

# ECONOMY, POPULATION AND QUALITY OF LIFE

## Economy and Industry

Korea's economic growth over the past 60 years can be attributed to both industrialization and globalization. As its industrial structure progressed rapidly from the incorporation of primary industries to the inclusion of secondary and tertiary industries, Korea achieved highly compressed economic growth. The industrial policy, especially in light of the government's export-oriented development strategies, was a success. However, as both internal and external circumstances have changed since the 1980s, restructuring became necessary; efforts to develop intellectual talent and to conduct research and development activities were made across all industries. The government focused on fostering the private sector, and as a result, the status of chaebols (Korean conglomerates) grew continuously.

From the founding of the Republic of Korea in 1948 until the early 1960s, Korea's economy depended primarily on agriculture, and its economic system and industrial structure resembled that of other underdeveloped countries. During that period, agriculture, forestry, and fishery accounted for more than 40% of domestic production and more than 60% of employment. On the other hand, manufacturing accounted for less than 20% of domestic production,

and less than 10% of employment. Beginning in the early 1960s, Korea focused on economic growth through industrialization, and it was during this time that manufacturing became the key to Korea's economic development. Export-led industrialization and economic growth were the new strategic foci, and the government-led industrial development policy was emphasized. In the 1960s, an export-led strategy based on light industries such as fabric, plywood, wigs, and shoes became the leading exports. In the 1970s, the government promoted heavy chemical industries, and the main industrial focus shifted from light to heavy industries overall. In the 1990s, high technology products such as semiconductors, computers, and smartphones became important exports.

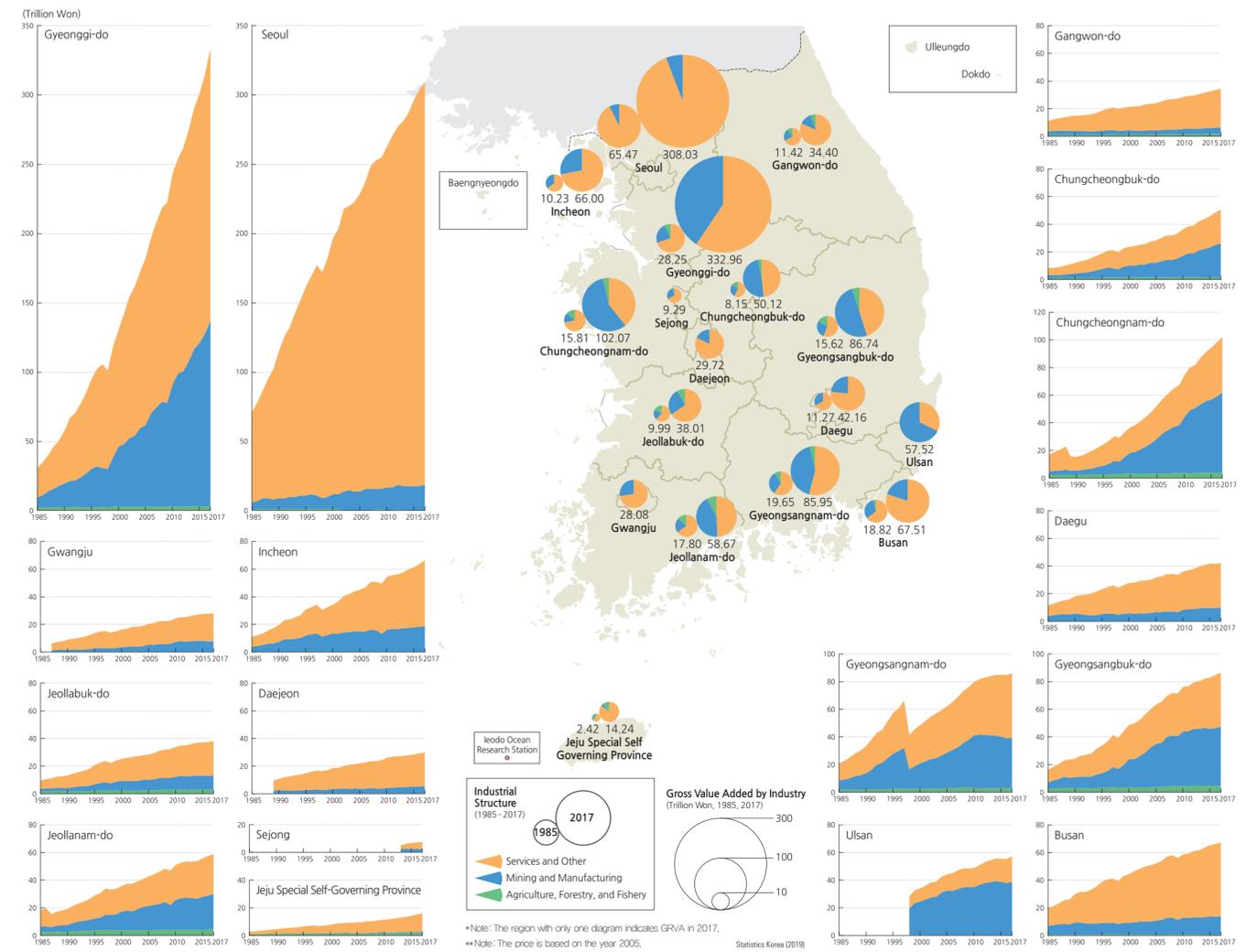
The nominal GDP of Korea was ranked 31st in 1960, 32nd in 1970, and 28th in 1980. With the rapid economic development, it climbed to 18th in 1985, 15th in 1990, and 12th in 2000. It has remained between 11th and 15th since then. In 1975, the GDP reached an excess of 10 trillion won, and it exceeded 100 trillion won in 1986, reflecting a tenfold growth within 11 years. In 2007, 30 years after it exceeded 10 trillion won, it exceeded 1,000 trillion won, which is 100 times over that of 1975, a vivid indicator

