

How to use this Interactive PDF



Click on the heading to go directly to the content page



Click on this icon to return to the table of content

Monetary Policy Report



The Monetary Policy Report is prepared quarterly by staff of the Bank of Thailand with the approval of the Monetary Policy Committee (MPC). It serves two purposes: (1) to communicate to the public the MPC's consideration and rationales for the conduct of monetary policy, and (2) to present the latest set of economic and inflation forecasts, based on which the monetary policy decisions were made

The Monetary Policy Committee

Mr. Sethaput Suthiwartnarueput Chairman

Mr. Mathee Supapongse Vice Chairman

Mr. Paiboon Kittisrikangwan Member

Mr. Kanit Sangsubhan Member

Mr. Rapee Sucharitakul Member

Mr. Somchai Jitsuchon Member

Mr. Subhak Siwaraksa Member

Monetary Policy in Thailand

Monetary Policy Committee

Under the Bank of Thailand Act, the Monetary Policy Committee (MPC) comprises the governor and two deputy governors, as well as four distinguished external members representing various sectors of the economy, with the aim of ensuring that monetary policy decisions are effective and transparent.

Monetary Policy Objective

The MPC implements monetary policy under the flexible inflation targeting regime. While regarding medium-term price stability as its primary objective, the MPC also aims at supporting sustainable, full-potential economic growth and preserving financial stability, attributing to long-term price stability and economic sustainability.

Monetary Policy Target

On December 22, 2020, the Cabinet approved the monetary policy target for 2021, which was mutually agreed between the MPC and the Minister of Finance to set the headline inflation within the range of 1–3 percent as the target for the medium-term horizon and for 2021. In the event that average headline inflation in the past 12 months or a forecast of average headline inflation over 12 months ahead breaches the target range, the MPC shall send an open letter to the Minister of Finance to explain reasons for the breach of the target range, together with measures taken and estimated time to bring inflation back to the target. In addition, the MPC will write an additional open letter to the Minister of Finance every six months if average headline inflation based on the above criteria remains outside the target range.

Monetary Policy Instrument

The MPC utilizes the 1-day bilateral repurchase transaction rate as the policy interest rate to signal the monetary policy stance.

The MPC has adopted the managed float exchange rate regime to stabilize and limit the volatilities in the exchange rate, as to let the baht reflect economic fundamentals

Evaluation of Economic Conditions and Forecasts

The Bank of Thailand takes into account information from all sources, the macroeconomic model, data from each economic sector, as well as surveys of large enterprises, together with small and medium-sized enterprises from all over the country, and various financial institutions to ensure that economic evaluations and forecasts are accurate and cover all aspects, both at the macro and micro levels.

Monetary Policy Communication

Recognizing the importance of monetary policy communication to the public, the MPC employs various channels of communication, both in Thai and English, such as (1) organizing a press statement at 14:00 on the day of the Committee meeting, (2) publishing edited minutes of the MPC meeting two weeks after the meeting, and (3) publishing the *Monetary Policy Report* every quarter

Table of Contents

Go to page

1. Executive Summary 7



Go to page

| 9 |
|----|
| 10 |
| 13 |
| 14 |
| 15 |
| 17 |
| |



Go to page

| 3. The Thai Economy | 19 |
|---|----|
| The COVID-19 outbreak in Thailand | 20 |
| Recent economic developments | 21 |
| Private consumption | 22 |
| Labor market and household income | 23 |
| The recovery in tourism sector | 30 |
| Exports | 31 |
| Inflation | 32 |
| Growth and inflation forecasts | 33 |
| Risks to growth and inflation forecasts | 37 |

Go to page

4. Monetary Policy Decision 40



Go to page

| 5. Special Issues | 49 |
|--|----|
| Impact of debt burden on household consumption | 50 |
| BOT's latest debt relief measures | 52 |
| Go to page | |
| Data tables | 54 |
| | |

1. Executive Summary







Monetary Policy Conduct in the Third Quarter of 2021

At the meeting on August 4, 2021, the Committee decided to maintain the policy rate at 0.50 percent. The votes were not unanimous with two members viewing that a policy rate cut would preempt potential economic slowdown in the period ahead given that the Thai economy could be impacted by the COVID-19 outbreak to a greater extent than previously assessed and remained subject to significant downside risks.

At the meeting on September 29, 2021, the Committee voted unanimously to maintain the policy rate at 0.50 percent. The Committee viewed that progress on vaccination and earlier-than-expected relaxation of containment measures would help support the economy. The Thai economy was projected to expand 0.7 and 3.9 percent in 2021 and 2022, respectively, largely unchanged from the August projection. Nevertheless, the economic outlook remained highly uncertain.

The Committee viewed that the most important issue for the Thai economy at present was the implementation of public health measures in a way that would facilitate the recovery in economic activities and income. The Committee also viewed that there was further progress on financial measures which would be more effective in providing targeted liquidity support and reducing debt burden than a further reduction in the policy rate which was already low.

Assessment of the Economic and Financial Outlook as the Basis for Policy Formulation

1. Global Economy

- Trading partner economies in 2021 would register slower growth than the previous assessment due to the new wave of the outbreak of COVID-19 Delta variant that became widespread and had affected recovery in consumption, production, and exports. The slowdown was also attributable to the ongoing supply disruption which was more prolonged than expected.
- · Growth among trading partner economies was expected to rebound in 2022 as the outbreak would subside and vaccination targets would be achieved.
- Most central banks would continue to maintain accommodative monetary policy stances to support economic recovery, while some central banks would raise their policy interest rates in response to reflation risks.

2. Financial Conditions and Financial Stability

- Overall financial conditions in Thailand remained accommodative and helped financial institutions to continue assisting borrowers through various financial measures. On exchange rates, the baht against the U.S. dollar and the effective exchange rate continued to depreciate from the previous quarter. The depreciation was due to (1) the third wave of COVID-19 outbreak in Thailand, (2) the announcement of larger-than-expected Thai government bond issuance under the fiscal year 2022, and (3) the appreciation of the U.S. dollar after the Federal Reserve signaled a tapering of its asset purchases.
- The Thai financial system remained vulnerable, especially as balance sheets of households and businesses were affected by the third wave of COVID-19 outbreak in Thailand. This resulted in a slower and more uncertain economic recovery. Businesses that provide tourism-related services, in particular, remained weak and continued to be impacted by the latest round of containment measures.

3. Economic and Inflation Outlook

- The Thai economy was projected to register slower growth of 0.7 percent in 2021 due to the more prolonged and severe third wave of COVID-19 outbreak that affected domestic spending and foreign tourist figures. In 2022, the Thai economy was projected to grow 3.9 percent as economic activities would gradually recover and more foreign tourists were permitted to enter Thailand.
- Headline inflation was projected to be 1.0 percent in 2021 and 1.4 percent in 2022. For 2021, headline inflation was revised down from the previous assessment due to the year-on-year decline in fresh food prices in tandem with higher-than-expected outputs, as well as measures to help lower the cost of living. For 2022, headline inflation was revised up due to the lower base effect. Headline inflation would remain within the target range throughout the forecast horizon.

Ξ

2. Global Economy





Global economy: Summary of Key Issues



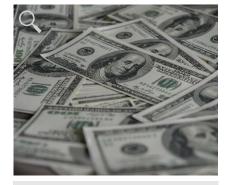
The global economy would

continue to recover

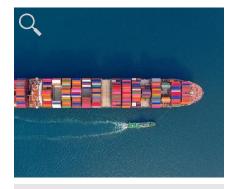
despite some slowdown due to
the spread of virus mutations
and the ongoing supply disruptions



Inflation has picked up
in many countries
mainly due to supply-side factors.
Inflation expectations remained
largely unchanged.



Monetary policy stances
remained accommodative
although some central banks
in major advanced economies
started to signal possible policy
normalization



Trading partners economies
was expected to register slower
growth in 2021 compared to
the previous assessment
due to the outbreak of virus
mutations that intensified





The total number COVID-19 cases worldwide have increased, especially among emerging economies where the progress on vaccinations remained slow overall



The outbreak of virus mutations was prolonged and became more widespread. The number of new COVID-19 cases in many countries has continued to rise since the second quarter of 2021. However, the severity of the outbreak varied across countries depending mainly on the vaccination rates in that respective country.

Major advanced economies (AE) with high vaccination rates such as the U.S., the euro area, Japan, and the United Kingdoms were able to ease lockdowns even as the number of new cases continued to rise. Meanwhile, emerging economies (EM) with low vaccination rates, especially Asian economies like Indonesia and the Philippines, still maintain strict containment measures.

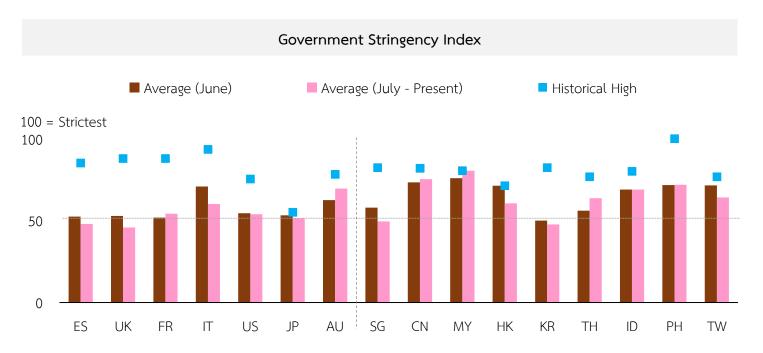
Source: Our World in Data as of 7 September 2021 10

^{*} Data as of 15 August 2021





The severe outbreak of COVID-19 prompted emerging economies with low vaccination rates to maintain strict containment measures. Meanwhile, advanced economics with high vaccination rates were able to gradually relax containment measures.



Note: This is a composite measure based on 9 response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.

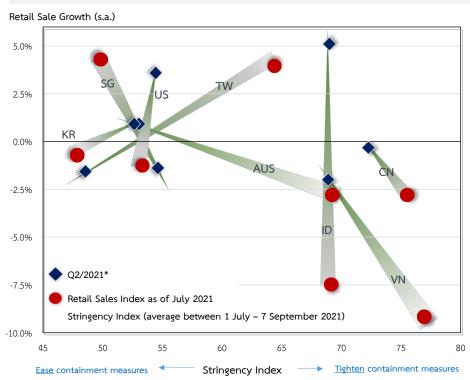
Source: Hale, Webster, Petheric, Phillips, and Kira (2020). Data as of 15 September 2021.





Private consumption in many countries would likely slow down due to stricter containment measures.





Consumption in Asian economies was impacted by the tightening of containment measures in the third quarter of 2021.

- China imposed the strictest containment measures in 20 provinces.
 Some seaports were also closed or faced tighter restrictions between
 July and August 2021.
- **Vietnam** implemented containment measures in July 2021 which was further extended until mid-September 2021
- Australia implemented containment measures towards the end of June 2021. The measures were later expanded to cover more areas and were extended to remain in effect until October 2021.

In the short run, the recovery in consumption among Asian economies would be held back by containment measures. Nevertheless, it was assessed that consumption would gradually recover in the fourth quarter of 2021 given that the outbreak situation would likely improve with higher vaccination rates.

