I. Overview

Potential macro environmental risk factors

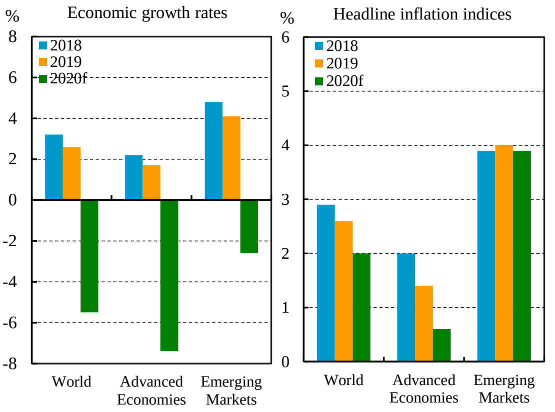
International economic and financial conditions

COVID-19 pandemic would dip global economy into recession, along with heightened volatility in financial markets

The global gross domestic product (GDP) growth rate decelerated to 2.6% in 2019 owing to the fact that the trade uncertainty between the US and Mainland China has hurt business confidence and jeopardized exports. Meanwhile, the downward trend of commodity prices moderated the global consumer price index (CPI) inflation rate to 2.6%. Moreover, affected by a global economic slowdown, monetary policies in major economies shifted towards a more dovish stance. Against this backdrop, most economies saw rises in their stock markets and the government bond yields in major economies descended before trending upwards. Moreover, the movements of exchange rates in advanced and emerging economies diverged. Among them, exchange rates in most advanced economies fluctuated within a narrow range, while the US dollar index of emerging economies trended upwards before dropping.

In the beginning of 2020, COVID-19 first broke out in Mainland China and rapidly spread around the world. Considering that the COVID-19 pandemic has battered the momentum of global economic growth, IHS Markit predicts[1] that the global economy will dip into recession with the GDP growth rate

Chart 1.1 Global economic growth rates and headline inflation indices

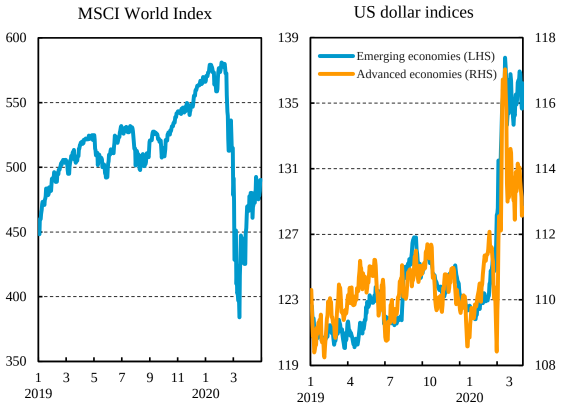


Note: Figures for 2020 are IHS Markit estimates.
Source: IHS Markit (2020/5/15).

[1] IHS Markit estimate on May 15, 2020.

weakening to -5.5%. Economic growth in advanced economies is projected to contract to -7.4%, while that in emerging economies is forecast to decrease to -2.6% (Chart 1.1, left panel). Moreover, affected by the pandemic, IHS Markit predicts that commodity prices will stay at a low level throughout 2020 and the global CPI inflation rate will fall to 2.0% (Chart 1.1, right panel), reflecting a declining trend in global inflation.

Chart 1.2 Performance of international stock and FX markets



Notes: 1. The MSCI World Index, maintained by Morgan Stanley, is a weighted index of stocks from large companies throughout the world.
2. The US dollar indices of advanced and emerging economies were developed by the Fed, and are weighted exchange rates of 7 and 19 trading partners, respectively. Base period is January 2016 (=100).

Sources: Bloomberg and Fed.

In March 2020, the Chicago Board Options Exchange Volatility Index (VIX)[2] once hit an all-time closing high of 82.69 and global stock markets crashed (Chart 1.2, left panel), with US stocks triggering multiple circuit breakers[3] amid intensifying fears that the pandemic continued spreading, international oil prices collapsed, and global financial leverage remained high. In addition, government bond yields in major economies, driven by surging demand for hedging, plummeted to a five-year low, while interest rate spreads of US high-yield corporate bonds jumped to a new high since the 2008 financial crisis. These factors all contributed to tightening financial conditions. However, after major economies successively adopted preemptive measures in response to COVID-19, financial conditions attenuated moderately.

In the beginning of 2020, affected by COVID-19 and efforts of the Federal Reserve System (Fed) to ease financial conditions, global FX markets fluctuated dramatically (Chart 1.2, right panel). Among them, emerging economies experienced large capital outflows and saw their currencies depreciate markedly. As emerging economies are excessively indebted, continuing capital outflows could further weaken their currencies and expose them to higher financial vulnerabilities.

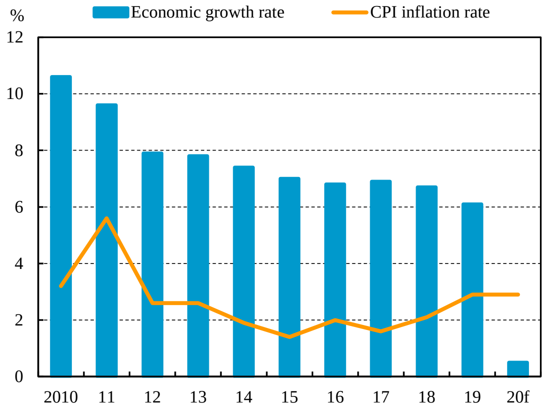
[2] The VIX Index (also known as the fear index) refers to the Chicago Board Options Exchange Volatility Index that represents the market's expectation of 30-day forward-looking volatility of S&P 500 index options. On March 16, 2020, the S&P 500 posted its record drop of 324.89 points, while the VIX Index jumped to 82.69, higher than the level seen in the 2008 financial crisis, reflecting the market's irrational fear towards the future.

