
Mizuho Economic Outlook & Analysis

August 1, 2022

Emerging Asian countries suffer from high inflation

Economic slowdown is expected in 2023 due to rising prices and interest rates

< Summary >

- ◆ Asia's economic recovery from the COVID-19 crisis began later than in Europe and the US; but being forced to respond to high inflation originating outside the region and currency depreciation due to interest rate hikes in the US and Europe, Asian countries have already begun raising interest rates.
- ◆ Going forward, inflationary pressure from import price factors is expected to recede due to a lull in rising commodity prices. However, unabated inflationary pressure driven by domestic factors, such as labor shortages and reduced price control measures, will result in high inflation persisting in Asia.
- ◆ There is a strong likelihood that the interest rate hike phase in Asia will continue against the backdrop of unending high inflation. The Asian economy is expected to pick up in 2022 fueled by recovery from the COVID-19 crisis, but it is highly likely that the region's economy will slow down in 2023 due to rising prices and interest rates.

Mizuho Research & Technologies, Ltd.

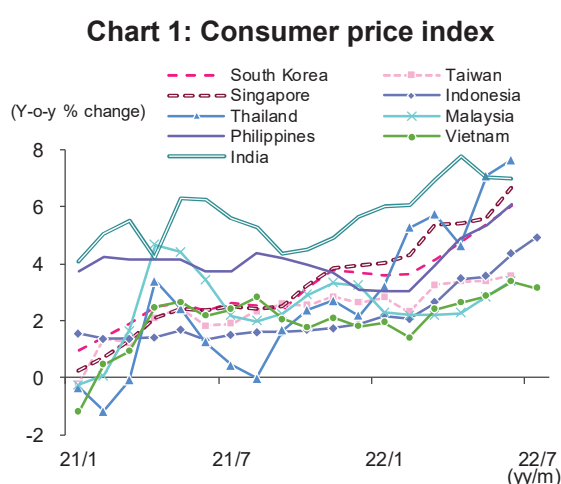
Yusuke Koshiyama, Economist, Asia Research Team, Research Division
yusuke.koshiyama@mizuho-rt.co.jp

This publication is compiled solely for the purpose of providing readers with information on a free-of-charge basis and is in no way meant to solicit transactions. Although this publication is compiled on the basis of sources which we believe to be reliable and correct, Mizuho Research & Technologies does not warrant its accuracy and certainty. Readers are requested to exercise their own judgment in the use of this publication. Please also note that the contents of this publication may be subject to change without prior notice. In the event readers do not wish to receive information free of charge from Mizuho Research & Technologies, readers are requested to notify their wish to suspend subscription.

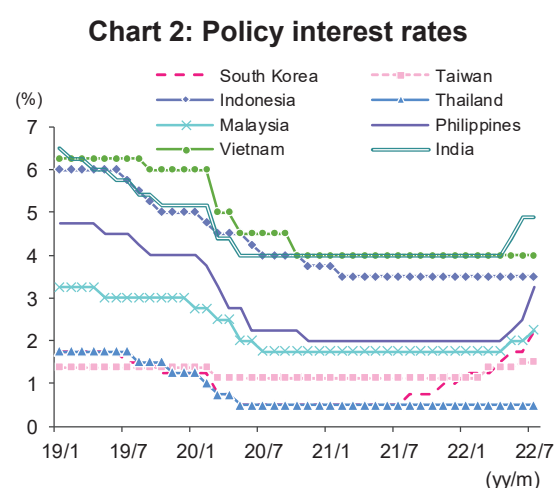
1. Asian countries have begun raising interest rates as inflation rises and currencies weaken

In Japan, while price inflation exceeded +2% year-on-year for the first time in seven years and became a focus of attention, inflation is also rising at a high rate in many emerging Asian countries. For example, in June, the consumer price index (CPI) in Thailand rose +7.7% year-on-year, the highest rise in 14 years, while South Korea's CPI rose +6.0% year-on-year, the first increase of such a range since 1998 after the Asian currency crisis. Inflation has also accelerated almost uniformly in other countries (**Chart 1**).

