2022 World Economic Outlook

(Translated from the original Japanese version put out on 1/6/2022 (slightly updated))

Marubeni

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Marubeni Research Institute

Table of Contents

General Outline

1-1. World Economic Outlook

1-2. Covid-19 Trends

1-3. Downside Risks to China's Economy

1-4. Concern Over High Inflation

1-5. Monetary Policy

1-6. Fiscal Policy

1-7. Fiscal Risk

1-8. Commodity Price Outlook

1-9. Exchange Rate Trends

1-10. International Relations/Geopolitical Situation

Contents

Major Country/Region Trends

2. U.S.

3. Europe

4. China

5. Japan

6. ASEAN

7. Other countries/regions: India, Korea, Central/Eastern Europe, Middle East, Central/South America, Sub-Saharan Africa, Emerging Economy Sentiment

Summary

- The world economy's real GDP growth rate is expected to be 4.4% in 2022. Although it will likely be lower than 2021's higher growth rate of 5.8%, which largely reflected the huge fall in growth in 2020, the recovery will still exceed annual average growth rates before the Covid pandemic, which is our main scenario.
- Covid-19 trends continue to be the largest risk factor regarding the world economy, however, we predict that there will be suppression of the virus due an effective move up the learning curve of the virus. Even if the virus continues to spread, vaccine penetration will prevent strains on medical systems with restrictions on economic and social activities not being prolonged.
- Two major factors will put downward pressure on the world economy in 2022: ① A downturn in China's economy and ② high inflation accompanied by accelerating monetary policy normalization.
  - China's economic growth rate is expected to fall to 5% in 2022 (2021: 8%) due to the zero Covid policy, power shortages and problems in the housing market. Further on the downside is if the authorities continue to maintain restraint in invoking measures against these downward pressures on the economy. The economic burdens on countries highly dependent on China's economy and natural resource producing countries is increasing.
  - The high inflation rate was brought on by the emergence of pent-up demand as a reaction to the sharp decline in demand during the first Covid-19 outbreak. This high inflation should peak in the 1st half of 2022. The problems of high resource prices, supply constraints due to supply chain deficiencies, and labor shortages due to supply/demand mismatches should be resolved by the 2nd half of 2022 with inflationary pressures expected to decline. Nevertheless, in Europe and the U.S. the inflation rate is likely to exceed the target inflation (2%) set by financial authorities for some time. The excess savings of households in the developed countries, which accumulated due to stimulus measures taken related to the Covid pandemic, will act as a buffer for consumption while demand-side inflationary pressures will remain at a certain level. The important question is whether this will turn into a cycle of rising wages and inflation or not.
  - The Bank of England (BoE) decided to raise interest rates in December amid growing caution over inflation. The U.S. Federal Reserve Board (FRB) will end the purchase of financial assets under its quantitative easing in March of 2022 and is expected to raise interest rate 3 times from April to the end of 2022. Among major countries, the UK and the U.S. are ahead in terms of normalization, as the Euro Zone and Japan are not expected to hike interest rates in 2022.
- The supply of products will gradually expand as supply chain problems are resolved, and although tight supply will seem to disappear, there will be little room for a decline in product prices.

General Outline

1-1. World Economic Outlook

Although the 2 Major Economic Powers, the U.S. and China, Have Slowed, Recovery from the Covid-19 Calamity Continues

▽ **Real Economic Growth Rates** (vs. prior year, %)

		Share	2019 actual	2020 actual	2021 estimate	2022 forecast	2023 forecast
World		100.0	2.8	-3.1	5.8	4.4	3.5
Advanced Economies		43.0	1.7	-4.5	5.0	3.9	2.1
	US	15.8	2.3	-3.4	5.5	3.5	2.0
	Euro Zone	12.1	1.5	-6.3	5.1	4.3	2.0
	UK	2.2	1.4	-9.8	6.8	5.0	1.9
	Japan	4.0	0.0	-4.6	1.7	3.1	1.5
	Japan (fiscal year)	~	-0.5	-4.4	2.7	3.0	1.3
Newly Emerging Economies		57.0	3.7	-2.1	6.4	4.9	4.5
	China	18.7	6.0	2.3	8.0	5.0	5.3
	India	6.8	4.0	-7.3	9.5	8.5	6.6
	ASEAN	5.7	4.9	-3.4	2.9	5.2	6.0
	Central/Eastern Europe	7.6	2.5	-2.0	6.0	3.6	2.9
	Russia	3.1	2.0	-3.0	4.7	2.9	2.0
	Central/South America	7.6	0.1	-7.0	6.3	2.5	2.4
	Middle East/North Africa	7.2	1.5	-2.8	3.8	4.1	3.8
	Sub-Saharan Africa	3.1	3.1	-1.7	3.7	3.8	4.1

Sources: IMF, Marubeni Research Institute

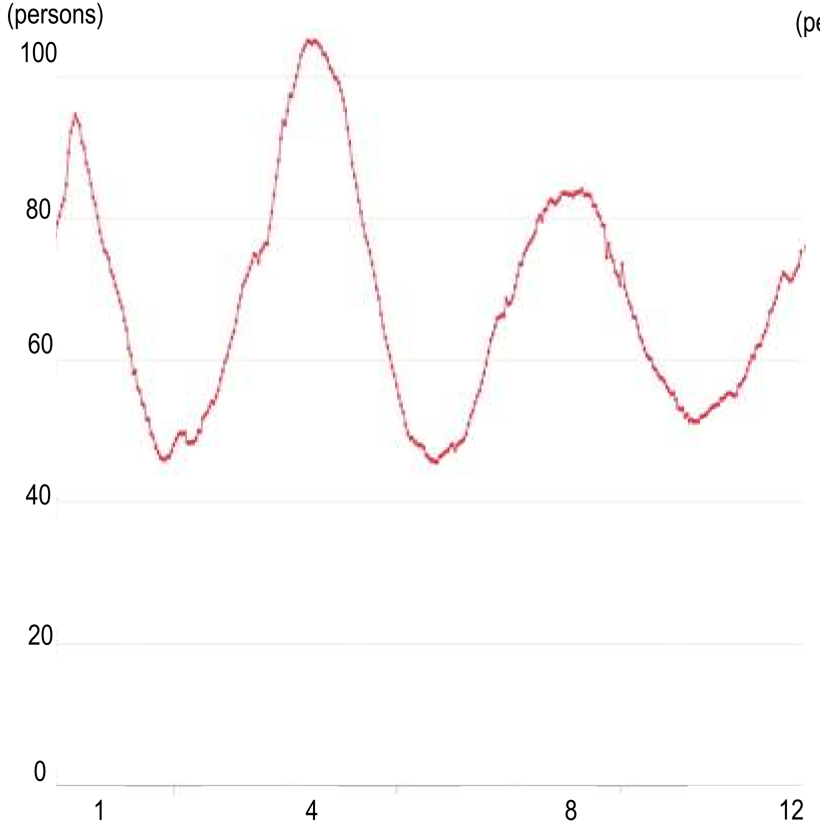
- The world's real GDP growth rate was 5.8% in 2021 and is expected to be 4.4% in 2022 as the recovery from the sharp drop off in 2020 caused by the Covid-19 pandemic continues. However, the growth rate is gradually declining closer to pre-pandemic levels.
- In the U.S., service-related consumption has recovered and the labor market has continued to improve, while inflation has continued to rise longer than expected. As such, the Fed will end its new purchases of financial assets in March and raise interest rates in the April to June period for the first time. Assuming that rates will be hiked 3 times this year we expect an economic growth rate of 3.5% in 2022.
- In China, the zero Covid policy, power shortages and the slump in the real estate market will, in particular, act to restrain economic activity in the first half of 2022 with the growth rate forecasted to slow to 5.0%.
- In the Euro Zone and the UK, the recovery in demand following the resumption of economic activity has all but come to end, with growth rates of 4.3% and 5.0% expected in 2022. In terms of monetary policy, the UK is returning to normalization, while the Euro Zone is still being cautious about lifting its easing policy.
- In Japan, due to the pick-up in personal consumption and capital investment a growth rate of 3.1% is predicted for 2022 (fiscal year 3.0%).

1-2. Covid-19 Trends (1)

Covid-19 Developments Continue to be a Major Risk, However, Deaths are Declining

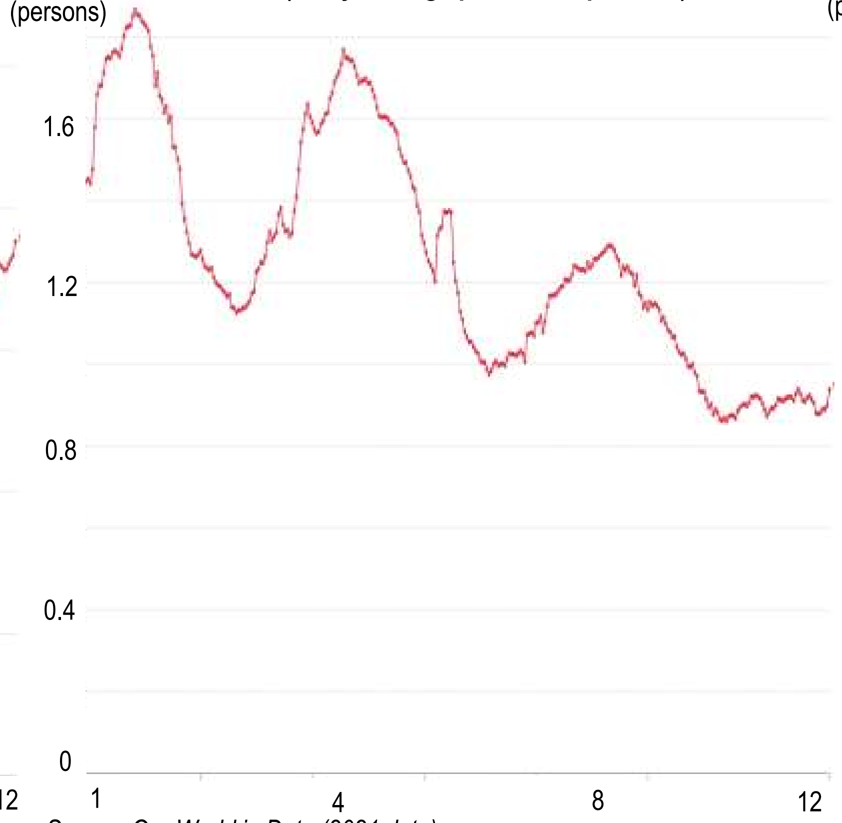
- Covid-19 developments will continue to be the largest risk factor for the global economy in 2022. While the number of infected people and deaths varies from country to country, the number of people worldwide who have received at least one vaccination shot exceeds 56%, and the spread of Covid-19 vaccines has led to a decrease in the number of deaths and a reduction in the severity of the disease.

▽ Number of New Infections Worldwide
(7-day average per million persons)



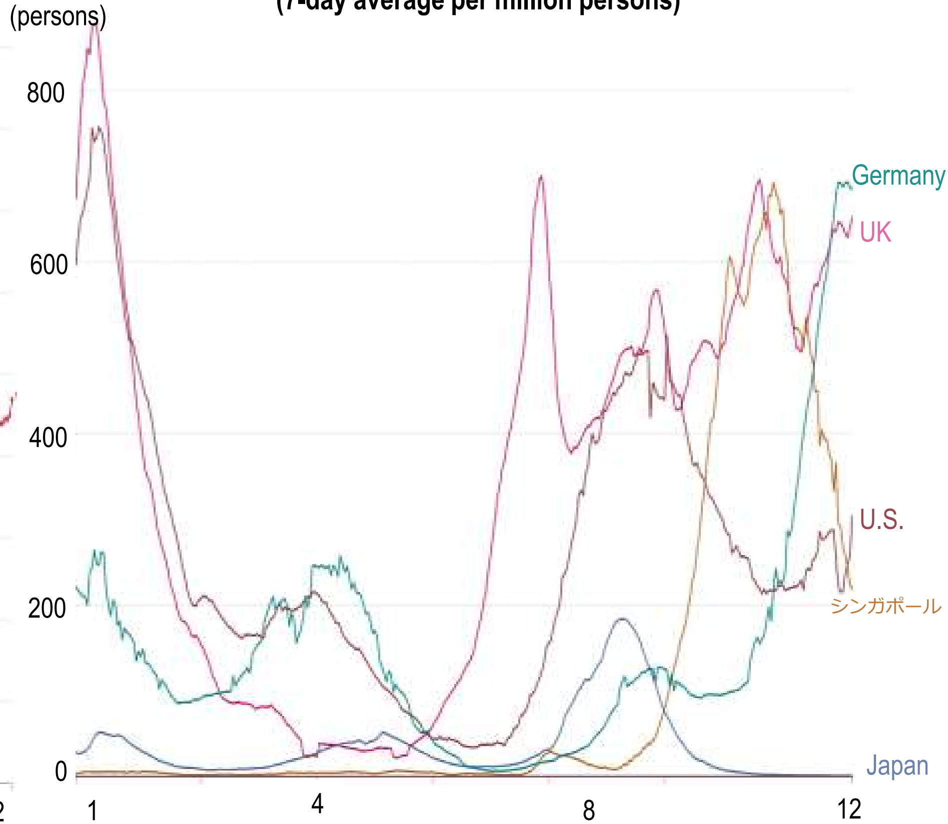
Source: Our World in Data (2021 data)

▽ Number of Deaths Worldwide
(7-day average per million persons)



Source: Our World in Data (2021 data)

▽ Number of Newly Infected People
(7-day average per million persons)

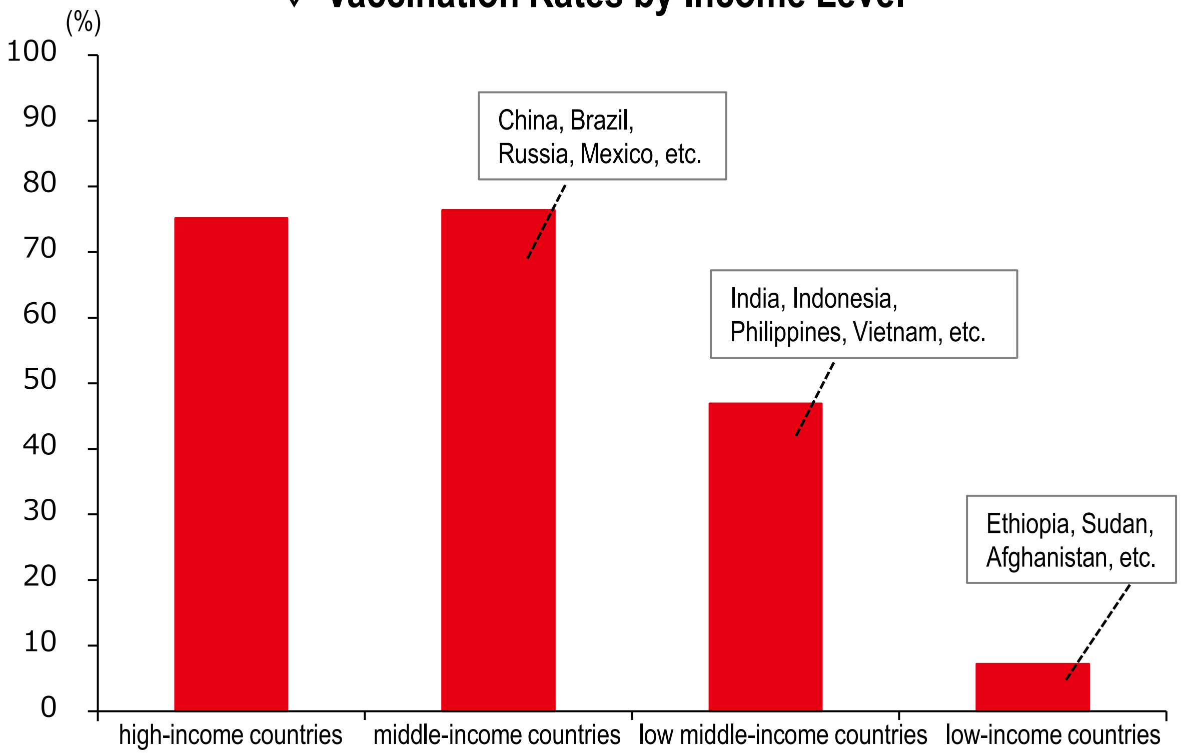


Source: Our World in Data (2021 data)

1-2. Covid-19 Trends (2)
Economic and Other Activity Restrictions Remain Limited

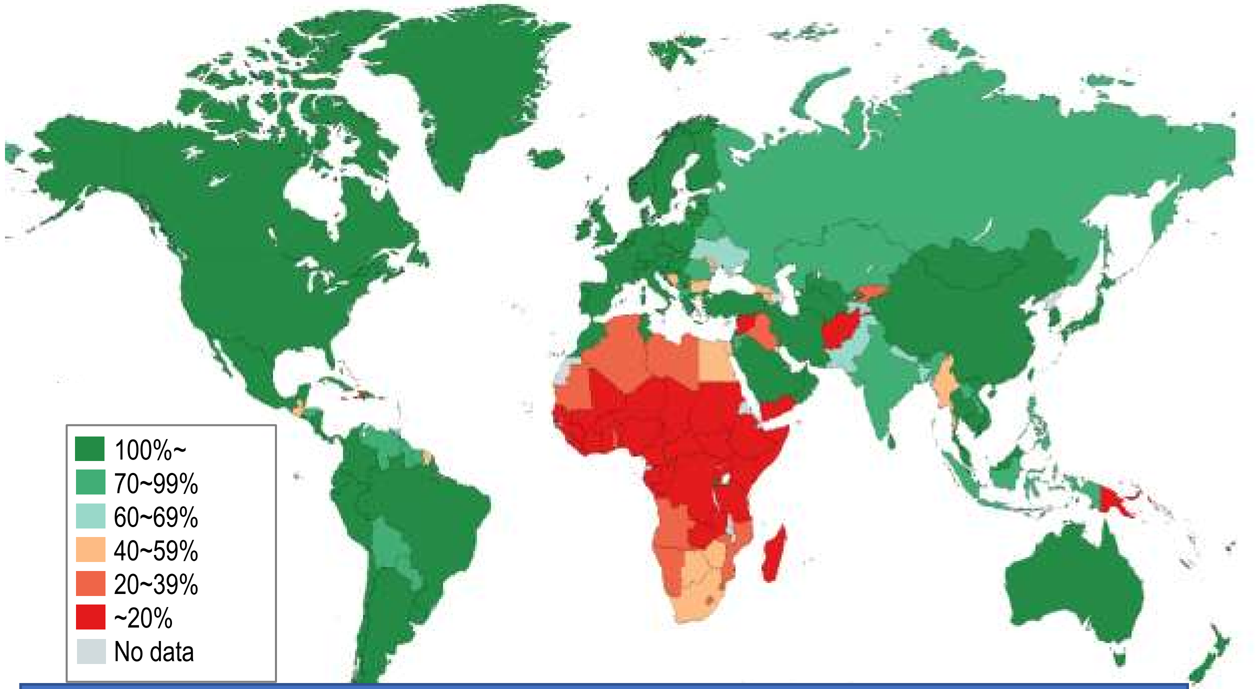
- The disparity in vaccination rates between high-income and low-income countries persist. As the proliferation of vaccinations have been delayed, new variants such as omicron have emerged and are spreading the infection. However, with the spread of Covid there has also been movement up the learning curve in terms of infection control, so even with lockdowns in major countries the long-term risks have been found to be small.

▽ Vaccination Rates by Income Level



Note: 12/14/21 data. Percentage of people who have been inoculated at least once
Source: Our World in Data

▽ Vaccine Rates



Since the rate is based on each country's population there is no need for "per 100 persons", etc.

Note: 12/16/21 data. Ratio of vaccinations to the total popualtion
Source: WHO

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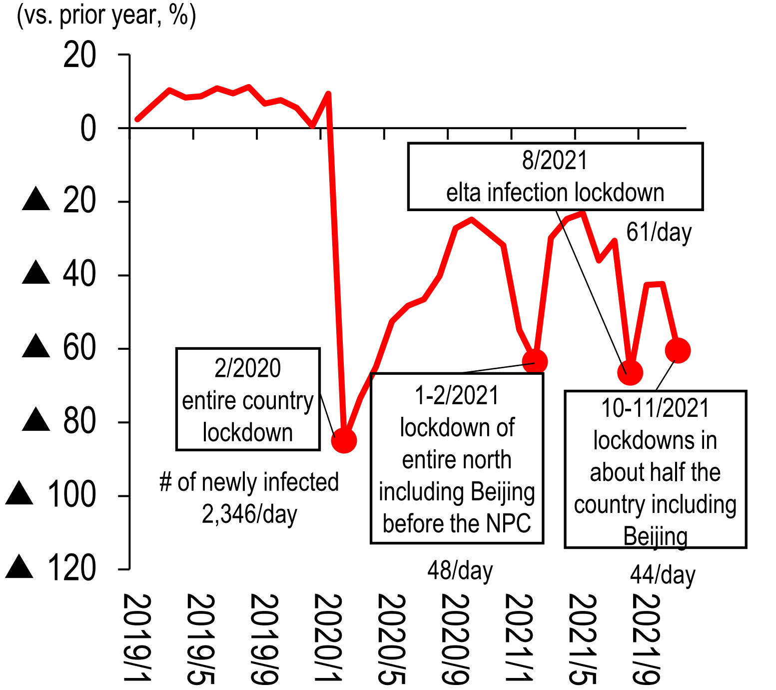
1-3. Downside Risks to China’s Economy (1)

Zero-Covid Measures, Power Shortages and Real Estate Market Slump Weighing Heavily in the Short-Term

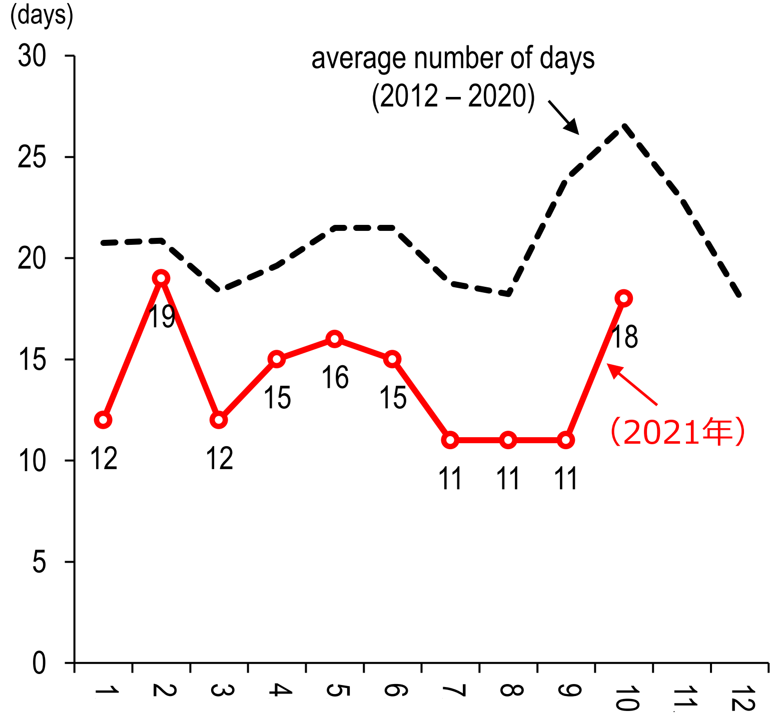
- Strict infection controls: Lockdowns on wide areas even with only a small number of infections giving priority to containing the infection. This leads to stagnation in the flow of people and hinders consumption.
- Power shortages: Limited room for increased coal production. Coal-fired power output has become restrained due to soaring prices and environmental regulations. Electricity supply and demand will remain tight until at least next spring (2022).
- Housing market slump: The housing-related share of GDP is about 25% and 30% of all outstanding bank loans. If measures are taken to curb the bubble and raise real estate taxes, real estate prices will fall.

▽ Domestic Passenger Transport



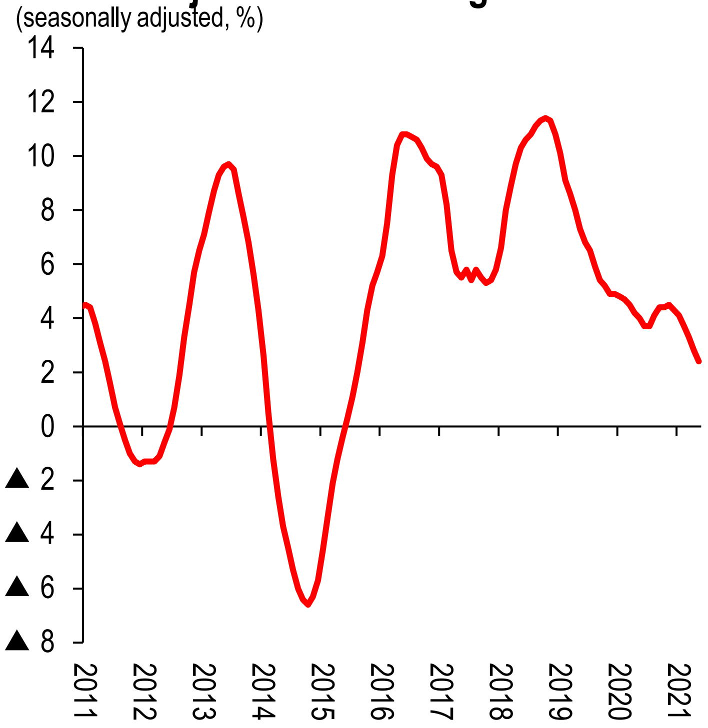
Source: China’s Central Statistics Bureau (most recent 11/2021, dotted arrow id an estimate)

▽ Electric Power Companies’ Coal Inventories (2021)



Source: China National development and Reform Commission

▽ 70 Major Cities Housing Price Index



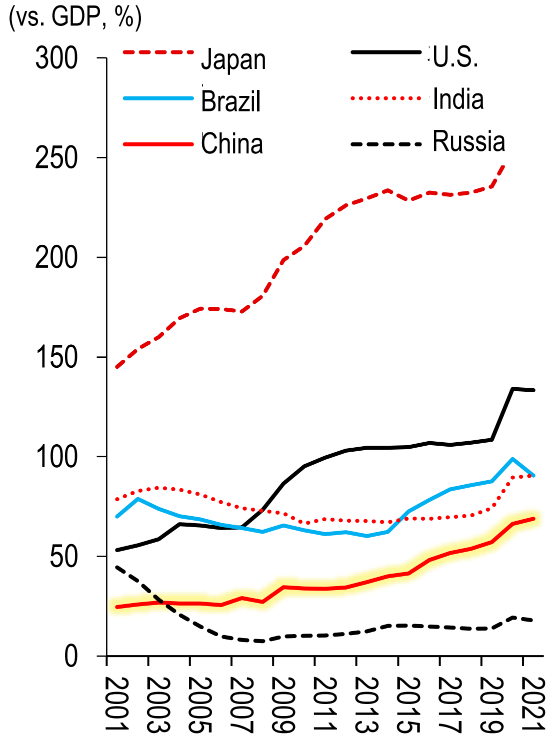
Source:: China’s Central Statistics Bureau

1-3. Downside Risks to China's Economy (2)

Stance Different Than Before, Taking a Patient Wait and See Attitude as Growth Slows

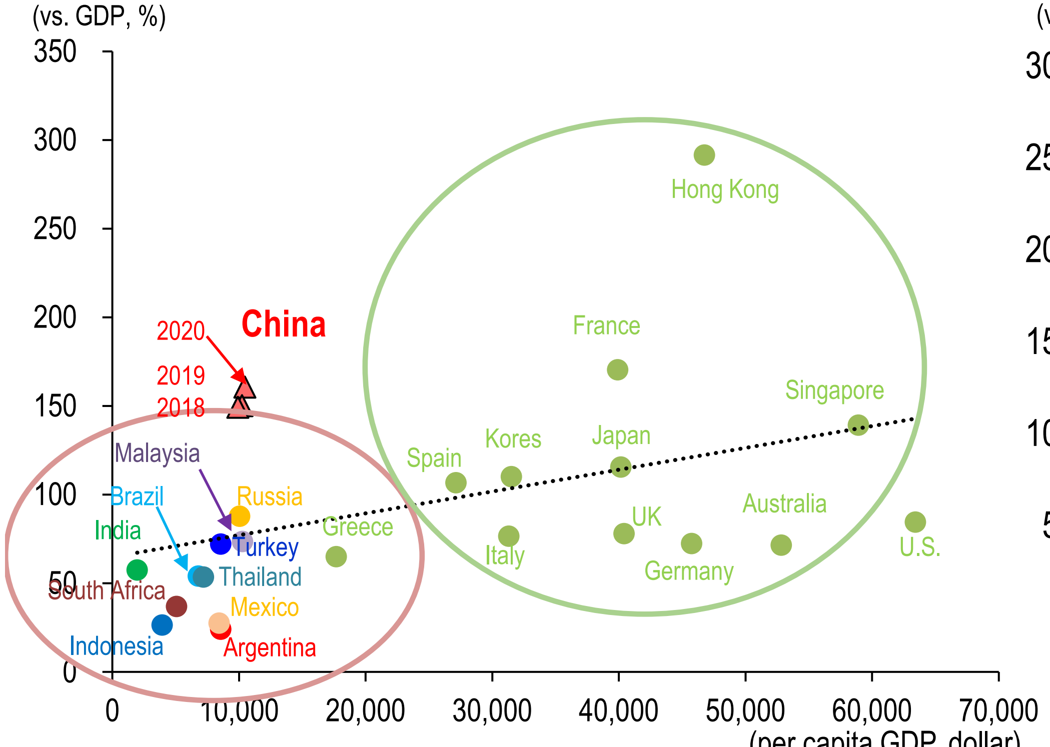
- Authorities have taken no fiscal or other measures so far to deal with a noticeable economic slowdown, unlike past stances when growth started to slow.
- Fiscal capacity: Government debt is relatively low due to its emphasis on fiscal discipline. However, in addition to a fall in tax revenues due to a decrease in the working age population, baby boomer retirement is putting pressure on finances.
- Financial sustainability: The scale of credit to the private sector of emerging economies is noticeable. The government is focused on curbing swelling debt. The outstanding loan balance has declined after a temporary increase.

▽ Government Debt



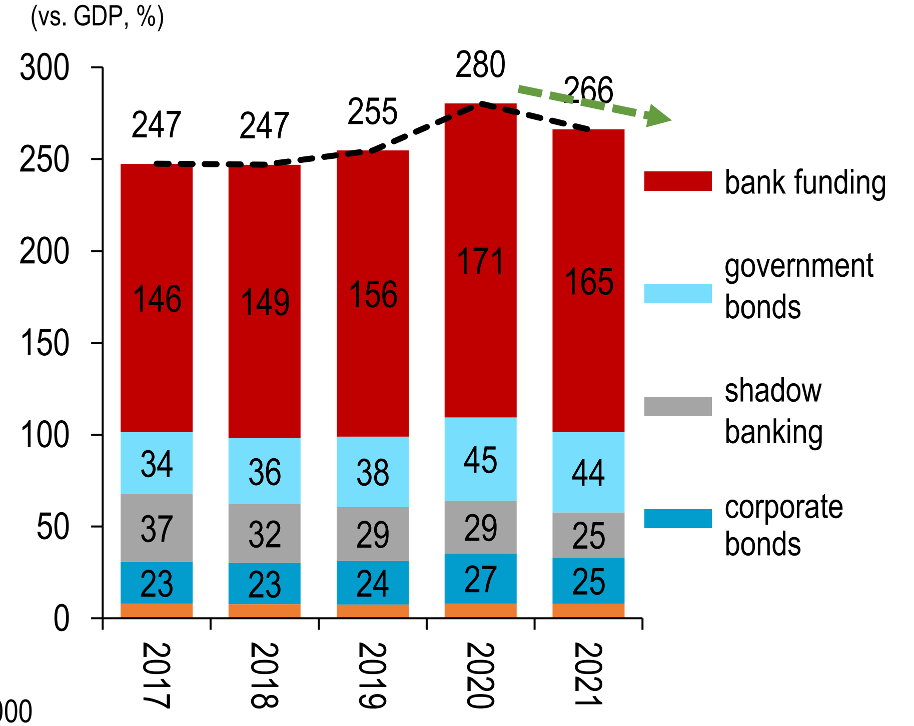
Source: IMF

▽ Private Non-Financial Corporations' Credit Balance (2020)



Sources: BIS, IMF

▽ Social Loans



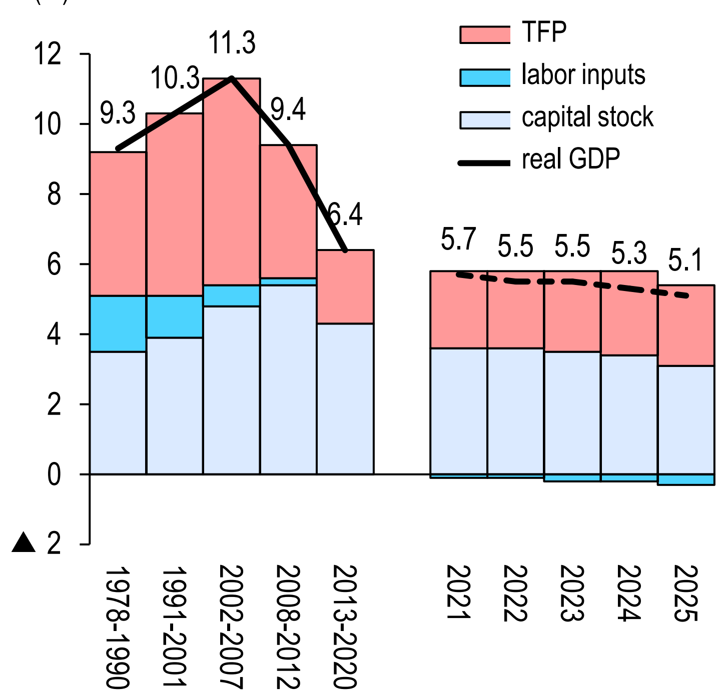
Source: People's Bank of China (2021: For the January to September period)

1-3. Downside Risks to China's Economy (3)

Unlikely to be a Driver of the World Economy Due to a Decline in the Potential Growth Rate

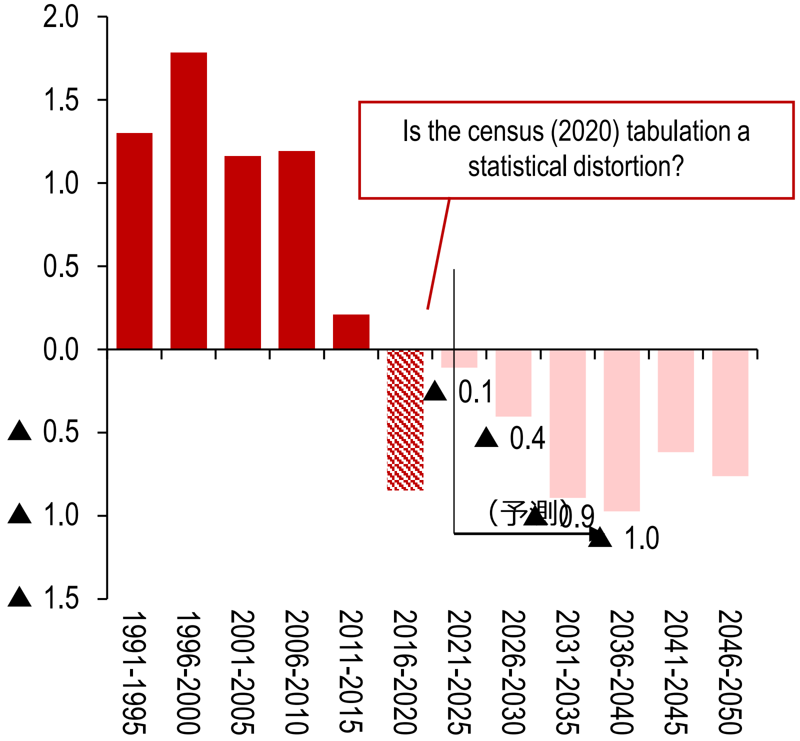
- The People's Bank of China estimates that China's potential growth rate will fall to 5.1% by 2025.
- Total factor productivity is expected to be flat and capital stock growth is likely to slow as labor inputs decline.
- In particular, the working age population has already started to fall and its negative contribution to the growth rate is gradually expanding. Also, there is less room for workers to migrate from rural areas.

