

2018 Taiwan Market Report

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By Taiwan Securities Association

A. Taiwan's Economic Situation and Outlook

Taiwan's economy kept on-year growth in the second quarter after first quarter's increase, as the expansion in exports continues. The annual real GDP growth rate was 3.30% in the second quarter of 2018. In the first half of the year, Taiwan's exports and imports increased by 10.9% and 10.8% year on year, while export orders were up 6.6% year on year. The industrial production showed an expansion of 4.6% in the first half of the year. The consumer price index (CPI) annual growth rate increased by 1.60% in the first half and the unemployment rate declined from 3.75% of 2017 to 3.66% in the first half. On the financial side, Monetary Aggregate (M2) increased by 3.70% in the first half of the year, while the stock price index averaged 10,883 points.

In June 2018, the overall monitoring indicator flashed a "yellow-blue," and the trend-adjusted leading index decreased by 0.34%, while the trend-adjusted coincident index decreased by 0.43% on the previous month.

To respond to Taiwan's low birth rate and ensure that the nation has the professional talent and workforce to meet the needs of ongoing industrial development, the Cabinet announced in May 2018 major elements of a proposed new economy immigration bill, which aims for the active recruitment and retention of the talent and labor necessary to carry forward continued national development. In addition, the government will continue to implement deregulation work, and to provide industries with steady supplies of land, water, electricity, manpower and professional talent. These initiatives will help to strengthen investment growth momentum and to build long-term economic growth, thereby improving wages and the economic wellbeing for the people of Taiwan.

	Historical Data				Data for Recent Months			
	2014	2015	2016	2017	Apr.	May	June	Jan. – June
% Change over previous year.								
GDP	4.02	0.81	1.41	2.89	-		3.30	3.20
CPI	1.20	-0.30	1.39	0.62	2.00	1.64	1.31	1.60
Exports	2.8	-10.9	-1.8	13.2	10.0	14.2	9.4	10.9
Imports	1.4	-15.8	-2.8	12.4	4.9	12.0	15.4	10.8
Export orders	6.7	-4.4	-1.6	10.9	9.8	11.7	-0.1	6.6
Industrial Production Index	6.4	-1.3	2.0	5.0	8.8	7.1	0.4	4.6
Monetary Aggregate (M2) ^b	5.66	6.34	4.51	3.75	3.59	3.73	4.10	3.70
Unemployment rate (%)	3.96	3.78	3.92	3.76	3.64	3.63	3.70	3.66
TWSE Stock Index ^c	8,992	8,959	8,763	10,208	10,796	10,818	10,987	10,883

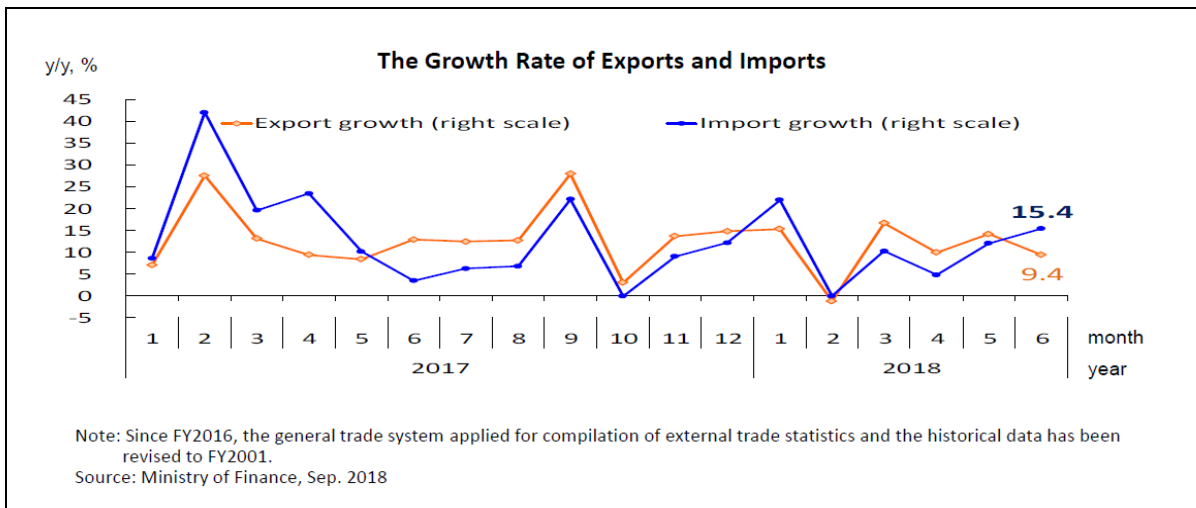
Note : ^a 2018 Q1 Preliminary Estimation.// ^b Daily Average // ^c Monthly Average TAIEX

Sources : The Central Bank of China (CBC), Financial Supervisory Commission (FSC), Directorate-General of Budget, Accounting and Statistics (DGBAS).