In addition to accelerating domestic inflation, central banks in Asia are suffering from external problems of currency depreciation caused by a series of rapid interest rate hikes in the US and Europe. Although economic recovery from the pandemic has only just begun in Asia, having lagged behind Europe and the United States, an increasing number of countries have already started raising interest rates to cope with the risk of further inflation and currency depreciation (**Chart 2**). Most recently, South Korea, mentioned above, decided to raise interest rates by 50 basis points on July 13. The interest rate hike of 50 basis points is the largest since the Bank of Korea adopted its current monetary policy framework in 1999. On July 14, the Philippines decided to raise interest rates by 75 basis points on an emergency basis. This also marked the largest single rate hike in its history. These moves are unprecedented and reveal a strong sense of urgency on the part of the central banks. In particular, central banks are concerned about the high level of uncertainty regarding future price trends. In this report, we provide a forecast of future price trends in emerging Asian economies and discuss the future of monetary policy and the economy.



Source: Made by MHRT based upon statistics of each country.



Source: Made by MHRT based upon statistics of each country.

2. In addition to higher import prices, tightening domestic supply and demand will also be a factor in accelerating inflation

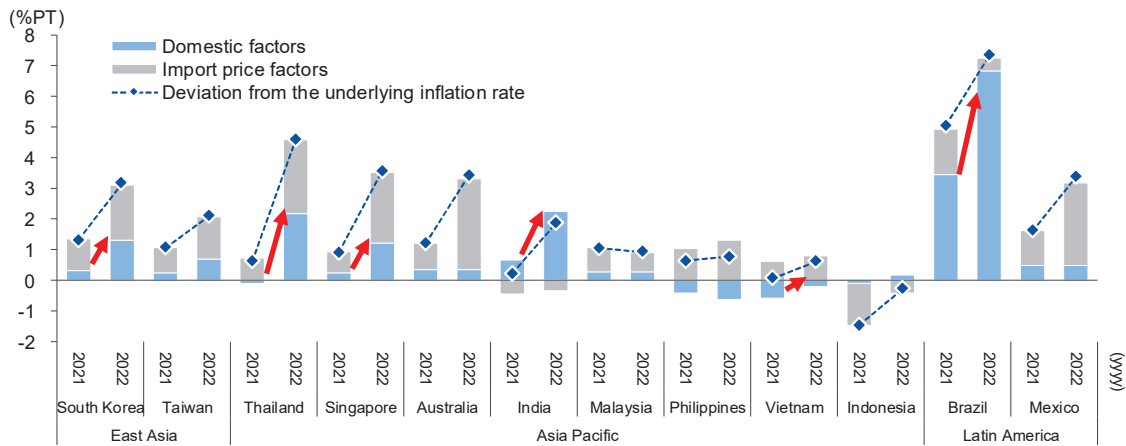
The current inflation, common in both Japan and Asia, is mainly due to the soaring prices of international commodities such as energy resources and food products. Since last year, the resumption of economic activities has led to a sharp recovery in global demand, but this situation, along with the Russia-Ukraine crisis, which has put pressure on supplies of natural gas and certain food items, has created a tight commodity supply-demand balance. The rise in international prices has led to so-called “import inflation.” With a view to looking ahead to inflation, let us first examine to what extent the current inflation rates can be explained by rising import prices.

Chart 3 shows the deviation of each country's inflation rate from the underlying inflation rate (i.e., the average core inflation rate before the pandemic). The deviations are then broken down into (1) import price factors and (2) domestic factors. Import price factors are inflationary pressure that can be explained by movements of the import price index published by the IMF; import price factors are also external price fluctuation factors as they are affected by commodity price hikes and currency depreciation.¹ Domestic factors include the tightening of domestic supply and demand in response to the economic recovery and the impact of governments' price control measures.