▽ Potential Growth Rate



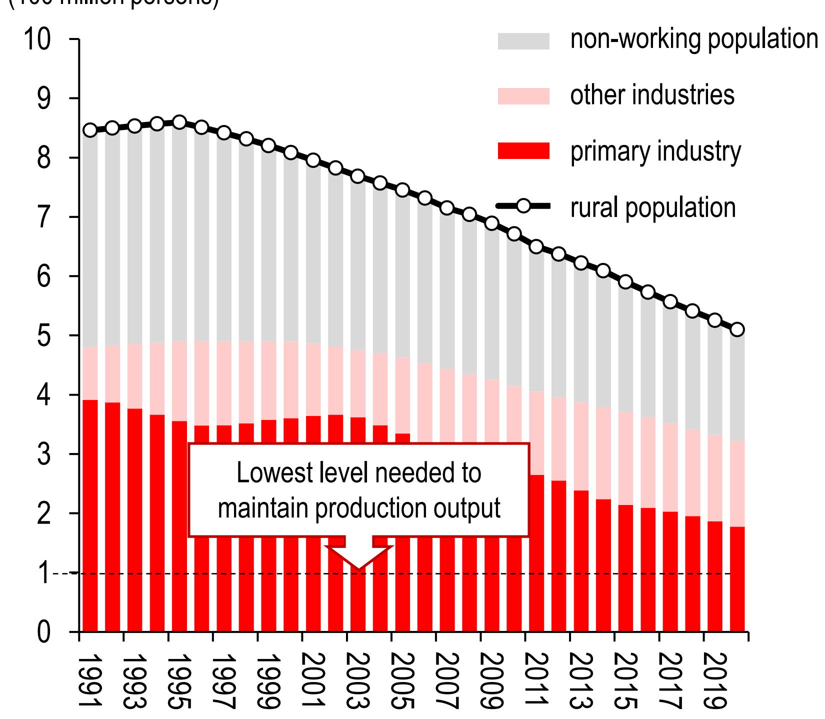
Source: PBC Working Paper No.202「Estimated Potential Economic Growth Rate During China's 14th 5-Year Plan」(3/25/2021)

▽ Working Age Population (age 15 – 64)



Sources: Actual: China Central Statistics Bureau Forecasts: UN

▽ Potential Rural Surplus Labor



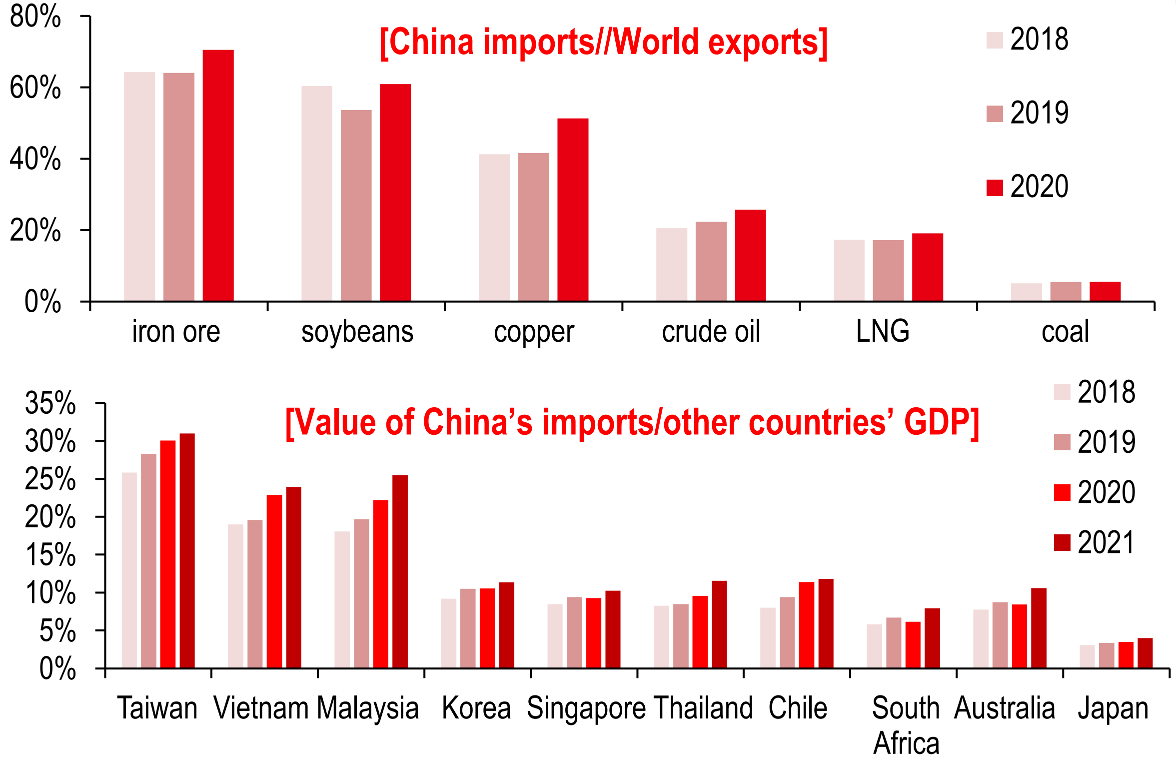
Source: China Central Statistics Bureau (Most recent: 2020)

1-3. Downside Risks to China's Economy (4)

Concerns Over the Impact of China's Economy on Resource Rich Countries and Asian Economies

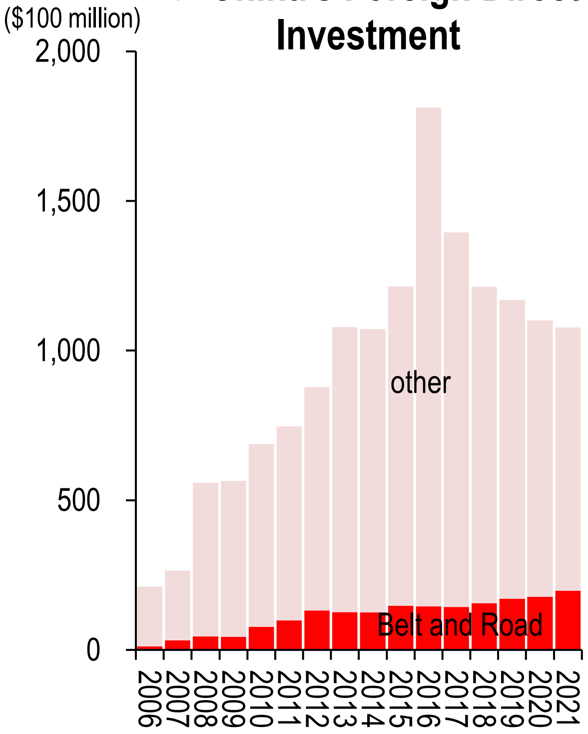
- Due to an early economic recovery from the Covid pandemic and expanding exports the import of such raw materials as iron ore, copper, crude oil and so on as well as intermediate goods grew rapidly.
- Also, FDI has fallen in recent years as China has tended to focus more on the Belt and Road Initiative in Asia, etc. Resource rich countries and Asian economies have increased their dependence on China.
- As China's economy slows, the economic burden on these highly dependent resource rich countries and Asian economies will only increase.

▽ Dependence on China



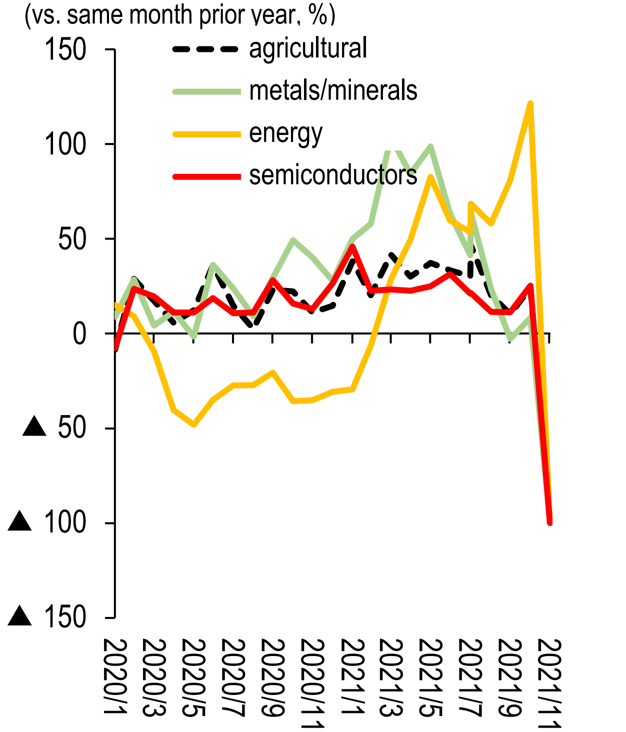
Source: WIND (2021 estimated based on Jan to Sept. results)

▽ China's Foreign Direct Investment



Note: 2021 estimated based on Jan. to Sept. results.
Source: China Ministry of Commerce

▽ Import Value of Major Items (China)



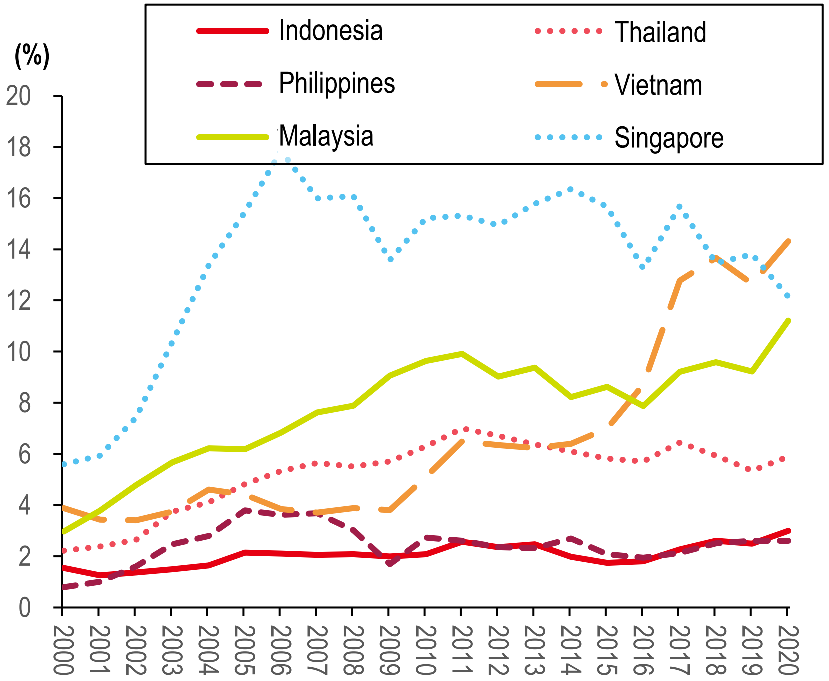
Source: China General Administration of Customs (Most recent: November)

1-3. Downside Risks to China’s Economy (5)

Vietnam and Malaysia Have a Large Impact on ASEAN Exports to China

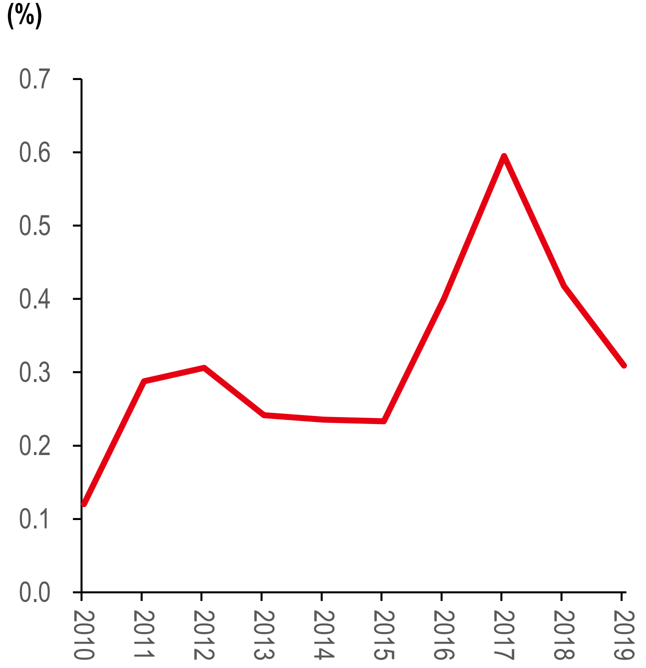
- Vietnam’s exports to China as a precent of GDP has been rising since 2015. Malaysia’s is also comparatively high, thus susceptible to China’s economy.
- The ratio of China’s exports to ASEAN 5 + Singapore to those 6 countries’ total GDP does not seem large on the surface, however, there are capital inflows of a certain scale coming from Hong Kong and various tax havens to those countries, so changes in the financial climate in China carries some potential risk.

▽ Exports to China as % of GDP



Source: MF

▽ China’s FDI to ASEAN 5 + Singapore as a % of GDP



Note: Calculated by dividing China’s FDI to ASEAN 5 + Singapore by the total GDP of those 6 countries.
Sources: International Trade Centre, IMF

▽ FDI Balances (vs. 2019 GDP, %)

		1		2		3	
Indonesia	Outward FDI	Singapore	2.8	France	1.7	China	1.7
	Inward FDI	Singapore	4.9	Netherlands	3.1	U.S.	2.6
Malaysia	Outward FDI	Singapore	6.4	UK	4.0	Indonesia	3.1
	Inward FDI	Singapore	9.4	Hong Kong	5.8	Japan	5.0
Philippines	Outward FDI	Cayman Islands	0.6	Singapore	0.5	British Virgin Islands	0.4
	Inward FDI	Japan	2.8	Netherlands	2.4	U.S.	1.1
Singapore	Outward FDI	China	28.8	Netherlands	16.8	Indonesia	12.8
	Inward FDI	U.S.	83.7	Cayman Islands	34.9	British Virgin Islands	28.3
Thailand	Outward FDI	Hong Kong	4.7	Singapore	3.1	Netherlands	2.1
	Inward FDI	Japan	17.2	Singapore	8.2	Hong Kong	4.3
Vietnam	Outward FDI	Laos	1.5	Russia	0.9	Cambodia	0.8
	Inward FDI	Korea	20.7	Japan	18.0	Singapore	15.1

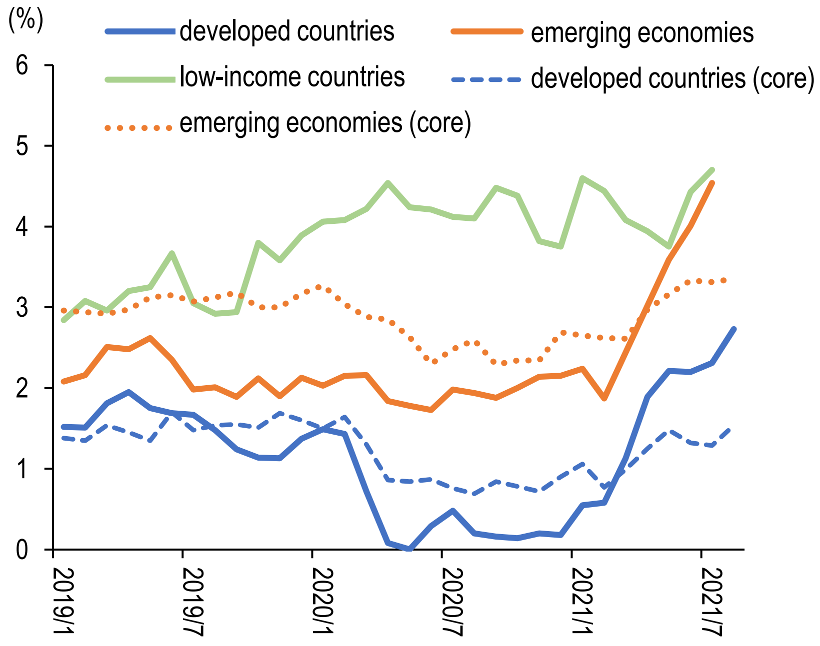
Sources: International Trade Centre, IMF

1-4. Concern Over High Inflation (1)

Inflation Rates Have Risen Sharply in Both Developed and Emerging Economies Putting Downward Pressure on the Global Economy

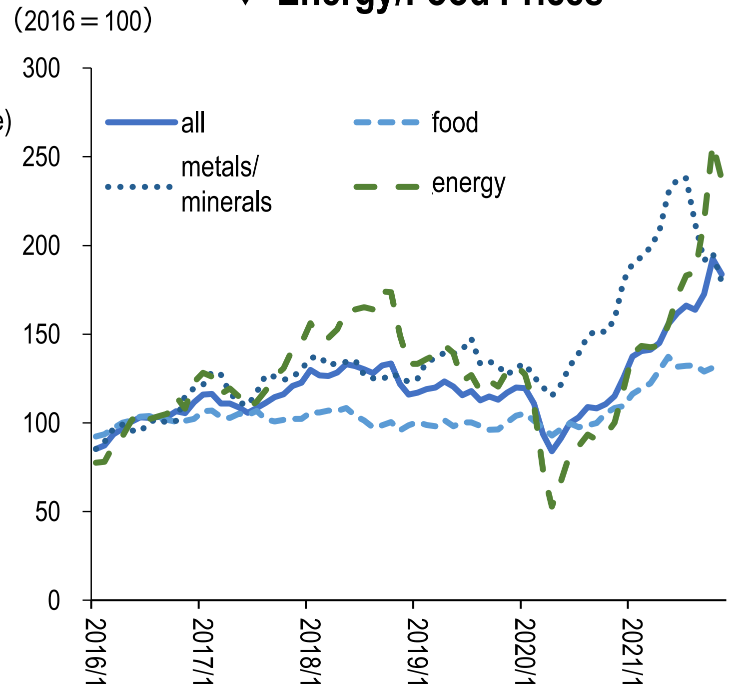
➢ Consumer prices rose significantly in both developed and emerging economies in 2021 and are currently above pre-Covid levels. Not only are such energy prices as crude oil and coal rising but also prices for raw materials like metals, minerals and food and are spreading to a wide range of other items as well. In particular, in low-income countries food accounts for a large portion of the consumer price index which has a large impact on daily life.

▽ Consumer Price Index



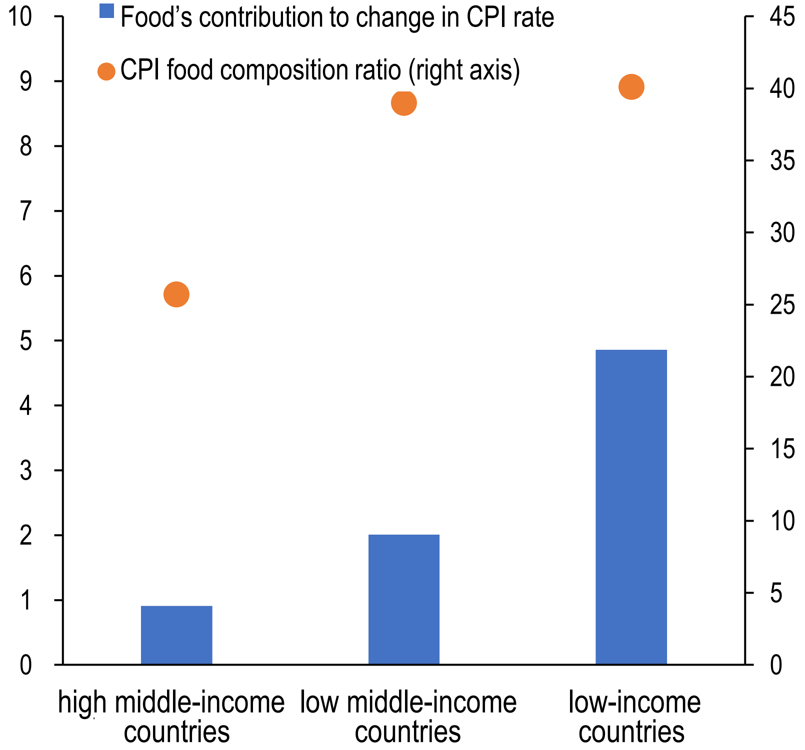
Source: MF "WEO Oct 2021" (data up until (/2021)

▽ Energy/Food Prices



Source: IMF (data up until November)

▽ Food CPI Composition (%)



Source: Marubeni Research Institute from IMF data((data is the Q1 2020-Q1 2021 average)

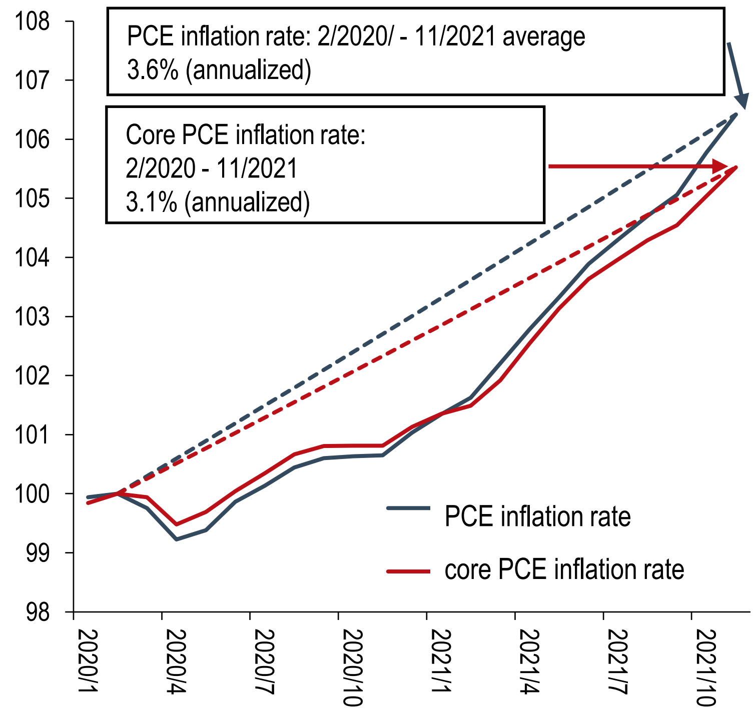
1-4. Concern Over High Inflation (2)

Inflation Should Peak in the 1st Half of 2022, But Will Likely Remain High

➢ High inflation is mainly due to the combination of supply constraints and the sharp recovery in demand that greatly disappeared during the initial Covid-19 outbreaks and spread. However, as these improve the reactionary factors (base effects) from 2020 will wear off and inflation should begin to level off and decline somewhat in the 2nd half of 2022. However, current inflationary pressures have gone beyond expectations affecting a wide range of goods and services, so the upside risk are increasing.

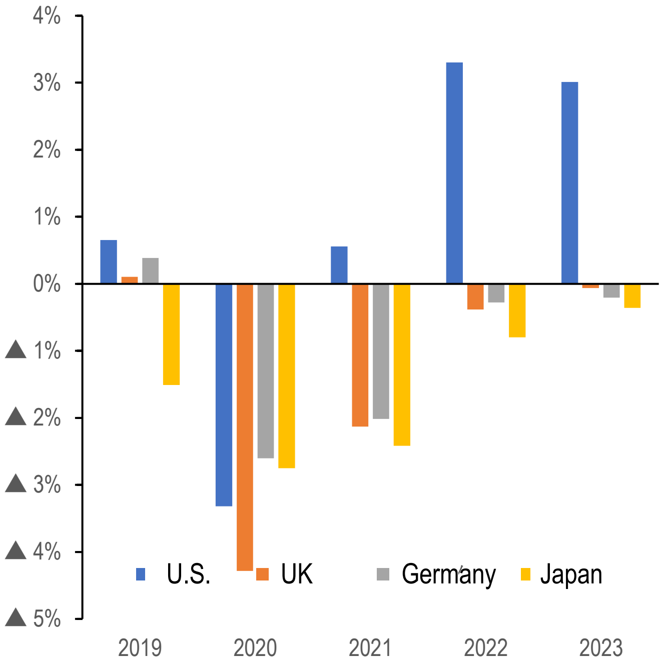
▽ PCE Inflation Rate

(2/2020 = 100)



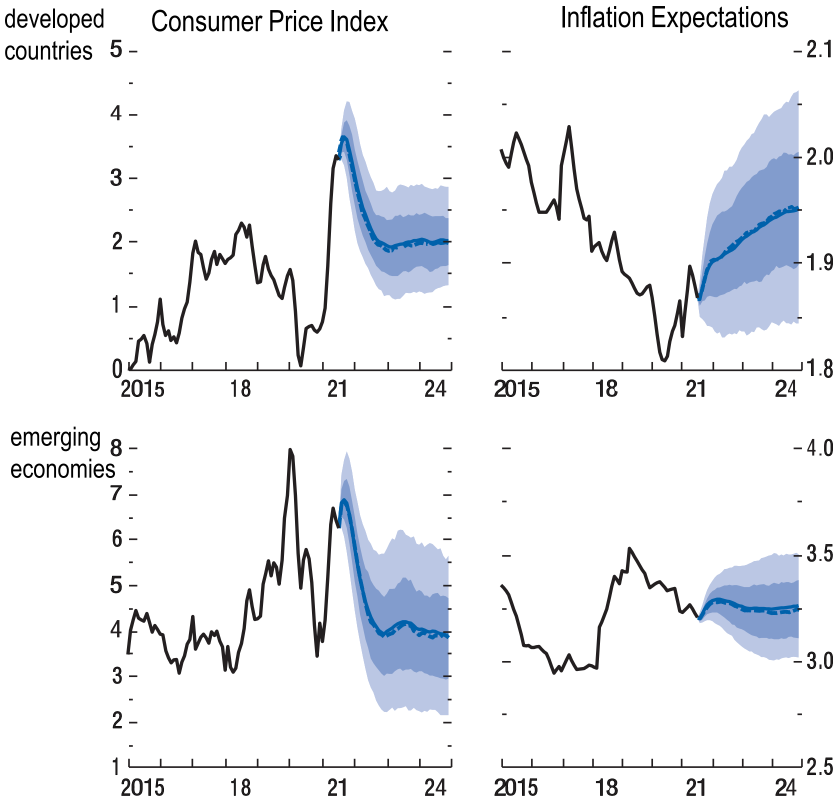
Source: Marubeni Research Institute from U.S. Commerce Department data

▽ Supply and Demand Gap (vs. GDP)



Source: IMF

▽ Inflation Outlook



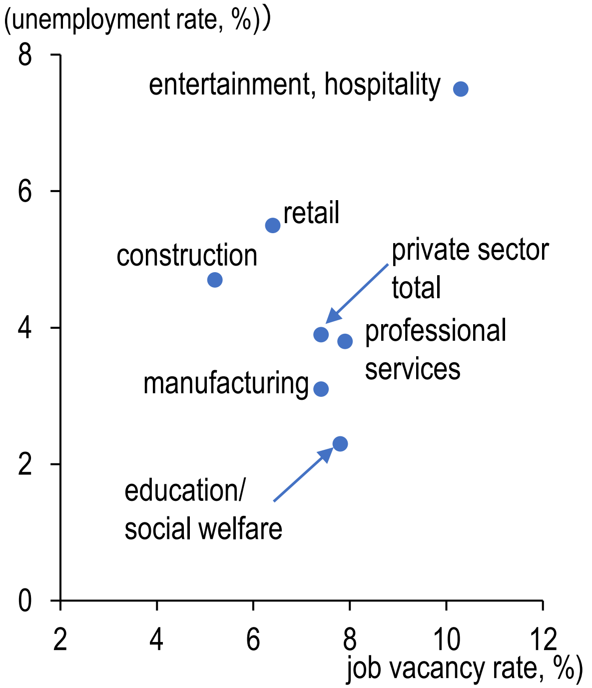
Source: IMF

1-4. Concern Over High Inflation (3)

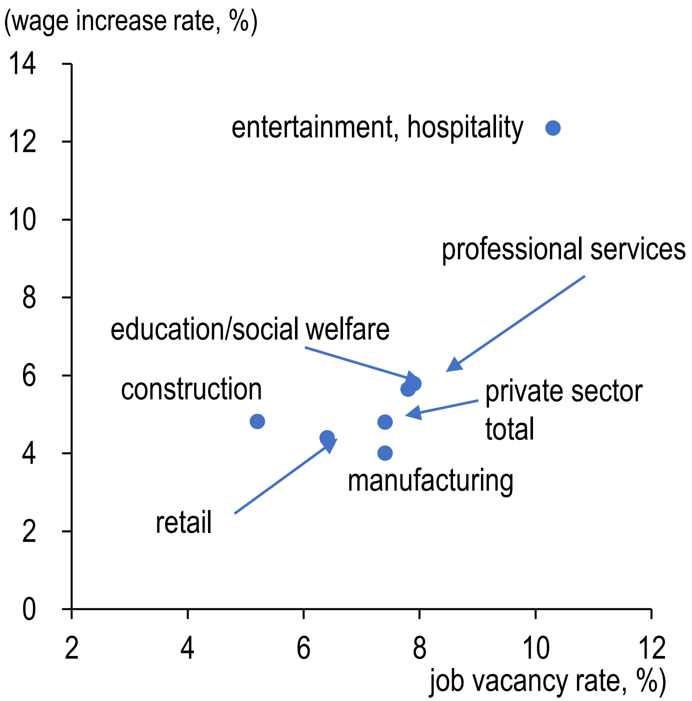
Unemployment Rate Drops to 4.2% in U.S, Labor Shortages and Employment Mismatches Factors in Rising Wages

- In the U.S. labor market, the unemployment rate is falling and job vacancy rate is rising (labor supply constraints). Job vacancies are especially prominent in the entertainment and hospitality sectors contributing to higher wages. In the U.S., which initially chose to pay unemployment benefits rather than use job retention measures, mismatches occurred as the unemployed returned to the labor market. On the other hand, in Europe, as result of efforts to maintain employment the unemployment rate hardly changed, while the job vacancy rate has significantly risen recently.

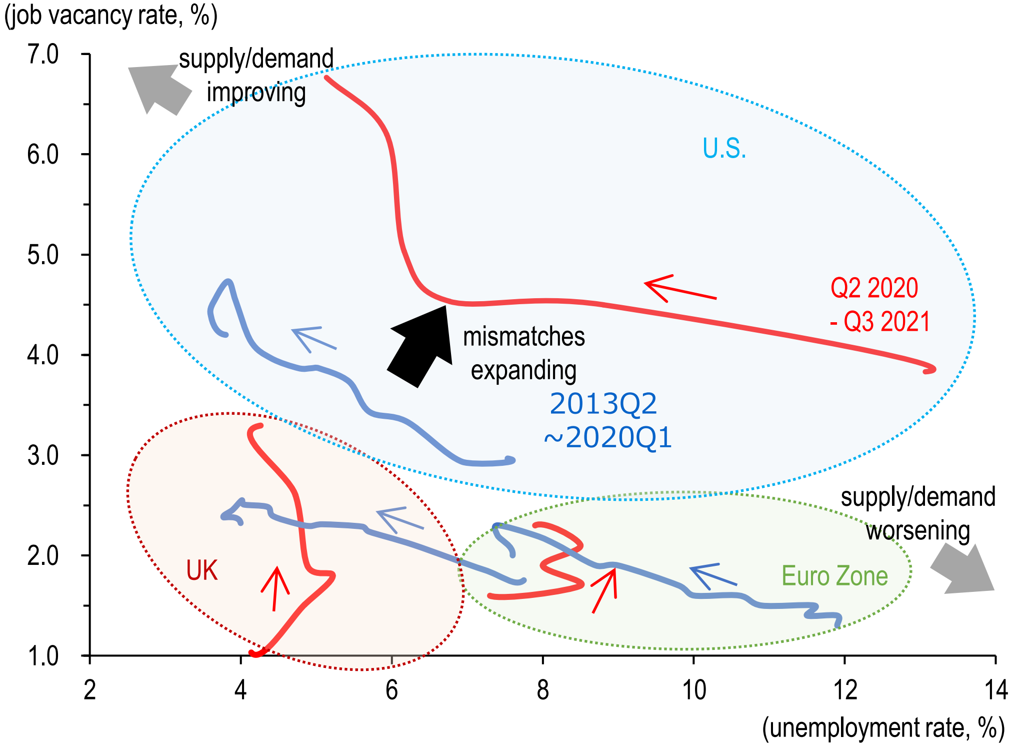
▽ Job Vacancy Rate/Unemployment Rate by Industry (U.S.)



▽ Job Vacancy Rate/Wage Increase Rate by Industry (U.S.)



▽ Relationship Between Job Vacancy Rate/ Unemployment Rate (U.S., UK, Euro Zone)



Source: Marubeni Research Institute from U.S. Department of Labor data (job vacancy rate: Oct., unemployment rate: pre-seasonal, wage increase rate: Nov.)

Note: The blue line runs from Q2 2013 to Q1 2020, the red line from Q2 2020 to Q3 2021.
Source: Marubeni Research Institute from U.S., UK, Euro Zone statistic agencies

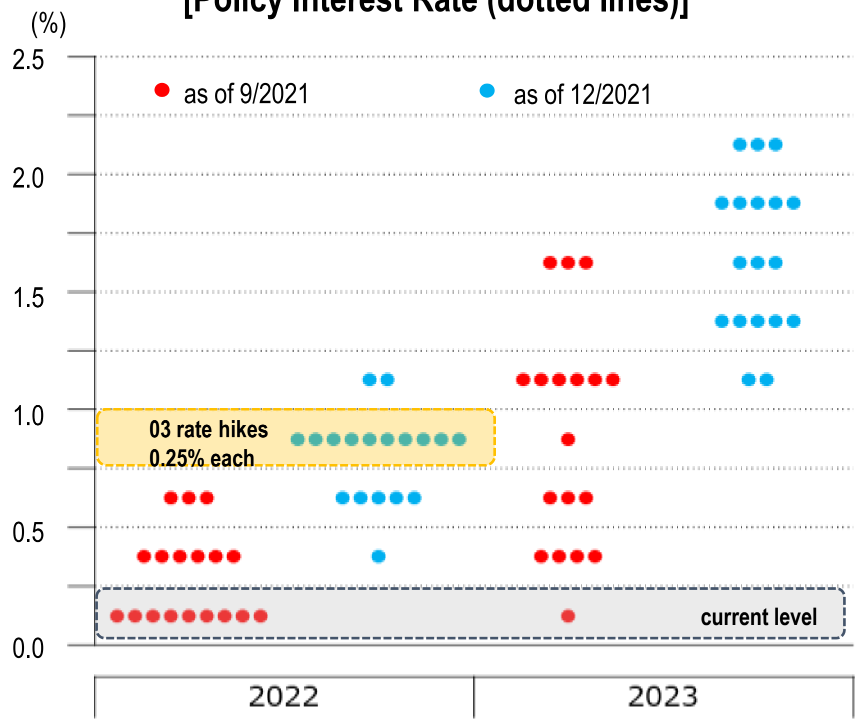
1-5. Monetary Policy (1)

Results of December FOMC: Shift to Strict Stance on Inflation, to Raise Interest Rates 3 Times in 2022

- The Federal Open Market Committee (FOMC) decided to leave the policy rate (FF) unchanged and accelerate curtailment (tapering) of its quantitative easing. New purchases of financial assets are expected to end in March 2022 and the FOMC members' forecast suggested there would be 3 rate hikes during the year.
- At a press conference, Fed Chair Powell was repeatedly asked about maximum employment, which is a condition for further policy normalization. However, that standard has not yet been stated. At the moment, the impact of rising wages is limited, but he said it will be a key point going forward if rents rise.

