The economic indices have been used to understand the economic power of a country and to predict the future of business cycles. They are often measured by using various statistically valid indicators. Each country adopts different sets of indices for its national atlas. For example, the National Atlas of the United States includes the economic indices, such as per capita income, unemployment rate, per capita number of jobs, median household income, and per capita average wage of employees. The National Atlas of Canada selects only income-related economic indices, such as median household income, real median income, and female median income. In this National Atlas of Korea, total regional gross domestic product (RGDP), income and expenditures, the total number of establishments and employees, the value added by industries, international trade and behavior of payments, research and development activities, and other statistical indicators are presented as economic indicators.

Regional gross domestic product measures the sum of the newly created final products and services rendered, i.e., the total value added during a specific time at a particular place. With other economic indices, the size of the regional economy, the level of production, and industrial structure can be deduced. Furthermore, these can be used as the basis for establishing regional economic policies and for conducting regional economic research. If this regional gross domestic product (RGDP) is expanded to the national level, it could be the national gross domestic product; however, the data used for the estimation and the methodologies may vary and may not necessarily be the same.

According to the World Bank, Korea’s gross domestic product (nominal basis) was ranked 10th in the world in 2020 at 1,637 billion USD. This growth pattern demonstrates that Korea has achieved accelerated economic growth in a compressed time frame. The GDP of Korea exceeded 10 billion USD in 1972, the gross domestic product (nominal basis) was ranked 10th in the world in 2020 at 1,637 billion USD. In 2006, 35 years after it first exceeded 10 billion USD. In 1985, 15 years later, it increased ten times, exceeding 100 billion USD. In 2010, Korea’s GDP reached 500 billion USD. In 2020, it surpassed 1,000 billion USD. This growth pattern demonstrates that Korea has achieved accelerated economic growth in a compressed time frame.

The industrial structure of Korea was quickly reorganized after 1970, with industry’s proportion of the gross domestic product moving from primary industry to secondary and tertiary industries. The proportion of the gross domestic product accounted by the agriculture, forestry, and fishing sector decreased from primary industry to secondary and tertiary industries.

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<th>Economic Index and Industrial Structure</th>
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Regional gross domestic product (RGDP) has been regarded as an index that evaluates regional wealth to explain regional inequality and economic differentials at the national level. However, it might not include all of the regional incomes. For example, the output produced by a branch factory would be included in the RGDP in the administrative region in which the branch is located, while the surplus yielded by the branch is going to be integrated into the regional income in the administrative region in which the headquarters is located. Therefore, the index of regional income levels should not equate regional income rather than RGDP. Nevertheless, it is hard to use regional income at the vantage point area levels because regional income data is only available at the level of metropolitan cities and provinces (do) in Korea. Instead, regional income tax would be used as a substitute index of regional income at the level of administrative cities and provinces.

Total regional income has increased from 661 trillion won in 2000 to 1,490 trillion won in 2019, accounting for a 194.7% increase in 19 years. In terms of regional income by the level of metropolitan cities and provinces, higher regions than the national average were as follows: Gyeonggi-do (274.2%), Incheon (251.1%), Changwon (183.9%), Ulsan (260.6%), Changwonbuk-do (152.8%), Gyeonggi (207.7%). In particular, regional income in Gyeonggi-do has overtaken Seoul since 2016 and accounted for 26.4% of national income in 2019. In this same year, the regional income per capita by the level of metropolitan cities and provinces was as follows: Gyeonggi-do (23.4%), Seoul (20.7%), Gyeongsangnam-do, Incheon (20.5%), and Chungbuk (19.8%).

