Korea Financial Investment Association

Market Report (KOREA)

Presented by

Korea Financial Investment Association

Macro-Economic Overview 2018-2019

Korea's per capita gross national income (GNI) registered USD 33,434 in 2018, up by 5.4% from the USD 31,734 posted a year ago. Real GDP grew 2.7% last year.

Statistics on annual real gross domestic product (GDP) growth by industry showed that the service industry posted significant growth, whereas the construction industry displayed contracted growth. The growth rate of the construction industry marked -4.0%, while the service industry saw GDP advance 3.2% in 2018. Weakened growth of the wholesale, retail, transportation industries had offset the stronger growth of the service industry, including the financial and insurance sectors. Persistently unfavorable weather conditions took a toll on the GDP of the agriculture and fishing industries, increasing only slightly by 1.5% compared to a year ago.

The Korean economy has been maintaining moderate growth year to date with continued improvements in the service sector despite a sluggish construction industry. Private consumption in 2018 remained at the same level as in 2017. As for construction investment, the growth rate is showing a constant decrease, which resulted in a negative growth in 2018. Meanwhile, facilities investment in 2018 has also suffered negative growth, after recording a significant growth rate in 2017. In overall, the domestic demand with a steady consumption significantly offset the slowdown in investment growth.

The unemployment rate in 2018 remained flat year-on-year at 3.8%. However, the unemployment rate has been slightly increasing in 2019 with a lower rate registered by major sectors with high employment creation effects such as manufacturing and consumption-related services. The consumer price index (CPI) has increased in the mid to high 1% range, which results from higher oil prices. Consequently, the core inflation rate has been showing slightly decelerated growth.

In 2019, the Korean economy is expected to continue to undergo through low economic growth. External uncertainties arising from the global trade conflict and export recession of major industries such as semiconductor can be an obstacle to the economic recovery. If the current situation deteriorates, it is possible that the expectation of the market and private sector worsen. However, an aggressive boost measures in needed economic sectors to prevent the risk of deflation and a long-term recession.

Table 1. Macroeconomic indices (YoY, %)

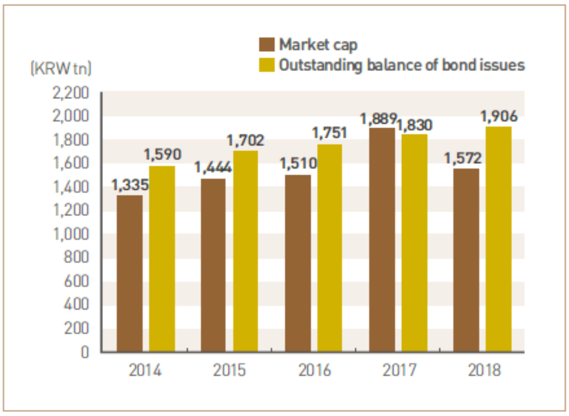
	2015	2016	2017	2018
Real GDP Growth Rate	2.8	2.9	3.2	2.7
Private Consumption	2.2	2.6	2.8	2.8
Facilities Investment	5.1	2.6	16.5	-2.4
Construction Investment	6.9	10.0	7.3	-4.3
CPI inflation	0.7	1.0	1.9	1.5
Core Inflation	2.4	1.9	1.5	1.2
Unemployment rate	3.6	3.7	3.7	3.8

Capital Market Overview 2018

Korea's stock market capitalization was KRW 1,572tn at the end of 2018, -16.8% lower than the previous year. The outstanding balance of bond issues registered KRW 1,906tn, up by 4.2% year-on-year. The stock market capitalization to GDP ratio is retreated 19.9%pts to 102.9%, while the bond market capitalization to GDP ratio recorded 100.6%, slightly advanced from a year earlier.

Put into a global context, Korea's stock market capitalization to GDP ratio is still lower than those of advanced economies.

