

FY2020 - FY2022 Economic Outlook

Acceleration of investment for digitalization and the environment (“green investments”) with a view to the world after Covid-19

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MIZUHO


The global economy: 2021 will mark a transition from the Covid-19 pandemic. Investment for digitalization and the environment (“green investments”) will accelerate

- The year 2021 will mark a transition from the Covid-10 pandemic. Despite the gradual rollout of vaccines, we expect that full vaccination will only be completed in 2022, due to issues regarding the production and transportation of vaccines and hesitancy toward uptake of vaccines. In view of the volume of vaccines secured and transportation capacities, the odds are high that the vaccine rollout will progress among the developed countries ahead of the emerging countries, thus leading to disparities in the pace of economic recovery.
- Lifestyle shifts such as remote working and e-commerce should continue as irreversible trends, leading to the acceleration of digitalization. Climate-change policies will progress as the developed countries unite in their stance to strive for a carbon-neutral society. US-China tensions will shift from bilateral to inter-regime tensions along with the US political transition to the new Biden administration. Disparities in responses to structural changes will lead to widening gaps in growth among countries, industrial sectors, and businesses.
- Toward the end of 2020, consumption of services requiring inter-personal contact continued to slump in contrast to the recovery of goods consumption. Looking forward, the recovery of personal consumption will shift to services consumption due to the gradual lifting of mobility restrictions such as social distancing requirements along with the rollout of vaccines. We expect a gradual recovery of overall consumption.
- Turning to capital investment, investment for digitalization and investment for the environment (“green investments”) is expected to grow in addition to demand for adaptation to lifestyles under the Covid-19 pandemic. We look forward to a strong recovery of capital investment from FY2021 through FY2022.

Reference: outlook on the rollout of vaccines

- Despite the start of vaccinations, we expect that the rollout will only be completed sometime after the turn of the year in 2022 because of factors such as supply constraints.
 - Currently, the volume of output by major vaccine developers has reached almost 80% of scheduled output in 2021. We expect that full vaccination will only take place sometime in or after 2022 due to issues regarding the transportation of vaccines and hesitancy toward uptake of vaccines.
- In view of the volume of vaccines secured and transportation capacities, the odds are high that the vaccine rollout will progress among the developed countries slightly ahead of the emerging countries.
 - There are disparities in the volume of vaccines secured. In contrast to high-income countries purchasing more than enough vaccines for reserves, emerging countries are facing challenges in securing enough vaccines.
 - The construction of cold chains is difficult among emerging countries. Storage facilities and quality control will be necessary even among developed countries which have relatively advanced infrastructures.

Outlook for commercialization of vaccines by major vaccine developers

Developers of vaccines	Phase	Timing of commercialization	Forecast on supply at the end of 2021	World population coverage ratio
Pfizer (US) BioNTech (Germany)	Vaccinations started		For 1 billion people	Approximately 13%
Moderna (US)	Vaccinations started		For 500 million people ※upper limit	Approximately 7%
Oxford Uni- AstraZeneca (UK)	Vaccinations started		For 1.5 billion people	Approximately 20%
Sinopharm (China)	Vaccinations started		For 500 million people	Approximately 7%
Sinovac Biotech (China)	Vaccinations started		For 500 million people	Approximately 7%
J&J (US)	Phase 3	Jan-Mar quarter of 2021	For 1 billion people	Approximately 13%
Novavax (US)	Phase 3	Jan-Mar quarter of 2021	For 1 billion people	Approximately 13%
Total			For 6 billion people	Approximately 77%

Source: Made by MHRI based upon press release/news by relevant sources

Outlook on vaccine rollout

Measures of evaluation	Evaluation
Production volume	The production volume of major vaccine developers thought to possess global supply capacity is approximately 77% of the world population as of 2021 .
Secured amount	There are concerns regarding the securing of vaccines for low-income countries (emerging countries) given the concentration of supply in high-income countries (developed countries) through individual contracts with vaccine developers.
Transportation system	Even though logistics systems are relatively developed among the developed countries and China, challenges persist regarding cold chains both among developed and emerging countries .
Willingness to be vaccinated	Hesitancy toward the uptake of vaccines linger widely reflecting concerns regarding side effects.
Scenario	Despite the start of vaccinations, it is unlikely that the rollout will be completed during 2021. The vaccine rollout will only be completed sometime after the turn of the year in 2022. Given challenges in secured vaccine volume and transportation capacities, the odds are high that the vaccine rollout will progress among the developed countries slightly ahead of the emerging countries.

