Minutes of the Monetary Policy Meeting

September 27, 2018

Central Bank of the R.O.C. (Taiwan)

Minutes¹ of the Joint Meeting of the Board of Directors and the Board of Supervisors on September 27, 2018

Date and Time: September 27, 2018, at 2 p.m.

Location: Room A606, Main Building, Central Bank of the R.O.C. (Taiwan)

Members Present:

Chairman, Board of Directors: Chin-long Yang

Executive Directors:

Jain-Rong Su, Jong-chin Shen, Tzung-ta Yen, Nan-kuang Chen, Ming-yih Liang

Directors:

Tsung-hsien Lin (excused, appointing Tzung-ta Yen as proxy), Chen-chia Lee, Chung-dar Lei, Jin-lung Lin, Mei-lie Chu, Chao-hsi Huang, Bih-jane Liu, Shiu-sheng Chen, Hsin-Hong Kang

Chairman, Board of Supervisors: Tzer-ming Chu

Supervisors:

Chi-yuan Liang, Tsung-jung Liu, Ching-fan Chung, Ping-yung Chiu (excused)

Staff Present:

E-dawn Chen, Director General, Department of Banking James T.H. Shih, Director General, Department of Issuing Hui-huang Yen, Director General, Department of Foreign Exchange Yue-min Chen, Director General, Department of the Treasury Tsuey-ling Hsiao, Director General, Department of Financial Inspection Tzong-yau Lin, Director General, Department of Economic Research Chien-ching Liang, Director General, Secretariat Kuei-chou Huang, Director General, Department of Accounting Jhih-cheng Hong, Director, Personnel Office Kun-shan Wu, Director, Legal Affairs Office Yu-ming Chang, Secretary, Board of Supervisors Chih-cheng Hu, Secretary, Board of Directors

Presiding: Chin-long Yang

¹ This English translation is provided for information purposes only; the Chinese version shall prevail in case of discrepancies.

Agenda Item: Economic and Financial Conditions and Monetary Policy Decision

I. Review of Economic and Financial Conditions

The Department of Economic Research presented the following review:

1. International Economic and Financial Conditions

Since June 2018, when the Board last convened, global economic growth has advanced steadily. Nevertheless, the economic outlook is expected to be weighed down by escalating international trade friction, with the world and major economies heading for some moderation in the second half of 2018 and the year of 2019. International forecasters recently trimmed their projections for global economic growth in 2018 and 2019 and most of them expected major economies to expand at a slower pace next year than this year. Growth in world trade volume this and next year could also be dragged down by intensifying trade conflicts. The 2018 global inflation rate will be higher than last year and continue to climb next year, reflecting the weakness in multiple currencies owing to a strong US dollar, and rises in energy prices.

In terms of monetary policy, the pace of normalization has been uneven among major economies. The US Federal Reserve raised its policy rate by 25 basis points in September, marking the eighth rate hike since the end of 2015. The European Central Bank will keep the policy rate unchanged until at least next summer but its asset purchases will end in December 2018. The Bank of Japan will maintain an easy policy stance and hold their short- and long-term rates at extremely low levels for an extended time. Meanwhile, some emerging market economies lifted rates in order to curb currency depreciation, rein in capital outflows, or cool inflation, whereas the People's Bank of China remained accommodative in view of downside risks to the economy and the financial sector.

In the international financial markets, the USD index rose to an all-year high as the Turkish lira's plunge in August stoked up hedging demand but then dropped as worries subsided over Turkey's currency crisis. The 10-year US government bond yield climbed higher on market expectations of faster Fed rate hikes. Dollar strength brought down the value

of most currencies of emerging market economies. In particular, the August lira crash has triggered capital outflows and currency depreciation in some emerging markets, and the global financial markets have become more volatile.

