
Minutes of the Monetary Policy Meeting

December 20, 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 December 20, 2018

Date and Time: December 20, 2018, 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 (excused, appointing Tzung-ta Yen as proxy), Jong-chin Shen, Tzung-ta Yen, Nan-kuang Chen, Ming-yih Liang

Directors:

Tsung-hsien Lin, 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 (excused)

Supervisors:

Chi-yuan Liang, Tsung-jung Liu, Ching-fan Chung, Sheng-yao Lin

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

Ling-chyun Ko, Deputy 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 1: SETTING M2 GROWTH TARGET RANGE AT 2.5%-6.5% FOR YEAR 2019

I. Background information on the 2019 M2 growth target range

The Department of Economic Research provided the following information:

1. The CBC's monetary (M2) targeting regime

- (1) The CBC adopted a monetary targeting regime in 1992, managing reserve money with the monetary aggregate M2 as the intermediate target so as to fulfill the mandate stipulated by *The Central Bank of the Republic of China (Taiwan) Act*. While following the monetary targeting framework, the CBC also monitors and considers important economic and financial indicators including inflation expectations, exchange rate movements, credit conditions, asset prices, and output gap, constituting, in practice, a flexible or eclectic monetary targeting regime.
- (2) The primary objective for M2 growth target setting is to maintain appropriate growth in bank credit, price stability, and financial stability. For the long term, the correlation coefficient between the annual growth rates of M2 and CPI and that between M2 and core CPI have been above 0.8.
- (3) Since the adoption of monetary targeting, the realized M2 growth rate have mostly fallen within the target range (including in the past decade, except for 2009).
- (4) The key factors taken into account for the setting of M2 growth target range are twofold: the projected growth rate of money demand in the following year, and future uncertainties that could affect M2 growth.

2. Review of the 2018 M2 growth target range

- (1) The money demand function produced stable results: The 2018 target range was set at 2.5%-6.5% in the December 2017 Board Meeting, based on the estimation results of the money demand function using the 1991Q1-2017Q3 data. When re-estimated using data updated to 2018Q3, the results showed insignificant difference from the previous estimation.
- (2) For the first eleven months of the year, the average M2 annual growth rate was 3.56%, marginally lower than the 3.76% of the same period of the previous year and within the

target range. The slower growth was mainly due to the following reasons:

- A. Net foreign capital outflows: During the Jan.-Nov. period, net foreign capital outflows amounted to US\$8.7 billion, whereas the same period of the previous year recorded net foreign capital inflows of US\$9.8 billion.
 - B. Shifts in residents' asset location strategy: Residents increased investments in insurance products denominated in foreign currencies and products linked to overseas Exchange-Traded Funds, which were not included in M2. Nevertheless, the increase did not affect the overall asset size of financial institutions.
- (3) For the first eleven months of the year, M2 growth slowed but bank loans and investments increased faster, posting an average annual growth rate of 5.24% compared to the previous year's 4.79%. This indicates domestic bank credit growth was adequate.

3. Preliminary estimation of money demand for 2019

Based on the coefficient estimates of the money demand function, and the CBC's own forecasts for the 2019 GDP growth rate (2.33%) and CPI growth rate (1.05%), the preliminary estimation of the annual growth rate of demand for M2 is around 2.84%.

4. Proposition to set the 2019 M2 target at a range of 2.5% to 6.5%

- (1) The CBC's preliminary estimation of the annual growth rate of demand for M2 is around 2.84%. In addition to past model forecasting biases, other factors with potential effects on M2 growth were also taken into account; these factors included: the US-China trade friction, international economic and financial uncertainties such as monetary policy of advanced economies, and external shocks that could affect domestic economic and money growth momentum. Therefore, it is proposed that the 2019 M2 growth target range be maintained at 2.5%-6.5%, consistent with the CBC's determined efforts to foster economic growth through appropriate and accommodative monetary policy to sufficiently support private sector demand for funds.
- (2) In a symposium on the preliminary estimation of the 2019 M2 target range, held at the CBC on December 7, 2018, the participating academics and experts gave the opinion that, in view of the downward revision of the projections for the 2019 domestic economic growth rate by most forecasting institutions at home and abroad, it would be appropriate to

set the 2019 M2 growth target range at 2.5%-6.5%.