Source: Made by MHRI

Outlook on the global economy: 2021 (+4.9 y-o-y), 2022 (+3.8% y-o-y)

- Mobility restrictions will gradually be lifted along with the rollout of vaccines. Personal consumption should start to recover mainly in services accompanying inter-personal contact.
 - Investment for digitalization and investment for the environment (“green investments”) is expected to grow, leading to a strong recovery of capital investment.

Outlook on the global economy

	(Y-o-y %change)					(Y-o-y % change)		(%Pt)	
	2018 CY	2019	2020	2021 (Outlook)	2022	2020 (Forecast as of December)	2021	2020 (Comparison with previous forecast)	2021
Global real GDP growth	3.5	2.8	- 3.8	4.9	3.8	-4.0	4.8	0.2	0.1
Japan, US, Europe	2.2	1.6	- 5.3	4.0	3.8	-5.6	4.0	0.3	-
US	3.0	2.2	- 3.5	4.5	3.3	-3.7	3.9	0.2	0.6
Eurozone	1.9	1.3	- 6.8	4.3	4.7	-7.3	4.5	0.5	-0.2
UK	1.3	1.4	- 9.9	3.5	4.2	-10.9	5.6	1.0	-2.1
Japan	0.6	0.3	- 4.8	1.4	2.3	-5.2	1.9	0.4	-0.5
Asia	6.1	5.2	- 1.2	7.3	4.8	-1.6	6.8	0.4	0.5
China	6.7	6.1	2.3	8.1	5.2	1.9	7.1	0.4	1.0
NIEs	2.9	1.8	- 0.9	3.3	2.3	-1.2	3.0	0.3	0.3
ASEAN5	5.3	4.8	- 3.5	5.2	4.6	-3.9	5.3	0.4	-0.1
India	6.8	4.9	- 8.3	8.5	4.9	-8.8	8.8	0.5	-0.3
Australia	2.8	1.8	- 3.1	2.8	2.3	-3.1	2.8	-	-
Brazil	1.8	1.4	- 4.3	3.0	2.6	-4.5	3.0	0.2	-
Mexico	2.2	-0.1	- 8.3	3.5	2.6	-9.0	3.0	0.7	0.5
Russia	2.8	2.0	- 3.1	2.7	3.7	-3.9	2.7	0.8	-
Japan (FY)	0.3	-0.3	- 5.0	3.0	2.2	-5.4	3.4	0.4	-0.4

Note: The total of the forecast area is calculated upon the GDP share (PPP) by the IMF.

Source: Made by MHRI based upon releases by the International Monetary Fund (IMF) and statistics of relevant countries and regions

Japan: the declaration of a state of emergency is serving as a drag upon the economy; we expect a sluggish recovery going forward

