Minutes of the Monetary Policy Meeting

December 15, 2022

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

Meeting Minutes[1] on Monetary Policy at the Joint Meeting of the Board of Directors and the Board of Supervisors, Held on December 15, 2022

Date and Time: 2:00 p.m., December 15, 2022

Location: Rooms A606 and A303, Central Bank of the R.O.C. (Taiwan)

Members Present:

Chairman, Board of Directors: Chin-Long Yang

Executive Directors: Jain-Rong Su, Mei-Hua Wang, Tzung-Ta Yen, Nan-Kuang Chen, Chung-Dar Lei

Directors:

Chi-Chung Chen, Jin-Lung Lin, Chao-Hsi Huang, Shiu-Sheng Chen, Chao-Yi Chen, Yi-Ting Li, Shi-Kuan Chen, Chien-Yi Chang

Fu-Sheng Hung (Excused, Appointing Tzung-Ta Yen as Proxy)

Chairman, Board of Supervisors: Tzer-Ming Chu

Supervisors: Ching-Fan Chung, Sheng-Yao Lin, Tien-Wang Tsaur, Kuei-Hui Cheng

Staff Present:

Alan R.-Y. Pan, Director General, Department of Banking

Yen-Dar Den, Director General, Department of Issuing

Chiun-Min Tsai, Director General, Department of Foreign Exchange

Pei-Jen Heh, Director General, Department of the Treasury

Dou-Ming Su, Director General, Department of Financial Inspection

Yih-Jiuan Wu, Director General, Department of Economic Research

Chien-Ching Liang, Director General, Secretariat

Shu-Huei Kuo, Director General, Department of Accounting

Shu-Hui Chang, Director, Personnel Office

Kun-Shan Wu, Director, Legal Affairs Office

Chih-Cheng Hu, Secretary, Board of Directors

Chih-Jung Lee, 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: ECONOMIC AND FINANCIAL CONDITIONS AND MONETARY POLICY DECISION

I. Staff Review of Economic and Financial Conditions

1. International Economic and Financial Conditions

Since the Board last met in September 2022, the effects from the ongoing Russia-Ukraine war, elevated inflation, and monetary policy tightening by major economies have markedly dampened global goods consumption demand and caused firms to receive fewer orders and inventories to pile up, putting a drag on global economic growth. With tepid demand for goods, world trade expansion weakened, while supply chain snags continued to ease and shipping rates dropped considerably. As major economies (such as the US and Europe) still recorded high inflation and many central banks significantly tightened monetary policy, global economic growth is expected to slow further in 2023, with the US and Europe likely entering mild recessions.

Regarding price trends of international commodities, from October onwards, oil prices dropped to levels last seen prior to the Russian invasion of Ukraine as international institutions downgraded their projections for global crude oil demand growth and the US crude oil production increased. For 2023, oil prices are forecasted to be lower than 2022. Grain prices had fallen since November after Russia rejoined the Black Sea grain export deal. The Reuters/Jefferies CRB (RJ/CRB) Index, the global commodities benchmark, moved downwards before hovering at low levels.

In spite of oil and grain price declines in recent months, inflation was still high in major economies for the year. Global inflation is expected to soften next year thanks to reduced consumption demand and eased supply bottlenecks, as well as a higher base effect. Regarding monetary policy in recent months, most economies, including the US and Europe, continued to raise policy rates to rein in high inflation, whereas Japan and China kept an accommodative monetary policy stance.

In the foreign exchange markets, the US Dollar Index (DXY) had traded significantly lower since November against a background of the US inflation posting lower than expected numbers for two months in a row and the Federal Reserve (Fed) thought to slow the pace of rate hikes, and major currencies broadly strengthened against the US dollar. Meanwhile, amid hopes of smaller Fed rate increases and concerns about a looming European recession, the US and German 10-year government bond yields fell and global stock markets rallied

Looking ahead, the global economy faces multiple downside risks: (1) Synchronized monetary policy tightening could deepen the global economic slowdown and undermine financial stability; (2) implications from the US-China disputes could hamper the process of globalization; (3) geopolitical risks could shake up supply chain networks; (4) the Russia-Ukraine war and the ensuing energy crisis in Europe could add to global economic headwinds; (5) extreme weather events and energy transition efforts could both be inflationary.

2. Domestic Economic and Financial Conditions

(1) Economic situation

The leading and coincident indicators both extended their downtrends recently. Manufacturing and non-manufacturing sentiment for the outlook for the next six months also remained cautious.