- (3) Primary considerations for maintaining the M2 growth target range at 2.5%-6.5% in 2019:
 - A. The recent reading according to the financial conditions index compiled by the CBC indicated tightened conditions.
 - B. It is expected that the domestic economic and inflation growth rates next year would both register lower than this year.
 - C. Headwinds to the global economy from US-China trade conflicts could dampen Taiwan's export performance and weigh on corporate investment and consumer confidence, which would combine to disrupt domestic economic growth momentum.
 - D. Continued divergence in monetary policy among major economies could lead to frequent cross-border capital flows, accompanied by an apparent impact on domestic M2 growth.
5. In view of persisting uncertainties over the economic and financial conditions at home and abroad next year, the CBC will, as usual, give a mid-year review and assessment of the M2 growth target while continuing with attention to and research on improving the money demand function estimation and related issues.

II. Discussion and decision on the 2019 M2 growth target range

1. All directors approved the proposition of keeping the M2 growth target range unchanged. Their views are summarized as below.

- (1) Discussion on the M2 growth target range

One board director noted that a change in the target range could send the following messages to the market: a downward adjustment implies concerns about the economy overheating while an upward adjustment implies a less favorable outlook for the economy. Considering that the economic prospects are not particularly bleak, it would be appropriate to tread a balanced path and keep the M2 growth target range unchanged.

Another board director stated that the M2 growth target has been set with a 4% difference between the upper/lower limits (such as a range between 2.5% and 6.5%), an approach adopted for many years with proven effectiveness. In the past decade, the annual M2 growth rate has been within the target range except for the year of 2009 when the global financial crisis broke

out. In addition to influencing interest rates for the short term, conducted by the CBC through policy rate decisions made in quarterly Board Meetings, setting the target range of monetary growth makes up another major part of monetary policy, via influencing the quantity of money. The target range of M2 growth serves as a guide to the implementation of open market operations and the observation of interest rate changes.

(2) Discussion on the implications of the M2 growth target range

One board director gave the opinion that there is a certain interactive relationship between the monetary growth target range and policy interest rates; therefore, it would be appropriate to increase the frequency of discussing the review of or adjustment to the monetary growth target range in the quarterly Board Meetings. One board director expressed the view that the CBC conducts monetary policy via interest rate setting, while the monetary growth target range is determined at the year-end Board Meeting and reviewed, if needed, at mid-year, an approach that has been in place for years and effective. Another board director commented that it is impossible to conduct monetary policy by influencing interest rates and money supply at the same time, and therefore the board only discusses the M2 growth target range at the year-end Board Meetings as it determines the following year's target range, instead of reviewing it every quarter. However, when the board convenes quarterly to decide policy rate adjustments, there exists a predetermined target range of monetary growth. Taking the long view, it would be important to reexamine the monetary policy framework.

One board director noted that though the Board Meetings in the first three quarters of the year do not include discussions on the quantity of money, the CBC regularly monitors the relevant readings every month. Another board director pointed out in particular that while the setting of M2 growth target range is on the agenda of the Board Meeting only in the fourth quarter of the year, the CBC would give a monthly assessment of the amount of reserve money at the beginning of the month, keeping watch of the growth trend of M2 and assessing the readings against the target range.

Another board director explained further that the CBC's monetary policy is one with a balanced focus on both interest rates and the quantity of money and has the ability to estimate and construct monetary quantity equations of statistical significance. In theory, the quantity of money is based on mid- to long-term observation, as Milton Friedman's constant growth rate

rule for money supply in the 1960s asserts that the quantity of money should increase by a constant percentage every year. Considering the longer-term observation span for money supply, the CBC's approach of setting the following year's M2 growth target range at the end of the year is adequate.