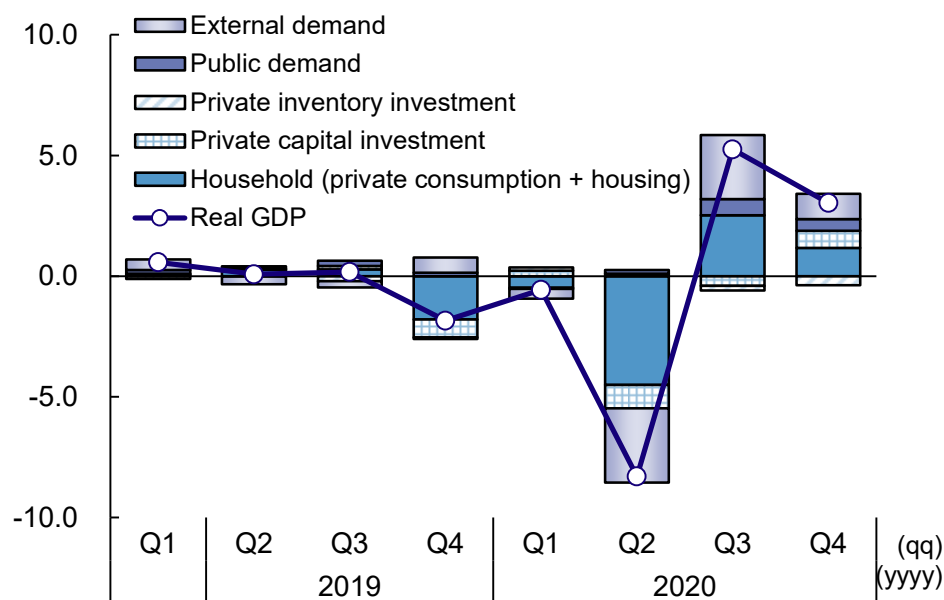
- Japan's economic growth rose into positive territory, growing a dramatic +12.7% q-o-q p.a. in the Oct-Dec quarter of 2020 (*First Preliminary Quarterly Estimates of GDP, "1st QE"*). Exports remained on an uptrend, driven by capital goods and information-related goods. Even though personal consumption increased up to November, reflecting the GoTo program, consumption weakened from December onward due to the spread of Covid-19 caseloads. A dip into negative growth appears inevitable in the Jan-Mar quarter, given the re-declaration of a state of emergency. For FY2020, we forecast a growth rate of -5.0%.
- FY2021 growth forecast: +3.0%. While public investment related to national land resilience will serve as a positive factor, the pace of recovery will be sluggish due to: (1) the continuation of partial restrictions on consumption activities such as dining out, travel, and entertainment; (2) the drag upon household and corporate activities stemming from uncertainties regarding the spread of Covid-19 caseloads; and (3) the decline in household disposable income due to a counter reaction stemming from the benefit payments amid the weak rebound in employee compensation.
- FY2022 growth forecast: +2.2%. Along with the rollout of vaccines, the recovery of personal consumption should accelerate mainly in services accompanying inter-personal contact. In addition to the firm growth of capital investment and exports, government consumption will also increase mainly in healthcare benefits due to the baby-boom generation reaching the "late elderly" age bracket (75 or older) of the population.
- The output gap will remain in negative territory, serving as downward pressure upon inflation. The BOJ core CPI (y-o-y) excluding institutional factors (consumption tax hike, free education, GoTo Travel program), will remain slightly negative.

The Japanese economy: the 1st QE for the Oct-Dec quarter of 2020 revealed the positive growth of personal consumption and exports

- According to the *First Preliminary Quarterly Estimates of GDP (1st QE)* for the Oct-Dec quarter of 2020, Japan's real GDP grew +3.0% q-o-q (+12.7% p.a.) Personal consumption and exports grew strongly, serving to lift overall growth. Even though growth slowed down from the previous quarter, the economy grew strongly for the second quarter in row.
 - As for exports, in contrast to a pause in motor vehicles, capital goods and information-related goods served as the driver, keeping exports on an uptrend. Even though personal consumption increased up to November, reflecting the GoTo program, consumption weakened from December onward due to the spread of Covid-19 caseloads.
 - In the Jan-Mar quarter, we forecast a dip into negative growth due to the slump of personal consumption mainly in services, given the re-declaration of a state of emergency.

2020 Oct-Dec quarter GDP (1st QE)

(Q-o-q % change)



	2019	2020			
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Real GDP	-1.8	-0.6	-8.3	5.3	3.0
(Q-o-q change, p.a.)	-7.1	-2.2	-29.3	22.7	12.7
(Y-o-y change)	-1.1	-2.0	-10.3	-5.8	-1.2
Domestic demand	-2.4	-0.2	-5.2	2.5	2.0
	(-2.4)	(-0.2)	(-5.2)	(2.6)	(2.0)
Private demand	-3.4	-0.2	-7.2	2.6	2.0
	(-2.6)	(-0.1)	(-5.4)	(1.9)	(1.5)
Personal consumption	-3.1	-0.6	-8.4	5.1	2.2
Housing investment	-1.9	-3.7	0.5	-5.7	0.1
Capital investment	-4.5	1.4	-5.9	-2.4	4.5
Inventory investment	(-0.1)	(0.1)	(0.1)	(-0.2)	(-0.4)
Public demand	0.6	-0.2	0.6	2.4	1.8
	(0.1)	(-0.0)	(0.2)	(0.7)	(0.5)
Government consumption	0.4	-0.3	0.2	2.8	2.0
Public investment	0.6	0.1	2.2	0.9	1.3
External demand	(0.6)	(-0.4)	(-3.1)	(2.6)	(1.0)
Exports	0.2	-5.3	-17.2	7.4	11.1
Imports	-3.2	-3.1	1.3	-8.2	4.1
Nominal GDP	-1.2	-0.5	-8.0	5.5	2.5
GDP deflator (y-o-y change)	1.5	0.9	1.4	1.2	0.2

Notes: Figures in the right hand chart are changes over the previous quarter (in real terms) unless otherwise noted. The figures in parentheses represent the contributions to growth.

