
The Layered Colonialism and Korea's Terms of Trade under Japanese Colonial Rule

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This paper examines how Japanese colonisation influenced Korea's economy, from the perspective of trade. Specifically, this paper will discuss Japanese colonial policies and examine how they shaped Korea's trade and economic structure. The aim here is to examine Japanese colonialism more broadly by analysing colonial Korea's trade not only with Japan but also with China. It discusses the 'layered' nature of Japanese colonialism involving trade among Japan, Korea, and China (especially Manchuria). It argues that Korea acts as a semi-periphery and a staging post for Japan-Manchuria trade during the shaping process of layered colonisation, and addresses the debate over the question whether the expansion of trade in East Asia in the early twentieth century were more driven by economic complementarity among the three countries or by Japanese imperialist expansion.

Moreover, this paper approaches colonialism, trade, and economic development in Korea by considering the historical context, constructs data sets on the structures of colonial trade and the net barter terms of trade, and examines which (if any) theories of colonialism and development and underdevelopment apply to the case of colonial Korea, and to what extent. Both qualitative and quantitative methods will be utilised to examine the characteristics of Japanese colonialism and colonial policies in Korea and the structural changes to Korea's trade

and economy, as well as changes in the net barter terms of trade. By examining the structural transformation of Korea's trade, this paper discusses how economic relations between colonial Korea, Japan, and China—and in particular, changes in the net barter terms of trade (NBTT) between the three countries, affected the broader economic development of Korea.

There are two reasons for the choice of trade as an approach to this topic. Firstly, trade has been a central theme in discussions about colonialism and economic development or underdevelopment. As Sugihara noted, 'the study of intra-Asian trade, which crossed territorial and colonial borders, also helps us to understand the nature of colonialism and the international climate of imperialism'.¹ This study provides further evidence in the context of East Asia for the discussion about the economic impact of imperialism with a focus on trade. Secondly, most economic research related to Japanese rule in English, Korean, Japanese, or Chinese, has focused on agriculture and industry. Little attempt has been made to analyse the importance of gains and losses from colonial trade. The impact of trade on economic development in colonial Korea has seldom been studied. Therefore, this paper chooses Korea's colonial trade as an angle from which to examine the impact of colonialism, the relationship between trade and economic development, and the characters of Japanese colonisation. It aims to enrich the existing literature in Korean studies from a balanced view of the debates.

¹ Kaoru Sugihara, 'An Introduction', in *Japan, China, and the Growth of the Asian International Economy, 1850-1949*, ed. Kaoru Sugihara (Oxford: Oxford University Press, 2005), 1-19, at p. 2.

This paper has five sections. The first section introduces the methods and sources that used in this study. The second section calculates the figures for the net barter terms of trade by using primary sources from the colonial government and discusses the impact of colonialism on Korea's trade and economy. The third section focuses on the trends and structures of Korea's trade with Japan and China. The purpose of incorporating Korea-China trade into the discussion of Korea's trade is to make a comparison with Korea-Japan trade and to show how trade policies influenced Korea's trade structure. The fourth section illustrates the 'layered' nature of Japanese colonialism in Northeast Asia. China could be considered a more equal trade partner with Korea, while Japan was Korea's imperial metropole. So, the analysis of Korea's trade with China and Japan will reflect the 'layered' nature of Japanese colonialism and how it affected the trade and economic patterns in Northeast Asia. The final section concludes.

1. Methods and Sources

Three phases of administrative policy can be distinguished across the years of Japanese colonial rule: ‘military rule’ (1910–1919), ‘cultural rule’ (1919–1931), and the war period (1931–1945). ‘Military rule’ was characterised by severe oppression in almost all aspects of society. Tight control of local citizens was accompanied by severe restrictions on establishing a new business. ‘Cultural rule’ was marked by a more liberal social atmosphere. The Company Law, which imposed a permission system for establishing new companies, was removed, and the colonial administrators also left some room for publications and assembly. The colonial administrators adopted more moderate methods to control society. Wartime was characterised by the strong mobilisation of society to aid the war efforts, not only politically but also economically. The colonial rulers adopted mandatory assimilation policies in Korea, with the Japanese language compulsory in all schools. Political movements were severely suppressed, and the Korean economy was treated as a military support base for Japan.

This paper focuses on the colonial period but sets it in the longer-term context of Korea's pre-colonial trade with Japan and China. This paper covers the period from 1910 to 1939, rather than continuing to 1945, because of source constraints (that is, data is limited to this shorter period). The major primary sources used for this thesis are *Chosen Sōtokufu tōkei nempō* (Statistical Yearbook of the Government-General of Korea) and *Chosen bōeki nenpyō* (Trade Yearbook of Korea). These sources offer data for the whole colonial period, from 1910 to 1945, and its paperback version is kept at the National Library of South Korea. However, due to the Covid-19 pandemic, I could not get access to the whole resource and read only the online

sources, which cover the period from 1910 to 1939. Therefore, this study of Korea-Japan trade only examines this shorter period while not discussing the final, wartime quintet of years, 1940 to 1945. For Korea-China trade, this study examines the period from 1910 to 1931, which was before the Japanese invasion of Manchuria. The terms of trade were calculated for Korea-China from 1912 to 1931, and for Korea-Manchuria from 1932 to 1939. The terms of trade between Japan and Korea were calculated from 1912 to 1939. The net barter terms of trade, or the commodity terms of trade, is the relative price of exports in terms of imports,² and can be defined as how many units of imports can be bought with the value of one unit of exports, or the ratio of export prices to import prices.³ ‘Terms of trade’ in this section means net barter terms of trade, unless otherwise specified.

It is necessary to note that there are slight differences between the two sources regarding the exact value or volume of the exports or imports of certain products. These discrepancies might result from officials using different dates to compile the data or making different adjustments. Nevertheless, overall, there were not many discrepancies. While the data used for the analysis of trade structures were from *The Statistical Yearbook of the Government-General of Korea*, the data I used for calculating the terms of trade between Korea and Japan were mainly from *The Trade Yearbook of Korea*.

² Maurice Obstfeld, Kenneth Rogoff, *Foundations of International Macroeconomics* (Cambridge, MA: MIT Press, 1996), p. 199.

³ Marshall B. Reinsdorf, *Terms of Trade Effects: Theory and Measurement* (Washington D.C.: U.S. Department of Commerce, Bureau of Economic Analysis, 2009), p. 1.

The final years of Japanese colonial rule in Korea were marked by the Japanese war effort, which caused hyperinflation and the mobilisation of all resources for the war. Furthermore, Korea was not in the same situation in the 1940s as before. Therefore, examining the years from the 1910s to the late 1930s provides a more balanced view of Japanese colonialism and its impact on the Korean economy and trade. Compared with previous studies calculating Korea's net barter terms of trade during the colonial period, this paper accurately uses the largest and broadest range of commodities and covers almost the whole period of colonial rule. It also calculates Korea's net barter terms of trade with its two key trading partners, Japan and China, rather than Korea's terms of trade as a whole, which had already been constructed by Park and Kim.⁴

There are other statistical sources on Korea's trade and economy during colonial period. The three volumes edited by Kim Nak-Nyeon contain a large volume of data on Korea's trade and economy.⁵ In 2006, researchers affiliated with Historical Statistics of Korea, a project managed by the Nakseongdae Institute of Economic Research, completed the estimation of the output and population of colonial Korea and the outcome was published as *Hangugui gyeongjeseongjang 1910-1945* (Economic growth in Korea 1910-1945) in 2006. In 2012, *Hanguk ui janggi tonggye: gungmin gyejeong 1911-2010* (Long-term statistics of Korea:

⁴ Park Ki-Joo and Kim Nak-Nyeon, 'Hanguk ui janggi muyeoktonggye wa muyeokjisu, 1877-1963 [Long-term trade statistics and indices in Korea, 1877-1963]', *gyeongjehak yeongu* 57:3 (2009), 131-170, pp. 161-3; Kim Nak-Nyeon, 'Historical Statistics of Korea: A Survey', *Korean Social Sciences Review* 2:2 (2012), 1-34, at p. 20.

⁵ Kim, *Hanguk ui gyeongje seongjang*; Kim Nak-Nyeon (ed.), *Hanguk ui janggi tonggye : gungmin gyejeong 1911-2010* [National Accounts of Korea, 1911-2010] (Seoul : seoul daehakgyo chulpan munhwawon, 2012); Kim Nak-Nyeon (ed.), *Hanguk ui janggi tonggye* [Historical statistics of Korea] (Seoul: Haenam, 2018).

national accounts, 1911-2010) was published as a revised version of previous estimation. The revised version expanded the time series of Korean output and expenditure from 1911 to 2010 and generated the data in the framework of national accounts. It also contained data on Korea's trade values and the balance of payments, while not covering the terms of trade.

Similar to Kim's *Hanguk ui janggi tonggye* (Historical statistics of Korea), an English volume of Korea's data sources, *Historical Statistics of Korea*, edited by Cha Myung-Soo, Kim Nak-Nyeon, Park Ki-Joo, and Park Yi-Taek, will be forthcoming in late 2021.⁶ This book in English presents Korea's economic statistics over the past three centuries with a focus on the century after 1910. The time-series data refer to population, wages, prices, education, health, national income and wealth, and technology. The editors of this volume also adjusted ensure intertemporal consistency. But since it has not been published yet, data in *Historical Statistics of Korea* will not be used in this paper.

The methodology and the procedures of calculating the terms of trade utilised in this paper are more complex. This paper calculates estimates of the commodity terms of trade of colonial Korea, not only with Japan but also with China. Elsewhere, Park and Kim discussed Korea's overall commodity and income terms of trade during the colonial period, but did not specifically calculate Korea's terms of trade with Japan and China.⁷ Since Japan and China were the two key trading partners of colonial Korea, together accounting for more than 90 percent of Korea's

⁶ Cha Myung-Soo, Kim Nak-Nyeon, Park Ki-Joo, Park Yi-Taek, *Historical Statistics of Korea* (Singapore: Springer, forthcoming in Nov. 2021).

⁷ Park and Kim, 'Hangukui janggi muyeoktonggye', pp. 161-3; Kim, 'Historical Statistics of Korea', p. 20.

trade value, the construction of Korea's net barter terms of trade with each of them is important to understand Korea's trade structure and economic development during the colonial period, and is an original contribution of this thesis. This is a step forward. The calculations of Korea's net barter terms of trade with Japan will determine whether the patterns fit with the predictions of Prebisch-Singer thesis.

Asia Long-Term Historical Statistical Database, compiled by researchers in the Hitotsubashi University under the Asian Historical Statistics project, also provided economic data on Korea during the colonial period (mostly from 1915 to 1940).⁸ The data included the categories of national accounts, agricultural production by commodities and regions (north and south), industrial production by sectors, transportation, finance, and so forth. However, it did not cover data related to Korea's trade. This paper also utilised statistics, such as GDP per capital in Korea and Japan, from the Maddison Project Database (using the 2013 version).⁹ The data on national accounts is used to analyse economic development (convergence or divergence) among East Asian countries in the early twentieth century.

Overall, the existing statistical compilation on colonial Korea has focused too much on Korea's national accounts, agriculture, and industries, while not providing much data on Korea's colonial trade. The recently published statistical sources covered the overall trends, categories

⁸ Institute of Economic Research, Hitotsubashi University, *Asia Long-Term Historical Statistical Database* [https://www.ier.hit-u.ac.jp/COE/Japanese/online_data/korea/koreaj.htm].

⁹ Maddison Project Database, version 2013. Bolt, J. and J. L. van Zanden. The Maddison Project: collaborative research on historical national accounts. *The Economic History Review*, 67:3 (2014), pp. 627-651, working paper.

of commodities, the level of trade concentration, and the balance of payments for Korea's trade; however, Korea's trade with other countries, especially third-party countries, or countries outside the yen bloc, was often ignored. Therefore, this paper analyses to a greater extent the patterns of Korea's trade and its high proportion of trade with Japan to make an original contribution to the scholarship.

The sources used in this paper also have some weaknesses. The data sources were still incomplete in terms of the range of commodities and their volume and traded values. *The Government-General Statistical Yearbook* only listed Korea's major traded commodities, rather than the entirety of traded commodities. And even though *The Statistical Yearbook of Korea* and *Trade Yearbook of Korea* contained detailed statistics on Korea's trade, the data was still incomplete in several respects. For example, the data on ore exports to Japan was not calculated in either of the sources. And a large proportion of export and import values was categorised as 'other', which should be excluded from the calculation of the terms of trade. Meanwhile, much of the data on machines and mechanics focused on the export and import values, while the volume data was missing. So, the incompleteness of the data, which accounted for around 30 percent of the overall values, may lead to some inaccuracy when calculating the net barter terms of trade for Korea.

2. Korea's Terms of Trade, 1910-1939

This section presents new estimates of the terms of trade of Korea under Japanese rule. Specifically, it presents figures for the commodity (net barter) terms of trade between Korea and Japan and between Korea and China from 1910 to 1939. So far, research has been done on the structural transformation of Korea's trade in the colonial period,¹⁰ the trade indices, the overall net barter terms of trade, and the income terms of trade during the colonial period.¹¹ This section enriches the literature by focusing specifically on Korea's trade with its two key trading partners, Japan and China, in the colonial period, when the currency was shared. By constructing Korea's commodity terms of trade with Japan and China, respectively, from 1910 to 1939, this section shows how economic relations between colonial Korea, Japan, and China—and in particular, changes in the net barter terms of trade (NBTT) between the three countries, affected the broader economic development of Korea. This section is informed by theoretical and conceptual literature and draws on an original analysis of the primary statistics.

This section contributes to the debate about whether the net barter terms of trade moves against or in favour of underdeveloped countries. Previous research showed how the terms of trade moved between the metropole and the colonised countries, and the effects of these changes.¹²

¹⁰ Song, Gyu-Jin, *Iljehai joseonmuyeok yeongu* (Study on Korean trade under Japanese colonial rule) (Seoul: goryeodaehagyo joseonmunhwa yeonguwon, 2001); Yi, Dae-Geun, *Hanguk muyeoklon - hanguk gyeongje seonjinhwa ui gil (je i pan)* (Study on Korean trade – the road to Korean economic development, 2nd ed.) (Seoul: beobmunsa, 2003).

¹¹ Park and Kim, 'Hangugui janggi muyeoktonggye', pp. 161-3; Kim Nak-Nyeon, 'Historical Statistics of Korea: A Survey', *Korean Social Sciences Review* 2:2 (2012), 1-34, at p. 20.

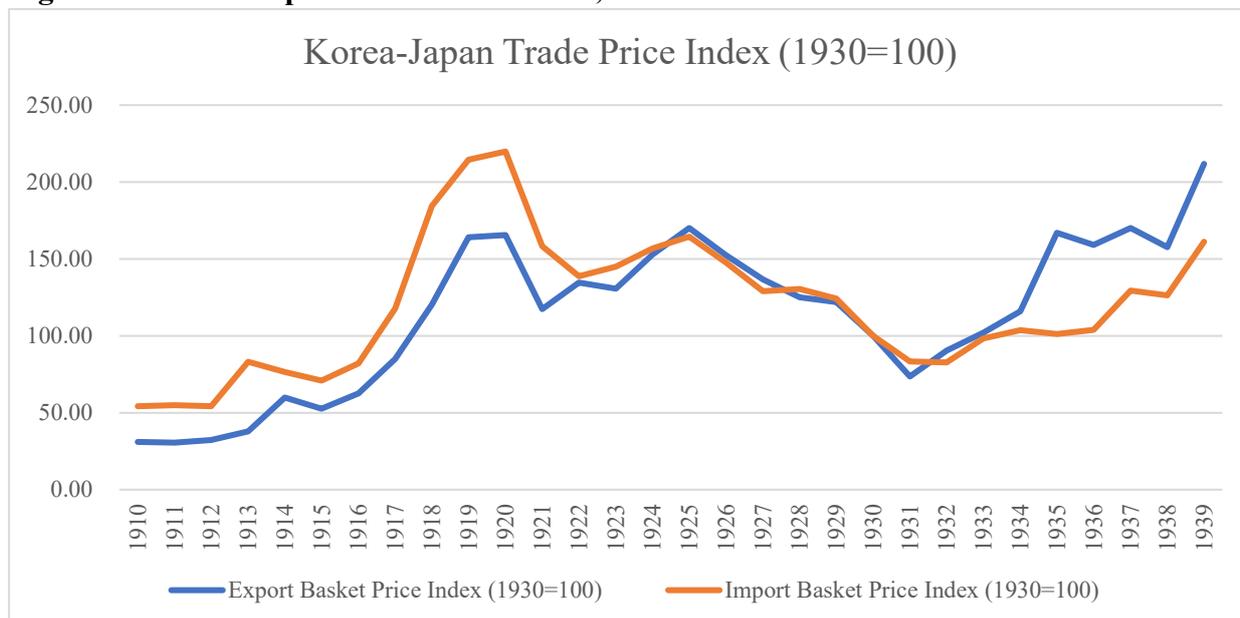
¹² For example, Raúl Prebisch, *The Economic Development of Latin America and Its Principal Problems* (Lake Success: NY: United Nations, Department of Economic Affairs, 1950); Hans Singer, 'The Distribution of Gains between Investing and Borrowing Countries', *The American Economic Review* 40:2 (1950), 473-485.

Calculating Korea's commodity terms of trade with its two important trading partners, this section discusses the implications for the NBTT trends raised in the Prebisch-Singer thesis and other scholarly works. But it also tries to figure out Korea's position in the Japanese mercantilist system, rather than considering Korea a forced participant in free trade.

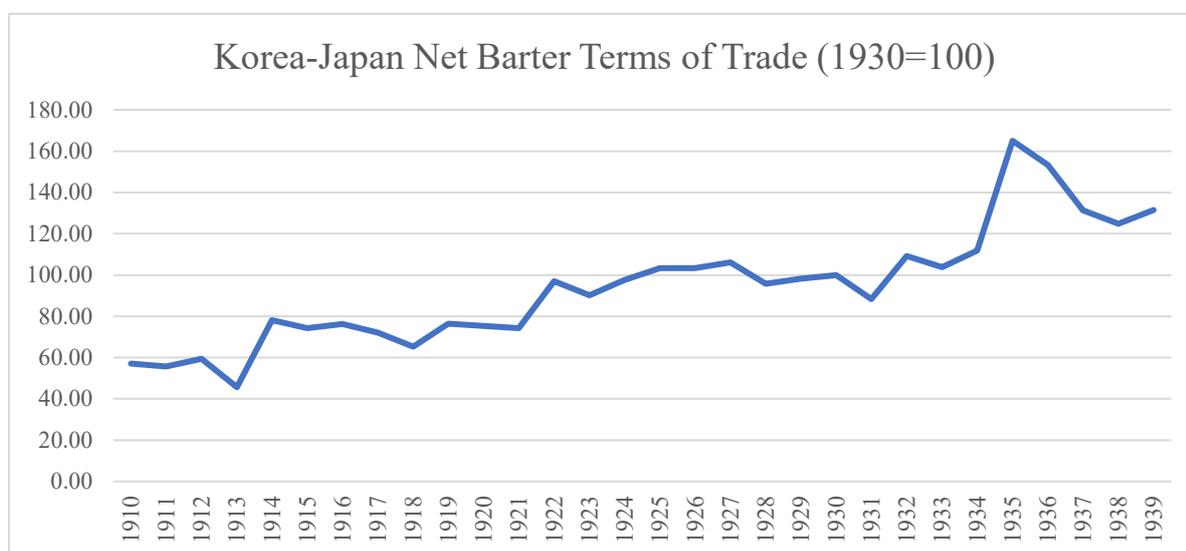
2.1 Korea-Japan Terms of Trade, 1910-1939

The Korea-Japan trade price index was calculated, is shown in Figure 2.1. The terms of trade for Korea showed an overall upward trend over the three decades. Specifically, it increased with some fluctuations during the 1910s and the early 1920s, showed a small downward trend during the late 1920s, and rose again during the 1930s. Terms of trade is often understood as the amount of import goods an economy can purchase per unit of export goods, so a rise in the net barter terms of trade for Korea in its trade with Japan meant that Koreans could buy more units of imports from Japan for each unit of exports.

The dramatic increase in the price of rice, and its share of exports, contributed to the rising terms of trade in the 1910s. From 1910 to 1920, the price of rice increased more than tenfold from 3.4 yen per koku in 1910 to 38.65 yen per koku in 1920. Also, the proportion of rice in the value of total Korean exports to Japan increased from 27 percent in 1910 to 43 percent in 1920, and to over 50 percent of Korean total exports to Japan in 1925. The expansion of rice exports and the rise in its price caused an improvement in the terms of trade for Korea. The statistics suggest an increase in the income terms of trade from the combination of rising net barter terms of trade and the increasing volume of exports, especially of rice.

