Geo Factsheet

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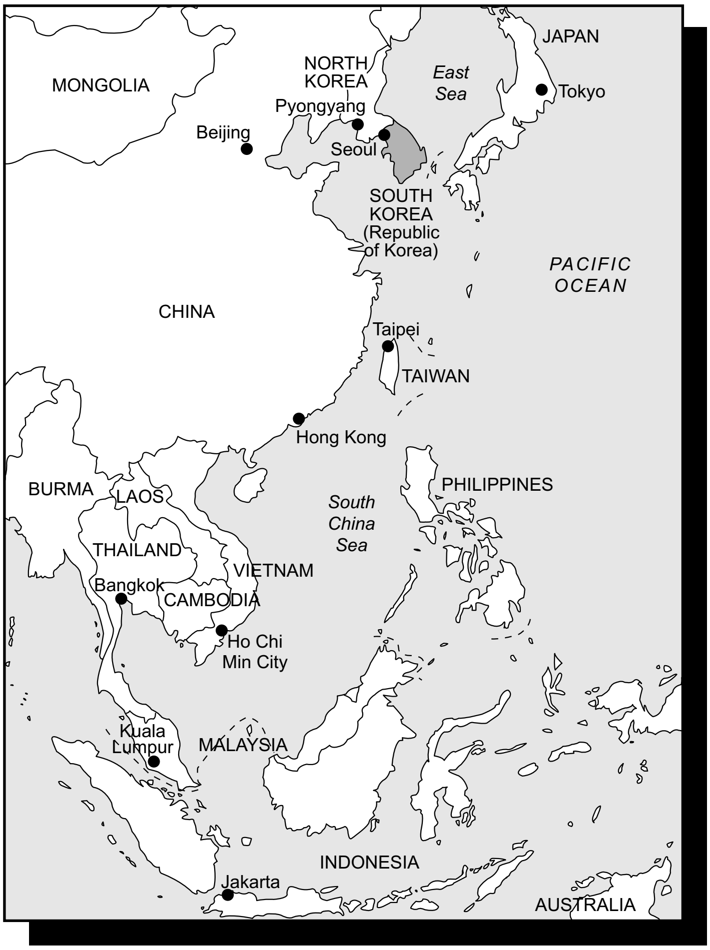
Economic development in South Korea - *an original tiger*

Introduction

Korea is located in east Asia *(Fig. 1)* and is one of the original NICs (newly industrialising countries). Korea, once one of the world's poorest agrarian societies, has undertaken economic development in earnest since 1962. In under fifty years, it achieved the 'Miracle on the Hangang River' – a process that dramatically transformed the Korean economy. Today, it is one of the most successful economies in eastern Asia. *NB: South Korea's official name is the Republic of Korea. In this Factsheet the name Korea will be used.*

Fig. 1 The Asia-Pacific region.



Over the past 30 years, Korea has enjoyed an annual average economic growth rate of 8.6% and has emerged as the world's 12th largest trading nation. In less than two generations, the nation has established itself as one of the world's leading shipbuilders and manufacturers of electronics, semiconductors and automobiles. Korea's accession to the OECD in 1996, signalled Korea's entry into the rank of advanced countries. There are only four OECD member countries in the Asia-Pacific region: Japan, Korea, Australia and New Zealand.

An outward-oriented economic development strategy, which used exports as the engine of growth, contributed greatly to the radical economic transformation of Korea. As a result, from 1962 to 2005, Korea's Gross National Income (GNI) increased from US$2.3 billion to US$786.8 billion, with its per capita GNI soared from $87 to about $16,291.

Korean imports have steadily increased thanks to the country's liberalisation policy and increasing per capita income levels. As one of the largest import markets in the world, the volume of Korea's imports exceeded those of China in 1995, and were comparable to the imports of Malaysia, Indonesia, and the Philippines combined. Major import items included industrial raw materials such as crude oil and natural minerals, general consumer products, foodstuffs and goods such as machinery, electronic equipment and transportation equipment.

The start of growth in the 1960s

The industrialisation process began in the early 1960s with the introduction of First Five-Year Economic Development Plan. The government made a conscious policy shift from the inward-looking growth strategy of import substitution to the outward-looking growth strategy of export promotion. The essence of growth strategy was to promote exports of light manufactured goods in which Korea possessed comparative advantage given its cheap labour cost.

The government's export promotion strategy did not receive warm acceptance at first. During the 1950s, Korea had depended on grant-in-aid and concessionary public loans, mainly from the United States, which financed imports and domestic projects.

Heavy and chemical industry promotion in the 1970s

In the early 1970s, the changing international economic environment had a significant impact on Korea. In 1971, the US government reduced the number of U.S. armed forces stationed in Korea by about one- third. The worldwide commodity shortage of 1972-73 and the oil shock of 1973-74 merely compounded the problem. The measures undertaken by the government were to restructure the composition of commodity exports in favour of a more sophisticated, higher value-added products, to diversify its trade partners, and to increase domestic agricultural output.