In terms of external demand since August 2022, exports were sapped by cooling global final demand and inventory adjustments by foreign firms with annual growth slumping towards a year-on-year contraction of 13.1% in November, marking the third consecutive month of negative growth. For next year, as global economic and trade activity is expected to be remarkably sluggish, final demand could remain weak, and inventory adjustment would likely go on, all of which could dampen Taiwan’s export growth. Overall, the Bank projected exports to expand at a slower pace next year.

Benefiting from investment in advanced equipment by major semiconductor and related supply chain firms, growth momentum for private investment held steady. However, goods exports were expected to slow down next year, business sentiment showed caution and lasting inventory overhang concerns might cause firms to delay investments or dial down capital outlays. The Bank expected private investment growth to drastically moderate next year.

Private consumption would likely gain traction as the easing of pandemic-related restrictions and border reopening are set to encourage in-store and overseas spending; a minimum wage rise and a hike in income tax-free allowance – both to be enacted next year – would also give a boost to consumption. The Bank expected private consumption to grow faster next year than this year.

In the labor market, with the pandemic's impact waning, the unemployment rate dropped and the number of employed persons slightly increased. However, overtime hours worked in the manufacturing sector had posted year-on-year decreases for four months in a row.

Overall, in view of a significant export slowdown this year, the Bank expected the economy to moderate markedly in the fourth quarter and hence downgraded the 2022 GDP growth rate forecast to 2.91%. For 2023, the Bank forecasted the GDP growth rate to slow to 2.53% with the increasing risk of a global economic downturn restraining Taiwan’s export and investment growth. Major institutions at home and abroad projected Taiwan’s economy to expand at a pace between 2.63% - 3.45%in 2022 and 1.58% - 2.91% in 2023.

(2) Financial conditions

After the policy rates were raised in September and the RRR increase took effect in October, bank deposit and loan rates both trended up and money market interest rates also climbed. Banks’ excess reserves averaged around NT$60 billion in recent months.

Short-term market interest rates and bank deposit rates both went up in October, in line with the Bank’s hike in the policy rates by 0.125 percentage points. In particular, interest rates of commercial paper rose far more steeply than the policy rate hike, showing a direct transmission effect from the interest rate channel of monetary policy.

In terms of money and credit conditions, the annual growth rate of bank loans and investments had risen steadily since August because private sector demand for working capital continued to strengthen and government enterprises increased their working capital funds and capital expenditures. The annual growth rate of bank loans and investments stood at 6.75% as of the end of October and averaged 7.55% for the first ten months of the year.

Regarding money supply since August, the RRR increase beginning in July had caused banks to set aside more reserves. The resultant reduction in banks' disposable funds and a net foreign capital outflow slowed down M2 growth, with the year-on-year increase reaching 6.83% in September. Then, despite another RRR increase, the M2 annual growth rate rose to 7.32% in October mainly because the principal of foreign investor portfolio investment turned into a net inflow and bank loans and investments recorded faster growth. For the first ten months of the year, the annual growth rate of M2 averaged 7.54%, higher than the upper threshold of the Bank's reference range, set at 6.5%. This was mainly because bank loans and investment had been growing fast year on year; however, M2 growth during these ten months was partly restrained because of a surge in net foreign capital outflows.

Considering a slowdown in the inflation rate next year, the moderation in economic growth, and the already high levels of bank loans and investments this year, the Bank expected that the M2 annual growth rate would likely come down to within the 2.5%-6.5% reference range in the second half of 2023. Based on the estimations of the money demand function, the annual growth rate of M2 demand will remain between 2.5% and 6.5% next year. Therefore, the Bank maintains the M2 growth reference range at the current 2.5%-6.5% for the year 2023.

In the housing market, trading had moderated in the year so far. For the first ten months of the year, the total number of building ownership transfers nationwide decreased by 4.5% year on year, while that number also dropped by 7% for the six Special Municipalities during the first eleven months of year. Construction costs for newly-built homes continued climbing but at a slower pace. Prices of new housing units and existing homes were both trending up, reflecting the rise in national Urban Land Price Index (compiled by the Ministry of the Interior). In the third quarter of the year, the price indices for existing homes rose by 15.64%; new housing projects saw a price gain of 33.73%, which might mostly represent the views of builders as the price index for new housing projects uses estimated prospective sale prices instead of actual transaction prices.

Meanwhile, reflecting the Bank's monetary tightening and the government's housing market measures, outlook sentiment of builders and real estate businesses significantly cooled down, while banks were cautious about the outlook of residential housing in major cities.

As of the end of October 2022, the annual growth rates of real estate lending, housing loans, and construction loans edged down to 8.6%, 7.6%, and 12.18%, respectively. Real estate loans as a share of total loans slightly shrank to 36.7% from the 37.16% registered at the end of 2021. Meanwhile, the construction loan ratio of domestic banks was 26.63%, still below the 30% cap prescribed in Article 72-2 of the Banking Act.[2] The ratio of non-performing housing loans extended by domestic banks remained low at 0.07%.