Graph 1. Size of the Capital Market in Korea



Source : Economic Statistics System (ECOS), BOK
FreeSIS, Korea Financial Investment Association (KOFIA)

Household Asset Composition

Non-financial assets including real estate accounted for 62.4% of household assets in 2017, still higher than the share of financial assets, which stood at 37.6%. However, it should be noted that the share of financial assets continues to be on the rise.

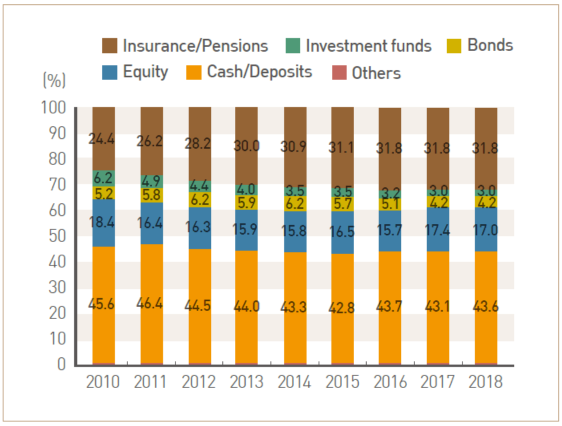
Table 2. Share of Non-Financial & Financial Assets in Korean Households

Category	2011	2012	2013	2014	2015	2016	2017
Non-financial assets	66.7	65.7	64.8	64.1	63.0	62.8	62.4
Financial assets	33.3	34.3	35.2	35.9	37.0	37.2	37.6

Source : ECOS, BOK

Although cash and deposits maintained the largest share of 43.6% among financial assets, their percentage is on a downtrend. Financial investment instruments such as equities, bonds and investment funds assumed 24.2%, a 0.4%pts decrease year-on-year.

Graph 2. Breakdown of Household Financial Assets



Source : ECOS, BOK

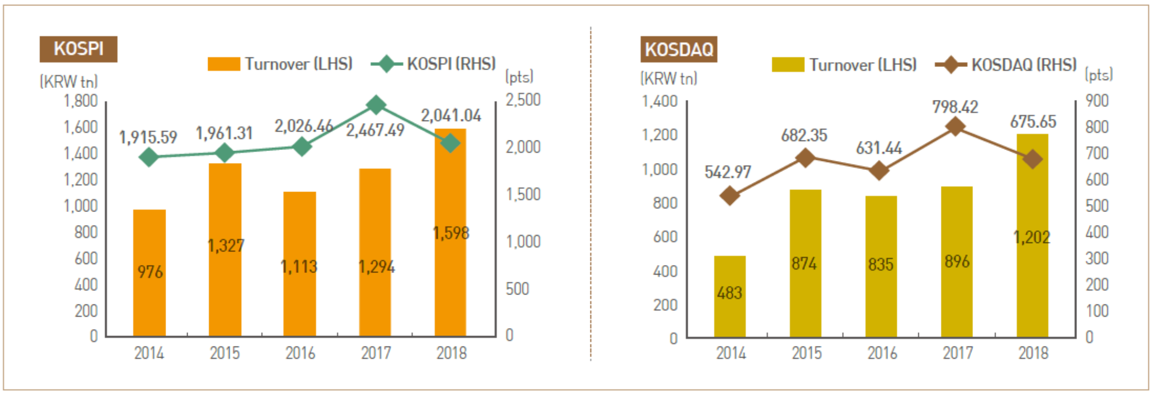
Equity Market

At the end of 2018, the KOSPI index decreased 17.3% year-on-year to 2,041.04pt, with a turnover increasing by KRW 304tn to record KRW 1,598tn. As for the KOSDAQ, the index declined 15.4% year-on year to 675.65pt as of the end of 2018, with a turnover of the KOSDAQ market increasing 34.2% to KRW 1,202tn.

In 2018 the KOSPI index was the highest on January29, but decreased afterwards due to factors including US-China trade disputes and increase in US interest rates. Supported mainly the government's policy to promote KOSDAQ market the KOSDAQ index also reached the peak on January 29 for the year, but it too decreased afterwards.

