shared through channels such as the BF Knowledge Center, BF Portfolio Solution and BF Economic Research.

Bualuang Fund has been organizing the Bualuang Fund Investment Forum for three years to provide insights and the latest market outlook for clients and investors so that they manage to achieve their investment objectives in the long run. The title of the Bualuang Fund Investment Forum in 2019 was “Navigating through Market Uncertainties”, in which partners from Allianz Global Investors, AXA Investment Managers, Fidelity International, Invesco Ltd to Nomura Asset Management offered their global perspectives on investment opportunities across a broad range

of sectors and markets. The Bualuang Fund Investment Forum represents one of BBLAM’s important missions.

BBLAM also worked with Bangkok Bank to organize more than 670 activities to develop the investment advisory qualifications and knowledge of branch staff nationwide.

BBLAM received the Best Mutual Fund – Thailand Equity Small/ Mid-Cap for its Bualuang Siriphol Corporate Governance RMF (BSIRIRMF) from the Morningstar Thailand Fund Awards 2019.

In 2020 BBLAM will launch a digital trading platform that can be used for opening accounts and communication as it continues with its efforts to educate the investing public. The government is switching the tax benefits for LTF to an alternative scheme (SSF: Super Savings Funds). This will be more accessible to investors with lower incomes. BBLAM will introduce new products to support investors in this asset class while extending the range of investment options in LTF to retain existing and attract new customers.

## OVERALL PICTURE OF THE BANK AND ITS SUBSIDIARIES

Million Baht

	2019	2018	Change (%)
Net profit *	35,816	35,330	1.4%
Earnings per share (Baht)	18.76	18.51	1.4%
Net interest margin	2.35%	2.40%	(0.05)%
Net fees and service income to operating income ratio	21.3%	22.7%	(1.4)%
Cost to income ratio	41.1%	45.4%	(4.3)%
Return on average assets *	1.13%	1.13%	-
Return on average equity *	8.45%	8.73%	(0.28)%

\* Attributable to owners of the Bank

Million Baht

	December 2019	December 2018	Change (%)
Loans **	2,061,309	2,083,160	(1.0)%
Deposits	2,370,792	2,326,470	1.9%
Loan to deposit ratio	86.9%	89.5%	(2.6)%
Non-performing loan (NPL)	79,149	80,137	(1.2)%
Ratio of NPL to total loans	3.4%	3.4%	-
Ratio of loan loss reserves to NPL	220.2%	190.9%	29.3%
Total capital adequacy ratio	20.04%	17.96%	2.08%

\*\* Less deferred revenue

In 2019 Bangkok Bank and its subsidiaries posted a net profit attributable to owners of the Bank of Baht 35,816 million, increased 1.4 percent compared to last year amid challenging economic environment. Net fees and service income increased 3.3 percent, driven by higher fees from loan-related services coupled with the strong performance in bancassurance and mutual funds in line with the Bank's strategic direction. Net interest income slightly declined with net interest margin at 2.35 percent. Other operating income grew 52.3 percent, led by higher gains on investments. While non-performing loan (NPL) had remained stable, a one-off higher provision for impairment loss of loans and debt securities was set aside on conservative premise to strengthen the loan loss reserves, in light of the imminent adoption of the new accounting regime which would entail lower credit cost provisioning rate. Operating expense marginally decreased by 0.4 percent from last year. The cost to income ratio was poised well at 41.1 percent.

At the end of December 2019, loan amounted to Baht 2,061,309 million. The non-performing loan (NPL) ratio was at 3.4 percent with strong loan loss reserves to NPL at 220.2 percent. The Bank continued to focus on loan quality through robust control over credit underwriting and risk management while maintaining the allowance for doubtful accounts at prudent level.

The Bank's financial position remained healthy with a strong capital base and optimal liquidity position. At the end of December 2019, the loan to deposit ratio stood at 86.9 percent. On September 25, 2019, the Bank issued 15-year Subordinated Notes qualified as Basel III-compliant Tier 2 capital amounting to USD 1,200 million, which supported the Bank's well mixed of capital structure to be even stronger. As of December 31, 2019, total capital adequacy ratio, Common Equity Tier 1 capital adequacy ratio and Tier 1 capital adequacy ratio of the Bank and its subsidiaries were 20.04 percent, 17.01 percent and 17.01 percent, respectively, comfortably above the Bank of Thailand's minimum capital requirements.

