I. Trends

1. Global Economy

❑ In 2023, the global economy hit the bottom, and the recovery - lacking sufficient momentum - is expected to be slow

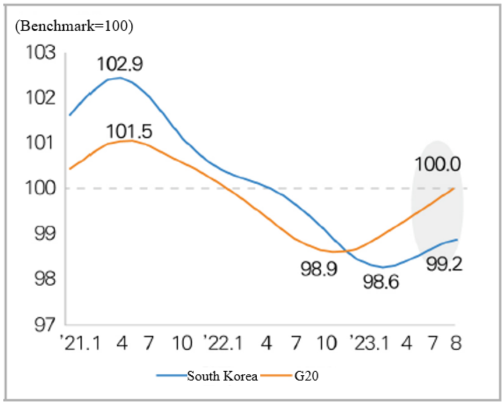
◦ Uncertainties have been reduced due to a stabilized rate of inflation and the easing of monetary policies. However, high interest rates and high prices have weakened domestic demand, leading to a slowdown.

◦ Major international organizations have lowered their projections for the growth rate of the global economy from 2023 to 2024.
– IMF(3.5% → 3.0%), World Bank(3.1% → 2.1%), OECD(3.3% → 2.7%)

◦ The OECD's composite leading indicator (CLI) is a leading barometer in predicting the health of the global economy: The CLI data indicate that the global economy has been on a downward trend since the second half of 2021 due to a contraction of the global trade volume.
– South Korea's CLI has also been declining since hitting a peak (102.9) in May 2022.

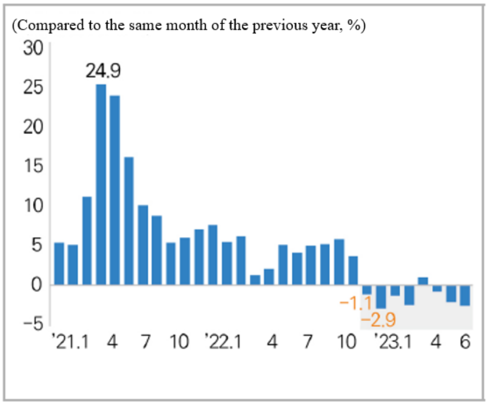
◦ After a period of recession caused by the COVID-19 pandemic, global trade grew at an average rate of 7-8% up until October 2022, before entering a continuous downward trend.
– However, the World Trade Organization (WTO) has predicted that the rate of increase of global trade will climb from 1.7% in 2023 to 3.2% in 2024.

Leading economic index of the OECD



Note: A figure above 100p indicates a rise in economic activity, whereas a figure below 100p indicates a fall in economic activity.
Source: OECD

