CHANGES IN THE VOLUME AND COMMODITY CHARACTER OF JAPANESE-UNITED STATES TRADE, 1925-1935

Thesis for the Degree of M. A.

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CHANGES IN THE VOLUME AND COMMODITY CHARACTER OF JAPANESE-UNITED STATES TRADE, 1925-1935

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THESIS

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INTRODUCTION

Purpose and Scope

A great deal has been written in various places concerning the foreign trade of Japan and of the United States. This study makes use of much of this material, combining divers sources and complementing them to give a picture of the bilateral trade between the United States and Japan from 1925 to 1935. The period considered begins in a time of prosperity (indeed, the peak year of Japan's foreign trade was 1925) and continues through a great world depression well into the recovery phase. It covers years in which Japan has attained added significance as a market for the United States and has lost some of her former importance as a source of supplies, in which the balance of merchandise trade between the two countries has reversed, and in which the Japanese government's monetary and commercial policy and, to a lesser extent, the United States government's action have been significant factors determining trade movements. The commodity character of the trade is dwelt upon that the effects of these rather unusual conditions may be observed in specific commodities.

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SOURCES

Statistical data were needed to show the movements of trade totals and of individual items. These were obtained principally from publications of the United States Department of Commerce. The Foreign Commerce and Navigation of the United States has furnished the United States statistics and the Commerce Yearbook and consular reports from the Tokyo consulate have furnished the Japanese government figures.

The data are not perfectly comparable by any means. Among other discrepancies, the Japanese statistics distinguish between the trade of Japan Proper and that of the Empire, and do not include Alaska, Hawaii, and Puerto Rico with the United States, while the United States includes these territories in compiling its own trade figures and also includes Chosen, Taiwan, and other possessions, although not Kwantung Leased Territory and Manchukuo, with Japan. Transshipments may be differently entered in the two countries; goods in transit at the year's end may appear in the statistics of one country in one year and in those of the other the next; valuations are on different bases. Nevertheless, despite these and other failings of the data the more significant trends are sufficiently well indicated.[1]

Among the sources of descriptive and analytical materials may be mentioned the Tariff Commission reports, the Bureau of Foreign and Domestic Commerce Trade Information Bulletins and Trade Promotion Series, and the consular reports from Tokyo, beginning with 1930, which the Department of Commerce loaned the writer. Of greatest use has been the Tariff Commission Report No. 105, Second Series, Recent Developments in the Foreign Trade of Japan.

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1 67 #105, p. 30, 32; 1, p. 374.

PROCEDURE

After a brief statement of Japan's rapid commercial development and her trade with the United States at the beginning of the period to be studied, the factors of general importance with regard to the commodity trade of these countries during this period are discussed. Significant changes in the values of Japanese-United States trade, in the bilateral balance of trade, and in the importance of the trade to the two countries receive considerable attention. A discussion of the tariffs of the two countries in relation to their bilateral trade completes Part One. In Parts Two and Three, imports from Japan into the United States and exports from the United States to Japan, respectively, are studied, first with respect to their general nature, and second by an analysis of the movements and nature of the trade in many of the more important commodities. However, the factors that were discussed in Part One are not treated again unless it appeared that certain commodities were particulary affected.

PART ONE

JAPANESE-UNITED STATES TRADE RELATIONS, 1925-1935

CHAPTER I

THE RISE OF JAPAN AS A COMMERCIAL NATION

The Beginning of Commerce

For over two centuries before the uninvited visit of Admiral Perry's four warships in 1853 Japan had prohibited intercourse with foreigners, save for a very limited trade with the Dutch and Chinese at Nagasaki. A previous attempt by Commadore Biddle had failed, but accounts of the confinement of certain American seamen, some shipwrecked and others deserters, who had happened upon Japanese shores and the annexation of California with resultant direct voyages to China, bringing merchant ships as well as whalers into Japanese waters, led to the decision to try again. This time the Japanese were more willing and a treaty was signed on March 31, providing for the opening of certain ports for supplies, the proper treatment of shipwrecked Americans, trade to be carried on through Japanese officials, and the dispatch of an American consul or agent after eighteen months, if either government deemed it necessary. Similar treaties with other countries soon followed.[1] Conventional tariffs fixed the duties at rather low rates for sometime, those of the final treaty of 1866 approximating five per cent. The 1894 treaty with the United States exacted no tariff concessions although this country received the benefit of those granted to European powers.[2]

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1 12,p.5-9; 22,p.16-30.
2 22,p.74-6,115,130,131.

After the Meiji restoration of 1868 intercourse with western nations proceeded at a faster pace. Already the development within Japan of a money economy and a wage-system had begun to undermine the feudal system, formally abolished in 1871 to strengthen the central government. The restoration itself grew out of the increasing poverty among the samurai (war lords) that accompanied this development and the growth of household and handicraft industry and the rise of a commercial class. These tendencies were furthered by the liberal policies of the new government, instituting a national code of laws, a national army, universal educational opportunity, and certain democratic forms of government. Economic advancement was actively sought, though less so in the earlier years, of course. The currency system was reorganized, railways and telegraph lines were built, foreign trade was encouraged, a postal system was set up, and Japanese students were sent abroad to bring back western knowledge and western methods.[1]

Government Enterprise

The first entries into the field of modern industry were often by government establishments. Foreign engineers, technicians, and machinery were imported and model mines and factories built and operated until they could be turned over to private concerns. Silk reeling and spinning, cement, glass, shipping, iron and steel, railway transportation, and sugar production were thus aided. In many fields the government remains an important enterpriser. Less spectacular, but effective, methods have been subsidies and financial grants and loans in aid of specific industries, shipping, agriculture, forestry, and fishing. Public credit had scarcely been touched when the centralized government was established. Extensive bond issues furnished capital for industrial projects, for subsidies, for

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1 12,p.7-11; 22,p.99

colonial development, and for the extensive construction of public works by the local divisions. Through the central banks of Japan proper, Taiwan, and Chosen, large private banks, and special investment banks and cooperative institutions abundant credit has been supplied. Public credit has often been used to guarantee these banks against losses in financing commercial transactions of doubtful safety, several instances of which occurred within the period selected for especial study.

Tariff protection has been given in increasing measure since the early days. The rates under the 1899 treaties averaged about 10 per cent to 1906, and about 15 per cent to 1911. Under the general tariff law of 1911 protection was afforded principally to finished manufactures and raw materials entered free of duty. The average rate rose to about 19 per cent in 1913, fell during the World War to about 8 per cent because of higher prices (at a time, however, when foreign countries were less able to compete), and approximated 17 per cent in 1927 under the act of 1926. The 100 per cent luxury duty imposed in 1924 was retained on many commodities. Shipping subsidies, government inspection of exports, and other measures have been adopted to promote trade.[1]

Political Expansion

Trouble with China arose from a dispute over the allegiance of the Ryukyu Islanders, claimed by Japan, and the murder by savages of a number of them who were shipwrecked in 1871 on the coast of Formosa, a Chinese possession. A Japanese expedition to punish the savages was resented by the Chinese government, but the difficulty was smoothed over for a time. Recurring offenses of the Koreans against Japanese seamen and, after the signing of the treaty of 1876 providing for the peaceful opening of the country, attacks upon Japanese residents there led to Japanese inter-

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1 12, p. 312-26.

vention at the time of the 1894 rebellion which the Korean Government seemed unable to suppress. China, upholding her refusal to recognize Korean independence, also sent troops and the Chino-Japanese War resulted. Winning, in 1895 Japan received Formosa and the Pescadores Islands as well as recognition of Korean independence. The opposition of European powers prevented her taking also the Liaotung Peninsula.[1]

Subsequently, Russia acquired certain rights in China by secret treaties and extended her influence in Manchuria and Korea. Instead of evacuating in accordance with her treaty with China she continued to strengthen her forces until Japan sought to protect her interests by military resistance. Her decisive triumph won her the recognition of the world, the railway rights in Southern Manchuria formerly held by the Russians, recognition of her paramount interests in Korea, the southern half of the island of Saghalien (Karafuto), and a 99-year lease of Kwantung Province. In 1910 the treaty of 1904 guaranteeing Korean independence was superseded by another formally annexing Korea. Japanese influence and enterprise continued to expand in Southern Manchuria, culminating finally in the episode of 1931 and 1932. As a result of her assistance to the Allies in the World War she received a mandate over the Marianne, Pelew, Caroline, and Marshall islands in the South Seas, which she did not trouble to turn over to the League of Nations upon her withdrawal in connection with the Manchurian dispute.[2]

Growth of Population

Meanwhile, the population, that had been more or less stationary at around 30,000,000 before the beginning of foreign intercourse, was increasing, roughly paralleling the economic growth of the country, that is, at an increasing rate, particularly marked from the beginning of the

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1 12, p. 24; 22, p. 106-8, 134-59.
2 22, p. 177-82, 199, 200; 12, p. 24; 6, p. 349-54.

World War period. This was possible only because of the economic development, for other countries rarely welcomed Japanese immigrants and their new territories did not provide room for any significant numbers. The latter were already settled, for the most part, and the inhabitants lived so cheaply that the Japanese immigrant could not compete with them . That the proportion of the population living in towns of over 10,000 rose from 16 per cent in 1894 to 36.6 per cent in 1925 reveals the increasing dependence upon industry.[1]

Not only did industry expand more rapidly than the population, but the production of agricultural materials and foodstuffs also, so that the standard of living has risen. But, the rate of increase of the food supply has declined since 1920 and that of industrial production since 1926 while the growth of population continues and new workers are continually coming of working age.[2]

The Effects of the World War

By far the greatest part of the expansion enabling Japan to support her people came during the World War. In 1913 native domestic industry had not been widely superseded by modern factories; 890,000 were employed in manufacturing where the work was done mainly by machinery, while nearly 1,100,000 were employed in industries depending chiefly upon hand labor. By 1921 these numbers had become 1,465,000 in factories where machinery performed most of the work, and only 737,000 in industries principally dependent upon hand labor. The number of factories increased from 9,403, of which 6,408 were not worked by power, in 1913 to 30,128 in 1920, 16,022 of which were not worked by power. The movement continued at a slower rate until, in 1926, there were 41,514 factories, of which only 10,392 were not worked by power.[3]

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1 12, p. 385, 396; 8, p. 245, 246, 249.
2 15, p. 62; 12, p. 396-9.
3 59 #642, p. 4, 5.

Large orders for military supplies from the Allies and curtailed European competition in Japanese markets and an opportunity to enter competitive foreign markets promoted a tremendous boom.[1] Modern equipment was installed[2] and more advanced manufactures were developed. The textile industry advanced from the stage of coarse-goods manufacturing to the manufacture of finished goods; the machinery, tool, and chemical industries did likewise; and the metallurgical industry arose.[3] The prosperity of the United States brought a demand for silk that sent sericulture to new heights. Foreign trade, adjusted for price changes by the Bank of Japan index of wholesale prices based on 1900 as 100, rose from ¥1,029,396,000 in 1913 to ¥1,424,742,000 in 1918. This was exceeded by the total in each year from 1924 to 1929, however. The trade balance, unadjusted for price changes, turned positive from 1925 to 1918 for the first time since 1909.[4] In nearly every other year since Japan entered world markets her merchandise balance has been passive.

Most of the commodities that first became important during the war almost immediately lost most of their importance upon its close. Iron manufactures, machinery and parts, and, to some extent, drugs, chemicals, and medicines maintained their war-time position. On the other hand, exports of copper and imitation Panama hats entirely lost their pre-war position. Japan's major activity remained concentrated upon the pre-war staples.[5] Certain unfavorable results were also brought by the war, notably, inflation, disorganized exchanges, a belief among business men that the extraordinary war profits were the usual accompaniments of modern business,[6] and an influx of workers to the cities unfitting them for rural life.[7] Evil effects were especially felt in the depression of

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1 12, p. 304.
2 59 #642, p. 4.
3 21, p. 1.
4 12, p. 304, 594.
5 59 #642, p. 9-14.
6 12, p. 304, 305.
7 [illegible] p. 248, 249.

1930, although they contributed also to the difficulties of 1927.

Comparative Advantage

The population of Japan on October 1, 1936, according to the last national census, was 69,254,148, nearly five million more than in 1930.[1] The area of the country is 147,416 square miles, and the density of population about 450 per square mile. The population density in the United States was 41.3 per square mile in 1932. Moreover, only about one-sixth of the land is arable, the rest being too mountainous or too sterile. Japan is a small, densely populated, highly industrialized country, dependent upon free commerce and a large navy. "Highly industrialized" is the only part of this description that would fit the United States. Japan has an extremely long coast line (1 mile per 8.5 square miles of land area) which facilitates commerce and fishing. Nearness to Asian markets and water routes to nearly all markets are conspicuous advantages.[2] Nevertheless, save for those industries dependent upon a natural advantage, such as camphor production, her exports to such highly industrialized countries as the United States are apt to be those things in which a great deal of labor is required. The use of large amounts of capital in contrast to labor is not her forte. Nevertheless, rapid advances have been made in the use of machinery; mountain rivers furnish abundant water power; rationalization has heightened the efficiency of the organization of her industries; and the wide use of public credit has permitted rapid industrial expansion. In textile exports to Asiatic countries she has a decided comparative advantage, but she has not been able to compete successfully in our markets over our tariff walls on any large scale. With relation to the United States under existing tariff conditions her natural advantage in the production of raw silk, tea, pyrethrum, camphor, and acquatic foods

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1 40.1.
2 12, p. 25, 26.

has been important. These things are largely non-competitive. In other lines such as pottery, straw-braid, brushes, and toys low labor costs have been a predominant factor, along with experience and available raw materials. Labor also is a large item in raw silk and tea production. In the latter case, Japanese workers have not been able to compensate for the lower wages paid in other tea-growing regions by greater effectiveness. Household industries, with low capital costs, continue to produce a rather important part of her exports.[1] Whether it be in actuality an advantage to Japan or a disadvantage, the fact remains that labor is only factor of production that she has in abundance. Therefore it is to be expected that it will be relatively cheap and that large amounts will be used.

External Dependence and Foreign Trade

Clay for pottery, limestone and other cement materials, and copper are about the only minerals which Japan possesses in adequate amount.[2] She has fairly large deposits of coal of a poor quality, but has been on an import basis in recent years.[3] Other important raw materials must be imported. Timber, wood pulp, and sugar come mostly from her colonies, but raw cotton, wool, iron ore, pig iron, aluminum and nickel, petroleum, and rubber must be brought in from abroad.[4]

Therefore it is not surprising that 56 per cent of Japan's imports in 1926 were raw materials and 15 per cent were semi-manufactures. Raw materials, principally raw cotton, wool, and oil cake, had increased relatively from an average of 47 per cent in 1909 to 1913. Old and scrap iron and steel and wood pulp were the leading semimanufactures, which had declined slightly in proportion from an 18½ per cent average in 1909 to 1913 after being higher in almost all intervening years. In all these items her resources were limited. Finished manufactures constituted 13

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1 7.5, p. 39-41; 71, p. 457, 458, 467, 468.
2 71, p. 184.
3 21, p. 6-8; 8, p. 230.
4 8, p. 9-19.

per cent in 1926, having declined proportionately from 21 per cent in 1909 to 1913 pursuant to the increased industrialization of the country. The principal item, machinery and parts, was imported, in practice, to be used in furthering manufacturing within the country. As yet the Japanese had not been able to equal the technical and industrial advancement of western countries. Foodstuffs had amounted to 12½ per cent of the total imports in the years from 1909 to 1913, on an average. By 1926 their proportion had risen to 15 per cent. Beans and peas were the principal import for domestic consumption; large proportions of the wheat and sugar imports were processed and exported to Asiatic countries.[1] Considering the density of her population Japan is remarkably self-sufficient in her food supply.[2] The average adverse balance in the 9 years ending 1927 was 7 per cent of the total trade in all commodities.[3]

Japan's dependence for export markets is fully as serious. Should she lose these markets she could not procure the needed imports. Especially precarious was her position because raw silk, a raw material and luxury product particularly susceptible to the effects of the business cycle, accounted for 36 per cent of her exports in 1926.[4] Eighty-eight per cent of the total production was exported, of which the United States took over 95 per cent. Over 40 per cent of her exports of all commodities went to the United States and over 25 per cent of her imports came from the same country. Nearly 60 per cent of the value of cotton textiles and over one-third of the production of tea and ceramics are sold in export markets.[5]

Raw silk, classified as a semimanufacture because of the reeling process required for the fibers, composed most of the class of semi-

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1 42; 71, p. 193-200; 12, p. 596.
2 71, p. 201.
3 71, p. 189.
4 59 #642, p. 15.
5 13, p. 419; 15, p.62.

manufactures which accounted for 42½ per cent of Japan's total exports in 1926. This class had declined relatively from an average of 50 per cent in 1909 to 1913. Manufactures had increased in comparison from 30 per cent in 1909 to 1913 to 41 per cent in 1926, marking the rapid advance of Japan in modern factory production, especially of textiles. Her advantage in raw silk production and handicraft products, largely dependent upon low-priced labor and such raw materials as she had, was giving way to developing industrial production. Wheat flour, refined sugar, and acquatic products led the food exports, which totalled 7 per cent, having decreased in proportion from 11 per cent. Japan was becoming less self-sufficient with regard to food. The first two of these exports were in effect manufactured products since the raw material was largely imported. Consonant with the advancing industrialization also was the relative decline of raw material exports (principally coal) from an 8½ per cent average from 1909 to 1913 to 7 per cent in 1926. The balance of the exports were miscellaneous and reexported products.[1]

In 1925, Japan's world trade, in terms of gold, amounted to 3 per cent of the total trade of the world. The year was the highest for Japan's trade before the depression, but the gold figures discounted this somewhat, for the yen was at a substantial discount.[2]

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1 42; 71, p. 189-92; 12, p. 597; 50 #642, p. 7.
2 41, 1926, Vol. II, p. 590, 591.

CHAPTER II

JAPANESE-UNITED STATES TRADE UNTIL 1925

Development

As early as 1879 the United States became Japan's leading customer as raw silk exports increased rapidly. In 1919 exports from Japan to the United States reached their highest point before 1925, ¥328,000,000. Raw silk, silk textiles, refined tea, straw-braid, fancy mats, and porcelain were the principal exports from the beginning.[1]

Imports likewise advanced rapidly, but did not exceed exports in any years from 1875 to the World War except 1900 and 1905. In the early days the United States was 4th in importance as a source of imports, behind Great Britain, China, and France. The development of the spinning industry required Indian cotton and in 1893 India became the first supplier followed by Great Britain, the United States, and China.[2]

As a result of the World War and the completion of the Panama Canal in 1914,[3] lowering transportation costs between Japan and Atlantic ports, the United States assumed a position of new importance in Japan's trade. In 1913 China, taking 34½ per cent of Japan's exports, was the leading customer and the United States was second, buying 29 per cent of her exports, or ¥184,000,000.[4] In 1919, however, the United States was again in first place,[5] and by 1923 the proportion sent to China had fallen to 27 per cent and that going to the United States had risen to 42 per cent. A similar change occurred in the position of the United States as a source of Japan's imports, but in this case British India, supplying

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1 1, p. 384.
2 1, p. 384.
3 3, Vol. VIII, p. 6445.
4 59 #642, p. 19.
5 1, p. 384, 385.

24 per cent in 1913, and Great Britain, supplying 16.8 per cent, were supplanted during the war. The proportion from the United States rose from 16.7 per cent in 1913 to 37½ per cent in 1918 while that from British India declined to 16 per cent and that from Great Britain to 4 per cent.[1]

From 1913 to 1927 the percentage of raw cotton imports coming from the United States rose from 27½ to 55, that of iron bars and rods from 8 to 36, and of machinery from 21½ to 40. In the last two items great gains in the war period were lost to a large degree as European countries reentered the market. Wheat and lumber imports into Japan expanded tremendously during this time; about 35 per cent of the former and 70 per cent of the latter came from the United States in 1927.[2]

Silk and cotton yarns and tissues accounted for over 65 per cent of Japan's total exports in post-war years. Of these, the United States was the leading market for raw silk, taking 66½ per cent in 1913 and 94 per cent in 1927, and, in 1927, the second market for silk tissues. Although the proportion exported to the United States rose from 14 per cent in 1913 to 24 per cent in 1918, it had fallen to 13 per cent by 1927. Cotton yarns and tissues are sent chiefly to Asiatic markets.[3]

During the war years imports from the United States increased so greatly as to cause a reversal of the bilateral balance of trade in 1918, 1920, and 1921. In 1920 imports from the United States reached ¥873,000,000, the all-time high. In 1920 and 1921 the balances with the United States and with all countries were negative, for Japan still required large amounts of raw materials while her exports declined greatly under the depression of 1920 and revived foreign competition.[4]

The Status at the Beginning of Our Period

In 1925 Japan took 4½ per cent of the exports of the United States

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1 59 #642, p. 18, 19.
2 59 #642, p. 20, 21.
3 59 #642, p. 21, 22.
4 1, p. 384, 385; 59 [illegible]

and supplied 9 per cent of the general imports; the United States, much more important in Japan's trade, took 43½ per cent of her exports, principally raw silk, and supplied 26 per cent of her imports (largely raw cotton). Despite her rather small percentage, Japan ranked third as a source of imports for the United States, following Canada and the United Kingdom, and fifth as a market, after Canada, the United Kingdom, Germany, and France.[1]

Crude materials, including raw silk, formed a much larger part and finished manufactures a much smaller part of Japan's exports to the United States in 1928 than of her total exports. Therefore her exports to this country would be particularly subject to falling prices and declining demand should a depression come, the more so since raw silk was a luxury as well as a raw material. Imports from the United States varied less from the norm of Japan's trade, the principal difference being a larger proportion of finished manufactures.

For the United States, crude materials were a far more important element in imports from Japan in 1928 than from all other countries, while other classes were correspondingly less important. In exports to Japan, crude materials and semimanufactures were of more importance relatively than in all exports, while the other classes were considerably less significant.

The predominance of raw silk and cotton in the trade between Japan and the United States is in itself sufficient to make it complementary for the most part. The other commodities important in trade are largely complementary, however, although they often are dutiable. Japan's imports of crude petroleum, lumber, old and scrap iron and steel, wood pulp, hides and skins,

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1 41.

and phosphorite are all necessary materials for her economy. These or substitutes are all to be had in Japan, but in limited amounts which must be supplemented. Moulton estimates that only 40 per cent of our exports to Japan were competitive. Tea, undressed furs, camphor, pyrethrum, some vegetable oils, and certain fish and fish products are exported to the United States and do not compete significantly with domestic products, although there is domestic production of synthetic camphor. Only about 4 per cent of Japan's exports were "competitive" products before the depression, according to H. G. Moulton.[1]

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1 12, p. 474, 475.

CHAPTER III

CYCLICAL AND MONETARY CONDITIONS AFFECTING JAPANESE-UNITED STATES TRADE, 1925-1935

A general correspondence exists between the trade of Japan and the United States with the world and with each other, the more so because of their importance in each other's total trade. Certain of the factors affecting their mutual trade affect trade with all countries; others, of more limited incidence, may account for variations from the norm.

Three phases are distinguishable in United States-Japanese trade during this eleven-year period. The first, from 1925 to 1929, was a time of ostensible normality; the second, 1930 and 1931, was composed of depression years during which the trade of all countries, as of the United States and Japan, declined at an astounding pace; the third, 1932 to 1935, was characterized by marked recovery, beginning for Japan in 1932 and appearing in the statistics of United States trade in 1933.

Prosperity

The high points of Japanese-United States trade corresponded with those of the total trade of the two countries. Japan's trade with all countries reached ¥4,878,000,000 in 1925; her trade with the United States amounted to ¥1,671,000,000. While yen values of Japanese-United States trade declined until 1928, rising sharply in 1929 to ¥1,568,000,000, United States statistics showed a rise from $612,000,000 in 1925 to $690,000,000 in 1929. The total foreign trade of the United States in the latter year amounted to $9,640,000,000 the highest in history save for the phenomenal year 1920.[1]

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1 7.5, p. 136; 41; 42.

Wholesale prices declined in both countries during these years, part of a world-wide movement. Japan had not returned to gold since the war and her prices might not have been affected so greatly had she not been following a program of general retrenchment and deflation after the inflation and boom of the war period and the later reconstruction boom following the 1923 earthquake. The fall of yen prices largely accounts for the decline in the yen values of her trade with the United States. The external value of the yen was moving upward, however, so that the gold value of her trade actually increased, as shown by the United States statistics.[1]

In 1925, Japan was following a program of retrenchment and reconstruction in an effort to come back to normal.[2] War-time expansion had left her particularly susceptible to the troubles of the post-war depression. Furthermore, the severe earthquake of 1923 had caused enormous damage in an area in which were located factories producing about 55 per cent of her output of electrical equipment and 30 per cent of the output of other machinery.[3] The replacement of temporary structures was responsible for a large amount of building activity.[4]

Attempts to carry on this program in 1926 met with less success owing to unfavorable business conditions. A general tariff increase on March 29 failed to stimulate business as much as had been hoped.[5] The year was characterized by rather general depression and financial stringency.[6]

The panic in 1927 was the result of a large volume of "earthquake bills", estimated at ¥207,000,000, which were to fall due that year and which business men were not able to meet. The government, closely connected with the banks, had guaranteed them against losses on commercial paper held at

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1 Table XLIX, Appendix, p. 181.
2 51, p. 440.
3 59 #505, p. 23.
4 42, 1925, p. 673.
5 51, p. 440, 441.
6 42, 1926, Vol. II, p. 338.

the time of the earthquake in 1923 and made of little value by that event, up to ¥100,000,000. Failure to enlarge this guarantee in time resulted in the panic.[1] The panic was part of a world-wide recession, also felt in the United States, but it struck with particular severity in Japan, and actually did her good by forcing reorganization on a sounder basis.

Financial readjustment and some progress in rationalizing industry occupied the next two years. In many ways Japanese industry was on a sounder basis in 1928 than it had been for sometime. Importers and manufacturers bought cautiously, fearing the projected removal of the gold embargo would result in falling prices.[2] Business activity was generally greater in 1929 despite the deflationary program of the new Minseito government.[3] This government came into office on a platform of retrenchment, a balanced budget without borrowing, and no loans to private business, looking toward the lifting of the gold embargo.[4] As a result of this policy and the first signs of the world depression many projected enterprises were postponed.

The Beginnings of the Depression

In the United States, on the other hand, the recession of 1927 had given slight pause to most business men and the years 1928 and 1929 were marked by great activity. Unfortunately, however, far too much of this was in real estate and the stock market. Although price levels did not rise, credit inflation was present, for the rapidly increasing productivity should have resulted in lower prices than existed. Loans to our European debtors helped to hide the danger here and generated an almost world-wide credit expansion. In 1927, partly to help Great Britain maintain the gold standard, and partly to halt the downward trend of business in the United States, the Federal Reserve System initiated a

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1 54.
2 42, 1929, Vol. II, p. 390.
3 12, p. 310.
4 18, p. 74.

policy of purchasing securities in order to lower interest rates, including the call loan rate. By 1928 the inflation was out of control. The stock market boomed and call rates went so high as to draw funds from domestic business corporations and from abroad. With the crash of security prices in October, 1929, the world depression had begun.[1] Other factors of as great importance were the result of the post-war maladjustments. New producing areas had entered world markets during the war, both in agricultural products and in manufactures. Japan is an outstanding example of the latter, while the United States benefited in both fields. By 1925 or so the combatant countries were ready to resume their old places, but found them filled. Intensified competition and the larger amounts of raw materials and foodstuffs being produced and no longer in as great demand by the countries that had largely finished reconstruction activities forced prices downward. Trade barriers had been generally raised since the war by countries seeking a larger degree of self-sufficiency. Nationalism was more pronounced. Add to these factors the burden of war debts and reparations payments, impossible to meet after the cessation of loans by the United States in 1928, because of the high tariff barriers in that country and the maldistribution of gold, and we have sufficient cause for a depression such as resulted.

Depression

During the depression period the Japanese government continued its conservative policy.[2] The gold embargo was removed in January, 1930, in accordance with its announced program,[3] despite the opposition of business men who thought their prosperity depended upon a currency not tied to gold. This move necessarily reduced the inflated currency and

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1 19, p. 48-54.
2 18, p. 74.
3 67 #105, p. 15.

lowered commodity prices[1] at a time when the effects of the world depression intensified the difficulty of adjustment. The government followed its "no loan" policy very closely with the possible exception of the ¥70,000,000 agricultural relief loan, but attempted in several other ways to ease the situation and improve the condition of industry without much noticeable success. The index of yen prices fell from 175 in 1929 to 122 in 1931. As a result of this combination of circumstances the situation in 1931 was characterized by the United States Consul as one of the worst slumps in Japan's economic history.[2] In a country where the government had typically taken the lead in industrial matters and come to the rescue of business men whenever hard times struck, the force of deflation under these conditions was particularly obnoxious to the individual.

Japan was not alone in her difficulty. World prices in general fell 30 to 40 per cent by 1932;[3] prices in the United States fell from an index of 95.3 in 1929 to 64.8 in 1932.[4] The demand for protection led to higher tariffs in nearly all countries of the world. The United States was among the leaders with the 1930 Smoot-Hawley tariff. As the depression wore on and trade fell to new levels quotas and exchange restrictions were imposed in efforts to safeguard the balances of trade and the financial positions of countries. Intense agricultural distress in most countries and a rapidly growing nationalistic spirit led to further restrictions on trade, protection for agriculture, and attempts to develop self-sufficiency. These measures did not reach their utmost intensity until after 1931, but the retarding effect on world trade of the numerous obstacles that were in existance during this period was pronounced. Even had there been no

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1 31, p. 4.
2 32, p. 1.
3 19, p. 11.
4 Table XLIX, Appendix, p. 181.

such changes, falling prices enhanced the protective effect of specific duties making them a greater barrier to trade.[1] Japanese exports to oriental markets were greatly handicapped also by the decline of silver values making Japanese exchange more costly.[2]

Measured in gold dollars, the total world trade declined from $69,000,000,000 in 1929 to $30,000,000,000 in 1931, a fall of 57 per cent. The total trade of the United States in the same years fell 53 per cent from $9,496,000,000 to $4,467,000,000 and the trade of Japan fell 42 per cent, from $1,965,000,000 in 1929 to $1,136,000,000 in 1931.[3] In yen the fall was 45 per cent, from ¥4,365,000,000 to ¥2,383,000,000,[4] the higher exchange value of the yen causing gold figures to show a somewhat smaller fall. Japan especially, but also the United States, suffered smaller losses than did the world in general. The decline of United States trade with Japan in the period was from $690,421,000 in 1929 to $361,188,000 in 1931, or 48 per cent. It is apparent that Japan's trade with the United States declined more than her trade with all countries although this same trade fell less than did the trade of the United States with all countries. The former was to be expected in view of the larger proportion of raw cotton and raw silk, both agricultural raw materials and raw silk also a luxury product, in her trade with the United States than in her trade with all countries. Nor is it unreasonable that the trade of the United States with Japan should decline less than its trade with the world when we consider that the trade of Japan declined considerably less than world trade in general. The importance of raw materials in Japan's trade makes her smaller decline rather unusual since raw materials are typically the most severely affected by a depression. However, the dependence of Japan

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1 71, p. 6, 9, 10.
2 12, p. 311.
3 71, p. 7.
4 71, p. 503.

for so many things needed for her industry may have helped to keep her trade nearer pre-depression levels.

Recovery

Devaluation

Although the recovery period was said to begin with 1932, it really dates from the reimposition of the gold embargo in Japan in December, 1931. The British suspension in September appeared to be the sign for an outflow of gold from Japan, which, following a cabinet crisis and the replacement of the Minseito government, preceded her departure from gold.[1] The depreciation of the yen preceeded at a rapid pace in terms of gold in 1932, falling at a slower rate in 1933 and 1934, and holding fairly steady in 1935.[2] The domestic price level rose but much more slowly.[3] The new government increased expenditures and borrowings at a rapid pace. Currency inflation was promoted in 1932 but did not go far enough to cause a very great rise in prices. An abundance of funds was available at relatively low interest rates.[4]

When the gold embargo was reimposed gold shipments could no longer be used to balance the more intense demand for foreign currencies by holders of yen than for yen exchange by holders of foreign moneys. The resultant fall in the exchange value of the yen enabled foreign buyers to pay the same price in terms of yen with smaller amounts of their own money, which gave a tremendous impetus to exports from Japan. Since inflation did not take place within the country to any marked extent there was nothing to send domestic prices up as long as their stocks of raw materials lasted. As it became necessary to import raw materials the yen had much less purchasing power in world markets than formerly

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1 32, p. 1.
2 9.
3 Table XLIX, Appendix, p. 181.
4 33, p. 2.

and prices were found to be correspondingly higher. Higher raw material prices tended to force up costs and thus domestic prices. An increased demand for capital and labor from the export industries wouldalso tend to force up the prices of these factors of production. However, in Japan opposing tendencies such as the over-supply of labor and the appeals of the government actually resulted in lower wages. In any event wages and prices of domestic goods would have responded but slowly. Export prices, partially determined by slowly-rising domestic costs thus advanced much more slowly than the prices of imports in which the adjustment for the depreciated exchange took place almost at once.

The Japanese Minister of Finance was given the power to prohibit or restrict dealings in foreign exchange, but it does not appear that he used it very extensively. His power was later extended under the Foreign Exchange Control Law and dealers in and holders of claims to foreign currencies were required to report their holdings or transactions. The primary object of this was to prevent the flight of capital.[1] Although the depreciation of the yen was probably not actively encouraged by government intent, the administration was certainly not anxious to stop it as long as the results seemed beneficial.

Agricultural distress reached new depths in 1932, but industry was practically booming due to the favorable export situation and the demand for military goods that accompanied the Sino-Japanese conflict.[2] A spirit optimism developed in 1932 that faded rather rapidly in 1933[3] with the panic in the United States. The bank holiday of that year assumed very serious proportions for a time and an extremely large number of banks remained closed after the moratorium. Exports of gold were not renewed, however. As in the case of Japan there had been a change of administration

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1 See also p.31.
2 33, p. 2, 5.
3 36, January, 1933, p. 1.

and radically changed policies ensued. The departure from gold was to facilitate a policy of reflation; certainly there was no suggestion of a loss of gold sufficient to force the United States from the standard.[1] This episode temporarily halted Japanese trade with this country and caused great uncertainty thereas to the effects upon yen exchange and her export trade of the fall of the dollar.[2] This fall did check the decline in yen-dollar exchange, and it rose to somewhat higher levels in the next two years.[3] The British devaluation had given that country an advantage over the United States in selling to Japan, for the yen was worth 78 per cent of par in terms of sterling in 1932, but only 56 per cent in terms of dollars.[4] After the fall of the dollar in 1933, United States exporters improved their positions, although rising commodity prices in this country largely offset the exchange advantage.[5] The upturn of prices that began in 1933 in the United States[6] was partly the result of better conditions that prevailed throughout the world, partly the result of the depreciation of the dollar, and partly the result of the NRA and the AAA. The upturn in the trade of the United States with all countries and with Japan also began in this year. On January 31, 1934, the gold value of the dollar was provisionally fixed at 59.06 per cent of the old parity.[7]

Trade Expansion

Japan's trade expansion continued in 1933 and 1934 despite difficulties. The rapid depreciation of the yen meant rapidly rising prices of imported raw materials which are so essential to Japanese exports. At first accumulated stocks postponed the ill effects of this; in later years rising costs from this source have been nearly balanced by increased efficiency and lower wages as mentioned above. Production costs have probably risen less with recovery in Japan than the United States.

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1 19, p. 121, 122.
2 36, March, 1933, p. 1.
3 Table XLIX, Appendix, p. 181.
4 33, p. 6
5 36, June, 1933, p. 1.
6 Table XLIX, Appendix, p. 181.
7 9.

New investments had fallen off greatly from 1929 to 1932, but were resumed in 1933 and 1934 in large amounts, although still far below those of 1926 to 1928. In many cases these were projects postponed in 1929.[1]

There was a temporary lag in business during the first half of 1935 resulting from apprehension over international exchange and currency developments, uncertainty over United States condition, fears of a curtailment of exports as a result of foreign restrictive measures, and tightness in the money market during March and April. A marked improvement in business in the United States and the speculative incentive offered by the Italo-Ethiopian War joined with the continuing favorable factors of the recovery phase to send foreign trade above the peak year 1925. Progress toward rationalization, the coordination of exporters, and the diversification of exports continued.[2]

Government expenditures on a mammoth scale accompanied by unbalanced budgets and extensive borrowing marked the recovery period in both Japan and the United States. Japan's national debt increased from ¥6,032,393,000 on December 31, 1929, of which ¥1,446,896,000 was foreign,[3] to ¥9,982,902,000 at the end of November, 1935, of which ¥1,396,613,000 was foreign.[4] The United States had reduced its national debt under previous administrations, but during this period it rose to a new peacetime high of over $30,000,000,000. This, however, is wholly internal and our resources are such as to make it a matter of less concern than is the debt of Japan.