1. Foreign Trade Continues to Increase

Total exports increased by 1.9% year on year in August 2018, mainly due to a stable global economy and rising prices of international crude oil. In the first eight months of this year, Taiwan's exports rose by 8.9% from a year earlier.

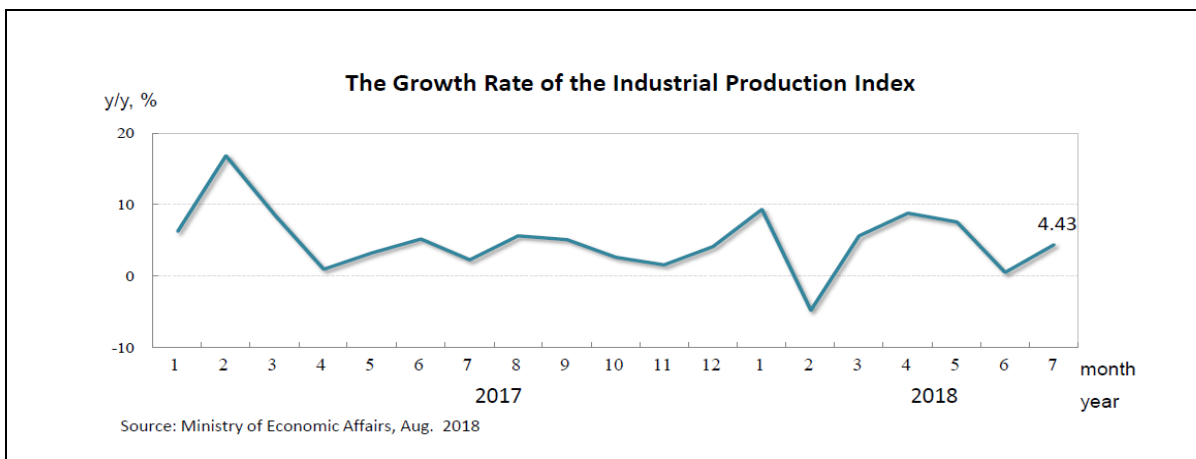
Imports increased by 7.9% in August over the previous year, driven by the demand for investment in the semiconductor industry and rising prices of crude oil. The annual change rate of January-August was 11.7%.



2. Industrial Production Remains its Solid Growth Path

The Industrial Production Index (IPI) posted an annual increase of 4.43% in July 2018. For the first seven months of 2018, the IPI increased 4.58% over the same period of the previous year.

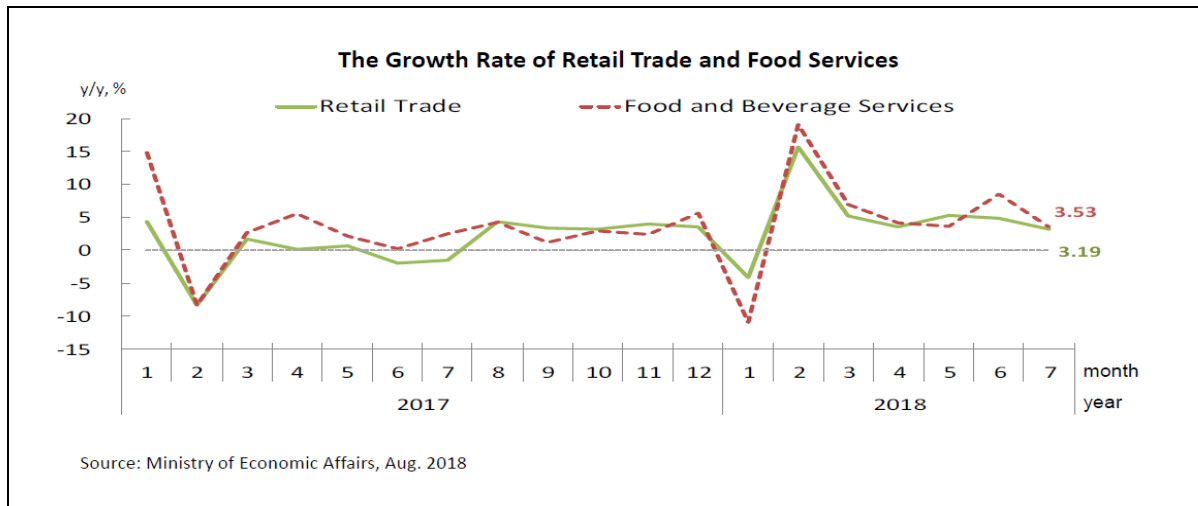
Manufacturing output rose by 5.01% year on year in July. The increase was largely supported by new smart phone launches and application of emerging technology.



