Minutes of the Monetary Policy Meeting

March 21, 2019

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

Minutes¹ of the Joint Meeting of the Board of Directors and the Board of Supervisors on March 21, 2019

Date and Time: March 21, 2019, at 2:00 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, Tzung-ta Yen, Nan-kuang Chen, Ming-yih Liang

Directors: Chi-chung Chen, Chen-chia Lee, Jin-lung Lin, Mei-lie Chu, Chao-hsi Huang,

Bih-jane Liu, Shiu-sheng Chen, Hsin-hong Kang

Excused: Jong-chin Shen (Executive Director, appointing Tzung-ta Yen as proxy),

Chung-dar Lei (Director, appointing Nan-kuang Chen as proxy)

Chairman, Board of Supervisors: Tzer-ming Chu

Supervisors: Ching-fan Chung, Sheng-yao Lin, Tien-wang Tsaur, Kuei-hui Cheng

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

Chih-cheng Hu, Secretary, Board of Directors

Yu-ming Chang, Secretary, Board of Supervisors

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 the Board last convened in December 2018, a number of major concerns, including lingering uncertainty over the US trade policy, a slowing China economy, and possible extension of Brexit deadline, had led major international forecasting institutions to revise down their projections for the global economic growth and to predict a slower pace this year than last. In the meantime, trade tension among major economies had weighed on global trade growth momentum. As a result, world trade volume was forecast by international institutions to rise slower this year than last year.

Forecasts for this year's growth in major economies were also revised down by international institutions on account of cooling economic and trade activity across the world; for Taiwan's primary trading partners, their growth this year would likely be slower than last year. Meanwhile, international institutions expected that global inflation and inflation in most economies would be weaker than last year, citing a sluggish global economic prospect and a projected downtrend in international oil prices. Overall, the global inflation outlook was expected to be mild for the year.

In terms of monetary policy developments overseas, central banks in advanced economies had kept policy rates unchanged in the year so far, albeit showing a more dovish turn in general. The US Federal Reserve (Fed) decided to hold the policy rate steady on March 20, along with a plan to end the balance sheet runoff in September. The European Central Bank (ECB) said it would begin a fresh round of targeted longer-term refinancing operations (TLTRO-III) in September to stimulate bank lending. The Bank of Japan (BoJ) also made no change in its easy policy stance. Despite a rate hold, the People's Bank of China cut reserve requirements for all banks to keep credit conditions accommodative. Meanwhile, other economies in Asia either maintained or reduced their policy rates.

In the international financial markets, yields on 10-year government bonds of major

economies fell on account of a dovish shift by major central banks and a dimmer global economic outlook. Global stock markets bounced back from the low in the fourth quarter of 2018, on the back of the aforementioned dovish turn, positive developments in US-China trade talks, and a marked easing in US financial squeeze.

Key risks to the global economic outlook include the following.

- (1) Persistently high uncertainty over major economies' trade policy: US-China trade talks are about to move towards conclusion with the final deal yet to be signed; the US will also open new battle fronts in trade with the European Union and Japan, where automobile tariffs, if imposed by the US on the EU and Japan, could trigger renewed tension.
- (2) Sharper-than-expected slowdown in China's economy: as the negative impact of US tariffs began to show, China could witness subdued growth in investment, consumption, and exports; spillovers from a sharper slowdown or financial instability in China could batter global economic growth and commodity markets.
- (3) Brexit uncertainty and geopolitical tension: still a great deal of uncertainty surrounding Brexit and a potential oil supply disruption from Venezuela's political crisis could incur additional risks to the global economic prospects.

2. Domestic Economic and Financial Conditions

(1) Economic situation

In January, though the domestic business climate monitor improved from a blue light to a yellow-blue light, both leading and coincident indicators continued sliding downwards, reflecting a domestic economic downturn. The manufacturing inventory ratio climbed higher in January, pointing to a higher risk of economic contraction. Moreover, the ratio rose further thereafter, a sign that economic growth could weaken in the future.

With the global economy cooling, domestic exports falling short of expectation, and economic growth losing steam, the Bank now projected the annual GDP growth rate to be 2.13% in 2019, a downward revision of 0.20 percentage points from its December 2018 forecast.

