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The Political Economy of Pre-industrial Trade in Northeast Asia

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Abstract

This paper examines why the countries of Northeast Asia (China, Korea, and Japan) in the early nineteenth century traded much less (as measured by the proportion of trade to GDP) than most countries in other parts of the world. It is argued that the most important reason for this are government policies that suppressed private trade. It is shown that these restrictive trade policies were designed to maximize the total net benefit from trade, covering not only economic net benefits but also non-economic benefits in the fields of diplomacy, defense, culture, and internal politics.

Key words: trade policy, Northeast Asia, tribute system, private trade, maritime ban, geography, culture

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The Political Economy of Pre-industrial Trade in Northeast Asia

I. Introduction

Foreign trade has played an important role in the economic development of most countries. Yet, countries in pre-industrial Northeast Asia relied to a much lesser extent on trade than most countries in other parts of the world. Although a direct comparison of the share of trade in GDP of pre-industrial countries is difficult, it does seem clear (as Section II will show) that this share was very low in China, Japan, and Korea during the early nineteenth century.[1] This raises the question: why was the share of trade in GDP so low in the three Northeast Asian countries just before they opened their doors to the Western world? And why can such significant regional and intertemporal differences in trade ratios be observed in world history? The aim of this paper is to answer these questions.

There are various factors that potentially explain the regional and intertemporal differences in trade shares, including geographic factors, economic factors (such as technology, markets, factor endowments, etc.), political factors, and cultural factors. Which factor is the most important is likely to vary depending on the period and region. It seems likely that the more immature a country's or region's level of technological and market development, the stronger is the role of geography in explaining any differences.

A scholar stressing the role of geographical factors is Diamond (1997), who suggests, for example, that Europe's highly-articulated coastline gave rise to flourishing trade, while China's smooth coastline was less conducive to trade. However, I will argue that by the eighteenth century, geography was not the main reason for the low trade-to-GDP ratio of Northeast Asian countries, for the following reasons. First, although Northeast Asia's geography was less favorable than Europe's, it was not bad for trade growth. Wang (2000, pp. 1-2), for example, argues that the South China Sea "looked like a small Mediterranean Sea," though "more open and more dangerous." Korea has the geographical advantage of being a peninsular country, while Japan has that of being an archipelago. Second, all the Northeast Asian countries – China, Korea, Japan, and Ryukyu – at one stage or another enjoyed prospering maritime trade, and China, Korea, and Japan have flourishing trade sectors today. In other words, by the Middle Ages, geographical constraints had clearly become surmountable. A third reason, finally, is that restrictive trade policies played an important role in

discouraging trade activities in the Northeast Asian countries. The second and third reasons are discussed in greater detail in Section III.

This paper shows that not only economic and geographic factors but also policy factors play a part in explaining the marked difference in trade from other regions. Of course, policies were influenced by economic and geographic factors, but they were not determined by them completely. Restrictive trade policies such as maritime bans (海禁) that forbade any private maritime trade independent of diplomatic missions, or in the case of Japan and Korea, national seclusion (鎖國) that forbade any exchange with Westerners, played a significant role in restricting the trade of the three Northeast Asian countries just before they opened their doors to the Western World.

This raises the question why the countries of pre-industrial Northeast Asia tended to adopt restrictive and passive trade policies. The answer is related to the reason why these countries adopted the Chinese tribute (朝貢) system, since the tributary relations functioned as a network of trade, and trade expanded via these relations (Hamashita 1990, p. 34). Under the tribute system, trade was subject to diplomacy, and economic gains from trade often were sacrificed for the sake of diplomatic ends such as the maintenance of suzerainty (宗主權) or border security.

Influential explanations of restrictive trade policies in China tend to stress culture as a factor. Fairbank (1968), for instance, thought that China's cultural superiority lay at the core of the tribute system, while Fairbank and Goldman (1998, p. 139) summarized Ming (明, 1368-1644) China's withdrawal from the maritime world as follows: "In short, anticommercialism and xenophobia won out.[…] The contradiction between Ming China's superior capacity for maritime expansion and conservative Neo-Confucian throttling of it suggests that Ming China almost purposely missed the boat of modern technological and economic development." Landes (1998, p. 97) similarly argued that "the Confucian state abhorred mercantile success." Another scholar to stress the cultural factor is Wang (2000), who – contrasting "earthbound China" with the "maritime enterprise of Europe" – suggested that it is the "continental mind-set" of the Chinese that explains why they were not actively pursuing maritime advances. However, as indicated above, the argument of this paper is that the trade policies of pre-industrial China were the outcome of rational choice, and culture generally was not a major but a minor factor underlying the policies.

Scholars concentrating on economic factors to explain China's indifference in the eighteenth century to maritime advances and colonization include Pomeranz and Topik (1999, pp. 10-1). They argue that the Chinese state had little incentive to trade, because it had no neighbors of comparable might and ran budget surpluses through most of the 1700s. Moreover, Chinese

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[1] In this paper, "trade" means international trade when a territorial state existed, or external trade

merchants also had little incentive because they faced a big domestic market. However, the argument I will put forward here is that the trade policies of pre-industrial China can be explained more effectively by the country's political economy rather than by economic or political factors alone.

Attempts to explain Chinese trade based on political economy are nothing new. Wallerstein (1974, pp. 52-63), for instance, argued that China did not show any interest in overseas expansion analogous to the European countries because China was a vast empire and, moreover, was able to solve its food problem by expanding rice production internally. Meanwhile, Wong (1998, chap. 6), suggested that China's strong and unitary state was able to manage fiscal flows over far greater distances than European states and therefore faced fewer pressures to tap revenue sources abroad. In this paper, I present a theoretical political economy approach to show that pre-industrial Northeast Asia's policies to suppress private trade were designed to maximize the total net benefit from trade, covering not only the economic net benefit but also diplomatic and internal political aspects, defense issues, and cultural goods and services.

The remainder of this paper is organized as follows. The next section provides evidence on the low levels of trade of China, Japan, and Korea in the early nineteenth century when compared with other regions of the world. Section III outlines the evolution of world trade in the pre-industrial era, dividing it into four phases, and describes the characteristics of trade in the Northeast Asian region. The close examination of trends in world trade also reveals the determinants of these trends. Section IV presents a theory of trade policy that has been developed to explain the trade of pre-industrial Korea and Chinese (Lee and Temin 2004; 2005). Section V applies the theory to trade policies in pre-industrial Northeast Asia, explaining both instances of trade restriction as well as of trade promotion. I will argue that even restrictive trade policies were rational in the context of East Asian geopolitics.

II. Intertemporal and Regional Differences in Trade Dependency Rates

This section provides a detailed examination and comparison of the trade dependency rates of various countries and regions around the world. Table 1 shows that the regional variation in the ratio of the trade volume to GDP in the world around 1870 was considerable and that it has narrowed since then. Moreover, the table indicates that the ratio of merchandise exports to GDP around 1870 was especially low in Northeast Asia, while it was especially high in Western Europe.

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between communities when no territorial state had been established.

Table 1: Merchandise Exports as a Percentage of GDP in 1990 Prices

	1870	1950	1998
Western Europe	8.8	8.7	35.8
Western Offshoots	3.3	3.8	12.7
Eastern Europe and former USSR	1.6	2.1	13.2
Latin America	9.7	6.0	9.7
Asia	1.7	4.2	12.6
China	0.7	2.6	4.9
Japan	0.2	2.2	13.4
Korea	0.7	0.7	36.6
India	2.6	2.9	2.4
Africa	5.8	15.1	14.8
World	4.6	5.5	17.2

Sources: Maddison (2001), except for the figure for Korea in 1870, which is explained in the text.
Note: 1. The figures for China and Japan in 1870 are likely to understate actual export ratios, as is also explained in the text.
2. Western Offshoots include the United States, Australia, New Zealand, and Canada.

The share of trade in Korea's GDP is estimated to have been about 2.5% during the late seventeenth and early eighteenth centuries –the highest share in the country's history before the opening of the economy to trade with the modern world. The major reason for this was Korea's role as an entrepôt for transit trade between Japan and China based on the massive inflow of Japanese silver. However, trade contracted in the eighteenth century, mainly due to the interruption of silver imports from Japan, and the share dropped to an estimated 1.5% in the nineteenth century before the opening of the economy. The share may have exceeded 1% from the late sixteenth century owing to the increase in Japanese silver inflows. Before then, it seems to have exceeded 1% only in the ninth century (Lee 2004).

The share of trade in China's GDP has been estimated at 1.5% around 1700 and 1800**,** while for England the equivalent share around 1700 was 26% (Kishimoto 1997, p. 206). In Japan, overseas trade grew steadily from the twelfth to the early seventeenth century. The share of trade in GDP is estimated to have been about 5% in the early seventeenth century, followed by a decrease to about 1% in the late seventeenth century and a further decrease to about 0.3% in the early nineteenth century.[2] Thus, just before China and Japan opened their doors to the modern world, the GDP share of trade in these two countries was almost the same as the figures for 1870 in Table 1.

[2] Nishikawa (1985, p. 45) has estimated the share of exports in farm output measured in units of *koku* (實收石高). The estimated farm output in 1872 (Hayami and Miyamoto 1988, p. 44) was 1.8 times the rice output in 1874 estimated by the Meiji government. As the share of rice output valued at market prices in GNP was 24% in Japan during 1885-88 (Ohkawa and Miyohei 1979, Tables A7 and A16), farm output in 1872 is computed to have been 43% of GDP. The Meiji government seems to have slightly underestimated the rice output in 1874, and the share of rice output in GNP seems to

Based on the above, it is safe to say that in the early nineteenth century, just before China, Japan, and Korea opened their doors to the modern world, the share of trade in GDP in the Northeast Asian countries was very low. In the case of Japan and Korea, the trade shares were especially low when taking into account that Korea is a peninsular country, Japan is an archipelago, and both countries are far smaller than China.

However, China, Japan, and Korea all experienced rapid increases in trade after opening their doors to the modern world in the mid-nineteenth century. As for Japan, the proportion of exports of goods and services and factor income received from abroad in gross national expenditure was 2.6% by 1885 (Ohkawa and Miyohei 1979, Table A3). By the end of the twentieth century, the share of trade in GDP in the three Northeast Asian countries is no longer low when compared with other regions.