▽ FOMC Members' Latest Outlook

[Policy Interest Rate (dotted lines)]



Note: The FOMC members' policy outlook is the median of the expected range at the end of the year,
Source: FRB

[Economic Indicators] (unit %)

	2021	2022	2023	2024	long-term level
real GDP growth rate	5.5 (5.9)	4.0 (3.8)	2.2 (2.5)	2.0 (2.0)	1.8 (1.8)
unemployment rate	4.3 (4.8)	3.5 (3.8)	3.5 (3.5)	3.5 (3.5)	4.0 (4.0)
PCE price increase rate	5.3 (4.2)	2.6 (2.2)	2.3 (2.2)	2.1 (2.1)	2.0 (2.0)
core PCE price increase rate	4.4 (3.7)	2.7 (2.3)	2.3 (2.2)	2.1 (2.1)	— —

Note: The numbers in the table are the members' median predicted values. The figures in parentheses are the previous forecast (9/2021). The real GDP growth rate and inflation rate are the year-on-year for the Oct.-Dec. periods, and the unemployment rate is the average for the same period.
Source: FRB

▽ FOMC Statement/FRB Chair Interview Key Points

FOMC Statement

- [Advance of vaccinations and policy support has strengthened economic activity and employment indicators.]
- [From January 2022, the pace of asset purchases will be reduced, treasuries by $20 bullion/MBS by $10 billion (each doubled), considering rising inflation and further improvement in the labor market.]
- Removed previous wording the inllation was "temporary".

FRB cair Powell's Interview

- [Despite the effects of the pandemic and supply constraints the FOMC expects rapid economic growth to continue.]
- [For maximum employment, not only the unemployment rate but also a wide range of factors such as the labor participation rate and wage trends should be considered.]
- Wages are "rising rapidly but at present are not the main cause of price increases". However, he mentioned as an important future point along with wages.
- ["Following tapering, it will not be long before rate hikes begin.]。
- [Reducing asset purchases was discussed at the FOMC meeting for the first time.]

Source: Marubeni Research Institute from FRB data and various media reports

1-5. Monetary Policy (2)

UK Begins Raising Interest Rates, U.S. to Raise Rates From April-June Period 2022, Rate Hikes Continue in Emerging Economies

- The timing and way in which easing policies are being ended varies from country to country. In the U.S., rates will likely be hiked 3 times from the April-June period of 2022 to the end of the year. Rate hikes are not expected in the Euro Zone and Japan in 2022.
- With the exception of ASEAN countries, where economic recovery has been hampered, many emerging economies have been tightening their monetary policies. Russia, Brazil and others have consecutively raised rates. Turkey has been the outlier by cutting rates, which Turkey's president has been pushing.

▽ Difference in U.S./Japan/Europe Central Bank Stances

	Recent Trends, Authorities' Remarks
U.S. FRB	• 11/2-3, decided to gradually reduce (tapering) asset purchases. • 12/14-15, decide to double the pace of tapering from 1/2022. All FOMC members interest rates would start being raised in 2022, suggesting the possibility rates would be hiked 3 times (0.25% each) by year end. Removed the word "temporary" from its December statement in regards to inflation.
European Central Bank (ECB)	• 12/16, it was decided to end the purchase of new assets under the Pandemic Emergency Purchase Program (PEPP) in March 2022. From 4/2022 part its role will be taken over by the regular purchasing program (APP), but tapering will still be substantial, so it seems that monetary policy is being normalized. • ECB President Lagarde said that a rate hike in 2022 is unlikely.
Bank of England (BOE)	• 12/16, the interest rate was raised contrary to most market expectations. The purchase limit for government and corporate bonds remains unchanged.
Bank of Japan (BOJ)	• 12/17, as the markets expected the framework for large-scale easing measures will be maintained. Currently, it is uncertain when interest rates could be raised.

Sources: Each country's central bank, various media reports

▽ Other Countries/Regions Monetary Policy

	Main Points
Australia	• Scaled-down quantitative easing began in September. Reduced purchases of government/quasi-government bonds from A\$5 billion a week to A\$4 billion (at least until mid-February 2022). • Announced in November an end to yield curve controls, which would induce 0.1%. yields on 3-year government bonds. • From 11/2020, the policy interest rate has remained unchanged at a record low of 0.10%. The phrase "the conditions will not be met before 2024" was removed after November, stating that "we will not raise rates until inflation continues at a rate of 2-3%".
Brazil	• By December, Brazil had raised 2021 interest rates 7 consecutive times. Increased by 7.25 percentage points (2.00% ⇒ 9.25%) after March. • A December statement envisions raising the policy rate to 11.75% in 2022.。
Korea	• In 5/2020, the policy interest rate was reduced to a record low of 0.50%. As the economy recovered, interest rates were hked in 8-9/2021 to curb inflation, raised a total of 0.50 percentage points (0.50% ⇒ 1.00%).。 It was suggested that rates would continue to raised depending on the economic situation.
ASEAN	• Countries have maintained low interest rates as a form of economic stimulus. • Bank Indonesia suggested a possible rate hike after the end of 2022. Only a limited number of central banks are mentioning rate hikes.

Sources: Each country's central bank, various media reports

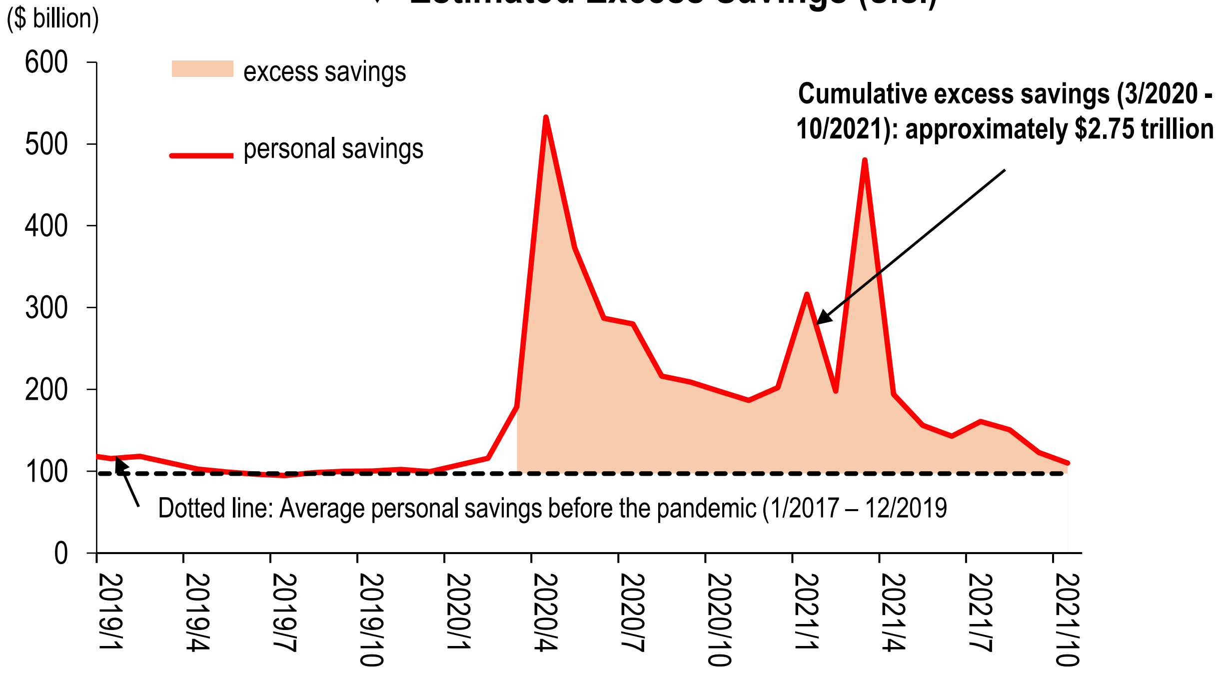
	Main Points
Taiwan	• Since the interest rate cut in 3/2020, a low interest rate policy has been maintained. • It said it would "adjust interest rates at an appropriate time" according to such factors as the inflation rate and monetary policy of major countries and did not mention the specific timing for interest rate hikes.
Canada	• In April, reduced quantitative easing began (decreased the purchase of government bonds from C\$4 billion to C\$3 billion and from July to C\$2 billion). In October, announced the end of quantitative easing and stopped new purchases other than reinvestment. The same month, expected timing for the first rate hike was moved up from "late 2022" to "4-9/2022". Same policy as that of the December meeting will be maintained.
Russia	• December marked the 7th consecutive time interest rates had been raised. Increased a total of 4.25 percentage points (4.25% ⇒ 8.50%) from March. • Said that "additional rate hikes would not be ruled out at any of the next few meetings," in a December statement.
Turkey	• In December, the 4th consecutive rate cut was implemented. A total of 5.00 percentage points (19% ⇒ 14%) were cut from September. • In September, rating agency Moody's lowered the country's rating after President Erdogan dismissed the central bank's governor, who was reluctant to cut interest rates, which raised suspicions about the central bank's independence. .Although there were 4 foreign exchange interventions in December, the currency Lira hit a new low against the dollar.

1-6. Fiscal Policy (1)

Excess Savings Accumulated During the Covid-19 Pandemic Begins to be an Economic Buffer

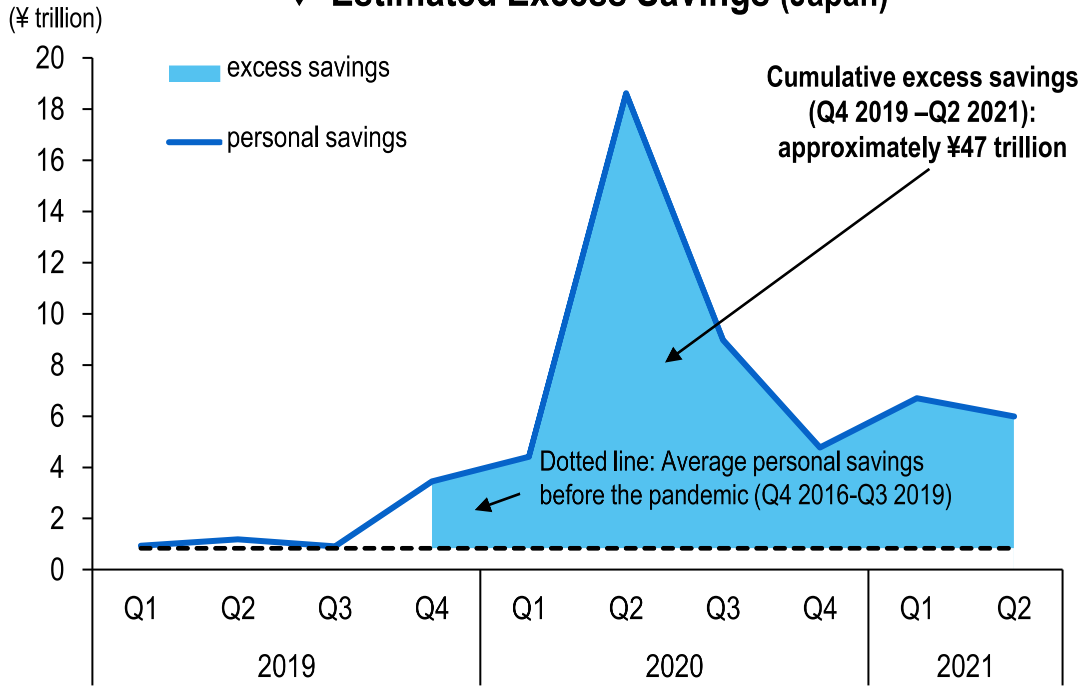
- ① Increase in forced savings due to lost consumption opportunities. ② Defensive savings increased due to uncertainty over the future. ③ Excessive savings also occur due to such factors as a rise in income from government money transfers to individuals. At the same time, savings can act as a buffer against future shocks or could induce pent-up demand as Covid recedes, weakens or we learn to live with it. A simple estimate of excessive savings has the U.S. with over $2.5 trillion and Japan with over ¥45 trillion in surplus savings.

▽ Estimated Excess Savings (U.S.)



Note; Excess savings were calculated as the sum of the differences in savings in each period over the entire pandemic and the average savings before the pandemic.
Source: Marubeni research Institute from U.S. Bureau of Economic Analysis data

▽ Estimated Excess Savings (Japan)



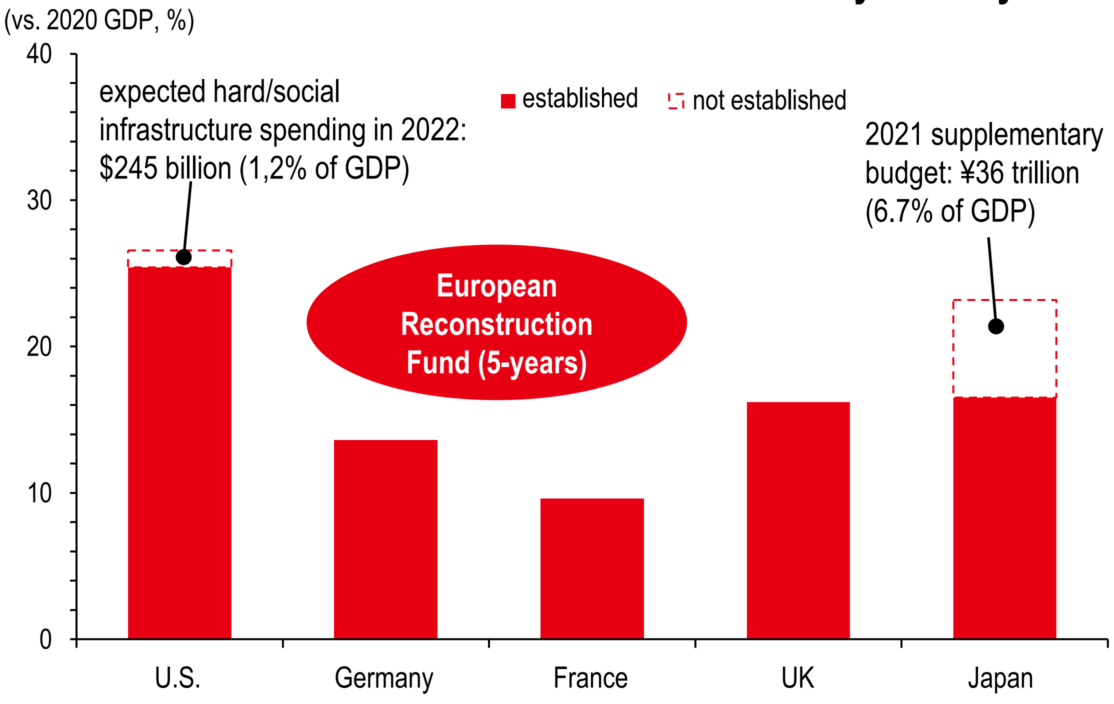
Source: Marubeni Research Institute from Japan Cabinet Office data

1-6. Fiscal Policy (2)

Despite the Shift from Economic Support Measures to Investment in Growth, Covid Remains a Concern

- (U.S.) Of the 2 infrastructure bills, the hard infrastructure bill has passed, while the social infrastructure bill was passed only in the House. Total spending in the bills is $3 trillion. They are multi-year plans in which spending in 2022 could be about $250 billion (both bills = 1.2% of GDP).
- (Europe) The European Reconstruction Fund, which supports investment in the environmental and digital fields, began in August 2021. Attention should be paid to utilization trends in each country.
- (Japan) Created economic measures using a supplemental budget. Due to prolonged economic stagnation, allocation of financial resources to extend financial support measures will increase.

▽ Scale of Covid-Related Fiscal Measures by Country



**Total cumulative fiscal expenditure for Covid countermeasures from the spring of 2020.*
Source: IMF - Policy Responses to Covid-19

▽ Outline of New Economic Measures

	Bills/Budget	Estimated Spending Scale	Main Content
U.S	① Hard infrastructure bill passed ② Social infrastructure bill under deliberation	① $1.2 trillion ($550 billion in new spending over 5 years) ② $1.75 trillion (10 years)	① Green energy transition, telecom, water infrastructure, roads/bridges, public transport, etc. ② child support (free pre-school, etc., long-term care, low-cost housing facilities → 2022 expenditure ① $27 billion, ② $218 billion, total $245 billion (1.2% of GDP) (Moody's)
Europe	European Reconstruction Fund Established, began 8/3/2021	Up to 750 billion euros (5 years)	EU join debt to secure financial resources supporting investment in the environmental and digital fields with large distributions going to Spain, Italy, etc.
Japan	Economic measures against Covid and for new era development (FY2021 supplementary budget) Planning in 2021	¥56.7 trillon (¥78.9 trillion including private funds) supplementary budget portion ¥36 trillion	All those under 18 years receive ¥100,000, clean energy investment, ¥20,000 in coupon points per my number, strengthening semiconductor production bases, vaccination promotion, business revival support, special employment adjustment extension, Go To business resumption

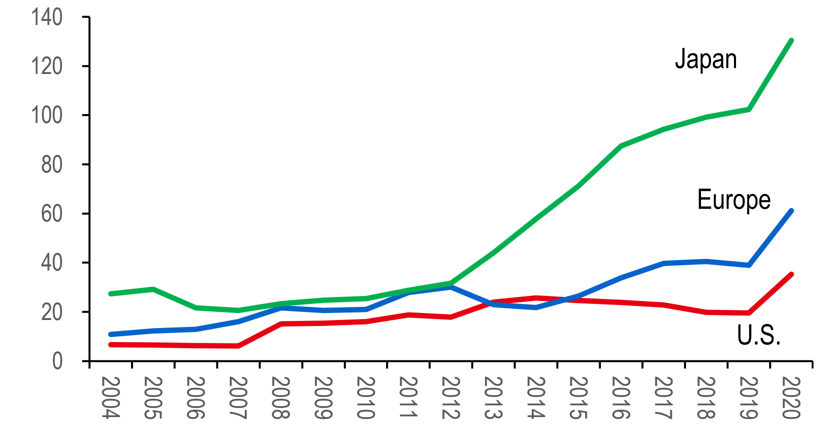
Source: Marubeni Research Institute from various media reports

1-7. Fiscal Risk (1)

Asset Prices Rise Due to Expanding Central Bank Balance Sheets (i.e., Supply of Funds to the Market)

➢ The balance sheets of the central banks of Japan, the U.S. and Europe have expanded significantly due to the large-scale monetary easing measures used during the pandemic. The supply of funds has flowed into financial assets (stocks, bonds, etc.) commodities, real estate, etc. Attention should be paid to the market impact of the curbing or ending of ultra monetary easing measures in each country, like the end of new purchases of financial assets by the U.S. FRB and expected interest rate hikes in 2022.

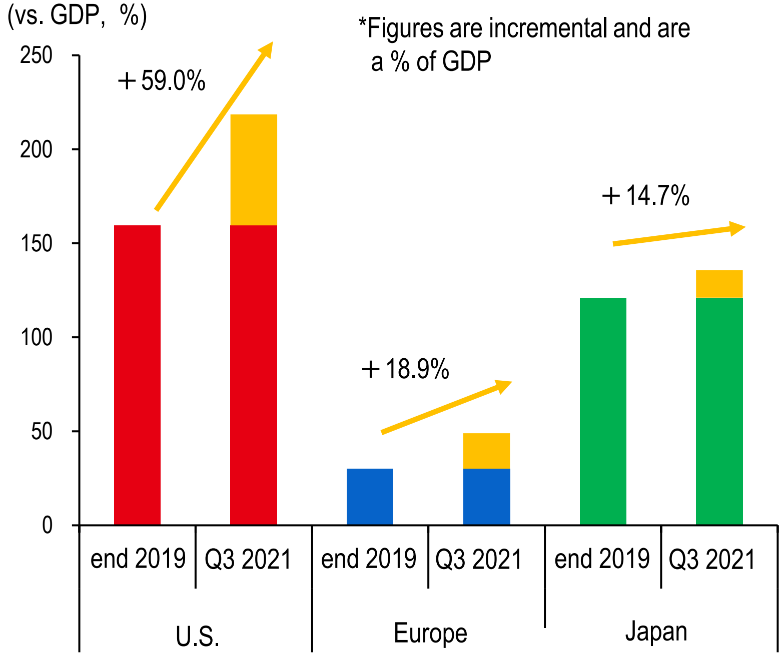
▽ Central Banks' Balance Sheets (assets, trends)



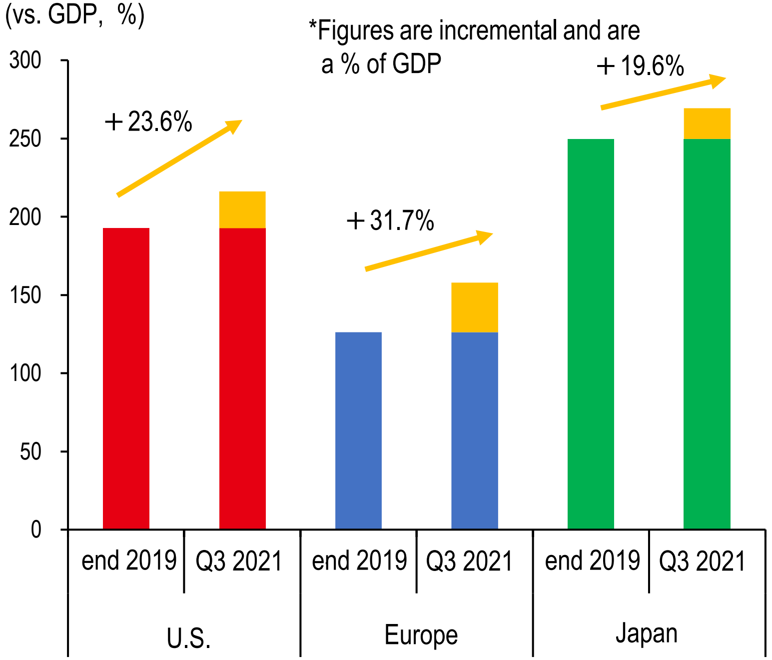
(ratio to GDP)	end 2019	end 2020	vs. end 2019
U.S. (Fed)	19.5%	35.2%	+15.8%pt
Europe (ECB)	39.0%	61.3%	+22.3%pt
Japan (BOJ)	102.4%	130.4%	+28.1%pt

Source: Marubeni Research Institute from FRED, Eurostat, BOJ, Japan Cabinet Office data

▽ Stock Market (market capitalization)



▽ Debt Securities (issuance balance)

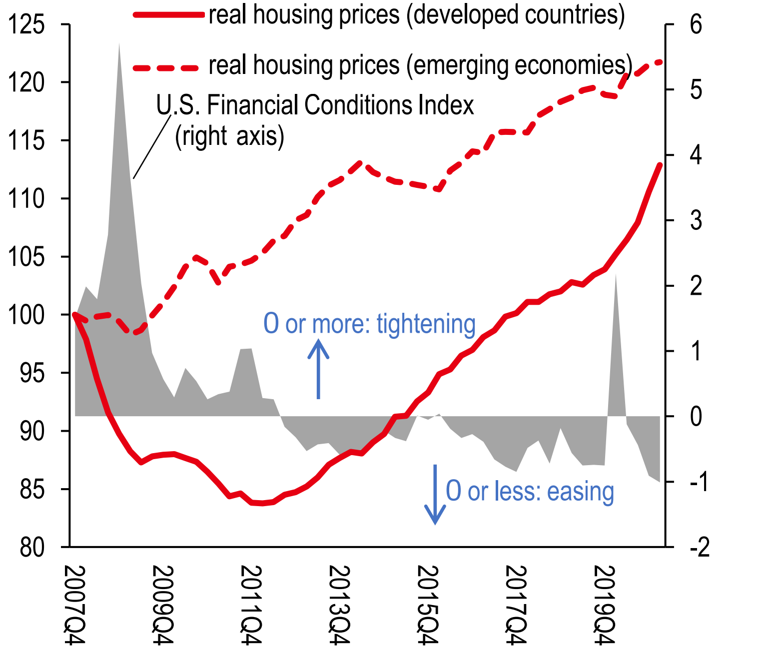


Note: Stock market is the market capitalization of the major stock exchanges of each country/region, NYSE and NASDAQ in the U.S., Euronext in Europe and the Japan stock exchanges in Japan. For the bond market, the BIS shows total outstanding debt securities.
Sources: World Federation of Exchanges (WFE), Bank for International Settlements (BIS)

1-7. Fiscal Risk (2)
Housing Prices Climb Significantly

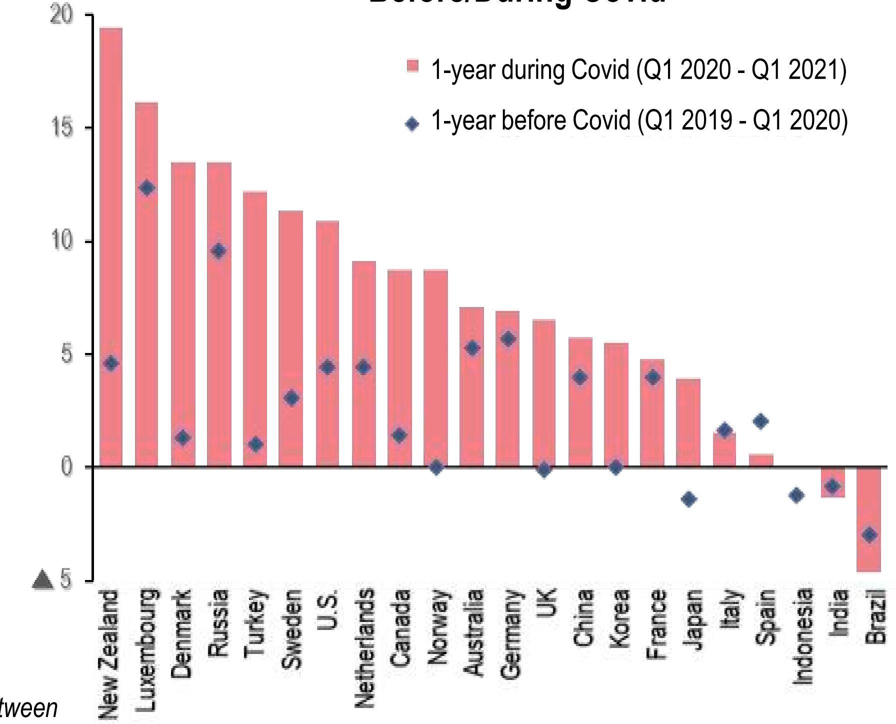
- Since the global financial crisis, the accommodative financial environment has pushed up housing prices, especially in emerging economies where the rise in housing prices have become chronic, exceeding overall consumer price increases.
- Housing supply temporarily declined due to various restrictions related to the pandemic. In addition to the rise in building material costs, housing demand may have expanded with prices rising due to the increase in teleworking from home. Except for a few emerging economies, the pace of price increases is higher than before Covid.

▽ Long-Term Real Housing Price Trend



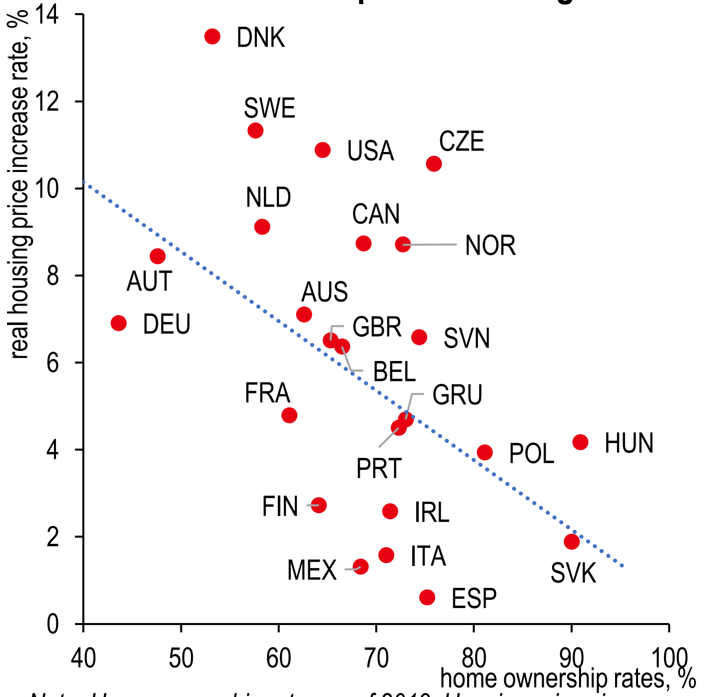
Note; The Financial Condition Index shows the ease of raising funds in the market, Created by the IMF by integrating such indicators as the spread between various interest rates, stock prices and exchange rates. Data until Q1 2021.
Source: Marubeni Research Institute from BIS, IMF data

▽ Real Housing Prices: Rate of Increase/Decrease Before/During Covid



Source: Marubeni Research Institute from OECD data

▽ Relationship Between Housing Price Increase Rates/Home Ownership Rates During Covid



Note: Home ownership rates as of 2019. Housing prices increase rates from Q1 2020 to Q1 2021.
Source: Marubeni Research Institute from OECD data

1-7. Fiscal Risk (3)

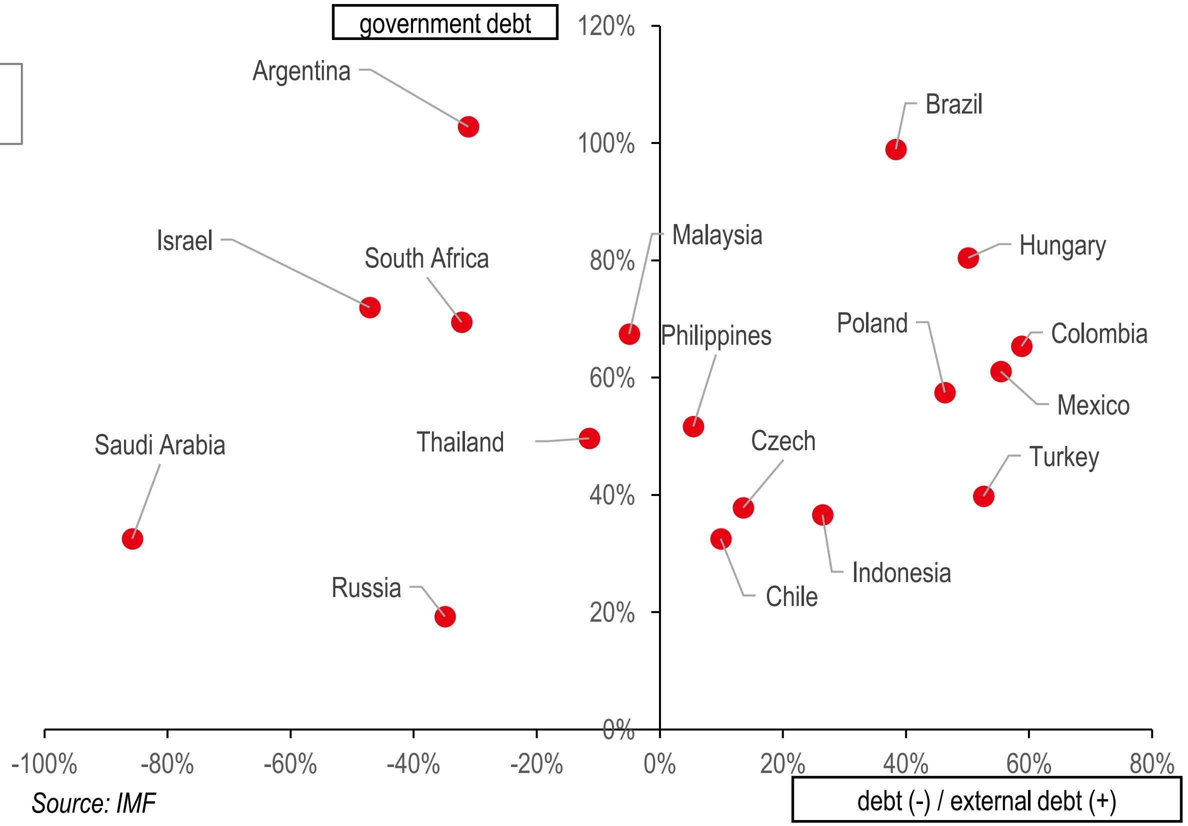
Attention Should be Paid to External Dependence In Addition to Worsening Financial Conditions

- Many countries' finances have deteriorated due to Covid-related fiscal measures. Vulnerability has increased overall, although the degree of fiscal measures used varies. In past debt crises, we see that the stability of government debt depends not only on how high the levels are but also how dependent the debt is on external sources. It is presumed that the risks are more likely to appear in emerging economies, where finances are more reliant on foreign countries, than in developed countries. However, note that a financial crisis might also spread to the creditor countries involved.

▽ Developed Countries' Debt Situation (2020 vs. GDP, %)

Source: IMF

▽ Emerging Economies' Debt Situation (2020 vs. GDP, %)



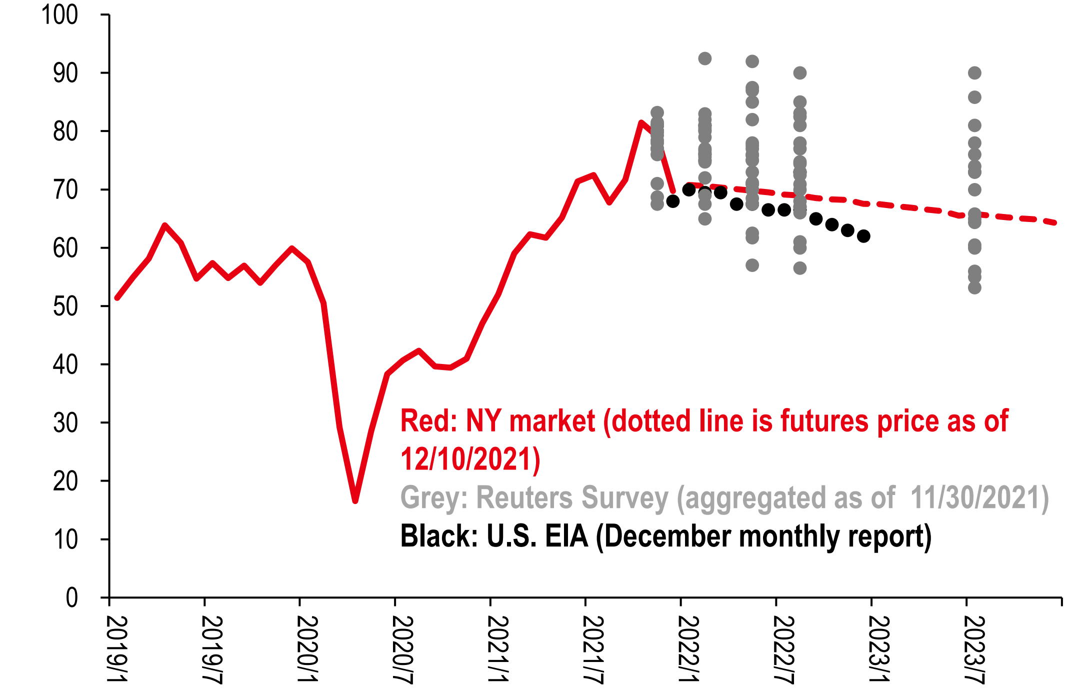
Source: IMF

1-8. Commodity Price Outlook (1)

Crude Oil: Oversupply in Supply/Demand, But Downside Firm Due to Upstream Investment Slowdown Worries

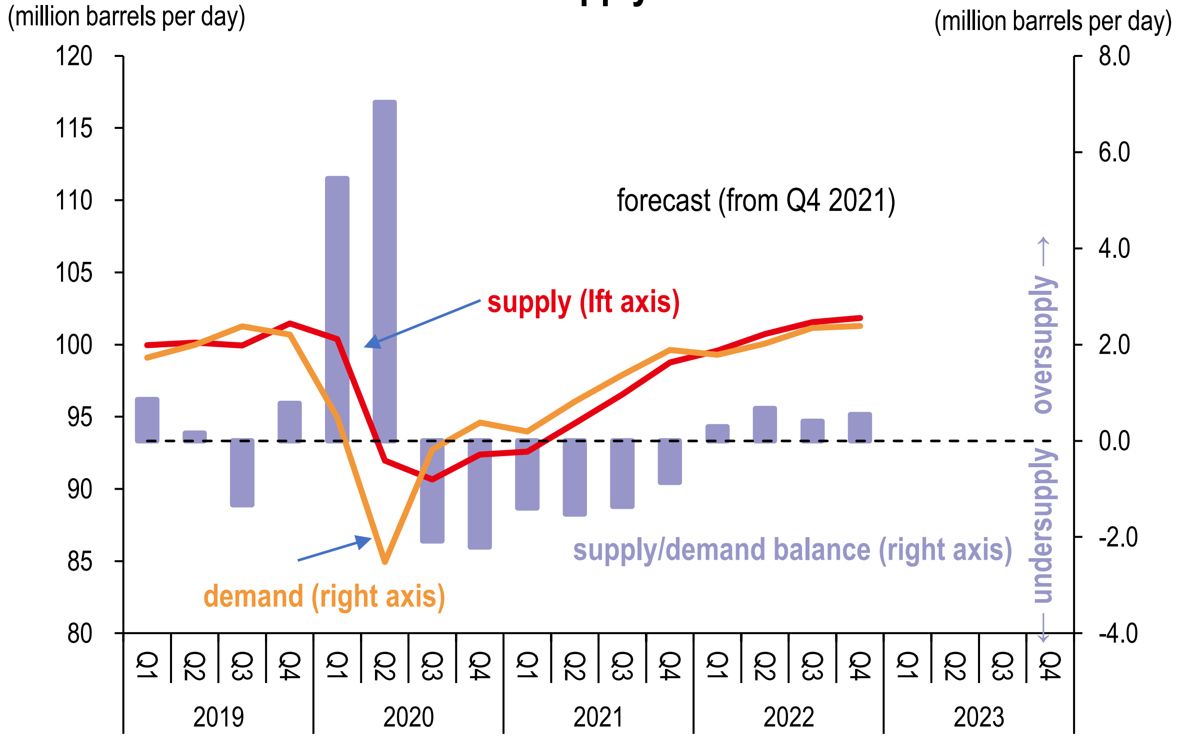
- Demand has recovered to pre-Covid levels. Supply has expanded due to the end of OPEC Plus production cuts and increased production in such oil producing countries as the U.S. So, in terms of supply and demand there will be oversupply, however, the decline in prices will be modest due to the restrained pace of production growth and a slowdown in upstream investment related to decarbonization. There are various factors of high uncertainty though, including the direction the Covid pandemic takes, the pace of monetary tightening in major countries and the timing of the return of Iranian crude oil to the market.