In terms of external demand, the global economic slowdown and US-China trade friction combined to drag export growth in major Asian economies, including Taiwan, into negative territory for the Jan.-Feb. period. Taiwan's exports contracted by 4.1% in value terms, with export prices falling by 4.5% and export volume rising by a modest 0.4%. By product groups, most of the leading groups registered negative growth, except for information, communications & audio-video products, and electrical machinery products. By destination market, the decline in exports to China had the greatest impact. In view of expected sluggishness in global economic and trade growth, as well as a flattening in consumer expenditures on mobile devices, the Bank forecast Taiwan's real export growth to moderate this year.

With respect to domestic demand, investment in machinery equipment and R&D would continue expanding. Meanwhile, the government rolled out measures to encourage more overseas Taiwanese businesses to invest back at home, along with the ongoing efforts under the Forward-looking Infrastructure Development Program. These would combine to bolster investment by public and private sectors alike. Therefore, real growth in private investment was projected by the Bank to gain stronger momentum this year.

In terms of private consumption, labor market conditions were stable, the unemployment rate edged down further, and the number of employed persons increased steadily. Furthermore, consumer spending is likely to be boosted by several favorable factors, including stronger prospects for pay raises as firms garnered better profits last year and incentives for shopping with government subsidies on energy-efficient home appliances and domestic tourism. However, recent signs of subdued growth momentum could dampen the willingness for hiring in the coming months. Overall, the Bank expected this year's real growth in private consumption to be mild.

With public and private investment expected to grow faster than last year and private consumption to expand steadily, domestic demand would continue to be the main driving force behind this year's economic growth. The Bank judged that a positive impetus from domestic demand and a lower base effect would enable Taiwan's pace of economic expansion to pick up quarter by quarter in 2019, albeit not as fast as 2018 on a yearly basis. Forecasts by major institutions for this year's economic growth were also lower than last year, ranging between 2.00% and 2.27%.

(2) Financial conditions

Earlier in the year, as demand for funds built up ahead of the Lunar New Year holidays,

the Bank managed market liquidity in response through open market operations. Excess reserves in the banking sector were kept at a higher level, increasing from over NT\$40 billion of the previous quarter to a level higher than NT\$50 billion on average for the Jan.-Feb. period. As for short-term market rates, notwithstanding a higher demand for funds before the Lunar New Year holidays, market liquidity was still ample thanks to net foreign capital inflows. As of late, with currency in circulation flowing back to the banking system, short-term market rates dropped slightly. Compared to several key economies, Taiwan's real interest rate (adjusted for inflation) stood around the middle of the range.

Looking at the money supply, for the first two months of the year, M2 growth averaged at 3.03%, within the Bank's target range. The annual growth rate of bank loans and investments averaged 5.70% for the same period as bank lending to private enterprises continued increasing. These data suggested that market liquidity was sufficient to support real economic activity and that inflationary pressures were muted.

For the year as a whole, it is expected that bank loans and investments will post mild growth. In spite of projections for slower domestic economic growth and multiple uncertainties over the economic outlook, government actions, including those under the Forward-looking Infrastructure Development Program and measures to encourage returning investment by overseas Taiwanese firms, are likely to fuel growth in bank credit.

(3) Price trends

Since the start of the year, international oil prices recovered ground from previous lows. However, in addition to a slowing global economy, the continuous rise in US oil production would probably balance out the effect of production cuts by the Organization of the Petroleum Exporting Countries. Therefore, it was expected that international oil prices would register an average level lower than the previous year. As for global grain prices, there has been a downward swing since February.

Against this backdrop of easing price trends for international commodities, domestic inflation was moderate. With vegetable prices falling on the back of stable weather conditions, communications rates decreasing, and consumer electronics products offered at promotional prices, the annual growth rates of CPI and core CPI stayed low for the first two months of the year. In terms of the output gap, a key factor in gauging inflationary pressures, the negative gap is expected to widen marginally owing to domestic economic moderation

this year.

For this year, the Bank forecast the CPI and core CPI annual growth rates to be 0.91% and 0.78%, respectively. The forecast was based on expectations of abating pressures of imported inflation owing to lower-than-2018 international oil prices, a hold on domestic electricity price hikes, mild domestic demand, and the receding of the tobacco tax hike effect. The medians of domestic and international institutions' 2019 inflation forecasts are 0.91% and 0.90%, respectively.