Moreover, these countries once had relatively high rates before the eighteenth century. According to the estimates of growth in the volume of world trade and GDP by Maddison (2005, p. 22), world trade increased 21.3 times during 1500-1820 and 7.7 times during 1820-70, while world GDP increased 2.8 times during 1500-1820 and 1.6 times during 1820-70. If we accept Maddison's estimates of merchandise exports as a percentage of GDP in 1870 and growth rate of world trade and GDP, the proportion of world exports in GDP is estimated to have been about 1% in 1820 and 0.1% in 1500. Considering the development of trade before 1500, the gap in growth rates between world trade and world GDP estimated by Maddison appears too big. However, it is highly probable that the share of world trade in world GDP in 1500 was less than 1%, if we accept his estimate for the ratio of merchandise exports to GDP around 1870 in Table 1. These considerations suggest that the world did not see a sustained growth in trade before 1500; rather, it was Europe's discovery of sea routes to South Asia and America, as well as the Industrial Revolution, that were crucial to the growth of world trade.

In the early seventeenth century, Japan's share of trade in GDP certainly was as high as that of Western European nations. In addition, it is likely that China, despite its size, had a trade share higher than the world average around the thirteenth century, because it more actively engaged in trade during this period than in the 1700s. China's trade experienced a serious retreat at the beginning of the Ming dynasty. Korea also experienced a decline in trade in the early Goryeo dynasty (高麗, 918-1392) and at the beginning of the Joseon dynasty (朝鮮, 1392-1910). Japan experienced the most dramatic decrease in trade from the mid-seventeenth to the early eighteenth

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have slightly decreased during 1872-1888 because of industrialization. Thus, I estimate the share of farm output in GDP in 1872 as around 40%. It was higher in early Tokugawa Japan.

century. These reversals of trade trends in the Northeast Asian countries can explain their small trade shares in the early nineteenth century.

By contrast, Europe and the regions incorporated into the European economy saw a notable increase in trade from 1500. Acemoglu, Daron, and Robinson (2002) estimate that the volume of Atlantic and Mediterranean trade was 8,000 tons in 1500, increasing to 384,000 tons in 1600, 664,000 tons in 1700, 3,380,000 tons in 1800, and 14,600,000 tons in 1850. This trend indicates that there is little doubt that Atlantic trade played a central role in the growth of world trade during 1500-1850.

Southeast Asia has experienced sustained trade growth since the fifteenth century, with the exception of the second half of the seventeenth century and the second quarter of the twentieth century. The average value of clove, pepper, coffee, and sugar exports in 1940 US prices has been estimated at US$53,000 in the 1500s, US$2,340,000 in the 1800s, and US$46,392,000 in the 1860s just before the beginning of "the high colonial period." These four export commodities accounted for 11% of total exports in the 1630s, and 26% in the 1890s (Reid 1993; Bulbeck et al. 1998). Trade growth in Southeast Asia since 1500 was as notable as that in Western Europe.

India's trade with Europe followed a growing trend since 1500 (Prakash 1998). However, the share of trade in GDP is estimated to have been between 1% and 2% around 1800. It increased to a little less than 10% in 1860 (Roy 2006). It thus appears that, as in China, the size of the Indian economy meant that the share of trade in GDP remained small before the nineteenth century.

III. Trends in Pre-industrial Trade and their Determinants

1. *The propensity to trade in human societies*

Most regions showed a potentiality to develop trade already at a very primitive stage of economic development. Maritime trade began and grew since the Stone Age. In fact, considering the very low levels of technology and the little surplus generated, trade in the Stone Age was relatively active. Evidence of trade during the Stone Age can be found around the world, including the Mediterranean (Curtain 1984, p. 71), Europe (Clarke 1987, pp. 26-7), South India and Southeast Asia (Abu-Lughod 1989, pp. 261, 268), Africa (Curtain 1984, p. 17), and Australia (Sharp 1952). Clarke (1987, p. 26), for example, in the European context, observes that "[t]he premise of 'Neolithic self-sufficiency' is therefore only relatively acceptable, if at all."

Northeast Asia was no exception in showing the potential for trade at a primitive stage of economic development**. T**he peoples along China's coast developed seafaring traditions even before the rise of the first Chinese state around 1600 B.C. Therefore, as Levathes (1994, p. 32) observes, "China even at this very early point cannot be dismissed as a land-based power with no interest in the sea." Although Japan was isolated from the continent by sea, there has been active exchange between Korea and Japan since pre-historic times (Komoto 1987; Yoshino 2004). Hanihara (1987) has estimated that more than one million people may have immigrated into Japan between the Yayoi period and the eighth century. Such active human migration must have been accompanied by the trading of goods. Iron imports from southern Korea until the fifth century contributed to the development of agriculture and the formation of the state in Japan.

Why did people trade even in the Stone Age? Why did trade come into existence? Adam Smith (1776) saw trade as the "consequence of a certain propensity in human nature […] to truck, barter, and exchange one thing for another." Put differently, people trade because they are looking for the gains from trade. And such gains from trade could be had even in the Stone Age, because peoples or communities differed in their resource or factor endowments.

Trade has been on a growing trend throughout human history owing to the development of technology and markets. But if human beings already in the Neolithic era showed a potential to engage in trade, why was the share of trade in world GDP so low before 1500? The most important reasons why trade in the pre-industrial era was so small must be economic ones and include the following. First, productivity was still low, so surpluses were small. Second, the development of markets was in its infancy and the overwhelming proportion of economic activity was for subsistence. Third, transaction costs were high owing to the low level of technological development and weak institutions. Another important reason were policies in the pre-industrial era that were in general much less favorable to the development of trade than in the industrial era.

Trends in the growth of trade in the pre-industrial era varied depending on the region. Why did the share of trade in GDP show such marked regional differences even as late as the early nineteenth century? An inspection of trends in world trade provides some clues to answer this question.

2. *The uneven development of trade in the ancient world and the lag of the Northeast Asian region*

In the ancient era (i.e., before the birth of Christ), the region that had achieved the most notable development of maritime trade is the Mediterranean region. Although maritime trade in the

Mediterranean experienced up and downs, when compared with other regions, growth in trade was relatively sustained. Clarke (1987, pp. 54), for example, noted the formation of "regular, long-distance, two-way commerce on an economically significant scale" circa 900 B.C. Curtin (1984, p. 80), similarly, observed that by the fifth century B.C., "a generalized ecumenical or cross-cultural set of trade practices was coming into existence in the Greek world."

Although other regions also developed trade, they did not see "a generalized ecumenical" trade comparable to that in the Mediterranean region probably until the seventh century. The main reason for this most likely is that the Mediterranean region had the most favorable geography for maritime trade given the seafaring technology available in the ancient period.

Huge empires came into being both in the Mediterranean region and in China almost simultaneously. This development had some effects on world trade and was of utmost importance in shaping the trade policies of the Northeast Asian countries. On the one hand, an empire could be more self-sufficient than ordinary states, as part of the external trade became internal trade in the enlarged territory.[3] On the other hand, the rise of the two empires stimulated trade between Europe and the Far East.[4]

Interestingly, the trade policies of the two empires differed substantially. The Roman empire "left trade to private individuals, intervening rarely and guardedly" (Walbank 1987, p. 90). In other words, the Roman empire left the tradition of open trade found in the Mediterranean unchanged.[5] By contrast, the formation of the Chinese empire was responsible for the restrictive trade policy that later emerged in Northeast Asia. The Chinese state attached great importance to official trade and restricted private trade, especially maritime trade, after the adoption of the tribute system in the Han dynasty, under which trade was subject to diplomacy. China's trade, especially maritime trade, was not vigorous until the early Tang (唐, 618-907) (Chen 1991, chap. 1; Wang 2003) – a fact that can be explained by geographic, economic, and policy factors: the sea around China is more open and more dangerous than the Mediterranean Sea; China did not have many trading partners; and trade policies were restrictive. The establishment of the Bureau of

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[3] Although the Roman empire was "not insulated from outside contacts," these contacts "were never very significant" (Walbank 1987, p.90).

[4] See, e.g., Curtin (1984, p. 115), who observed: "[B]etween about 200 B.C. and the beginning of the Christian era, regular overland trade came into existence across central Asia from China to the eastern Mediterranean. Seaborne trade also began over important segments of the whole route from Morocco to Japan."

[5] See, e.g., Curtin (1985, p. 115), who argued: "Up to the late twelfth century, this trade to the east was an extension of the relatively free and open trade patterns of the Mediterranean itself. Then a particular group of Muslim Egyptian merchants, called *karimi*, gained control over eastern trade with government support."

Maritime Trade (市舶司) in Guangzhou (廣州) around 714 provided an institution for the development of maritime trade in China. However, the Chinese government carefully controlled foreign visitors to this biggest port even in the mid-ninth century (Abu-Lughod 1989, p. 335).

In the Korean peninsula, in a similar way as in China, the formation of territorial states had transformed an open-trade system into an administered trade system. During the third and fourth centuries A.D., the southeastern coastal region of Korea developed external trade. Iron produced in this region was distributed across the Korean Peninsula and to Japan. This open system of external trade collapsed in the fifth century owing to the region's incorporation into the Silla kingdom (新羅, 57 BC – 935 AD). In other words, the consolidation of the Three Kingdoms shrunk external trade among local powers in the Korean peninsula (Yi 1998). There is no evidence that private maritime trade independent of emissary traffic was allowed by the Three Kingdoms. It appears that there were bans on maritime trade.

Turning to Japan, the *ritsuryo* (律令) state also adopted a restrictive trade policy. Foreign traders were restricted entirely to the Dazaifu port in Kyushu. Private Chinese traders had been a familiar sight since the first half of the ninth century, although official exchange with China ceased. In 911, the state allowed Chinese merchants to come only once every three years because of the heavy financial burden of accommodating them as well as fears of piratical incursions and foreign attacks. McCullough (1999, p. 87) observes in this context: "The condition under which trade was constructed at the port worked further to the disadvantage of merchants, forcing them to sell their choicest goods on interest-free credit to the government at prices determined by it. Thus they were exposed to the often realized threat of confiscation and placed at the mercy and whim of corrupt officials." In addition, by the second half of the tenth century, unauthorized travel overseas by Japanese had also been banned.