Since the Bank deployed selective credit control measures by making four amendments to relevant regulations from December 2020 onwards, banks' loan portfolio concentration in the real estate sector had kept steady, which was conducive to bank credit risk management. The Bank's tightening stance since March 2022 was also judged to amplify the effectiveness of selective credit controls. In addition, housing market trading had gradually slackened off since the beginning of the year as a result of the concerted efforts under the government's Healthy Real Estate Market Plan as well as the pandemic's impact. The results of the cross-agency policy efforts towards a sound housing market have begun to show.

(3) Price trends

The annual growth rate of the consumer price index (CPI) rose to 3.59% in June. Afterwards, domestic inflation slowed down gradually, reflecting price declines in international raw materials and domestic food items such as fruit and vegetables. The annual CPI growth rate stood at 2.35% in November. Excluding fruit, vegetables, and energy items, the core CPI annual growth rate remained high, reaching 2.86% in

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[2] According to Article 72-2 of the Banking Act, the total amount of loans extended for residential construction and construction for business purposes by a Commercial Bank shall not exceed thirty percent (30%) of the aggregate of such Commercial Bank's deposits and Bank Debentures issued at the time such loans is extended.

November.

For the first eleven months, the inflation rate averaged 2.97%, mainly owing to rises in food, fuel and lubricants, rent, and durable goods. The core inflation rate averaged 2.6%. As there was a more marked increase in prices of staples with a higher purchase frequency, consumers tended to be more conscious of the price uptrends.

Since the middle of the year, the annual growth rates of import and producer price indices had moderated on the softening of international raw material prices, relieving some pressures from imported inflation. The Bank forecasted the inflation and core inflation rates to register 2.93% and 2.59% for 2022. For next year, as global supply bottlenecks ease, international freight rates trend lower, and crude oil and other raw material prices are expected by international institutions to drop lower than this year, the Bank forecasted the inflation and core inflation rates to come down to 1.88% and 1.87%. Projections for Taiwan's annual CPI growth rate made by major domestic and foreign forecasting institutions ranged between 2.9% and 3.1% for 2022 and between 1.21% and 2.5% for 2023 with the forecast average below 2% for next year.

Looking at next year's domestic price trends, upside pressures could arise from (1) overseas travel encouraged by the reopening of borders, pushing up travel group fees, and sustained domestic travel boom, driving up travel and accommodation spending; (2) the scheduled hike of minimum wages; (3) possible hikes in electricity tariffs and gas rates to reflect rising costs. On the other hand, downside pressures could come from (1) lower international freight rates as supply chain bottlenecks ease, and a decline in international raw material prices including crude oil; (2) reductions in domestic prices of mobile phones and other communication devices.

3. Considerations for Monetary Policy

<u>Major considerations:</u>

(1) The domestic inflation rate had come down in the second half of the year, but could still register above 2% for the year as a whole before declining to below 2% next year.

(2) Export expansion had significantly moderated this year, and the Bank revised down

the economic growth rate forecast to 2.91% in 2022 (0.6 percentage points lower than the September forecast). For the year 2023, in view of a rising risk of a global economic slowdown and its impact on domestic export and investment growth, the Bank also revised down the economic growth rate forecast (by 0.37 percentage points) to 2.53%.

II. Proposition and Decision about Monetary Policy

1. **Policy Proposition: To raise the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations by 0.125 percentage points to 1.75%, 2.125%, and 4%, respectively.**
2. Board members decided to raise the policy rates by 0.125 percentage points. Related discussions are summarized as follows.

(1) Discussions on domestic price trends and future outlook

One board director noted that Taiwan's inflation was not as high as the US and Europe mainly because Taipower and CPC Corp. Taiwan, both state-owned enterprises, absorbed some of the rising costs of electricity and oil to the detriment of running huge losses, but this brought forth better outcomes in preventing prices from spiraling up. While international oil prices were expected to decline, liquefied natural gas prices remained elevated and steam coal saw spot prices far exceeding contract prices. Going forward, the extent to which the domestic electricity and gas pricing reflect true costs and its impact on domestic inflation will have important implications for monetary policymaking.

One board director also stated that Taiwan's supply-side measures of price stabilization were better and more effective than those taken in Europe and the US. By freezing the electricity rates and mitigating oil price hikes, Taiwan's price rises were contained from the source before spilling over to other goods, whereas European and US responses were mostly subsidies supported by government budgets after the price spillover effects already emerged. While both types of policies used taxpayers' money, Taiwan's price control differed from the subsidy policy implemented in Europe and the

US. Furthermore, the aggressive rate hikes by Western countries to combat inflation not only dampened economic growth but also impacted economically vulnerable households. As for the Bank's forecasts that the CPI and core CPI annual growth rates would drop below 2% in 2023, it had already taken into account power tariff rises based on the government's electricity price stabilization mechanism.