▽ WTI price Outlook



Sources: Refinitiv, EIA, Marubeni Research Institute

▽ Global Crude Oil Supply/Demand Balance



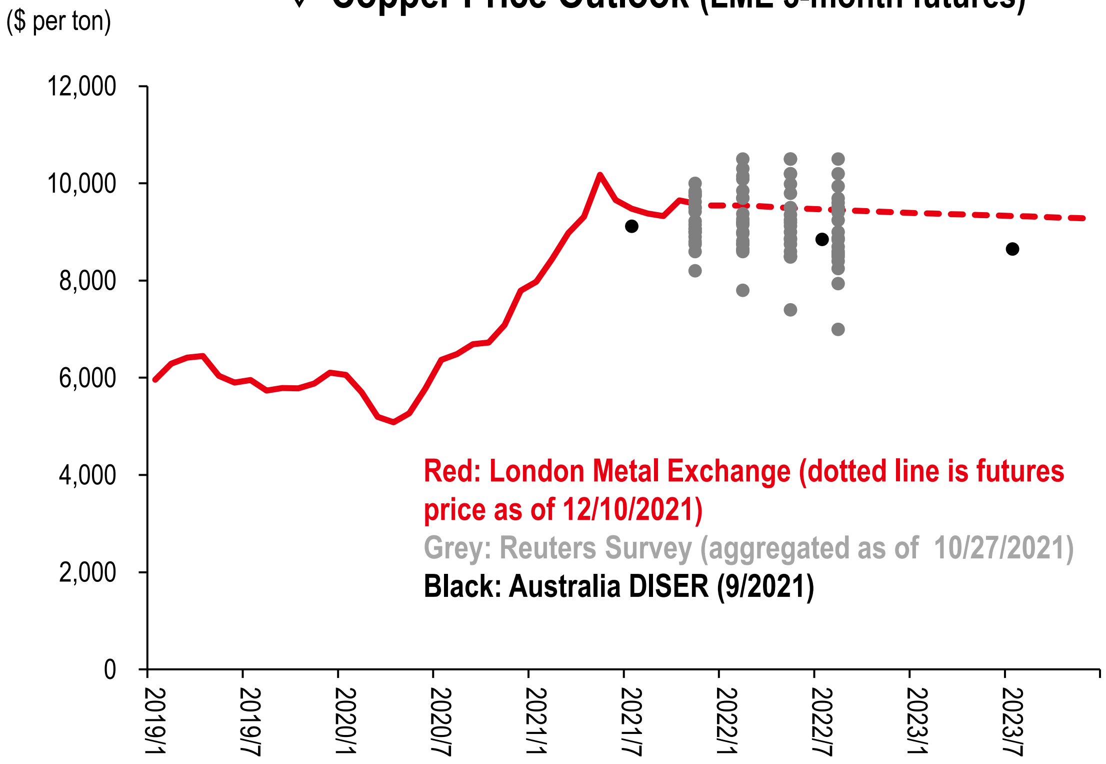
Source: Marubeni Research Institute in reference to EIA "Short-Term Outlook December 2021"

1-8. Commodity Price Outlook (2)

Copper: Tight Supply and Demand Expected to Ease, But Lower Prices Will be Limited Due to Increased Energy Transition Demand

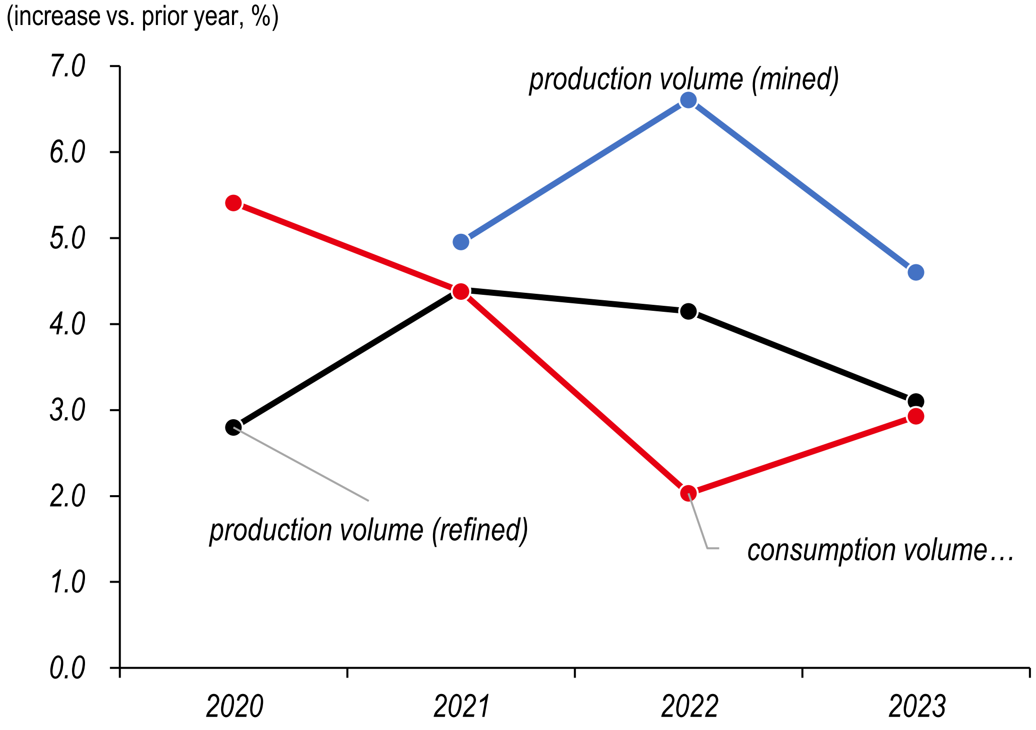
- Due to the effects of monetary tightening and the slowdown in the Chinese economy demand growth for smelted copper has slowed compared to supply and there is a sense that tight supply and demand has eased. On the other hand, there are high expectations for future demand growth due to the energy transition toward decarbonization. In addition, the downside is limited because of the pressure to reduce the environmental loads in production, the possibility of royalties being raised by South American copper producing countries, and upward pressures on energy and labor costs.

▽ Copper Price Outlook (LME 3-month futures)



Sources: Refinitiv, Marubeni Research Institute

▽ Global Copper Production/Consumption Growth Outlook



Source: Australia Department of Industry, Science, Energy and Resources (DISER) "The Resources and Energy Quarterly September 2021"

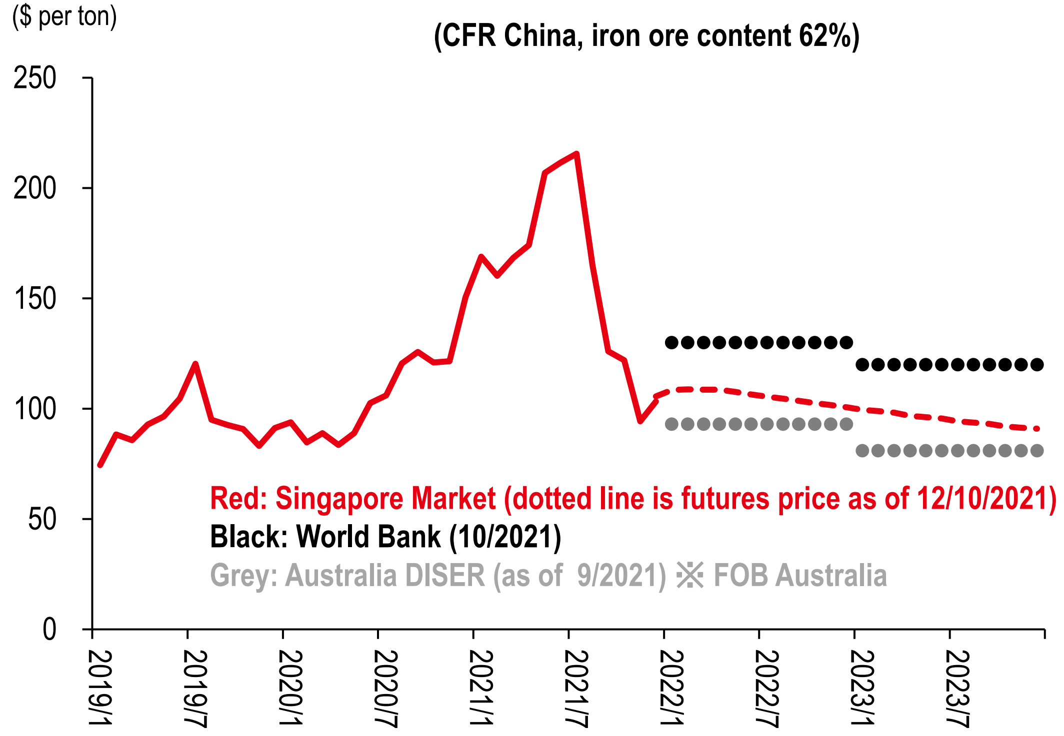
1-8. Commodity Price Outlook (3)

Iron Ore/Coking Coal: Soft Prices Due to Restrained Steel Production in China With Demand Slowing and Supply Still Expanding

- Demand for iron ore and coking coal slowed due to subdued steel production in China, Covid's impact on production and distribution an uncertain factor.
- An oversupply of iron ore is expected because of increased production and expanded exports from Brazil, which is recovering from a dam-related disaster.
- As for coking coal, the domestic price in China, which was the cause for soaring prices, fell as a result of price constraint measures and increased domestic production. In addition, prices in other coal producing regions softened. The main variables are China's embargo on Australian coal and disruptions to Australian coal shipments from La Nina's weather effects.

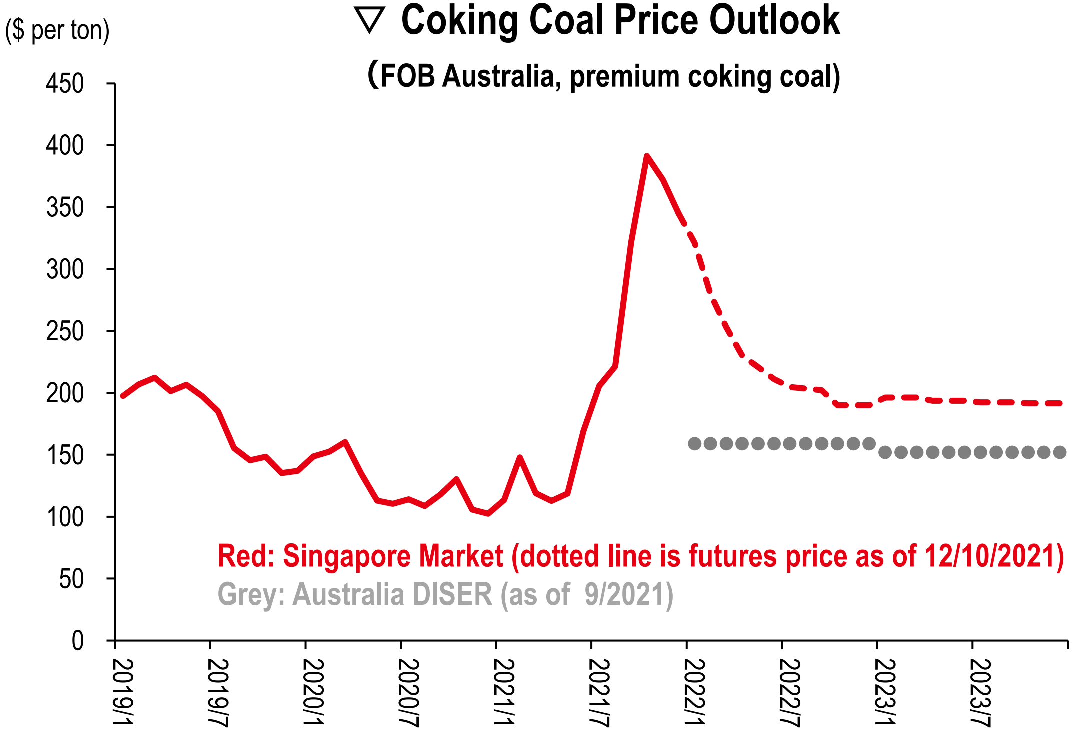
▽ Iron Ore Price Outlook

(CFR China, iron ore content 62%)



▽ Coking Coal Price Outlook

(FOB Australia, premium coking coal)



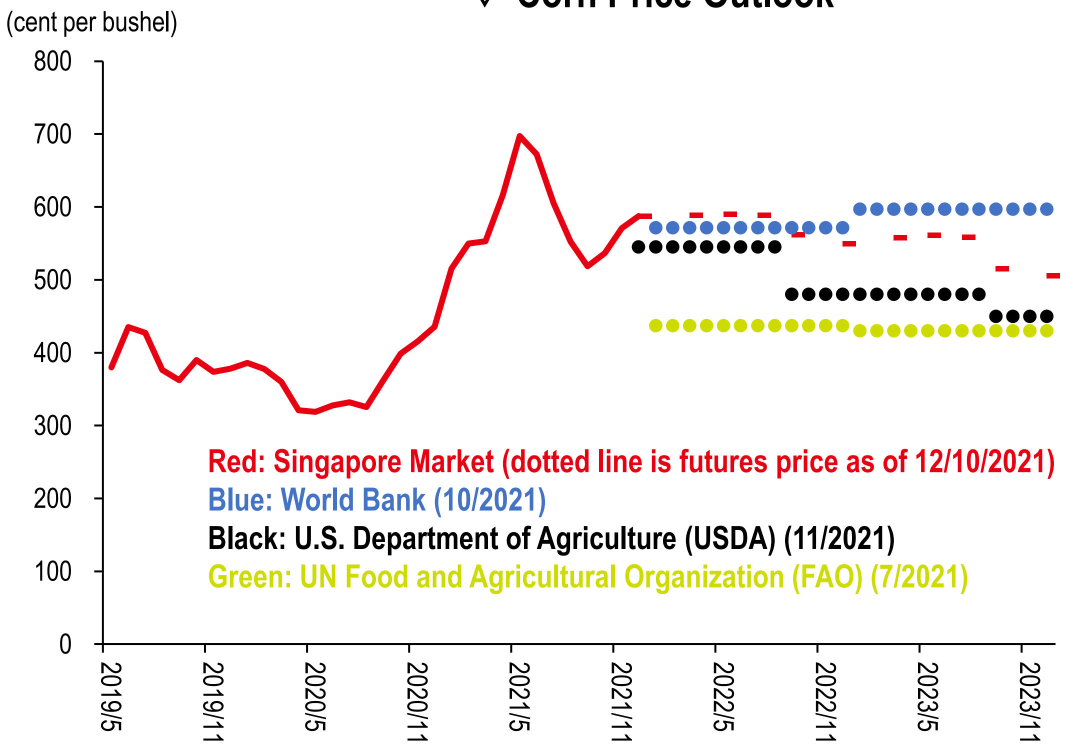
(Sources: Refinitiv, World Bank, Australia Department of Industry, Science, Energy and Resources (DISER), Marubeni Research Institute

1-8. Commodity Price Outlook (4)

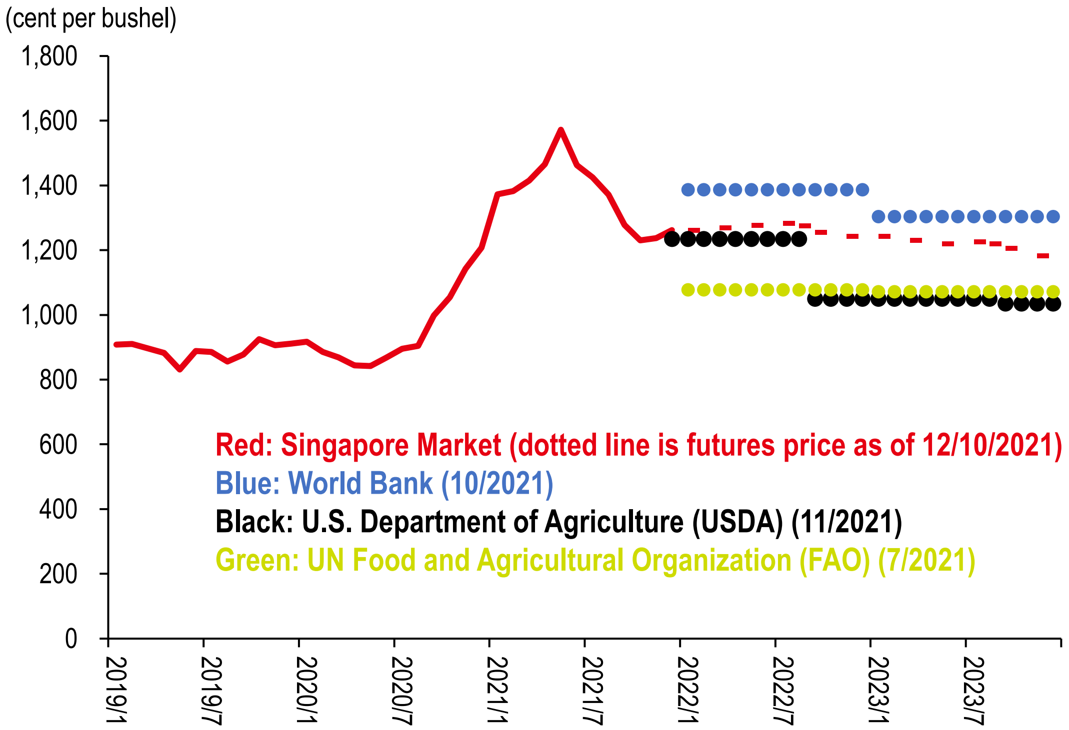
Corn/Soybeans: Slight Softening From Tight Market Relief, Fluctuation Factors are Weather and U.S.-China Relations

- For both corn and soybeans, tight supply perceptions caused by low inventories in the U.S. have eased. Rapidly rising fertilizer prices are expected to lead to a shift from fertilizer-intensive corn to soybeans. Weather, China-U.S. relations and U.S. bio-fuel policy will be the main variable factors.
- Due to high wheat prices, corn substitute demand has fallen. Falling crude oil prices is a downside factor leading to lower demand for ethanol.
- Regarding soybeans, the focus will be on the trend of China's imports from the U.S. There is the possibility that soybeans will become even cheaper with a good harvest as soybean acreage has increased worldwide.

▽ Corn Price Outlook



▽ Soybean Price Outlook



Sources: Refinitiv, Marubeni Research Institute

Note: USDA producer prices and World Bank and FAO forecast have been processed by the Marubeni Research Institute to align standards.

1-9. Exchange Rate Trends (1)

In the Short-Term Widening Interest Differentials in U.S. and Japan = Depreciation Pressure on Yen, While Risk Aversion = Yen Appreciation

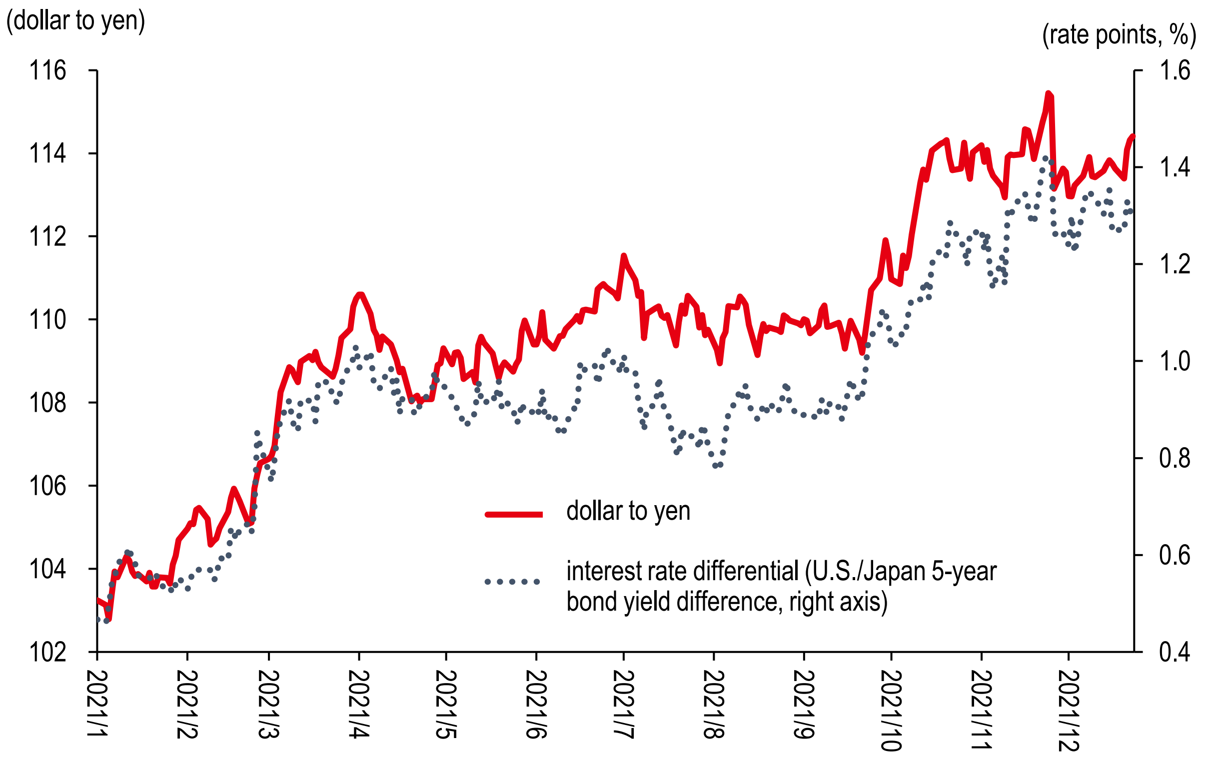
- While large-scale monetary easing has led to depreciation pressures on the U.S dollar, the yen has weakened due to Japan's delayed economic recovery.
- In the short-term a widening interest differential between the U.S. and Japan brought about by the U.S. move to normalize monetary policy will continue to contribute to dollar appreciation and yen depreciation. However, the financial markets have already factored in U.S. interest rate hikes for 2022, so yen depreciation may halt.

▽ Factors Affecting Dollar-Yen Exchange Rate

	Factors Affecting $-¥ Movement	Overview
Yen Appreciation Pressure	Difference in U.S.-Japan business sentiment directions (U.S. economy peaks, full-scale recovery of Japan's economy)	Although the U.S. economy continues to recover, the pace has slowed since peaking in Q2 2021. On the other hand, Japan Covid emergency measures were lifted in Japan in September and a recovery was in full swing at the end of 2021.
	Heightened U.S.-China tensions, geopolitical risks increase, broad resurgence in Cofid-19 infections, etc.	In the case of re-heightened U.S./China tensions, increased geo-political risks in the Middle East, etc., and a widespread resurgence in Covid infections from new variants, yen buying will occur due to risk aversion.
	Sense of weakening in the yen from its long-term equilibrium value	The real effective exchange rate (based on trade volume and price level) has been declining because of the Covid-19 pandemic and deviation from the long-term equilibrium value has widened. In the long run there will be correction pressure toward a stronger yen and weaker dollar.
Yen Depreciation Pressure	U.S. fiscal and monetary policies	The U.S. unleashed the most extensive fiscal/monetary policies in history due to the Covid pandemic resulting in an economic recovery ahead of Japan. However, monetary normalization began in 11/2021 and it is expected that interest rates will be raised 3 times from the April-June period of 2022 to the year end. If the pace of tightening is faster than market predicts, the yen could depreciate further.

Source: Marubeni Research Institute

▽ Dollar to Yen and U.S./Japan Interest Rate Differentials

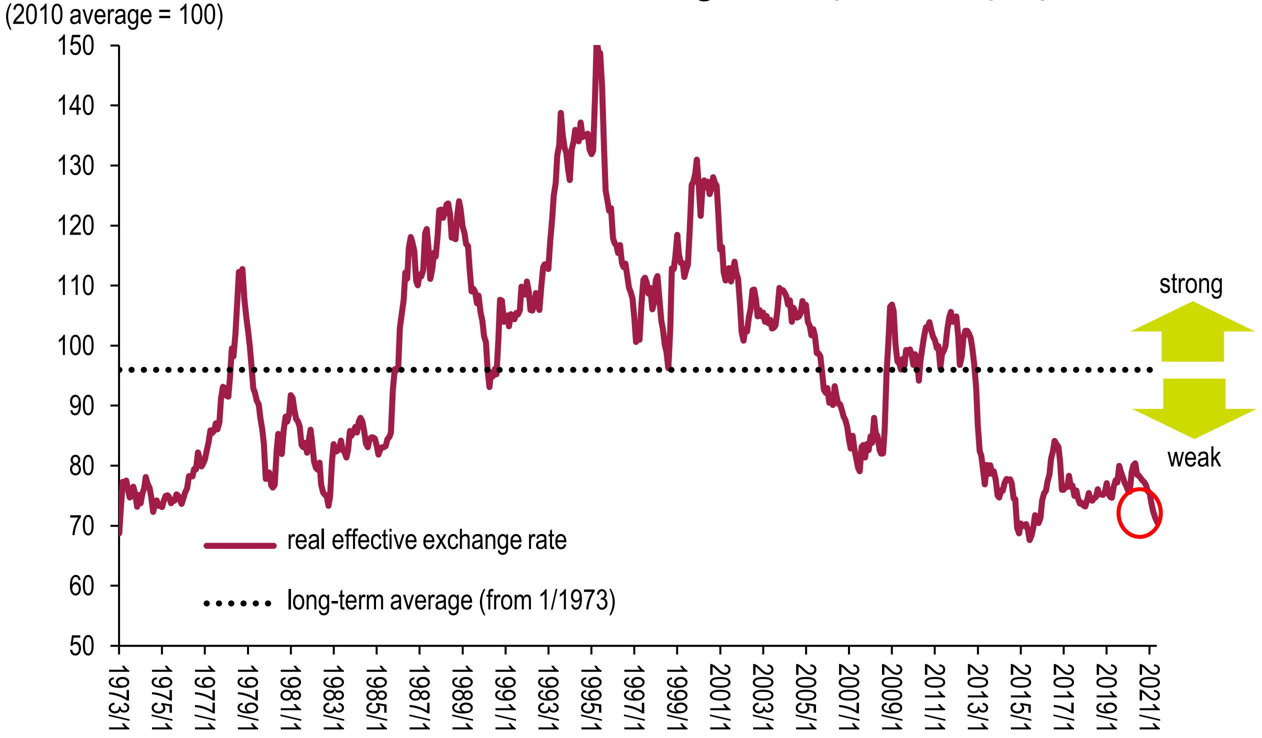


Note: Data as of 12/24/2021
Source: Refinitiv

1-9. Exchange Rare Trends (2)
In the Long-Term Adjustment Pressure Toward Yen Appreciation vs. Dollar Depreciation Continues (Overpriced Dollar/Undervalued Yen)

- The real effective exchange rate, which indicates the exchange rate taking into account trade weight and inflation, maintains that the relative price of traded goods will converge to the same level due to fluctuations in the nominal exchange rate. It is thought that deviation from and convergence with the equilibrium value will be repeated. If the long-term average is regarded as the equilibrium value, it can be assumed that the current U.S. dollar is overpriced and the Japanese yen is undervalued and that the dollar-yen rate will come under potential yen appreciation pressure.

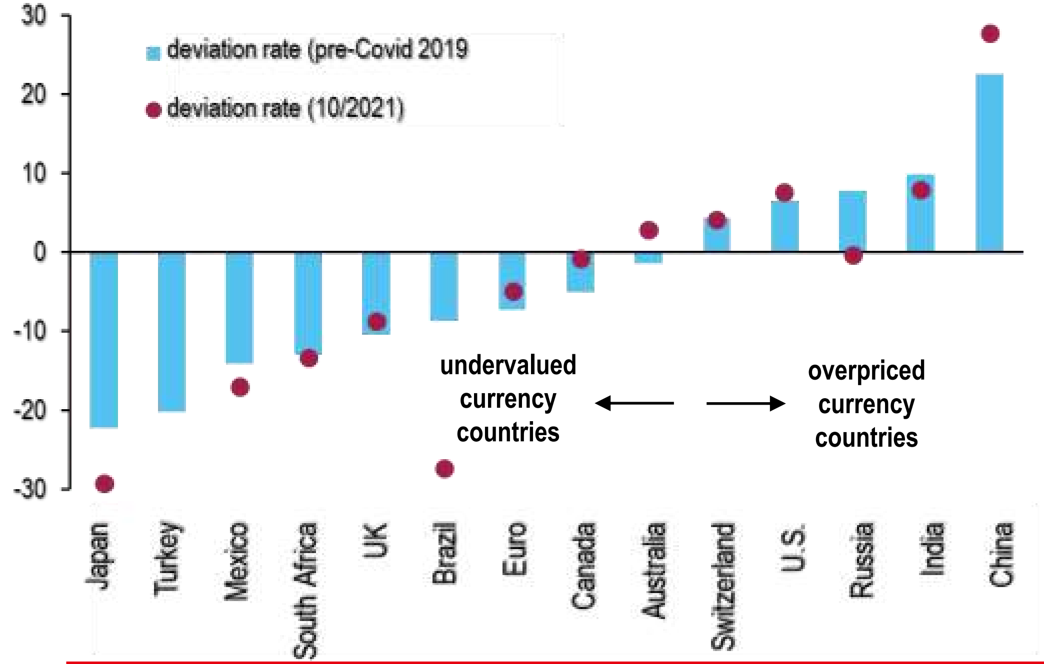
▽ Real Effective Exchange Rate (Japanese yen)



Note: Data as of 10/2021
Source: Marubeni Research Institute from BOJ data

▽ Degree of Overpriced/Undervalued Currencies by Country

(deviation rate from the real effective exchange rate's long-term average, %)



If the red dot is opposite of the direction the blue graph is going it means that adjustments have been made toward a long-term equilibrium value based on the real effective exchange rate.

Source: Marubeni Research Institute from BIS data

1-10. International Relations/Political Trends (1)

U.S. China Tensions Deepen Under Biden Administration, Afghanistan After Withdrawal, Elections in Major Countries

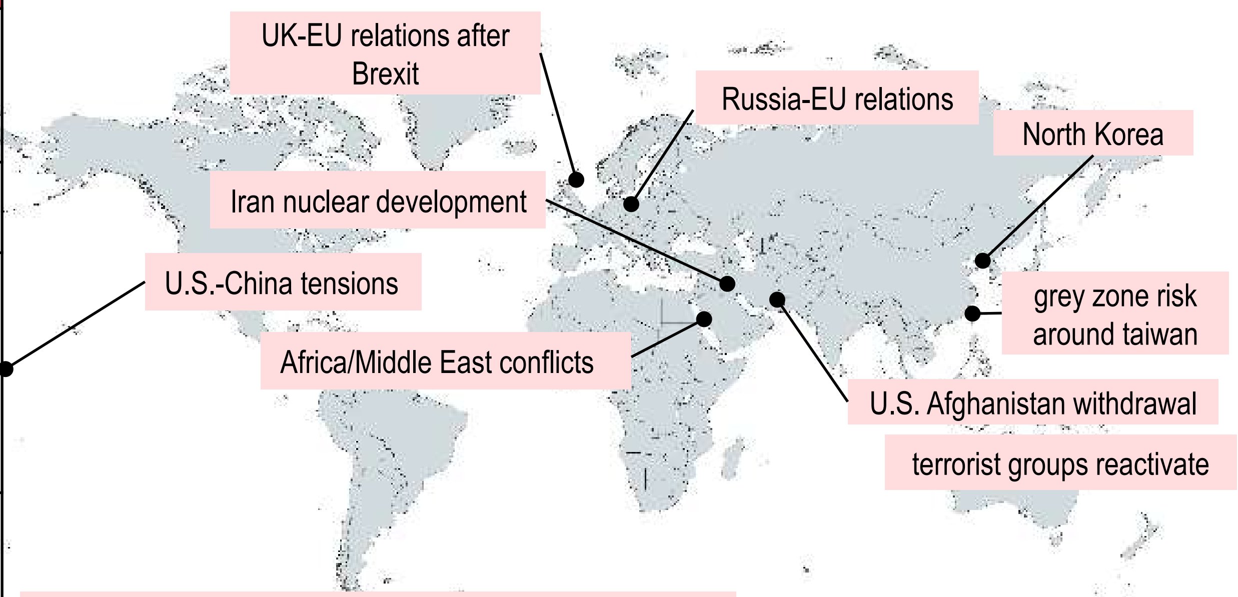
- Even under the Biden administration, the U.S. has continued to take a tough stance on China with increased risk of sanctions over human rights issues, rising tensions over Taiwan and friction between the two countries involving alliances and friendly nations. There are also moves to reorganize semiconductor supply chains based on U.S.-China discord.
- New concerns have also emerged over other geopolitical risks, such as regional destabilization and increased risk of terrorism following the U.S withdrawal from Afghanistan

▽ Complicated U.S.-China Tensions

	Recent Major Trends
General	Under the Biden administration U.S.-China discord expanded to include human rights becoming more complicated. While the U.S. is drawing on its alliances with allied countries in Europe and Japan as part of its strategy toward China (G7, Quad, AUKUS), Shina is strengthening cooperation with the Shanghai Cooperation Organization and created confusion with it application to the CPTPP.
Human Rights	The Uighur Forced Labor Prevention Bill, which bans the import of products by forced labor in the Xinjiang Uygur Autonomous Region, passed Congress in December 2021.
Trae	Compared to the Trump administration, U.S. interest in trade issues has declined somewhat. In October 2021, high level trade talks resumed aimed at verification of implementation of the Phase-1 Agreement. Additional tariffs have been occurring, but there are growing calls for ending elimination due to Covid.
Invest-ment	The U.S. Committee on Foreign Investment is seeking to share investment revies with allies and the Securities and Exchange Commission is strengthening information disclosure requests on Chinese companies listed in the U.S.
Environ-ment	US-China cooperation being sought on climate change measures. At COP26, a joint statement from the United States and China was announced, stating the formulation of a methane emission reduction plan and efforts to support developing countries.
Security	Military tensions around Taiwan are increasing. In response to the U.S. strengthening its support for Taiwan, China has intensified military aircraft incursions into Taiwan's air defense identification zone and gray zone activities. A bilateral dialogue framework on the issue of nuclear weapons is being sought.