Looking ahead, key determinants of future price trends include upside pressures from the following: last year's price decline for fruit and vegetables owing to abundant supply is likely to result in a steeper increase in food prices this year; the base wage hike this year would drive upwards employee pay and prices for away-from-home food; coach bus fares would be raised from March onwards. On the other hand, downside price pressures could come from a projected downtrend in international oil prices compared to last year, further reductions in communications rates, and a still negative output gap.

3. Considerations for Monetary Policy

- (1) International institutions recently revised down their forecasts for global economic and trade growth this year. Major economies would be facing slower economic growth. There remain many uncertainties over international economic, trade, and financial prospects, including the lack of clarity in future developments of US trade policy towards China, Europe, and Japan, China's economic downturn, and possible extension of Brexit deadline.
- (2) Inflationary pressures would be mild, given a slight moderation in the domestic economy and still below-potential output. For the year of 2019, the Bank projected the economy to expand mildly by 2.13% and inflation to rise 0.91%.
- (3) In recent months, major central banks kept policy rates unchanged while assuming more accommodative stances. Furthermore, Taiwan's nominal and real interest rates were still around the middle range compared to selected economies.

II. Proposition and Decision about Monetary Policy

 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. Board members reached a unanimous vote for policy rates to remain unchanged. The discussions are summarized as follows.

(1) Discussion on domestic and international economic and financial conditions

In respect of the external environment, one board director noted that since the end of February international forecasting institutions and investment banks have actually adjusted their views on the global economic outlook given the Fed's rate hike pause and a milder-than-expected slowdown in China thanks to Beijing's massive stimulus measures. In fact, we have begun to see since mid-March that some foreign analysts said they expected global economic prospects to brighten in the second quarter or the latter half of the year. In light of these shifts, it remains to be seen whether a deeper domestic downturn would materialize as previously projected.

Another board director stated that the expectation of a slowdown in not only world trade but also global investment this year suggested the corporate sector was worried about future business prospects. A series of uncertainties have sowed the seeds of this concern, including the US-China trade conflicts, which are not merely some transitory events but represent fundamentally a contest for technological dominance. In addition, if the Brexit deadline were to be extended till June, the concomitant effects would carry on for an even longer period. The influence on the global and domestic economy arising therefrom also needs to be closely monitored.

In respect of domestic economic conditions, several board directors discussed the issue of domestic investment growth momentum. One board director pointed out that, given the scale of Taiwan's investment in and merchanting trade (particularly intermediate goods trade) with China over the years since 2000, we are highly integrated into the global value chain. As the US-China trade friction could shake up global supply chains along the way, opportunities might also rise for Taiwan. In the past year, the government not only held meetings but also launched an action plan to encourage overseas Taiwanese businesses to invest at home. These efforts are expected to spur real investment by the returning Taiwanese firms, especially in the area of start-ups. In turn, such real investment could help address Taiwan's long-running excess saving, raise productivity, and shore up wages, which would all be conducive to Taiwan's economic growth.

Another board director noted that projections for investment supported the view that

Taiwan's economic growth in the second half of the year would outpace that in the first half. For instance, private investment is forecast to expand faster in the coming three quarters (from the second quarter onwards) than last year, and the government's Forward-looking Infrastructure Development Program is also expected to propel growth in public and private investment this year. Nonetheless, an export-oriented economy like Taiwan should also consider potential headwinds in the broader environment, such as a global investment slowdown, and take careful counteractions as needed.

One supervisor gave an opinion on domestic economic growth and noted that although falling export prices (in NT dollars) – deteriorating terms of trade – led to a weak performance in Taiwan's exports, data based on real export volume showed modest growth in the Jan.-Feb. period. This supervisor also pointed out that domestic economic growth was not as slow as perceived by the public, let alone recessionary. One of the most popular definitions of a recession is two consecutive quarters of decline in the seasonally-adjusted annual rate (SAAR) of GDP growth. In contrast, Taiwan's economy is forecast by multiple domestic institutions to register positive, close to 2% SAARs in all the quarters this year.

With regard to domestic prices, one board director stated that inflation was quite low in the first quarter of 2019 and was expected to stay at a lower level for the year as a whole. Another board director noted that, compared to last year's significant increase, crop production per unit of harvested area is expected to decrease this year. Combined with the growth-dampening effect of a warm winter at the start of the year, food prices are likely to pick up. However, this would only have a limited influence on the overall inflation rate.

