Business Review

Operating income for each line of business of the Group is set forth in the following table:

Unit: RMB million, except percentages

	For the six-month period ended 30 June 2019		For the six-month period ended 30 June 2018	
Items	Amount	% of total	Amount	% of total
Commercial banking business	249,000	89.99%	230,579	91.69%
Including: Corporate banking business	112,719	40.74%	106,244	42.25%
Personal banking business	92,092	33.28%	86,448	34.38%
Treasury operations	44,189	15.97%	37,887	15.06%
Investment banking and insurance	17,856	6.46%	12,612	5.01%
Others and elimination	9,832	3.55%	8,291	3.30%
Total	276,688	100.00%	251,482	100.00%

A detailed review of the Group's principal deposits and loans is summarised in the following table:

Unit: RMB million

	As at	As at	As at
Items	30 June 2019	31 December 2018	31 December 2017
Corporate deposits			
Domestic: RMB	6,060,613	5,884,433	5,495,494
Foreign currency	487,675	453,815	436,458
Hong Kong, Macao, Taiwan and overseas operations	1,697,915	1,594,165	1,451,822
Subtotal	8,246,203	7,932,413	7,383,774
Personal deposits			
Domestic: RMB	5,486,871	5,026,322	4,551,168
Foreign currency	291,315	302,256	310,253
Hong Kong, Macao, Taiwan and overseas operations	1,136,394	1,093,892	969,807
Subtotal	6,914,580	6,422,470	5,831,228
Corporate loans			
Domestic: RMB	5,413,939	5,057,654	4,761,874
Foreign currency	265,894	280,878	338,379
Hong Kong, Macao, Taiwan and overseas operations	2,101,766	2,009,066	1,872,448
Subtotal	7,781,599	7,347,598	6,972,701
Personal loans			
Domestic: RMB	4,213,390	3,933,840	3,481,682
Foreign currency	1,220	1,177	1,250
Hong Kong, Macao, Taiwan and overseas operations	538,771	505,068	440,925
Subtotal	4,753,381	4,440,085	3,923,857

Commercial Banking

Domestic Commercial Banking

In the first half of 2019, the Bank's domestic commercial banking business recorded an operating income of RMB210.290 billion, an increase of RMB15.791 billion or 8.12% compared with the same period of the prior year. Details are set forth below:

Unit: RMB million, except percentages

	For the six-month period ended 30 June 2019		For the six-month period ended 30 June 2018	
Items	Amount	% of total	Amount	% of total
Corporate banking business	98,115	46.66%	92,811	47.72%
Personal banking business	80,669	38.36%	76,562	39.36%
Treasury operations	30,563	14.53%	23,845	12.26%
Other	943	0.45%	1,281	0.66%
Total	210,290	100.00%	194,499	100.00%

Corporate Banking

The Bank made great efforts to expedite the transformation of its corporate banking business. It further consolidated its corporate customer base, continuously optimised its customer and business structure and endeavoured to improve its global service capabilities for its corporate banking customers, thus achieving high quality development in its corporate banking business. In the first half of 2019, the Bank's domestic corporate banking business realised an operating income of RMB98.115 billion, an increase of RMB5.304 billion or 5.71% year on year.

Corporate Deposits

The Bank achieved stable growth in corporate deposits by seizing business opportunities arising from key industries and regions and improving its service capabilities for key projects. It accelerated the upgrading of product functions and strengthened promotion efforts for its settlement, cash management

and CDs products. It expanded its corporate customer base by improving the multi-layered management of its customers and service system and by intensifying its marketing efforts directed at customers along the upstream and downstream of supply chains and industrial chains. The Bank managed to attract more administrative institution customers by improving its products and services for those engaged in industries relating to public finance and social security, education and public health, and cultural tourism, thus achieving rapid growth in deposits from such institutions. In addition, the Bank enhanced the service functions of its outlets so as to improve their customer service capabilities and increase their contribution to the Bank's deposits. As at 30 June 2019, RMB corporate deposits in the Bank's domestic operations totalled RMB6,060.613 billion, an increase of RMB176.180 billion or 2.99% compared with the prior year-end. Foreign currency corporate deposits amounted to USD70.938 billion, an increase of USD4.815 billion or 7.28% compared with the prior year-end.

Corporate Loans

The Bank continued to step up its efforts in serving the real economy, deeply implemented requirements on supply-side structural reform, actively supported key investment fields and assisted in the transformation and upgrading of the domestic economy. It provided stronger support for the improvement of weak links in infrastructure, the high-quality development of manufacturing industry, modern service industry and technologically innovative enterprises, and improved services for privately-owned businesses. In addition, the Bank allocated more resources to strategic regions such as the Beijing-Tianjin-Hebei region, the Guangdong-Hong Kong-Macao Greater Bay Area, the Yangtze-River Economic Belt, and the Hainan Free Trade Zone, and played an active role in serving key sectors, such as social welfare and people's livelihood, internet, rural revitalisation, pensions and the Winter Olympic Games. As at 30 June 2019, RMB corporate loans of the Bank's domestic operations totalled RMB5,413.939 billion, an increase of RMB356.285 billion or 7.04% compared with the prior year-end. Foreign currency corporate loans totalled USD38.677 billion, a decrease of USD2.248 billion or 5.49% compared with the prior vear-end.

Financial Institutions Business

The Bank continued to deepen its wide-ranging cooperation with various global financial institutions including domestic banks, overseas correspondent banks, non-bank financial institutions and multilateral financial institutions. It built its integrated financial service platform and maintained a leading position in terms of financial institution customer coverage. The Bank has established correspondent relationships with nearly 1,600 institutions and opened 1,450 cross-border RMB clearing accounts for correspondent

banks from 112 countries and regions, thus carving out a leading position among domestic banks. It also promoted the RMB Cross-Border Interbank Payment System (CIPS) and signed cooperation agreements for CIPS indirect participants from more than 260 domestic and overseas financial institutions, seizing the largest market share among its peers. The Bank's custodian service for Qualified Foreign Institutional Investors (QFII) and RMB Qualified Foreign Institutional Investors (RQFII) and its agency service for overseas central banks and other sovereign institutions ranked among the top in the industry in terms of both customer base and business size. The Bank strengthened its cooperation with the Asian Infrastructure Investment Bank, New Development Bank and Silk Road Fund. It served as the lead underwriter of the issuance of the first USD-denominated bond by the Asian Infrastructure Investment Bank. By the end of June 2019, the Bank ranked first in terms of market share in foreign currency deposits from financial institutions, and its market share in terms of the number of third-party custody customers with outstanding balances also further increased.