Source:: Marubeni Research Institute from various media and other reports

▽ Political/Geo-Political Risks



Political direction: Major country elections
(March South Korean presidential election, April French presidential election, October Brazilian presidential election, November US midterm election, etc.)

social instability due to Covid

expanding cyber attack risk

1-10. International Relations/Political Trends (2)

Number of Major Country National Elections Including U.S. Mid-Terms, Beijing Olympics/Paralympics and Communist Party Conferences in China

▽Country/Region Specific

Date	Region	Event
January 1	Asia	Regional Comprehensive Economic Partnership (RCEP) Agreement comes into effect
January 30	Europe/CIS	Portugal General Election
January 30-February 6	Asia	Chinese new year holidays
February 4-20 March 4-13	Asia	Beijing Olympics/Paralympics
February 21	Asia	50th anniversary of Nixon's visit to China
March 9	Asia	South Korea presidential election
March 27	Asia	Hong Kong chief executive election
March 31	Middle East	Dubai (UAE) International Exposition closing
April 1	Japan	Legal age for adulthood in Japan lowered to 18
April 3	Europe/CIS	Serbia general election
April 10-24	Europe/CIS	France presidential election
April	Europe/CIS	Hungary parliamentary election
May 9	Asia	Philippine presidential and congressional elections
May 15	Japan	50th anniversary of return of Okinawa
Around May	Latin America	Colombia presidential and parliamentary elections
Around May	Asia	Australia parliamentary elections
June 12-19	Europe/CIS	France parliamentary elections
June 15	World	End of MS「Internet Explorer」 support services
July	Japan	Japan House of Councillors term expires
August 9	Africa	Kenya general election
September 11	Europe/CIS	Sweden general election
September 29	Asia	Japan-China 50th anniversary of normalization of diplomatic relations
October 2	Latin America	Brazil presidential and national congress elections
November 8	North America	U.S. mid-term elections
November-December	Middle East	FIFA World Cup (Qatar)
December	Asia	China Central Economic Work Conference
In fall	Asia	China's 20th National People's Congress
During 2022	Europe/CIS	German denuclearization completed

▽ International Meetings, Summits, etc.

Date	Region	Event
Undecided	World	BRICS Summit (China)
Undecided	World	World Trade Organization (WTO) Ministerial Conference
Undecided (bi-annual)	Asia	ASEAN Summit (Cambodia)
Undecided	Asia	Shanghai Cooperation Organization (SCO) Summit
January 4-28	World	Nuclear Non-Proliferation Treaty Review Conference (U.S.) (every 5 years)
January 17-21 *Postponed until summer	World	World Economic Forum Annual Meeting (Davos, Switzerland) *Online meeting in January
February 17-18	World	G20 Finance Minister's/Central Bank Governor'
March 17-20	Latin America	Inter-American Development Bank (IDB) Annual Meting (Uruguay)
March 24-25	Europe/CIS	European Council Meeting (Belgium)
April 22-24	World	IMF/World Bank Spring Meeting
Around April	Asia	Boao Forum for Asia Annual Meeting (China)
May 2-5	Asia	Asian Development Bank (ADB)k Annual Meeting (Sri Lanka)
May 5-12	Europe/CIS	30th Annual European Bank for Reconstruction and Development Meeting (EBRD)
May 22-28	World	World Health Organization (WHO) World Health Assembly (Switzerland)
May 30-June 10	World	International Labor Organization's (ILO) International Labor Conference
May	Africa	57th Annual African Development Bank (AfDB) Meeting (Ghana)
June 23-24	Europe/CIS	European Council Meeting (Belgium)
June 26-28	World	G7 Summit (Germany)
June 29-30	World	NATO Summit (Spain)
September 5-8	Europe/CIS	Eastern Economic Forum. (Russia)
September	World	77th Session of the UN General Assembly (U.S.)
October	World	IMF/World Bank Annual Meeting (Morocco) *Postponed from 2021
Around October	Asia	Asian Infrastructure Investment Bank (AIIB) Annual Meeting (Russia)
October 30-31	World	G20 Summit (Indonesia)
November 7-18	World	COP27 (Egypt)
Around October or November	Asia	Asia-Pacific Economic Cooperation (APEC) Summit (Thailand)

Note 1: Fine print signifies an annual event ***bold print*** *signifies other*
Note 2: Schedules provisional at the time of this survey
Source: Marubeni Research Institute from various announcements and media reports

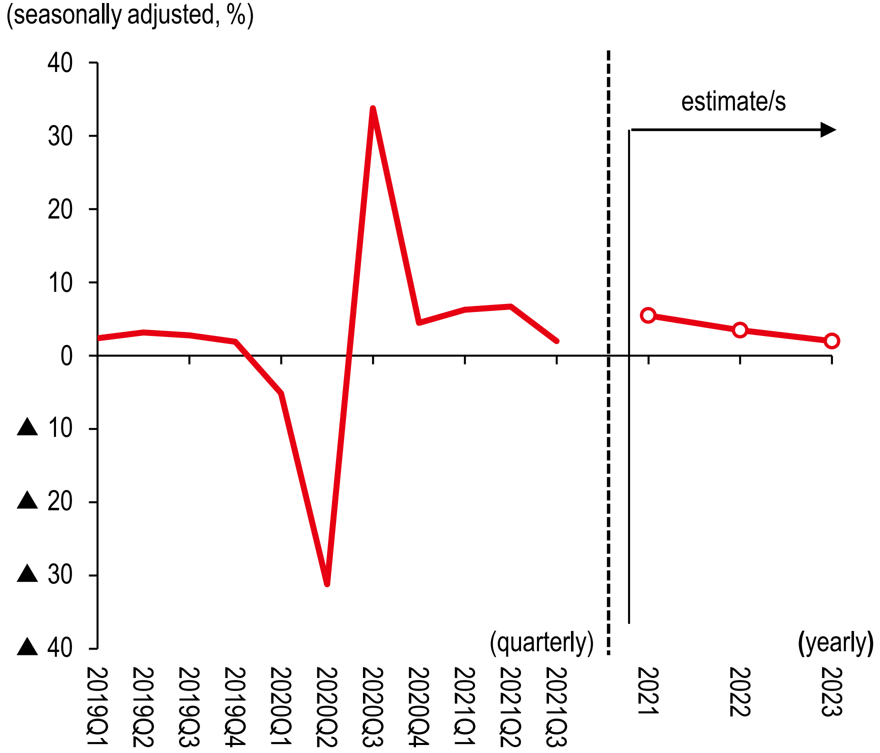
Major Country/Region Trends

2-1. U.S. Main Economic Indicators

Economic Recovery Continues, but Concerns Over Prolonged Inflation

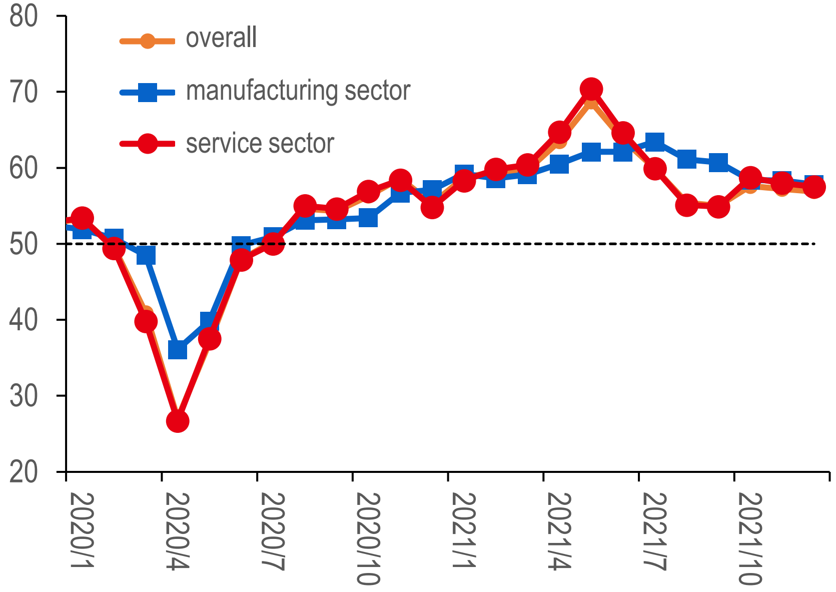
- Real GDP growth gradually slowed after peaking in the April-June period of 2021.The economy stagnated in the summer due to the effects of the Delta variant but picked-up again toward the end of the year. An economic growth rate of 3.5% is expected in 2022 on the back of surplus household savings accumulated during the Covid-19 pandemic. As a result of rapid improvement in the labor market, labor shortages and rising wages have appeared with inflation showing signs of remaining longer than anticipated.

▽ Real GDP Growth Rate



Note: Estimates by the Marubeni Research Institute
Source: U.S. Commerce Department

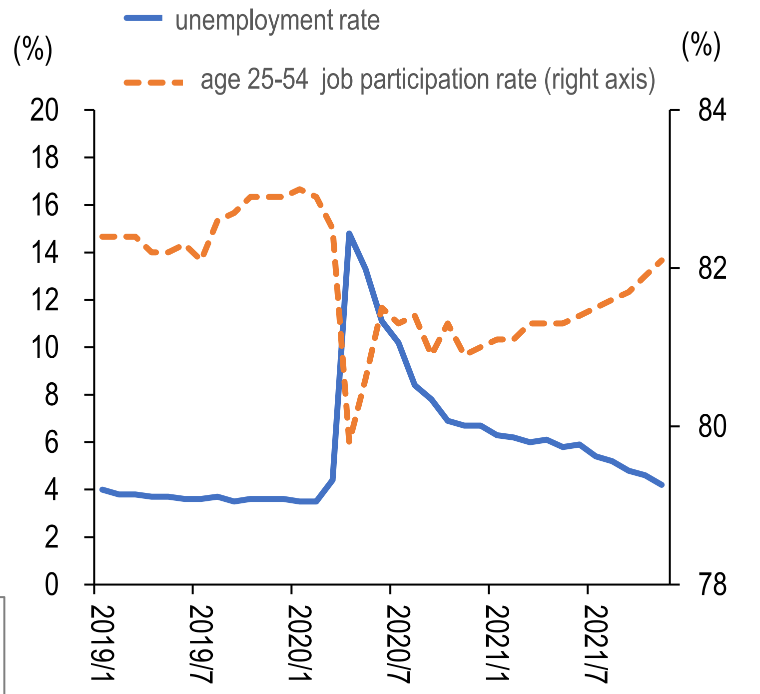
▽ PMI



PMI = Purchasing managers' business sentiment. Above 50 suggests improvement and below 50 suggests deterioration.
*Survey period: 12/6-15

Source: Refinitiv

▽ Unemployment Rate



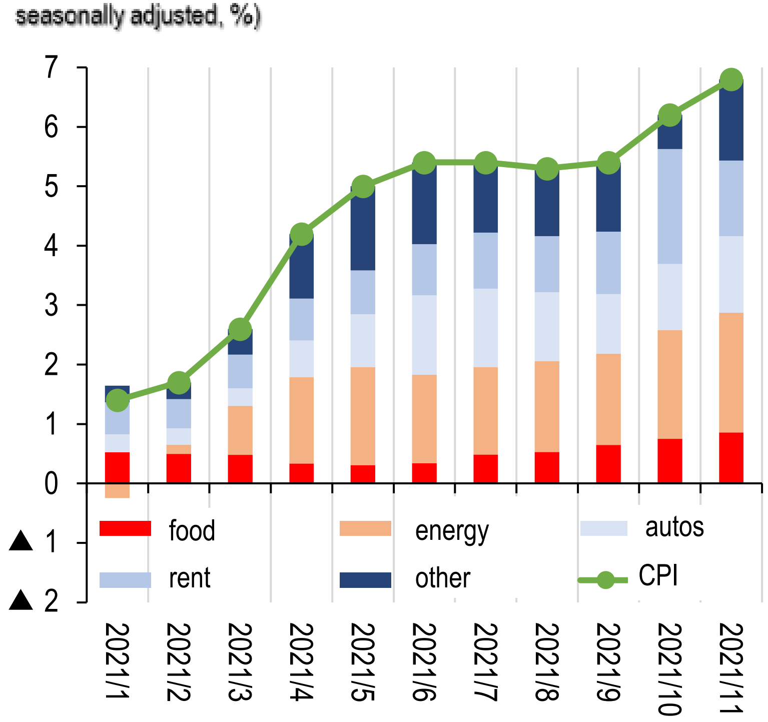
Source: U.S. Census Bureau

2-2. U.S.: Inflation, Monetary Policy

Amid Recovery in Demand and Rising Prices Tapering Has Accelerated, Interest Rates to be Raised 3 Times in 2022

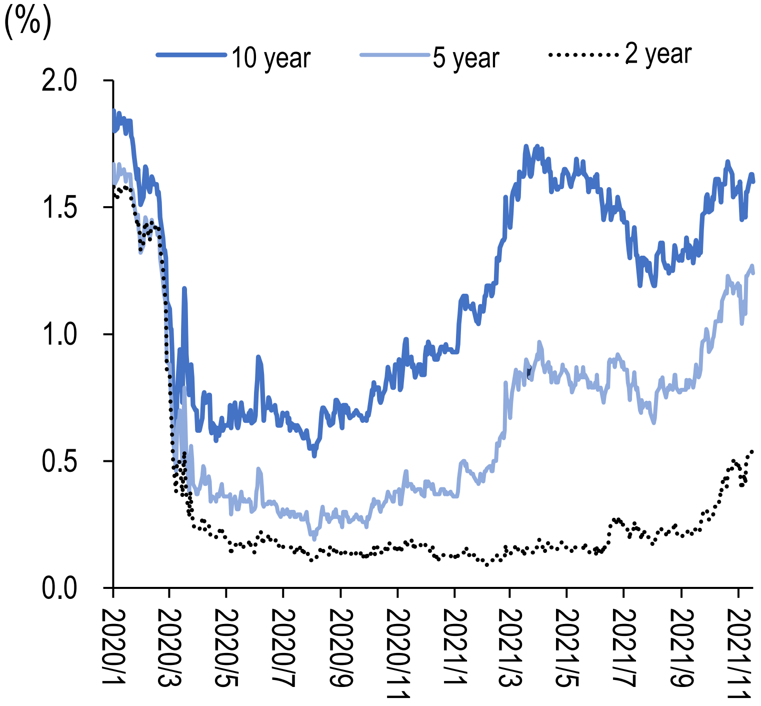
- The Federal Reserve Board (FRB) began reducing purchases of financial assets (tapering) in November with new purchases of assets expected to end in March 2022. In addition to the improving labor market, inflation has expanded beyond energy and has risen even further since October. With inflation remaining high, monetary policy is likely to move forward with the interest rate expected to be raised 3 times from the April-June quarter of 2022 to the end of the year.

▽ Consumer Price Breakdown



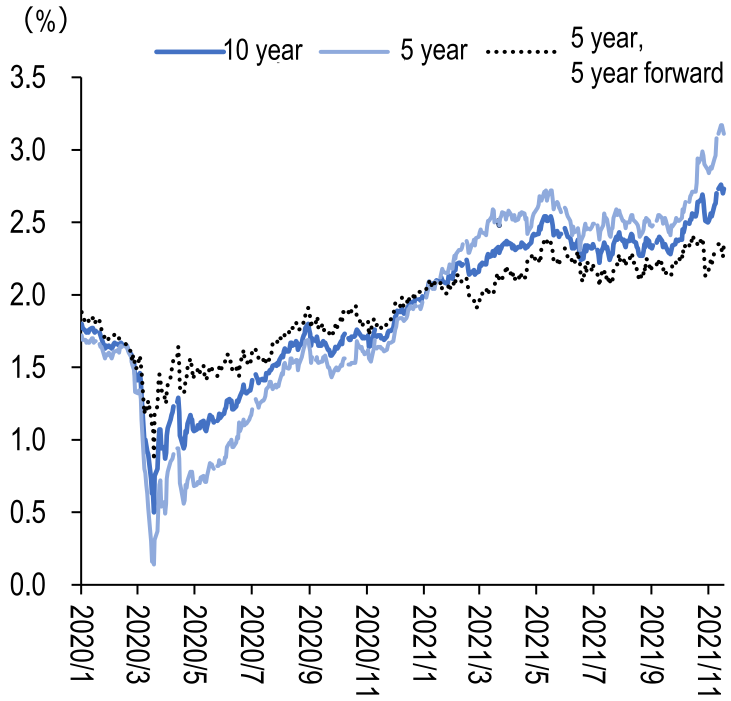
Source: Department of Labor

▽ Interest Rates



Source: FRED

▽ Expected Inflation Rate



Source: FRED

2-3. U.S.: Fiscal Policy

A Certain Amount of Fiscal Support for the Economy Continues Through Infrastructure and Other Spending

➢ The Infrastructure Investment and Jobs Act consisting of $1 trillion in hard infrastructure investment was passed in November. Another bill, the Build-Back-Better bill, which aims to increase social spending, including on climate change and childcare, has been reduced to $1.75 trillion but negotiations are still ongoing. Such large-scale fiscal spending will certainly spur economic growth from 2022.

▽ Overview of Infrastructure Bills Under Deliberation in Congress

Infrastructure Investment and Jobs Act

<Content>
- $1 trillion in spending on such hard infrastructure as roads and bridges, railways, electric power, electric vehicles, etc., and $550 billion in new expenditures invested annually
- Main breakdown:
  $240 billion on public infrastructure ($3 billion on clean energy, $65 billion on broadband, $55 billion on water treatment, 60 billion on infrastructure reinforcement, etc.
  $280 billion on transportation infrastructure ($110 billion on roads/bridges, $66 billion on railways, $39 billion on public transportation, $25 billion on airports, $15 billion on EVs/charging facilities, $17 billion on harbors/waterways, $11 billion on transportation safety
  $21 billion on other items (pollution mitigation, etc.)

<Progress in Congress>
- Senate: Passed on 8/10 with a bipartisan majority (69 in favor, 30 against, 50 Democrats and 19 Republicans in favor)
- House: Passed on 11/5 (228 in favor, 206 against. It passed with a majority of Democrats in favor, however, 6 Democrats voted against it, however 13 Republicans crossed over to vote for it.)
- Signed by President Biden on 11/15 with active spending expected to begin in 2022.

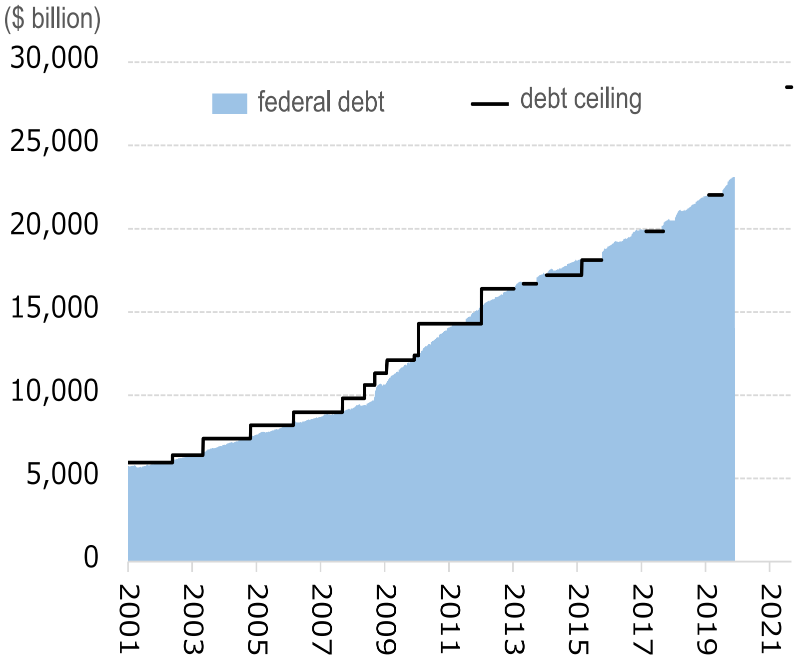
Social Infrastructure Investment (Build-Back-Better Act)

<Content>
- Initially, this bill was for $3.5 trillion over 10 years in spending on social infrastructure, however, President Biden decided on 10/25 to scale back the plan to $1.75 trillion over 10 years under a new framework (Build-Back-Better Act).
- Main breakdown:
  $56 billion on green energy, etc., $400 billion on such childcare support as free pre-school,, $200 billion in child tax credits for households $150 billion on long-term nursing care and low-cost housing, etc. .

<Progress in Congress>
- The bill passed in the House on 11/19 along partisan lines. (220 Democrats voted in favor and 213 213 Republicans voting against it. No Republicans voted in favor.
- In the Senate it cannot pass without the approval of all the Democrats. Currently, discussions revolve around reducing its scale even further, however as the Senate's schedule is limited, a vote on it is being pushed back to mid-January 2022.
- Cost estimates by the Office of Budget and Management predict that annual budget deficits will increase as a result of the bill: $151 billion in 2022, $161 billion in 2023, $194 billion in 2024 and 253 billion in 2025.

Source: Marubeni Research Institute

▽ U.S. Government Debt Trend



Source: Marubeni Research Institute from U.S. Office of Management and Budget data

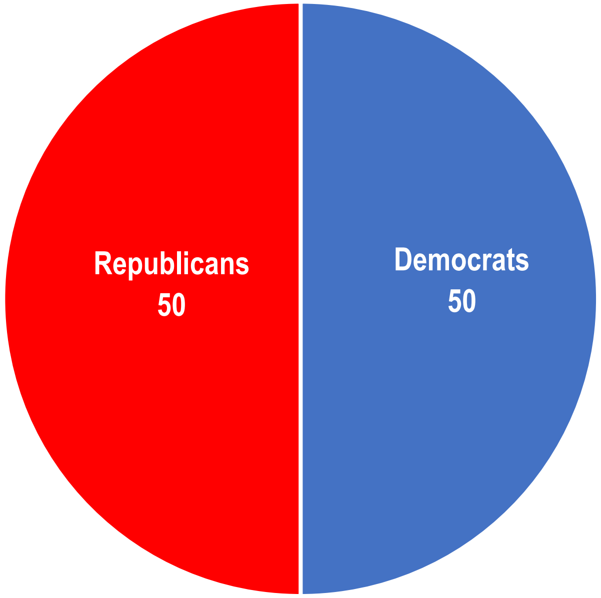
2-4. U.S.: Notable Points

Can an Economic Recovery be Achieved and Inflation Brought Under Control by the Mid-Term Elections?

- 2022 is a mid-term election year, and the focus is on whether the Democrats can maintain their majority in the House and the Senate. Many Republican seats in the Senate are up for re-election and many of the most competitive Senate election races seem to be in Republican-held constituencies. Since the summer, President Biden's approval rating has fallen below 50% and his disapproval rating is 8 points higher than his approval rating. If the Democrats lose in the mid-terms there will be a decline in the center of power.

▽ Senate Power

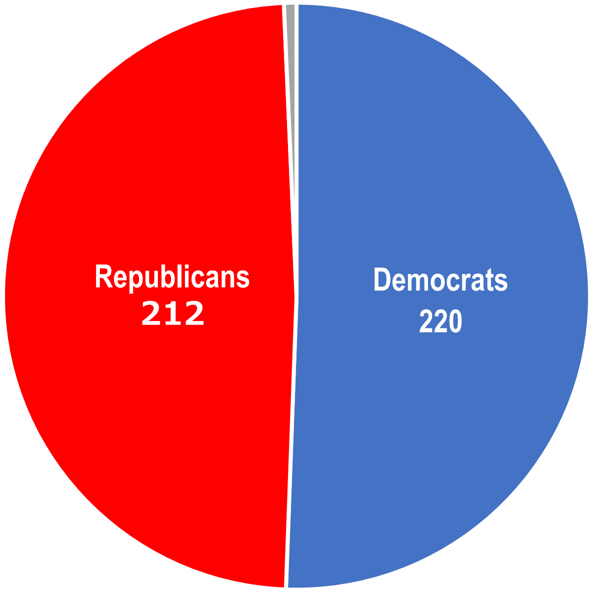
100 members, Vice-President (Democrat) has the decisive vote



20 Republican and 14 Democrat seat are being contested in 2022. The closest contested races are centered on current Republican seats in such states as NC, PA and WI.

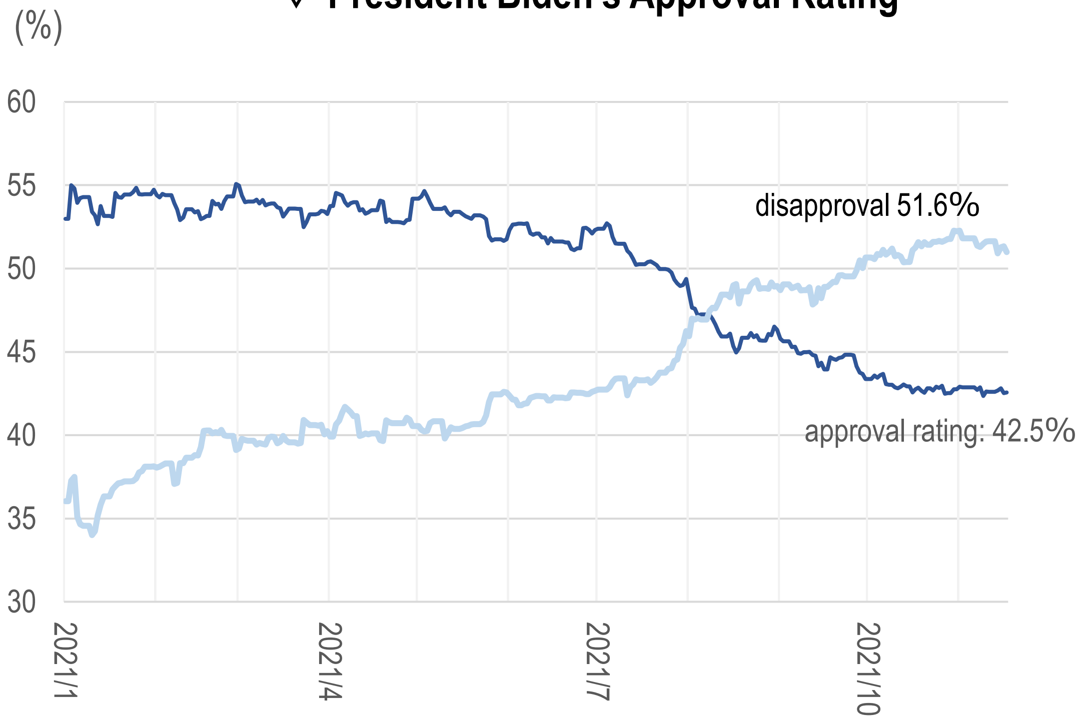
▽ House of Representatives Power

435 members, (3 vacancies)



Source: U.S Congress

▽ President Biden's Approval Rating



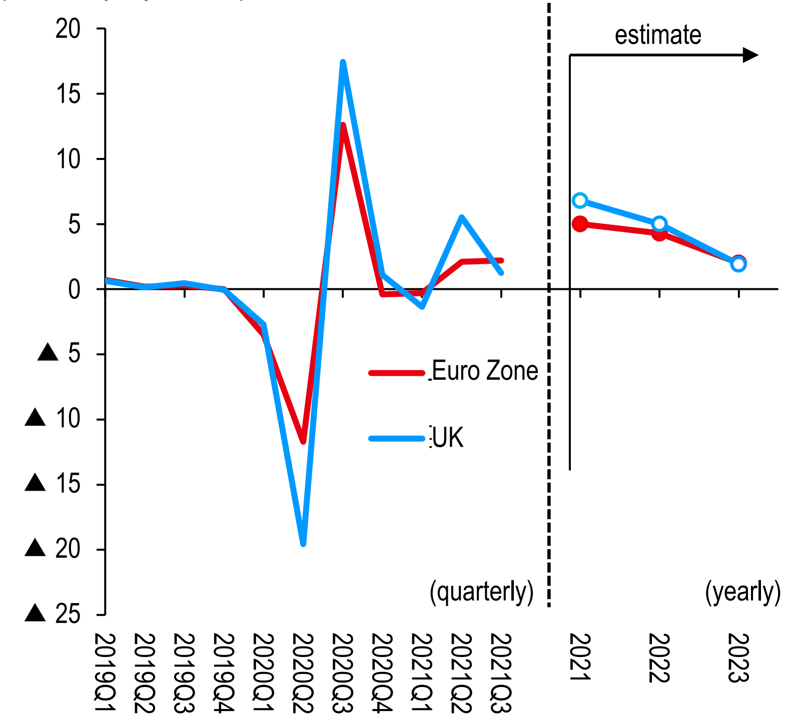
Source: Five Thirty Eight

3-1. Euro Zone/UK: Main Economic Indicators
GDP Returns to Pre-Covid Levels, But Supply Constraints are a Weight

- Real GDP in the Euro Zone and the UK is expected to recover to above the pre-Covid-19 average level by the end of 2021.
- Production activity in the manufacturing industry has generally reached pre-Covid levels but auto production continues to steadily decline due to the impact of global semiconductor shortages.
- With prolonged supply constraints and pause in the recovery of demand following the resumption of economic activity, improving business sentiment has lost momentum. Also, the number of Covid infections is rising again.

▽ Real GDP

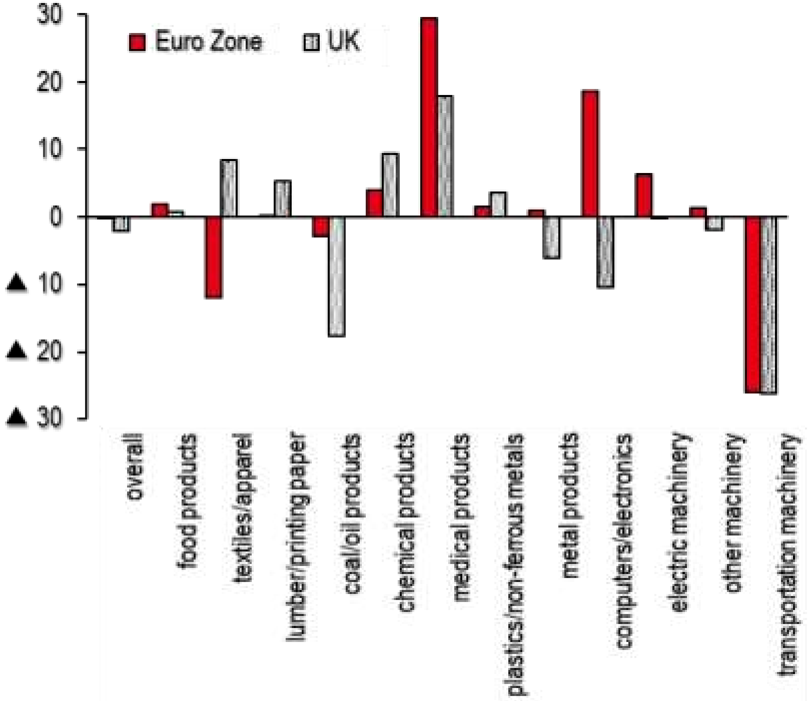
(seasonally adjusted, %)



Note: Estimate by the Marubeni Research Institute
Sources: Eurostat, ONS

▽ Degree of Recovery in Production (Q3 2021)

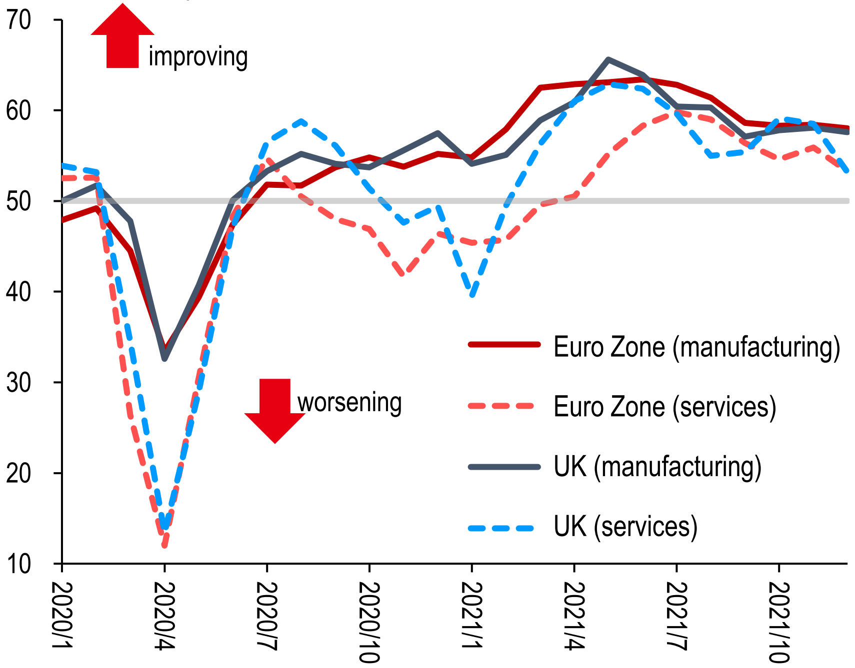
(seasonally adjusted from Q4 2019, %)



Note: As of the Q3 2021. Mining industry production base.
Sources: Eurostat, ONS, Marubeni Research Institute

▽ Business Sentiment (PMI)

(50 considered the break even point)

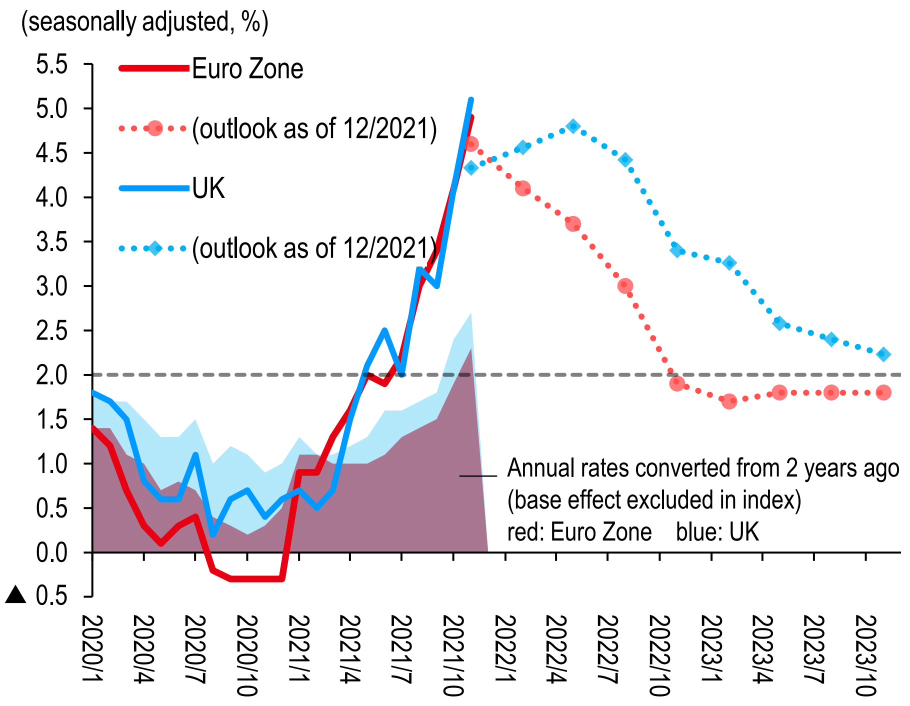


Note: For purchasing managers conditions were either flat or improved from the previous month. Managers were given 3 choices including worsening, and answers were indexed.
Sources: IHS Markit, Refinitiv

Inflation Has Continued Longer Than Expected Due to Supply Constraints and Soaring Energy Prices

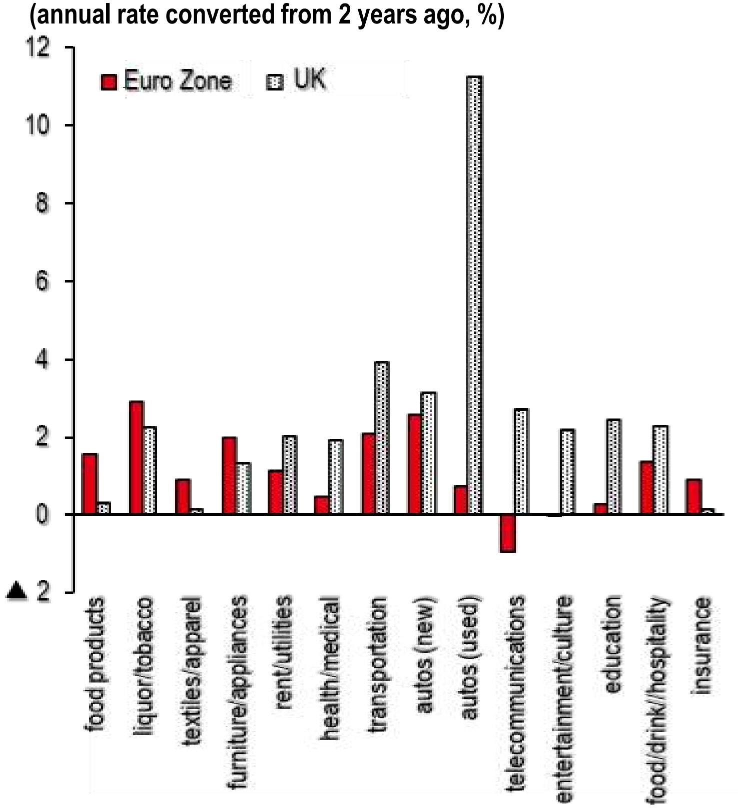
- The inflation rate is significantly higher than the central bank's pre-summer price outlook due to supply constraints and sharply rising energy prices.
- In the UK used car sales and services shot up remarkably. Since October utility bills skyrocketed in both the UK and the Euro Zone further boosting overall prices. The sharp rise in energy market prices is expected to peak over the winter with the impact gradually diminishing in the 2nd half of 2022.