Risks to the global economic and financial development include: (1) uncertainty over the US trade policy: an escalation of US-China trade conflicts, in particular, could dampen corporate confidence, adversely affecting global economic growth; (2) financial risks stemming from emerging market economies: if a stronger dollar and higher Fed rates significantly push up USD-denominated debt held by emerging market economies, financial conditions in these economies could deteriorate further; (3) risks associated with China's economic and financial conditions: the prospect of a deeper US-China trade conflict impacting China's manufacturing investment and export growth has driven up downside risks to economic growth; mounting non-financial sector debt and increasing defaults on bonds and loans undermine China's financial stability; (4) geopolitical risks: the Brexit talk deadlock and upward pressures on oil prices from the supply shock of re-imposed US sanctions against Iran would add to the uncertainty over the global economic and financial outlook.

2. Domestic Economic and Financial Conditions

(1) Economic situation

The overall monitoring indicators for business outlook flashed a "green" light, indicating a mild expansion. However, momentum for further expansion seemed to soften, reflected in recent declines in manufacturer sentiment about business outlook and slower growth in industrial and manufacturing production indices. In general, net external demand will contribute less to economic growth in the second half of 2018 and 2019 than in the first half of 2018 as a result of global uncertainties including US-China trade disputes; the 2018-2019 economic growth will mainly be driven by domestic demand. The CBC forecasts Taiwan's economy to expand by 2.73% this year and 2.48% next year. Growth forecasts by major institutions range between 2.30% and 2.74% for 2018 and between 2.23% and 2.55% for 2019.

For the first eight months of the year, major Asian economies post continued export growth thanks to moderate global economic expansion and rising raw material prices. The total value of Taiwan's exports also increased by 8.9% in the same period. By product, electronics parts and components and base metal were the main contributors to export growth. By market, exports to Japan grew the most, followed by China. Looking ahead, despite lingering international uncertainties, greater demand for emerging technology applications and elevated raw material prices should support the prospect of steady export growth in this and next year.

Private consumption is expected to gain traction as listed companies distributed record high cash dividends and many companies granted pay raises. However, given subdued consumer confidence and the impact of pension reforms on the willingness to spend, private consumption is expected to register mild growth in 2018 and 2019.

In terms of private investment, higher capital outlay in the semiconductor industry and further increases in construction investment are expected to fuel growth in private investment this year, but growth next year will turn lower owing to slightly softer export growth.

Labor market conditions are stable. Amid the mild economic expansion, the year-on-year unemployment rate continued to trend lower and the number of employed persons increased. As employers began raising pay, the average earnings and regular earnings increased moderately.

(2) Financial conditions

Taiwan has seen ample market liquidity and stable nominal short- and long-term rates. The real interest rate would slip slightly deeper in the negative territory this year owing to a higher CPI annual growth rate, but it is expected to move upwards next year as the CPI rate decreases. Compared to an array of major economies, Taiwan's real interest rate stands at a relatively moderate level.

In terms of monetary growth, the M2 annual growth rate averaged 3.66% for the first eight months of the year, within the CBC's target range. In terms of bank credit, bank lending to the private sector recorded stable growth amid the steady domestic economic expansion. Bank loans and investments posted an average annual growth rate of 5.23% in the January-August period. The above readings broadly indicated that credit supply was sufficient to support real economic activity and inflationary pressures were muted. In recent months, the NT dollar real effective exchange rate climbed up while the domestic stock market fluctuated in an uptrend and market rates held steady. Overall financial conditions were accommodative.

Looking ahead, monetary growth could be disrupted if international uncertainties, including an uneven pace of policy normalization by major central banks, an escalation of US-China trade friction, and heightened economic and financial risks from emerging markets, undermine stability of the global economy and financial markets. Meanwhile, bank loans and investments are expected to increase steadily as sustained economic expansion will buttress the demand for funds.