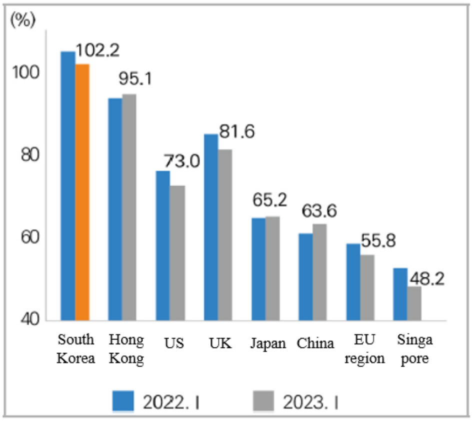
Global trade volume



Source: CPB WORLD TRADE MONITOR

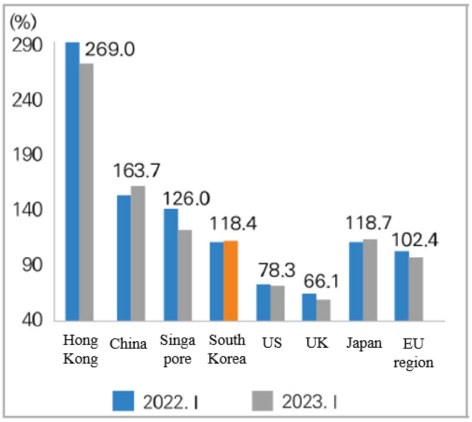
- The upside pressures on the inflation growth rate have been slightly lower in 2023 compared to 2022, but they are still higher than in 2021.
  – The IMF has predicted that the growth rate of the global consumer price index will reach 7.0% in 2023, i.e. 1.7%p lower than in 2022, while the OECD has forecast a drop in the consumer price index to 6.6% in 2023 (from 9.4% in 2022).
- The upward trend and magnitude of interest rate hikes have made the debt situation more difficult for households and companies alike. Especially in low-income countries and newly emerging countries, high interest rates have been a significant burden in 2023.
  – When the household debt-to-GDP ratio and the debt-to-GDP ratio of non-financial corporations are compared, South Korea, with a household debt ratio of 102.2%, ranks highest among thirty-five countries investigated for two years.
  – South Korea's debt-to-GDP ratio for non-financial corporations reached 118.4% in the first quarter of 2023, the fourth highest after Hong Kong (269.0%), China(163.7%), and Singapore (126.0%).

Household Debt-to-GDP Ratio



Source: Institute of International Finance (IIF)

Debt-to-GDP Ratio of Non-Financial Corporations

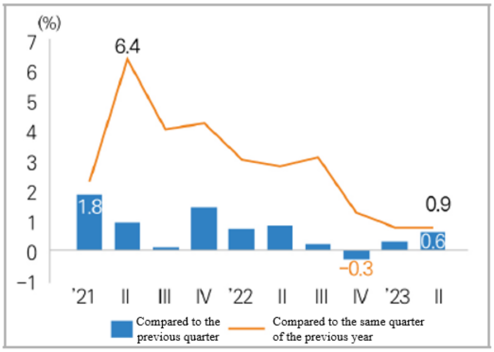


Source: Institute of International Finance (IIF)

❑ In 2023, the domestic economy was characterized by sluggish exports, a contraction of manufacturing, and consumption-driven growth

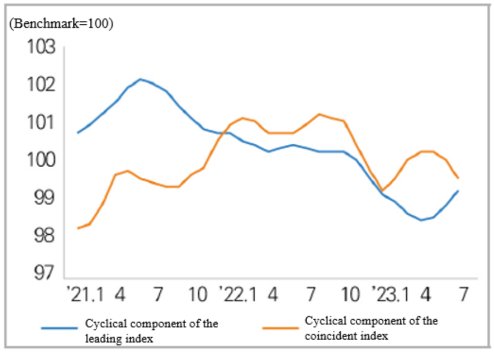
- In the first half of 2023, the domestic economy remained stagnant due to weak exports, despite the improvement in private consumption and a vibrant service economy.
  – In the first half of 2022, real GDP grew by 3.0% compared to the same period of the previous year, whereas in the first half of 2023 it grew by just 0.9%.
  – As regards economic indicators, the cyclical component of the coincident index has recently dropped below the baseline of 100, a clear indication of ongoing concerns about the possibility of an economic downturn.

