I

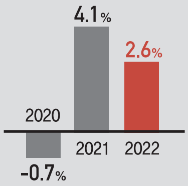
Economic Trends

Major Economic Indicators in 2022

Growth

2.6%

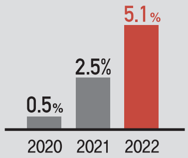
Real GDP Growth Rate



Prices

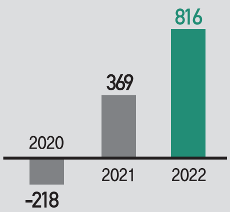
5.1%

CPI Inflation



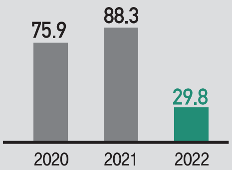
Changes in Employment Figures

816 1,000 persons



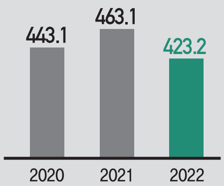
Current Account

29.8 $ billion (surplus)



Foreign Exchange Reserves (year-end)

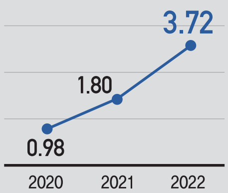
423.2 $ billion



Interest Rate
(year-end)

3.72%

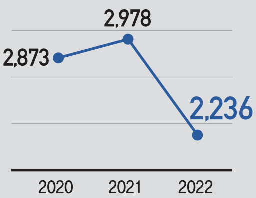
KTB(3y)



Stock Index
(year-end)

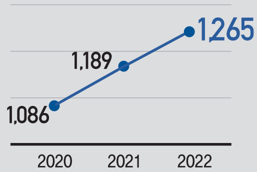
2,236

KOSPI



Exchange Rate
(year-end)

1,265 ₩/$

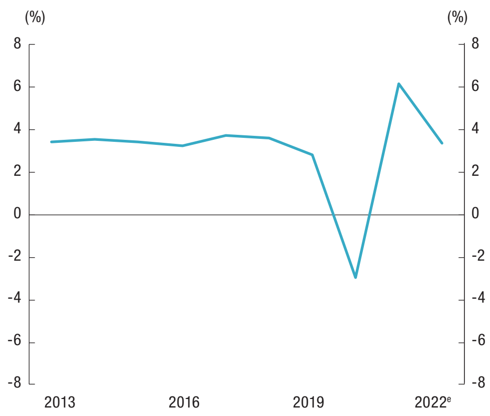


1. Real Economy[1)]

A. Global Economy

In 2022, the growth of the global economy heavily decelerated in accordance with simultaneous sluggishness in the economies of major countries. By country, in the U.S. and the euro area, the economic slowdown was mainly attributed to price inflation and the subsequent interest rate hikes. In Japan and China, COVID-19 quarantine measures were a leading factor behind their economic downturn. The recovery of global trade was also weakened, affected by the global economic slowdown. Meanwhile, amid growing volatility due to the Russia-Ukraine war, the global economic slowdown, and the OPEC+ decision to cut oil production, international oil prices fluctuated at a generally higher level compared to 2021. Prices grew at a considerably faster rate, affected by a surge in global commodity prices.

Figure Ⅰ- 1. Changes in Global Economic Growth

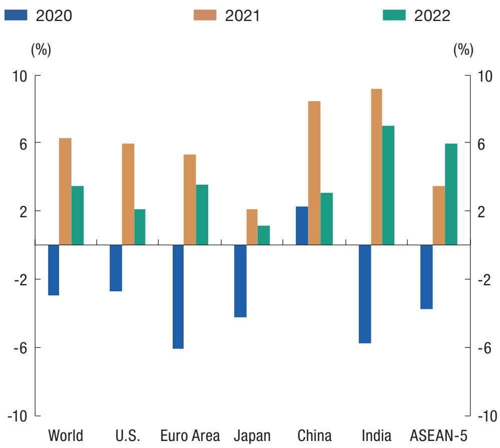


Sources: IMF

Slowdown in Global Economic Growth

In 2022, the growth of the global economy stagnated significantly in line with the simultaneous economic downturn of major countries, which led to the estimation that it would remain in the lower to mid-3 percent range.[2)] This was largely driven by the prolonged Russia-Ukraine war, China's lockdown, tightened monetary policy stances of major economies, and energy supply disruptions.