▽ Consumer Price Index (General CPI)



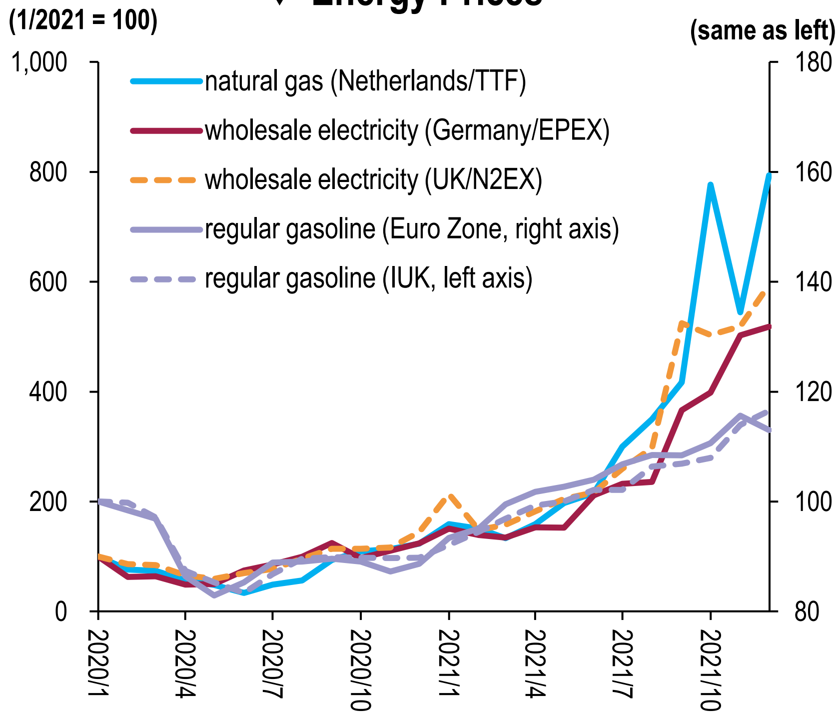
Note: The outlook for the quarterly inflation rate from the 4th quarter of 2021 is based on the forecasts of each central bank (European Central Bank or ECB, Bank of England or BOE). BOE forecasts are based on market forecast policy rates.
Sources: Eurostat, ECB, ONS, BOE

▽ CPI Price Changes by Item (Q3 2021)



Note: As of Q3 2021. New/used cars also included in transportation.
Sources: Eurostat, ONS, Marubeni Research Institute

▽ Energy Prices



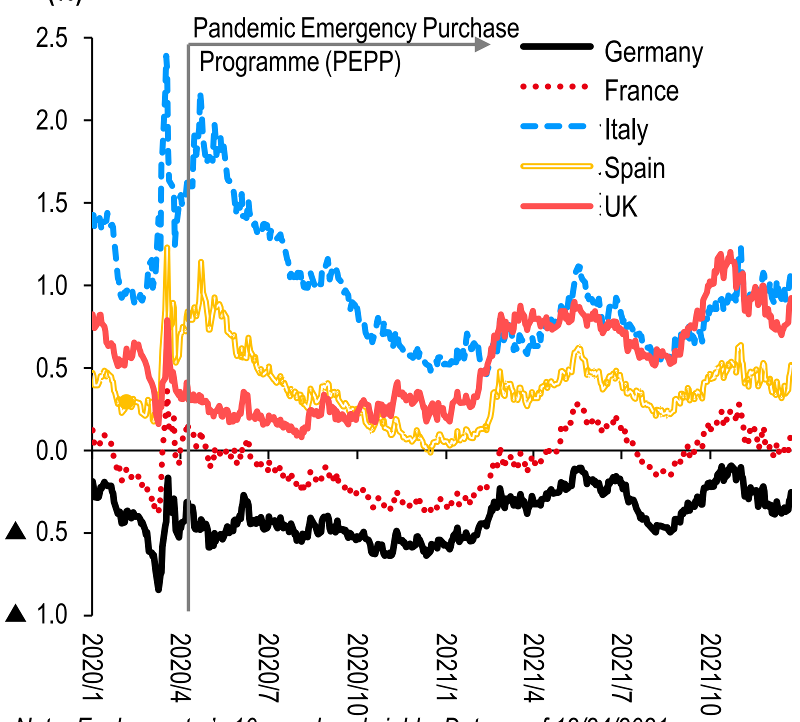
Note: Wholesale electricity is the spot price at the beginning of the month. Gasoline is the tax included price in the first week of each month. The original unit for wholesale electricity and natural gas are euro/MWh while gasoline is denominated in local currency.
Sources: Refinitiv, CEIC

3-3. Euro Zone: Fiscal/Monetary Policy

Euro Zone to Normalize Monetary Policy Behind U.S./UK, Full-Scale Investment Linked to Reconstruction Fund

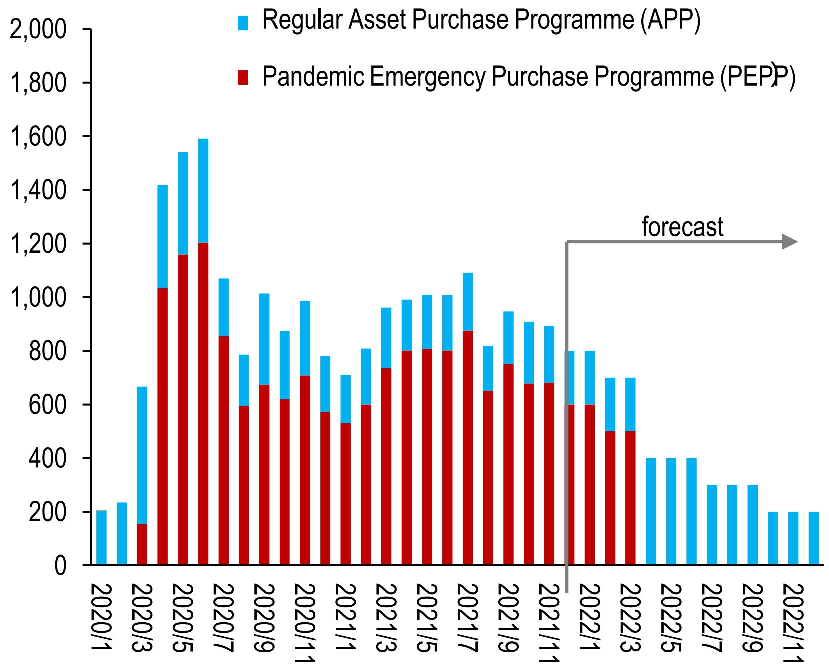
- The ECB's emergency purchase programme (PEPP), which has helped keep sovereign risk under control in heavy debt Euro Zone countries, is scheduled to end in March 2022. From April, as a measure to mitigate drastic situations, the regular purchase program (APP) will be temporarily expanded, however it is to face reductions after every 3 months.
- The EU reconstruction fund is already being sequentially funded by countries where budget plans have been approved. Investment linked to the fund will actively begin in 2022 and run throughout the year.

▽ Major European Country Long-Term Interest Rates



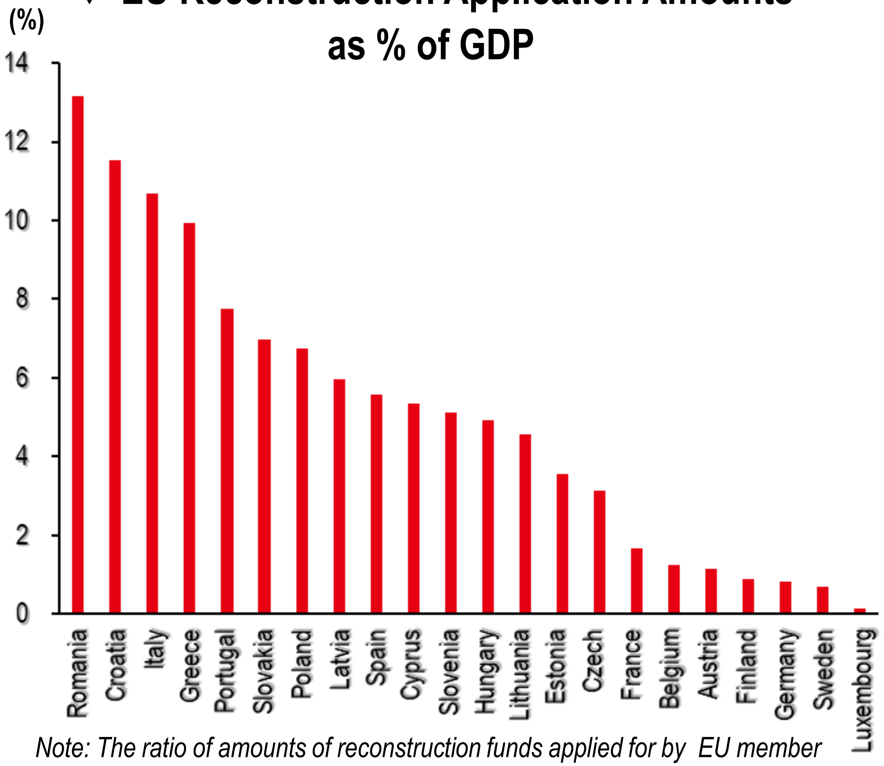
Note: Each country's 10-year bond yields. Data as of 12/24/2021.
Source: Refinitiv

▽ ECB Net Asset Purchases



Sources: Marubeni Research Institute from ECB data, media information sources

▽ EU Reconstruction Application Amounts as % of GDP



Note: The ratio of amounts of reconstruction funds applied for by EU member states to 2019 nominal GDP as of July 2021.
Sources: Bruegel, Eurostat, Marubeni Research Institute

3-4. Euro Zone: Notable Points

New German Government Inaugurated, Next Important Event is the April 2022 French Presidential Election

- In Germany, a new center-left Social Democratic Party (SPD) led government was launched on 12/8. Attention should be paid to whether such foreign policies as those toward China and others will be revised or not.
- The next significant event will be the April French presidential election. Also, important elections will be held in a number of other European countries in which it may be difficult to maintain stable governments.

▽ New German Government's Prospectus

Item	Key Points in New Administration's Coalition Agreement Document
Climate Change Measures	• Ideally, coal-fired power eliminated by 2030 (previously 2038) • Ratio of renewable energy in electric power supply 80% by 2030 • 2% of land made available for onshore wind power • At least 15 million BEVs on the road by 2030 • Set a minimum carbon price of 60 euros per ton (EU-ETS emission allowance price)
Labor Climate・Social Welfare, etc.	• Raise minimum wage from 6,6 euros to 12,6 euros per hour • Abolish the renewable energy levy burden on households • Construct 400,000 homes annually (with100,000 subsidized)
Diplomacy/Security	• 2% of GDP for defense spending (matches NATO's target) • Strengthen diplomatic/security cooperation with NATO, etc. • Deal clearly with human rights violations • Ratification of EU/China Comprehensive Investment Agreement currently impossible • No mention if the "Nord Stream 2) gas project with Russia
Fiscal Management	• The domestic "debt brake" constitutional provision (budget deficit within 0.35% of GDP) will be reapplied in 2023 • Supports flexibility in fiscal discipline in the operations of EU's "Stability and Growth Pact" (SGP) • To push back debt repayment plan for the Covid pandemic crisis • Contribute to climate-related investment fund from 2021 supplementary budget

Source: Marubeni Research Institute from various reports, etc.

▽ 2022 Government Events

	Notable Points		Notable Points
Portugal General Election (1/30)	• In October , the 2022 budget of the center left socialist party led by Prime Minister Costa was rejected because the left wing bloc, which had been cooperating with the socialists, and the Communist Party opposed fiscal expansion. A general election is being held in January. • Opinion polls still show the socialists are the dominant party, but they unlikely to win a majority in parliament. So, there concerns that establishing a government will be difficult.	Hungary General Election (mid-April)	• In October, Mr. Marki-Zay, who insists Hungary switch to a pro-EU/pro-U.S. stance, was chosen by an opposition coalition as the unified candidate for PM. • He also demands a constitutional amendment to correct the dictatorial concentration of power by PM Orban. If a peaceful transfer of power is realized, it is possible that Hungary will shift to being pro-EU and the problem of moves that are contrary to the basic "rule of law" values of the EU will be resolved.
Italy Presidential Election (mid-January)	• President Mattarella's term (7 years) expires in February. Prime Minister Draghi has come up as a candidate for president, so the question is if he will remain as PM until the end of his term in June 2023 • There is also concern that parliament will again become unstable if the PM, who has very high credibility, does retire.	British Northern Ireland Parliamentary Elections (5/5)	• First Minister Foster resigned in June following the turmoil after Britain's departure from the EU. The political situation is in confusion as the leaders of the Democratic Unionist Party (DUP), to which the FM belonged to and emphasizes unity with Britain, have resigned one after the other。 • Opinion polls have shown that support for Sinn Fein, the Irish nationalist party, now exceeds that of the unionists. If the party becomes the majority party calls for reunification with Ireland (independence from Britain) may become more pronounced.
France Presidential Election (4/10-24)	• Initially it was thought the race would just be a battle between President Macron and Ms La Pen, however, a recent poll suggests the race will be a free for all that includes Mr. Zemmour of a new far right party and Ms. Pecresse of the conservative Republican Party. • With the retirement of German Chancellor Merkel, who played a formidable leadership role in the EU, the next leader of France will be noteworthy in regard to EU leadership.	Sweden General Election (September)	•In June PM Lofven (Social Democratic Party) announced his resignation after a vote of no confidence. In November Finance Minister Andersson began to lead the government as the new leader of the party. However, the party does not yet have a majority of seats in Parliament , so the political situation is still unclear。

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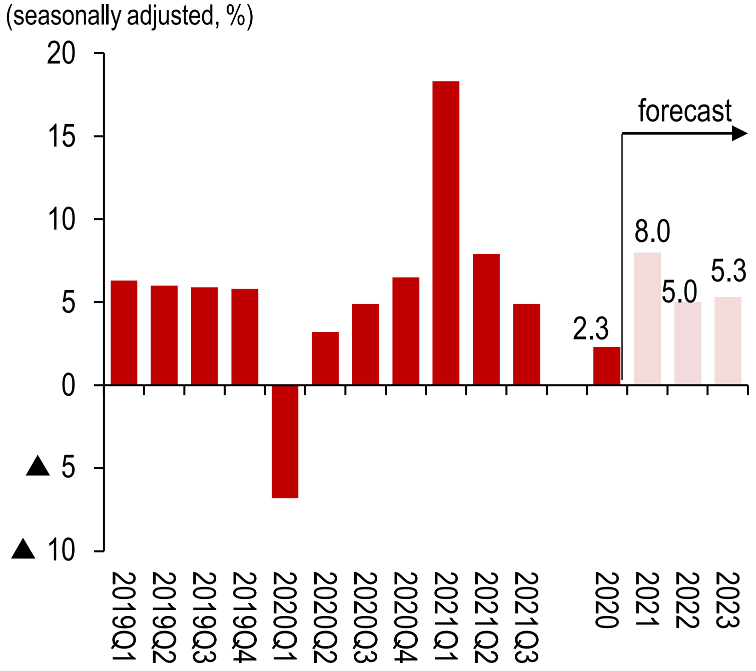
4-1. China: Main Economic Indicators
Growth Slows to 5% from 2022

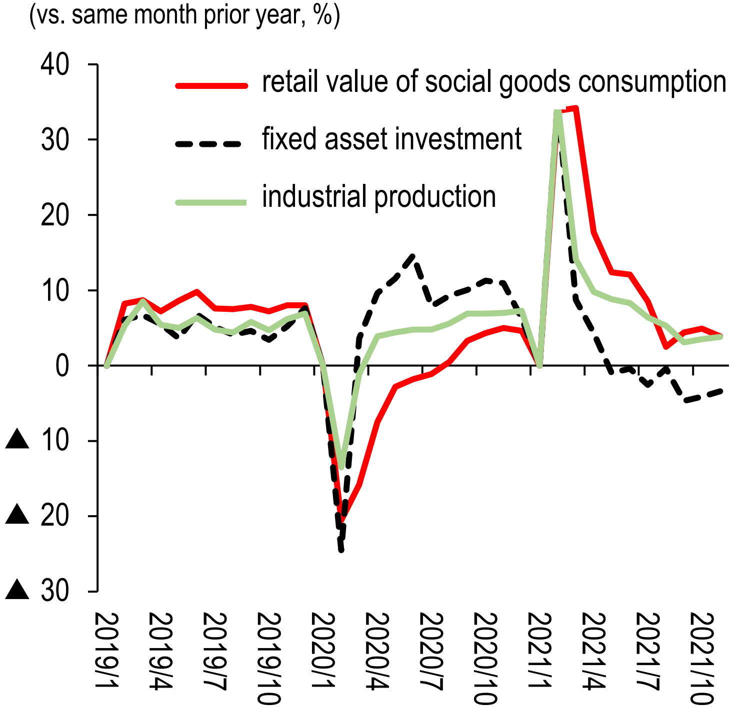
- The economy has slowed down due to prolonged power shortages, the strict zero Covid policy, and a real estate market slump. Business sentiment in the manufacturing sector has improved, however, attention must be paid to environmental regulations and electricity supply and demand toward next spring.
- The government is not prepared to take fiscal and other financial measures, so economic growth is expected to slow to 5% in 2022 and 5.3% in 2023.

▽ Real GDP Growth Rate



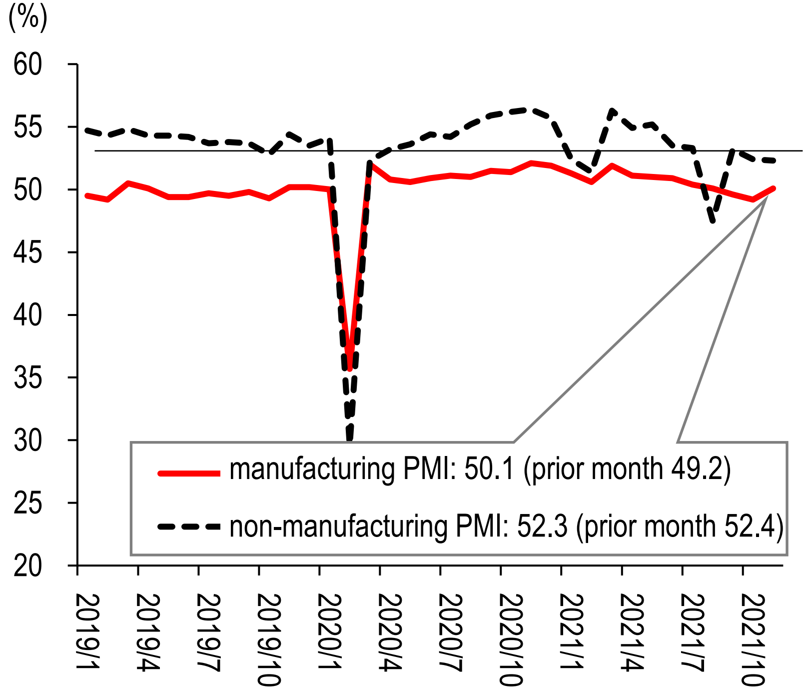
Source: China's Central Statistics Bureau
Forecast: Marubeni Research Institute

▽ Main Economic Indicators



Source: China's Central Statistics Bureau Most recent: November

▽ Purchasing Manager's Index (PMI)



Source: China's Central Statistics Bureau Most recent: November

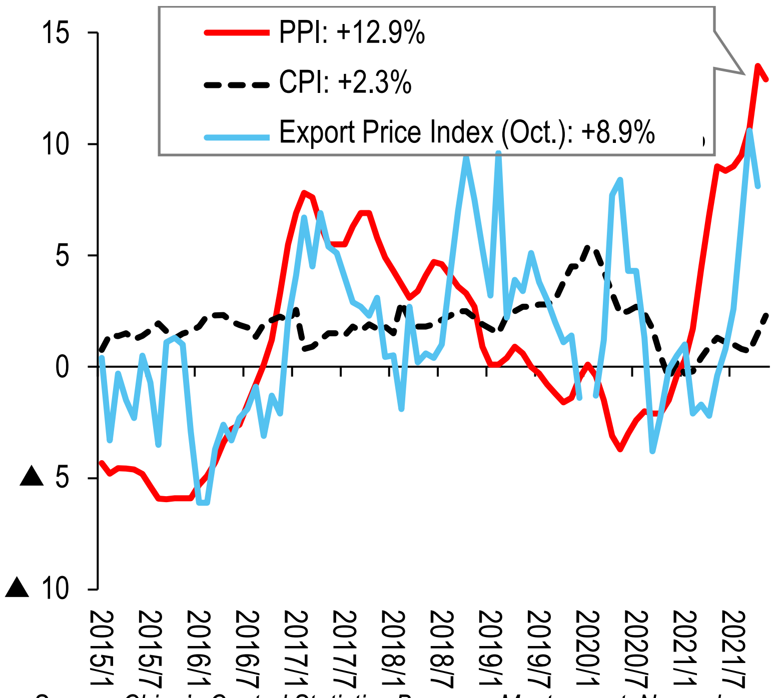
4-2. China: Inflation Trends

Manufacturing Costs Higher, Costs Shifted to Price of Exports

- PPI: Record increase since September. The main reason is the skyrocketing prices for such resources as coal and other raw materials. Electric power shortages and environmental regulation have contributed to a fall in supply.
- CPI: Prices have risen slightly with a large gap with the rate of PPI prices increases. Suppressing costs by shifting the price burden to final product manufacturers is squeezing their profits.
- Export price index: High manufacturing costs are being passed on. Such supply constraints as electric power shortages could push the world import price index up even further.

▽ Price Indexes

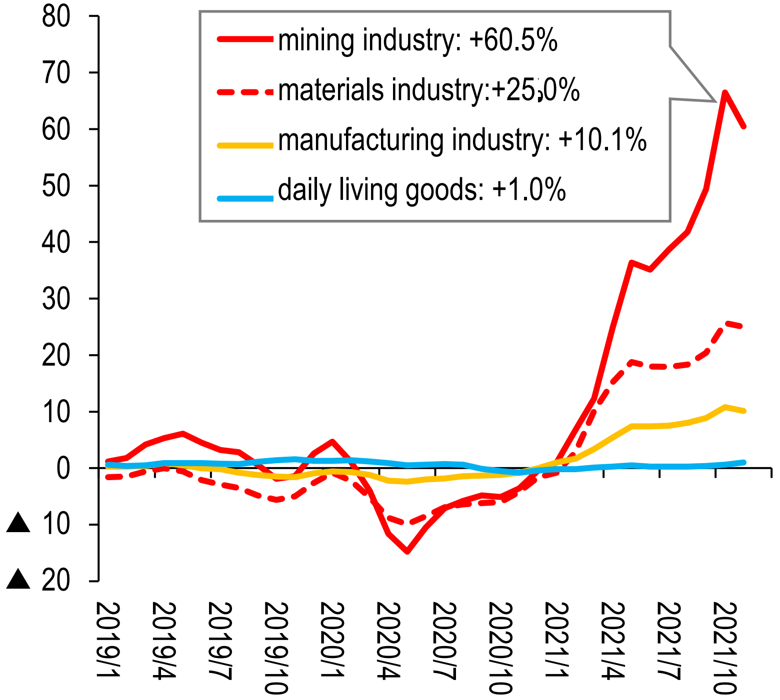
(vs. same month prior year, %)



Source: China's Central Statistics Bureau Most recent: November
Export Price Index: October

▽PPI: Breakdown

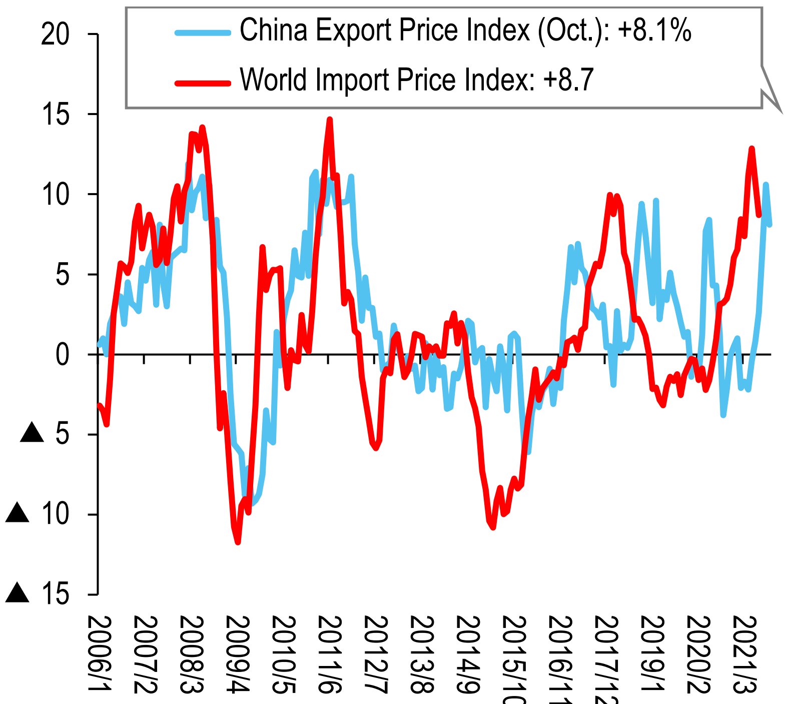
(vs. same month prior year, %)



Source: China's Central Statistics Bureau Most recent: November

▽Export/Import Price Indexes

(vs. same month prior year, %)



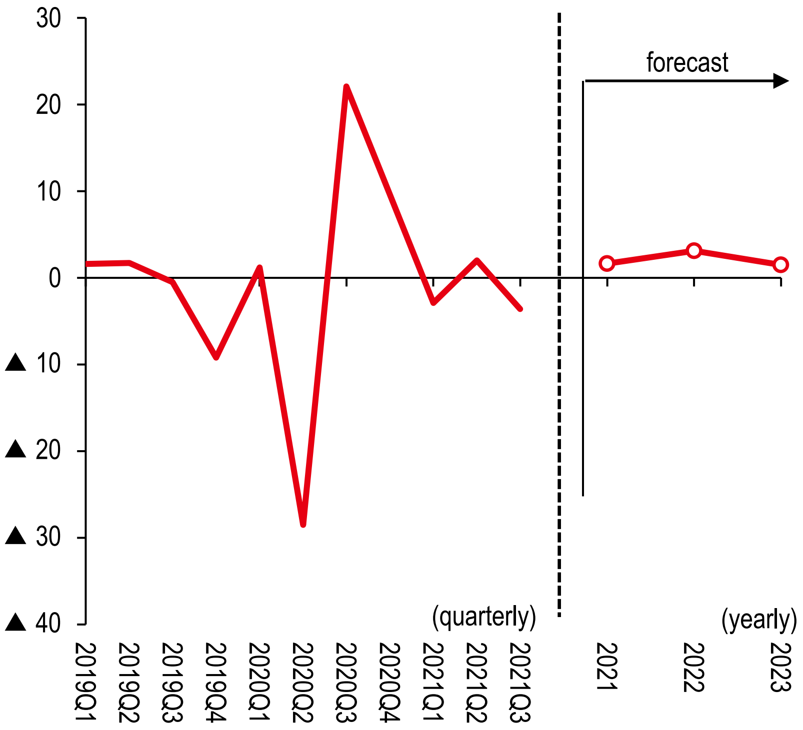
Sources: World: WTO China: China's Central Statistics Bureau

5-1. Japan: Main Economic Indicators
GDP to Return to Pre-Covid Levels in 2022

- Real GDP continued to stagnate in 2021 mainly due to a significant re-expanding of Covid-19 infections but is expected to return to pre-Covid levels in 2022.
- (Manufacturing industry) Auto production slowed due to such supply constraints as semiconductor shortages. It is highly likely that this will continue as a downside risk even in 2022.
- (Service industry) Although it is expected that the food and beverage industry will pick up as a result of the relaxation on activities, both companies and consumers remain cautious.

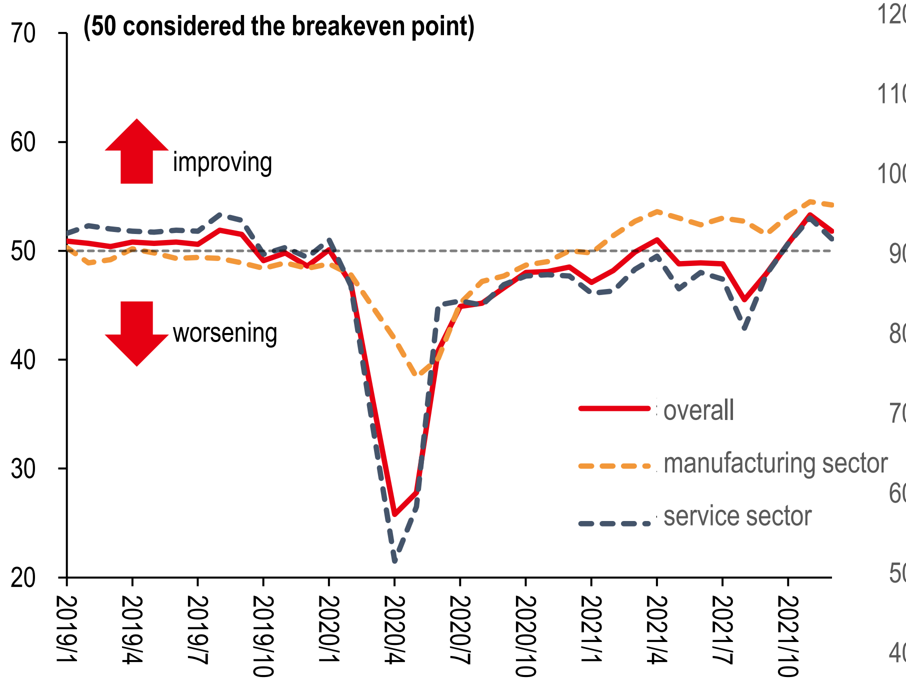
▽ Real GDP

(seasonally adjusted, vs. same period prior year), %)



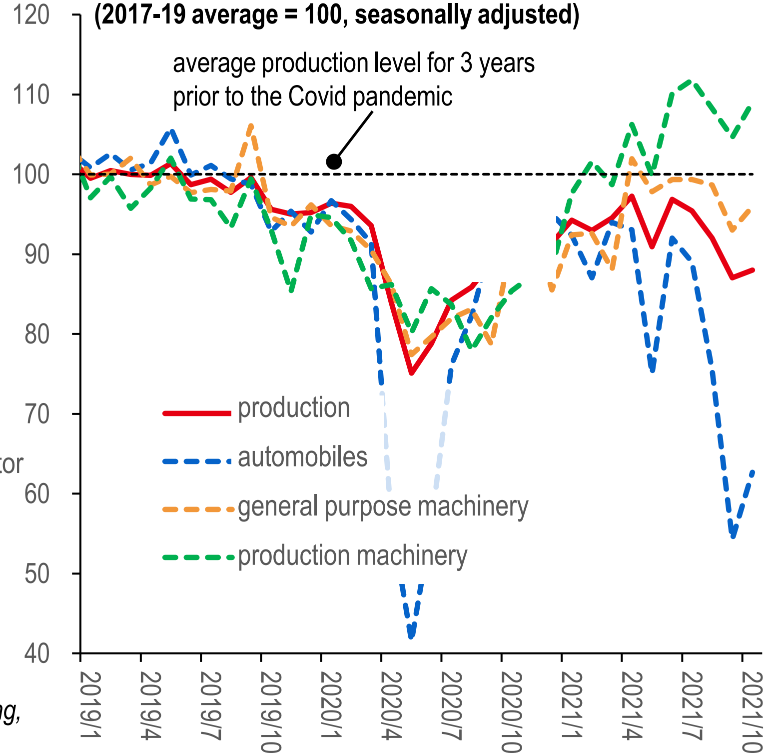
Source: Japan Cabinet Office

▽ Business Sentiment (PMI)



Note: This index is the purchase managers' response results given 3 options; improving, level, or worsening compared to the previous month.
Sources: IHS Markit, Refinitiv

▽ Industrial Production



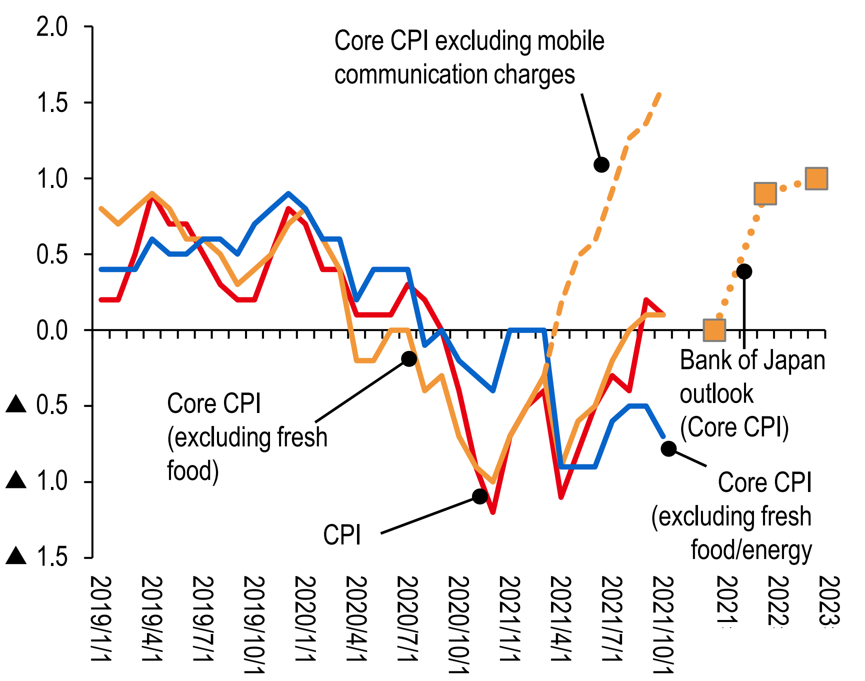
Source: Japan Ministry of Trade. Economy and Industry

5-2. Japan: Inflation Trends

Rising Imports Costs Weigh on Companies Restraining Consumer Prices

- The rate of increase in consumer prices in Japan is lower than in Europe and the U.S. Except in special cases (reduction in mobile communication fees) the key price indicator has risen to the upper 1% range.
- On the other hand, producer prices continue to rise sharply, especially in import-related areas, against a backdrop of supply constraints and soaring energy prices. Companies have restrained themselves from passing on producer price increases to consumers, so there is concern that the decline in profitability will constrain new employment.

