



Available online at www.sciencedirect.com



Procedia Social and Behavioral Sciences 2 (2010) 7208-7217



Selected Papers of Beijing Forum 2005

# How Geography and International Relations Shaped Economic Development in the Republic of Korea

Hun-Chang Lee

Professor, Korea University

#### I Introduction

This paper argues that international relations have been the most important factor in determining Republic of Korea's economic development, they have been fundamentally affected by geography, and geopolitics has been favorable to its economic development, during the last two millennia.

## **II** Hypothesis

The economic development of a country is determined by many factors including geography, trade, culture, institutions, and so on. These factors are interrelated with each other. Among those, geography is the only exogenous variable. Institutions are determined by culture and policy. There have been heated debates on what is the main determinant of growth (Rodrik, Subramanian, and Trebbi 2004). Economists and historians consider geography, trade and institutions as strong candidates.

Sachs(2003) argued that levels of per capita income, growth, and other economic and demographic dimensions were strongly correlated with geographical and ecological variables such as climate zone, disease ecology, and distance from the coast. Republic of Korea has a favorable ecology to develop agriculture.

International economic relations are trade, capital flow, and transfers of technology and institutional knowledge. These affect economic development through market integration, capital accumulation, technological and institutional innovations, etc. Acemoglu, Johnson and Robinson (2005) argued that the growth of Atlantic trade played a central role in the rise of the West. There are special reasons why international relations have strongly affected Korea's economic development. Republic of Korea has a geographical advantage for trade development, because it is a peninsular country. Because Korea is smaller than the neighboring countries, it has had no option other than to accept the given international environment for the most part of its history. Economic theory says that the smaller the country, the bigger the benefits from trade. Republic of Korea has favorable geographical features to pursue a catch—up strategy and has been successful in benefiting from the catch—up strategy for the most part of the last two millennia.

This paper does not propose any sort of geographic determinism. Technological progress in transportation and communication weakens geographical influence on economic development. Modern technology enabled Republic of Korea to have close relations with regions outside East Asia. There are other factors determining economic development such as culture, institutions, and policy, independent of geography. Institutions are formed by policy and culture, and they seem to exert a stronger influence on economic growth than geography under modern technology. These factors affect international relations. The salient example was maritime ban that prohibited natives to go oversea independent of emissary traffic, making Korea's geographic advantage useless.

Some Less Developed Countries succeeded in catching up with advanced countries, while others did not. It is argued that the success depended upon social capabilities (Abramovitz 1986), or culture (Huntington and Harrison 2001). Korea's success or failure in catch-up was strongly affected by policies and institutions related to international relations. The enhancement of social capabilities can support efficient policies and institutions for catch-up.

The fundamental influence of geography cannot be denied, however. Even under modern technology geographic characteristics are important determinants of countries' overall trade (Frankel and Romer 1999). Policy and culture have been affected by geography. For example, the acceptance of Chinese tribute system by Korea, which was the most important factor determining the pre-industrial foreign relations, and had something to do with maritime ban, was almost an inevitable outcome of the East–Asian geopolitics. The acceptance of Confucianism, the most important culture of pre-industrial Korea, was fundamentally affected by the East–Asian geopolitics. Advanced civilization flowed in Korea first, and then social capabilities to catch up with them formed gradually. Intimate international relations with advanced neighboring countries have helped Korea develop technology and institutions for economic development and accumulate social capabilities for catch–up.

Therefore, I argue that international relations have been the crucial factor in determining Republic of Korea's economic development, and they have been fundamentally affected by geography. This paper lays stress on the following causality: geography  $\rightarrow$  geopolitical environment  $\rightarrow$  international relations  $\rightarrow$  market development, and transfers of technology and institutional knowledge  $\rightarrow$  economic development.

## III Characteristics of Korean Economic Development

According to Kuznets(1973), modern growth is characterized by sustained growth of about 3% rate, and modern growth rate is about ten times higher than pre-modern one. The Korean economy grew at a rate of over 3% during 1910—1940 (Colonial period), which was more than ten times higher than that during 1392—1876 (Joseon period), as shown in Table 1. It seemed that per capita income did not change significantly during the Joseon dynasty (Bak 2005). But Korean economy experienced a serious setback just after Liberation from Japanese imperialism in 1945. It could stabilize and grow more than 3% thanks to massive economic aid from the U.S. During 1963—1996, Republic of Korea had sustained very high growth rates without foreign aid. Seen from the Penn World Tables 6.1 and Maddison's estimates (2001), Republic of Korea's real per capita income increased about tenfold during the High Growth Period (1963—1996), twenty-fold in the 20th century, whilst less than twofold for two millennia before 1900.