[3] The US stock market circuit breaker mechanism was put in place after October 19, 1987, also known as "Black Monday." It aims to reduce panic selling, give traders time to consider related risks and trading strategies calmly, and restore market liquidity. There are three thresholds for circuit breakers to kick in. If the S&P 500 index declines by 7%, level one circuit breaker would be triggered and trading would be halted for 15 minutes. If the S&P index declines by 13% after trading resumes, level two circuit breaker would be triggered and trading would be halted for another 15 minutes. If the S&P index declines by 20% after trading resumes, trading would be suspended for the remainder of the day.

Mainland China experienced a significant economic slowdown with elevated potential risks

Mainland China's economic growth continued at a moderate pace and registered 6.1% in 2019 with the annual CPI inflation rate climbing to 2.9%. IHS Markit projects that the economic growth rate will fall dramatically to 0.5% in 2020 amid the COVID-19 pandemic, while the annual CPI inflation rate is forecast to remain at 2.9% (Chart 1.3).

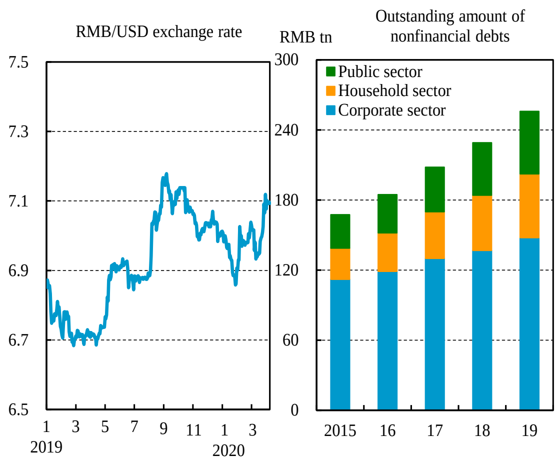
Chart 1.3 Economic growth rate and CPI inflation rate of Mainland China



Note: Figures for 2020 are IHS Markit projections.
Sources: National Bureau of Statistics of China and IHS Markit (2020/5/15).

From May 2019 onwards, affected by the escalation of the US-China trade dispute, as well as Mainland China's designation as a currency manipulator by the US, the renminbi against the US dollar depreciated substantially before turning to appreciate in September (Chart 1.4, left panel). Meanwhile, the Shanghai Stock Exchange (SSE) Composite Index trended upwards before dropping. In the beginning of 2020, the renminbi depreciated sharply against the US dollar driven by mounting panic sentiment in global financial markets. The SSE Composite Index also trended downwards following a slump in international stock markets; however, the decline was relatively moderate.

Chart 1.4 RMB/USD exchange rate and outstanding amount of nonfinancial debts in Mainland China



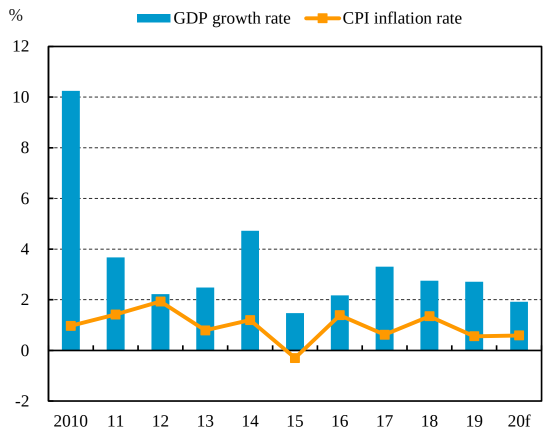
Sources: CBC and BIS.

In Mainland China, the aggregate financing to the real economy expanded continually in 2019, but the credit quality of banks deteriorated. Their credit risk could further increase if the COVID-19 pandemic continues to spread. The outstanding debt for nonfinanical sectors, including corporate, household, and government sectors, reached a record high at the end of the year (Chart 1.4, right panel), reflecting a rise in potential risks.

Major economies have successively adopted accommodative monetary policy stances and expansionary fiscal policies to alleviate the impacts of the COVID-19 pandemic

To alleviate the substantial impacts from the spread of the COVID-19 pandemic, the Fed made emergency interest rate cuts twice by a total of 150 basis points (bps) in March 2020, announced an unprecedented limitless asset purchase program, and provided up to US$2.3 trillion in loans. With the aim of maintaining liquidity for the real economy, other major central banks also promptly adopted accommodative monetary policy stances. Furthermore, in response to meeting market needs for US dollars, the Fed and central banks of major economies reactivated or set up new temporary swap lines, so as to relieve strains in global US dollar funding markets.

Chart 1.5 Economic growth rate and CPI inflation rate of Taiwan



Note: Figures for 2020 are CBC forecasts released on March 19, 2020.
Source: CBC.