One board director presented the view that M2 growth target range is watched over the long term. When M2 growth is close to the upper or lower limit of the target range, special attention is warranted. When M2 growth is within the target range, this suggests the amount of credit is neither too high nor too low; furthermore, in the long run, given M2's correlation with inflation, its within-target-range growth signifies that inflation is within control, which also suggests financial stability.

Another board director pointed out that some central banks in the world have adopted an inflation targeting regime. One board director stated that few economies adopt a narrowly-defined inflation targeting regime (using inflation rate as the sole target); for instance, the US monetary policy regime is not inflation-targeting since the Federal Reserve has an inflation target but also pursues full employment. In the past, inflation-targeting economies were mostly those with high inflation and used nominal anchors to contain inflation expectations to sustain economic stability. However, even the world's first inflation-targeting economy, New Zealand, puts an emphasis on full employment nowadays. While inflation-targeting proved effective in some economies, it should be noted that the result was partly achieved owing to a high comparison base in the past, as well as a sharp decline of inflation rates after the world became increasingly globalized from the 1980s onwards. Moreover, after the global financial crisis, some economists argued that inflation-targeting might not be the appropriate regime, and the number of inflation-targeting economies was small. In this view, it seems that, other than continued attention to the development of inflation-targeting, there is currently no need for the CBC to consider adopting this regime as the existing monetary-targeting framework is functioning well.

Another board director added that, as opposed to inflation-targeting countries where inflation presents a major challenge, Taiwan's inflation is not a cause for concern, hence a non-issue for adopting an inflation-targeting regime.

2. Decision on the 2019 M2 growth target range

The board directors reached a unanimous decision to set the 2019 M2 growth target range at 2.5% to 6.5%.

Voting for the proposition:

Chin-long Yang, Jain-Rong Su (voting by proxy), Jong-chin Shen, Tzung-ta Yen, Nan-kuang Chen, Ming-yih Liang, Tsung-hsien Lin, 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.

AGENDA ITEM 2: 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 September Board Meeting, the global economy expanded at a slower pace, owing mainly to ongoing trade friction between the US and China, economic slowdown in China, and uncertainty about monetary policy paths among major economies. For the year as a whole, the US economy is expected to grow faster whereas the euro area and Japan are to experience some moderation. As for emerging market economies, the majority of them would see slight downturn compared to the previous year. In terms of the 2019 outlook, international forecasting institutions projected that growth momentum would generally weaken for the world economy as well as in major economies.

Reflecting escalating global trade conflicts, readings on global trade prospects trended down recently; in this connection, international institutions trimmed their 2018-2019 growth forecasts for the global trade volume. They also forecast that global inflation will pick up in both 2018 and 2019, citing continued global economic expansion and tightening labor market conditions in several advanced economies.

Meanwhile, not all advanced economies were in step towards monetary policy normalization. The Federal Reserve's quarter-point rate hike in December is likely to be followed by a slower pace in lifting rates next year, the European Central Bank's asset purchases will draw to a close by the end of 2018 with the policy rate on hold till at least next summer, while the Bank of Japan has maintained its accommodative stance. Although some emerging market economies raised policy rates in response to capital outflows or higher inflation, China's central bank held a steady, neutral stance and kept the policy rate unchanged.

The international financial markets have been highly volatile since October. As American technology shares were hit hard by concerns over escalating US-China trade spat and slower global economic growth, global stock markets took a tumble. The US dollar index rose on a robust US economy, but 10-year bond yields of major economies trended down as a

result of increased hedging demand amid sharp price volatility of lower-rated investment products.