3. Retail Trade Shows Steady Growth

Retail trade increased by 3.19% year on year, with rising demand of pre-ordered in Moon Festival and Ghost Festival, and increased purchases of fuel products and electronic products.

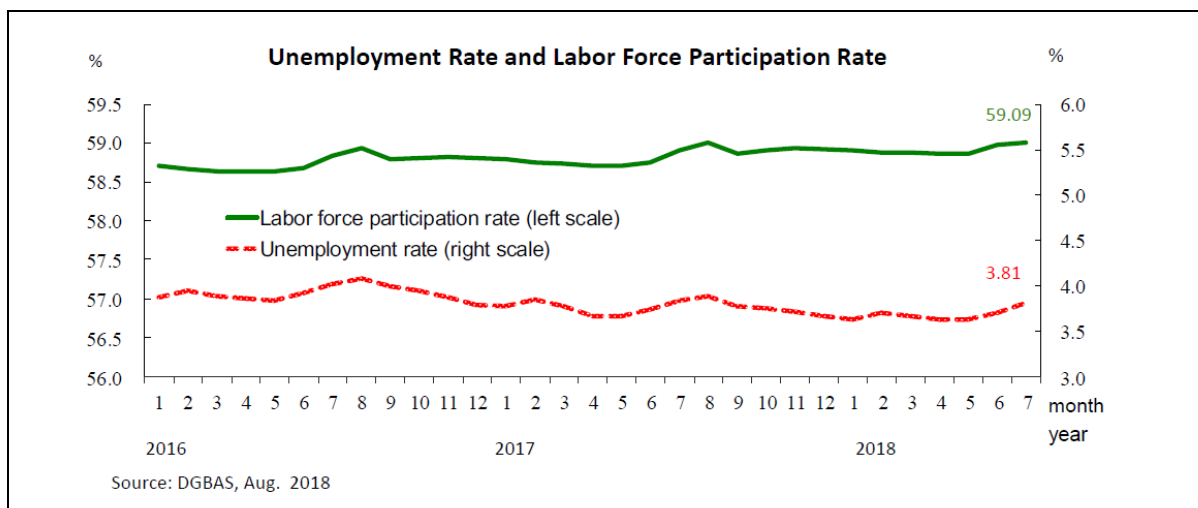
Food and beverage services grew by 3.53% year on year, benefited from the increase of dining out during the world football match season and the rising demand for cold beverages during summer.



4. Labor Market Stays Healthy

The unemployment rate rose by 0.11 percentage points to 3.81% in July 2018, compared with the previous month. After seasonal adjustment, unemployment rose by 0.01 percentage points to 3.69%.

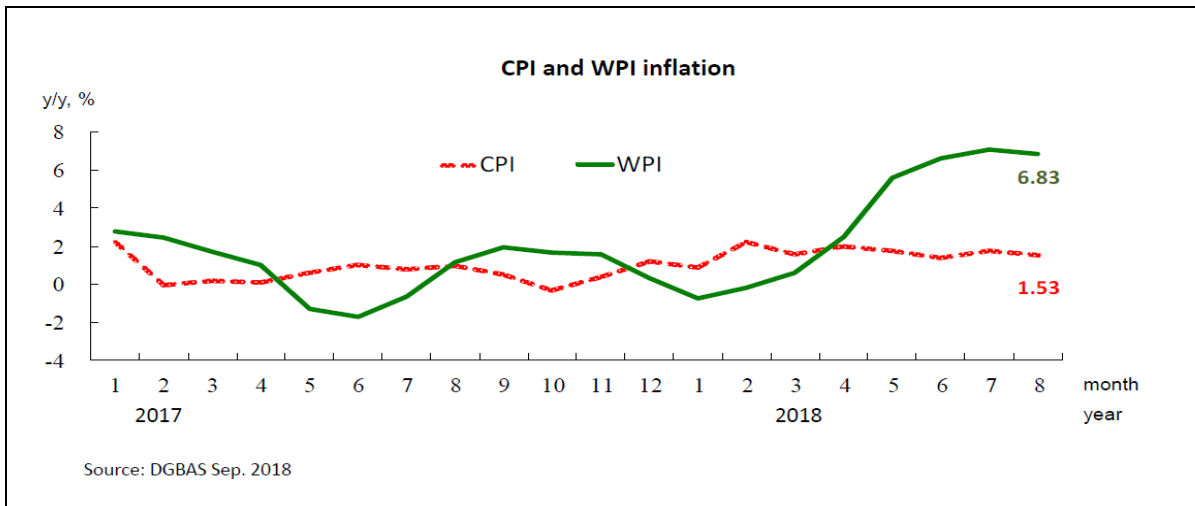
Labor force participation rate was 59.09% in July, up by 0.17% from the previous month. Over the last 12 months, the rate increased by 0.18 percentage points.