## OPERATING INCOME AND EXPENSES OF THE BANK AND ITS SUBSIDIARIES

	2019	2018	Million Baht Change (%)
Net interest income	71,071	71,376	(0.4)%
Non-interest income	62,675	50,025	25.3%
Operating expenses	54,963	55,165	(0.4)%
Impairment loss of loans and debt securities	32,351	21,965	47.3%
Operating profit before tax	46,432	44,271	4.9%
Income tax expenses	10,219	8,554	19.5%
Net profit	36,213	35,717	1.4%
Net profit *	35,816	35,330	1.4%
Total comprehensive income *	27,029	23,157	16.7%

\* Attributable to the Bank

In 2019, net profit attributable to owners of the Bank amounted to Baht 35,816 million, an increase of Baht 486 million from last year. Non-interest income rose by Baht 12,650 million mainly from higher gains on investments and net fees and service income. An

increase in net fees and service income was due to increases in fees from bancassurance and mutual funds, investment banking and loan-related services. Impairment loss of loans and debt securities increased by Baht 10,386 million.

## Net Interest Income

In 2019, net interest income amounted to Baht 71,071 million, fell slightly from last year. Interest income rose by Baht 1,784 million, due mainly to higher interest income from investments and interbank and money market items from improvement in volume

and yield. Meanwhile, interest income from loans remained stable netted by an increase of Baht 2,089 million in interest expenses, in line with the growth in deposits and borrowings, while the net interest margin stood at 2.35 percent.

	Million Baht		
	2019	2018	Change (%)
<b>Interest income</b>			
Loans	93,155	93,131	0.0%
Interbank and money market items	9,101	8,451	7.7%
Investments	10,309	9,199	12.1%
<b>Total interest income</b>	<b>112,565</b>	<b>110,781</b>	<b>1.6%</b>
<b>Interest expenses</b>			
Deposits	23,044	21,762	5.9%
Interbank and money market items	2,100	2,218	(5.3)%
Contributions to the Deposit Protection Agency and Financial Institutions Development Fund	9,953	9,864	0.9%
Debt issued and borrowings	6,397	5,561	15.0%
<b>Total interest expenses</b>	<b>41,494</b>	<b>39,405</b>	<b>5.3%</b>
<b>Net interest income</b>	<b>71,071</b>	<b>71,376</b>	<b>(0.4)%</b>
Yield on earning assets	3.72%	3.72%	-
Cost of funds	1.59%	1.52%	0.07%
<b>Net interest margin</b>	<b>2.35%</b>	<b>2.40%</b>	<b>(0.05)%</b>

<b>Bangkok Bank Interest Rate</b>	<b>Dec'19</b>	<b>Sep'19</b>	<b>Jun'19</b>	<b>Mar'19</b>	<b>Dec'18</b>	<b>Sep'18</b>
<b>Loans (%)</b>						
MOR	6.875	6.875	7.125	7.125	7.125	7.125
MRR	6.875	6.875	7.125	7.125	7.125	7.125
MLR	6.000	6.250	6.250	6.250	6.250	6.250
<b>Deposits (%)</b>						
Savings	0.500-0.625	0.500-0.625	0.500-0.625	0.500-0.625	0.500-0.625	0.500-0.625
3-month Fixed	1.000	1.000	1.000	1.000	1.000	1.000
6-month Fixed	1.250	1.250	1.250	1.250	1.250	1.250
12-month Fixed	1.375-1.500	1.500	1.500	1.500	1.500	1.500
<b>Bank of Thailand Policy Rate (%)</b>	<b>1.250</b>	<b>1.500</b>	<b>1.750</b>	<b>1.750</b>	<b>1.750</b>	<b>1.500</b>

## Non-Interest Income

In 2019, non-interest income amounted to Baht 62,675 million, an increase of Baht 12,650 million from last year, due to higher gains on investments and net fees and service income. The increase in net fees and service income was due to fees from bancassurance and mutual funds, investment banking and loan-related services.