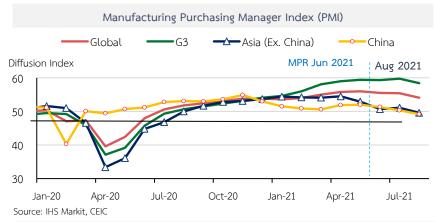
Note: *Data for Q2/2021 is the average value between April-June 2021

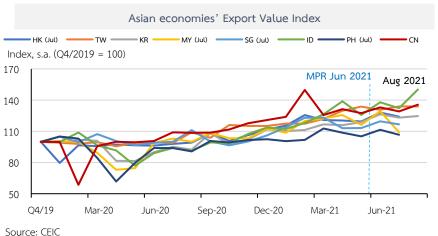
Source: CEIC, Our World in Data





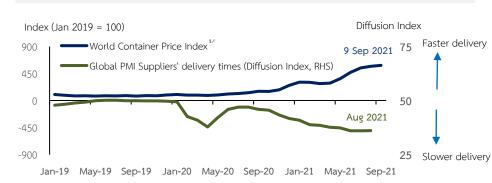
Manufacturing and exports were expected to slow down due to prolonged supply disruption





Manufacturing and exports in some countries would slow down due to prolonged supply disruption such as reduced working hours after containment measures were tightened, the closure of seaports in China, the shortage of freight containers, and the shortage of manufacturing inputs such as electronic parts. However, the supply disruption was expected to be resolved within the first half of 2022 as economic activities gradually return to normal in many countries.

World Container Price Index and Delivery times



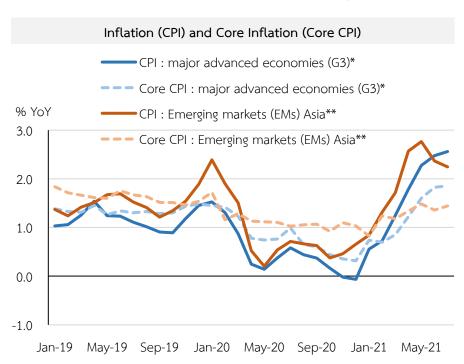
Noe:: ^{1/}Composite container freight benchmark rate (40ft container) Source: Bloomberg, JP Morgan

13



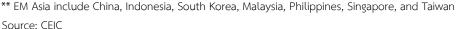


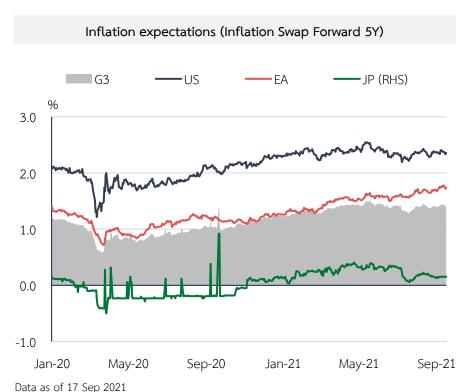
Inflation has picked up in many countries mainly due to supply-side pressure that resulted in higher prices of certain goods. Rising inflation in major advanced economies was driven by the gradual resumption of economic activities. Nevertheless, inflation expectations in many countries remained close to their respective inflation targets.



^{*} G3 include the U.S., euro area, and Japan

** EM Acia include China Indenesia South Korea Malaysia Philippines Singape



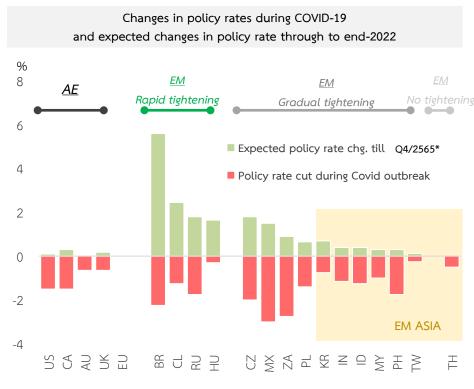


Source: Bloomberg

: Bloomberg



Policy rates remained low all around to support the economic recovery which remained highly uncertain. Some EM central banks have already raised their policy rates and would continue to raise rates further throughout 2022 in response to reflation risks.

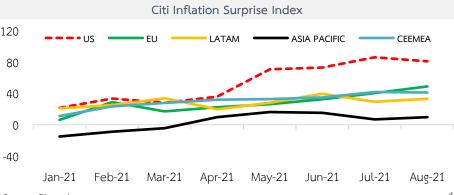


*Expected changes in policy rates at the end of 2022 (Bloomberg) compared to the lowest policy rates during the COVID-19 pandemic

Central banks in major advanced economies (AE) would likely keep their policy rates low to support economic growth which was still subjected to high degrees of uncertainty. Meanwhile, inflationary pressures were limited especially as employment rates remained below full employment despite tighter labor market conditions.

Most central banks in Asia would likely keep their policy rates low to support economic growth which was adversely affected by new waves of COVID-19 outbreak. Notwithstanding, the Bank of Korea (BOK) raised its policy rate in August 2021 given that economic activities in Korea have returned to pre-COVID levels, inflation has risen above the target range, and household debt levels were high.

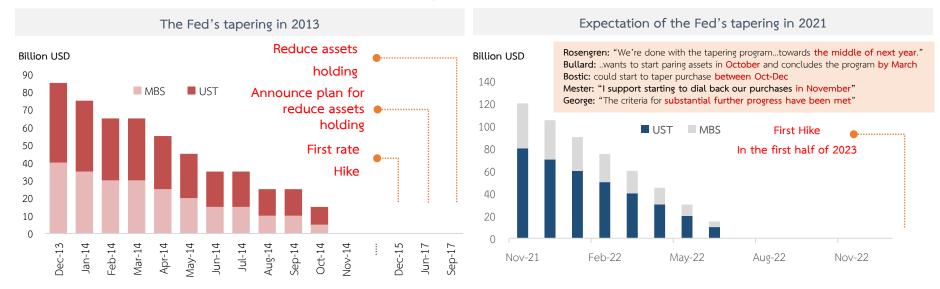
Some emerging markets (EM) central banks might start raising their policy rates in response to reflation risks.



Source: Bloomberg 15



The Federal Reserve and the European Central Bank signaled that they would begin tapering their asset purchases in the fourth quarter of this year. The tapering is expected to be gradual, but there are still risks that financial markets could become more volatile and thus should be closely monitored.





The Federal Reserve (Fed) signaled a tapering of its asset purchases (QE tapering) as the U.S. economic recovery gained traction. The QE tapering was expected to commence in the fourth quarter of 2021. It was also expected that the policy rate would remain low, in part because employment numbers remain below full employment despite improvements in labor market conditions. Notwithstanding, the September 2021 FOMC statement suggested that the Fed could raise its policy rate by the end of 2022.



The European Central Bank (ECB) signaled a tapering of its quantitative easing. The ECB announced that it would reduce asset purchases under the Pandemic Emergency Purchase Programme (PEPP) starting in the fourth quarter of 2021. The policy rate was expected to remain low to support the economic recovery which remained highly uncertain.





Trading partner economies would register slower growth in 2021 compared to the previous assessment due to the COVID-19 outbreak and ongoing supply disruption which lasted longer than expected. Growth was expected to rebound in 2022 as the outbreak subsided and vaccination targets are met.

Assumptions on trading partners' growth

| | \\\a:=b+ | 20 | 21 | 20 | 22 |
|-----------------------------------|---------------|--------|--------|--------|--------|
| %YoY | Weight (%) | MPR | MPR | MPR | MPR |
| | (70) | Jun 21 | Sep 21 | Jun 21 | Sep 21 |
| United States | 20.4 | 6.6 | 5.9 | 4.5 | 4.6 |
| Euro area | 9.2 | 4.5 | 5.1 | 4.0 | 4.1 |
| Japan | 13.9 | 2.5 | 2.4 | 2.6 | 2.6 |
| China | 18.1 | 8.4 | 8.2 | 5.2 | 5.2 |
| Asia (excluding Japan and China)* | 30.6 | 6.0 | 5.2 | 4.0 | 4.4 |
| Total** | 100.0 | 6.0 | 5.6 | 4.1 | 4.3 |

Note: * Asia (excluding China) comprise of 7 countries weighted by major Thai trades' share in 2020

Trading partner economies would register slower growth in 2021 compared to the previous assessment due to the COVID-19 outbreak and ongoing supply disruption, both of which have had larger-than-expected impacts on consumption and manufacturing. The U.S. economy was affected by the outbreak of the delta variant that became more widespread. Meanwhile, Japan, China, and many other Asian economies were also further affected by the implementation of stricter containment measures which impacted private consumption and the manufacturing sector, prolonging the ongoing supply disruption. On the other hand, the outlook for the euro area has improved given (1) the relaxation of containment measures and high vaccination rates, and (2) the disbursements under the Next Generation EU Fund which would help drive growth going forward.

Trading partners' growth forecasts for 2022 were revised up under the assumptions that the outbreak would subside and vaccination targets could be achieved. These factors would support a gradual resumption in economic activities in many countries.

^{**} Weighted by major Thai trades' share in 2020 (13 countries) Asia (30.6%) = Singapore (5.8%) + Hong Kong (6.9%) + Malaysia (5.3%) + Taiwan (2.3%) + Indonesia (4.7%) + South Korea (2.6%) + Philippines (3.1%)

3. The Thai Economy







The Thai Economy: Summary of Key Issues



The Thai economy would slow down significantly in the third quarter of 2021. However, progress on vaccination allowed the government to gradually relax containment measures since September 1, 2021. This would help support the economic recovery going forward.



Although the recovery outlook had improved, uncertainties remained high. Risk factors that warrant monitoring include (1) implementation and relaxation of domestic containment measures, (2) continuity of government stimulus, and (3) external factors.



Headline and core inflation remained low in line with weak domestic demand.

Inflation expectations remained anchored within the target range.

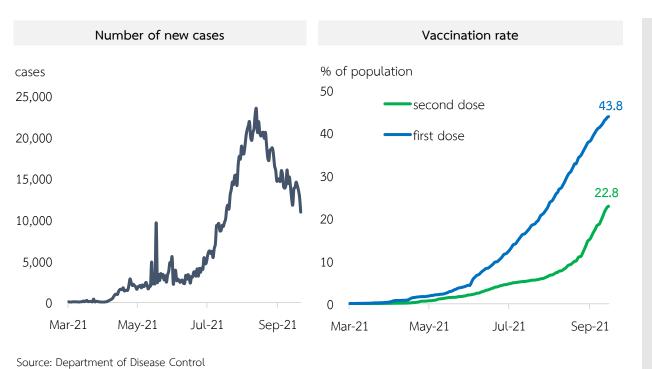


The Thai economy would register slower growth in 2021, compared with the June assessment due to more severe outbreak of COVID-19 from virus mutations.

The Thai Economy



The COVID-19 outbreak in Thailand became more severe and widespread in the beginning of the third quarter of 2021 due to the Delta variant. Nonetheless, the improvement in the COVID-19 situation and progress on vaccination allowed the government to gradually relax containment measures since September 1, 2021.



The COVID-19 outbreak in Thailand became more severe and widespread in the beginning of the third quarter of 2021 with the number of new COVID-19 cases soaring in July 2021. The increase in the number of new cases also outpaced the number of recoveries, causing the cumulative number of COVID-19 patients to exceed the capacity of the public health system.