5. Consumer Prices Remain Stable

In August 2018, the CPI increased by 1.53% year on year, mainly reflecting oil prices hike and the increase of cigarette tax.

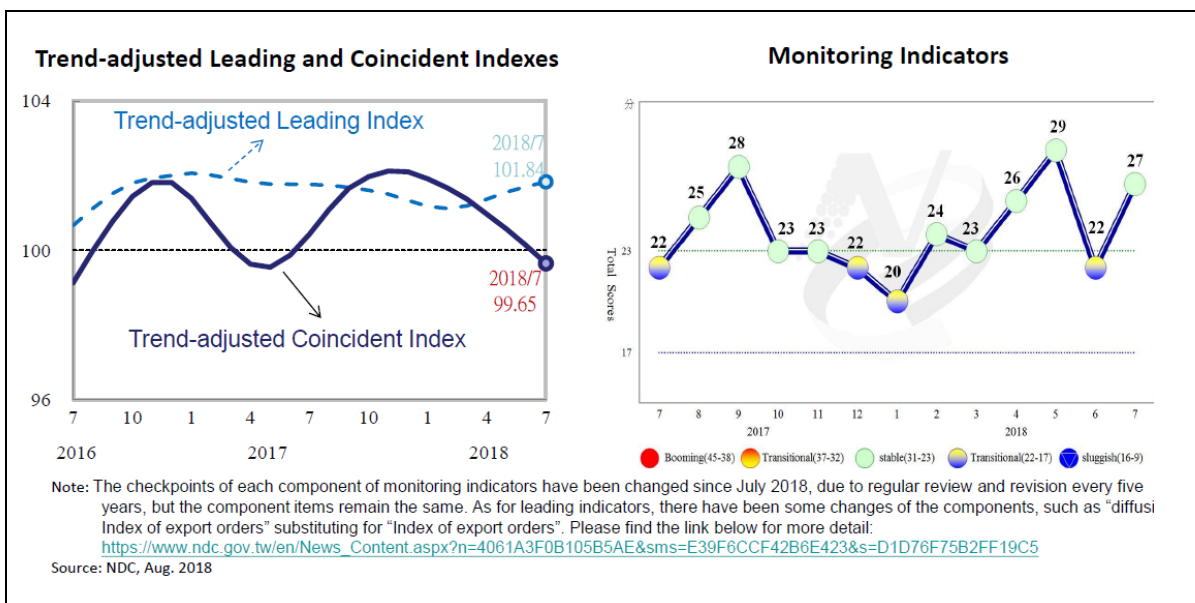
The WPI increased by 6.83% year on year, mainly because the prices of quarrying and mining products increased by 40.54%, and those of the petroleum and coal products increased by 35.05%.



6. Monitoring Indicators Flash “Green” Signal

In July 2018, the trend-adjusted leading index stood at 101.81, up by 0.13% from last month, while the trend-adjusted coincident index stood at 99.65, down by 0.47% from last month.

The overall monitoring indicator flashed the “green” signal. The total score was 27.



B. Taiwan Securities Market Performance Is Improving

I. Equity Market Performance

(Taiwan Stock Exchange)	2015	2016	2017	2018 (1-8)
TAIEX Index (point)	8,338	9,253	10,642	11,063
Market Capitalization (NT\$ Billion)	24,504	27,248	31,832	33,241
Market Capitalization to GDP (%)	146.11	158.86	182.62	186.07
P/E Ratio	13.46	16.51	15.66	14.59
Average Dividend Yield (%)	4.60	4.35	3.95	4.20
Total Trading Value (NT\$ Billion)	22,505	18,915	25,799	22,517
Daily Trading Value (NT\$ Billion)	92.23	77.52	104.87	138.14
Turnover Ratio (%)	77.55	64.60	78.41	63.58

Trading Value Percentage by Investors

	2015	2016	2017	2018 (1-8)
Domestic Individual	52.3%	52.0%	59.4%	60.5%
Foreign Institutional	28.4%	30.4%	25.9%	25.2%
Domestic Institutional	18.3%	17.6%	14.7%	14.3%

1. The Taiwan Stock Exchange Weighted Stock Index (TAIEX)

Since April 2017, the TAIEX has climbed to over 10,000, and stayed for more than 17 months. The index was up to 11,063 in August 2018. This is a milestone to Taiwan, as it is a relative high point over the past ten year, ever since the 2008 economic downturn at 4,591, a historical high ever seen back in 2000.