Figure 2.1 Korea-Japan Trade Price Index, 1910-1939

Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, 1910-1941.

Figure 2.2 Korea-Japan Net Barter Terms of Trade (1930=100)

Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, 191-1941.

Regarding the imports from Japan in the 1910s, textiles were the largest component. In the 1910s, tissues and yarns accounted for more than 30 percent of total imports from Japan.

Processed foodstuffs, such as flour and sugar, comprised around 10 percent. Although the prices of tissues imported from Japan rose in the 1910s, it was not comparable to the increase in the price of rice. For example, the price of cotton tissues tripled from 0.16 yen per square yard in 1912 to 0.5 yen in 1920, but the price of rice increased more than ten times during the same period.

In the 1920s, the terms of trade increased in the first half of the decade and declined a little in the second half. In the early 1920s, although the price of rice fluctuated around 27 to 37 yen per koku, the price of manufactured products, such as cotton and silk tissues, kept declining. These factors resulted in the rise in the terms of trade in the early 1920s. However, there was a dramatic decline of the price of rice in the second half of the 1920s. It decreased from 38 yen per koku in 1925 to 16 yen per koku in 1931 due to the global depression that reduced the demand for rice as well as the abundant supply from great harvests in those years. In 1930, influenced by the Great Depression, which began in the United States in 1929, many factories in Japan were forced to close, causing high unemployment. In the same year, a good harvest was recorded in Japan with a rice yield of 670 million koku. Korea and Taiwan also had good rice harvests of 190 million and 7.5 million koku, respectively; meanwhile, the Japanese imports of rice from Korea and Taiwan exceeded 10 million koku for the first time in 1931.¹³ As a result, from 1930 onwards, the price of rice began to collapse and the recessions in

¹³ O Ho-Seong, *Iljesidae migok sijangg wa yutonggujo* (The rice markets and circulation structure in colonial Korea) (Seoul: gyeonginmunhwasa, 2013), p. 294.

Japanese rural areas became more severe. From 1929 to 1931, the average price of basic agricultural commodities, including rice and barley, fell by 43 percent in Japan.¹⁴

The prices of Japanese manufactured goods, which was a major category of Korean imports from Japan, also declined. The depression threatened the retailers, factory owners, as well as their employees; wage cuts and job losses also reduced the purchasing power of the public.¹⁵ But since the fall in the prices of rice was much more severe than the decline in the prices of manufactured goods, the terms of trade showed only a small downward trend during the late 1920s and the Great Depression.

In the 1930s, there was also a degree of industrial development in Korea, a situation clearly coloured not only by Japan's strategic needs but also by the needs of a newly emerged cotton-textile sector.¹⁶ Although the Japanese invested a lot to develop Korean heavy industry in the 1930s, the exports to Korea of Japanese heavy-industrial products, such as petroleum and railway supplies, also increased during the 1930s. Nevertheless, the heavy industries developed in colonial Korea were not for producing consumer goods but rather mostly for military products.

¹⁴ Andrew Gordon, *A Modern History of Japan: From Tokugawa to the Present* (Oxford: Oxford University Press, 2014), p. 182.

¹⁵ Ibid.

¹⁶ Sugihara, 'An Introduction', p. 3.

The 1930s witnessed a revival of the rice price and a continuation of the slump in the prices of yarns and tissues. The Great Depression served as an opportunity to bring about a fundamental change in the rice policy, which had focused on dealing with excessive rice and controlling rice prices. Japan's Ministry of Agriculture and Forestry, which had been working hard to recover rice prices until 1937, changed tack rapidly to encourage rice production for the smooth supply and accumulation of rice for the military. Together with the recovery of the global economy from the Great Depression, the price of rice doubled from 16 yen per koku in 1931 to 32.6 in 1938. But the price of silk tissues, which accounted for more than 8 percent of total imports from Japan, kept declining from 0.55 yen per square yard in 1931 to 0.33 in 1938. Although the price of cotton textiles increased in the late 1930s as a result of the war, its share of Korean imports from Japan declined to 2.78 percent in 1938 and 0.82 percent in 1939. Imports of vehicles and machinery increased dramatically in the 1930s, which accounted for 16 percent of total imports from Japan in 1939, but the prices of these heavy industrial goods were not included in my calculation of the terms of trade because the data on their import volume was unavailable.

In the 1930s, the Japanese war on China also contributed to the increase in the terms of trade for Korea. Due to wartime policies, the demand for raw materials increased dramatically, which resulted in the rise in the prices of products such as coal, graphite, copper, and manure. Since the Japanese regarded Korea as a producer of foodstuffs and raw materials, the export of foodstuffs and raw materials to Japan accounted for a large proportion of the total exports to Japan. Therefore, the increased demand for foodstuffs and raw materials caused not only the

increase in the prices of these products but also their export volume, which led to an increase in the terms of trade for Korea to Japan in the 1930s.

The Mechanism of Price Formation

Through the examination of the terms of trade between Korea and Japan, it could be seen that the prices of products were influenced by two factors: external demand and productivity. Since Korea was drawn into an imperial economic system by Japan, trade with Japan accounted for a large proportion of the overall trade of Korea; thus Japanese demand, or prices specific to the Co-Prosperity Zone, could heavily influence prices in Korean markets.¹⁷ This section will further discuss the mechanism of price formation in the context of developing and developed countries, or the ‘periphery’ and the ‘core’, and compare the case of Korea-Japan trade with previous empirical studies.

There were other factors that contributed to the decreasing prices of primary commodities relative to the price of manufactures in the long term. One was that the income elasticity of demand for manufactures was larger than those for food and raw materials, which is indicated in the Engel’s Law; so the rise in real incomes generates a more than proportionate increase in the demand for manufactures. Singer indicated that the lack of an automatic increase in demand for primary products, expressed in the low price elasticity of

¹⁷ The Co-Prosperity Zone originated from the Japanese government's declaration of a ‘new Asian order’ on 3 November 1938. On 1 August 1940, the Japanese Foreign Minister announced the plan to create a ‘Co-Prosperity Zone’. But as early as 1936, the Japanese government considered ensuring Japan’s dominant position in Asia as their fundamental national policy.

demand for raw materials and food, leads to a significant price drop for primary products, a drop which is not merely cyclical but structural.¹⁸ Research has also shown that a relative decline in the export price of manufactured goods is usually associated with a considerable increase in the quantity of them sold, whereas a decline in the export price of primary commodities is usually associated with a lower increase in the volume sold, mainly due to the lower price elasticity of demand for primary products.¹⁹

Figure 2.3 Terms of Trade between Rice and Cotton Textiles, and Rice and Silk Textiles, 1910–1939



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen Sōtokufu tōkei nempō* (Statistical Yearbook of the Government-General of Korea), Keijō, 1910–1941; Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, 1910–1941. The rice price index was calculated with data of rice exports from Japan; the cotton textiles price index and silk tissues price index were calculated with data of imports from Japan.

¹⁸ Singer ‘Distribution of Gains’, p. 479.

¹⁹ *Ibid*, p.88.

According to Figure 2.3, during the period from 1912 to 1938, the terms of trade between rice exports and silk-tissues imports kept increasing. The only exception was the sharp decline in the rice-to-silk terms of trade in 1939, which was caused by the increase in the prices of silk textiles and the stable rice price in 1939. This exception contradicts Prebisch's generalisation that 'the prices of primary products fall more in the downswing.'²⁰ The 1920s witnessed the painful economic collapse of Japan. Soon after the Rice Riots in the summer of 1918 were brought under control, competition from developed countries exerted heavy pressure on the Japanese economy. Businesses that had over-expanded in the 1910s were faced with bankruptcy, and the prices of key goods, such as silk, decreased dramatically, which threatened the livelihoods of farmers and small-scale producers.²¹ Together with the Great Earthquake in 1923, the Banking Crisis in 1927, as well as the Great Depression beginning in 1929, the Rice Riots and foreign competition severely impacted the prices of Japanese manufactures. Moreover, the Japanese government implemented a series of measures to stabilise the prices of rice in the 1920s and 1930s, such as the Rice Act in 1930, which was modified three times later in the 1930s.²² These measures helped rice prices remain relatively stable compared to the prices of manufactured products.

In addition, this finding about Korea's colonial trade could be explained by the price elasticity of demand for both products. Even though both prices decreased, as manufactured goods (silk

²⁰ Prebisch, *Economic Development of Latin America*, 1950, p. 13.

²¹ Penelope Francks, *Japanese Economic Development: Theory and Practice 3rd edn.* (London: Routledge, 2015), p. 77.

²² O, *migok sijang*, pp. 290-306.

tissues) have a larger price elasticity of demand than food (rice), the price of manufactured goods decreased more drastically than the price of food. This provides further evidence that the terms of trade favoured Korea, whose major export was rice and primary import was manufactured products. Since manufactured commodities have a larger income elasticity of demand than primary commodities, other things being equal, the price of manufactured commodities will rise when the income level increases. And because of the larger price elasticity of demand for manufactured products, when the prices of both manufactured and primary products go down, it will cause a larger increase in the demand for manufactured goods than for primary products.

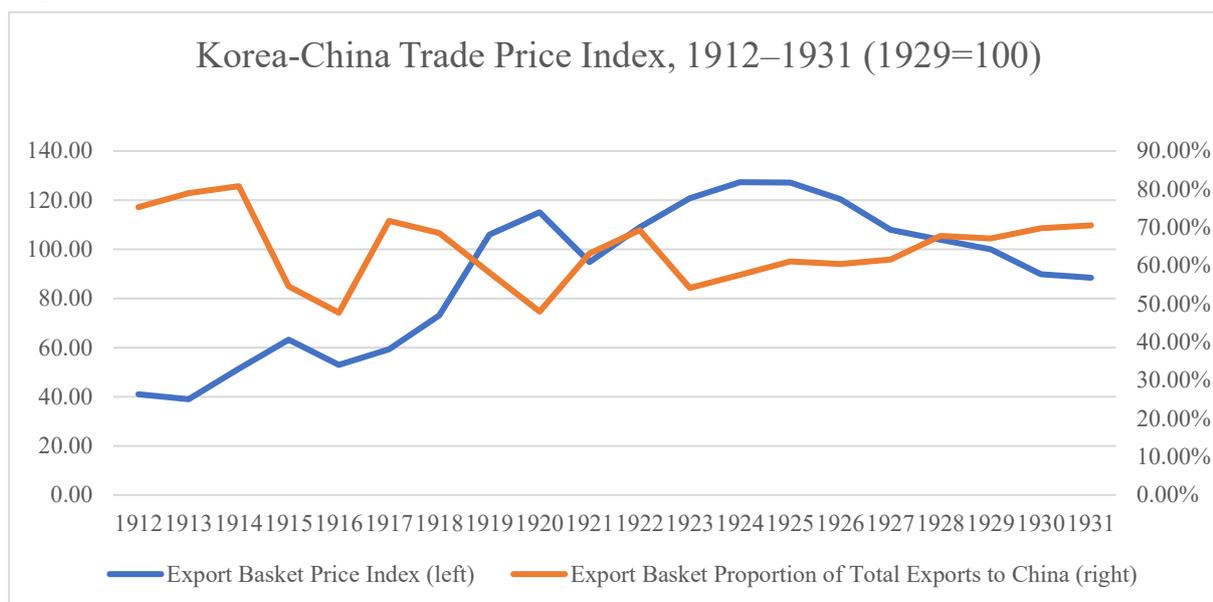
However, these findings presume that there were abundant foodstuffs and primary products that could meet the people's needs, neglecting the extreme cases when there were shortages of food or other necessities as primary goods. This study examines the case of Korea-Japan trade during the colonial period, which shows two extreme situations that could raise the terms of trade for the exporter of primary products. One situation is when there is not an abundance but a shortage of food, causing a dramatic rise in food prices and therefore improving the terms of trade for the exporter of foodstuffs. The other situation is war, which dramatically increases the demand for natural resources; as a result, the terms of trade for the exporter of primary products would also improve. Although the case of Korea-Japan trade is consistent with general assumptions on the income and price elasticities of demand for primary and manufactured products, it provides further evidence of Korea's terms of trade and contradicts the traditional Prebisch-Singer view that the exporter of primary products, which is usually considered as a peripheral

country, would suffer a deterioration in the terms of trade. Above all, this case study of Korea's colonial trade provides evidence that changes in the terms of trade could favour the colony rather than the metropole under specific circumstances of demand and productivity. The impact of productivity progress on Korea's trade structure and terms of trade will be discussed further in the next section.

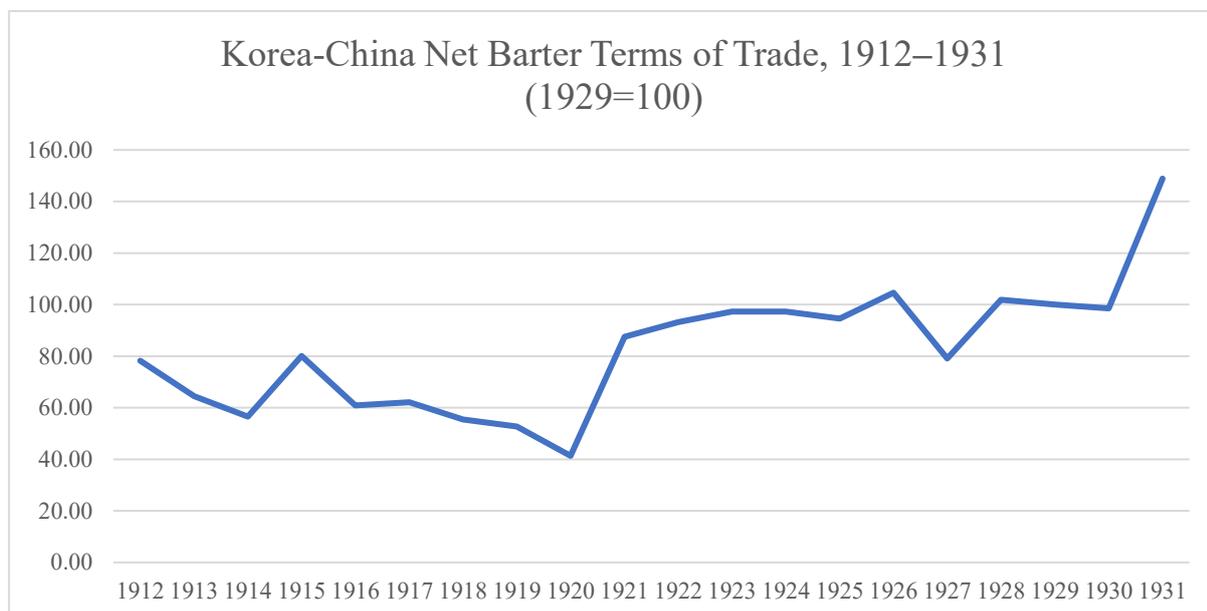
2.2 Korea-China Terms of Trade, 1912-1931

Figure 2.4 shows the price indices of Korea's export and import basket with China from 1912 to 1931 and Figure 2.5 illustrates the net barter terms of trade between Korea and China during the same period. According to the figures, Korea-China net barter terms of trade declined in the 1910s, rose in the early 1920s, where it remained stable in the 1920s before increasing from 1927 to 1931. Overall, Korea's terms of trade with China showed a significant improvement over the two decades.

Figure 2.4 Korea-China Trade Price Index, 1912–1931 (1929=100)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, 1912–1931, various years.

Figure 2.5 Korea-China Net Barter Terms of Trade, 1912–1931

Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, 1912–1931, various years.

In the 1910s, millet, salt, coal, China grass cloth, and silk tissues were Korea's main imports from China, while rice was the major export and accounted for half of the total export value to China in the early 1910s. In the 1920s, Korea's trade structure with China changed greatly because of shifts in demand, changes in Japanese colonial policy, as well as structural change in the Korean economy. The imports of silk tissues from China reduced sharply due to the imposition of heavy tariffs by the colonial government in 1924; by contrast, imports of China grass cloth kept expanding.²³ Yi pointed out that the main reason why the colonial government imposed heavy tariffs on Chinese silk tissues, rather than China grass cloth, was due to the market competition between Chinese and Japanese silk products; if China grass cloth—a

²³ Yi, Jeong-Hi, 'A Study on the Economy of the Overseas Chinese in Korea during the Colonial age (1905-1930): A case study of the trade between Korea and China', *Kyoto Sosei University Review* 5:1 (2005), 1-22.

popular product because of its low price—was subject to a heavy tariff, it would lead to the rising cost of living and anti-government resistance among ordinary Korean people.²⁴ Yi cited the following article, which strongly warned Koreans against imposing tariffs on Chinese goods in August 1920:

Most of the goods imported from China, which occupies the top spot among foreign trade countries, are consumed by Koreans, and the tariff burden imposed on necessary goods is transferred to consumers. Increasing the tariff rate on China in particular will increase the living expenses of Koreans. In other words, the unified tariff system allocates a part of the burden of migrant Japanese and adds it to the burden of Koreans.²⁵

Therefore, the colonial authority imposed customs tariffs on Chinese silk products, but not on China grass cloth, in 1924 to guarantee the sales of Japanese silk products, leading to the dramatic increase in silk imports to Korea from Japan. Also, due to the increasing export of rice to Japan and the Rice Production Increase Plan implemented in 1920, rice exports to China were strictly prohibited—rice was no longer a major export to China. Instead, sugar, timber, manure, and cotton textiles became the major commodities exported to China. In particular, exports to China of timbers, including planks and materials for wooden axes and rims, increased drastically, peaking at 5,502,564 cubic feet in 1928; this increase can be explained by the growing demand for railway construction in Manchuria. Meanwhile, there are some products

²⁴ Ibid.

²⁵ Gim Gyu-Jo, 'Gwansegaejeong joseonin saneopgyeui geupaneun yeonghyang [The impact of tariff modification on Korea's industry]', *gaebyeok* 3:11 (1922 November), p. 11, cited from Yi, 'Study on the economy of overseas Chinese', p. 16.

that remained major trade commodities throughout the two decades; for example, ginseng has always been a major Korean export, accounting for around 10 percent of total exports to China. China grass cloth, millet, and coal also remained major imports from China.

In the 1910s, both the prices of export and import baskets increased; however, the prices in the import basket rose much more than those of the export basket, leading to a decreasing net barter term of trade. The prices of major imports from China, including millet, salt, coal, grass cloth, and silk tissues, increased dramatically in the 1910s. In particular, the price of China grass cloth increased by three times from 0.21 yen per square yard in 1912 to 0.65 in 1920; then it declined gradually in the 1920s and finally reached 0.22 in 1931.

While silk cloth was popular among middle-class households, hemp cloth was popular with lower classes or farmers as summer clothes and rural work clothes throughout the four seasons. However, due to geographical limitations, only a few regions could plant raw hemp in Korea. The production of raw hemp was thus kept at a low level in Korea. Also, the production of hemp cloth in Korea remained the work of small households, such that expanding the volume of production and reducing the production cost was difficult. Therefore, hemp cloth became an important import from China because of the low price as well as its good quality, as a result of the application of advanced technology.²⁶ The import of Chinese hemp cloth had occurred since the Qing-Korea Maritime and Commerce Treaty in 1882, and the product kept its

²⁶ Yi, 'Study on the economy of overseas Chinese', pp. 12-4.

popularity throughout the colonial period. Even though the Japanese exported hemp cloth to Korea, it was not comparable to the Chinese product in terms of quality and price.

The deteriorating terms of trade with China in the 1910s can be attributed to the combined effect of rising prices of millet and China-grass-cloth imports from China. With Japan's Rice Riots in 1918, Korea's rice exports to Japan began to surge. This also led to increasing imports of Chinese millet as an alternative of foodstuffs for Koreans, which led to the rising price of millet. Also, from 1912 to 1920, the price of China-grass-cloth imports increased by nearly three times, especially during World War I. Due to the war, textile products were in great demand from the European countries but the supply was limited;²⁷ also, the import of raw materials for textiles was blocked due to the wartime decline in the transportation business. Accordingly, textile prices increased dramatically from 1917,²⁸ which also affected the price of China grass cloth—a major export to Korea. Therefore, China's textile-manufacturing factories enjoyed high profits during World War I; this period is often regarded as the golden era for the development of China's manufacturing industry.²⁹ Although the price of rice, as the major export commodity to China in the 1910s, increased drastically, the share of rice in overall Korean exports to China kept declining. The prices of other export commodities, such as ginseng, remained stable in the 1910s. So the price indexes of the export basket only increased moderately in the 1910s.