Transaction Banking

Actively adapting to the trend of FinTech innovation and integrated customer financial needs, the Bank vigorously developed transaction banking in order to further improve the quality and efficiency of its service to the real economy. It fully implemented the requirement of stabilising foreign trade and continued to lead its peers in market share of cross-border settlement. It actively participated in the Belt and Road Initiative, RMB internationalisation and the building of pilot free trade zones and free trade ports. The Bank supported the National Office of Port Administration in the construction of the financial service function of the standard version of "Single Window" and was one of few pilot banks to launch this program. In

addition, the Bank continued to roll out new products and services and strengthened the development of application scenarios for transaction banking. It further improved the comprehensive product system of "Global Cash Management Platform+" and expanded the global integration on key products, and provided customers with multi-currency, multi-channel, multi-area and one-stop products and services. Moreover, the Bank improved the service quality of its settlement accounts, thus realising a steady increase in the scale of settlement business.

Inclusive Finance

Actively implementing national policies and measures to support the development of micro and smallsized enterprises, the Bank continuously improved and refined its inclusive financial services and steadily enhanced the quality and efficiency of its services for micro and small-sized enterprises. As at 30 June 2019, the Bank's outstanding inclusive finance loans granted to micro and small-sized enterprises reached RMB379.2 billion, up by 27.07% compared with the prior year-end, outpacing the overall loan growth of the Bank. The number of micro and small-sized customers stood at approximately 400,000, an increase compared with the beginning of the year. The average interest rate of micro and small-sized enterprises' inclusive finance loans granted in the first half of 2019 was 4.59%. The quality of loans granted to micro and smallsized enterprises remained at a stable and controllable level. Focusing on the themes of the 16+1 Cooperation and the Belt and Road Initiative, the Bank expanded its cross-border matchmaking services by holding the 2019 China-CEEC SMEs Cross-Border Matchmaking Event in Croatia and the Belt and Road CEO Conference B2B Matchmaking Session of the Second Belt and Road Forum for International Cooperation in Beijing, so as to offer global SMEs a connectivity and cooperation

platform and facilitate their integration into the global capital chain, value chain and industrial chain. It has held 55 cross-border matchmaking events since 2014, attracting the participation of 30,000 enterprises from 108 countries and regions across the globe.

Pension Business

Focusing on the development of China's social security system, the Bank continuously extended its pension business coverage, promoted product innovation and improved system functions. It provided a range of products including enterprise annuities, occupational annuities, employee benefit plans and pension security management thus continuously enhancing satisfaction. It also vigorously supported the development of China's pension finance system, promoted wholeprocess business services, and facilitated financial supplyside structural reform. As at 30 June 2019, pension funds under custody reached RMB30.984 billion, and the total number of individual pension accounts held by the Bank reached 5.2508 million, an increase of 0.2389 million or 4.77% compared with the prior year-end. Assets under custody amounted to RMB255.471 billion, an increase of RMB34.313 billion or 15.52% compared with the prior year-end, with the Bank serving more than 15,000 clients.

Personal Banking

The Bank always puts customers at the centre of its business. It innovated and improved its personal banking product and service system and endeavoured to enhance the capability of its online, scenario-based and smart services. It grasped development opportunities in cross-border business, consumer finance and wealth management so as to continuously enhance the market competitiveness of its personal banking business. In the first half of 2019, the Bank's domestic personal banking business realised an operating income of RMB80.669

billion, an increase of RMB4.107 billion or 5.36% compared with the same period of the prior year.

Personal Deposits

In response to the trend of interest rate liberalisation, the Bank took its advantages of comprehensive personal financial services, and enriched its deposit product offerings so as to meet customers' diverse needs. It solidified its capacity in funds pooling by expanding advantageous businesses such as salary payment agency, "BOC Wealth Accumulator", online margin and Service Platform for construction workers. It further developed its foreign exchange services by increasing the number of foreign currencies offered by its personal deposit and withdrawal businesses to 25 and the number of convertible foreign currencies available to customers to 39, thus maintaining its leading position among peers. In addition, the Bank improved customer experience by launching a cash exchange reservation service for 23 currencies via e-channels such as mobile banking, online banking and WeChat banking in major cities in the Chinese mainland. As at 30 June 2019, the Bank's domestic RMB personal deposits totalled RMB5,486.871 billion, an increase of RMB460.549 billion or 9.16% compared with the prior year-end. Personal foreign currency deposits amounted to USD42.375 billion, maintaining a leading market share.

Personal Loans

The Bank stepped up efforts to serve the real economy and support consumption upgrade by steadily expanding its personal loan business. It actively put into practice the state's regulatory policies on real estate and continued to implement a differentiated residential mortgage loan policy, with a particular focus on

serving the needs of households seeking to buy owneroccupied homes for the first time, thus maintaining the sound development of its residential mortgage loan business. The Bank accelerated its consumer finance business, promoted its featured "BOC E-Credit" product, a whole-process online consumer loan service, and refined online application for governmentsponsored student loans. It improved the product policy and business process for personal business loans, thereby effectively reducing the comprehensive financing costs of inclusive finance customers, including micro and small-sized business owners and privatelyowned businesses. As at 30 June 2019, the total amount of RMB personal loans of the Bank's domestic operations stood at RMB4,213.390 billion, an increase of RMB279.550 billion or 7.11% compared with the prior year-end.

Wealth Management and Private Banking

The Bank enhanced its wealth management and private banking services by accelerating product and service model innovation with a focus on customer demands, so as to consolidate its development foundation. It implemented a strategy of enabling advancement through technology, and refined its asset allocation tactics. In the first half of 2019, the "BOC Robot Advisor", an intelligent investment advisory service, generated sales of RMB4.7 billion with more than 100,000 customers. The Bank continued to carry out targeted marketing campaigns based on big data, and further enhanced its customer relationship management competence. It intensified efforts in product and service innovation, and improved its sales management mechanism, which helped enhance its personal insurance and investment product sales capabilities. In addition, the Bank continued to upgrade its personal customer marketing model and service system, which resulted in a

rapid growth in terms of the number of customers and the scale of customer financial assets. It continuously raised its professional service capabilities by improving the management mechanism for its relationship managers. It delivered better services to cross-border customers, including achieving positive results in providing integrated cross-border services to personal customers in the Guangdong-Hong Kong-Macao Greater Bay Area. It explored new marketing mechanisms for private banking products and customers, and enhanced its family trust service, thus further improving its services for private banking customers. As at 30 June 2019, the Bank had set up 8,082 wealth management centres, 1,105 prestigious wealth management centres and 44 private banking centres in the Chinese mainland.

Bank Card

Closely following changes in market and customer demand patterns, the Bank launched star products for key customer groups, while continuously improving the benefits of its core products. Implementing national policy requirements for the acceleration of the development of the electronic toll collection (ETC), the Bank refined the products of Car Credit Card and ETC Co-branded Credit Card. It responded to the national call to speed up the development of winter sports by issuing the world's first Olympic Winter Games Beijing themed credit card. Focused on variety of active-usage scenarios and popular social media platforms, the Bank acquired online customers based on scenarios, and improved the efficiency of customer acquisition through light and agile tools. To support the demands of consumption upgrade, the Bank established an online, scenario-based and diversified instalment service system by launching "BOC E-Instalment", enriching its auto scenario instalment

product series, upgrading its home decoration instalment products and releasing diversified scenario instalment services across the customer life cycle. It continued to promote the "BOC Smart Payment" brand, intensified pilot programmes for the newly-emerging function of "non-medium payment", and accelerated the online and digitalisation-driven transformation of its acquiring business. Drawing on artificial intelligence and big data technologies, the Bank deepened the construction of its merchant value-added service system, and conducted 360-degree customer life cycle maintenance. It also carried out invitation-based marketing campaigns for targeted customer groups to continuously boost customer activation. As at 30 June 2019, the cumulative number of credit cards issued by the Bank reached 118.3296 million, and the credit card transaction amount stood at RMB862.284 billion for the first half of 2019. while the instalments volume of credit cards amounted to RMB166.338 billion.