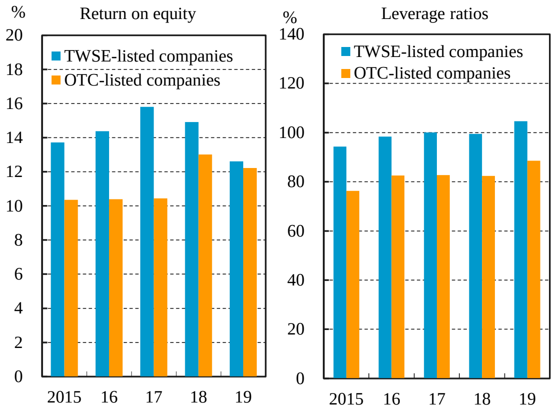
In addition, major economies consecutively launched large-scale fiscal stimulus packages to facilitate virus prevention and vaccine development, offer credit guarantees to and bail out the most affected industries and firms, and provide direct cash transfers to support vulnerable households. Among them, the US has passed fiscal stimulus bills totaling US$2.9 trillion, far higher than the US$0.79 trillion made available during the global financial crisis (GFC) in 2008. The Japanese government put forth a 117 trillion yen economic stimulus package, the largest fiscal stimulus package in history.

Domestic macro environment

In 2019, the domestic economy grew mildly, while consumer prices rose moderately and external debt servicing capacity remained sound

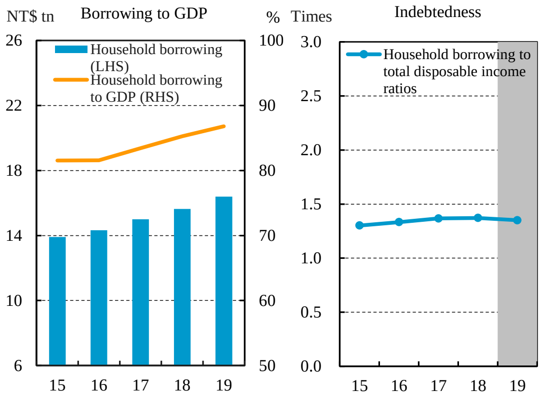
In 2019, thanks to the three major investment programs promoted by the government[4] and steady growth momentum in private consumption, the annual economic growth rate in Taiwan reached 2.71%, slightly lower than the 2.75% of the previous year. Meanwhile, domestic prices rose mildly throughout the year with the annual CPI inflation rate registering 0.56%, lower than the 1.35% of the previous year (Chart 1.5). In addition, Taiwan's external debt contracted to US$184.6 billion at the end of the year, and FX reserves remained at a sufficient level of US$478.1 billion, implying a robust capacity to service external debt.[5] The amount of the fiscal deficit saw a rebound, equivalent to 0.94%[6] of annual GDP in 2019. The outstanding public debt at all levels of government slightly increased at the end of the year, but the ratio of total public debt to annual GDP slightly fell to 33.93%,[7] indicating that total government debt stayed within a manageable level.

Chart 1.6 Return on equity and leverage ratios in corporate sector



Notes: 1. Return on equity = net income before interest and tax/average equity.
2. Leverage ratio = total liabilities/total equity.
Source: TEJ.

Chart 1.7 Household indebtedness



Note: Total disposable income in shadow area is a CBC estimate.
Sources: CBC, JCIC and DGBAS.

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[4] The Executive Yuan launched the *Action Plan for Welcoming Overseas Taiwanese Businesses to Return to Invest in Taiwan* in January 2019, and approved the *Action Plan for Accelerated Investment by Domestic Corporations* and the *Action Plan for Accelerated Investment by SMEs* in June 2019. These programs attracted overseas corporates to invest in Taiwan and enhanced the transformation and upgrade of domestic enterprises.

[5] External debt refers to the combined amount owed to foreign parties by Taiwan's public and private sectors, including long-term debt with a maturity of greater than one year and short-term debt with a maturity of one year or less. The term "public external debt" refers to debt that the public sector is either obligated to repay directly or has guaranteed. The term "private external debt" refers to private-sector foreign debt not guaranteed by the public sector.

[6] The figure of GDP used in the ratios cited in this report is based on a DGBAS press release on February 12, 2020. As a comparison, fiscal deficits in European Union (EU) member nations are not allowed to exceed 3% of GDP according to the *Maastricht Treaty* and the subsequent *Stability and Growth Pact*.

[7] As a comparison, outstanding debt in EU member nations is not allowed to exceed 60% of GDP according to the *Maastricht Treaty* and the subsequent *Stability and Growth Pact*.

Corporate sector saw declined profitability, while household sector remained in a healthy financial condition

In 2019, the protracted US-China trade dispute and subdued momentum in major economies induced waning market demand. Against this backdrop, the profitability of Taiwan Stock Exchange (TWSE) listed and over-the-counter (OTC) listed companies abated (Chart 1.6, left panel) alongside increasing financial leverage ratios (Chart 1.6, right panel). However, their short-term debt servicing capacity remained at an adequate level. The non-performing loan (NPL) ratio for corporate loans from financial institutions fell to a record low of 0.27% at the end of the year, reflecting that overall credit quality for the corporate sector strengthened.