Chart 3 shows the increasing impact of import price factors in each country from 2021 to the first half of 2022, indicating that import inflation has been rising. The contribution of domestic factors is smaller than that of import price factors in many countries, but it also rose to a certain degree. This suggests that the tightening of domestic supply and demand has gradually exerted an impact on rising prices. Demand is currently recovering thanks to the relaxation of regulations on human mobility aimed at preventing the spread of the coronavirus in Asian countries. Meanwhile, on the supply side, companies are facing bottlenecks against the backdrop of logistics disruptions and labor shortages. The increase in inflationary pressure driven by domestic factors may reflect a situation where supply is not keeping up with growing demand, leading to higher prices of goods and services.

¹ It should be noted that we also treated price increases for finished products in response to higher import raw materials prices as an import price factor in a broad sense.

Chart 3: Factors behind the upward shift from the underlying inflation rate



Notes 1. The above data are averages from January to May in 2022.
 2. The underlying inflation rate is the 2017-19 average of the core inflation rate.
 3. Domestic factors are deviations from the underlying trend of consumer price inflation in each country, regressed on the import price index (including lag terms) with the import price factor removed.
 Source: Made by MHRT based upon statistics of each country and the IMF.

3. Despite the pause in rising commodity prices, inflation will remain high due to labor shortages and reduced price controls

In the following section, we will examine future price trends by dividing inflation into two components: import price factors and domestic factors.

(1) Inflationary pressure from import price factors will diminish

Import price factors, which are the main cause of today’s inflation, are expected to weaken as the upward trend of international commodity prices slows to a crawl. The reason for the pause in rising commodity prices is the slowdown in demand in the global economy, particularly in the US and Europe. In the United States, interest rates are rising in the face of high inflation, ahead of Asia. Likewise, Europe has also begun raising interest rates as energy prices soar due to declining gas supplies from Russia. As a result, the economies of the US and Europe are likely to stall through 2023. The Chinese economy is also expected to lack strength for the time being due to its zero-coronavirus policy, making it difficult to expect it to be a driving force in the global economy. Amid the global economic slowdown, international commodity markets are forecast to peak out, and the contribution of import price factors to the inflation rate is expected to shrink.

(2) Pressure from domestic factors is expected to increase in the future

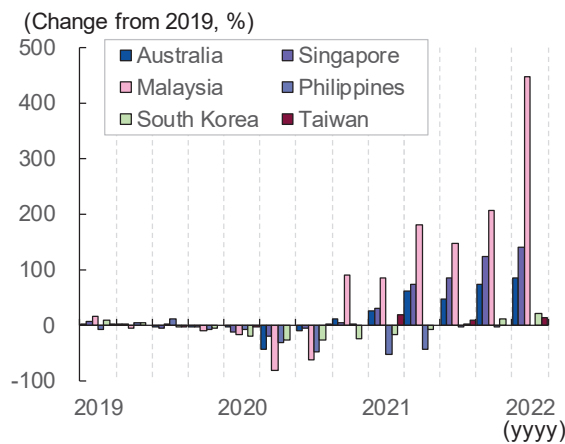
On the other hand, inflationary pressure caused by domestic factors may likely intensify in the future for the following two reasons: labor shortages and reduced price control measures.

First, labor shortages have already become a bottleneck, as mentioned earlier, and are

considered one of the current inflation factors. The number of job vacancies in each country has actually risen after the COVID-19 crisis, indicating that labor shortages are becoming more serious (**Chart 4**). Especially in the service industry, while depressed demand is finally recovering, companies have been unable to secure the necessary labor force. This is because in the process of recovering from the COVID-19 crisis, the manufacturing sector quickly picked up and absorbed workers ahead of the service sector, resulting in a delay in service sector hiring. Looking ahead, the economic recovery in Asia is expected to be supported by recovery mainly in the tourism industry, along with the easing of border control measures. At the same time, however, it is expected that firms will find it difficult to keep pace with securing workers, and the sense of a labor shortage will likely intensify. As a result, higher wages will be passed on and become a factor in pushing up prices.