(2) Discussion on interest rate decision

All board directors favored no change to the current levels of policy rates, based mainly on the assessment of domestic economic moderation. One board director gave the reason that, with economic momentum weaker than last year, it is warranted to continue with the accommodative monetary policy in order to support funding needs, particularly those of small- and medium-sized enterprises. Another board director stated that a widened output gap, which indicated deficient growth momentum and subdued inflation, and the likely year-long pause of rate hikes by the Fed gave little ground for Taiwan to raise policy rates.

One board director remarked that while economies around the world, including Taiwan, were experiencing some slowdown and uncertainties abounded for the global economic

outlook, caution would be in order and, therefore, a 'wait and see' approach to the domestic policy rates would be warranted. Another board director mentioned that the Bank's previous rate cut cycle spanned about one year, namely from the third quarter of 2015 to the second quarter of 2016, with four consecutive reductions in response to domestic economic doldrums, even negative growth. By contrast, domestic institutions already pointed out that, despite a slowdown in general, there is a likelihood for the economy to pick up gradually from quarter to quarter this year, underpinning the rate hold proposition. Furthermore, many economies had kept rates unchanged or continued with policy easing since the fourth quarter last year as they experienced slowdown in varying degrees. This board director highlighted that, in accordance with the Central Bank of the R.O.C. (Taiwan) Act, the last operational objective "to foster economic development" is to be pursued "within the scope of" the other objectives, such as financial stability and sound banking operations, whereas the general public sometimes give too much weight to the Bank's role in economic growth.

Several board directors expressed support for a rate hold and commented on future deliberations about monetary policy. One board director noted that holding rates steady would suffice in the short term given the relative calmness in the current international economic and financial environment. Nevertheless, protracted low interest rates hamper the efficiency of capital allocation. It is thus important to explore potential structural impacts of sustained monetary accommodation on the economy as a whole and whether the Bank has enough wiggle room if a sharper financial recession strikes. Another board director stated that developments since the previous Board Meeting, including policy rate holds and a dovish shift in major economies, a negative domestic output gap, the prospect of gradual improvement of domestic economic growth within the year, and muted inflationary pressures at home, suggested no need to reduce policy rates for the time being. However, going forward, it is vital to identify what policy tools the Bank can use to counter future uncertainties such as a financial crisis.

One board director expressed the view that the Bank's main policy rate, i.e., the discount rate, has had a signaling effect, albeit with limited power towards market interest rates and the real economy. However, that signal could be obscured given the contradiction between a downtrend in money supply, which was shown in recent declines of M2 growth, and a proposed rate hold, which is to indicate continued policy accommodation. In that connection,

this board director pointed to the moves by the Fed, who began last year to review its monetary policy framework and the effectiveness of its policy instruments while also inviting inputs from outside the institution, and argued that the Fed's reforming act merits our attention.

Another board director contended that the Bank's discount rate not only serves as a signal but also affects interest rates on deposits and loans offered by banks under the bank-based financial system in Taiwan. For instance, banks would adjust their deposit rates after the central bank's discount rate decision is announced. Bank lending rates, including those on adjustable rate mortgages, would change in tandem. These would in turn affect macroeconomic activity including investment and consumer spending.

This board director explained further in regard to M2 growth. While the Bank continued with an accommodative stance, the annual M2 growth rate has kept sliding since the second half of 2018. Whether this is transient or persistent calls for attention. In particular, it needs to be determined if the significant increase in net ETF assets in the interim affected M2 growth adversely. Nonetheless, the annual M2 growth rate has stayed within the Bank's 2.5%-6.5% target range in recent years, implying sufficient support for domestic economic activity in normal circumstances. Indeed, the endogenous nature of M2 variations entails that M2 growth would soften in a slowing economy as bank lending is dampened, in parallel with a central bank's accommodative stance amid an economic slowdown. In terms of monetary policy framework, it seems that decisions of other central banks to shift to a different framework or modify the existing one are usually made to address issues like ineffective policy implementation, problems not facing the Bank. Moreover, our current monetary policy framework is functioning well, having facilitated the attainment of low and stable inflation and financial stability. At present, there seems no pressing need to change the monetary policy framework except for regular review.

