Minutes of the Monetary Policy Meeting

September 22, 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 September 22, 2022

Date and Time: 2:00 p.m., September 22, 2022

Location: Rooms B1101, B1102 and B1107, Central Bank of the R.O.C. (Taiwan)

Members Present:

Chairman, Board of Directors: Chin-Long Yang

Executive Directors: Tzung-Ta Yen, Chung-Dar Lei

Directors:

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

Jain-Rong Su (Excused, Appointing Tzung-Ta Yen as Proxy), Mei-Hua Wang (Excused, Appointing Chung-Dar Lei as Proxy), Nan-Kuang Chen (Excused, Appointing Shiu-Sheng 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:

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 second quarter this year, the U.S., the euro area, and China had all experienced economic slowdown. Global manufacturing expansion sputtered, business sentiment of major economies became more cautious about the economic outlook, and decreasing new orders and increasing inventories also pointed to weaker demand for goods consumption worldwide. Amid the global economic moderation and sluggish trade growth, supply chain bottlenecks had begun to ease and freight fees had dropped significantly from the peaks. However, the world continued to witness elevated inflation, many economies including the U.S. and Europe continued hiking policy rates and financial conditions were tight. It was projected that global economic growth would soften this year, with international institutions downgrading their forecasts for the world's GDP growth rate in 2022 and expecting a further slowdown in 2023.

Regarding commodity prices, oil prices had swung downwards since July 2022, against a background of the European Union allowing Russia to export its crude oil to economies outside the EU, OPEC+ agreeing to increase oil output, and a global economic moderation dampening demand for crude oil. International institutions forecasted this year's oil prices would exceed the levels of last year then edge down next year. The Reuters/Jefferies CRB (RJ/CRB) Index, the global commodities benchmark, fell in recent months from a previous high and fluctuated within a narrow range.

Surging energy and food prices have kept inflation in major economies at high levels this year so far. Nevertheless, given the monetary tightening actions by most major central banks and a recent decline in energy prices, the world would likely see next year's inflation come down from previous highs. While the U.S., Europe and many other economies carried on with policy rate hikes to tame high inflation, Japan and China remained accommodative.

In terms of international financial market trends since August 2022, as the Federal Reserve (Fed) and the European Central Bank (ECB) signaled for further tightening, the

U.S. and German10-year government bond yields both rebounded. Major stock markets experienced turbulence in recent months in response to U.S. inflation data and Fed policy paths. The DXY index set a new record high in more than 20 years, leading major currencies to depreciate against the US dollar.

Looking ahead, the global economy faces multiple downside risks, including the following: (1) Aggressive tightening by major central banks including the Fed and the ECB, roiling global financial markets and depressing economic activity worldwide, heightening the risk of defaults by countries with high levels of external debt; (2) the Russia-Ukraine war continuing on, taking a toll on the European economy amid the resulting energy crisis and hurting political and economic stability amid financial market turbulence; (3) China's "zero-COVID" policy posing a threat to the easing of global supply chain bottlenecks, and the real estate market pressures destabilizing global financial stability. In addition, geopolitical risks, extreme weather events, and pandemic waves also cast a long shadow over the global economic outlook.

2. Domestic Economic and Financial Conditions

(1) Economic situation

In recent months, the domestic economic expansion moderated, with both leading and coincident indicators for business outlook on a downtrend. Manufacturing and non-manufacturing sentiment for the outlook for the next six months also became cautious.

In terms of external demand since July 2022, robust demand for integrated circuits and mineral products counteracted by global final demand losing steam led export growth to slow down year on year, registering 2% in August. Looking ahead, emerging technology applications and digital transformation would continue supporting demand and extend the gains in related supply chain exports. However, with major central banks tightening further and external demand cooling down, Taiwan could witness slowing growth momentum for its exports. Overall, the Bank projected exports to post solid growth this year and slower growth next year.

In respect of domestic demand, private investment grew at a slower pace mainly because raw material shortfalls resulted in an extension of equipment delivery time, while labor shortage and inventory adjustments as well as a cautious economic outlook prompted some firms to postpone capital expenditure plans. The Bank expected private investment to still post steady growth this year and slower growth next year.

In terms of private consumption, growth momentum strengthened, as an abated domestic pandemic and the government's domestic tourism stimulus measures encouraged consumers to spend and travel. The Bank projected private consumption growth to be mild this year and to gather pace next year.