Meanwhile fee income from transaction services decreased as more transactions migrated to digital channels due to changing consumer behavior, following the exemption of transaction fees via digital channels in the second quarter of 2018.

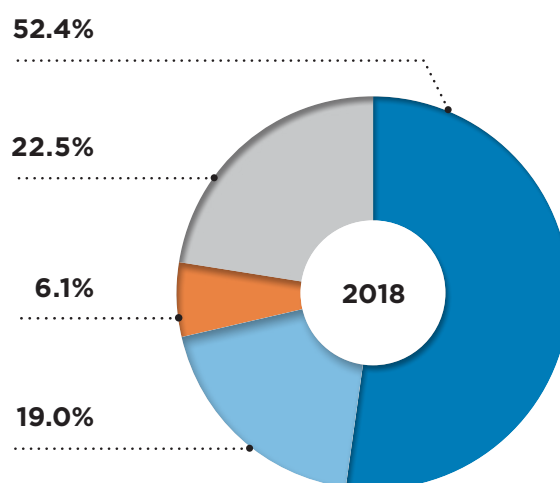
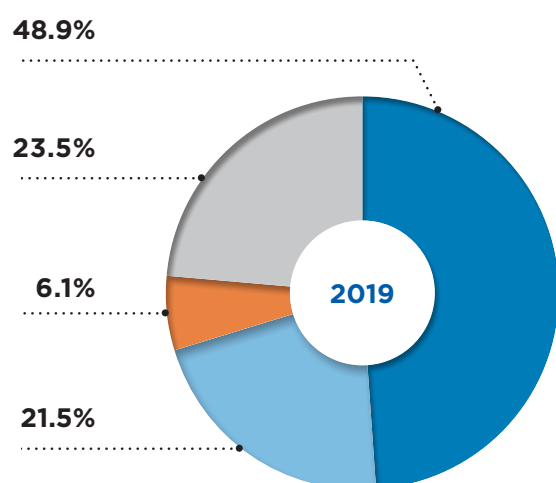
Million Baht

	<b>2019</b>	<b>2018</b>	<b>Change (%)</b>
Fees and service income	39,280	37,437	4.9%
<u>Less</u> Fees and service expenses	10,776	9,847	9.4%
<b>Net fees and service income</b>	<b>28,504</b>	<b>27,590</b>	<b>3.3%</b>
Gains on tradings and foreign exchange transactions	7,848	8,300	(5.4)%
Gains on investments	19,765	8,009	146.8%
Share of profit from investment using equity method	93	78	19.2%
Gains on disposal of assets	2,134	1,049	103.4%
Dividend income	3,769	3,781	(0.3)%
Other operating income	562	1,218	(53.9)%
<b>Total other operating income</b>	<b>34,171</b>	<b>22,435</b>	<b>52.3%</b>
<b>Total non-interest income</b>	<b>62,675</b>	<b>50,025</b>	<b>25.3%</b>
Net fees and service income to operating income ratio	21.3%	22.7%	(1.4)%

## Operating Expenses

In 2019, operating expenses amounted to Baht 54,963 million, falling by Baht 202 million or 0.4 percent from last year owing to a decrease in personnel expenses of Baht 2,048 million. This is mainly because in 2018 the Bank had set aside a provision

of compensation for retirement and termination of employees according to the amendment of the new Labor Protection Act. Premises and equipment expenses increased, mainly from technology expenses.



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	2019	2018	Change (%)
	Million Baht		
● Personnel expenses	26,726	28,774	(7.1)%
● Directors' remuneration	167	154	8.4%
● Premises and equipment expenses	11,789	10,467	12.6%
● Taxes and duties	3,364	3,367	(0.1)%
● Other expenses	12,917	12,403	4.1%
Total operating expenses	54,963	55,165	(0.4)%
Cost to income ratio	41.1%	45.4%	(4.3)%

## Impairment Loss of Loans and Debt Securities

In 2019, impairment loss of loans and debt securities was Baht 32,351 million, an increase of Baht 10,386 million from the previous year, a one-off higher provision to strengthen the

loan loss reserves, in light of the imminent adoption of the new accounting regime.