At the end of 2019, total household borrowing expanded and reached NT$16.39 trillion, equivalent to 86.74% of annual GDP (Chart 1.7, left panel). The ratio of household borrowing to total disposable income leveled off at 1.35 times, reflecting a stable household debt burden (Chart 1.7, right panel). Furthermore, in Taiwan, household net worth[8] has been remarkable, which has hovered around 8.2 times the GDP in recent years, reflecting a healthy financial condition and a sustained debt servicing capacity of households. Meanwhile, the NPL ratio of household borrowing decreased to a new low of 0.22%, indicating a satisfactory credit quality.

Real estate market saw an increase in both trading volume and housing prices, while mortgage burden stayed high

In 2019, trading volume in the housing market increased, as the total number of building ownership transfers for transaction increased to 300 thousand units, the highest since 2015. Meanwhile, the Sinyi housing price index (for existing residential buildings) rose gradually, while the Cathay housing price index (for new residential buildings) increased significantly.

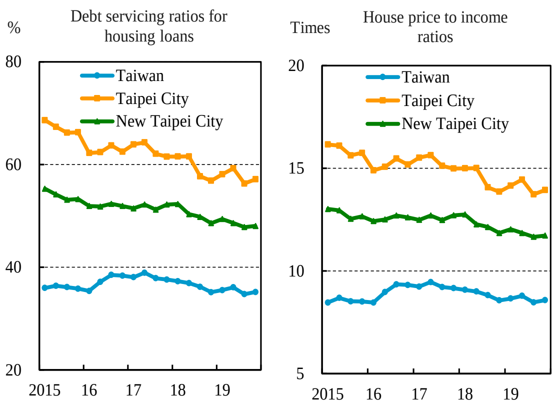
In 2019 Q4, the debt servicing ratio for housing loans and the house price to income ratio in Taiwan ascended marginally year on year to 35.15% and 8.58, respectively, demonstrating a high mortgage burden. Among the six metropolitan areas, the ratios in Taipei City registered 57.11% and 13.94, respectively (Chart 1.8), showing that the mortgage burden remained heavy.

[8] Household net worth includes household net non-financial assets and net financial assets. Net non-financial assets include produced assets (buildings and constructions, transport equipment, machinery equipment, etc.) and non-produced assets (construction land, non-construction land, and other assets). Net financial assets are domestic and foreign financial assets minus liabilities (deposits, loans, shares of listed companies or other enterprises, life insurance reserves, etc.).

The COVID-19 pandemic could pose a negative impact on domestic economic growth momentum and, in turn, affect the debt servicing capacity of the corporate and household sectors

Since the COVID-19 pandemic spread around the world in the beginning of 2020, global travel has almost ground to a halt and domestic tourism has also shrunk substantially. Moreover, Taiwan's private consumption weakened and exports faced pressures as the COVID-19 pandemic intensified concerns over global demand contraction. According to the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan (DGBAS), the preliminary estimate of Taiwan's economic growth rate dropped to 1.59%[9] in 2020 Q1. Although the rate reflected weakened economic growth momentum, it was still higher than those in the US (0.2%) and Mainland China (-6.8%). Based on a more conservative growth forecast in private consumption and investment, combined with the adverse impact on export momentum, the Bank lowered its earlier forecast for Taiwan's economic growth to 1.07% for the first half of 2020. Given an improvement in the situation of the COVID-19 pandemic in the second half of the year, domestic economic growth is expected to pick up. The supporting factors include a rebound of private consumption, regaining export momentum deriving from emerging technologies, and the government's relief and revitalization measures to bolster domestic demand. Accordingly, the Bank forecasts the domestic economy to expand by 1.92%[10] in 2020, a decrease of 0.79 percentage points (pps) compared to the 2.71% reported in 2019 (Chart 1.5).

Chart 1.8 Debt servicing ratios for housing loans and house price to income ratios



Notes: 1. Debt servicing ratio for housing loans = median monthly housing loan payment/median monthly household disposable income.
2. House price to income ratio = median house price/median annual household disposable income.

Source: Housing Price Affordability Indicator Statistics, Construction and Planning Agency of the MOI.

The impact of the pandemic on individual industries was diverse. Among them, the industries of the manufacturing sector were vulnerable to the suspension of production in Mainland China and the order cancellation triggered by weakened global demand. As for the services sector, the spread of the pandemic has chilled consumers' willingness to travel and ravaged the revenue

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[9] The figure is based on a DGBAS press release on May 28, 2020.

[10] The figure is based on a CBC press release on March 19, 2020. In addition, according to a DGBAS press release on May 28, 2020, the domestic economic growth rate is forecast to be 1.67% in 2020.

for some industries, including the wholesale trade industry, retail trade industry, transportation & storage industry, and accommodation & food services industry. In addition, the pandemic hit the local labor market, which could pose an impact on households' income sources and, in turn, affect their debt-servicing capacity in the future. It also provoked a wait-and-see attitude for the real estate market. In response to the COVID-19 pandemic, the government launched relief and revitalization measures totaling NT$1.05 trillion. Since some of the measures would be financed by debt,[11] the government's fiscal deficits and outstanding debt could expand further.