Figure Ⅰ- 2. Growth Rate of Global Economy and Major Countries



Sources: IMF, statistics agencies of individual countries

1) A detailed explanation of economic trends during 2022 can be found in "I. Monetary Policy Operating Conditions" of the Monetary Policy Report (Quarterly) published by the Bank of Korea, such as the March 2022 Issue, June 2022 Issue, September 2022 Issue, December 2022 Issue, and March 2023 Issue.

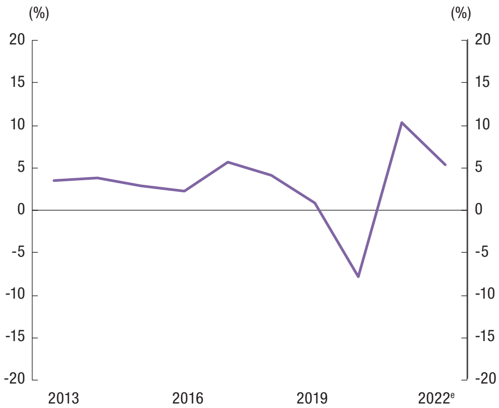
2) The growth rate of the global economy in 2022 estimated by major international organizations: 3.4 percent by the IMF, 3.2 percent by the OECD·U.N., and 3.1 percent by the World Bank.

By country, the U.S. saw its economic growth slow due to rising inflationary pressures and the subsequent rapid policy rate rises. In the euro area, amid the prolonged Russia-Ukraine war, the economy continued to show a downward trend owing to high inflation. In the case of Japan, the economic recovery was sluggish, affected by prolonged quarantine measures in response to the spread of COVID-19, as well as to the global economic slowdown. Meanwhile, China experienced a sharp decline in economic growth due to its continued zero-COVID policy and extended slump in the real estate market.[3] India sustained its favorable upward trend until the third quarter, but later entered a gradual economic slowdown owing to a worsening of domestic and external conditions. In the ASEAN-5 countries, a favorable economic recovery trend continued thanks to strong exports and a rise in the number of foreign tourists stemming from the resumption of cross-border travel. Into the fourth quarter, however, it weakened due to a deterioration of domestic and external conditions, such as the economic slowdown in major countries and the sluggishness in the IT sector.

Downturn of Global Trade

The recovery of global trade weakened, affected by the global economic slowdown.[4] Entering the second half of the year, trade in goods saw its growth trend slow, influenced by global supply chain disruptions and weak-

Figure Ⅰ- 3. Changes in Global Trade Growth[1)]



Note: 1) Based on trade of goods and services.
Source: IMF

3) China's real estate market has maintained a downward trend since the second half of 2021 due to the decline of the country's economic growth, strengthened restrictions, and deterioration in consumer sentiment. In particular, since the China Evergrande Group issue (September 2021), market risks were expanded in relation to a rise in debt defaults among real estate development companies caused by the deterioration of financing conditions.

4) Global trade growth (based on IMF statistics): -7.8 percent in 2020 → +10.4 percent in 2021 → +5.4 percent in 2022.

ened economic trends in major countries. Trade in services showed a modest upward trend, centered on tourism services thanks to the alleviation of entry restrictions.

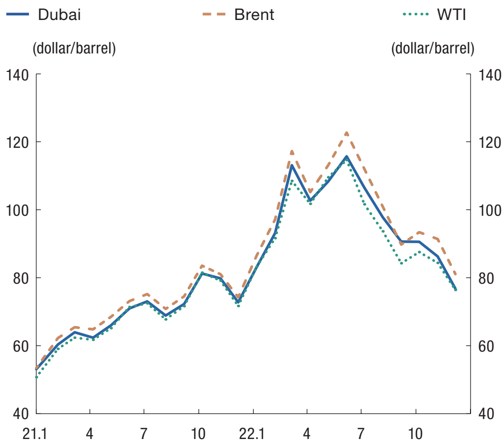
Expansion of Volatility in International Oil Prices

International oil prices (based on Dubai crude oil prices) fluctuated at a generally higher level compared to 2021, while exhibiting high volatility.[5] During the first half of the year, oil prices soared, affected by concerns over disruptions in the crude oil supply from Russia because of the Russia-Ukraine war. During the second half of the year, prices fell to around the 70-dollar range due to heightened concerns over the global economic downturn.