With the pandemic's impact diminishing at home, the number of employed persons increased by 0.29% year on year in July. The unemployment rate rose to 3.78% in July owing to seasonal factors, but the seasonally-adjusted figure was 3.68%, declining to the level before the domestic COVID-19 resurgence in April this year. This also showed that labor market conditions were picking up.

Overall, while the previous pandemic impacts had eased, the global economy could increasingly face greater downside risks, and domestic firms were conservative about the economic outlook. In this view, the Bank revised the GDP growth rate forecasts to 3.51% this year and 2.90% next year. The growth projections by major institutions ranged between 2.60% and 3.81% for this year and between 1.90% and 3.41% for next year.

(2) Financial conditions

Domestic long and short-term interest rates went upwards as the Bank's hikes in policy rates and the reserve requirement ratios (RRRs) took effect in June and July, respectively. As for excess reserves, the total amount as held by all banks stood at a level over NT$60 billion in recent months.

In July, short-term market rates and bank deposit rates both rose by more than 0.125 percentage points – the size of the June hike in policy rates, a testament of direct transmission from the policy rate hike to the market.

Bank loans and investments had gradually slowed month by month to an annual growth rate of 6.55% in July, mainly because of an increase in government tax revenue, government repaying the borrowings, and banks scaling back investments owing to funding needs and foreign capital outflows. The annual growth rate edged up in August, though, buoyed by greater demand of government enterprises for funding. In terms of money supply, reflecting the slowdown in bank loans and investments and a year-on-year increase of foreign capital outflows, as well as the Bank's hikes of policy rates and the RRRs, the M2 annual growth rate had trended downwards since May this year, with the pace of growth averaging 7.66% for the first eight months of the year.

In the housing market, trading had moderated in the year so far. During the period of January to July, the total number of building ownership transfers nationwide decreased by 1.64% compared to the same period last year, while that number for the six Special Municipalities nudged up by 0.2% for the first eight months of year. Construction costs for newly-built homes continued climbing but at a slower pace. Prices of new housing units were trending up, reflecting the rise in national Urban Land Price Index (compiled by the Ministry of the Interior) in March 2022. The price indices for existing homes and new housing projects rose further by 14.77% and 34.72% in the second quarter of the year. Meanwhile, affected by the domestic pandemic resurgence and the Bank's policy measures, recent sentiment-related data showed that builders and real estate businesses turned cautious about the housing market outlook, while banks became less optimistic about the outlook of residential housing in major cities.

As of the end of July 2022, the annual growth rates of real estate lending, housing loans, and construction loans edged down to 9.46%, 8.64%, and 12.53%, respectively. Real estate loans as a share of total loans slightly shrank to 37.07% from the 37.16% registered at the end of last year. Meanwhile, the construction loan ratio of domestic banks was 27.05%, 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 0.08%.

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

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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.

judged to amplify the effectiveness of selective credit controls. In addition, housing market trading had started to slacken 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; given time, more results of the policy efforts are expected to show.

(3) Price trends

In the year to date, Taiwan had suffered considerable pressures of imported inflation owing to global supply chain bottlenecks and the Russia-Ukraine war pushing up international grain and energy prices. More recently, though, as international raw material prices softened and domestic food price rises were also slowed by declines in vegetable prices, the annual growth rate of the consumer price index (CPI) dropped from 3.36% in July to 2.66% in August and that of the core CPI edged down to 2.73%.

For the first eight months of the year, the annual CPI growth rate averaged 3.10%, mainly owing to rising prices for food, fuel and lubricants, consumer durables, and residential rent. As there was a more marked increase in prices of staples with a higher purchase frequency, consumers tended to be more conscious of upward price trends.

Recent data on multiple inflation-related indicators all pointed to a prospective ease in domestic inflationary pressures. Spot crude oil prices already dropped from previous highs and would likely trend down steadily in the future, while international commodity futures also saw price corrections. The import price index and the producer price index also gradually came down. As for the NT dollar depreciation's impact on domestic price trends, it remained within manageable range: If the NTD-USD exchange rate came from the 2021 average of 28.02 to the estimated 2022 average of 29.5 (representing a depreciation of 5.02%), this year's CPI annual growth rate would rise by 0.12 - 0.25 percentage points; if the exchange rate came to 30 (a depreciation of 6.60%), the effect on the CPI annual growth rate would edge up to a rise by 0.16 - 0.33 percentage points.