2. Market Capitalization

The total market capitalization of TWSE-listed stocks amounted to NT\$33.24 trillion as of August 2018, growing by 4.42% this year.

3. Market Capitalization to GDP

Market value to GDP ratio reached 182.62 in 2017, up 15% from that in 2016 (158.86), showing the stock market was thriving and prosperous in support of the real economy.

4. P/E Ratio

In 2017, TWSE stocks traded at a price-to-earnings ratio of 15.66. In August 2018, price-to-earnings ratio has stayed at 14.59, which is considered globally competitive.

5. Dividend Yield

The average dividend yield of total TWSE-listed companies was 4.20% in August 2018, compared to 3.95% in 2017. The dividend yield was higher than the rate of return on bank deposits and exceeded levels attained in other major markets. The average dividend yield of TWSE stocks from 2012 to 2017 averaged at 3.98%.

6. Total Trading Value

The aggregated trading value from January to August this year has reached NT\$22.52 trillion, up 27% year on year. It is expected to exceed NT\$32 trillion by the end of this year, with a 25% increase to 2017.

7. Daily Trading Value

The average daily trading value in 2016 dropped to the 5-year low at NT\$77.52 billion; however, it bounced back by 35% to NT\$104.87 billion in 2017. The figure reached another high, 138.14 billion, in August 2018, indicating that the stimulus plans promoted by Taiwan's regulators and related securities agencies over the past year have successfully regained investors' confidence.

8. Turnover Ratio

From January to August this year, TWSE's turnover ratio reached 63.58%, and it is estimated to reach 90.17% by the end of this year, growing by 15% than last year.

9. Trading Value Percentage by Investors

As of August, 2018, the percentage of domestic individual investors has exceeded 60.5%, 1.1% increase compared to last year. This indicates that more and more domestic retail investors have regained their confidence on Taiwan's equity market. This phenomenon may be attributed to the boom of day trading, which is up to 33.1% of daily trading value, attracting more domestic individual investors.

II. Bond Market Performance

1. Bond Issuance Is Up

(Outstanding NT\$ Billion)

Bond type	2015	2016	2017	2018 (1-8)	Estimated 2018 (vs. 2017)
Government Bond	5,569.37	5,605.33	5,636.33	5,623.72	
Financial Debenture	988.91	977.43	916.43	915.45	
Beneficiary Securities	8.61	12.41	9.44	4.40	
Corporate Bond	1,863.56	1,825.95	1,860.31	1,923.12	
Foreign Bond	9.69	9.81	11.30	16.36	
International Bond	57.82	94.79	129.28	157.59	
Total	8,497.96	8,525.72	8,563.09	8,640.64	8,650 (+87, +1.1%)

The aggregated bond issuance from January to August 2018 was NT\$77.55 billion, which is double to the figure of whole 2016 (NT\$ 37.37 billion). The growth is attributed to the rise of corporate bond and international bond issuance. It is estimated that the total bond issuance will grow by NT\$ 87 billion by the end of 2018, and the outstanding on bond issuance will reach NTS 86.50 trillion.