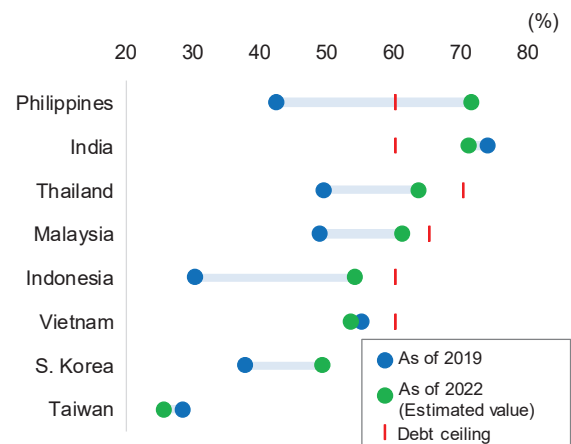
Regarding reduced price control measures, the governments of each country have implemented various price control measures, such as subsidies and price restrictions, in response to rising fuel and food import prices (refer to the Supplementary Discussion at the end of this report for details on price control measures). However, the historic expansion of public finances necessary to deal with the coronavirus crisis has led to a rapid increase in each country's outstanding government debt, and the leeway for additional fiscal spending has shrunk significantly (**Chart 5**). As their economies recover, more and more countries are expected to move toward fiscal normalization, and it is natural to assume that the maintenance of price control measures will gradually reach its limit.

Chart 4: Number of job vacancies



Source: Made by MHRT based upon statistics of each country.

Chart 5: Government debt to GDP ratio



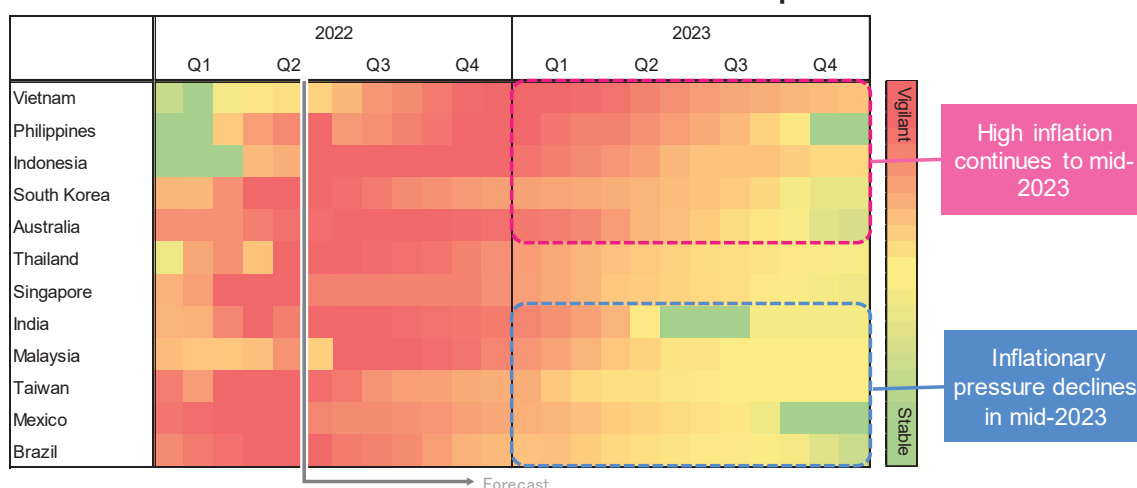
Note: Public debt-to-GDP ratios are shown for countries with a ceiling on the ratio (Thailand, Vietnam)
 Source: Made by MHRT based upon the IMF and IIF.