The Bank steadily promoted its online and offline debit card business, and expanded scenario-based applications for mobile payment, thus continuing to improve customer experience. It gave full play to its advantages in campus services and made efforts in creating a "Whole Education" scene by expanding its service scope to primary and high schools, kindergartens, training institutions and other "blue ocean" educational markets. The Bank, in cooperation with local Human Resources and Social Security Bureaux, has accumulatively issued over 100 million social security cards equipped with financial functions at the end of June 2019. It also launched innovative online products including electronic social security cards and electronic health cards, providing customers with integrated "online + offline" and "financial + non-financial" services.

Financial Markets Business

In order to further enhance its financial market influence, the Bank closely tracked market developments and actively aligned itself with the trends towards interest rate and exchange rate liberalisation and RMB internationalisation. It leveraged its professional advantages, continued to deepen adjustments to its business structure, enhanced its efforts in financial market innovation and made steady progress in compliance with international regulatory requirements.

Securities Investment

The Bank strengthened its capacities for research and judgment regarding market interest rates while proactively seizing market opportunities. It also rationally adjusted the duration of its investment portfolio and further optimised its investment structure. Consistent with national macroeconomic policies, the Bank supported the economic development of local governments and properly participated in local government bond investment. Following trends in global bond markets, the Bank optimised its foreign currency investment portfolio and managed to prevent interest rate risk and credit risk.

Trading

The Bank accelerated the construction of an integrated global financial markets business system founded on the three core product lines of interest rates, exchange rates and commodities. It endeavoured to improve a new customer-centric service model, in order to boost stable and rapid development of its financial markets business. The Bank continued to outperform its peers in market share of foreign currency exchange against RMB business, and brought the number of currency pairs available for exchange up to 39. It also increased

the total number of tradable foreign currencies to 63, among which 52 are currencies of emerging economies and 29 are currencies of countries along the Belt and Road, covering almost all convertible currencies. It expanded its over-the-counter (OTC) bond business by introducing new types of OTC local government bonds and completing the first sales. It enriched its personal trading product system by launching convertible precious metals savings products, in order to meet the asset allocation needs of personal customers. The Bank continuously deepened its global integrated development and further enhanced its quotation and service capabilities for overseas institutional investors by strengthening business support from the Head Office and its overseas trading centres to its regional branches. During the reporting period, its volume of bond trading with overseas institutional investors continued to maintain leading positions in the market. Making full use of its advantages in professional quotation and its paramount focus on compliance, the Bank steadily created demands for financial institutions. In line with the financial demands of the real economy, the Bank provided professional hedging against risks relating to exchange rates, interest rates and commodity prices. It also increased support for private enterprises and small and medium-sized enterprises by offering expedient and effective hedging services under the precondition of compliant operation.

Investment Bank and Asset Management

The Bank leveraged the competitive advantages of its international and diversified operations, centred on serving the real economy, and vigorously expanded its investment banking and asset management business and worked to deliver an integrated "commercial banking + investment banking" service system. Following national strategies, the Bank intensified efforts in coordinated operations, made greater efforts to develop

direct financing and investment advisory business including domestic and overseas bond underwriting and distribution as well as asset securitisation, and managed to meet customers' all-round needs for comprehensive financial services based on the concepts of "domestic + overseas" and "financing + intelligent". The Bank actively promoted its asset management business transformation and product development, launching net value products such as "BOC Strategy Steady Wealth Creation" and "BOC Strategy — Intelligent Wealth Creation", further expanding its product system and scale. BOC Wealth Management Co., Ltd. obtained regulatory approval to open for business on 27 June 2019 and completed company registration on 1 July 2019. The Bank boosted its underwriting business for financial institutions with its financial bond underwriting volume and market share improving at a stable pace. It enhanced the crossborder competitiveness of its underwriting business, assisted issuers such as the Republic of the Philippines, the Republic of Portugal and United Overseas Bank in issuing Panda Bonds and Asian Infrastructure Investment Bank in issuing its first USD2.5 billion bond. In the first half of 2019, the Bank underwrote debt financing instruments for non-financial institutions in the China interbank market with a total amount of RMB208.495 billion, and successfully issued residential mortgage-backed securities with a total amount of RMB17.991 billion. As at 30 June 2019, the balance of the Bank's wealth management products amounted to RMB1,335.4 billion. The Bank maintained the largest market share in China offshore bond underwriting and

consecutively leading the market share in Panda Bond underwriting. As a result, the brand influence of "BOC Debt Capital Markets" was continuously enhanced.

Custody Business

Focusing on serving the real economy and improving the development quality of its custody business, the Bank endeavoured to enhance the overall competitiveness of its custody business by strengthening and refining its custody products. It actively supported pension security system reform and secured a leading position among peers by winning all of the bids for custodian bank services made by provisional and municipal occupational annuities. It bolstered capital market development and mixed ownership reform of state-owned enterprises, and became the custodian bank for multiple science and technology-themed funds and state-owned enterprise reform ETFs. Capturing opportunities arising from capital market connectivity, the Bank signed an agreement with MUFG Bank on cross-border custodian service for RQFII. Catering to the shift towards net value-based wealth management products, the Bank cooperated with a number of banks in wealth management custody and outsourcing schemes. In addition, the Bank pushed forward advancement through technology and system building, thus further enhancing its custody service capability. As at 30 June 2019, the Group's assets under custody stood at RMB10.37 trillion, of which its cross-border custody business accounted for RMB288.2 billion, maintaining a leading position among Chinese banks.

Village Bank

BOC Fullerton Community Bank actively implemented national strategies for rural revitalisation with the aim of "focusing on county area development, supporting farmers and small-sized enterprises, and growing together with communities". It is committed to providing modern financial services to farmers, micro and small-sized enterprises, individual merchants and the wage-earning class, thus promoting the construction of China's "New Countryside".

BOC Fullerton Community Bank expedited the construction of its institutional distribution network so as to support financial development in county areas. As at 30 June 2019, BOC Fullerton Community Bank controlled 125 village banks and 157 sub-branches in 22 provinces (including municipalities directly under the Central Government) through self-establishment and acquisition, of which 65% are located in China's central and western regions. BOC Fullerton Community Bank has become the largest domestic village bank in terms of total institutions and business scope. It continuously improved its product and service system, and its customer base was further expanded. As at 30 June 2019, the registered capital of BOC Fullerton Community Bank amounted to RMB7.524 billion, with its total assets and net assets standing at RMB63.072 billion and RMB10.410 billion respectively. The balances of total deposits and loans of these banks were RMB41.808 billion and RMB42.109 billion respectively. The NPL ratio was 2.50% and the coverage ratio of allowance for loan impairment losses to NPLs stood at 211.36%. It achieved a profit for the period of RMB378 million in the first half of 2019.

Overseas Commercial Banking

In the first half of 2019, the Bank further enhanced its global service and support capabilities and sharpened its market competitiveness by continuously promoting the establishment of overseas institutions, pushing forward the integrated development of its domestic and overseas operations, actively deepening the construction of the financial artery of the Belt and Road Initiative, and pushing forward RMB internationalisation across the board.

As at 30 June 2019, the Bank's overseas commercial banking customer deposits and loans totalled USD449.230 billion and USD383.236 billion respectively, an increase of 3.64% and 4.92% compared with the prior year-end. In the first half of 2019, the Bank's overseas commercial banking operations achieved a profit before income tax of USD4.809 billion, accounting for 21.34% of the Group's total profit before income tax.

Regarding branch distribution, the Bank closely tracked the financial services needs of global customers and accelerated the development and distribution of institutions in countries along the Belt and Road, so as to improve its global service network. As at 30 June 2019, the overseas institutions of the Bank totalled 553, covering 57 countries and regions across the world, of which 24 countries were along the Belt and Road.

For corporate banking business, by giving full play to the advantages arising from its diversified operations, the Bank provided a full spectrum of premium, efficient, tailor-made and comprehensive financial services for "Going Global" and "Bringing In" customers, "Fortune Global 500" enterprises and local corporate customers. It further improved its globalised customer service system and continually enhanced its middle and highend products and services. Through core products including syndicated loans, project financing, crossborder M&A, export credit, global cash management and letters of guarantee, the Bank provided strong support to key projects related to infrastructure construction, energy resource development, international production capacity cooperation and overseas industrial parks, with the aim of enhancing financial support and services for major projects in countries along the Belt and Road.

For personal banking business, the Bank provided "one-stop" financial services for personal "Going Global" customers by leveraging its extensive overseas institution network. It continued to expand its overseas account opening witness service, which now covers 18 countries and regions in North America, Europe, Asia and Oceania. The Bank also enhanced its services for customers studying abroad through such brands as "Brilliant Tomorrow" in the US, "Golden Age" and "UK Manager" in the UK, "Home in Canada" in Canada, "Golden Years" in Australia, "Sail in Lion City" in Singapore and "Splendid Life" in Macao. The Bank actively built up cross-border scenarios and improved its cross-border credit card services, so as to provide customers with preferential and convenient cross-border credit card services. It launched a series of promoting activities for cross-border consumption, further expanding the brand influence of crossborder business. It also cooperated with overseas education and business travel agencies to acquire crossborder customers from the source by holding salons, lectures and institutional activities. In addition, the Bank expanded its overseas credit card issuance and acquiring business, developing new products such as

Macao MasterCard Credit Card, supporting overseas "integrated payment" business in Southeast Asia and establishing a unified "BOC Smart Payment" product system across its domestic and overseas operations, in order to further enhance its competitiveness in local payment markets. The Bank optimised the service coverage of its overseas debit cards by issuing UnionPay, Visa and MasterCard debit cards in 19 countries and regions. In addition to withdrawal, consumption and other basic functions, it introduced new features including contactless payment, non-card payment and 3D secure payment, which can be used via multiple channels including domestic and overseas counters, online banking and mobile banking, thereby better satisfying the world-wide consumption demands of overseas customers.

For financial markets business, the Bank gave full play to its advantages in integrated global operations and actively engaged in RMB futures market-making on the exchanges of Singapore, South Korea and Dubai, in line with national opening-up strategy. It also took its advantages of compliant operations, becoming the first Chinese banking group to serve as a central clearing member of the London Clearing House. It enhanced its capacity for customer base expansion in Asia, Europe and the Americas, with its professional service abilities further reaching the international standard. It kept optimising its product line structure for exchange rates, interest rates and commodities, and continuously improved its business scale and profitability. The Bank sped up efforts to shape its global custody service network and exerted every effort to deliver custody services to "Going Global" and "Bringing In" customers. It grasped opportunities arising from capital market connectivity to undertake the marketing of new businesses such as cross-border depository. The Bank successfully issued the fifth tranche of its Belt and Road-themed bonds with a total volume equivalent to approximately USD3.8 billion.

For clearing business, the Bank continuously improved its cross-border RMB clearing capabilities and consolidated its position at the leading edge of international payments. In the first half of 2019, the Group's cross-border RMB clearing transactions totalled RMB212.67 trillion, up by 22.64% compared with the same period of the prior year, maintaining first place in global markets. The Bank now accounts for 12 of the world's 26 authorised RMB clearing banks and continues to lead its peers. The Bank's Tokyo Branch launched its RMB clearing business as an RMB clearing bank in Japan. Moreover, the Bank also expanded its CIPS indirect participant client bases, and maintained first place in terms of market share.

For e-banking, the Bank further expanded the coverage of its overseas corporate online banking and continued to enhance its global internet financial service capacity for enterprises. With its internet financial service platform actively integrating overseas and domestic operations, the Bank further enriched service functions such as overseas corporate online banking and overseas bankenterprise connection channels, and therefore continued to lead its peers in global capital management services. As at 30 June 2019, the Bank offered overseas corporate online banking services in 46 countries and regions, with 13 available languages. The Bank continued to improve overseas personal e-banking services, and upgraded the mobile banking services of London Branch, Seoul Branch, Frankfurt Branch, Paris Branch and other institutions, taking active steps to explore new service modes of virtual banking. As at 30 June 2019, the Bank's overseas personal online banking services covered 41 countries and regions across the world, and its mobile banking services covered 18 countries and regions, with services available in 14 languages.

BOCHK

In the first half of 2019, BOCHK remained committed to its strategy of building a top-class, full-service and internationalised regional bank. It actively responded to changes in the market environment and steadily pushed forward its business priorities, with major financial indicators remaining at solid levels. Striving to be customer-centric at all times, it continued to develop the local market in Hong Kong so as to enhance allround sustainable development. BOCHK was actively involved in the development of the Guangdong-Hong Kong-Macao Greater Bay Area, and endeavoured to sharpen its integrated competitive advantages by meeting people's livelihood financial needs. It promoted business development in Southeast Asia and enhanced regional synergies and development quality. It expedited its transformation into a digital bank and enhanced its innovation, infrastructure and application capability. Moreover, BOCHK closely monitored changes in the economic and financial environment and enhanced its risk management capabilities and internal compliance levels. It remained dedicated to cultivating its bank culture to ensure a balanced and sustainable development. As at the end of June 2019, BOCHK's issued share capital was HKD52.864 billion. Its total assets amounted to HKD2,988.440 billion and net assets reached HKD296.867 billion. In the first half of 2019, its profit for the period was HKD18.276 billion.

BOCHK continued to develop its local market in Hong Kong to support economic growth and make contributions towards people's livelihood. The growth of BOCHK's total customer deposits and loans was above the market average. Its asset and liability structure was further optimised, with asset quality

outperforming the local market. BOCHK continued to expand its business in key financing projects and successfully arranged a number of significant syndicated loans and project finance deals with notable market influence. It remained the top mandated arranger in the Hong Kong-Macao syndicated loan market and maintained its leading market position as the main receiving bank for IPOs in Hong Kong. It continued to uplift its service levels for commercial customers in Hong Kong and supported the development of SMEs. Continuous enhancements were made to the product functions and scenario-based applications of the BoC Pay and BoC Bill payment systems in order to provide customers with personalised payment and settlement solutions, resulting in a greater market penetration. BOCHK accelerated the development of its cash pooling, treasury centre, cash management and trade finance businesses, thus achieving breakthroughs in key projects and continuous expansion in business scale. It catered to the different needs of personal clients and provided exclusive and all-round services to its middle and high-end clients, which led to continuous improvement in customer base structure and the scale. In addition, it further enhanced the efficiency of its payment services to better satisfy people's livelihood banking needs and improve service penetration to young customers.

BOCHK promoted integrated development and collaboration in the Greater Bay Area in order to expand featured cross-border services. BOCHK strengthened its collaboration and communication with branches and subsidiaries within the Group in order to establish an integrated sales and service system in the Greater Bay Area across four major aspects of cross-border activities: people flow, commodities flow, fund flow and information flow. It fully promoted sustainable business development in the Greater Bay Area and actively developed key products, including cross-border

loans, cash pooling and payment services. To meet the demand of customers from Guangdong, Hong Kong and Macao for financial services, including account opening, payment services, wealth management and financing, BOCHK launched a "Greater Bay Area Account Opening" service to provide Chinese mainland personal account opening attestation service for Hong Kong residents, the "Greater Bay Area Service Connect" service to provide mutual service access to wealth management personal customers. As a result, it achieved an encouraging increase in the number of cross-border customers.

BOCHK deepened its regional integration in Southeast Asia and steadily pushed forward its integrated regional development. Following the completion of the acquisition of Bank of China Vientiane Branch, BOCHK's Southeast Asian entities now operate in eight Southeast Asian countries. BOCHK steadily pushed forward the operation and implementation of its regional management model, adopting differentiated development strategies for each Southeast Asian entity and reinforcing resource support. It continuously enriched its product and service portfolios for these entities so as to expand into local mainstream markets. It focused on major clients and projects, actively developing business with institutional clients and promoting its RMB products, treasury, payment and settlement businesses, resulting in a continuous expansion of customer base and business scale. Bank of China (Malaysia) Berhad launched a wealth management service and Bank of China (Thai) Public Company Limited helped a Thai asset management company client to become an RQFII. BOCHK Ho Chi Minh City Branch successfully handled the first crossborder RMB entrusted settlement business in Vietnam's non-border area and the payment function of BoC Pay was extended to Malaysia and Indonesia. The Southeast Asian entities comprehensively enhanced

capabilities in credit risk management, internal control and compliance, operating in accordance with more stringent standards stipulated by BOCHK, and ensure compliance with related regulatory requirements.

BOCHK implemented technology-based and innovationdriven development to expedite its transformation into a digital bank. BOCHK kept up with the FinTech development trends, strengthened O2O integration and upgraded the customer experience with intelligent products and services. It supported innovation-driven strategic research and further enriched the scenariobased applications of FinTech in order to boost the pace of innovation, accelerate adaptation to client demands and improve competitiveness. It upgraded the settlement function of mobile payments and achieved further expansion in client base. BOCHK also increased investment in strategic resources to support its transformation into a digital bank. It utilised artificial intelligence and biometric authentication in its financial products, service processes, operations management and risk control, upgrading its service capabilities and better meeting client needs. In addition, Livi VB Limited ("Livi"), a virtual banking joint venture company owned by BOC Hong Kong (Holdings) Limited, JD New Orbit Technology (Hong Kong) Limited and JSH Virtual Ventures Holdings Limited, was granted a banking licence by the Hong Kong Monetary Authority. Using various innovative technologies, Livi brings a unique banking experience to customers.

(Please refer to the results report of BOCHK for a full review of BOCHK's business performance and related information.)

Comprehensive Operation Platforms

The Bank gave full play to the competitive advantages inherent in its integrated operations and actively seized

opportunities arising from the Belt and Road Initiative and the development of China's multi-layered capital markets. By focusing on its specialised business areas, deepening business collaboration and promoting cross-selling and product innovation, it provided comprehensive and high-quality financial services to customers.

Investment Banking Business

BOCI

The Bank is engaged in investment banking business through BOCI. As at 30 June 2019, BOCI had an issued share capital of HKD3.539 billion, total assets of HKD62.474 billion, and net assets of HKD19.315 billion. In the first half of 2019, BOCI realised a profit for the period of HKD932 million.

BOCI actively captured the strategic opportunities arising from the Belt and Road Initiative, Chinese enterprises' "Going Global" efforts, mixed ownership reform of state-owned enterprises and the development of the Guangdong-Hong Kong-Macao Greater Bay Area. It accelerated network expansion in countries along the Belt and Road, strengthened its marketing efforts, reinforced internal controls and enhanced risk management practices. With the aims of serving the real economy, BOCI improved and strengthened its core businesses and increased its integrated service capabilities.

BOCI made solid progress in providing services for global clients, established a Singapore-based team and actively explored opportunities in the Southeast Asian market. It leveraged its structural advantages in government services and its financial solution expert panel in order to promote cross-border collaboration with the Group's branches and subsidiaries. In addition,

it achieved steady progress in its equity underwriting and financial advisory businesses, with its bond issuance and underwriting businesses continuing to maintain leading positions in the market. Deeply rooted in Hong Kong and Macao, BOCI leveraged its competitive edges in the Chinese mainland and continued to expand its sales network globally. Keeping abreast of market changes, it further improved its value and influence as a "think tank" in terms of research capability.

BOCI steadily upgraded its brokerage and trading system, thus improving its targeted marketing and customer services abilities. It solidified its leading position in brokerage and equity derivatives business in Hong Kong, and continuously enhanced the business structure of its wealth management services for highend individuals by providing integrated private banking services and family inheritance succession planning. It launched the BOCI Equity Index Series, comprising three indices, which has registered satisfactory performance since inception. BOCI-Prudential Asset Management Limited, a subsidiary of BOCI, maintained its position as a top-ranked service provider in the Hong Kong Mandatory Provident Fund (MPF) and Macao Pension Fund businesses. In addition, BOCI actively participated in the Mainland-Hong Kong Mutual Recognition of Funds (MRF) scheme.

The Bank achieved steady progress in worldwide commodity business and maintained a leading position among its Chinese peers in terms of commodity business platform and market shares. It provided a series of hedging products and trading services for domestic and overseas customers engaged in the metal and energy businesses, assisting them with market and price risk management. BOCI strengthened cross-border business cooperation, and explored high quality

technological projects in line with industry development trends. Moreover, it explored a new digital business model, and expanded the application scenarios of its securities sales, wealth management and traditional investment banking services using big data and artificial intelligence (AI) technologies.

BOCI China

The Bank is engaged in securities-related business in the Chinese mainland through BOCI China. As at 30 June 2019, the registered capital, total assets and net assets of BOCI China were RMB2.500 billion, RMB51.307 billion and RMB12.467 billion, respectively. It realised a profit for the period of RMB540 million for the first half of 2019.

BOCI China followed a robust and aggressive development principle and adopted a customer-centric approach. Implementing its "Technology-empowered Development, Transition and Synergy" strategy, it made further progress in business transformation while holding fast to the risk compliance bottom line. It endeavoured to outperform its peers by pushing forward wealth management transformation for personal customers and transaction ecosystem management transformation for institutional customers. Deepening the synergistic advantages of "investment bank + commercial bank", "investment bank + investment" and "domestic + overseas" in its investment banking business, BOCI China shifted its investment banking focus towards transaction-driven comprehensive financial services, its asset management business focus towards active management, and its brokerage business focus towards wealth management, while improving the versatility of its branches. As a result, its customer service capability and market influence steadily strengthened.

BOCIM

The Bank is engaged in fund management business in the Chinese mainland through BOCIM. As at 30 June 2019, BOCIM's registered capital amounted to RMB100 million, its total assets stood at RMB4.622 billion and its net assets totalled RMB3.415 billion. It realised a profit for the period of RMB406 million in the first half of 2019.

BOCIM steadily expanded its asset management business, maintained sound internal control and risk management, continuously improved its brand and market reputation and further enhanced its comprehensive strengths. As at 30 June 2019, BOCIM's assets under management reached RMB692.1 billion. In particular, its public-offered funds reached RMB374.9 billion, and its non-monetary public-offered funds reached RMB208.8 billion, ranking seventh among domestic fund management companies.

Insurance

BOCG Insurance

The Bank is engaged in general insurance business in Hong Kong through BOCG Insurance. As at 30 June 2019, BOCG Insurance reported issued share capital of HKD3.749 billion, total assets of HKD9.133 billion and net assets of HKD4.158 billion. In the first half of 2019, BOCG Insurance recorded gross written premiums of HKD1.521 billion and realised a profit for the period of HKD35 million. It remained at the forefront of the Hong Kong general insurance market in terms of gross written premium.

Upholding the market development strategy of "deepen services in Hong Kong, refine business approach in the Chinese Mainland, reach out to overseas markets and widen brand awareness", BOCG

Insurance made solid progress in expanding its business. In response to the relatively saturated and highly competitive market in Hong Kong, the Bank actively grasped market trends, made timely adjustments to its product structure and achieved sound results by strengthening the promotion of tourism insurance and other products. It actively supported the development of the Guangdong-Hong Kong-Macao Greater Bay Area, launched a number of Greater Bay Area-specific products for local customers. It also strengthened cooperation with the Group's institutions in the Greater Bay Area and launched an insurance product covering cars passing over the Hong Kong-Zhuhai-Macao Bridge, so as to take the lead in the market. In addition, BOCG Insurance closely cooperated with BOCHK in implementing its Southeast Asian development strategy, improved its customer sharing and mutual marketing mechanism, and collaborated with Vientiane Branch and Phnom Penh Branch to conduct a number of insurance schemes with an aggregate underwriting amount of HKD7.4 billion.

The Bank pushed forward the development of its comprehensive risk management system, further improved its relevant risk control management system and mechanism, optimised its risk appetite setting and transmission mechanism and, properly managed various risks in a coordinated manner, and thereby continuously enhancing its risk management capabilities.

BOC Life

The Bank is engaged in life insurance business in Hong Kong through BOC Life. As at 30 June 2019, BOC Life's issued share capital was HKD3.538 billion, total assets amounted to HKD146.269 billion and net assets amounted to HKD9.772 billion. In the first half of 2019, it realised a profit for the period of HKD493 million.

BOC Life continued to push forward its product and service innovation. To support the tax deductible Voluntary Health Insurance Scheme (VHIS) and deferred annuity products promoted by the HKSAR government, BOC Life was amongst the first batch of insurers to introduce relevant products to the market, including "BOC Life Standard VHIS", "BOC Life Deferred Annuity Plan (fixed term)" and "BOC Life Deferred Annuity Plan (life time)", thus offering customers a more diverse product range. The "iTarget 3 Years Savings Insurance Plan" was simultaneously launched on BOCHK's mobile and internet banking services for the first time, providing customers with a simple and convenient application service. BOC Life also launched "Forever Glorious ULife Plan II" in order to enhance service support for high-end customers and increase the value of new business and long-term profitability.

BOC Life proactively applied InsurTech to improve customer experience. With the launch of BOC Life's Live Chat service, customers now can be referred to customer service ambassadors via BOC Life's WeChat Official Account and website platform, enabling them to make enquiries in an easy and simple manner. Moreover, the inclusion of a policy binding function on BOC Life's WeChat Official Account effectively strengthened customer service support and communication.

BOC Insurance

The Bank is engaged in property insurance business in the Chinese mainland through BOC Insurance. As at 30 June 2019, BOC Insurance reported registered capital of RMB4.535 billion, total assets of RMB13.659 billion and net assets of RMB4.093 billion. In the first half of 2019, it realised gross written premiums of RMB3.615 billion, and a profit for the period of RMB108 million.

Following national strategies, BOC Insurance paid attention to market trends and customer needs, remained committed to serving the real economy and continued to improve its comprehensive financial service capabilities. It actively responded to the Belt and Road Initiative by supporting large domestic enterprises in their "Going Global" efforts. It maintained a leading position in overseas insurance business, covering nearly 30 industries in more than 70 countries and regions in Asia, Africa and South America. It pioneered customs bond insurance to make customs clearance more convenient for import enterprises. BOC Insurance supported enterprises' technological innovations, so as to facilitate technical equipment improvement. It supported regional development strategies and assisted in the development of the Guangdong-Hong Kong-Macao Greater Bay Area by providing insurance services for the Hong Kong-Zhuhai-Macao Bridge. In addition, it assumed its share of social responsibility by joining the China Nuclear Insurance Pool, the single-purpose pre-paid card performance bond insurance pool, the China Urban and Rural Residential Building Earthquakes Catastrophe Insurance Pool and the Residential Project Inherent Defect Insurance (IDI) supplier list, and by obtaining qualification to provide serious illness insurance for urban and rural residents. It increasingly applied technology to claim settlement, innovated new forms of services, and addressed major incidents in a timely and appropriate manner, thus delivering expedient and high-quality claim settlement services to customers.