Period	Population Growth Rate	Economic Growth Rate		
Joseon Dynasty (13921876)	0.25%			
Colonial Period (19111938)	1.3%	3.7%		
Period of Economic Aid (19531961)	3.3%	4.1%		
High Growth Period (19611990)0.25%	2.1%	8.3%		

Table 1Population and Economic Growth in Korea

Source: Lee (2000), p.278.

Pre-industrial Korea absorbed Chinese civilization better than any other countries. "In the Sui period, only one of China's neighbors, Goguryeo had any claim to be a "state" with a mainly sedentary populations and stable institutions." (Franke and Twitchett: p.4) Therefore, Korea was an advanced country, more developed than Japan and West Europe, in the sixth century.

Korea has characteristics of slow growth before the nineteenth century and high growth in the twentieth century, especially during 1963—1996, compared with other industrialized countries. Though the growth rate of Joseon Korea was not so low among pre-industrial societies, it did not experience a dynamic economic development before the nineteenth century, unlike the Late Medieval and Early Modern Europe, or Tokugawa Japan. As a result Korea lagged behind West Europe before the fifteenth century, and Tokugawa Japan.

Korean civilization had been degraded into the middle level, and its per capita income into the low level, in the nineteenth century. Although Korea was ranked low in terms of per capita income, its cultural, social and political capabilities were not so low, and its population density was high. Korea's per capita income rose to the middle level

during the heyday of Colonial period, but fell again into the low level after liberation from Japanese imperialism. Republic of Korea was a poor country in the early 1960s when it began to take off, as shown in table 2.

Table 21 rends of GDP and 1 rade Dependency in Republic of Rorea									
Year	1870	1912	1938	1949	1960	1982	1999		
GDP per capita (Dollar)	650	800	1,100	770	1,124	4,557	13,317		
GDP (billion Dollars )	10	14	26	16	27	179	625		
Trade dependency (%)	1.5	17.1	63.6		16.8(4.1)	69.0	71.5		
(Export/GDP)		(5.2)	(30.9)			(33.2)	(39.1)		

Table 2Trends of GDP and Trade Dependency in Republic of Korea

Note: 1. Dollar means 1990 international Geary-Khamis Dollars used in Maddison (2001).

Source:Data for the trade dependency is referred to Lee (2004) for 1870, database of the Nakseongdae Institute of Economic Research for 1912 and 1936, and the Website of the Bank of Korea for 1960 and thereafter. Figures before 1938 consider only commodities, and those after 1960 covers commodities and services.

According to the Penn World Tables 6.1, 2000 World Development Indicators, and Maddison estimate (2001), Republic of Korea's per capita income remained at the top 60% level just before the High Growth Period (1963—1996), and jumped to the top 20% in 1990. During the High Growth Period, Republic of Korea had transformed from a Less Developed Country into a Newly Industrialized Country. By the end of the twentieth century, Republic of Korea again belonged to advanced regions.

## IV International Relations and Economic Development

Korean experiences fit well with economic theory that increases in trade and capital flow, and technological diffusion induce economic growth. The main reason why economic growth of Korea in the twentieth century is far higher than that before the nineteenth century could be sought in international economic relations. The port opening in 1876—1883 signified a turning point toward an open system in terms of trade, capital movement, and personal exchange. Its trade grew very rapidly with the enforcement of free trade system and the development of trade facilities, foreign capital began to flow in Korea, and technology and institutional knowledge were transferred to Korea far more freely along with expanded personal exchanges. I will mention them in more detail.

Trade is the oldest international economic relations. Korea's trade dependency (trade volume/GDP) was estimated to be about 2.5% during the late 17th and early 18th centuries when trade volume was the largest before the port opening owing to the massive inflow of Japanese silver. Trade contracted mainly due to the interruption of silver import from Japan in the early and middle 18th century, and recovered as cultivated ginseng export to China began and grew from the late 18th century. The trade dependency might exceed 1% from the late 16th century owing to the increase in Japanese silver inflow. Before then, it seemed to exceed 1% only in the 9th century (Lee 2004). The ratio of trade volume to GDP in Korea was estimated to be around 1.5% in the early 1870s, while the ratio of merchandise exports to GDP of Asia, Western Europe and the world was estimated to be 1.7%, 8.8% and 4.6% in 1870 (Maddison 2001). As Acemoglu, Johnson and Robinson (2005) argued, this low dependency on Korean trade played an important role on the lag behind Europe in the middle and early modern periods.