Source: Made by MHRI based upon Cabinet Office, *Preliminary Quarterly Estimates of GDP*

Japan: events following the declaration of a state of emergency

- The government issued a declaration of a state of emergency in 11 prefectures and extended it to March 7 in 10 prefectures except for Tochigi.
 - Even though the number of new Covid-19 caseloads took a downturn in the second half of January, the hospital bed utilization rate remains high. According to our assumptions, the rate of utilization of beds for critically ill patients will only emerge out of Stage IV in mid-March in Tokyo and the three surrounding prefectures (Note). The fall of consumption of services is inevitable.
 - The current declaration focuses on requests for shorter hours for restaurants. The overall impact on the Japanese economy is limited compared with last spring, given the small drop in consumption of goods due to the continuing operation of commercial facilities, and the limited impact on exports because production activities have not stagnated.

Date	Government responses
January 8th	<p>Issuance of a declaration of a state of emergency in Tokyo and the three surrounding prefectures</p> <ul style="list-style-type: none"> • Measures focused on expanding requests for shorter hours for restaurants (advance closing time: 22:00 ⇒ 2:00)
January 14th	Seven prefectures (Tochigi, Gifu, Aichi, Kyoto, Osaka, Hyogo, Fukuoka) were added to the scope of the declaration of a state of emergency
Mid-January	New Covid-19 caseloads took a downturn from the turn of the New Year due to the decline of mobility. On the other hand, the number of hospitalized and critically ill patients continued to increase, and the rate of utilization of beds for critically ill patients exceeded 100% in Tokyo
February 8th	The declaration of a state of emergency was extended for one month until March 7 in 10 prefectures, including Saitama, Chiba, Tokyo, Kanagawa, Gifu, Aichi, Kyoto, Osaka, Hyogo and Fukuoka. The declaration was lifted only in Tochigi.
February 13th	<p>The Act on Special Measures Concerning Covid-19 and Other Diseases (Special Measures Law) was enacted</p> <ul style="list-style-type: none"> • Orders and penalties (non-penal fine) have become applicable to businesses that do not comply with changes in business hours
Late February (assumption)	The rate of utilization of beds for critically ill patients in Tokyo and the three surrounding prefectures falls below 100%
Early March (assumption)	New Covid-19 caseloads in Tokyo improves to Stage II (less than 15 per 100,000 persons)
Early March (assumption)	Re-extension of the declaration of a stage of emergency in view of the high rate of utilization of beds for critically ill patients
Mid-March (assumption)	<p>The rate of utilization of beds for critically ill patients in Tokyo and the three surrounding prefectures improves to Stage II (50% or lower)</p> <p>The declaration of a state of emergency is lifted</p>

Note: "Three surrounding prefectures" refer to Kanagawa, Chiba and Saitama. Source: Made by MHRI

Japan: forecasts on growth in FY2021 (+3.0%) and FY2022 (+2.2%)

- Forecast on growth in FY2021: positive growth of +3.0% y-o-y. The rebound is weak, relative to the slump in FY2020.
- Forecast on growth in FY2022: +2.2% y-o-y. We expect that the recovery of consumption mainly of services will accelerate along with the rollout of vaccines