Korea turned to the Heavy and Chemical Industry (HCI). Already an important priority in the Third Five-Year Development Plan (1972-1976), HCI received greater emphasis because of the changes in the external environment. As the HCI drive spread, the growing demand for skilled workers pushed up domestic wages. HCI accelerated the urbanisation of Korea, as workers flocked to industrial centres where there were jobs available.

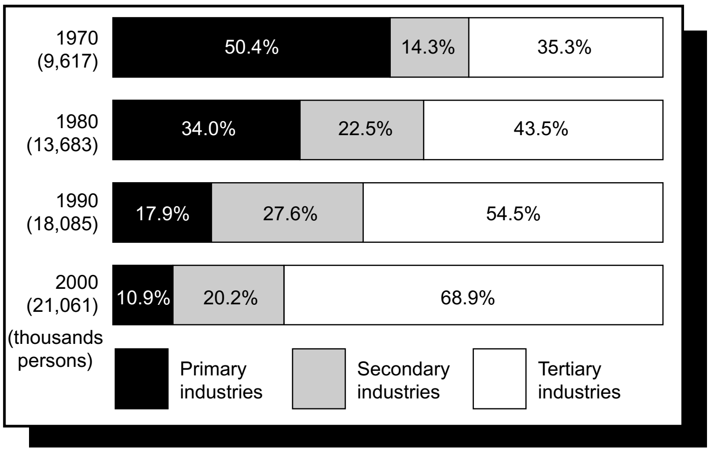
The HCI drive policy produced impressive results. Between 1972 and 1978 the GNP growth averaged 10.8% annually, and the annual growth rate from 1976 and 1978 reached 11.2%. The share of HCI products in total exports rose from 21.3% in 1972 to 34.7% in 1978. However, Korea's industrial structure was distorted by over-investment in HCI and under-investment in light industries. At the same time, real wages were increasing faster than productivity, weakening export competitiveness.

Rationalisation and liberalisation in the 1980s

The government forced firms suffering from excess capacity, namely those involved in power-generation equipment industry and automobile industry, to merge. Between 1984-1987, further rationalisation of industries took place in shipping and overseas construction. The concentration of economic power increased, since many of the troubled firms were taken over by the growing Korean conglomerates or **chaebol**.

Due to the world recession following the second oil shock, many debt-ridden firms became financially insolvent. The government's concern over unemployment and financial instability led it to bail out these firms for the sake of social stability. In addition, the government restrictions on foreign direct investment (FDI) were relaxed substantially in recognition of the FDI's role in promoting competition and transferring advanced foreign technologies. Industrial restructuring in the 1980s aimed at promoting small and medium-sized enterprises (SMEs). Employment in primary industries decreased *(Fig. 2)* but there were increases in secondary and tertiary industries. Therefore employment in primary industries decreased *(Fig. 2)* but increased in secondary and tertiary industries.

Fig. 2 Employment by industry in Korea, 2007.



Globalisation in the 1990s

Market liberalisation and political democratisation resulted in labour disputes and wage increases which far exceeded the rise in productivity. Entering the 1990s, wage hikes averaged 18% annually. In addition high financial costs and regulations on business activities reduced industrial competitiveness and entrepreneurship. Furthermore, the sudden increase in disposable income among Koreans led to excessive private spending and speculation.

Internationally, the 1990s witnessed growing regionalisation as economic trade blocs were formed among countries of Europe and America. The government increasingly felt the need to change its economic strategy, as the previous strategy that promoted exports using cheap labour as comparative advantage while keeping domestic markets protected from foreign competition showed its limit.

Economic Crisis of 1997

Throughout the 1990s, the structure of the Korean economy had become increasingly vulnerable. The vulnerability came from two sources. First was the short-term external debt and insufficient foreign exchange reserves. By the end of 1996, the share of short-term debt out of the total external debt peaked at 58%.

The second factor behind Korea's economic vulnerability was the corporate financial structure. The 30 years of government-led growth process created a close relationship between the government and chaebol. Chaebol were often engaged in projects at the government's bidding and the government, in turn, implicitly provided insurance against project failures. Business firms' main concern became expansion in size rather than to earn profits. To finance the expansion of businesses, firms chose the option of debt-financed growth.

Unfavourable terms of trade shocks in 1996 severely damaged profits of Korean corporations in 1997. Insolvent corporations and financial institutions damaged Korea's credibility abroad, leading to foreign capital flight. The vicious cycle of foreign exchange shortage and deterioration of Korea's credibility developed into a full-fledged foreign exchange crisis at the end of 1997. In October 1997, the Korean Stock Exchange began to plunge followed by a sharp fall of the Korean won against the U.S. dollar.