Although historical materials are scant, what is available is sufficient to show that the Chinese empires and the Korean territorial states before the ninth century as well as the Japanese *ritsuryo* state before the eleventh century had in common that their trade policies were more restrictive of private trade than those of most other regions. Moreover, it is highly likely that the restrictive trade policies of Korea and Japan followed, or were influenced by, that of China.

3. *Convergence in medieval trade development and the growth of Northeast Asian trade*

The growth in trade between the East and the West since the rise of Islam in the seventh century helped Asia to gradually overcome its geographical disadvantage vis-à-vis Europe in terms

of trade development. The gradual development of technology and markets increased the surplus available for trade and facilitated long-distance maritime trade, weakening the binding force of geography. During the Middle Ages, i.e., before the fourteenth century, all the major Eurasian civilizations had developed trade and the gap in trade development had narrowed.

The Persian Gulf occupied a central position in the trade between East and West before the fifteenth century thanks to its strategic location. The Islamic World, and especially Persian sailors, dominated the long distance trade between East and West in eastern spices and luxury items, and Persian ships appear in Chinese documents frequently and early, including in 671, 712, 720, 727 and 748 (Chaudhuri 1985, chap. 2; Abu-Lughod 1989; Aulafia 1987).

Around the thirteenth century, there was a convergence in trade development among the different regions of the Eurasian land mass. According to Abu-Lughod, "[b]etween A.D. 1250 and 1350 an international trade economy was developing that stretched all the way from the northwestern Europe to China," and "similarities between trading partners in the thirteenth century far outweighed differences, and, whatever differences appeared, the West lagged behind" (Abu-Lughod 1989, p. 8 and p. 15). As three centers – Europe, India, and China – emerged as the most dynamic and economically productive regions of the world around the thirteenth century, the role of the Middle East in world trade experienced a relative decline (Curtin 1984, p. 121).

A notable development is that Korea, China, Japan, and Ryukyu all developed seaborne trade during the Middle Ages and showed the potential to become maritime powers. The first East Asian country to achieve substantial maritime advances was Korea. Underlying this trend is the weakening of Chinese and Korean state authorities in the late eighth century, which had resulted in the shrinkage of tribute trade and the prospering of private maritime trade. Silla traders ran the private coastal trade in China and established residence in the country. They also participated in trade with Japan, dominating the East Asian sea trade. This vigor in seaborne private trade was unique in the history of pre-industrial Korea. The most prominent figure of this period was Jang Bo-go, who controlled the flourishing trade with China and Japan. Involving himself in the thick of the political strife in the capital, he was assassinated in the end and "[h]is death and the subsequent disappearance of his maritime commercial empire very probably marked the passing of the high-water mark of Korean mastery over the sea lying between China, Korea and Japan" (Reischauer 1955, p. 294).

China's trade grew steadily from the ninth century onward (Wang 2003, p. 137). During the Song (宋, 960-1279) and Yuan (元, 1271-1368) dynasties, the Chinese made great advances in shipbuilding and nautical technology. They actively engaged in maritime trade in the East Asian seas, and even advanced to Indian ports (Abu-Lughod 1989, pp. 274-5). As a result, foreign trade

came to account for a large share of Chinese government revenues during the Southern Song, almost the only period before the nineteenth century that it did so (Fairbanks 1998, p. 92).

Control over commerce in the Northeast Asian seas shifted from the hands of Korean to Chinese traders from the tenth century, and then to Japanese traders some centuries later. As in ninth century Korea, maritime advance in eleventh century Japan resulted from the weakening of the authority of the *ritsuryo* state and the rise of local rulers (Tanaka 1975). As the power of the *ritsuryo* state to control foreign trade had diminished, by the eleventh century, "[t]he appearance of unofficial ports within *shoen* partially immune from government taxes and law offered Chinese merchants a more attractive and profitable alternative" to the state administered trade (McCullough 1999, p. 87). Japan's overseas trade grew steadily from the twelfth to the early seventeenth century, by which time Japan's proportion of trade in GDP was as high as in Western Europe and the country's mercantile inclination as strong as Western Europe's.[6]

Ryukyu emerged as a trading country from the fifteenth to the sixteenth century. The kingdom of the Ryukyu benefited from the tribute trade with China by obtaining goods that were subsequently sold on to Japan and Southeast Asia, and from the transit trade between Northeast Asia and Southeast Asia. However, Ryuku's trade was eroded in the second half of the sixteenth century by the Japanese who traded directly with Southeast Asia, by the Chinese who became active in maritime trade after the lifting of the country's ban on maritime trade in 1567, and by Portuguese traders who entered the East Asian seas (Takara 1993). Ryukyu was conquered by the Shimazu of Satsuma in 1609, but continued its role as an entrepôt for trade between China and Japan.

This convergence in trade development among the different regions of the Eurasian continent can be partly explained by the convergence of trade policies. An important reason for the growth in Korea's, China's, and Japan's maritime trade was the dismantling of restrictive trade policies or the adoption of policies to actively purse gains from trade. Around the thirteenth century, as in China, trade in South India and Southeast Asia was freer than ever before (Curtin 1984, p. 124).

4. *The trade retreat in Northeast Asia and the divergence in early modern trade*

With regard to world trade, the notable trends in the late medieval and early modern period are the rise of Europe as the dominant sea power, the relative decline of the Middle East and India, and the sudden retreat in the maritime activities of the Northeast Asian countries. This reversal from

6 The Japanese actively advanced into Southeast Asia for trade (Iwao 1984).

convergence to divergence cannot be explained by geography, because the previous convergence in trade development demonstrates that the binding force of geography had in fact weakened. The reversal also cannot be explained by economic factors such as factor endowments, because there was no change in factor endowment around the period of this reversal. The argument that I therefore put forward here is that it is a divergence in trade policies between Western Europe and Northeast Asia that was the crucial factor underlying the divergence in trade developments between the two regions.

There is considerable variation in pre-industrial trade policies, depending on the period and the region concerned. However, trade policies may be classified into three major types. The first type can be characterized as an open trade policy. This policy allowed relatively free and open trade and pursued to generate tax revenues for the state. Chaudhury (1985, pp. 12-14) presented this most widely adopted trade strategy of states as follows: "There were certainly well-established conventions in commercial contracts in all the trading cities of the Mediterranean and the Indian Ocean. The legal corpus protected merchants when the contracts were concluded between intra-communal members, […] before the arrival of the Portuguese in the Indian Ocean in 1498 there had been no organized attempt by any political power to control the sea-lanes and the long distance trade of Asia."

But even among open trade policies, some variation can be observed. The large states in India, with their capitals inland and deriving most of their fiscal revenues from land, did not actively pursue gains from trade in the same way as the Chinese empire did. This passive attitude is one reason for the small share of trade in India's product before the nineteenth century. By contrast, the small political units of South India and the Malabar showed significant financial interest in maritime trade (Chaudhuri 1985, p. 15; Maddison 2005, p.56). Similarly, the small states of Southeast Asia actively responded to the expanding trade opportunities provided firstly by the China's maritime advance and more importantly by the arrival of European buyers since 1509, meeting the trade boom of the fifteenth and sixteenth centuries. This is mainly because the financial and military advantages derived from trade were critical to these states' existence and expansion (Reid 1993).

The second type of trade policy, namely mercantilism, appeared in Europe. Mercantilism represents the most active type of trade policy before the Industrial Revolution, systematically using state power in the commercial competition with other countries to increase the profits from trade. Mercantilist trade policies included, for example, the granting of trade privileges to protect native merchants, attempts to control trade routes by using the power of the state, and the encouragement of exports for the accumulation of bullion - aspects that were absent from the other types of trade

policy.[7] Such state support, in turn, contributed to Europe's discovery of the sea routes to Asia and America, and the advance into these regions provided the impetus for Europe's notable increase in trade and guaranteed the continent's invincible position in world trade.[8]

The third type of trade policy was the passive and restrictive one adopted by the countries in the Northeast Asian region. The three Northeast Asian countries, which once had shown the potential to become maritime powers during the Middle Ages, suddenly abandoned their path to maritime power of their own accord. Ming China, Goryeo and Joseon Korea, and Tokugawa Japan all reverted to their former restrictive trade policies. In fact, they adopted trade policies that were more restrictive than at any time in the past. The reason is that these countries were willing to sacrifice gains from trade in order to achieve their diplomatic and political aims under the strengthened tribute system or the seclusion policy. Whereas the European mercantilist states restricted the trading activities of foreign traders to provide support for native traders, the Northeast Asian countries curtailed the trading activities of native traders. Of the three types of trade policy described here, that of the three Northeast Asian countries thus was the most unfavorable for foreign trade, and the distinct advantage of the second type of trade policy over the third one was an important reason for the divergence in trade development between Europe and Northeast Asia.

Among the three Northeast Asian countries, Korea was the first not only to achieve substantial maritime advances but also to abandon its path to maritime power. The Goryeo government came to prohibit private maritime trade independent of emissary traffic. Korean merchants did not go to Japan from the Goryeo dynasty onward, as the interest of the Korean dynasties in maritime trade diminished. Since the latter part of the eleventh century, Japanese vessels came to Korea, paid tributes, and engaged in trade. Private trade with China grew gradually in the late Goryeo dynasty, but the Joseon government at first prohibited all private trade with China. Although the Joseon government eventually allowed private trade attendant on tribute missions and authorized border-market trade, it did not allow Koreans to go overseas for trade until 1882.

Similarly, China at the beginning of the Ming dynasty, after a two-hundred-year period of mercantile adventurism, reverted to its former restrictive trade policies, consolidating the tribute

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[7] Venice systematically used state power and, in the words of Curtin (1984, pp. 117-9) turned "an incipient maritime trade diaspora into a full-blown trading-post empire with military control over chosen centers." Other Italian port cities followed this pattern of establishing a maritime trading-post empire. This Mediterranean style of trade and warfare was exported to the Indian Ocean by the Portuguese, thus violating the agreed conventions of that Ocean (Chaudhury 1985, pp. 63-4).