Even when measured in old gold dollars, the part of Japan in world trade increased during this period. Her share rose from 2.9 per cent of the world's import trade in 1931 to 3.4 per cent in 1934 and from 3.0 per cent of the export trade in 1931 to 3.5 per cent in 1934. The United States in the same period lost in relation to total world imports, falling from 10.1 per cent

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1 36, January, 1935, p. 6, 7.
2 38, p. 1, 2.
3 12, p. 242.
4 37, December 23, 1935, p. 10.

to 8.3 per cent. Its share of world exports fell from 13.0 per cent in 1931 to 11.5 per cent in 1934.[1]

Using the countries' own currencies we find that the proportion of trade with Japan in the total trade of the United States jumped from 8.1 per cent in 1931 to 9.2 per cent in 1932, but it failed to hold this gain and was back at 8.3 per cent in 1935.[2] A similar movement took place in the relationship of Japanese-United States trade to the total trade of Japan, measured in yen. The proportion was 32 per cent in 1931, jumped to 35 per cent in 1932, and thereafter declined to 27 per cent in 1935.[3] This movement may be accounted for in large part by the following facts: Exports of raw silk to the United States rose in value in 1932 over 1931, but fell in subsequent years. Raw silk also accounted for a larger proportion of the total exports of Japan in 1932 than in following years, although not as large a proportion as in preceding years. Imports from Japan constituted 10 per cent of total United States imports in 1932, more than in any other year of this eleven-year period. Raw cotton, an important item in Japan's import trade, was secured more largely from this country in 1932 than in the years before and after, the spread between the prices of United States and of Indian cotton having been much less than usual in that year. Japanese imports of raw cotton from the United States doubled from 1931 to 1932. The increases in these two commodities in 1932 were the principal causes for the relative increase in importance of Japanese-United States trade in 1932. Since that year silk imports into the United States have declined and Japan's cotton has come more largely from other sources. Imports from the United States have become larger than exports to it, reversing the pre-depression situation. The tremendous expansion of Japan's exports has taken place

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1 42: 1935, p. 376; 1933, p. 348.
2 General imports and domestic exports, 41 and 58.
3 71, p. 503; 42; 39.

principally in commodities not adapted to the needs of this country, so exports to us have become much less important than formerly. This decline was toogreat to be balanced by the increasing importance of imports from the United States.[1]

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1 67 #105, Tables p. 4, 5, 8, 16, 19, 34-6, 100. See also p. 43 below.

CHAPTER IV

GOVERNMENTAL MEASURES AND COSTS

Government activities rather closely connected with cyclical and monetary conditions have been briefly mentioned in the preceding section. This was done in order that the effects of governmental policies might be seen and that the cyclical changes be explained in some degree. However, many of these measures and others less directly related to the above deserve the fuller treatment which is given here.

Japanese Commercial Policy, 1925-1935

Japan's Problems

A long history of economic leadership has perhaps given the Japanese government a greater feeling of responsibility for the economic welfare of the country than other governments have whose recent past has been somewhat less concerned with such subjects. Probably of more immediate importance is the peculiar social and financial structures wherein some half dozen families hold about 90 per cent of the national wealth. They cooperate closely with each other and exert a great influence upon the government,[1] thus effecting an extensive control over the industry of the whole nation. Another factor of great and increasing importance is the threat of an excessive population. Until 1926 the increase roughly paralleled the country's economic growth. The latter has slowed down since 1926, however, while the rate of population increase has advanced. The former growth was accompanied by higher standards of living, but a continued economic expansion as rapid as that during the World War and the following years is hardly to be

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1 6.5, p. 154-5; 70.7, p. 186.

expected. Furthermore, although population pressure has already resulted in extensive overmanning of both private and government working staffs, with the coming of working age of large numbers already born, the problem will become intensified.[1]

Another problem of great concern to the government was Japan's persistent import balance of merchandise trade. The negative balance of Japan proper averaged about ¥250,000,000 from 1925 to 1928 and about ¥70,000,000 in the next 6 years, far less than the normal post-war balance. In 1935 the balance of trade reversed and Japan proper had an export balance of ¥27,000,000 although the balance of trade of the Empire remained negative as it had been previously, although by only ¥15,000,000.[2] In the first half of 1936 tariff pressure on major exports and large imports for the munitions industries gave Japan the largest import balance for the six months since 1931.[3]

For the period from 1923 to 1928 a positive balance of invisible items was not enough to offset the trade deficit and there was an adverse yearly net balance of payments of ¥102,000,000 for Japan proper.[4] A summary of the balance of payments of the Japanese Empire, 1927 to 1934, reveals that active balances from shipping and other services rendered to foreigners exceeded the passive merchandise balance by small amounts in 1929, 1932, 1933, and 1934. Before 1929 there was a net capital movement into Japan, offsetting debit balances on account of merchandise and gold movements and services.[5] In 1929 she was a net international debtor to the amount of ¥810,000,000.[6] Since that year the net movement of capital has been outward, mostly in the nature of investments in foreign securities and in

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1 12, p. 385, 386, 396-9.
2 67 #105, p. 14, 23, 24; 39, p.1.
3 39.5.
4 13, p. 419-22.
5 67 #105, p. 23, 24.
6 12, p. 274.

Manchuria and repatriation of Japanese securities. This has been balanced largely by net gold exports.[1]

Whereas in former years the positive balance of trade of Japan proper with the United States was not large enough to offset her import balance with all other countries, from 1932 until 1934, when these balances were reversed, the import balance with the United States was greater than the export balance with allother countries.[2] In 1935 her import balance with the United States was smaller and was exceeded by her export balance with all countries, giving a net export excess of ¥26,837,000, although the Empire still had an import balance of ¥14,700,000.[3]

Government Initiative

Japan's industrial and commercial development has been accompanied by more government aid and control than that of any other country in the same era. Many industries were first begun as government enterprises, particularly mining, textiles, railways, shipping, iron and steel, and sugar refining. These were to be turned over to private enterprise as soon as practicable, but the government had still 371 factories as late as 1928. Public policy has seemed to call for the continuance of the government in the fields of transportation and communication. In addition to direct activity of this sort there has been an abundance of subsidies and loans from the regular and special banks.[4] There are several government monopolies and control schemes in operation; there has been economic and military penetration of the mainland; emigration to Brazil has been encouraged; and exports have been promoted by government inspection, by the depreciation of the yen, and by other methods. Of course, the protective tariff has not been omitted. Had the government

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1 67 #105, p. 23, 24.
2 67 #105, p. 8.
3 39, p. 1. See also p. 42 below.
4 12, p. 312-18.

not actively encouraged the industrialization of the nation, progress would have been much slower in spite of the fact that agriculture was in a state of diminishing returns, for, in addition to the lack of experience and of capital, the Japanese were greatly inhibited by reverence for the traditions of their fathers. Of greater significance than the direct participation were the energies spent in establishing general economic objectives, in studying and adapting the institutions of other countries, and in promoting the more or less simultaneous development of the parts as a coordinated economic system.[1]

Subsidies

Subsidies have taken the forms of direct grants (more or less) and of loans (not always repaid) from government-controlled banks. Among others, there were loans to the silk industry and to shipping concerns in 1930. There have been aids given to almost the whole field of economic activity. Intensification of the effects of the world depression after Japan returned to gold on January 1, 1930, resulted in a subsidy consisting of half the wage cost for the promotion of local engineering works in which the wage bill would exceed 30 per cent of the cost, as a measure to relieve unemployment. Since shortly after the time of the Restoration, the shipping and shipbuilding industries have received attention. The usual methods, reserving coastwise trade for vessels of her own nationals, granting profitable mail contracts, and putting a tariff upon imported ships, are accompanied by the admission free of duty of shipyards' steel imports and the payment of a bounty to Japanese steel manufacturers upon the steel used in building or repairing ships in Japan. In 1930 subsidies were granted to shipping and shipbuilding.

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1 12, p. 336-7

These often permit the government to require low freight rates upon certain commodities when it desires. A few more samples of the range of these grants follow: automobile production, small business men and manufacturers, indigo and fertilizer manufacturers, insurance companies, and stock exchange. Particular efforts have been made to build up the industries needed for national defense and self-sufficiency. The prevalence of government aid has made the people unusually ready to turn to the government for support in crises and to do their best to shift losses to the state.[1]

Export Promotion

Two export guild laws were passed in 1925 permitting the combination of exporters of the same kinds of articles. Although receiving special privileges, few had attained any great success by 1930,[2] but in later years they became more prominent.[3] Exported merchandise must meet the government's standards.[4]

Among other measures of more recent years were the Export Indemnification Law of 1930, the Exchange Control Bill of 1933, and the Trade Protection Law of 1934. The first of these was designed to encourage exports through indemnifying banks for losses on loans secured by exports in accordance with the law. It apparently did not increase exports very greatly.[5] Although the Japanese Finance Minister already had the power to prohibit or restrict dealings in foreign exchange (not, apparently, used very extensively),[6] the Foreign Exchange Control Law was put into operation in May, 1933. It was originally intended to prevent the accumulation of Japanese funds abroad, but the provisions were extended to cover also commodity exports that the government might

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1 6.5, p. 377-93.
2 31, p. 78.
3 38, p. 2.
4 12, p. 144.
5 31, p. 79.
6 70.5, p. 591.

be able to limit them if necessary to prevent the raising of foreign tariff barriers.[1] These things it set about to do by giving the government the authority to prohibit or restrict transactions likely to create the flight of capital. The transactions included and the manner of control were set down in detail in ordinances of the Department of Finance. Remittances with the object of transferring capital, purchases of foreign securities, and loans expressed in foreign currencies might not be made without the permission of the Minister of Finance. Holders of and dealers in foreign exchange and securities expressed in foreign currencies were required to report their holdings and transactions. The government could require holders of securities or claims expressed in foreign currencies to sell them to the Bank of Japan or others to be designated.[2] Through these regulations exports could be controlled should it seem desireable.

Efforts continued in 1934 toward the reduction of the restraints put upon Japanese exports by foreign countries, but with little success. There were at this time 61 export guilds maintaining strict control over production, exports, and prices, hoping to forestall retaliatory measures. The Trade Protection Law in force since May 1, 1934, was intended to protect Japan's foreign trade, particularly against restrictive measures undertaken by the receivers of her goods. The government, given the power by this measure whenever it feels it necessary for the purpose of safeguarding commerce or adjusting trade in answer to measures undertaken or proposed by foreign countries, may impose additional duties not to exceed their value upon specific articles for a specified time, may reduce or remove import duties, or may prohibit or restrict imports or exports.[3]

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1 36, December, 1933, p. 1, 36, 37.
2 1, p. 338, 339.
3 1, p. 423.

Not extensively treated in this section since it has been previously dealt with is the factor of greatest importance in promoting exports--the depreciation of the yen. The immediate effect of this was to lower the prices of Japanese goods in terms of foreign currencies, while yen prices did not respond immediately. While the yen was falling Japan could buy raw materials, process them, and export them later at a lower exchange rate. This advantage has disappeared[1] and yen prices have risen, as was bound to happen, especially since such a large part of Japan's raw materials are imported. Large stocks of certain important materials were on hand at the time of the departure from gold, however. This postponed the evil effects of rising import prices for a time, while falling wages and the improved organization and greater efficiency that have resulted from the rationalization movement to be described in the ensuing section went a long way toward nullifying the effects in later years. Nevertheless, they cannot be permanently avoided.

Rationalization

A great deal has been done to lower costs by the rationalization movement, sponsored by the goverment. More efficient methods, better equipment and machinery, and unified action to control production have resulted. The 1923 earthquake, the 1927 financial panic, and the 1930 deflation weeded out many concerns, leaving the others in a more favorable position to compete. Agriculture and small-scale industries have not benefited greatly with regard to methods and equipment, but unified purchasing and selling through guilds and export associations have aided them as well as the others.

This program was pushed more intensively with the beginning of the depression. The overproduction that has developed in many industries has

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1 40.2.

been largely controlled through the associations that have been set up. The Government is opposed to price-cutting in foreign markets and flooding them with goods, fearing retaliation.[1]

Labor Costs

Wages are far lower, in Japan than in the United States, but less so than is commonly believed. In December, 1934, the average daily wage for male workers in 59 classes of industry was 2.03 yen for 10.27 hours work, and the average daily wage for female workers in 14 classes of industry was .76 yen for 9.27 hours.[2] Hours were cut about 15 per cent in 1929 for women and children under the factory law passed in accordance with the Geneva Labor Convention.[3] In addition to regular wages, workers receive bonuses and supplementary services of many kinds. Many factories employing women furnish dormitories, recreation, and other conveniences, besides feeding the workers at low cost.[4] The small industries and household enterprises usually offer lower wages and fewer advantages, while they demand longer hours. Simple tastes and a cheap standard of living may be satisfied reasonably well with these wages.[5] The large surplus of available labor in agriculture, where conditions have been much worse, especially since 1929, presses wages down.[6] Industrial workers form a very small part of the whole[7] and industrial prosperity depends so largely upon export markets that to a considerable extent wages have depended upon the prices that could be obtained in them.[8] However, despite increasing prosperity, wage rates in 1934 were 8.9 per cent below those of 1931.[9] Other factors making this possible were the acceptance by the workers of the government's claim that such a trend was necessary in

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1 67 #105, p. 27, 28; 37, July 24, 1935, p. 15, 16, 18, 19; 1, p. 687-90.
2 35, p. 137.
3 59 #642, p. 7.
4 67 #105, p. 26; 35, p. 134.
5 67 #105, p. 26; 35, p. 134.
6 35, p. 138.
7 59 #642, p. 7.
8 67 #105, p. 27.
9 35, p. 9.

the national emergency and the rapid growth of population (nearly a million per year).[1]

Actual labor costs are higher than the wage scale would indicate. The effectiveness of Japanese workers and industry is less than that in Western countries in almost all industries but textiles.[2] Nevertheless, being a newly industrialized country, her efficiency has been rising relative to that of the older industrial countries and faster than wage rates.[3]

The Militaristic and Imperialistic Policy of Japan

The army and navy have always been unusually influential in government affairs in Japan when they chose to exert their influence. Under the conservative Minseito government the expenditures for military purposes were reduced markedly. As a consequence, the military party was active in securing the overthrow of that government in 1931 and outdid itself when it again received power. Large army and navy budgets since that time have meant heavy expenditures contributing largely to industrial prosperity and to the national debt.[4] The army, apparently, began the trouble in Manchuria without the consent of the government, which found itself obliged to support the action. Sizeable exports from Japan to the new state of Manchukuo have resulted from the change in control, but shipments to China have declined.

Although it is difficult to be certain just what is the Japanese policy, Manchukuo is the most recent step in a long-developing program of penetration of the mainland. She had previously made extensive investments in China and Manchuria, but after the establishment of the state of Manchukuo, a more definitely planned program seems to have been instituted. Japan has been given the right to maintain certain of her military forces in Manchukuo for cooperative maintenance of the national security; the Japanese-

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1 67 #105, p. 27.
2 6, p. 204-5.
3 67 #105, p. 27.
4 35, p. 15, 16.

government-controlled South Manchuria Railway Company is to operate all Manchukuo-owned railroads and carry on much new construction; and, in general, Japan has pretty largely financed the development of the state. The Manchukuo Information Bulletin, No. 37, published March 1, 1933 by the Department of Foreign Affairs of the Manchukuo Government states, "The principle of the open door and equal opportunity will be observed..." Discrimination against others than Japanese has been charged, but upon uncertain foundations, though it is said that Japanese oil companies receive a different classification and, in that way, a lower rate. However that may be, Japan, including Korea, took over 48 per cent of Manchukuo's exports in 1933 and furnished over 66 per cent of her imports. European and American firms are leaving or losing out, save where there is little Japanese competition.[1] According to H. F. Timperley, Manchukuan officials are unable to suggest any openings for American capital. Japan has many legitimate trade advantages, but the foreign merchants complain of smuggling across the Kwantung leased territory from Dairen and of Japanese merchants importing piece goods through the Japanese parcel post, thus evading the duty.[2] Most of the Japanese in Manchukuo are advisors, engineers, officials, skilled workers, merchants, etc., but there are practically no permanent settlers. The Japanese farmers live too well in comparison with their efficiency to compete with the Chinese, but colonization schemes are being continued, nevertheless. Many say that the resources and market have been overestimated and that many of the investments made so far can only be justified as stragetic measures. In any event, it will be long before the returns justify the economic expenses, let alone the political and military disturbances.[3]

Many believe that the pressure of population has been the cause for

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1 6.8.
2 20.5, p. 300, 301.
3 6.8.

such an adventure as this in Manchukuo. H. Vere Redman, an English observer in Japan, differs, stating that in his opinion the increase of population has served more largely as a defense for policies actually carried out for national political reasons. In any event, if the economic pressure continues unalleviated by the expansion of exports the nation will probably resort to war before the people will accept lower standards of living.[1]

United States Measures

The attention of the United States government has been given principally to domestic recover. Foreign trade is far less vital to the economic welfare of a country as large and abundantly supplied with raw materials as ours. The balance of merchandise trade has been positive ever since 1874[2] and thus has given little concern to the government although this may not be a very sound situation for a creditor country as regards the world at large. In 1929 and 1930 the export balance amounted to over $700,000, but it averaged only $276,000 from 1931 through 1935. Trade with Japan appears not to have been a decisive factor.

Such measures for the promotion of exports as the export banks set up under government sponsorship and the trade agreements have not affected trade with Japan directly to any large degree. Two measures for domestic recovery have been far more important, the NRA and the AAA. The former increased costs in most industries by requiring higher wages and shorter hours at a time when recovery had scarcely begun, if that. It permitted combination within the industry which resulted in higher prices, thus minimizing the favorable effects upon exports of the depreciated dollar. Quotas or additional fees were imposed on several imported commodities under this law in order to protect domestic producers uner the codes.

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1 18, p. 26, 27, 32-4, 218.
2 7.5, p. 110.

The AAA achieved the same results in a different way, with the aid of a severe drought. Crop reduction, government loans on surplus cotton at a fixed price, and processing taxes helped raise the prices of agricultural products.

CHAPTER V

SIGNIFICANT CHANGES IN JAPANESE-UNITED STATES TRADE RELATIONS, 1925-1935

The General Movement

Movements of United States-Japanese Trade, 1925 to 1935

Table I, page 40, presents the values of United States-Japanese trade from 1925 through 1935. The Japanese currency gives a better indication of the movements as they affected Japan, while United States dollars are more significant with regard to our own economy. Aside from currency differences, the import statistics are likely to be more accurate than export figures for the same trade.[1]

In yen, the high point for the total trade was in 1925, with a value of 1.7 billions of yen, although dollar values show the high point to have been 690 millionsof dollars in 1929. Falling price levels and the rising exchange value of the yen account for this variation in large part.

Measures of the physical volume of trade have been found only for the trade of these countries with the world. Furthermore, they so frequently disagree with each other that it has not been thought worthwhile to present any in this study. It is probable, however that the trend of Japan's exports and imports, by quantity, was upward before the depression. It is presumed that trade with the United States, who filled a larger place in the total trade than any other country, followed similar lines.[2]

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1 For other variations see footnotes to Table I, page 40.
2 67 #105, p. 15.

Table I. - Bilateral Trade of Japan and the United States

Year	Japanese Statistics[a] (Values in thousands of yen)			United States Statistics[a] (Values in thousands of dollars)		
	General Exports to the United States	General Imports from the United States	Balance of Trade	General Imports from Japan	Domestic Exports to Japan	Balance of Trade
1925	1,006,253	664,992	+341,261	384,094	227,566	-156,528
1926	860,881	680,186	+180,695	400,693	260,374	-140,319
1927	833,804	673,686	+160,118	402,105	257,139	-144,966
1928	826,141	625,536	+200,605	384,450	287,691	- 96,759
1929	914,084	654,060	+260,024	431,873	258,548	-173,325
1930	506,220	442,882	+ 63,338	279,040	164,042	-114,998
1931	425,330	342,289	+ 83,041	206,349	154,839	- 51,510
1932	445,147	509,873	- 64,726	134,011	134,147	+ 136
1933	492,237	620,788	-128,551	128,418	142,921	+ 14,503
1934	398,928	769,359	-370,431	119,251	209,926	+ 90,675
1935	535,389	809,645	-274,256	152,886[b]	203,260[c]	+ 50,374

a Japanese statistics are for Japan proper and include United States territories with continental United States; United States statistics are for continental United States and the Japanese Empire (Chosen and mandates not included in 1925). "Japan proper", for statistical purposes, includes Karafuto. The four large islands included are Honshu, Shikoku, Kyushu, and Hokkaido. The Japanese Empire includes also Taiwan (Formosa), Chosen (Korea) and adjacent small islands, and the mandated Marianne, Pelew, Caroline, and Marshall islands.[1] The general exports of Japan include re-exports, the "domestic exports" of the United States do not. The "balance of trade" figures were obtained by subtracting the other two columns.

b Imports for consumption.

c Exports including reexports. The corresponding value for 1934 was $210,480. Sources: Japanese Statistics from: 71, p. 503 (1925-34), and 39 (1934-5). United States Statistics from: 41 (1925-34), and 58 (1935).

1 12, p. 24; 32.

After falling by 53 per cent from their 1929 level, exports to the United States began to rise in 1932 following the depreciation of the yen. A small fall in the quantity and a drastic fall in the price of raw silk exports in 1934 far outweighed the 14 per cent increase in the value of other commodities, with the result the lowest figure of the eleven years, 399,000,000 yen.[1] The United States statistics present a decline in imports from Japan lasting through 1934. That the country was still on gold before 1933 explains the apparent contradiction of the Japanese figures.

The available measures of quantity indicate that Japan's exports to all countries did not fall off greatly in volume during the depression years and rose to record amounts after 1932 or 1933.[2] Although the volume of exports of all other commodities than raw silk to the United States rose very much after 1931 the volume of raw silk exports declined. It is not certain what was the trend in the net volume of exports to the United States.

Imports from the United States increased startlingly after 1931, reaching 810,000,000 yen in 1935, not far below the 1920 record of 873,000,000 yen. The United States statistics do not show as large an increase, since monetary devaluation did not go as far as in Japan, nor do they reveal the increase as beginning until 1933, when the devaluation occurred in this country.

Because the prices of Japanese imports rose more rapidly (in yen) than the prices of exports, the high import values following 1932 do not reflect a corresponding increase in the physical volume of trade. Raw cotton, constituting over half of the imports by value, actually decreased in value through 1934, however, although not as rapidly after 1932 as other commodities.[3] In the recovery period the barter terms of trade were unfavorable to Japan. She exported large quantities to the United States at low prices and

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1 67 #105, p. 35.
2 71, p. 529; 9; 10, p. 185, 186; 67 #105, p. 14; 44, 1933, p. 123, & 1934, p. 106, 107.
3 67 #105, p. 36.

imported relatively smaller quantities at high prices. The total value of imports was much greater than that of exports. The things that Japan sent to this country were in relatively small demand, especially raw silk, the bulk of her principal exports. On the other hand, her dependence for raw materials compelled her to buy extensively of raw cotton and other things from this country. Prices were determined in world markets and since she couldn't do without the goods she had to pay them.

The Bilateral Trade Balance

In 1932 United States-Japanese merchandise trade showed an export balance for the United States for the first time in 10 years. In 1934 this amounted to $91,000,000, as compared with $173,000,000 (import balance) in 1929. The principal causes for this reversal were the fall in the value of raw silk imports and the rise in the value of raw cotton exports. Both the quantity and the price of raw silk declined; the quantity of raw cotton has declined since 1932 (but is still well above the pre-depression average) and the price has risen. In 1934 our exports of raw cotton exceeded in value our imports of raw silk. Exports of all other commodities than raw cotton exceeded in value imports of all other commodities than raw silk. Since 1932 these exports increased more rapidly in both quantity and value than the corresponding imports. Our exports to Japan increased largely because she was compelled to buy raw materials and semimanufactures that could be purchased here advantageously; our imports from her did not increase as greatly, even exclusive of raw silk, since the expansion of her exports was in low-priced, low-quality goods for the most part not readily saleable in this country of relatively high purchasing power, effective producers in many lines, and high tariff walls.[1]

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1 67 #105, p. 33-8.

The Relationship to the Total Trade of the Two Countries

Japan's Part in United States Trade

From Table II, page 44, it appears that Japan has become a more important market for United States products during this period. During the first phase over five per cent of our total exports went to Japan. In 1934 the proportion had reached 9.8 per cent. Raw cotton played the most important role here as above. To a certain extent this shift is an outgrowth of the depression since the lowered purchasing power of world markets has made price more important to consumers. It was on a price basis largely that Japan's phenomenal export expansion grew. As a result of this expansion she has increased her imports from the United States more rapidly than other countries. In the future she may have to furnish higher quality goods, but she will be in a better position to do so.[1] At the beginning of this eleven-year period Canada, the United Kingdom, Germany, and France ranked ahead of Japan as markets for United States goods. For a time Japan alternated with France for 4th place, but by 1932 she had climbed into 3rd place, ahead of Germany, where she remained.

Japan's proportion of our total imports moved upward haltingly to reach 10 per cent in 1932. Imports of silk in 1931 and 1932 nearly up to the 1929 level in quantity helped offset the decline in prices. The decline in the quantity and value of silk imports in the next two years overbalanced the increase in other commodities so that total imports from Japan were still falling when those from other countries were rising.[2] Not until 1935 did imports from Japan begin to rise. As a consequence the proportion of our imports from that source dropped to 7.2 per cent in 1934. She was second only to Canada as a source of imports in every year

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1 40.2.
2 67 #105, p. 34, 35.

Table II. - United States-Japanese Trade in Relation to the Total Trade of These Countries

Year	Japan's Part in United States Trade (United States statistics)				The United States' Part in Japanese Trade (Japanese statistics)			
	Per Cent of Total United States Exports	Rank as Market	Per Cent of Total United States General Imports	Rank as Source	Per Cent of Total Japanese Imports	Rank as Source	Per Cent of Total Japanese Exports	Rank as Market
1925	4.6	5	9.1	3	25.8	1	43.6	1
1926	5.4	5	9.0	2	28.6	1	42.1	1
1927	5.3	4	9.6	2	30.9	1	41.9	1
1928	5.6	4	9.4	2	28.5	1	41.9	1
1929	4.9	5	9.8	2	29.5	1	42.5	1
1930	4.3	5	9.1	2	28.7	1	34.4	1
1931	6.4	4	9.9	2	27.7	1	37.1	1
1932	8.4	3	10.1	2	35.6	1	31.6	1
1933	8.5	3	8.8	2	32.4	1	26.4	1
1934	9.8	3	7.2	2	33.7	1	18.4	2
1935	8.9	3	7.5	3	32.7	1	21.4	1

Percentages from: 67 #105, p. 31 (1925-1934); 1935, Japanese statistics, 39; 1935, United States statistics, computed from Table I, page 40, and 58.

Rankings from: United States, 41, 58; Japan, 42, 39, 35, p. 94, 97.

but 1925 and 1935 when the United Kingdom surpassed her.

The Part of the United States in Japan's Trade

Throughout this eleven-year period the United States has been Japan's most important supplier. In the recovery period her share of Japan's total imports stood at a new level of about one-third. As exports of cotton goods led Japan's recovery imports of raw cotton increased. Moreover, the United States supplied a larger proportion of Japan's total imports of cotton. Decreases in quantity have been more than compensated by high prices. This is not the sole factor, however, for after 1932 imports of other commodities from the United States rose faster than those of raw cotton.[1]

Over two-fifths of Japan's exports went to the United States from 1925 to 1929. In the following years the proportion fell until it reached 18½ per cent in 1934, due to the decline in silk prices and to the rapid expansion of exports to other markets than the United States, as explained before.[2] Almost since the beginning of trade with Japan the United States has been her largest customer. This position was lost in 1934 to Manchuria and Kwantung, considered together, but it was regained in 1935. Had those countries been separated the United States would have been first in 1934, but since a large portion of the shipments to Kwantung eventually reaches Manchuria they should be joined.[3]

The United States is far more important in the trade of Japan than Japan is that of the United States. This is not at all surprising in view of the size and wealth of this country. The remarkable thing is that a country as small and devoid of resources as Japan should bulk so large in our trade. The dominant position held by the United States in the

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1 67 #105, p. 36, 37.
2 67 #105, p. 35.
3 35, p. 94, 97.

foreign trade of Japan has joined with other factors to tie the two countries closely together in business matters. As the United States Commercial Attaché in Tokyo, Frank S. Williams, has said, Japan's whole industrial structure is essentially American, having been developed largely with our engineers and machinery. The close proximity of the two countries, the personal contact maintained through the steady flow of travellers in both directions, and the intense interest shown in every financial, economic, and social development in the United States are indicative of the extremely close relationship between Japanese business conditions and conditions in the United States. The countries are fortunate in that trade is largely supplementary. Given careful consideration of such minor trade disputes as are bound to arise occasionally, trade should continue to grow to the mutual advantage of both countries.[1]

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1 35, p. 102, 103.

CHAPTER VI

TARIFFS IN RELATION TO UNITED STATES-JAPANESE TRADE, 1925-1935

Japan

In 1924 Japan imposed a luxury tariff of 100 per cent on designated articles, hoping to reduce the import balance of trade, to curb extravagant spending, and to raise revenue. In 1925 the list of commodities affected was amended by removing articles imported for industrial use, materials for reexport, and certain others from the luxury class. The revision of 1926, a general increase, was declared to embody the following principles: (a) Free entry for raw materials not domestically produced (or produced in insufficient amounts); (b) protection for staple industries with bright prospects; (c) the same or lower import duties if home products are able to compete; (d) lower duties on necessities of life; (e) high duties on other than necessities, to discourage consumption; and (f) a greater proportion of specific duties. A law passed on June 16, 1932, provided for the assessment of specific duties on a basis of 135 per cent of the existing rate for the time being, with certain exceptions.[1] In 1933 the rates were again raised.[2] Japan's leading imports from the United States in 1929 were raw cotton, wood, petroleum products, agricultural products (wheat, rice, and tobacco), automobiles and parts, minerals (iron, lead, and aluminum), machinery, hide and leather, and fertilizers. Although materials to be used in further production predominate, only raw cotton, old iron, hides, and certain fertilizers were admitted free of duty.[3]

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1 1, p. 422, 423, 1296.
2 71, p. 214-18.
3 71, p. 220.

Duties upon imports of foodstuffs and agricultural products have been increased during this period. They tend to weaken the ability of Japanese industrialists to compete in foreign markets, but are a political benefit and may be the result of recognition of the dangers of relying upon export markets as a means of paying for food imports in the face of increasing duties levied by foreign countries.[1]

Japan's own policy has thus tended to restrict her exports, reducing the purchasing power of other countries for her goods by opposing imports from them, and increasing the costs of her manufacturers (eventually, if not already) by giving protection to agricultural products and to the domestic production of semimanufactures and raw materials. In view of her abundant labor supply it would seem wise to facilitate the imports of such raw materials and semimanufactures as might be processed into finished goods. Those industries in which the value added in manufacture is great should be encouraged, even if this means doing without some of the others.[2] Such a program will probably not be adopted, for Japan is giving great attention to the development of self-sufficiency for military reasons and necessarily excluding the above project.

The United States

During this period two tariffs have been in effect in the United States. The Fordney-McCumber tariff of 1922 was known as a highly protective measure; the Smoot-Hawley tariff of 1930 was far more so. Regardless of speeches to the contrary, Congress followed no definite policy in formulating either of these measures, unless, of course, securing reelection may be termed a tariff policy. Tariff measures have been chiefly the result of trying to please conflicting pressure

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1 71, p. 467.
2 12, p. 477-9.

groups. Those that were thought to control the most votes were served. One result of this was increased protection to agriculture. Another was the pyramiding of rates by giving protection to the raw material producer and then raising the rate with successive stages in the fabrication of that raw material to compensate for the higher costs of raw materials in each stage of manufacture as well as for any disadvantage the domestic producer may be successfully claim.[1] In addition to these general tariffs certain changes under the flexible provisions of the laws and added fees or quotas applied under the NIRA have affected individual commodities and will be mention in that connection.

Japanese-United States trade was also affected by the increasing ad valorem equivalents of specific duties when prices were falling. United States imports from Japan in 1929 paid an equivalent ad valorem duty of 4.5 per cent; in 1931 they paid 6.9 per cent. Computed merely upon dutiable imports these percentages were 37.1 and 44.5, respectively. These may be compared with 13.3 per cent upon both free and dutiable imports from all countries in 1929 and 17.7 per cent in 1931 and 40.1 per cent upon dutiable imports in 1929 and 53.2 per cent in 1931. Japan appears to be at less of a disadvantage than most countries, especially when the rates upon all imports are considered, since the large raw silk imports free of duty, send that rate to a very low point.[2]

A compilation of the United States Tariff Commission, using general imports until 1934 and imports for consumption in that and the following year, shows that duty-free imports from Japan constituted 88.3 per cent of the total in 1928 and amounted to $339,000,000. This proportion declined to 1934, when it was 71.2 per cent and duty-free imports were valued at $84,000,000. The first nine months of 1935 showed an increase

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1 71, p. 263-5.
2 71, p. 9, 10.

in value over the same period in 1934, but they were a smaller proportion of the whole, since dutiable imports were increasing more rapidly. The principal reason for this decline was the greater fall in raw silk prices than in the average for dutiable goods. Dutiable imports have risen in both quantity and value since 1932. In terms of quantity dutiable imports probably were materially larger in 1934 than in 1931, although not much greater in value.[1]

Most of Japan's exports to the United States are not directly competitive.[2] However, relatively few enter free of duty, the principal ones being raw silk, tea, undressed furs, and pyrethrum. From the narrow scope of the free list and the high rates upon the manufactured products in which Japan has such an advantage as to enable her to sell them here in fair quantities it would appear that our tariff was formed upon a basis of "comparative disadvantage"--that only when this country was exceptionally unfitted to produce a commodity was its import unrestricted and not always then.[3]

Free imports of crude materials alone (principally raw silk) made up 85 per cent of all imports in 1928 and 65½ per cent in 1934. The 1930 tariff act had no effect upon this. Finished manufactures imported free of duty rose relatively from ½ of 1 per cent in 1928 to 1.3 per cent in 1934 while dutiable imports climbed in proportion to the total from 8.0 per cent in 1928 to 20½ per cent in 1934. This reflected Japan's increasing industrialization and the great decline in raw silk imports. Semimanufactures likewise increased relatively, the dutiable from 1.1 per cent in 1928 to 3.0 per cent in 1934 and the free from .8 per cent in 1928 to 2.8 per cent in 1934. Free imports gained on the dutiable in this class, perhaps a result of higher rates on the dutiable

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1 67 #105, p. 38-40.
2 12, p. 474.
3 71, p. 210, 219.

items under the act of 1930. Free imports of crude foodstuffs rose proportionately from 1.6 per cent in 1928 to 2.6 per in 1934, while dutiable imports, after increasing in importance from .5 of 1 per cent in 1928 to .9 of 1 per cent in 1930 accounted for an average of only .2 of 1 per cent from 1932 to 1934. An increase in the tariff on dried beans from 1¾¢ to 3¢ per pound in the act of 1930, in conjunction with low bean prices, was the principal cause of this relative (and absolute) decline.[1] A decrease in the proportion of the total accounted for by duty-free manufactured foodstuffs from .3 of 1 per cent in 1928 to .006 of 1 per cent in 1934 may also have been due to a reduced free list in the tariff act of 1930. In the same period the proportion of dutiable manufactured foodstuffs rose from 1.8 per cent in 1928 to 4.3 per cent in 1934.

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1 67 #105, p. 134.

PART TWO

THE IMPORTS OF THE UNITED STATES FROM JAPAN

CHAPTER I

IMPORTS FROM JAPAN BY ECONOMIC CLASSES

Over four-fifths of our imports from Japan before 1933, according to Table III, page 53, were raw materials, principally raw silk, but also including pyrethrum, crude camphor, vegetable wax, and undressed furs.[1] The decline in raw silk imports was largely responsible for the smaller proportions of crude materials in later years. Imports of crude materials from all countries also declined during this eleven-year period. They were less than half as important as in our trade with Japan.

Finished manufactures made up the bulk of the remainder of our imports from Japan, showing a marked upward trend to 22 per cent in 1934. Refined camphor, cotton and silk manufactures, clay products, toys, brushes, and electric lamps were important items.[2] Finished manufactures composed an increasing part of our imports from all countries until 1931, but moved downward relatively thereafter. By 1934 Japan supplied as large a proportion of finished manufactures as the hypothetical "average" country.

Foodstuffs from Japan, about half crude and half manufactured in 1928, also expanded relatively during the period, the proportion of manufactured foodstuffs doubling while crude foodstuffs showed no definite trend. Fish, tea, and dried beans and peas were the principal

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1 41, 1933, p. s16, s17.
2 41, 1933, p. s16, s17.