Real GDP Growth Rate Trend



Source: Bank of Korea

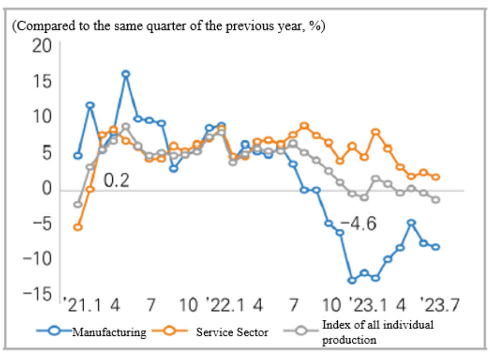
Composite Index



Source: KOSTAT

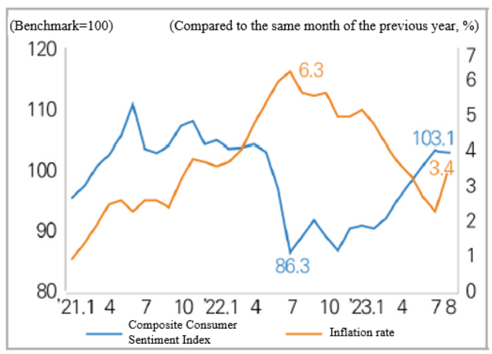
- ◦ Exports continued to decline due to the downturn in the semiconductor industry that began in the 2nd half of 2022, while the growth rate of imports also decreased over the same period.
  - – The trade deficit margin decreased and imports decreased for the previous three consecutive months, indicating a recession trade surplus (i.e. a decrease in imports of 22.8%, and a decrease in exports of 8.4%).
- ◦ In terms of production, the momentum of production growth in the service sector mitigated the decline of the index for all industrial production, despite the spiraling drop in the production volume of the mining and manufacturing industries in the second half of 2022.
- ◦ The CPI increase rate showed declining momentum in the first half of 2023, before rebounding to + 3.4% in August 2023.
  - – Starting in the second half of 2022, the Consumer Confidence Index started to climb upward, recovering to the baseline of 100 by June 2023 and to 103.1 by August 2023.

Industrial Production Index Growth Rate Trend



Source: KOSTAT

Consumer Price Index and Consumer Confidence Index



Note: If the consumer confidence index is above 100, it is considered optimistic; conversely, it is considered pessimistic if it falls below 100.

Source: KOSTAT

2. Industry Trends

A. Global trade environment

❑ Uncertainties in the global economy are increasing

- Due to growing uncertainties all around the world, countries are pursuing protectionist policies and linking national security to trade.
- Geoeconomic fragmentation is occurring in traditional supply chains, and the fragmented supply chain is being reorganized around countries with common politico-economic interests.
  – The US's Inflation Reduction Act (IRA) and CHIPS and Science Act, together with the EU's Critical Raw Materials Act (CRMA) and Net Zero Industry Act (NZIA), amply illustrate how major countries are adopting industrial policies designed to protect their home industries and increase their competitiveness.

❑ Securing a stable supply chain and stable markets are urgent challenges

- For leading South Korean companies seeking to build competitive advantages, securing a stable supply chain is a necessary prerequisite
  – It is essential to secure suppliers who can meet the regulatory requirements in key markets.
- In order to sell manufactured products, stable markets must be developed.
  – Existing trade agreements must be utilized and new agreements examined.

B. Supply and Demand of Commodities

❑ Since the 2nd half of 2022, the prices of commodities have been fluctuating on a downward path

- Since the second half of 2022 the prices of commodities have been on the decline due to shrinking demand attributable to the transition to tight monetary policies by key governments, China's draconian Covid-19 lockdown measures, and the outlook on the global economic downturn.
  – However, when the Chinese government decided at the end of 2022 to end its zero-COVID policy, expectations about economic recovery led to a slight increase in commodity prices in the first quarter of 2023.
- After the second quarter of 2023, the prices of commodities began a downward trend in response to the stagnant real estate market in China and weak consumption that is getting worse by the day, and predictions that the tight monetary policies of key governments will remain in place.
  – Grain prices are also stabilizing at a lower level, except for rice, whose price is climbing due to India's export ban.

- **In the immediate future, the prices of commodities are expected to remain on a downward trend, although high exchange rates should prevent it from seriously affecting industries**
  - Crude oil prices have risen slightly, helped by continued production cuts by the OPEC+, leading to the recent predictions of higher oil prices. However, once the supply/demand for most commodities stabilizes, it is expected that crude oil prices will also settle downward at a lower level.
  - Recently, commodity prices declined by a large margin compared to the price in the second quarter of 2022, but with the US dollar/Korean won exchange rate remaining at around KRW 1300 from January to July 2023, the drop in the prices of commodities is expected to have little or no effect on the domestic prices of imported commodities or the producer price index.