[8] The discovery of the new sea routes as well as differences in trade policies provided Europe with a strong advantage over the Middle East in terms of trade activity. However, the relative decline of the

system and implementing a maritime ban. By then, this maritime ban dealt a serious blow to trade growth, not only because seaborne trade became "the leading sector of commercial growth in the world economy" (Curtin 1984, p. 179), but also because "the Chinese had achieved almost all the preconditions for a flourishing trade both within and outside the empire" (Wang 2003, p. 138). Although China eventually removed the maritime ban in 1684, it did not change the underlying principles of the restrictive trade policies until the forced opening of its ports in 1842.

As for Japan, as mentioned in Section II, foreign trade declined drastically after the imposition of severe restrictions on exchanges with Westerners in the 1630s and tight restrictions on the export of silver from the late seventeenth century. Commercial relations with the outside world were extremely limited. In 1636, the Tokugawa government ordered that henceforth Japanese could not go abroad. Two years later followed the prohibition of the construction of large ships that would be suitable for overseas trade. In the eighteenth and early nineteenth centuries, Japan's economy therefore was almost completely closed.

Trade policies were an important reason why Northeast Asia fell behind in trade development before the ninth century and play a key role in explaining trade growth from the ninth century onward. Moreover, they were the decisive factor underlying the drastic retreat in trade in later centuries and explain why, by the early nineteenth century, Korea, Japan, and China traded less than countries in other regions. The following section explains how these policies were adopted.

IV. A Theory of Pre-industrial Trade Policy[9]

1. *The effects of externalities on behavior*

Economic theory suggests that trade occurs when it provides net economic gains and rational actors act to maximize such gains. If we want to explain trade in the pre-industrial era, and especially China's, Korea's, and Japan's, we need to modify the theory. The assumption of rational actors does not need to be modified, because people in general prefer an advantageous outcome to a less advantageous one. We assume that pre-industrial trade policies were the outcome of rational choices made by rulers.

Middle East began before the discovery of the new sea route to Asia. Another reason were institutional weaknesses in Muslim societies (Abulafia 1987).

9 This section is a summary of Section II of Lee and Temin (2005).

However, we need to consider those non-economic effects that trade produces as well as the economic gains. In the industrial era, the economic gains from trade have been enormous, owing to the development of markets and technology, while its non-economic effects have often been negligible when compared with the economic benefits. The situation in the pre-industrial era was quite different or even the opposite. The economic gains from trade may have been small, owing to high transaction costs and small trade volumes. On the other hand, the non-economic effects of trade, namely, externalities, may have been substantial, since trade had significant effects on diplomacy, internal politics, and even culture. As shown later, the pre-industrial governments in Northeast Asia considered other aspects as well as economic aspects when making decisions about trade.

The rulers of pre-industrial states attached great importance to border security and culture. Wars and conquests broke out frequently in the pre-industrial era, and frontiers were far more fluid than in the industrial era. The most important object of diplomacy often was border security, and trade policy may have been subordinated to diplomacy. In the pre-industrial era, many societies also were closed to alien cultures and ideologies, and people often drew a sharp line between civilized people and barbarians. Trade was an important way to spread alien cultures and ideologies, particularly when other forms of communication were limited. Power elites consequently may have administered trade in order to foster the acquisition of high culture or to protect their state from undesirable ideologies.

In the pre-industrial era, when polities typically were not democratic, internal political concerns also mattered much. Every policy, including trade policy, ultimately aimed at consolidating the current rulers' political power. The distribution of the economic gains from trade might affect the distribution of power; nobles and local elites could increase their power by amassing trade gains, or they could connect to a foreign trading power and defy state authority. Ideologies that would threaten state authority also might enter the country.

The consideration above suggests two factors that explain why pre-industrial governments had a propensity to administer trade, sometimes carrying out trade directly and sometimes imposing severe limitations on private trade. The first factor is trade externalities. In the presence of externalities, free trade potentially did not ensure the maximization of society's welfare, and government intervention could help to achieve a maximization of total net benefit. The second factor is rulers' incentive for trade. Rulers in non-democratic societies in general were inclined to maximize their own gains rather than the country's gains. If trade affected the distribution of power, free trade would not ensure the maximization of rulers' welfare. In the case of the restriction of

trade with the aim of preserving the rulers' own political power, social welfare is not maximized.

It is difficult to measure the total net benefit from trade covering all aspects ranging from diplomacy and defense to the acquisition of cultural goods and services, and internal politics. Moreover, Simon (1982) argued that human beings even in the modern world exhibit bounded rationality owing to the limitation of their knowledge and computational ability even in the purely economic domain. This limitation was far more severe in a choice problem that covered various domains and in the case of pre-modern people. There must have been some method of comparing different aspects and calculating total net benefit or some criteria and principles to guide decisions since decisions to prohibit, limit, or encourage trade were made.

We observe two major procedures in history. The first was to follow the principle of priority. People determined the rank of importance among competing goals and pursued first an objective of high priority. Then they pursued a goal of lower priority within the limits of not hurting the goal with higher priority. This is a method often used by statesmen and diplomats.

The highest priority of foreign policy in pre-industrial China, Korea, and Japan was border security, which made sense when war and conquest broke out frequently and frontiers were fluid. If trade affected the security problem, or if the security problem could be managed through trade, it was rational to subordinate economic activity such as trade to diplomacy in order to deal with the security problem, because a security risk incurred a huge cost far exceeding any short-term trade gains. Only slightly less important was the need to promote domestic tranquility, that is, to prevent independent groups from threatening the state's power.

The second procedure was to devise institutions or policies to internalize externalities. Institutions produce stable patterns of behavior and help people to avoid inconsistent acts arising from difficult choice problems in various domains. This mode of operation also saves the costs of calculation arising from difficult choice problems. A prominent example of such an institution is the Chinese tribute system. Trade policy under the tribute system helped China to achieve border security and suzerainty. The rationale of this policy will be elaborated in Section V.

2. *Formal restatement of the argument*

A simple game-theoretical model is presented to explain the pattern of pre-industrial trade and clarify the reasons why pre-industrial rulers often limited and sometimes even prohibited

private trade.[10] The order of the game is that the government chooses a strategy and traders (or foreign countries) then choose either to obey or disobey. Such a sequential game needs to be expressed in extensive form, as in Table 2. The initial node is the government's strategy. The second node is the traders' strategy, and the terminal node contains the payoffs. The government chooses the more advantageous strategy, considering the response of traders or trading counterparts.

Table 2: A Game-theoretical Model of Pre-industrial Trade

Government's strategy	Traders' strategy	Payoffs	
		Government	Traders
Allow private trade	Obey	*A*	*B*
	Disobey	$a - \alpha 1$	$b + \alpha 2 - \beta 1$
Prohibit private trade	Obey	0	0
	Disobey	$-\alpha 3$	$\alpha 4 - \beta 2$

In the table, *a* represents the government's gains from trade, while *b* stands for traders' gains from trade. If official trade exists, *a* and *b* are the increment in gains from allowing private trade. The ruler or government receives tariff revenues, whereas traders earn profits that are part of the economy's gains from trade. The *a* represents the total gains, including externalities.

Next, the αi represent the losses of the ruler or traders' gains arising from disobedience. The αi include both economic and non-economic losses or gains. Disobedience means, from an economic perspective, that traders engage in illegal trade and, from a non-economic perspective, that they defy state authority. If we confine our attention to economic gains or losses, $\alpha 1$ is the loss of tariff revenues due to smuggling or other illegal activity. If $\alpha 1$ includes the risk of losing political power, it may well be larger than *a.* The costs include both the damage to the country's diplomatic relations and to its internal stability.

A similar duality applies to $\alpha 3$. If we confine our attention to economic gains or losses, $\alpha 3$ measures the cost of trying to eliminate smuggling. If we take a broader view, $\alpha 3$ may include the costs to the ruler of chronic disobedience by his subjects, such as acts of piracy.

The βi represent the expected costs of punishment, that is, the probability of being detected multiplied by the disutility from the penalty for disobedience. The stronger the government, the more likely it is that traders who disobey the rules will be punished.

[10] The political economy of international trade has become a growing field in both economics and political science. See, e.g., Grossman and Helpman (2002), and Milner (1997).

This extensive form game can be solved by backward induction. Traders obey if $\alpha 2 < \beta 1$ and $\alpha 4 < \beta 2$. They disobey if the inequalities go the other way. We denote the probability that traders disobey as *p* when private trade is allowed and as *q* when it is prohibited. The expected payoff to the government when it allows trade is $(1- p)a + p(a-\alpha 1) = a - p\alpha 1$. The expected payoff when the government prohibits trade is $-q\alpha 3$; even if private trade is prohibited, the government incurs the expected cost of $-q\alpha 3$. If $a - p\alpha 1 > -q\alpha 3$, the government chooses the strategy of allowing trade. If $a - p\alpha 1+q\alpha 3 < 0$, it chooses the strategy of prohibiting trade. If official trade exists and $a - p\alpha 1 + q\alpha 3 < 0$, only official trade is allowed. Moreover, it is likely that the bigger the proportion of $a - p\alpha 1 + q\alpha 3$ in GDP or financial revenues, the stronger is the incentive for a policy to actively pursue gains from trade.

3. *Important factors determining pre-industrial trade policy*

Active trade policies are promoted by economic growth and market development. If tariff revenues (*a*) increase with economic growth, then the ruler will be more inclined to allow trade. Moreover, if merchants' incentive for trade is strengthened by economic growth and market development, then $\alpha 3$ becomes bigger. Again, rulers have a stronger reason to allow private trade.

Then how can we explain the appearance of policies that prohibit or limit trade? Our simple model can generate an important conclusion: such policies cannot be explained by economic factors alone. If it is assumed initially that $\alpha 1$ includes only economic gains and losses, then $-\alpha 1$ represents the decrease in fiscal revenue arising from a decrease in the legal trade volume owing to smuggling. Whatever the amount of smuggling, the legitimate trade cannot be below zero. That is, $a - \alpha 1>0$. Therefore, $a - p\alpha 1 + q\alpha 3$ is greater than zero. The ruler always allows trade. We therefore arrive at the proposition that if trade was prohibited, there must have been non-economic factors that affected trade policy. In other words, the economic loss from smuggling alone cannot be a rationale for trade prohibition.