Then how could Korea belong to the advanced or the middle level civilizations in the pre-industrial period? It was mainly because Korea is located near China that had been the most advanced country during the ancient and middle times. Before the port opening in 1876, transfers of technology and institutional knowledge seemed to play a central role on economic development, because there was no capital inflow, and trade dependency was less than 1% for the most part of the pre-industrial period. Technology and institutional knowledge were transferred through diplomatic and trade relations. The Three Kingdoms succeeded in absorbing advanced Chinese civilization and establishing advanced states, though trade was not thriving during the Three Kingdoms Period.

Before East Asian countries opened doors to Western countries, however, personal communication and travel other than emissary traffic were strictly restricted, and migration was almost impossible. By contrast, numerous

<sup>2.</sup> Confined to South Korea for the period after the Korean Liberation

<sup>3.</sup> GDP is estimated based on the data from Maddison (2001, pp.214-215, 298, 304). Those figures for 1950 are considered as statistics in 1949, because these are statistics before the Korean War. GDP per capita in 1913 is adjusted to be lowered, because it seems to be overestimated.

professionals, intellectuals and engineers migrated into other countries during the Medieval and the Early Modern Europe, which was a crucial factor in realizing the dynamic economic development (McClosky 1981).

Korea had been active in foreign relations before the ninth century. The Three Kingdoms engaged in active foreign relations with Chinese and Japanese dynasties in order to win military competition between them. Unified Silla was the most active in foreign advance before the port opening. The Unified Silla government was more active in pursuing trade gains than the contemporary Japanese government (Lee 1997). Studying abroad was active only in the Unified Silla period. About two hundred monks traveled to India between the 3rd and 8th centuries; most of them were Chinese, and only nine were Korean (Fairbank, Reischauer, and Craig 1978). Based on residences of Silla people built in China and Japan, private trade flourished in the ninth century. This vigorous seaborne trade of private merchants was unique in the history of pre-modern Korea. The 9th century was the only time when Korean pirates troubled Japan.

Korea became passive in maritime advance in the tenth century. The Goryeo government was actively engaged not only in cultural exchanges but also in trade with Song China. However, it prohibited the private maritime trade independent of the emissary traffic. As the result, Song merchants dominated Goryeo–Song trade, and Korea's leadership in the Northeast Asian maritime trade was transferred to the hand of China. As the interest of the Goryeo and Joseon dynasties in maritime advance diminished, Korean merchants did not go to Japan, Japanese came to Korea for trade, and Japanese pirates were rampant in Korean seashores. The Joseon dynasty was the most passive in foreign advance, having a label, "the Hermit Kingdom."

Interestingly, the economic gap between Korea and China had narrowed until the Unified Silla period (668—918) when Korea was active in foreign advance, but this trend did not continue during the Goryeo and Joseon periods when Korea was passive in it. This is revealed by the technology for silk fabrics and porcelain, representative products in pre-industrial East Asia. It is well known that Korea's ceramic technology reached its peak in the Goryeo period (936—1392). The prosperous private maritime trade in the 9th century Korea seemed to stimulate the catch-up process. It is argued that maritime traders of Unified Silla played an important role in absorbing Chinese ceramic technology. The technological gap in weaving silk fabrics between Korea and China had narrowed until the Unified Silla, but got widened in the Joseon period (Lee 2004, pp.247-248).

Though Goryeo and Joseon dynasties became passive in foreign advance, they were also eager to absorb China's advanced civilization. The Joseon dynasty had very intimate diplomatic relationship with China, and there were on average three embassies to China per year during the long Joseon period. Then why did they not have good records in catching up? First, maritime ban was enforced until 1882. Second, the Joseon dynasty was very passive in pursuing trade gains. Third, the Joseon dynasty not only closed doors to Western countries, but also restricted dissemination of Western Civilization through China. It was afraid that Western religion contaminated Confucian culture.

Table 2 shows that Korea's trade dependency evolved into a new dimension, after the administered trade system under the tributary order was transformed into the free trade system by unequal treaties with Japan and Western countries during 1876—1883. The introduction of modern trade facilities also helped trade to increase. Not only trade volume but also trade dependency made the most notable increase from the port opening to the end of the colonial era and during the Park Chung-Hee regime.

The port opening of Korea signified a starting point for the introduction of foreign capital. However, the volume of capital introduced in Korea before 1904 was small, which was used mostly for the payment of foreign debts and indemnities, adding not much to industrial production. Massive capital inflows during the colonial and Park Chung–Hee periods played an important role on industrialization and growth. Note that capital inflows during Colonial period mostly comprised foreign direct investments that made Japanese capital dominate the colonial economy, while those under the Park Chung–Hee government were foreign loans that facilitated Korean capital to grow.

The port opening accelerated transfers of technology and institutional knowledge not only through the free trade system and capital movement, but also through more active personal exchanges. The Korean government employed many foreign intellectuals and engineers, and sent a number of students to study abroad after 1880 for the first time in history. The purchase of technology started in the 1960s, and the amount exceeded \$100 million in 1980, and \$1 billion in 1990.