Outlook on the Japanese economy

		2019	2020	2021	2022	2020				2021				2022				2023
		FY	(Outlook)			Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
GDP (real)	Q-o-q % ch	-0.3	-5.0	3.0	2.2	-0.6	-8.3	5.3	3.0	-2.4	1.1	1.1	0.3	0.4	0.4	0.9	0.8	0.4
	Q-o-q % ch p.a.	—	—	—	—	-2.2	-29.3	22.7	12.7	-9.3	4.4	4.3	1.1	1.6	1.5	3.6	3.2	1.6
Domestic demand	Q-o-q % ch	-0.1	-4.3	2.1	2.4	-0.2	-5.2	2.5	2.0	-2.6	1.2	1.2	0.3	0.5	0.4	0.9	0.8	0.4
Private sector demand	Q-o-q % ch	-0.8	-6.8	2.4	2.9	-0.2	-7.2	2.6	2.0	-2.9	1.5	1.4	0.3	0.5	0.6	1.0	0.9	0.5
Personal consumption	Q-o-q % ch	-1.0	-6.6	2.5	3.4	-0.6	-8.4	5.1	2.2	-3.9	1.8	1.6	0.4	0.3	1.1	1.1	1.1	0.4
Housing investment	Q-o-q % ch	2.5	-7.9	-3.3	4.1	-3.7	0.5	-5.7	0.1	-2.2	-2.0	1.3	0.9	1.2	1.6	0.2	1.0	1.0
Capital investment	Q-o-q % ch	-0.6	-6.4	3.9	3.4	1.4	-5.9	-2.4	4.5	0.1	0.4	1.1	1.2	1.2	0.8	0.6	0.6	0.5
Inventory investment	Q-o-q contribution, % pt	(-0.1)	(-0.2)	(-0.1)	(-0.4)	(0.1)	(0.1)	(-0.2)	(-0.4)	(0.1)	(0.1)	(-0.0)	(-0.2)	(0.0)	(-0.3)	(0.1)	(0.0)	(-0.0)
Public sector demand	Q-o-q % ch	2.0	3.3	1.3	0.9	-0.2	0.6	2.4	1.8	-1.7	0.6	0.4	0.4	0.2	-0.1	0.4	0.3	0.2
Government consumption	Q-o-q % ch	2.0	3.1	0.9	1.0	-0.3	0.2	2.8	2.0	-1.9	0.5	0.2	0.2	0.2	0.3	0.3	0.2	0.2
Public investment	Q-o-q % ch	1.5	4.2	2.7	0.7	0.1	2.2	0.9	1.3	-0.8	1.0	1.0	1.0	0.4	-1.5	1.0	0.9	0.3
External demand	Q-o-q contribution, % pt	(-0.2)	(-0.8)	(0.9)	(-0.2)	(-0.4)	(-3.1)	(2.6)	(1.0)	(0.1)	(-0.2)	(-0.1)	(-0.1)	(-0.1)	(-0.0)	(-0.0)	(-0.0)	(-0.0)
Exports	Q-o-q % ch	-2.6	-10.7	11.0	3.3	-5.3	-17.2	7.4	11.1	2.4	0.6	1.0	1.0	1.0	0.7	0.8	0.8	0.4
Imports	Q-o-q % ch	-1.3	-6.2	5.1	4.2	-3.1	1.3	-8.2	4.1	1.7	1.5	1.6	1.5	1.4	0.8	0.8	0.8	0.5
GDP (nominal)	Q-o-q % ch	0.5	-4.5	2.2	1.7	-0.5	-8.0	5.5	2.5	-3.0	1.0	1.3	0.2	-0.4	0.5	0.7	0.7	0.6
GDP deflator	Y-o-y % ch	0.8	0.6	-0.8	-0.6	1.0	1.4	1.2	0.3	-0.7	-1.0	-0.9	-0.5	-0.7	-0.5	-0.9	-1.0	0.1
Domestic demand deflator	Y-o-y % ch	0.6	-0.1	0.7	0.2	0.8	0.0	0.1	-0.7	0.1	1.0	0.7	0.7	0.2	0.3	0.3	0.2	0.1

Note: Figures in the shaded areas are forecasts.

Source: Made by MHRI based upon Cabinet Office, *Quarterly Estimates of GDP*

The rebound of employment and wages will be limited. The BOJ-style core CPI (y-o-y) will remain slightly negative

Outlook on the Japanese economy (major economic indicators)