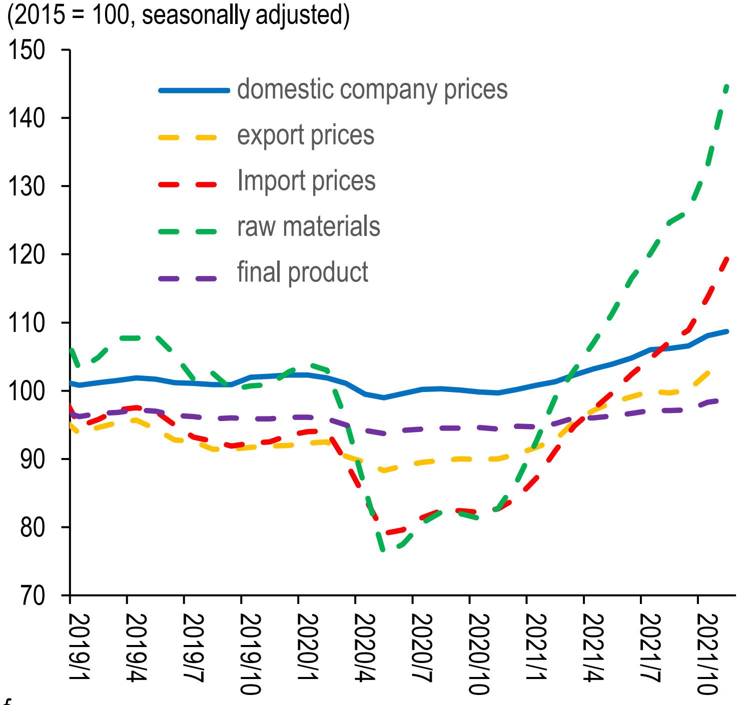
▽ Consumer Price Index (CPI)



Note: The fiscal year forecast is the Core CPI forecast from the Bank of Japan Outlook Report (10/2021). Sources: Japan Ministry of Internal Affairs and Communications, Bank of Japan

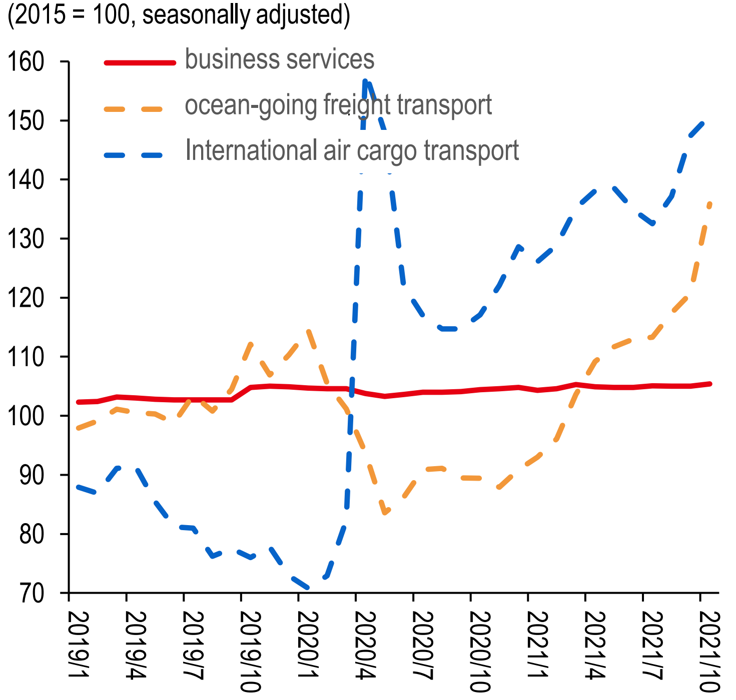
▽ Producer Price Index (PPI)

▽Company Prices



Source: Bank of Japan

▽Business Services Prices



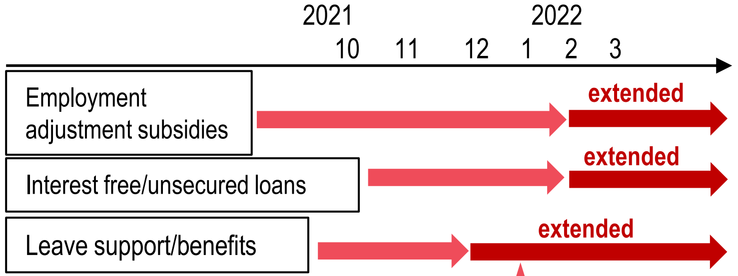
Source: Bank of Japan

5-3. Japan: Monetary/Fiscal Policy

Due to the Delayed Economic Recovery the Shift From Support Measures to Growth Measures has Stalled

- Against a backdrop of a demand shortage of about ¥27 trillion (Cabinet Office estimate), new fiscal spending measures of about ¥55.7 trillion, including funds from the 2021 supplementary budget and the 2022 budget are planned. Major financial support measures implemented during the Covid pandemic have largely been extended to the end of fiscal 2021 due to the stagnant economic recovery.
- The BOJ will continue with monetary easing and funding support policies in response to the Covid pandemic. On the other hand, actual purchases of ETFs and J-REITs have dropped sharply since 2021.

▽ Government's Pandemic Induced Fiscal Policy



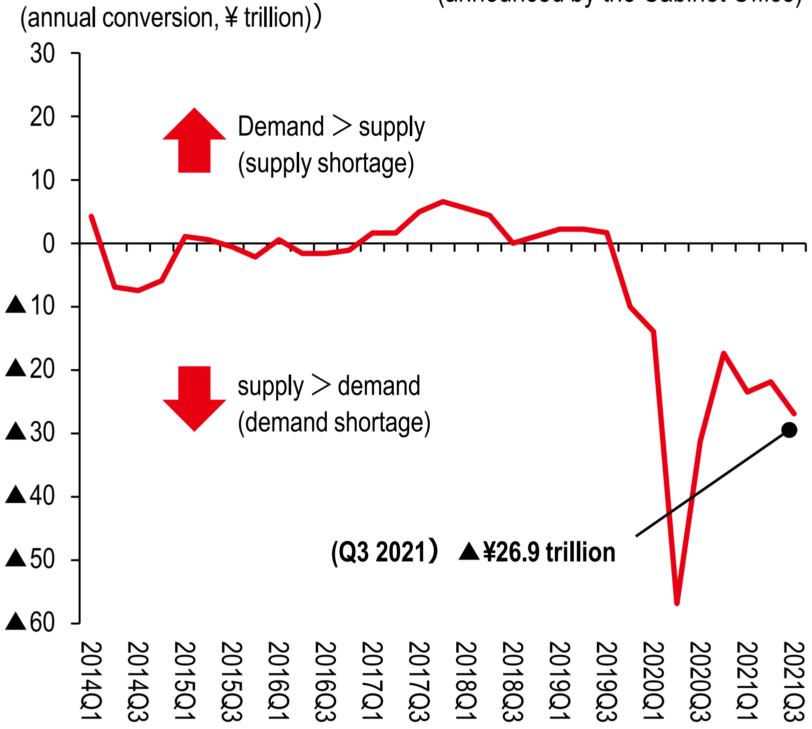
Economic Measures to Counter Covid and Prepare for a New Era
Fiscal Expenditure: ¥55.7 trillion

Expanded prevention measures for Covid-19 infections ¥22.1 trillion (vaccination promotion, business revival support, employment adjustment subsidy extension, etc.)	**Growth/distribution strategy ¥19.8 trillion (benefits worth ¥100,000 for those under 18 years ,clean energy investment, ¥20,000 in my number points, strengthening semiconductor production bases, etc.)**	**Resuming social/ economic activities, preparing for next crises ¥9.2 trillion** **Disaster prevention/ reinforcement ¥4.6 trillion**

Source: Marubeni Research Institute from various HPs and news reports

▽ Supply and Demand Gap

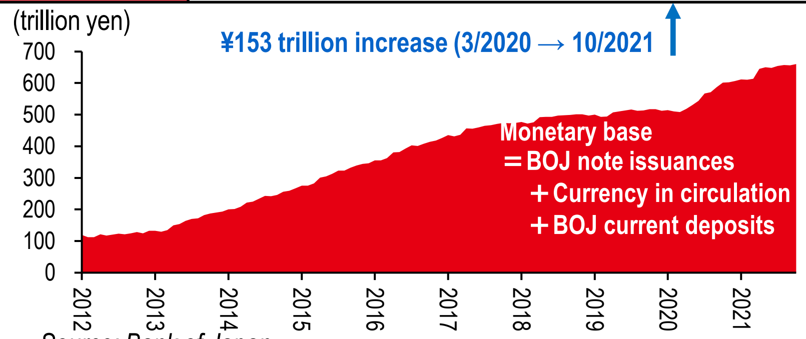
(announced by the Cabinet Office)



Note: Supply and demand gap = (actual GDP – potential GDP)/potential GDP
Source: Japan Cabinet Office (12/2021)

▽ Bank of Japan Pandemic Monetary Policy

	Overview
Short-Term Interest Rate Operations	Short-term interest rate (apply a▲0.1% minus interest rate to the policy interest rate on BOJ's current deposits.)
Quantitative Easing	① Government bond purchases, U,S, dollar fund supply operations → **Since the summer of 2020 outstanding balance of government bonds has been flat.** ② ETF (¥12 trillion/year) and J-REIT (¥180 billion/year) purchases → **¥3-¥6 trillion/year purchase limit scrapped in 2021**
Funding Support	① Purchases of CP, corporate bonds, etc. (total upper limit balance of ¥20 trillion) → **Extended to end of March 2022** ② Special funding support program due to the Covid pandemic → **For small/medium size companies extended to September 2022**



Source: Bank of Japan

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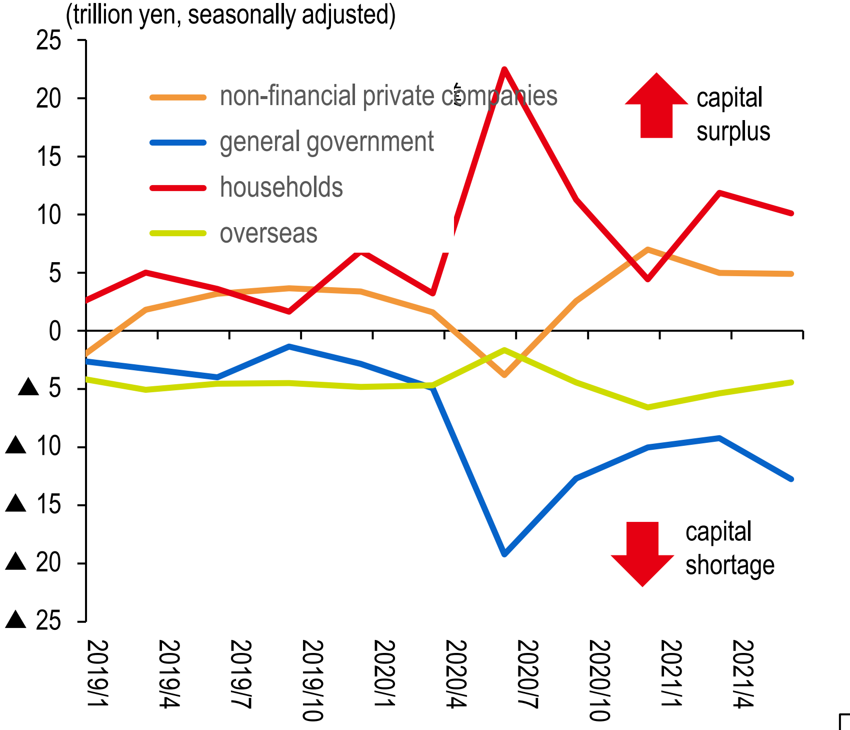
5-4. Japan: Notable Points

A Rebound in Consumption/Capital Investment by Ending Future Uncertainty a Factor for an Economic Recovery

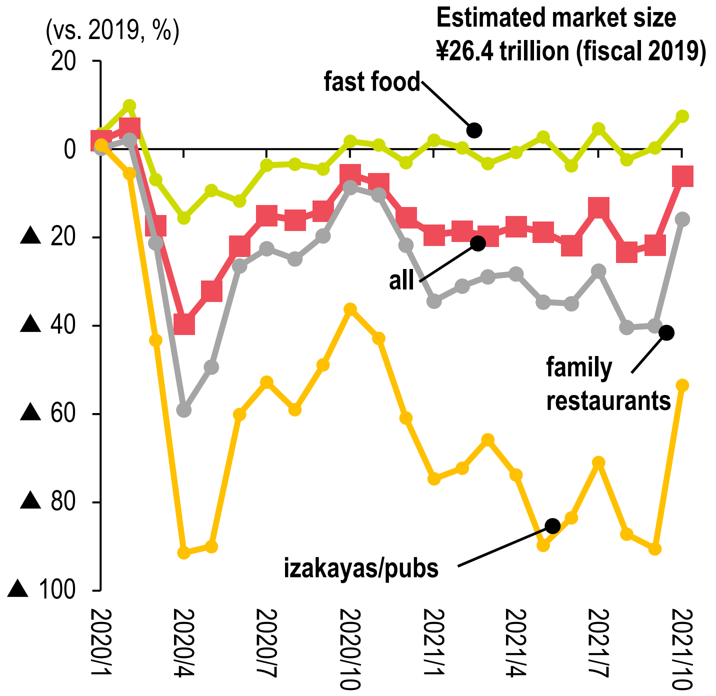
- (Capital circulation) Given the government's financial support measures, the surplus funds of households and business will remain at high levels.
- (Dining out (food/drink services) consumption) Due to prolonged restrictions on outside activities consumption was down in 2021. Although a recovery is expected at the beginning of 2022, the risk of widespread infections continues.
- (Capital investment) While a recovery in operating profits, which had been depressed by the Covid pandemic, is progressing and there are signs of an increase in capital investment the question is whether there will be a full-expansion after the beginning of 2022.

▽ Capital Circulation Statistics (by sector)



Note: Capital shortage = capital supply – capital usage (flows)
Source: Bank of Japan

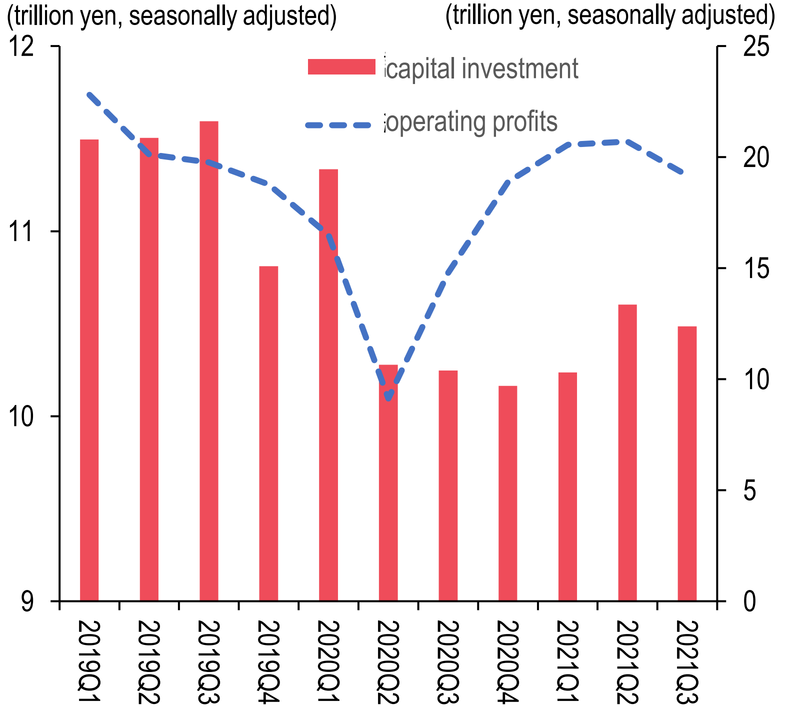
▽ Dining Out Sales (food/drink)



*Dining out sales include food delivery and take out.

Source: Japan Food Service Association

▽ Capital Investment



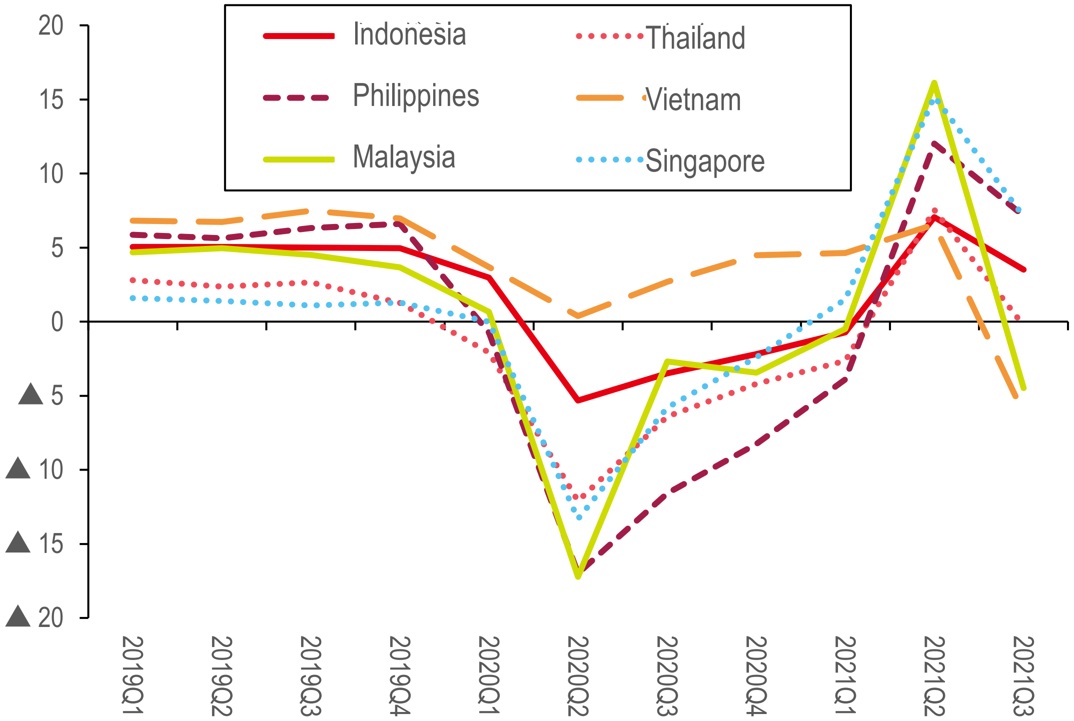
Note: All industries except finance and insurance
Source: Japan Ministry of Finance "Corporate Enterprise Statistics Survey)

6-1. ASEAN: Main Economic Indicators

Economic Recovery is Expected to Continue Due to the Proliferation of Vaccinations

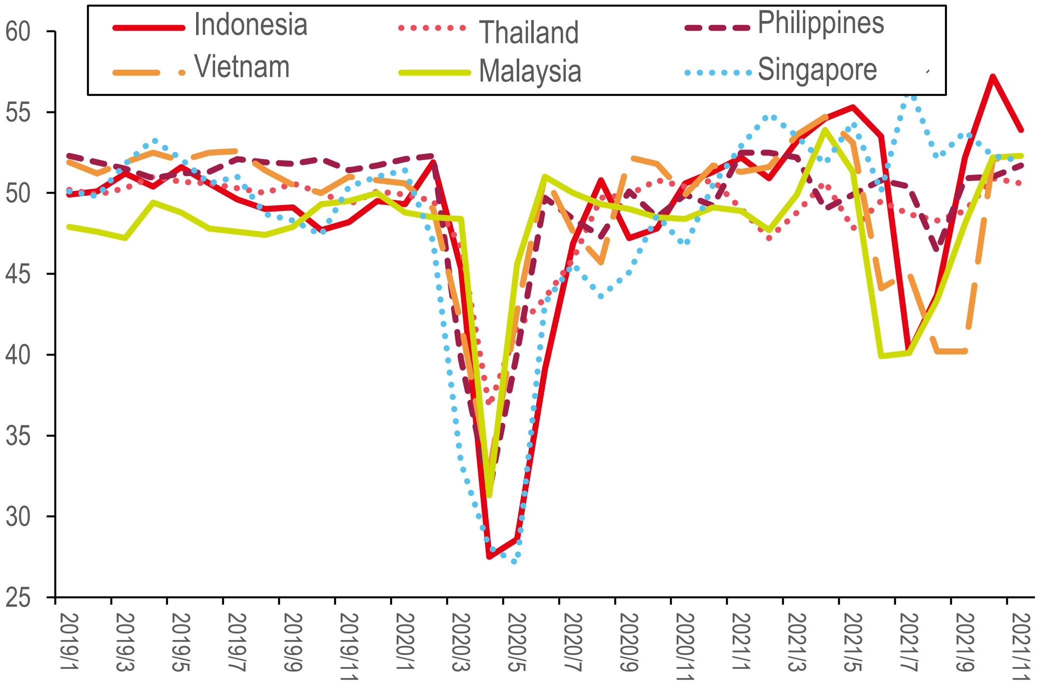
- The real GDP growth rate of ASEAN countries in the July-September period fell below the previous year's level in Thailand, Vietnam and Malaysia due to the extensive spread of Covid-19. The manufacturing PMI also fell in June to September. However, the outlook is that the recovery trend is expected to continue as vaccinations become more widespread.
- The risks are ① the slowdown in China's economy ② the impact from U.S. monetary tightening, and ③ concerns over a re-expansion of Covid infections.

▽ Real GDP Growth Rate



Source: CEIC

▽ Business Sentiment (Manufacturing PMI)



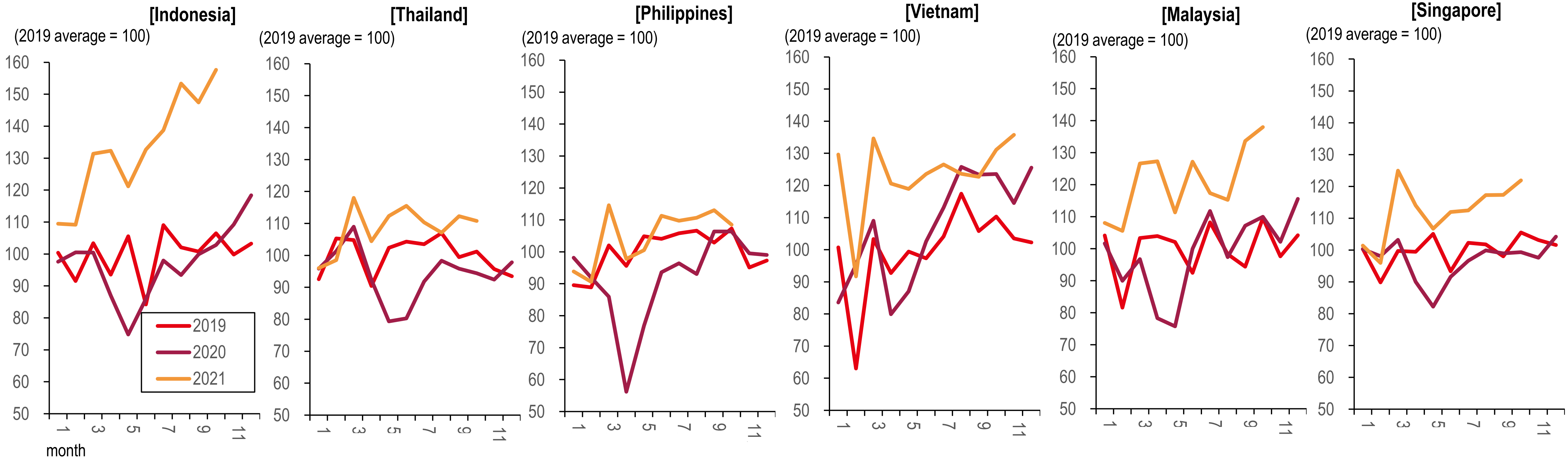
Source: IHS Markit

6-2. ASEAN: External Demand

External Demand is Expected to Remain Firm on the Back of a Global Economic Recovery

- Currently, global demand remains firm as the world economy continues to recover, especially in developed countries. Indonesia and Malaysia are seeing a rise in the value of their exports due to high resource prices.
- External demand is still expected to be solid as the world economy continues to improve going forward, however, one must be cautious of a slowdown in China’s economy.

▽ Exports



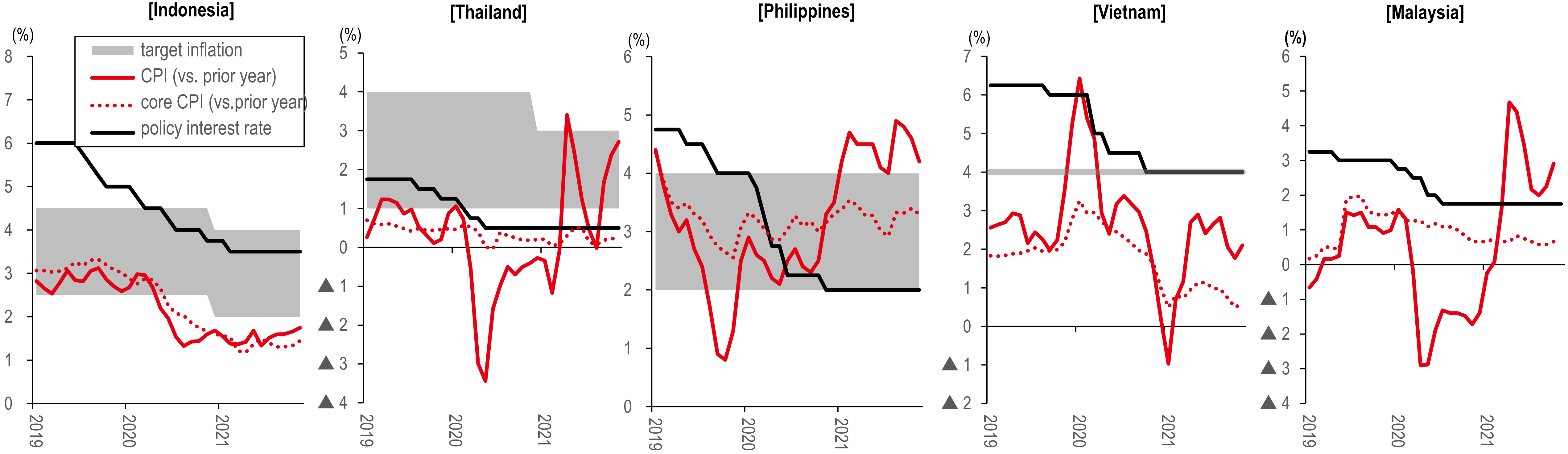
Note: Malaysia and Vietnam export values are calculated in local currency, while all others are calculated U.S. dollars
Source: CEIC

6-3. ASEAN: Inflation Rates

Core Inflation in General is Stable, Although Inflation Has Exceeded the Target Inflation in the Philippines

➢ With high resource and rising food prices the inflation rate in the Philippines has exceeded target inflation, however, core inflation has remained relatively stable in the ASEAN countries. Indonesia has suggested a rate hike after the end of 2022, but most central banks are not mentioning any rate hikes. It should be noted that inflation may rise, however, there is little need for an early monetary policy shift.

▽Inflation Rates/Target Inflation (Policy Interest Rates)



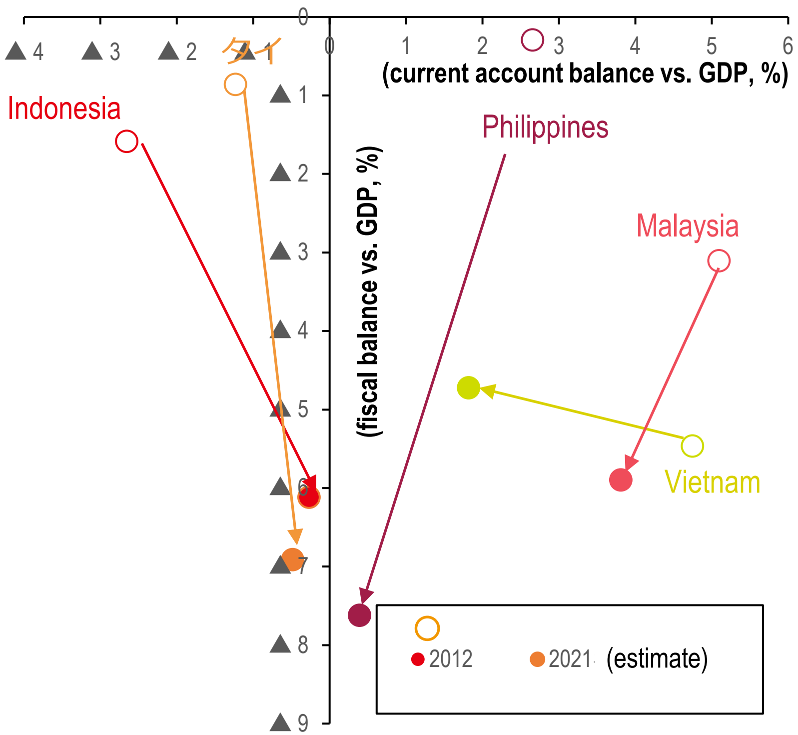
Source: CEIC

6-4. ASEAN: Notable Points

Foreign Exchange Rates are Expected to Remain Stable, But Pay Attention to Currency Depreciation in Non-Resource Rich Countries

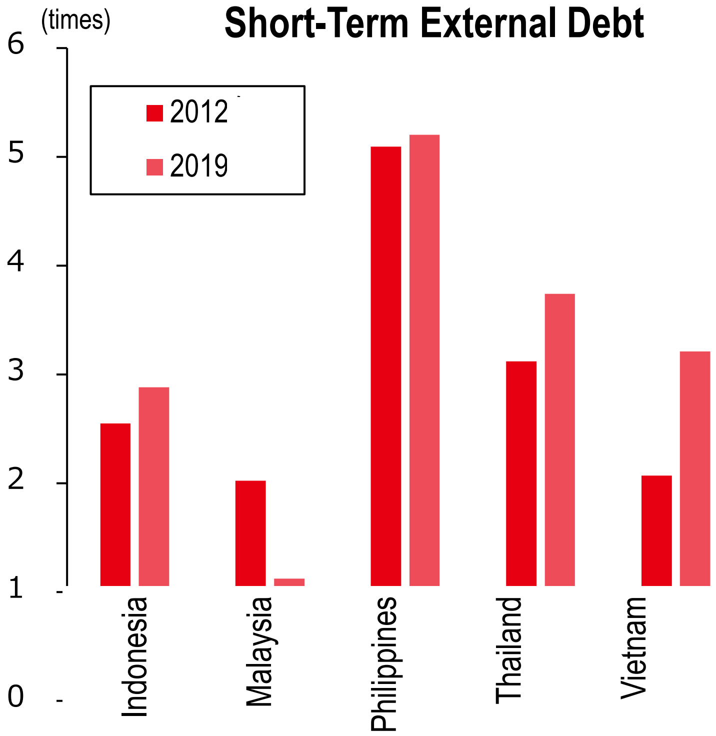
- Budget deficits have widened compared to 2012 (before the taper tantrum) due to measures taken to combat Covid-19, but the ratio of government debt to GDP remains low. Compared to 2012 foreign currency reserves have accumulated in many ASEAN countries, and capital outflow resistance has increased. Although exchange rates are expected to remain stable, it should be noted that currencies are depreciating in non-resource rich countries like the Philippines and Thailand.

▽ Fiscal Balance/Current Account Balance



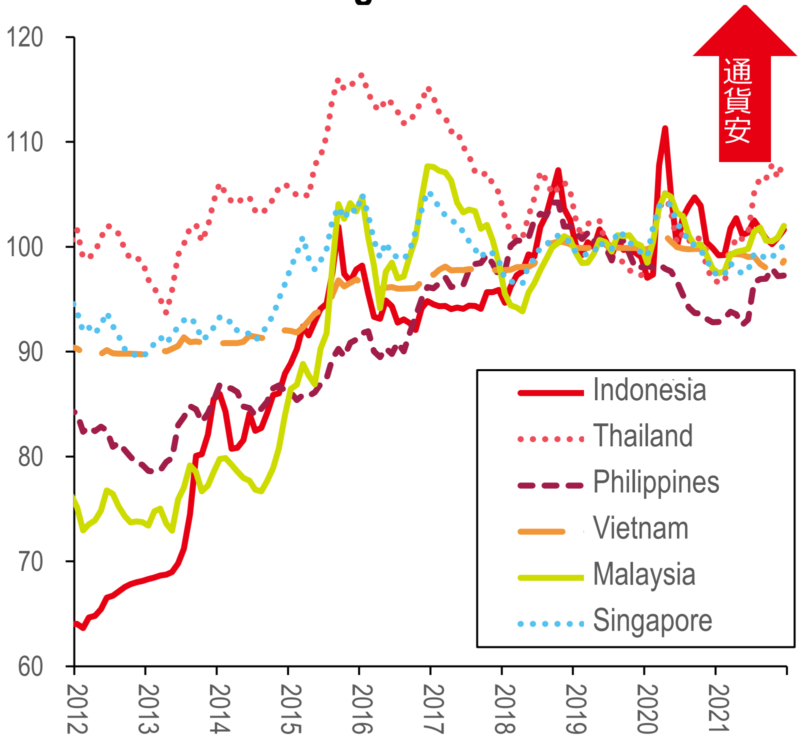
Source: IMF

▽ Foreign Currency Reserves vs. Short-Term External Debt



Source: World Bank

▽ Exchange Rates vs. U.S. Dollar



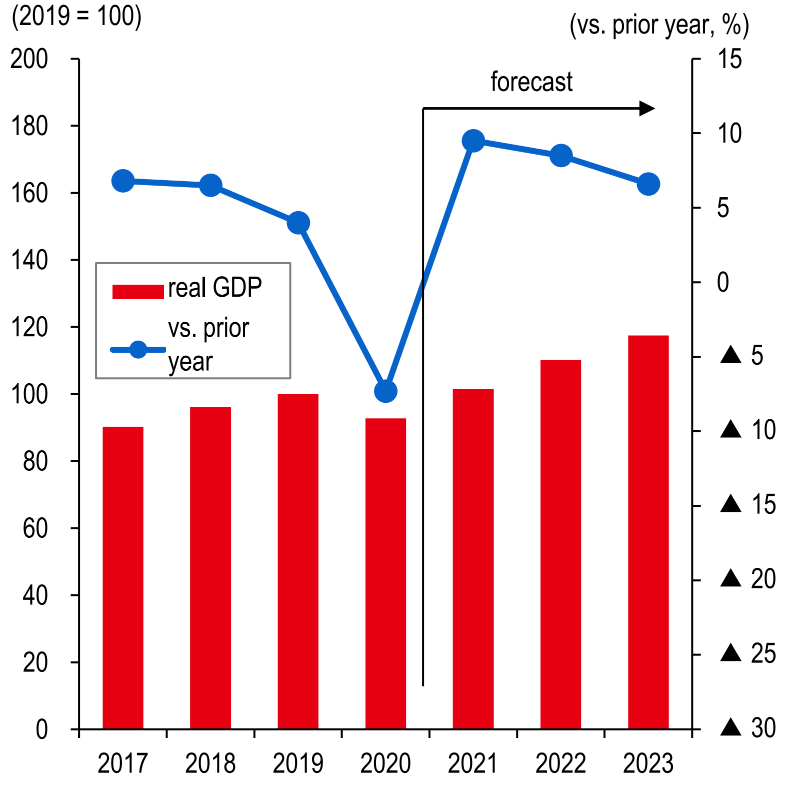
Source: Refinitiv

7-1. Other Regions: India

On an Economic Recovery Path Due to Fiscal and Monetary Policy and a Stabilizing Covid Pandemic

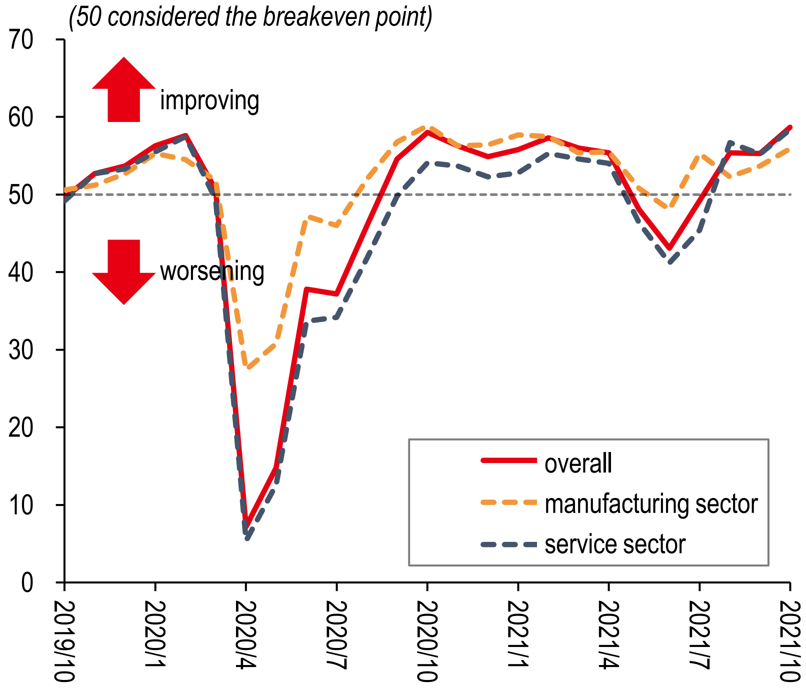
- The growth rate is expected to continue to recover and reach 8.5% in 2022 (2021 forecast 9.5%). Covid has spread again but remains at relatively low levels. Consumer prices have remained within the target inflation since July. Although the pace of recovery in the automobile industry is slow, business sentiment is on a recovery path after hitting bottom in June. The budget deficit is expected to gradually improve, although government debt still remains high.