	2019	2018	Change (%)
Bad debt and doubtful accounts	31,208	18,358	70.0%
Loss on debt restructuring	1,143	3,607	(68.3)%
<b>Total</b>	<b>32,351</b>	<b>21,965</b>	<b>47.3%</b>

Million Baht

## SIGNIFICANT ITEMS IN THE FINANCIAL POSITION

### Assets

Total assets as of December 31, 2019 amounted to Baht 3,216,743 million, an increase of Baht 99,993 million from the end of December 2018. Significant items included an increase of Baht 90,909 million or 16.3 percent in net investments from higher

investments in all categories, as well as an increase of Baht 21,649 million or 4.8 percent in net interbank and money market items due mainly to higher lending volume. Meanwhile, loans decreased by Baht 21,851 million or 1.0 percent.

	December 2019	December 2018	Change (%)
Net interbank and money market items	472,349	450,700	4.8%
Net investments	647,697	556,788	16.3%
Net investments in associates	1,737	1,608	8.0%
Loans *	2,061,309	2,083,160	(1.0)%
Net properties for sale	9,363	10,604	(11.7)%
<b>Total assets</b>	<b>3,216,743</b>	<b>3,116,750</b>	<b>3.2%</b>

Million Baht

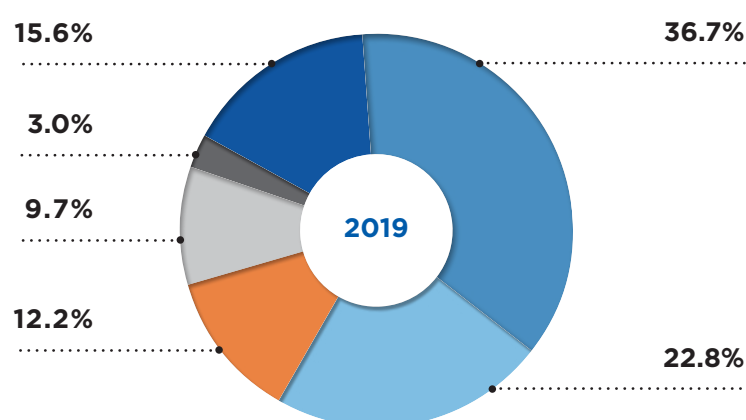
\* Less deferred revenue

## Loans

Loans as of December 31, 2019, amounted to Baht 2,061,309 million, a decrease of Baht 21,851 million or 1.0 percent from the end of December 2018 due to the decreases in loans to medium-sized and small businesses, and loans made through the Bank's international network, in accordance with the slowdown in the economy.

## Loan by Business Type

The Bank and its subsidiaries had loans which were distributed across business sectors, with 36.7 percent in the manufacturing and commercial sector, 22.8 percent in the utilities and services sector, 12.2 percent in the housing sector, and 9.7 percent in the real estate and construction sector. The increase in loans from the end of December 2018 was due mainly to the manufacturing and commercial sector.



	December 2019	December 2018	Change (%)
	Million Baht		
● Manufacturing and commercial	755,979	819,481	(7.7)%
● Utilities and services	470,159	455,969	3.1%
● Housing	251,197	240,047	4.6%
● Real estate and construction	200,736	202,600	(0.9)%
● Agriculture and mining	61,569	51,498	19.6%
● Others	321,669	313,565	2.6%
<b>Total loans *</b>	<b>2,061,309</b>	<b>2,083,160</b>	<b>(1.0)%</b>

\* Less deferred revenue

## Classified Loans and Allowance for Doubtful Accounts

Non-performing loan (NPL) at the end of December 2019 amounted to Baht 79,149 million, a decrease of Baht 988 million or 1.2 percent from the end of December 2018. The ratio of NPL to total loans stood at 3.4 percent.

Total allowance for doubtful accounts at the end of December 2019 was Baht 174,276 million or 284.8 percent of the minimum amount of Baht 61,182 million required by the Bank of Thailand. The ratio of loan loss reserves to NPL at the end of December 2019 was 220.2 percent.