Table III. - Percentage Distribution of United States General Imports[a] from Japan and from All Countries

Year	Crude Materials		Crude Foodstuffs		Manufactured Foodstuffs		Semimanufactures		Finished Manufactures	
	Japan	All Countries	Japan	All Countries	Japan	All Countries	Japan	All Countries	Japan	All Countries
1925	-----	41.3	-----	11.7	-----	10.3	-----	17.9	-----	18.8
1926	-----	40.4	-----	12.2	-----	9.4	-----	18.2	-----	19.8
1927	-----	38.2	-----	12.1	-----	10.8	-----	17.9	-----	21.0
1928	85.5	35.9	2.1	13.4	2.1	9.9	1.9	18.6	8.5	22.2
1929	85.0	35.4	2.1	12.3	2.0	9.6	2.1	20.1	8.8	22.6
1930	81.9	32.7	2.7	13.1	2.4	9.6	3.5	19.9	9.5	24.7
1931	81.4	30.7	2.6	14.6	2.6	10.6	2.2	17.8	11.2	26.3
1932	82.7	27.1	2.0	17.6	3.0	13.1	2.1	16.4	10.1	25.8
1933	75.2	28.9	2.0	14.6	4.5	14.2	4.3	20.1	14.0	22.2
1934	65.2	28.2	2.9	15.5	4.3	16.1	5.8	18.8	21.7	21.4
1935	-----	28.6	-----	15.8	-----	15.6	-----	20.1	-----	19.9

Sources: 41 (1925-1934); 58 (1935). The percentages from Japan were computed from the values as given in thousands.

(a) Imports for consumption in 1934 and 1935. In 1934 "Articles especially imported" were all put in the last class, while in prior years some had been classified as manufactured foodstuffs.

items.[1] Foodstuff imports from all countries were about five times as important at the beginning of the period. They also increased, but not quite as rapidly.

Semimanufactures, such as silk waste, vegetable oils, and hat materials,[2] rivalled one or the other of the classes of foodstuffs for the cellar position until the expansion relative to the total in 1933 and 1934. In the total trade of the United States, imports of semimanufactures bulked much larger, but no definite trend was evident.

The general upward trends of the four smaller classes in United States imports from Japan, particularly rapid in 1933 and 1934, were in large measure the results of the great decline in the importance of crude materials. That this was not the entire cause, in later years, at least, is evidenced by the actual value increases after 1932 in all of the four except crude foodstuffs, and that increased in 1934. Meanwhile, the values of crude materials and of the total imports from Japan were declining. The substantial rise in the total of imports from Japan in 1935 could hardly have taken place without an increase in crude materials, however. The United States statistics of raw silk imports from Japan in 1935 are not yet available, but Japanese exports to this country were over 35 per cent higher in value than in 1934 and the average yen-dollar exchange rate was only one cent lower.

Evidently, under existing conditions of demand, tariffs, and comparative advantage, Japan has an advantage over most countries as a supplier of raw materials to the United States. In all other classes save finished manufactures (and that only in 1934) other countries as a whole excelled

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1 Ibid.
2 Ibid.

Japan as suppliers of our markets.

Table IV. - Percentage Distribution of Japanese Export Trade (excluding minor miscellaneous items and coin and bullion)

Year	Food, Drink, and Tobacco	Raw Materials	Articles Wholly Manufactured	Manufactures for Further Use in Manufacturing
1926	7.1	6.7	41.0	42.4
1927	6.7	6.3	38.4	39.4
1928	7.9	4.5	41.2	41.7
1929	7.6	4.2	44.6	42.0
1930	8.7	4.3	47.1	35.8
1931	8.9	3.9	46.5	36.9
1932	7.4	3.6	49.7	34.5
1933	8 (a)	4½ (a)	55½ (a)	29 (a)
1934	7.9	4.4	61.9	23.0
1935	7.9	4.4	58.1	26.9

Sources: 1926 to 1929, 42; 1930, 31; 1931-1932, 33; 1933 as in footnote; 1934-1935, 39.
(a) 1933 data obtained from text of 35. They are approximate.

From Table IV, it appears that wholly manufactured articles have increased their proportion of Japan's export trade during this period and are now the leading class. A smaller proportion of semimanufactures (in which "raw" silk is included, as it is the product of a reeling process essentially manufacturing and mostly carried on in filatures built for the purpose[1]) is now exported, due to declining silk values and greater use of her materials herself. Foodstuffs exports are somewhat more important than at the beginning of the period; raw materials somewhat less.

1 12.5, p. 204.

CHAPTER II

AGRICULTURAL PRODUCTS

The Foreign Agricultural Service Division of the Bureau of Agricultural Economics has compiled the values of agricultural imports from Japan in 1929 and 1935, using general imports in the first instance and imports for consumption in the second. The data for other years are not yet available, but these will give a fair sample of the significance of agricultural commodities in the trade. In 1929, 87 per cent of our imports from Japan were agricultural products, valued at $374,000,000 and amounting to 17 per cent of our total agricultural imports. In 1935 only 71 per cent of our imports from Japan were agricultural; their value was $107,000,000; and they amounted to but 10 per cent of all our agricultural imports. Japan was declining in importance as a supplier of agricultural products, but still remained well above the 54 per cent average for all countries.[1] The declines in raw silk, tea, beans and peas were the principal losses. Raw silk bulks so large that almost alone it controls the movements of the total.

Vegetable oils are classified as agricultural products in the Yearbook of Agriculture[2] and are so classified in this discussion, but it happens that Japan's production of perilla oil is largely from seed imported from China. It is not an agricultural process as far as she is concerned although the product is agricultural by nature and is so classified in this country.

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1 58.
2 22.5.

Silk

Raw Silk

Raw silk, imported free of duty, accounted for about 83 per cent of the total value of United States imports from Japan before 1929, but had dropped to only 60 per cent by 1934.[1] Until 1931 about 96 per cent of Japan's silk exports went to the United States, but by 1934 this had declined to 83½ per cent, rising again to 93 per cent in 1935.[2] The principal reason for this latter decline was the greater depreciation of the yen after 1932 in terms of the currencies of important European markets than in terms of dollars, as prices in European currencies were lower giving greater encouragement to the demand.

Approximately 40 per cent of the farm population of Japan is dependent upon a combination of sericulture and rice-growing[3], each of which has fallen upon evil days during this period. The production of silk in Japan climaxed some years of expansion with an output of 96,000,000 pounds in 1931. Not until 1934 did the output drop significantly, to 78,000,000 pounds.[4] The low production of that year may have had some part in the rise in price in 1935. Exports of raw silk averaged 80 per cent of the production during the years from 1925 through 1929, but declined relatively to 66⅓ per cent in 1934. Much of this may be accounted for the growing export business in silk manufactures.[5]

The value of Japanese exports of raw silk to the United States fell from ¥849,500,000 in 1935 to ¥244,400,000 in 1935. Lower values through 1929 were due to lower yen prices, which fell about one-third from 1925 to 1928 while quantities were increasing. The quantities fell after 1929, but remained above the 1925 level. For a few months in 1932 yen prices were

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1 71, p. 211; 41; 42.
2 39.
3 21, p. 5.
4 26, p. 447, 448; 17, p. 105.
5 26, p. 447, 448.

were nearly double those of 1931 as the external value of the yen fell rapidly, but the demand in the United States fell off sharply and yen prices

Table V. - United States-Japanese Trade in Silk

Commodity / Year	United States Imports: Pounds (000)	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Japanese Exports: Yen (000)	Per Cent to U. S. (by value)
Raw Silk						
1925	49,685	317,753	80.2	1	849,486	96.6
1926	53,793	328,903	83.7	---	709,359	96.6
1927	61,797	334,160	85.6	---	698,245	94.2
1928	64,112	318,124	86.4	---	687,464	93.8
1929	69,759	356,122	83.4	1	755,376	96.7
1930	59,918	221,468	84.3	---	398,714	95.7
1931	69,526	163,070	85.4	---	342,479	96.4
1932	69,136	106,187	93.2	1	360,149	94.2
1933	60,213	91,659	89.4	---	355,806	91.0
1934	54,989	69,847	97.3	1	239,568	83.5
1935	41,369(a)	53,774(a)	97.0(a)	---	328,911	92.7
Silk Waste (b)						
1925	3,928	4,598	38.3	4	11,615	40.8
1926	2,933	3,190	32.5	---	7,438	50.8
1927	4,284	2,941	34.0	---	6,104	60.6
1928	4,365	1,804	34.1	---	3,560	----
1929	3,535	1,290	26.0	15	4,284	----
1930	2,684	684	21.2	---	2,561	----
1931	2,381	254	26.1	---	1,601	----
1932	2,012	72	17.6	19	142	----
1933	1,526	78	7.7	---	-----	----
1934	1,532	173	24.2	19	-----	----
1935	1,263(a)	155(a)	34.4(a)	---	-----	----

(a) 8 months.
(b) In Japanese statistics, "Silk waste and floss."

Sources: In this and the following tables in Part Two the United States statistics were compiled from Foreign Commerce and Navigation and Tariff Commission Report No. 105, Second Series, p. 106-193. The former gives general imports and the latter imports for consumption . Usually they were quite comparable and imports for consumption were used beginning with 1931. In some tables, compiled entirely from Foreign Commerce and Navigation, general imports were used until 1933 and imports for consumption in 1934. The Japanese statistics were obtained from the Commerce Yearbook, Foreign Trade of Japan--1934 and 1935, Tariff Commission Report No. 105, Second Series, p. 78-85, and the Annual Economic Report of Japan--1933, p. 103. Only the latter gave no figures for exports to all countries from which percentages could be computed. The values in the Commerce Yearbook were expressed in "old gold dollars," converted from

slipped back nearly to their position before the imposition of the gold embargo. The severe fall of prices in 1934 sent the value to the low point of the period. Recovery both in prices and in consumption in the United States brought the value for 1935 to ¥328,900,000,[1] and the prospects for 1936 were as good, if not better, according to the analysis of O. L. Dawson and W. Ladejinsky.[2] However, in the first half of 1936 exports of raw silk to all countries actually showed a great decrease.[3]

The analysis of Dawson and Ladejinsky indicates that the principal factor other than price affecting the demand for raw silk has been business conditions in the United States. Before 1929 prices were falling and consumption increasing in the United States; the rapid fall in price after 1929 was accompanied by a decline in the quantity consumed. Rayon was not an important factor in reducing silk consumption before 1933, according to this analysis, price and business conditions sufficing to explain the movements of previous years.[4] It would seem difficult to be certain, however, that the rapid growth of rayon production at constantly declining prices had not prevented a greater expansion of silk consumption before 1929.

Subsidies, loans, government purchases of surplus silk, and restriction of sales and output have been tried, with little success, in order to improve the position of the Japanese industry.[5] The price in 1926 was said to be

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yen by the average exchange rate through 1932 and in later years by a conversion factor obtained by multiplying the nominal gold parity of the yen by the League of Nations figure of its exchange value as a percentage of that parity. In order to present the trends of yen values these figures have been reconverted into yen, using conversion factors as shown in the Appendix. The results are comparable, discrepancies usually being confined to the last two or three figures. Percentages were calculated from the gold values as given.

1 26, p. 451, 457H.
2 26, p. 452, 453.
3 39.5, p. 1.
4 26, p. 453-7D.
5 26, p. 457.

below the costs of production,[1] yet that price was over four times those of 1931 and 1934.[2] Conditions improved somewhat in 1932, but the United States financial crisis in 1933 was reflected in silk prices,[3] while during the last half of the year strikes in the silk mills, the competition of rayon, and the rising yen-dollar exchange rate affected exports to the United States unfavorably.[4] These same factors, accompanied by the existence of excessive stocks in both Japan and the United States, sent the value of exports to the United States in 1934 to the low point of ¥244,400,000. Toward the end of the year rayon prices advanced in the United States; the typhoon of September 21 destroyed considerable quantities of cocoons and raw silk; and the other inhibiting factors diminished or disappeared, setting the stage for the increased quantity and value of 1935 exports to this country. The government continued its efforts to improve the conditions in the industry by passing the Raw Silk Transaction Act providing for the licensing of wholesalers supplying exporters and the recording of all their transactions in raw silk. Plans were made for the complete reorganization of the industry,[5] including the regulation of the prices and production of cocoons and the control of export trade. Under previous laws the government had required licenses for filatures, over which it could exert active control and had obtained a considerable measure of regulatory authority over the production of silkworm eggs.[6]

Japan's advantage over Italy and France is principally a matter of price, since her product is more variable and of somewhat lower quality than the Italian. Some Italian reelers are at a disadvantage in the American market because they have not adopted the Japanese style of skein in which the raw silk is crossed in a diamond-shaped formation,

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1 42, 1926, Vol. II, p. 339.
2 26, p. 457H.
3 36, March, 1933, p. 5.
4 35, p. 18.
5 35, p. 87.
6 26, p. 457.

greatly facilitating manufacturing. Japan's superiority over China, however, is a result of better and more mechanized production methods and higher quality rather than of lower wages, since the Chinese live more cheaply than the Japanese. Government encouragement has promoted the shifting of most of the stages of raw silk production to centralized control under expert supervision. Silkworm rearing is still for the most part a home industry, but egg production and reeling are quite largely carried on in special establishments. Japanese grow cocoons in Chosen and in California which are sent to Japan for reeling and at times cocoons are purchased from China. One-third of the cost of the silk was represented by the cost of reeling, before the depression. An automatic machine with two or three times the reeling capacity of the one in common use had been developed, but had not proven very satisfactory. Could such a machine be developed and the cost of silk be lowered the industry would be on a much more satisfactory and profitable basis.[1]

The import statistics of the United States differ from Japanese export statistics principally in showing increasing values of imports to 1929 (because of the rising yen-dollar exchange rate) and in emphasizing the decline since that date (because of the severe downward movement of the yen-dollar exchange rate). The unit value of imports from Japan declined from $5.03 per pound in 1929 to $1.27 in 1934.[2] An increasing proportion of the total raw silk imports of this country has come from Japan, the value reaching 97 per cent of the total in 1934. In former years Japan supplied a larger proportion of the better grades[3] than of total imports, but in 1934 she practically monopolized the whole trade.

Silk Waste

Silk waste is used in this country by the spun silk industry and the

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1 12.5, p. 202-5; 17, p. 107-150.
2 67 #105, p. 190, 191.
3 64, p. 60.

woolen yarn industry. The term includes fiber discarded in the filatures during reeling, mill wastes, and cocoons that are unreelable. The latter were separately recorded in the United States statistics except in 1930 and were of little importance. There is a small production of mill waste in the United States, but none of the other types.[1] Imports have been duty-free throughout the period.[2]

Silk waste imports, ranked fourth in 1925, declined markedly from 1925 to 1932 and have shown little recovery. Japan has nearly recovered her former importance in our trade, however, accounting for 34½ per cent of the value of our imports from all countries in 8 months of 1935. From 1931 to 1934 an average of 42 per cent by quantity came from Japan. In most years Japan was second to China as a source of this product.[3]

Data for Japanese exports of silk waste for 1928, 1929, and 1931 indicate that from 20 to 50 per cent by value went to the United States. In 1933 and 1934 very little went to this country (none in 1933) and the United States was not among the first three markets.[4] The more inclusive classification, "Silk waste and floss", appears in Table V.

Tea

Tea, also imported free of duty, has composed about 1½ per cent of the United States imports from Japan.[5] Japanese statistics, excluding sizeable exports from Formosa to the United States, showed a slight downward trend to 1933 in the portion of total exports from Japan proper to the United States accounted for by tea, the average being a little over 1 per cent.[6]

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1 67 #105, p. 191, 192; 41.
2 71, p. 211.
3 67 #105, p. 190, 191.
4 67 #102, p. 82.
5 71, p. 212.
6 42.

Tea is grown both in Japan proper and in Formosa. Before 1929 about 80 per cent of the annual crop was exported to the United States. The great amount of hand labor needed in picking and preparing the tea prevented progress in the industry in the face of competition in the world

Table VI. - United States-Japanese Trade in Tea

Year	United States Imports				Japanese Exports	
	Pounds (000)	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Yen (000)	Per Cent to U. S. (by value)
1925	29,582	6,456	20.5	3	12,244	82.9
1926	28,292	6,898	22.0	---	10,089	83.3
1927	26,403	5,890	20.9	---	8,640	79.3
1928	23,422	5,250	19.3	---	9,287	78.4
1929	24,539	5,152	19.9	5	8,124	67.5
1930	20,948	3,897	17.2	---	6,366	75.9
1931	21,417	3,143	16.8	---	5,275	64.1
1932	24,594	1,967	15.8	3	4,752	58.1
1933	24,881	1,898	13.8	---	5,084	60.7
1934	22,569	2,286	14.1	6	4,629	48.8
1935	9,918(a)	1,085(a)	9.8(a)	---	4,481	----

(a) 8 months.

markets with teas from India and Ceylon, where wages were lower.[1] Moreover, Japan teas are still produced in small establishments whose processes are inferior, and must be refined and packed for export by the exporters, an additional expense not incurred in other producing countries.[2]

About 80 per cent of the imports of green tea into the United States come from Japan, but only about 10 per cent of the much larger imports of black tea. In 1933 about 14 per cent of the imports of all teas were from Japan after a fairly sharp fall from the pre-depression proportion of one-fifth. Even in those years, however, the proportion from Japan was slowly declining, for green tea is losing favor in this country[3] and Japan teas are not suited to the fermentation process required in the production of

1 59 #642, p. 2.
2 13, p. 107, 108.
3 67 #105, p. 192, 193.

black teas.[1] The dollar unit value of imports from Japan is below that of imports from all countries because of the predominance of the lower priced green tea. It fell more under the influence of the depression and the depreciation of the yen than that of imports from other countries, yet did not stimulate consumption sufficiently to increase Japan's proportion of the total. However, the quantity imported, declining until 1930, rose in the next three years past the 1929 level. There may have been a shift in the consumption of some people from the higher-priced black teas to green teas. With better times in 1934 and 1935 the movement reversed. Prices fell more rapidly than consumption increased and values continued to fall to $1,900,000 in 1933. The Japanese export statistics pictured a general fall in the quantities and values exported that continued through 1935. Larger imports of teas from Formosa (oolong comes principally from that island) may explain this seeming discrepancy. Although still Japan's most important market for tea in 1934, the United States had reduced its proportion of her total exports to about 49 per cent from the 1926 level of 83 per cent.[2]

Pyrethrum

Pyrethrum is a species of chrysanthemum whose flowers contain a substance that is widely used in insect powders and liquid sprays. It has the advantage of not being poisonous to men and animals. There is no domestic production commercially although experimental plantings have been made in several States and several varieties are grown here as ornamental perennials. In the crude form the flowers enter the United States free of duty. There were very small additional imports of pyrethrum flowers advanced in value by grinding to powder, dutiable at at 10 per cent throughout this period.[3]

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1 17, p. 324.
2 42, 67 #105, p. 78, 192, 193.
3 67 #105, p. 106, 107, 178, 179.

Imports in 1934 failed to reach the 1928 level although they exceeded the years before 1928 in value and all years but 1928 and 1932 in quantity. In the first 8 months of 1935, however, they seemed to be slipping considerably. Japan was the principal source at all times but her proportion was

Table VII. - United States-Japanese Trade in Crude Pyrethrum (a)

Year	United States Imports				Japanese Exports	
	Pounds (000)	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Yen (000)	Per Cent to U. S. (by value)
1925	4,957	986	79.7	14	-----	----
1926	8,061	1,024	84.0	---	-----	----
1927	7,787	1,064	87.2	---	-----	----
1928	12,024	3,299	89.4	---	6,518	87.1
1929	8,815	2,013	97.7	12	3,504	82.4
1930	8,224	1,281	96.1	---	-----	----
1931	3,872	453	86.7	---	1.179	70.1
1932	11,062	1,202	91.8	8	4,349	91.5
1933	9,066	1,373	90.1	---	5.500	86.6
1934	10,094	1,986	96.4	7	6,791	91.2
1935	5,804(b)	1,003(b)	96.9(b)	---	5,809	----

(a) In Japanese statistics, "Dried plants for insectifuge."
(b) 8 months.

definitely greater in the last seven years, going as high as 98 per cent in 1929. Although pyrethrum accounted for only about .3 of 1 per cent of our imports from Japan from 1925 to 1927 and an average of .5 of 1 per cent from 1928 to 1931, by 1933 it amounted to 1.2 per cent, at about which level it probably remained.[1]

Japanese exports (1934) set a new record in yen, although, strangely, the quantity exported was only 8,600,000 kin as against 9,200,000 kin in 1928[2]. Apparently yen prices have risen faster than those of most of her exports, probably reflecting a rather strong demand in this country for the

1 71, p. 213; 42.
2 60 #78, p. 73.

household insecticides in which pyrethrum is used. The United States is Japan's principal market, taking 85 to 90 per cent of her total exports of insect flowers in most years. The European market is apparently supplied mostly from the Danubian countries.[1]

Vegetable Oils

Data for export of vegetable oils from Japan to the United States were not given in the Commerce Yearbook for the years before 1927, but by 1935 they had reached ¥27,000,000. The growth since 1930 was faster than that of exports to all countries, the proportion sent to the United States being over four-fifths in the last three years. At the same time, vegetable oils increased relative to the remaining exports to the United States from .3 of 1 per cent in 1928 to 2.2 per cent in 1934.[2]

Table VIII. - United States-Japanese Trade in Vegetable Oils

Year	United States Imports (a)			Japanese Exports	
	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Yen (000)	Per Cent to U. S. (by value)
1925	1,173	2.0	13	------	----
1926	2,232	3.5	---	------	----
1927	2,178	3.6	---	4,261	54.7
1928	1,242	2.0	---	2,502	63.6
1929	1,853	2.2	13	3,358	48.9
1930	1,758	2.9	---	2,440	25.8
1931	1,076	2.9	---	2,594	63.7
1932	651	3.0	13	2,503	60.7
1933	1,391	5.2	---	5,804	82.6
1934	1,926	7.4	8	8,860	80.3
1935	-----	---	---	27,473	83.1

(a) Total vegetable oils, inedible, expressed (imports of edible vegetable oils from Japan have been less that $15,000 in every year except 1933, when they were $37,000, and 1934, when they were $110,000, with over half corn oil). Changes in classification have rendered earlier years less comparable than, per haps, they should be.

1 60 #78, p. 73.
2 42.

This remarkable growth came with the expansion of the United States imports of perilla oil. This was first entered separately in 1928 in the United States statistics, passed vegetable wax, formerly second in importance, in 1930, and in 1932 stepped into first place ahead of inedible

Table IX. - United States Imports of Perilla Oil from Japan[a]

Year	Pounds (000)	Dollars (000)	Per Cent from Japan (by value)
1928	1,092	117	54.7
1929	2,193	253	39.7
1930	7,010	676	76.5
1931	6,110	333	45.7
1932	8,613	273	49.3
1933	16,109	851	78.4
1934	16,667	1,118	69.3
1935	33,127(b)	2,080(b)	61.3(b)

(a) Not separately classified before 1928.
(b) 8 months.

rapeseed oil. Until recent years perilla oil was used principally in making special enamels and varnishes requiring an exceptionally hard finish, especially those that would come in frequent contact with water. Japan imports perilla seed from China and exports the oil; the seed supply formerly was uncertain, tending to restrict the use of the oil in this country. The higher prices of competing oils, principally linseed, in 1930 and in more recent years combined with a more general appreciation of the qualities of perilla oil to send imports from Japan to 33,000,000 pounds and $2,100,000 in the first 8 months of 1935. Japan has been our chief supplier, by value, almost the only others being Kwantung and China. There is no domestic production, and imports have been free of duty.1

1 67 #41, p. 6, 28, 42, 62, 63, 108; 67 #105, p. 188, 189.

Rapeseed (colza) oil is now second, but was formerly the leading import in this class. About 80 per cent of the domestic consumption is used with mineral oils as a marine engine lubricant. It is "blown"

Table X. - United States-Japanese Trade in Certain Vegetable Oils

Commodity	United States Imports			Japanese Exports	
Year	Gallons (000)	Dollars (000)	Per Cent from Japan (by value)	Yen (000)	Per Cent to U. S. (by value)
Rapeseed (colza) Oil(a)					
1925	377	308	21.1	-----	----
1926	1,493	1,050	51.7	-----	----
1927	2,368	1,422	90.6	-----	----
1928	888	582	38.7	1,378	65.5
1929	1,636	997	62.8	2,347	54.4
1930	1,592	792	71.6	-----	----
1931	1,254	493	98.2	1,249	63.6
1932	705	184	81.0	-----	----
1933	1,263	354	85.8	1,487	66.2
1934	1,974	616	99.8	3,867	77.0
1935	2,287(b)	776(b)	96.9(b)	-----	----
Vegetable Wax	Pounds (000)				
1925	1,676	253	19.3	-----	----
1926	1,812	273	12.1	-----	----
1927	2,749	477	18.2	-----	----
1928	1,988	318	44.2	811	38.8
1929	3,072	460	63.5	924	41.0
1930	1,824	226	66.7	-----	----
1931	2,137	171	74.4	520	45.1
1932	2,463	146	67.3	-----	----
1933	2,754	130	65.2	496	43.5
1934	1,904	106	55.3	337	26.8
1935	1,946(b)	116(b)	53.6(b)	-----	----

(a) United States general imports, through 1930, of all rapeseed oil; imports for consumption, 1931-5, of inedible rapeseed oil. Edible rapeseed oil imports were $521,000 in 8 months of 1935, but averaged less than $65,000 from 1931 to 1934.
(b) 8 months.

(oxidized), after which it blends easily with mineral oils, forming an emulsion with water that sticks to the bearings. It is also used as a plasticizer and in varnishes and lacquers and in the making of rubber substitutes. In the latter use it competes somewhat

with corn oil, but generally the result is a different product with special uses. Where they are interchangeable, rapeseed, the cheaper oil, has usually been used. No domestic production has been reported since 1926, although imports were dutiable at 6 cents per gallon before 1930. The duty was continued in that act, but the oil was to be admitted free if so denatured as to be inedible and subsequent imports from Japan have been largely under this provision. The ratio of imports from Japan to imports from all countries has risen from 21 per cent (1925) to 97 per cent in 1934, including both edible and inedible colza oil.[1]

Dutiable rapeseed oil, entered separately since the act of 1930 (rapeseed oil, n. e. s.) is used largely for edible purposes such as the making of lard compounds. Imports of colza oil were nearly all denatured and entered free until the first 8 months of 1935, but during that period the dutiable imports jumped to 1,550,000 gallons and $520,000, largely because of higher prices and lower production of domestic edible oils and the excise tax placed on certain other edible oils in 1934. The latter tax also resulted in larger imports of corn oil, which also was not taxed, but had little direct effect upon the other items mentioned here as they were used for different purposes.[2] In the 1936 Revenue Act, however, taxes were placed on rapeseed, perilla, and other oils and oilseeds not formerly taxed, to give more complete protection to our corn farmers. Imports will probably be somewhat adversely affected.[3]

The third item of importance is vegetable wax, mainly Japan wax used in polishes, insulating materials, varnishes, etc. Japanese products accounted for more than 60 per cent of the imports of other vegetable waxes than Carnauba wax beginning in 1929, the year after these were

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1 67 #41, p. 7, 28, 29, 43; 67 #105, p. 188, 189.
2 67 #105, p. 108-111.
3 60.5.

separated in the published statistics. The other important item in the classification is candelilla wax from Mexico, which has similar uses.[1]

Despite the importance of Japan as a source of these three commodities, she only accounted for about 3 per cent of total imports of inedible vegetable oils until 1932 and only 7½ per cent in 1934. Moreover, were edible vegetable oils included, the proportion would be substantially less, for Japan sends us a very small part of those.

Menthol

Japan has been at all times our principal supplier of menthol even though her importance declined from 1926 until 1931. Something over half of her total exports of the product were sent to this country. In value our imports have fallen far below their levels of 1925 and 1926. Except in 1928 the price of menthol fell throughout the period until 1935. At the beginning of 1925 the effects of the 1923 earthquake were still evident in a price of about $13 per pound. By the end of 1927 the price was nearly down to $4 per pound. Higher prices in 1928 and 1929 were accompanied by smaller imports. Practically all our natural menthol comes from Japan. Only when the price is unusually high and domestic peppermint oil is abundant does it pay to produce menthol from that source, although it is possible.[2] Only the natural product was used for medicinal purposes until the official recognition of synthetic menthol by the United States Pharmacopoeia on June 1, 1936. Japanese mint can be grown in this country, but commercial success has been attained only in the San Joaquin Valley of California. Domestic production of natural menthol was discontinued in 1935.[3]

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1 67 #105, p. 192, 193.
2 33, p. 1-3.
3 67 #105, p. 108, 109.

Table XI. - United States-Japanese Trade in Menthol

Year	United States Imports				Japanese Exports	
	Pounds (000)	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Yen (000)	Per Cent to U. S. (by value)
1925	270	2,380	91.6	9	6966	55.8
1926	423	2,697	94.9	---	6133	61.0
1927	314	1,142	85.7	---	2468	50.4
1928	220	802	86.8	---	1836	46.9
1929	242	1,022	83.0	17	2346	45.4
1930	263	872	85.8	---	2019	58.1
1931	260	697	79.0	---	1669	55.9
1932	315	650	89.2	14	2015	54.6
1933	264	546	93.3	---	2692	50.9
1934	400	797	94.0	16	2946	56.5
1935	160(a)	378(a)	92.7(a)	---	----	----

(a) 8 months.

Dried Beans and Peas

One of the most obvious examples of the effects of an increase in the tariff rate is afforded by this group, after the fall in bean prices made the rate effective. The tariff act of 1930 raised the duty from $1\frac{3}{4}$ cents per pound to 3 cents per pound on dried beans and from 1 to $1\frac{3}{4}$ cents per pound on dried peas.[1] The increase was immediately effective in reducing imports from all countries, but did not affect Japanese beans as greatly, so that her proportion increased. The unit price of Japanese beans, lower than that of all beans in 1929, fell further than that of others, so that her price advantage increased. When, however, the average price of domestic pea beans in New York fell to less than 3 cents per pound in 1932, the imports from Japan nearly disappeared and her proportion of the total shrank to $10\frac{1}{3}$ per cent. In 1932 the duty on imports from Japan was equivalent to 189 per cent of their unit value.[2] Imports of dried

1 67 #105, p. 134-7.
2 67 #61, p. 2; 67 #105, p. 134, 135.

peas were very much smaller at all times. They followed the same general direction of movement but were not as drastically affected.

Bean imports from all countries as from Japan before 1932 were mostly of white varieties competing principally with domestic pea beans grown in

Table XII. - United States-Japanese Trade in Beans and Peas

Year	United States Imports							Japanese Exports of Beans and Peas	
	Beans			Peas			Rank of both by Value		
	Pounds (000)	Dollars (000)	Per Cent from Japan by Value	Pounds (000)	Dollars (000)	Per Cent from Japan by Value		Yen (000)	Per Cent to U. S. by Value
1925	25,947	1,118	25.5	1,269	60	4.9	12	-----	----
1926	20,216	630	25.5	1,321	74	12.9	--	-----	----
1927	27,612	862	28.6	1,707	65	7.9	--	2,645	25.3
1928	34,666	1,293	20.8	2,584	80	17.1	--	3,010	28.9
1929	39,529	2,143	31.6	6,520	198	23.2	10	6,345	43.4
1930	54,733	2,320	43.4	1,633	36	7.5	--	3,240	44.8
1931	40,672	987	58.0	594	15	6.5	--	831	16.4
1932	1,543	26	10.4	354	12	4.6	20	132	2.2
1933	1,819	29	8.2	512	17	23.3	--	201	----
1934	1,971	34	10.9	1,042	31	7.6	20	-----	----
1935	7,533(a)	139(a)	19.1(a)	693(a)	18(a)	8.8(a)	--	-----	----

(a) 8 months.

Michigan and New York, and great northerns grown mostly in Idaho. White beans made up about 46½ per cent of the domestic bean production from 1929 to 1931.[1] There were wide variations in total bean imports under the 1922 act in response to changes in the domestic output and the output of the principal foreign bean-producing countries, but on the whole imports tended upward parallel with domestic production. From 1922 to 1929 imports for consumption equaled about 8 per cent of the total domestic production or about 17 per cent of the production of white beans exclusive of limas.[2] New York quotations on choice Japanese white beans were usually substantially the same as for domestic pea beans, although the unit values of general

1 67 #61, p. 1.
2 67 #61, p. 2.

imports from Japan were considerably below the estimated domestic cost of production. Until the latter part of 1931 the quotations were on a duty-paid basis. For the first 10 months of 1932 the average quotation without the duty was about 1¼ cents. If the 3-cent duty were added the price would be above that of domestic pea beans, so these prices may have been partly based on reexport transactions which occurred.[1]

The Japanese government's Farm Products Inspection Service is very efficient and beans accompanied by its certificate are accepted without question as of the choicest hand-picked quality. They are largely used in canning. Most of them come from Hokkaido with some from Chosen. Japan herself was on a net import basis for beans of over a million bags a year from 1926 to 1930. Most of her imports came from the Kwantung Province. The Japanese may prefer these beans to those from Hokkaido or they may be less suitable for export.[2]

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1 67 #61, p. 3-6.
2 67 #61, p. 16, 31, 40.

CHAPTER III

MARINE AND FOREST PRODUCTS

Edible Fish and Fish Products

The quantity of edible fish and fish products imported from Japan increased during this period, as is shown in Table XIII, to 42,000,000 pounds in 1933, over three times their amount in 1925. The proportion from Japan by quantity would be larger than by value, for imports from Japan increased after 1930 when those from other countries were falling.[1]

The Japanese classifications which seem to correspond most closely to the above are "Foods in tin and bottle" and Fish and shellfish" (Table XIII). The first, at least, includes many canned foods other than fish, but canned crabs and tuna are the largest items in trade with this country. An increasing trend appears in the value of exports of this group. The drop apparent both here and in the United States statistics in 1934 was at least partially due to decreased exports of canned tuna and crab meat to the United States. This loss seems to have been nearly recouped in 1935. The proportion of Japan's total exports sent to this country declined decidedly. The proportion by quantity is definitely smaller, indicating that we take the higher quality goods. "Fish and shellfish" is a classification not sufficiently important in former years to warrant entry in the Foreign Commerce Yearbook before the 1935 edition. The United States takes a rather small proportion of Japan's total exports. An increasing part of exports to the Unites States was composed of foods in tin and bottle.

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1 41.

Table XIII. - United States-Japanese Trade in Edible Fish and Fish Products

Commodity	United States Imports				Japanese Exports		Commodity
Year	Pounds (000)	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Yen (000)	Per Cent to U. S. (by value)	Year
Crab Meat(a)							Crabs in Tins(b)
1925	9,035	3,051	98.0	--	-----	----	1925
1926	7,916	3,679	97.6	--	-----	----	1926
1927	8,700	3,703	97.9	--	-----	----	1927
1928	12,744	5,030	99.8	--	10,448	56.3	1928
1929	10,681	5,001	97.8	--	9,821	58.8	1929
1930	9,491	4,188	82.8	--	-----	----	1930
1931	9,361	3,748	84.6	--	6,760	55.6	1931
1932	6,358	2,276	73.2	--	-----	----	1932
1933	6,943	2,057	71.1	--	7,385	39.7	1933
1934	5,232	1,747	78.0	--	5,757	37.3	1934
1935	5,654(c)	1,962(c)	86.9(c)	--	-----	----	1935
Tuna Fish in Oil							Fish and Shellfish
1931	649(d)	127(d)	76.9(d)	--	2,678	9.9	1931
1932	5,071	653	91.4	--	1,697	6.2	1932
1933	14,219	1,950	99.0	--	1,748	3.4	1933
1934	3,315	502	98.7	--	-----	----	----
1934(e)	4,253(e)	702(e)	96.4(e)	--	2,197	3.8	1934
1935	5,284(c)	845(c)	96.2(c)	--	-----	----	1935
Tuna Fish, Fresh or Frozen							Foods in Tin and Bottle(f)
1925	831	40	8.1	--	7,856	----	1925
1926	None	None	None	--	8,551	53.7	1926
1927	108	10	.6	--	8,825	45.2	1927
1928	3,545	472	25.5	--	11,286	49.0	1928
1929	6,243	686	26.1	--	11,384	44.3	1929
1930	6,449	571	20.4	--	9,265	42.6	1930
1931	6,812	530	91.6	--	7,811	41.2	1931
1932	4,295	271	90.9	--	8,053	35.4	1932
1933	4,497	179	76.7	--	17,838	----	1933
1934	5,733	396	95.9	--	11,182	22.2	1934
1935	1,981(c)	128(c)	90.2(c)	--	16,813	29.4	1935
Total Edible Fish & Fish Products(g)							
1925	13,617	3,864	12.8	6			
1926	12,699	4,610	13.4	--			
1927	13,941	4,606	13.0	--			
1928	21,958	6,456	16.8	--			
1929	26,543	7,159	18.0	3			
1930	24,419	5,880	16.6	--			
1931	24,457	5,010	17.7	--			
1932	27,802	3,679	17.2	2			
1933	41,675	5,190	23.4	--			
1934	35,206	4,388	18.9	2			

Footnotes on bottom of next page.