(3) Price Trends

In the period since July, international oil prices were first dented by intensifying US-China trade discord and the Turkish currency crisis but then rebounded to close to an all-year high on the back of Qatar's pledge to invest in Turkey, reduced Iranian oil exports, terrorist attacks on Libyan oil facility, and decreases in US crude oil output and inventory. International institutions also revised up their 2018 oil price forecasts to levels that would outpace those in 2017. International grain prices were relatively steady in recent months.

On the other hand, domestic prices have posted a mild uptrend. For the first eight months of the year, the CPI annual growth rate averaged 1.64% owing to rises in cigarette, oil, and vegetable prices while the Core CPI annual growth rate averaged 1.44% for the same period. Despite a recent price upsurge caused by crop damage from torrential rain and high oil prices, the CPI is expected to rise at a slower pace owing to lower telecommunication rates and the receding effect of the cigarette tax hike. In assessing future inflation, the output gap is seen to remain negative but with a narrower difference that reflects solid growth in domestic demand, suggesting that inflationary pressures will be moderate.

The median of domestic institutions' CPI forecasts is 1.56% for this year and 1.10% for next year, and that of international institutions' forecasts is 1.55% and 1.35% for 2018 and 2019, respectively. Based on the CBC's projections, Taiwan's CPI annual growth rate will register 1.50% this year (1.10% if excluding the cigarette tax hike effect) and the core CPI annual growth rate will register 1.28%. The rates are forecast to drop to 1.05% and 1.00% next year, respectively. The inflation outlook is mild.

As for the primary factors behind future price trends, sources of upside pressures include (1) prolonged heavy rainfall could inflict agricultural losses and push up prices; (2) international oil prices might hover around high levels, buoying up import prices; (3) wage increases have been somewhat faster this year; (4) upward pressures for electricity tariffs, fuel and gas fee rises, as well as price hike for some daily necessities, could combine to drive up inflation expectations. On the other hand, sources of downside pressures include further reductions in telecommunication rates and a persistent negative output gap.

3. Considerations for Monetary Policy

(1) Domestic inflationary pressures are subdued; inflation outlook for 2018 is stable given a narrowing but still negative output gap for this and next year.

The annual CPI growth rate averaged 1.64% for the first eight months of the year and is to register 1.50% based on the CBC's projection for the year as a whole, with a forecast of 1.10% if excluding the cigarette tax hike effect. For the year of 2019, the CBC expects inflation to ease to 1.05%, in view that international forecasters predicts a less strong rise in oil prices compared to this year's, domestic demand is mild, and the deferred effect from the cigarette tax hike will dissipate.

(2) Many uncertainties exist over the global economic outlook; the domestic growth momentum will be moderate for the second half of 2018 and the year of 2019.

Signs of US-China trade friction escalating, continued US monetary policy normalization, and currency depreciation and economic and financial stress in some emerging markets would add to global financial market turbulence, clouding the global economic outlook and consequently restraining domestic growth momentum going forward. In this view, the CBC thinks the economic expansion will moderate to a pace of 2.30% in the second half of this year. The projected GDP growth rate is a mild 2.73% in 2018 and 2.48% in 2019.

(3) Taiwan's nominal and real interest rates stand at appropriate, moderate levels compared to those of major economies.

II. Proposition and Decision about Monetary Policy

1. Policy Proposition: To keep the discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral unchanged at 1.375%,

1.75%, and 3.625%, respectively.

2. All board members approved of keeping policy rates unchanged. The discussions are summarized as follows.

With respect to international economic conditions, several Board Directors and Supervisors expressed concern about the effect of international uncertainties including US-China trade conflicts on the domestic growth prospects. If China, the world's second largest economy, is rattled by the economic ramifications thereof, the shock would be felt across the supply chain. Although Taiwan might benefit from order transfers or supply chain reshoring amid the US-China tariff crossfire, there is also the possibility of business relocation to other countries as a result of strategic supply-chain adjustments. A balanced assessment is warranted. Furthermore, as companies were eager to place orders ahead of the tariff imposition and there tends to be a time lag before the effect shows, the actual impact on Taiwan's external trade has yet to manifest. However, it seems that US-China trade friction would drag on, potentially with more tariffs on the horizon, and that the global trade order awaits restoration. It is important to continue monitoring and assessing the effects from these ongoing developments, considering that the domestic economic outlook could slip below expectation if negative trade spillovers dampen a soft expansion.