Million Baht

	Loans & Accrued Interest Receivables *		Allowance for Doubtful Accounts Classified to Bank of Thailand Criteria	
	December 2019	December 2018	December 2019	December 2018
Normal	1,918,520	1,962,102	16,119	16,215
Special mentioned	67,596	46,501	848	591
Substandard	9,783	5,460	1,359	1,018
Doubtful	14,522	20,884	6,259	10,608
Doubtful of loss	54,901	53,837	30,087	30,188
<b>Total</b>	<b>2,065,322</b>	<b>2,088,784</b>	<b>54,672</b>	<b>58,620</b>
Add Excess allowance for doubtful accounts			113,094	88,968
<b>Total allowance for doubtful accounts from loan classification</b>			<b>167,766</b>	<b>147,588</b>
Add Revaluation allowance for debt restructuring			6,510	5,415
<b>Total allowance for doubtful accounts</b>			<b>174,276</b>	<b>153,003</b>

\* Less deferred revenue

Million Baht

	December 2019	December 2018	Change (%)
NPL before allowance for doubtful accounts	79,149	80,137	(1.2)%
Ratio of NPL to total loans	3.4%	3.4%	-
NPL after allowance for doubtful accounts (net NPL)	28,368	26,412	7.4%
Ratio of net NPL to net total loans	1.2%	1.2%	-
Ratio of loan loss reserves to minimum required provisioning	284.8%	238.9%	45.9%
Ratio of loan loss reserves to NPL	220.2%	190.9%	29.3%

## Net Investments

Net investments as of December 31, 2019 amounted to Baht 647,697 million, an increase of Baht 90,909 million or 16.3 percent from investments in all categories from the end of December 2018.

Most of the net investments were in government and state-enterprise securities. As of December 31, 2019, these amounted

to Baht 354,975 million, accounting for 54.8 percent of total investments. The remaining net investments were foreign debt securities of Baht 117,676 million, private enterprise debt securities of Baht 66,270 million, and net investment in equity securities of Baht 101,199 million.

Investments by Investment Holding	Million Baht		
	December 2019	December 2018	Change (%)
Trading securities	13,613	7,516	81.1%
Available-for-sale securities	574,720	497,838	15.4%
Held-to-maturity debt securities	23,257	19,849	17.2%
General investments	36,107	31,585	14.3%
<b>Total net investments</b>	<b>647,697</b>	<b>556,788</b>	<b>16.3%</b>

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## Liabilities and Shareholders' Equity

Total liabilities as of December 31, 2019 amounted to Baht 2,788,627 million, an increase of Baht 85,036 million or 3.1 percent from the end of December 2018, mostly from an increase

of Baht 44,322 million or 1.9 percent in deposits and an increase of Baht 28,333 million or 24.4 percent in debt issued and borrowings.

	Million Baht		
	December 2019	December 2018	Change (%)
Deposits	2,370,792	2,326,470	1.9%
Interbank and money market items	134,346	136,862	(1.8)%
Debt issued and borrowings	144,681	116,348	24.4%
<b>Total liabilities</b>	<b>2,788,627</b>	<b>2,703,591</b>	<b>3.1%</b>
<b>Shareholders' equity *</b>	<b>427,751</b>	<b>412,814</b>	<b>3.6%</b>

\* Attributable to owners of the Bank

## Deposits

Total deposits as of December 31, 2019 amounted to Baht 2,370,792 million, an increase of Baht 44,322 million or 1.9 percent from the end of December 2018 from all types of deposits.

Deposits Classified by Product Type	December 2019		December 2018		Change (%)
	Amount	Portion	Amount	Portion	
Current	113,067	4.8%	101,557	4.4%	11.3%
Savings	1,145,106	48.3%	1,117,522	48.0%	2.5%
Fixed *	1,112,619	46.9%	1,107,391	47.6%	0.5%
<b>Total deposits</b>	<b>2,370,792</b>	<b>100.0%</b>	<b>2,326,470</b>	<b>100.0%</b>	<b>1.9%</b>
Loan to deposit ratio		86.9%		89.5%	(2.6)%

Million Baht

\* Including negotiable certificates of deposit

## Debt Issued and Borrowings

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Total debt issued and borrowings as of December 31, 2019 amounted to Baht 144,681 million, an increase of Baht 28,333 million from the end of December 2018, due mainly to the issuing of 15-year Subordinated Notes qualified as Tier 2 capital of USD 1,200 million in September 2019.