In the 19th century prior to the port opening, Korean economy experienced a downturn mainly due to decreases in land productivity. It met an upturn mainly owing to trade expansion after the port opening. The 19th century Korea seemed to face the limit of pre-modern growth in various aspects such as food and energy productions,

market development, etc. The new international economic environment following the port opening enabled Korea to break through the limit (Lee 2006, chap. 5). The urbanization ratio had been in a long-term downward tendency since the Unified Silla, but has rolled over to an increasing trend after the port opening (Lee 2003b). The growth of colonial period benefited from the favorable turn of economy after the port opening.

Wallerstein (1974) argued that the modern world-system originated in the sixteenth century Europe where an international division of labor formed. Western impact on Korea was limited before opening its door to Western civilization, because the Korean government prohibited direct intercourse with Western countries. Frank(1988) argued that China had been the center of world economy before the eighteenth century. But the case of Korea that had had a very intimate relationship with China seemed to reveal that the Chinese World Order did not develop an international division of labor comparable to Europe. China had little motive and intention to become the center of world economy. It just wanted to maintain the political suzerainty. The advent of industrial capitalism in Europe and the U.S. enabled East Asia including Korea to incorporate into a modern world-system.

### V The Role of Policy and Institutions on International Relations

This section argues that policy and institutions have exerted strong influences on international relations, and they have been affected fundamentally by geopolitical environment, in the Korean history.

The pre-industrial Korean trade had a growing trend. It was mainly owing to population increase. Population in Korea was roughly estimated as about three millions in the twelfth century, about five millions around 1400, and about eighteen millions around 1800 (Bak 1996, pp.147-156; Kwon & Shin 1977). But Korea's dependency on trade was very low compared to other regions even just before the door-opening to the modern world in 1876, as mentioned in the above section. Why did Korea that has an advantage of being a small peninsular country have so small a trade?

The history of pre-industrial Korea sometimes showed its potentials to develop trade and become a maritime power. The first ancient state of Korea, Old Joseon did not agree to be incorporated into Han China's world order and sought to serve as an intermediary in the trade between Han China and the outlying territories beyond its northeastern borders, which provoked a Han invasion. This state showed the ability to become a maritime power (Shiba 1992, p.8), but the Chinese foreign policy did not tolerate it.

During the 3rd and 4th centuries A.D. the southeast coastal region developed external trade. Iron produced in this region was distributed in the Korean Peninsula and Japan. This open system of external trade collapsed at the beginning of the 5th century owing to the Silla advance (Yi 1998).

During the 9th century when the state power of Unified Silla weakened, private trade unrelated to the tribute by Koreans prospered. Silla merchants organized the private coastal trade in China and participated in trade with Japan, dominating the East Asian sea trade. The most distinguished figure, Jang Bo-go, controlled the flourishing trade with China and Japan.

Korean pre-industrial trade had several ups and downs, however, resulting in a very slowly growing trend. There were serious setbacks of trade. The consolidation of the Three Kingdoms curtailed the external trade among local powers in the Korean Peninsula, so the consolidation and extension of state power had transformed the open trade system into an administered one. We find no evidence that the private maritime trade independent of the emissary traffic was allowed by Korean states since the Three Kingdoms. It seemed that maritime ban had been implemented since then.

Goryeo government became passive in maritime advance, and implemented a maritime ban. Korean merchants did not go to Japan. After the late eleventh century, Japanese vessels came to Korea, presented tributes, and carried out trade.

The Joseon dynasty prohibited all the private trade with China at first. Such a strengthened policy against private trade can be explained by the attitude of Ming China and the rise of Confucianism. Ming consolidated tribute systems, implemented maritime bans, and criticized the private trade of Korean embassies. Power elites who founded Joseon criticized that private trade by powerful men weakened state disciplines, based on the notion of Confucianism that became the ruling ideology of the new dynasty (Sukawa 1997). The Joseon court colluded in private trade with China attendant on tributary traffic and that accompanied by authorized border markets trade, and

at last allowed it. Private trade grew remarkably owing to silver import from Japan in the sixteenth and seventeenth centuries.

Korean vessels could not go abroad for trade during the Joseon dynasty. The ambassadors of Joseon to Ming China turned to the land route in order to avoid the possibility of shipwrecks in the sea route, which shows that reducing transportation costs was secondary to the goal of avoiding risks to ambassadors. The movement of the Chinese capital to Beijing also decreased the incentives for maritime traffic. Joseon maintained the maritime ban even after Ming China relaxed the policy. By the time when the Korean government allowed Koreans to go oversea for trade in 1882, Koreans had lost completely any competitive edge in maritime trade.