Key risks to the global economic outlook include the following: (1) US trade policy uncertainty: Although the US suspended tariff hikes on Chinese exports, it is still unclear whether the two sides would reach a trade deal before the expiry of the 90-day truce; (2) A sputtering Chinese economy: With the negative trade impacts of US tariffs gradually emerging and China's manufacturing, property market, and consumption likely weakening, as well as mounting debt in the non-financial sector, downside risks to the Chinese economy increased considerably, carrying possible spillover effects that could weigh heavily on global economic growth; (3) uncertainty over major economies' monetary policy paths, which could induce rapid cross-border capital movements and heightened volatility in foreign exchange markets; (4) political and economic unrest in Europe: Market apprehension over a no-deal Brexit and a deterioration in Italian fiscal discipline have negative implications for European economy, adding to downside risks to the global economic prospects.

2. Domestic Economic and Financial Conditions

(1) Economic situation

According to relevant readings in October, the business climate monitor flashed a "yellow-blue" (a transitional light) for the second consecutive month and both leading and coincident indicators continued to point downwards, indicating softer momentum for domestic economic expansion. The GDP growth rate of the last quarter this year is expected to run lower than the third quarter while also significantly outpaced by the rate in the first half of 2018.

For the year as a whole, GDP growth would be chiefly driven by domestic demand, given that export performance could be bogged down by external uncertainties such as a weaker global economy and persistent US-China trade friction. Despite a softer outlook, the economy will continue to gain support from domestic demand next year. The CBC forecasts Taiwan's economy to grow by 2.68% and 2.33% in 2018 and 2019, respectively, while the projections of major forecasting institutions fall in a range of 2.57%-2.68% for 2018, and slightly slowing to 2.15%-2.45% for 2019.

In terms of external demand, moderate global economic expansion and rising

international raw material prices led exports of major Asian economies to grow further for the first eleven months of the year. During the same period, Taiwan's export increased by 6.9% in total value terms, with export prices rising by 2.9% and export volume rising by 3.8%. However, goods export growth contracted in November owing to lower-than-expected mobile set sales and sluggish overseas machinery investment, while goods import growth was eroded by a slump in capital equipment imports. These developments could likely become a drag on export growth for the rest of the year. Exports will likely expand slower next year according to the CBC's own projections, as US-China trade friction remains on the horizon and global economic and trade growth would moderate, outweighing the boost from increased demand for emerging technology applications.

With respect to domestic demand, labor market conditions were stable. For the first ten months of the year, the unemployment rate ran lower year on year, while average and regular earnings both increased further. The continued growth in corporate profits, which would be conducive to cash dividends and wage adjustments next year, and minimum wage hikes would help sustain consumption growth, whereas consumer confidence might weaken. In this view, the CBC expects next year's private consumption to post gentle growth.

Private investment is forecast by the CBC to grow faster next year, bolstered by higher construction investment and continuous investment in machinery equipment and R&D by the semiconductor sector and related manufacturers along the supply-chain.

(2) Financial conditions

In recent months, banks took a more cautious liquidity management strategy in light of continued US-China trade battle and heightened volatility in international financial markets, leading the interbank rates to rise slightly. Short-term market rates have moved up modestly since the middle of the year owing to an increasing amount of the national treasury deposits and outflows of foreign capital, along with a more recent effect from higher year-end demand for funds. Compared to several key economies, Taiwan's real interest rate (adjusted for inflation) stands around the middle of the range.

M2 growth averaged at 3.56% for the first eleven months of year, within the target range. Despite the slightly slower M2 growth, bank lending to the private sector remained on the rise thanks to moderate economic expansion, with the growth rate of bank loans and investments

averaging 5.24% year on year for the Jan.-Nov. period. It suggested ample liquidity in the credit market to support real economic activity and inflationary pressures were muted.

Despite steady market interest rates, overall financial conditions have tightened since October. In the interim, the domestic stock market swung lower on a steep US high-tech stock sell-off and net foreign selling of local shares, and the NT dollar real effective exchange rate showed a modest appreciation over the previous year.