(2) Discussions on the monetary policy proposition

One board director stated that the 0.125 percentage point increase in the policy rates would be appropriate given that the annual CPI growth rate was forecasted to rise above 2% this year before dropping to slightly below 2%. While the Fed raised the fed funds rate by 0.5 percentage points yesterday (December 14), the Board Meeting's proposition of a moderate policy rate hike absent a reserve requirement ratio (RRR) increase was a comparatively mild approach. Taiwan's year-on-year export growth plunged from expansion in August to double-digit contraction in November, showing a sharply weaker growth momentum at a time when big undue rate hikes could bring hardship to firms. Nonetheless, inflation remained an indispensable part of the consideration. On balance, 0.125 percentage points seemed the appropriate size for today's rate hike.

One board director supported the proposed rate hike, citing the interest rate differential as the reason with the Fed and the ECB delivering aggressive and steep rate hikes to fight inflation amid ongoing rate hike cycles. By hiking the policy rates, the Bank would be able to signal determination for tightening, but a big hike would not be appropriate if considering domestic inflation trends and economic strains. Inflation and inflation expectations in Taiwan were not as worrying as in many other countries. Taiwan's exports had contracted for three consecutive months owing to foreign economic slowdown, soft demand, and inventory adjustment. The Bank also revised down the domestic GDP growth rate forecasts for 2022 and 2023. Therefore, it would be advisable not to overdo the rate hike so as to avoid eroding the momentum of economic growth.

Another board director pointed out that the domestic inflation rate would register around 3% this year and was expected to drop below, but close to, the level of 2%, indicating inflationary pressures had not entirely ebbed. In addition, the domestic economic expansion weakened on account of export slowdown and most major economies continued to raise policy rates. Based on an overall assessment of domestic economic growth, financial market conditions at home and abroad, and, particularly and primarily, domestic inflation trends, it would be the sensible decision to raise the policy rates by 0.125 percentage points. On the other hand, the RRR adjustment and its cumulative effects were both significant. Considering that the Bank had made two RRR adjustments in the previous two Board Meetings, further deployment of this tool would not be advisable unless warranted by extraordinary circumstances.

One board director stated that the domestic economic growth had held steady; while the Bank revised down the GDP growth rate forecasts for 2022 and 2023, it should be noted that financial and price stability take priority in the Bank's mandate whereas economic development is not the foremost objective. In terms of price trends, though both inflation and core inflation slowed somewhat in November, the core inflation rate was still higher than 2%. Also at issue was persistent inflation; the core inflation rate had registered above 2% since March and whether the slowdown in November was a one-off remained to be seen. Moreover, inflation expectation plays a vital role and offers great help in monetary policymaking. The longer inflation lingers, the more likely for inflation expectations to build up, highlighting the importance to tackle the issue of domestic inflation proactively. Therefore, while these warranted a rate hike, they seemed to give stronger grounds for hiking by 0.25 percentage points.

Another board director shared the view that a rate hike in the size of 0.125 percentage points was the balanced approach after weighing up the incessant inflation pressures against an economy facing downside risks. In particular in the US, where an economic recession was already looming large, further aggressive rate hikes by the Fed in view of stubbornly high inflation could raise the specter of a hard landing. The outlook seemed bleaker in Europe as energy price surges and the ECB's tightening stance pushed the economy to the brink of recession. In addition, China's COVID-19 case surge and inventory destocking by domestic firms had sharply hit corporate sales. The director therefore supported a 0.125 percentage point rate hike.

One board director stated support for raising the policy rates by 0.125 percentage points and leaving the RRR unchanged, adding that the move matched market expectation. The director also suggested that the Bank should pay attention to the fact that the annual growth rate of the monetary aggregate M2 continued to exceed 6.5%, namely the upper threshold of the Bank's M2 growth reference range, and the situation that the interest rate differential between Taiwan and the US continued widening.