		2019	2020	2021	2022	2020				2021				2022				2023
		FY	(Outlook)			Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar
Industrial production	Q-o-q % ch	-3.8	-8.3	14.8	5.1	0.4	-16.9	8.7	6.2	7.3	1.3	1.8	1.7	1.6	1.0	1.3	0.7	0.5
Ordinary profits	Y-o-y % ch	-13.1	-28.2	23.0	11.5	-28.4	-46.6	-28.4	-17.5	-13.9	41.4	23.3	14.6	15.6	15.3	13.5	9.8	7.2
Nominal compensation of employees	Y-o-y % ch	2.0	-2.4	0.8	1.1	1.8	-2.3	-2.3	-2.7	-2.0	0.3	0.9	1.1	0.8	1.4	1.1	1.2	0.7
Unemployment rate	%	2.4	2.9	3.1	2.8	2.4	2.8	3.0	3.0	3.1	3.3	3.2	3.0	2.9	2.9	2.9	2.8	2.7
New housing starts	P.a., 10,000 units	88.4	79.7	79.2	81.9	85.0	80.9	81.3	80.5	76.9	78.5	78.7	79.8	81.1	81.2	81.8	83.0	83.1
Current account balance	P.a., JPY tril	20.1	17.3	17.7	15.4	19.8	7.9	16.1	24.2	21.5	20.5	19.8	17.6	14.9	14.6	16.1	16.4	15.4
Domestic corporate goods prices	Y-o-y % ch	0.1	-1.6	0.1	-0.4	0.5	-2.2	-0.8	-2.2	-1.1	1.2	-0.7	0.2	-0.2	-0.1	-0.4	-0.7	-0.6
Domestic corporate goods prices (ex consumption tax)	Y-o-y % ch	-0.7	-2.3	-	-	-1.0	-3.8	-2.3	-0.8	-	-	-	-	-	-	-	-	-
Consumer prices, ex fresh food	Y-o-y % ch	0.7	-0.5	0.3	-0.1	0.6	-0.1	-0.2	-0.1	-0.5	0.3	0.3	0.6	-0.0	-0.0	-0.1	-0.1	-0.0
Consumer prices, ex fresh food (ex institutional factors)	Y-o-y % ch	0.5	-0.7	0.2	-0.1	0.2	-0.5	-0.3	-0.4	-0.4	0.3	0.1	0.2	-0.0	-0.0	-0.1	-0.1	-0.0
Consumer prices, ex fresh food and energy	Y-o-y % ch	0.6	-0.1	0.1	-0.2	0.7	0.3	0.1	0.3	-0.3	-0.1	0.1	0.2	-0.1	-0.1	-0.1	-0.1	-0.1
Consumer prices, ex fresh food and energy (ex institutional factors)	Y-o-y % ch	0.5	-0.2	-0.1	-0.1	0.5	0.2	0.1	0.2	-0.2	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
Interest rate on Policy-Rate Balances	%	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Yield on newly-issued 10-yr JGBs	%	-0.10	0.00	0.00	0.05	-0.04	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05
Nikkei average	JPY	21,915	24,200	28,400	29,200	21,932	20,746	22,913	25,203	27,800	28,100	28,300	28,500	28,700	28,900	29,200	29,200	29,300
Exchange rate	USD/JPY	109	106	107	108	109	108	106	104	105	105	106	107	108	108	108	108	108
Crude oil price (WTI nearest term contract)	USD/bbl	55	40	50	53	46	28	41	43	47	47	48	52	53	53	53	52	53

- Note: 1. Figures in the shaded areas are forecasts. The readings above may differ from public releases because the rates of change are calculated on the basis of real-terms data.
2. Ordinary profits are based upon the *Financial Statements Statistics of Corporations by Industry* (all industries basis) (ex finance & insurance).
3. "Institutional factors" in consumer prices refer to the impacts of the consumption tax, free education, and the GoTo Travel program.
4. Of the finance-related indices, the yield on newly-issued 10-yr JGBs refers to the average of the end-of-month rates during the relevant term, and all others are averages during the relevant terms

Source: Made by MHRI based upon relevant statistics

Reference: Key political events

	2021		2022	
US	Jan	Presidential inauguration	Feb	End of term of office of Federal Reserve Chair Jerome H. Powell
	Sep	20 years since the September 11 attacks	Nov	Mid-term elections
Europe	Sep	Russia: Legislative election	Apr	France: Presidential election
	Sep	Germany: Legislative election	Jun	France: Legislative election
	Autumn	Germany: Chancellor Merkel scheduled to step down		
Japan	Mar	10 years since the Great East Japan Earthquake	Jul	End of term of office of Upper House members
	Jul-Sep	Tokyo Olympic and Paralympic Games		
	Sep	End of term of office of the LDP president		
	Oct	End of term of office of Lower House members		
Asia	Jan	Vietnam: National Congress of the Communist Party	By year-end	Hong Kong: Chief Executive election
	Mar	National People's Congress of the People's Republic of China	Mar	South Korea: Presidential election
	Jul	100th anniversary of the establishment of the Communist Party of China	Around May	The Philippines: Presidential and legislative election
	Sep	Hong Kong: Legislative Council election	1H	Australia: Senate and House of Representatives elections
			Autumn	China: 20th National Congress of the Communist Party
Others	Jun	Mexico: Mid-term election of the Congress of the Union (Chamber of Deputies [lower house])	Oct	Brazil: Presidential election

Source: Made by MHRI based upon media coverage

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