In terms of total regional consumption expenditure in 2019, the proportion of consumption by metropolitan cities and provinces was as follows: Gyeonggi-do (22.3%), Seoul (22.0%), Gyeongsangnam-do (15.1%), Busan (17.5%), Ulsan (16.6%), and Incheon (16.3%). Regions higher than the national average of consumption expenditure (16.6 million won) were Beijing (24.8 million won), Gyeongsang (23.5 million won), Seoul (22.9 million won), Incheon (20.7 million won), and so on. Lower regions than the national average were Incheon (12.3 million won) and Busan (13.3 million won). Consumption expenditure by items was as follows: food and non-alcoholic beverages (15.9%), restaurants and hotels (13.3%), transportation (12.3%), and housing, bills, gas, and other fuels (11.9%).
As an analysis of the changes in the proportion of employees and establishments by industries reveals that the economic sectors of agriculture, forestry, fishing, mining, and manufacturing have declined continuously, while service sectors have increased. For example, the proportion of mining and manufacturing employees declined from 24.4% in 2000 to 16.4% in 2018. On the other hand, the proportion of service industrial sector employees and their establishments grew from 8.5% in 2000 to 78.5% in 2018. In particular, since 2000, the greatest increases in the number of service sector employees per thousands of persons have mostly occurred in the large metropolitan areas where service sector grew the fastest, such as Jung-gu in Seoul (2,441 to 3,111), Geumcheon-gu in Seoul (388 to 1,042), Gangseo-gu in Busan (449 to 1,004), Jongno-gu in Seoul (1,182 to 1,721), and Jung-gu in Busan (1,132 to 1,911).

Changes in the Percentage of Employees by Industry
Since the 1960s, the rapid growth of international trade has played a crucial role in the economic growth of Korea. By 2011, the country's international trade volume had exceeded 1 trillion USD, and in 2018, it reached 1.441 trillion USD. However, it declined to 980.1 billion USD (import: 457.6 billion USD) in 2020 due to Covid-19. In particular, the foreign trade dependency initiated by the export-led growth strategy of the 1960s maintained a steady increase (to 40%) through the mid to late 1990s and continued to increase to 86.1% by 2021. It has significantly decreased thanks to the growth in the domestic market, accounting for 59.8% in 2021.

The analyses of international trading activities by region reveal that Gyeonggi-do (22.5%) had the most export volume in 2020, followed by Chungcheongnam-do (15.5%). Seoul (31.6%) had the most import volume, followed by the United States, Japan, and Vietnam. Meanwhile, China was also the country from which Korea received the most imports, followed by the United States, Japan, and Vietnam. In particular, China has been Korea's most important trading partner since 2013.
Since the 1990s, Korea’s industry has been transformed into an innovation-based industrial structure through technology investment and advanced technology, as well as human resource development. In 1979 the R&D ratio to GDP among OECD countries revealed that Israel is currently in first place at 4.2%, with South Korea in second place at 3.6%, followed by Taiwan (3.5%), Sweden (3.5%), Japan (3.5%), Austria (3.5%), and the United States (3.3%). A survey of the R&D performing organizations shows that in the 1970s, over half of them were public research institutions.

However, starting in 1990, the proportion of private enterprises increased rapidly, and after 1999, they accounted for more than 70%. In 2019 the proportion of public research organizations accounted for 1.6%, private enterprises accounted for 30.3%, and universities accounted for 3.1%. An examination of R&D performing organizations by region shows that most R&D organizations are located in the Seoul Metropolitan Area of Gyeonggi-do (35.0%) and Seoul (24.0%), followed by Incheon (16.9%)

In the R&D investment trends, the share of R&D to GDP increased from less than 1% in the early 1990s to 2% in the 1990s and continued to rise, accounting for 4.9% in 2019. According to the proportion of R&D to regional GDP all metropolitan areas and provinces except Daejeon and Gyeonggi-do, did not reach the national average. Since 1973 the Ministry of Science and Technology has invested 30 trillion won in investment up to Daejeon and established Korea’s first intensive scientific technology and research park in the Bundang Research Complex. As a result, R&D expenses in the Daejeon area accounted for 13.8% of the regional GDP in 2005 and continued to increase to 18.8% in 2019. Meanwhile, through vigilant attention to technology-intensive enterprises after the 1997 financial crisis, Gyeonggi-do significantly increased R&D investment throughout the 2000s. Statistically, the R&D ratio to GDP was 2.7% in 2005, but by 2019 it had increased significantly to 9.4%. In particular, in terms of per capita R&D expenditure by metropolitan area and province, the highest region was from Gyeonggi-do (234.4 million won), followed by Seoul (206.3 million won), Chungcheongnam-do (190.8 million won), Gyeongbuk (180.0 million won), and Gyeonggi-do (141.5 million won).