Graph 2. Stock Market Trend

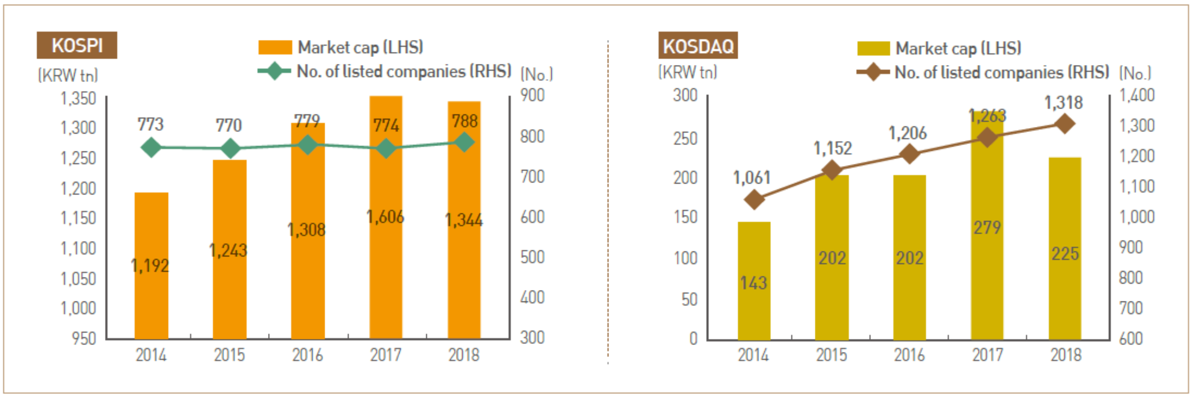
Graph 2-1. Stock Market Trend



Source : KRX

As for the securities market, the number of listed companies increased by 14 year-on-year to 788 as of the end of 2018 with a market capitalization of KRW 1,344tn, 16.3% decrease from the previous year. As of the end of 2018, the number of listed companies on the KOSDAQ market increased by 55 year-on year to 1,318, with a market capitalization decreasing 19.4% to KRW 225tn.

Graph 3. Listed Companies and Market Capitalization



Source : KRX

In the Korean stock market, individual investors contribute the most to turnover, followed by foreign investors and institutional investors.

Looking at the market by investor type, individual investors accounted for 51.0% of the total turnover in the KOSPI market in 2018, while foreigners took up 27.1%. Institutional investors including investment trusts and pension funds accounted for 20.7%. The share of foreign investors has been maintained at around 30% since 2014 and it decreased 3.8% year-on-year in 2018. However, the percentage of individual investors picked up by 4.3% year-on-year.

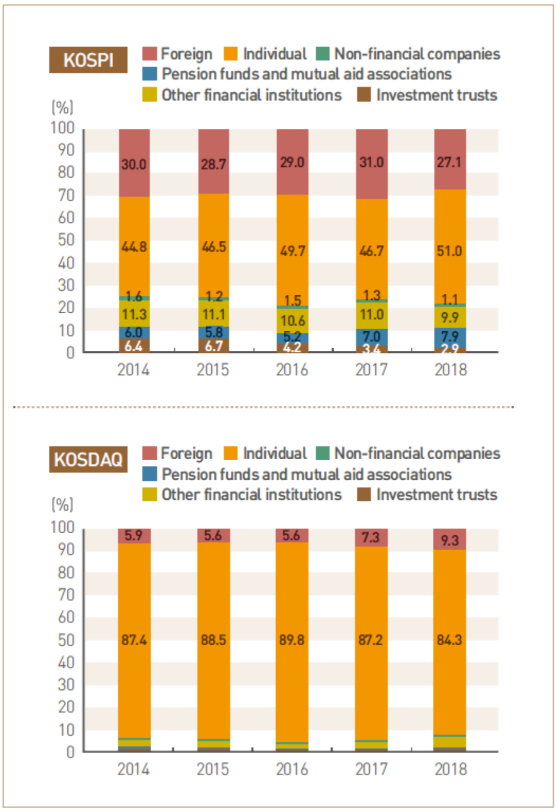
Unlike the KOSPI market, the KOSDAQ market is still dominated by individual investors, who comprised 84.3% of the total turnover. The proportion of foreign investors moved up by 2%pts to 9.3% compared to the previous year.