Looking ahead, it is anticipated that the global economy and international financial markets could suffer from uncertainties over the US-China trade conflicts and divergence in the pace and stance for monetary policy normalization among advanced economies. In addition to these external factors, the government's policy to encourage capital expatriation by Taiwanese firms would also affect capital flows and, in turn, domestic money growth. Bank loans and investments might register limited growth next year, given domestic economic moderation and a multitude of uncertainties over the economy.

(3) Price trends

International oil prices have plunged since October owing to increased production by the US, Russia, and members of the Organization of the Petroleum Exporting Countries (OPEC), as well as the trade spat between the US and China. Though stabilizing around early December, oil prices could still trend lower next year than this year. Meanwhile, global grain prices fluctuated upwards.

In terms of the factors behind the recent domestic price trends, in addition to the international oil price slump since October, vegetable prices have dropped further in the meantime amid favorable weather conditions, and the effect of a previous tobacco tax hike has also receded. Against this backdrop, the CPI annual growth rate has declined since October; the rate averaged 1.48% for the first eleven months of the year, mainly reflecting price rises in fuel, tobacco, and foods away-from-home. Thereafter, as pressures of imported inflation abated on falling international oil prices, the annual growth rate of import prices dropped significantly and consequently the WPI annual growth rate slid to 3.25%, below the previous yearly low in May. Reflecting moderate domestic demand, the output gap, a key factor of inflationary pressures, is expected to remain negative in both 2018 and 2019, with the gap widening slightly next year.

In terms of next year's price trends, the CPI and core CPI annual growth rates are projected to be 1.05% and 0.93% according to the CBC's forecasts, lower than this year's 1.38% and 1.21% given that international oil prices would trend slightly lower than this year, domestic demand is moderate, and the tobacco tax hike effect dissipates. The medians of domestic and international institutions' 2019 inflation forecasts are 1.07% and 1.24%, respectively.

As for the key determinants of future price trends, the minimum wage hike next year, which may prompt the private sector to raise employee pay, would add to inflationary pressures, while fruit and vegetable prices would face upside pressures owing to a lower comparison base as high crop yields suppressed prices this year. On the other hand, a projected downtrend in international oil prices compared to this year, lower communication rates, and a still negative output gap may bring about downward pressures on inflation.

3. Considerations for Monetary Policy

(1) External factors

- A. The global economy and world trade volume are expected to expand at a slower pace owing to US-China trade friction.
- B. The policy stance of major central banks except the US Federal Reserve is mostly accommodative.
- C. The economic and financial outlook is clouded by many uncertainties, including policy uncertainty over the US-China trade issue, a Chinese economic slowdown, uncertainty over monetary policy paths of major economies, and political and economic unrest in Europe.

(2) Domestic factors

- A. Both the economic growth rate and inflation rate are projected to register lower next year than this year, decelerating from this year's 2.68% and 1.38% to 2.33% and 1.05%, respectively, based on the CBC's estimation and projection.
- B. The negative output gap would widen slightly.
- C. Taiwan's nominal and real interest rates are around the middle range compared to selected economies.

- D. M2 growth has moderated whereas credit has increased steadily.
- E. Financial conditions have tightened.

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. 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

With regard to the outlook for the international economic and financial conditions, several board directors and supervisors commented on the implications of the flattening of the US Treasury yields. One board director cited the CBC's internal papers, which pointed out that inverted Treasury yield curves have preceded the last five US recessions since the 1980s. Another board director pointed out that, in the post-crisis era, yield curve inversion does not necessarily portend economic recessions because of structural changes including the introduction of tighter financial supervision and the requirement of banks holding a larger proportion of safety assets (such as medium- to long-term US Treasuries), as well as lower risk premiums brought down by the quantitative easing policies of major central banks. According to the Federal Reserve, even an inverted yield curve occurs now or next year, the likelihood of a US recession next year is not high, and the economic growth is expected to begin to decelerate only after peaking in 2020. However, if a protracted yield curve inversion in the future could reinforce market expectation of an impending US recession. One supervisor also noted that the general market view predicts a US recession sometime in 2020.