In 1925 they accounted for only .8 of the total, but in 1934 and 1935 amounted to 3 per cent.[1] Before the depression it was estimated that over 1,400,000 were actively engaged in fishing in Japan and about 720,000 people lived from canning or otherwise preparing fish for market. Most of the catch was consumed at home, but exports were growing.[2]

Crab Meat

Crab meat, canned, was the largest item. Imports from Japan declined in both quantity and value after 1928, and more rapidly than imports from all countries so that by 1933 Japan supplied only 71 per cent of the total. Since that year she has regained some of her former importance. Japan supplies a higher-priced, higher quality product than do other countries. Her exports to this country declined relative to her total exports, and the United States, which had been the largest market until 1933, was second to Great Britain in 1934.[3]

The Japanese product is quite different from the domestic and only partially competitive. To begin with, only five to ten per cent of the domestic production is canned, and that chiefly in Alaska.[4] The principal domestic production is on the Chesapeake Bay and the distribution of the product is limited by its perishability.[5] About ¾ of the imports from Japan are fancy meat of the deep-sea king crab. The leg meat of

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(a) Beginning in 1930, "Crab meat, crab sauce, and crab paste".
(b) Includes "Crabs in bottles" in 1928, 1929, and 1931.
(c) 8 months.
(d) For 1931, only reports from collectors of customs at Boston, New York, San Francisco, Los Angeles, and Seattle.
(e) Duty rate changed from 30 to 45 per cent by Presidential proclamation, effective Jan. 13, 1934.
(f) Crabs in tins is included in this larger classification.
(g) Includes canned clams, swordfish, and miscellaneous fish and shellfish as well as the above.

1 42; 39.
2 59 #642, p. 3.
3 67 #105, p. 78; 36, December, 1933, p. 24.
4 67 #105, p. 130, 131.
5 59 #779, p. 1; 67 #105, p. 130, 131.

this crab has a reddish cast and is partially interchangeable with imported canned lobster meat. There are also some imports of meat prepared in Chosen from the "Korean crab." For the most part the Japanese crab meat brings higher prices than the domestic. The prices of the latter fell rapidly with the coming of the depression, due chiefly to increased production and the physical difficulties of wide distribution,[1] but the previous amalgamation of Japanese canneries and production control[2] apparently were successful in at least one direction, for the prices in this country of imported crabs remained almost stationary until well into 1932.[3] Although the unit values of imports declined from $.449 per pound (1929) to $.306 per pound (1933), this was considerably less than the decline for imports from all countries. Had prices fallen more freely Japan's share of the United States imports might not have declined as much. The duty in this country was not changed during the period, remaining at 15 per cent.[4]

Tuna

Imports from Japan of tuna fish free of duty (fresh, frozen, or packed in ice) were not important before 1928, when Japan supplied one-fourth of the total. After 1930, when imports from other countries (principally Mexico) nearly disappeared, Japan sent over 90 per cent of the total in most years. Japan sends practically all frozen albacore which is canned in this country as "white meat" tuna, the highest grade. That species of tuna has practically disappeared from American waters since 1925.[5]

Imports of tuna fish in oil were insignificant before 1931. Nearly all of the supply comes from Japan and the bulk of this is albacore, packed in cottonseed oil, "domestic style."[6] Our domestic production is about one-half yellowfin, one-fourth striped tuna, and one-sixth albacore,

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1 59 #779, p. 2,,4, 6, 7.
2 42, 1929, p. 396.
3 59 #779, p. 1, 2, 9.
4 67 #105, p. 130, 131.
5 67 #105, p. 188, 189.
6 67 #71, p. 2; 67 #69, p. 114.

the latter mostly from imported frozen fish from Japan. When Japan developed her own canning industries this supply of fish was somewhat checked and the California pack of white meat tuna decreased. Total imports of canned tuna in oil supplied 18 per cent, 31 per cent, and 15 per cent, respectively, of an increasing domestic consumption from 1932 to 1934. As the result of a Tariff Commission report the duty was raised from 30 per cent, as it had been under both tariff acts in effect in this period, to 45 per cent on January 13, 1934.[1] Nearly half of the 1934 imports entered before that date and the imports for the year were decidedly below those of 1933.

The effects upon Japan were also pronounced. The tariff increase plus a small catch led to a pack less than half as great as in 1933. Many canneries that formerly packed tuna specialized on canned mandarin oranges for the British trade. Great Britain superseded the United States as the largest buyer of Japan's canned goods, taking more than twice the value of the previous year.[2] The law "for the Control of the Export of Marine Products" was enforced for the first time by the Japanese government in September, 1934, when the domestic production of canned boiled tuna not packed in oil was prohibited in order to prevent any possible agitation in the United States for higher duties upon this product, which has become popular since the higher duties on tuna in oil were put into effect.[3] The United States took 85 per cent of Japan's exports, by quantity, in 10 months of 1934, but only 69 per cent in the same period of 1935, though the absolute amount was larger.[4]

Fish Scrap and Fish Meal

Fish scrap and meal were not of sufficient importance to be separately entered in the United States statistics before 1931, nor was Japan an impor-

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1 67 #71, p. 2, 3, 8; 67 #105, p. 128, 129.
2 35, p. 45, 46.
3 36, August, 1934, p. 21.
4 40.3.

tant supplier until shortly prior to that year.[1] Since that year exports to this country have grown rapidly, but not quite as fast as her exports to all countries.[2] The commodity enters this country free of duty and is enthusiastically received for use as a fertilizer and increasingly as stock feed.

Table XIV. - United States-Japanese Trade in Fish Scrap and Meal

Year	United States Imports				Japanese Exports(a)	
	Tons (000)	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Yen (000)	Per Cent to U. S. (by value)
1928	--	---	----	--	7	26.9
1929	--	---	----	--	Negligible	Negligible
1930	--	---	----	---	-----	----
1931	27	940	69.5	--	1,656	63.5
1932	13	288	54.3	16	-----	----
1933	24	611	88.6	--	2,965	58.6
1934	34	931	93.5	14	6,095	50.3
1935	21(b)	553(b)	97.2(b)	--	-----	----

(a) Values for 1928--33 are for "Other manures". In 1934 fish meal equaled 98 per cent of "Fish meal"and "Other manures".
(b) 8 months.

Most of the product was sold on the Pacific coast until 1934. Transportation costs are an important element in the price. Not much is sold in the middle west on account of the large production there of animal tankage. In 1934, when California relaxed its restrictions on the use of pilchards for fish scrap and meal, the United States production reached its maximum and exports expanded by ten times, 80 per cent of them from the Pacific coast. The imported product was diverted to the Atlantic coast in that year, the production of menhaden meal being low there due to low prices and a poor run of fish.[3]

Despite the restrictions imposed in this country, Japan has been able

1 59 #779, p. 6.
2 67 #105, p. 78.
3 67 #69, p. 254; 67 #105, p. 192, 193.

to offset to some extent the drastic shrinkage in our silk purchases by larger sales of these marine products. She has always had abundant resources in this line; her people have had long experience as fishermen; and the development of the export industry has proceded apace.

Furs

Despite the density of her population Japan is a rather important source for certain wild animal furs, since more than half of the area of Japan proper is forested.[1] Exports to the United States increased from 61 per cent of the total sent to all countries in 1928 to 92 per cent in 1933.

Table XV. - United States-Japanese Trade in Furs

Year	United States Imports						Japanese Exports	
	Mink Furs, Undressed			All Undressed Furs			of All Furs	
	Number (000)	Dollars (000)	Per Cent from Japan by Value	Dollars (000)	Per Cent from Japan by Value	Rank by Value	Yen (000)	Per Cent to U. S. (by value)
1925	434	781	32.2	2,550	2.5	8	-----	----
1926	545	1,251	37.3	2,874	2.7	--	-----	----
1927	657	1,806	55.9	4,610	3.7	--	-----	----
1928	526	1,442	42.1	3,550	3.3	--	1,844	61.0
1929	752	2,104	53.6	4,217	3.9	6	2,352	64.3
1930	417	615	38.7	1,965	3.4	--	-----	----
1931	697	663	38.2	1,447	3.0	--	1,403	85.9
1932	918	754	48.2	1,413	5.6	6	-----	----
1933	849	614	29.3	1,306	3.9	--	2,820	91.8
1934	882	955	37.5	1,855	4.9	9	2,759	91.3
1935	883(a)	867(a)	46.5(a)	-----	---	--	-----	----

(a) 8 months.

The United States statistics shown in Table XV include only undressed furs, entering free of duty. Imports of dressed furs from Japan are small. The values fell severely in the depression years, not rising until 1934,

1 59 #642, p. 3.

although the quantities were frequently larger than those of 1929 before the end of the period. Trappers during the depression probably had no alternative to selling their furs for what they might bring. Lack of other opportunities might even tend to increase the production, while the demand was very low due to the lack of purchasing power.

From one-third to one-half of the imports from Japan have been mink. The skins are of a different texture and lighter color than the much higher-priced domestic and Canadian skins. They supplement the domestic supply. Japan has been the principal source by quantity and, beginning in 1927, by value. Over 80 per cent of the skins came from there from 1929 through 1935.[1]

Coney and rabbit furs were imported from Japan in sizable amounts, but accounted for a little less than 5 per cent of the imports from all countries from 1931 to 1935. Squirrel furs, kolinski furs, and fox furs other than silver or black were also fairly prominent.[2]

Natural Camphor

Crude camphor, distilled by the collectors from chips from an evergreen tree found principally in Formosa[3] forms the basis of Japan's monopoly of natural camphor. Refined camphor is not strictly a forest product, but will be discussed herealso.

Less than half of the value of United States imports of natural camphor is accounted for by the refined product. Synthetic camphor imports, principally from Germany, were less than imports of natural camphor in 1926[4]; in 1930 they were slightly greater in terms of quantity[5] and slightly less in terms of value; in 1934 they were again much less

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1 67 #105, p. 182, 183.
2 67 #105, p. 182-5.
3 7.
4 60 #78, p. 77.
5 41.

than of natural refined camphor. Since refined natural camphor was chiefly used in medicine, for which synthetic camphor was not permitted until June 1, 1936, the German competition was felt chiefly by crude camphor. This

Table XVI. - United States-Japanese Trade in Camphor

Year	United States Imports of Natural Camphor							Japanese Exports	
	Crude			Refined			Rank of Both by Value		
	Pounds (000)	Dollars (000)	Per Cent from Japan by Value	Pounds (000)	Dollars (000)	Per Cent from Japan by Value		Yen (000)	Per Cent to U. S. by Value
1925	2,090	1,165	89.5	1,514	918	96.3	10	3,175	----
1926	1,886	1,092	94.3	1,165	760	99.6	--	2,241	----
1927	1,621	779	96.2	1,480	823	100.0	--	2,274	40.3
1928	4,365	1,649	100.0	1,176	593	100.0	--	2,413	44.3
1929	4,204	1,580	100.0	1,386	769	97.0	9	3,060	49.4
1930	1,058	419	100.0	1,031	557	100.0	--	1,168	37.6
1931	1,964	700	98.1	1,191	573	100.0	--	1,348	45.8
1932	1,799	513	100.0	1,045	371	99.8	11	1,216	34.4
1933	1,989	411	100.0	1,599	479	100.0	--	1,568	35.2
1934	2,663	646	100.0	1,425	570	100.0	11	1,716	37.3
1935	964(a)	263(a)	100.0(a)	884(a)	348(a)	100.0(a)	--	-----	----

(a) 8 months.

is perhaps best revealed by the figures of quantity presented in Table XVI. Refined camphor imports maintained a fairly steady level, but crude natural camphor fluctuated quite severely in certain years. The Japanese government was several times forced to lower the price to meet the competition, evidence of which is apparent in the relatively small increase in the value of crude camphor imports in 1928 and 1929 when the quantity was more than doubled. The principal use of crude camphor, except for the production of refined natural camphor, which is kept a Japanese monopoly by the prohibition of exports for refining purposes, is in the manufacture of pyroxylin plastics. Here it has suffered from the wider use of other plasticizers than camphor and the trend toward plastics not requiring camphor, as well as from the

use of German synthetic camphor (and domestic, since 1933).[1] These tendencies are perhaps reflected in the smaller proportion of Japanese camphor exports coming to this country in recent years, although we were still her principal market in 1934.[2] There was a cent a pound specific duty on imports of crude natural camphor, and refined camphor was dutiable at 6¢ per pound under the act of 1922 and at 5¢ per pound under the 1930 act.[3] The medical demand for the refined product tended to keep the imports of this from falling as far as the other.

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1 7; 42, 1926, Vol. II, p. 340; 67 #105, p. 108, 109.
2 67 #105, p. 79.
3 71, p. 213.

CHAPTER IV

MANUFACTURED TEXTILES

Total Cotton Manufactures

Until recently Japan was only a minor supplier of cotton manufactures to this country, but her proportion by value of our total imports gradually rose from its 4.1 per cent level in 1925, advancing rapidly in 1933 and 1934 to reach 10.7 per cent. Imports in the latter year amounted to $3,400,000, slightly exceeding those of the prior record years of the period, 1925 and 1929. Cotton manufactures ranked 7th among our imports from Japan in 1925, 1929, and 1932, but had moved up to 4th place in 1934, when they accounted for 2¼ per cent of the value, in contrast to .7 of 1 per cent in 1926.

Improvements in technology and in management, somewhat lower wages since 1928, collective buying and selling and price and production control, the ability to use a larger proportion of the cheaper Indian and Chinese cottons than can most mills, and the depreciated yen put Japanese producers in a favorable position for competition on world markets that, because of the depression, gave more attention to price and less to quality than usual.[1] Meanwhile, due to the crop reduction program, the drought, the cotton loans, the processing tax (although a fee was levied on the cotton content of imports to equalize this), the dollar devaluation, and the NRA, the costs of our producers of all cotton manufactures rose.[2]

"Other" Cotton Rugs

Imports from Japan of "Floor coverings of cotton other than 'hit-and-miss' rag rugs, chenille rugs, imitation oriental rugs, and grass and rice-

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1 61, p. 131-4; 67 #112, p. 159.
2 61, p. 33, 34.

straw rugs" doubled in quantity from 1929 to 1934 as Japan's share of our total imports, by quantity, rose from 75 per cent (1929) to 99 per cent (1933). Japan special ized in the lower-priced types, principally plain

Table XVII. - United States Imports of Rag Rugs from Japan

Commodity & Year	Square Yards (000)	Dollars (000)	Per Cent from Japan (by value)
Rag Rugs			
Cotton Chenille			
1929	-----	---	----
1931	317	119	88.7
1932	463	97	87.6
1933	1,072	254	97.7
1934	1,182	379	98.4
1935	570(a)	157(a)	98.7(a)
"Hit-and-Miss"			
1929	2,020	1,140(b)	100.0
1931	3,583	433	100.0
1932	4,264	278	100.0
1933	3,989	259	100.0
1934	3,750	273	100.0
1935	3,410(a)	250(a)	100.0(a)
Other(c)			
1929	2,179	536	36.9
1931	1,850	365	61.6
1932	2,065	243	63.2
1933	3,995	536	90.1
1934	4,756(d)	626(d)	92.9(d)
1935	1,960(a)	330(a)	93.0(a)

(a) 8 months.
(b) Valued at the United States selling price.
(c) Imports of "Other carpets, carpeting, mats, and rugs" from Belgium, France, and Italy were assumed to be oriental rugs and were not included in the total in figuring percentages.
(d) From Jan. 1, to June 4, inclusive, rugs of grass or rice straw were included. For the remainder of the year these rugs amounted to 890,000 square yeards and $68,000. None were from other countries. Although these rugs were in chief value of cotton they were included in "other" cotton rugs only from Jan. 1, to June 4, of 1934.

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and plaid rag rugs and rugs of Sanshu-yarn (reclaimed from old rags). Imports expanded rapidly in quantity after the fall of the yen under the

35 per cent tariff, but were much lower in 1935 (8 months) after the imposition under the NIRA of a fee of 20 per cent ad valorem but not less than five cents per square yard, effective June 5, 1934, and the negotiation of a quota agreement, effective June 1, 1934, limiting Japan's exports to 4,070,000 square yards annually. The fee was abolished on June 15, 1935 after the demise of the NIRA, but the quota remained, after having been lowered to 3,250,000 square yards in May, 1935. The domestic production of competing rugs has been declining, with a substantial proportion carried on outside the mills.[1]

Cotton Chenille Rugs

Over half of the quantity of cotton rugs produced in this country in recent years were chenille. The Japanese production, mainly for the United States market, has been smaller than ours, quite the opposite of the situation with regard to "hit-and-miss" and "other" rugs, but has increased steadily. Our domestic production averaged over 2,000,000 square yards from 1929 to 1933, was probably about half this in 1934, and increased about 25 per cent during the first half of 1935. The apparent consumption was increasing, so the share supplied domestically declined from 88 per cent in 1931 to 64 per cent in 1933, and less in 1934. Low-priced imports, despite inferior quality, tended to restrict domestic production even before the NRA. With that episode it was felt necessary to impose a fee of 15¢ per square yard in addition to the 40 per cent ad valorem duty under the act of 1930 (itself an increase over the 1922 rate of 35 per cent), effective June 5, 1934, and abolished June 15, 1935. There was also an agreement restricting entries to 650,00 square yards per year, which was revised in May, 1935, to 750,000 square yards. As a result imports were much lower.[2]

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1 67 #105, p. 146, 147; 67 #95, p. 8, 9, 11, 56.
2 67 #95, p. 3, 4, 11, 17; 67 #105, p. 144, 145.

"Hit-and-Miss" Rag Rugs

Rag rug imports from Japan amounted to $810,000 in 1925 and $1,100,000 in 1926 according to the Tariff Commission. The duty of 35 per cent was shifted to the United States selling price of similar rugs in 1928 after a cost investigation by the Commission. Japanese rag rugs, an increasing proportion of which were made in household shops under contract to middlemen who furnished hand looms and materials, constituted more than 70 per cent of our imports of cotton floor coverings at the beginning of the period. The tariff increase was followed by a reduction of nearly one-third in the quantity of hit-and-miss rag rugs imported.[1]

The change to 75 per cent of the Japanese value in the 1930 act was a virtual reduction of the tariff by about half, so much lower were they than domestic values. As a result of this and the broadened market under depression conditions as consumers sought cheaper goods the quantities imported advanced until 1932 and their values until 1931. There has been no increase since 1932 such as occurred with most other cotton manufactures.

Our domestic output has been declining for nearly a decade; in 1932, when the consumption reached its peak, imports supplied 90 per cent of the whole. Our production is now largely in homes or institutions, whereas the Japanese industry, chiefly interested in our market, has become concentrated in small factories using hand looms.[2] As a result of higher costs for our producers under the recovery program our government made a quota agreement with Japan whereby she was to limit exports to 3,250,000 square yards annually, effective June 1, 1934. In May, 1935, the quota was increased to 3,550,000 square yards.[3]

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1 65, p. 2-37; 67 #95, p. 26, 27.
2 67 #95, p. 5, 25; 67 #105, p. 144, 145.
3 67 #95, p. 6, 56; 67 #105, p. 144, 145.

Cotton Rags

The United States has been Japan's principal market for Japan's exports of cotton rags, although its proportion has declined, perhaps the result of

Table XVIII. - United States-Japanese Trade in Certain Cotton Manufactures

Commodity & Year	United States Imports			Japanese Exports	
	Pounds (000)	Dollars (000)	Per Cent from Japan (by value)	Yen (000)	Per Cent to U. S. (by value)
Cotton Rags (except for paper making)					
1928	------	------	----	7,222	85.7
1929	------	------	----	8,308	84.6
1931	15,183	669	94.4	3,753	75.6
1932	10,182	280	98.1	-----	----
1933	15,399	459	99.7	3,525	55.7
1934	17,161	712	98.2	4,838	55.5
1935	16,046(a)	683(a)	98.4(a)	-----	----
Cotton Cloth(b)	Square Yards (000)				
1925	5,051	744	7.9	-----	----
1926	1,863	278	3.5	-----	----
1927	1,401	219	2.6	-----	----
1928	1,476	229	2.6	-----	----
1929	1,038	171	1.9	-----	----
1930	967	114	2.0	-----	----
1931	770	106	1.5	64	----
1932	789	57	1.3	264	----
1933	1,116	79	1.3	1,299	----
1934	7,287	363	5.6	2,763	.6
1935	24,962(a)	1,213(a)	26.8(a)	8,184	1.6
Cotton Waste(c)	Pounds (000)				
1925	7,291	669	18.0	-----	----
1926	6,075	489	22.8	-----	----
1927	6,148	412	25.4	-----	----
1928	5,522	382	12.7	808	17.0
1929	5,070	277	11.2	637	12.5
1930	4,760	232	17.8	-----	----
1931	3,359	141	23.7	243	15.4
1932	976	18	10.1	-----	----
1933	3,129	69	8.5	395	9.6
1934	1,449	53	2.5	1,265	19.2
1935	15,439(a)	729(a)	28.6(a)	-----	----

(a) 8 months.
(b) U. S. : 1925-30, only "colored, dyed, printed, etc., or woven-figured", general imports. 1931-35, imports for consumption of all "Countable cotton cloth." For 1929 the latter classification showed 1,217,000 square yards, $189,000, and 1.3 per cent.
(c) Japanese classification, "Waste cotton and waste cotton yarn."

an increase in the tariff from 20 per cent in the 1922 act to 3¢ per pound in 1930 (about 70 per cent at 1931 prices).[1] The effect was intensified at depression prices, but better times were accompanied by increasing imports, which are principally wiping rags--old clothing usually processed by washing or bleaching and then torn or cut into rags. Domestic production in this country in 1931 was valued at $5,400,000; we exported 20,000,000 pounds in 1934, valued at $931,000, largely rags suited to remanufacture into shoddy.[2]

Cotton Fabrics

The statistics secured were of doubtful comparability, but there can be no questioning the rising trend since 1931. Japanese exports rose much more rapidly in quantity than in value, indicating lower yen prices.[3] Imports from Japan declined before 1929; she was evidently unable to meet both our quality and price requirements. "Countable cotton cloth" includes bleached and unbleached cotton cloth as well as the colored, etc., cloth, figures for which were given through 1930 in Table XVIII. Imports of the other two classes from Japan were small before 1931, but due to the use of imports for all countries as a base for the percentage computation, Japan's proportion of the total will be relatively lower. With these reservations the table may serve to indicate trends. In 1933 and 1934 Japan's share of the total reached record heights.

Japan became our leading supplier in point of quantity in December, 1935, although the United Kingdom remained first by value.[4] Japan sold us principally medium-fine staples, especially white shirtings, lighter weight than domestic bleached print cloths, but competing with them for use in underwear, nightgowns, and handkerchiefs, selling about 3 to 1

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1 41.
2 67 #105, p. 146, 147.
3 67 #105, p. 83.
4 67 #112, p. 11.

cent per yard below the domestic product. The ad valorem equivalent of the duty in 1934 was 27 per cent, generally below that upon imports from from other countries because they were of finer quality or more largely composed of cloths that were printed, dyed, etc. Rates under the 1930 act were above those of 1922. It will be noted that the bleached cloths formerly of little importance have become the chief component. The quality also is better than in former years.[1]

As a consequence of a Tariff Commission investigation a 42.6 per cent increase in the duty was effected by Presidential proclamation on May 21, 1936. Furthermore, an agreement was reached with the Japanese government during 1935 by which exports of cotton piece goods to the United States and the Philippines were to be voluntarily limited. The threatened Japanese competition was probably less serious than some thought, however, for there was an increase in the stock in bonded warehouses from 495,000 square yards in December, 1934, to 9,518,000 square yards in December, 1935 (preliminary figures), indicating that the demand was less than had been expected by importers.[2]

Cotton Waste

This is another commodity whose imports from Japan declined in quantity, in value, and in relation to total imports even before 1929. A remarkable reversal in 1935, however, sent all these figures to their highest levels of this eleven-year period. Imports, principally thread waste used for machine wipings and for manufacture into low-grade yarn, enter free of duty. In recent years the total imports have been equivalent to about 6 per cent of the domestic production for sale. They were exceeded by exports. The remarkable increase in the proportion of the total that is from Japan is associated with the rapid growth

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1 67 #105, p. 138, 139; 67 #112, p. 155.
2 67 #112, p. 4-6, 14, 166, 167; 38, p. 3.

of her cotton textile industry. It was not, however, based on a price advantage for the unit value of imports from all countries was below that of imports from Japan.[1]

The 1934 exports from Japan to this country set a new mark both in value and in the share of her total exports sent here. Nevertheless, the United States remained the third market, surpassed by Great Britain and Germany.[2]

Silk Manufactures

Imports of silk manufactures from Japan amounted to $12,000,000 in value and 29½ per cent of our total imports of this class in 1926, but were declining absolutely and relative to imports from other countries before 1929. A small recovery brought their values to $2,700,000 in 1934. Japan's proportion of our total imports of silk manufactures advanced from 1930 to reach 40 per cent in 1934. In rank this class was second among our imports in 1925 and 1929, fourth in 1932, and fifth in 1934.[3]

This country has declined in importance as a market for Japanese silk tissues, even in recent years. Japan's general expansion of exports met stiffer domestic competition in this country as well as a demand for, particularly, the higher quality goods in which she was less well equipped to compete. The above trends are clear but any detailed comparison of the Japanese statistics of the different years in Table XIX should be undertaken with caution, for in some years at least rayon and artificial silk were included.[4]

Broad Silks

Cloth for export was woven mainly on power looms in Japan, but the inferiority of equipment, skill, technique, and management confined the production to rather simple low-grade goods at the beginning of this

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1 41; 67 #105, p. 182, 183.
2 67 #105, p. 79.
3 41.
4 42

Table XIX. - United States-Japanese Trade in Silk Tissues

Year	United States Imports of Broad Silk						Japanese Exports	
	In the Gray(a)			Bleached, Printed, or Dyed(b)				
	Pounds (000)	Dollars (000)	Per Cent from Japan (by value)	Pounds (000)	Dollars (000)	Per Cent from Japan (by value)	Yen (000)	Per Cent to U. S. (by value)
1925	1,179	5,693	87.0	410	1,747	25.4	21,038	18.0
1926	1,916	8,467	85.3	228	1,184	16.8	26,263	19.7
1927	1,798	6,990	86.7	125	669	8.0	18,190	13.0
1928	1,808	5,893	86.5	213	775	8.9	15,406	11.5
1929	2,073	5,647	85.9	274	999	12.0	14,703	9.8
1930(c)	767	1,853	84.3	94	308	12.1	6,528	9.9
1930(d)	206	404	(d)	206	404	(d)	------	----
1931	1,223	2,069	75.4	443	924	30.4	4,673	10.7
1932	1,008	1,064	90.6	177	249	30.7	4,244	8.4
1933	1,106	965	88.5	207	329	28.2	6,127	9.7
1934	1,024	944	88.8	331	621	38.6	5,532	7.2
1935	706(e)	632(e)	89.7(e)	393(e)	732(e)	56.7(e)	------	----

(a) 1925-30(c): general imports; broad (except pile); all silk, in the gray. 1930(d): general imports; except pile; over 30 inches wide; not Jacquard-figured. 1931-5: imports for consumption; except pile; over 30 inches in width; not Jacquard-figured; in the gray; all silk. 1930(d) includes both colored and gray.

(b) 1925-30(c): general imports; broad; dyed, colored, or advanced. 1930(d): general imports; except pile; over 30 inches wide; not Jacquard-figured. 1931-5: imports for consumption; except pile; over 30 inches in width; not Jacquard-figured; bleached, dyed, or printed; all silk. 1930(d) includes both colored and gray.

(c) Ending June 17.

(d) Beginning June 18. The percentage is omitted as the change in the classification makes it incomparable.

(e) 8 months.

period. The lack of modern dyeing and throwing facilities ("throwing" is a process that imparts more twist to the raw-silk threads) also restricted production to goods of unthrown silk in the gray or bleached, such as the two leading exports, pongee and habutae. Oriental pongee is a cheap, plain-woven, undyed cloth made of unthrown tussah (wild) silk.[1] Genuine pongee has been produced only sporadically in this country; most of the output is a

1 64, p. 8, 9, 17, 65.

cheaper imitation.[1] Habutae, as imported, is a lustrous white silk suitable for linings, underwear, negligees, dresses, shirts, upholstery, etc. About half of the imports were used without dyeing or printing when this report was made by the Tariff Commission in 1926. It was a lower-priced cloth than any all-silk cloth produced in this country; rigid government inspection was practiced to insure against adulteration.[2]

Table XIX shows a great decline in the value of imports of broad silks in the gray from Japan since 1926. The percentage of our imports sent us by Japan has been on a higher level beginning with 1932 than before and during the depression, however.[3] About three-fourths of the imports under this classification now are genuine pongee. Habutae is second in importance. Chiefly the lighter and medium weights are imported, competing only indirectly with domestic fabrics of a different nature, such as silk mixtures and rayon.[4] Under the influence of increasing prosperity until 1929, these cheaper silks were apparently in less demand in this country; although the quantities imported expanded after 1927, they were valued at less. With the depression, of course, the demand for all silks collapsed quite suddenly.

According to Japanese statistics the United States took a smaller share of her exports of pongees (from 78 per cent in 1929 to 45 per cent in 1934) following the depression and a slightly larger share of her exports of habutae (from 10 per cent in 1928 to 12 per cent in 1934). The United States was her first market for pongee and her third for habutae in 1934.[5]

The other important group of broad silks according to the United States classification was "bleached, printed, piece-dyed, or yarn-dyed" all-silk fabrics, chiefly printed and piece-dyed pongees and Fuji cloth (imitation pongee). Apparently the lack of dyeing facilities at the beginning of this

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1 67 #105, p. 150, 151.
2 64, p. 9, 15, 229.
3 41.
4 67 #105, p. 150, 151.
5 67 #105, p. 79.

period has been remedied, at least in part, for in the first 8 months of 1935 these fabrics exceeded in value the imports of broad silks in the gray.

In 1926, 2½ per cent of our imports from Japan were silk fabrics. The ratio had fallen to 1.2 per cent by 1933.[1] The tariff remained at 55 per cent upon both classes of broad silks throughout the period.[2]

Hats

The quantities of hats exported to this country by Japan were greater after 1930, as were the yen values, although the latter did not reach the 1929 level. The peak year in the dollar value of our imports and in the quantity of Japan's exports was 1931, but due to the lower exchange value of the yen in 1929, that year was first in Japanese statistics, though second in ours. There must have been an unusual domestic demand for cheap summer hats in that year. There is practically no domestic production of the principal sorts imported from Japan, but there is quite an industry employed in finishing the hat bodies.[3] Japan supplies now over one-fifth of our imports of hats of straw or other fiber.

Before 1930 imports from Japan paid a duty of 35 per cent; beginning in 1927 over half the value was composed of blocked or trimmed hats. After the 1930 act the duty on blocked or trimmed hats was 29 1/6 cents each plus 50 per cent; hats of these sorts not blocked and trimmed entered at 2 1/12 cents each plus 25 per cent if bleached, dyed, or colored (apparently higher than the former rate in most cases, under the ruling prices), and at 25 per cent if not bleached, dyed, or colored.[4] This change resulted in the practical elimination of imports of blocked and trimmed hats.

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1 71, p. 211.
2 67 #105, p. 150, 151.
3 67 #105, p. 160, 161.
4 41, 1930.

Bleached, dyed, and colored hats are our largest imports despite the duty disadvantage. Most of the imports were paper imitation Panama hats, almost none of which come from other countries. In the other items such as palm leaf and straw hats Japan was generally an unimportant supplier.[1]

Table XX. - United States-Japanese Trade in Hats and Materials

Commodity & Year	United States Imports			Japanese Exports		
	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Dozens (000)	Yen (000)	Per Cent to U. S. (by value)
Hats (a)						
1925	721	9.1	16	-----	2091	----
1926	1,939	18.9	--	-----	4310	----
1927	1,674	18.5	--	-----	2552	27.1
1928	432	5.6	--	141	1799	14.8
1929	2,807	19.6	8	572	7200	39.7
1930	1,860	16.0	--	466	3689	39.4
1931	2,950	25.1	--	1,098	6201	58.3
1932	1,143	24.5	9	637	3035	39.3
1933	896	21.8	--	886	4136	29.7
1934	1,204	19.9	12	836	4513	25.3
Hat Materials (b)				Bundles (000)		
1925	1,530	40.3	11	7,947	3,638	----
1926	1,927	39.4	--	9,488	3,761	----
1927	1,823	34.8	--	7,819	2,879	----
1928	563	18.4	--	2,526	1,161	24.9
1929	728	16.5	13	3,073	1,356	26.2
1930	544	13.6	--	2,102	875	----
1931	341	13.2	--	1,799	623	34.6
1932	152	10.8	17	1,741	633	----
1933	748	53.9	--	8,859	3,303	42.3
1934	1,200	81.1	13	13,632	4,941	61.6

(a) U. S. : Hats of straw or other fiber. Japan: Hats, caps, and bonnets.

(b) U. S. : Hat materials of straw or other fiber. Japan: Plaits for hat-making. The percentages are computed from the data for "Plaits of straw and hemp" given in 67 #105, p. 79, which correspond very closely to the values given here.

1 67 #105, p. 160, 161; 67 #97, p. 9.

Hat Materials

In 1928 there was a tremendous fall in the value of our imports of hat materials from Japan, accompanied by a decline of 2/3 in quantity and a fall in the per cent of our total imports of this class coming from Japan by nearly 50 per cent. The drop in our imports of hat materials from all countries was probably due to changing styles, although unit values of imports rose from $.0042 to $.0048 per yard. There was little change in the relationships between Japanese and other prices,[1] but the development of braids in part of synthetic textile, such as pedaline (a hemp core, usually, wrapped spirally with a narrow strip of cellophane), and neora (a ramie band laminated between two cellophane strips) may explain the decline in Japan's relative importance. When Switzerland supplied nearly all the pedaline braid before 1931, it was used only for high priced millinery. Japan entered the market in that year with lower prices, but comparable quality, but not until 1933 did braids in part, but not chief value, of synthetic textiles exceed in value the balance of imports of hat materials from her. Over 2/3 of the 1934 imports were of pedaline braid.[2]

Unbleached braids of straw and hemp were the items of next importance. Imports of these from Japan were an increasing proportion of imports from all countries, beginning with 1929, so evidently the declining ratio of Japanese hat materials to the total until 1932 was due to a shift in demand away from these straw and hemp braids in which long experience and the availability of raw materials had given her a natural advantage.[3]

Straw and manila hemp braids, not bleached, dyed, colored, or

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1 41.
2 67 #97, p. 2, 3, 6; 67 #105, p. 158, 159.
3 67 #105, p. 158, 159; 59 #642, p. 7.

stained, paid a 15 per cent duty throughout the period. Pedaline braid, 87½ per cent of which came from Japan in 1934, was dutiable at 15 or 20 per cent before the act of 1930 and at 45 per cent thereafter, but the increase of imports was not halted.[1] There is no domestic production of these types of braids. Certain braids of synthetic textile are produced in this country, but producers have suffered from (1) a general lowering of millinery prices so that cheaper materials were required, (2) style trends in higher priced millinery away from braids, especially the rough braids made here, and (3) the increasing competition of imported materials, which consumers have preferred. The United States value of our imports probably exceeds the value of domestic braid production.[2]

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1 67 #105, p. 158, 159.
2 67 #97, p. 1, 2, 9, 10.

CHAPTER V

OTHER MANUFACTURED PRODUCTS

Pottery and Glassware

Pottery

One of the more important exports of Japan to this country has been pottery, accounting for around 1½ per cent of the total value until recent years. Its proportion reached 3½ per cent in 1934, well ahead of any prior year of the period. Long experience, an abundance of raw material[1], and organization as a household industry with low wages and low capital costs[2] fit Japan for international competition. Imports of earthenware, much the smaller class, expanded through 1930 while those of china and porcelain declined from 1926, but the depression brought no important shift in the relative positions of the two. China and porcelain imports remain about twice as large in value and Japan continues to supply a considerably larger part of our total imports of those articles than of earthenware. Production in this country is almost entirely earthenware.[3]

Despite high duties, imports of household table and kitchen pottery have supplied a much larger part of our total consumption than in the case of most manufactured commodities from Japan. The large amounts of skilled hand labor required are prejudicial to the success of United States producers, especially in the more highly decorated articles. Japan supplies large quantities of these, as do the European countries; Japan sends principally, however, articles of intermediate and low price,[4] which compete to a larger extent with domestic producers. In the cheap lines of both earthenware and china this competition is severe, although concentrated

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1 59 #642, p. 7.
2 35, p. 96.
3 67 #105, p. 112, 113.
4 67 #102, p. 3.

principally in decorated cups and saucers not parts of sets, of which she supplied nearly 40 per cent of the domestic consumption (in quantity) in 1933 and about 25 per cent in the first half of 1934. Imports of medium-priced goods are principally china, competing only indirectly. A sub-

Table XXI. - United States- Japanese Trade in Pottery and Glassware

Commodity & Year	United States Imports			Japanese Exports	
	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Yen (000)	Per Cent to U. S. (by value)
Pottery					
1925	3,950	23.1	5	12,022	34.1
1926	5,762	29.9	--	13,947	42.0
1927	4,731	23.4	--	12,244	40.2
1928	4,662	26.0	--	13,792	39.8
1929	5,335	28.4	4	14,500	39.2
1930	4,632	32.9	--	10,820	39.8
1931	2,760	35.2	--	6,634	34.4
1932	1,513	34.6	5	6,441	28.1
1933	2,456	44.4	--	10,180	28.6
1934	4,164	57.9	3	14,314	34.2
Glass and Products					
1925	82	.5	19	------	----
1926	115	.6	--	------	----
1927	106	.6	--	------	----
1928	101	.7	--	------	----
1929	178	1.3	19	------	----
1930	117	1.3	--	------	----
1931	92	1.3	--	100	1.5
1932	106	2.9	18	492	5.5
1933	134	3.8	--	803	5.2
1934	390	9.2	18	1816	9.3
1935	---	---	--	2309	9.9

stantial amount of the imports are excellent quality dinnerware, well above the price range of ordinary domestic earthenware. Some, less expensively decorated, are more or less competitive in price with the domestic article. Imports from Japan accounted for about 10 per cent (of the number of pieces) of the complete earthenware or china dinner sets (domestic and Japanese) sold in this country in 1933, and about

15 per cent in the first half of 1934. The increase, and the imports, were largely sets with a large number of pieces, whereas the domestic industry specializes in the smaller sets.[1] As to kitchenware, the share of Japan in the United States consumption declined from 88 per cent in the first half of 1933 to 36 per cent in the first half of 1934 as the domestic production expanded greatly.[2]

Japan has partially supplanted Germany, France, and Czechoslovakia in our markets, sending mostly goods of lower quality for which depression conditions widened the market, but also having a price advantage on similar goods, particularly after her currency depreciation. Before the depression her cheaper goods probably found readier markets in poorer countries; the United States was taking a declining proportion of her exports at that time.

Under the recovery codes costs of domestic producers rose considerably. Japanese price competition did not increase in severity, however, due to the advance in yen exchange and to the practise of the Federation of Japanese Pottery Exporters' Associations, formed in 1933, of advancing the prices of the major classes of pottery exported to the United States. For about 3 months late in 1934 importers brought in abnormally large quantities of pottery in anticipation of an advance in the price in Japan. This partially accounts for the large imports of that year while tending to reduce them in 1935.[3]

The duties under the act of 1922 applicable to the principal imports from Japan were 70 per cent on decorated china and porcelain and 50 per cent on decorated earthenware. The act of 1930 imposed an additional 10 cents specific duty upon imports of decorated earthenware and of decorated household table and kitchen ware of china and porcelain.

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1 67 #105, p. 114, 115; 67/#102, p. 3.
2 67 #105, p. 114, 115.
3 67 #105, p. 8, 9, 11, 12.

Table XXII. - United States Imports of Pottery from Japan

Commodity / Year	Dollars (000)	Per Cent from Japan (by value)	Commodity / Year	Household Table and Kitchen: Dozens (000)	Household Table and Kitchen: Dollars (000)	Household Table and Kitchen: Per Cent from Japan (by value)	Other (a): Dozens (000)	Other (a): Dollars (000)	Other (a): Per Cent from Japan (by value)
China and Porcelain			China and Porcelain, Decorated (b)						
1925	3,363	31.8	1925	-----	-----	----	----	----	----
1926	4,894	40.0	1926	-----	-----	----	----	----	----
1927	4,021	32.9	1927	-----	-----	----	----	----	----
1928	3,708	34.7	1928	-----	-----	----	----	----	----
1929	3,935	36.9	1929	5,258	3,457	41.8	497	261	23.8
1930	3,010	39.2	1930	-----	-----	----	----	----	----
1931	-----	----	1931	3,358	1,418	45.1	1,344	321	33.3
1932	-----	----	1932	3,420	806	43.3	1,428	188	32.1
1933	-----	----	1933	4,513	1,216	55.5	1,823	268	42.6
1934	-----	----	1934	4,844	2,004	68.3	3,604	586	73.0
1935	-----	----	1935	2,552(c)	1,105(c)	63.6(c)	3,577(c)	398(c)	71.1(c)
Earthenware, except Common & Rockingham			Earthenware & Stoneware, Decorated (b) (except Rockingham)						
1925	584	9.5	1925	-----	-----	----	-----	----	----
1926	867	12.6	1926	-----	-----	----	-----	----	----
1927	708	9.1	1927	-----	-----	----	-----	----	----
1928	951	13.3	1928	-----	-----	-----	-----	----	----
1929	1,397	17.5	1929	1,509	900	18.0	656	476	23.3
1930	1,616	25.7	1930	-----	-----	----	-----	----	----
1931	-----	----	1931	1,022	526	24.1	803	449	45.7
1932	-----	----	1932	1,121	302	24.0	602	210	42.7
1933	-----	----	1933	2,007	619	37.4	584	210	40.0
1934	-----	----	1934	2,667	1,043	45.1	769	354	58.7
1935	-----	----	1935	1,909(c)	708(c)	47.3(c)	499(c)	212(c)	62.6(c)

(a) For earthenware and stoneware, other than household table and kitchen, and sanitary; for china and porcelain, other than table, kitchen, electrical, and chemical.

(b) Undecorated earthenware and china constituted only about 10 per cent of imports from Japan.

(c) 8 months.

The specific duty assumed particular significance with regard to low-priced imports from Japan. One rather unusual result of its application was that the ad valorem equivalent of the duty upon undecorated articles became considerably higher than that upon the decorated articles of higher value, placing a sort of premium upon the export of this latter class.[1]

Glass and Glassware

In 1935 the Commerce Yearbook first included glass and glassware among the principal commodities exported from Japan to the United States, giving data for the years back to 1931. This item has shown a remarkable increase, but exports to other markets are of much more importance to Japan.

Our imports from Japan have never fallen back as far as the 1925 level in value and in 1934 set a mark over twice as great as the previous maximum.

Before 1930 articles for chemical, scientific, and experimental purposes comprised the largest class, although they were never over one-fifth of the total. Second in value was cut or decorated glassware. The classifications have been changed since that year, but it appears that scientific articles lost their preeminence in 1932. Blown glassware of various kinds now forms the bulk of the imports. Animal figures and glass novelties, bowls and vases, table and kitchen ware, and decorative jars and bottles are included. Most of the Japanese products are man-blown, whereas a large part of the domestic articles are blown by machine. There is very little domestic production of decorative glassware except bowls and vases.[2]

In this field, as in others, Japan has taken advantage of her low-priced skilled labor and the adaptability of her small-scale industry

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1 67 #105, p. 112-17; 67 #102, p. 1, 2.
2 67 #105, p. 116, 117.

to the production of novelties for sale at low prices in foreign markets. Despite higher tariffs under the act of 1930, her products have met marked success. Continued recovery may mean a shift to higher quality goods, where her advantage over other foreign countries is less.

Toys

Toys are becoming of more importance in Japan's exports to the United States. Their proportion grew steadily from .4 of one per cent in 1927, the first year for which data were obtained, to 2.4 per cent 1934.[1]

At the beginning of this period toy manufacture in Japan was virtually a household industry save for the production of celluloid and rubber toys, which were largely by-products of factories specializing in other manufactures of these materials. This condition, conducive to low prices, has probably not been substantially altered. Japan produces chiefly for the export trade, for which the United States is the principal market.[2]

Japan's exports of toys to all markets increased except in the depression years; exports to this country remained a fairly constant proportion. In value the 1929 level has been passed and Japan has become our principal supplier although at the beginning of the period she was rather unimportant. Japan has largely replaced Germany in our toy markets.[3]

Dolls and parts have been important throughout. Bisque dolls designed to retail at not more than 10 cents each, dolls of cellulose compounds, with and without movable parts, and stuffed dolls of textile or thin leather are the principal types imported from Japan. Japan is almost the only external source of most of these; celluloid dolls without movable parts are the only kind made extensively in this country with which the Japanese dolls compete. The duties were 60 and 70 per cent in the 1922 act. The 70 per cent on

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1 42.
2 59 #445, p. 6, 10, 11.
3 41; 37.5.

dolls of bisque, china, etc. has been retained, but the imposition of compound duties on the other types has resulted in ad valorem equivalents well over 100 per cent. Hand labor, a variety of styles, and long experience in the manufacture and use of cellulose and clay products give Japan an advantage not offset by the tariff.[1]

Table XXIII. - United States- Japanese Trade in Toys

Year	United States Imports: Dollars (000)	United States Imports: Per Cent from Japan (by value)	United States Imports: Rank by Value	Japanese Exports: Yen (000)	Japanese Exports: Per Cent to U. S. (by value)
1925	248	6.1	18	-----	-----
1926	383	8.7	--	-----	-----
1927	343	7.5	--	3,417	32.5
1928	403	9.5	--	3,666	33.3
1929	1,321	25.8	14	4,631	33.4
1930	1,332	31.4	--	3,470	29.7
1931	1,149	30.9	--	2,928	30.0
1932	788	31.7	12	4,987	33.0
1933	857	45.5	--	6,976	26.5
1934	1,560	76.6	10	9,604	31.6
1935	-----	----	--	11,494	34.0

Rubber toys (animals, fish, balloons, and water pistols) surpassed dolls in value in 1933 only. In that year they supplied about 6 per cent of our domestic consumption, more than at any time since. Celluloid animals and birds, rattles, and other toys, bisque or porcelain tea sets or figures, and miscellaneous toys of various sorts are also important. In almost every case the last few years have seen rapid increases in the value and the proportion from Japan. Germany has lost her former priority. Many of these articles are not produced in this country, often because of the necessity for hand labor. In other parts of the trade variety and new ideas that catch the fancy are important factors.[2]

1 67 #105, p. 164, 165.
2 67 #105, p. 164-7.

Electric Lamps

It may seem surprising that Japan supplied 21 per cent of our total imports of electrical machinery and apparatus in 1925 and that this proportion has increased, ranging from 39 to 71½ per cent from 1929 through 1934 and averaging over 50 per cent in 1933 and 1934. This group ranked only 17th among our imports from Japan in 1925, 16th in 1929, 10th in 1932, and 15th in 1934. However, electrical equipment is a field in which the preeminence of the United States is such that it need import very little. Electric lamps were the bulk of the imports and of these Japan has been sending an increasing portion, largely low-quality bulbs at low prices. No great technical advancement is required and the low wages and small overhead costs of the household industry that produces them give her a great advantage.[1] The bulk of the imports before 1930 were carbon filament incandescent lamps. The expiration of domestic tungsten filament patents in 1929 permitted Japan to enter this field and carbon filament lamp exports have fallen off even more rapidly than they grew. The duty was raised from 20 per cent to 30 per cent in 1930, but they would have declined anyway.[2]

Imports of metal filament lamps rose steadily through 1933 in quantity, but were reduced nearly one-fourth in 1934 by trade restrictive measures applied in this country.[3] Japan has come to supply 99 per cent of our total import trade in these. The largest part, by quantity though not by value, has been miniature Christmas-tree, toy, and flashlight lamps, inferior in quality, and lower in price than the bulk of the domestic product. Imports of Christmas-tree and toy lamps have probably equaled or exceeded domestic production in some recent

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1 35, p. 96.
2 41, 1930.
3 37.5.

years. The large increase in imports since 1929 resulted to a considerable extent from the expiration of domestic tungsten filament patents. Domestic production of lamps other than miniature (metal filament) was valued at about $41,000,000 and exports in 1934 were more than twice imports.[1]

Table XXIV. - United States-Japanese Trade in Electric Lamps

Year	United States Imports of Incandescent Lamps						Japanese Exports of Lamps and Parts	
	Metal Filament(a)			Carbon Filament				
	Number (000)	Dollars (000)	Per Cent from Japan (by value)	Number (000)	Dollars (000)	Per Cent from Japan (by value)	Yen (000)	Per Cent to U. S. (by value)
1925	1,121	26	7.1	19,501	478	42.7	----	----
1926	1,464	52	12.7	16,599	513	40.7	----	----
1927	2,334	72	36.5	17,665	629	59.7	1765	25.7
1928	2,367	61	44.2	30,339	886	82.2	2616	31.2
1929	4,285	125	89.3	37,502	1092	88.3	3113	32.8
1930	28,798	747	95.9	13,201	459	93.5	2786	34.2
1931	67,552	1,335	97.4	1,597	54	99.4	3040	38.7
1932	113,269	1,138	97.9	155	2.8	71.6	4667	33.5
1933	120,423	789	99.0	169	2.2	90.0	3273	----
1934	92,721	832	99.2	70	.86	61.2	3155	20.1
1935	-------	-----	----	------	-------	----	2631	15.7

(a) In some years very small amounts of "other" lamps were included with the metal filament group.

The United States increased in importance as a market for Japan until 1931. By 1934 our proportion was only 16 per cent. The market for low-priced lamps would naturally be reduced in this country as the effects of the depression wore off. While our imports decreased other countries continued to buy more from Japan.

Brushes

Under the Fordney-McCumber Tariff brushes imported from Japan were dutiable at 45 per cent for the most part, but the 1930 act increased the rate in most cases to 50 per cent plus one or two cents.[2] The effects of this change would appear to be a drastic reduction of imports if the high

1 67 #109, p. 118, 119.
2 71, p. 213.

marks of 1929 ($2,000,000) and 1926 ($1,300,000) be compared with subsequent values falling to $450,000 in 1933. On the other hand, the effects of the tariff increase cannot be separated from those of the depression. Moreover, comparison of the years before 1929, exclusive

Table XXV. - United States-Japanese Trade in Brushes

Year	United States Imports			Japanese Exports
	Dollars (000)	Per Cent from Japan (by value)	Rank by Value	Yen (000)
1925	850	57.6	15	3097
1926	1,304	62.7	--	4595
1927	730	48.6	--	3261
1928	864	53.2	--	2984
1929	2,024	72.1	11	4022
1930	830	61.4	--	1328
1931	720	62.6	--	1134
1932	468	61.9	15	1256
1933	450	63.8	--	1679
1934	638	66.5	17	1808
1935	-----	----	--	1663

of 1926, when the value averaged a little over $800,000, with values of $800,000 and $700,000 in round numbers for 1930 and 1931 would indicate that the tariff had little effect. The statistics will, of course, not reveal whether imports might not have been greater had the tariff not been increased. The failure of imports of brushes to respond more rapidly after the depression may be due to this increase; certainly, Japan has the advantages of low wages and experience. Her camphor supplies gave her an early start in the manufacture of cellulose compounds. Other materials are imported but are not bulky in relation to value.[1] As far as Japan was concerned, exports fell more suddenly and more severely than was the case with most commodities. Some recovery was made, but predepression levels were not approached. Never-

1 13,p. 145.

theless, brushes approximated their predepression ratio to the total exports to the United States in 1933, 1934, and 1935,[1] so that any definite results of the tariff increase may not be seen in the presence of the many other factors. In 1934 and 1935 the United States took about one-third of Japan's brush exports.

The largest single group in our imports from Japan was toothbrushes, but not until 1929 and 1930 did they make up more than half of the imports in this classification. About one-fifth of the domestic consumption of toothbrushes with handles of cellulose compounds is imported, over 95 per cent from Japan, which has a price advantage over other countries. The change in the duty sent the ad valorem equivalent to 178 per cent in 1933 in contrast to 45 or 60 per cent under the former act.[2] Our other toothbrush imports were chiefly low-priced toothbrushes with bamboo handles, not produced in this country since 1934, which are sold principally to prisons, asylums, and similar institutions. The duty, formerly 45 per cent, reached an ad valorem equivalent of 125 per cent in 1933. Contrary to the usual trend, Japan is a somewhat less important supplier now, with about 80 per cent, than she was in 1929, with 85 per cent.[3]

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1 41.
2 67 #105, p. 160, 161.
3 67 #105, p. 162,163.

CHAPTER VI

SUMMARY

New Items

Many of the items which later became of considerable importance in the trade of Japan and the United States were not of sufficient significance early in this period to warrant their inclusion in lists purporting to present the "principal items." Among those not appearing in the Commerce Yearbook list for the years before 1927 are: lamps and parts, ranked 15th according to United States statistics in 1934; toys, ranked 10th in 1934; beans and peas, that slipped into last place in 1932 and were not listed again after that year; and vegetable oils, ranked 8th in 1934. Another group, for which the 1931 figures were the first given, included insect flowers, ranked 7th in 1934, cotton fabrics (total cotton manufactures ranked 4th in 1934), fish and shellfish, glass and glassware, ranked 18th in 1934, and knit goods. Generally, though small in value, these increased rapidly. First appearing in Japan's lowest year of the depression, they would naturally appear to grow more rapidly than others whose former status was available for comparison.[1]

There were also certain commodities not always sufficiently important to secure separate listing in the official statistics. Cotton floor coverings were not separately listed in our statistics before 1929; perilla oil not before 1928; rags, except paper stock, not before June 18, 1930; and fish scrap and fish meal not before 1931.[2] In the Japanese statistics, also, such commodities as fish meal and tuna fish in tins were not separately classified till 1934.[3]

Conversely, beans and peas and silk waste and floss declined in

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1 42.
2 41.
3 67 #105, p. 78-80.

importance and were dropped from the Commerce Yearbook after 1932.[1]

Variations from the General Average

The general movements of trade during this period, in brief, were as follows: in terms of yen, 1925 was the peak year, with 1929 second, in exports from Japan to the United States. Except during 1929 there was a steady decline until 1931, after which recovery set in. Although the total exports to the United States dropped severely in 1933, this may be disregarded for our purposes since it was almost entirely due to the slump in raw silk values, other commodity exports continuing to expand. In dollars, 1925 was the year of the lowest predepression value and 1929 that of the highest. Total imports from Japan did not begin to rise until 1935, but if raw silk be excluded, the imports of all other commodities are seen to have turned upward after 1932.[2] Therefore we may say that the usual trend, according to the number of commodities following it, was upward after 1931 in yen and after 1932 in dollars. The cases in which such an upturn reached predepression levels were sufficiently out of the ordinary however, to deserve especial mention. In most cases Japan's share of our total imports of the commodity increased during the period. Not nearly as general was the tendency for the United States to take a larger part of Japan's exports of these principal commodities. A brief discussion of the variations from these general trends may add to our understanding of the forces in action.

Failure to Recover

Outstanding in this group is raw silk, a luxury product suffering from lack of demand in the United States due principally to poor business conditions and the competition of rayon. Most of the decline in values was due to falling prices, for the quantities imported have remained

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1 42.
2 67 #105, p. 8.

above those of 1925 and 1926. Its value in 1934 was below that of 1931 or 1932 in either dollars or yen; other markets have become more significant for silk, tea, and vegetable wax as a result of the pressure of low prices and a small demand here. Tea has failed to recoup its losses in value, measured in terms of yen, in the face of a secular decline in the demand. Japan's former preeminence in our markets seems definitely gone. Vegetable wax also failed to participate in the general recovery. Japan's exports of fish and shellfish were less in 1934 than in 1931; crab meat imports from her declined continually until 1934 in value and in proportion to imports from all countries partially because of the Japanese price-maintenance policy in all probability. Other markets for crab meat have proved more receptive than ours, also. "Hit-and-miss" rag rugs seem less in demand in this country and have been restricted by quota agreements; and the demand for dyed, colored, etc. silk fabrics (broad) is still low. Japan's exports of hats, caps, and bonnets have not reached their 1931 level. The United States is a less important market for silk tissues and hat, caps, and bonnets than formerly. This is not a sign of laggard recovery in the latter case, for 1931 was nearly the peak year. The case of electric lamp bulb imports is similar. The expansion was not checked until after 1931.

Only two manufactured products, of moderate importance, have actually failed to recover from the low point of the depression: "hit-and-miss" rag rugs and broad silk fabrics, dyed, colored, printed, etc. In such important agricultural products as raw silk, tea, and vegetable wax Japan has been unable to maintain the volume of her trade with this country. It is possible, however, that greater prosperity will mean a continued reduction of the markets for her hat bodies and lamp bulbs, each of which is a substitute for something better.

Commodities That Have Regained Former Levels

The trade in pyrethrum had attained predepression levels by 1934, measured either in yen or in dollars. Vegetable oils did even better, leaving far behind the previous high year of 1927, in terms of yen. The principal cause of this was the unprecedented expansion of the trade in perilla oil, although rapeseed oil also reached predepression levels in value. Edible fish and fish products, despite the decline in crab meat, returned to the levels of 1925 to 1927, gains in canned tuna fish going a long way toward making up for the loss. The Japanese classification, "Foods in tin and bottle", showed an average value of exports to the United States for 1933 to 1935 almost one-fourth above the previous high annual value (1929), despite heightened tariff barriers. Fish meal, not included in the above fish and fish products, since it is not an edible product, is a comparatively new field for Japan, but one with great possibilities, as she has already discovered. Exports in 1928 and 1929 were so small as to make comparison with the present futile. In the last two cases, however, other markets for Japan have expanded more rapidly than ours.

The Japanese data for the values of fur exports also indicate that 1929 has been surpassed. The United States statistics show that not even the 1931 level has been reached; the two classifications are not comparable. United States imports of mink from Japan were in advance of the 1925 imports, but not near any other predepression year. Japan seems to be supplying a smaller part of our imports than previously, but accidental variations in the size of catch and quality of fur may account for this. Cotton manufactures reached their high point in 1934. "Other" cotton rugs and countable cotton cloth reached predepression levels. Cotton waste touched

a new high in yen in 1934.

Exports of hats, caps, and bonnets from Japan were above most pre-depression years in 1933 and 1934; in dollars, the imports of hats of straw or other fiber were above 1925 and 1928. As to hat materials, dollar values show a return to the former status, while the yen value was a new high for the period. In such comparisons as these the effects of the low foreign value of the yen and the rising export prices in yen are seen repeatedly. Pottery had reached its former level; earthenware slightly exceeded the 1929 peak in terms of dollars. Exports to other countries had advanced even more rapidly, making our proportion smaller. Glassware set a new record for the period in 1934. Toys, in yen and in dollars, set a new record in 1934. Menthol could make no claim to pre-depression status except in terms of yen. With electric lamps as with hats, the 1925 value was easily exceeded in 1934. Here, however, practically all our imports are now metal filament lamps; in 1925 they were practically all of carbon. Our proportion of Japan's exports declined in late years as other countries found the cheap lamps more to their liking than we did.

Of these commodities it will be noticed that cotton manufactures, toys, glassware, perilla oil, canned tuna fish, and fish meal were relatively unimportant at the beginning of this period. The first three are not new products but the extremely successful attempts to meet the needs of our market in these lines represent a new degree of skill in foreign marketing and in production for such markets. The last three are new products whose possibilities were neglected before . As early as the first half of 1934 it was apparent that miscellaneous items were gaining on the major commodity exports of Japan.[1] This is not surprising for these markets have been less fully exploited and producers in the

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1 36, May, 1934, p. 32; 39.5, p. 1.

countries entered by the Japanese goods are less powerful.

Of the two principal classes of obstacles met by Japan in our markets, one was composed of trade restrictions in the nature of high tariffs, quotas, fees, and trade agreements. The frequent use of specific or compound duties resulted in higher barriers, in effect, as the prices of goods fell. Japan, supplying generally low-priced goods, was particularly affected. The barriers raised in other countries seem to have been more serious. The other general category was inclusive of all the factors affecting our demand for her products. In very many cases Japan was unable to supply goods of high enough quality to meet any general demand in this country. During the depression years the cheaper goods were often more in demand. As time wears on Japan will find our demands more exacting; she already has found the great possibilities of the markets of backward countries as outlets for her industries. Price is more important and quality less important in those countries and Japan is better fitted to fill their needs. With most commodities in the period just past, the yen depreciation and Japan's intense efforts to produce cheaply goods for export markets have increased her proportion of our total imports.

PART THREE

THE EXPORTS OF THE UNITED STATES TO JAPAN

CHAPTER I

EXPORTS TO JAPAN BY ECONOMIC CLASSES

By far the largest class is crude materials, which has advanced to new levels since 1930 with the greater importance of raw cotton. Although exports were above those of 1925 to 1931, declining cotton shipments since 1932 account for the falling percentage shown in Table XXVI. Of the other commodities included, hides and skins, crude petroleum, and phosphate rock have shown marked advances since the depression years; tobacco leaf, logs and hewn timber, and unmanufactured wood have not advanced as rapidly largely because of barriers raised against imports in attempts to gain self-sufficiency and a favorable balance of trade.[1]

Finished manufactures was the second class until 1933, accounting for one-quarter of our exports to Japan before the depression, but much less now that Japanese industry supplies so much of its home market, leaving principally new, complex, and high-quality articles for foreign producers. The demand for these is less, of course, but may be expected to increase as Japan grows more prosperous. Advanced iron and steel and petroleum products, machinery and vehicles, and photographic and projection goods are the principal components.[2]

Exports of semimanufactures declined relative to the total until 1932 but have since advanced into second place with twenty-three per cent in

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1 41.
2 41.

Table XXVI. - Per centage Distribution of United States Domestic Exports to Japan and to All Countries

Year	Crude Materials		Crude Foodstuffs		Manufactured Foodstuffs		Semimanufactures		Finished Manufactures	
	Japan	All Countries	Japan	All Countries	Japan	All Countries	Japan	All Countries	Japan	All Countries
1925	----	29.5	----	6.6	----	11.9	----	13.8	----	38.2
1926	----	26.8	----	7.1	----	10.7	----	13.9	----	41.5
1927	----	25.1	----	8.9	----	9.7	----	14.7	----	41.6
1928	50.9	25.7	2.5	5.9	1.8	9.3	20.1	14.2	24.8	44.9
1929	48.2	22.2	3.4	5.2	2.6	9.4	18.1	14.1	27.7	49.1
1930	47.1	21.9	4.1	4.7	2.4	9.6	17.9	13.6	28.5	50.2
1931	59.3	23.8	.7	5.3	2.3	10.4	14.7	13.4	23.0	47.1
1932	70.7	32.6	.2	5.7	1.3	9.6	12.4	12.5	15.4	39.6
1933	67.7	35.9	.3	2.9	.7	9.4	17.9	14.4	13.3	37.4
1934	60.4	31.1	1.2	2.8	.4	8.0	23.0	16.2	15.0	41.9
1935	----	30.5	----	2.6	----	7.0	----	15.6	----	44.3

Sources: 41 (1925-1934); 58 (1935). The percentages sent to Japan were computed from the values as given in thousands.

1934, following the movement of exports to all countries, but changing more rapidly. Sawed timber, wood pulp, leather, and certain petroleum and metal products compose this group. Many items have declined in the face of the Japanese development of her own industries; the gains in commodities required for processing outweighed these, however, as Japanese recovery progressed.[1]

Foodstuffs exports were small and suffered disproportionately from higher tariffs and a policy of self-sufficiency after 1931. Rice and condensed milk particularly were affected. Although Japan became self-sufficient with regard to domestic consumption of wheat, imports continued as the basis of her export trade in flour. The United States sent very little in 1932 and 1933, but increased its shipments in 1934, accounting for the rise in crude foodstuffs.[2]

Japan takes about twice as large a proportion of the United States exports of crude materials as all countries, a much smaller proportion of finished manufactures (now well under one-half), a somewhat larger share of semimanufactures, and a much smaller part of foodstuffs. The advances in crude materials and semimanufactures and the decline in finished goods are expected accompaniments of the industrialization of the country. Decreases in foodstuffs are contrary to rule, but have followed upon governmental policies of self-sufficiency and agricultural relief and larger imports from Chosen, Manchukuo, and Australia. It must be remembered, too, that Japan is still predominantly agricultural .

Japan's imports from all countries are predominantly and increasingly raw materials. Manufactures for further use in manufacturing have increased, displacing wholly manufactured goods, declining in recent years. Foodstuffs imports, the smallest class, have declined for reasons given above.

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1 41.
2 41.

Table XXVII. - Percentage Distribution of Japanese Import Trade (excluding minor miscellaneous items and coin and bullion)

Year	Food, Drink, and Tobacco	Raw Materials	Articles Wholly Manufactured	Manufactures for Further Use in Manufacturing
1926	14.7	56.4	13.2	15.0
1927	12.9	47.9	11.6	13.9
1928	13.6	53.0	15.1	17.4
1929	12.2	55.2	16.0	16.0
1930	13.2	53.3	16.6	15.7
1931	12.8	55.4	16.0	14.7
1932	11.2	58.6	15.3	14.1
1933	9 (a)	61½ (a)	14 (a)	17 (a)
1934	7.6	61.9	11.5	18.3
1935	7.9	61.0	11.6	19.0

Sources: 1926 to 1929, 42; 1930, 31; 1931-2, 33; 1933 as in footnote; 1934-5, 39.

(a) 1933 data obtained from text of 35. They are approximate.

CHAPTER II

AGRICULTURAL AND FOREST PRODUCTS

Agricultural

Agricultural products make up more than half our exports to Japan. Cotton shipments caused the percentage to rise in 1932, but they have fallen off since. The other items are for less important, hides and skins being the only one to increase greatly. It, however, exceeded the best predepression years in 1934.

Table XXVIII. - United States Agricultural Exports to Japan

Year	Agricultural Exports to Japan: As Percent of Total Exports to Japan	Agricultural Exports to Japan: Value	Agricultural Exports to Japan: As Percent of Total Agricultural Exports	Total Agricultural Exports
		Million Dollars		Million Dollars
1925	59	135	6	2,280
1926	49	127	7	1,892
1927	55	141	7	1,908
1928	52	149	8	1,815
1929	51	132	7	1,847
1930	49	80	5	1,496
1931	57	89	9	1,038
1932	67	90	12	752
1933	64	91	15	590
1934	57	120	15	787
1935	52	105	16	669

Source: Foreign Agricultural Service Division. Compiled from official records of the Bureau of Foreign and Domestic Commerce.

More striking is the great increase in the proportion of our total agricultural exports that went to Japan. In 1935 she was our second market for agricultural products, far behind Great Britain. The need for imports, chiefly cotton, to supply her industries caused her trade with us to advance much more rapidly than that of other

countries.[1] Our total agricultural exports, in fact, have been declining since the beginning of the period, although they have shown some recovery from the low level of 1933.

Raw Cotton

Raw cotton, our principal export to Japan, accounted for nearly 50 per cent of the total value of our exports to that country from 1925 to 1927. In 1929 and 1930 it amounted to about 40 per cent, but in 1932 and 1933 had passed the 60 per cent mark, falling to 53 per cent in 1934.[2] Since 1931, Japan has been our principal market, in quantity and in value, supplanting the United Kingdom and Germany.[3]

The progress and success of the Japanese cotton textile industry determines the demand for foreign cotton (there are practically no domestic supplies). The export trade has been particularly significant since 1931, and in that year it was estimated that one-fourth of the imported raw cotton was reexported as cotton yarn or fabric.[4] The proportion supplied by the United States had been increasing before the depression, but it has been on a new level in recent years. The advancing quality of Japanese fabrics, reflecting higher domestic standards of living, the entrance into a higher class of export markets, and severe competition from Chinese mills in the coarser fabrics required more of the United States cotton.[5]

The shorter staple Indian cotton usually sells for about 80 per cent of the price of our product,[6] but its uses are more limited, not much of it being suitable for cloths of yarn counts above 30s. An unusually narrow price margin in 1927[7] sent our share of Japan's

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1 25, p. 386, 387.
2 67 #105, p. 36.
3 67 #105, p. 98.
4 21, p. 12.
5 12.5, p. 115, 119.
6 69, p. 547.
7 67 #112, p. 148.

Table XXIX. - United States-Japanese Trade in Raw Cotton

Year	United States Exports (a)				Japanese Imports	
	Bales (000)	Dollars (000)	Per Cent to Japan (by value)	Rank by Value	Yen (000)	Per Cent from U. S. (by value)
1925	1,003	120,887	11.5	1	360,168	39.0
1926	1,251	107,859	----	--	317,428	----
1927	1,437	122,922	----	--	343,563	----
1928	1,225	129,272	----	--	245,935	----
1929	1,101	109,399	14.3	1	276,358	48.3
1930	889	65,910	----	--	176,801	----
1931	1,744	79,740	24.6	--	155,306	51.9
1932	2,249	85,921	----	1	320,751	----
1933	1,814	86,699	21.9	--	381,087	63.1
1934	1,737	112,178	30.6	1	400,242	54.9
1935	-----	-------	----	--	371,952	52.1

(a) "Total raw cotton, except linters."

Sources: In this and the following tables in Part Three the United States statistics were compiled from Foreign Commerce and Navigation and Tariff Commission Report No. 105, Second Series, p. 86-99. The Japanese statistics were obtained from the Commerce Yearbook, Foreign Trade of Japan--1934 and 1935, Tariff Commission Report No. 105, Second Series, p. 50-53 and 72-77, the Annual Economic Report of Japan--1933, p. 103, 104, and P. G. Wright, Trade and Trade Barriers in the Pacific, p. 214-18. In the latter, values were given only to tenths of millions of yen. In some of the tables these values in round numbers have been used to fill in the gaps that would otherwise have been left. The data from the Commerce Yearbook had to be reconverted into yen as explained in the source note to Table V, p. 58. In order to save time percentage figures have only been included for 1925, 1929, 1931, 1933-5, and upon occasion, certain other significant years.

imports to 63 per cent.[1] In that year and since 1929 this country has been Japan's leading supplier in terms of value.[2] In terms of quantity the United States was first in 1927 and from 1931 to 1935.[3] United States cotton growers have benefited from the expansion of Japanese cotton textile exports to markets of low purchasing power whose demand otherwise might not have been tapped.[4] In 1931 and early in 1932 there

1 42.
2 67 #105, p. 50; 42.
3 67 #112, p. 149.
4 61, p. 109.

were large Japanese imports in anticipation of the fall in yen exchange.[1] The value of our exports of cotton to Japan began to rise in 1931, two years before the upturn in our total exports to her. Concurrent with the general deflation after the stock market crash our cotton prices fell as low as five cents in June of 1932.[2] The price differential between United States and Indian cotton was again exceptionally small in 1931 and 1932; India suffered a crop shortage;[3] and Japanese cotton buyers boycotted India in retaliation against her measures restricting imports of Japanese cotton goods.[4] As a result, imports of United States cotton set a record in quantity in 1932. They have declined since then as United States prices have risen, but more slowly. The devaluation of the dollar, reduced supplies because of the drought and the crop reduction program, and cotton loans at values above the market price have contributed to this rise.[5] For a time in late 1934 and early 1935 Indian cotton sold at only about 70 per cent as much as United States cotton, but this abnormal differential has since disappeared.[6] The conclusion of the Indian trade agreement removed the objection to imports from India. Japanese imports of our cotton were, however, 350,000 bales lower in 1935 than in 1934. Stocks were very low at the end of the year and imports were expected to be larger in 1936.[7] Japanese mills had postponed purchases pending the announcement of this country's cotton loan program.[8] The continued importance of United States cotton has been due principally to the need for its quality in making the higher grade yarns. Some mixing with fibers from India and Chosen is done,[9]

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1 32, p. 7; 33, p. 12, 13.
2 61, p. 64, 65.
3 67 #112, p. 148.
4 27, p. 6, 7.
5 61, p. 64, 65; 24, p. 29.
6 69, p. 547.
7 38, p. 3, 10.
8 37, November 25, 1935, p. 15.
9 67 #112, p. 148.

and is especially suitable for exports that must compete on a price basis in backward countries.[1]

Germany and the United Kingdom have drastically reduced their imports of cotton from this country.[2] Our exports to Japan will suffer if barriers such as we have raised in the Philippines and in our domestic markets limit her exports of cotton products.[3] Another obstacle appears in the form of Japan's drive for self-sufficiency and the problem of her trade balance. There has been talk of importing cotton from Brazil and other countries in order to balance trade bilaterally and secure freer entry for her own exports;[4] cotton cultivation is being encouraged in Korea; and staple fiber, manufactured by many rayon companies, is becoming popular as a substitute for cotton and wool.[5]

Wheat

Through 1930, although declining in importance, wheat imports did not fall below 2.3 per cent of Japan's imports from the United States, but in the next three years they almost disappeared.[6] Roughly, the quantity and value of wheat exports from this country to Japan, as well as our proportion of Japan's total wheat imports, followed the same movement.

The United States has not been the leading supplier of Japan during this period, either Australia or Canada holding that position. Price relationships have been largely determinative of the distribution of Japan's imports.[7] The United States was giving way to these newer countries to whom wheat production for export was far more important than to us in accordance with the general decline in the importance of wheat exports to our economy. A declining acreage following the World War and a growing

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1 27, p. 6, 7.
2 67 #105, p. 98.
3 38, p. 3.
4 37, May 24, 1935, p. 15.
5 39.5, p. 2.
6 71, p. 215.
7 20, p. 360, 375; 67 #105, p. 50.

Table XXX. - United States-Japanese Trade in Wheat and Tobacco

Commodity & Year	United States Exports				Japanese Imports	
	Bushels (000)	Dollars (000)	Per Cent to Japan (by value)	Rank by Value	Yen (000)	Per Cent from U. S. (by value)
Wheat						
1925	3,673	5,441	3.7	7	25,580	36.3
1926	8,006	11,040	----	--	25,293	----
1927	4,105	5,339	----	--	18,365	----
1928	5,600	7,023	----	--	15,904	----
1929	7.003	8,515	7.6	6	15,046	21.2
1930	6,403	6,483	----	--	17,961	----
1931	1,820	904	1.8	—	2,523	7.7
1932	218	117	----	27	751	----
1933	664	353	7.4	--	238	.5
1934	4,401	2,352	22.9	8	9,854	24.2
Leaf Tobacco(a)	Pounds (000)					
1925	7,741	3,278	3.0	--	4,600	----
1926	7,188	2,369	----	--	6,400	----
1927	9,991	4,289	----	—	7,700	----
1928	15,241	5,521	----	--	6,790	----
1929	13,969	4,875	4.2	--	8,047	81.7
1930	5,899	2,221	----	--	5,000	----
1931	11,053	3,056	3.4	--	5,546	68.1
1932	2,940	788	----	--	1,700	----
1933	6,191	1,126	1.7	--	3,962	63.5
1934	9,405	1,878	1.7	--	4,782	56.9
Total Tobacco & Manufactures						
1925	------	3,372	2.0	9		
1926	------	2,469	----	--		
1927	------	4,350	----	--		
1928	------	5,624	----	--		
1929	------	4,953	3.0	10		
1930	------	2,311	----	--		
1931	------	3,216	2.7	--		
1932	------	924	----	10		
1933	------	1,248	1.4	--		
1934	------	1,975	1.5	11		

(a) United States: "bright flue cured."

domestic consumption that left only the less desirable grades and types for foreign sales was already evident at the beginning of this period.[1] Our exports held up exceptionally well in 1930; forty-three per cent of the value of Japan's wheat imports were from this country,[2] but the bottom dropped out in the next three years. Australia's program of export encouragement increased her share in 1931;[3] in 1932 the price advantage to Japan of buying in depreciated sterling markets caused a further shift to Australia and Canada;[4] in 1933, as a result of the drought and the AAA much of the advantage that might have arisen from our own depreciation was lost. Our total wheat exports in 1933 were valued at less than $5,000,000.[5] Our exports of flour to Japan suffered even more severely, meeting increasing competition from her local millers as well as these other unfavorable factors. They amounted to $1,700,000 in 1929, fell to $4,100 in 1933 and rose only to $12,000 in 1934. Japan took only 2 per cent of our total flour exports in 1929 and has taken less than 1 per cent since then.[6]

Except for 1931 and 1932 the proportion of our wheat exports that was sent to Japan showed an upward trend. A short crop in Australia in 1934 enabled us to regain a portion of the former trade,[7] and Japan's retaliatory duty of 50 per cent ad valorem additional imposed upon Canadian wheat, beginning July 20, 1935,[8] probably further increased our share of the trade. Another beneficial factor in the 1933-1934 season was the operation of the North Pacific Emergency Export Association, which bought wheat at

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1 17, p. 247, 248.
2 42.
3 32, p. 13, 14.
4 33, p. 14.
5 41.
6 67 #105, p. 87.
7 35, p. 102.
8 4, p. 84.

the domestic price and sold it abroad at competitive prices, the difference being made up by funds raised by the processing tax. For the twelve months ending June 30, 1934, about 87 per cent of our net wheat and flour exports were made through this organization at a cost of about 23 cents per bushel. Operations ceased after June 30, as it became evident that the 1934 crop would not meet our domestic needs.[1]

An increase in the Japanese tariff, effective June 16, 1932, from 1½ to 2½ yen per picul was followed by lowered quantities of imports in the next three years, a longer consecutive period, but at no lower levels than were frequent in previous years. There is a drawback on the duty when the wheat is milled into flour for export[2] and so effective was the government's program of encouragement of wheat production that Japan had become self-sufficient by 1935,[3] the production in Japan proper rising from 31,000,000 bushels in 1932 to 48,000,000 bushels in 1934.[4] Gross imports have varied from year to year since the development of the export flour business, dependent upon the domestic crop and demand and the success of the millers in meeting foreign, especially Australian, competition. Even if Japan can continue self-sufficient with an increasing population there will be large imports for milling flour for exports plus some strong wheat to mix with the domestic soft wheat.[5]

Tobacco and Manufactures

Despite a Japanese import duty of 355 per cent throughout the period imports of leaf tobacco from the United States averaged nearly 1 per cent of Japan's total imports from this country.[6] Through 1930 the next largest item in our total exports of tobacco and manufactures was cigarettes; stems, trimmings, and scrap supplanted them in 1931. Neither item was

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1 26.5.
2 4, p. 84.
3 4, p. 56.
4 42.
5 4, p. 56, 90.
6 71, p. 216.

ever very large. The Japanese government has a monopoly of the tobacco industry in that country. The failure of imports to respond to the general recovery movement after the depression is perhaps due to government discouragement. The product is not a necessity; contributes to Japan's unfavorable trade balance; and the government is promoting more and better production within the country.[1] The United States is the principal supplier, sending a higher grade product than its principal competitors, China and the Philippines. They have been gaining ground during the depression and recovery periods, however.

Hides and Skins

The intensity of cultivation of the limited amount of land in Japan has not lent itself to stock raising. Few livestock are reared and but a small proportion of these are slaughtered annually, partially at least due to religious objections. Such domestic hides as are produced are usually of low quality, for the livestock are poor and the take-off and curing careless. According to the Japanese data, China was the leading source of imports until 1934 when the United States moved up from second place.[2] Many partly tanned hides are also imported from British India and Malaya, but these are included in the statistics of leather imports.[3] The heavier weights of medium-quality rawhides, principally cattlehides, are most popular, with a trend toward the use of semitanned hides, which the tanners have found more advantageous than the purchase of the raw product.[4]

Cow and buffalo hides enter Japan duty-free.[5] Because the United States itself uses so much leather only a rather small proportion of the large production of hides and skins incident to meat production is exported and large quantities are imported. Japan is one of our larger customers[6] and

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1 38, p. 2.
2 60 #50, p. 3, 164; 59 #755, p. 5-7; 67 #105, p. 52.
3 59 #632, p. 34.
4 59 #755, p. 7.
5 71, p. 216.
6 60 #50, p. 3, 43, 44.

her proportion has increased during this period, our exports to all countries continuing to decline until 1933 while exports to Japan turned upward in 1931, supplying her growing leather industry.[1] Although values dropped

Table XXXI. - United States-Japanese Trade in Hides and Skins and Leather

Commodity & Year	United States Exports			Japanese Imports	
	Dollars (000)	Per Cent to Japan (by value)	Rank by Value	Yen (000)	Per Cent from U. S. (by value)
Hides and Skins					
1925	1,090	9.1	16	(a)	(a)
1926	1,474	----	--	(a)	(a)
1927	1,281	----	--	3,132	32.5
1928	1,269	----	--	3,185	----
1929	1,375	20.2	19	3,729	29.1
1930	876	----	--	2,472	----
1931	807	26.3	--	2,242	30.6
1932	885	----	12	3,397	----
1933	901	44.0	--	4,315	31.9
1934	1,579	36.7	13	6,270	38.5
1935	-----	----	--	6,696	31.4
Leather					
1925	2,025	3.9	14	3,779	----
1926	2,357	----	--	4,200	----
1927	2,110	----	--	3,084	40.2
1928	2,002	----	--	3,392	----
1929	1,512	3.5	17	3,093	42.4
1930	789	----	--	1,616	----
1931	680	2.7	--	1,469	33.8
1932	245	----	23	982	----
1933	227	1.6	--	767	19.5
1934	238	1.5	23	749	15.5

(a) Not listed in 42 for the years before 1927.

considerably under the influence of depression conditions, the quantities sent Japan showed a general upward trend reaching new high marks in 1934. Cattlehides comprised the bulk of our exports throughout the period. Calf and kip skins showed a remarkably steady growth in the face of poor business conditions in general and accounted for over one-third of the total in 1934.

1 41; see also p. 129 below.

The customary movements toward greater self-sufficiency are under way in Japan as she attempts to promote sheep-raising in Manchukuo and in Chosen. Should such projects be successful, imports of wool and of hides

Table XXXII. - United States-Japanese Trade in Certain Hides and Skins

Year	United States Exports						Japanese Imports of Cow and Buffalo Hides and Skins	
	Calf and Kip Skins (a)			Cattle Hides				
	Pounds (000)	Dollars (000)	Per Cent to Japan by Value	Pounds (000)	Dollars (000)	Per Cent to Japan by Value	Yen (000)	Per Cent from U. S. (by value)
1925	311	67	2.2	6,576	1,011	14.4	2,600	----
1926	628	111	----	9,342	1,317	----	4,200	----
1927	688	134	----	6,823	1,108	----	2,900	----
1928	1,065	296	----	4,488	936	----	2,600	----
1929	1,311	322	20.9	6,800	986	28.1	3,370	31.8
1930	711	142	----	4,926	685	----	2,300	----
1931	1,843	213	34.8	6,210	497	29.5	1,949	34.1
1932	4,470	315	----	9,581	488	----	3,100	----
1933	2,971	294	58.1	8,897	584	56.8	4,175	35.6
1934	5,307	582	48.4	12,739	946	38.0	6,015	41.9

(a) 1925-1930, calfskins only.

could be reduced, but it will not be for some time in any event.[1]

Leather

Japan's use of leather has been increasing during this period although the depression was a setback, causing an even greater tendency to buy the cheaper varieties than was customary in a country whose populace has such low purchasing power and sometimes sending consumers back to the articles formerly used or to cheap substitutes. The demand for foreign style shoes has been gradually increasing, however. School regulations require them; they are used in the army; and business men prefer them.[2]

The domestic tanning industry has expanded its output, extended its range, and improved the quality. The tariff was increased in 1926 and

1 39,5, p. 2; 40.4.
2 56; 59 #755, p. 1; 60 #157, p. 7.

in 1933. Sole leather was dutiable at 21 yen (1926) and 36.58 yen (1933) per 100 kin; the more valuable dyed or colored leather paid 145 yen from 1926 to 1932 and 195.75 yen in 1933 and following years, per 100 kin.[1]

Table XXXIII. - United States Exports of Certain Leathers to Japan

Year	Goat and Kid (Glazed Kid), Black			Sole Leather, Backs, Bends, & Sides			Calf and Kip (Other than Black)		
	Square Feet (000)	Dollars (000)	Per Cent to Japan by Value	Square Feet (000)	Dollars (000)	Per Cent to Japan by Value	Pounds (000)	Dollars (000)	Per Cent to Japan by Value
1925	1,116(a)	340(a)	2.7(a)	1,869	747	28.4	1,584(b)	564(b)	5.7(b)
1926	559	200	----	1,744	703	----	1,619	569	6.8
1927	592	196	----	1,634	737	----	1,876	535	----
1928	608	219	----	1,093	612	32.6	1,085	407	----
1929	633	229	4.3	778	331	28.3	559	209	3.6
1930	665	228	----	498	220	----	301	100	----
1931	734	192	4.8	709	216	35.6	309	82	4.7
1932	496	98	----	105	26	----	127	21	----
1933	643	122	5.7	27	14	11.9	35	6	.8
1934	479	122	5.2	38	18	8.8	49	10	.8

(a) Total goat and kid.
(b) Total calf and kip.

Early in the period domestic uppers were inferior in finish and elasticity, while domestic sole leather absorbed water quickly.[2] Even in 1930 most of the leather producing establishments were household shops with only 1 or 2 employees; less than twenty were fully equipped with modern machinery. The greater part of the consumption of the medium qualities and practically all of the best grades had to be imported.[3] By 1934 more of the smaller producers had been forced out of business and there were 50 important plants fitted with modern machinery. Practically all types of leather were produced and the foreign producers were being displaced.[4]

Although the competition was more severe and losses had been sustained the United States in 1934 remained Japan's leading supplier of finished

1 71, p. 216.
2 59 #546, p. 54, 55.
3 59 #755, p. 4, 5.
4 60 #157, p. 209.

leather and of each of the three sub-classes presented in Table XXXIII. The Japanese statistics include imports of partly tanned hides and skins from British India, sufficient to give it the bulk of the trade as reported in Table XXXII.[1] The outstanding feature of the tables is the continuing decline in exports to Japan and in Japan's status among our customers. Greater domestic production caused larger imports of hides and skins but reduced imports of leather. Sole leather, backs, bends, and sides, and calf and kip other than black declined much more rapidly than goat and kid, black, leaving the latter first in importance.

Japan increased in importance as a customer for black goat and kid leather. Her domestic production was small before 1925, grew sufficiently to cover about 45 per cent of her requirements in 1930, but did not increase much thereafter, while the consumption fell off less than that of other leathers.[2] The Japanese output of sole leather now compares favorably with our grade 2, but a large part satisfies the important demand for the cheaper qualities. Imports are chiefly from our Pacific coast producers.[3] Leather produced in Japan virtually dominated the domestic market for black uppers in 1929, and the manufacture of medium qualities and of colors has grown since then. The shift to cheaper types has reduced the demand so that the domestic production of calf and kip now predominates.[4]

Condensed Milk

The lack of development of the dairy industry in Japan means that a large part of the demand must be met by imports. The native Japanese have not generally come to desire milk in their diet, but there was a demand on the part of resident foreigners[5] and certain of the Japanese.

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1 60 #157, p. 212, 214; 60 #103, p. 224; 59 #401, p. 23; 60 #157, p. 210.
2 59 #755, p. 16; 60 #103, p. 223, 224; 60 #157, p. 212.
3 59 #401, p. 23; 59 #571, p. 58; 60 #157, p. 209.
4 59 #632, p. 32; 60 #103, p. 223; 59 #755, p. 13-15, 19; 60 #157, p. 210, 211.
5 10.5, p. 5.

With the advance in the duty from 11 to 20 yen per 100 kin in that year and to 25 yen per 100 kin in 1933, imports declined markedly. The United States was the principal supplier, sending usually about two-thirds of the total, but by 1933 its proportion had fallen below half.[1] Meanwhile, Japan

Table XXXIV. - United States Exports of Condensed Milk to Japan

Year	Pounds (000)	Dollars (000)	Per Cent to Japan (by value)	Rank by Value
1925	5,242	966	14.6	18
1926	3,642	670	----	--
1927	4,947	925	----	--
1928	5,652	1,068	----	--
1929	5,186	984	15.2	22
1930	4,219	800	----	--
1931	3,732	721	21.8	--
1932	2,224	421	----	18
1933	.1	.02	.003	--
1934	91	13	1.3	28

had practically lost her significance as a market for our exports of condensed milk.

Rice

Between 1880 and 1928 Japan's rice production increased 88 per cent, three-fourths due to a higher yield and one-fourth due to an increase in the area under cultivation. It did not seem possible in 1929 that either by an increase in the cultivated acreage or by larger yields Japan could significantly increase her production.[2] From 1928 to 1932 , 85 per cent of the annual consumption was domestically produced and 13 per cent imported from Chosen and Taiwan. Despite the efforts of the government to support the price by loans for storage, and by buying and selling at fixed prices during this period the crops brought low prices.[3] On October 12, 1933, was issued an imperial ordinance prohibiting the importation of

1 71, p. 198, 217.
2 13, p. 31.
3 7.8.

rice without a license.[1] In that year also the duty was advanced from 1 yen per 100 kin to 1.35 yen per 100 kin.[2] Table XXXV shows the effects upon our trade.

Table XXXV. - United States-Japanese Trade in Broken Rice

Year	United States Exports (a)				Japanese Imports	
	Pounds (000)	Dollars (000)	Per Cent to Japan (by value)	Rank by Value	Yen (000)	Per Cent from U. S. (by value)
1925	21,157	810	89.2	20	----	----
1926	26,589	1,035	----	---	----	----
1927	35,116	1,293	----	---	----	----
1928	48,635	1,504	----	---	2,457	----
1929	47,643	1,471	74.3	18	3,225	18.1
1930	35,259	1,005	----	---	----	----
1931	23,978	356	40.8	---	1,271	19.5
1932	30,962	351	----	20	----	----
1933	9,165	85	78.6	---	581	5.5
1934	None	None	None	None	None	None

(a) "Rice flour, meal, and broken rice."

A large part of Japan's total rice imports consisted of broken rice. We sent little of any other classification to her except in 1927, following Japan's short rice crop of 1926,[3] when exports of "Rice" totalled $2,600,000. From 70 to 90 per cent of our broken rice exports went to her in most years. The size of her domestic crop has been the principal determinant of the volume of imports. Should she have a very short crop some year the government would probably relax its restrictions to prevent excessive prices. The United States has always been a rather unimportant source of supply, still less important with regard to total rice and paddy imports than with regard to imports of broken rice alone.[4]

1 35, p. 110.
2 71, p. 218.
3 42, 1928, Vol. II, p. 389.
4 67 #105, p. 72, 75; 71, p. 197.

Forest Products

Wood Pulp

Our exports of paper base stocks to Japan have expanded remarkably since the early part of the period, when Canada, Sweden, Norway, and Germany supplied larger proportions of the value of Japan's imports than did we.[1] This has come about with the growth of exports of sulphite wood

Table XXXVI. - United States-Japanese Trade in Paper Base Stocks

Year	United States Exports: Total Paper Base Stocks: Dollars (000)	Per Cent to Japan by Value	Rank by Value	Sulphite Wood Pulp: Tons	Dollars (000)	Per Cent to Japan by Value	Japanese Imports: Pulp for Papermaking: Yen (000)	Per Cent from U. S. (by value)
1925	175	3.0	24	None	None	None	------	----
1926	97	----	--	165	20	----	------	----
1927	191	----	--	303	17	----	------	----
1928	470	----	--	2,627	177	----	1,289	----
1929	576	11.3	25	8,463	451	21.3	2,317	17.2
1930	324	----	--	3,595	188	----	------	----
1931	1,224	32.9	--	21,662	1,152	51.2	2,418	20.4
1932	1,086	----	9	21,162	1,065	----	3,952	----
1933	1,994	51.6	--	45,017	1,959	64.3	7,802	28.8
1934	5,207	63.9	6	91,426	5,154	75.6	16,321	36.9
1935	-----	----	--	------	-----	----	22,812	41.4

pulp, comprising nearly all of the paper base stocks sent Japan since 1931. Our exports to all countries of all paper base stocks declined until 1933, but exports of sulphite wood pulp rose in value after 1928.[2]

The rapid development of Japan's foreign style paper, rayon, and other cellulose products industries has been particularly marked since the depression. Although she produces about 80 per cent of the paper pulp needed,[3] the high grade sulphite wood pulp needed for the manufacture of rayon,

1 59 #672, p. 8.
2 41.
3 38, p. 7.

staple fiber, cellophane, and other cellulose products must be imported.[1] It was largely due to the demand for this quality and type of product that the United States had become Japan's principal supplier in 1934. A temporary factor of minor importance was the added 50 per cent retaliatory duty upon wood pulp imports from Canada, practically none entering in the last four months of 1935. This was to be removed on January 1, 1936, according to press reports.[2]

The Japanese data presented in Table XXXVI do not differentiate between rayon and paper pulp. Imports of the latter still form a somewhat larger part of the total quantity,[3] but there seems to be more room for the growth of imports of rayon pulp. In 1933 our government's representative in Tokyo stated, "We believe that Japan already accounts for about 15 per cent of world rayon production, being exceeded only by the United States and Italy. There is reason to believe that in a very short time production will equal that of the United States and that in 1934 Japan will be the world's largest producer."[4] As usual, however, Japan is trying to develop her own production. Among other things it is reported that the Taiwan Paper Company is building a factory for the manufacture of paper pulp from Xiphagrastis, an Asiatic grass somewhat similar to sugar cane in appearance.[5]

Wood

Japan has been forced to import large amounts of lumber to supplement her domestic supply. The need was particularly great in the years following the earthquake of 1923 when reconstruction was going on. Housing and the construction needs that accompanied her industrial expansion[6] before 1929 maintained imports at a high level. Construction declined in 1929 as many new projects were postponed and imports began a

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1 35, p. 46; 36, December, 1933, p. 26.
2 38, p. 3.
3 36, March, 1935, p. 18; 37, May 24, 1935, p. 21; 37, July 24, 1935, p. 19.
4 36, July, 1933, p. 7.
5 36, January, 1935, p. 16.

Table XXXVII. - United States-Japanese Trade in Wood

United States Exports

Year	Sawed Timber, Douglas Fir Feet (000,000)	Sawed Timber, Douglas Fir Dollars (000)	Sawed Timber, Douglas Fir Per Cent to Japan by Value	Douglas Fir, Rough & Dressed Feet (000,000)	Douglas Fir, Rough & Dressed Dollars (000)	Douglas Fir, Rough & Dressed Per Cent to Japan by Value	Hemlock Feet (000,000)	Hemlock Dollars (000)	Hemlock Per Cent to Japan by Value	Cedar Feet (000,000)	Cedar Dollars (000)	Cedar Per Cent to Japan by Value	Total Sawmill Products (a) Dollars (000)	Total Sawmill Products (a) Per Cent to Japan by Value	Rank by Value
	Boards, Planks, and Scantlings														
1925	207,003	4,415	60.4	148,173	3,153	22.6	102,679	2,188	81.1	(b)	(b)	(b)	12,456	12.5	3
1926	344,651	7,082	----	176,798	3,760	----	145,922	3,146	----	(b)	(b)	(b)	16,638	----	--
1927	259,796	5,203	----	178,554	3,550	----	165,496	3,323	----	14,282	588	66.9	13,710	----	--
1928	326,905	6,413	----	188,480	3,530	----	199,729	3,979	----	20,770	889	----	15,845	----	--
1929	247,874	4,756	43.4	128,047	2,358	11.4	93,975	1,889	56.2	11,015	503	57.1	10,089	9.1	5
1930	170,772	2,824	----	66,674	990	----	47,518	852	----	4,958	237	----	5,327	----	--
1931	207,026	2,551	66.1	64,009	808	11.0	45,217	719	65.7	4,914	195	44.5	4,565	10.1	--
1932	177,637	1,546	----	38,969	358	----	19,595	251	----	2,466	66	----	2,462	----	4
1933	174,191	1,627	68.9	26,276	260	5.4	10,729	129	71.2	2,159	54	28.6	2,131	6.6	--
1934	135,187	1,627	56.7	15,206	189	2.9	8,320	119	72.0	1,898	55	22.4	2,112	4.9	9

Japanese Imports

Year	All Wood Yen (000)	Cedar, Pine, and Fir (c) Yen (000)	Cedar, Pine, and Fir (c) Per Cent from U. S. (by value)	Logs and Hewn Timber: Hemlock Yen (000)	Hemlock Yen (000)	Hemlock Per Cent from U. S. (by value)	Cedar Yen (000)	Cedar Yen (000)	Cedar Per Cent from U. S. (by value)	Total Unmanufactured Wood (e) Dollars (000)	Total Unmanufactured Wood (e) Per Cent to Japan by Value	Rank by Value
1925	60,485	------	----	(d)	(d)	(d)	105,587	2,976	95.4	3,319	35.9	10
1926	84,709	------	----	(d)	(d)	(d)	134,184	3,382	----	4,300	----	--
1927	71,289	------	----	(d)	(d)	(d)	184,445	3,946	----	5,316	----	--
1928	84,928	84,245	----	(d)	(d)	(d)	258,018	5,812	----	7,235	45.8	--
1929	67,317	66,610	83.1	(d)	(d)	(d)	170,029	3,731	94.8	5,268	34.5	9
1930	32,620	------	----	(d)	(d)	(d)	111,061	2,356	----	3,726	----	--
1931	26,450	25,198	66.8	61,821	625	98.0	113,718	2,074	95.9	3,436	54.4	--
1932	20,228	------	----	50,993	453	----	33,907	550	----	1,363	----	7
1933	23,709	22,904	69.4	53,638	474	99.5	36,112	556	85.1	1,426	42.1	--
1934	20,930	20,106	66.7	45,460	394	78.6	44,585	695	89.9	1,834	30.8	12
1935	28,227	------	----									

Footnotes continued on next page.

decline from which the recovery has been but slight.

The United States, with large supplies of timber very similar to that which grows in Japan and to which they have become accustomed, growing in the Pacific States and readily shipped by water to Japanese ports, is her principal supplier. Although the value of our exports of sawmill products to Japan is greater than the value of our exports of unmanufactured wood, the latter class has become relatively more important during this period. The Japanese much prefer to import large sizes[1] and rough lumber, sawing them in their own mills or on the job itself. Their mills cut for quality, finishing their products very smoothly and accurately. Purchasers willingly pay a higher price for this type of material. Most of the sawn sizes of Douglas fir and hemlock imported are remanufactured in Japan with as much upgrading as possible. There is extremely little waste, almost all fragments being used in some way.[2]

Douglas fir, mostly sawed timber, but including large amounts of boards, planks, and scantlings, nearly all rough sawn, is the variety most in demand. The large sizes in which it may be obtained plus its inherent qualities make it more or less indispensable. Cedar is imported to supplement the decreasing supply of Japanese red and white cedar, no other substitute being available. Imports are principally as logs and hewn timber. Hemlock is particularly suitable by virtue of its size and freedom from resin for construction requiring a clear lumber without pitch.[3]

There were but small evidences of recovery in this trade as late as 1934. Sawmill products continued their decline; those groups that rose did so in small degree. A shift to unmanufactured timber might have been expected as Japan pursued her policy of self-sufficiency and continued her industrialization, especially in view of the above-mentioned practice of

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1 60 #59, p. 3.
2 60 #59, p. 5, 7, 8, 13.
3 60 #59, p. 7, 9, 15-21, 39.
(a) Inclusive also of other softwoods and of hardwoods.
(b) Not separately classified before 1927.
(c) "Cedar, other than for pencils, pine and fir boards, planks, logs, and cants."
(d) Not separately classified before 1931.

resawing most imported lumber. Nor would imports be expected to reach former levels now that the reconstruction work and government building program have been largely completed.[1] But the United States, particularly since 1929, has been supplying a smaller proportion of Japan's imports of wood, while Canada's share of cedar, pine, and fir imports climbed from 6½ per cent in 1929 to 31 per cent in 1934.[2] Canada's departure from gold aided her exports of lumber in 1932, but this factor is in no way a complete explanation, for we were losing Japanese markets to her quite rapidly before that. The NRA enabled many lumber companies to raise prices domestically in 1933; if they quoted equivalent prices for export the advantages of our depreciation were largely nullified. Labor troubles in Pacific ports in 1934 kept down exports to Japan in that year and enabled Canada to capture more of the market, particularly as Canadian prices were reduced during the latter part of the year. Imports of foreign lumber in general were favorably affected by the higher prices and policy of control put into effect by the Saghalien government to conserve the pulp supply.[3] Japan's imports from this country rose considerably in 1935, accounting for nearly all of the increase in her total imports.[4] A logger's strike in the Pacific Northwest, the 50 per cent retaliatory duty imposed on Canadian lumber in the last part of the year, and rumors of an impending shipping strike in our own Pacific ports contributed to this.[5]

Japan's general tariff increase upon imports of wood affected all countries equally, but helps to explain the marked decline in the proportion of our exports of most of these products that went to Japan. According to P. G. Wright the representative tariff rate was 1.8 yen per cubic meter until 1932 when it was increased to 3 yen. In 1933 it again was raised, this time to 4.45 yen per cubic meter.[6]

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1 36, December, 1933, p. 26, 27.
2 67 #105, p. 50.
3 36, August, 1934, p. 17, 18; 35, p. 90, 91.
4 39.
5 37, September 26, 1935, p. 22; 38, p. 3.
6 71, p. 214.

Rosin

The United States furnishes the bulk of Japan's imports of rosin, which have held remarkably steady. In 1929 we supplied rosin valued at ¥3,500,000. Quantities rose during the depression, but the value dropped to ¥2,000,000 in 1931, rising to ¥2,900,000 in 1934. As a necessary raw material, imports are not dutiable.[1] Our statistics showed that while the value of our exports to Japan fell from $1,400,000 (1931) to $680,000 (1933), she took a larger part of our total exports, by 1934, 10 per cent, in contrast to 7 per cent in 1929.[2]

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1 71, p. 217; 67 #105, p. 74.
2 67 #105, p. 87.

CHAPTER III

METALS AND MANUFACTURES, EXCEPT MACHINERY AND VEHICLES

Dependent as she is for most minerals and metals due to the volcanic formation of the islands,[1] yet needing large quantities of them for the furtherance of her program of industrialization, Japan has been a rather important market for our exports of metals and manufactures. Her proportion of the total declined from 7½ per cent in 1926 to 5 per cent in 1931 under the influence of a general slowing up of Japan's expansion, but with her recovery boom far in advance of other countries it reached 15½ per cent in 1934. Values fell from $34,500,000 in 1926 to $6,000,000 in 1932 and rose to $29,600,000 in 1934, above their 1929 level. Exports of most of the items that are discussed here followed this general course before the depression, but there was more variance in their response to that influence. The remarkable expansion of exports to Japan during the recovery period was concentrated almost entirely in iron and steel semimanufactures, copper, and aluminum. These outweighed all others.

Iron and Steel

By far the largest metal imports of Japan were of iron and steel, basic to any sort of industrial program. The first year of our period, 1925, is hardly representative, for Japan's purchases were below their normal levels, largely due to the excessive stocks on hand as a result of large imports in 1924 following the earthquake of September, 1923.[2] Our exports of semimanufactures and advanced manufactures reached their predepression peak during this eleven-year period in 1928; exports of

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1 59 #505, p. 3, 4.
2 59 #612, p. 35.

steel mill products to Japan were at their highest in 1926. Government regulations requiring the replacement of all temporary structures erected in the business district after the earthquake by buildings of concrete and steel before 1928[1] added their force to the general industrial growth of

Table XXXVIII. - United States-Japanese Trade in Iron and Steel

Year	United States Exports					
	Dollars (000)	Per Cent to Japan (by Value)	Rank by Value	Dollars (000)	Per Cent to Japan (by value)	Rank by Value
	Semimanufactures			Advanced Manufactures		
1925	8,796	12.5	5	2,910	3.8	12
1926	14,450	----	--	3,201	----	--
1927	14,082	16.2	--	2,584	----	--
1928	15,403	----	--	3,874	----	--
1929	14,828	14.2	4	3,511	4.0	13
1930	9,643	----	--	2,558	----	--
1931	3,375	10.5	--	2,547	6.9	--
1932	2,407	----	5	749	----	15
1933	7,265	28.2	--	414	2.1	--
1934	17,352	30.5	3	620	2.2	17

Year	Steel Mill Products			Japanese Imports of Iron and Steel	
				Yen (000)	Per Cent from U. S. (by value)
1925	2,657	5.6	13	(a)	(a)
1926	5,569	6.8	--	33,697	25.0
1927	3,967	----	--	36,745	----
1928	3,429	----	--	39,237	----
1929	3,719	3.9	12	39,931	25.0
1930	2,027	----	--	29,067	31.1
1931	980	3.2	--	8,635	17.8
1932	552	----	16	11,683	----
1933	580	2.9	--	22,190	16.3
1934	530	1.7	18	67,797	39.6
1935				88,991	43.0

(a) Not comparable before 1926.

Japan, necessitating imports of iron and steel and their products.

Under the influence of the world depression imports from the United States fell to less than one-fourth their 1929 value, and the United States came to supply less than 18 per cent of the total imports. Before 1933

1 42, 1925, p. 673.

the share of the United States was greater by value than by quantity; we were sending products of higher quality and value than other countries. It was perhaps for this reason that imports from this country declined so much more rapidly than the total imports of Japan. Certainly, in 1933 and following years, probably due in large part to the much greater importance of old and scrap iron and steel, the unit value of imports from this country was lower than that of imports from all other countries,[1] and in 1934 and 1935 imports from the United States reached new heights, both in absolute value and relative to the total. Japan, in 1934 ranked sixth among the world's steel producers, was our leading customer for iron and steel products in 1933 and 1934.[2]

The Imperial Geological Survey has estimated the iron ore reserves of Japan Proper to be 80,000,000 tons which would supply the blast furnaces of the United States for little more than a year. Not over half of this ore is utilizable at present. There are extensive deposits of iron sands, but these cannot be economically worked with existing methods.[3] Iron ore is imported principally from the Malay Peninsula and China;[4] pig iron is imported in large amounts from India, Chosen, Manchuria, and China; the other iron and steel products imported come principally from Germany, the United States, and Great Britain.[5]

The United States, in 1929, produced 37 per cent of the world's iron ore, 47 per cent of its pig iron, and 48 per cent of the steel ingots.[6] Although our exports of tonnage products are but a small part of our total production, their persistence indicates that we have a comparative advantage in general in world competition in this field, growing out of our rich natural resources

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1 42.
2 2, p. 311, 312, 342.
3 13, p. 277-9.
4 21, p. 14.
5 59 #615, p. 1.
6 45, p. 2.

and our industrial effectiveness. The advantage does not extend to special steels and ferro-alloys where high wages, power costs, and sometimes high raw material costs are not offset by other advantages.[1] No significant amounts of iron ore or pig iron are sent to Japan from this country, although pig iron exports touched $540,000 in the one year 1928.[2]

Iron and Steel Semimanufactures

Iron and steel semimanufactures amounted to nearly half of our exports to Japan of metals and manufactures during this period--something more than half in 1933 and 1934. Iron and steel scrap accounted for more than half of the total value beginning in 1932, although formerly tinplate and terneplate was the largest single item. These two groups, plus wire rods, largely accounted for the remarkable advance made by this classification after 1932.

Scrap Iron and Steel

Japan makes unusually extensive use of scrap in her steel industry, where it is more important than pig iron, due to the small scale of operation and the peculiar manufacturing conditions. In an appreciable number of mills the ratio of scrap to pig is as high as 7 to 3.[3] There has been a trend toward the use of more scrap iron and steel in the mixture, also, in order to improve the quality of steel materials.[4] Another advantage is that scrap iron may be imported duty-free, while pig iron pays a rather stiff duty pursuant to Japan's policy of encouraging self-sufficiency.[5] A 50 per cent reduction in the subsidy paid to pig iron producers, effective April 1, 1933,[6] probably had a discouraging effect upon the domestic production, making it necessary to import more scrap iron and pig iron to satisfy the growing demand for iron and steel products, both for domestic

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1 5, p. 72, 80, 82, 93, 102.
2 41.
3 37.5, p. 3.
4 36, August, 1934, p. 15.
5 36, November, 1934, p. 25.
6 36, March, 1933, p. 8.

Table XXXIX. - United States-Japanese Trade in Certain Iron and Steel Semimanufactures

Year	United States Exports: Tons	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan by Value	Japanese Imports: Yen (000)	Japanese Imports: Per Cent from U. S. by Value	United States Exports: Pounds (000)	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan by Value	Japanese Imports: Yen (000)	Japanese Imports: Per Cent from U. S. by Value	United States Exports: Pounds (000)	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan by Value
	Scrap, Including Tinplate Waste or Old Iron					Tinplate and Terneplate			Iron Plates & Sheets, Tinned		Iron and Steel Sheets, Galvanized		
1925	8,066	194	14.1	700	----	86,857	4,356	23.4	13,000	----	8,922	353	2.1
1926	18,868	478	----	800	----	109,903	5,629	----	8,500	----	12,450	477	----
1927	71,087	1,301	----	3,100	----	122,493	6,533	----	12,200	----	8,120	312	----
1928	160,427	2,460	----	6,322	----	125,414	6,092	----	11,983	----	9,546	369	----
1929	208,260	3,090	39.9	8,282	45.1	133,457	6,988	24.5	13,244	66.5	8,681	350	2.4
1930	168,186	2,946	----	9,300	----	91,930	4,734	----	11,000	----	5,202	221	----
1931	48,036	843	43.1	824	11.3	40,383	1,611	20.5	3,912	46.1	1,293	38	.9
1932	164,001	1,325	----	4,700	----	15,809	580	----	7,000	----	278	8	----
1933	547,539	4,739	68.9	16,673	43.1	53,633	1,925	25.2	6,923	30.2	521	14	.4
1934	1,168,496	12,428	64.8	45,564	69.3	90,082	3,628	21.5	14,667	57.1	792	23	.5
			Wire Rods			Steel Sheets, Black(a)							
	Pounds (000)												
1925	18,081	370	34.2	------	----	83,960	3,107	37.8	------	----			
1926	18,501	352	----	------	----	198,906	6,983	----	------	----			
1927	20,198	409	----	------	----	138,544	4,891	----	------	----			
1928	58,215	1,041	----	2,704	----	140,103	4,383	----	7,622	----			
1929	45,660	857	42.6	2,497	18.4	56,949	1,933	13.5	1,952	16.2			
1930	32,017	565	----	------	----	17,909	671	----	------	----			
1931	35,284	547	42.2	1,220	28.9	5,577	219	3.2	19	1.0			
1932	23,565	342	----	------	----	1,776	80	----	------	----			
1933	30,864	458	75.3	1,826	34.9	1,404	38	1.5	10	3.2			
1934	41,038	547	67.1	2,235	54.4	7,137	222	3.7	143	83.6			

(a) Japanese Classification: "Iron plates and sheets, not coated, less than .7 mm. thick, other than silicon steel."

use and for export.[1] Domestic and colonial pig iron producers cannot compete successfully without extensive tariff aid and subsidization. The problem of an ore supply is the nearest to solution of any. Lack of good coking coals, out-moded equipment, and general inefficiency send Japanese costs far above those of Indian producers.[2] Since the United States has in nearly all years been the leading supplier of scrap iron[3] the growth of Japan's total consumption is represented by her imports from this country. Some imported scrap is used for other purposes than smelting. Tin-plate and black-sheet scrap is in good demand for handicraft work, as toy manufacture. Old gas pipe and steel boiler tubes are redrawn and used for making bicycles.[4] These factors alone could not have caused the growth from .1 of 1 per cent of Japan's total imports from the United States in 1925 to 2.7 per cent in 1933,[5] however, had it not been for the enormous expansion of Japanese industrial activity, government aid in the search for self-sufficiency, and the greatly increased demand for iron and steel products for military purposes in recent years. Our departure from the gold standard in 1933 gave us an advantage over competing suppliers in scrap as in other steel products,[6] but higher prices in the United States in 1934 tended to cause a shift toward other countries for scrap iron supplies and toward a wider use of pig iron in general. The Belgian devaluation in 1935 also was adverse to our exports.[7]

Other Semimanufactures

Tin plate and terneplate constituted our largest single iron and steel export to Japan before the depression, but now ranks behind iron and steel

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1 38, p. 5.
2 59 #612, p. 6, 9, 16, 18.
3 59 #615, p. 11, 12; 42.
4 59 #615, p. 20.
5 71, p. 215.
6 36, June, 1933, p. 2.
7 36, February, 1934, p. 14; 36, April, 1934, p. 11; 37, May 24, 1935, p. 19.

scrap. From 1925 through 1933 it averaged 1.7 per cent of Japan's total imports from us.[1] We were usually Japan's principal supplier by a wide margin. This position was lost to Great Britain in 1933, but was regained in 1935. Japanese firms are not able to furnish the tin plate needed by her petroleum and canning industry.[2] The rapid growth since 1931 of canning for export that was noticed in Part Two above,[3] the very slow increase of domestic production, and the slight price advantage held by United States producers in 1934 over their British, French, and Italian competitors[4] point to continued exports on an important scale for some time, although if the new government tin plate factory proves successful we may eventually lose the market.[5]

Wire rod exports to Japan also showed a substantial recovery from the 1932 low point. Except for the period from 1929 through 1931 Japan has taken an ever-growing share of our exports and is now far and away the principal customer. At the same time the percentage of her imports supplied by this country has risen, the United States since 1931 ranking as her most important source, ahead of Germany and Great Britain.[6] This is another commodity with which Japanese firms have not yet been able to supply their compatriots.[7] Imports of wire itself are comparatively small.[8]

Black steel sheets and iron and steel galvanized sheets differ from the class of semimanufactures as a whole, failing to recover much of their predepression status. The former was second only to tin plate and terneplate through 1928, but has been hard hit by the expansion of Japanese capacity. Japan was formerly a very important market for black sheets,

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1 71, p. 215.
2 36, February, 1933, p. 9; 59 #612, p. 46.
3 43, p. 3.
4 36, April, 1934, p. 11.
5 36, February, 1934, p. 14.
6 59 #615, p. 11, 12; 67 #105, p. 51.
7 36, February, 1933, p. 9.
8 59 #615, p. 16.

preferring United States open-hearth steel sheets for galvanizing because of their superior quality,[1] although Great Britain ranked first as a supplier in most years, probably competing on a price basis.[2] We were Japan's principal supplier of galvanized sheets from 1925 to 1927[3] and probably continued so until 1930, although the data are not available. The domestic production has come to dominate this field, in which imports were never very large during our period.

Other Iron and Steel

Japan took an increasing share of our exports of advanced manufactures until 1931, but her proportion was on a much lower level from 1932 to 1934. From five to six per cent of our exports of tools of all sorts went to Japan before 1932; her proportion of our smaller exports of woodscrews rose to 51 per cent in 1931. The depreciation of the yen raised a barrier against imports in the form of higher prices. In the case of most of the commodities that have been discussed this was of little avail, for Japanese industry had to have them in order to carry on. Here, however, was a finished product, not a raw material; furthermore, Japanese producers had become able to supply most of the market. These markets are probably lost to United States producers, except for those manufactures beyond the technical scope of Japanese industry.

The situation is essentially the same with regard to steel mill products, except that Japan has been losing significance as a market for our exports since 1926. Tubular products and fittings were the principal imports of this group, mostly welded black pipe (nearly all steel) before 1931. As early as 1927 domestic producers supplied 47 per cent of the consumption of pipes and tubes. United States products sold principally upon a quality basis.[4]

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1 59 #615, p. 24.
2 59 #615, p. 11, 12; 67 #105, p. 51; 36, February, 1933, p. 10.
3 59 #615, p. 11, 12.
4 59 #615, p. 16, 17.

The percentages of our exports of structural iron and steel and of iron and steel rails sent to Japan fluctuated widely during this period, but have been on a much lower level in recent years, due to the depreciated

Table XL. - United States Exports to Japan of Certain Steel Mill Products and Advanced Manufactures (a)

Year	Pounds (000)	Dollars (000)	Per Cent to Japan (by value)	Dollars (000)	Per Cent to Japan (by value)	Dollars (000)	Per Cent to Japan (by value)
		Welded Black Pipe		All Tubular Products and Fittings(b)		Structural Iron & Steel	
1925	23,877	977	14.7	1,364	4.6	383	3.2
1926	50,545	1,712	22.2	2,278	6.7	972	6.3
1927	43,225	1,412	----	1,866	----	339	----
1928	34,720	1,265	----	1,680	----	297	----
1929	45,244	1,531	16.5	1,998	5.5	529	2.3
1930	16,331	569	----	1,004	----	472	----
1931	9,662	306	10.9	612	5.3	58	.8
1932	4,271	139	----	289	----	79	----
1933	956	25	2.5	379	4.7	48	2.2
1934	3,324	80	4.9	374	2.8	21	.4
		Wood Screws		Tools		Iron & Steel Rails	
	Gross (000)						
1925	2,988	327	35.9	841	4.1	426	6.9
1926	3,753	427	----	1,147	----	1,452	19.0
1927	3,513	394	----	893	----	1,106	----
1928	4,550	430	----	1,208	----	566	----
1929	3,456	348	44.9	1,083	5.3	516	9.7
1930	3,216	294	----	871	----	182	----
1931	2,260	250	51.3	500	6.2	120	9.3
1932	337	46	----	155	----	73	17.1
1933	58	6	8.4	169	3.3	39	3.2
1934	30	3	6.1	325	4.3	12	.6

(a) "Wood screws" and "Tools" are the only advanced manufactures presented here.

(b) The most important item besides welded black pipe is casing and oil-line pipe, exports of which have averaged over $200,000 annually since 1929, every year being above predepression levels.

yen and to Japan's rapid extension of her own production. Never did Japan import much fabricated structural material, for the low labor costs make it cheaper to fabricate the material in her own shops, although rigid inspection is required.[1] Germany was the principal source of rail imports for Japan,

1 59 #615, p. 18, 19.

with the United States second. Domestic production was supplying an increasing amount of the total consumption before the depression.[1]

Although Japan is still largely dependent upon outside sources for the materials required for her iron and steel industry she has achieved a degree of self-sufficiency in fabricated steel products. Japan proper now produces finished steel products in excess of the domestic demand, although the Empire is still on a deficit basis.[2] Rising prices of iron and steel products in 1934 led the Japan Iron Manufacturing Company, a government-sponsored project, to import foreign finished steel products to sell with its own.[3]

Copper

The United States, although importing large quantities of copper, mostly for refining, was on a net export basis from 1881 to 1932. From 1925 to 1929 our domestic consumption was from 100 to 150 per cent greater than before the war; that of the rest of the world only about 40 per cent more. Able to make reasonable profits by means of improved methods, nevertheless, domestic producers did not wish to exploit the less profitable ores and thus lost some of their foreign market to the low-cost producers in South America, the Belgian Congo, and Canada. Many of these mines, particularly in Chile and Peru, were owned by United States interests who chose to expand them because of higher profits than at home. The effective price-fixing action of Copper Exporters, Inc., with the aid of a strong demand and production quotas, raised the price from less than 12½ cents per pound in June, 1927, to nearly 18 cents in February, 1929. Despite rising stocks it was maintained at about this level for a year and perhaps encouraged the foreign

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1 59 #615, p. 20, 21.
2 35, p. 33, 34.
3 36, August, 1934, p. 11.

Table XLI. - United States- Japanese Trade in Other Metals and Manufactures

Year	United States Exports: Pounds (000)	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan by Value	Rank by Value	Japanese Imports: Yen (000)	Japanese Imports: Per Cent from U. S. by Value	United States Exports: Pounds (000)	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan by Value	Rank by Value	Japanese Imports: Yen (000)	Japanese Imports: Per Cent from U. S. by Value	United States Exports: Pounds (000)	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan by Value
	Aluminum						Lead (c)						Copper, Old and Scrap		
	Ingots, Scrap, and Alloy				Ingots, Slabs, & Grains										
1925	1	.3	.02	29	(a)	(a)	2,688	191	1.2	23	1,330	8.1	6	.6	.04
1926	68	18	----	--	(a)	(a)	29,052	1,865	----	--	3,882	----	5,044	655	30.1
1927	341	61	----	--	1,500	25.0	33,735	1,767	----	--	5,362	----	5,555	671	----
1928	783	158	----	--	3,601	----	42,432	1,927	----	--	6,107	41.5	10,421	1,381	----
1929	195	31	26.4	29	6,048	54.5	32,609	1,584	22.4	16	4,474	29.7	4,129	634	11.2
1930	311	32	----	--	1,956	----	31,306	1,293	----	--	4,112	----	1,756	185	----
1931	1,294	96	72.1	--	106	4.8	34,602	973	79.9	--	2,511	30.7	2,502	200	3.6
1932	3,499	278	----	22	676	----	40,439	826	----	13	3,275	----	2,716	140	----
1933	5,316	516	95.7	--	90	(b)	42,472	758	91.0	--	4,012	33.4	7,399	392	23.8
1934	7,880	1,116	97.7	14	(b)	(b)	8,908	215	70.5	24	6,823	37.9	4,828	323	17.7
1935	-----	-----	----	--	-----	----	------	-----	----	--	4,815	23.7	-----	-----	----
	Zinc and Manufactures				Zinc Ingots, Slabs & Grains		Copper Refined, in Ingots, Bars, or Other Forms				Ingots & Slabs				Rank by Value
1925	90	.5	25		1,001	9.6	8,494	1,181	.8	15	(d)	(d)			28
1926	1,434	----	--		3,236	----	37,344	5,279	4.4	--	9,300	98.2			--
1927	1,286	----	--		2,559	27.4	24,475	3,198	----	--	5,779	----			--
1928	1,306	27.2	--		2,814	----	32,395	4,662	----	--	8,785	----			--
1929	205	5.6	28		666	8.1	7,954	1,596	1.1	15	2,456	68.7			24
1930	68	----	--		-----	----	3,187	351	----	--	298	48.0			--
1931	51	5.0	--		148	5.5	188	18	.049	--	67	87.2			--
1932	194	18.7	24		388	----	448	34	----	28	123	----			26
1933	122	13.0	--		825	11.1	28,158	1,589	9.4	--	7,238	----			--
1934	108	7.7	25		1,352	18.7	113,769	8,266	20.8	5	36,138	99.9			21
1935	-----	----	--		-----	----	-------	-----	----	--	35,850	98.4			--

(a) Not listed in 42 for the years before 1927.
(b) " " " 42 " " " after 1932.
(c) U. S.: "in pigs, bars, etc."
(d) Not listed in 42 for the years before 1926.

development that made such inroads on our foreign markets.[1] This price policy was perhaps directly responsible for our smaller share of the Japanese market in 1930 and prior years, although we remained the principal exporter of copper to her.

Japan was not an important customer for United States copper exporters before 1934. Nearly 90 per cent of our exports of unmanufactured copper went to Europe, principally France, the United Kingdom, and Germany.[2] Although she is the fifth copper producing country of the world, Japan has been generally on an import basis since the war, despite her widespread deposits of good quality.[3] Accumulated stocks within the country and the sharp fall of world copper prices, especially acute in November, 1931, forced producers to sell at a loss so that for a time since 1930 Japan has been on an export basis. The government, aided by a copper cartel, has tried to check imports and encourage exports by raising the tariff or providing a drawback, but without permanent success.[4] There is a much greater demand for copper than formerly, for buildings, electrical equipment, chemical apparatus, alloys,[5] and, predominating in recent years, for munitions. The 1934 demand, arising from munitions manufacture, was thought to be abnormal, so it was not thought worth while to go to the expense of further exploiting the producers' own mines.[6]

These shifts, to an export basis during the depression, and back to a heavy import basis, explain the sudden fall of our exports to Japan and the sudden loss of her position in our export trade followed by a recovery

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1 16, p. 429, 430, 434-6.
2 67 #29, p. 62.
3 21, p. 6; 13, p. 272; 59 #505, p. 3, 4.
4 21, p. 6.
5 67 #29, p. 2.
6 2, p. 149.

exceeding all prior years of the period. It is interesting also to observe that a much larger part of our exports of old and scrap copper is sent to Japan than of refined copper. Her refining industries are strong enough to make it more profitable to refine her own copper than it would be for most countries importing copper from us.[1]

Aluminum

Aluminum, besides its rapidly growing use industrially, is essential for the munitions industry. Japan proper has no bauxite ores economically workable and is entirely dependent upon foreign sources for the metal which she manufactures into finished products. Her imports come from the United States, Canada, Switzerland, Germany, and Great Britain.[2] The United States improved its position in the Japanese market before 1929, but its share fell in later years as scrap aluminum was imported from Germany and Great Britain.[3] Despite the much smaller proportion of Japan's demand supplied by this country her position in our market continued to strengthen until by 1934 she took 98 per cent of our exports of ingots, scrap, and alloy, which had supplanted fabricated aluminum products as the principal class of our total aluminum exports.[4] Japan had also swung back by a very narrow margin to the United States as her principal source of supply in 1934, purchasing ¥4,146,000 of "ingots, slabs, grains, and other", 33 per cent of her total imports. The "other," representing largely scrap, was not included in the figures presented in Table XLI.[5] The duty upon ingots, slabs, and grains, raised from 3.20 to 4.32 yen per 100 kin in 1933 probably places a premium upon scrap imports.[6] Strenuous efforts for some years past to attain self-sufficiency in this

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1 2, p. 149.
2 21, p. 17.
3 32, p. 12.
4 2, p. 18, 19.
5 67 #105, p. 73; 62, 1935, p. 434.
6 71, p. 218.

metal appear to be bearing fruit, for the Nippon Electric Industry Company has been producing aluminum since 1934 and six other companies are preparing to begin production. A rich clay discovered in Manchuria, Korean raw material, and bauxite imported from the Dutch East Indies are to be used, depending upon the location of the plant. [1]

Lead

Normally a net importer of lead despite the possession of the world's principal producing deposits of lead ore, the United States had developed an export trade in refined lead, or manufactured products made therefrom, smelted and refined in bond from imported ore and base bullion. This trade has declined since 1927,[2] exports to Japan forming a rapidly rising proportion of the whole. In 1928 Japan ranked third as a market for our refined pig lead exports in point of quantity, following the United Kingdom and Germany; in 1929 she was second only to the United Kingdom; since then she has been first.[3] This relative advance came while exports to Japan were declining; the other markets were lost more rapidly.

Although she is almost entirely dependent upon foreign sources,[4] Japan was the world's fifth consumer of lead in 1934, taking about 8 per cent of the total consumption. Her total imports broke all previous records in that year and according to her statistics the proportion from the United States was also nearly at its highest point. They seem to in error, however, probably reporting large shipments of Mexican lead as from the States. The former large shipments of Mexican lead to the United States for refining have nearly disappeared as refining capacity has been extended in Mexico.[5] This sharp decline accounts for the fall in rank among our exports to Japan from 13th in 1929 to 24th in 1934. The United States had been

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1 2, p. 25, 26.
2 45, p. 3; 62, 1935, p. 89, 91.
3 62, 1932-33, p. 62; 62, 1935, p. 92.
4 60 #76, p. 4, 5.
5 62, 1935, p. 94, 97.

increasing in importance relative to Japan's principal supplier, Canada,[1] but should Mexican lead prove satisfactory, and this seems probable, its importance will be considerably less in the future. An increase in the Japanese tariff from ¥.40 per 100 kin to ¥.54 per 100 kin in 1933[2] has had no apparent effect as yet.

Zinc

The zinc exports of the United States to all countries declined from 1925 to 1933, as our total exports of lead did from 1925 to 1934.[3] The situation is quite similar: Although one of the major world sources of zinc is the Mississippi Valley the United States' export trade, normally, is largely in slab zinc produced from foreign ore. From 1925 to 1927 considerable domestic ore was also exported.[4] Japan is a much less important market than she was for our lead exports and her importance has been declining since 1928, rather than growing. Save for the years 1929 to 1931, when Japan took an unusually small part of our exports, cast zinc in slabs, blocks, or pigs formed the bulk of the trade.[5] Canada and Australia furnish the bulk of Japan's imports, the United States running a very poor third.[6] Japan, largely dependent for the zinc supplies that will be needed in her expanding industrial system, will furnish a fine market for Canada and Australia, but it does not seem that the United States, with its enormous domestic consumption and record of declining exports for 9 years before 1933 will supplant these other countries. The ore supplies in Japan are said by some to be adequate for her domestic needs, but the domestic production of predepression years will need to be more than tripled if this is to come to pass.[7]

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1 67 #105, p. 52.
2 71, p. 217.
3 41.
4 62, 1935, p. 114; 45, p. 3.
5 41.
6 67 #105, p. 52.
7 60 #76, p. 4, 5, 101.

CHAPTER IV

OTHER INDUSTRIAL PRODUCTS

Petroleum and Products

Prior to 1929 the United States produced about 70 per cent of the world's total output of petroleum. Exports as a group ranked second among the major classifications save for the years 1929 to 1931 when machinery occupied second place. Raw cotton, of course, was always first.[1] Petroleum products also ranked second among our exports to Japan, whose deposits are neither large nor susceptible of economical exploitation. She has been forced to import the largest part of her rapidly growing consumption.[2] As a consequence, her importance as a market of the United States has been steadily increasing. Imports of crude and heavy mineral oil advanced almost without pause as the United States supplied an increasing part of Japan's growing total import business. Both the quantity and the proportion of other mineral oils imported from this country declined during the latter part of our period. The tariff increase of 1933 from 2.75 to 3.71 yen per 100 gallons on crude and heavy oil merely meant higher domestic prices, for the imports were essential; with regard to other mineral oils the change from 7.50 to 9.10 yen per 100 gallons probably aided the shift to domestic refineries.[3]

Crude and Heavy

The largest item in our exports to Japan is crude petroleum. Its exceptional advance marks the development of domestic refining facilities as well as the growing demand for petroleum for industrial and military uses. Second in value was the class, gas and fuel oil, with another

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1 60 #80, p. 1; 60 #99, p. v; 42; 73.
2 59 #505, p. 3, 4; 21, p. 17, 18; 12.5, p. 121.
3 71, p. 215.

remarkable increase. It is in these two classes, and gasoline, naphtha, etc., that Japan has taken an increasing share of our exports during this period. Although refined products still account for the bulk of our exports to all countries they have declined in relation to the total.[1] Our rising exports

Table XLII. - United States-Japanese Trade in Petroleum and Products

Year	United States Exports of Total Petroleum Products			Japanese Imports			
				Crude and Heavy Oil		Mineral Oil, Other	
	Dollars (000)	Per Cent to Japan (by value)	Rank by Value	Yen (000)	Per Cent from U. S. (by value)	Yen (000)	Per Cent from U. S. (by value)
1925	16,329	3.5	2	6,700	----	-----	----
1926	25,757	----	--	8,600	----	-----	----
1927	20,862	4.3	--	10,900	----	-----	----
1928	24,004	----	---	20,548	----	22,294	----
1929	22,860	4.1	2	26,091	56.0	24,423	52.7
1930	19,292	----	--	25,400	----	-----	----
1931	16,878	6.2	--	24,972	56.7	24,104	57.8
1932	15,524	----	2	32,100	----	-----	----
1933	14,440	7.2	--	39,784	58.2	19,526	48.2
1934	21,052	9.3	2	54,475	66.0	17,215	41.4
1935	------	----	--	81,336	76.1	-----	----

to Japan in these two classes have contributed to a general advance in the significance of our exports of the heavier products.

Gas and fuel oil is partially used as a raw material for cracking, partially made into furnace oil, and partially used for Diesel engine fuel.[2] Diesel engines have been widely adopted in ships; the fishing fleets have been widely motorized, increasing the market for light fuel oils; and the Japanese navy imports large quantities of petroleum, probably mostly fuel oil, although governmental imports are not included in the Japanese statistics. The extensive hydroelectric development and plentiful coal supply has kept the demand for heavy fuel oil at a rather low level.[3]

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1 41.
2 .5.
3 21, p. 17, 18; 60 #29, p. 137.

Japan is now our principal market for gas and fuel oil and ranks with France, behind Canada, as one of the three important markets for our crude oil.[1]

Other Petroleum Products

With the lighter, more refined products, the trends have been quite different. The declines in the values of these commodities sent to Japan sometimes began as early as 1926 and usually lasted until 1933. In most cases exports to Japan fell more rapidly in the latter part of our period than exports to all countries. It was the decline in these products that drew downward the values of our total petroleum exports to Japan. Since they were generally of declining significance in our total export trade they did not prevent the rise of Japan relative to other markets, however.

Gasoline, naphtha, and other finished light products was the largest item in 1934. The demand for motor fuels increased enormously as automobiles became more widely used, although the per capita consumption is still very small. Aircraft, particularly military planes, account for a much larger proportion of the demand than in this country. There will undoubtedly be a great expansion of this demand in the future, but domestic refineries may be expected to supply a larger part of the market, probably using imported crude.[2] Moreover, Netherland India is a strong competitor in many of these refined products and preceded the United States in 1934 as a supplier of "other " mineral oil.[3] She and the United States together just about split 95 per cent of Japan's total gasoline imports in 1934.[4]

The severe decline in exports of illuminating oil (kerosene) was probably the largest single factor explanatory of the decline in all petroleum products. Electric lighting is very widely used in Japan, as electric power is quite cheap and quite readily available, so the consump-

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1 62, 1932-33, p. 459-495; 62, 1935, p. 748, 758.
2 21, p. 17, 18; 12.5, p. 121, 122.
3 67 #105, p. 73.
4 35, p. 55.

tion tended to fall. At the same time domestic producers were expanding their output. In lubricating oils, also, 90 per cent of which came from this country in 1934, domestic competition was felt.[1] Much of the former comparative advantage of our refineries in all lines has disappeared in the face of government aid and protection and rapid industrial growth. Should the duty on imported crude be lowered the Japanese refinery branch, best fitted to compete anyway, would probably develop even more rapidly, although the difficulty of disposing of by-products is an obstacle.[2]

The duty will probably be retained, however, as Japan makes strenuous efforts to develop her own supplies, though without much success. Shale oil distillation is already being done on a small scale in Manchuria.[3] In an effort to secure an artificial self-sufficiency the military forces procured the passage of the Oil Control Bill in 1934, providing that all refiners must have a stated minimum capacity and that importers and refiners of gasoline, heavy oil or crude oil must maintain stocks equal to half of their annual imports. The foreign companies, already operating at a loss due to low gasoline prices objected to the added cost in the absence of assurance for the future. October 1, 1935, was originally set for the enforcement of the act but it was postponed to June 30, 1936. If the foreign companies continue to decline to comply as they have done, the government will be forced to aid domestic concerns and expand refineries in order to supply the market, or else modify its requirements.[4]

Machinery and Vehicles

Only about 3 per cent of our exports of this class (next to petroleum and products in our total export trade except from 1929 to 1931, when it was ahead of them[5]) went to Japan until 1931, but her proportion rose

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1 60 #80, p. 137; 36, December, 1933, p. 35; 35, p. 55.
2 70.
3 60 #76, p. 255; 21, p. 22.
4 36, May, 1934, p. 25; 35, p. 19; 70.
5 42; 43.

Table XLIII. - United States Exports to Japan of Petroleum and Products

Year	Barrels (000)	Dollars (000)	Per Cent to Japan (by value)	Barrels (000)	Dollars (000)	Per Cent to Japan (by value)	Barrels (000)	Dollars (000)	Per Cent to Japan (by value)	Pounds (000)	Dollars (000)	Per Cent to Japan (by value)
	Crude Petroleum			Gas and Fuel Oil			Gasoline, Naphtha, and Other Finished Light Products			Paraffin Wax		
1925	836	1,189	4.9	1,585	2,220	4.5	217	2,173	1.1	6,099	376	2.0
1926	1,335	1,536	----	2,149	2,214	----	493	6,802	2.5	16,193	1,032	5.5
1927	1,633	1,905	----	4,419	4,032	----	356	2,789	----	6,702	391	----
1928	2,066	2,254	----	5,114	4,256	----	738	4,780	----	14,154	768	----
1929	2,476	2,911	7.7	5,172	4,379	11.8	913	5,038	1.9	9,075	489	3.5
1930	2,926	3,233	----	5,694	4,597	----	1,067	4,018	----	5,035	223	----
1931	3,606	3,518	16.9	5,437	4,595	19.2	1,256	4,185	3.8	3,147	112	1.3
1932	4,877	4,835	17.8	4,986	4,216	----	987	2,686	----	1,332	48	----
1933	5,533	5,505	17.2	5,181	4,430	24.2	967	2,128	3.7	1,788	56	.8
1934	6,693	7,944	16.0	7,917	7,297	25.7	1,079	2,650	5.2	88	6	.1
	Lubricating Oil			Illuminating Oil (Kerosene)			Insulating or Transformer Oils					
1925	188	2,333	2.6	1,328	7,555	8.9	(a)	(a)	(a)			
1926	201	2,396	----	2,441	13,690	----	(a)	(a)	(a)			
1927	260	2,896	----	1,609	8,013	----	17	216	25.9			
1928	272	2,976	----	2,372	8,091	----	16	207	----			
1929	282	3,299	3.2	1,304	5,466	6.5	39	580	43.5			
1930	229	2,460	----	1,074	3,997	----	19	196	----			
1931	231	2,545	4.0	370	1,413	4.1	8	75	15.0			
1932	183	1,544	----	978	1,758	----	10	83	----			
1933	162	1,380	2.5	265	511	2.7	2	23	6.9			
1934	254	2,017	3.5	375	809	3.9	3	33	8.9			

(a) Not separately classified before 1927.

in the following years to 4.7 per cent in 1934. Exports of this class followed quite closely the movements of our total exports to Japan, the values rising to $34,700,000 in 1929, falling to $8,700,000 in 1932, and rising to $20,300,000 in 1934, still below predepression levels. Automobiles and parts and industrial machinery, the principal components, moved in the same directions, but electrical equipment and office equipment declined in value from early in the period.

Automotive Products

The United States supplies practically all of Japan's growing market save for the small amount of domestic production. The advance of this class from eleventh in 1925 to third among our exports to Japan in 1929 is rather significant. Trucks and busses, though the smallest group, showed the greatest advance. The Japanese data for all autos and parts do not agree with the separate statistics presented, but it seems that most of the imports are in the form of parts, probably for assembly. The United States statistics show parts to be the largest class, but not to that extent. Probably many parts exported for assembly are reported as automobiles by the shippers. Of the parts reported, the largest portion since 1927 has been "for assembly."[1]

At the beginning of 1925 Japan possessed only about 20,000 automobiles; at the end of 1934 the total was estimated to be 120,000, of which 55,000 were passenger cars, 40,000 trucks, and 25,000 busses.[2] Extremely high taxes in the principal cities and the lack of good roads limited the growth, especially as regards pleasure cars. The government inaugurated a road building program in the fiscal year 1930-31 that was to last for twenty years. Repairs and overhaul costs are much lower

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1 41.
2 35, p. 129.

Table XLIV. - United States-Japanese Trade in Automobiles and Parts

Year	United States Exports: Number	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan by Value	Japanese Imports: Yen (000)	Japanese Imports: Per Cent from U. S. by Value	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan by Value	Japanese Imports: Yen (000)	Japanese Imports: Per Cent from U. S. by Value
	Passenger Cars & Chassis			Total Automobiles		Parts, except Tires & Engines and Accessories		Parts, other than Chassis & Tires	
1925	1,095	1,144	.6	-----	----	1,840	2.6	-----	----
1926	1,642	1,600	----	-----	----	2,874	----	-----	----
1927	2,685	2,316	----	-----	----	5,905	----	-----	----
1928	8,419	5,997	----	12,987	----	9,792	----	10,826	----
1929	5,408	3,892	1.7	8,921	93.5	12,837	7.0	16,313	99.2
1930	4,600	2,719	----	-----	----	3,881	----	-----	----
1931	5,482	2,692	5.4	3,093	91.6	4,108	5.9	9,675	99.4
1932	2,778	1,518	----	-----	----	2,143	----	-----	----
1933	3,517	1,564	4.9	1,532	84.8	2,619	7.1	10,706	93.4
1934	9,645	4,638	5.9	3,075	91.6	5,474	8.3	27,534	99.1
	Trucks, Busses, & Chassis, except Electric					Total Automobiles, Parts, & Accessories (a)		Autos and Parts (b)	
					Rank by Value				
1925	-----	109	.3		11	3,103	1.0	9,228	78.9
1926	167	292	----		--	5,399	----	13,105	----
1927	387	555	----		--	9,042	----	16,024	----
1928	2,024	1,729	----		--	17,556	----	23,354	----
1929	3,448	2,226	2.0		3	19,016	3.5	31,048	92.4
1930	2,304	1,476	----		--	8,243	----	19,868	----
1931	4,286	1,661	6.6		--	8,509	5.8	15,817	96.9
1932	2,961	980	----		3	4,673	----	13,838	----
1933	3,903	1,239	6.2		--	5,454	6.0	13,288	(c)
1934	9,841	3,139	7.1		4	13,344	7.0	31,553	(c)
1935	-----	-----	----		--	------	----	31,255	95.9

(a) Includes minor items in addition to the groups given here.
(b) Not the total of the other columns for Japan.
(c) The classification for all countries was not comparable, so the percentages were not computed.

than here because of the low wages paid, so cars last much longer despite poor roads and the lack of ready service facilities.[1] Fully 95 per cent of the vehicles serve commercial purposes. Most of the passenger cars operate as taxis or vehicles for hire; truck transportation up to 100 miles has been

1 59 #492, p. 12; 35, p. 128; 60 #108, p. 68.

highly developed; and there is a complete system of bus lines, mostly serving as feeders to the railways and tramways. The taxes on commercial vehicles are much lower than on pleasure cars, but excessive competition among themselves and with other forms of transport have forced rates to seriously low levels.[1] Low earnings and the low external value of the yen in 1932 cut down imports, affecting particularly the United States. After our devaluation the exchange preference for European goods was wiped out and by 1934 much deferred replacement buying was being done.[2]

Automobile accessories are in less demand than might be expected because of the almost exclusive commercial use of the cars and the low earnings. Since practically all the cars are United States makes we get nearly all the replacement business, but the domestic parts industry has been growing rapidly. Where hand labor can be used Japanese producers can often compete effectively on a price basis, of especial importance in such a market. More liberal credit terms and more rapid delivery by the manufacturer appeal to the dealers.[3] Under the influence of the rapidly depreciating yen, United States parts and accessories rose in price so far above the domestic products that sales practically closed until our devaluation in 1933 brought prices down to a point where the difference in quality would justify them. By this time, however, the quality and appearance of the domestic product had been improved and it appeared that a large part of this business was permanently lost to the United States.[4] Imported parts paid a duty of about 30 per cent in 1925, 25 per cent from 1926 to 1932, 35 per cent in that year and 42 per cent in following years. This, too, was a strong stimulus to domestic production.[5]

The duty on automobiles was 50 per cent in 1925, 35 per cent from

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1 35, p. 129; 60 #108, p. 68.
2 36, March, 1933, p. 11; 37, June 25, 1935, p. 22.
3 60 #128, p. 97, 99, 100.
4 36, May, 1933, p. 8; 36, August, 1933, p. 6, 7.
5 71, p. 216.

1926 to 1933, and 50 per cent in that and following years,[1] sufficiently higher, levied upon the higher values of finished cars, to make it profitable to establish assembly branches of United States firms there. In addition to the tariff, domestic production is encouraged by subsidies and by government purchase of Japanese cars.[2] Further development was sought through the bill for the control of the auto industry passed May 23, 1936.[3] Principally, it imposes a license system upon manufacturers of parts and assemblers of automobiles, licenses to be issued only to firms organized under Japanese law over half of whose capital stock is owned by Japanese subjects, except for established companies, to the extent of their equipment and productive capacity on August 9, 1935. All further increases are subject to governmental control under the law.[4] If policy so dictates, the effects upon our exports may be severe.

Industrial Machinery

Industrial machinery exports have retained their relative position among our more important exports to Japan during this period, but there have been significant changes in their composition. Since 1931 Japan has increased her proportion of our exports beyond predepression levels, although of the groups presented here sewing machines, the least important in former years, is the only one to evidence the same tendency. Several classes of little importance before the depression have set new records in recent years, e.g., gear-cutting machines, turret lathes, and milling machines.

Industrial development in Japan has extended her market rapidly, but

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1 71, p. 216.
2 35, p. 48, 49.
3 8.5.
4 37, September 26, 1935, p. 26.

Table XLV. - United States Exports to Japan of Certain Machinery and Aircraft

Year	Sewing Machines and Parts: Dollars (000)	Sewing Machines and Parts: Per Cent to Japan by Value	Mining & Quarrying Machinery: Dollars (000)	Mining & Quarrying Machinery: Per Cent to Japan by Value	Textile Machinery and Parts: Dollars (000)	Textile Machinery and Parts: Per Cent to Japan by Value	Air Compressors: Number	Air Compressors: Dollars (000)	Air Compressors: Per Cent to Japan by Value	Total Industrial Machinery (a): Dollars (000)	Total Industrial Machinery (a): Per Cent to Japan by Value	Total Industrial Machinery (a): Rank by Value	Total Office Appliances: Dollars (000)	Total Office Appliances: Per Cent to Japan by Value
1925	186	1.7	349	3.3	295	2.6	491	381	9.8	6,823	4.0	6	332	1.0
1926	426	----	836	5.6	549	----	667	439	----	7,752	----	--	608	----
1927	509	4.8	351	----	313	----	599	349	----	7,090	----	--	709	1.6
1928	243	----	585	----	392	----	945	420	----	7,624	----	--	638	----
1929	299	2.1	503	2.8	624	4.6	930	384	5.1	8,140	3.0	7	683	1.3
1930	190	----	368	----	416	----	546	206	----	6,256	----	--	421	----
1931	272	5.5	230	2.3	141	2.1	492	95	3.7	3,431	2.4	--	380	1.5
1932	172	----	58	----	68	----	130	43	----	2,393	----	6	184	----
1933	179	5.3	75	1.7	40	.8	13	16	1.1	2,971	5.4	--	163	1.0
1934	431	7.1	182	2.4	173	2.4	54	53	2.3	5,155	5.2	7	335	1.4

Year	Transmission & Distribution Apparatus: Dollars (000)	Transmission & Distribution Apparatus: Per Cent to Japan by Value	Generators and Parts: Dollars (000)	Generators and Parts: Per Cent to Japan by Value	Transforming & Converting Apparatus: Dollars (000)	Transforming & Converting Apparatus: Per Cent to Japan by Value	Total Electrical Machinery & Apparatus (b): Rank	Total Electrical Machinery & Apparatus (b): Dollars (000)	Total Electrical Machinery & Apparatus (b): Per Cent to Japan by Value	Aircraft, Parts & Accessories: Dollars (000)	Aircraft, Parts & Accessories: Per Cent to Japan by Value	Aircraft, Parts & Accessories: Rank by Value	Total Office Appliances: Rank by Value
1925	2,139	27.0	2,316	36.0	806	18.1	4	10,111	13.7	2	.2	26	22
1926	1,940	----	1,201	----	1,281	----	--	10,719	----	.7	----	--	--
1927	1,231	----	1,149	----	713	----	--	6,525	----	78	----	--	--
1928	843	----	427	----	327	----	--	4,623	----	136	----	--	--
1929	616	7.4	521	25.5	276	4.8	11	4,275	3.5	448	4.9	27	23
1930	443	----	295	----	48	----	--	2,548	----	440	----	--	--
1931	269	4.6	70	1.4	74	2.3	--	1,658	1.9	154	3.2	--	--
1932	78	----	11	----	33	----	14	779	----	367	----	19	25
1933	47	2.3	8	.5	11	1.6	--	558	1.3	339	3.7	--	--
1934	62	2.3	46	2.8	4	.5	16	661	1.0	321	1.8	22	20

(a) Besides the preceding four classes, includes also gear-cutting machines (exports of which to Japan reached $110,000 and $230,000 in 1933 and 1934, respectively), turret lathes ($150,000 and $235,000 in the same years), milling machines ($255,000, $290,000, and $550,000 in 1932, 1933, and 1934), and many less important items.

(b) Radio and other electrical equipment also included.

government aid, tariff protection, greater upon the simpler types of machinery and generally increased in recent years, and the need for less transportation of bulky and easily damaged machinery have aided the domestic industry.[1] Wages are very low, but the value of the output per man is far below that in the United States.[2] The United States has developed a quality trade, especially in the larger and more complicated machinery, and new devices. We have been Japan's largest foreign supplier in general, but Germany, selling much cheaper goods, has made remarkable gains, displacing the United Kingdom and threatening our supremacy.[3] Germany took over our leading position as a shipper of metal working machinery in 1931.[4]

The general revival of business in Japan since 1931 has benefited domestic producers far more than foreigners. Nevertheless, the establishment of new manufacturing enterprises, the purchases of military authorities for the modernization of munitions plants, and the orders of government railways for rolling stock have redounded to our benefit as it is still necessary to import precision machinery, heavy internal combustion engines, and many special jobs.[5] The very growth of the domestic industry itself creates a demand for certain products such as those imported for the use of the machine tool and automatic industry.[6]

Electrical Apparatus

The noteworthy feature of this trade is its steady decline in value and in significance to the United States. At the beginning of the period Japan followed Canada as a purchaser of our electrical apparatus and we were her most important supplier; in 1934 she took only about 1 per cent of our electrical goods exports and we were second to Germany in her

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1 46, p. 161; 71, p. 214; 12.5, p. 120, 121; 13, p. 144.
2 60 #111, p. 16, 25.
3 47, p. 109; 59 #825, p. 66; 36, May, 1934, p. 18; 40.5; 60 #111, p. 42, 54; 12.5, p. 121.
4 46, p. 162; 67 #105, p. 53.
5 59 #825, p. 66, 67.
6 36, December, 1933, p. 19.

markets.[1] Electrical equipment dropped from fourth to sixteenth among our exports to Japan.

The early development of exports of this class rested upon the widespread government development of water power in Japan by granting concessions to private companies, making electricity about as readily available as in any country for industrial uses. Power is widely used, although the abundance of labor and the practical necessity of retaining all of a firm's workers restrained the use of automatic machinery. Railway electrification has been undertaken on a wide scale also. A large part of the homes are wired but little use is made of electricity except for lighting and some power companies have not encouraged any other use.[2] A market for United States goods would probably develop in this field if they could be supplied at prices within the purchasing power of the people or if their purchasing power should rise sufficiently.

Broadcasting is government-controlled and supported by license fees. Radios are required to conform to government regulations; the topography and climate make reception only fair; and the programs are quite serious in nature. Registrations of sets increased from 250,000 at the beginning of 1926 to 1,900,000 at the end of November, 1934, with United States exports supplying a rather small part, as Japanese manufacturers possessed most of the market. Formerly they imported the parts, but these have been locally produced in recent years.[3]

As with radio, so with other electrical goods. Tariff protection and domestic production under license agreements with foreign manufacturers have greatly reduced imports. The Japanese goods must be sold on a price rather than a quality basis, but price is far more important there than

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1 59 #505, p. ii; 35, p. 40.
2 59 #505, p. 7-9, 11, 14, 16.
3 59 #505, p. 19; 59 #433, p. 75; 60 #136, p. 102; 35.

in this country.[1] The composition of each of the sub-classes in our exports to Japan has changed quite rapidly during this period,[2] illustrative of the rapid entrance of Japanese producers when a new market is opened and indicating the dependence of our trade upon technical advances and new developments.

Office Appliances

No unusual features are presented here. Japan takes but a small part of our total exports, yet we dominate her market in such items as cash registers, calculating machines, and typewriters. Domestic production and imports are both increasing as recovery advances.[3] The necessity for precision and high quality should make Japanese competition less threatening in the near future than in many other lines of machinery.

Aircraft

Exports of aircraft, parts, and accessories to Japan from 1931 to 1934 were above all years before 1929. Here the military demand for planes conflicts with the desire for self-sufficiency. Many ships are produced in Japan's own factories, but imports of planes and of parts are also necessary. Commercial aviation also creates a demand. Our exports to other countries advanced rapidly after 1931, so the proportion sent to Japan declined.

Chemicals and Fertilizers

Fertilizers

The intensive agriculture necessarily practiced by Japan upon her old soils requires the extensive use of fertilizers, considerable amounts of which must be imported. Japan has some phosphate deposits but is partially dependent upon foreign sources, and has almost no workable

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1 12.5, p. 120, 121.
2 41.
3 40.6.

Table XLVI. - United States-Japanese Trade in Fertilizers

Year	United States Exports: Tons (000)	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan (by value)	Japanese Imports: Yen (000)	Japanese Imports: Per Cent from U. S. (by value)	United States Exports: Tons (000)	United States Exports: Dollars (000)	United States Exports: Per Cent to Japan (by value)	Japanese Imports: Yen (000)	Japanese Imports: Per Cent from U. S. (by value)
	Phosphate Rock, Land Pebble					Potassic Fertilizer Material			Crude Chloride of Potash	
1925	95	281	8.3	(a)	(a)	(b)	(b)	(b)		
1926	96	343	----	2,598	28.4	(b)	(b)	(b)		
1927	131	481	----	3,459	----	(b)	(b)	(b)		
1928	184	657	----	3,255	----	(b)	(b)	(b)	1,485	----
1929	231	827	16.8	4,234	31.5	10	383	65.8	2,378	77.2
1930	287	1,052	----	4,363	----	11	484	----	1,600	----
1931	220	831	22.7	2,994	41.5	23	1,046	82.6	2,438	74.2
1932	143	520	----	2,996	----	1	40	----	800	----
1933	157	486	14.9	2,718	17.7	17	600	66.5	2,681	53.5
1934	214	881	20.3	3,999	24.0	20	752	81.9	2,643	45.7
1935	---	-----	----	4,519	22.5					
	Ammonium Sulphate					Total Fertilizers and Fertilizer Materials (d)			Rank by Value	
1925	52	2,968	44.0	8,945	27.0	168	4,502	26.0	8	
1926	67	3,590	----	9,764	----	183	5,231	----	--	
1927	31	1,467	21.5	5,191	----	190	3,450	19.5	--	
1928	24	1,064	----	3,477	----	251	3,869	----	--	
1929	60	2,523	40.1	6,434	13.4	344	6,025	29.5	8	
1930	25	917	----	3,918	----	349	3,653	----	--	
1931	5	135	6.1	297	1.9	267	2,595	19.9	--	
1932	1	18	----	130	----	160	920	----	11	
1933	None	None	None	None	None	188	1,347	16.3	--	
1934	"	"	"	(c)	Negligible	253	1,999	15.9	10	

(a) Not listed in 42 for the years before 1926.
(b) Not separately classified before 1929.
(c) Less than 500 yen.
(d) Includes other items of small or temporary significance.

deposits of nitrates and potash.[1] Although exports of other fertilizers in fairly large amounts have occurred sporadically, phosphate rock, potassic materials (chiefly chloride of potash), and ammonium sulphate have been our principal exports to Japan.[2] All enter Japan duty-free.[3] Fertilizers suffered greatly in 1932 from the extremely low purchasing power of Japanese farmers. Somewhat better prices and government credit have expanded imports since that year, with the exception of ammonium sulphate. In each case, however, the United States now supplies less of Japan's import trade.[4]

Japan has been one of the three leading purchasers of phosphate rock in the form of land pebble from this country.[5] In 1933 and 1934 Egypt replaced the United States as Japan's primary supplier.[6] We remain her principal source of chloride of potash.[7]

With ammonium sulphate the case has been quite different. Our exports and our place in Japan's market have disappeared. Two influences have caused this, primarily. The chemical industry in Japan has undergone a tremendous expansion. Ammonium sulphate preparation by nitrogen-fixation from the air has been developed until Japan is very nearly independent although as yet the consumption has outrun her domestic production.[8] The other influence is the loss of the Japanese market to German and British producers, principally German. Consequent upon Japan's advance as a producer came an invitation to the Japan Sulphate of Ammonia Manufacturer's Association to join the European Sulphate of Ammonia Syndicate. Agreements were drawn up in 1934 and 1935 whereby the European nitrogen syndicate was to supply a limited amount during the first half of the year and Japan was to be permitted to export, in limited amounts, to markets not considered the syndicate's exclusive sales territory.[9]

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1 60 #76, p. 4, 5.
2 41.
3 71, p. 217, 218.
4 59 #818, p. 15; 59 #823, p. 19.
5 62, 1934, p. 960; 62, 1935, p. 1057.
6 2, p. 452; 67 #105, p. 51.
7 67 #105, p. 52.
8 59 #823, p. 14; 36, March, 1934, p. 19.
9 59 #823, p. 20; 36, December, 1934, p. 13; 37, December 23, 1935, p. 23.

Dyes

Coal-tar colors are in great and increasing demand in Japan as her cloth export industry grows, especially as she attempts to develop the production of the more valuable dyed and printed cloths. Exports from

Table XLVII. - United States-Japanese Trade in Certain Other Chemicals

Commodity & Year	United States Exports: Pounds (000)	Dollars (000)	Per Cent to Japan (by value)	Rank by Value	Japanese Imports: Yen (000)	Per Cent from U.S. (by value)
Synthetic Dyes (a)						
1925	-----	1,063	15.9	17	(b)	(b)
1926	-----	1,351	----	--	(b)	(b)
1927	-----	1,303	23.7	--	(b)	(b)
1928	-----	1,299	----	--	(b)	(b)
1929	-----	1,055	14.5	21	(b)	(b)
1930	-----	777	----	--	(b)	(b)
1931	-----	797	16.8	--	1,025	14.1
1932	-----	528	----	17	1,157	----
1933	-----	315	6.8	--	882	10.9
1934	-----	393	7.0	19	1,115	12.2
Sodium Hydroxide (Caustic Soda)(c)						
1925	22,205	574	19.3	21	(d)	(d)
1926	33,804	937	----	--	2,663	33.4
1927	28,812	764	----	--	2,086	17.0
1928	44,441	1,192	----	--	3,631	----
1929	45,315	1,162	33.0	20	4,531	40.0
1930	31,363	882	----	--	2,841	----
1931	38,230	974	28.1	--	2,915	35.4
1932	22,630	337	----	21	1,014	----
1933	3,552	65	2.5	--	1,038	(e)
1934	2,848	56	1.9	26	473	(e)
Soda Ash(c)						
1925	158	3	.3	27		
1926	3,591	65	----	--		
1927	5,083	71	----	--		
1928	16,676	238	----	--		
1929	35,038	549	40.9	26		
1930	24,460	333	----	--		
1931	23,450	274	31.9	--		
1932	432	7	----	29		
1933	8,615	64	8.5	--		
1934	6,945	52	5.4	27		

(a) U. S. classification: "Coal-tar colors, dyes, stains, and color lakes."
(b) No so listed in 42 for the years before 1931.
(c) Japanese classification: "Caustic soda and soda ash."
(d) Not listed in 42 for the years before 1926.
(e) " " " 42 for all countries after 1932.

this country have declined in value and in proportion to our total exports of coal-tar colors, however, German competition has been severe. Seeking to regain their former position in world dye markets, German producers formed a super trust in 1925 which has since extended its activities by agreements with producers of other countries, cut manufacturing costs by centralization and coordination, reduced selling expenses by unification of sales agencies, and widened its range of chemical products.[1] German dyes were practically excluded from Japan in 1925 in order to protect the domestic industry,[2] but an agreement was reached in 1926 whereby Germany was to send only those dyes not produced in Japan.[3] Governmental aid in the form of higher import duties in 1926 (specific duties whose force increased as prices fell[4]) and the extension of liberal subsidies to companies producing certain special varieties was extended as a national defense measure.[5] So successful was this that Japan ranked fourth among the world's dye producers in 1933, along with Russia.[6] She is now self-sufficient in most types of synthetic dyes, leaving only the more expensive ones to be imported.[7] The United States, which exports principally the cheaper dyes, will not receive much of this trade.[8]

Caustic Soda and Soda Ash

A growing export business that had become a very large part of our total exports in these commodities failed to survive the depression. Japan not only developed domestic production nearly to the point of self-sufficiency, but took a smaller proportion of her imports from us.[9] The demand for caustic soda has grown tremendously with the expansion of the textile, paper, soap, and cellulose products industries,[10] but the domestic production has grown even

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1 66 #34, p. 8; 66 #38, p. 142.
2 66 #34, p. 186.
3 66 #35, p. 165.
4 66 #37, p. 165.
5 66 #34, p. 8, 126; 66 #35, p. 164.
6 59 #823, p. 12.
7 59 #818, p. 6.
8 67 #19, p. 5.
9 71, p. 197, 217; 42; 59 #818, p. 6, 7.
10 59 #818, p. 12; 59 #823, p. 18.

more rapidly under the protection of a tariff duty raised from .70 yen per 10 kin in 1925 to 1.50 yen per 100 kin in 1926 and from there to 2.02 yen per 100 kin in 1932. Soda ash production subsidized, has also grown. Japan's imports from all countries are probably chiefly natural soda which is made into soda ash, much of which is converted in turn into caustic soda or used in glass manufacture.[1]

Table XLVIII. - United States Exports to Japan of Photographic and Projection Goods

Year	Dollars (000)	Per Cent to Japan (by value)	Rank by Value
1925	895	4.7	19
1926	1,210	---	--
1927	1,588	---	--
1928	1,716	---	--
1929	1,790	5.7	14
1930	1,430	---	--
1931	1,281	6.4	--
1932	1,090	---	8
1933	1,047	8.3	--
1934	1,017	6.6	15
1935	-----	---	--

Photographic and Projection Goods

Japan, though still a minor market for photographic and projection equipment, takes a larger part of our total exports than at the beginning of the period, but she will not for long unless exports to her advance soon as those to other countries are doing.[2] The depression's immediate effects were less severe than with many other commodities, but the values have continued to decline slowly since 1932. The classification includes a great many items, the most important of which are unexposed sensitized films (over 4/5 other than motion-picture films), photographic paper, and dry plate. Japan has taken nearly half our total exports of the latter

1 71, p. 217; 59 #818, p. 12.
2 41.

and probably more than twenty per cent of our exports of photographic paper in recent years.[1] No other country approachs the United States as a supplier of the principal item, sensitized moving-picture films,[2] and the trade will probably continue until the domestic chemical industry takes it over. No doubt much of the failure to recover has been due to the expansion of domestic production in the lesser and simpler components of the class.

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1 67 #105, p. 93.
2 67 #105, p. 53.

CHAPTER V

SUMMARY

General Trends in United States Export Trade with Japan

Our total export trade with Japan moved upward haltingly until 1928, dropped something more than fifty per cent, in value, by 1932, and then advanced again, not, however, reaching predepression levels. When measured in yen the predepression peak of 1926 was exceeded by 1934 and 1935 imports and the low point occurred in 1931. This trade bears less uniformity than our import trade with Japan. Two general tendencies are evident. The depreciation of the yen tended to reduce imports from all countries. Our retention of the gold standard after the British Empire and other countries had left tended to cause Japanese importers to shift their purchases to countries with depreciated currencies. Later, when we depreciated, our own prices rose coincident with the beginning of recovery, the NRA, and the AAA sufficiently to nullify the advantage in many cases. Furthermore, the severe fall of Japan's exports to this country caused a reversal of the balance of trade and the government is inclined to discourage purchases from this country in favor of purchases from others whose bilateral balance is active for Japan. Definite action has been taken in relatively few cases, but the tendency is there. Frequently, too, our exports to Japan have been of quality goods that were less in demand during the depression. Customers became more price-conscious and shifted to Japanese goods, particularly as the domestic production increased in quantity and improved in quality.

All these factors, growing domestic production being of greatest and most lasting importance, tended to discourage imports from this country.

In contravention to them was the demand for raw materials which Japanese industry could convert into goods for the growing domestic and export trade. Her deficiency in resources can hardly be remedied, although she may adapt her industrial structure to it and perhaps shift her sources of supply to points within the Empire. The latter appear inferior, but the pressure of the military demand for self-sufficiency, rising barriers against her export trade, the desire for world recognition, and the lack of a feeling of political security drive her on.

New Export Items

Several items appeared in the Commerce Yearbook's list of the principal exports from this country to Japan during only a part of the period. Synthetic dyes, first appearing for the year 1931, were only of ordinary importance; hides and skins, first appearing for 1927, and phosphate rock, for 1926, added their bit to the recovery of our exports to Japan; but copper, data for which first appeared for the year 1926, ranked fifth among our exports to Japan in 1934. Caustic soda and soda ash appeared for 1926 and dropped out after 1932; aluminum ingots, slabs and grains appeared in 1927, but lasted no longer (had scrap been included the situation would have been otherwise).

The United States statistics added two new classifications of wood during the period, cedar boards, etc, in 1927 and hemlock logs and hewn timber in 1931, and separately classified potassic fertilizer materials for the first time in 1929.

Items Showing Marked Recovery

Hides and skins, wood pulp, iron and steel semimanufactures (principally scrap), refined copper, crude oil, gas and fuel oil, and phosphate rock and potassic fertilizers, are the essential raw materials so important that recovery, an expanding export trade, and enormous military expenditures

necessitated imports in excess of the highest predepression years. Hides and skins, iron and steel scrap, and crude and heavy oil imports have replaced many former imports of more advanced manufactures as Japanese firms have taken over the processing. In most cases Japan has taken a larger proportion of our exports of these commodities and in the leading ones, wood pulp, iron and steel, and crude and heavy oil, the United States has enlarged its share of Japan's imports.

Less remarkable advances were made by raw cotton (a phenomenal increase in 1932 has been followed by a decline), aluminum, automobiles, and aircraft. These equaled predepression levels or exceeded them in the last year or two of the period. The first two are essential materials for industry and munitions; the last two are finished products in great demand for commercial and industrial use which cannot yet be successfully produced in Japan.

Items Failing to Recover

Among the principal articles of trade in which the first group of influences predominated were two food products, condensed milk and rice, imports of which continued to decline as tariff barriers were raised to protect agriculture, promote self-sufficiency, and improve the balance of trade. Sawmill products, steel mill products and advanced iron and steel manufactures, the lighter and more advanced petroleum products, dyes, electrical equipment, ammonium sulphate, photographic and projection apparatus, leather, and caustic soda have continued to decline in the face of domestic competition. Our exports of gasoline, naphtha, and other finished light products and of photographic goods to Japan improved their position relative to our total exports of those classes, while the other groups lost relative to the total. In most of these groups, also, the United States lost a portion of its former share in Japan's import trade in the face of adverse exchanges and foreign competition, chiefly on a price basis.

Two commodities, lead and zinc, declined as a part of a secular downward trend in United States exports to all countries. Japan took an increasing proportion of our total exports in the first case, but our domestic needs are so great that our export business has been built on the refining of foreign ores which has been declining for years.

CONCLUSION

Japan, driven by a desire for power and standing among Western nations and a rapidly growing population in a small, poor country has been rapidly becoming industrialized. The exigencies of the depression led to the depreciation of the yen and the intensification of the efforts of the government and business men to expand her exports. So successful were they that the world was startled and some were frightened by the "economic invasion." Most raw materials had to be imported. Since their prices were determined on world markets in currencies of greater value than that of Japan, their prices rose more rapidly in terms of yen than did those of exports (determined in relation to the price levels of Japan, which rose more slowly), although the quantity of imports increased much less than did that of exports.

In addition to the above factor, imports from the United States, largely needed raw materials, rose while exports to this country decreased. The predominance of silk, a luxury product meeting increasing competition from rayon, largely accounted for the decrease, as "all other" commodities increased in value. Tariff barriers were high and were raised in several instances after 1930 when certain commodities began to enter in large amounts. Quota agreements were made and fees temporarily imposed. Barriers of this sort were probably less common than in other markets, but Japan's export growth was chiefly in commodities not well adapted to our markets. During the depression more attention was given to price and Japanese competition, aided by the lower external value of the yen, by government subsidies, regulation of quality, and general encouragement, was more severe. However, she had difficulty in meeting our demands as to quality in some lines, while in others our tariff was too high, and the balance of

trade turned passive for Japan in 1932 for the first time in years, and she declined in importance as a supplier of our wants. The United States likewise took a smaller share of her total exports as other, principally backward, countries took more.

Our exports to Japan had to overcome the disadvantages of a depreciated currency, heightened tariff barriers, a governmental program of self-sufficiency, governmental attempts to balance trade, and the rapid development of domestic industry. Many of them declined. The more important, however, were crude materials and semimanufactures and these generally advanced as Japan, lacking raw materials, was forced to import cotton for her domestic and export trade, iron and steel scrap for her iron and steel producers, whose demand was heightened by military activities and armament programs, crude petroleum for her refineries, etc. The United States came to supply a larger proportion of Japan's needs than formerly and found her taking a greater part of our total exports as her recovery preceded that of other countries.

Japan has made a remarkable recovery and the government deserves most of the credit. Its policies have been contradictory at times as it has tried to satisfy all producers. The country would advance more rapidly in industrial matters if agriculture and the primary industries were not protected. Japan is best fitted for the production of finished goods requiring large amounts of labor and little capital. Political and military necessities have forced compromises with the economic, as usual. The recovery has been conducted under stimulants; the patient may have difficulty learning to live without them. The budget is badly unbalanced. The balance of trade has not been successfully controlled. Moreover, the benefits have gone to a small part of the nation. Agricultural and industrial

workers have received only the remnants. There is more employment, but wages are lower. The advantages of depreciation have worn off. Continued attempts to balance trade bilaterally will probably mean higher raw material costs in the future. It seems that the benefits of the government's program have yet to be paid for.

APPENDIX

Table XLIX. - Prices and Exchange Rates

Year	Wholesale Price Indices		Yen-Dollar Exchange Rates	Conversion Factors (a)
	Japan	United States		
1925	212.2	103.5	41.04	.4104
1926	188.2	100.0	47.12	.4712
1927	178.6	95.4	47.41	.4741
1928	179.8	96.7	46.41	.4641
1929	174.8	95.3	46.10	.4610
1930	143.9	86.4	49.39	.4939
1931	121.7	73.0	48.85	.4885
1932	128.1	64.8	28.11	.2811
1933	142.7	65.9	25.65	.2014
1934	141.3	74.9	29.72	.1775
1935	-----	80.0	28.81	.1705

(a) Used in converting "old gold" values given in 42 into yen.
Sources: Price indices: For Japan, the Bank of Japan index, based on July, 1914, cited in 67 #105, p. 14; for the United States, 1926-1935, the Bureau of Labor Statistics index, based on 1926, 63.5, p. 9; 1925, Ibid., 63. Exchange rates: 1925-1934, Federal Reserve Bulletin, cited in 67 #105, p. 14; 1935, 39.

BIBLIOGRAPHY[1]

.5 ----------
The Encyclopedia Americana. Americana Corporation, New York and Chicago, 1932.
Vol. XXI, p. 694.

1. ----------
The Japan Yearbook: 1934. The Foreign Affairs Association of Japan, Tokyo, 1934.
xxx + 1358p.

2. ----------
The Mineral Industry: Its Statistics, Technology, and Trade during 1934, edited by G. A. Roush. McGraw-Hill Book Company, Inc. New York and London, 1935.
xxii + 739p.

3. ----------
The New Larned History, edited by Donald E. Smith, et al. C. A. Nichols Publishing Company, Springfield, Massachusetts, 1922.

4. Alsberg, Carl L.
Japanese Self-sufficiency in Wheat. Wheat Studies of the Food Research Institute, Vol. XII, No. 3, November, 1935, p. 57-100. Stanford University.

5. Berglund, Abraham, and Wright, Philip G.
The Tariff on Iron and Steel. The Brookings Institution, Washington, 1929.
xviii + 248p.

6. Bisson, T. A.
Japan's Trade Expansion. Foreign Policy Reports, Vol. X, No. 16, October 10, 1934, p. 194-208.

6.5 Bratter, Herbert M.
The Role of Subsidies in Japan's Economic Development. Pacific Affairs, Vol. IV, No. 5, May, 1931, p. 377-393.

6.8 Dorfman, Ben.
Two Years of the Manchukuo Regime. Foreign Policy Reports, Vol. X, No. 14, September 12, 1934, p. 170-180.

7. Durham, Walter A., Jr.
The Japanese Camphor Monopoly. Pacific Affairs, V, No. 9, September, 1932, p. 797-801.

7.5 Griffin, C. E.
Principles of Foreign Trade. The Macmillan Company, 1934.
xiv + 476p.
Revised Edition.

---

1 Government documents are generally arranged according to the classification numbers of the Government Printing Office. Where these were not ascertained and for other materials entries are alphabetical by author and title.

7.8 Holland, W. L. (ed.).
Commodity Control in the Pacific Area. George Allen and Unwin, Limited, London, 1935.
Tobata, Seiichi, "The Japanese Rice Control", p. 157-197.

8. Kennedy, Captain M. D.
The Changing Fabric of Japan. Richard R. Smith, Inc., New York, 1931.
viii + 282p.

8.5 The Lansing State Journal.
Lansing, Michigan
May 23, 1936.

9. League of Nations.
Monthly Bulletin of Statistics, Vol. XVII, No. 5, May, 1933, p. 217. League of Nations, Geneva.

10. League of Nations. Economic Intelligence Service.
Statistical Year-book of the League of Nations: 1933/34. League of Nations, Geneva, 1934.
299p.

10.5 McDonel, Karl H.
The United States Export and Import Trade in Dairy Products. Michigan State College, Agricultural Experiment Station, Section of Economics, East Lansing, Michigan, January, 1933.
Technical Bulletin No. 131.

11. Mears, Eliot G.
The Foreign Trade Statistics of the United States. Journal of the American Statistical Association, Vol. XXX, No. 191, September, 1935, p. 501-516.

12. Moulton, Harold G.
Japan: an Economic and Financial Appraisal, with the collaboration of Junichi Ko. The Brookings Institution, Washington, 1931.
xx + 645p.

12.5 National Industrial Conference Board, Inc.
Trends in the Foreign Trade of the United States. National Industrial Conference Board, Inc., New York, 1930.
xviii + 329p.

13. Orchard, John E., with the collaboration of Dorothy Johnson Orchard.
Japan's Economic Position: The Progress of Industrialization. Whittlesey House, McGraw-Hill Book Company, Inc., New York, 1930.
xvi + 504p.

14. Patterson, Ernest Minor.
The World's Economic Dilemma. Whittlesey House, McGraw-Hill Book Company, Inc., New York, 1930.
viii + 323p.

15. Penrose, E. F.
Food Supply and Raw Materials in Japan. The University of Chicago Press, Chicago, 1930.
75p.

16. Pettengill, Robert B.
The United States Foreign Trade in Copper: 1790-1932. American Economic Review, Vol. XXV, No. 3, September, 1935, p. 423-441.

17. Pratt, Edward Ewing.
International Trade in Staple Commodities. McGraw-Hill Book Company, Inc., New York, 1928.
viii + 570p.

18. Redman, H. Vere.
Japan in Crisis. George Allen and Unwin Ltd., London, 1935.
224p.

19. Robbins, Lionel.
The Great Depression. The Macmillan Company, New York, 1934.
xiv + 238p.

20. Swen, Wen Yuh, with the assistance of Carl L. Alsberg.
Japan as a Producer and Importer of Wheat. Wheat Studies of the Food Research Institute, Vol. VI, No. 8, July, 1930, p. 351-378. Stanford University.

20.5 Timperley, H. F.
Japan in Manchukuo. Foreign Affairs, Vol. XII, No. 2, January, 1934, p. 295-305.

21. Tokyo Institute of Political and Economic Research.
Supply of Raw Materials in Japan. Japanese Council, Institute of Pacific Relations, Tokyo, 1933.
ii + 23p.

22. Treat, Payson J.
Japan and the United States, 1853-1921. Houghton Mifflin Company, Boston and New York, 1921.
vi + 283p.

United States.[1] Department of Agriculture.
22.5 Yearbook of Agriculture. 1935.
iv + 762p.
23. Plant Industry Bureau.
Commercial Possibilities of Japanese Mint in the United States as a Source of Natural Menthol, by A. F. Sievers and M. S. Lowman. August, 1933.
35p.
Technical Bulletin No. 378.

---

1 United States government publications are published at the Government Printing Office in Washington. The repetition of this has been avoided.

United States. Department of Agriculture.

Bureau of Agricultural Economics.

24. The Agricultural Outlook for 1936, November, 1935.
144p.
Miscellaneous Publication No. 235.

25. Geographic Distribution of United States Agricultural Exports. Foreign Crops and Markets, Vol. XXXII, No. 13, March 30, 1936, p. 386-393.

26. The Position of Silk in United States-Japanese Trade, prepared by O. L. Dawson and W. Ladejinsky. Foreign Crops and Markets, Vol. XXXII, No. 15, April 13, 1936, p. 447-457.

Agricultural Adjustment Administration.

26.5 Agricultural Adjustment.
May, 1933, to February, 1934, p. 62-5.
February 15, 1934, to December 31, 1934, p. 77.

Agricultural Adjustment Administration. Division of Information.

27. World Cotton Markets. 1935.
8p.
G-43, issued September, 1935.

Agricultural Adjustment Administration.

28. Cotton Production Adjustment, 1934-1935. No. 25, December, 1935.

United States. Department of Commerce.

Bureau of Fisheries.

29. Fishery Industries of the United States: 1934, by R. H. Fiedler. 1935.
ii + 75-330p.
Appendix II to Report of Commissioner of Fisheries for the Fiscal Year 1935.

30. Studies in Crab Canning, by Kokichi Oshima. 1931.
ii + 8p.
Investigational Report No. 8, Vol. I.

Bureau of Foreign and Domestic Commerce.

31.-37.0 Consular Reports.

31. Annual Review of Commerce and Industry of Japan for 1930, by Vice Consul Hiram Bingham, Jr. American Consulate General, Tokyo, 1931.
114p.

32. Review of Commerce and Industries of Japan--1931, from Leo D. Sturgeon, American Consul. American Consulate General, Tokyo, 1932.
ii + 32p.

United States. Department of Commerce.

Bureau of Foreign and Domestic Commerce.

33. Review of Commerce and Industries of Japan--1932, prepared by Leo D. Sturgeon, American Consul. American Consulate General, Tokyo, 1933.
ii + 33p.

34. Annual Economic Report--Japan--1933, submitted by Frank S. Williams, Commercial Attaché. Tokyo, 1934.
ii + 112p.

35. Annual Trade and Economic Report: Japan--1934, by Frank S. Williams, Commercial Attaché. American Embassy, Tokyo., 1935.
vi + 140p.

36. Japan Trade and Economic Letter, Office of Commercial Attaché, American Embassy, Tokyo.
January, 1933-- March, 1935. September and November, 1933, were not obtained.

37. Japan Monthly Trade Report.
May 24, 1935--December 23, 1935. The August number, covering the month of July, was not obtained.

Division of Regional Information.

37.5 Trends in United States-Japanese Trade, by V. P. Copping. 1935.
8p.
Special Circular No. 333. (Far Eastern Series No. 149.)

38. Economic Developments in Japan during 1935 and Outlook for 1936. February 15, 1936.
10p.
Special Circular No. 355. (Far Eastern Series No. 155.)

39. Foreign Trade of Japan-1934 and 1935. February 29, 1936.
6p.
Supplement to Special Circular No. 355. (Far Eastern Series No. 155.)

39.5 Far Eastern Supplement No. 38, July 28, 1936. Excerpt from Whaley-Eaton Service.
2p.

40. Press Memoranda.

40.1 June 18, 1936.
40.2 July 24, 1934.
40.3 December 30, 1935.
40.4 November 2, 1935.
40.5 January 17, 1936.
40.6 December 27, 1935.

United States. Department of Commerce.

Bureau of Foreign and Domestic Commerce.

41. Foreign Commerce and Navigation of the United States.
Various paging.
1925 to 1935 editions.

42. Foreign Commerce Yearbook.
Various paging.
1925-1935. (Before 1933, Commerce Yearbook.)

43. Statistical Abstract of the United States.
1933 and 1935.

44 World Economic Review.
Various paging.
1933 and 1934.

45 Charts of World Production, Imports, and Exports of Major Minerals of Industry, 1929. 1933.
ii + 13p.

46.-57.0 Articles from Commerce Reports.

46. ----------
The Industrial Development of Japan, based on report from Trade Commissioner J. H. Ehlers, Tokyo. Commerce Reports, No. 16, April 18, 1927, p. 161-163.

47. ----------
The Industrial Machinery Market of Japan, based on report from Trade Commissioner J. H. Ehlers, Tokyo. Commerce Reports, No. 15, April 11, 1927, p. 109-110.

48. ----------
Japan's Imports Larger in March, based on cable from Acting Commercial Attaché H. A. Butts, Tokyo. Commerce Reports, No. 16, April 18, 1927, p. 188.

49. ----------
Leading Markets for United States Lumber Exports in 1925. Commerce Reports, No. 30, July 26, 1926, p. 218-220.

50. ----------
Marketing Flash Lights and Batteries in Eastern Asia. Commerce Reports, No. 45, November 5, 1928, p. 366-368.

51. ----------
Unsettled Conditions Mark Close of Year in Japan, based on cabled and other reports from Commercial Attaché C. E. Herring, Tokyo. Commerce Reports, No. 7, February 14, 1927, p. 440-442.

United States. Department of Commerce.

Bureau of Foreign and Domestic Commerce.

52. Baldwin, C. F.
Motor-Vehicle World Census, January 1, 1931. Commerce Reports, No. 27, July 6, 1931, p. 3-7.

53. Marlowe, Alice.
Douglas-fir Exports in 1926. Commerce Reports, No. 16, April 18, 1927, p. 166-167.

54. Mayton, Joseph Gregory.
Adjustment of Earthquake Bills Sought by Japanese Government. Commerce Reports, No. 16, April 18, 1927, p. 175.

55. Peirce, Francis Lamont.
Commercial Developments in the Pacific Area. Commerce Reports, No. 28, July 13, 1925, p. 75-78.

56. Schnitzer, J. (compiler).
The Market for Leather in Japan. Commerce Reports, No. 12, March 22, 1926, p. 724.

57. Steintorf, Paul P.
Japan's Industrial Progress. Commerce Reports, No. 28, July 13, 1925, p. 79-80.

58. Monthly Summary of Foreign Commerce of the United States, December, 1935. 1936.

59. Trade Information Bulletins.

#401 Sole Leather: World Production and International Trade, J. Schnitzer. 1926.
ii + 25p.

#433 World Radio Markets in 1926, compiled by Lawrence D. Batson. 1926.
ii + 85p.

#429 Outlook for Increased Leather Exports, by J. Schnitzer. 1926.
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59. Trade Information Bulletins.

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#615 Japanese Trade in Iron and Steel Products, by J. H. Ehlers. 1929.
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#672 Paper Trade and Industry of Japan, by B. M. Frost. 1930.
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#734 Markets for Motor Boats, Marine Engines, and Equipment in Canada, Latin America, Oceania, and Asia. 1930.
ii + 46p.

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Bureau of Foreign and Domestic Commerce.

59. Trade Information Bulletins.

#755 Leather Industry and Trade of Japan, by J. Schnitzer. 1931.
ii + 20p.

#779 International Trade in Fish Meal, compiled by George J. Carr. 1931.
ii + 18p.

#805 Motor Fuels in Foreign Countries. 1932.
ii + 35p.

#818 World Chemical Development in 1933 and Early 1934. 1934.
ii + 84p.

#823 World Chemical Developments in 1934. 1935.
ii + 132p.

#825 Industrial Machinery in Principal Foreign Countries. 1935.
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60. Trade Promotion Series.

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vi + 175p.

#103 International Trade in Leather, by J. Schnitzer. 1930.
iv + 266p.

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60. Trade Promotion Series.

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#136 Radio Markets of the World, 1932, by Lawrence D. Batson. 1932.
vi + 112p.

#157 Leather: World Production and International Trade, by J. G. Schnitzer. 1935.
viii + 258p.

60.5 United States. 74th Congress.
Revenue Act of 1936.
p. 105-106.
(Public Act No. 740.)

61. United States. 74th Congress. Senate.
Cotton Textile Industry. 1935.
xi + 154p.
Senate Document No. 126, 74th Congress, 1st Session.

62. United States. Department of the Interior.

Bureau of Mines.

Minerals Yearbook.
Various paging.
1932-1933, 1934, and 1935.

63. United States. Department of Labor.

Bureau of Labor Statistics.

Monthly Labor Review, Vol. XXV, No. 6, December, 1927, p. 198.

63.5 Wholesale Prices, February, 1936.
ii + 12p.
Serial No. R. 370.

United States. Tariff Commission.

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Census of Dyes and Other Synthetic Organic Chemicals.
Various paging.
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#108 Wool Knit Gloves and Mittens. 1936.
viii + 43p.

#112 Cotton Cloth. 1936.
viii+ 168p.

68. Vinacke, Harold M.
International Organization. F. S. Crofts and Co., New York, 1934.
x + 483p.

69. Wallace, Henry A.
The World Cotton Drama. Foreign Affairs, Vol. XIII, No. 4, July, 1935, p. 543-556.

70. Wertheim, Barbara.
The Oil War in Japan. The Christian Science Monitor, Weekly Magazine Section, Vol. XXVIII, No. 3, November 27, 1935, p. 4.

70.5 Whittlesey, C. R.
Exchange Control, American Economic Review, Vol. XXII, No. 4, December, 1932, p. 585-604.

70.7 Windel, Dudley.
Economic Consequences of an Industrialized Japan, Economic Forum, Spring, 1934, Sec. 1, p. 182-192.

71. Wright, Philip G.
Trade and Trade Barriers in the Pacific, with an introduction by W. L. Holland. Stanford University Press, Stanford University, California, 1935.
xvi + 530p.