2. Bond Trading Is Slightly Down

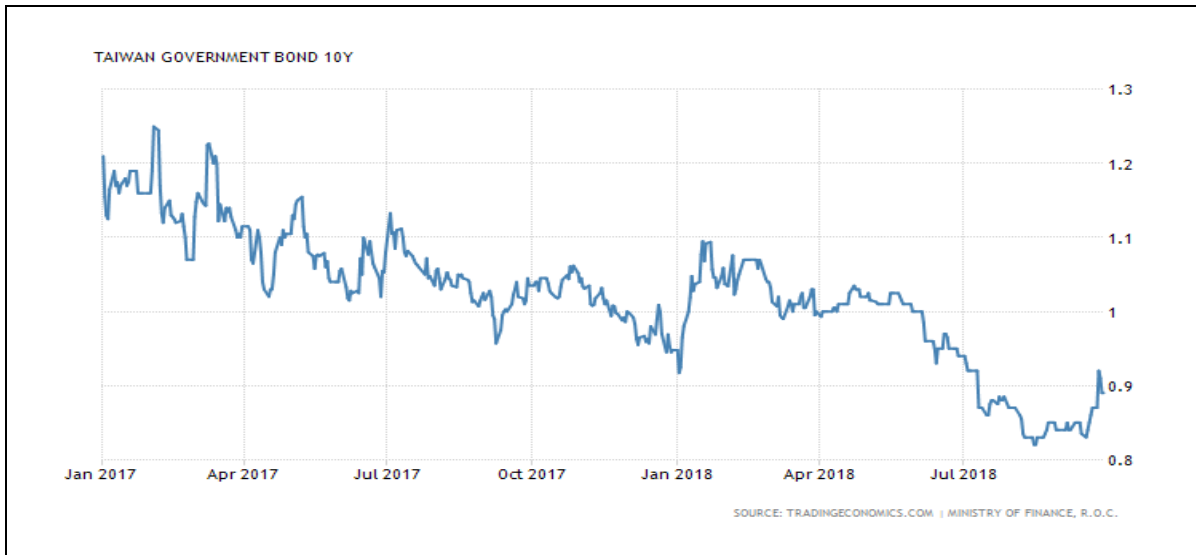
(Trading Unit: NT\$ Billion)

Bond type	2015	2016	2017	2018 (1-8)	Estimated 2018 (vs. 2017)
Government Bond	6,726.85	6,312.61	5,260.08	3,396.00	
Financial Debenture	233.00	138.42	119.53	106.83	
Beneficiary Securities	0.00	3.19	0.00	0.00	
Corporate Bond	964.48	829.36	908.21	583.94	
Foreign Bond	12.38	8.38	8.38	8.79	
International Bond	1,051.41	1,363.94	964.37	473.90	
Total	8,988.12	8,655.90	7,260.57	4,569.46	6,855 (-406, -5.6%)

Although the bond issuance has shown slight growth, it is estimated that bond trading value will go down by NT\$ 4,060 billion or 5.6% in 2018.

3. Taiwan Government Bond 10Y

The 10-year benchmark bond yield closed around 0.89% as of mid-Sep. 2018, staying at very low level.



C. Two Key Challenges in Taiwan's Securities Market

I. Impact of the U.S.- China Trade War on Taiwan's Industries and Securities Market

1. Short-Term Effect : Benefits from Diverted Orders to Traditional Sectors

The notable change in Taiwan's economy in the first half of 2018 is exports increase. This has had to do with the short-term diverted orders due to the U.S.-China trade war, especially in the traditional sectors. The value of the major products orders from the U.S. year to July grew year on year, by 14.49% in machinery, by 13.63% in electric products, and by 9.38% in base metal.

Despite Taiwan's worries on the trade war, so far the supply chain of ICT (Information and Communication Technology) across the Taiwan Strait has not been affected. ICT sector and the traditional sectors both contributed to the strong exports performance in the first half, therefore pushing the economic growth rates of Q1 and Q2 to 3.10% and 3.30%, maintaining the strength seen in Q3 and Q4 of the last year. This bears significance because Taiwan's economy has for very long time relied on exports. Thus, the overall economic performance has appeared quite good for the first half.

However, the real challenge has started in the second half. The exports in Q3 and Q4 are expected to slow down mainly due to the uncertainties in the global trade due to the economic protectionism started by the U.S. Also, due to the high base, it is hard to maintain the same annual growth rate for the exports in the second half. The whole year economic growth rate will be at 2.69%.

2. Long-Term Concerns:

1) Impact on Taiwan's Position in the Global Supply Chain in Technology Industry

At the present stage, the U.S. adds 10% tariffs on \$200 billion of Chinese goods and the tariffs will be increased to 25% January 1st next year. With the buffering provide by the current depreciation of renminbi, the 10% tariffs are likely to be absorbed by China itself. Nonetheless, if the trade war enters into the next stage, the elevated 25% tariffs will pose pressure to China's exports. This may cause a chain reaction on Taiwan as fifteen out of the top 20 China-based companies exporting to the U.S. are Taiwan-funded.

Dubbed as Technology Island, Taiwan is the main provider for the global supply chain in technology industry. Forty percent of Taiwan's exports go to China, and a big portion of these

exports are key components for technology products. In this regard, Taiwan, China and the U.S. form a close foreign trade relation. The orders are very often placed in Taiwan, with Taiwan exporting key components to China; and final products are made in China to be exported to the U.S. In this structure, the upcoming high tariffs levied by the U.S. on China could ultimately prevent many technology final products from being exported to the U.S., thus unfavorable to Taiwan's export of key components to China. Therefore, the unfolding U.S.-China trade war could pose threat to Taiwan's exports, which has always been Taiwan's strong point.