The serious setbacks of Korean trade were caused mainly by political and diplomatic factors, as shown above. All the pre-industrial Korean states preferred official trade to private trade and often suppressed the latter. There had been a diplomatic principle from ancient times in Northeast Asia that vassals did not have the right of diplomacy, which provided an ideology for the tribute system. A policy behind the principle was to capture or monopolize the gains from trade by rulers (Kim 1934; Arano 1988).

This tendency was strengthened by the incorporation into the Chinese tribute system. Before the port opening, the Chinese tribute system was the most cardinal factor that determined Korea's international relations, and the passive trade policy under the tribute system was largely responsible for the low dependency on trade (Lee and Temin in progress). The tribute system was first developed in Han China, and its disciplines were not rigid before Song China. Ming China consolidated the tribute system with stricter regulations on tributary missions and trade, accompanied by the banning of native seaborne commerce. Before the Goryeo dynasty, however, Korea's diplomatic relations with China were flexible. The Joseon dynasty became deeply incorporated into the tribute system. As a result it was the most passive in foreign advance. The enforcement of free trade system and the growth of open port trade made the restriction of tribute system on trade meaningless, before the Sino–Japanese War in 1894 completely destroyed the system.

The tribute system prevented Korea and China from reaping dynamic gains from the development of trade, because they limited private trade. The restrictive trade policy was more unfavorable to Korea than to China, because Korea is far smaller than China. The pre-industrial Korea could not achieve market development as China or Japan did, because its internal market was small, the redistribution of centralized state crowded out internal trade, and international trade was not thriving. An agricultural society with underdeveloped markets provided a fertile soil to root firmly Confucianism that was hostile to seeking profit, which supported the tribute system and restrictive trade policy.

The Korean government adopted the first active policy pursuing trade gains in its history after the port opening. It was forced to open its port in 1876, but quickly chose to take open foreign policy and adopt modernization policy since 1880. Having known international public laws, the government tried to reform the tributary relation with China, voluntarily opened door to Western countries, and intended to foster private trade including the lifting of maritime ban in 1882. Though policy improvements had played some role on trade growth, and technological and institutional developments during the period of port opening, the record of the modernization policy was not good owing to bad financial situations, the low ability of bureaucrats and the private sector, and the interference of China and Japan.

Acemoglu, Johnson and Robinson (2001; 2002) stressed the role of colonial institutions on economic growth and reversal of fortune. Japan made institutional reforms promoting investment in Colonial Korea, a large quantity of Japanese capital flowed into it in the 1930s, and trade between them increased notably. As a result Korean economy grew fast under the Japanese colonial rule. But it witnessed a serious setback after Liberation in 1945. Korea's per capita income seemed to stay around the top 60% of the world in the 19th century, and about 40—50% at the peak of colonial economy. It drastically fell to hit the bottom right after Liberation, and then came back to its previous 60% level about 1960, thanks to the annual growth rate of approximately 4% supported by foreign economic aid in the 1950s. The Japanese colonial rule did not bring reversal of fortune in Korea.

How can this be explained? Korean economy was completely incorporated into Japan during the colonial period. Korea's trade was simply a part of Japan's imperial trade, and Japanese enterprises dominated trade activities. Trade with Japan had occupied over 70% of Korea's total trade, and most of the remainder had been that with Manchuria under the influence of Imperial Japan. This is an important reason for the depressed trade activities after Liberation

until the 1950s. As revealed in table 2, trade dependency, especially the share of export to GDP was very low in the 1950s.

In general, colonized regions had difficulties in protecting and nurturing strategic infant industries, or inducing offshore investment geared for the maximization of technological transfers. Discriminations of education and employment between Koreans and Japanese set limits on transferring technology, and native firms without nation state to back up had difficulties in meeting competition with Japanese firms. Learning by doing was possible, but systematic and active learning was not encouraged. The insufficient high education for Koreans with a limited job opportunity given to Koreans in Japanese companies to become technical experts or managers intensified the discontinuity after Liberation. In sum, the will to catch up was discouraged during the colonial period.

Since the port opening, the Rhee Syngman government in the 1950s adopted the most passive foreign economic policy. How can this be explained? First, Korea had little opportunity to accumulate its national capability to promote overseas advance during the colonial period. Second, the government was passive in introducing foreign direct investment because of its painful experience of Japanese rule. Third, with the massive inflows of foreign aid goods, there was little instant need to foster export for the settlement of imports or to induce foreign capital for industrialization. Fourth and last, the government's import substitution policy lessened the need to open markets.