One Board Director also noted that a protracted US-China trade conflict could hurt China and other supply chain economies but further pointed out some additional factors that might send the global economy into a recession cycle. For example, with the US economy at its peak, it could enter recession once the fiscal stimulus effect diminishes. Another case in point is US rate hikes. Many companies around the world have taken advantage of low interest rates in previous years to raise capital. More Fed rate hikes next year when a huge pile of corporate debt in the US and other countries reach maturity could batter global financial stability.

In discussions about domestic price trends, one Board Director observed that Taiwan's inflation is forecast by the CBC to rise by just 1.05% for the year of 2019 as the cigarette tax hike effect dissipates, a pace close to the 2018 forecast of 1.1% when excluding the same effect. This suggested that inflation remains mild. One Board Supervisor pointed out that oil prices is a major uncertainty over the inflation outlook. Recently, oil prices trended upwards as crude oil supply came under strain after the OPEC decided not to lift output and exports from Iran and

Venezuela dropped. However, the inflation outlook for 2018 and 2019 remains mild, given the following constraints on oil price hikes: (1) crude and refined oil stock both were on the rise for the past three weeks towards their five-year average levels, reflecting the balance of supply and demand; (2) net long positions in crude oil futures trended downwards in the past three weeks, helping to cap oil prices; (3) weaker demand for oil as US-China trade disputes depress the global economy would also hold down oil prices rises. Another Board Director said that although pressures on inflation are expected to ease, import prices could still lead to strains on domestic inflation. In this view, it would be important to explore the mechanism in which import prices feed through to domestic prices.

In respect of the interest rate decision, several Board Directors expressed approval of a rate hold, citing the following factors among others: inflationary pressures were subdued, inflation expectations are mild, and the inflation rate is projected to decline next year; the output gap remained negative, the momentum for economic growth was mild, and the economy is forecast to expand at a slower pace next year; Taiwan's real interest rate stood at a relatively moderate level compared to other economies, and, though currently in negative territory, will move up next year. In particular, one Board Director highlighted the remarkable uncertainty surrounding the US-China trade clash, noting that jumping into a rate hike decision could bring about adverse implications for Taiwan's economy. It was true that some economies have begun raising their policy rates. However, as demonstrated by how long the US Fed waited and pondered before it initiated the first post-crisis rate hike in December 2015, such a decision should be supported by strong certainty about the macroeconomic conditions or prompted by necessity and urgency.

Several Board Directors also agreed that keeping the policy rate unchanged is the appropriate and robust action. However, they also noted that, as Taiwan maintains the current rate level, the spread between US-Taiwan interest rates will widen amid the Fed's rate hike cycle. Furthermore, because US-China trade friction would not only have implications for external trade but could also prompt many companies to begin strategic relocation back to Taiwan, it is thus important to carefully monitor the effect of capital repatriation on the NT dollar exchange rate and take this into consideration in interest rate policy-making. On a related note, one Board Director explained that, instead of a widening Taiwan-US money market spread, two major factors contributed to a greater foreign capital outflow so far this

year. First, foreign investors pulled out of emerging Asia (including Taiwan) recently; in the meantime, the 10-year US government bond yield continued to hit new highs, causing the stock-bond spread (the TWSE dividend yield versus the US Treasury yield) to shrink and a stock market correction was looming in Taiwan after significant run-up in share prices as well as selling pressures on concern of international uncertainties. Second, foreign investors, after receiving stock and cash dividends, posted a larger amount of outward remittances as TWSE-listed companies paid more dividends this year than last year.