²⁷ Wang Jing-yu (ed.), *Zhongguo jindai jingjishi 1895-1927 [Modern economic history of China, 1895-1927]* (Beijing: renminchubanshe, 2012), p. 1680.

²⁸ *Ibid.*, p. 1661.

²⁹ *Ibid.*, p. 1664.

However, in the 1920s, the expanded production capacity, together with a decline in the exchange rate and international prices, contributed to the decreasing prices of textiles in China; this caused a huge strike in China's textile-manufacturing industry. The price of China grass cloth, as the major export to Korea, also declined sharply. Millet prices declined as well because Korea launched the Rice Production Increase Plan to boost rice production for food security.

In addition, the colonial Korean government imposed a 15 to 20 percent tariff on hemp-cloth imports from China, which had previously been only 7.5 percent.³⁰ To tackle this situation, Chinese producers and merchants reduced the prices of hemp when exporting to Korea.³¹ Meanwhile, the Chinese silver dollar also depreciated by 60 percent from July 1920 to March 1921.³² This led to a further decline in the price of hemp cloth. Moreover, the government's efforts to promote the production of raw hemp in Korea increased the supply of hemp cloth. The promotion was carried out through the expansion of farming area and the application of advanced farming methods. The government also promoted the organisation of small households to mass produce hemp cloth; however, those households would have rather produced other commodities. In 1924, Chinese hemp cloth made up 49 percent of the market share in Korea; later it remained at around 35 percent.³³ Thus the promotion of hemp production was effective in the sense that it reduced the price of hemp imports and the market

³⁰ Kējō shōgyōkaigisho (Gyeongseong Chamber of Commerce), 'zaisen' shina bōekishōno jitsuryoku [Competence of Chinese traders in Korea]', *chōsen kēzaizasshi*, 58 (1920), 1-10, p. 3.

³¹ Yi, 'Study on the economy of overseas Chinese', p. 15.

³² Ibid.

³³ Ibid.

share of Chinese hemp cloth, but it did not completely eliminate Chinese hemp from the Korean market in the 1920s.

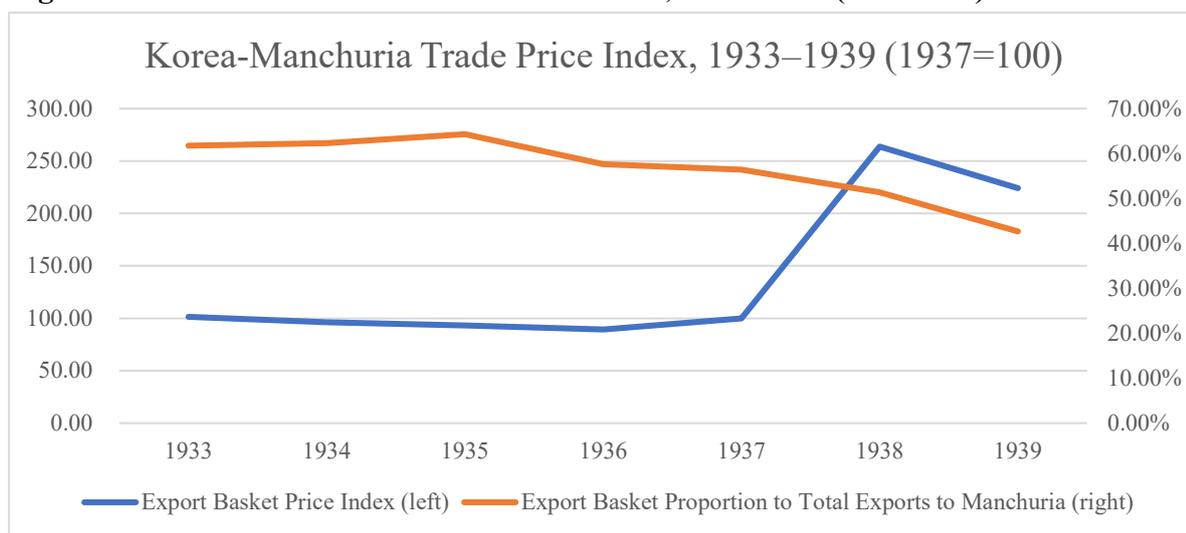
With regards to other commodities, while the price of manure was stable in the 1920s, the price of timber declined. Also, as one of the major import commodities from China, the price of millet remained relatively stable, only showing a moderate increase (around 20 percent) in the mid-1920s. Consequently, the import-basket price indexes remained stable in the early 1920s and decreased slightly in the late 1920s. For exports, it needs to be noted that the price of ginseng remained stable for the two decades. However, the prices of sugar and timber kept declining in the 1920s. The price of cotton textiles also increased in the early 1920s, but from 1925 onwards, it showed a downward trend. So the export-basket price indexes rose slightly in the early 1920s and then declined in the second half of the decade. In addition, the increasing net barter terms of trade during the Great Depression was mainly due to the decreasing prices of millet and soybeans during the Great Depression. By contrast, although the prices of some major exports to China, such as cotton yarns, declined, the decrease was not as much as in the prices of major imports. Overall, the decline in the terms of trade in the 1910s was due to the more dramatic increase of import prices from China.

2.3 Korea-Manchuria Terms of Trade in the 1930s

From 1931, after Manchuria was invaded by Japan, the data source divided China into Kwantung, Manchuria, and the Republic of China. Figure 2.6 shows that the import-basket price index kept increasing from 1933 to 1939. By contrast, the export-basket price index

decreased slightly from 1933 to 1936 before increasing dramatically in the late 1930s. According to Figure 2.7, the net barter terms of trade between Korea and Manchuria experienced a moderate decline from 1933 to 1937 before a dramatic rise in 1938 and decline in 1939. Therefore, Korea's net barter terms of trade with Manchuria declined in the early 1930s, then increased as the export-basket price index rose from 1937 to 1939. In the late 1930s, the prices of agricultural imports nearly doubled; however, the prices of textiles and mechanics that were exported to Manchuria increased by around three to four times. As such, Korea's terms of trade with Manchuria improved in the last few years of the 1930s. Also, the increasing exports of manufactured goods and heavy-industrial products to Manchuria further indicated that Japan also regarded Manchuria as a ready market and military base. As such, to some extent, it hindered the development of the textile industry in Manchuria.

Figure 2.6 Korea-Manchuria Trade Price Index, 1933–1939 (1937=100)

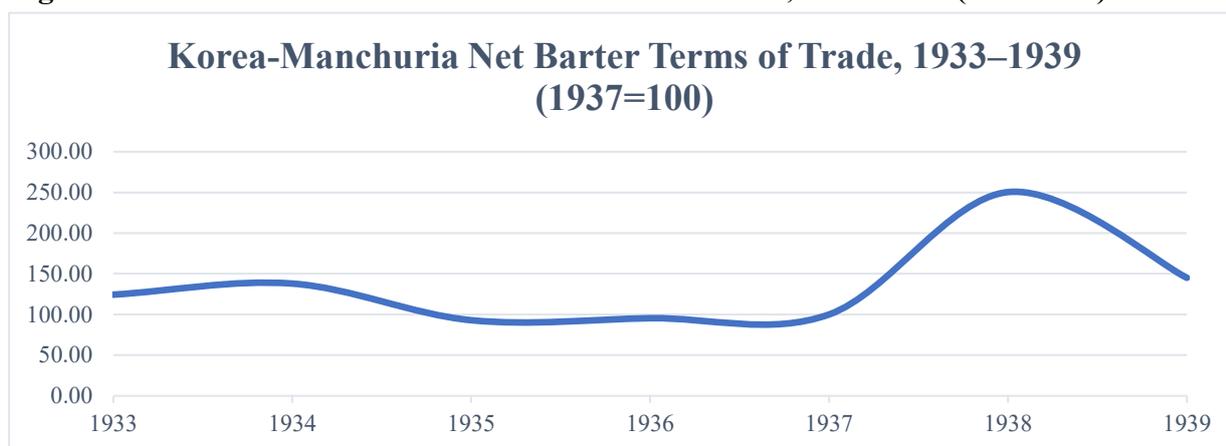


Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, 1933–1939, various years.

Due to the Japanese military expansion, the Korea-Manchuria trade structure in the 1930s was different than in the 1920s. One consequence was that, in the 1930s, not only did the overall

trade with Manchuria expand, but Korea's balance of payments with Manchuria turned from deficit to surplus, as will be discussed later. This transformation was mainly a result of the dramatic increase in the exports of foodstuffs and machinery to Manchuria to satisfy Japanese military needs.

Figure 2.7 Korea-Manchuria Net Barter Terms of Trade, 1933–1939 (1937=100)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, 1933–1939, various years.

Regarding exports, firstly, there was an increase in the exports of manufactured products, such as cotton textiles and tennis shoes. In the early 1930s, most manufactured exports from Korea to Manchuria were re-exports, having been originally produced in Japan. Only some semi-manufactured products were produced in Korea. However, in the late 1930s, most of those manufactured products exported to Manchuria were produced in Korea, which indicated a development of Korean domestic manufacturing industry. The development of the domestic Korean manufacturing industry was also reflected in the higher imports of machines from the United States and the United Kingdom in the 1930s.

Secondly, there was a higher level of exports to Manchuria of heavy-industrial products, such as cement, mineral oils, and mechanics. With the invasion of Manchuria, Japan launched a wartime mobilisation and, as part of this, made efforts to develop heavy industry not only in Korea but also in Manchuria. Especially after the outbreak of the Second Sino-Japanese War in 1937, the exports of explosives increased rapidly, half of which were produced in Korea because the other half were mainly produced in Japan and transferred via Korea to Manchuria. While most machines were produced in Japan, the mineral oils, including lubricating, machine, and illuminate oils, were almost all produced in Korea. Thirdly, the export of foodstuffs to Manchuria, such as rice and vegetables, expanded in the late 1930s. Overall, manufactured exports were upgraded from semi-manufactured materials, such as ginned cotton, to a variety of products.

In terms of the import structure from Manchuria in the 1930s, there was not much difference from the import structure from China in the 1920s. Agricultural commodities, such as millet, and raw materials, such as coal and timber, accounted for the majority of imports from Manchuria. Pig iron was also a major import from Manchuria in the 1930s.

2.4 Some Theoretical Reflections

This section offers a new perspective from the traditional views of the patterns of the net barter terms of trade between the metropolitan country and its colonies and uses the case of colonial Korea to discuss theories of trade, colonial rule, and development. It shows that the history of economic development in Korea during colonial rule does not fit with the Prebisch-Singer

generalisation that the barter terms of trade move against the colony and in favour of the metropole: the net barter terms of trade between Korea and Japan moved in the colony's favour during the colonial period. However, the terms of trade between China and Korea do conform to the trend that the secondary exporter enjoyed improved terms of trade compared to the primary exporter.

According to the Prebisch-Singer thesis, the net barter terms of trade have an inherent tendency to move in favour of those developed countries that export manufactured products and, at the same time, harm those underdeveloped countries whose major exports are primary products. This study found that changes in the net barter terms of trade were in favour of colonial Korea, the periphery, rather than Japan, the metropole. This finding contradicts the Prebisch-Singer thesis that the terms of trade would favour the industrialised country, in this case, Japan.

However, the trade deficit of Korea to Japan in the 1930s also suggested an economic disparity caused by colonial trade. The patterns of economic change, featuring rice exports at the expense of Korean consumption and military-oriented investment in manufacturing, were very much the result of the self-interested policies of the Japanese rulers. And, overall, the two countries had very similar growth trends: in both, GDP per capita doubled over the three decades to 1940, yet leading to a slight divergence in the GDP per capital between the colony and the metropole.

According to the Prebisch-Singer thesis, the net barter terms of trade between primary products and manufactures have shown a decreasing trend over the long run.³⁴ This trend caused a deterioration of the terms of trade for those countries exporting primary products, while benefiting those countries exporting manufactured products. However, the logic of Williamson's research indicated that the net barter terms of trade moved in favour of underdeveloped regions, the exporters of primary sources, for most of the nineteenth century, which led to the concentration of investment in the primary sector, thus causing economic divergence between the underdeveloped and the developed regions.³⁵

In the debate on the terms of trade in the early 1950s, many empirical studies showed a downward trend in the prices of primary commodities relative to those of manufactured products, which also reflected the terms of trade of developing countries *vis-à-vis* developed countries. According to Hans Singer, this trend was mainly because of the different modes of price formation in the markets for primary products and manufactured goods. As a result of the differences, the fruits of technical progress in the production of food and raw materials in developing countries were transferred to consumers in the form of lower prices, whereas in the case of manufactured commodities, it was distributed to producers in the form of higher incomes. Singer generalised the changes in the barter terms of trade between developed and underdeveloped countries as: 'progress in manufacturing industries showed in a rise in incomes while technical progress in the production of food and raw materials

³⁴ Prebisch, *Economic Development of Latin America*, p.10; Hans, 'Distribution of Gains', pp. 480-1.

³⁵ Jeffrey G. Williamson, *Trade and Poverty: When the Third World Fell Behind* (Cambridge, USA: MIT Press, 2011).

in underdeveloped countries showed in a fall in prices'.³⁶ Contrary to the Prebisch-Singer thesis, this study shows that the prices in Korea, as a underdeveloped region compared to Japan, increased during the colonial period.

Moreover, it fits Williamson's argument that the rising prices of primary commodities attracted a lot of investments into the primary sector. However, the improving terms of trade did not lead to de-industrialisation in colonial Korea; the declining prices of agricultural products during the Great Depression, together with the shifts of Japanese political ambition, caused an increase in investments in manufacturing sector in the 1930s. Thus, Korea experienced industrial growth in the 1930s with a more diversified trade structure, although with less added value compared to Japanese products.

The colonial experience of Korea also offers an opportunity to assess dependency theory. Dependency theorists focus more on the imperialists and the colonial state, and political discrimination in favour of the metropole and against the colony. When discussing the history of colonial Korea, Korean nationalist historiography often invokes dependency theory when emphasizing the opposition between the imperialist power and the colonised.³⁷ In the context of colonial Korea, the distorted economic structure and impoverishment of the peasants fits the prediction of dependency theory. However, Korea's colonial experience provides an unusual case for discussions about dependency theory because the colonial government promoted

³⁶ Singer 'Distribution of Gains', p. 478.

³⁷ Carter J. Eckert, *Offspring of Empire: The Koch'ang Kims and the Colonial Origins of Korean Capitalism 1876-1945* (Seattle: University of Washington Press, 1991), p. XX.

manufacturing and heavy industry in the colony, which is uncommon in the global history of colonialism. I argue that, in the 1930s, the Japanese regarded industrial policy as an extension of war preparations and put more resources into the colony for its industrial development because of its geographic proximity and strategic value for war. Manufacturing expanded rapidly in the 1930s and led to a much more diversified economic structure. Japan used Korea as a military base for the war preparations, so it was far from a typical case for dependency theory.

Korea's industrialisation in the late 1920s and 1930s also casts some doubt on Williamson's argument that the rising prices of primary commodities widened the economic gap and lead to de-industrialisation in the periphery.³⁸ Many scholars of Korean history have argued that the Company Law denied the opportunity for many industrial firms to exist and thus hindered the development of Korean industries in the 1910s.³⁹ Kimura also suggested that 'compared with the agricultural sector, the Government-General did not have much interest in industrialisation in Korea in the 1910s and 1920s'.⁴⁰ Once this the Company Law, as an institutional constraint, was removed in 1920, however, investments did not go into manufacturing, but rather into agriculture because of the rising price of rice—a fact which supports Williamson's argument. In general, however, the 1930s was a period of falling primary-commodity prices on the world

³⁸ Williamson, *Trade and Poverty*.

³⁹ For example, Son Jeong-Mog, 'A Study on the Company Law', *The Journal of Korean History* 45 (1984), 87-130; Carter J. Eckert, Ki-baik Lee, Young Ick Lew, Michael Robinson, Edward W. Wagner, *Korea Old and New: A History* (Cambridge, USA: Harvard University Korea Institute, 1990), p. 272.

⁴⁰ Mitsuhiro Kimura, 'Colonial Development of Modern Industry in Korea', *Japan Review* 2:2 (2018), 23-44, at p. 29.

market. Since the price of rice was in Korea, contrary to the general pattern, presumably it could be regarded as an effect of the Japanese colonial system. Williamson argues for a strong causal relationship between rising prices of primary commodities and de-industrialisation, because the former gives incentive to producers to switch from manufacturing to agriculture. But the case of colonial Korea was different; in other words, the relationship indicated in Williamson's research does not necessarily apply in all colonial contexts.

The improved net barter terms of trade for Korea in the 1920s and 1930s did not lead to the de-industrialisation of Korea. On the contrary, while the terms of trade were rising in the 1920s and 1930s, Korea underwent rapid industrialisation, which focused not on handicraft production but on modern (factory-based, mechanised) manufacturing. The decline of the price of rice during the Great Depression could only explain part of the shift to industry. The other reason was the rise of Japanese militarism and imperialism in the early 1930s. Rice prices increased again after the Great Depression to the levels of the 1920s but did not lead to expanding investment in agriculture. Moreover, the shift of Japanese colonial policy from promoting agriculture to encouraging industrialisation for war played a crucial role in Korea's industrial growth in the 1930s. So the 1930s witnessed a more diversified and industrialised economic structure in Korea, while Korea's net barter terms of trade improved.

It is generally acknowledged that Korean trade grew quantitatively both in value and volume during the colonial period, but there are still many aspects to be discussed, such as the nature and qualitative structure of trade. While diversification into manufactures was recommended

by development economists as a step towards industrialisation, as well as a means of reducing the risk of price volatility, creating employment, and eventually increasing savings to spend on imports, diversification into manufactures was not in itself an escape from deteriorating barter terms of trade (as distinct from income terms of trade).⁴¹ Song examined the tariff policy, composition of the Korean trade structure, and Korea's trade relations with other countries.⁴² Based on a dynamic analysis of Korea's trade structure and colonial policies, the proportion of trade with Japan in Korea's overall trade increased during the colonial period, from 68.2 percent in 1910 to 82.1 percent in 1939.⁴³ Song pointed out that this change indicated the nature of the colonial integration of the Korean economy into the Japanese empire, and the transformation of the trade structure not only reflected colonialism but also structural changes induced by colonial exploitation.

Trade has been a central theme in discussions about colonialism and economic development or underdevelopment. Specifically, colonial trade has been regarded as one of the primary ways by which the metropole gained monopolistic profits through the exploitation of colonial people, thus reinforcing the economic backwardness of the colony, notably by reinforcing monocultural production and retarding the diversification of local outputs. Through colonial trade, the colonies were gradually drawn into the global capitalist economy and turned into producers of

⁴¹ Hans Singer, 'Beyond Terms of Trade - Convergence and Divergence', *Journal of International Development* 11 (1999): 911-916, at p. 912.

⁴² Song, *Joseon muyeok yeongu*.

⁴³ Calculated based on Chōsen Sōtokufu [Government-General of Korea], *Chōsen bōeki nenpyō* [Trade Yearbook of Korea], Keijō, 1941.

agricultural products and raw materials for capitalist countries and markets for their industrial products.⁴⁴

This section adds to the long-running comparative and theoretical debate about the economic impact of colonialism. The dominant elements of the colonial Korean economy in the 1930s were agriculture and heavy industry. Rice exports accounted for more than 40 percent of the total value of exports to Japan in the 1930s. When the Japanese planned for the war, Korea began to be regarded as a military base for the invasion of Manchuria and the rest of China, which led to a dramatic expansion of heavy industry in Korea in the 1930s. This was signalled by the increasing imports of machinery, precise instruments, coal, cement, and iron products from Japan in the 1930s, and exports of machinery, coal, and timber to Manchuria at the same time.