There were a total of 55 securities firms in Korea at the end of 2018, same as the previous year. The number of securities firms peaked in 2013 at 62, but then dropped by nine over the next three years from 2014 to 2016. This was due to corporate restructuring and re-organization at securities companies following a

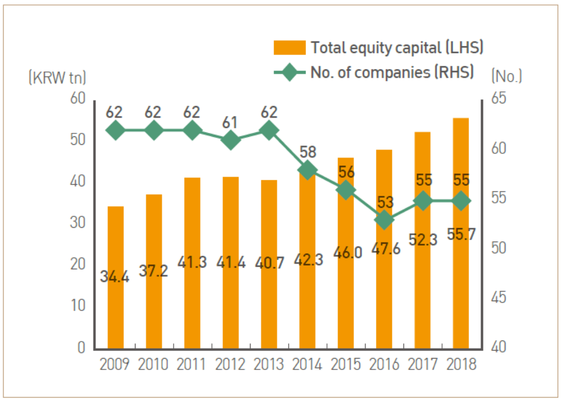
Graph 4. Stock Market Breakdown by Investor Type

prolonged market recession. In the following year 2017, however, two new players began operations. Total equity capital, which displays the size of a securities company, remained on an upward track. At end-2018, the equity capital of securities companies totalled KRW 55.7tn, increasing the average equity capital per securities firm to KRW 1.01tn. This is a result of securities firms growing their size through measures including capital increases, backed by the government's policy to foster mega investment banks.

Graph 5. No. of Securities Companies and Equity Capital



Source : KRX

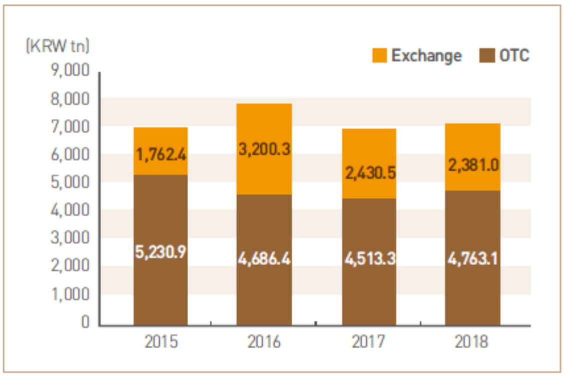


Source : Monthly Financial Statistics Bulletin, FSS

Bond Market

Graph 6. Annual OTC and Exchange Trading Volume

The Korean bond market witnessed an overall increase of trading volume in 2018, as market rates significantly dropped due to factors such as the US Fed raising interest rate by 100bp, which had been going up by 25bp quarterly to reach the target range of 2.25~2.50% from 1.25~1.50%; the Monetary Policy Committee at the Bank of Korea (BOK) raising the key interest rate from 1.50% to 1.75% on November 30; continued US-China trade disputes; and emerging markets jitters, although the year-on-year volume of both OTC and exchange trading declined in 2017. Bond trading volume increased 3.0% year-on-year to KRW 7,144.1tn in 2018.

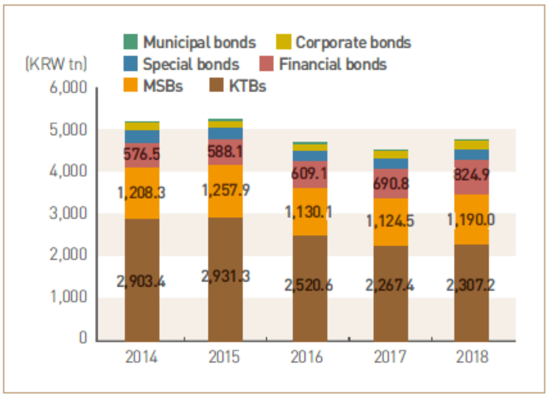


Compared to the exchange trading, the proportion of OTC trading remains at around 70% (90.5% in 2010; 66.7% in 2018) in bond trading volume. An analysis of trading volume by bond type shows that the proportion taken up by accounting for a lion's share of approximately 50% in in the secondary bond market.