Significant Expansion of Global Inflation

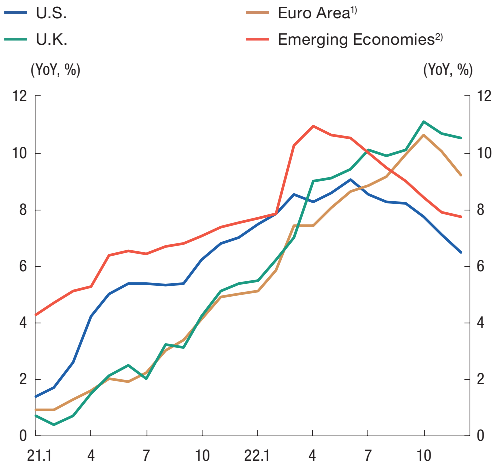
While global inflation sustained its high upward trend throughout 2022, the uptrend began to weaken gradually in the second half of the year. In the first half of the year, the growth margin in prices rose significantly in both major advanced economies and in emerging countries, affected by an increase in global commodity prices, including oil prices and food prices, resulting from the Russia-Ukraine war. After mid-2022, global inflation began to slow in line with rising downward pressure on the economy, in addition to a considerable alleviation of supply-side inflationary pressure due to a decline in international oil prices. However, the time and pace

Figure Ⅰ- 4. International Oil Prices (monthly average)



Sources: Bloomberg, Reuters

Figure Ⅰ- 5. CPI Inflation in Major Countries



Notes: 1) Based on HICP.
2) Average of Brazil, Russia, India, and South Africa.
Sources: Statistics agencies of individual countries

5) International oil prices (annually averaged per barrel based on Dubai crude oil prices): 42.2 dollars in 2020 → 69.0 dollars in 2021 → 97.0 dollars in 2022.

of the slowdown in inflation varied somewhat depending on the country.

B. Domestic Economy

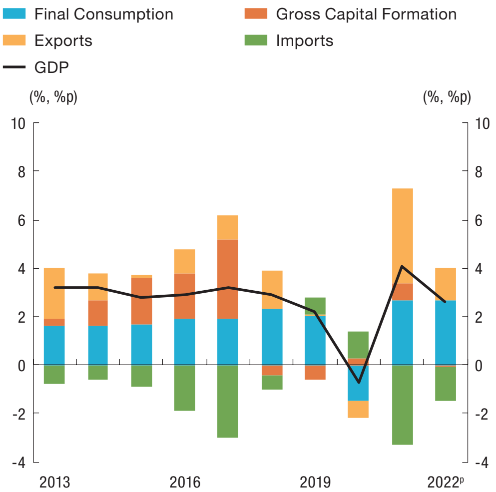
In 2022, although consumption continued to undergo a rapid recovery, the Korean economy exhibited a lower growth rate than the previous year because of slow growth in exports. The employment status exhibited a favorable trend with a significant increase in the number of persons employed, centered on the service sector. Consumer price inflation recorded its highest figure since 1998 with rising pressure on both the demand and supply sides, and the growth of core inflation also hit a record high since 2008. In the meantime, the current account saw its surplus considerably narrow owing to a rise in imports resulting from a surge in raw material prices.

(1) Economic Growth

Slowdown in Domestic Economic Growth

In 2022, the Korean economy witnessed GDP growth of 2.6 percent in real terms, which fell from 4.1 percent in 2021, as export growth slowed and investment was also sluggish, affected by weakened global economic growth and global supply disruptions, despite a rise in consumption buoyed by the lifting of social distancing measures.[6] In particular, as the global economic slowdown intensified in the second half of the year, GDP growth stood at 2.2 percent year-on-year, lower than 3.0 percent in the first half of the year.

Figure Ⅰ- 6. GDP Growth and Contributions by Expenditure Item (in real terms)[1]



Notes: 1) Preliminary figures for 2021 and 2022.
Source: Bank of Korea

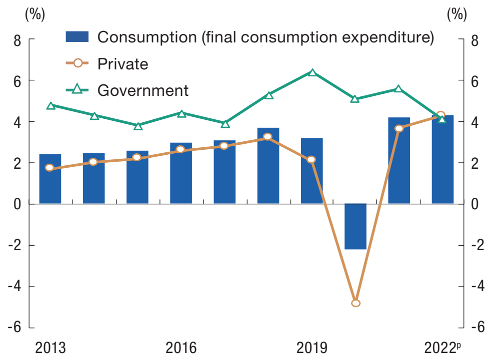
6) GDP growth in real terms: -0.7 percent in 2020 → +4.1 percent in 2021 → +2.6 percent in 2022.
7) Change in final consumption expenditure in real terms: -2.2 percent in 2020 → +4.2 percent in 2021 → +4.3 percent in 2022.