Singer indicated that the types of manufactured goods that developing countries could export in the early stages of development were different from the types of manufactured varieties that they could import from developed countries, and the manufactured goods exported by developing countries were often technically simpler than manufactured goods imported from developed countries. Therefore, the extension of the Prebisch-Singer thesis from commodities to countries must also account for the development of technological capabilities, entrepreneurial skills, and human capital in general, and use them as a way to achieve industrialisation and

⁴⁴ In the case of Korea, it was drawn more into the Japanese economy than the global one, although the Korean market was open to trade with capitalist countries other than Japan, such as the UK. Nevertheless, the trade value between Korea and western countries was minimal compared to Korea-Japan trade, especially after the 1920s.

development.⁴⁵ Without such technical capacity, the shift into manufactures requires foreign investment or aid.⁴⁶ Korea's export and import structure in the 1930s accorded with Singer's predictions, as it imported more sophisticated manufactured products from Japan, such as textile machineries, while exporting less sophisticated goods to Manchuria, such as cotton textiles. Even though with the Korea's trade structure diversified and upgraded from exporting raw materials to exporting semi-manufactured and manufactured products, Song argued that the diversification of the Korean trade structure reflected colonial exploitation from agriculture towards manufacturing industry.⁴⁷ The case of colonial Korea contrasts the usual perception of colonialism as obstructing the shift from agriculture towards manufacturing industry.⁴⁸

The price of rice exports from Korea was also highly dependent on demand in Japan and Korea. Although some fluctuations occurred, the rice price retained an overall upward trend during the colonial period. This increasing price improved the terms of trade for Korea and, to some extent, helped the development of Korea's colonial economy. Because rice production became profitable in the 1910s and early 1920s, a large amount of investment went into the agriculture rather than manufacturing. As Prebisch noted, 'capital is scarce, and it would indeed be deplorable to invest it where it would lessen total productivity rather than where it could increase it.'⁴⁹ On the one hand, the monocultural economic structure put Korea into a risky

⁴⁵ Singer, 'Beyond terms of trade', p. 912.

⁴⁶ Ibid.

⁴⁷ Song, *joseon muyeok*, p. 238.

⁴⁸ Anne Booth, Kent Deng, *Japanese Colonialism in Comparative Perspective* (London: Department of Economic History, London School of Economics and Political Science, 2016), p. 23.

⁴⁹ Ibid., p. 46.

situation for long-term economic development since it made the peasants and the majority of the economy too vulnerable. This was the situation in the first half of the colonial period. On the other hand, Korea experienced some level of diversification during the second half of the colonial period. The vulnerability of Korean agricultural production shown during the Great Depression also helped redirect both Japanese and local Korean investment from agriculture into manufacturing. Financial and technological support from Japan, as well as the enhancement of entrepreneurial human capital and increasing investment by local entrepreneurs, resulted in the improvement of industrial productivity in colonial Korea.⁵⁰ There was a structural upgrade in Korea's economy from producing raw materials to producing industrial commodities, although economic planning was under Japanese colonial control and these improvements were mostly due to shifts in Japanese political and economic interests. It is likely that the development of manufacturing industry benefited the Korean society in the sense that it improved productivity and provided job opportunities for Korean people; but the development was achieved in the context of Japanese colonisation, making this modernisation process different from those in other countries with national sovereignty.

Also, it is worth discussing whether technological change affected the terms of trade during the period. For Korea-Japan trade, from the 1910s to 1930s, rice remained the major Korean export to Japan. The exports of raw copper, raw silk, and fertiliser to Japan increased dramatically in the 1930s. The prices of those products experienced a similar trend in the 1920s and 1930s:

⁵⁰ Duol Kim and Ki-Joo Park, 'Colonialism and industrialisation: factory labour productivity of colonial Korea, 1913-37', *Australian Economic History Review*, 48:1 (2008), 26-46.

declining from 1925 to 1931 while rising from 1931 onwards. Since most of those export commodities were primary products (even fertiliser was more related to agricultural production), those prices were more influenced by supply and demand. Technological change did not greatly influence the prices of those primary products, which recovered from the Great Depression in the 1930s to the level of the 1920s.

However, as shown in Figure 2.8, the price of cotton-textile imports from Japan, as Korea's main import from Japan from the 1910s to the early 1930s, kept declining in the 1920s and 1930s, after reaching its peak in 1920. The rising price of cotton textiles in the 1910s can mainly be attributed to its popularity and a shortage of supply. However, during the 1920s and early 1930s, as the manufacturing technology developed, the price of cotton-textile imports decreased. Its price declined by almost 70 percent in 1931 compared to the price in 1920; and even by 1937, six years after the Great Depression began to ease, the price did not recover to its previous level. Only from 1937 onwards did the price of cotton textiles show a dramatic increasing trend. The expanding demand for cotton textiles caused by war might explain this sharp increase in price. With technological progress, not only did the cost of production decrease, but many entrepreneurs, both Korean and Japanese, also purchased the machines from Japan at a relatively low price and opened their own cotton-manufacturing factories in Korea from the 1920s. These reasons explain why the price of cotton-textile imports from Japan declined.

Figure 2.8 Volume and Price of Korea's Cotton-Textile Imports from Japan, 1912–1939

Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, various years.

Figure 2.9 Volume and Price of Korea's Silk-Tissue Imports from Japan, 1912–1939

Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, various years.

Figure 2.9 also indicates that the price of silk-textile imports from Japan showed a similar trend to that of cotton-textile imports: increasing in the 1910s while declining in the 1920s and 1930s. The expansion of manufacturing factories and the reduction of production costs brought on by technological development both contributed to the decline of silk-textile prices in the late 1920s and 1930s. It should be noted that technological change, as well as domestic Japanese demand for manufactured products in the 1930s, led to further diversification of Korean trade, as it exported more manufactured products from the late 1920s onwards; however, those manufactured products, such as cotton textiles, accounted for only a small proportion of Korea's total exports to Japan.

Regarding Korea's trade with China from 1912 to 1931, more manufactured products were exported from Korea to China in the 1920s than in the 1910s, while primary commodities were the major import from China. During the Great Depression, the decline of the prices of manufactured products was not as significant as the decline of the prices of primary commodities; so Korea enjoyed improved terms of trade with China during this period.

Concerning Korea-Manchuria trade from 1933 to 1939, the prices of both primary and secondary commodities, including wheat, cotton textiles, and chemical oils, increased in the 1930s. Although the prices of certain manufactured products declined slightly from 1933 to 1936, they increased again from 1937, exceeding the price level in 1933. Korea mainly imported primary commodities from Manchuria and exported manufactured products to

Manchuria. Because the prices of manufactured products increased more dramatically than those of primary commodities, the terms of trade favoured Korea during this period.

Although it seems that price changes were mainly caused by increasing demand for manufactured products rather than technological change, it was technological development that brought about the development of the domestic manufacturing industry in Korea and turned Korea into a secondary exporter in its trade with China in the 1920s. The dissemination of cotton production helped the early development of Korean cotton-textile industry in the 1920s,⁵¹ as it began to export ginned cotton to Japan and cotton textiles to China. The expansion of Korea's industrial exports could be attributed to its development of the manufacturing and chemical industry in the 1920s and 1930s.

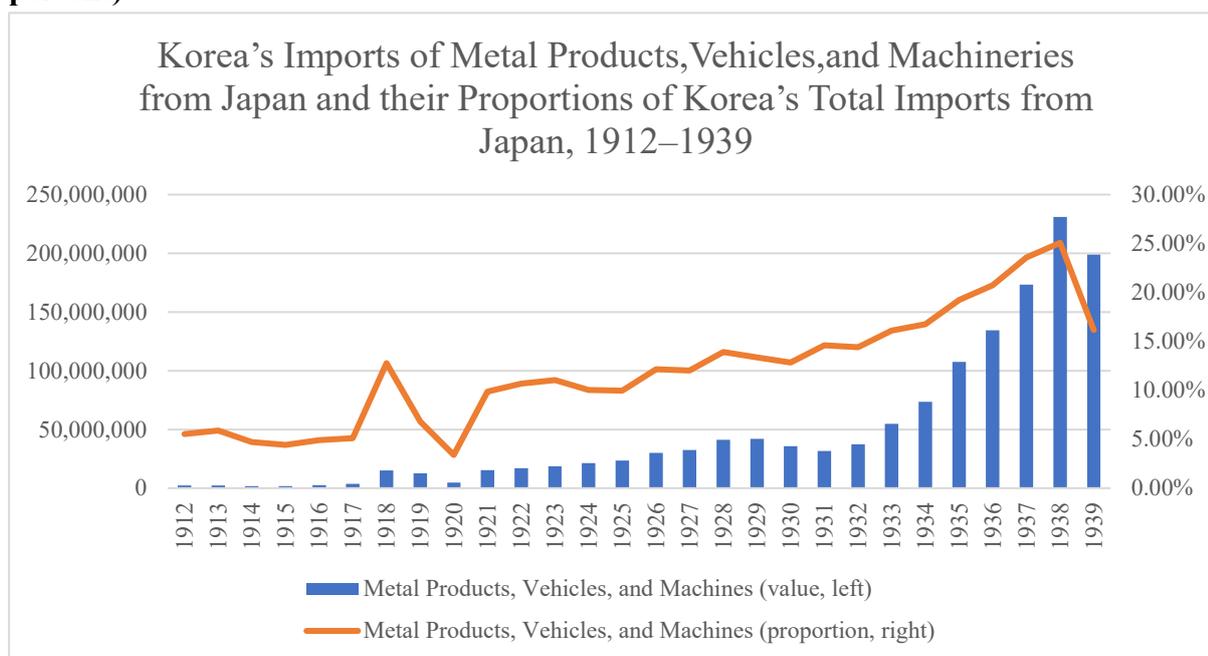
Figure 2.10 shows that the import of metal products, vehicles, and machineries from Japan increased dramatically in the 1930s, which indicates an expansion of Japanese heavy industry in Korea during that period. In the 1930s, because of the Japanese war effort, heavy industry developed very quickly, such that it reshaped the trade structure between Korea and Japan. From 1920s to 1930s, many large-scale industrial factories were established in Korea, contributing to the expansion of industrial production.⁵² The shares of metal products and machines accounted for more than 25 percent of Korea's total imports from Japan. Since the

⁵¹ Mitsuhiro Kimura, 'Colonial Development of Modern Industry in Korea', *Japan Review* 2:2 (2018), 23-44, at pp. 28-9.

⁵² Mitsuhiro Kimura, 'Colonial Development of Modern Industry in Korea', *Japan Review* 2:2 (2018), 23-44, at pp. 29-42.

exact volume of machinery imports was not available in the primary sources, it was not included in the import basket to calculate the terms of trade. However, the increasing imports of metal products and machines did indicate that technological progress brought about structural transformation to Korea-Japan trade in the late 1920s and 1930s. In addition to the expanding exports of manufactured products, there were also increasing exports of rice, which could be attributed to the dissemination of more advanced fertiliser and seeds in Korea.

Figure 2.10 Korea's Imports of Metal Products, Vehicles, and Machineries from Japan and their Proportions of Korea's Total Imports from Japan, 1912–1939 (unit: yen, percent)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, various years.

3. Transformation of Korea's Trade Structure

This section brings this issue of Korea's trade expansion and structural change into a broader context, by discussing whether Korea's trade was more influenced by its economic complementarity with China and Japan or by Japanese imperialist goals. It shows the formation of Japan's layered colonialism in East Asia through the perspective of trade. Previous literature put more emphasis on Korea-Japan trade when discussing Korea's external trade, while ignoring the role of China. I contribute to the existing literature by examining how the structure of trade was transformed through interactions among the three countries. This section also explores the forces driving the structural change and the expansion of trade from 1910 to 1939. While previous literature argued that Korea was turned into a producer of rice, a ready market for Japan, and a transfer station for Japan,⁵³ this paper provides a new perspective to understand Korea's trade structural change and probe the dynamics of trade among Korea, Japan, and China. It has been argued that the Japanese aimed to turn Korea into an 'agricultural appendage of Japan',⁵⁴ a ready market for Japanese manufactured products,⁵⁵ a provider of raw materials and cheap labour for Japanese industrial development, and later a military base. Koreans were to supply inexpensive rice to solve the rice shortage in Japan and thereby reduce the rise in the cost of living and prevent the upward pressure on Japan's industrial wages. By the late 1930s,

⁵³ For example, Kang Chul-Won, 'An Analysis of Japanese Policy and Economic Change in Korea', in *Korea Under Japanese Colonial Rule*, ed. Andrew C. Nahm (Kalamazoo, Mich.: Center for Korean Studies, Western Michigan University, 1973), 77-88; Choi, Ho-Chin, *The Economic History of Korea: From the Earliest Times to 1945* (Seoul: The Freedom Library, 1971).

⁵⁴ Ho Samuel Pao-San, 'Colonialism and Development: Korea, Taiwan, and Kwantung', in *The Japanese colonial empire, 1895-1945*, eds. Myers, Ramon Hawley, and Mark R. Peattie (Princeton: Princeton University Press, 1984), 347-398, at p. 350.

⁵⁵ Ibid.

Korea became closely tied with Japan in terms of its economic development and trade. Japanese products penetrated every aspect of Koreans' economic life. But the influence of Japan on Korea's trade was not only achieved with tariffs, which made other countries' products, such as Chinese silk, uncompetitive and therefore prevented their import, but also by controlling Korea's entire economy. Factories, banks, lands, infrastructures, and government bureaus were in the hands of the Japanese. Japanese firms inevitably had to make decisions about what and where to import and export, and these decisions were influenced by Japanese government policies.⁵⁶

This section brings this issue of Korea's trade expansion and structural change into a broader context, by discussing how Japanese imperialist goals affected Korea's trade structure with Japan as well as China. Previous literature put more emphasis on Korea-Japan trade when discussing Korea's external trade, while ignoring the role of China. I contribute to the existing literature by examining how the structure of trade was transformed through interactions among the three countries. This section also explores the forces driving the structural change and the expansion of trade from 1910 to 1939. While previous literature argued that Korea was turned into a producer of rice, a ready market for Japan, and a transfer station for Japan,⁵⁷ it did not discuss the specific commodities that were traded and whether those commodities were transferred from Japan to China via Korea, or from China to Japan via Korea. Therefore, this

⁵⁶ Anne E. Booth, *Colonial Legacies. Economic and Social Development in East and Southeast Asia* (Honolulu: University of Hawaii Press, 2007), p. 97.

⁵⁷ Kang, 'Analysis of Japanese Policy and Economic Change in Korea',; Choi, *Economic History of Korea*.

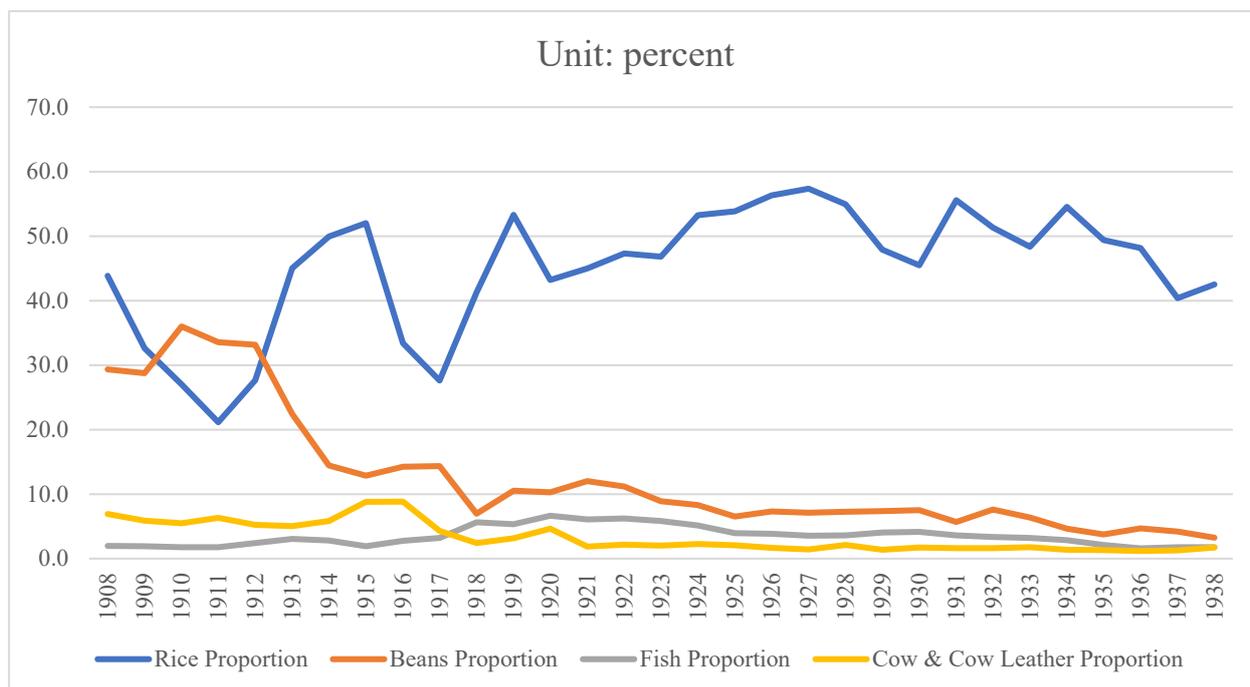
section also contributes to the existing literature by examining the specific commodities that transferred through colonial Korea and the features of Korea's colonial trade.

This section has three parts. The first part examines the three countries' trade in agricultural commodities. It not only addresses Korea's increasing exports of rice to Japan and imports of millet from China, but also discusses the increasing share of agricultural imports from China. The second part investigates Korea's trade in manufactured products and raw materials with Japan and China. It explains why the share of imports of Chinese manufactured products in all of Korea's imports from China declined during the colonial period. Then, it will try to find out the true reasons behind Japanese efforts to integrate Korea and Manchuria. The third subsection examines Korea's exports of heavy industrial products in the 1930s. Therefore, this part offers an in-depth analysis of Korea's exports of industrial products to determine the characteristics of Korea's colonial industrialisation.

3.1 Agricultural products

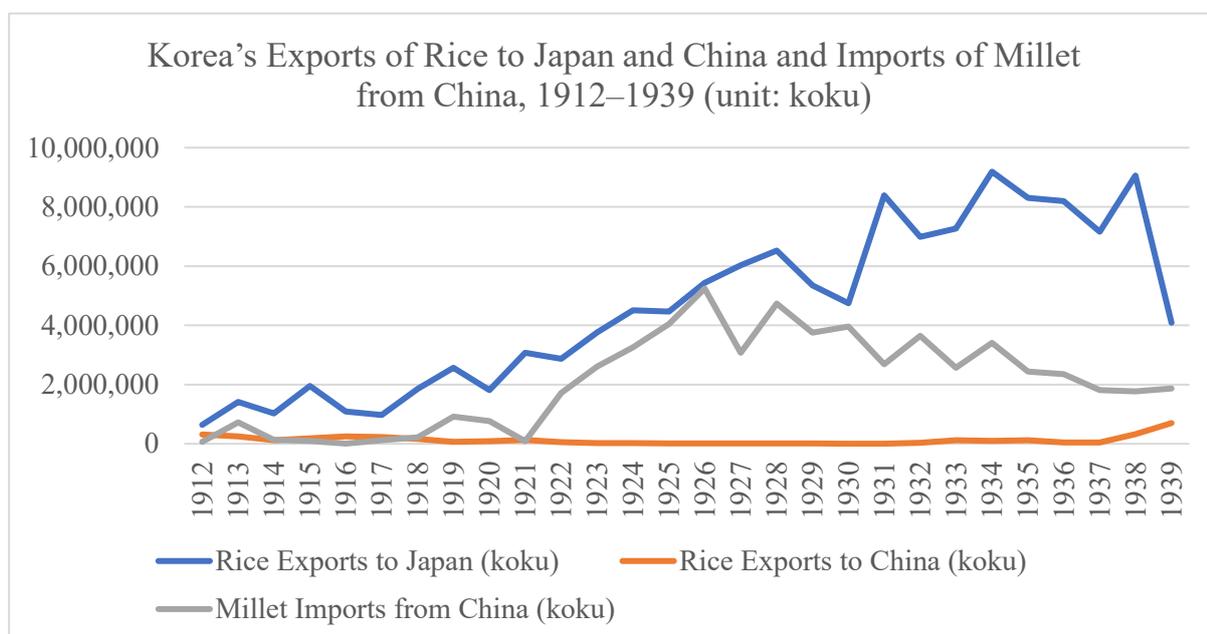
Agricultural products accounted for a large proportion of Korea's trade not only with Japan but also with China. The Figure 3.1 shows that the major agricultural products, including rice, beans, and fish, accounted for more than 50 percent of Korea's exports to Japan across the period examined. However, during this period, there were different trends in those exports. Rice was always a significant category of exports to Japan, accounting for around 50 percent of the overall exports to Japan. Although the proportion of rice exports in overall Korean exports to Japan declined after 1937, it remained at more than 40 percent at the end of this period of study.

Figure 3.1 Major Primary Commodities as a percentage of Korea's Total Exports to Japan, 1908–1938 (unit: percent)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen Sōtokufu tōkei nempō* (Statistical Yearbook of the Government-General of Korea), Keijō, 1910–1941.

Figure 3.2 Korea's Exports of Rice to Japan and China and Imports of Millet from China, 1912–1939 (unit: koku)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, various years.