Regarding international oil prices, one supervisor stated that the recent oil price slump was mainly attributable to oil futures, instead of deteriorating fundamentals, as the decline in the stock of crude and finished oil products in recent months weakened concerns about oversupply. In terms of the outlook, softer crude demand amid a moderating global economy would be outweighed by the impact of production cuts by both OPEC and non-OPEC economies, thereby

bolstering oil prices. It is therefore expected that, in 2019, oil prices will only be slightly lower than this year.

In respect of the domestic economic outlook, one board director noted that, based on the CBC's forecast about Taiwan's economic growth, domestic demand has played an increasingly significant role. Another board director stated that some small-sized brick-and-mortar stores have witnessed falling sales because of competition from online or large retailers. Nevertheless, it is expected that corporate equipment investment would continue rising next year as a result of planned reshoring of Taiwanese firms amid US-China trade conflicts. Taiwan's economy is projected to expand at a moderately steady pace with the support of appropriate and accommodative monetary policy.

With regard to domestic prices, one board director pointed out that inflation has been relatively subdued in recent years, with the 2019 forecast for the CPI annual growth rate dropping to around 1% according to major domestic institutions. In addition to short-term factors such as oil prices and grain prices, inflation is also affected by several longer-term structural factors. For instance, intensified price competition as a result of globalization and booming e-commerce and falling mobile communication rates in recent years have combined to depress domestic inflation rates.

(2) Discussion on interest rate decision

Many board directors expressed support for keeping the policy rates unchanged, based mainly on the view that uncertainties continue to exist next year. One board director stated that, given the uncertainties next year, dynamic stability of the exchange rate would help companies in Taiwan, an export-orient economy, in decision making related to external trade and investment. One board director was in favor of a rate hold because such decision would weaken market expectation of future uncertainties. Another board director pointed out that the projections of mild inflation expectation and slower economic growth in Taiwan next year, as well as lingering uncertainties over international trade, remove an urgent need to begin a rate hike cycle.

One board director expressed support for maintaining the policy rates at current levels, noting that the interbank call loan rates and the excess reserves of financial institutions indicated that market liquidity were stable and sufficient.

One board director, while approving of a rate hold, called attention to the impact of US-Taiwan interest spread and capital movements. Another board director continued with the opinion that, instead of the US-Taiwan interest spread, the following three reasons contributed to foreign capital outflows this year: (1) a narrowing difference between the local stock market's dividend yield and the US Treasury yield; (2) increased outward remittances by foreign investors after receiving a large amount of cash dividends; (3) capital flows drawn from emerging markets to the United States given the US dollar's status as a safe haven currency and a strong US economy. Moreover, capital outflows from domestic insurance companies were mainly due to a maturity mismatch between assets and liabilities, instead of an interest rate gap. Nevertheless, it would be helpful if adequate long-term investment tools are available at home to offer domestic insurers more investment options in addition to overseas products.

Many board directors commented on future deliberation of monetary policy-making. One board director stated that both short-term and long-term factors should be taken into account. Two of Taiwan's neighboring economies, South Korea and China, have posted higher policy rates than Taiwan as their inflation rates were relatively higher. Although Taiwan enjoys robust financial risk management, it is recommended that long-term factors be incorporated in policy rate decision-making in the future. Another board director noted that the policy rates have stayed on hold for a while and suggested consideration should be given to what messages a future rate adjustment might communicate to the public and how it could be interpreted by the market. Moreover, while the CBC's interest rate decision is made under a monetary-targeting framework, the setting of the money growth target range under this framework could face the question of relying fundamentally on the CBC's estimation and assessment or considering also the interpretation and reaction of the market.

One board director pointed out public concerns about financial market behavior in a low-interest environment. As the government might introduce regulations on repatriation of overseas capital next year and a large amount of capital are expected to return to Taiwan, it presents a greater challenge to the domestic financial surplus and interest rate issues. The board director noted that low interest rates are in fact the outcome, resulting mainly from prolonged financial surplus – a long-term structural problem that is beyond the capability of monetary policy instruments.