Now expand the interpretation of the model to include non-economic gains and losses. Then we cannot rule out the possibility that $a - p\alpha 1 + q\alpha 3 < 0$. Traders may accumulate resources that could be used to challenge the ruler's authority. Ideas brought in by traders might diminish support for the ruler. The ruler might have much more than *a* at stake in choosing a trade strategy. If these potential losses, represented by $-\alpha 1$, are very large, $a - p\alpha 1 + q\alpha 3$ may be below zero. If the government is weak so that traders do not fear punishment and *p* is high, then this conclusion

may be even stronger. If the government is very weak and inefficient, it may anticipate that official trade could decrease dramatically if private trade were allowed.

The history of trade policies in pre-industrial Northeast Asia can be summed up as a battle between the forces to promote trade, driven by the growth of markets and the economy, and the forces to restrict trade, driven by non-economic factors. Because, as will be explained in the following section, the latter forces were stronger in pre-industrial Northeast Asia than in pre-industrial Europe, trade policies were more restrictive and passive.

V. Explanations for Trade Policies in Pre-industrial Northeast Asia[11]

1. *The restrictive trade policies of ancient states in Northeast Asia*

Why did the Chinese empires and the Korean territorial states before the ninth century, and the Japanese *ritsuryo* state before the eleventh century have in common trade policies that were restrictive of private trade? I would argue that the restrictive trade policies of ancient states in Northeast Asia were ultimately shaped by the unique geopolitics of this region.

Ancient Chinese civilization was founded in North China in the region of the great bend of the Yellow river. The North China Plain, a loess area (see Figure 1), was, like the homes of any other ancient civilization, well suited to agriculture in primitive times. The North China Plain covers an area of about 387,000 km^2, half of which consists of arable land. Its size far surpassed that of the homes of other ancient civilizations. The main economic resources of almost all the Chinese states before the Song (宋, 960-1279) had been based on this plain. Because there are no geographic barriers in this enormous region, the militarily competing states had no choice other than to unite in the end. This vast open plain provided a geographic and economic base for the existence and long duration of the Chinese empire before the Song dynasty. Southern and western regions of China subsequently also became rice-baskets. The existence of this large Chinese empire was of utmost importance in shaping the trade policies of the Northeast Asian countries.

Figure 1: Geographical Features of China: The North China Plain (華北平原), a Loess (黃土) Area

11 The explanation of Chinese and Korean trade is mostly from Lee and Temin (2004; 2005). However, I made some changes in this paper, the most notable of which is the inclusion of the influence of the North China Plain.

Source: Fairbank and Goldman (1998, p. 10).

On the one hand, the big inland empire in China made few economic gains from trade (i.e., in terms of our model, *a* in an economic sense was small). First, China was a very big country, its internal prices were not affected much by trade, and its economic gains from trade would have been small. Because of the availability of huge and fertile fields, the pre-industrial Chinese empire had little need to search for resources other than land for fiscal purposes. Second, the inland location of the political center weakened the incentive for maritime trade. Third, China was an internally self-sufficient country, producing almost all the goods it needed. The Chinese often said that they had little need for trade, because China's land was vast and it had ample domestically-produced goods (地大物博). Fourth, China possessed advanced technology and needed few "high-tech" goods. Fifth, China had no neighbors of comparable might.

On the other hand, China's large empire enjoyed great non-economic gains from trade, in other words, the externalities of trade. China faced formidable military challenges from the nomadic tribes of Inner Asia, such as the Xiongnu (匈奴) and the Mongols, that urgently wanted Chinese goods. The harsh natural environment in which they lived meant that the nomads suffered shortages of materials necessary for their survival. As a consequence, they had to rely on trade, plunder, and the exploitation of neighboring countries to obtain the needed materials. Thus, for China, trade manipulation through the tribute system contributed both to the defense of the country's borders and the establishment of its suzerainty, the main foreign policy objectives of the Chinese state. Even if China incurred economic losses in the tribute trade, its diplomatic and military gains from trade were great enough to compensate for any economic loss. Therefore, China adopted a tribute system under which trade was subordinated to diplomacy. Thus, the passive and restrictive trade policies were closely related to the adoption of the tribute system.

The state rulers had another incentive to adopt the tribute system. There had been a diplomatic principle from ancient times in Northeast Asia that subjects did not have the right of diplomacy (人臣無外交), which provided an ideological underpinning for the tribute system. Springing from this principle was a policy to ensure that the state captured or monopolized the gains from trade (Kim 1934; Arano 1988). Such a policy helped to block the rise of local maritime powers that could challenge the authority of the state.

The idea that China was the center of civilization, and the Confucian teaching that governance by virtue with an economically generous attitude was the royal road to becoming king, played some role in devising and justifying the tribute system. However, culture played an

ancillary role; building up the tribute system was rational without considering Confucianism.[12] Historically, the need for countermeasures against the Xiongnu threat was the decisive factor in establishing the tribute system (Yü 1967).

Under the tribute system, China's rulers attached pivotal importance to gift exchange which symbolized its suzerainty and was also an economic exchange of real value. What is more, reciprocal exchanges often were conducted through the evaluation of exchanged items, showing that this gift exchange was not completely independent of market forces (Lee 2004; Gao & Feng 2003, p. 28). While tribute trade was inefficient in pursuing economic gains, its raison d'être was its efficiency in internalizing externalities. Tribute trade included voluntary transfers from China or compulsory transfers to China to internalize externalities, the most important of which were diplomatic and military. The stronger in military power, or the more strategic and friendly in diplomatic relations a foreign country, the more favorable was the gift exchange rate adopted by the Chinese government (Lee 2004).

Under the tribute system, official trade with gift exchange as the major item was substantial, while private trade, especially maritime trade, was often restricted by the state. What factors made pre-industrial states promote official trade? First, the profit margin rate of official trade exceeded the tax rate of private trade. Second, official trade may have had non-economic gains, such as diplomatic gains as seen in tribute trade, because it was effective in internalizing externalities. Third, official trade that allows rulers to stay in control of trade does not incur the negative externality represented by $\alpha 1$. However, official trade was an inefficient way to expand trade. Therefore, a good way to increase rulers' gains from trade, a in terms of our model, is to allow both official trade and private trade.

China allowed tribute embassies to carry out trade at the capital and the border to permit embassies to cover their expenses or procure goods desired by the state, but often suppressed private trade. Trade attendant on tribute traffic was never prohibited, but it had predetermined trading dates, places and participants, and did not allow the trade of certain items.

Then why did pre-industrial states often choose to suppress private trade, while promoting official trade? It appears that $a - p\alpha 1 + q\alpha 3 > 0$ when only official trade is allowed, but $a - p\alpha 1 + q\alpha 3 < 0$ when private trade is also allowed, for the following reasons. Unlimited private trade would encroach on official trade. If the government had been weak so that traders did not fear punishment and p was high, the government may have anticipated that official trade could have decreased dramatically if private trade had been allowed. If official trade also provided non-

[12] Wang (2003) argues that Confucian attitudes had not inhibited overseas trade until the fourteenth century but became a major factor during the Ming and Qing dynasties.

economic gains, the potential losses, represented by -α1, became large. Moreover, the tribute system meant larger non-economic gains from official trade. China preferred vertical tribute trade to horizontal private trade in order to display its suzerainty. If there were no limitations on private trade, especially that independent of tribute traffic, it would be difficult for China to manipulate foreign rulers through tribute trade. In addition, the pre-industrial rulers of Korea and China often thought that the marginal increase in gains from trade when also allowing private trade were not that great.

Pre-industrial China was more restrictive of private trade independent of tribute traffic than that attendant on tribute traffic because the former was more difficult to monitor and posed a threat to the official trade, including tribute trade. In terms of our model, α1 was large.

Private maritime trade was more severely limited than private land trade; in fact, it was the main target of prohibition. Private maritime trade by Chinese was restricted before the late Tang dynasty, and was banned altogether during 1368 – 1567 and 1655-1684. This was because private maritime trade was apt to arouse negative externalities, which would more than offset the economic gains from private maritime trade. Maritime traders could amass great fortunes and gain power that would threaten state authority. Moreover, it was impossible to prevent maritime traders from interacting with people of foreign, hostile countries and leaking secret information. The government sometimes thought that a maritime ban would be a way to blockade the activities of pirates. In terms of our model, this means that *a* from independent maritime trade was large, but α1 was also very large.

Another question is why Korea and Japan followed the Chinese pattern of pursuing restrictive trade policies. This cannot be explained satisfactorily without considering the existence of the large and powerful Chinese empire. Both Japan and Korea had geographies much more advantageous to trade than China: Korea is a peninsular country, while Japan is an archipelago, and both countries are not large. However, they had a geographical disadvantage in trade development in that they faced a China that was united and adopted a restrictive trade policy. Korea for the most part of its pre-industrial period had no other choice but to accommodate to the Chinese tribute system, mainly because it shared a common border with a China that was strong militarily and possessed an advanced culture, economy and technology. Korea enjoyed peaceful diplomatic relations with China for very a long time span as compensation for accepting an inferior position under the Chinese tribute system. Moreover, under the tribute system, the Korean states were able to benefit economically from the generous gift trade with China and could easily absorb high culture and technology from China. The adoption of the tribute system made smaller the gains from private trade, *a* in terms of our model, because of the substantial official trade. And unlimited

private trade would encroach on official trade. If official trade provided non-economic gains, the potential losses, represented by -α1, would become large. Thus, Korea's adoption of the tribute system also led to restrictive trade policies.

In contrast with Korea, Japan's geographic isolation helped it to free itself from the Chinese world order. But then why did the *ritsuryo* state choose to suppress private trade? First, Japanese rulers sometimes accommodated to China's tribute system, because the introduction of Chinese civilization was vital to the development of the state. Second, like Chinese and Korean rulers, they wanted to control the source of trade gains. Third, gains from private trade were small, because not only China but also Korea adopted the tribute system, and because maritime technology was underdeveloped.