(3) Higher inflation rates are expected to continue in ASEAN and South Korea

Inflation is expected to remain high in Asia, especially in ASEAN countries and South

Korea, for the time being, albeit differences will exist among the countries. **Chart 6** shows the estimated inflation rates for each country through 2023. As in **Chart 3**, the alert level is indicated by the deviation from the underlying inflation rate. The higher the deviation, the stronger the inflation warning level, which is indicated in dark red. Countries in the upper part of the chart are those that will take longer to settle into an underlying level of inflation and will remain vigilant during 2023. In particular, for Vietnam, the Philippines, and Indonesia, the current delay in monetary tightening relative to their neighboring countries will likely cause prolonged inflation in the future. In contrast, India, Malaysia, and Taiwan (as well as Mexico and Brazil, shown for reference), which started raising interest rates early on, line up at the bottom of the chart. The effects of early interest rate hikes are expected to emerge, and inflation will likely converge at roughly normal levels in mid-2023 for these countries.

Chart 6: Inflation alert level map



Note: We assumed the core inflation rate for 2017-19 as the underlying inflation rate and evaluated deviations from the underlying inflation rate. Data after June 2022 are our estimates.
Source: Made by MHRT based upon statistics of each country.

4. Asia may remain in the interest rate hike phase in 2023, prolonging the economic downturn

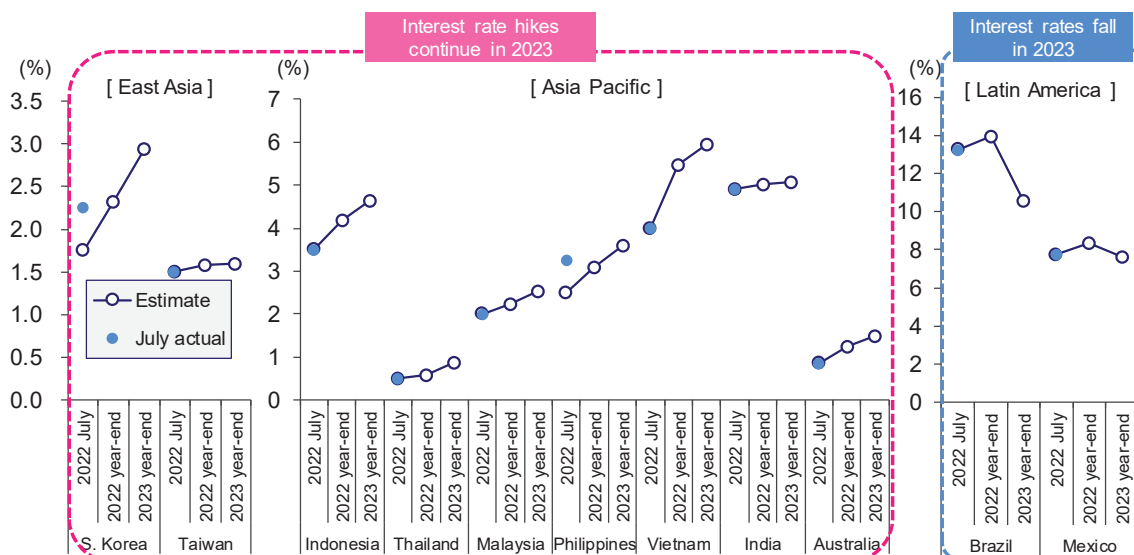
Looking ahead, the persistence of high inflation may prolong the interest rate hike phase in some countries, such as ASEAN nations. In this report, we estimated the theoretically suggested level of policy rate in each country using the Taylor Rule, based on the expected inflation rate presented in the previous section. The Taylor Rule is one of the standard monetary policy rules used in developed countries, and is an equation linking the optimal level of policy rate to changes in economic variables, such as inflation rate and supply-demand gap. It should be noted that, since our analysis focused on emerging economies, we took into account that exchange rates may fluctuate affected by US

monetary policy and other external factors, and estimated the Taylor Rule for small open countries by adding the real exchange rate as a variable.