of Korea's compressed economic growth by any measure. The shock of the 1997 Asian foreign exchange crisis reduced growth temporarily in 1998, but since then, it has continued to increase year after year. The per capita GNI was 100,000 won in 1971, but by 1980 it had jumped to 1 million won. By 1996, it exceeded 10 million won; by 2007 the number exceeded 20 million won, and by 2015 it exceeded 30 million won.

The success in industrialization greatly impacted the national landscape. As a result, both industrial growth and population settlement concentrated in the greater capital area, while major industries developed mainly along the Gyeongbu Axis. In the 1960s, government-led industrial policies resulted in growth pole development in certain areas, and export-led industrial development occurred in the southeastern coastal cities due to their designation as export/import industrial centers. As a corrective measure to such imbalanced growth, factory regulation in the capital area was instituted, industrial facilities were relocated to rural areas, and local businesses were fostered through the implementation of balanced growth policies.

## Changes in Industrial Structure

The Growth of Cross Regional Value Added by Industry



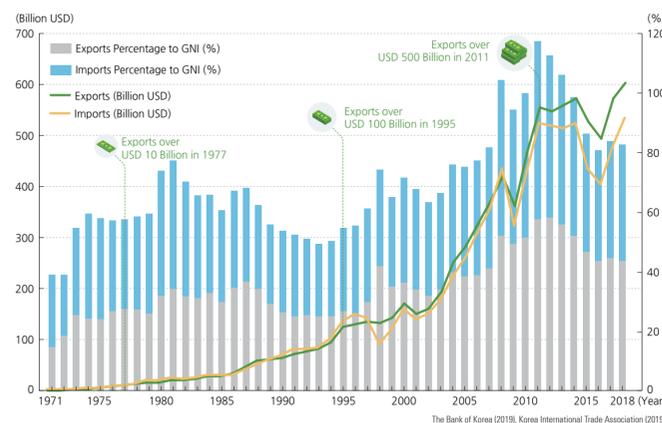
Changes in industrial structure are usually assessed by reviewing changes in the share of agriculture, forestry, fishery, mining, manufacturing, service, and other industries. Korea's industrial structure rapidly shifted from primary to secondary and tertiary industries. The number of employees in each industry proves to be an excellent indicator of the changes in industrial structure. Since the 1960s, the agriculture, forestry, fishery, and mining industries in Korea have suffered a steady decrease in employment while

manufacturing, service, and other industries increased. Similar patterns of decrease in agriculture along with a concordant increase in manufacturing have also occurred in other countries, but what is unique about Korea's changing employment pattern is that it happened very rapidly. Even advanced countries went through such changes but saw their transformation unfold over hundreds of years. Korea, on the other hand, underwent this dramatic shift in about 30 years. As such, Korea's industrialization can truly be characterized

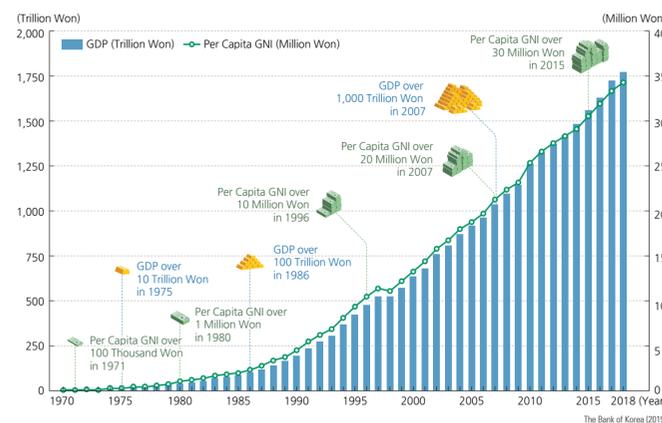
as rapid and compressed economic growth.

To examine the industrial structure of each city and province between 1985 and 2017, one must review the changes in total value. In all regions, the total value added grew for 32 years. Rapid growth was seen especially in Gyeonggi-Do, which overtook Seoul in 2014. In all regions, the agriculture, forestry, and fishery share decreased, and metropolitan areas showed a decrease in manufacturing and an increase in service and other industries.