2. *The active pursuit of trade gains in medieval Northeast Asia*

The considerations above raise the question why restrictive trade policies were abandoned and/or policies to actively pursue trade adopted in the medieval period. Moreover, why is it that at this time, all the Northeast Asian countries showed a potential to become maritime powers? At least three reasons can be made out. First, the growth of trade between East and West, aided by the trading vessels from the Muslim world, stimulated maritime trade in Northeast Asia. Second, economic growth, especially the development of Southern China, supported the growth of maritime trade. But this would not have sufficed without the third and decisive factor, namely, changes in the political situation in Northeast Asia, which is expounded below.

When China was divided or too weak to maintain suzerainty, there appeared Chinese rulers who were active in pursuing trade gains, like the European mercantilists. During the long periods of disunity and competition, called the Spring and Autumn Period (722-481 B.C.) and the Warring States Period (403-221 B.C.), Qi (齊), a state located on the eastern edge of the North China Plain, adopted an active economic policy to encourage trade and monopolize salt and iron production. A Chinese record says that furs of Old Joseon (古朝鮮) were already famous goods in Qi (Chen 1997, p .3). Thanks to its active economic policies, Qi increased its area sixfold in the seventh and eighth centuries B.C.

During the Six Dynasties period (222-589), another long period of disunity, the southern six dynasties promoted ship building and sought maritime advances to strengthen their political and

military position (Chen 1997, p. 8).[13] Wu (220-280), the southern kingdom during the Three Kingdoms period, actively sought out the Southeast Asian kingdoms and ports for closer relationships.

Although the Tang (唐, 618-907) government allowed maritime interchange to grow, it also restricted private trade. During a short period of disunity after the fall of the Tang dynasty, as Wang (2000, p. 14) observes, the rulers and officials in the four coastal states "knew the value of overseas trade and depended on the profits of that trade to help finance their defense against the continental threat of reunification that would put to an end their independence."

The Song success in reunifying the empire in the late tenth century slowed down the development of overseas trade by the previous southern kingdoms. When Keifeng, the capital of the Northern Song, fell to the Jurchen (金) in 1127, the Song were forced to move south to Hangzhou. As Wang (2000, p. 15) remarks, "[i]t is that move that led to the beginning of a new era for the expansion of coastal trade." And Smith (1991, p. 8) has observed in this context that "the Song state's unusually active involvement in domestic and international commerce was prompted by an endless search for new methods of generating revenues to finance these expensive technological and logistical solutions to military vulnerability." The central means to increase national wealth was the expansion of trade (Shiba 1983, p. 110). Thus, it was the military inferiority of the Song that gave rise to an active economic policy that resembled European mercantilism.

How can this change in Chinese trade policy be explained in the model proposed here? First, the economic gains of *a* became large, because as a result of the division, countries were small and some of them were well placed to expand their maritime trade. Second, the externalities of *a* also became large, because the rulers urgently needed funds to compete militarily, which trade could provide. Third, the negative externalities of private trade of $\alpha 1$ became small, because the incentive to defend suzerainty became weak. Fourth, there appeared a new form of $\alpha 3$ in times of disunity. If a ruler prohibited private trade, his rival could benefit if traders changed their trading place.

Although the Yuan (元, 1279-1368) were strong enough to maintain suzerainty, they were as active in trade as the Song. This is because the Yuan Mongols were not fully sinicized and, as a consequence of their nomadic origin, attached greater importance to the economic gains from trade than the Chinese. Moreover, it probably also helped that the Song dynasty that preceded them had

[13] Abulafia (1987, pp. 444-5) observes: "The fifth and sixth centuries saw independent developments in the Far East which gave slow birth to the oversea routes. The division of China between northern and southern dynasties made access by foreign merchants to southern China less easy, at least by sea.

adopted an active trade policy. On the other hand, the position of the Qing (淸, 1636-1912) was different, because they were fully sinicized and inherited a restrictive trade policy from the Ming.

Private maritime trade flourished in Northeast Asia from the mid-eighth century as state powers in China and Korea weakened (Kim 1934). The weakening of state restrictions in medieval Japan also led to a diversification in the exchange with foreign countries and a growth in trade. This suggests that if states or rulers had not intervened, private maritime trade would have prospered in Northeast Asia. When state power weakened, the expected costs of punishment for private maritime trade, ß2, decreased, so q increased. This is another reason why the sign of $a - p\alpha 1 + q\alpha 3$ changed: the state gave up prohibiting private maritime trade. The growth of private trade in China also contributed to the change in trade policy in Korea and Japan.

In Europe where after the fall of the Roman Empire there was no hegemonic country like China, feudal societies appeared, competition between states prevailed, and self-governing city-states emerged in the context of decentralized states. Feudal lords had strong incentives to actively participate in trade in order to survive and expand in the competition between them, as did European states when they grew, because of the strong competition in their environment. In such a situation, rational rulers would not adopt, or continue for long, 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 generate funds available for winning competition when rivalry became violent. By comparison, Chinese rulers did not have strong incentives to promote trade because of the weakness of internal and external competition. But when China was divided or too weak to maintain suzerainty, there appeared Chinese rulers who behaved like European mercantilists. And China's trade policies exerted a strong influence upon those of Korea and Japan.

3. *The return to restrictive policies in Goryeo and Joseon Korea, Ming China, and Tokugawa Japan*

Why did the three Northeast Asian countries suddenly abandon any maritime ambitions? As mentioned in Section III, during the Middle Ages, economic factors such as the trade growth between East and West for once appear to have overcome the binding force of Northeast Asian geopolitics unfavorable to trade. However, these economic factors subsequently were once again

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[…P]erhaps the most significant achievement of the Malay merchants was to introduce the Chinese to a range of commodities which had not greatly attracted attention before the fifth century."

eclipsed when the new rulers of Ming China, Joseon Korea, and Tokugawa Japan consolidated the state systems at the beginning of their reigns.

In China, the Ming adopted the most restrictive trade policy of all dynasties to have ruled the country. The reasons for such a restrictive trade policy can be found in the Ancestral Injunctions of the first Ming emperor (洪武帝 皇明祖訓). First, the costs of expeditions were high, because foreign countries were "separated by mountains and seas and far away in a corner." Second, the costs of occupation were also high, because "their people will not usefully serve us." And third, the economic benefits of colonization were not great, because "their lands will not produce enough for us to maintain them." Because China's tax revenues from land were large, Chinese rulers did not have a strong incentive to seek tax revenues from conquered lands or trade. Moreover, since China produced diverse goods and, unlike most European countries, had a big internal market, it does not seem out of the ordinary for its rulers not to actively search for colonies as export markets and resource bases. It was therefore a rational choice for China not to become a colonial power.

Though Ming China decided to cling to the tribute system and not become a colonial power, it still could have actively pursued economic gains from trade like the Song and Yuan dynasties did. Why did it not do that? The Yuan policy of encouraging maritime trade did not appeal to the founder of the Ming dynasty. In his view, uncontrolled private trade made the tribute system ineffective, giving rise to unrest along the coastal frontiers (Wang 1998, p. 303). Moreover, the Yuan dynasty had been short-lived and the Song dynasty similarly was not regarded by the Ming rulers and elites as a model to follow because the Song had been very weak militarily and were destroyed by the northern nomads, even though they actively engaged in trade and had built up the navy. If the Song had been strong militarily or the Yuan had achieved political stability like the Qing eventually did, early modern world history might have turned out very different.

Moreover, as the Ancestral Injunctions said, the most serious threat was the nomads of Inner Asia. The capital was moved to Peking in order to cope with the Mongol military threat and effectively control the main army on the northern front. The relocation of the capital in 1421 signified the conversion of a maritime power to an inland empire. The above considerations show that in the context of East Asian geopolitics, the conversion was not an irrational choice.

Was the maritime ban also a rational choice? Private maritime trade by Chinese was entirely prohibited, and maritime trade only in connection with tribute embassies was allowed, the size and frequency of which were regulated. The main reason why Ming China implemented the maritime ban was to blockade the rise of local maritime powers that could defy the authority of the state, and defend itself from Japanese and Chinese pirates. Moreover, the Manchu Qing implemented the ban to destroy the strong naval power under Zheng Chenggong who fought against

the rising Qing for the dying Ming (Li 1990, pp. 80-81; Wang 2000, pp. 21, 31-32). Chinese rulers were very afraid of a combination of internal and external threats (內憂外患), or a joint menace from Inner Asian nomads and local maritime powers. They wanted to eliminate the maritime threat by a maritime ban and then focus on the threat from Inner Asia. In terms of our model, Chinese rulers judged $\alpha 1$ from private maritime trade to be very high. And they thought that a was small, so their calculation was $a - p\alpha 1 + q\alpha 3 < 0$.

There was another effective way in which the Ming government could have coped with a maritime threat: it could have strengthened its naval power while allowing maritime trade. This approach would have been the fundamental solution to defend the coast and also obtain economic gains from maritime trade. If this approach indeed would have been better, the maritime ban must have been a decision resulting from bounded rationality because the Ming did not embrace this position.

The fully-sinicized Manchu Qing adopted the typical tribute system as well as a passive stance toward trade. Before occupying China, the Qing imposed exploitative tributary relations on Korea based on their military strength. Once they had become the rulers of China, however, they made these relations reciprocal (Lee 2004). The Qing's trade policy was less restrictive than the Ming's, and maritime trade flourished after the Qing lifted the maritime ban (Matsuura 2003). But trade under the Qing experienced considerable swings, increasing and contracting three times owing to the restrictive nature of trade policy (Chen 1991, p. 229). Mancall (1968, p. 89) has attributed the change in the Qing's attitude to "the influence of the rigid Sino-Confucian tradition." However, it should be understood as a rational choice. When the nomadic tribes lived in the steppe, they pursued trade in order to survive; and when they became rulers of China, they found that the traditional Chinese trade policies were useful to stabilize power and maintain suzerainty.