Examining the components of demand, overall consumption (final consumption expenditure) rose by 4.3 percent year-on-year as the growth of private consumption expanded despite a slowdown in the growth of government consumption.[7] In spite of constraints, including high inflation, interest rate hikes, and a decrease in housing prices, private consumption increased by 4.3 percent year-on-year, driven by a surge in services consumption due to an easing of quarantine measures, in addition to improvements in income conditions, such as employment and wages.[8] However, approaching the year-end, the upward trend slowed as pent-up demand weakened.

Fixed investment (gross fixed capital formation) diminished by 0.8 percent year-on-year with a decline in both construction and facilities investment.[9] Facilities investment decreased by 0.5 percent from the previous year, influenced by disruptions in the supply of automobile semiconductors and China's lockdown measures, although major IT companies continued to make large-scale investments. Construction investment fell by 3.5 percent from the previous year because of disruptions in the supply of construction materials resulting from the Russia-Ukraine war and the sluggishness in the real estate market. Investment in intellectual property products rose by 4.7 percent as investments in both R&D and other intellectual property products increased.

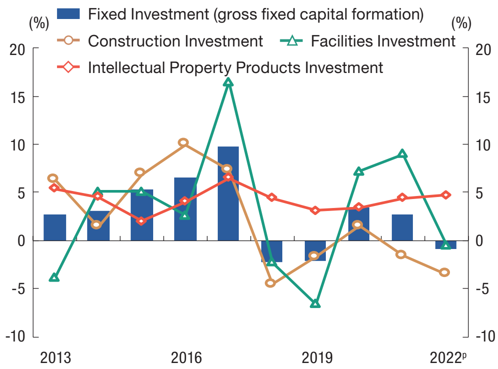
Exports of goods and services in real terms recorded an increase of 3.2 percent year-on-year, falling from 2021, as growth in major countries slowed and the positive effects of the pandemic that had been working in favor of such exports (e.g., increased demand for non-

Figure Ⅰ-7. Changes in Consumption (in real terms)



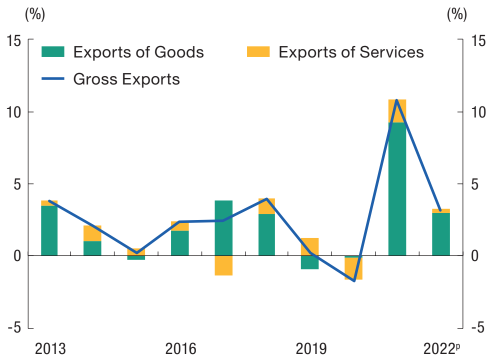
Source: Bank of Korea

Figure Ⅰ-8. Changes in Fixed Investment (in real terms)



Source: Bank of Korea

Figure Ⅰ-9. Changes in Exports (in real terms)



Source: Bank of Korea

8) Change in disposable income in real terms based on "Household Income and Expenditure Survey" conducted by Statistics Korea: +0.7 percent in 2021 → +2.0 percent in 2022. Number of persons newly employed: 816,000 persons in 2022 (245,000 persons on average between 2015 and 2019).

9) Change in gross fixed capital formation in real terms: +3.5 percent in 2020 → +2.8 percent in 2021 → -0.8 percent in 2022.

face-to-face goods) weakened.[10] Approaching the second half of the year, the sluggishness in exports of goods expanded, due to the prolonged continuation of China's lockdown measures and the downturn in the IT sector. The growth rate for exports of services was also significantly reduced because of a deceleration in global cargo volumes.