When grant-type foreign aid decreased from 1957, export and capital import became urgent, turning the inward oriented policy into outward oriented strategies. The Korean government has adopted the active policy pursuing trade gains since 1960s, which was the second time in history. The Park Jung-Hee's government was the only one to adopt the mercantilistic policy that protected infant industries and supported export industries. The policy bore fruits, because international economic environment was favorable, Korea had accumulated economic and social capabilities to enjoy the advantage of backwardness, and it had an efficient hard government. The active response to a favorable international economic environment in close public-private cooperation materialized the high growth (Lee 2006).

Although the Republic of Korea–Japan Normalization in 1965 and the accession to GATT in 1967 expedited the liberalization of trade and capital markets, the Park Chung–Hee administration was unwilling to open its import and capital markets for the protection of domestic industries and enterprises. The Jeon Du–Whan government's economic liberalization and the Kim Yeong–Sam government's globalization project together with the economic crisis in 1997 and 1998 accelerated the pace of market opening, resulting in a fully liberalized open market system after the crisis.

The geopolitical environment has strongly affected Korea's foreign policy. For most of the pre-industrial period Korean states had to accommodate the Chinese foreign policy due to Korea's geopolitical location since Han China. China was a big, strong, and culturally advanced state that claimed universal rule, and Korea as one of the smaller neighboring states, naturally accepted the Chinese tribute system and its junior position. As Ming China strengthened tributary disciplines, Joseon's foreign policy became passive. Entering into the modern world, Joseon's foreign policy became open. And the golden age of growing world trade after WWII supported the Park administration's active foreign policy.

Besides Korea's geopolitical environment, its domestic condition also played an important role in determining the foreign policy. Even when China was not so strong as to enforce its foreign policy, the Three Kingdoms voluntarily accommodated it to enlist diplomatic and military support from the Chinese dynasties to win the fierce military conflicts among them. Korean states in fact imposed maritime bans before Ming China did. Though Ming China relaxed its maritime trade ban in 1567, and Qing China imposed that again only from 1656 to 1684, the Joseon government finally removed its maritime ban as late as in 1882. When Chinese merchant ships appeared on the west coast of Korea after the Qing China's lifting of maritime ban in 1684, the Joseon government asked the Chinese government to prohibit those merchant ships from trading with Koreans. The Park administration's outward oriented strategy was quite unpopular among other Less Developed Countries in those days. If Korea had not faced the critical moment of a blockade on import through foreign aid, then such an outward oriented policy might have not been enforced in the 1960s.

Even the policies that were not beneficial to economic growth had rationality or bounded rationality under their own international environment. Though China's restrictive trade policy and its tribute system played an important role in China's economic lag behind Western Europe in the early modern era, it was a rational decision to increase total gains from trade under the East–Asian geopolitics. China adopted the tribute system that subordinated trade to its diplomacy and suppressed private trade by maritime bans, because the economic gains from trade to a large

country like China were small. By contrast, the anticipated non-economic gains from trade were big, because China faced the formidable military power of nomadic tribes in Inner Asia and trade manipulation through the tribute system contributed to both the defense of China's borders and the establishment of its suzerainty, China's main foreign policy objectives. China was active in pursuing trade gains during periods of disunion and weakness, in a process that resembled the European Mercantilism. This suggests that East–Asian geopolitics that gave birth to a large united China was a fundamental reason for China's restrictive and passive trade policies (Lee and Temin 2005). The pre–industrial Korean policy to suppress private trade, like that of China, can be explained by non–economic factors such as the consideration of externalities and rulers' incentives, bounded rationality of policy makers, and the path-dependency of history. It was a rational or bounded–rational decision to increase total gains, that is, economic and non–economic gains, from trade under the East–Asian geopolitics (Lee and Temin in progress).

In Europe, where there was no hegemonic country like China after the fall of Roman Empire, feudal societies appeared, and self-governing city-states emerged in the context of decentralized states. Feudal lords had strong incentives to participate in trade actively in order to survive and expand in the competition between them, as did European nation states when they grew, because of the strong competition in their environment. In such a situation, rational rulers would not adopt or continue institutions or policies under which economic interests were sacrificed for the sake of non-economic goals, because this strategy led to the weakening of state power. Rulers were more concerned with trade gains that would attract funds for winning competition when rivalry became violent.

While Zheng He's ships did not intend to go on a voyage beyond the Cape of Good Hope in the early 15th century, Western countries, armed with mercantile ideas, marched further into the world including Asia to take a lead in creating a world-market. China that had acquired a great amount of silver from export of high value added products such as silk fabrics, potteries, and teas to Europe was troubled by outflows of silver from the late 18th century. One of the important reasons for the success in European industrialization must be that European countries pursued trade gains more actively than China.