Chart 7 shows the policy rate level for each country suggested by the estimates. The estimation results suggest that Brazil and Mexico (blue box, right panel), which are listed for reference, may exit the interest rate hike phase in 2023 and begin to cut rates. This possibility is because the two countries started raising interest rates at an early stage, leading to a faster convergence of inflation, and also because of the expected downturn of their domestic economies as a result of interest rate hikes and the economic slowdown in the United States.

On the other hand, a contrasting scenario is expected for emerging Asian countries. For example, in South Korea, Vietnam, Indonesia, and the Philippines, interest rate hikes of a relatively significant scale may continue into 2023. These countries are expected to maintain an aggressive stance toward interest rate hikes with inflation forecast to remain high in these nations until late 2023. Our analysis also suggests that Taiwan, India, and Malaysia, where inflation is rising slower than in the above four countries, will continue in a gradual interest rate hike phase until the end of 2023. In any case, we can confirm that, based on current assumptions, the hurdles for Asian countries to end interest rate hikes in 2023 are relatively high compared with Brazil and Mexico.

Chart 7: Taylor Rule implications for policy rates in each country



Note: Using data through the end of June, we estimated the Taylor Rule that takes into account the supply-demand gap, inflation rate, and real exchange rate (all our estimates). For Australia, only the supply-demand gap and the inflation rate were used. The nominal exchange rate estimates are based on Reuters consensus (as of July 8, 2022).

Source: Made by MHRT based upon Refinitiv and statistics of each country.

5. Conclusion: Asian economies will pick up in 2022, but taper off in 2023

Asian economies in 2022 are basically in the middle of the recovery phase from the

COVID-19 crisis, and recovery is expected to continue especially in the service sector.² These economies, however, are projected to decelerate in 2023 due to the expected economic downturn in the US and Europe, along with the obstructive factors of higher inflation and rising interest rates. With regard to these obstructive factors, (1) not only will real income be pushed down by inflation leading to a decline in personal consumption, but (2) rising interest rates will also increase the burden on households and businesses to repay private debt accumulated during the pandemic, and serve as factors restraining consumer spending and private investment. With regard to the impact of higher interest rates in (2), it is important to note that downside effects are likely to appear in South Korea and Vietnam due to the sizes of the interest rate hikes and outstanding private debt.

Supplementary Discussion

(1) Price control measures implemented by each country (as of July 2022)