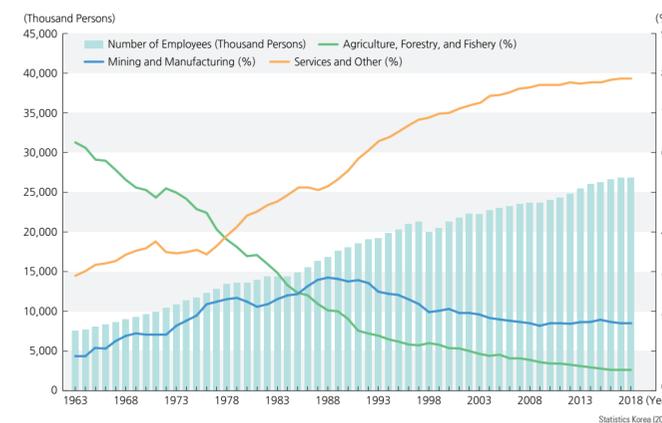
The Growth of Export and Import



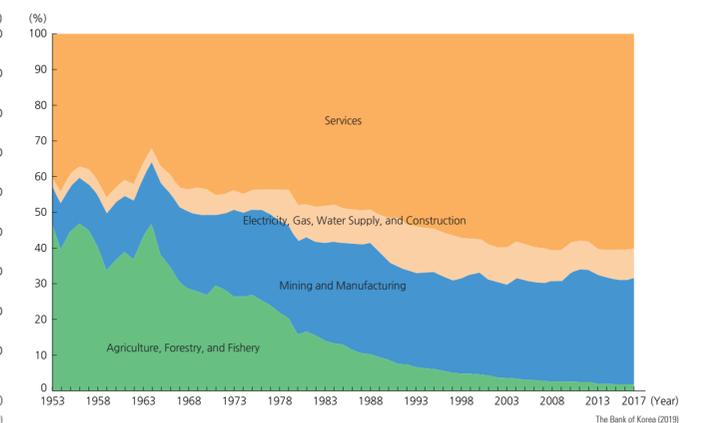
The Growth of GDP and per Capita GNI



The Change of Industrial Structure

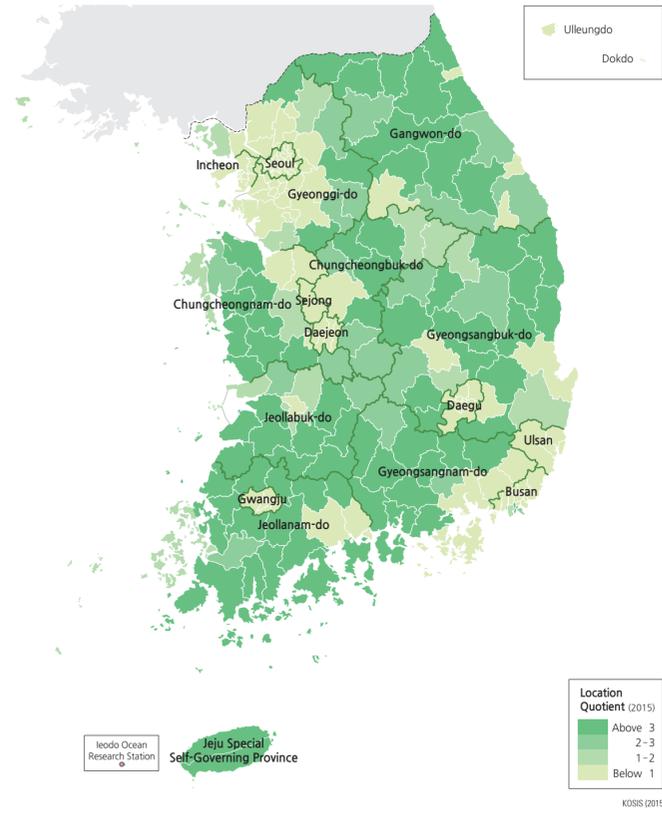


The Share of Value Added by Industry

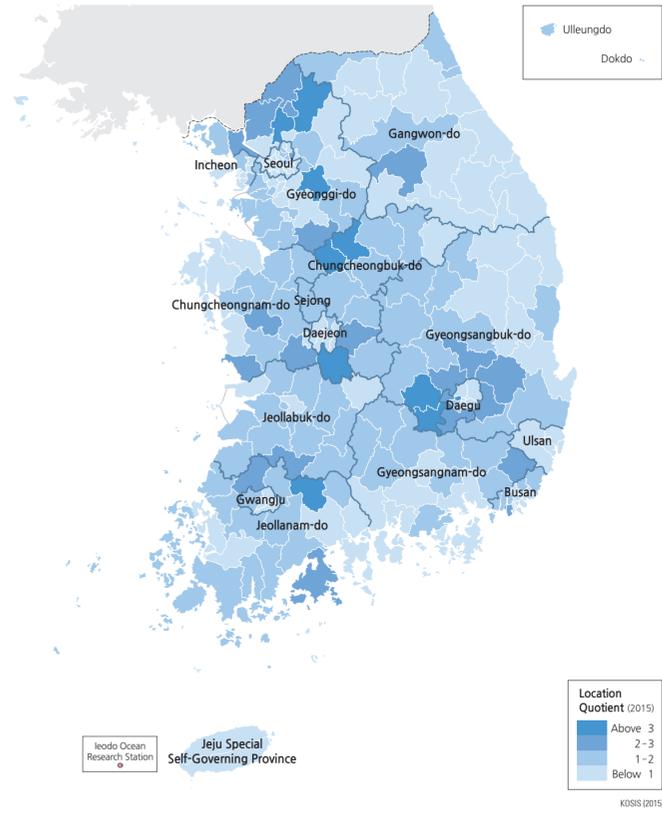


## Location Quotient by Industry

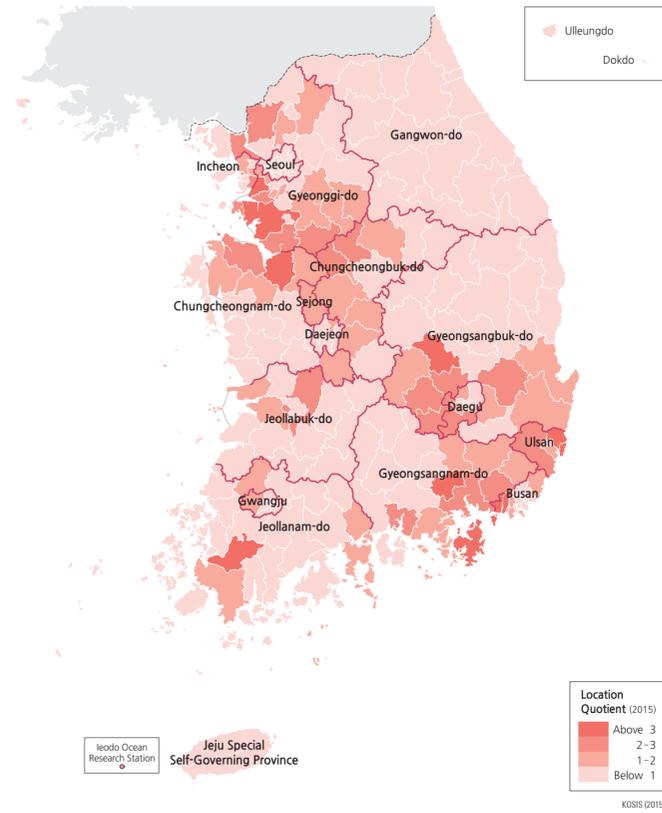
### Agriculture, Forestry, and Fishery



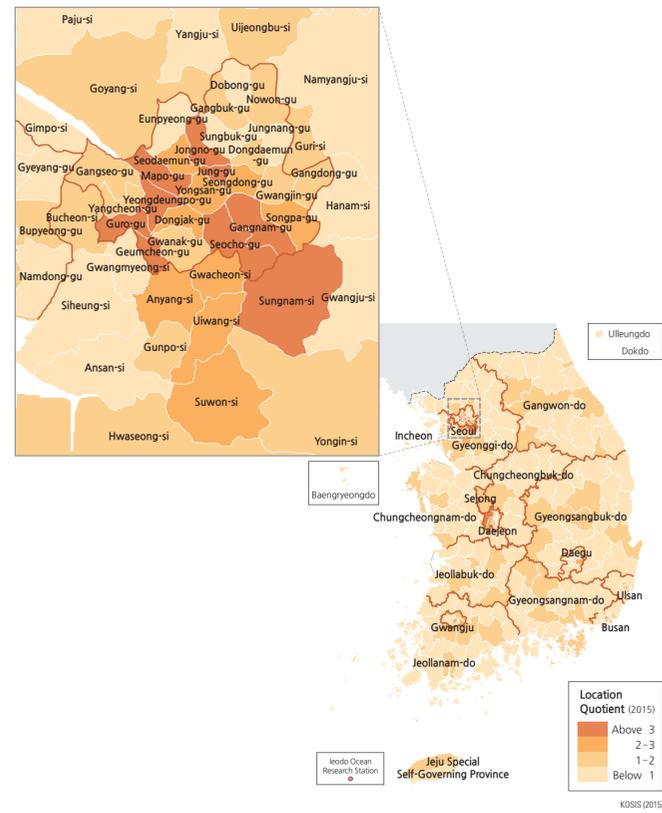
### Light Industries



### Heavy and Chemical Industries



### Knowledge Intensive Services



The Location Quotient is an index that indicates how specialized a specific industry is within a certain region; it shows the number of people engaged in a certain industry within a specific region divided by the number of people in that same industry in the entire

country. Generally, when the location quotient is over one, then that specific industry is specialized within that region. Spatially, industry is developed along the Gyeongbu Axis, and the heavy chemical industries are concentrated on the south side of the greater capital

area and the southeastern industrial coast. Knowledge-intensive services are concentrated in the Gangnam area of Seoul.