Similar explanations may apply to the economic development of Tokugawa Japan. Tokugawa Japan also imposed strong restrictions on foreign trade as Joseon Korea did, but it achieved a dynamic development unlike China or Korea. Though Tokugawa Japan was more closed to the outside world than China, the former pursued trade gains more aggressively than the latter (Gao & Bin 2003, p.14). One of the important reasons must be that the Baku–han system of Tokugawa Japan was like a small world economy. So the feudal lords promoted trade to enrich their domains and strengthen their power. Korea earned high returns from the transit trade of Chinese silk and Japanese silver in the 17th century. Japan successfully dealt with its problem of insufficient silver by promoting import substitution of Chinese silk in the 18th century. But Korea barely managed to obtain settlement money for its import of Chinese silk by Ginseng farming when silver import from Japan was interrupted.

#### VI Conclusion

Geography and international relations have been crucial factors in determining Korea's growth and its backwardness or advancement. Korean economy grew fast and developed, when facing a favorable international environment and responding to it actively. Korea had belonged to advanced countries from the formation of ancient state about the third century B.C. to about the tenth century, because it is located near China that had been the most advanced country during the ancient and middle times, and responded to the international environment actively. Korea's economic position had degraded to a middle level in the world in the nineteenth century, because China's economic position had also come down following the rise of Europe since the fifteenth century, and Korea had been incorporated into the Chinese tribute system deeply and responded to Western impact passively. Geopolitics was not favorable to Korea's modernization before the nineteenth century. However, the international environment of Republic of Korea in the late twentieth century located near Japan, an economically developed country and facing the U.S., the most advanced country across the Pacific has been favorable to its economic development. Geopolitics has helped Korea to locate in the advanced countries for most of its history since the formation of ancient state.

The influences of geography and international relations on Korea's growth have been particularly strong, because Korea is a peninsular country smaller than neighboring countries. Korea has a geographic advantage to develop its economy, because it has conveniences to gain access to big markets and advanced civilizations. Advanced civilizations flowed in Korea, and then social capabilities for catch-up formed gradually. Korea has enjoyed the

geographic advantage for most of its history, because it has guarded sovereignty and developed the social capabilities to learn the advanced technologies and institutions. Even the Joseon dynasty that adopted the most passive foreign policy was very active in learning Chinese civilization. Though Korea that has shared common land border with China had to incorporate into the Chinese world order deeply, its distance from the center of China helped to guard its sovereignty. As technology develops, and economic and social capabilities enhance, the influence of geography become weaker.

The epochal event since the end of the twentieth century is the rise of China, which offers an opportunity for the diversification of international relations and gives the stimulus of further economic advancement to Republic of Korea, while provoking serious concerns over the possibility of weakening its overall competitiveness. What do Koreans learn from history to cope with the challenge of this new epochal event?

#### References

Abramovitz, Moses, "Catching up, forging ahead and falling behind," Journal of Economic History 46-42, 1986, pp.385-406.

Acemoglu, Daron, S. Johnson & J.A. Robinson, "The Colonial Origins of Comparative Development: An Empirical Investigation, *American Economic Review*, 2001, pp.1369-1401.

Acemoglu, Daron, Simon Johnson & James Robinson, "Reversal of Fortune: Geography and Institution in the Making of the Modern World Income Distributions," *Quarterly Journal of Economics* 117, 2002. pp.1231-1294.

Acemoglu, Daron, Simon Johnson & James Robinson, "The Rise of Europe: Atlantic Trade, Institutional Change and Economic Growth," American Economic Review, 95, 2005, pp.546-579.

Arano, Yasunori, Kinsei Nihon to Higashi Ajia (Japan and East Asia in Early Modern), (Tokyo: Tōkyō Daigaku Suppankai, 1988).

Bak, Gi–Ju, "Standards of Living in the Late Joseon Period," *New Perspective on History of Korean Economic Development*, (in Korean) edited by Dae–Keun Lee (Seoul: Nanam, 2005), pp.69-103.

Bak, Yong-Un, Studies on Gaegyeoing in the Goryeo Period, (in Korean) (Seoul: Ilgisa, 1996).

Dani Rodrik, Arvind Subramanian, and Francesco Trebbi, "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development," *Journal of Growth*, 2004, pp.131-165.

Diamond, Jared, Guns, Germs and Steel: The Fate of Human Societies (New York: Norton, 1997).

Fairbank, John K. "A Preliminary Framework." In John K. Fairbank, ed., *The Chinese World Order: Traditional China's Foreign Relations* (Cambridge: Harvard University Press, 1968), pp.1-19.

Fairbank, John K., Edwin O. Reischauer, and Albert M. Craig, East Asia, Tradition & Transformation (Boston: Houghton Mifflin, 1978 New impression).