Note: 1 koku = 180.3 kg

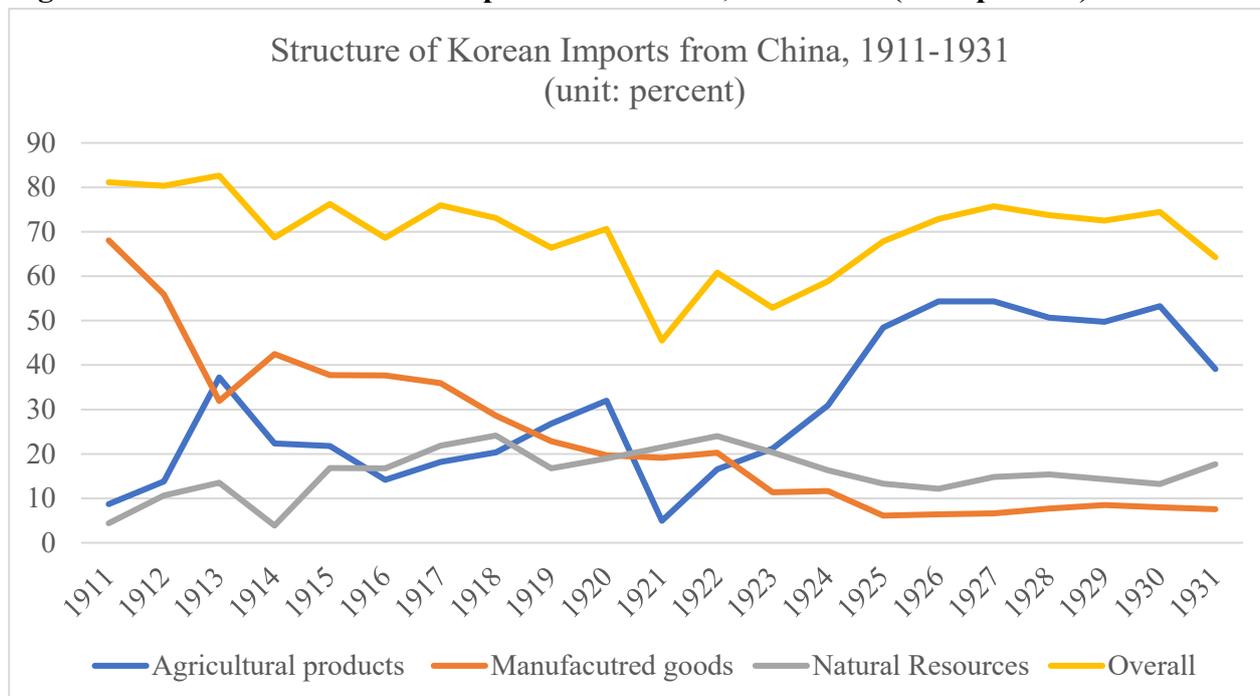
Millet imports from China increased with the expansion of rice exports to Japan, as indicated in the figure above. A dramatic growth of millet imports and, on a smaller scale, rice imports from China began in the early 1920s, when the Japanese government initiated a series of measures to assure an adequate supply of rice at home in order to avoid excessive rice prices.⁵⁸ In the late 1930s, Korea's imports of millet from China remained at around 2 million koku per year, and it accounted for around 20 percent of the overall value of Korea-China trade.⁵⁹ Significantly, it should be noted that Korea's exports of rice to China increased significantly after 1937, when the Second Sino-Japanese War broke out. These exports were to support the Japanese military in China and satisfy Chinese local demand. According to *Trade Yearbook of Korea*, half of the rice exports went to Manchuria while the other half went to the Republic of China, mainly to the north-eastern region. Soybeans were another major import from China during the colonial period, similar in volume to millet imports from China. The Korean government not only implemented the Rice Production Increase Plan but also increased imports of other foodstuffs to tackle the risk of a rice shortage in Korea. Figure 3.2 illustrates the dynamism of Korea's trade in agricultural commodities with Japan and China. Thus, economic complementarity among these three countries explains the expansion of agricultural trade. However, the increasing exports of rice to Japan and imports of millet from China was primarily driven by Japanese colonial policies. Economic complementarity allowed Koreans to import

⁵⁸ Bruce F. Johnson, *Japanese Food Management in World War II* (Stanford: Stanford University Press, 1953), pp. 57-8.

⁵⁹ Calculated from Chōsen Sōtokufu [Government-General of Korea], *Chōsen bōeki nenpyō* [*Trade Yearbook of Korea*], Keijō, various years.

millet as an alternative to rice. Economic complementarity and Japanese colonial policies were not necessarily conflict with each other.

Figure 3.3 Structure of Korean Imports from China, 1911–1931 (unit: percent)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen Sōtokufu tōkei nempō (Statistical Yearbook of the Government-General of Korea)*, Keijō, 1910–1931.

According to Figure 3.3, a highly significant change, reflecting the new colonial relationship, was the marked decline in the import of manufactured goods as a proportion of Korea's imports from China: from nearly 70 percent in 1911 to less than 10 percent in 1931. Conversely, the share of agricultural products in Korea's imports from China grew, though in the 1910s, there was a lot of fluctuation, reflecting the success of harvests.

3.2 Textiles

As Perkins and Tang remarked, ‘the (Japanese) import of textiles was steadily replaced by food, and then replaced by mineral sources as well as miscellaneous commodities.’⁶⁰ Sugihara also noted that ‘by the early twentieth century, Japan imported raw cotton from India, rice, and sugar from Southeast Asia, Korea, and Taiwan, and soybeans and their derivatives from Manchuria; in exchange, it exported labour-intensive manufactured goods such as cotton yarn, cotton cloth and sundries to other parts of Asia.’⁶¹ The increasing exports of semi-manufactured products, such as raw silk and ginned cotton, to Japan also suggested that the internal demand in the Japanese economy ‘shifted from household consumption to intermediate products used by industrial enterprises’.⁶² Japan and Korea thus had a division of labour, such that the Japanese moved up the value chain from agricultural-oriented to industrial-oriented. But Korea’s exports were not only primary commodities but also semi-manufactured products. With the removal of resource restrictions, the orientation of the Japanese economy transformed towards the cotton textile industry.⁶³ Most imports to Korea from Japan were value-added products while exports to Japan were primary commodities.

One case that needs particular attention is the import of Chinese silk, the evolution of which reflected the colonial authority’s intention of unifying Korea’s customs tariff and reducing

⁶⁰ Dwight H. Perkins and John P. Tang, ‘East Asian Industrial Pioneers: Japan, Korea and Taiwan,’ in *The Spread of Modern Industry to the Periphery since 1871*, eds. Kevin O’Rourke and Jeffrey Williamson (Oxford: Oxford University Press, 2017), p. 175.

⁶¹ Kaoru Sugihara, ‘Varieties of Industrialisation: An Asian Regional Perspective’, in *Global Economic History*, eds. Tirthankar Roy and Giorgio Riello (London: Bloomsbury Academic, 2019), 195-214, at p. 200.

⁶² Perkins and Tang, ‘East Asian Industrial Pioneers’, pp. 175-6.

⁶³ Sugihara, ‘Varieties of Industrialisation’, p. 200.

imports from other countries, such as China and western countries.⁶⁴ In the early 1920s, Japanese silk textiles were in fierce competition with Chinese ones in the Korean market. In 1923, the quantities of silk textile imports from China were 2.27 million square yards, which outnumbered the 1.67 million square yards from Japan, as illustrated in Table 3.1. When Korea began to the unified tariff rate with Japan, the import duties on Chinese silk products increased by 30 to 40 percent. However, the early 1920s witnessed a commercial collapse and falling silver prices in China. This caused Chinese silk prices to fall, such that Chinese silk textiles became more competitive in the Korean market; Japanese policy-makers were caught off-guard and the interests of Japanese merchants and silk producers were hurt. Thus, in August 1924, the Government-General of Korea imposed a heavy import duty on Chinese silk products.⁶⁵ This brought about a dramatic decline in the volume of Chinese silk imports from 1.4 million yen in 1924 to merely 2,708 yen in 1925. In 1924, 58.8 percent of the total silk imports to Korea were from Japan; following the implementation of the new tariff rate, in 1925, the share of Japanese silk imports increased to 99 percent of Korea's overall silk imports.⁶⁶ By 1932, Chinese silk had vanished from the Korean market.

Also, since Korea was usually regarded almost like a home market for Japanese manufactured goods, the Japanese authorities also imposed customs duties on Chinese manufactured products to guarantee the sales of Japanese ones. As the customs duties on Chinese manufactured goods, especially silk products, increased in the 1920s,⁶⁷ the imports of Chinese manufactured

⁶⁴ For more detailed discussion on the transformation of Korea's customs tariff policy, see Section Four.

⁶⁵ Chongdokbu Gwanbo [Bulletin of the Government-General of Korea], 24 August 1924.

⁶⁶ Song, *joseonmuyeok yeongu* [Study on Korean trade], p. 81.

⁶⁷ Yi, 'Overseas Chinese', pp. 9-10.

products declined. However, according to the *Statistical Yearbook of the Government-General of Korea*, silk imports from China persisted, albeit at a fraction of the previous level. Therefore, the Korean markets came close to being dominated by manufactured goods produced in Japan.

Table 3.1 Imports of Silk Textiles from Japan, and the Domestic Korean Production and Consumption of Silk, 1912-1928 (value in thousands of yen)

Year	Silk Imports from Japan	Silk Imports from China	Domestic Korean Production	Domestic Korean Consumption	Proportion of Japanese Silk Imports in Overall Consumption (%)
1912	648	2,004	666	3,321	19.5
1913	780	1,534	734	3,054	25.5
1914	671	1,612	622	2,915	23.0
1915	866	1,770	583	3,222	26.9
1916	995	1,866	741	3,605	27.6
1917	1,429	2,222	1,054	4,708	30.4
1918	2,307	3,993	2,080	8,382	27.5
1919	5,082	6,763	2,844	14,704	34.6
1920	3,921	5,126	2,018	11,065	35.4
1921	5,430	4,012	2,512	12,172	44.6
1922	5,793	5,132	2,502	12,441	46.6
1923	4,307	3,414	2,718	10,461	41.2
1924	5,158	3,608	3,194	11,965	43.1
1925	8,031	352	2,422	11,459	70.1
1926	7,903	489	3,378	11,291	70.0
1927	9,266	490	3,283	12,576	73.7
1928	13,376	444	3,511	16,892	79.2

Sources: Yi, Jeong-Hi, 'A Study on the Economy of the Overseas Chinese in Korea during the Colonial age (1905-1930): A case study of the trade between Korea and China', *Kyoto Sosei University Review* 5:1 (2005), 1-22, Table 4.

Note: Proportions of imported Japanese silk textiles in the overall Korean silk consumption are calculated based on the data from 1912 to 1928 provided by Yi (above).

The table above illustrates the imports, domestic production, and consumption of silk textiles from 1912 to 1928. In 1912, Japan's silk textiles accounted for only 19.5 percent of Korea's domestic consumption, but its share increased to 79.2 percent in 1928. Although Korea's domestic production increased more than five times during this period, the imports from

Japan increased more than twenty times. One reason for this discrepancy was that Japanese silk textiles took up the market share left by Chinese products after 1924. Yi's research put emphasis on the decline of Chinese products and the rise of Japanese dominance in Korea.⁶⁸ This study examined this data through an institutional-economics approach. From this perspective, protectionist policies against third-party countries (for example, the high customs tariff against Chinese silk textiles in 1924) did not bring any protection or incentives for indigenous Korean industry, but only offered more opportunity for Japanese products to dominate the Korean market. But this is an exaggeration: Korea's domestic silk-textile production increased during the two decades of 1920s and 1930s, indicating an expansion of Korea's indigenous manufacturing industry.

Yi argued that China grass cloth was the one exception to the rule that commodities from countries outside the yen bloc were subjected to heavy tariffs by the colonial Korean government, as the imports of China grass cloth remained stable in the late 1920s.⁶⁹ However, the statistics showed that Korea's imports of China grass cloth declined dramatically later in the 1930s, from 10 million square yards in 1930 to 4 million in 1932, and almost diminished after 1937. Thus, the colonial government merely postponed the imposition of higher tariff duty on China grass cloth. In 1931 and again in 1937, the Government-General's imposition of higher tariff rates against China grass cloth led to a sharp decline of its imports. This trend contradicts Yi's view by showing that imports of China grass cloth were highly affected by the

⁶⁸ Yi Jeong-Hi, 'A Study on the Economy of the Overseas Chinese in Korea during the Colonial age (1905-1930): A case study of the trade between Korea and China', *Kyoto Sosei University Review* 5:1 (2005), 1-22.

⁶⁹ *Ibid.*, p. 13.

customs duties imposed by the Government-General. The turning points at 1931 and 1937 were exactly the time when Japan invaded Manchuria and launched the Second Sino-Japanese War. This timing indicated the uniqueness of the Korean case: Korea's trade and economic performance were highly influenced by the factors of war and Sino-Japanese relations.

Figure 3.4 Korea's Imports of China Grass Cloths from China, 1912–1939 (unit: yen, square yard)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (*Trade Yearbook of Korea*), Keijō, various years.

Note: textile products include cotton textiles, silk textiles, wool textiles, hemp textiles. The real value of Korea's trade with Japan is calculated by using the consumer price indices provided by Mizoguchi, 'Consumer Price Indices', Table A.2(b).

Figure 3.5 Value of Korea's Textile Imports and Their Share in Korea's Overall Imports from Japan, 1912–1939 (units: yen, percent)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō (Trade Yearbook of Korea)*, Keijō, various years.

Note: textile products include cotton textiles, silk textiles, wool textiles, hemp textiles. The real value of Korea's trade with Japan is calculated by using the consumer price indices provided by Mizoguchi, 'Consumer Price Indices', Table A.2(b).

Figure 3.5 illustrates the increasing textile imports from Japan and the trends of various kinds of textile imports. From 1912 to 1939, the value of annual textile imports from Japan increased by twenty times, from 15 million yen to 300 million yen in nominal terms. But if we take inflation into account, the real value of textile imports increased less dramatically, by 10 times from 21.5 million yen in 1912 to 211.2 million yen in 1939; though it was still a big increase. There was a slight decline during the Great Depression, but the value recovered quickly in 1932 and kept increasing in the remainder of the decade. Korea's textile imports also showed structural change. There was a surge of cotton textile imports in the 1910; and this high level remained stable in the 1920s before declining in the late 1930s. By contrast, the 1920s and 1930s witnessed a rise in the imports of silk textiles and clothing. Woollen textile imports also

increased in the 1930s. The expansion of silk textile imports from 1924 could be largely attributed to the higher tariff rates against Chinese silk. The imports of linen from Japan also increased from 1937 onwards, taking up the market share left by Chinese grass cloth.

The decrease in cotton textile imports could be attributed to the shift of Japanese colonial policies in Korea as well as the development of Korea's indigenous textile manufacturing industry. As Japanese manufactured goods found markets further afield in the 1930s, especially in Southeast Asia, it was no longer essential to ensure its dominant position in the Korean market. The development of an indigenous Korean cotton-textile industry also provided cotton textiles for local Korean residents. But the imports of other textiles, such as silk and wool, increased dramatically; therefore, the shares of Korea's textile imports from Japan did not decline much over this period.

In the late 1920s and 1930s, as the indigenous Korean light industry began to develop, Korea increasingly exported semi-manufactured and manufactured products. According to Figure 3.6, ginned cotton exports to Japan increased significantly during the colonial period, from 0.2 million yen in 1910 to 13 million yen in the late 1930s. The share of ginned cotton exports in total exports rose in the 1910s, peaking at 6.5 percent in 1917, then declined gradually to around 2 percent in the 1920s, with some fluctuations in the 1930s. The increasing exports of cotton textiles to Japan reflected the development of Korea's indigenous textile manufacturing. Even so, the expansion of indigenous Korean industry was minimal. In 1939, Korea's cotton textile exports to Japan were valued at 9.7 million yen, but its textile imports from Japan nearly reached

300 million yen. The sharp decline of Korea's cotton imports and increase in cotton textile exports with Japan after 1937 should be mainly attributed to the shift of Japanese colonial policies towards war preparations, which created market space for Korean-made textiles, for both domestic Japanese and domestic Korean use.

Figure 3.6 Nominal Value of Korea's Exports of Ginned Cotton and Cotton Textiles to Japan and Their Shares in Korea's Total Exports to Japan, 1910–1939



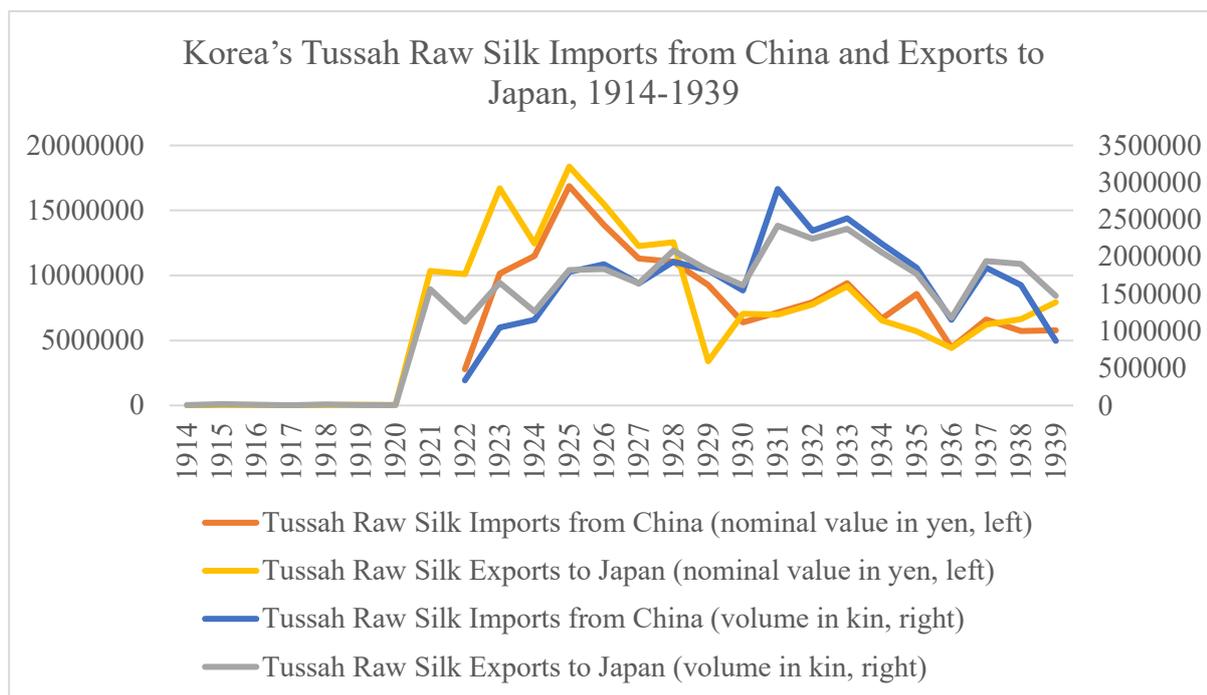
Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen Sōtokufu tōkei nempō (Statistical Yearbook of the Government-General of Korea)*, Keijō, 1910–1941.

In the 1930s, Korea's cotton textile exports to China also increased, which indicated an expansion of Korea's indigenous textile-manufacturing industry in the 1930s. However, there was still many textiles produced in Japan being re-exported via Korea to China. This showed that Korea was a transfer station not only for raw materials from China to Japan, but also for manufacturing products from Japan to China.

3.3 Raw Materials and Heavy Industrial Products

Existing literature often focused on Korea's role as an exporter of raw materials to Japan but ignored how Korea-China trade influenced Korea's trade structure with Japan. Korea's special geographic location, between China and Japan, was central to its strategic and economic value under Japanese colonial rule. This sub-section categorises raw materials and heavy industrial products into transit products, products for domestic use in Korea, and products for export to Japan. This categorisation makes it clearer to discuss Korea's trade relations with Japan as well as China.

Figure 3.7 Korea's Tussah Raw-Silk Imports from China and Exports to Japan, 1914–1939



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (*Trade Yearbook of Korea*), Keijō, various years.