One board director expressed the view regarding policy rates that it is important to ponder the influence of monetary policy adjustments on inflation expectation. In addition, it is possible that the forces behind and their effects on inflation expectation might not be captured, as elaborated in the following. First, nominal earnings posted marked rises this year, indicating further pressures on inflation and possibly reflecting high inflation expectations. Given that a higher inflation rate this year led to a slight contraction in real earnings, which hurt household disposable income and could then restrain consumption and investment, it is crucial to prevent inflation from accelerating. Second, goods purchased at least once per month and the top 17 staple goods posted much larger price gains than the broad basket, and the situation had lasted for some time now, which tended to intensify consumer sentiment about price rises and could then push inflation expectations further upwards. Third, one of the contributors to higher inflation rate this year was rent increases, and the continuous housing price rises could feed into rental costs and hamper price stability. Fourth, for 27 months in a row, the annual growth rate of M2 had exceeded the upper limit (6.5%) of the reference range, a reference set by the Bank in view of M2 growth's influence on longer-term price trends. That reference range might need to be reviewed to explore the case for an adjustment; it was also advisable to communicate with the public about the Bank's monetary policy conduct, and let the public know that the Bank takes the issue of inflation seriously. Furthermore, the previous two RRR increases actually ran counter to the Bank's long-standing policy direction to gradually decrease the RRR. It would be more desirable to employ other policies to achieve more effective interest rate transmission, such as issuing certificates of deposits or raising the policy rates. In a committed effort to rein in inflation and inflation expectations, it would be advisable to adopt a rate hike by 0.25 percentage points.

One board director pointed out that corporate sector survey results showed that the pay-rise decision was chiefly predicated on employee work performance and company profits, rather than on price trend changes. In addition, this year's domestic price rises were mostly due to the peculiar case of supply-side shocks; nonetheless, Taiwan's inflation was milder than in the US or Europe thanks to government's supply-side responses and the drastic tightening by major central banks exerting a spillover effect that eased inflationary pressures in many economies including Taiwan.

The board director also commented on the issue of M2 growth. While the M2 annual growth rate began to exceed the upper threshold (6.5%) of the reference range in August 2020, it should be noted that there existed pandemic's impacts and inflationary pressures were rather modest, with a negative 0.23% inflation rate in 2020; to help cushion the downturn and buttress the economy, it was actually necessary to maintain higher M2 growth. That growth had started to decelerate in the second half of 2021, during which it remained above 6.5% mainly because bank loans and investments stayed high as the government continued with stimulus efforts, exports and investments both expanded, and the real estate market also saw demand booming. More recently, the NT dollar depreciation caused the value of troves of foreign currency deposits to seemingly increase when denominated in NTD terms, resulting in a rise in M2 growth; accounting for that exchange rate factor, the average annual growth rate of M2 for the first ten months of 2022 would be only marginally above 6.5%. Considering that M2 is a mid- to long-term reference indicator, it would be more appropriate to look at longer-term trends when reviewing inflation anchoring in the mid- to long-term, allowing for some time before forming a decision around a reference range adjustment.

One board director approved of the proposition of a 0.125 percentage rate hike but also stated support for a rate hike in a larger size. The previous concern of imported inflation was mainly because the Russian invasion of Ukraine pushed up prices of oil, natural gas, soybean, wheat, and corn. China, which remains the key player in global supply chains, recently began to lift pandemic-related restrictions; although this would likely boost its consumption and investment and help bring global supply chains back to normal, post-pandemic consumption boom in a country where the population is large and monetary policy still accommodative could drive up inflation and wage growth. As such, it could increase supply chain costs and trigger renewed woes of inflation. While the Bank downgraded the domestic economic growth forecasts, it also projected the inflation rate would turn lower. Nonetheless, the Bank still needs to continue monitoring new developments in global supply chains and other international economic situations and to keep watch on the effects therefrom on domestic price trends.

Another board director pointed to economic fundamentals: Export growth momentum had slowed amid a streak of growth contraction for three consecutive months. Despite a still steady economic expansion, the official business climate monitor had barely stayed within the "yellow-blue light" that suggested a possible transition towards a slowdown, and the leading indicator also declined, both implying high uncertainties over the business outlook. The headline inflation rate recently trended downwards, but annual growth rates of key staple goods and core inflation remained elevated, necessitating close monitoring of inflation expectations. Compared to the US and Europe, Taiwan's inflation was still mild and the inflation rate was expected to come down to below, but still close to, 2%. With the latest Fed rate hike by 0.5 percentage points yesterday, today's proposition of a 0.125 percentage rate hike was an appropriate move that would keep the US-Taiwan interest rate differentials from widening significantly. As for the RRR, considering that next year's outlook is shrouded in many uncertainties, it would be appropriate to put a hold on the RRR policy.

One board director was in favor of the proposed rate hike by 0.125 percentage points and commented on inflation. Regarding the Bank's projection that the inflation and core inflation rate would come down to below 2% next year, the director noted that the forecasted downtrend would be mostly due to a higher base effect. The key components of core inflation, including food away from home, rent, durable consumer goods, meat, and apparel, had all recorded large price gains for quite some time, making it hard for core inflation to slow down in the near future. Moreover, if prices of agricultural products and energy items climb back next year, the inflation rate could continue to trend up. Surveyed data on inflation expectations also revealed public concern on future inflationary pressures, which warranted the Bank's close attention.