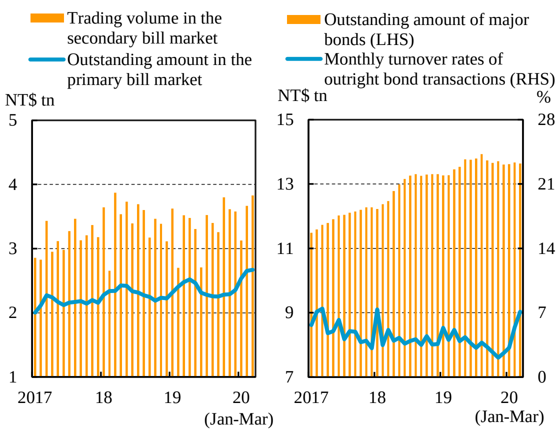
Financial system assessment

Financial markets

Bill and bond issuance in the primary market expanded, while their trading volume in the secondary market contracted

At the end of 2019, the outstanding amount of bill issuance in the primary market increased by 5.85% year on year, while trading volume in the secondary bill market decreased by 1.82% (Chart 1.9, left panel). As for the bond market, the outstanding amount of bond issuance increased marginally by 2.35% year on year. Trading volume in the secondary bond market[12] decreased by 10.70%, as repo transactions and outright transactions both saw diminishing trading volumes. The average monthly outright turnover rate of major bonds[13] in the secondary market declined further in 2019 to a record low of 3.68%, but rebounded in 2020 Q1 (Chart 1.9, right panel).

Chart 1.9 Primary and secondary bill and bond markets



Notes:1. Major bonds include government bonds, international bonds, corporate bonds, and financial debentures.
2. Monthly turnover rate = trading value in the month/average outstanding amount of bonds issued. Average outstanding amount of bonds issued = (outstanding amount at the end of the month + outstanding amount at the end of last month)/2.

Sources: CBC and FSC.

In 2019, the interbank overnight call loan rate stabilized at a low level, while 10-year government bond yields roughly trended downwards.

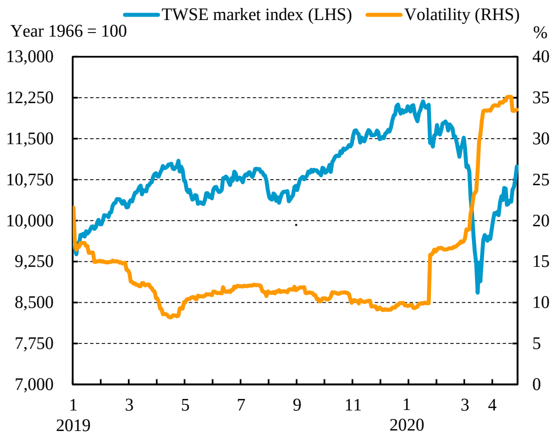
[11] The increased budget comprised a special budget of NT$210 billion, of which NT$30 billion would be financed by the surplus of the previous fiscal years and NT$180 billion by debt.
[12] Includes repo and outright transactions.
[13] Includes government bonds, international bonds, corporate bonds, and financial debentures.

In the beginning of 2020, the yields dipped consecutively and dropped to a historical low level of 0.44%, driven by the COVID-19 pandemic outbreak and the pressure arising from the replenishment of bonds by life insurance companies. Afterwards, as market sentiment worsened, a wave of selling hit the bond market and propelled bond yields to jump abruptly. However, with the Bank's interest rate cut, the interbank overnight call loan rate dropped to a low level of 0.074%, and bond yields fell back again. Considering that volatility in the bond market exacerbated amid the pandemic, interest rate risks related to bond investments are still high, which warrant close attention.

Stock indices fluctuated with an upward trend, and volatility increased dramatically since the beginning of 2020

In 2019, the Taiwan Stock Exchange Weighted Index (TAIEX) of the TWSE market fluctuated with an upward trend, registering 11,997 at the end of the year and posting an annual increase of 23.33%. Starting from late January in 2020, affected by a slump in international stock markets, the TAIEX reversed to trend downwards. In March, as the US stock market collapsed and triggered multiple circuit breakers, the TWSE market plunged to 8,681. Afterwards, the TAIEX rebounded gradually and reached 10,992 at the end of April (Chart 1.10), decreasing by 8.38% compared to the level at the end of 2019. However, the decline in the TAIEX was more moderate than those in the major indices of the US and European stock markets.

Chart 1.10 TWSE market index and volatility



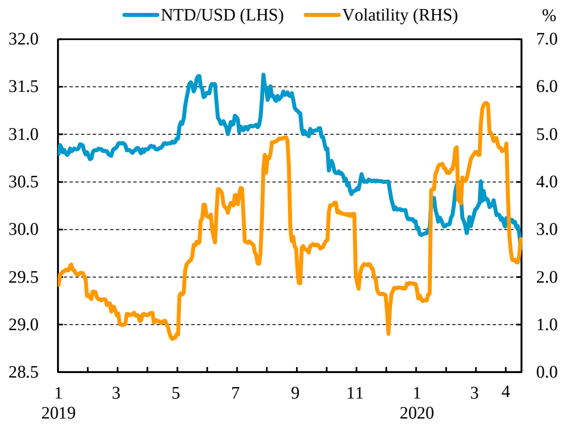
Note: Volatility refers to the annualized standard deviation of 60-day daily index returns.
Sources: TWSE and CBC.

In 2019, volatility in the TWSE market was moderate and registered merely 9.71% at the end of the year. From the beginning of 2020 onwards, the volatility surged sharply on the back of a plunge in local stock indices, and registered 33.54% at the end of April (Chart 1.10).