The figure above indicates that the trend of Korea's raw-silk exports to Japan closely matched that of Tussah raw-silk imports from China from 1921. The import volume of Tussah raw silk

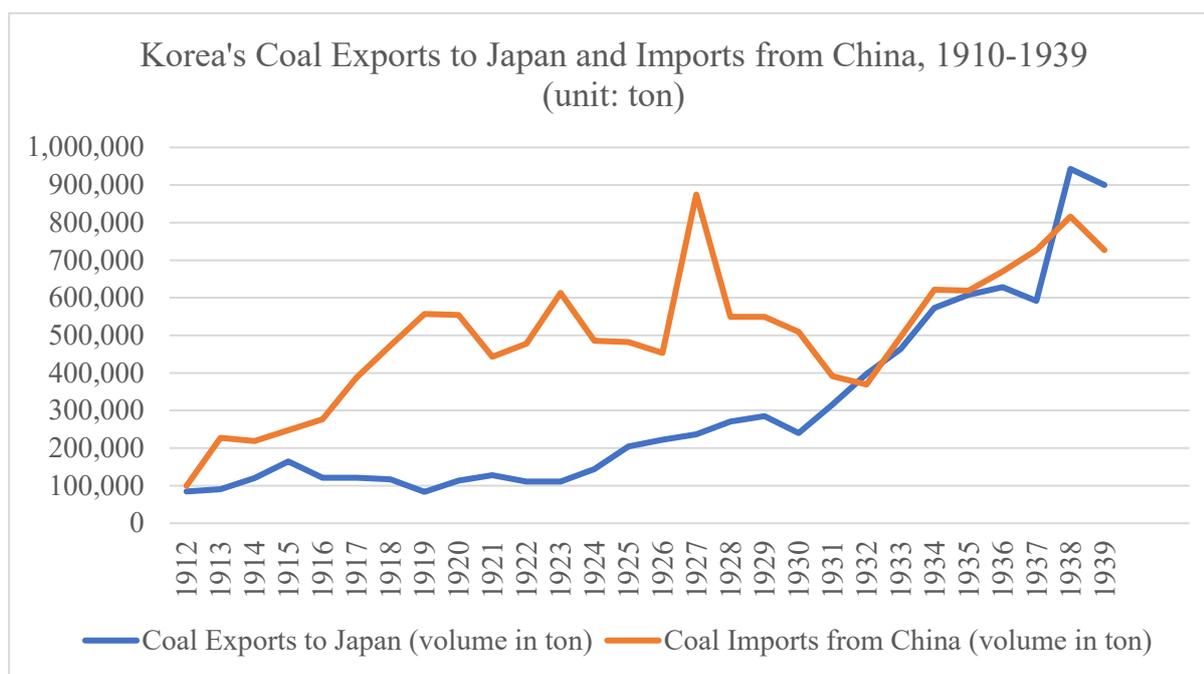
from China was slightly higher than those exports to Japan, which averaged 1.5 million kin over the two decades. Raw silk accounted for around 10 to 20 percent of the value of Korea's total imports from China. The similar amount of Tussah raw silk imports from China and exports to Japan also illustrated that Korea became a transit station for Japan as early as in the 1920s.

The export of ordinary raw silk to Japan also increased in the late 1920s, while remaining stable in the 1930s at around 3 percent of Korea's total exports to Japan. As discussed in the previous section on colonial institutions, the Sericulture Law contributed to the development of the sericulture industry in Korea, which led to the expansion of raw-silk production in Korea. The increasing exports of raw silk and Tussah raw silk from the 1920s could also explain the increasing imports of silk products from Japan in the late 1920s and 1930s. As such, colonial Korea developed not only into an exporter of rice but also a provider of raw materials for Japanese manufacturing.

Colonial Korea had a high demand for natural resources, so the overall imports of natural resources from China remained relatively stable over the period, trending upwards from 1912 to 1922, and then slightly downwards until 1930. In the 1910s and 1920s, coal imports from China outnumbered Korea's coal exports to Japan. There was a large net surplus of coal imports before 1931. Since Korea did not mine coal, the coal imports from China were mostly consumed domestically. A shift of colonial policy to promote Korea's mining and heavy industrial

production required a large amount of energy sources, such as coal.⁷⁰ However, coal exports to Japan increased quickly in the 1930s, and even exceeded its imports from China from 1938 onwards. This statistic could be attributed to Japanese war efforts and heavy industrialisation in the 1930s, but the dramatic increase in coal exports contradicted with Korea's increasing demand for energy sources because of its heavy industrialisation. The statistics also showed that coal transformed from a product that met domestic demand into an industrial energy source for transit to Japan over the three decades.

Figure 3.8 Korea's Coal Exports to Japan and Imports from China, 1910–1939 (unit: ton)

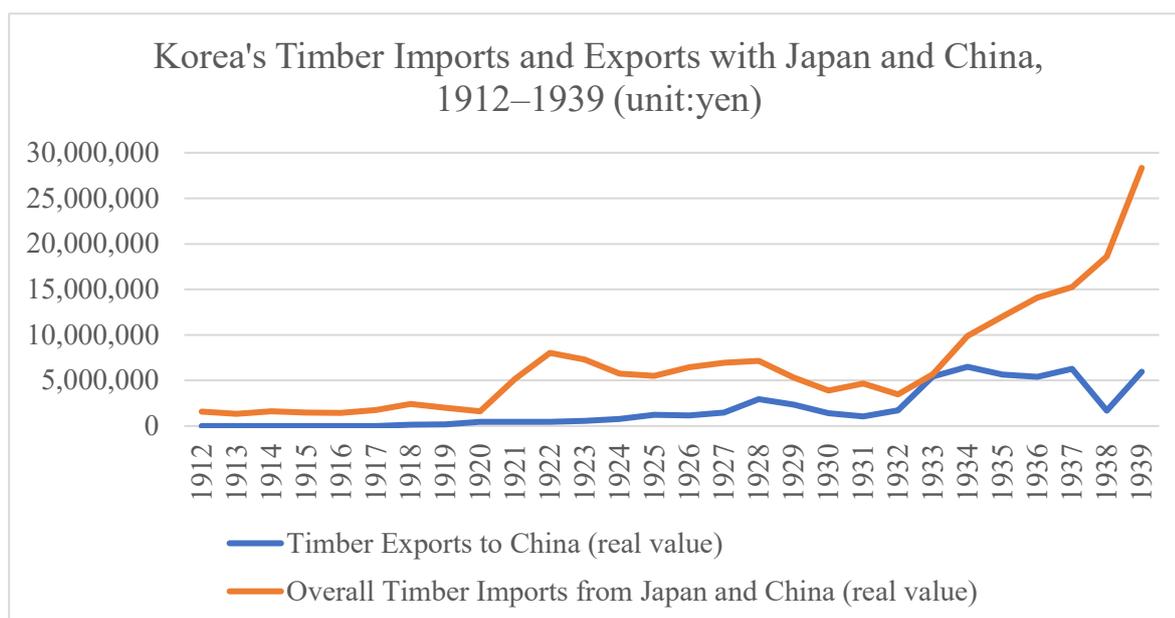


Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (Trade Yearbook of Korea), Keijō, various years.

⁷⁰ Yi, *Hanguk muyeoklon*; Kimura, 'Colonial Development'.

Timber, as a building material, was another major commodity traded by Korea. The figure above indicates that Korea's timber imports exceeded its exports over the three decades. Korea's timber trade remained relatively stable in the 1910s and 1920s. In 1927, the Government-General of Korea abolished the customs duty on timber to promote imports.⁷¹ However, the imports of timber showed a declining trend in the late 1920s. From 1932 onwards, Korea's timber imports from China and Japan began to increase sharply, while timber exports to China experienced only a slight increase.

Figure 3.9 Korea's Timber Imports and Exports with Japan and China, 1912–1939 (unit: yen)



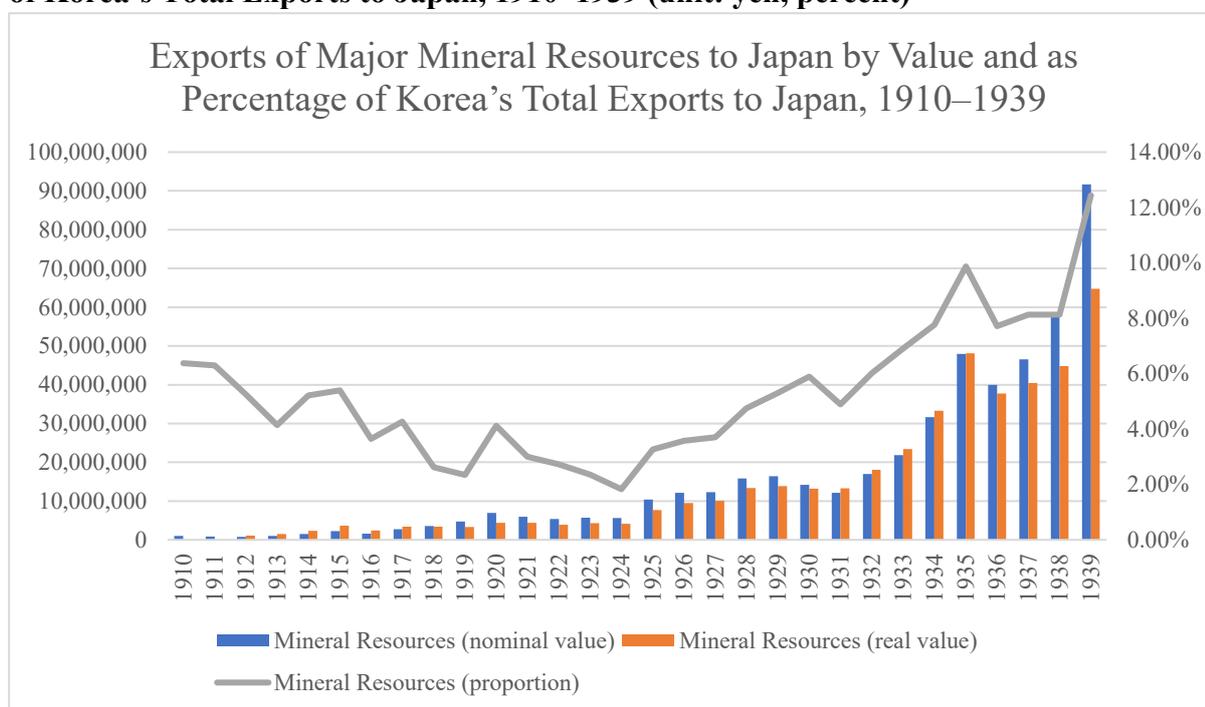
Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (*Trade Yearbook of Korea*), Keijō, various years.

Note: The real value of Korea's trade with Japan is calculated by using the consumer price indices provided by Mizoguchi, 'Consumer Price Indices', Table A.2(b).

⁷¹ Yi, 'Overseas Chinese'.

The increase in the imports of natural resources in the early 1930s was also a feature of Korea's colonial trade. Imports of coal and timber were the highest among the imports of natural resources from Japan. However, coal was mainly consumed domestically in Korea in the 1920s and exported to Japan in the 1930s. On the other hand, timber imports increased in the 1930s, mostly for Korea's domestic use. Korea was often regarded as an exporter of raw materials to Japan, but this view ignored Korea's trade with China. Taking Korea's trade with China into consideration, Korea had large imports of coal from China, which laid a foundation for its coal exports. This data also reflected Korea's large demand for raw materials, which were imported from both China and Japan, and that Korea was both a re-exporter and a net importer of coal and timber.

Figure 3.10 Exports of Major Mineral Resources to Japan by Value and as Percentage of Korea's Total Exports to Japan, 1910–1939 (unit: yen, percent)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (*Trade Yearbook of Korea*), Keijō, various years.

Note: mineral resources include graphite, coal, iron ore, gold ore, pig iron, and copper. The real value of Korea's trade with Japan is calculated by using the consumer price indices provided by Mizoguchi, 'Consumer Price Indices', Table A.2(b).

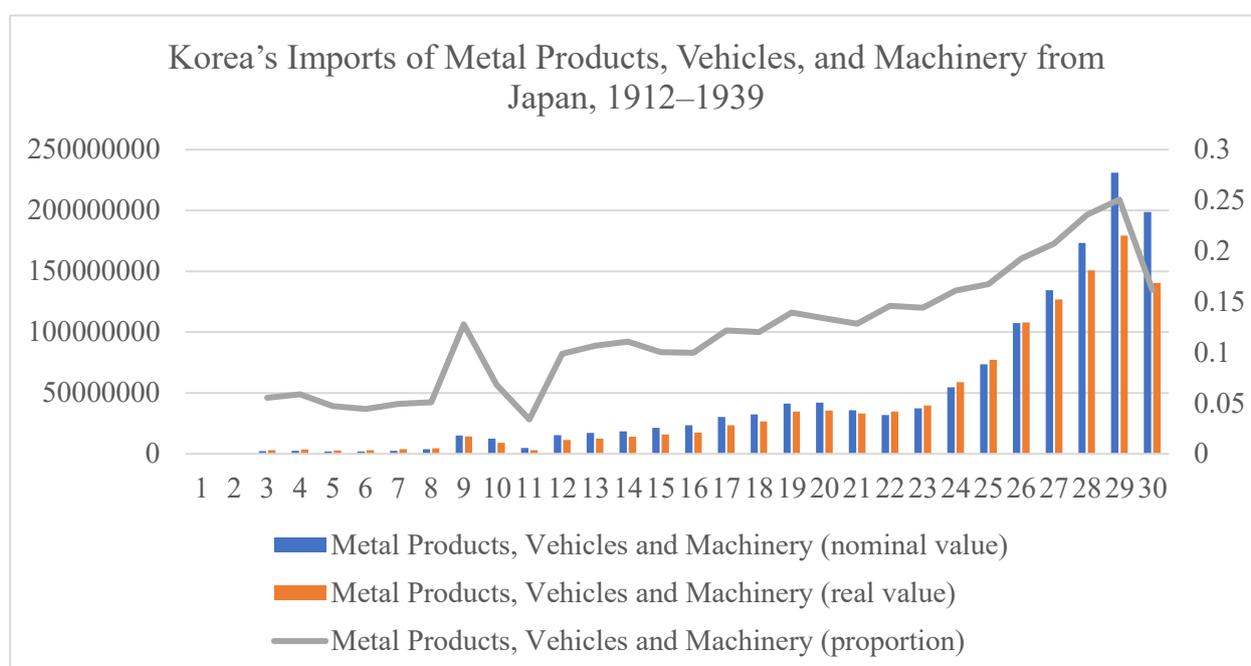
As shown in the figure above, exports of these mineral resources all rose moderately in the 1910s and 1920s and then increased dramatically in the 1930s. The share of mineral resource exports in total Korean exports to Japan decreased from more than 6 percent in 1910 to around 1.5 percent in 1925, then increased dramatically from 2 percent to 12 percent for 1925 to 1939.

From the late 1920s, as the Japanese government shifted its policy towards war preparation, both Korea and Japan experienced a rapid development of heavy industry. Iron, steel rail, automobiles and their parts, and machines were also major categories of heavy industrial products imported from Japan. The Figure 3.11 shows an increase in the import value of metal products and machineries during the colonial period, especially in the late 1920s and early 1930s. It also indicates that the proportions of certain heavy industrial imports in Korea's overall imports from Japan increased rapidly in the 1930s. These changes indicated the expansion of heavy industries in both colonial Korea and Japan and suggested that the Japanese provided a lot of support (materials and resources) for industrial development in Korea.

Fertiliser exports also increased dramatically in the late 1920s and 1930s; for example, the export volume of fertiliser quadrupled. The share of fertiliser exports in overall Korean exports to Japan increased, reaching around 6 percent in the late 1930s, which reflected the growth of the chemical industry in Korea during that period. As Japan adopted wartime policies in the 1930s, Korean heavy industry experienced rapid development, including of the chemical and hydroelectrical industries. With the growth of the heavy industry, exports of fertiliser increased dramatically in the late 1920s and 1930s; for example, the export volume of fertiliser

quadrupled. The share of fertiliser exports in overall Korean exports to Japan increased, reaching around 6 percent in the late 1930s, which reflected the growth of the chemical industry in Korea during that period. Thus, fertiliser was not only consumed in Korea but was also exported to Japan. Most fertiliser imports from China and exports to Japan were comprised of both organic fertilisers, such as oil-cake of beans and rice bran, and chemical fertiliser, such as sulphate ammonium crude, while the fertiliser imports from Japan were mainly chemical fertilisers. This discrepancy reflected the different development stages of the chemical fertiliser industry in China, Korea, and Japan: Japan was able to produce and export more sophisticated chemical fertilisers than Korea and China, even in the late 1930s. It also reflected an economic complementarity between Japan and Korea within the fertiliser production sector.

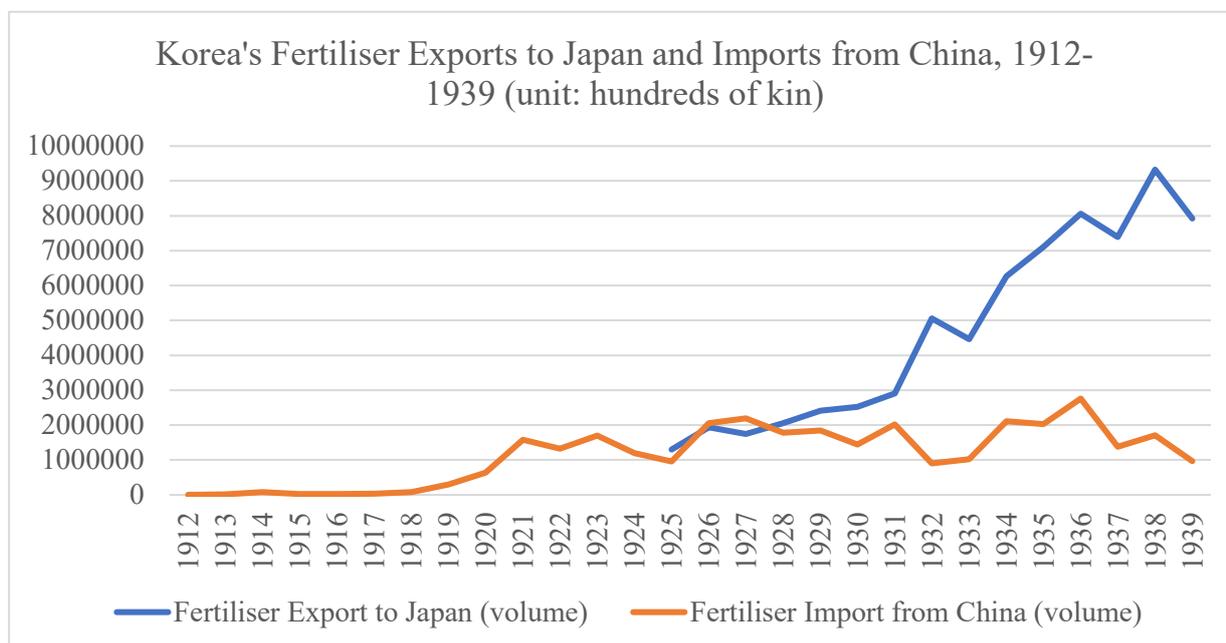
Figure 3.11 Korea's Imports of Metal Products, Vehicles, and Machinery from Japan, 1912–1939 (unit: yen, percent)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (*Trade Yearbook of Korea*), Keijō, various years

Note: The real value of Korea's trade with Japan is calculated by using the consumer price indices provided by Mizoguchi, 'Consumer Price Indices', Table A.2(b).

Figure 3.12 Korea's Fertiliser Exports and Imports with Japan and China, 1912–1939



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō (Trade Yearbook of Korea)*, Keijō, various years.

This section has discussed several characteristics of Korea-China trade. First, Korea-China trade was heavily influenced by international and domestic political situations. Since Korea, China, and Japan kept very close trade relationships, a large increase in an export from China to Korea would naturally affect the export of the same product from Japan to Korea. To dominate the Korean markets, the Government-General of Korea took a series of measures to prevent the imports of manufactured goods from China in the 1920s. Since China was also a producer of food, the overall imports from China still increased to meet the needs of the colonial government, albeit at a very moderate rate. After the Manchurian Incident, trade between Manchuria and Korea was not regarded as part of Korea-China trade in the official documents of the Government-General of Korea. Because China conducted trade with Korea mostly

through Manchuria, the Japanese invasion led to a rapid decline in the value of Korea's trade to Republic of China.

Secondly, under the control of the colonial government, Korea's trade with China occurred mainly to fulfil the interests of the Japanese, not Koreans. The actual traders were Japanese rather than Korean.⁷² The Japanese considered colonial Korea as a market for Japanese manufactured products and as a producer of food. So, not only were Chinese manufactured products prevented from being imported to Korea, but Korean rice was also prevented from being exported to China. Even though — or perhaps precisely because — the Chinese manufactured products were of high quality and cheap,⁷³ the Government-General of Korea levied a heavy customs duty on Chinese manufactured goods to protect the sales of Japanese manufactured goods. Also, due to the implementation of the Rice Production Increase Plan, rice output increased dramatically in colonial Korea. However, it only led to an increase in the export of rice to Japan, not to other countries like China. Therefore, it could be seen that the Korea-China trade during the colonial period was very much Japanese-oriented.