One board director stated that several previous inflation forecasts by the Bank seemed to err on the optimistic side, which might need to be revisited. In addition, the seemingly milder inflation compared to other economies was mainly attributable to government policy controls and underestimated rent costs in the CPI; given the colossal costs, it would be better to avoid a premature verdict of Taiwan's inflation being relatively mild. At present, core inflation remained elevated and would not weaken rapidly as the price gains had taken root in many items. Meanwhile, the overnight interbank call loan rate was only higher than the history trough by less than 0.5 percentage points, a level far lower than before the 2008 global financial crisis, leaving limited maneuver for future policy rate cuts. Monetary policy tightening involves difficult tradeoffs; historical lessons from the 1970s showed that insufficient monetary tightening and premature easing would result in protracted inflation and thus leave the economy prone to a stagflation trap. As the Bank has still kept the policy rates persistently low, slow rate hikes in the size of 0.125 percentage points will not bring about meaningful results in containing inflation and mitigating inflation expectations.

One board director remarked that the Bank had taken a gradual, mild approach to monetary tightening as domestic inflation had been mild compared to Western economies this year so far. It is important to calibrate the right amount of tightening; gradual and steady tightening would help attain a soft economic landing whereas too much tightening could risk triggering a recession and exacerbate the pain inflicted on the economically-vulnerable. The proposed size of today's rate hike was based on readings of domestic inflation and impacts from global factors on economic growth. In view of abated domestic inflation pressures in recent months, the Bank expected the inflation rate to come down to below 2%, a forecast similar to those made by external research institutions, albeit still subject to uncertainties surround inflation (for example, no one could have predicted the breakout of a war in Ukraine this year). In addition, a mild tightening stance also took into account a considerable downgrade of the domestic economic growth forecast. In view of a myriad of uncertainties over the global economic outlook, the Bank will closely monitor the domestic and foreign economic and financial conditions and adjust monetary policy in a timely fashion as warranted. As for the overnight call loan rate, given ample market liquidity conditions at home after 2009, the call loan market has mainly served as a pool for bank reserves management and hence played an increasingly less central role. This is different from the US, where capital market holds a dominant position in the financial system and the Federal Reserve uses the fed funds rate (the rate banks charge each other for overnight loans) as its operational target for monetary policy.

(3) Discussions on housing prices

One board director noted that housing prices had surged dramatically this year, during which the Bank, echoing the industry, indicated that this reflected price-inelastic housing demand (e.g., owner-occupied housing) and rising construction costs; however, although the price index for construction works had significantly decreased since the beginning of the year, housing prices continued soaring. Currently, bank loan portfolio concentration in real estate lending ticked down only modestly, while no new selective credit controls were introduced after December 2021. Elevated property prices not only cause housing affordability to deteriorate but will feed into rental costs and push up inflation; this is also an issue greatly pertinent to financial stability. It would be wrong to think that high housing prices has nothing to do with monetary policy. Research shows that, in Taiwan, the housing price cycle runs ahead of the credit cycle. This indicates that Taiwan's housing price rises are not mainly driven by bank credit increases, which also helps explain why the Bank's selective credit controls have not been distinctly effective in taming housing price gains. A lot of studies also show that Taiwan's housing price rises have in large part been driven by short-term speculation expecting price gains. The Bank has a responsibility to address the issue of high housing prices and needs to make committed efforts rather than relying on other competent authorities.

Another board director expressed the view that in accordance with Bank's mandate to safeguard financial stability, the concern is about whether housing price trends could become a source of financial instability. The selective credit controls were not aimed at housing prices but rather the impact of housing credit on financial stability; in the meantime, the Bank will continue to keep watch on the housing market issue. As for recent property price surges, the construction cost indices showed that supply-side cost uptrends owing to labor and materials shortage were part of the reasons. Housing demand and upside expectations of future price gains driven by big new corporate investment projects had also stirred up speculative transactions. That was why the government launched the Healthy Real Estate Market Plan that involved cross-agency efforts to address the issue from the demand, supply, and institutional aspects. On the Bank's part, it rolled out selective credit controls via four statutory amendments, the effectiveness of which was also reinforced by the monetary tightening policies this year. Similarly, other major economies have raised the policy rates to combat high inflation first and foremost, with a collateral dampening effect on housing prices. It is the Bank's hope that the housing market will achieve a soft landing given that a hard landing would cause severe damage and would then require even more policy measures to mend. A case in point was China's recent property market debacle. Another example was the Bank of Japan's sizeable rate hikes during 1989-1990 that intended to tackle the real estate headache but ended up causing a housing market crash and plunged the economy into secular stagnation. The Bank will close monitor the implications of the domestic real estate market on financial stability and conduct a rolling review on its selective credit control measures.