The outbreak situation had improved since the end of August 2021 in line with increased vaccination rates. This allowed the government to gradually relax containment measures. However, as of September 2021, the percentage of people who are fully vaccinated with two doses was fairly low at 22.8% of the population

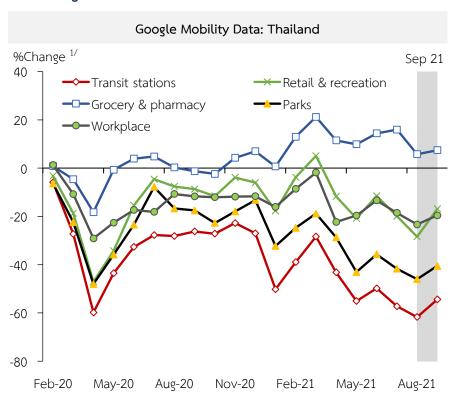


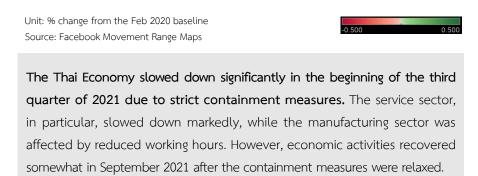
1-15 Sep 2021

Economic activities slowed down significantly in the beginning of the third quarter of 2021 but has since recovered somewhat following the relaxation of containment measures.

May 2021

-23%





Facebook Movement Range: Thailand

Jul 2021

Jun 2021

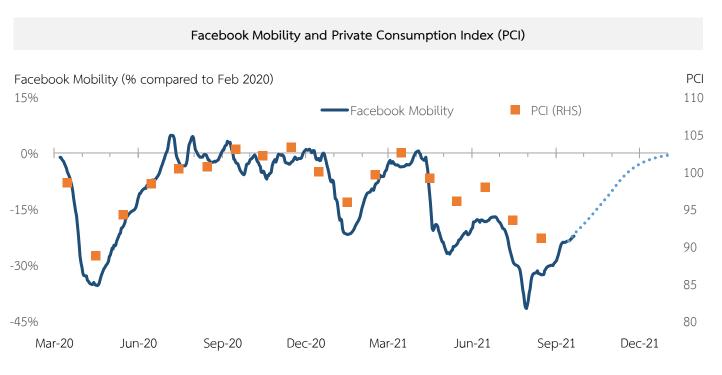
-17%

Aug 2021





The relaxation of containment measures would shore up confidence and help boost private consumption for the rest of 2021 and 2022.



Source: calculations by Bank of Thailand (BOT)

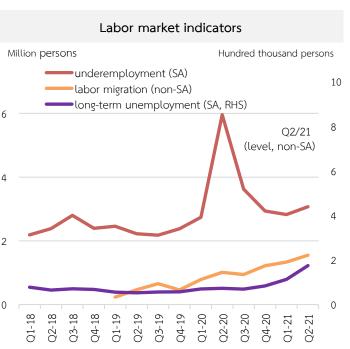




In 2022, Thailand's economic growth would still be pressured by more fragile labor market fundamentals owing to several waves of the COVID-19 outbreak.

Unemployed workers under the social security system % of insured persons, seasonally adjusted (SA) 4.5 4.0 3.5 3.0 2.5 total workers who have requested 2.0 for unemployment benefits 1.0 new workers who requested for unemployment benefits 0.0 Jan-19 Jul-19 Jan-20 Jul-20 Jan-21 Jul-21





Note: Long-term unemployment refers to unemployment for at least 1 year Source: Labor Force Survey by National Statistics Office of Thailand and True Corporation, calculated by BOT

Several waves of the outbreak led to a more fragile labor market. This was reflected in the continuously rising number of employees under the social security system who applied for unemployment benefits due to unforeseen circumstances. especially workers in the service sector. Laid-off workers in the service sector were unable to transfer to manufacturing sector, which is already recovering, due to skill mismatch. In addition, the numbers of longterm unemployed workers, migrant workers, newly-graduated unemployed workers, and workers exiting the labor force would likely continue to rise.

The Thai Economy

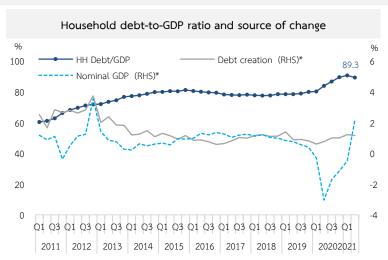


Financial positions of households were more fragile due to elevated debt levels.

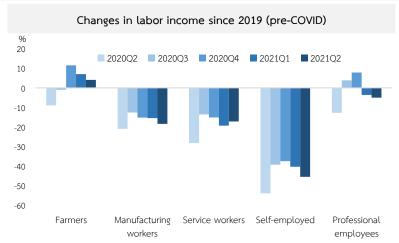
At the end of the second quarter of 2021, the ratio of household debt to GDP remained high at 89.3 percent despite declining from the previous quarter. The decline was mainly attributed to higher nominal GDP growth while growth of household debt remained largely unchanged. The increase in household debt would further weigh on recovery in consumption and the economic growth in the period ahead.

Q Click for more details on the impact of debt burden on household consumption

Households were also subject to risks pertaining to the economic recovery which remained highly uncertain as a result of the COVID-19 outbreak. Thus, it is necessary to closely monitor debt servicing capability of households going forward, especially those in the service sector and the self-employed. Recently, the BOT, in collaboration with the Thai Bankers' Association, has implemented additional debt relief measures for retail borrowers to help reduce debt burden and provide liquidity support to households. These measures include a relaxation of regulations on credit card loans and supervised personal loans, as well as measures to enhance existing debt facilities to be more sustainable. Click for more details on measures to assist retail borrowers







Note: (1) Income of the self-employed is estimated from their economic activities

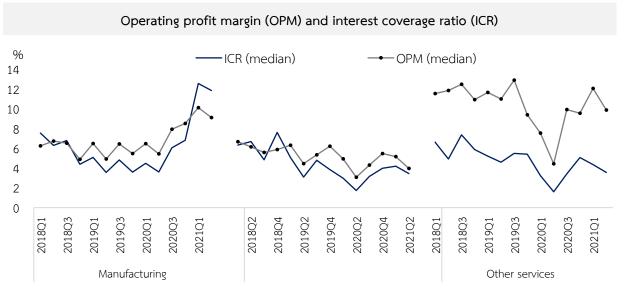
(2) Labor income is calculated from income of those who work more than 24 hours per week.

Source: Household Socio-Economic Survey and Labor Force Survey (National Statistics Office of Thailand), Office of Agricultural Economics, calculated by BOT



Financial positions of businesses overall became more fragile, especially tourism-related services and those that were affected by the latest containment measures.

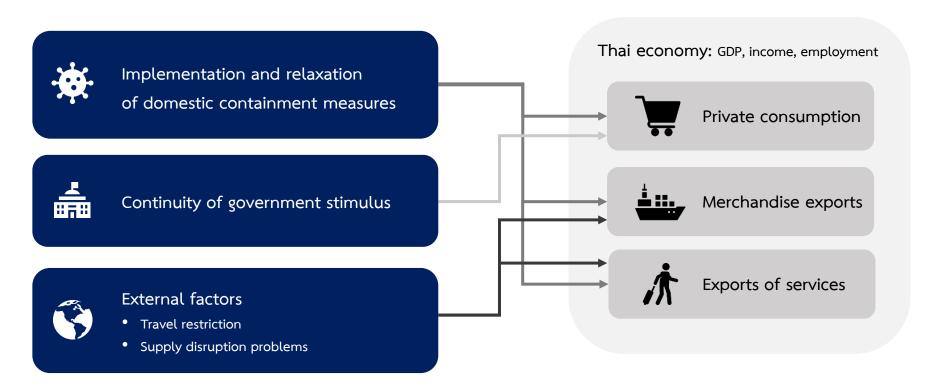
Financial positions of businesses became more fragile in the second quarter of 2021. This was reflected in their lower operating profit margin (OPM) and interest coverage ratio (ICR). It was deemed necessary to closely monitor debt servicing capability of businesses that were significantly affected by the latest containment measures, namely tourism-related services and construction, especially small and medium-sized enterprises (SMEs). Given high uncertainties surrounding the COVID-19 outbreak, the BOT has adjusted its soft loan scheme to enhance credit access for SMEs. Click for more details on adjustment to the soft loan scheme.



Note: Tourism-related services include hotels, airlines, restaurants, and trade Source: Stock Exchange of Thailand (SET), calculated by BOT



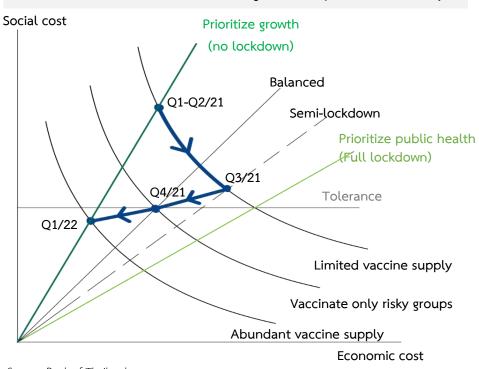
Thai economic recovery outlook is subject to high uncertainties. Some major factors include (1) implementation and relaxation of domestic containment measures, (2) continuity of government stimulus, and (3) external factors.





The COVID-19 outbreak would likely be prolonged due to virus mutation. Nonetheless, containment measures were expected to be gradually relaxed in line with vaccination progress.

Trade-off frontier between economic growth and public health safety





Developments in the COVID-19 outbreak and vaccination progress

The decision to implement public health measures depends on the trade-offs between social costs, as measured by the number of severe cases which could become fatal, and economic costs. Limited vaccine supply in the first half of 2021 led to an implementation of strict containment measures in the third quarter of 2021.

Nevertheless, distribution of vaccines to high-risk groups at the beginning of September 2021 helped contain the outbreak by reducing the number of severe cases. The Center for COVID-19 Situation Administration (CCSA) was thus able to relax the containment measures since September 1, 2021. This led to a resumption in economic activities which would support the economic recovery going forward.

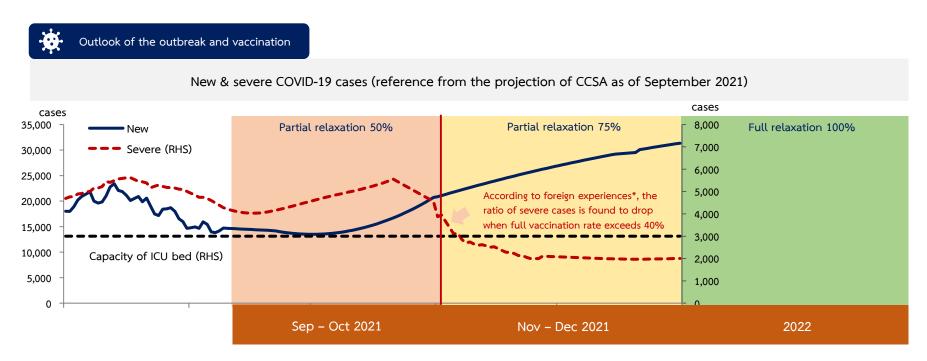
While the situation has improved recently, the COVID-19 outbreak would likely be prolonged due to virus mutation. Greater emphasis should be placed on monitoring the number of severe cases and vaccination rates in addition to the number of new cases.