## Corporations and Innovation

Large export-industry firms played a significant role in Korea's economic development. As development progressed, these firms became Korea's chaebols or conglomerates. Korea's economy is highly dependent on large firms, and large firms have become increasingly important since 2000. The top 100 companies account for about 50% of the total billing amount of shipment, and the top 50 companies account for 43%. Among large firms with more than 300 employees, 37% and 17% of these are located in Seoul and Gyeonggi, respectively. About 58% of large firms are located in the

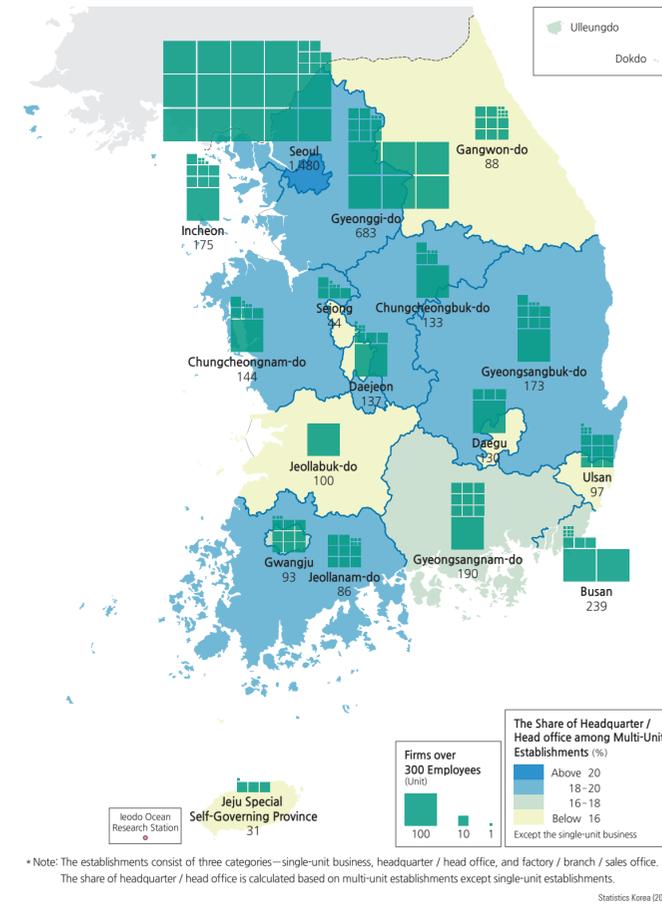
greater capital area, which indicates that many administrative and control functions are concentrated around the capital.

Korea's first approach to manufacturing industries focused on factor-driven light industries until the early 1970s, but after the mid-1970s, it shifted its emphasis toward investment-driven heavy chemical industries. After the 1980s, it shifted again toward a focus on innovation-driven industry by fostering highly-skilled human resources and technological development.

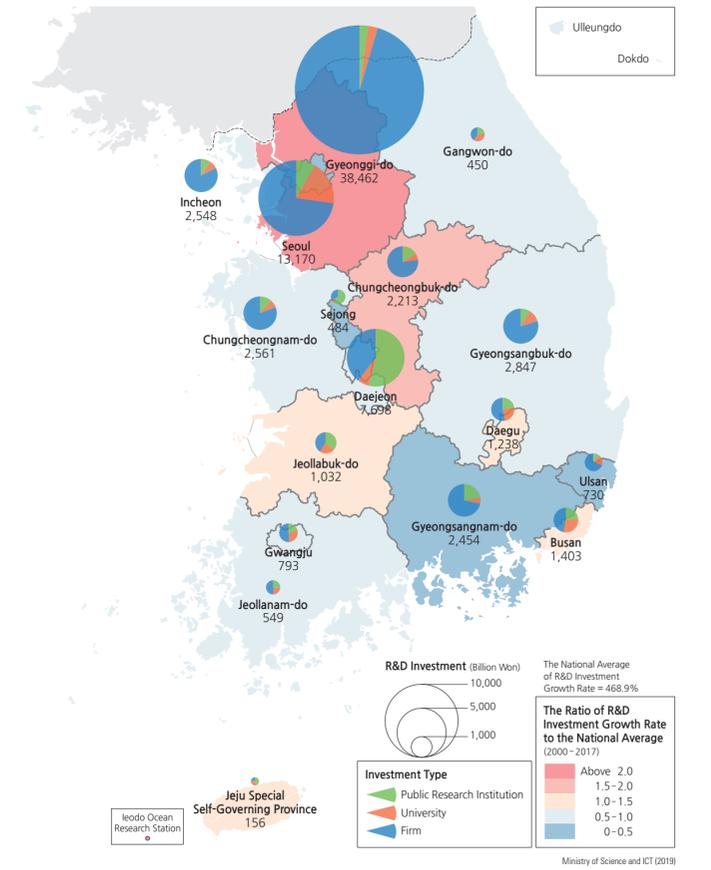
Research and development investment in Korea has increased

from less than 1% of the GDP in the early 1980s, to 4% in 2012, and to 4.6% in 2017. This growth represents a much faster growth in the technology-based sectors than in most other countries. The investment bodies of research and development changed as well. By the 1970s, public research institutes accounted for more than half of the research and development, but the share of private sector investments rapidly increased to make up more than 70% since the 1980s.