Another board director pointed out that policy rate decisions and the monetary growth target range have separate sets of considerations, with the former weighed against short-term factors and the latter longer-term ones. One board director added that, in practice, interest rates serve as the operating target of the CBC's monetary policy, while M2 supply serves as the intermediate target. Given the importance of indirect finance in Taiwan and the relative stable correlation between M2 and nominal GDP, it is pragmatic to use M2 supply as an intermediate target for monetary policy. In other words, the parallel adoption of the interest rates as an operating target and M2 supply as an intermediate target presents no contradiction.

One board director stated that a rate hold would be a solid move and suggested that the CBC use leading indicators to forecast the likelihood of economic recessions and enhance inflation expectation surveys on the general public, so as to offer guidance to monetary policy decisions. Another board director added that the CBC's monthly projections of the next month's prices have proven highly reliable.

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 (voting by proxy), Jong-chin Shen, Tzung-ta Yen, Nan-kuang Chen, Ming-yih Liang, Tsung-hsien Lin, 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.

Monetary Policy Decision of the Board Meeting

I. Global economic and financial conditions

Since the Board met in late September this year, dragged by an intensification of US-China trade conflicts and tightening global financial conditions, the global economy has expanded at a slower pace, trade growth momentum has weakened, and international financial markets have also experienced a high level of volatility. International institutions have thus widely revised down projections for global economic and trade growth this year and next year.

The global economy and major economies are expected to register slower growth in 2019. In addition, uncertainties such as global trade tensions, monetary policy directions of major economies, economic and financial fragilities in emerging market economies, as well as the developments regarding European political and economic conditions constitute downside risks that could potentially affect the global economic outlook.

II. Domestic economic and financial conditions

1. A slowing global economy and lingering trade disputes between the US and China have caused growth in exports and capital equipment imports to decelerate in recent months. Meanwhile, despite stable labor market conditions, a declining unemployment rate, and moderate wage growth, the domestic stock market correction triggered by international financial market turbulence have weighed on consumer sentiment. The CBC forecasts Taiwan's economic growth to decelerate further in the fourth quarter. For the entire year, the GDP growth rate is projected to be 2.68%.

Looking ahead to 2019, growth in private consumption is likely to remain steady and private investment may also post continuous expansion while the government pushes ahead with the Forward-Looking Infrastructure Development Program. However, external demand may be dented by economic slowdowns experienced by Taiwan's major trading partners. Therefore, the CBC forecasts the domestic economy to advance by 2.33% for 2019.

2. Since October this year, the rise in CPI has slowed as global oil prices turned sharply downwards, domestic vegetable prices fell because of abundant supply, and the effect of mid-2017's cigarette tax hike receded. The CBC projects the

annual growth rates of CPI and core CPI (excluding vegetables, fruit, and energy items) for 2018 to be 1.38% and 1.21%, respectively.

In terms of next year, as global oil prices are forecast by international institutions to be somewhat lower than this year, leading to alleviated imported inflationary pressures, added with moderate domestic demand and the dissipation of the cigarette tax hike effect, CPI and core CPI inflation are projected by the CBC to decrease to 1.05% and 0.93% year on year in 2019 (see Appendix Table). The outlook for inflation is mild.

3. The CBC has managed market liquidity with flexibility in view of the developments in domestic economic conditions, and banks' reserves have remained at an appropriate level. For the first eleven months of the year, the average annual growth rates of the monetary aggregate M2 and of bank loans and investments were 3.56% and 5.24%, respectively, indicating market liquidity is sufficient to support economic activity.

Recently, both short- and long-term interest rates rose slightly, lifted mainly by a greater demand for funds commonly seen at year ends. Despite heightened volatility across global financial markets and frequent cross-border capital flows, domestic markets still enjoyed ample liquidity and market interest rates remained relatively stable.