Looking forward, containment measures would likely be further relaxed. The number of new cases could rise as restrictions are eased. However, vaccination progress would help reduce the number of severe cases.

Source: Bank of Thailand



Looking forward, the number of new cases could rise following the relaxation of the containment measures. However, progress on vaccination would help reduce the number of severe cases and risks of insufficient public health capacity. This would in turn lessen the need for strict containment measures.



Note: * Relationship between the ratio of severe cases and vaccination rate is analyzed by applying a local linear regression model to data from 21 sample countries Source: press conference by CCSA, estimated by BOT



Government stimulus would play an important role in supporting the economy going forward. However, the spending ratio of each measure warrants monitoring.

Examples of government measures in the second half of 2021

| | Budget (bn baht) | Time period | Spending ratio ^{1/} (as of 17 Sep) |
|---|---------------------|--------------------|---|
| The More You Spend, the More You Get scheme | 7 | | 2.3% |
| Half-Half co-payment scheme (phase 3) | 84 | Second half | 35.4% |
| Extra allowance for state welfare card holders (phase 3) | 16.4 | of 2021 | 47.9% |
| Additional allowance for vulnerable group | 3 | | 18.2% |
| Measure to remedy workers and entrepreneurs in the urgent phase | 77.8 | Aug-Sep 2021 | 54.8% |
| We Travel Together campaign (phase 3) | 6 | Fourth | - |
| Travel around Thailand campaign | 5 | quarter of 2021 | - |
| total | 211.0 | | |



The government announced additional measures to stimulate tourism in the fourth quarter of 2021. Such measures include We Travel Together campaign (phase 3) and Travel around Thailand campaign. However, government stimulus is subject to some downside risks because of the following reasons.

- Spending ratio of the previous measures, particularly the More You Spend, the More You Get scheme, were low
- Spending ratio of the We Travel Together campaign (phase 3) and Travel around Thailand campaign would likely be lowas well.

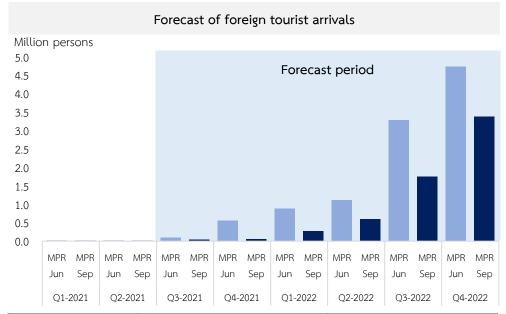
Note: ^{1/} Spending ratio = accumulated spending (both public and private) / target for each project

Source: Ministry of Finance, compiled by BOT





The projection of foreign tourist arrivals is significantly revised down due to the COVID-19 outbreak resulting in a delay in the country's re-opening, lower confidence among foreign tourists, as well as a delayed re-opening for commercial flights.



| Million popula | 202 | 21 | 2022 | |
|------------------|--------------------------|------|----------|----------|
| Million people | Million people Jun 2021 | | Jun 2022 | Sep 2022 |
| Foreign tourists | 0.7 | 0.15 | 10.0 | 6.0 |



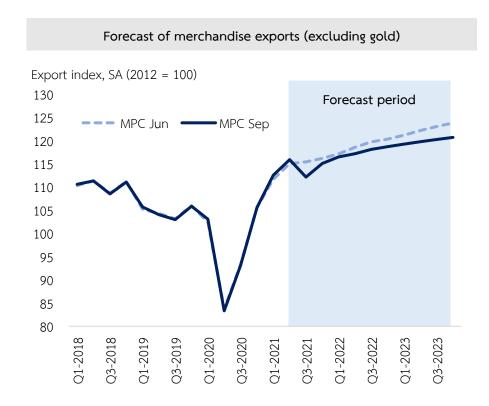
The projected number of foreign tourists is revised down from the following factors.

- A delay in the re-opening of the country to foreign tourists due to (1) more severe COVID-19 outbreak in Thailand and abroad, (2) delayed vaccination, and (3) difficulty of achieving herd immunity in practice
- Tourism sentiment would deteriorate given uncertainties of the outbreak
- The airlines would not be able to resume normal commercial flight services by 2022



Merchandise exports would be lower than the previous assessment due to global supply disruption. Meanwhile, domestic

supply disruption would only have temporary effects.





The merchandise export projection was revised down given the slightly more severe and prolonged global supply disruption than expected.

- Container shortage could be prolonged until the second quarter of 2022 as a result of the COVID-19 outbreak in many countries, particularly China, which led to a huge pileup of containers at ports and the closure of Ningbo-Zhoushan Port.
- Semiconductor shortage could possibly last until mid-2022 due to the outbreak in some countries including Malaysia which would impact the manufacturing of electronic products and automobiles.

The domestic outbreak also temporarily affected Thai manufacturing sector.

- Factory shutdown in accordance with the COVID-19 control measures somewhat affected the manufacturing industry. However, the situation is likely to improve owing to the adoption of bubble and seal measures and proactive COVID-19 testing.
- Migrant labor shortage had some impacts on the manufacturing sector such as food processing factories. The impacts would be limited because employers have instead hired Thai labors and increased working hours.



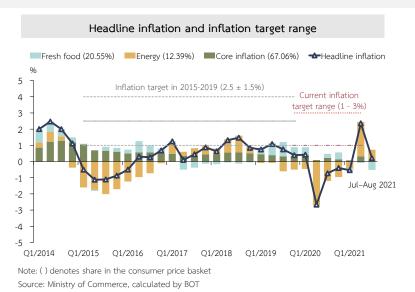
Headline inflation would remain low in tandem with weak demand-pull inflationary pressures. Medium-term inflation expectations remained well-anchored within the target range.

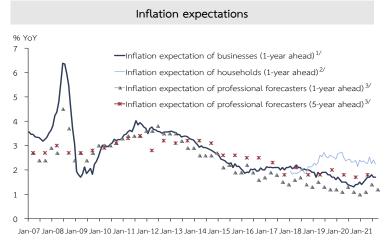
Headline inflation in the first two months of the third quarter of 2021 averaged 0.22 percent, falling from 2.36 percent in the previous quarter. The decline was due to the dissipation of the base effect of low energy prices in the previous year, as well as the government's electricity bill subsidies to lower the cost of living in July and August 2021. There was also a larger contraction in fresh food prices compared with the previous quarter mainly due to prices of vegetables and fruits.

Core inflation in the first two months of the third quarter of 2021 averaged 0.11 percent, falling from 0.43 percent in the previous quarter. The decline was mainly attributed to lower prices of housing and furnishing due to the government's water bill subsidies to reduce the cost of living during the COVID-19 outbreak.

Short-term and medium-term inflation expectations remained within the target range

- The short-term (one-year ahead) inflation expectation according to the survey of businesses in August 2021 was 1.7 percent.
- The short-term (one-year ahead) inflation expectation according to the survey of households in August 2021 was 2.2 percent.
- The short-term (one-year ahead) inflation expectation according to the survey of professional forecasters in September 2021 was 1.2 percent, while the long-term (five-year ahead) inflation expectation according to the survey of professional forecasters in April 2021 was 1.8 percent.





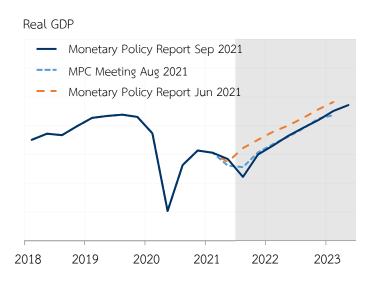
Source: 1/ Business Sentiment Index (BSI) Survey by BOT

3/ Asia Pacific Consensus Forecast

^{2/} Consumer Confidence Index (CCI) Survey by Ministry of Commerce



Economic forecast: The Thai economy is projected to register slower growth in 2021 than the assessment in the previous Monetary Policy Report due to the spread of COVID-19 Delta variant which was more severe and prolonged. The economic outlook is largely unchanged from the special interim forecast in August 2021. Widespread vaccination coverage is expected to occur in the fourth quarter of 2021 and would support the economy in 2022 to grow at around the same pace as the previous forecast.



| %YoY | 2020* | 20 | 021 | 20 |)22 |
|---|-------|--------|-----------|--------|-----------|
| Projection as of | | Jun 21 | Sep 21 | Jun 21 | Sep 21 |
| GDP growth | -6.1 | 1.8 | (0.7) 0.7 | 3.9 | (3.7) 3.9 |
| Domestic demand | -1.6 | 4.1 | 1.9 | 3.2 | 4.7 |
| Private consumption | -1.0 | 2.5 | 0.0 | 3.4 | 5.7 |
| Private investment | -8.4 | 7.0 | 4.2 | 6.0 | 6.7 |
| Government consumption | 0.8 | 4.1 | 3.3 | -1.0 | -0.5 |
| Public investment | 5.7 | 9.5 | 8.0 | 5.7 | 6.4 |
| Exports of goods and services | -19.4 | 8.8 | 8.7 | 7.8 | 6.1 |
| Imports of goods and services | -13.3 | 15.0 | 15.3 | 5.5 | 4.8 |
| Current account (billion, US dollar) | 20.3 | -1.5 | -15.3 | 12.0 | 1.0 |
| Value of merchandise exports | -6.5 | 17.1 | 16.5 | 4.9 | 3.7 |
| Value of merchandise imports | -13.8 | 22.7 | 23.8 | 6.6 | 4.8 |
| Number of foreign tourists (million person) | 6.7 | 0.7 | (0.2) 0.2 | 10.0 | (6.0) 6.0 |

Note: * Outturn

^() Projection as of MPC meeting in August 2021 $\,$

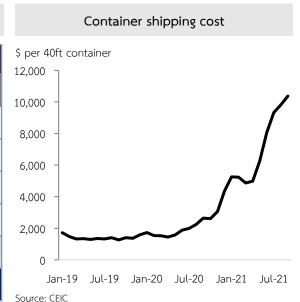




Economic forecast: Current account projection was revised down in 2021 and 2022 owing to rising freight expenses as well as smaller surpluses in trade balance and travel balance.

Summary of changes in current account forecast

| Current account (billion, US dollar) | 2021 | 2022 |
|--------------------------------------|-------|-------|
| MPC June 2021 | -1.5 | 12.0 |
| Net services, income and transfers | -10.2 | -8.3 |
| o/w Freight balance | -8.9 | -9.2 |
| o/w Travel balance | -0.7 | -5.8 |
| Trade balance | -3.6 | -2.7 |
| Total change | -13.7 | -11.0 |
| MPC September 2021 | -15.3 | 1.0 |



Current account balance was projected to register a deficit of 15.3 billion U.S. dollars in 2021 due to a sharp rise in shipping costs as well as a smaller trade surplus on account of increased imports and lower exports from domestic and global supply disruption.