Chart A: Examples of price control measures currently in place

Country	Targeted items	Measures	Details
Indonesia	Fuel	Subsidy and tax reduction	<ul style="list-style-type: none"> The government provides subsidies for petroleum fuel and LPG sales in response to soaring oil prices. The government postponed the introduction of a carbon tax scheduled for July 1 in light of its impact on prices.
India	Fuel and others	Tax reduction and others	<ul style="list-style-type: none"> The government is considering an additional contribution of 2.15 trillion rupees (about 3.54 trillion yen) in FY2022/23 (April 2022-March 2023) to cover the cost of subsidies and other measures to counter rising prices. The country cut taxes (1 trillion rupee reduction in tax revenues) on skyrocketing gasoline and diesel fuel prices.
Vietnam	Petroleum products	Tax reduction	<ul style="list-style-type: none"> The government reduced the environmental protection tax on gasoline and other petroleum products (from April 2022). The government is also discussing additional reductions in environmental protection taxes after August.
Thailand	Fuel	Tax reduction	<ul style="list-style-type: none"> At the Cabinet meeting on February 15, the government decided to reduce the excise tax rate on diesel fuel.
Philippines	Fuel	Subsidy	<ul style="list-style-type: none"> The government provides subsidies to public transportation drivers.
	Food	Tax reduction	<ul style="list-style-type: none"> The government reduced tariffs on food products (pork, corn, rice, etc.).
Singapore	Life support	Subsidy	<ul style="list-style-type: none"> On June 21, the government announced a support package totaling SGD1.5 billion to address inflation. The government will provide up to SGD300 to citizens with an annual income of SGD34,000 or less, and all households will receive a credit that can be used to pay utility bills.
Australia	Fuel	Tax reduction	<ul style="list-style-type: none"> Effective March 30, the government reduced the fuel tax (excise duty and equivalent duty applicable to gasoline and diesel) for a period of six months.
	Life support	Tax refund	<ul style="list-style-type: none"> In its March 29 budget proposal, the government announced an increase in the tax rebate program for low- and middle-income taxpayers (LMTO) from a maximum of A\$1,080 (about 100,000 yen) to A\$1,500.
Mexico	Gasoline	Tax reduction and subsidy	<ul style="list-style-type: none"> The government will reduce or exempt the special tax on production and services (IPES), and provide additional subsidies to distributors and importers.
	Food	Tariff suspension	<ul style="list-style-type: none"> Import tariffs on designated major commodities (cooking oil, rice, wheat flour, meat, etc.) were suspended (for one year).
Brazil	Food and others	Tariff cut	<ul style="list-style-type: none"> Import tariffs on designated major commodities (sugar, wheat, steel products, etc.) were suspended. Import tariffs on foods, construction materials, capital goods, and information and communication goods were reduced.
	Industrial products	Tax reduction	<ul style="list-style-type: none"> The industrial goods tax (IPI) rate on product shipments and imports was reduced.
	Fuel	Tax reduction	<ul style="list-style-type: none"> A state goods distribution services tax (ICMS) cap on fuel was set (18%, currently over 30% in some states).

Source: Made by MHRT based upon various media coverage.

² Mizuho Research and Technologies (2022). "FY2022 - FY2023 Economic Outlook: July 26, 2022—The future of global inflation and the world economy—" July 26, 2022. <https://www.mizuho-rt.co.jp/publication/report/research/forecast/2022/outlook220726.html>

(2) Taylor Rule

The Taylor Rule is an equation linking the optimal level of policy rate to the changes in economic variables, such as inflation rate and supply-demand gap. In this section, we assumed the following model and estimated it using the Ordinary Least Squares (OLS) method.

Policy rate = supply-demand gap + inflation rate + real exchange rate + policy rate in the previous period

The basic Taylor Rule uses the supply-demand gap and the inflation rate as explanatory variables, but our analysis also added real exchange rates to take into account the situation where emerging countries may raise interest rates to defend their currencies, and hence the exchange rates react to interest rate differentials with developed countries. In particular, for Indonesia, Taiwan, and Mexico, economies that explicitly state currency stability as a policy objective, we believe the exchange rates should be taken into account. It should be noted that real exchange rates were not incorporated into the Taylor Rule applied to Australia because the Australian dollar is a relatively stable currency with very high market confidence compared with other Asian currencies.

We also implemented the idea of interest rate smoothing, in which the central bank changes its policy rate in stages, and we added a self-lagging term (the policy rate in the previous period) to our variables.

Lastly, regarding the Taylor Rule estimation method, the Generalized Method of Moments (GMM) is often used because of the endogeneity problem that arises when performing the OLS estimation. However, even when GMM is used, problems of weak instruments and bias due to small-sample characteristics arise. Also, in the GMM estimation, the method of using the lag terms of endogenous variables as operating variables is often applied. But Carvalho et al. (2021) point out that this method is not useful for estimating the Taylor Rule in the presence of persistent monetary shocks, and that under realistic conditions there is no significant difference in the estimation results between OLS and GMM. Based on the above observations, we performed the estimation using the simpler OLS.

Reference

Refer to the original Japanese report by clicking the URL below for the reference material.

<https://www.mizuho-rt.co.jp/publication/report/research/insight/2022/insight-as220801.html>