Financial sector reform

To manage the crisis, Korea called in the IMF, and produced economic reform programme focused on macroeconomic stability. The macroeconomic policy aimed to achieve stabilisation by requiring acquisition of sufficient foreign reserves, reforming the corporate and the financial sectors, and laying a foundation for enhancing the country's long-term growth potential.

Corporate sector reform

The corporate sector reforms aimed to achieve two objectives; to reduce the size of corporate debt, and to institute a new corporate governance structure that induced better and more transparent management. Big corporations led by Hyundai, Samsung, Daewoo and LG groups agreed to realign their businesses in seven areas: semiconductors, petrochemicals, automobiles, aircraft, rolling-stock, power generating facilities, ship engines and petroleum refining.

Labour sector reform

In particular, unions in chaebol became stronger and more militant, and dismissals became virtually impossible. Unemployment rates increased from 2.6% in November 1997 to 6.8% in 1998, but it has decreased to 2.7% in 2007.

Changes after the crisis

A change of government in 1998 led to reform in the financial, corporate, public and labour sectors with a view to restoring and strengthening foreign investors' confidence. The Korean economy once again proved its durability after undergoing its sharpest contraction in the wake of the financial crisis. The rebound was the result of the rigorous restructuring efforts, the elimination of bad loans from the banking sector and favourable macro conditions during 1999-2000.

Looking back into the 1960s, large corporations in Korea played the key role of spearheading the economy toward rapid growth. However, the concentration of economic resources brought some unique features that needed to be discarded if the firms are to remain globally competitive. Over-borrowing and reckless expansion, close links with political interest groups and dominance of major shareholders, lack of transparency, outdated governance structures all added to the negative image of chaebol.

Industrial innovation

Sustaining Korea's economic growth are key industries that have garnered recognition in the global arena. Korea is the world's largest shipbuilding nation; the third largest for semiconductors, and the fourth largest for digital electronics *(Fig. 3)*. As a major auto manufacturer, Korea produces over three million vehicles annually. Korea first started exporting cars in 1976.

Fig. 3 World rankings

- World's largest shipbuilding nation
- World's largest supplier of DRAM semiconductors, TFT-LCD and CDMA mobile phones
- 3rd largest supplier of semiconductors
- 4th largest supplier of digital electronics
- 5th largest producer of textile, steel and petrochemicals
- 6th largest supplier of automobiles

With almost 11% of the global market share, Korea's semiconductor sector is at the forefront of the industry, particularly in terms of flash memory and sac (System on a Chip). As of 2004, Korea's DRAM (Dynamic Random Access Memory) ranked first in the world, with a 47.1% market share.

Since 2000, innovation has topped the national agenda. Having undergone spectacular growth in a relatively short period of time, the Korean government is now focusing on the "quality of growth". Korea envisions three pillars for future growth: growth that fosters job creation, growth that fuels innovation in industries, and growth that brings balanced development among the provinces as well as metropolitan areas and among companies large and small. Employment in manufacturing has declined *(Fig. 4)* but it has increased in services. Nevertheless, the size and composition of manufactured products has increased and changed between 1970 and 2000, as shown in *Fig. 5*.

Fig. 4 Employment composition in Korea.