BOC-Samsung Life

The Bank is engaged in life insurance business in the Chinese mainland through BOC-Samsung Life. As at 30 June 2019, BOC-Samsung Life's registered capital stood at RMB1.667 billion, total assets amounted

to RMB16.814 billion and net assets amounted to RMB1.404 billion. In the first half of 2019, BOC-Samsung Life recorded written premiums and premium deposits of RMB4.795 billion, and a profit for the period of RMB23 million.

BOC-Samsung Life continued to enhance its crossselling capabilities and provided personal security, longterm savings, pension, medical care, travel insurance and other diversified insurance services to individual and corporate customers of the Group. As a result, it realised a year-on-year increase of 39% in premiums brokered by the Bank. It expanded its customer service channels by launching new branch in Shandong and new sub-branches in Zibo, Wuxi and Jinhua. BOC-Samsung Life also provided life insurance service through comprehensive financial service portal on the BOC mobile banking platform, and continuously upgraded the self-service functions of the WeChat official account and claims application, which were used by more than 60% of its customers. Moreover, BOC-Samsung Life continuously enhanced the research and development on products and strengthened the protection function of its product line, including introducing the lifetime multi-claim critical illness insurance with increasing sum assured "Xiang You Zhen Xiang" for individual customers, and a lifetime critical illness insurance "Shou Hu Yi Sheng" for group customers.

Investment Business

BOCG Investment

The Bank is engaged in direct investment and investment management business through BOCG Investment. As at 30 June 2019, BOCG Investment recorded issued share capital of HKD34.052 billion, total assets of HKD123.192 billion and net assets of

HKD63.818 billion. In the first half of 2019, it recorded a profit for the period of HKD2.293 billion.

BOCG Investment strives for high quality development by firmly embracing the central task of business transformation and adhering to the strategies of integration, fund development and digitalisation. It worked side by side with the Group to build a direct financing strategic business unit, deepened cooperation in investment and loan linkage, crossborder M&A, and alternative asset allocation, etc., and assisted in enhancing the Group's comprehensive competitiveness in key regions. It took advantage of its direct investment platform, focused on new industries and businesses such as artificial intelligence, logistics, and healthcare, etc., and supported the development of the real economy. It strengthened investment portfolio management by implementing project phases and classification management. BOCG Investment committed itself to technology-driven development, benchmarked itself to market leaders, and promoted its intelligent and digital development. It pushed forward the timely exit of projects that met investment standard, and locked in investment return.

BOC Asset Investment

The Bank is engaged in debt-for-equity swap and related business in the Chinese mainland through BOC Asset Investment. As at 30 June 2019, the registered capital of BOC Asset Investment was RMB10.000 billion, with its total assets and net assets standing at RMB36.620 billion and RMB10.335 billion respectively. In the first half of 2019, it realised a profit for the period of RMB225 million.

BOC Asset Investment actively implemented the national strategic decision to deepen supply-side structural reform. It conducted debt-for-equity swap based on both market-oriented and law-based principles, with the aim of improving enterprises' business operations and helping them to reduce their leverage ratios and improve their market value, thus effectively serving the real economy and preventing and mitigating financial risks. As at 30 June 2019, the market-oriented debt-for-equity swap business of BOC Asset Investment reached RMB79.159 billion, an increase of RMB34.798 billion compared with the prior year-end. Twenty-five directors and supervisors were appointed to participate in the corporate governance of the enterprises that conducted the swap.

Leasing Business

BOC Aviation

The Bank is engaged in the aircraft leasing business through BOC Aviation. BOC Aviation is one of the world's leading aircraft operating leasing companies and is the largest aircraft operating leasing company headquartered in Asia, as measured by the value of owned aircraft. As at 30 June 2019, BOC Aviation recorded issued share capital of USD1.158 billion, total assets of USD19.162 billion and net assets of USD4.292 billion. In the first half of 2019, it recorded a profit for the period of USD321 million.

Committed to pursuing sustainable growth, BOC Aviation continued to implement its proactive business strategy and steadily promoted its standing in the aircraft leasing industry. Actively supporting the Belt and Road Initiative, it had leased more than 68% of its aircraft to airlines of Belt and Road countries, as well as airlines based in the Chinese Mainland, Hong Kong, Macao and Taiwan, as of 30 June 2019. Continuously targeting customer demand, the company took delivery of 25 aircraft, including five aircraft that airline customers purchased at delivery, as it expands

its owned fleet. All of these aircraft have been placed on long-term leases. During the first half of 2019, BOC Aviation signed 39 leases for future deliveries and added six new customers. The company consistently sought to optimise its asset structure and to improve its sustainable development. It sold nine owned and two managed aircraft in the first half of 2019, leaving it with an average owned fleet age of 3.1 years (weighted by net book value) as at 30 June 2019, one of the youngest aircraft portfolios in the aircraft leasing industry.

(Please refer to the BOC Aviation Interim Report for a full review of its business performance.)

Service Channels

With a core focus on improving customer experience, the Bank pushed forward its service channel integration and outlet transformation so as to attract more active customers and to cultivate an ecosystem wherein online and offline channels are integrated and financial and non-financial scenarios are seamlessly connected.

Outlet Development

The Bank was the first in the industry to launch an intelligent outlet concept that deeply integrates 5G technology and life style, namely, "BOC 5G Intelligence + Life House". Relying on 5G, big data, artificial intelligence and other cutting-edge technologies, the Bank boldly innovated and actively explored future business models for outlets in order to build a comprehensive financial pattern integrating new finance, new retail banking and new lifestyle across different businesses. Closely following technological development trends and focusing on the core demands of customers, these new-generation intelligent outlets offer more thoughtful banking services and provide

smart and convenient services covering cash and noncash business, resident and non-resident customers, and RMB and foreign currencies by adopting multiple smart elements. By integrating aspects of various lifestyle scenarios, the Bank tapped contemporary trends when refining its outlets and provided financial services of higher quality and customers appeals.

The Bank pushed forward bank-wide outlet transformation, centred on its smart counters, so as to enhance its outlets' value-creating capacity. In the first half of 2019, the Bank completed eight smart counter upgrades to further refine its service system, making the smart counter a major channel of customer services, business processing and product sales. The Bank promoted mobile smart counters across the outlets of banking institutions under 36 tier-1 branches in the Chinese mainland. with the aim of encouraging a proactive approach to acquiring customers beyond the boundary of the outlet hall and effectively expanding the scope of services. Relying on channel innovation and process improvement, corporate account opening via mobile counters was implemented in 12 tier-1 branches in the Chinese mainland, door-to-door "one-stop" account opening and product contracting were realised, thus enhancing service levels for basic customers and basic accounts. The smart counters with cash withdraw function was piloted in more outlets, and has covered 33 tier-1 branches in the Chinese mainland. Taking RMB banknotes as the starting point, these smart counters provide smart cash services with higher limits and multiple denominations and mediums, solving the

"last mile" problem in the migration of counter-based services. The Bank became the first bank to introduce a new O2O physical delivery model, realising smoother online-offline coordination by enabling customers to make online reservation and collect products offline by themselves. In addition, to develop "cardless" personal business, the Bank introduced mobile banking code scanning, and realised online and offline authentication and mutual trust, creating a new "contactless service" experience.