Graph 7. Annual OTC Trading Volume by Bond Type

Improvements in government policies to

nurture the KTB market, including the introduction of fungible issues in May 2000 and the increase of KTB issuance, mainly drove this growth. With government and public bonds having come to represent a bigger slice of the pie, the share of corporate bonds, including ABSs, has comparatively diminished. Corporate bonds assumed 14.7% of total trading volume back in 2000. However, the share declined since 2004 to approximately 4.5% at the end of 2018.

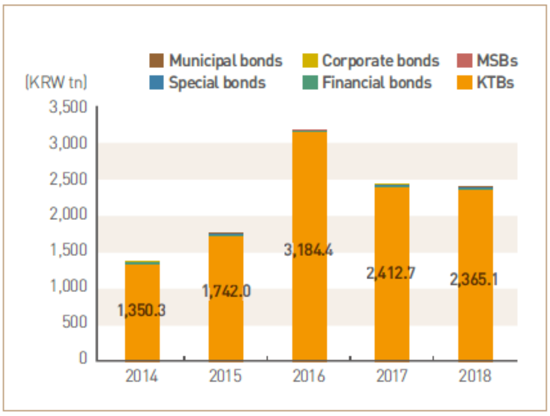


Source : KOFIA

Another special aspect of the Korean bond market that can be found after breaking it down by bond type is that the exchange market is more concentrated on KTBs, compared to the OTC market. Other bonds excluding KTBs comprise less than 1% of the exchange market.

This is mostly due to the exchange trading of on-the-run KTBs required for primary dealers by the government (This policy was repealed in July 2008). Simply put, institutional investors-the major participants in the Korean bond market-are rarely trading on the exchange market to the exclusion of KTBs. Instead, the majority of their bond trading including Monetary Stabilization Bonds(MSBs), special bonds, financial bonds and corporate bonds take place on the OTC market.

Graph 8. Annual Exchange Trading Volume by Bond Type



Source : KOFIA

Derivatives Market

Starting from the listing of KOSPI 200 futures in May 1996, the KRX has steadily grown as a world-class derivatives market in size by introducing various products from KOSPI 200 options (listed in July 1997)- the flagship exchange-traded derivatives on the KRX-, to the most recently introduced KRX 300 futures (listed in March 2018). In addition, the KRX has strengthened risk control for blue chip stocks and provided further investment opportunities by additionally listing equity futures and options.

The turnover of the OTC derivatives market has been on a steady uptrend since 2014, increasing 7.9% year-on-year to KRW 16,304tn in 2018. Derivatives-linked securities (DLS) that were first introduced in

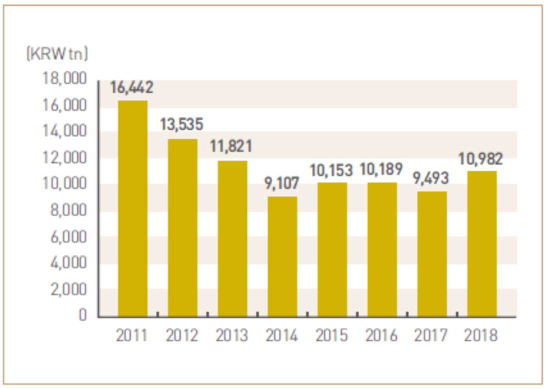
Graph 9. Annual Turnover of Exchange-Traded Derivatives

2003 saw issuance volume soar by 30 times from KRW 3.5tn to KRW 101tn in just over ten years, earning them recognition as attractive mid-risk and mid-return products in the low–growth and low-interest-rate environment.