2) Impact on the predominately electronics-sector-based securities market

From the perspective of Taiwan's securities market, the U.S.-China trade war has rendered Taiwan's securities market crisis-ridden.

The trade war waged by the U.S. with tariffs as its means against China is a countermeasure against "Made in China 2025," in which China aims to control the advanced manufacturing industry in the world by 2025. The countermeasure of the U.S. will focus on the advanced manufacturing industry and consequently Taiwan may suffer, as Taiwan has been renowned for its electronics and ICT industry, which account for a large proportion of the products provided into the global technology supply chain.

Many Taiwanese ICT firms have set up factories in China, exporting to the U.S. as well as providing for China's domestic demand. If the U.S.-China trade war continues developing, it may have an impact on China's red supply chain, causing it to shift, and accordingly impacting on Taiwan's significant position in the global supply chain in technology industry. Known as technology island, an arresting feature of Taiwan's securities market is its predominate electronics sector base. Up to the last August, the electronics sector accounts for 54% of the total market cap on TAIEX. Many Taiwanese firms are listed in Taiwan, manufacturing in China. If the U.S-China trade war hampers the exports of electronic components to China, there may be serious consequences on the electronics sector, and Taiwan's securities market will be held back.

3. Three Dimensions

1) Diversification Strategy

Taiwan will continue optimizing its investment environment to attract domestic and foreign investment. We will relax regulations to be in line with international standards and expand the

channels for bringing in overseas talent. At the same time, we will develop high-end service industry, reinforce intellectual property management, advance in integration of software and hardware, and hopefully transform Taiwan's trade pattern. Apart from merchandise trade, we will gradually strengthen service trade such as intellectual property to reduce threat from merchandise tariffs.

2) Assistance from the Government and Capital Market to Homecoming Firms

Taiwan's government will help in finding land and reducing manufacturing cost for those Taiwanese firms operating in China but considering relocation back in Taiwan. The Cabinet has made a lot of efforts this year to tackle the "five shortages" plaguing business: lack of land, power, water, labor and talent.

On the other hand, the government can consider the possibility of formulating policies such as one-off reduction on repatriation tax, giving incentives to Taiwanese firms to move their profits back and invest in Taiwan. Our capital market can also assist in funding these homecoming firms to expand in Taiwan.

3) Implementation of the New Southbound Policy

Taiwan's government has brought forth the New Southbound Policy as early as in 2016 to face new global economic and trade landscape. Since then, we have made a lot of efforts and have achieved some concrete results. As the U.S.-China trade war evolves, it proves that the judgment at that time was right. But knowing that we have been on the right direction is hardly enough. Taiwan will need to speed up its transformation and progress.

Through its economic and trade cooperation with the southbound countries, Taiwan is in the process of renewing its national economic and trade strategy. Taiwan is now connecting its industry deployment with the industry development progress of the South-East Asia and South Asia countries through multi-lateral and diversified economic and trade cooperation. At the same time, we will endeavor to join Asia-Pacific and India-Pacific economic and trade cooperation systems, such as CPTPP, to rebuild Taiwan's key economic and trade position in Asia.

II ‧ The Challenge Facing Taiwan in Fintech Development

In recent years, Fintech has become a global topic, and Taiwan also started to introduce Fintech into the existent financial system, hoping that it will not be left behind.

In 2015, Taiwan's government launched FinTechBase to promote the development of a financial innovation experiment mechanism. In 2016, Taiwan published Fintech Development Strategy White Paper, showing the government's determination and policy direction in Fintech development. In the same year, Fintech Development Foundation was set up with preliminary funds of NT 200 million to be used in developing Fintech.

What is more important, however, is the Financial Technology Innovation and Experiment Act, the so-called financial regulatory sandbox, which was passed in last December. This made Taiwan the fifth country in the world to have a regulatory sandbox system after the U.K., Singapore, Australia and Hong Kong. It is worth mentioning that this is the first regulatory sandbox to be put into act among the countries of Statutory Law.

In addition, in the four dimensions of the Financial Development Action Plan announced this June, Fintech has been placed side by side with the three traditional financial sectors, showing some changes in the government's perspective.

Two issues are identified here.