Debt Issued and Borrowings Classified by Type of Instruments	December 2019		December 2018		Change (%)
	Amount	Portion	Amount	Portion	
Senior unsecured notes	99,530	66.3%	107,027	87.6%	(7.0)%
Subordinated notes	49,757	33.1%	14,587	11.9%	241.1%
Bills of exchange	8	0.1%	23	0.1%	(65.2)%
Others	838	0.5%	456	0.4%	83.8%
<b>Total (before less discount on borrowings)</b>	<b>150,133</b>	<b>100.0%</b>	<b>122,093</b>	<b>100.0%</b>	<b>23.0%</b>
Less Discount on borrowings	5,452		5,745		(5.1)%
<b>Total debt issued and borrowings</b>	<b>144,681</b>		<b>116,348</b>		<b>24.4%</b>

Million Baht

## Shareholders' Equity

Shareholders' equity attributable to owners of the Bank as of December 31, 2019 amounted to Baht 427,751 million, an increase of Baht 14,937 million or 3.6 percent from the end of 2018. The increase was mainly due to the net profit attributable to owners of the Bank for 2019 of Baht 35,816 million net of dividend payments

in 2019 totaling Baht 12,092 million. Losses on translation of the financial statements of foreign operations rose by Baht 5,706 million and revaluation gains on available-for-sale investments decreased by Baht 1,721 million.

## Contingent Liabilities

Contingent liabilities as of December 31, 2019 amounted to Baht 625,891 million, a decrease of Baht 27,839 million from the end of December 2018, due predominantly to a decrease in other

guarantees and letters of credit while "others" (under other commitments) increased.

	Million Baht		
	December 2019	December 2018	Change (%)
Avals to bills	7,598	5,800	31.0%
Guarantees of loans	27,513	32,236	(14.7)%
Liability under unmatured import bills	17,745	19,041	(6.8)%
Letters of credit	22,116	35,822	(38.3)%
Other commitments			
Amount of unused bank overdrafts	165,562	170,329	(2.8)%
Other guarantees	247,490	270,320	(8.4)%
Others	137,867	120,182	14.7%
<b>Total contingent liabilities</b>	<b>625,891</b>	<b>653,730</b>	<b>(4.3)%</b>

## Sources and Utilization of Funds

The primary sources of funds as of December 31, 2019 were Baht 2,370,792 million or 73.7 percent in deposits, Baht 427,751 million or 13.3 percent in shareholders' equity attributable to owners of the Bank, Baht 144,681 million or 4.5 percent in debt issued and borrowings, and Baht 134,346 million or 4.2 percent in interbank and money market liabilities.

The utilization of funds comprised Baht 2,061,309 million or 64.1 percent in loans, Baht 649,434 million or 20.2 percent in net investments (including net investments in associates), and Baht 472,349 million or 14.7 percent in net interbank and money market assets.

## Capital Reserves and Capital Adequacy Ratio

Under the principles of Basel III, the Bank of Thailand requires commercial banks registered in Thailand and members of their financial groups to maintain minimum levels of capital adequacy as measured by three ratios, including the Common Equity Tier 1 ratio at no less than 4.50 percent, the Tier 1 ratio at no less than 6.00 percent, and the total capital ratio at no less than 8.50 percent – measured as a percentage of total risk-weighted assets. The Bank of Thailand also requires a capital conservation buffer, phasing in an additional capital ratio of more than 0.625 percent p.a. starting January 1, 2016 until completion of the increment to more than 2.50 percent from January 1, 2019 onwards. It also requires the Bank, which is identified as a Domestic Systemically Important Bank (D-SIB), to have additional capital to meet the Higher Loss Absorbency (HLA) requirement, which gradually raised the Common Equity Tier 1 ratio by 1.00 percent, beginning

with a 0.50 percent increase from January 1, 2019, rising to 1.00 percent from January 1, 2020 onwards. To satisfy the minimum levels and capital buffer requirements of the Bank of Thailand, in 2019 the Bank is required to maintain the Common Equity Tier 1 ratio at more than 7.50 percent, the Tier 1 ratio at more than 9.00 percent, and the total capital ratio at more than 11.50 percent – measured as percentages of total risk-weighted assets.