Frank, Andre G., ReORIENT: Global Economy in the Asian Age (Berkeley: University of California Press, 1998).

Franke, Herbert, and Denis Twitchett, "Introduction." In *The Cambridge History of China, vol. 6, Alien Regimes and Border States*, edited by Herbert Franke and Denis Twitchett (Cambridge: Cambridge University Press, 1994), pp.1-42.

Frankel, Jefferey A., and David Romer, "Does Trade Cause Growth," American Economic Review 89, 1999, pp.379-399.

Gao, Shu Juan & Feng Bin, Zhong Ri Duiwai Jingji Zhengce Bijiao Shigang (A Comparative History of Foreign Economic Policy between China and Japan), (Beijing: Qinghua Daxue Chubanshe, 2003).

Huntington, Samuel P. and Lawrence E. Harrison eds., Culture Matters, Basic Books, 2001.

Kim, Sanggi, "Status of Ancient Trade and Maritime Expansion of the Late Period of Silla Dynasty," (in Korean) *The Chin-tan Hakpo* 1·2, 1933·1934.

Kwon, Tai-hwan & Shin Yong-ha, "Chosŏn Wangjo Sidae Ingu Ch'ujŏng-e kwanhan yŏn'gu (On population Estimates of the Yi Dynasty, 1392—1910)," The Dong-A Mun-Hwa, Seoul: Institute of Asian Studies, 1977, pp.289-330.

Kuznets, Simon, "Modern Growth: Findings and Reflections," American Economic Review 63, 1973, pp.247-258.

Lee, Hun-Chang, "Historical Backgrounds of High Growth in Korea," *The Present Situation and Possibility of Economic Cooperation in East Asia* (in Korean), (Seoul: Asian Study Institute, Korea University, 2000), pp.275-322.

Lee, Hun-Chang, "A Study on Maritime Trade Promotion Polices Proposed by" Practical Learning"in Joseon Dynasty," (in Korean) *Joseon Sidae ui Sasang-kwa Munhwa(Ideology and Culture in Joseon Dynasty*) (Seoul: Jipmundang, 2003a), pp.227-265.

Lee, Hun-Chang, "The Periphery and Center in Economic Perspective," *The Periphery and Center in Korean History* (in Korean) (Seoul: Humanities Research Institute, Sogang University, 2003b), pp.261-280.

Lee, Hun-Chang, "A Study on the Pattern and Change of the Pre-industrial Korean Trade," (in Korean) Kyngje Sahk(Review of Economic History) 35 (in Korean), 2004, pp.83-122.

Lee, Hun-Chang, *Economic History of Korea* (Third edition, in Korean) (Seoul: Beopmun-Sa, 2006; Translated in Japanese by Hosei University Press, 2004).

Lee, Hun-Chang, and Peter Temin, "Trade Policies in China under the Tribute System as Bounded Rationality," 王天有、徐凱、萬明編, 鄭 和遠航與世界文明 *Zheng He Voyages and World Civilization*, Peking University Press, 2005, pp.279-311.

Lee, Hun-Chang, and Peter Temin (in progress), "The Political Economy of Pre-Industrial Korean Trade."

Lee, Seong-Shi, Prerogatives and Trade in East Asia (in Japanese) (Tokyo: Aoki Shoten, 1997).

McClosky, Deirdre, "1780—1860: a survey," *The Economic History of Britain Since 170*0, Vol. 1, Cambridge University Press, 1981 (Reprinted 2000), pp.242-270.

Maddison, Angus, The World Economy: A Millennial Perspective (OECD, 2001).

Reischauer, E.O., Ennin's Travels in T'ang China (New York: Ronald Press Company, 1955).

Sachs, Jeffery D., "Institutions Don't Rule: Direct Effects of Geography on Per Capita Income," NBER Working Paper 9490, 2003.

Shiba, Yoshinobu, On Port Market, Japanese History among Asia III (in Japanese) (Tokyo: Tokyo University Press, 1992, pp.1-34.

Sukawa, Hidenori, "Goryeo kōki ni okeru shōgyō seisaku no Tenkai (Changes in commercial Policy in the late Goryeo Dynasty)," *Chōsen bunkashitsu kiyō* 4, 1997, pp.25-45.

Tashiro, Kazui, Kinsei Nicho tsūkō boeki shi no kenkyu(Studies on the History of the *Diplomatic Relations and Trade between Japan and Korea in 17th and 18th Centuries*), (Tokyo: Sōbun Sha, 1981).

Yi, Hyun-Hae, Agricultural Production and Trade in Ancient Korea (in Korean) (Seoul: Ilchokak, 1998).

Wallerstein, Immanuel, The Modern World system I (New York: Academic Press, 1974)