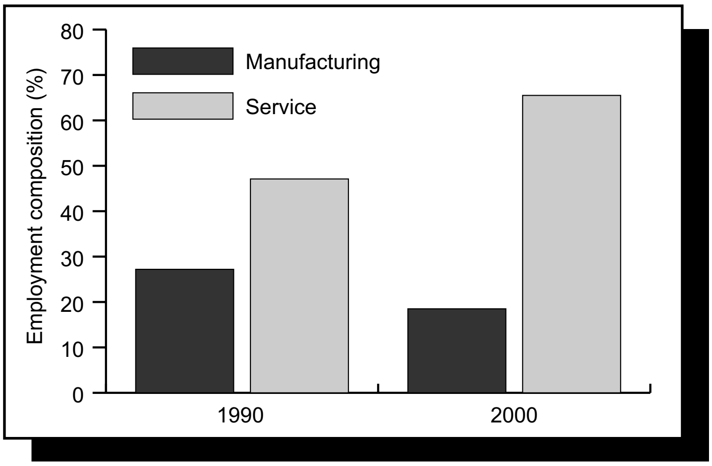
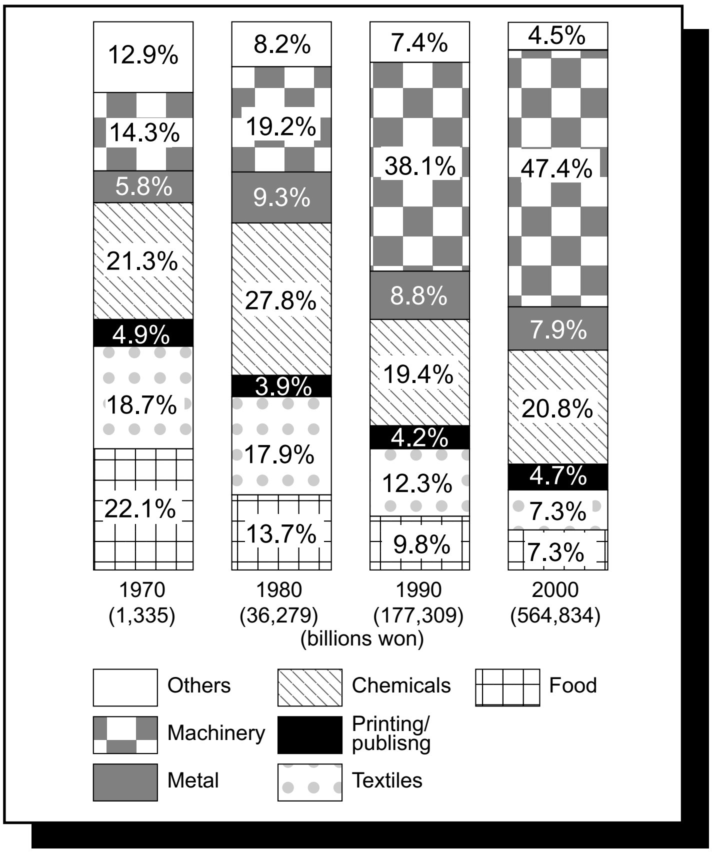


Fig. 5 Manufacturing products.



Technology in agriculture

Agricultural development efforts have been concentrated mainly on maximising yields from the country's limited arable land, which comprises only about 19% of total land area. New high-yield varieties of rice and other crops have been introduced. Also, a large-scale fertiliser and pesticide industry has been developed to keep farmers adequately supplied with these essential products.

There has also been rapid growth in the production of fruits, vegetables and other high quality crops, as well as livestock products. The spread of vinyl greenhouses greatly contributed to the increased volume of the nation's vegetable harvest.

The process of industrialisation resulted in a steady decrease in Korea's farm population. The ratio of rural residents to the overall population plunged from 57% in 1962 to below 9% in the late 2000. This trend has also affected the employment structure of the nation's industry. To solve the problem of rapidly dwindling rural labour, major efforts have been undertaken to promote farm mechanisation.

Science and technology

To reinvigorate the development of advanced science and technology, the government established the Korea Institute of Science and Technology (KIST) and the Ministry of Science and Technology (MOST) in 1966 and 1967, respectively. Initially, Korea's national science and technology policies focused mainly on the introduction, absorption, and application of foreign technologies. In the 1980s, however, the emphasis shifted to the planning and conducting of national R & D projects to raise the level of scientific and technological skills.

Since the early 1990s, the government has been concentrating on three areas: the fostering of research in the basic sciences, securing an efficient distribution and use of R & D resources and expanding international cooperation. In 2004, the government announced a plan to restructure the National Innovation System (NIS). The plan emphasises shifting from a catch-up model to a more creative approach, increasing networking among players. At the end of 2004, Korea's total R & D investment was around 2.85% of GDP.

Conclusion

International financial markets positively regard Korea's economic achievements, including sustained high growth, moderate inflation, and high national savings. However, these impressive accomplishments were overshadowed by the difficulties of several major conglomerates and financial institutions. Nevertheless, Korea is intent on moving forward.

Korea is working to become the focal point of a powerful Asian economic bloc during the 21st century. The Northeast Asian region commands a large pool of essential resources that are the necessary ingredients for economic development. These include a population of 1.5 billion people, abundant natural resources, and large-scale consumer markets.

Korea is attempting to develop as North-east Asia's new business centre and logistics hub. Taking advantage of its geographical location between such large economies as China and Japan, it hopes to emerge as a major economic and IT power early in this century.

To go forward, the government intends to upgrade business practices to international standards, promote human resources and technology development, and enhance institutional efficiency. Korea's goal is to solve the problems rooted in the past, and create an economic structure suitable for an advanced economy to meet the challenges of the 21st century.

Acknowledgements
This Factsheet was researched by Garrett Nagle who visited Korea in 2007, as a guest of the government. ***Curriculum Press, Bank House, 105 King Street, Wellington, TF1 1NU. Tel. 01952 271318.*** *Geopress Factsheets may be copied free of charge by teaching staff or students, provided that their school is a registered subscriber. No part of these Factsheets may be reproduced, stored in a retrieval system, or transmitted, in any other form or by any other means, without the prior permission of the publisher.* ***ISSN 1351-5136***