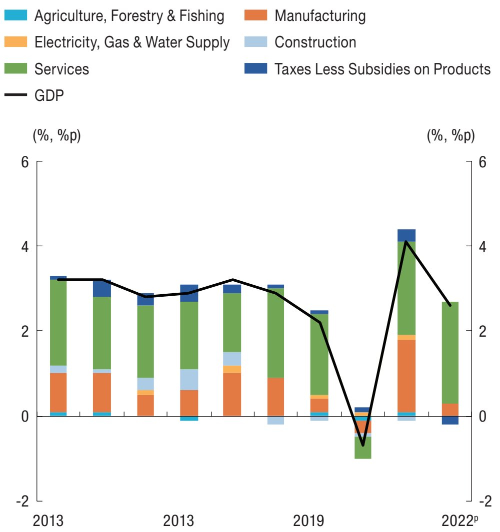
Imports of goods and services in real terms climbed 3.7 percent, lower than the previous year, affected by the sluggishness in imports of services due to a delay in the recovery of demand for overseas travel, amid the weakened growth in imports of goods because of a decline in exports and a slump in domestic demand.[11]

Slowdown in Manufacturing Growth and Increase in Services Growth

An overview of production activities across various sectors (based on GDP) in 2022 shows that growth was sluggish in the manufacturing sector while it accelerated in the service sector, particularly in face-to-face services. The construction industry shifted to a rise on the back of an increase in construction sites that had accumulated over the past one to two years.

The manufacturing sector registered its growth rate at 1.4 percent, far lower than 6.9 percent in 2021, as growth slowed in the IT sector, while non-IT sectors also faced a slump in general. By sector, the margin of growth in the computers, electronics, and optical devices sector, including semiconductors, narrowed due to the downturn in the global IT sector.

Figure Ⅰ- 10. GDP Growth and Contributions by Economic Activity (in real terms)



Source: Bank of Korea

Table Ⅰ- 1. Growth Rate of Manufacturing by Sector

(%)

	2017	2018	2019	2020	2021p	2022p
Manufacturing	3.7	3.3	1.1	-1.1	6.9	1.4
Chemicals and Chemical Products	3.4	2.5	-0.9	-0.3	5.7	-3.7
Basic Metals	2.9	-3.8	-0.9	-3.3	5.6	-5.7
Fabricated Metal Products	-0.3	-1.3	-1.8	-6.3	-3.5	-4.0
Computers, Electronics, and Optical Products	4.8	11.4	6.4	5.2	12.9	7.9
Machinery and Equipment	22.5	0.7	-0.9	1.0	11.2	1.6
Transportation Equipment	-8.1	-2.3	1.9	-10.1	5.4	9.2

Source: Bank of Korea

10) Change in exports of goods and services in real terms: -1.7 percent in 2020 → +10.8 percent in 2021 → +3.2 percent in 2022.

11) Change in imports of goods and services in real terms: -3.1 percent in 2020 → +10.1 percent in 2021 → +3.7 percent in 2022.

Non-IT sectors, such as chemical products and basic metals, were also mostly sluggish, although the transportation equipment sector, including automobiles, saw its growth expand thanks to the alleviation of global supply disruptions.

The service sector registered its growth rate at 4.2 percent, higher than 3.8 percent in 2021. By sector, face-to-face sectors, such as wholesale & retail trade, food services & accommodations, and transportation & storage, witnessed their recovery expand considerably, buoyed by the easing of quarantine measures. The business activities and the human health & social work sectors also sustained a favorable uptrend.

The construction sector climbed by 0.3 percent year-on-year, led by the building construction business. The growth rate for the agriculture, forestry, and fishing sector shifted to a decrease, registering minus 1.3 percent, while the electricity, gas, and water supply sector continued its upward trend with a growth rate of 1.9 percent.

(2) Employment and Wages

Significant Increase in the Number of Persons Employed

Overall employment conditions sustained a favorable trend, with the number of persons employed surging by 816,000 due to the effects of the resumption of economic activities following the pandemic.

By industry, the number of persons employed increased most in the service sector. Although employment remained sluggish in several face-to-face service sectors, such as wholesale & retail trade, and personal services, those in human health & social work,

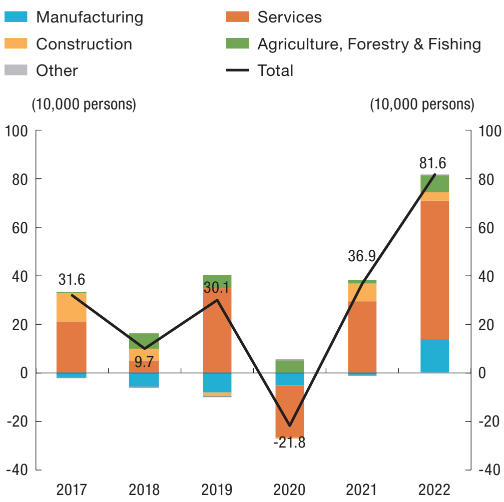
Table I - 2. Growth Rate of Services by Sector