C. Green Transition Policies of Key Countries

- **Green competencies have emerged as a core source of competitiveness for companies**
  - As part of the “Green Deal” proposed in 2019, the EU's Green Deal Industrial Plan, announced in February 2023, includes a section on the relaxation of regulations on national subsidies for achieving the Net Zero goal by 2050, as well as the creation of a joint fund by the EU countries.
    – To minimize the cost of the carbon neutrality transition process, the EU has enacted the Net Zero Industry Act, the Critical Raw Materials Act (CRMA), and the Alternative Fuels and Infrastructure Regulation, as well as announcing a plan for enforcing the Foreign Subsidies Regulation.
    – In relation to the green transition, the EU will apply the Carbon Border Adjustment Mechanism to goods produced outside the EU from October 2023.
  - As for the US, it has introduced a green transition policy under the Inflation Reduction Act (IRA).
    – The IRA is an industrial policy announced by the US with the objectives of restituting the global supply chain in the wake of the COVID-19 pandemic and maintaining its technological hegemony.
    – The IRA includes tax credits for companies that implement environmentally-friendly measures and incentive investment support policies, the promotion of renewable energy across the entire supply chain, and climate change response plans.
  - The introduction of the carbon trade barrier by key countries has made matters worse for domestic companies that are heavily focused on manufacturing.
    – The supply chains of domestic companies that export mostly intermediate goods have been particularly affected.
    – Companies in industries that generate high levels of carbon emissions, such as the steel, petrochemical, and semiconductor industries, are feeling increasingly burdened, making it necessary to adopt long-term measures to address this issue.
    – In the government's proposed budget for 2024, investments related to 'core resources for resource security' have been increased, while investments in core industrial R&D projects for green transition have been reduced.

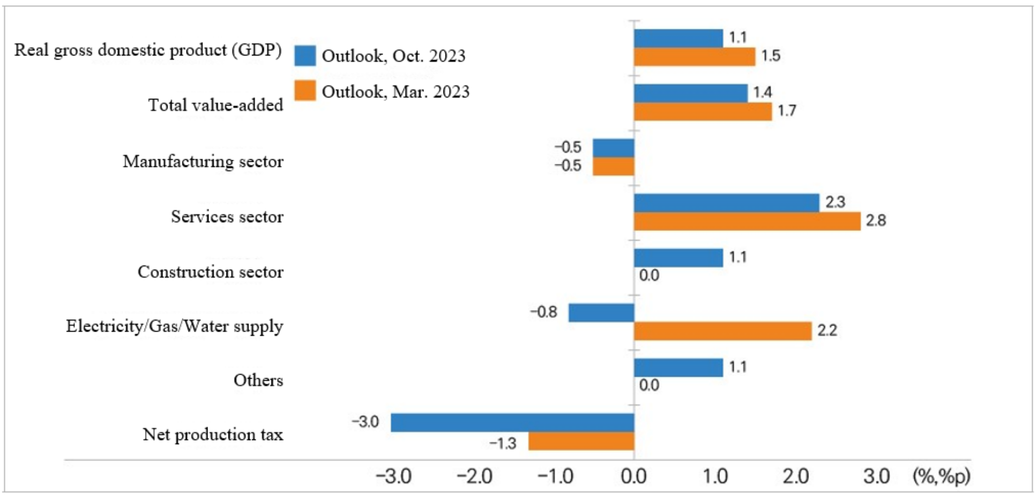
II. The Outlook for Production Sectors

1. Key Revision Factors in the Economic Outlook

❑ **In 2023, the total value-added (1.4%) was projected to decrease by 0.3%p compared to the earlier projection (March 2023, 1.7%p)**