3. Monetary Policy Decision:

The board directors decided to raise the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations by 0.125 percentage points to 1.75%, 2.125%, and 4%, respectively.

Voting for the proposition: Chin-Long Yang, Jain-Rong Su, Mei-Hua Wang, Tzung-Ta Yen, Chung-Dar Lei, Chi-Chung Chen, Jin-Lung Lin, Chao-Hsi Huang, Chao-Yi Chen, Shi-Kuan Chen, Chien-Yi Chang, and Fu-Sheng Hung (Excused, Appointing Tzung-Ta Yen as Proxy)

Voting against the proposition: Nan-Kuang Chen, Shiu-Sheng Chen, and Yi-Ting Li

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.

Press Release December 15, 2022

Monetary Policy Decision of the Board Meeting (2022Q4)

I. Global economic and financial conditions

Since the Board met in September this year major economies have continued to tighten monetary policy, and the global economy has experienced significantly slower growth. International prices of commodities such as crude oil have mostly exhibited a downtrend, and upside pressures for global inflation have become mildly relieved. As the US and the European economies continued with policy rate hikes, leading to tighter global financial conditions, international institutions forecasted global economic and trade volume growth to decelerate drastically in 2023. With global demand weakening markedly, supply chain bottlenecks easing, and international raw material prices declining, global inflationary pressures are expected to drop next year. Meanwhile, recent developments in US inflation and the Fed's monetary tightening actions have triggered continuous turmoil in international financial markets.

Looking ahead, largely synchronized policy rate hikes by major central banks such as the Fed and the ECB may cause the global economy to register a sharper slowdown, undermine global financial stability, and increase downside risks to the world economy. In addition, a string of factors, including the US-China conflict affecting the development of globalization, extreme weather events, the ongoing war between Russia and Ukraine, and the European energy crisis, could weigh on commodity prices, adding to uncertainties surrounding global inflation trends.

II. Domestic economic and financial conditions

1. Against a background of diminished impact from the domestic pandemic waves and a gradual lifting of lockdown restrictions in recent months, the unemployment rate decreased further, the number of employed persons edged up, and private consumption steadily recovered. However, sapped by weaker global final demand and ongoing inventory destocking, Taiwan's exports contracted for the third consecutive month, which in turn dampened business sentiment and constrained private investment. The Bank expects the pace of economic growth to slow notably in the fourth quarter this year and downgrades its forecast of Taiwan's GDP growth rate to 2.91% for the year as a whole (Appendix Table 1).

Looking ahead to next year, loosened social restrictions and border controls are likely to boost private consumption. Nonetheless, significant slowdown in global economic and trade activities would hamper export growth for Taiwan, while a cautious business outlook and inventory overhangs might prompt firms to defer investment plans or shrink capital expenditure, weighing on private investment. The Bank expects the economic expansion to moderate to a pace of 2.53% in 2023. .

2. Since the middle of the year, international prices of raw materials such as crude oil and grains have softened and domestic prices of food such as vegetables and fruit have posted smaller gains; as a result, the annual growth rate of consumer price index (CPI) trended downwards and registered 2.35% in November. However, the core CPI (excluding fruit, vegetables, and energy items) annual growth rate remained elevated, reaching 2.86% in November. For the first eleven months of the year, the annual growth rates of CPI and core CPI averaged 2.97% and 2.60%, respectively. For the year as a whole, the Bank forecasts the inflation rate and the core inflation rate to be 2.93% and 2.59%, respectively (Appendix Table 2).

   Looking ahead to next year, global supply chain gridlocks would likely be resolved and markets expect crude oil and other raw material prices to trend lower than this year. The Bank forecasts the CPI and core CPI annual growth rates to drop to 1.88% and 1.87%, respectively, in 2023. External forecasts by domestic and foreign institutions also project Taiwan's inflation rate to come down next year.

3. Banks' excess reserves stayed around NT$60 billion on average in recent months. For the first ten months of the year, the annual growth rate of bank loans and investments and that of M2 (measured on a daily average basis) were 7.55% and 7.54%, respectively. Alongside the Bank's monetary tightening, interest rates on bank deposits and loans turned higher and money market rates showed an across-the-board uptrend.

III. Monetary policy decision: Raising the policy rates by 0.125 percentage points

In today's meeting, the Board considered the following assessment of economic and financial conditions at home and abroad. Although the domestic inflation rate declined in recent months, it is expected to remain above 2% this year before dropping to below 2% next year. Meanwhile, as domestic exports and investment face headwinds from the anticipated global economic downturn compounded by rising downside risks, Taiwan's economy is expected to grow at a slower pace next year. The Board judged that a policy rate hike and continued monetary policy tightening will help rein in domestic inflation expectations, thereby attaining the policy objectives of promoting price stability and fostering sound economic and financial development on the whole.