(%)

	2017	2018	2019	2020	2021p	2022p
Services	2.6	3.8	3.4	-0.8	3.8	4.2
Wholesale & Retail Trade, Accommodation and Food Services	1.8	2.9	3.5	-5.6	3.4	6.8
Transportation & Storage	2.7	3.7	1.7	-17.3	5.3	9.2
Finance & Insurance	4.2	5.6	3.4	9.6	6.7	2.4
Business Activities	2.0	3.8	2.6	0.1	2.8	2.5
Human Health & Social Work	6.4	8.2	9.8	1.1	5.2	6.2

Source: Bank of Korea

Figure I - 11. Changes in Employment Figures by Industry



Source: Statistics Korea

and in food services & accommodations continued to grow at a rapid rate, buoyed by increased demand for care and social welfare services and the return to normalcy. The number of persons employed in the manufacturing sector shifted to a rise for the first time in seven years, influenced by the improvement in business conditions in the electrical and electronic sectors, while the margin of growth in the number of persons employed in the construction sector narrowed.

By employment status, the number of wage workers employed soared at a rapid rate, centered on regular workers, and that of non-wage workers employed also shifted to a rise.

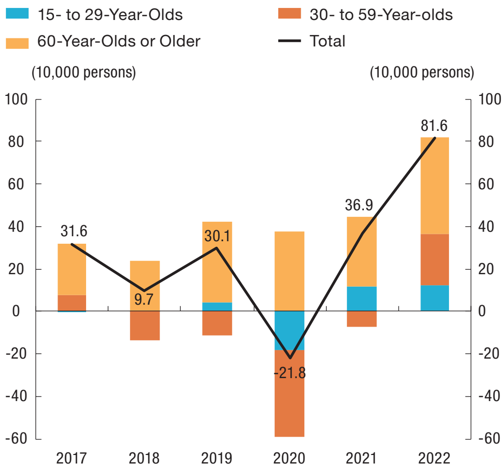
By age, the number of employees aged 30 to 59 and employees aged 60 or older rose significantly, while the margin of growth among those employed aged 15 to 29 slightly expanded.

Boosted by a rise in the number of persons employed, the employment rate increased by 1.6 percentage points over the previous year. The total unemployment rate decreased by 0.8 percentage points, year-on-year, to 2.9 percent. The youth unemployment rate, covering people aged 15 to 29 fell from a year earlier by 1.4 percentage points to reach 6.4 percent.

Figure Ⅰ- 12. Changes in Employment Figures by Employment Status

Source: Statistics Korea

Figure Ⅰ- 13. Changes in Employment Figures by Age



Source: Statistics Korea

Increase in Wage Growth

Nominal wage growth recorded 4.9 percent, an increase from 4.6 percent in 2021. By employment status, regular workers saw a rise in wage growth, in line with a sharp increase in fixed wages resulting from a solid labor market and high inflation expectations. In the meantime, wage growth narrowed among temporary and day workers.

The growth rate for unit labor cost (non-farm basis) expanded as nominal hourly wages rose steeply despite a decline in labor productivity.

(3) Prices

Highest Consumer Price Inflation Since 1998

In 2022, consumer price inflation was 5.1 percent year-on-year, significantly surpassing the inflation target of 2.0 percent, to record the highest figure since the 7.5 percent seen in 1998. In terms of trends throughout the year, it steeply rose from the 3 percent range earlier in the year, and then hit a record high of 6.3 percent for the year in July. It somewhat slowed to the 5 percent range at year-end 2022, but remained above the inflation target.

The expansion of the upward inflation trend stemmed from an increase in supply-side inflationary pressures due to a surge in international commodity prices resulting from the Russia-Ukraine war, as well as a rise in demand-side inflationary pressures owing to the easing of quarantine measures. However, as the supply-side inflationary pressures were substantially mitigated by a decrease in international oil prices and the downward pressure on the economy gradually increased in the second half, the high inflation trend somewhat slowed.