- In the manufacturing sector(-0.5%), the manufacturing value-added produced in the first half was 0.3%p higher than the projection made in March. However, as the resumption of economic activities in China has increased uncertainties about improving demand, and the expected uptick in semiconductor exports has been delayed, the March projection (-0.5%) will be maintained for the rest of the year.
- In the services sector (2.3%), household spending power is expected to fall as a result of real household income falling by a large margin (-3.9%) in the second quarter, accompanied by increasing household debt (102.2% of GDP) and a hiked interest rate, leading to weak consumer spending.
- In the construction sector (1.1%), the projected total value-added produced was adjusted upwards by just 1.1%p from the March forecast of 0.0% due to a drop in construction orders and the issuance of fewer construction permits, along with a sluggish outlook for public investment in the second half, despite an unexpectedly robust performance in valued added production in the first half (5.2%) of 2023.
- In the electricity/gas and water supply sector (-0.8%), the projected total value-added produced decreased by a large margin (-5.6%) due to rises in electricity and gas prices and a slowdown in production activities. However, as demand is expected to pick up to some extent in the second half of the year, the total value-added produced has been adjusted 3.0%p downward from the March projection (2.2%).

Comparison of outlooks for different production sectors for 2023



2. Manufacturing Sector

❑ **In 2024, the real value-added produced in manufacturing is anticipated to grow, unlike in the previous year**

◦ In 2023, the real value-added produced in the manufacturing sector is projected to decline by 0.5% from the previous year's level.

– In the first half of 2023 the real value-added produced will decline by 2.0% due to the large drop in exports; however, in the second half it will increase by 1.0%, fueled by improving exports.

– At a time when the economy is being depressed by downside factors such as the global economic downturn due to high inflation, declining exports in the IT industry (for example, semiconductors), and increasing inventory levels attributable to the simultaneous decline of domestic demand and export shipments, the Chinese economy is showing very little improvement despite the Chinese government's desperate attempts to revive the national economy, and there are growing fears about the collapse of the real estate market in China. For these reasons, the recovery of Korea's exports to China is being delayed.

◦ In 2024, the real value-added produced in the manufacturing sector is expected to increase by 2.2% compared to 2023, boosted by the base effects from 2023 and the improvement in exports brought about by the increase in global trade volume, as well as recovering demand in the global semiconductor sector

– The increase in trade volume coming hard on the heels of a recovering global economy, easing concerns about an economic hard landing (in the US and the Euro-zone in particular), and the rising demand for semiconductors in the IT industry driving exports up to previous levels are all expected to act as upside factors.

– The main downward factors include growing uncertainties about China's real estate market delaying the recovery of South Korea's exports to China; the increasing likelihood of weakened demand around the world due to financial market instabilities and credit tightening; instability in commodity prices and the international price of oil triggered by the weaponization of resources and production cuts by major oil producing countries; the increasing relocation of manufacturing to overseas countries due to the intensification of protectionist trade policies adopted by the US and China; and reorganization of the global supply chains. Because of the relative dominance of these downward factors, any increase of production in the manufacturing sector is expected to be limited.

◦ During the period 2023-2027, the real value-added produced in the manufacturing sector is projected to increase at an average annual rate of 2.0%.

– During the previous five-year period (2018-2022), low growth in 2019 and the effects of the COVID-19 pandemic in 2020 led to negative growth, resulting in an average annual growth rate of 2.3%.

– The rate of increase of the real value-added produced during the next five-year period (2023-2027) is predicted to be 0.3%p lower than that recorded in the previous five years. From 2023 to the first half of 2024, the real value-added produced will exhibit low growth due to increasing uncertainties about the global economy and weakening momentum in the upward growth of exports to China. However, growth is expected to resume the road to recovery after the second half of 2024, reaching a peak in 2025. Then, due to the maturity of South Korean industries, manufacturing will enter a structurally-induced low growth stage and record a low growth rate in the 2% range.

3. Service Sector

❑ In 2024, the real value-added produced in the service sector is anticipated to show slower growth than in the previous year

- In 2023, the real value-added produced in the service sector is projected to increase at a rate of 2.3%, a decrease of 1.9%p from the previous year.
  - Interest rates have remained at high levels since the 2nd half of 2022. This leads to the increasing burden of principal and interest repayments which reduces consumption and investment capacity, leading to rising prices and wages. These conditions, in turn, increase manufacturing costs.
- This trend will continue into 2024, and the real value-added produced will increase at a rate of 2.0%, which is 0.3%p lower than the previous year's rate of increase.
  - However, with the government allowing group visits by Chinese tourists to resume this year, Chinese tourists are expected to visit South Korea in increasing numbers, and with domestic/overseas travel returning to previous levels, transportation and hotel sectors will act as upside factors.
- During the 2023~2027 period, the real value-added produced in the service sector is projected to increase at an average annual rate of 2.6%.
  - This projected rate of increase is 0.3%p lower than the average annual increase rate of the previous 5-year period (2018~2022). It is caused by the slowdown in the growth of demand for services.