One board director expressed support for a rate hold, citing developments in recent months, including short-term factors such as developments in the domestic economy, financial conditions such as banks' excess reserves, and situations overseas especially those in major economies. However, it is no good news when protracted low interest rates since the 2008 global financial crisis restrict the efficacy of monetary policy via interest rate-setting. Foreign rate-setters, including those at the US Fed, have argued for raising policy rates,

though the timing of such a move would need to take some short-term factors into account. Furthermore, as in the case of Japan, which has kept policy rates low since 1992, trying to achieve short-term results via low rates could backfire in the long run. In this light, it is advisable to include longer-term factors in the Bank's monetary policy decision-making in the future.

Another board director stated that there are three types of interest rate decisions, a rate cut, a rate hold, and a rate hike. While nominal interest rates in Taiwan have stayed at very low levels for a long time, too low a level close to liquidity trap territory would render a rate cut ineffective in spurring consumption and investment. Moreover, prolonged low rates could restrain options for available policy tools; it is also unusual when an interest rate-setting approach has not been as effective as intended. On the other hand, though, this is neither the right time to begin a rate hike cycle, considering the absence of an overheating risk or strong growth momentum. Excluding a cut or hike, adopting a rate hold and allowing market forces to play their roles constitutes the better option in the current environment.

One board director supported a rate hold on account of considerations regarding short-term economic cycles. However, the long-term effects of protracted low interest rates on Taiwan's economy as a whole have been unclear and should be revealed in a timely manner. It is also suggested that the Bank communicate to the public that it pays great attention to not only short-term volatility but also longer-term economic growth. Basic economics seems to indicate that low rates could harm creditors but benefit debtors, with such possible effects as creating income inequality or widening the rich-poor gap along the way. More attention is warranted to this potential risk.

Another board director also commented on the issue of protracted low interest rates. First, according to the "secular stagnation" thesis by former US Treasury Secretary Lawrence H. Summers, interest rates had been declining before, not after, the 2008 global financial crisis. Meanwhile, Taiwan has recorded low nominal rates for quite some time, but its real interest rate is not one of the lowest. Some economists suggest that the reason why interest rates have stayed low for a prolonged period with adverse implications is because of insufficient investment demand to absorb all the saving available in the economy. Therefore, the fundamental solution to protracted low rates is to boost investment. Furthermore, it is the collective viewpoint of several renowned foreign economists that monetary policy is

disproportionally burdened with the task of stabilizing the economy; countries with fiscal space should take more proactive action with fiscal expansion.

Second, this board director continued, in a world of increased globalization, small open economies with free capital movements have their limitations in implementing interest rate policy, particularly in a low-interest rate environment, as well as in managing exchange rates. This concept could be described with the "impossible trinity" theory. On another front, Japan has adopted low policy rates for a long time but could still be slipping into the "lost 30 years." While monetary policy (such as the BoJ's balance sheet expansion) and fiscal policy (such as increased government spending) could be used to counter short-term economic cycles, they are not the effective cure for long-term structural diseases, which have been ailing Japan. Meanwhile, globalization makes protracted low rates a worldwide syndrome, which is not just seen in Taiwan, but many other economies elsewhere. In sum, the Bank should, in addition to heeding the possible side effects of protracted low rates, strive to resolve the root cause (such as considerable excess saving as a result of insufficient investment) behind this phenomenon.

One board director, while approving of a rate hold, called for attention to the influence of capital flows. Another board director commented on Taiwan's capital outflows, pointing out that outbound investments by insurers were massive in size and concentrated by market. If international stock and bond markets were to decline significantly, it could hit these insurers and affect domestic financial stability. It is therefore recommended that domestic insurers be encouraged to make longer-term investments at home, instead of overseas. One other board director followed up by explaining that insurers' outbound investment is in fact due to the lack of longer-term (20-year or 30-year) financial products in the local market, to the extent that the levels of domestic interest rates, high or low, have little effect to the situation of insurer capital outflows. The solution would therefore be to guide insurers to invest more in real economic activity. In addition, given Taiwan's large trade surplus and foreign capital inflows, small capital outflows could help let out pressures of a domestic market flush with liquidity. Liquidity utilization would also be less effective with domestic banks sitting on massive deposits yet lackluster in lending. These have all exerted downward pressures on interest rates.