Multiple Board Directors and Supervisors agreed with the rationale for a rate hold and contributed to the discussion about future interest rate policy deliberation. One Board Director stated there seemed to be no pressing need for an immediate rate hike; in the future, however, if the question arises as to when to raise the policy rate, the Board should consider a wider range of macroeconomic and financial factors in addition to inflationary pressures and the output gap, so as to provide a stronger foundation for any interest rate changes.

Another Board Director stressed the role of policy rates given that Taiwan's nominal rates have stayed low for an extended time, citing the following observations: (1) the domestic economy has seen mild expansion and stable inflation since the rate cut in June 2016 while international uncertainties lingered, a situation expected to continue several years or at least until the end of 2019; (2) several financial indicators, such as recent declines in the M2 annual growth rate and a gradual downtrend of the CBC's Financial Conditions Index after peaking in January, suggested domestic liquidity tightened compared to the beginning of this year; (3) Taiwan's real interest rate, currently in negative territory, is expected to turn upwards next year as inflation eases, but its level in comparison with other economies would not stand around the middle range if some of those economies raise policy rates as expected.

Another Board Director added that, since the previous Board meeting, there have been no drastic changes to the general environment besides another quarter-point rate hike by the Fed, warranting a wait-and-see approach while holding the policy rate unchanged. In the upcoming quarter or the next six months, the Board may need to be prepared for careful deliberation on whether to adjust the policy rate. This director presented three viewpoints. First, a prolonged low interest rate is not entirely positive to the longer-term economic development considering the interplay between interest rates and prices. Second, it is advisable to monitor and assess policy rate paths of major economies. On the one hand, to navigate safely in the sea of international economic and financial developments, it seemed proper for a small boat like Taiwan to hold position in monetary policy when aircraft carrier-sized economies such as the euro area, Japan, and China kept their policy rates unchanged. However, the ECB and the BoJ had their respective country-specific rationales and the PBoC, as well as the Bank of Korea, already had higher rates than Taiwan's. Moreover, besides the US Fed, the Bank of England also raised the policy rate just recently. Third, the monthly figures of the CPI annual growth rate registered above 1.5%, albeit below 2%, for eight consecutive months so far this year, a trend rarely seen in many years. It is thus important to closely monitor inflation and changes in the real interest rate. Another Board Director noted that, in response to the global financial crisis, major economies such as the US, the euro area, and Japan adopted quantitative easing (QE) or quantitative and qualitative easing (QE) and zero or negative nominal rate policy; in that sense, monetary policy normalization refers to exiting QE or QQE and taking the nominal policy rates back to the positive territory. Since Taiwan did not implement these unconventional instruments, there was no need for Taiwan to "normalize" its monetary policy.

Another Board Director also favored a rate hold, adding that a rate decision that would surprise the market seemed unnecessary. Nevertheless, because the interest rate has stayed low for quite a while, the CBC may try to communicate to the public that there could be rate adjustments perhaps in the foreseeable future. The CBC might also need to communicate to the market that, in addition to the business cycle outlook, inflation, and the output gap, a broad range of factors, such as financial conditions, the effect of import prices on inflation expectations, etc., are taken into account during monetary policy decision-making. In this way, the general public would gradually become more aware of how the CBC's policy is based on a variety of considerations, thereby affecting the public's monetary policy expectation.

One Board Supervisor pointed out that rate change deliberation involves many aspects, especially inflation, economic growth, and exchange rates; moreover, exchange rates movements and interest rate policy also have implications for economic growth. At the moment, though, a rate hike would immediately impact investment and financial markets (domestic stock and foreign exchange markets). The impact could be amplified if the rate hike is perceived to be in contrast to market expectation given the current economic situation and a softer economic outlook. In this view, a rate hold would be appropriate.