As of December 31, 2019, the regulatory capital position of the Bank's financial group according to the consolidated financial statements was Baht 478,740 million, Common Equity Tier 1 capital was Baht 406,463 million, and Tier 1 capital was Baht 406,529 million. The total capital adequacy ratio was 20.04 percent, the Common Equity Tier 1 capital adequacy ratio was 17.01 percent, and the Tier 1 capital adequacy ratio was 17.01 percent.

Million Baht

Consolidated	December 2019			December 2018		
	BOT's notification	Ratio	Capital	BOT's notification	Ratio	Capital
Total capital	11.500%	20.04%	478,740	10.375%	17.96%	426,563
Tier 1 capital	9.000%	17.01%	406,529	7.875%	16.43%	390,369
Common Equity Tier 1 capital	7.500%	17.01%	406,463	6.375%	16.43%	390,309

Million Baht

The Bank	December 2019			December 2018		
	BOT's notification	Ratio	Capital	BOT's notification	Ratio	Capital
Total capital	11.500%	20.20%	471,262	10.375%	17.78%	409,945
Tier 1 capital	9.000%	17.14%	399,842	7.875%	16.24%	374,633
Common Equity Tier 1 capital	7.500%	17.14%	399,842	6.375%	16.24%	374,633

## Liquid Assets

Liquid assets consisted of cash, net interbank and money market items, trading securities and available-for-sale securities. As of December 2019, liquid assets totaled Baht 1,118,772 million, an increase of Baht 100,324 million or 9.9 percent from the end of

December 2018. Significant items included an increase of Baht 76,882 million in available-for-sale securities and an increase of Baht 21,649 million in interbank and money market items.

	December 2019	December 2018
Liquid assets (Million Baht)	1,118,772	1,018,448
Liquid assets/Total assets (%)	34.8	32.7
Liquid assets/Deposits (%)	47.2	43.8

## CREDIT RATINGS

As of December 31, 2019, Moody's Investors Service, S&P Global Ratings and Fitch Ratings maintained the Bank's credit ratings from the end of December 2018. In July 2019, Moody's Investors Service upgraded the bank's subordinated debt instrument rating

to Baa2 from Baa3 and the bank's Baseline Credit Assessment (BCA) to baa1 from baa2, and changed the outlook from stable to positive. In December 2019, S&P Global Ratings changed the outlook from stable to positive.

Details of the Bank's credit ratings are as follows:

Credit Rating Agency *	December 2019	December 2018
<b>Moody's Investors Service</b>		
Long-term Deposit	Baa1	Baa1
Short-term Deposit	P-2	P-2
Senior Unsecured Debt Instrument	Baa1	Baa1
Subordinated Debt Instrument	Baa2	Baa3
Subordinated Debt (Basel III-compliant Tier 2 securities)	Baa3	-
Financial Strength (BCA)	baa1	baa2
Outlook	Positive	Stable
<b>S&amp;P Global Ratings</b>		
Long-term Issuer Credit Rating	BBB+	BBB+
Short-term Issuer Credit Rating	A-2	A-2
Senior Unsecured Debt Instrument	BBB+	BBB+
Subordinated Debt Instrument	BBB	BBB
Financial Strength (SACP)	bbb	bbb
Outlook	Positive	Stable
<b>Fitch Ratings</b>		
<b>International Rating</b>		
Long-term Issuer Default Rating	BBB+	BBB+
Short-term Issuer Default Rating	F2	F2
Senior Unsecured Debt Instrument	BBB+	BBB+
Subordinated Debt Instrument	BBB	BBB
Subordinated Debt (Basel III-compliant Tier 2 securities)	BBB	-
Financial Strength (VR)	bbb+	bbb+
Outlook	Stable	Stable
<b>National Rating</b>		
Long-term	AA+(tha)	AA+(tha)
Short-term	F1+(tha)	F1+(tha)
Outlook	Stable	Stable

\* Long-term credit ratings classified as investment grade by Moody's Investors Service, S&P Global Ratings and Fitch Ratings are Baa3, BBB- and BBB-, or higher, respectively. Short-term credit ratings classified as investment grade by Moody's Investors Service, S&P Global Ratings and Fitch Ratings are P-3, A-3 and F3, or higher, respectively.