1. New Supervisory Mindset Needed to Be in Line with the World Trend

The incumbents of Taiwan's existing financial sector are somewhat hesitant about developing Fintech, mainly due to the long-term high-degree supervision of the competent authority for the market order and the protection of investors. The incumbents have doubts on whether new financial services with disruptive nature will really be allowed by the competent authority, as they will be most likely in conflict with the present regulations.

The current Fintech policy direction outlined by Taiwan's government emphasized on adaptability. The perspective is mostly from the financial system and its incumbents, to adapt to changes that, to a certain extent, have been made (such as third-party payment, P2P lending, e-orders, equity crowdfunding, etc.), and to come up with development and supervision strategies. For the next stage, Taiwan's financial sector should act proactively to anticipate probable innovations in the future and design accordingly the path for transformation.

The main challenge lies in adjusting the long-term mindset that has overemphasized on planning, guidance, and supervision in the financial sector. The whole sector must engage itself in the latest trend and the competent authority must recreate its image so that the private sector will be more willing to participate in developing Fintech.

2. Requirement for More Funds and Talent

Studies have shown that, put in the context of the whole Fintech development in Asia, the funds invested in Fintech development by the financial holdings in Taiwan is not enough. In another study conducted in 2017, Taiwanese respondents said the percentage of resources they were willing to invest in Fintech is 13%, compared to 15% per cent of global respondents. However, the expected annual return on investment for Fintech projects in Taiwan is 9%, much less than 20% of global standard.

Despite the fact that Fintech has become a major trend in the global financial sector, there is still a lot of room to grow in terms of funds invested in developing Fintech from Taiwan's Banking, Insurance, and securities sectors. Furthermore, Taiwan has brain drain problem, and therefore, a major challenge for Taiwan in Fintech development is to retain talent, and still further, to attract foreign talent. The incumbents of the financial sector do not have consensus in developing Fintech, so at the current stage they are unable to work together with the government toward a common goal. A financial technology ecosystem is yet to exist, therefore hard to attract overseas funds and talent.

3. Three Dimensions

1) Find Balance between Supervision and Financial Innovation

Taiwanese government has done a good job putting the regulatory sandbox into act, providing a clear source of law to follow. Nevertheless, Taiwanese government still needs to launch more efficient measures to provide friendlier environment for financial technology innovation and transform the regulator's image that has overemphasized more on supervision than on innovation, to gain the confidence and trust from the incumbents and Fintech start-ups, and attract foreign funds and talent to develop Fintech without sparing any effort.

Taiwanese government may need to consider setting up a dedicated unit to push Fintech development forward. In Singapore, the cross-functional unit is under the Infocomm

Development Authority (IDA). The U.S. has also set up a specialized team for Fintech, so has Thailand. Regardless of the model, proactive innovative financial system is better than sclerotic supervisory financial system.

2) Create a Financial Science and Technology Ecosystem

The results of the FinTechBase launched in 2015 have gradually shown. Newly launched in September, FinTechSpace aims to combine the resources from industry, government, academia and research to develop an ecosystem for innovative start-ups, and assist the industry in providing open data and open API (Application Programming Interface). To compete in a global race, a dynamic financial science and technology ecosystem needs to be established in order to effectively attract Fintech talent and capital to Taiwan. And Taiwan should aim for overseas markets for its financial technology applications, once mature, as on an island, to reach out to the whole world has always been the spirit.

3) Develop Regtech Simultaneously

In terms of Fintech development, Taiwan is trying to catch up with the global trend. And the sandbox is just a first step towards a more flexible regulatory approach.

Taiwanese government may need to think how to achieve balance between financial services driven by new technologies and the existing regulatory framework, once new financial services pass the test of the regulatory sandbox. Many incumbents have expressed their concerns about the likely disruption to the present financial system. The issue of how the regulations should be adjusted accordingly needs to be addressed in advance. The competent authority has to do researches, formulate policies and announce them as soon as possible.

In addition, the innovative financial services proved by the sandbox will not only have an immediate impact on the current regulations, but will also introduce new types of risk into our financial sector due to the use of new technologies, such as Blockchain and Big Data.

Some scholars have suggested that Regtech should be considered to be a domain independent of Fintech, with great potential enough to bring about by itself a paradigm shift in the financial sector. We expect Taiwanese government to invest funds and resources to promote Regtech to respond to new kinds of risk in a new financial ecosystem.

According to researches, the security of information technology and the uncertainty in supervision are the two common challenges identified by both financial institutions and financial technology companies. We believe the government's efforts in developing Regtech will reduce the concerns of financial institutions and technology start-ups in developing Fintech.