Several Board Directors suggested that longer-term factors be incorporated into policy rate decision-making. Monetary policy at present considered more near-term assessments in this and next year, instead of three or four years ahead, but it should also take into consideration potential risks facing the global economy in several years to come. In other words, the Board should also give prudent consideration to long-term monetary policy direction as well. Rate adjustments could also be put forward for discussion to allow sufficient space for monetary policy maneuver in case the global economy slumps into a recession cycle and impact Taiwan. Furthermore, other longer-term factors could be included. For example, capital repatriation by Taiwanese firms could disturb financial stability, as well as the developments and effects of US-China trade friction. At the moment, stable interest rates might be conducive to attracting those funds back home as some Taiwanese firms were rethinking strategic relocation of production bases. However, protracted low rates here at home also meant challenges to help put these funds into more efficient use.

Several Board Directors noted that currency monetary policy-making has already incorporated a broad scope of variables. One Board Director pointed out that, aside from inflation and economic growth, monetary policymakers also look at the real interest rate, money market liquidity conditions, inflation expectations, etc. Citing the US Fed as an example, this director added that the US interest rate policy is in general more preemptive, in that the Fed not only considers current inflation and the degree of ease in funding but also adjusts rates as a precaution if warranted by assessments of expectations about inflation and market liquidity. Propositions about monetary policy should therefore derive from forward-looking expectations, and greater monetary policy flexibility and responsiveness require more thorough and in-depth analysis and projections. Perhaps future rate adjustments do not have to follow previous patterns and approaches. Another Board Director also noted that the Board takes more factors into consideration than just inflation, inflation outlook and the output gap, such as M2 growth trends, bank credit growth rates, financial condition indicators, etc. Nonetheless, market expectations about the CBC's policy rate decision are mainly informed by current inflation trends and future inflation outlook, which are closely related to the output gap.

Based on the assessment of domestic and international economic and financial

conditions and prospects, the Board Directors all expressed approval for keeping policy rates unchanged.

3. Monetary Policy Decision: The Board Directors reached a unanimous vote to keep the discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral unchanged at 1.375%, 1.75%, and 3.625%, respectively.

Voting for the proposition:

Chin-long Yang, Jain-Rong Su, Jong-chin Shen, Tzung-ta Yen, Nan-kuang Chen, Ming-yih Liang, Tsung-hsien Lin (voting by proxy), Chen-chia Lee, Chung-dar Lei, Jin-lung Lin, Mei-lie Chu, Chao-hsi Huang, Bih-jane Liu, Shiu-sheng Chen, Hsin-Hong Kang

Voting against the proposition: None.

III. The Press Release

The Board Directors and Supervisors approved unanimously to issue the following press release in the post-meeting press conference, together with the Supplementary Materials for the Post-Monetary Policy Meeting Press Conference prepared by the CBC. <Website : http://www.cbc.gov.tw>

Monetary Policy Decision of the Board Meeting

I. Global economic and financial conditions

Since the Board last met in late June this year, the global economy has witnessed continuous growth. Nevertheless, signs of escalation in trade friction between the US and China and further gradual normalization of the US monetary policy, combined with currency depreciation and deteriorating economic and financial conditions in several emerging market economies such as Turkey, have heightened volatility in global financial markets and affected the global economic outlook.

International institutions widely expect the global economy to have a weaker performance in the second half of the year than the first half and major economies to post slower growth in 2019. Nevertheless, currency devaluation in many economies induced by a strengthening US dollar and energy price rises have pushed up global inflation expectations.

- II. Domestic economic and financial conditions
- 1. Since mid-2018, affected by global economic uncertainties such as US-China trade conflicts and a higher comparison base, export growth has slowed slightly. On the other hand, domestic demand has remained the key driving force of economic growth. Of the components, stable employment and higher wages have contributed to moderate growth in private consumption. Capital equipment imports have expanded, private investment has picked up, and public investment has also continued to rise. The CBC forecasts Taiwan's economy to grow by 2.30% for the second half of the year and 2.73% for the entire year.

Looking ahead to 2019, the government will increase public investment, while private consumption is likely to grow at a steady pace. However, deceleration in global economic and trade growth may lead exports and private investment to register slightly weaker growth next year than this year. As a result, the CBC projects the domestic economy to advance by 2.48% in 2019. Domestic demand will continue to serve as the primary driver of economic growth.

2. For the first eight months of the year, the average CPI annual growth rate was 1.64%, while core inflation (excluding vegetables, fruit, and energy items) averaged 1.44%, reflecting a mild price uptrend. Crop damage caused by recent torrential rain and elevated oil prices have driven short-term prices upwards, yet inflation is likely to moderate as the effect of the cigarette tax hike is expected to significantly fade away in the fourth quarter. The CBC projects the annual growth rates of CPI and core CPI for 2018 to be 1.50% and 1.28%, respectively.

In terms of next year, as global oil prices are forecast by international institutions to rise less sharply than this year, along with moderate domestic demand and the dissipation of effects from mid-2017's cigarette tax hike, CPI and core CPI are projected by the CBC to increase by 1.05% and 1.00% year on year in 2019, both slower than 2018. The outlook for inflation is mild (Table 1 in Appendix).

- 3. In line with continued domestic economic growth and mild inflation, the CBC has managed market liquidity with flexibility, and banks' reserves have remained at an appropriate level. For the first eight months of the year, the annual growth rate of bank loans and investments averaged 5.23%, representing steady growth. In the meantime, the monetary aggregate M2 expanded at an annual pace of 3.66%, within the target range. Overall, financial conditions remained accommodative with ample market liquidity and stable short- and long-term market rates.
- III. Interest rate decision

Domestic inflationary pressures are mild, and the output gap, though expected to narrow further this and next year, remains negative, indicating a stable inflation outlook. Moreover, as the many uncertainties over the global economic outlook could restrain the strength of the economic pickup from the second half of this year into next year, the growth momentum for Taiwan's economy is still moderate. Meanwhile, Taiwan's nominal and real interest rates register around the middle range among a host of economies (Figure 1 and Table 2 in Appendix). Based on the above assessments, the Board judged that a policy rate hold and a continued accommodative monetary policy stance will help foster price and financial stability and sustain economic growth.

The Board reached the following decision unanimously at the Meeting today:

The discount rate, the rate on accommodations with collateral, and the

rate on accommodations without collateral are kept unchanged at 1.375%, 1.75%, and 3.625%, respectively.

The CBC will continue monitoring domestic economic and financial conditions and pay close attention to any possible impacts on Taiwan's economic and trade activities and financial market stability resulting from global trade disputes, monetary policy normalization in major economies (except for the US Fed on track for more rate hikes, central banks in the euro area, Japan, and China maintain an accommodative stance), and financial risks facing emerging market economies. We will undertake appropriate and timely monetary policy actions as warranted to fulfill the central bank's statutory mandate.

- IV. To ensure financial stability, the CBC has kept a watchful eye on financial institutions' management of risks associated with real estate lending. In addition, since the mortgage debt-to-income ratio (monthly mortgage repayment as a percentage of monthly disposable income) of the household sector has exceeded 30%, borrowers are advised to be mindful of increased debt-servicing burdens after the expiration of grace periods and risks stemming from future interest rate changes.
- V. Since the previous Board Meeting, exchange rate volatility has intensified for most emerging market economies. The NT dollar has also seen sharper swings in its exchange rate vis-à-vis the US dollar, but not as volatile as other major currencies.

In principle, the NT dollar exchange rate is determined by market forces. If irregular factors (such as massive inflows or outflows of short-term capital) lead to excess volatility and disorderly movements in the NT dollar exchange rate with adverse implications for economic and financial stability, the CBC will, in accordance with its mandate, step in to maintain an orderly foreign exchange market.

Appendix

				Unit: %	
г	Forecast institutions	Inflation	Inflation	n outlook	
1	Forecast institutions	JanAug. 2018	2018 (f)	2019 (f)	
Domestic institutions	CBC (2018/9/6)	1.64 (CPI) 1.44 (Core CPI**)	1.50* (CPI) 1.28 (Core CPI**)	1.05 (CPI) 1.00 (Core CPI**)	<u>Median:</u>
	DGBAS (2018/8/17)		1.52	0.93	1.56% (2018)
	Yuanta-Polaris (2018/9/26)		1.59	1.15	1.10% (2019) (domestic institutions) <u>Median:</u> 1.55% (2018) 1.35% (2019) (foreign institutions)
	CIER (2018/7/18)		1.65	1.43	
Foreign institutions	ADB (2018/9/26)		1.40	1.30	
	Goldman Sachs (2018/9/25)		1.40	0.90	
	Credit Suisse (2018/9/20)		1.40	1.60	
	BoA Merrill Lynch (2018/9/25)		1.50	1.20	
	Nomura (2018/9/21)		1.50	1.30	
	Barclays Capital (2018/9/21)		1.50	1.50	
	UBS (2018/9/24)		1.55	1.35	
	IHS Markit (2018/9/18)		1.58	1.43	
	HSBC (2018/9/25)		1.60	1.40	
	Citi (2018/9/14)		1.60	1.60	
	Morgan Stanley (2018/9/12)		1.60	1.10	
	EIU (2018/9/17)		1.70	1.40	
	Deutsche Bank (2018/9/7)		1.70	1.20	

Table 1 Taiwan's Inflation and Inflation Outlook

* The CBC's forecast for 2018 CPI inflation is 1.50%, with a lower projection of 1.10% if excluding the cigarette tax hike effect.

**Excluding vegetables, fruit, and energy.

% 4 3.06 3.19 U.S. 3.00 2.96 2.83 3 2.41 2.34 South 2.22 Korea 1.93 1.93 2 1.42 Taiwan 1.65 1.30 1.14Germany 0.89 0.75 1 0.91 Japan 0.53 1.07 0.51 0.68 Switzerland 0.16 0.18 0.13 -0.04 -0.11 0 -0.06 > 0.01 -0:06 -0.50 0.06 -0.21 -0.42 -0.36 -0.75 -0.71 -1 overnight 1-year 2-year 5-year 10-year 30-year deposit call loan bond bond bond bond rate rate yield yield yield yield

Nominal Interest Rates of Selected Economies (2018/9/27)

Figure 1

Sources: Bloomberg; CBC; Taipei Exchange; Bank of Japan; US Federal Reserve; US Treasury Department; Swiss National Bank.

Table 2

Real Interest Rates of Selected Economies

			Unit: %	
	(1)	(2)	(3)=(1)-(2)	
Economies	1-year time deposit rate*	CPI annual growth rate**	Real interest rate	
	(As of 2018/9/27)	(2018 forecast)		
Malaysia	2.950	1.04	1.910	
Indonesia	4.750	3.21	1.540	
United States	3.000	2.53	0.470	
Thailand	1.500	1.30	0.200	
South Korea	1.300	1.49	-0.190	
Singapore	0.400	0.77	-0.370	
Taiwan	1.065	1.50	-0.435	
China	1.500	2.21	-0.710	
Switzerland	0.160	1.01	-0.850	
Japan	0.011	0.93	-0.919	
United Kingdom	1.080	2.55	-1.470	
Euro Area	-0.210	1.75	-1.960	
Hong Kong	0.050	2.33	-2.280	
The Philippines	0.500	5.17	-4.670	

Unit: %

* 1-year time deposit floating rate of the five major domestic banks.

** IHS Markit projections, as of Sep. 18, 2018. Forecast for Taiwan's CPI annual growth rate is the CBC's projection.