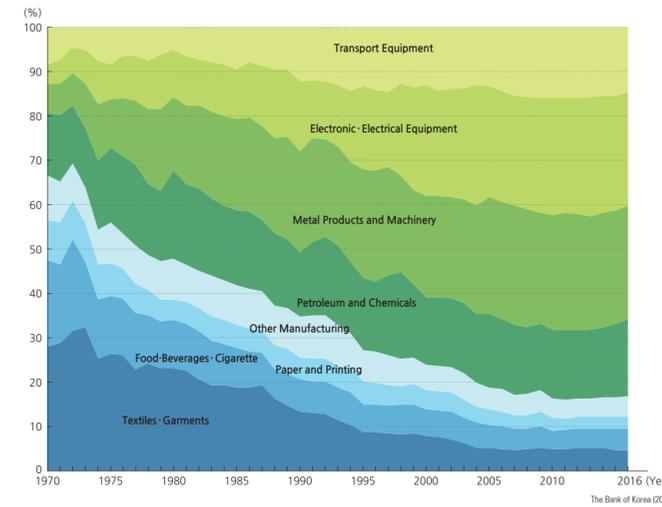
### The Distribution of Firms by Business and Scale



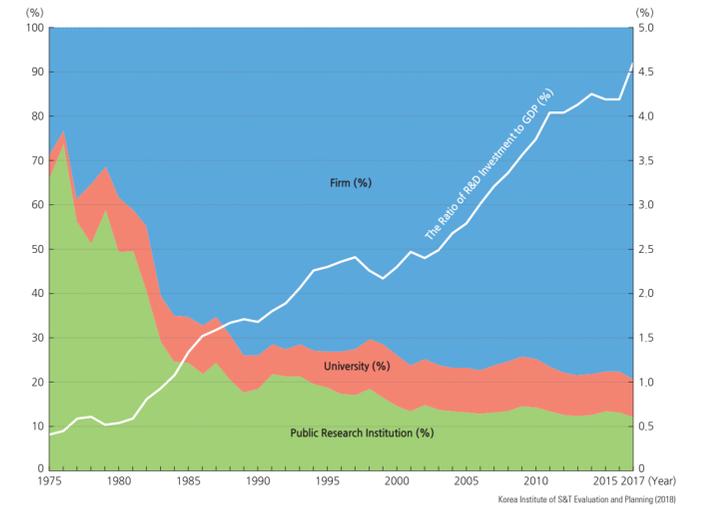
### R&D Investment



### Change of Manufacturing Industry Structure

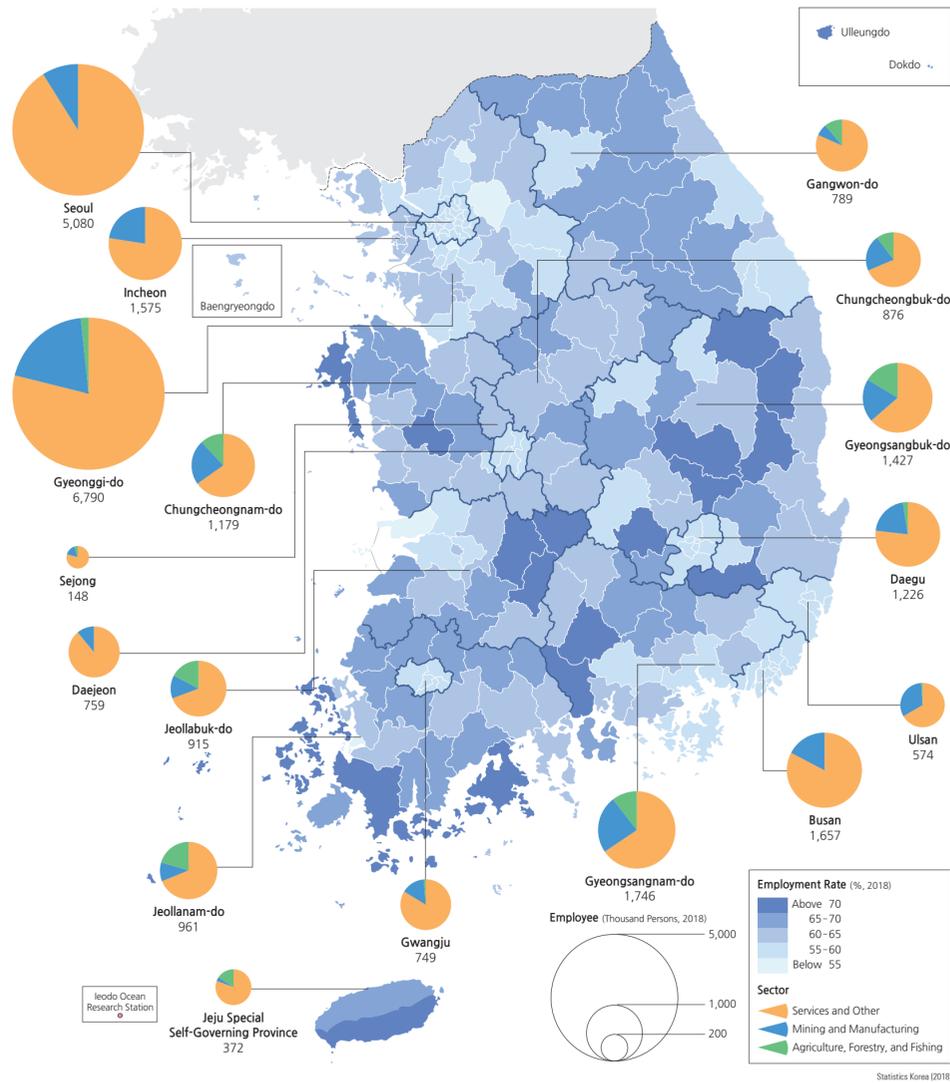


### The Share of R&D Amount by Investor



## The Transformation of Economic Activities

The Share of Employees by Industry and the Employment Rate



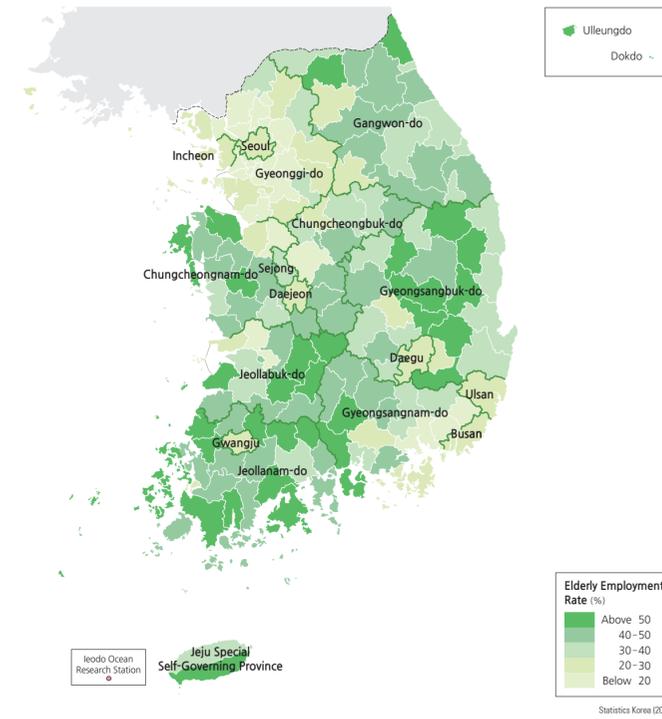
A number of crises during Korea's transformation into an economically stable world power deeply affected national economic activities. The two oil crises in the early and late 1970s, the decrease in competitiveness due to labor disputes and wage increases in the late 1980s, the Asian foreign exchange crisis in the late 1990s, and the global financial crisis of the late 2000s all had profound effects on Korea's economy. The most recent crisis led to a lower employment rate and a higher unemployment rate, which cast a shadow over the national economy. Fortunately, due to intensive restructuring in both private and public sectors, the economy recovered relatively quickly, and it has started to show growth once again.

The employment rate is the share of the employed as a percentage of the entire population group older than 15 years of age, and the unemployment rate indicates the share of the unemployed as a percentage of the economically active population, both the employed and the unemployed. The