The total trading volume of exchange-traded derivatives was approximately 1,486.2mn contracts in 2018, a 38.6% gain year-on-year, but a 64.1% slip from the roughly 3,928.0mn contracts recorded in 2011. The trading volume of KOSPI 200 futures and options, the most representative products in the market, also increased by 22.7% year-on-year in 2018, but sharply

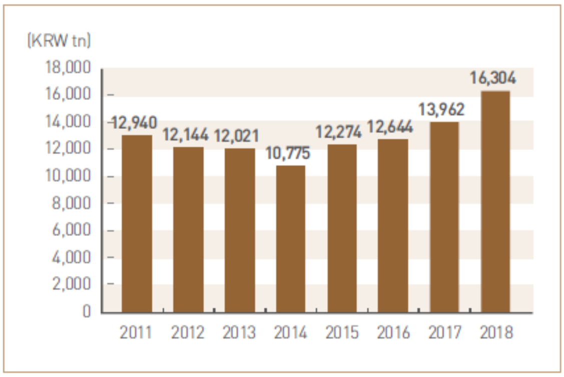
Graph 10. Annual Issuance Volume of Structured Products

contracted by 80.8% when comparing with 2011.

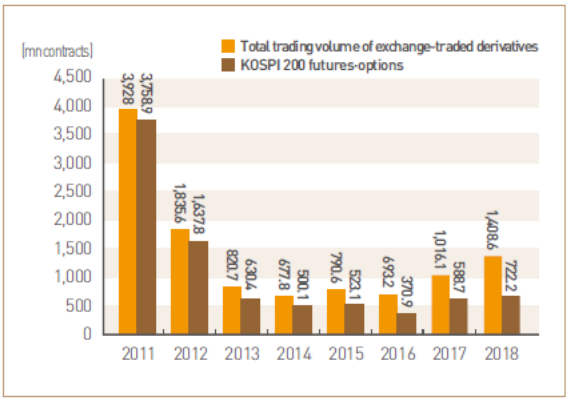


Source : KRX

Graph 11. Annual Turnover of OTC Derivatives



Source : KRX



Source : KRX

Market and Regulatory Issues

2018-2019

1. Financial Authority to ease listing rules for Tech Start-ups & Scale-ups

The FSC approved amendment proposals by the KRX to ease listing regulations on Kospi and Kosdaq to facilitate IPOs of innovative tech start-ups and scale-ups.

Despite a series of deregulatory measures to facilitate IPOs of innovative start-ups, standards for listing review are still mainly focused on current business and market status, making it difficult for tech start-ups with growth potential to list on KOSDAQ.

Against this backdrop, differential standards for listing review will apply across sectors to better reflect sector-specific conditions, particularly high-tech and bio-tech sectors in the fourth industrial revolution. The focus of listing review will be on innovativeness and potential value of technology.

Currently, bio-tech companies listed on KOSDAQ via a special track for tech companies as administrative issues if such company's total sales are below KRW 3 billion in 5 years after listing. To meet such revenue requirement, biotech companies are often forced to reduce R&D activities, consequently undercutting their growth potential.

According to the amended rule, the revenue requirement will be eased for biotech companies suffering from temporary drop in sales. Even if a biotech company's revenue in the latest business year falls short of KRW3 billion, it will not be designated as issues for administration if its total sales in the recent three years is KRW9 billion or more.

Biotech companies which qualify for certain criteria will be exempted from the revenue requirement: (i) those designated by the Ministry of Health and Welfare as 'innovative pharmaceutical companies' with excellent R&D records; or (ii) those with daily market capitalization of more than KRW 40 million.

The scope of special listing scheme for tech companies, currently limited to domestic SMEs, will be widened to include scale-ups* and foreign companies.