Meanwhile, the structure of Korea-Japan trade also reflected some features of the Japanese economy. As noted by Perkins and Tang, 'starting from the Meiji period and up until the World War II, Japan's exports of processed food declined significantly, while textiles accounted for the most significant shares of exports in the early twentieth century; machinery exports also

⁷² Kang Jin-A, 'Singminji joson gwa daeman e daejungmuyok bigyo (Comparison between Korea's and Taiwan's trade with China during colonial period)', *daegu sahak* 81 (2005), 123-164.

⁷³ Yi, 'Overseas Chinese', p. 14.

increased, albeit more modestly.’⁷⁴ These features were also reflected in Korea-Japan trade: imports of Japanese textiles and machinery featured prominently in Korea-Japan trade while the imports of foodstuffs from Japan were minimal.

Korea’s textile imports from China increased significantly in the 1910s, but their share of total imports to Korea still fell because the imports of raw materials grew faster. In the late 1930s, the most significant imports from China were millet, beans, timber, raw silk, fertiliser, and coal, while textile imports from China were almost negligible. Meanwhile, around half of Korea-China trade was transported through the crossings at Korea-China land border. Thus the construction of railway networks and the integration of the Korea-Manchuria border customs-inspection system (as discussed in section 4) greatly facilitated the transportation of raw materials, which was a major motivation for the Japanese government.

During the colonial period, trade among Korea, China, and Japan expanded quickly. This may be attributed to the economic complementarity of those countries. For example, Korea produced raw silk and rice and exported them to Japan, while importing millet and linen from China. The economic structure of each of the three countries laid the foundation for the economic integration of those countries and rising intra-Asian trade. However, the transformation of Korea’s trade structure was largely driven by Japanese colonial rule rather than economic complementarity. The colonial government often imposed higher tariff rates on foreign products to restrict their imports and secure a dominant position for Japanese products in the

⁷⁴ Perkins and Tang, ‘East Asian Industrial Pioneers’, pp. 175-6.

Korean market. Korea also often acted as a trade channel between China and Japan: importing raw materials from China and then exporting them to Japan. Moreover, the enormous imports of millet from China would have been unnecessary if Korea had not exported such a huge amount of rice to Japan. Similarly, the imports of machinery from Japan in the 1930s were primarily because of Japan's imperialist expansion and war needs, rather than comparative advantage between those countries. As such, I argue that the development and transformation of Korea's colonial trade was more driven by Japanese imperialist goals than by economic complementarity among East Asian countries.

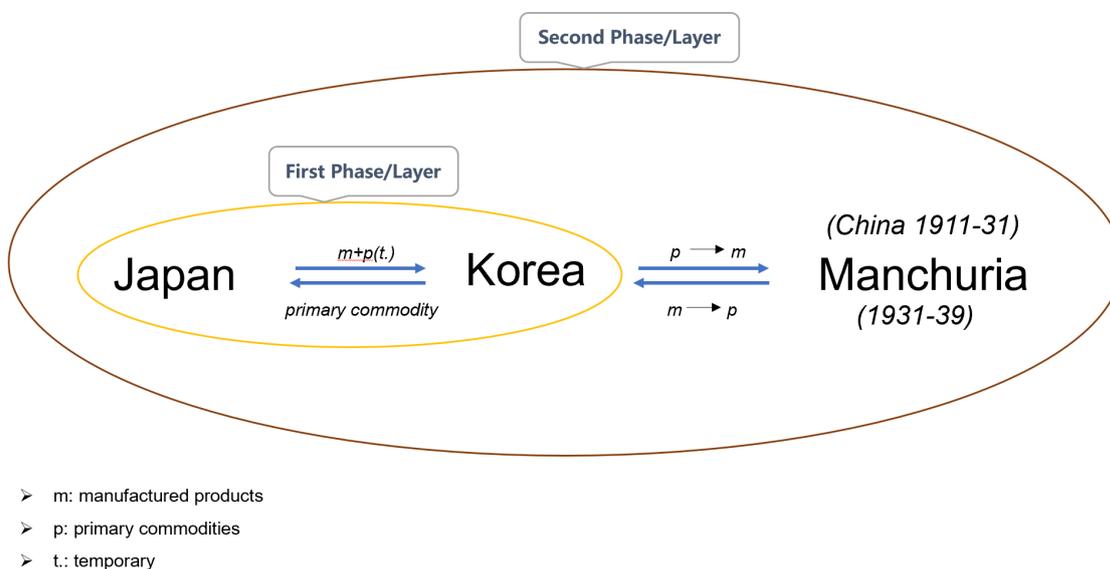
4. The Layered Colonialism in East Asia

The transformation of Korea's trade structure illustrated the formation of colonial hierarchy within Japanese colonial empire. In the first phase, before Japan invaded Manchuria, Korea produced primary products for the metropole and acted as a market of Japanese manufactured products. Korea even exported primary products to and imported manufactured products from China at this stage. In the second phase, from the late 1920s onwards, Korea turned into a semi-periphery and began to produce manufactured products and transported them to the new periphery, Manchuria. Manufactured products became Korea's major exports to Manchuria while primary products became its major imports from Manchuria. Korea began to act as a channel and a semi-industrialised economic entity between Japan and Manchuria.

4.1 Colonial Hierarchy in East Asia

Imperialism and the colonial order in the twentieth century became the decisive force defining the East Asian regional order. Although the centre moved from China to Japan, certain characteristics of pre-modern Korea, namely its international isolation and its military importance, did not change so much. This section contributes to the literature by showing the interactions of the balance of payments between Korea and China and Korea and Japan, respectively, and Korea's transformation into a besieged colony. I also argue that the structural transformation of Korea's trade was driven by Japanese imperialist expansion rather than economic complementarity among East Asian countries. Nevertheless, economic complementarity created the possibility for the transformation of Korea's trade which Japanese imperialism exploited.

Figure 4.1 Commodity Flow and Colonial Hierarchy in Japanese Colonial Empire



The trends of Korea's balance of payments with Japan and China also reflected Japan's economic penetration into China, especially Manchuria. Previous scholars argued that Korea became a producer of foodstuffs and raw materials and a trade channel for Japan during the colonial period. This section has further examined the role of Manchuria as a provider of foodstuffs and raw materials for both Korea and Japan. If we divide Japan's colonial empire into three layers, the core was Japan, the middle layer or the semi-periphery was Korea, and the outer layer or the periphery was Manchuria. Korea successfully developed a textile manufacturing industry in the late 1920s and 1930s, while Manchuria was turned into a pure peripheral region and a military base for Japan in the late 1930s. Thus, both Korea and China helped Japan to continue to expand economically by freeing it from local-resource constraints.

Korea became a besieged colony because of its geographic proximity to both China and Japan. With Japanese imperialist expansion, the proportion of Korea's trade with the yen bloc increased dramatically. This situation was unusual for Korea for two reasons. Firstly, although it had a long history of trade with China, the proportion of trade with China declined to a minimal level during the colonial period. Secondly, Korea, as a colony, had a significantly high ratio of trade with the metropole and its colonies. Even the colonies of Western countries did not have such a high proportion of trade with their metropolises.⁷⁵

When discussing the history of colonial Korea, nationalist historiography often invoked dependency theory when emphasizing the opposition between the imperialist power and the colonised.⁷⁶ In the context of colonial Korea, the distorted economic structure and impoverishment of the peasants fits the prediction of dependency theory. However, Korea's colonial experience provides an unusual case for dependency theory because the colonial government promoted manufacturing and heavy industry in the colony, which is uncommon in the global history of colonialism. This paper argues that, in the 1930s, the Japanese regarded industrial policy as an extension of war preparations and put resources into the colony for its industrial development because of its geographic proximity to Japan and strategic value for war. Manufacturing expanded rapidly in the 1930s and led to a much more diversified economic structure. Because Japan used Korea as a military base for war preparations, dependency theory does not explain the case of colonial Korea well.

⁷⁵ Ephraim Kleiman, 'Trade and the Decline of Colonialism', *The Economic Journal* 86:343 (1976), 459-480.

⁷⁶ Eckert, *Offspring of Empire*, p. XX.

4.2 The Besieged Colony: An Increasing Proportion of Trade with Japan and the Yen

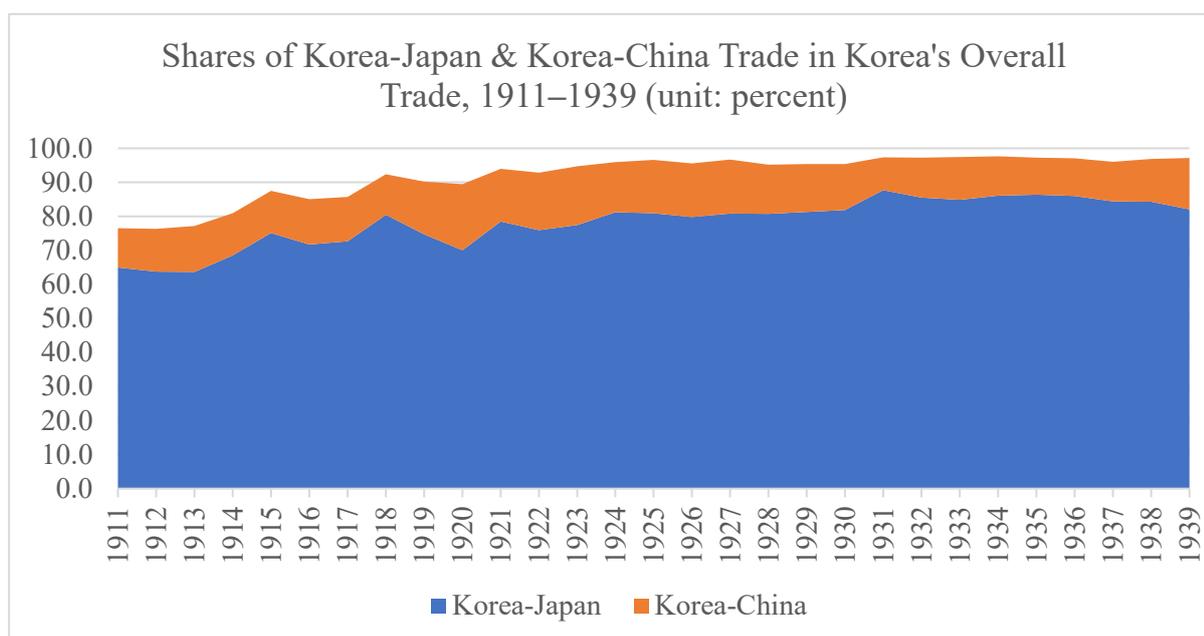
Bloc

Japan's formal annexation of Korea in 1910 tightened trade relations. It may be suggested that the use of its supreme authority to directly establish trade dominance was a distinctive feature of Japanese colonialism as a form of neo-mercantilism. Throughout the entire colonial period, Korea-Japan trade increased from 60 to 80 percent of total value of Korean trade. Ho drew parallels between Korea and Taiwan: before it became a Japanese colony, Taiwan's trade was mostly with the Chinese mainland, and only 1 percent of its imports and 10 percent of its exports were with Japan. But after the Japanese annexation of Taiwan in 1895, the situation changed quickly; by 1910, 70 percent of Taiwan's trade was with Japan, and it rose to 90 percent in the following decade.⁷⁷ Although Korea maintained trade relations with other countries, such as Great Britain and China, during the colonial period, Korea-Japan trade played a dominant role in Korea's economic life. The Japanese colonial government adopted both tariff and non-tariff measures to ensure the dominance of Japanese manufactured products in the Korean market. For example, in the 1920s, as Chinese silk products competed with Japanese ones in Korea, the colonial government imposed heavy tariffs on Chinese silk textiles, which led to the sharp decline of its imports. But, like many other sectors in which Japanese products dominated or showed strong competitiveness, the Japanese colonial government still allowed the import of those products from other foreign countries.

⁷⁷ Ho, 'Colonialism and Development', p. 370.

Based on the dynamic analysis of Korea's trade structure and colonial policies, Song pointed out that the proportion of Korea-Japan trade in Korea's overall trade increased during the colonial period. Song further argued that the transformation of the trade structure reflected colonial exploitation by the Japanese. It is generally acknowledged that Korean trade grew quantitatively during colonial period, but the qualitative aspect and the relationship between quantitative growth and Japanese colonial policy should be examined together to reveal the whole picture.

Figure 4.2 Shares of Trade with Japan and China in Korea's Overall Trade, 1911–1939
(unit: percent)

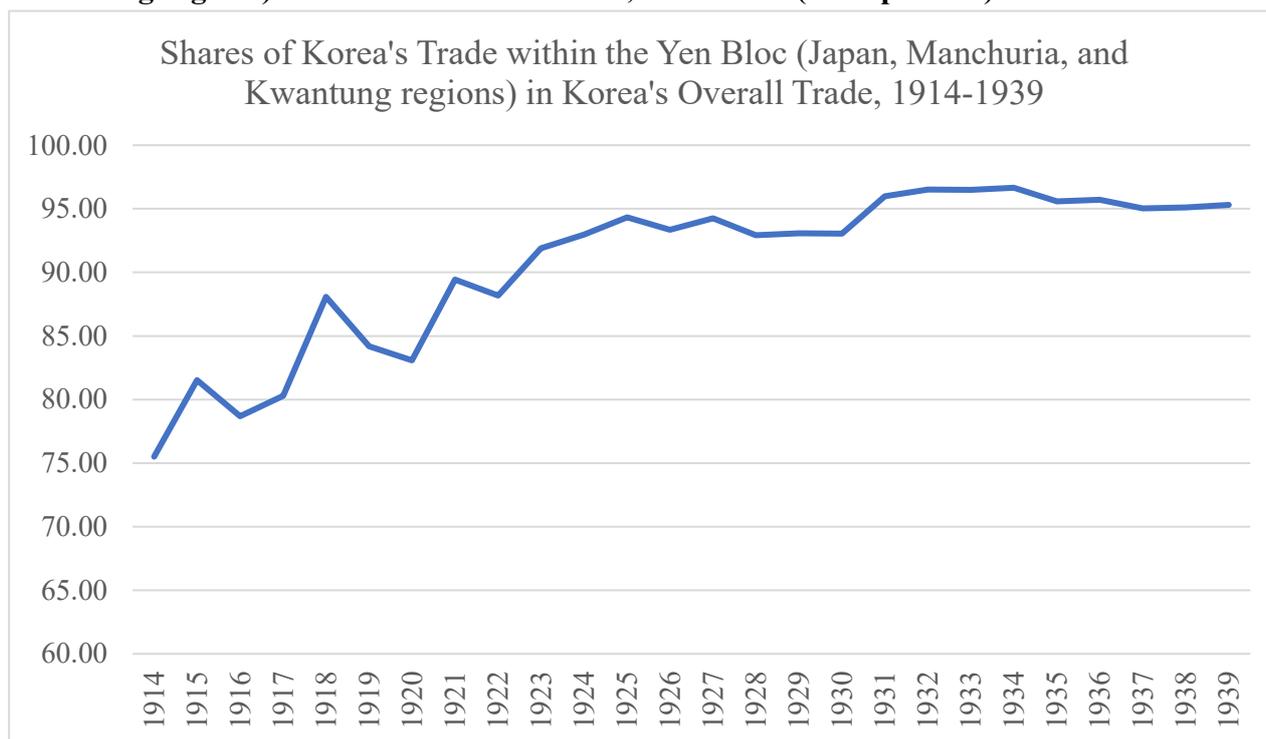


Source: Calculated from Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (*Trade Yearbook of Korea*), Keijō, various years.

The figure above shows the growth in the already large proportion of trade with Japan and China in Korea's overall trade. From 1911 to 1939, that proportion showed upward trend from

76.6 percent to 97.1 percent. The share of the Japan trade in Korea's overall trade increased from 65 percent in 1911 to 82.1 percent in 1919, and the share of the China trade rose from 11.6 percent in 1911 to 15.1 in 1939. Both countries were increasingly important in Korea's trade.

Figure 4.3 Share of Korea's Trade within the Yen Bloc (Japan, Manchuria, and Kwantung regions) in Korea's Overall Trade, 1914–1939 (unit: percent)



Source: Calculated from Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (*Trade Yearbook of Korea*), Keijō, various years.

The figure 4.3 shows an increasing share of Korea's trade with yen-bloc regions, including Japan, Manchuria, and Kwantung, from 76 percent in 1914 to 94.3 percent in 1925, and then to 96 percent in 1931. In the 1930s, Korea's proportion of trade with yen-bloc regions remained at more than 95 percent — overwhelmingly dominant. Even though the colonial government retained customs tariff policy in the 1910s, as discussed in Section Four, the share of Korea's trade with the world outside the yen bloc still declined.

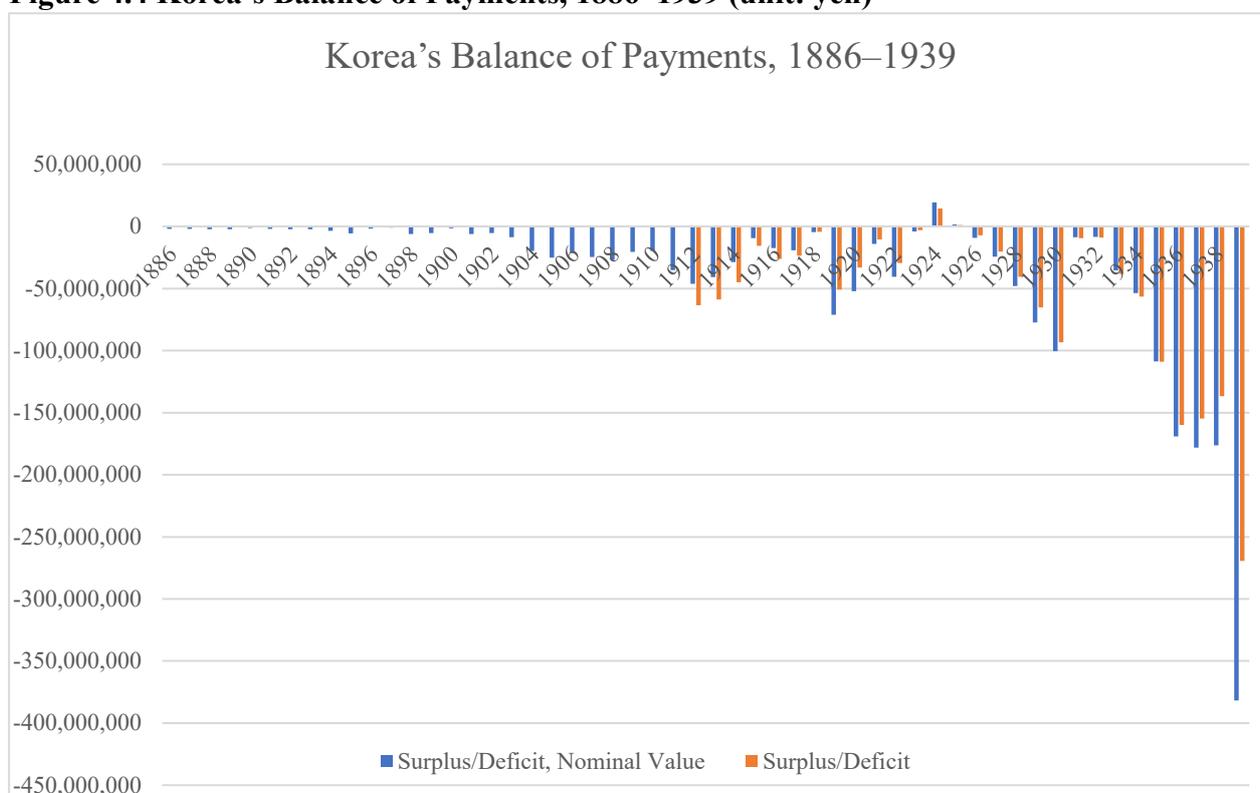
In the 1910s, Korea became more heavily reliant on China and Japan for trade, while its trade with other countries diminished to almost nothing. In fact, not only China but all foreign countries enjoyed the ten-year period in which Korea's pre-colonial customs tariff rate was retained. However, only China expanded its trade with Korea during that decade, while other countries did not. The Japanese government planned to integrate the Korean and Chinese markets, and to promote the flow of Japanese capital and goods into and out of the Chinese market to compete with the UK and the US. Japan's efforts to build railways between Korea and northeast China and to simplify customs-clearance procedures were part of this plan. This vision was implemented successfully in the 1910s, when Korea became a trade channel between Japan and China. By contrast, the connection between the Korean market and other foreign countries became weaker. The favourable conditions enjoyed by China and other foreign countries in the 1910s proved only temporary. From the early 1920s, Chinese goods entering and leaving Korea were subject to protectionist policies. Due to the imposition of protective tariffs, Chinese products, were gradually eliminated from the Korean market.