employment rate is lower in metropolitan areas even though there are many jobs, but this is due to the high urban population that skews the statistics. On the other hand, the unemployment rate is high in urban areas due to the high number of job seekers compared to the size of the urban population.

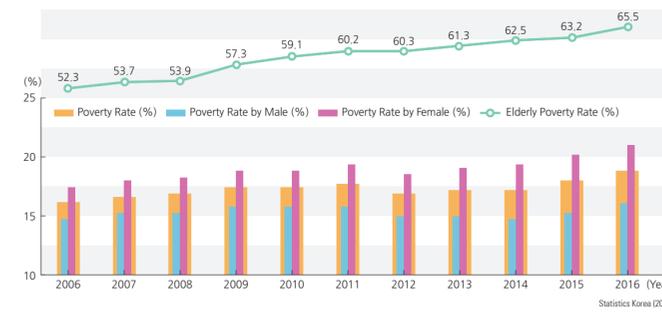
Korea's rapidly aging population is causing serious social issues such as a breakdown in securing support for the elderly and age-based income inequity. The number of young job seekers who are not reflected in unemployment rate statistics is also on the rise. The population of the elderly who are not supported by their children is also increasing, making elder employment issues more serious. In 2018, the employment rate was 70.8% for men and 50.9% for women, indicating a drop for men and a rise for women over the past 15 years. However, the proportion of non-regular workers for women is far higher than that for men, and the proportion is increasing. The increase in women's employment came in the relatively vulnerable job sectors. The youth unemployment rate has risen from 7% in the early 2000s to 9.8% in 2017, creating a serious social problem. Looking at the relative poverty rate (poverty being defined as less than 50% of the median income), the women's poverty rate appears to be higher than the men's. In 2016, the elderly poverty rate rose to 65.5%, showing this to be a very serious situation.