Given the decline in international raw material prices and a higher base effect, the annual CPI growth rate was expected to gradually come down from the third quarter of the year onwards. Looking ahead to next year, as global supply chain bottlenecks ease, global freight rates trend low, and international raw material prices continue with a downswing, domestic inflation would likely decrease to below 2%. The Bank forecasted the annual growth rate of the CPI and the core CPI to register 2.95% and 2.52% for 2022 and to decline to 1.88% and 1.87% for 2023. Projections for Taiwan's annual CPI growth rate made by major forecasting institutions ranged between 2.85% and 3.30% for 2022 and between 1.30% and 2.40% for 2023, with the forecast average below 2% for next year.

Looking ahead, upside pressures for domestic prices could arise from (1) downward price stickiness (i.e., "easy to rise but hard to fall") in some items of the services category, including food away from home and residential rent; (2) the easing of border controls leading to hikes in airfares and travel group fees; (3) greater demand for domestic travel as concerns over pandemic waves diminished, and the resulting rise in prices for hotels and accommodation; (4) the planned hike of minimum wages next year. On the other hand, downside pressures could come from (1) an expected softening of crude oil and other raw material prices in the second half of the year; (2) lower international freight rates as supply chain bottlenecks ease; (3) telecom operators cutting prices of mobile phones and other communication devices amid intense competition.

Since the beginning of this year, the U.S., Europe, and some Asia-Pacific economies had aggressively raised their policy rates to tame relatively higher inflationary pressures. Taiwan's price uptrends were similar to Japan and China; the Bank of Japan maintained an accommodative monetary policy stance and China's central bank even reduced policy rates, whereas the Bank continued with a tightening stance with gradual rate hikes.

3. Considerations for Monetary Policy

Major considerations:

(1) The domestic inflation rate is likely to gradually 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) The domestic economy is expected to see growth moderating to a pace slower than 3% next year.

Primary causes for moderations in domestic inflation and in economic growth:

(1) Spillover effects from the global economic downturn and tight financial conditions:

As major economies including the U.S. and Europe take big steps in monetary tightening and global financial conditions become tighter, global economic growth is expected to slow in 2022 and 2023 and faces heightened downside risk. As a small open economy, Taiwan could be impacted by spillover effects via the following three channels:

A. The real economy: With global final demand weakening, Taiwan's exports have seen slower growth in recent months and private investment has turned conservative. The domestic GDP growth rate is projected by the Bank to slow to below 3% next year, which would also take some heat off domestic inflation.

B. Prices: Global economic slowdown, declines in crude oil and other raw material prices on tepid demand, and lower international freight rates on the easing of global supply chain bottlenecks would combine to help mitigate pressures from imported inflation.

C. Finance: As the Fed continues with rate hikes and global stock markets slump on concern about a global recession, Taiwan's stock markets would experience more volatile downswings along with massive foreign capital outflows, and domestic financial conditions could tighten further.

(2) The government's continued efforts to implement supply-side measures in response to fluctuations in energy and food prices, providing substantial support for sustaining overall price stability:

A. Continued adjustments, as seen needed, of the tariff reduction measures, including commodity taxes on gasoline, diesel, and cement, and tariffs on beef, formula milk, butter, and wheat; an extension of business tax exemption on imported soybeans, wheat, and corns.

B. A freeze on electricity tariff adjustments for the second half of the year, as per the resolution of the government's review committee for electricity tariffs.

(3) The Bank's approach of simultaneously affecting price (interest rate) and quantity (money stock) with hikes in both the policy rates and the RRRs, helping to rein in domestic inflation expectations:

A. Reflecting the policy rate hikes, long and short-term market rates have gone upwards and financial conditions have broadly tightened.

B. The RRR increase is expected to reinforce money and credit management and slow down monetary growth: As banks are required to set aside more reserves, their credit creation capacity would be restrained, helping to keep M2 growth at an appropriate pace. In recent months, the annual growth rate of M2 has declined, with the rate averaging 7.66% for the first eight months of the year – still higher than the 6.5% upper threshold of the Bank's reference range. If the RRRs are to be raised further in the future, M2 growth would likely soften more markedly, which could amplify the effect of denting inflation expectations.

II. Proposition and Decision about Monetary Policy

1. **Policy Propositions: To raise the discount rate, the rate on refinancing of secured loans, and the rate on temporary accommodations by 0.125 percentage points to 1.625%, 2%, and 3.875%, respectively; and to increase the reserve requirement ratios on NT dollar demand deposits and time (savings) deposits by 0.25 percentage points, respectively.**

2. Board members decided to raise the policy rates by 0.125 percentage points each and reached a unanimous vote to increase the reserve requirement ratios on NT dollar demand deposits and time (savings) deposits by 0.25 percentage points. Related discussions are summarized as follows.