At the meeting today, the Board decided to raise the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations by 0.125 percentage points each to 1.75%, 2.125%, and 4%, respectively, effective December 16, 2022.

Looking ahead to next year, with the world to be confronted by intensifying downside economic risks and the path of global inflation still shrouded by uncertainty despite some signs of pressures subduing, the Bank will closely monitor the trajectory of monetary policy moves in major economies, changes in international raw material prices, geopolitical risks, and extreme weather events, to assess their implications for domestic price trends, and economic and financial conditions. Accordingly, the Bank may adjust its monetary policy in a timely manner as warranted, so as to fulfill the statutory duties of maintaining financial and price stability, and fostering economic development within the scope of the above objectives.

IV. The Bank's recent round of selective credit control measures, implemented with four successive amendments from December 2020, has so far successfully bolstered credit risk management of the banking sector. In the year to date, banks' construction and housing loans have expanded at a slower pace, real estate loan concentration has improved slightly, and the level of non-performing loan ratio for real estate lending has stayed low. The effectiveness of the existing credit controls have also been amplified by the Bank's monetary policy tightening. Meanwhile, housing market transactions have decreased considerably in recent months amid slower economic growth and a volatile stock market, as well as the government's cross-agency efforts under the Healthy Real Estate Market Plan. The Bank will continuously monitor the developments in housing credit and market, review the implementation of the selective credit control measures, and make adjustments as needed in order to promote financial stability and sound banking operations.

V. The NT dollar exchange rate is in principle determined by market forces. Nonetheless, when seasonal or 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 Bank, in line with its statutory mandates, will step in to maintain an orderly market.

Appendix Table 1

Taiwan's Economic Growth Forecasts by Major Institutions

Unit: %

Forecast institutions		2022 (f)	2023 (f)
Domestic institutions	**CBC (2022/9/22)**	**3.51**	**2.90**
	Yuanta-Polaris (2022/9/21)	3.40	3.08
	DGBAS (2022/8/12)	3.76	3.05
	TIER (2022/7/25)	3.81	n.a.
	CIER (2022/7/19)	3.56	3.41
	Academia Sinica (2022/7/18)	3.52	n.a.
Foreign institutions	Citi (2022/9/21)	3.40	3.00
	EIU (2022/9/21)	2.90	2.40
	Goldman Sachs (2022/9/21)	2.99	2.61
	HSBC (2022/9/21)	3.20	2.20
	UBS (2022/9/20)	3.35	2.97
	Standard Chartered (2022/9/19)	3.60	2.60
	Barclays Capital (2022/9/16)	3.40	2.60
	BofA Merrill Lynch (2022/9/16)	3.30	2.20
	Credit Suisse (2022/9/16)	2.80	2.20
	J.P. Morgan (2022/9/16)	2.60	1.90
	Morgan Stanley (2022/9/16)	3.10	2.70
	S&P Global Market Intelligence (2022/9/15)	2.91	2.55
Forecast Average		**3.28**	**2.65**

Appendix Table 2

Taiwan's Inflation Forecasts by Major Institutions

Unit: %

Forecast institutions		2022 (f)	2023 (f)
Domestic institutions	**CBC (2022/9/22)**	**2.95 (CPI)** **2.52 (Core CPI*)**	**1.88 (CPI)** **1.87 (Core CPI*)**
	Yuanta-Polaris (2022/9/21)	2.94	1.69
	DGBAS (2022/8/12)	2.92	1.72
	TIER (2022/7/25)	2.95	n.a.
	CIER (2022/7/19)	3.11	2.06
	Academia Sinica (2022/7/18)	3.16	n.a.
Foreign institutions	Citi (2022/9/21)	2.90	2.00
	EIU (2022/9/21)	3.30	1.80
	Goldman Sachs (2022/9/21)	3.04	1.36
	HSBC (2022/9/21)	3.20	2.00
	UBS (2022/9/20)	2.92	1.39
	Standard Chartered (2022/9/19)	2.90	1.40
	Barclays Capital (2022/9/16)	3.10	2.40
	BofA Merrill Lynch (2022/9/16)	3.10	1.90
	Credit Suisse (2022/9/16)	3.10	2.10
	J.P. Morgan (2022/9/16)	2.90	1.80
	Morgan Stanley (2022/9/16)	3.30	1.30
	S&P Global Market Intelligence (2022/9/15)	2.85	1.88
Forecast Average		**3.04**	**1.79**

* Excluding vegetables, fruit, and energy.