The NT dollar exchange rate by and large oscillated along an appreciating path, and its volatility remained relatively stable

In 2019, affected by the US-China trade dispute and the interest rate cuts by the Fed after September, the NT dollar exchange rate against the US dollar depreciated before appreciating, and registered 30.106 at the end of the year, appreciating by 2.08% year on year. In 2020 Q1, as the COVID-19 pandemic hit market sentiment and net foreign capital outflows surged in March, the NT dollar exchange rate turned to depreciate against the US dollar. However, owing to remittances from overseas investments of domestic funds and the selling of US dollars by exporters, the NT dollar exchange rate reversed to appreciate and stood at 29.802 at the end of April (Chart 1.11), appreciating by 1.02% compared to the end of 2019.

Chart 1.11 Movements of NT dollar exchange rate against US dollar



Note: Volatility refers to the annualized standard deviation of 20-day daily returns.
Source: CBC.

In 2019, volatility in the NT dollar exchange rate against the US dollar shifted between 0.70% and 4.94%, and registered an annual average of 2.39%. Afterwards, global financial markets fluctuated dramatically under the huge impacts of the COVID-19 pandemic, fueling volatility in the NT dollar exchange rate against the US dollar to increase between 1.50% and 5.66% during January to April 2020 (Chart 1.11). Compared to major currencies such as the Japanese yen, the euro, and the Korean won, the NT dollar exchange rate has been relatively stable against the US dollar.

Financial institutions

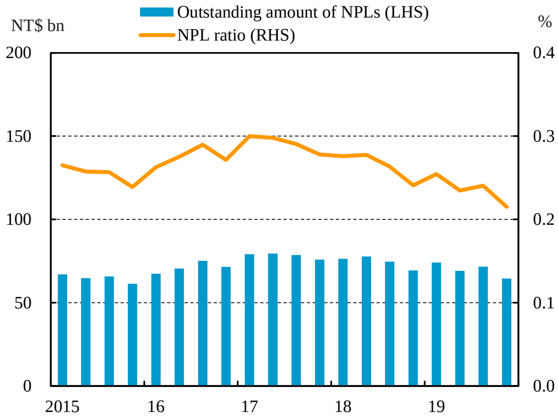
Domestic banks maintained a healthy financial condition, but the impacts of the COVID-19 pandemic warrant close attention

In 2019, customer loans of domestic banks kept rising. The credit concentration of corporate loans slightly diminished, but that in real estate loans went up marginally. The NPL ratio continued decreasing to a record low of 0.22% at the end of the year (Chart 1.12), along with sufficient provisions. Meanwhile, the aggregate amount of exposure to Mainland China contracted, and the ratio of the exposures to banks' net worth dropped to 46% at the end of the year, hitting the lowest level in recent years.

The net income before tax of domestic banks increased by 7.94% year on year to NT$362.1 billion in 2019 (Chart 1.13, left panel). The average return on equity (ROE) and return on assets (ROA) also increased to 9.49% and 0.70% (Chart 1.13, right panel), respectively, showing improved profitability. In addition, at the end of 2019, the average capital adequacy ratio of domestic banks ascended to 14.07% with satisfactory capital quality.

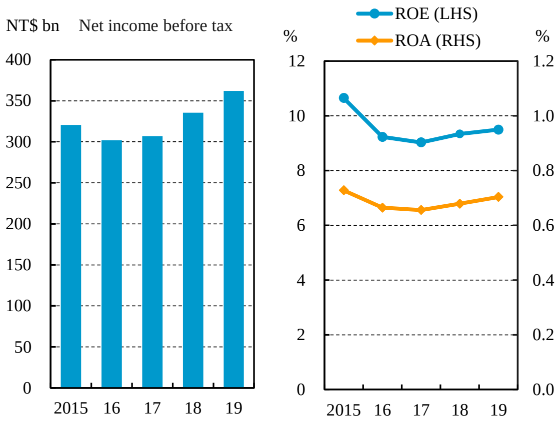
From early 2020 onwards, the COVID-19 pandemic could impair the debt servicing capacity of some industries, which might deterioate domestic banks' asset quality and, in turn, undermine their profitability in the future. Moreover, domestic banks faced drastically higher market risk as financial markets became more volatile amid the spread of the pandemic, which might pose a negative impact on their capital levels and warrants close attention.

Chart 1.12 NPLs of domestic banks



Note: Excludes interbank loans.
Source: CBC.

Chart 1.13 Profitability of domestic banks



Notes: 1. ROE = net income before tax/average equity.
2. ROA = net income before tax/average total assets.
Source: CBC.

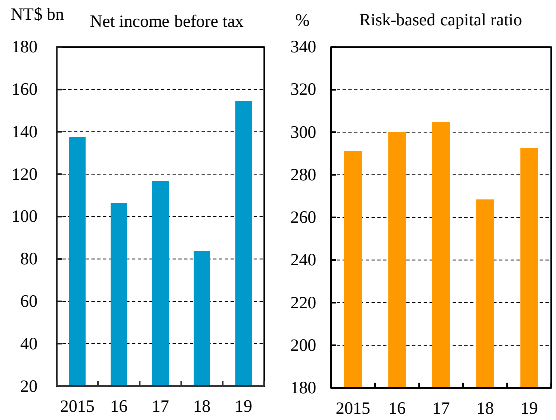
Life insurance companies posted elevated profitability and capital levels, but faced higher market risk

Life insurance companies reported net income before tax of NT$154.6 billion in 2019, increasing dramatically by 84.74% year on year (Chart 1.14, left panel). This was chiefly contributed to by a higher gain on investments. Owing to an increase in pretax income and unrealized equity and bond investment profits, the average risk-based capital (RBC) ratio and the average equity to asset ratio[14] of life insurance companies both significantly rebounded to 292.54% (Chart 1.14, right panel) and 7.10%, respectively, at the end of the year.