(1) Discussions on today's monetary policy propositions

One board director stated that inflation has become a challenge to central banks around the world, with all major economies except Japan and China commencing a monetary tightening cycle. However, the Fed's aggressive rate hikes could heighten the risk of a hard landing and further roil the financial markets. By contrast, Taiwan does not need to move at such a drastic pace. Meanwhile, the domestic economic growth would moderate this year and likely to slow further next year. The six-month outlook sub-index data under the Manufacturing Purchasing Managers' Index (PMI) and the Non-Manufacturing PMI have in recent months dropped below 50 in the contraction territory, and export growth momentum has also weakened considerably. The inflation rate has turned from upswings in the first half of 2022 to a gradual downtrend since July and is expected to ease to below 2%, which is within the Bank's tolerance range. If the Bank hikes too fast, corporates and households would experience greater hardship as they face higher borrowing costs and consumers would also feel the pain; it is therefore not appropriate to have steep policy rate hikes. In the meantime, raising the reserve requirement ratios (RRRs) would reduce market liquidity and rein in upside price pressures. In this view, the board director was in favor of a 0.125 percentage point rate hike and a 0.25 percentage point RRR increase.

One board director also supported the propositions that would simultaneously affect interest rates and money stock. The director, who had previously worried that the June RRR increase might have taken a heavy toll on banks' excess reserves and hit money supply as well as market interest rates, pointed out that excess reserves actually expanded in recent months. However, this was not due to ineffectiveness of the ratio increase policy but rather because the effect was offset by other factors, including the existing tendency for banks to keep excess reserves at high levels, the uneven distribution of excess reserves among foreign and domestic banks who also react differently to such ratio adjustments, the volume of certificates of deposits (CD) issued by the Bank, stock market turbulence and foreign capital flows, etc. Considering that the RRR policy tool is still relevant and that it is not frequently put to use, it is important to explore in depth how and how well the tool works.

One board director noted that as the RRR increase has the effect of reducing money stock, the Bank's CD issuance would naturally decrease on less strong bank demand for liquidity; the issuance decrease and the ratio hike do not contradict each other. Furthermore, though in theory a "quantity" policy tool's effect on "price" would take some time to show, it has been observed that in recent months money market rates rose significantly in increments larger than the Bank's policy rate hike, and corporate bond yields also climbed swiftly and steeply; this mainly reflected three other factors with similar impacts on liquidity, namely foreign capital outflows, the RRR increase, and the tax season. The Bank has continued studying the channels and effects of reserve requirement ratio hikes. Preliminary findings show that such a policy has a greater effect on M2; when compared with a policy rate hike, a reserve requirement ratio increase exerts a more pronounced effect on CPI but a smaller effect on GDP.

Another board director also stated that an RRR increase could potentially bring about a greater effect than a policy rate hike. Such a policy tool tends to affect excess reserves of the banking sector on the whole; that kind of extensive reach could be one of the reasons why this policy tool has been rarely deployed among Western central banks. Moreover, the fact that domestic short-term market rates have risen much more than the size of recent policy rate hikes also demonstrated that the RRR increase had exerted a greater effect than the policy rate hike. On another front, policy rate hikes would directly affect banks' interest rates on deposits and loans, which would significantly hit first-time homebuyers, while RRR hikes affect market interest rates and push up short-term funding costs of corporates, who generally have greater capacity (than first-time homebuyers) to withstand rising costs of funding. Therefore, it seems the appropriate approach to take the middle course by raising the policy rates by 0.125 percentage points and the RRRs by 0.25 percentage points. In this view, this director supported a 0.125 percentage point hike in policy rates accompanied by a 0.25 percentage point hike in RRRs.

One board director agreed with a 0.25 percentage point hike in RRRs but favored a 0.25 percentage point hike in policy rates, based on the following reasons. First, the current conditions of and outlooks for domestic job market and economic growth were steady, with the probability of Taiwan entering a recession in the next quarter lower than 50%. Second, while the annual growth rate of CPI declined in August, that of core CPI remained elevated. Foreign research work shows that inflation expectations need to be anchored at a lower level in order to prevent inflation from being persistently high. With domestic staple goods still posting sizable rises and affecting consumer sentiment, policy rates should be raised at a more aggressive pace, even by 0.25 percentage points in one move. This would help anchor inflation expectations at a lower level with an inflation-fighting message, thereby boosting monetary policy credibility.

One board director stated that the Bank needs to review how it kept underestimating the rise in inflation in the course of more than one year. It was not until March this year did the Bank recognize the risk of rising inflation and raise the policy rates by 0.25 percentage points. Later, even as domestic inflation got increasingly higher, the Bank only devised a 0.125 percentage point rate hike, along with an RRR hike by 0.25 percentage points. That was in stark contrast with many other central banks, with the policy actions repeating a previous pattern of small-step hikes of 0.125 percentage points. While domestic inflation showed signs of moderation recently, it would be too sanguine to conclude that it has embarked on a downtrend. International energy and food prices are highly likely to go up again and domestic price gains have become entrenched in a wide range of goods, particularly food items, which would keep inflation expectations from softening any time soon. In addition, government measures to hold prices of some goods steady and the fact that residential rent, one of the CPI components, seemed insufficiently represented implied that Taiwan's inflationary pressures could have far exceeded the published statistical data; in other words, had the housing costs been truthfully reflected in the CPI data and/or the price stabilization measures withdrawn, Taiwan's inflation data would see a significant upward revision. Therefore, the Bank cannot be content with inflation being relatively mild, nor let the guard down seeing signs of inflation moderating. Moreover, a protracted low interest rate environment at home has led to chronic ailments in the macro-economy and the financial sector. Therefore, today's proposition of a 0.125 percentage point hike in policy rates would not help to rein in inflation and inflation expectations. Furthermore, the interest rate differential between Taiwan and the U.S. will continue to widen, exerting depreciation pressures on the NT dollar and worsening imported inflation.

One board director pointed out that in recent months the Bank's inflation forecasts had sometimes overshot and sometimes undershot the actual figures, indicating little evidence of a "systemic underestimation." The Bank bases its inflation forecasts on the latest available information about domestic and foreign economic and financial conditions, whereas unexpected critical exogenous shocks make forecasting more challenging as it is difficult for them to be captured through models or expert analysis, which could lead to forecasting errors. Since the start of this year, given a series of unexpected exogenous shocks overseas, including pandemic-induced supply chain bottlenecks, the Russia-Ukraine war, and China's pandemic-related lockdowns, the Bank had upgraded its inflation forecasts for 2022, as did the central banks of several major economies. As for the NT dollar, the main factor driving down its value against the US dollar in the year to date would be large foreign capital outflows: As the Fed's aggressive rate hikes to tame high inflation had led US stock markets to plummet and dragged down Taiwan's stock indices, foreign investors looking for global asset re-allocation therefore off-loaded their shares to lock in profits and transferred the gains out of Taiwan. In addition, since a large proportion of foreign capital inflows usually goes into the stock markets, the interest rate differential does not play a major role in their investment decisions. The view that a widening Taiwan-U.S. differential caused capital outflows and weakened the NT dollar is not true to the actual conditions in Taiwan's financial markets.

One board director noted that despite the appearance of steady economic expansion, non-farm real regular earnings continued to post negative growth, reflecting that inflation still imposed a hefty impact. Also, rises in prices of the top 17 staple goods and of the items purchased at least once a month both significantly outpaced the rise in headline inflation, indicating that lower-income households would be more exposed to the strains from inflation. In addition, housing prices in all areas registered double-digit growth year on year in the second quarter, and housing price rises could feed into rents; among the CPI components, residential rent rises, which are often sticky and lasting, represent marked inflationary pressures. Therefore, it is important to contemplate how monetary policy may help to anchor inflation expectations at a lower level. Given the ongoing inflationary pressures, and taking into account the feed-through from continuous housing price rises to rents and then to inflation, it would be in line with the important objective of price stability to raise the policy rates by 0.25 percentage points. Furthermore, a policy rate hike – whatever the size – sends a clear message of tightening to the public, whereas an RRR increase, albeit also a tightening move, would seem less straightforward data-wise and its effect would take some time to show; in this view, an RRR increase cannot replace a policy rate hike in terms of clearly sounding an inflation-fighting message to rein in expectations.

Another board director expressed the view that a 0.125 percentage point rate hike was rather mild. With international sea transport gridlock thawing and global energy prices softening, domestic inflationary pressures would likely ease. Against this background, while considering potential impact on homebuyers' interest burden, the director supported the 0.125 percentage point hike in policy rates. Regarding the RRR increase proposition, given that the M2 annual growth rate remained above the upper limit (6.5%) of the Bank's reference range, the director also agreed with a 0.25 percentage point RRR hike.

Another board director showing support for the two propositions also pointed out the following. Ocean freight rates pushed up by the pandemic have come down. While Ukrainian grain exports hampered by the war have been easing somewhat, many of their crop areas were no longer arable; combined with adverse weather conditions (such as droughts) in other major food commodity exporters, feed prices remained elevated, which could affect domestic prices of eggs and meat and impact the CPI trends. Under the circumstances, a policy rate hike would somewhat relieve household burdens associated with rising food prices; on the other hand, it could add to funding costs for housing and credit loans, hence the need to take into account the potential influences of policy rate hikes in terms of the size.

One board director, in favor of both of the propositions, stated that despite steady economic growth, the National Development Council's Monitoring Indicator had in recent months descended to the lower threshold of the "stable" signal range, the Leading Indicators had trended further downwards, and exports had also showed signs of weakening. While Taiwan's inflation was mild relative to other major economies, it was partly sustained by tariff and tax control measures aiming at restraining raw material prices. If the war in Ukraine rages on and extreme weather conditions lack improvements, domestic inflation might not see meaningful declines; continued monitoring should be warranted. The director gave the reason for supporting a 0.125 percentage point rate hike, citing the consideration that higher policy rates affect the entire economy instead of specific segments, including posing an impact on borrowers' interest payments. Still, the director recognized the importance to convey the Bank's tightening stance. The RRR increase by 0.25 percentage point would affect money stock with a powerful punch. In order to help anchor inflation expectations at a lower level, the Bank should communicate its stance in a clear and unequivocal way.

One board director pointed out the relatively lower inflation in Taiwan was mainly due to government efforts to reduce tariff and commodity tax rates and keep down electricity and oil prices through state-owned businesses, both of which were temporary measures. The director did not see the inflation rate to decline to below 2% in the second half of 2022 and in the year of 2023. Against a background of bold rate hikes by major central banks and a projected domestic inflation rate of nearly 3%, the fact that the Bank's policy rates were only 0.25 percentage points higher than before the pandemic might not favorably affect inflation expectations. As for the RRR increase, it is a tool seldom used because it usually strikes hard and fast, but there would be two consecutive 0.25 percentage point RRR increases in Taiwan after today's meeting; the Bank needs to indicate the actual effects of such a tool on the inflation rate.

Another board director pointed to the complex international economic and financial conditions recently. Many major central banks continued to raise their policy rates to tackle inflation whereas some economies still kept an accommodative monetary policy stance or even reduced rates. Being key players in the world, these economies' policies carry a weight on the global economic and financial scenes. At the current juncture, international uncertainties remain, the war in Ukraine continues, and the future outlook is clouded, therefore the director agreed to a policy hike but at a measured pace. The Fed's aggressive hikes came with a worrying economic outlook; if the U.S. economy has a hard landing, then Taiwan could, in the following six months, sustain injury in many aspects including investment, consumption, and exports, a consideration that warranted the director's support for a 0.125 percentage point rate hike. As for the proposed RRR increase by 0.25 percentage points, it would not bring about too much a hit given the enormous scale of Taiwan's excess reserves now.

(2) Discussions on housing prices, residential rent, and consumer price measurement

One board director noted that although tax policies may be the most effective tool to tamp down housing prices, as repeatedly stressed by the Bank and supported by some researches, this does not keep monetary authorities on the sidelines when housing prices continue to surge. For the Bank to safeguard financial stability, it needs to take policy actions in response to housing price changes. For instance, according to some economists at the Bank for International Settlements, housing prices in South Korea have dropped significantly since its central bank began a series of rate hikes last year. By contrast, it is wrong when the Bank pays great attention to indicators like housing credit growth and concentration but not enough emphasis on price changes.

Another board director pointed out that information on housing price trends are reflected in the Bank's publications, internal reports, quarterly Board Meeting reference materials, etc., indicating that the Bank has been keeping close watch. Indicators such as housing credit growth and concentration would reveal the trends in housing prices and housing market trading. Moreover, though being closely watched by the Bank, housing prices as an indicator does not in itself necessitate a systemic policy response. Indeed, housing prices has a role in financial stability but it is also affected by many factors. The Bank's response measures were meant to stem market speculation and prevent credit resources from gushing into the real estate sector. When housing prices are bolstered by economic fundamentals, the ensuing price rises would not be interfered with unless financial stability becomes compromised. The Bank tackles housing market risks with selective credit control measures. The primary purpose of a policy rate hike is to combat inflation, with concomitant effects on housing prices; this is the same in the cases of rate hike decisions by other economies (including the U.S., South Korea, the U.K., and the euro area) as they aim at high inflation instead of housing prices.

Another board director remarked that with domestic housing prices going higher in the second quarter this year, today's rate hike would also help put the brakes on those price rises. In addition, since the Bank had already sent out messages of beginning a rate hike cycle, gradual hikes should not markedly increase mortgage borrowers' burdens while still conveying the Bank's gradual tightening stance.

Two board directors remarked on housing prices, rent, and CPI measurement. One of them suggested that costs of housing should be reflected in the CPI statistics; the other cited examples of other central banks: The Fed chairman showed concerns about how rising home prices could lead to rent rises and thus push up inflation; the ECB had several years ago contemplated incorporating owner-occupied housing (OOH) prices in the CPI. Though such a concept has not been adopted in the official CPI program, it indicates the kind of thought given to OOH prices – in addition to rent – in that their increases may have a potential effect on the CPI.

One supervisor stated that according to the DGBAS, who is responsible for CPI statistics compilation in Taiwan, residential rent has a weight of about 15%, while the U.S. assigns a higher weight to rent (above 30%) and the sample of housing units are for urban U.S. Across many countries, data show that housing prices have posted larger increases than rents. When home prices go up, prospective purchases would take into account buyers' income and affordability, whereas rent surveys for CPI statistics reflect only the price factor. The international norm for CPI compilation is to seek to reflect the change in the cost of buying a fixed basket of goods and services of constant quality, whereas changes (such as improvements) in the quality or rises in the prices of a home property are not included in the CPI measurement. And the CPI data compiled by the DGBAS only measure the changes in residential rent, but not housing prices. Recently, residential rent seemed to be trending upwards, and that uptrend was indicated by the DGBAS' CPI data using a compilation approach in line with the international principles. Regarding the previously mentioned idea of incorporating housing prices into CPI compilation, the supervisor noted that this was simply one of the suggestions once floated by the ECB, and currently there are no countries directly including housing prices in their CPI measurement.

One board director noted that the DGBAS is Taiwan's CPI compiler and follows the international principles; the institution's authority and efforts deserve respect. Most countries, including the U.S. and Japan, use the "rental equivalence" approach; their rent is generally less susceptible to housing price changes, showing a more stable trend with little deviation from the CPI. This is also the case for Taiwan.

3. Monetary Policy Decision:

On Proposition 1, 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 1.625%, 2%, and 3.875%, respectively.

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

Voting against the proposition: Shiu-Sheng Chen, Yi-Ting Li, Nan-Kuang Chen (Excused, Appointing Shiu-Sheng Chen as Proxy)

On Proposition 2, the board directors reached a unanimous vote to increase the reserve requirement ratios on NT dollar demand deposits and time (savings) deposits by 0.25 percentage points.

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

Press Release September 22, 2022

Monetary Policy Decision of the Board Meeting (2022Q3)

I. Global economic and financial conditions

Since the Board met in June this year, growth in the US, the euro area, and China has moderated, prices of commodities such as international crude oil have trended downward, and global supply chain bottlenecks have gradually eased, whereas global inflation remains at high levels. With most economies including the US and the European economies continuing with policy rate hikes, leading to a tightening of financial conditions, growth momentum for the global economy is expected to soften and international institutions have downgraded their forecasts for the 2022 global economic growth. Meanwhile, recent developments in US inflation and the Fed's monetary policy stance have sparked a drastic increase in volatility in international financial markets. The US dollar has strengthened, with the international US Dollar Index reaching a 20-year high and major economies' currencies all depreciating against the US dollar.

Looking ahead, the global economy faces multiple downside risks, including the following: (1) aggressive monetary policy tightening by the US and the European economies inducing tighter international financial conditions, which could weigh on global economic activity; (2) the energy crisis fueled by the ongoing Russia-Ukraine war dragging down economic growth in Europe; (3) China's zero-COVID policy affecting the easing of global supply chain bottlenecks and its real estate troubles undermining financial stability. In addition, geopolitical risks, extreme weather events, and the evolution of the COVID-19 pandemic would also add to uncertainties surrounding the global economic and financial outlooks. International institutions project global economic growth to moderate further and inflation to fall back down in the year 2023.

II. Domestic economic and financial conditions

1. Since around the middle of the year, domestic private consumption has rebounded on the stabilized pandemic situation at home. On the other hand, faltering final demand amid a slowing global economic expansion and the ensuing inventory adjustment by some firms have exerted a drag on Taiwan's export growth and private investment. The Bank trims its forecast for the economic growth this year to 3.51% (Appendix Table 1).