III. Monetary policy decisions

In sum, international and domestic economic and financial developments informed the following assessment for next year, including a narrower expansion in the global economy, amplified uncertainties over the international economic and financial prospects, a moderation in domestic economic growth, a slightly wider negative output gap, and a mild inflation outlook that is softer than this year. Moreover, Taiwan's nominal and real interest rates register around the middle range among a host of economies. 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 decisions unanimously at the Meeting today:

1. 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.

2. Taking economic growth, financial conditions, and price trends into consideration, the Board decided to set the 2019 M2 growth target range at 2.5% to 6.5%, same as this year (see Appendix Note).
- IV. The CBC will watch closely for any possible impacts on Taiwan's economic and financial conditions resulting from global trade protectionism, monetary policy shifts of major economies, global financial market volatility, and geopolitical risks. We will undertake appropriate and timely monetary policy 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. 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 CBC will, in accordance with its mandate, step in to maintain an orderly foreign exchange market.

Appendix Note

Considerations for the year 2019 M2 growth target range

1. In recent months, the Bank's financial conditions index² started to signal a tighter financial situation. In terms of the outlook, the economy is likely to grow at a slower pace in 2019 than in 2018, and inflation is expected to be more subdued but still stable. Meanwhile, continuing divergence in monetary policy among major economies is expected to induce more volatile capital movements across borders. In addition, domestic private investment and consumer confidence could be dampened by a more tempered view of global economic growth given the adverse implications of US-China trade conflicts, which would in turn weaken domestic growth momentum.
2. Against such a backdrop of elevated political, economic, and financial uncertainties on the global scene, the M2 growth target range for 2019 is set at 2.5% to 6.5%, unchanged from this year. The CBC maintains an accommodative monetary policy stance as warranted, so as to sufficiently meet the funding needs of the private sector and foster economic growth.
3. Given the uncertain outlook for international and domestic economic and financial conditions next year, the CBC will, as usual, review and assess the M2 growth target in mid-year and adjust the target range if necessary.

² The financial conditions index (FCI) incorporates an array of financial variables to capture a country's overall financial conditions. A positive reading indicates that current financial conditions are more accommodative, which provides a positive pull for future economic growth. On the contrary, a negative reading indicates tightening of financial conditions, which could restrict economic growth.

Appendix Table

Taiwan's Inflation and Inflation Outlook

Unit: %

Forecast institutions		Inflation	Inflation outlook	
		2018 (f)	2019 (f)	
Domestic institutions	CBC (2018/12/20)	1.38 (CPI) 1.21 (Core CPI*)	1.05 (CPI) 0.93 (Core CPI*)	Median: 1.43% (2018) 1.07% (2019) (domestic institutions)
	CIER (2018/12/19)	1.42	1.01	
	TRI (2018/12/18)	1.43	1.39	
	DGBAS (2018/11/30)	1.43	0.96	
	Academia Sinica (2018/12/5)	1.49	1.08	
	TIER (2018/11/12)	1.60	1.40	
Foreign institutions	IHS Markit (2018/12/18)	1.40	1.28	Median: 1.45% (2018) 1.24% (2019) (foreign institutions)
	Nomura (2018/12/14)	1.40	1.00	
	Barclays Capital (2018/12/14)	1.40	1.20	
	Citi (2018/12/12)	1.40	1.30	
	ADB (2018/12/11)	1.40	1.30	
	EIU (2018/12/10)	1.40	1.30	
	Deutsche Bank (2018/12/6)	1.40	1.00	
	BoA Merrill Lynch (2018/12/17)	1.50	1.10	
	Goldman Sachs (2018/12/17)	1.50	1.10	
	HSBC (2018/12/14)	1.50	1.20	
	Credit Suisse (2018/12/13)	1.50	1.40	
	IMF (2018/10/11)	1.50	1.30	
Morgan Stanley (2018/11/26)	1.54	1.08		
UBS (2018/12/14)	1.60	1.43		

* Excluding vegetables, fruit, and energy.

Sources: forecasts by respective institutions.