4.3 Dynamics of Trade in East Asia

During the colonial period, Korea experienced widening balance of payments deficits compared with the period preceding the Japanese annexation. Generally, in the late nineteenth and early twentieth centuries, Korea witnessed expanding trade deficits. For most of the colonial period, Korea had trade deficits. The only exceptions were 1924 and 1925, when Korea had trade surpluses, mainly because of the implementation of high tariffs against Chinese textiles in 1924,

which caused a sudden decline in imports from China. For the 1930s the accumulated trade deficits in total exceeded the combined deficits for the 1910s and the 1920s. From 1910 to 1939, Korea had trade deficits equal to over 1.76 billion yen. Taking inflation into account, the trade deficits in the 1910s were at similar levels to those in the 1920s. And the expansion of trade deficits in the 1930s became less dramatic compared to the trends shown in nominal values.

Figure 4.4 Korea's Balance of Payments, 1886–1939 (unit: yen)



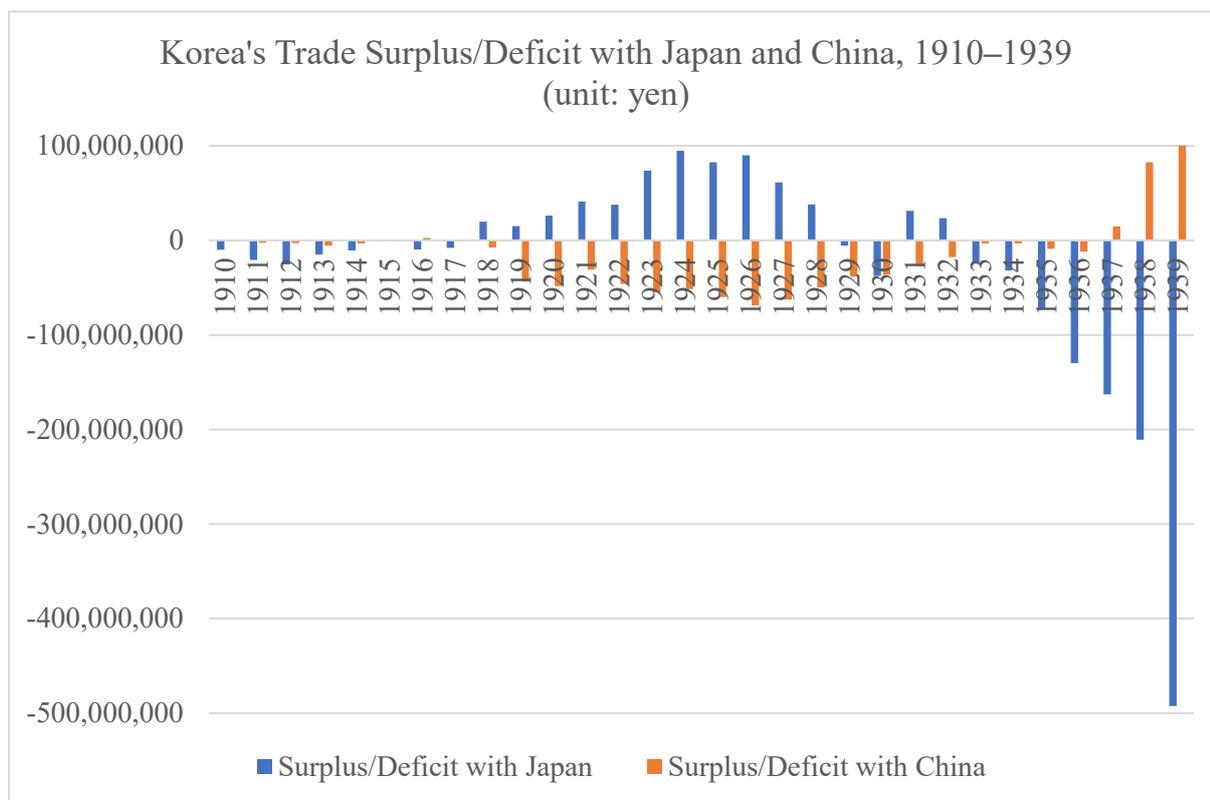
Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō (Trade Yearbook of Korea)*, Keijō, 1941, p. 6.

Note: The real value of Korea's trade with Japan is calculated by using the consumer price indices provided by Mizoguchi, 'Consumer Price Indices', Table A.2(b).

In the 1910s, Korea had relatively small trade deficits with both Japan and China. However, Korea's balance of payments with these countries showed opposite trends in the 1920s and 1930s. Specifically, Korea had trade surpluses with Japan in the 1920s; on the contrary, Korea

had trade deficits with China in the 1920s, which decreased and turned into trade surpluses in the late 1930s, as indicated in Figure 4.5 below. Previous literature often focused on Korea's overall balance of payments or discussed Korea's trade surplus/deficits with Japan and/or China. But Korea's balance of payments with Japan and China showed special features since 1920s, such that they often moved in opposite directions.

Figure 4.5 Korea's Balance of Payments with Japan and China, 1910–1939 (unit: yen)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō (Trade Yearbook of Korea)*, Keijō, various years.

With respect to Korea-Japan trade, Korea had a trade deficit of 10 million yen with Japan in 1910. After reaching 25 million yen in 1912, the deficit began to shrink and, in 1918, Korea started to have trade surpluses with Japan. The trade surplus reached 26.3 million yen in 1920 and peaked at 94.8 million yen in 1924. Thus, Korea's balance of payments with Japan

increased steadily from 1910 to 1924 and then declined in the late 1920s. Although there were some fluctuations during the Great Depression, the balance of payments deteriorated dramatically after 1933 and transformed into large deficits.

As Korea's second largest trade partner, China enjoyed an increasingly favourable trade balance with Korea in the 1910s and 1920s. From 1911, Korea's trade deficit with China kept increasing. The deficits enlarged in the 1920s, due to the increasing imports of foodstuffs, especially millet, from China. The sharp decline in the balance of payments in 1930 was mainly because of the Japanese invasion of Manchuria. From this point, most commodities were imported from Japan and then re-exported to China, which caused expanding trade surpluses in the 1930s.

Changes in the balance of payments can be attributed to several factors. Firstly, the volume and price of rice exports heavily influenced the balance of payments because rice constituted a large proportion of total exports to Japan. The economic boom during World War I was accompanied by rapid growth in Japan's exports and a substantial trade surplus between Japan and all of its trading partners; and increasing demand, driven by the expansion of the supply of money issued by the Bank of Japan, caused rising prices as well as higher real wages of the urbanised labour force.⁷⁸ In the summer of 1918, the Rice Riots broke out and spread widely throughout the country as workers and housewives protested against the rising price of rice, which, in the words of Penelope Francks, 'harmed the expanding and increasingly important urban industrial

⁷⁸ Francks, *Japanese Economic Development*, pp. 76-7.

workforce'.⁷⁹ These riots prompted the importation of rice from the world market as well as drew policy-makers' attention to the issues of food security faced by Japan. Thus, the Government-General of Korea launched the Rice Production Increase Plan in 1920 to boost the production of rice in Korea to export to Japan.

From 1918 onwards, both the volume and price of Korea's rice exports to Japan increased more dramatically than before. This led to the improvement of the balance of payments for Korea during this period. Conversely, the subsequent decline of rice prices in the late 1920s weakened the balance of payments. Although the export volume of rice remained stable around 5 to 6 million koku in the late 1920s, due to the decline of the rice price, its export value decreased dramatically from 190 million yen in 1926 to 110 million yen in 1930, which directly caused Korea's trade deficit. Meanwhile, in the 1910s and the early 1920s, the prices of Japanese manufactured goods declined, thereby contributing to the improvement of the balance of payments for Korea.

After the annexation of Korea by Japan, the value of China-Korea trade kept rising. In the 1910s, the value of exports was like that of imports from China; however, the trade deficit with China enlarged in the 1920s due to an expansion of imports. As for the structure of imports from China, manufactured goods were the major imports in the early 1910s; however, the late 1910s and 1920s witnessed the decline of imports of manufactured goods and the increase of imports of primary commodities, especially foodstuffs. Like Korea-Japan trade, rice accounted for a large

⁷⁹ Ibid., p. 77.

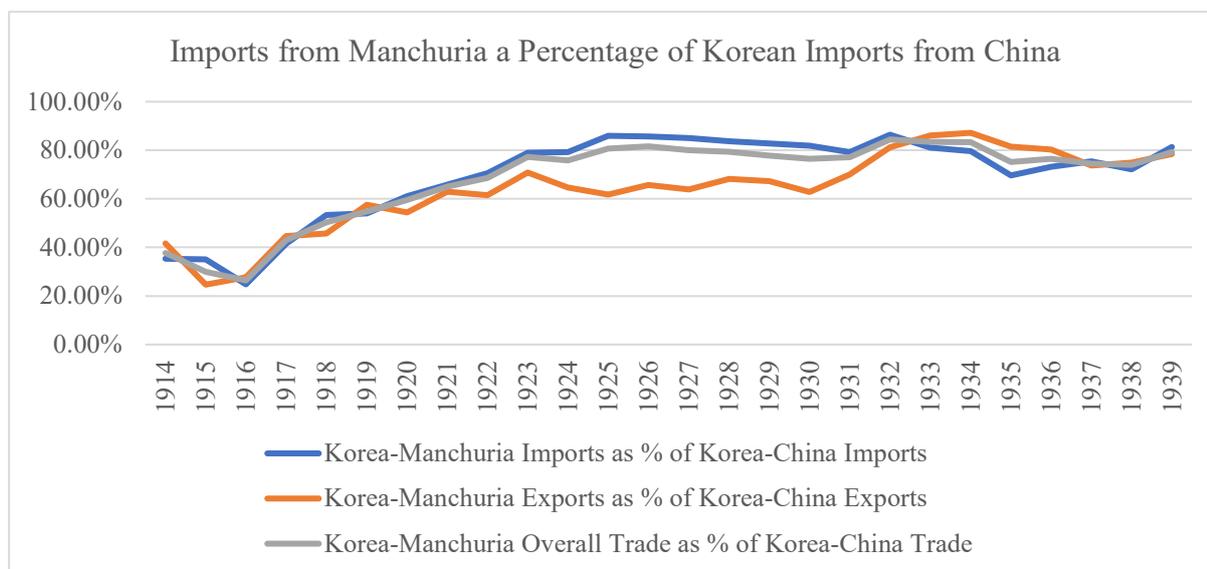
proportion of exports to China in the 1910s. However, the share of rice in total exports to China declined during the decade partly due to the Japanese colonial policy that considered Korea as a producer of rice for Japan.

Also, the shifts of Japanese policy towards a war footing in the late 1920s and 1930s influenced Korea's trade structure and balance of payments. Military considerations led to larger imports of machinery, metals, and raw materials from Japan for the development of heavy industry in colonial Korea. Meanwhile, as Japan invaded Manchuria in 1931 and established a puppet state there in 1932, Korea was not only regarded as a frontline military base but also became a transfer station for military materials and other goods from Japan to Manchuria. This was reflected in the dramatic increase in Korean exports to Manchuria in the late 1930s. Part of the imports from Japan in the late 1930s were re-exported to Manchuria to establish war facilities and meet local demand, including of the Japanese and Korean settlers. In addition, the imports of cotton textiles and clothing from Japan to Korea expanded nearly four times from 1930 to 1939. The imports of grains, flours, foodstuffs, and beverages quadrupled during the same period. Therefore, after the Japanese launched their wartime policy, the expansion of all kinds of imports from Japan resulted in the growing trade deficits of Korea in the 1930s. Some of them were re-exported to Manchuria, leading to a trade surplus during the same period.

Figure 4.6 below shows the increasing share of trade with Manchuria trade in Korea's trade with mainland China as a whole, from 1914 to 1939. Especially from 1916 to 1925, this rose significantly from 26.4 percent to 81.6 percent. In the late 1920s and 1930s, Korea's trade with Manchuria took up a large proportion, around 80 percent, of Korea's overall trade with China.

As such, the increasing proportion of Korea's trade with the yen bloc in the late 1910s and early 1920s can be mainly attributed to the expansion of Korea-Manchuria trade.

Figure 4.6 Imports from Manchuria a Percentage of Korean Imports from China, 1914–1939

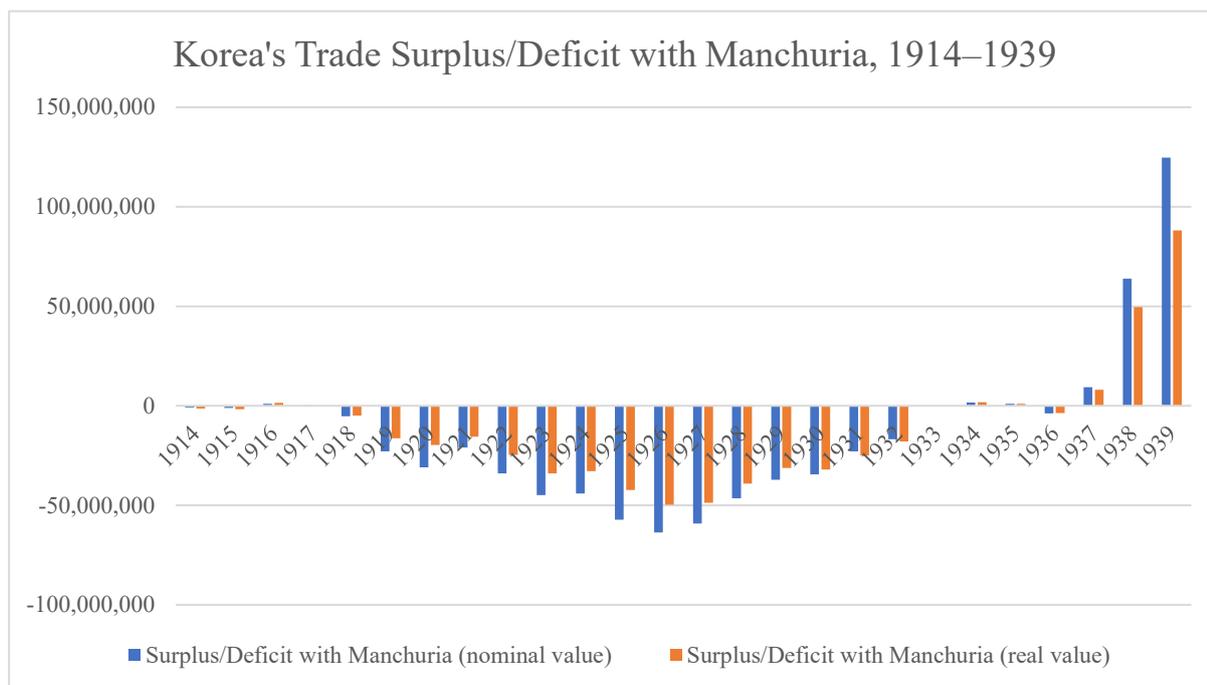


Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō* (*Trade Yearbook of Korea*), Keijō, 1910–1941.

Figure 4.7 shows that there was a deterioration of Korea's balance of payments with Manchuria from 1918 to 1926 and an improving trend from 1926 to 1939. It indicates the increasing trend of more imports than exports in the late 1910s and early 1920s and a reversal of this trend from the late 1920s to 1930s. The trade pattern was unusual in the sense that it changed sharply in the 1920s and 1930s. This sudden shift can be mainly attributed to the Japanese imperialist and military endeavours to invade Manchuria and transfer resources to that region. Korea became a trade channel for Japan to realise its strategic goals. This unusual change also proved that, in certain political and military circumstances, trade expansion within East Asia could be much

more plausibly attributed to Japanese imperialist expansion than to economic complementarity among those countries.

Figure 4.7 Korea's Trade Surplus/Deficit with Manchuria, 1914–1939 (unit: yen)



Source: Chōsen Sōtokufu (Government-General of Korea), *Chōsen bōeki nenpyō (Trade Yearbook of Korea)*, Keijō, 1910-1941.

Note: The real value of Korea's trade with Japan is calculated by using the consumer price indices provided by Mizoguchi, 'Consumer Price Indices', Table A.2(b).

The transformation of Korea's balance of payments with China from deficit to surplus indicated that intra-Asian trade went through further structural change in the interwar period. Japan's full-fledged industrialisation was the prime cause, with a rapid increase in Japan's trade with Korea, Taiwan, and Manchuria. In the 1930s, Japanese exports of consumer goods, such as cotton textiles, to Southeast Asian markets increased, but Japan's trade with its colonies grew more dramatically: there was a sharp increase in exports to Taiwan, Korea, and Kwantung province

in southern Manchuria.⁸⁰ Moreover, imports from countries other than Japanese colonies decreased as a percentage of total imports. Korea also played its role as a transfer station from Japan to Manchuria, as a large proportion of Korean exports to Manchuria in the 1930s were produced in Japan. These trends indicate the regional economic integration of East Asia during this period.⁸¹ The composition of Japanese trade was marked by Japan's export of manufactured goods and import of primary products, a small but rising share of which were related to heavy and chemical industries. The growth of Japanese colonial exports in the 1930s was dominated by industrial products, which resulted from the rapid development of industry and infrastructure in the colonies.⁸² Therefore, Korean trade was also characterised by its imports of Japanese industrial products and exports of those products to Manchuria.

⁸⁰ Booth, *Colonial Legacies*, p. 92.

⁸¹ *Ibid.*

⁸² *Ibid.*

5. Conclusion

This study of Korea's colonial trade with Japan provides some significant points of comparison for many countries in today's world. It also helps us understand Japanese imperialism in East Asia and its impact on the colonies' local economies from the perspective of trade and in a broader context.

Counterintuitively, the commodity terms of trade showed a trend in favour of the colony against the imperial power throughout the period of 1911 to 1939. According to Park and Kim's research, Korea's overall commodity terms of trade declined from 1910 to 1919.⁸³ However, this study found that Korea's net barter terms of trade with Japan improved in the 1910s and continued to increase during the 1920s and 1930s. This finding has broadened our understanding of Korea's terms of trade with the imperialist power and of the impacts of Japanese imperialism on Korea's trade and economy.

Moreover, in the case of Korea's trade with Japan, the Prebisch-Singer thesis turns out to be wrong regarding the net barter terms of trade. Korea's terms of trade improved from 1911 to 1939. The improvement in the terms of trade for Korea with Japan was mainly due to the increase in rice prices and decrease in the prices of silk tissues. However, the terms of trade between Korea and China do conform the trend, as it moved in favour of the secondary exporter, Korea, rather than the primary exporter, China. The improvement of Korea's terms of trade with China resulted from a dramatic decline in the prices of imports, mainly agricultural

⁸³ Park and Kim, 'Hangugui janggi muyeoktonggye', pp. 161-3.

commodities, while the rising prices of manufactured exports, mostly machines and textiles, explains most of Korea's rising terms of trade with Manchuria in the 1930s.

This indicated a paradox of an improving terms of trade and a wider economic gap with Japan. Several reasons might account for this paradox. First, the Japanese government's measures to keep rice prices stable in the 1930s influenced Korea's terms of trade with Japan because it allowed the prices of Korean rice exports to Japan to recover from the Great Depression in the 1930s. While the prices of primary-commodity imports from China showed more volatility, in the 1910s, they increased much more than the secondary commodities, and in the 1920s and 1930s, they also decreased more dramatically. Thus, Korea, as a primary exporter to Japan and a secondary exporter to China, enjoyed improved terms of trade with these two countries from 1911 to 1939. Secondly, the Japanese as well as indigenous Korean investments in the manufacturing industry from the late 1920s and in heavy industry in the 1930s helped Korea become a secondary exporter of the trade with Korea; however, the war policies to develop heavy industry also contributed to this structural economic transformation in colonial Korea.

Moreover, the formation of colonial hierarchy illustrated the layered nature of Japanese colonialism and a colonial hierarchy in East Asia. For Korea, the most encouraging feature of the growing exports of manufactured products to Japan and Manchuria in the late 1930s, half of which were produced in Korea, indicated the development of a modern, native Korean manufacturing industry. However, it should be noted that its development was limited to cotton-textile manufacturing and chemical industries. Some high value-added exports, such as woollen

textiles and machineries, were still produced in Japan. Korea transformed from a peripheral region into a semi-periphery within Japanese colonial empire whilst Manchuria became the periphery providing primary products and acting as the market of manufactured products for the metropole and the semi-periphery.

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