[14] Assets are exclusive of the assets of investment-linked insurance products in separate accounts.

Since the beginning of 2020, life insurance companies have faced higher reinvestment risk as major economies successively cut interest rates. Moreover, owing to a global stock market crash and the international oil price collapse in March 2020, global financial market volatility fluctuated dramatically. Therefore, investment risks related to equity and corporate bonds with a rating of BBB or below remained high and warrant close attention.

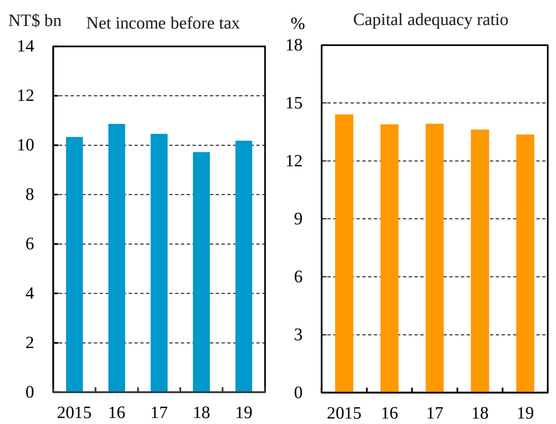
Chart 1.14 Net income before tax and risk-based capital ratio of life insurance companies



Note: Figures for risk-based capital ratios exclude insurance companies taken into receivership by the FSC.
Source: FSC.

Liquidity risk of bills finance companies remained high and the impact of the COVID-19 pandemic warrants attention

Chart 1.15 Net income before tax and capital adequacy ratio of bills finance companies



Source: CBC.

In 2019, commercial paper (CP) guaranteed by bills finance companies expanded, mainly owing to interest rates in the money market remaining at a low level, which attracted corporates to increase the issuance of CP for the purpose of fund raising. The non-performing credit ratio of bills finance companies remained low, but the impact of the pandemic on their credit quality warrants close attention. Meanwhile, maturity mismatches between long-term assets and short-term liabilities persisted, reflecting a still high liquidity risk in bills finance companies.

Bills finance companies posted a net income before tax of NT$10.2 billion in 2019, increasing by 4.71% year on year (Chart 1.15, left panel). This was mainly driven by an increase in gains from sales of bond investments. The average capital adequacy ratio of bills finance companies moderately descended to 13.37% at the end of 2019 (Chart 1.15, right panel), while the capital adequacy ratio for each company remained well above the statutory minimum of 8%.

Financial infrastructure

The amount of mobile payments has grown steadily, and BigTechs in the payment field could pose a significant impact on markets

In 2019, the CBC Interbank Funds Transfer System (CIFS) functioned smoothly, transferring funds worth a total of 25.9 times the GDP for the year. The electronic retail payment market saw a prosperous development, with the electronic retail payment ratio[15] climbing to 43.7%. The amount of mobile payment transactions has also grown rapidly, exceeding NT$110 billion in 2019. With an aim to increase the penetration of mobile payments, the Bank urged the Financial Information Service Co., Ltd. (FISC) to set up a "Common Platform for Electronic Payment Institutions," which allows banks and non-bank payment providers to connect and communicate across institutions so as to jointly expand the territory of mobile payments.

In recent years, large technology companies (BigTechs) have begun to enter the payment field, which has had a significant impact on the market. For example, Facebook plans to use blockchain technology to issue a stable currency, Libra, to provide global payment services. However, at present, there are still many challenges in the implementation of blockchain technology in practical applications. Only in the field of cross-border payment may blockchain technology have room to develop.

Other measures to strengthen the financial system

In 2019, to ensure a sound development of the domestic financial system and comply with international standards, the FSC established an assessment framework for domestic systemically important banks (D-SIBs) in Taiwan. It requires the D-SIBs to set aside 2% additional regulatory capital buffer and 2% bank's internal capital buffer, submit contingency plans, and pass stress tests with an aim to reinforce their risk-bearing capacity. Meanwhile, in order to promote the sound development of the insurance industry and protect the rights and interests of policyholders, the FSC proposed various reinforcing measures for life insurance companies regarding their usage of funds and the structure and sales of products, etc.

In response to the third-round mutual evaluations by the Asia/Pacific Group on Money

[15] The electronic retail payment ratio is the quotient of total consumption via electronic payment instruments (including credit cards, debit cards, electronic tickets, and electronic payment accounts) divided by total private consumption expenditure.