When non-Chinese became the rulers of China, there arose a new externality of trade. The reason why Emperor Kangxi prohibited Chinese trade in the South China Sea in 1716 was that he was afraid to face an alliance of Chinese traders and Chinese residents in Southeast Asia that stood against the Qing dynasty (Chen 1993, pp. 71-2). In our model, $\alpha 1$ became greater. The Yuan dynasty did not have this problem, because overseas trade was largely in the hands of Muslims whom the Mongols trusted more than the Chinese.

Turning now to Korea, why did the Goryeo dynasty come to prohibit private maritime trade independent of emissary traffic? The founder of the Goryeo dynasty and his successors, whose ancestors engaged in maritime trade, must have known of the large gains from maritime trade, because ninth century Korea witnessed prospering maritime trade. They must have concluded that a was large but that nevertheless $a - p\alpha 1 + q\alpha 3 < 0$ for independent maritime trade. What made $\alpha 1$

so big? The most important factor seems to be the lesson that the rise of local maritime power threatened the state power of the Unified Silla dynasty. It can be inferred from the cessation of independent maritime trade that the rulers of the Goryeo dynasty attached greater importance to the rulers' incentive to monopolize diplomacy and trade than to the economic gains from unrestricted trade.

The Joseon dynasty at first prohibited all private trade with China. Such a strong policy against private trade can be largely explained by the attitudes of Ming China and the rise of Confucianism. The Ming consolidated the tribute system, implemented a maritime ban, and were criticical of the private trade of Korean embassies. The power elites who founded the Joseon dynasty argued that private trade weakened state discipline, basing their arguments on Confucianism, which became the ruling ideology of the new dynasty (Sukawa 1997). Confucians generally underestimated the economic role of commerce, a, and overemphasized the adverse effect of private economic motives on society and politics, $\alpha 1$. Before the Goryeo dynasty, Confucianism had little to do with the adoption and maintenance of the tribute system, but it played an important role in its consolidation during the Joseon dynasty.

In the pre-industrial era of Northeast Asia, the most dramatic reversal in trade policy occured in seventeenth century Japan. Actually, Ieyasu, like his predecessors, was eager for commerce with the outside world. He had the idea of making Japan into a world maritime power that traded not only with Asia and Europe but also with America. Interestingly, all the rulers of Korea, Japan, and China who initiated the reversion to restrictive trade policies were keen political and economic calculators and were well aware of the gains from trade. Probably more than any other of these rulers, Ieyasu, the founder of the Tokugawa *bakufu*, was clearly aware of the gains from trade, and for him, a in our model seems to have been as large as for the European mercantilists.

Nevertheless, the Tokugawa *bakufu* suddenly imposed restriction on trade as severe as the early Ming government and the Joseon government. This seclusion policy initiated by Ieyasu reveals that $\alpha 1$ was great enough to make $a - p\alpha 1 + q\alpha 3 < 0$. Ieyasu found that trade development benefited his military rivals, the strong *daimyo* in western Japan, such as Shimazu of Satsuma, more than himself (Uehara 2006). Moreover, Ieyasu and his followers became convinced that if the belligerent European countries, the *daimyo* the trade with, and Christian Japanese were to form an alliance, they would have posed a formidable menace to the *bakufu*'s authority. Ieyasu and his followers thus seem to have attached greater importance to trade than Chinese rulers, but seem to have been more afraid of the combination of external and internal threats than Chinese rulers, because they could not established as centralized a state as China.

But in medieval and early modern Europe there were also states that were not completely centralized because of the presence of feudal lords. Why did these states not adopt policies similar to those of the Northeast Asian countries? The answer must lie in the geopolitical differences. If China and Korea had been actively engaged in trade with Japan, and they had been competing militarily with Japan, then Ieyasu probably would have given up the policy of seclusion, because he must have known that qα3 is too large for $a - p\alpha 1 + q\alpha 3$ to become less than 0.

4. *The persistence of restrictive trade policies in the context of developments in world trade around the eighteenth century*

It is worth noting that the growth of markets and hence the incentives for trade widened the range of private trade, resulting in "the eclipse of the tribute system by trade" in the Southern Song period (Shiba 1983, p. 110), the late Ming period, and the late Qing period (Fairbank 1953; Mazumdar 1998, chap. 2). On the one hand, the huge size of China meant that the gains from trade were small; on the other hand, this characteristic promoted the growth of markets and subsequently strengthened the incentives for trade. And trade with Europe grew from the sixteenth century. "The eclipse of the tribute system by trade" also happened, to a lesser degree, in seventeenth century Korea as a result of growing trade with Japan.

Let us explain this "eclipse of the tribute system by trade" in terms of our model. The growth of markets and the incentives for trade increased the cost of eliminating smuggling, α3. After experiencing widespread pirate activity, the Chinese government realized that the maritime ban increased α3. As the bureaucrats became less strict, β2 decreased to become smaller than α4, so q increased. The bureaucrats also became officially or privately interested in absorbing part of the gains from trade, because a grew with the expansion of trade. Therefore, the sign of $a - p\alpha 1 + q\alpha 3$ changed. As a result, Ming and Qing China in the end lifted maritime bans and Joseon Korea officially allowed periodic border trade with China in the seventeenth century. These changes in trade policies provided an environment supportive of the increase in trade.

During the eighteenth and nineteenth centuries, Atlantic trade increased tremendously. However, China, Japan, and Korea did not consider changing the underlying principles of their trade policies until the forced opening of their ports around the mid-eighteenth century. Moreover, China showed significant resistance to the relaxation of restrictions on trade. A more restrictive trade system was established in 1757, under which only one port, Guangzhou (廣州), was open to

European traders and only privileged Chinese merchants, Cohong, were allowed to trade with Europeans.

Let us explain why China devised this "Guangzhou system." The reasons were well expressed in a widely quoted passage of an edict by Emperor Qianlong to a British envoy in 1793. This shows, first, that the notion persisted that the economic gains from trade, a in terms of our model, were small. The edict stated: "This heavenly dynasty is so abundant with produce in every area that we usually do not rely on foreign goods for supply." Second, the Chinese thought that free trade would make the tribute system meaningless and undermine their suzerainty. In other words, China could not control the externalities, $\alpha 1$, under free trade. Therefore, $a - p\alpha 1 + q\alpha 3 < 0$ under free trade.

China preferred the "Guangzhou system" not only to free trade but also to trade prohibition. China adopted the traditional strategy of letting barbarians cherish China from far away, so the edict said that "considering that tea, porcelain, and silk produced by this heavenly dynasty are so needed by every Western country including Britain, with my favor I grant you the right to establish trading houses in Macao so that your people not only get goods for everyday life but also share our profit." This strategy revealed China's concern about the complaints of Europeans when it prohibited trade.

The cost of the Guangzhou system increased as trade with Europe and the European desire for more trade grew. First, the economic gains would have increased considerably under free trade. The ratio of custom revenues to central government revenues was estimated to have been about 10% in the early nineteenth century. Custom revenues increased tenfold during the latter part of the nineteenth century (Fairbank, Reischauer and Craig 1978, p. 568). Chinese rulers and elites must not have imagined such a big increase. Second, smuggling increased along with the incentive for trade under the "Guangzhou system." What was intolerable for China was the large-scale smuggling of opium. China's misgivings over opium smuggling and British complaints about the "Guangzhou system" eventually escalated into the Opium War in 1840-41, resulting in China's defeat at the hands of the British. In other words, the attempt to stabilize the dynasty by clinging to restrictive trade policies in the end resulted in destabilizing it.

Why did China fail to accurately assess the costs under the Guangzhou system? The main reason is that China failed to understand the meaning and impact of European advances until its defeat in the Opium War and the war with Britain and France in 1860. In fact, it was difficult for China to understand the European challenge, because this was a challenge of a new type. European states were maritime powers that had the potential to defeat China. There had been no such powers before. Even in deliberations on defense strategy in 1874-5, frontier defense strategy prevailed over a maritime defense strategy, which was "influenced by the traditional lack of enthusiasm for

maritime affairs on the one hand, and by China's deep historical interest in [Inner Asia] on the other" (Hsü 1965, p. 225). In addition, European states were being transformed into modern industrial powers, which China had difficulty in understanding.

So far, we have explained China's trade polices – even the maritime ban by the first emperor of the Ming dynasty – as a rational calculation from the viewpoint of political economy without much recourse to culture. However, it seems that China's response to the European challenge during the late Qing era cannot be explained without recourse to culture, such as the notion that China always had been the center of civilization, and the role of Confucianism in subordinating private economic motives to moral principles.[14]

It is not difficult to understand why the Chinese should have held Sino-centric notions (中華觀念), given that China always had been the center of civilization in East Asia before the nineteenth century. Because China was a far bigger and wealthier country than its surrounding neighbors, it could adopt a Confucian doctrine that belittled the pursuit of economic gains from trade. The Chinese continental mind-set had become entrenched because China derived most of its income from the land, and the main threat it faced came from Inner Asia rather than from across the seas. Based on these considerations, I would argue that Chinese culture was molded largely by rational choices.

But Chinese culture molded by rational choices could limit rationality in political and economic calculations owing to human bounded rationality and path-dependency. Because Confucianism had been the dominant ideology since the Han dynasty (漢, 206B.C.-220A.D.), cultural inertia was very strong. Though the growth of markets and hence the increasing incentives for trade widened the range of private trade, resulting in "the eclipse of the tribute system by trade" in the late Qing period, culture played an important role in buttressing a policy that subordinated trade to diplomacy until the military power of an industrialized nation forced China to allow free trade.

Turning to Korea and Japan, these two countries remained more restrictive in their exchange with the Western world than China. Even after China eventually removed its maritime ban in 1684, these two countries continued to cling to their policies. When Western ships came to Korean shores for trade in the nineteenth century, the Korean government refused all requests for trade. The rulers of the Joseon dynasty did not expect any gains from independent maritime trade. The Korean elites also thought that the exchange of Korean silver and gold for Western clothes was

[14] Fairbank (1968) has developed a model of the tribute system that stresses cultural factors to explain foreign policy, including trade policy, in the late Qing period; however, because of its overemphasis on culture, the model is of limited use in explaining the tribute system before that period.

unfavorable to Korea. As a result, in terms of the model, they judged *a* to be small. The main reason why Korea prohibited trade with Westerners in the nineteenth century was the threat of a debasement of Confucian culture through the intrusion of Christianity. Because the Joseon court judged *a* to be very small and $\alpha 1$ to be very large, it turned out that $a - p\alpha 1 + q\alpha 3 < 0$.