The Bank continued to optimise its outlet performance management and assessment system. It carried out the classified development of its outlets, built featured outlets at a faster pace, and further differentiated outlet services. It also extended its service channels and strengthened financial service capacity in county areas. In addition, the Bank refined the operational management of its outlets and adjusted the authority and responsibilities of outlet employee positions. It improved outlets' marketing service approaches, and strengthened the risk management of outlet business, thus enhancing comprehensive operational efficiency.

As at 30 June 2019, the Bank's domestic commercial banking network (including Head Office, tier-1 branches, tier-2 branches and outlets) comprised 10,722 branches and outlets. Its domestic non-commercial banking institutions totalled 477, and the number of its institutions in Hong Kong, Macao, Taiwan and other countries and regions totalled 553.

Unit: single item, except percentages

	As at	As at	
Items	30 June 2019	31 December 2018	Change (%)
ATM	41,060	41,723	(1.59%)
Smart Counter	29,939	26,044	14.96%
Self-service terminal	3,973	17,627	(77.46%)

Internet Finance

The Bank realised rapid and sustained development in internet finance and sound growth in its mobile banking business. In the first half of 2019, the Bank's substitution ratio of e-banking channels for outlet-based business transactions reached 93.73%. Its e-channel transaction amount reached RMB115.48 trillion, among which, mobile banking transaction volume reached RMB13.65 trillion, an increase of 64.14% compared with the same period of the prior year.

Unit: million customers, except percentages

	As at	As at	
Items	30 June 2019	31 December 2018	Change (%)
Number of corporate online banking customers	4.2503	3.8905	9.25%
Number of personal online banking customers	174.1907	166.2361	4.79%
Number of mobile banking customers	162.9251	145.3118	12.12%
Number of telephone banking customers	113.9211	113.7678	0.13%

The Bank continually upgraded its mobile banking service to build a mobile portal for its integrated financial services across the Group. For corporate mobile banking, taking into account the needs of small and mediumsized enterprises for convenient mobile finance, the Bank started by improving basic services, enriching featured services and expanding new scenarios to push forward implementation in a tiered and step-by-step manner. It prioritised the promotion of basic service functions such as biometric identification login, account management, mobile reconciliation, remittance, deposit service and online reservation of account opening, covering the highfrequency transactions of corporate customers, so as to improve customer experience. For personal mobile banking, the Bank released version 6.0 of its mobile banking service, which improved its "thousand customers, thousand faces" personalised services, and added functions such as income and expense recording, voice navigation, voice-enabled fast transfer and new version of

online customer services. Personal business loan services were launched, realising loan granting and repayment in real time based on online handling of application, approval, granting and repayment. The Bank released "Zhen Yu" mobile banking, using big data technology to provide users with select and customised products and services. In addition, the Bank adopted new security authentication methods to realise the online application and the open of Mobile Key and SIM Key for its mobile banking, further simplifying the authentication process, raising the transaction limit, and making transactions safer and more convenient. The Bank enriched the content and functions of BOC Live Platform by adding functions such as thumbs-up interaction, invitation sharing, oneclick order placing and card activation, so as to build a multimedia interactive bridge between itself and customers. In addition, the Bank continued to improve its service experience in online banking, telephone banking, WeChat banking and SMS banking.

The Bank enhanced FinTech applications, promoting better integrated service scenarios and building signature products. For products and services, it accelerated the development of its payment business, achieving a substantial increase in the number of customers making online payments and mobile payments, as well as in related transaction volume. The Bank further refined its one-stop financial supermarket by adding investment and wealth management information, simulated trading of precious metals and other services. It continued to promote the scenario-based and digital development of online financing products, and built a digital sandbox as an innovative incubation mechanism for online financing. The Bank enriched products under the import and export mode, and proposed and reached cooperation intentions in foreign exchange business with multiple payment institutions. For scenario integration, the Bank continued to build its E-BOC scenario expansion platform and carry out extensive external cooperation, thus promoting the integration of accounts, foreign exchanges, precious metals and other products into online scenarios. Meanwhile, the Bank strengthened the construction of localised scenarios and vigorously expanded scenarios in utility service payment and contactless payment of parking fee. Leveraging its mobile banking service, the Bank enriched comprehensive financial services such as fund, securities, life insurance and property insurance, and took the lead in launching cross-border tuition payment, BOC foreign currency banknote recognition and other cross-border financial services. For basic capacity, the Bank refined the process of corporate online banking activation and launched the function of contracting at the counter, so as to make corporate online banking activation more efficient. It continuously deepened big data applications, developed more unified and comprehensive customer labelling and 360-degree portraits, and realised close-loop targeted

marketing consisting of data mining, data analysis, marketing strategy and outcome feedback. The Bank continued to enhance its smart anti-fraud capability and, expanded the coverage of concurrent risk control, which so far covers major online transactions and transactions through UnionPay card and other offline channels. In addition, the Bank built a smart customer communication and contact centre based on its new-generation customer service system, improving the experience and efficiency of customer services provided in several channels.

Information Technology Development

Following the strategy of enabling advancement through technology, the Bank remained committed to building a digital bank characterised by rich scenarios, online and offline coordination, the ultimate user experience, flexible and innovative products, efficient operation and management, and intelligent risk control.

The Bank carried out extensive ecosystem building and practiced an open concept of digital transformation. It actively promoted the pilot application of new technologies in financial scenarios through three strategies, namely integrated scene, integration of scenes and self-built scene. With the integration of the advantages of its internal and external resources, accelerate the ecological layout of high-loyal, high-dynamic scenes so as to support the transformation and upgrading of its products and services.

The Bank vigorously promoted digital transformation in key areas to support business innovation and development. It pushed forward key projects such as mobile banking, transaction banking, smart counters, smart outlets, smart customer services, a quantitative trading platform, online financing for SMEs and big data-based risk control, etc. This helped to enrich its

services and products, functions and channels, thus improving customer experience and promoting financial innovation.

The Bank proactively strengthened its capabilities in global comprehensive IT application, promoting the integrated development of the Group. It vigorously supported the construction of information technology system of newly-established overseas institutions, actively promoting its regional business development and creating predominate products in cross-border market.

The Bank also accelerated the implementation of strategic infrastructure projects so as to consolidate its foundations for digital development. The Bank boosted the all-round strategic transformation of its technical architecture, following a technical development route that gives equal

emphasis to centralised and distributed architectures. It continuously improved the three fundamental platforms of cloud computing, big data and AI, and accelerated the construction of its IT infrastructure layout and next generation backbone network.

The Bank deepened reform of its scientific and technological mechanism and system, and explored new paths for FinTech development. To this end, it established BOC Finance Technology Co., Ltd., and improved its mechanisms for the deep integration of business and technology. It set up innovative R&D bases and a joint innovation and application laboratory, continuously carried out fundamental research in cutting-edge technologies, and actively promoted the application of new technologies such as 5G, Internet of Things (IOT), blockchain and virtual reality.