The pandemic's impact on the labor market has waned. The July 2022 figures showed that the number of employed persons increased by 0.29% year on year; the unemployment rate rose to 3.78% owing to seasonal factors but the seasonally-adjusted rate came in at 3.68%, returning to the level before the domestic COVID-19 flare-up in April this year.

Looking ahead to next year, employment and wage growth are likely to benefit from the recovery in domestically-oriented services sector, helping to extend the uptrend in private consumption. Meanwhile, the global economic moderation could dampen growth momentum for Taiwan's exports and private investment. For the year 2023, the Bank forecasts the economy to expand by 2.90%.

2. In recent months, domestic inflation eased on account of the decline in international crude oil and grain prices and local vegetable prices. The annual growth rate of consumer price index (CPI) dropped to 2.66% in August and that of core CPI (excluding fruit, vegetables, and energy items) edged down to 2.73%. For the first eight months, the CPI and core CPI annual growth rates averaged 3.10% and 2.49%, respectively. Given the softening in international raw material prices and the effect of a higher comparison base, the Bank expects the domestic inflation rate to gradually come down, with the CPI and core CPI annual growth rates at 2.95% and 2.52%, respectively, for this year (Appendix Table 2).

   Looking ahead to next year, global supply chain bottlenecks would likely be gradually alleviated and international institutions mostly anticipate a price downtrend for crude oil and other raw materials. The Bank projects the CPI and core CPI annual growth rates to drop to 1.88% and 1.87%, respectively, in 2023.

3. Banks' excess reserves hovered slightly above NT$60 billion recently. For the first eight months of the year, the annual growth rate of bank loans and investments and that of M2 (measured on a daily average basis) were 7.77% and 7.66%, respectively. Short- and long-term market interest rates rose higher following the Bank's monetary tightening this year.

III. Monetary policy decisions: Raising the policy rates by 0.125 percentage points and raising the reserve requirement ratios by 0.25 percentage points

In today's meeting, the Board considered the following developments in domestic and foreign economic and financial conditions. Given the recent international commodity price decline, the domestic inflation rate is expected to come down gradually in the second half of the year, while registering above 2% for the year as a whole before dropping below 2% next year. Moreover, with a slowing global economy compounded by greater downside risk in the second half of the year through to next year, it is expected that the domestic economic growth momentum would weaken next year. The Board judged that, by continuing with policy rate hikes while also raising the reserve requirement ratios, it would help rein in domestic inflation expectations, maintain price stability, and help attain the policy objectives of fostering sound economic and financial development.

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 1.625%, 2%, and 3.875%, respectively, effective September 23, 2022.

The Board also decided to increase the reserve requirement ratios on NT dollar demand deposits and time (savings) deposits by 0.25 percentage points each (see Appendix for the requirements by type of deposits), effective October 1, 2022.

Against a backdrop of elevated inflationary pressures and intensified headwinds facing the global economy, the Bank will closely monitor the implications for domestic price trends brought forth by international raw material price movements, geopolitical risks, extreme weather events, and the course of the pandemic worldwide, while also paying close attention to the trajectory of monetary policy tightening in major economies and the effects therefrom on economic and financial conditions at home and abroad. The Bank may adjust its monetary policy accordingly 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 selective credit control measures, implemented with four successive amendments from December 2020, have so far successfully bolstered credit risk management of the banking sector. In the year so far, banks' construction and housing loans have expanded at a slower pace, real estate loan concentration has been broadly steady, and the level of non-performing loan ratio for real estate lending has been low. The effectiveness of the existing credit controls would also have been amplified by the Bank's monetary policy tightening. In addition, housing market transactions have been dampened somewhat in the year to date as a result of the government's cross-agency efforts under the Healthy Real Estate Market Plan and the pandemic flare-up in recent months. The Bank will actively keep track of the developments in real estate lending and continue to review the implementation of the selective credit control measures, and make adjustments as needed in order to promote financial stability.

V. While the currencies of major economies and the NT dollar have all depreciated against the US dollar so far this year, the NT dollar exchange rate has experienced comparatively less volatility. The Bank will keep close watch on international financial conditions and the trends of cross-border capital flows. In the event of 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

Adjustments to the Reserve Requirement Ratios (Effective October 1, 2022)

Unit: Percentage of Deposits

Type of Deposit	Current Ratio	New Ratio
Checking Accounts	11.000	11.250
Passbook Deposits	10.025	10.275
Passbook Savings Deposits	5.750	6.000
Time Savings Deposits	4.250	4.500
Time Deposits	5.250	5.500
Principal (in NT Dollars) Received by Banks from the Sale of Structured Products	5.250	5.500

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.