* non-SMEs whose average revenue growth is 20% or more for two business years

Given that foreign companies are out of Korea's supervisory reach, separate measures to protect investors will be required:

(i) External Audit Act will be applicable to ensure accounting transparency

(ii) foreign companies incorporated in "qualified" markets –e.g. NYSE, Nasdaq, Euronext, Tokyo, London, Germany, Hong Kong, Singapore, Australia, Canada

(iii) technology evaluation with AA or higher grades received from more than two evaluation agencies

(iv) IPO sponsors will be restricted to those with record of sponsoring IPOs of foreign companies or insolvent companies. They will be required to acquire KRW 5 billion of shares, up from KRW 2.5 billion, in companies they sponsor.

2. Reform of interest rate benchmark

The FSC and the Bank of Korea (BOK) jointly launched a taskforce to develop a new benchmark interest rate, which aims to replace the current benchmark interest rate of certificate of deposits (CDs) by 2021. Co-chaired by FSC Vice Chairman and BOK Vice Governor, the taskforce is composed of officials from the Ministry of Economy and Finance, the Financial Supervisory Service, market participants and research institutions.

The rate-rigging scandal of the London Interbank Offered Rate (LIBOR) in 2012 prompted global reform efforts to improve the representativeness and credibility of benchmark interest rates. In preparation for the expiration of LIBOR in 2022, the US, the UK, the EU, Japan and Switzerland are replacing it with new benchmarks such as "risk-free" overnight rates. Other countries including Australia, Canada, Hong Kong and Singapore, whose currencies are not used to calculate LIBOR, are also developing alternatives to enhance the representativeness and transparency of benchmark interest rates and their consistency with international standards. In line with the global move, Korea will also develop a new benchmark interest rate as an alternative to the CD rates, currently being widely used as a benchmark interest rate in Korea's financial markets.

However, the CD rates have fundamental limitations in serving as a benchmark interest rate: (i) the issuance of CDs is not sufficient; and (ii) CD rates are based on quotes, not real transactions.

Against this backdrop, the FSC and the BOK jointly launched a taskforce to develop an alternative to the CD rates, which aims to publish a new benchmark interest rate in March 2021. Meanwhile, the taskforce will also come up with measures in the second half of 2019 to boost the issuance of CDs and improve the current method of calculating CD rates.

At a kick-off meeting on June 14, FSC Vice Chairman Sohn Byungdoo called for an active role by market participants including banks, financial investment companies and the KRX in reforming the current benchmark interest rate regime. In particular, Mr. Sohn emphasized it is urgent for Korea to develop a new benchmark interest rate, which is consistent with international standards, amid growing demand for fundamental reforms of benchmark interest rates across the globe.

3. Guidelines on Financial Companies' Investment in Fintech Business

In September 4, the FSC announced Guidelines on Financial Companies' Investment in Fintech business to facilitate financial companies' investment in fintech business.

The guidelines expand the scope of fintech business in which financial companies are allowed to invest by adopting a negative list approach and recent trend in technology and regulatory environment:

▪ [NEW TECHNOLOGY] innovative technology business –e.g. artificial intelligence (AI), Internet of things (IoT); data business; and ICT technology business needed in the operation of financial business

▪ [FINANCIAL INNOVATION ACT] innovative financial service provider accepted into the FSC′s regulatory sandbox or designated fintech firms to operate business commissioned by financial firms

▪ [NEGATIVE LIST APPROACH] fintech business recognized by the FSC with its innovative digital technology and contribution to the financial sector and consumers Procedural period.

To expedite regulatory approval process, the guidelines require financial regulators to reply within 30 days whether such investment is approved or not. Currently, ancillary business that financial firms are allowed to operate is limited to one directly related to their primary business. The guidelines make it clear for financial companies to operate fintech business as ancillary business once they are allowed to invest in such fintech business.

If financial firms make loss in fintech investment, they will be granted mitigation or immunity from penalty unless such loss was incurred intentionally or out of gross negligence.

IMPLEMENTATION SCHEDULE

The guidelines are to be implemented from October 2019 on a temporary basis for two years on condition that relevant regulatory changes will be made in the meantime.