Laundering (APG), Taiwan actively implemented corresponding measures. Through close cooperation between the public and private sectors, Taiwan reached the best "regular follow-up"[16] category of the anti-money laundering and combating the financing of terrorism (AML/CFT) evaluation, the best result among member jurisdictions in the Asia-Pacific region. In addition, in response to repatriation of offshore funds to Taiwan, the FSC promulgated the *Regulations Governing the Financial Investment, Management, and Utilization of Repatriated Offshore Funds* in August 2019. The regulations, governing the scope and method of management and utilization of the inflow of offshore funds engaged in financial investments, are expected to help the development of domestic financial markets.

Impacts of the COVID-19 pandemic on the domestic financial system

Since the outbreak of COVID-19 in early 2020, Taiwan's government has actively implemented prevention, relief, and revitalization measures in response to the pandemic. Moreover, domestic financial markets, financial institutions, and financial infrastructures exhibited sound fundamentals. As a result, the COVID-19 pandemic posed only limited impacts on the domestic financial system. Against this backdrop, the TAIEX plunged before a rebound and the decline in stock prices was relatively moderate. Meanwhile, the NT dollar exchange rate remained relatively stable. As for financial institutions, domestic banks could see compression of interest rate spreads between deposits and loans and deteriorated credit quality. However, supported by healthy financial conditions and sound risk-bearing capacity, domestic banks shall withstand the financial shocks brought by the pandemic. Life insurance companies, suffering quite a few impacts on their securities investments, experienced significant declines in their equities. Considering that the abovementioned impacts were relieved in April, coupled with the fact that life insurance companies have continuously injected profits as capital in recent years, their resilience to weather unfavorable impacts was enhanced. Meanwhile, the COVID-19 pandemic might impair the credit quality of bills finance companies, but the impacts are expected to be moderate. Important financial infrastructures, which are equipped with system and data backup plans as well as split operation mechanisms, functioned smoothly without being affected by the pandemic.

[16] The assessment categories from high to low are "regular follow-up" (follow up once every two years), "enhanced follow-up" (follow up once a year), "transitional follow-up" (the frequency of follow-up is up to the APG member meeting, could be quarterly or monthly), and "high-risk and non-cooperative jurisdiction list" identified by the Financial Action Task Force (FATF).

Measures to promote financial stability and respond to the COVID-19 pandemic in Taiwan

In 2019, Taiwan's financial markets operated smoothly in the context of a slowdown in economic growth and mild inflation both domestically and abroad. Domestic financial institutions experienced sharp increases in profitability, benign asset quality, and higher capital levels. The major payment systems also functioned along an orderly trajectory. By and large, the financial system in Taiwan remained stable. On the back of a stable economic and financial environment, the Bank adopted appropriate monetary, credit, and FX policies, while the FSC continued to revamp financial regulations and enhance financial supervision measures so as to guide the sound operations of financial institutions and promote financial stability.

Following the global spread of the COVID-19 pandemic in the beginning of 2020, economic downside risks increased dramatically worldwide and global financial markets became volatile. To mitigate the impacts of the COVID-19 pandemic on domestic economic and financial conditions, Taiwan's government (including the Bank) have launched a series of measures related to relief, revitalization, and financing totaling NT$1.05 trillion. In addition, the Bank cut policy rates and, together with the FSC, adopted a number of measures to stabilize the financial market as follows:

1. Monetary policy: (1) the Bank cut the discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral by 0.25 pps to 1.125%, 1.50%, and 3.375%, respectively; and (2) the Bank provided domestic banks, cooperative organizations as well as farmers' and fishermen's associations with an NT$200 billion (up to NT$400 billion depending on the pandemic situation) special accommodation facility to support credit extensions to small and medium enterprises (SMEs).

2. Measures for financial market stability: (1) with the aim of providing liquidity to the financial system, the Bank decreased issuing certificates of deposits (CDs) in a timely manner so as to release funds into the market, and domestic banks could use their holdings of CDs issued by the Bank to request early withdrawals or to obtain funds from the Bank with CDs as collateral whenever necessary. Moreover, the Bank closely monitored cross-border capital flows so as to maintain an orderly FX market, and could expand the repurchase agreement (repo) facility under emergency situations; and (2) with an aim to maintain stability of securities markets, the FSC lowered the cap on the total volume of securities lending for short selling transactions during trading sessions, relaxed the scope

of collateral to cover margin deficiency, implemented a short-selling ban on certain stocks, and encouraged listed companies to buy back treasury shares.

3. Relief loans, assistance in easing tax burden, and subsidy schemes: (1) the FSC encouraged financial institutions to carry out relief measures adopted by the government and urged the banking industry to provide loan assistance to enterprises and individuals affected by the COVID-19 outbreak; (2) the Ministry of Finance (MOF) urged government-owned banks to provide loan assistance and deferred reporting and payment periods of income taxes; (3) the Ministry of Labor (MOL) adopted measures such as providing subsidy schemes, launching an employment assistance program, and extending labor relief loans; and (4) the Ministry of Economic Affairs (MOEA), the Ministry of Health and Welfare (MOHW), the Ministry of Transportation and Communications (MOTC), and some other ministries and commissions provided enterprises, individuals, or groups affected by the pandemic with loan assistance and subsidies for operations, loan interest payments, taxes, payroll, and fees.

Considering that the COVID-19 pandemic has not yet eased and international economic and financial developments are still surrounded by many uncertainties, the Bank will continue to pay close attention to the impacts of relevant subsequent developments on domestic economic and financial conditions so as to take pertinent response measures in a timely manner to promote financial stability.