Current account balance was projected to register a surplus of 1.0 billion U.S. dollars in 2022. This downward revision from the previous assessment was attributed to higher-than-expected shipping costs, lower tourism receipts in line with lower foreign tourist figures, and a smaller trade surplus from a slowdown in external demand and increased imports.

The Thai Economy



Economic forecast: The Committee assessed that the Thai economy would grow 0.7 percent in 2021 and 3.9 percent in 2022.



Merchandise exports would expand at a slightly slower pace throughout the forecast period due to both domestic and global supply disruption.

Value of merchandise exports was expected to grow 16.5 percent in 2021 and 3.7 percent in 2022, slightly slower compared with the previous forecast. The downward revision was attributed primarily to lower export volumes given the temporary impacts of the more severe COVID-19 outbreak on Thai manufacturing sector in the third quarter of 2021. Some factories had to close or reduce manufacturing output temporarily in accordance with the containment measures as well as migrant labor shortages. The export outlook was expected to be affected by shortages of containers and semiconductors which would likely last until mid-2022.



Exports of services would continue to contract and recover more slowly than previously assessed. The tourism sector would recover more slowly than previously expected due to more severe COVID-19 outbreaks both in Thailand and abroad. This could delay the unconditional re-opening of Thailand's borders and commercial flights to foreign tourists and China would likely postpone the re-opening of its borders to 2023. Therefore, the projected foreign tourist figures were revised down to 150,000 persons in 2021 and 6 million persons in 2022.



Private consumption in 2021 was significantly affected by the spread of Delta variant which became more severe to the point that the government had to impose strict containment measures in the third quarter of 2021. Thus, private consumption growth in 2021 was revised down from 2.5 percent to 0.0 percent. Nonetheless, better-than-expected vaccination progress, the relaxation of containment measures since the beginning of September 2021, and various relief measures and fiscal stimulus measures would foster confidence, help boost consumption in the fourth quarter of 2021, and support consumption recovery in 2022.



Private investment in 2021 would expand at a lower rate than previously assessed. The spread of Delta variant resulted in weakened demand and business confidence. Investment in the construction sector was also impacted by strict containment measures in certain construction sites. As a result, private investment forecast for 2021 was revised down to 4.2 percent. However, private investment would continue to expand from end-2021 to 2022 as private consumption gradually picks up.



Inflation forecast: Headline inflation is projected to decline in 2021 and stay close to the lower bound of the target range at 1.0 percent. The downward revision is mainly due to the oversupply of fresh food. However, the forecast for headline inflation in 2022 is revised up to 1.4 percent as the oversupply problem is expected to subside and also due to the lower base effect.

Inflation forecast

| %YoY | 2020* | 2021 | 2022 |
|------------------------|-------|-------------|-----------|
| Headline inflation | -0.8 | 1.0 (1.2) | 1.4 (1.2) |
| - Core inflation | 0.3 | 0.2 (0.2) | 0.3 (0.3) |
| - Energy inflation | -11.6 | 10.4 (10.1) | 4.2 (4.2) |
| - Fresh food inflation | 1.7 | -1.5 (-0.5) | 3.1 (2.5) |

Note: * Outturn

() Previous projection in Monetary Policy Report (June 2021)

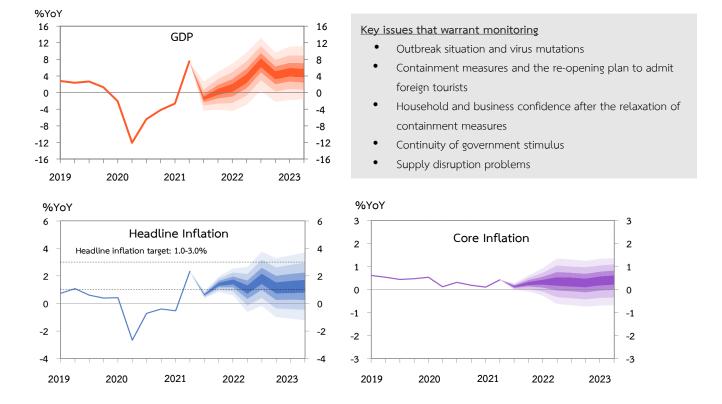
Source: Ministry of Commerce, estimated by BOT

Headline inflation would were additionally impacted by the higher-than-expected impact of government measures and supply-side factors.

- Core inflation would be largely unchanged from the previous projection and stay low in tandem with weakened recovery.
- The energy and fuel inflation would rise slightly in the short run owing to rising global crude oil prices, although this would be partially offset by the impacts of an extension of the government's electricity bill subsidy measure. However, crude oil prices would decline to the level that was previously expected. Thus, the forecast for 2022 was largely unchanged.
- Fresh food inflation would decline in 2021 in line with the lower-thanexpected vegetable and fruit prices, as well as the lower rice prices from domestic oversupply. This was attributed to high shipping costs that caused difficulties to drain the excess stock and favorable weather conditions, resulting in increased agricultural outputs. Such problems were expected to gradually subside in 2022, thus causing an increase in fresh food inflation from the lower base effect.



Risk to growth and inflation forecasts: Risks to Thailand's growth outlook are more balanced as progress on vaccination would lessen the need to reimpose strict containment measures. Risks to the inflation forecast tilted to the downside.







Summary of key forecast assumptions

- Trading partner economies would slow down in 2021 due to the prolonged outbreak of COVID-19 Delta variant in many countries and the ongoing supply disruption exacerbated by more stringent containment measures imposed as the outbreak became more severe.
 However, many countries have achieved their vaccination targets. Thus, growth among trading partner economies would pick up in 2022.
- The Federal Funds Rate assumption was unchanged at 0.00 0.25 percent
- Regional currencies (excluding the Chinese yuan) would weaken slightly due to an increased possibility of QE tapering by the Federal Reserve and the more severe outbreak of COVID-19 Delta variant among ASEAN countries.
- Dubai crude oil prices were revised up due to a temporary decline in supply in the second half of 2021 from a delay in OPEC+ negotiations to increase oil production and the impacts of Hurricane Ida on U.S. oil output. Looking ahead, the oil market would become less tight, and oil prices would return to normal in 2022.
- Farm income (excluding government support measures) was revised down for 2021 on account of lower rice prices owing to domestic oversupply. Rice exporters have faced logistical issues, resulting in a large stockpile of rice domestically. Off-season rice production was also higher than expected due to favorable weather conditions. The situation was expected to gradually improve in 2022, and farm income would expand at about the same rate as previously assessed.
- Public spending at current price was revised down. Government consumption was revised down due to lower-than-expected budget disbursements in the second quarter of 2021.
 Public investment was revised down because of the shift in investment expenditures under the Emergency Decree to public health expenditures.

| Annual percentage change | 2020* | 2021 | 2022 |
|--|-------------|---------------------------|---------------------------|
| Trading partners' GDP growth (% YoY) ^{1/} | -3.4 | 5.6 (6.0) | 4.3 (4.1) |
| Fed funds rate (% at year end) | 0.00 - 0.25 | 0.00 - 0.25 (0.00 - 0.25) | 0.00 - 0.25 (0.00 - 0.25) |
| Regional currencies (excl. China) vis-à-vis the U.S. dollar (index) $^{2\prime}$ | 157.1 | 153.1 (152.9) | 154.3 (153.1) |
| Dubai crude oil price (U.S. dollar per barrel) | 42.2 | 66.4 (62.3) | 65.5 (65.5) |
| Farm income (% YoY) | -0.3 | 6.5 (6.9) | 0.6 (0.6) |
| Government consumption at current price (billion baht) ^{3/} | 2,780 | 2,927 (2,948) | 2,973 (2,980) |
| Public investment at current price (billion baht) ^{3/} | 1,011 | 1,107 (1,120) | 1,192 (1,199) |

Note:

• Additional assumptions that underpin the latest recovery prospects include

- (1) Current containment measures are sufficient to reduce the number of severe cases to be within the capacity of the public health system. Thus, there is no need to tighten the containment measures.
- (2) The government can procure and administer two COVID-19 vaccine doses to more than 80% of high-risk groups and more than 70% of general population by the end of 2021. This would allow the government to relax all containment measures within the first guarter of 2022.
- (3) Additional fiscal stimulus would be forthcoming under the new Emergency Decree that authorized 500 billion baht of government borrowing.

^{1/} Weighted by each trading partner's share in Thailand's total exports

^{2/} Increasing index represents depreciation, decreasing index represents appreciation

 $^{^{\}rm 3/} \, \text{Assumption}$ includes spending on infrastructure investment plans

^{*} Outturn

^() Projection as of Monetary Policy Report June 2021

4. Monetary Policy Decision





Monetary Policy Decision: Summary of Key Considerations



The implementation public health measures that could contain the outbreak while allowing economic activities to recover is currently the most important issue facing the Thai economy



Monetary Policy
must help contribute to
accommodative financial
conditions and does not impede
economic recovery



have made significant progress and should be followed through to ensure they are effective and have broader impacts

Financial and credit measures



should prioritize providing relief
to affected groups and supporting
the economic recovery.
The government should also
prepare measures to restore
economic growth and uplift
long-term growth potential

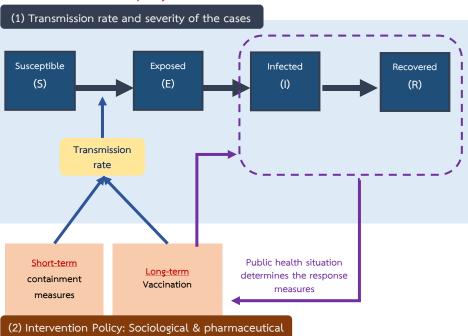
Fiscal measures



The implementation of public health measures that could contain the outbreak while allowing economic activities to recover is currently the most important issue facing the Thai economy. The government policies should focus on long-term results, by prioritizing the distribution of appropriate vaccines in a broad-based and timely manner.

Assessing the outlook of the COVID-19 outbreak: SEIR model

The outbreak trajectory would depend on (1) the transmission rate and severity of the casesand (2) intervention policy



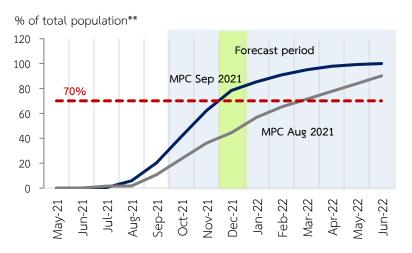
Virus mutations have led to more severe and widespread outbreaks in of new cases outpaced recoveries, resulting in a marked increase in cThailand during the earlier parts of the third quarter of 2021. The number umulative cases. Government policy thus focused on strict containment measures to reduce the number of COVID-19 patients and sustain capacity of the public health system given that vaccination was still progressing slowly at the time. The strict containment measures had significant impacts on economic activities, employment, and income.

Going forward, the implementation of public health measures to contain the outbreak should facilitate economic activities and income recovery. The policies should focus on long-term results, by prioritizing the procurement of appropriate vaccines to be distributed in a broad-based and timely manner. Higher vaccination rates would reduce the number of severe hospitalization even as the number of new cases continues to rise. This would reduce the need for stringent containment measures and thus allow economic activities to resume normalcy for both businesses and households.