5. *The role of culture in explaining restrictive trade policies*

Lastly, let me explain the role of culture which influential scholars have regarded as the most important factor for the restrictive trade policies in pre-industrial China and Korea. Culture influenced pre-industrial trade policies in two ways. First, it was a component of the total net benefit that the trade policies were designed to maximize. For example, in the late Joseon period, the government refused demands for trade by Westerners because the negative effects on its Confucian culture were deemed to surpass the economic gains from trade. Thus, the government was willing to pay the price of fighting with Western trading ships in order to protect Confucian culture. Second, culture influenced the political and economic calculation. For example, in late Joseon Korea, orthodox Confucians judged the economic gains from trade with Westerners to be small and the cultural losses to be large, while a few practical scholars argued that trade with Westerners would not only bring forth substantial economic gains but would also be beneficial in the cultural sphere (Lee 2003).

Why did culture matter? Because human beings are boundedly rational and their positive views about how the world works are apt to be affected by their normative value judgments. Culture has been the product both of long-standing ways of thinking and of specific decisions made to solve specific historical problems (Temin 1997). Recourse to culture utilizes the transmitted and tested values from generation to generation, and saves the cost of internal conflicts. Aoki (2001, p. 13) therefore argues that "[i]n a world of incomplete and asymmetric information," an institution that "coordinates agents' beliefs only in summary and shared ways […] enables the bounded-rational agents to economize on the information processing needed for decision-making."

However, I do not agree with explanations that assign culture the central role in accounting for restrictive trade policies and argue that, in general, culture was not a major but a minor determinant of trade policies. An anti-commercial culture was common in many pre-industrial societies, and despite of this culture, not a few countries – such as ancient Greece and early modern

Portugal developed – maritime trade.[15] Culture played only a marginal role in the devising of the tribute system in Han China, in accepting it in Korea before the Joseon dynasty, and in the policy of "national seclusion" in Japan during the 1630s.[16]

Confucian culture that belittled commercial activities and was antipathetic to the Western religion played a significant role in determining the passive and restrictive trade policies in Ming and Qing China and in Joseon Korea. But even when Confucian culture exerted a strong influence, some rulers and elites were not ignorant of the gains from trade and were keen economic and political calculators. For example, a Korean politician in the fifteenth century argued that giving generous gifts to the Ryukyu ambassador did not make sense because the Ryukyus did not have the potential to invade Korea, whereas giving generous gifts to the Japanese made sense because they had this potential.[17] It seems to have been only during the late Joseon dynasty when culture played a central role in blockading the exchange with Western countries that cultural consideration overwhelmed political and economic calculations in Northeast Asian history.

It is owing to human bounded rationality and path-dependency that culture molded by rational choices could limit rationality in political and economical calculations. Culture persists in the face of changes in relative prices or formal rules (North 1990, p. 87). It may not be rational to change transmitted and tested values without confirming that the changed relative prices will remain stable. If the majority of the population has not confirmed that this is so, such attempts to change culture are likely to arouse social conflict. But even if it has done so, the benefit from changes in culture or institutions needs to be compared with the costs, because it is costly to dismantle and recreate institutions or culture. Interest groups that benefit from the dominant culture will resist change, even when the majority wants it. As a result, like a paradigm, culture does not change flexibly. The persistence of institutions or culture in the face of changes in relative prices or

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15 Because the ancient Greek disdained commercial activities, trade was left to foreigners (Curtin 1984, pp. 75-8). As the Portuguese also held an anticommercial ideology, "[m]erchants were even further down the line in prestige, in spite of their wealth and occasional power" (ibid., p. 138). Similarly, despite contempt for merchants and commerce, there developed trade among the upper-class of ancient Rome (Walbank 1987, p. 74), among the Brahman caste of pre-industrial India (Curtin 1984, p. 103), and among the nobility of the Melaka kingdom (ibid., pp. 130-1). Based on "the evidence from the thirteenth- and fourteenth-century economies of China, India, and the Arab world," Abu-Lughod (1989, pp. 363-4) "cast[s] doubt on [Max Weber's] view that eastern culture provided an in hospitable environment for merchant-accumulations and industrial developers."

16 With regard to Japan, Reischauer (1970, pp. 92-3) for example, argues that "Hideyoshi and the Tokugawa had no particular objections to Christianity on religious grounds, but they looked upon it with deep suspicion as a political menace to their rule. They were desirous of retaining profitable trade relations with the Europeans, but gradually came to the conclusion to prohibit Christianity for reasons of national safety and political stability."

17 *Joseon Wangjo Silok* (朝鮮王朝實錄, The Veritable Records of the Joseon Dynasty), King Sejo 13·8·kihae.

formal rules makes history path-dependent. Because Confucianism had been the dominant ideology in China and Korea for a very long time, the cultural inertia was very strong.

VI. The model's implications for trade policies in the industrial period

The theory of trade presented in this paper may appear to be a special case because it presupposes trade externalities, but I would argue that modern trade theory is the special case because it often ignores externalities. Viewed from a broad perspective, economic acts have externalities; the economic domain and other domains are interrelated. This is why an interdisciplinary approach is needed.

What is more, the theory presented here also possesses some explanatory power in accounting for trade policies in the industrial period. Following the compulsory opening up of China, Japan, and Korea to the modern world, these three countries became active in pursuing the gains from trade. In terms of the model, *a* became bigger, because they came to know well the benefit of trade through the influx of Western knowledge, and because they were more keenly aware of the external competition. In addition, $\alpha 1$ became smaller, because Confucian ideology weakened and suzerainty worth defending disappeared.

The model can also be applied to the trade between Socialist countries, which developed reciprocal trade amongst themselves but had little interest in trade with capitalist countries. This socialist trade system resembled the tribute system under which trade was subject to diplomacy. Both attached great importance to the externalities of trade and developed official trade such as gift exchange that internalized externalities. Similarly, many developing countries that were liberated from their colonial masters following the Second World War did not actively pursue the gains from trade because they were concerned that close trade relations with developed countries might restore their political and economic subordination. In other words, they judged $\alpha 1$ to be big.

Even present protective agricultural trade policies in the developed countries can only be understood by considering the externalities from trade. Similarly, the policies of South Korea, China, Japan, and America with regard to trade with North Korea are strongly influenced by political consideration.

However, the influence of externalities on trade has gradually weakened during the industrial period. Since around the turn of the new millennium, owing to the transformation of socialist economies into market economies, and the widening and deepening of globalization, we are

entering a period when neoclassical trade theory ignoring externalities provides a good explanation for most trade around the world.

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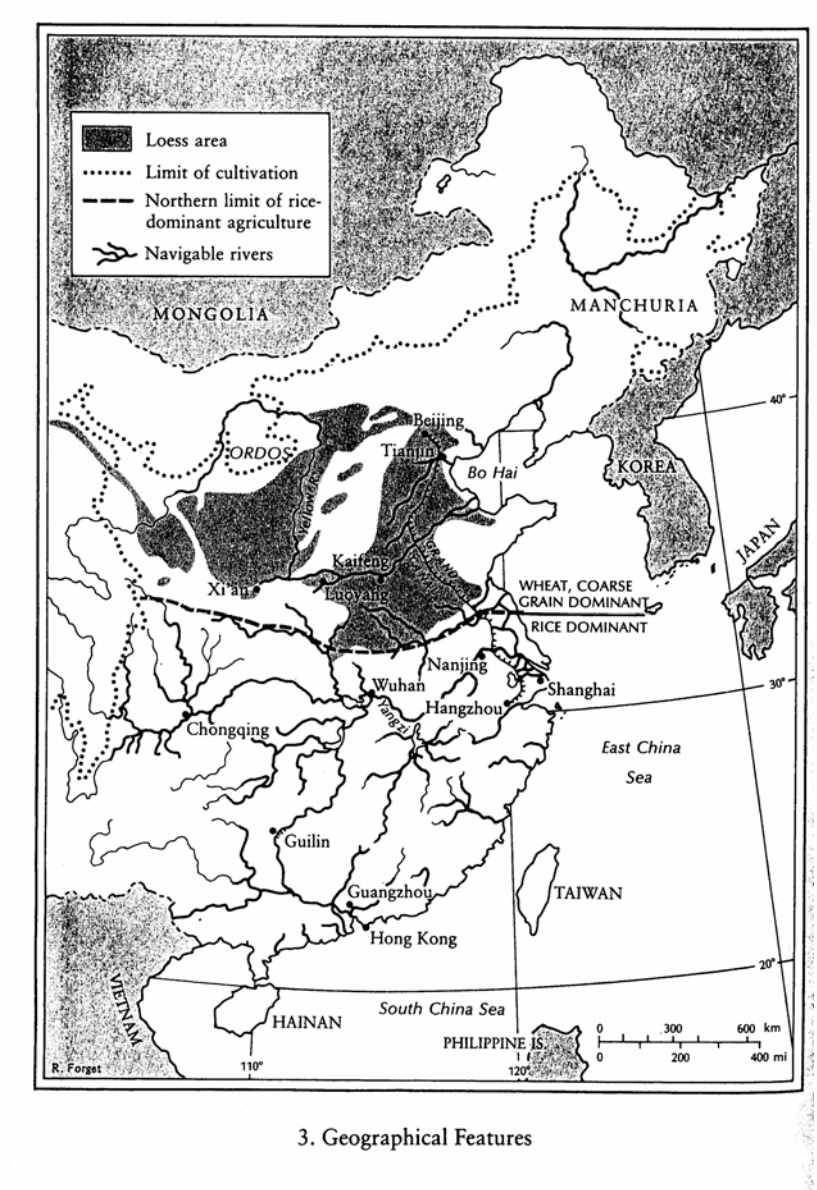
Figure 1: Geographical Features of China: The North China Plain (華北平原), a Loess (黃土) Area



3. Geographical Features