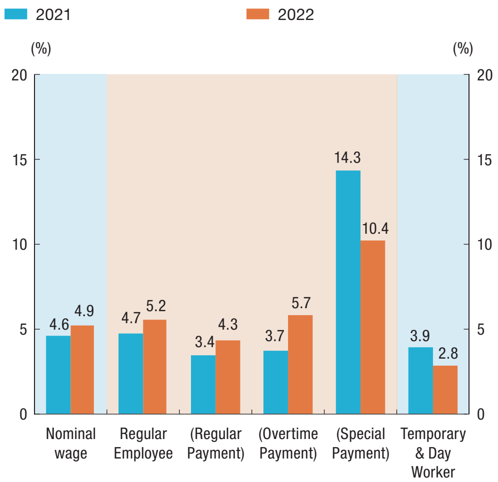
Table Ⅰ- 3. Employment-Related Indicators

(10,000 persons, %)

	2017	2018	2019	2020	2021	2022
Economically Active Population	2,775	2,790	2,819	2,801	2,831	2,892
Change Rate	1.2	0.5	1.0	-0.6	1.1	2.2
Labor Force Participation Rate	63.2	63.1	63.3	62.5	62.8	63.9
Employed Persons	2,672	2,682	2,712	2,690	2,727	2,809
Change	31.6	9.7	30.1	-21.8	36.9	81.6
Unemployment Rate	3.7	3.8	3.8	4.0	3.7	2.9
(15- to 29-year-olds)	9.8	9.5	8.9	9.0	7.8	6.4
Employment Rate	60.8	60.7	60.9	60.1	60.5	62.1
(15- to 64-year-olds)	66.6	66.6	66.8	65.9	66.5	68.5

Source: Statistics Korea

Figure Ⅰ- 14. Wage Growth by Employment Status



Source: Ministry of Employment and Labor

By item, the upward trend in the prices of agricultural, livestock, and fisheries products expanded due to deteriorating weather conditions, but fell considerably in the fourth quarter. Among industrial products, the prices of petroleum products rapidly rose in line with a surge in international oil prices in the wake of the Russia-Ukraine war, and then entering the second half of the year, the margin of growth in prices narrowed substantially as international oil prices declined due to concerns over the sluggishness in demand. On the other hand, the prices of other industrial products, excluding petroleum products, gradually expanded with a rising trend, centered on processed food, due to the delayed reflection of the preceding increase in raw material prices, including international food prices. Electricity, gas, and other bills also consistently expanded in an upward trend, as the burden of rising costs began to be reflected.[12)] In the case of overall service price inflation, while the prices of public services continued a slow rising trend at below 1 percent, along with housing rental prices rising moderately at a slower pace, the prices for personal services sustained a high uptrend, particularly in dining-out costs.

In 2022, the growth of core inflation (CPI, excluding food and energy) soared to 3.6 percent, the highest level since the 3.6 percent seen in 2008, centered on the prices for personal services, including dining-out costs. In terms of trends throughout the year, even after July when the growth of consumer price inflation peaked, core inflation continued a rising trend for four months, and then slightly slowed toward the year-end.

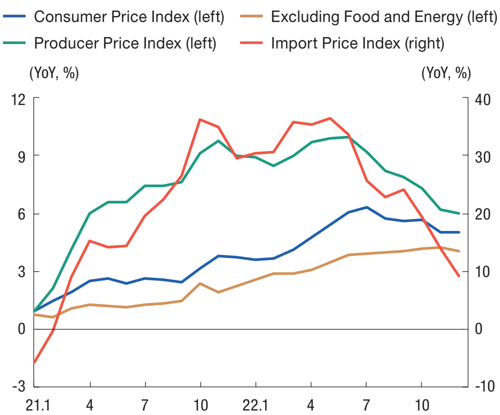
Table Ⅰ- 4. Growth in Wage Indicators

(%)

	2016	2017	2018	2019	2020	2021
Nominal Wage[1)]	3.3	5.3	3.4	1.1	4.6	4.9
(Real Wage)[2)]	1.3	3.7	3.0	0.5	2.0	-0.2
Nominal Hourly Wage[3)]	5.2	6.8	3.9	2.6	4.5	6.2
Labor Productivity[4)]	3.9	4.5	1.9	1.8	2.8	1.4
Unit Labor Costs[5)]	1.3	2.2	2.0	0.8	1.7	4.7