4. Construction Sector

❑ In 2024, the real value-added produced in the construction sector is projected to increase by 1.5% over the previous year

- In 2024, the real value-added produced in the construction sector is projected to increase by 1.1% over the previous year
  - In the 1st half of 2023, the real value-added produced increased by 5.2%, thanks to increased construction investments and construction activities. However, due to a slowdown in construction investments in the private sector and inadequate government SOC, the real value-added produced will decline by 2.3% in the 2nd half.
  - In the 2nd half, with an increasing number of unsold houses, adjustments in the housing supply will create signs of short-term recovery. However, in the 2nd half, the prices of some building materials (cement, ready mix concrete) will still remain high and issues like high interest rates and a lack of funding in the construction market due to private finance loans will act as downside pressure.
- In 2024, the real value-added produced in the construction sector is projected to increase by 0.4%p over that recorded in 2023(1.1%) to reach 1.5%
  - When the increased SOC budget (relative to 2023) and the expected easing of funding problems in the construction market in the 2nd half of 2024 are taken into consideration, the real value-added produced is projected to increase from the previous year's level. However, the poor performance indicators related to the construction economy in 2023 are indications that growth will be limited.
  - In 2024, the South Korean economy will benefit from an overall economic recovery. Therefore, it is anticipated that the construction industry will also see a recovery trend.

- The real value-added produced in the construction sector during the period 2023-2027 is projected to increase by 1.4% per year on average.
  – This rate of increase is 3.0%p higher than the average increase rate of -1.6% recorded during the previous five-year period (2018-2022).
  – For the previous five years, the real value-added produced in this sector recorded a reverse growth rate due to the effects of the COVID-19 pandemic and global economic ncertainties. In the near future, this base effect and global uncertainties are expected to be ameliorated, while the real value-added produced is predicted to achieve a growth rate of 1% and then improve gradually.

5. Electricity, Gas and Water Utilities Sector

❑ The real value-added produced by electricity, gas and water utilities is expected to grow by 0.7% in 2024

- In the first half of 2023, the sluggish growth rate of -5.6% was attributed to the price increase necessitated by rising energy fees.
  – In the first quarter of 2023, electricity prices increased by KRW 13.1/kWh, i.e., double the price hike recorded in the previous quarter (KRW 7.4/kWh), before rising again in the second quarter - this time by KRW 8/kWh.
  – Decreased production (the culprit being the economic downturn) reduced the demand for industry-bound electricity. As for the manufacturing and services sectors, the consumption of electricity has still not returned to pre-pandemic levels.

- The real value-added produced in the electricity, gas, and water supply sector in 2024 is projected to increase by 0.7% over the previous year.
  – Due to the base effects from the first half of 2023 (-5.6%) and rising demand for electricity as the manufacturing sector returns to normal levels of production, the demand for energy will spike upwards, while the real value-added produced will increase by 0.7%p compared to 2023.
  – The recovery in the IT sector is anticipated to drive a surge in exports and facility investments by domestic companies. Additionally, heightened demand for air conditioning during rising summer temperatures, increased demand for heating in colder winter temperatures, and the potential for an additional electricity price hike could all serve as upside factors.

- During the period 2023-2027, the real value-added produced by the electricity, gas and water supply industry is projected to increase at an average annual rate of 1.2%.
  – This rate is 1.0%p lower than the average value-added growth rate of 2.2% recorded during the previous five-year period (2018-2022).
  – After 2023, it is expected that the economy will gradually improve while volatility will diminish. Therefore, the real value-added produced by the electricity, gas and water supply industry is projected to decline.