Higher vaccination rates would reduce the number of severe cases, lower the need for stringent containment measures, and preserve both monetary and fiscal policy space for other downside risks that may arise in the future

Vaccination timeline*



| Assumptions* | | | | | | | | | | |
|--------------------|-------------------|-------------------|--|--|--|--|--|--|--|--|
| Vaccine supply | 2021 | 2022 | | | | | | | | |
| MPC August 2021 | 80 million doses | 70 million doses | | | | | | | | |
| MPC September 2021 | 140 million doses | 110 million doses | | | | | | | | |

Note: * according to CCSA

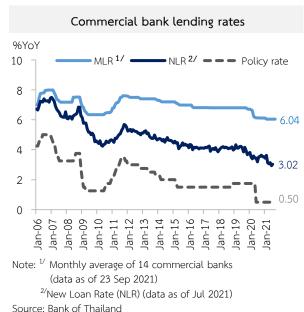
Note: * according to CCSA

** Total population (include commuter and non-registered population) = 72,081,042

Source: Department of Disease Control, forecast by the Bank of Thailand



Monetary policy contributed to accommodative financial conditions. The overall costs of financing for businesses through both banks and bond markets remained low.



Source: Thai Bond Market Association (data as of 23 Sep 2021)

Overall private sector financing costs through commercial banks and bond markets remained low. The minimum loan rate (MLR) of commercial banks remained below pre-COVID levels. The new loan rate (NLR) declined from the end of the second quarter of 2021, especially for loan contracts smaller than 100 million baht in the manufacturing and trade sectors. The decline in NLR was partly due to progress made with the soft loan facility.

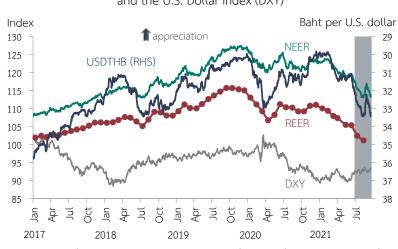
The credit spread between corporate and government bonds (corporate credit spread) with maturity of 3 years or less was largely unchanged from the end of the second quarter of 2021 across all credit ratings. However, the corporate credit spread for BBB-rated bonds remained elevated. Overall, the private sector was still able to obtain financing through the bond market as normal.



The baht depreciated and did not impede economic recovery. However, the baht would remain highly volatile in the period ahead.

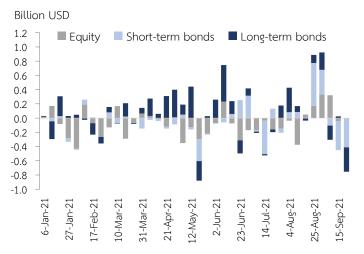
In July, the baht depreciated more sharply than other regional currencies due to capital outflows from the Thai bond market driven in part by concerns over the COVID-19 outbreak in Thailand. Towards the end of August, the baht appreciated due to capital inflows returning into the Thai stock market and short-term government bonds. This was in line with capital flows development in other regional markets as investors' concerns have subsided after the Fed signaled a dovish tone at the Jackson Hole Economic Symposium. However, in late September, the baht depreciated further. The depreciation was driven by capital outflows from the Thai bond market after the Ministry of Finance announced a larger-than-expected issuance of Thai government bonds under the Fiscal Year 2022 Budget, and the stronger U.S. dollar after the Fed signaled a tapering of its asset purchases amidst improved U.S. economic outlook. Looking ahead, the baht exchange rate would remain highly volatile due to QE tapering by the Fed and thus must be monitored closely.

Baht per U.S. dollar (USDTHB), Nominal Effective Exchange Rate (NEER), and the U.S. Dollar Index (DXY)



Source: Bank of Thailand, Bloomberg, and Reuters (data as of 23 September 2021)

Capital flows into Thai securities (weekly)

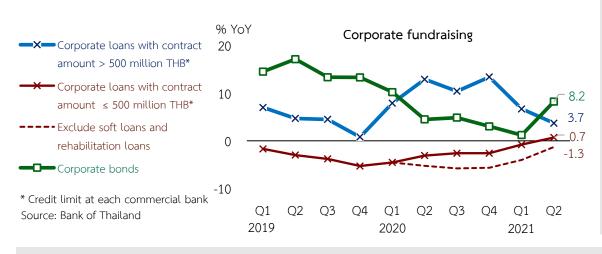


Source: ThaiBMA and Bloomberg

Monetary Policy Decision



The implementation of financial and credit relief measures helped to distribute liquidity to affected businesses and households. Notwithstanding, there remained the need to continue expediting additional measures that are more effective and well-targeted, namely the soft loan facility, the asset warehousing scheme, and debt restructuring programs that are well-tailored to the long-term debt repayment serviceability of different groups of borrowers.



Large corporates were still able to obtain financing throughout the second quarter of 2021. Corporate bond issuance has increased, mostly to rollover existing debt. Bank lending to large corporates (credit limit over 500 million baht) slowed down somewhat due to a higher base in the previous year but was still expanding across many sectors in part due to liquidity needs during the third wave of COVID-19 outbreak.

Bank lending to SMEs (credit limit less than 500 million baht) turned positive in the second quarter of 2021. This was in part supported by the soft loan facility which improved credit extension to businesses in the trade and services sectors.





Approved amount

106 billion baht





Number of recipients 34.538



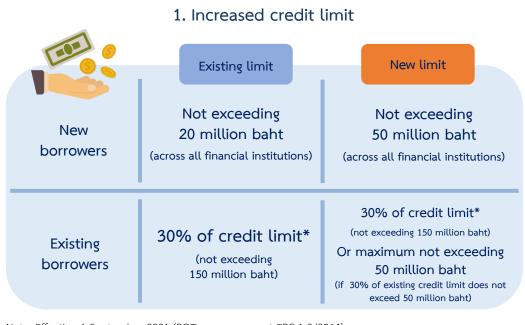
Number of recipients 106

Note: Data as of 20 Sep 2021

Source: Bank of Thailand



The Bank of Thailand enhanced its soft loan facility to improve credit access for borrowers with high credit risks



2. Increased credit guarantee for borrowers with high credit risk

1

Lower guarantee fees for borrowers significantly affected by COVID-19**

2

Lower guarantee payments during the first 2 years (total guarantee fee unchanged) for other borrowers***

Note: Effective 1 September 2021 (BOT announcement FPG.1 3/2564)

- * credit limit at each financial institutions as of 31 Dec 2019 or 28 Feb 2021, whichever is higher
- ** existing borrowers with credit limit not exceeding 50 million baht and received addition credit limit not exceeding 15 million baht, or new borrowers that received credit limit not exceeding 15 million baht
- *** existing borrowers with credit limit exceeding 50-500 million baht and received additional credit limit exceeding 15 million baht, or new borrowers that received credit limit exceeding 15 million baht



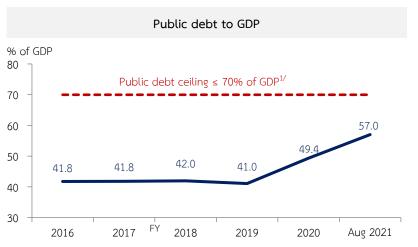
Fiscal measures should prioritize providing relief to affected groups and supporting economic recovery.

The government should also prepare measures to restore economic growth and uplift long-term growth potential.

Fiscal measures should prioritize providing relief to the affected groups and supporting the economy to better suit the current situation. Measures should aim at supporting employment and businesses that are most vulnerable in a sufficient and timely matter. The government should also prepare measures to restore economic growth and uplift long-term growth potential going forward so that they could be implemented once the pandemic subsides.

Raising the public debt ceiling to 70 percent of GDP and growing public debt levels do not pose significant risks to fiscal sustainability because (1) Thailand's public debt stood at 57 percent in August 2021 which was still low compared to advanced economies and EM Asia at 120 percent and 70 percent, respectively; (2) large portion of Thailand's public debt are domestic debt and have low financing costs; and (3) risks that Thailand's credit rating would be downgraded are low.

Public debt to GDP will eventually decline over the longer term if the budget were to be spent efficiently towards shoring up the economy that remained subject to high degrees of risks in the short-run and implementing structural reforms such as labor upskilling/reskilling. In addition, the government should have clear medium-term fiscal consolidation plans including generating additional government revenues by expanding tax bases and keeping current expenditures in check.



Note: Includes borrowing under the new Emergency Decree authorizing 500 billion baht of government borrowing.

 $^{1/}$ As determined by the State Monetary and Fiscal Policy Committee under the Fiscal Responsibility Act in September 2021

Source: Ministry of Finance



The MPC voted to maintain the policy rate. The monetary policy stance remained accommodative and the MPC stands ready to use additional appropriate monetary policy tools if deemed necessary.

MPC Meeting 5/2021
(4 Aug 2021)

The MPC voted 4 to 2*

to maintain the policy rate at

MPC Meeting 6/2021
(29 Sep 2021)

The MPC unanimously voted

0.50%



In the third quarter of 2021, the Thai economy was impacted by the COVID-19 outbreak more than previously assessed. Notwithstanding, the Thai economy had already bottomed out and was expected to make a strong recovery supported by the sooner-than-expected relaxation of containment measures. The most important issue for the Thai economy at present was the implementation of public health measures that would facilitate economic and income recovery.



Despite some progress on financial measures, liquidity distribution and debt restructuring should be expedited further for those who were affected as it would be more effective than a further reduction in the policy rate.



Stand ready to use additional appropriate monetary policy measures if needed

^{*1} MPC member was unable to attend the meeting

Ξ

5. Special Issues

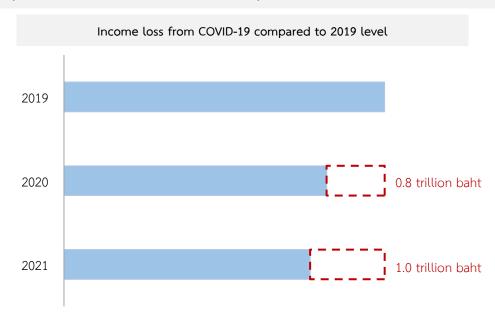
1) Summary of "Impact of debt burden on household consumption"

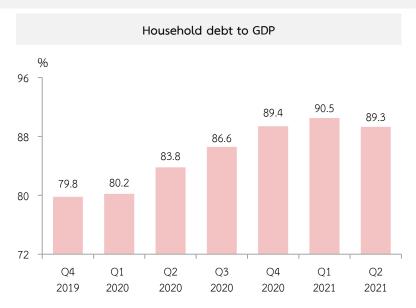
2) Summary of "BOT's latest credit relief measures"





The COVID-19 outbreak severely impacted the Thai economy and caused household income to decline significantly. Loss in household income between 2020-2021 was estimated to be as much 1.8^{1/} trillion baht. Households therefore needed to borrow to maintain purchasing power and consumption levels. However, the growing debt burden of households would in turn constrain consumption and economic recovery going forward. This Special Issue seeks to quantify the impact of debt burden on household consumption in 2020-2021.