▽ Real GDP



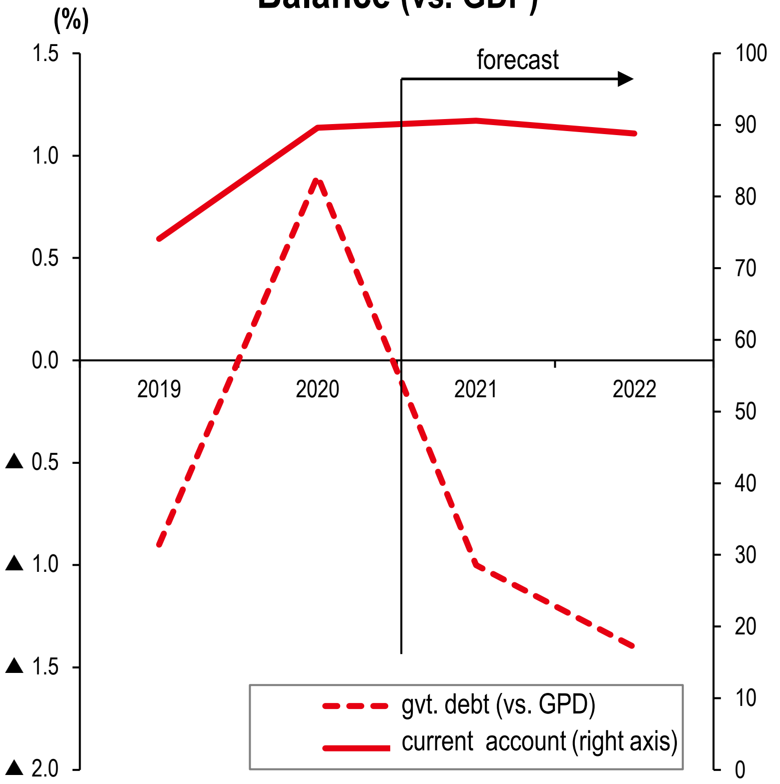
Source: IMF

▽ Business Sentiment (PMI)



Note: Purchasing managers compare conditions monthly to the precious month. Managers were given 3 choices; improving, level or worsening, and responses were indexed.
Sources: IHS Markit, Refinitiv

▽ Government Debt/Current Account Balance (vs. GDP)



Source: IMF

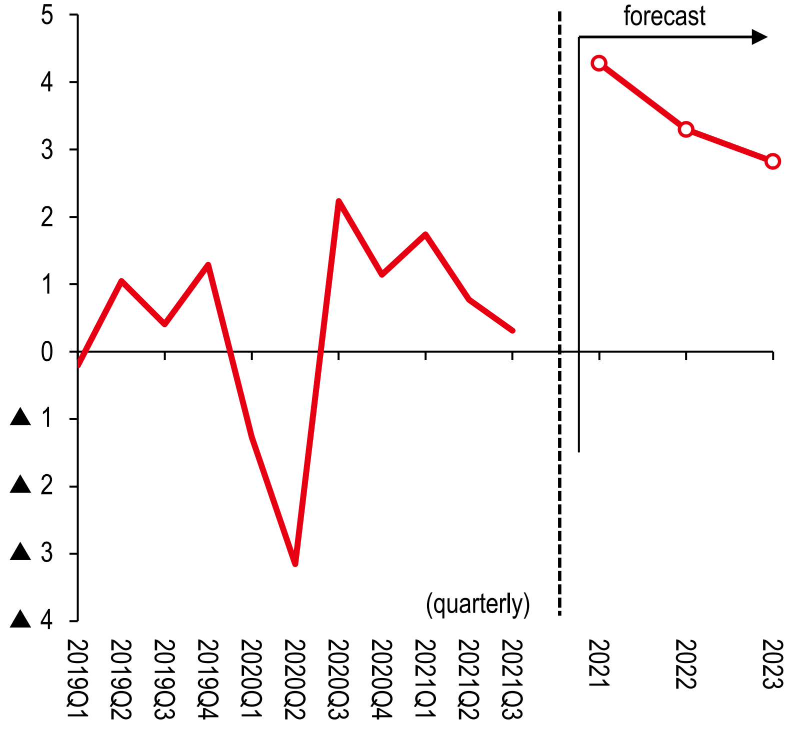
7-2. Other Regions: Korea

Semiconductor Exports are Strong, Though Spreading Covid Infections are a Concern

- Semiconductor exports and capital investment picked up in the latter half of 2020 with levels quickly recovering to those before the Covid pandemic. On the other hand, despite the steady, widespread roll out of vaccinations, Covid infections continued to spread strongly impacting service-related consumption. In the manufacturing sector, while the semiconductor business was robust, the automobile-related sector slump continued due to the general shortage of semiconductors. Note that the presidential election and mayoral elections in Busan and Seoul will be held in March and April of 2022.

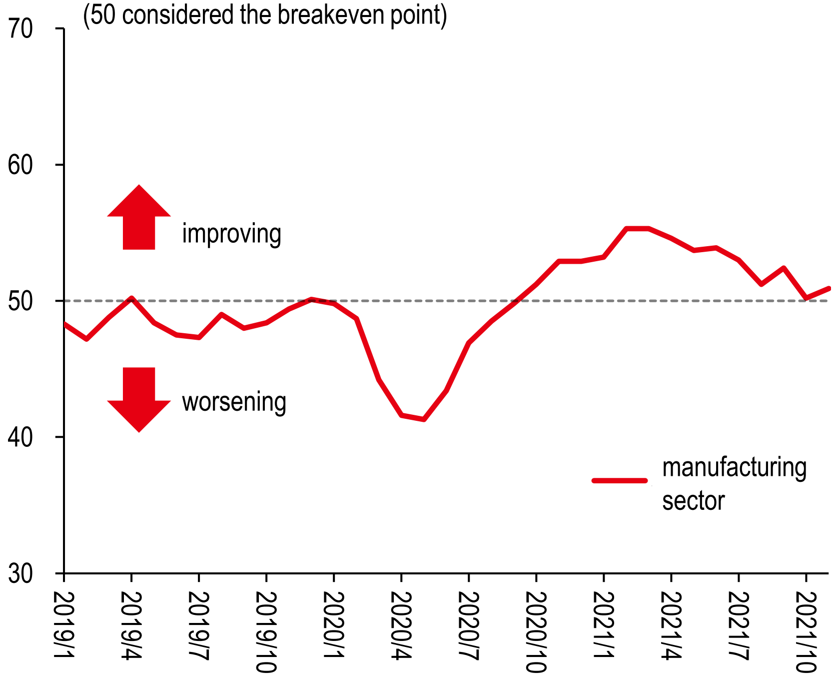
▽ Real GDP

(seasonally adjusted, vs. prior period, %)



Sources: Marubeni Research Institute from Bank of Korea, IMF data

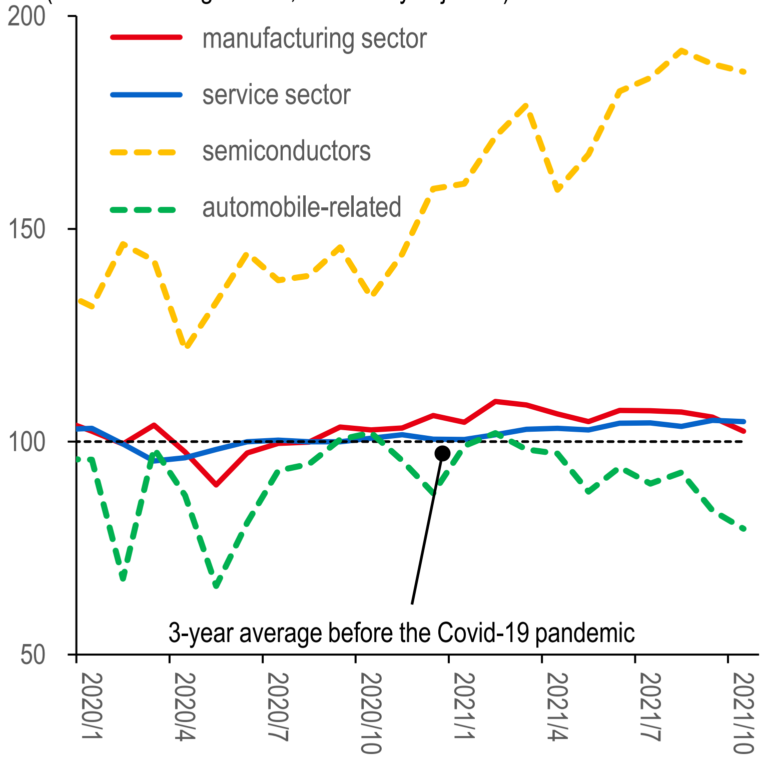
▽ Business Sentiment (PMI)



Note: Purchasing managers compare conditions monthly to the precious month. Managers were given 3 choices; improving, level or worsening, and responses were indexed.
Sources: IHS Markit, Refinitiv

▽ Industrial Production

(2017-19 average = 100, seasonally adjusted)



Source: Korea National Bureau of Statistics

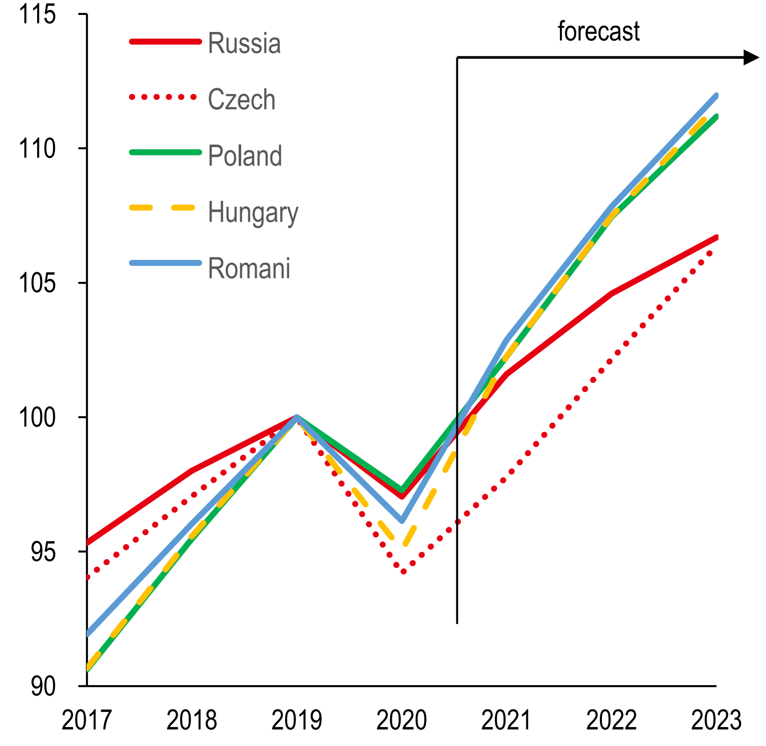
7-3. Other Regions: Central/Eastern Europe/Russia

Economies Have Generally Recovered to Pre-Covid Levels, Taming Inflation is the Current Issue

- Eastern European economies (excluding Czech) and Russia returned to pre-Covid levels in 2021, with Czech expected to do so in 2022.
- There is concern though that high inflation will lead to currency depreciation creating a vicious circle in which inflation further accelerates due to higher import prices
- Every country responded aggressively by hiking policy interest rates, however, except for the ruble, which was bolstered by high crude oil prices, currency movement has been weak.

▽ Real GDP

(2019 average = 100, seasonally adjusted)



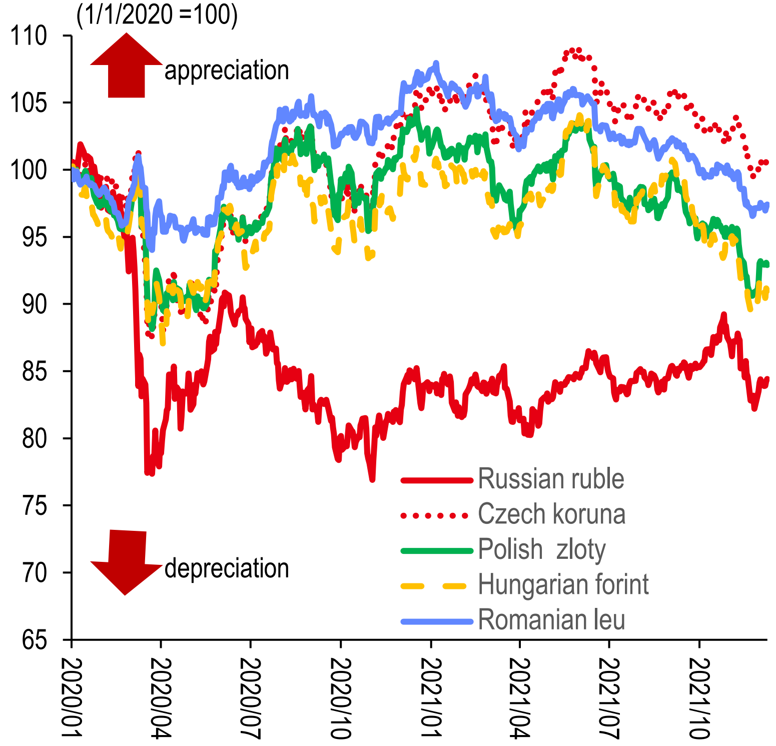
Source: IMF

▽ Currency Instability Risk Indicators

	Public Debt (vs. GDP, %)		Current Account (vs. GDP, %)		Foreign Debt in Foreign Currency (vs. GDP, %)		Inflation Rate (vs. prior year, %)	
	2013	2021	2013	2021	2013	2020	2013	2021
Russia	12.3	17.9↑	1.5	5.7↑	23.7	22.9↓	6.5	5.8↓
Czech	44.4	45.0↑	▲0.5	1.6↑	32.0	37.4↑	1.4	2.7↑
Poland	56.5	55.5↓	▲1.8	2.3↑	47.9	41.3↓	0.7	5.0↑
Hungary	77.4	76.6↓	3.5	0.6↓	113.4	141.5↑	0.4	4.8↑
Romania	39.1	51.1↑	▲0.9	▲5.7↓	63.1	51.9↓	1.6	5.3↑

Note: Green arrows show improvement while red arrows show deterioration. Public debt, current account and inflation rate figures are based on the IMF's outlook (10/2021).
Sources: Marubeni Research Institute from IMF, World Bank data

▽ Selected Country's Currency vs. U.S. Dollar



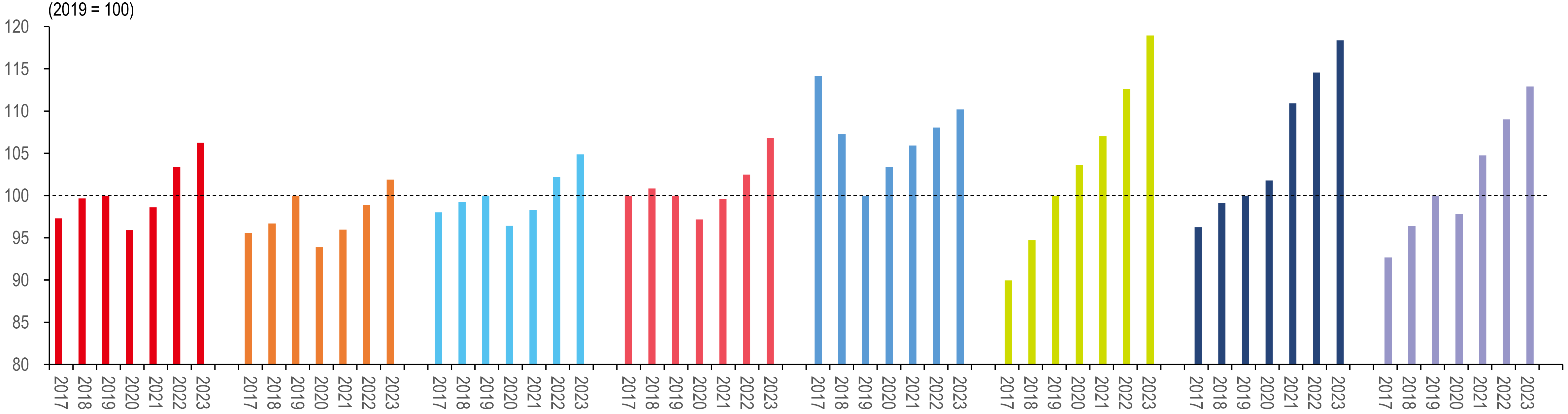
Source: Marubeni Research Institute from Refinitiv data

7-4. Other Regions: Middle East

Recovery From the Covid Pandemic in Main Middle East Countries is Expected to Come After 2022

- The initial plunge in crude oil prices brought on by the widespread onset of the Covid pandemic weighed heavily on the oil producing countries. However, their economies have picked-up with sharply rising oil prices brought about by the recovery in the world economy. However, as oil prices gradually settle in 2022, these countries economic dependence on oil again becomes an issue. The rate of growth varies from country to country.
- Domestically in these countries the gap between the face-to-face based service industry and other industries is widening.

▽ **Real GDP** (levels)



	Saudi Arabia	UAE	Qatar	Oman	Iran	Egypt	Turkey	Israel
2022 growth rate forecast, %	+4.8	+3.0	+4.0	+2.9	+2.0	+5.2	+3.3	+4.1

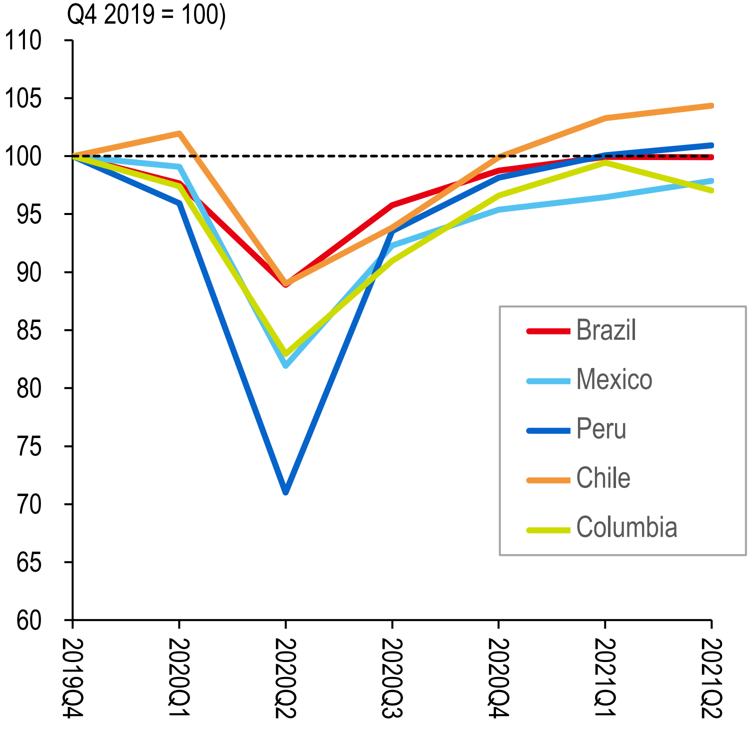
Source: Marubeni Research Institute from IMF data

7-5. Other Regions: Central/South America

Recovery in Domestic Demand and Rising Commodity Prices Boost Economic Growth, But Risks Remain

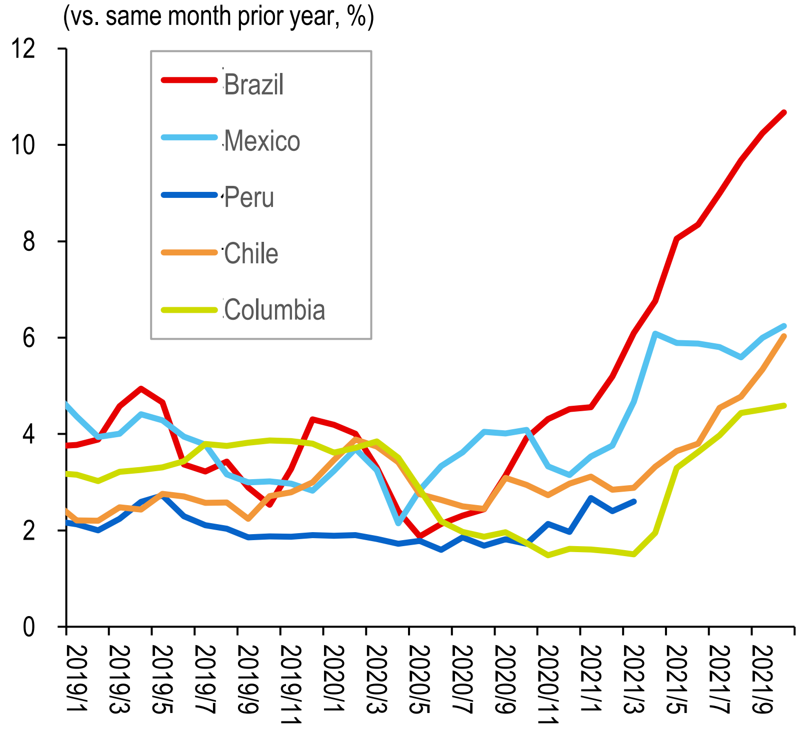
- The growth rate forecast for 2022 is 2.5%, but the pace of growth will slow even as it recovers. In 2021, in addition to a recovery in domestic demand, a favorable external environment, led by the U.S., pushed primary product prices up which supported growth. However, rising inflation, shrinking fiscal and monetary support policies and the re-expansion of Covid infections are obstacles. As for downside risks in 2022, attention should be paid to normalization of monetary policies at home and abroad, sovereign debt credit risks and political instability stemming from elections.

▽ Real GDP



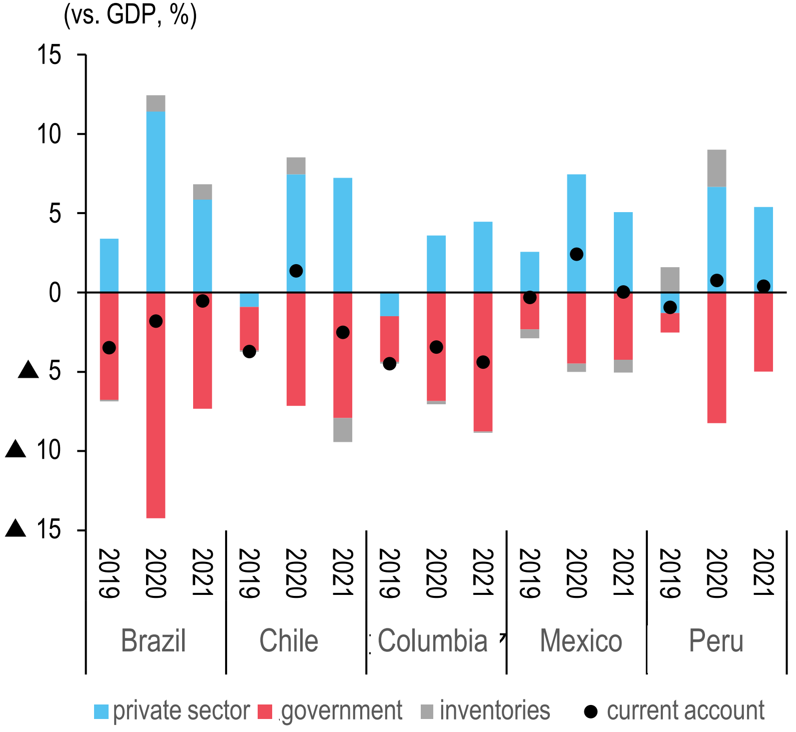
Source: IMF

▽ Consumer Price Index



Note: The latest data from Peru is missing (4/2021 – 10/2021.
Source: IMF

▽ Savings/Investment Balance



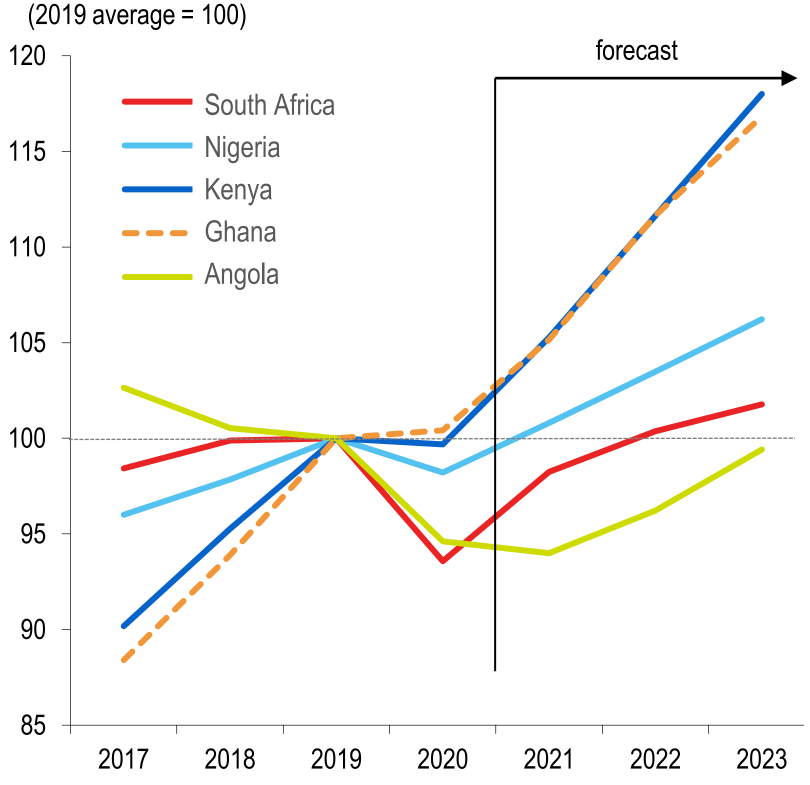
Source: IMF

7-6. Other Regions: Sub-Saharan Africa

Resource Exporting Countries' Growth Accelerated in the Short-Term as Resource Prices Rose, Non-Resource Rich Countries Return to Past Solid Growth Pace

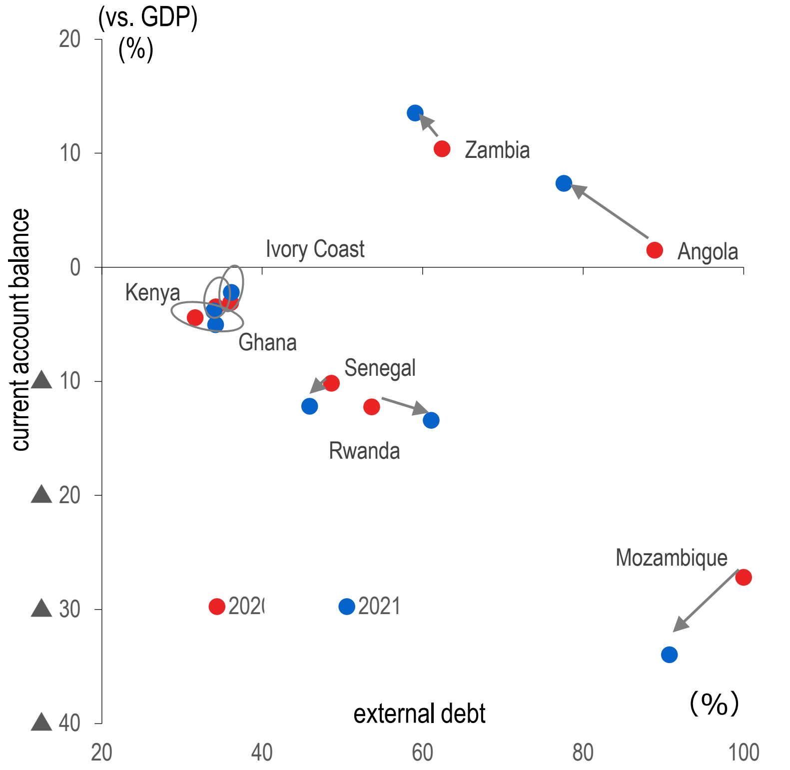
- High resource prices are supporting short-term growth in such resource exporting countries as South Africa and Nigeria, while such non-resource rich countries as Kenya return to their past solid growth pace. Worrisome debt problems have been avoided for the time being due to increased revenues from rising resource prices and international debt support. On the other hand, as U.S. monetary tightening approaches there are worries over the risk of capital outflows in countries with vulnerable fundamentals.

▽ Real GDP (selected countries)



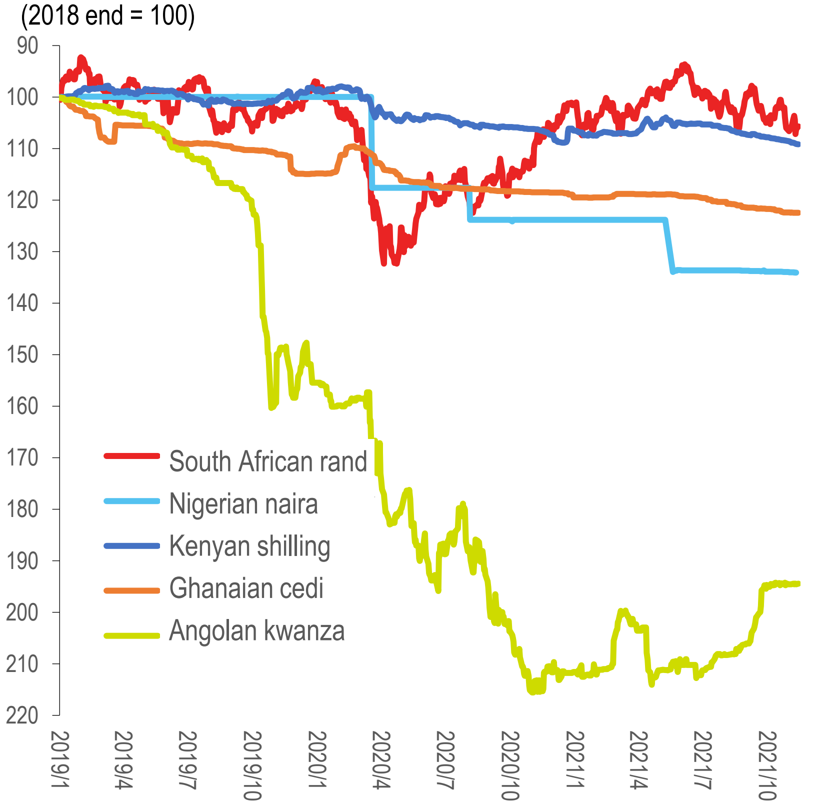
Source: IMF

▽ External Debt/Current Account Balance



Source: IMF

▽ Selected Country's Currency vs. U.S. Dollar



Source: Refinitiv

7-7. Other Regions: Business Sentiment in Emerging Countries

Although It Worsened With the Reemergence of Widespread Covid Infections, It is Recovering Again

➢ In emerging countries, the re-expansion of Covid infections coupled with a delay in vaccination proliferation weighed heavily on economic recovery, but the trend is now toward economic recovery.

▽ Business Sentiment Heatmap

			2021										
			1	2	3	4	5	6	7	8	9	10	11
	Korea	manufacturing	53.2	55.3	55.3	54.6	53.7	53.9	53.0	51.2	52.4	50.2	50.9
ASEAN	Vietnam	manufacturing	51.3	51.6	53.6	54.7	53.1	44.1	45.1	40.2	40.2	52.1	52.2
ASEAN	Philippines	manufacturing	52.5	52.5	52.2	49.0	49.9	50.8	50.4	46.4	50.9	51.0	51.7
ASEAN	Thailand	manufacturing	49.0	47.2	48.8	50.7	47.8	49.5	48.7	48.3	48.9	50.9	50.6
ASEAN	Malaysia	manufacturing	48.9	47.7	49.9	53.9	51.3	39.9	40.1	43.4	48.1	52.2	52.3
ASEAN	Singapore	manufacturing	50.7	50.5	50.8	50.9	50.7	50.8	51.0	50.9	50.8	50.8	50.6
	Australia	overall	5.9	53.7	55.5	58.9	58.0	56.7	45.2	43.3	46.5	52.1	55.7
	India	overall	55.8	57.3	56.0	55.4	48.1	43.1	49.2	55.4	55.3	58.7	59.2
Middle East	Saudi Arabia	overall	57.1	53.9	53.3	55.2	56.4	56.4	55.8	54.1	58.6	57.7	56.9
Middle East	UAE	overall	51.2	50.6	52.6	52.7	52.3	52.2	54.0	53.8	53.3	55.7	55.9
Middle East	Qatar	overall	53.9	53.2	54.9	52.1	51.5	54.6	55.9	58.2	60.6	62.2	63.1
Middle East	Turkey	manufacuring	54.4	51.7	52.6	50.4	49.3	51.3	54.0	54.1	52.5	51.2	52.0
Middle East	Egypt	overall	48.7	49.3	48.0	47.7	48.6	49.9	49.1	49.8	48.9	48.7	48.7
	South Africa	overall	50.8	50.2	50.3	53.7	53.2	51.0	46.1	49.9	50.7	48.6	51.7
Central/ Eastern Europe	Czech	manufacturing	57.0	56.5	58.0	58.9	61.8	62.7	62.0	61.0	58.0	55.1	57.1
Central/ Eastern Europe	Poland	manufactuing	51.9	53.4	54.3	53.7	57.2	59.4	57.6	56.0	53.4	53.8	54.4
Central/ Eastern Europe	Hungary	manufactuing	54.4	49.5	49.3	51.3	53.3	54.9	55.5	55.5	51.9	52.9	52.2
	Russia	ovreall	52.3	52.6	54.6	54.0	56.2	55.0	51.7	48.2	50.5	49.5	48.4
Central/ South America	Brazil	overall	48.9	49.6	45.1	44.5	49.2	54.6	55.2	54.6	54.7	53.4	52.0
Central/ South America	Mexico	manufacturing	43.0	44.2	45.6	48.4	47.6	48.8	49.6	47.1	48.6	49.3	49.4

Sources: IHS Markit, Refinitiv

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