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, Tzung-ta Yen, Nan-kuang Chen, Ming-yih Liang,

Chi-chung Chen, Chen-chia Lee, Jin-lung Lin, Mei-lie Chu, Chao-hsi Huang, Bih-jane

Liu, Shiu-sheng Chen, Hsin-hong Kang, Jong-chin Shen (voting by proxy), Chung-dar

Lei (voting by proxy)

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 Bank.

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Central Bank of the Republic of China (Taiwan)

PRESS RELEASE Release Date: March 21, 2019

<Website: http://www.cbc.gov.tw>

Monetary Policy Decision of the Board Meeting

I. Global economic and financial conditions

Since the Board met in late December last year, global trade and manufacturing activity has continued to show signs of cooling. International institutions have widely revised down growth projections for the global economy this year, and major economies have mostly witnessed slower growth. Momentum for global economic expansion has weakened and international oil prices are expected to trend lower than last year, indicating a mild global inflation outlook.

Major central banks have maintained policy rates unchanged in recent months, yet they have broadly adopted a more accommodative monetary policy stance. In addition, US-China trade negotiations are likely to achieve positive results, and global financial markets have rebounded significantly. Looking ahead, given lingering uncertainties over the US trade policies toward major economies such as China, the euro area, and Japan, a slowdown in the Chinese economy, and a possible extension of the Brexit deadline, the global economic and financial outlook remains unclear.

II. Domestic economic and financial conditions

1. Since the beginning of this year, softened external demand has contributed to negative growth in exports and weighed on production activity. Nevertheless, capital equipment imports have increased and the domestic stock market has rallied on the back of buoyant international stock markets, bolstering consumer confidence. The domestic economy has thus continued to register moderate growth. Labor market conditions have been stable, with employment slightly increasing and the unemployment rate modestly declining.

In light of anticipated slowing in global economic and trade activity this year and a higher base last year, export growth may decelerate in 2019. However, with sustained growth in regular earnings and the government's consumption stimulus measures, private consumption is likely to grow at a steady pace. Meanwhile, as the government has proactively promoted the Forward-Looking Infrastructure Development Program and launched an action plan to welcome investments by

Taiwanese companies abroad, both public and private investment will continue to expand. The Bank forecasts Taiwan's economic growth to accelerate quarter by quarter driven by domestic demand. For the entire year, the GDP growth rate is projected to be 2.13%, lower than the previous year.

2. For the first two months of this year, the consumer price index (CPI) posted an average annual growth rate of 0.20%, and the core CPI also rose mildly by 0.41% in the same period.

In terms of the inflation outlook, a lower base effect as excess supply brought down prices in fruit and vegetables is likely to result in a steeper increase in food prices this year, while a minimum wage hike is expected to boost wage growth and drive up prices in away-from-home food. On the other hand, imported inflationary pressures would be held down by lower international oil prices projected for this year. Combined with moderate domestic demand and a dissipated tobacco tax hike effect, the inflation outlook is stable. The Bank forecasts the annual growth rates of CPI and core CPI (excluding fruit, vegetables, and energy items) for 2019 to be 0.91% and 0.78%, respectively (Appendix Table 1).

3. Early in the year, demand for funds in preparation for the Lunar New Year holidays was well met as the Bank managed market liquidity through open market operations. Banks' excess reserves climbed to a level higher than NT\$50 billion on average for the first two months of the year, from over NT\$40 billion of the previous quarter. Meanwhile, both long- and short-term market interest rates slipped slightly downwards in recent months.

In the meantime, reserve money and the monetary aggregate M2 registered average annual growth rates of 6.78% and 3.03%, respectively, while bank loans and investments expanded by 5.70% for the same period, indicating sufficient money and credit growth to support economic activity. Recent data also pointed to satisfactory bank asset quality, with the non-performing loan ratio of domestic banks standing at 0.24% and the loan loss coverage ratio reaching a considerably healthy level of 569.56%.

III. Monetary policy decisions

The overall assessment based on the above information showed that Taiwan's economy would likely grow at a somewhat slower pace this year against the backdrop of a downward revision of global GDP and trade growth forecasts and

persistent uncertainties over the international economic, trade, and financial prospects. In addition, the actual output remains below potential and inflationary pressures are expected to be subdued. Moreover, Taiwan's nominal and real interest rates continue to register around the middle range among a host of economies (Appendix Figure 1 & Table 2). Therefore, the Board judged that a policy rate hold and a continued accommodative monetary policy stance will help foster sound development of the economy and the financial sector.

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.

- IV. The Bank will continue to monitor inflation, economic, and financial developments at home, while paying close attention to any possible impacts on Taiwan's economy and financial conditions resulting from shifts in global economic and trade activity, monetary policy of major economies, and cross-border capital flows. We will undertake appropriate and timely actions as warranted, so as to fulfill the central bank's statutory mandate.
- V. In principle, the NT dollar exchange rate is determined by market forces. Nonetheless, if irregular factors (such as massive inflows or outflows of short-term capital) as well as seasonal ones lead to excess volatility and disorderly movements in the NT dollar exchange rate with adverse implications for economic and financial stability, the Bank will, in accordance with its mandate, step in to maintain an orderly foreign exchange market.

Appendix

Table 1 Taiwan's Inflation and Inflation Outlook

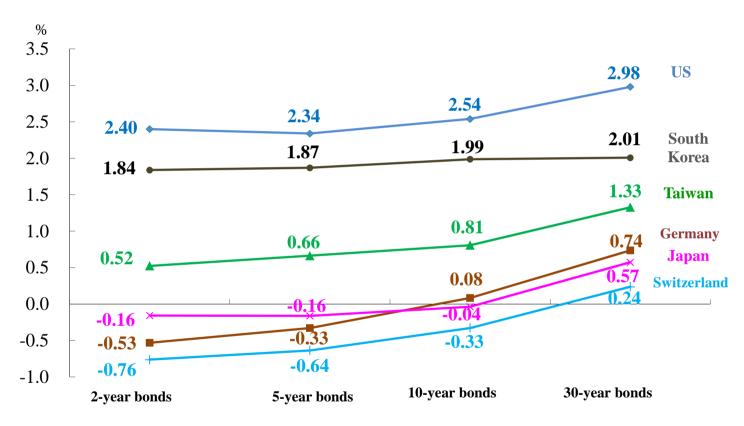
Unit: %

	Proceed in displaying		Inflation outlook	
	Forecast institutions	JanFeb. 2019	2019 (f)	
Domestic institutions	DGBAS (2019/2/13)		0.73	
	CBC (2019/3/21)	0.20 (CPI) 0.41 (Core CPI*)	0.91 (CPI) 0.78 (Core CPI*)	<u>Median:</u> 0.91%
	TIER (2019/1/25)		1.10	(domestic institutions)
Foreign	Morgan Stanley (2019/2/15)		0.50	
	Citi (2019/2/18)		0.70	
	Nomura (2019/3/15)		0.80	
	UBS (2019/3/15)		0.81	
	IHS Markit (2019/3/15)		0.87	
	Deutsche Bank (2019/3/14)		0.90	<u>Median:</u>
	Barclays Capital (2019/3/15)		1.00	0.90%
	BoA Merrill Lynch (2019/3/18)		1.10	(foreign institutions)
	Goldman Sachs (2019/3/18)		1.10	institutions)
	HSBC (2019/3/18)		1.20	
	Credit Suisse (2019/3/14)		1.40	

^{**}Excluding vegetables, fruit, and energy.

Sources: DGBAS, Executive Yuan; forecasts by respective institutions.

Figure 1
Government Bond Yields of Selected Economies (2019/3/21)



Sources: Bloomberg; Taipei Exchange; US Treasury Department.

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 2019/3/21)	(2019 forecast)	Real interest rate	
Malaysia	2.950	0.59	2.360	
Indonesia	4.750	2.99	1.760	
South Korea	1.500	0.32	1.180	
Thailand	1.500	0.78	0.720	
Taiwan	1.065	0.91	0.155	
Singapore	0.700	1.08	-0.380	
US	1.390	1.95	-0.560	
Japan	0.010	0.62	-0.610	
Switzerland	0.000	0.62	-0.620	
UK	0.700	1.94	-1.240	
China	1.500	2.79	-1.290	
Euro area	0.050	1.44	-1.390	
Hong Kong	0.300	2.26	-1.960	
Philippines	0.500	3.32	-2.820	

^{* 1-}year interest rates on small-amount deposits of selected major banks in respective economies, except for Taiwan, of which the figure is the 1-year time deposit floating rate of the five major domestic banks.

^{**} IHS Markit projections, as of March 15, 2019. Forecast for Taiwan's CPI annual growth rate is the CBC's projection.