Note: 1/ compared to 2019

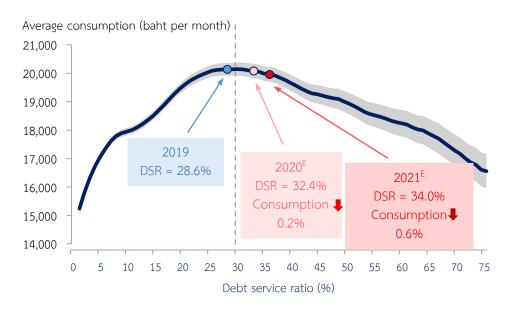
Source: National Statistics Office, forecast by Bank of Thailand

Source: Bank of Thailand





Average consumption of households with various debt service ratios



Note: (1) debt service ratio used in this study is at the household level

- (2) E = Estimated
- (3) grey shaded area reflect the 95% confidence interval

Source: Household Socio-economic Survey (2013, 2015, 2017, 2019), calculation by Bank of Thailand

The study^{2/} used data from the Household Socio-Economic Survey from 2013, 2015, 2017, and 2019 (only households with debt are selected in the sample) to assess the correlation between consumption and debt service ratio (DSR) of households. The study found that debt burden was a factor that would drag household consumption in the period ahead. The 3 key findings were as follow

- Prior to COVID-19, household debt levels in Thailand were elevated and the DSR in 2019 was close to 30% which was the turning point where debt burden would start to negatively impact consumption.
- 2) The COVID-19 crisis impacted household income. It was estimated that the DSR increased from 28.6% in 2019 to 34% in 2021. Such increase in debt burden resulted in a 0.2% and 0.6% decline in household consumption in 2020 and 2021, respectively.
- Income-support and debt restructuring measures were still needed to prevent debt burden from dragging household consumption to the point that it affects the overall economic recovery.

^{2/} Utilizes non-parametric (local linear regression) to assess the correlation between consumption and debt service ratio





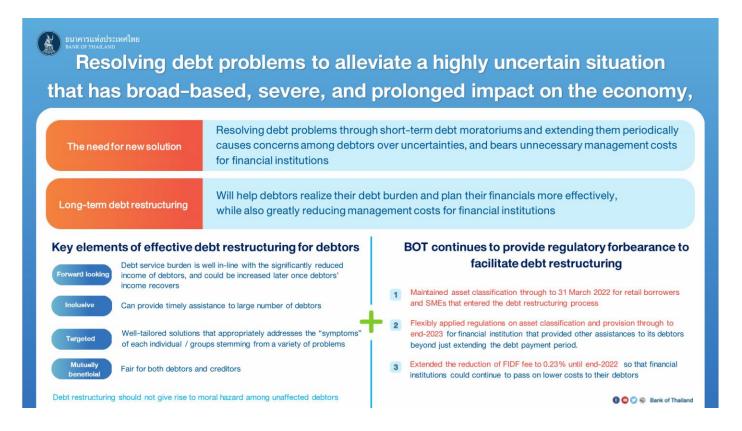
The BOT Temporarily relaxing the regulations regarding the retail debtors on credit card loans, supervised personal loans and digital personal loans to alleviate the debt burden of debtors and to provide additional liquidity to those debtors still with ability to pay.







The BOT enhanced the existing debt restructuring facilities to be more sustainable by encouraging financial institutions to assist debtors via the long-term debt restructuring program.





Data tables





| ร <mark>แพ่งประเทศ</mark> ik of thailani | |
|---|--|
| | |

Q2

7.5

2.0

8.1

16.8

5.2

5.5

11.6

13.2

5.8

2.3

2.7

55

-3.0

1.0

12.9

-2.2

-17.7

-35.5

4.7

3.4

2.2

| ■ Thai Economy Dashboard (1/2) | | | | | | | |
|--------------------------------|------|--------|------|-------|------|------|------|
| Percent | 2242 | 0000 | 2020 | | | | 2021 |
| | 2019 | 2020 - | Q1 | Q2 | Q3 | Q4 | Q1 |
| GDP growth | 2.3 | -6.1 | -2.1 | -12.1 | -6.4 | -4.2 | -2.6 |
| Production | | | | | | | |
| Agriculture | -0.6 | -3.6 | -9.9 | -3.1 | -1.1 | 0.4 | 1.3 |

-6.3

-5.7

2.2

-3.7

-21.0

-36.6

4.6

2.7

1.4

-1.3

-2.4

-9.4

3.6

-5.5

-23.3

4.4

4.3

1.7

-12.9

-14.7

7.6

-10.9

-36.6

-49.9

4.1

1.7

0.9

-6.7

-5.3

10.3

-6.1

-22.2

-39.3

4.5

1.6

1.5

-4.7

-0.7

-0.2

-3.1

-21.1

-35.2

5.4

3.3

1.3

2.5

-0.7

1.7

4.5

3.0

7.8

12.3

2.2

3.8

Source: Office of the National Economic and Social Development Board National Statistical Office and Bank of Thailand

Non-agriculture

Manufacturing

Construction

Wholesales and retail trade

Accommodation and Food Service

Information and Communication

Transport and storage

Financial intermediation

Real estate and renting



| | 0010 | 0000 - | 2020 | | | | | 2021 | |
|--|-------|--------|-------|-------|-------|-------|-------|-------|--|
| Percent | 2019 | 2020 — | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | |
| GDP growth | 2.3 | -6.1 | -2.1 | -12.1 | -6.4 | -4.2 | -2.6 | 7.5 | |
| Expenditure | | | | | | | | | |
| Domestic demand | 3.0 | -1.6 | -0.6 | -5.6 | -0.5 | 0.3 | 2.0 | 4.8 | |
| Private consumption | 4.0 | -1.0 | 2.7 | -6.7 | -0.6 | 0.9 | -0.3 | 4.6 | |
| Private investment | 2.7 | -8.4 | -5.3 | -14.9 | -10.6 | -3.3 | 3.0 | 9.2 | |
| Government consumption | 1.7 | 0.9 | -2.5 | 1.0 | 2.5 | 2.2 | 2.1 | 1.1 | |
| Public investment | 0.1 | 5.7 | -9.1 | 12.6 | 17.6 | 0.6 | 19.6 | 5.6 | |
| Imports of goods and services | -5.2 | -13.3 | -3.0 | -23.6 | -19.3 | -7.0 | 1.7 | 31.4 | |
| imports of goods | -5.8 | -11.2 | -2.2 | -21.2 | -18.1 | -3.1 | 6.4 | 32.2 | |
| imports of services | -2.7 | -21.1 | -6.2 | -32.4 | -23.9 | -22.1 | -15.5 | 28.2 | |
| Exports of goods and services | -3.0 | -19.4 | -5.8 | -27.5 | -23.3 | -21.5 | -10.5 | 27.5 | |
| exports of goods | -3.7 | -5.8 | 1.7 | -15.8 | -7.5 | -1.5 | 3.2 | 30.7 | |
| exports of services | -0.5 | -60.1 | -26.8 | -67.7 | -73.1 | -75.2 | -63.6 | -1.9 | |
| Trade balance (billion, U.S. dollars) | 26.7 | 40.9 | 9.2 | 8.8 | 14.1 | 8.7 | 7.4 | 9.7 | |
| Current account (billion, U.S. dollars) | 38.0 | 20.3 | 11.0 | 1.6 | 7.7 | 0.0 | -2.8 | -4.4 | |
| Financial account (billion, U.S. dollars) | -15.7 | -12.0 | -9.6 | 6.0 | -6.3 | -2.0 | -5.1 | -0.8 | |
| International reserves (billion, U.S. dollars) | 224.3 | 258.1 | 226.5 | 241.6 | 251.1 | 258.1 | 245.5 | 246.5 | |
| Unemployment rate (%) | 1.0 | 1.7 | 1.0 | 2.0 | 1.9 | 1.9 | 2.0 | 1.9 | |
| Unemployment rate, seasonally-adjusted (%) | n.a. | n.a. | 1.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | |

Source: Office of the National Economic and Social Development Board National Statistical Office and Bank of Thailand *Data may be subject to change in line with periodic revisions or changes to data collection methodologies





| la di sata ya | 2019 | 2020 - | 2020 | | | | 2021 | | | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Indicators | 2019 | 2020 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Jul | Aug |
| 1. Financial market sector | | | | | | | | | | |
| Bond market | | | | | | | | | | |
| Bond spread (10 years - 2 years) | 0.3 | 0.9 | 0.6 | 0.8 | 0.8 | 0.9 | 1.5 | 1.3 | 1.1 | 1.1 |
| Equity market | | | | | | | | | | |
| SET index (end of period) | 1,590.6 | 1,449.4 | 1,125.9 | 1,339.0 | 1,237.0 | 1,449.4 | 1,587.2 | 1,587.8 | 1,521.9 | 1,638.8 |
| Actual volatility of SET index 1/ | 9.4 | 30.4 | 46.9 | 25.2 | 13.7 | 23.0 | 13.6 | 12.4 | 13.1 | 11.4 |
| Price to Earnings ratio (P/E ratio) (times) | 19.4 | 28.8 | 13.0 | 18.9 | 21.2 | 28.8 | 41.4 | 30.2 | 28.7 | 20.9 |
| Exchange rate market | | | | | | | | | | |
| Actual volatility of Thai baht (%annualized) ^{2/} | 4.1 | 5.4 | 5.5 | 5.5 | 5.3 | 5.2 | 4.4 | 4.4 | 4.8 | 4.8 |
| Nominal Effective Exchange Rate (NEER) | 123.2 | 122.6 | 123.3 | 122.5 | 122.0 | 122.5 | 122.8 | 119.3 | 115.8 | 114.3 |
| Real Effective Exchange Rate (REER) | 112.8 | 110.2 | 114.4 | 113.0 | 111.1 | 110.4 | 109.0 | 106.0 | 102.4 | 101.1 |
| 2. Financial institution sector ^{3/} | | | | | | | | | | |
| Minimum Lending Rate (MLR) ^{4/} | 6.08 | 5.36 | 5.93 | 5.36 | 5.36 | 5.36 | 5.36 | 5.36 | 5.49 | 5.49 |
| 12-month fixed deposit rate | 1.33 | 0.49 | 0.75 | 0.49 | 0.49 | 0.49 | 0.44 | 0.42 | 0.45 | 0.45 |
| Capital adequacy | | | | | | | | | | |
| Capital funds / Risk-weighted asset (%) | 19.6 | 20.1 | 18.7 | 19.2 | 19.8 | 20.1 | 20.0 | 20.0 | n.a. | n.a. |
| Earning and profitability | | | | | | | | | | |
| Net profit (billion, Thai baht) | 270.8 | 145.2 | 67.5 | 32.4 | 28.0 | 17.1 | 43.8 | 60.4 | n.a. | n.a. |
| Return on assets (ROA) (times) | 1.4 | 0.7 | 1.0 | 0.6 | 0.5 | 0.3 | 0.8 | 1.1 | n.a. | n.a. |
| Liquidity | | | | | | | | | | |
| Loan to Deposit and B/E (%) | 96.2 | 92.3 | 92.5 | 92.8 | 93.0 | 92.3 | 92.2 | 92.8 | n.a. | n.a. |

Note:

^{1/} Calculated by 'annualized standard deviation of return' method ^{2/} Daily volatility (using exponentially weighted moving average method)