Notes: 1) Based on businesses employing at least one regular employee, non-farm basis.
2) Nominal wage/CPI.
3) Nominal wage/hours worked.
4) Real gross added value/(total employed persons × hours worked), non-farm basis.
5) Nominal hourly wage/labor productivity.
Sources: Ministry of Employment and Labor, Statistics Korea, Bank of Korea

Figure Ⅰ- 15. Major Inflation Indexes



Sources: Statistics Korea, Bank of Korea

12) In 2022, electricity bills increased by a total of 19.3 won/kWh, being raised in April, July, and October, and gas bills rose by a total of 5.47 won/MJ, being raised in April, May, July, and October.

Decline in Housing Sale Prices and Leasehold Deposit Prices

Housing sale prices dropped by 4.7 percent throughout the year, sustaining a declining trend following June due to a rise in interest rates and weakened expectations for housing price increases.[13] By region, the Seoul metropolitan area significantly decreased, centered on certain neighborhoods[14] that experienced a substantial growth margin in 2021. As for the rest of the country, amid heightened downward trends in Daegu, Daejeon, and Sejong, most other cities also saw a declining trend.

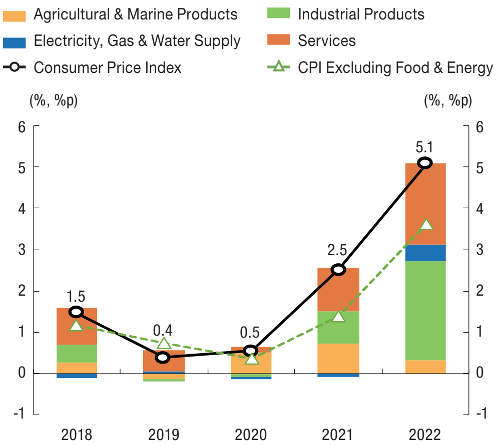
Leasehold deposit prices also declined, as the demand for leaseholds shifted in favor of monthly housing rentals owing to lending rate hikes.[15] In the meantime, monthly housing rental prices climbed slightly due to the expansion of demand.

(4) Current Account

Contraction in Current Account Surplus

The current account in 2022 significantly narrowed to a surplus of 29.8 billion dollars compared to the previous year due to the deteriorated goods account.[16] The goods account surplus shrank, led mainly by a rise in imports resulting from a surge in energy and raw material prices, as well as partly by a slowdown in exports due to weakened growth trends in major countries and a downturn in the IT in-

Figure Ⅰ- 16. CPI Inflation and Contribution by Item



Source: Statistics Korea

Table Ⅰ- 5. Rate of Increase in Housing Prices and Housing Leasehold Deposits (compared to the last survey dates of the previous periods)

(%)

	06~10 avg.	11~15 avg.	16~20 avg.	2021	2022 Year	2022 H1	2022 H2
Housing Prices	5.2	2.0	1.7	9.9	-4.7	0.2	-4.9
Seoul Metropolitan Area	7.9	0.2	2.8	12.8	-6.5	-0.1	-6.4
Non-Seoul Metropolitan Area	2.4	4.1	0.6	7.4	-3.0	0.5	-3.5
Housing Leasehold Deposits	4.7	5.2	0.7	6.5	-5.6	0.0	-5.6
Housing Monthly Rent Prices	..	..	-0.3	2.6	1.0	0.9	0.1

Source: Korea Real Estate Board

13) Housing sale prices dropped by 14.3 percent throughout the year based on the nationwide transaction-based price index (based on sale prices of apartments and houses).

14) In 2021, housing sale prices in Siheung and Uiwang in Gyeonggi-do and in Yeonsu-gu in Incheon increased substantially, by 30.4 percent, 30.0 percent, and 34.7 percent, respectively, due to expectations surrounding a metropolitan transportation network (GTX, Great Train eXpress), but in 2022, prices in those areas declined by 10.4 percent, 12.7 percent, and 15.0 percent, respectively (compared to the last survey dates of the previous periods).

15) Leasehold deposit prices dropped by 9.4 percent throughout the year based on the nationwide transaction-based price index (based on leasehold deposit prices for both apartments and houses).

16) Current account: +59.7 billion dollars in 2019 → +75.9 billion dollars in 2020 → +85.2 billion dollars in 2021 → +29.8 billion dollars in 2022.