## Social Economy and Inclusive Growth

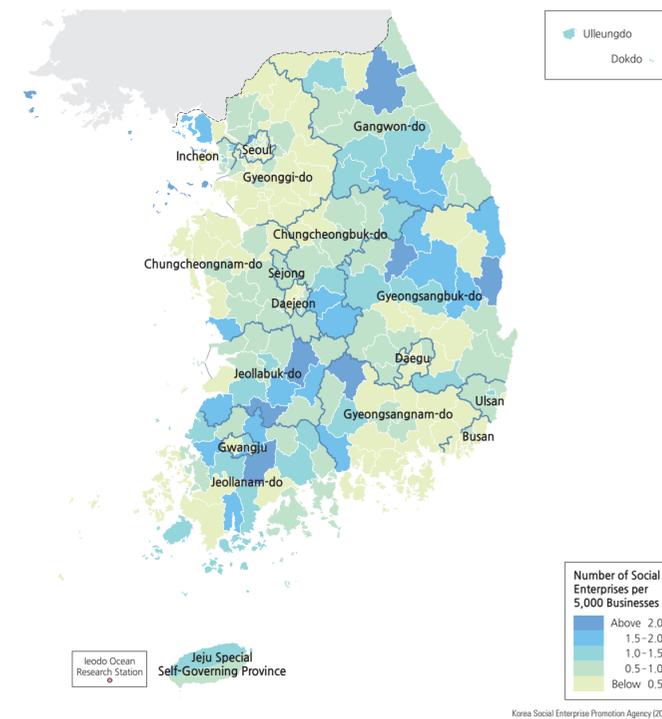
Elderly Employment Rate



Poverty Rate

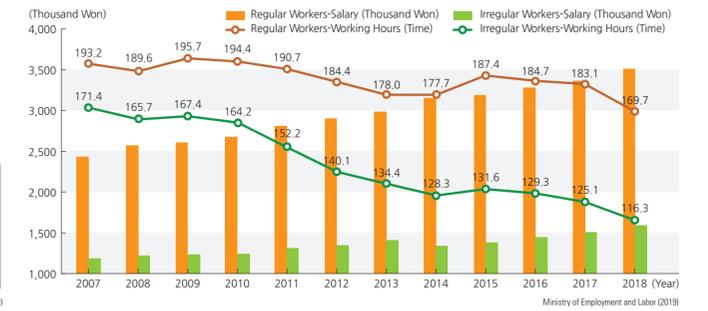


Social Enterprise Distribution

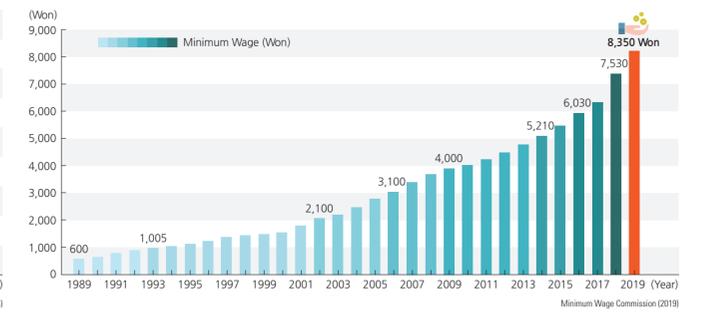


The state-led and export-oriented Korean economic development strategies faced a major crisis during the late 1990s. Unemployment skyrocketed as the economy faltered, which led to a rise in poverty. Until the early 2000s, the concept of social economy was not well-known in Korea. It started to draw attention in the 2000s and has now emerged as a major policy issue. There are many definitions of the term "social economy," but it is commonly agreed that the social economy incorporates economic activities that privilege meeting social needs before profit maximization. It is related to the involvement of disadvantaged communities in the production or consumption of socially useful goods and services. Policy actors around the world are increasingly interested in the social economy to underpin livelihoods and deliver welfare services. In 2006, Korea enacted the Social Enterprise Promotion Act, thus becoming the first Asian nation to legally stipulate the qualifications for social enterprises and to adopt policies for promoting them. Social enterprises and cooperatives can be cited as the representative types of social economy organizations in Korea, and social ventures and impact investments are also growing. Social economy can also be related to the "inclusive growth" discussion, which means that the quality of life is generally enhanced by giving members of society the opportunity to participate in equal economic activities and by the fair distribution of growth benefits. Policies are pushing for a hike in the minimum wage and the conversion of non-regular workers into regular workers to improve equality in the labor market.

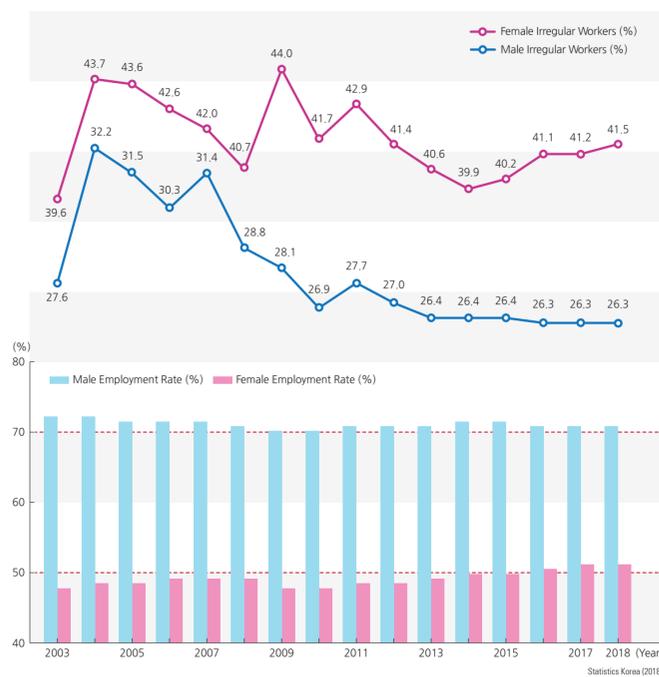
Comparison of Working Hours and Salary



Minimum Wage



Employment Rate by Gender and Percentage of Irregular Workers



Employment Rate by Age and Unemployment Rate by 15-29 Years Old



Cooperative Distribution