^{3/} Based on data of all commercial banks

^{4/} Average value of 5 largest Thai commercial banks





| La Paret en | 2010 | 2020 — | 2020 | | | | 2021 | | | |
|---|------|--------|------|------|------|------|------|------|------|------|
| Indicators | 2019 | 2020 — | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Jul | Aug |
| 3. Household sector | | | | | | | | | | |
| Household debt to GDP (%) | 79.8 | 89.4 | 80.2 | 83.8 | 86.6 | 89.4 | 90.6 | 89.3 | n.a. | n.a. |
| Financial assets to debt (times) | 3.0 | 2.9 | 2.8 | 2.9 | 2.9 | 2.9 | 2.9 | n.a. | n.a. | n.a. |
| Non-Performing Loans (NPLs) of commercial banks (%) | | | | | | | | | | |
| Consumer loans | 2.9 | 2.8 | 3.2 | 3.1 | 2.9 | 2.9 | 2.9 | 2.9 | 3.0 | n.a. |
| Housing loans | 3.7 | 3.8 | 4.0 | 4.0 | 3.9 | 3.8 | 3.7 | 3.7 | 3.7 | n.a. |
| Auto leasing | 1.9 | 1.4 | 2.1 | 1.9 | 1.6 | 1.4 | 1.6 | 1.6 | 1.7 | n.a. |
| Credit cards | 2.4 | 2.4 | 3.5 | 3.0 | 2.4 | 2.4 | 3.0 | 3.5 | 3.7 | n.a. |
| Other personal loans | 2.3 | 2.4 | 2.6 | 2.5 | 2.3 | 2.4 | 2.5 | 2.5 | n.a. | n.a. |
| 4. Non-financial corporate sector 5/ | | | | | | | | | | |
| Operating profit margin (OPM) (%) | 6.8 | 6.5 | 6.3 | 4.5 | 7.5 | 7.7 | 9.4 | 8.5 | n.a. | n.a. |
| Debt to Equity ratio (D/E ratio) (times) | 0.7 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | n.a. | n.a. |
| Interest coverage ratio (ICR) (times) | 4.4 | 4.1 | 3.8 | 2.7 | 4.3 | 5.4 | 6.5 | 6.5 | n.a. | n.a. |
| Current ratio (times) | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 | 1.6 | 1.6 | 1.5 | n.a. | n.a. |
| Non-Performing Loans (NPLs) of commercial banks (%) | | | | | | | | | | |
| Large businesses | 2.6 | 3.1 | 2.6 | 3.0 | 3.1 | 3.1 | 3.1 | 3.0 | 3.0 | n.a. |
| SMEs | 6.3 | 6.9 | 6.7 | 6.3 | 6.6 | 6.9 | 7.3 | 7.3 | 7.3 | n.a. |

Note:

^{5/} Only listed companies on Stock Exchange of Thailand (median value); with data revisions





| | 0040 | 0000 - | 2020 | | | | 2021 | | | |
|--|-------------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| Indicators | 2019 | 2020 - | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Jul | Aug |
| 5. Real estate sector | | | | | | | | | | |
| Number of approved mortgages from commercial banks (Bangkok and | Vicinity) (units) | | | | | | | | | |
| Total | 70,876 | 70,950 | 14,882 | 17,531 | 18,977 | 19,560 | 15,958 | 17,238 | 4,461 | n.a. |
| Single-detached and semi-detached houses | 16,167 | 17,367 | 3,553 | 4,408 | 4,790 | 4,616 | 4,445 | 4,954 | 1,163 | n.a. |
| Townhouses and commercial buildings | 24,763 | 23,062 | 5,314 | 5,559 | 6,128 | 6,061 | 5,709 | 6,133 | 1,587 | n.a. |
| Condominiums | 29,946 | 30,521 | 6,015 | 7,564 | 8,059 | 8,883 | 5,804 | 6,151 | 1,711 | n.a. |
| Number of new housing units launched for sale (Bangkok and Vicinity) (| units) | | | | | | | | | |
| Total | 118,975 | 73,022 | 18,591 | 11,535 | 23,122 | 19,774 | 10,187 | 15,050 | 2,298 | 3,666 |
| Single-detached and semi-detached houses | 19,683 | 17,746 | 3,682 | 3,495 | 5,483 | 5,086 | 2,306 | 3,565 | 167 | 833 |
| Townhouses and commercial buildings | 32,925 | 29,370 | 8,132 | 6,046 | 9,396 | 5,796 | 2,788 | 6,619 | 1,219 | 1,921 |
| Condominiums | 66,367 | 25,906 | 6,777 | 1,994 | 8,243 | 8,892 | 5,093 | 4,866 | 912 | 912 |
| Housing price index (2009 = 100) | | | | | | | | | | |
| Single-detached houses (including land) | 144.0 | 150.3 | 149.1 | 151.3 | 150.51 | 150.38 | 152.19 | 153.52 | 153.8 | n.a. |
| Townhouses (including land) | 156.4 | 163.6 | 164.0 | 164.7 | 162.40 | 163.17 | 165.31 | 166.87 | 167.1 | n.a. |
| Condominiums | 182.3 | 184.8 | 190.0 | 190.2 | 179.24 | 179.86 | 192.67 | 190.28 | 190.0 | n.a. |
| Land | 172.8 | 186.5 | 181.6 | 185.1 | 188.52 | 190.79 | 195.25 | 196.60 | 197.7 | n.a. |
| 6. Fiscal sector | | | | | | | | | | |
| Public debt to GDP (%) | 41.2 | 51.8 | 41.7 | 45.8 | 49.4 | 51.8 | 54.3 | 55.2 | 55.6 | n.a. |
| 7. External sector | | | | | | | | | | |
| Current account balance to GDP (%) ^{6/} | 7.0 | 4.0 | 8.2 | 1.5 | 6.2 | 0.0 | -2.1 | -3.5 | n.a. | n.a. |
| External debt to GDP (%) ^{7/} | 34.2 | 36.8 | 32.5 | 33.6 | 33.5 | 36.8 | 35.9 | 36.0 | n.a. | n.a. |
| External debt (billion, U.S. dollars) | 171.9 | 190.7 | 165.9 | 171.9 | 172.2 | 190.7 | 186.5 | 187.8 | n.a. | n.a. |
| Short-term (%) | 34.8 | 39.2 | 36.1 | 36.1 | 36.3 | 39.2 | 38.7 | 38.0 | n.a. | n.a. |
| Long-term (%) | 65.2 | 60.8 | 63.9 | 63.9 | 63.7 | 60.8 | 61.3 | 62.0 | n.a. | n.a. |
| International reserves / Short-term external debt (times) 8/ | 3.1 | 3.0 | 3.1 | 3.2 | 3.4 | 3.0 | 2.8 | 2.9 | 3.0 | 3.0 |

Note:

 $^{^{\}mbox{\scriptsize 6}\prime}$ Current account / Nominal GDP at the same quarter

^{7/} External debt / 3-year average nominal GDP

 $^{^{8/}}$ Short-term external debt refers to debt with remaining maturity less than 1 year from each period end





Probability distribution of GDP growth forecast

| D | 2021 | | 2022 | | | | 2023 | |
|---------------|------|----|------|----|----|----|------|----|
| Percent | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| > 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 16.0-18.0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 14.0-16.0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 |
| 12.0-14.0 | 0 | 0 | 0 | 1 | 6 | 1 | 2 | 2 |
| 10.0-12.0 | 0 | 0 | 1 | 3 | 12 | 3 | 5 | 4 |
| 8.0-10.0 | 0 | 1 | 2 | 6 | 20 | 8 | 10 | 10 |
| 6.0-8.0 | 0 | 2 | 5 | 13 | 23 | 17 | 19 | 18 |
| 4.0-6.0 | 2 | 6 | 11 | 20 | 18 | 24 | 24 | 23 |
| 2.0-4.0 | 5 | 15 | 20 | 23 | 10 | 23 | 20 | 20 |
| 0.0-2.0 | 12 | 29 | 26 | 18 | 4 | 14 | 10 | 12 |
| (-2.0)-0.0 | 48 | 29 | 20 | 10 | 2 | 6 | 4 | 5 |
| (-4.0)-(-2.0) | 27 | 13 | 10 | 4 | 1 | 2 | 2 | 2 |
| (-6.0)-(-4.0) | 5 | 4 | 4 | 2 | 1 | 2 | 1 | 1 |
| < -6 | 1 | 1 | 2 | 1 | 0 | 2 | 2 | 1 |





Probability distribution of headline inflation forecast

| Dawaant | 2021 | | 2022 | | | | 2023 | |
|---------------|------|----|------|----|----|----|------|----|
| Percent | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| > 4 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 |
| 3.5-4.0 | 0 | 0 | 1 | 1 | 3 | 1 | 2 | 2 |
| 3.0-3.5 | 0 | 1 | 4 | 2 | 7 | 3 | 4 | 4 |
| 2.5-3.0 | 0 | 5 | 9 | 4 | 12 | 6 | 7 | 7 |
| 2.0-2.5 | 0 | 14 | 17 | 9 | 17 | 11 | 11 | 11 |
| 1.5-2.0 | 0 | 25 | 21 | 15 | 18 | 15 | 15 | 14 |
| 1.0-1.5 | 11 | 27 | 21 | 19 | 16 | 17 | 16 | 15 |
| 0.5-1.0 | 56 | 18 | 15 | 19 | 12 | 16 | 15 | 14 |
| 0.0-0.5 | 31 | 8 | 8 | 15 | 7 | 13 | 12 | 12 |
| (-0.5)-0.0 | 2 | 2 | 3 | 9 | 3 | 9 | 8 | 8 |
| (-1.0)-(-0.5) | 0 | 0 | 1 | 4 | 1 | 5 | 5 | 5 |
| (-1.5)-(-1.0) | 0 | 0 | 0 | 2 | 0 | 2 | 3 | 3 |
| (-2.0)-(-1.5) | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| < -2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |

Probability distribution of core inflation forecast

| Dargant | 2021 | | 2022 | | | | 2023 | |
|---------------|------|----|------|----|----|----|------|----|
| Percent | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| > 2.1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 1.8-2.1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 |
| 1.5-1.8 | 0 | 0 | 2 | 3 | 3 | 2 | 3 | 4 |
| 1.2-1.5 | 0 | 2 | 5 | 6 | 6 | 5 | 7 | 8 |
| 0.9-1.2 | 0 | 6 | 10 | 10 | 10 | 10 | 12 | 12 |
| 0.6-0.9 | 3 | 15 | 16 | 15 | 15 | 15 | 16 | 16 |
| 0.3-0.6 | 22 | 24 | 20 | 18 | 18 | 17 | 17 | 17 |
| 0.0-0.3 | 43 | 25 | 19 | 17 | 17 | 17 | 16 | 15 |
| (-0.3)-0.0 | 26 | 17 | 15 | 14 | 14 | 14 | 12 | 11 |
| (-0.6)-(-0.3) | 5 | 8 | 9 | 9 | 9 | 9 | 8 | 7 |
| (-0.9)-(-0.6) | 0 | 2 | 4 | 4 | 5 | 5 | 4 | 4 |
| (-1.2)-(-0.9) | 0 | 0 | 1 | 2 | 2 | 3 | 2 | 2 |
| (-1.5)-(-1.2) | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| < -1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |