PHILIPPINE INDUSTRIES TODAY AND TOMORROW

Catherine Porter

The Philippine Commonwealth has reached a point where, for better or for worse, a larger degree of industrialization seems inevitable. For the days of free trade with the United States are rapidly passing; export taxes on Philippine goods destined for the United States will be levied after 1940; after 1945, when the Commonwealth is scheduled to attain its political freedom, its goods coming into the United States will pay American duties on a gradually rising scale. In 1960, when presumably the trade agreement now being arranged between the two countries comes to an end, the Philippine nation will have to stand on its own feet economically.

On first consideration, it is not immediately apparent why this period of transition should cause concern to the Filipinos and to other nationals with business interests in the Islands. The financial condition of the country is sound; the great depression was hardly felt in the Philippines; there has been a gold boom of considerable proportions; large sums of money have been pouring into the Commonwealth Treasury from the United States coconut oil excise and sugar processing tax refunds; and the natural resources of the country, agriculture, mining, fishing, forestry, are known to be bountiful. If the country cannot sell its sugar, why not sell some of its other agricultural produce? If it cannot sell enough to pay for purchases abroad, why not produce more of those goods at home? If agriculture no longer pays, why not industrialize?

The answer is that these things must be done, but they take time and money and intelligent planning. They call for confidence in the men in public office; they call for close cooperation between the government and the people, between labor and capital, between all branches of industry. Given money and confidence and cooperation, it will take a long time to work out the reorientation of the country's economy—but all during that period a nation of over 14,000,000 people still has to be fed and clothed, furnished with employment, schools, public services, protection.

Foreign trade has been the source of the country's prosperity during the American regime; and a rapid dwindling of that trade, which has been directed largely to the American market, is inevitable now that the period of free interchange of goods is drawing to a close. A semi-colonial country, such as the Philippines has continued to be, might be expected to raise enough food for its population. But the big money crops—sugar, coconuts, hemp, tobacco—have taken precedence over corn and wheat, fruit and vegetables, to such an extent that a large part of the imports into the Islands—18% in 1937—is made up of food products many of which could be supplied at home. A thoughtless queen might say, Let them eat sugar, and indeed there is a drive on to increase domestic consumption of the big crop which will soon have little or no outside market. The national ambition now is to improve the national diet, become self-sufficient in food, and attain a larger degree of self-sufficiency in other lines, especially manufactured goods.

It might be well to remind ourselves, at the start,
of one of the principal snags in the industrial development of the Philippines. They are now exporting iron, copper, manganese, and steel. Why not, then, build up heavy industries, to take care of the $30,000,000 yearly import of iron and steel manufactures, cars, machinery and other apparatus? The immediate answer is that the country lacks coal; it imports nearly $1,000,000 worth of coal annually, chiefly from Japan. Both the quality and quantity of its iron, also, are too doubtful to form the basis of heavy industry. Although coking coal is known to be present in north China, uncertainty about the future of the region and control of its resources is such as to discourage hopes of building an industry in the Philippines on coal from that source—and experience has shown, moreover, that iron moves toward coal, because it is easier to transport. Japan is one of the outstanding examples of a country poor in natural resources that has been able to build up heavy industry by importing a large part of the necessary raw materials. The Philippines shows as yet no eagerness to follow that example. For the time being, at least, the country proposes to concentrate on light industries to which it is more naturally adapted.

Lacking coal, the question of petroleum resources and their method of exploitation not having been completely explored, the Commonwealth must depend on water power as its chief source of energy. The plans that are being made to develop water power have been described in “Steps Towards Economic Planning in the Philippines,” (Far Eastern Survey, Apr. 6, 1938, pp. 73-79), but operations have not advanced far beyond maps and diagrams. It is apparent that industrialization on a large scale is not yet possible, and must proceed slowly for some time.

It is difficult to arrive at anything but rough estimates with regard to the extent of actual industrialization in the Philippine Commonwealth. The paucity of data is in itself indicative of the situation. The best single compilation is to be found in the special report of the United States Tariff Commission, “United States-Philippine Trade” (1937), from which a large part of this material is drawn.

In terms of industrialization as the West understands the term, the face of the country has changed little during the last forty years. In 1903, there were in the Islands some 5,000 industrial establishments capitalized at $85,000,000, employing 64,000 people. According to the 1918 census (and there has been none since) there were 8,500 industries, with an approximate investment of $110,000,000, employing 143,000 workers. The backbone of the country’s industry was the little home shops in which all kinds of materials were worked and a wide variety of products offered for local consumption and in a few cases for export. Since then, there has been a concentration of industry about the agricultural export crops, at the expense of some of the home industries, but very little large-scale organization of manufacturing such as is common in western countries, in Japan, and in the coast cities of China.

On admittedly incomplete data, it appears that there are less than 250,000 persons today employed in manufacturing industries of any size in the Philippine Commonwealth, chiefly in Manila, Cebu and Iloilo. Out of a total population of between 14 and 15 million, this would not seem too startlingly small a proportion if it were not for the fact that a great deal of this employment is part-time, seasonal. Probably ten times as many people are engaged in strictly agricultural pursuits; and moreover there is a wide overlapping of the two groups, because many farm and field laborers turn to some kind of industrial occupation in the periods between harvest and planting.

It is even more difficult to decide with any accuracy the actual investment in industrial plants and equipment in the Islands. It is well over $200,000,000, as compared with an investment of nearly $600,000,000 in the four major export agricultural industries alone. The Filipinos themselves control the larger share of the sugar centrals, their capital representing $38,000 of a total investment of $84,000. They also have the controlling interest, 43%, in the shoe manufacturing business; 40% of the cordage; one fourth of the embroideries; over 20% of the sawmills; and they own one large and four small coconut oil plants.

The American investment is large, about a fifth of the total; American capital controls the major part of gold production and chromium; two of the largest coconut oil plants and six of the desiccated coconut factories; nearly half of the sawmills; about one third of the sugar centrals; practically all of the pearl button business, three fourths of the embroidery, over half of the cordage investment; nearly a quarter of the shoe business; and one large soap factory, among others. Rice-growing is practically all in the hands of the Filipinos, but the Chinese control the milling—and there are nearly 2,500 rice mills scattered about the Islands. Chinese control almost one fourth of the shoemaking, 10% of the sawmills, 6% of the cordage business, some of the smaller coconut oil plants as well as one of the large ones, a large number of the smaller soap factories, and some of the candy making. The Japanese have long been identified with the fish industry, are entering the textile field, and are also interested in shoemaking, some of the coconut plants, and in iron and manganese mines. Their interest in the hemp industry in Davao has been widely dis-
cussed. Of other foreign capital in the Commonwealth, Spanish is the most important, controlling 60% of the tobacco business (the rest being shared largely by Filipinos and Americans), and some of the goldmining.

Today the country's wealth, equipment, organization, labor and technique are concentrated in a few great industries, many of which are threatened with serious loss or complete ruin when free trade ceases. This aspect of the situation has been considered at some length in previous issues of the Far Eastern Survey. What we shall consider here is the chance that some parts of these industries have of surviving, either by holding part of their present export market or by becoming adapted to some domestic need; what part other infant industries may assume in saving a part of the export trade or answering local wants; and what the prospects are for developing new industries for internal or external trade.

Take sugar, for instance: a $200,000,000 industry, occupying 750,000 acres, running 46 sugar centrals and 4 refineries, employing 330,000 men. It has accounted for 50% or 60% of total exports in recent years. Already that export is being curtailed, and as taxes are imposed upon its export or upon its import into the United States, its position becomes more and more unfavorable. How far producers will be able to limit and intensify production, and lower costs, thus putting their sugar in a better competitive position vis-a-vis the Cuban product; how far they will be able to increase domestic consumption—these things are highly problematical. But there is no great optimism in the Commonwealth about the future of sugar.

The coconut industry, too, faces the complete loss of one of its important enterprises, that of oil-expressing. The whole industry represents a total investment of $220,000,000, occupies about 1½ million acres, and furnishes employment to some 800,000 persons. It is considered likely that copra will be able to survive the transition period, for it has other important markets, and may also continue to find a market in the United States. (Copra from all sources is now on the United States free list.) Desiccated coconut, which goes almost exclusively to the United States, may survive also. This branch of the industry operates 11 factories. But the coconut oil industry, which operates 18 oil plants, representing an investment of $12,000,000, is considered doomed because of the United States excise tax. Therefore exports of copra cake and meal, by-products from oil-expressing, will disappear.

Less important industries that are threatened with complete loss under the payment of duties are cigar-making, embroideries, and pearl buttons. Cigars are the most important product of the $30,000,000 tobacco business. There are in all 92 cigar factories, 17 cigarette factories, and 23 other tobacco plants, in which are invested $14,000,000, employing 20,000 workers. It is not considered likely that low-priced Philippine cigars will be able to pay the graduated taxes into the United States, their chief market. Therefore this branch of the industry faces partial or complete collapse. The embroidery industry, loosely organized and carried on largely in the homes, is not expected to ride out the transition period. That means the end of a $4,000,000 enterprise, the extinction of 32 factories, and the end of employment, some part-time, for 30 to 50 thousand workers. It is the part-time home industries that have made it possible for a large part of the population to eke out a living. The pearl-button business, too, will probably go over the dam, with its three factories, its investment of $100,000, and its jobs for 600 workers.

These are the branches of present industries which, because of their relationship to the American market, face a dubious future even during the period of transition, unless the present scheme outlined by the Joint Preparatory Committee is adopted. This provides for duty-free quotas on certain of these commodities entering the United States. It is significant that, while total exports in this group made up nearly three fourths of the total value of exports in 1934, their share had fallen to 58% in 1937. But the present export trade is not completely doomed. A large part of the basic coconut industry may survive, and there are other important products which world markets need and the Philippines can provide.

Although hemp and cordage are suffering from general world conditions (see Far Eastern Survey, June 1, 1938, pp. 131-2), steps are being taken to help them weather the storm. In view of the country's practical monopoly in hemp-growing, this industry has a fair chance of maintaining its position. It employs about 600,000 workers, and the total investment amounts to approximately $185,000,000. In the 5 cordage factories, over 1,000 persons are employed, and the investment is some $3,000,000. The lumber industry is a steady backlog. It operates largely for home consumption, but has a substantial foreign market as well in the United States and Japan. It employs some 35,000 persons; the 108 sawmills represent almost the total investment of $15,000,000. A new industry in this field is that of furniture-making. There are now about 100 furniture shops in the Commonwealth, employing 1,000 workers. The investment is estimated at about $350,000.

Leaf tobacco, which goes largely to Spain as well as to Japan, China, France and Belgium, may continue to find a market. Production of cigarettes, which are manufactured largely for domestic use, may increase,
for the import of American cigarettes is destined to fall off, and the home product may have an opportunity to regain part of its domestic market which it has lost in the last decade to popular American brands. The Joint Committee will recommend, in this connection, free importation into the United States of a gradually declining number of Philippine cigars, corresponding to a gradually reduced number of American cigarettes to be admitted into the Philippines. Tobacco imports into the Philippines in 1937 were valued at $3,600,000, exports at $5,000,000.

An off-shoot of the sugar industry, which is classed among the most promising “shock absorbers,” is that of candymaking. This has had an uncertain growth since the first factory was established early in the century.

**Shock Absorber for Sugar**

There are now some 15 candy factories in Manila, representing an investment of $50,000, and employing some 2,000 workers. The only ingredient produced locally, however, is sugar, everything else being imported. There is now a small export of “penny candy,” bubble gum and similar products. The confectionery and candy import, on the other side of the ledger, amounts to about $250,000, in the better grades.

Besides candy manufacture, there are other possible uses for the sugar crop. Bagasse, the pithy material that comes from the crushers after the juice has been extracted, has been found to have a comparatively high cellulose content. Its conversion into paper pulp might require mixture with a stronger chemical pulf from abaca and bamboo fibers, to improve its tensile strength. However, some of the sugar mills are now using all of the waste material possible for fuel, so that conversion of this waste into still other products might entail unwarranted cost in securing substitute fuels.

The production of alcohol from molasses, an old industry, is now becoming an important one, with an output of 70 million liters. Filipinos point to its increasing use as motor fuel, to help offset the annual imports of gasoline and kerosene which run into several millions annually. Other sources of alcohol are cassava and sweet potato. The production of Philippine rum has been increased as a result of repeal of the United States Prohibition Law; the import into the United States was valued at over $50,000 in 1937. In fact, it is thought that the distilling business may reach a point of substantial export; there are now some 170 alcohol distilleries, as well as 54 wine and liquor plants, and 3 breweries. They represent an investment of about a million dollars, and employ over 3,000 workers. In addition, there are 150 mineral water plants, employing 10,000, the estimated investment amounting to $750,000.

Several older industries are now branching out, and promise to divert more and more of the coconut product to domestic use. Already there are nearly 200 soap factories employing about 5,000 people, besides some 500 home plants. There are 5 vegetable butter and 4 vegetable lard plants, representing a total investment of nearly $300,000. Prospects for supplying home demand and developing an export supply for Far Eastern markets are considered good. At present, however, the export is almost negligible, while soap to the tune of over $500,000 was imported in 1937.

A home industry for which expansion is foreseen is that of hatmaking. Its fate is thought to depend on the whims of fashion and the growth of competition in South China (from hats made from imported Philippine buntal), rather than on the United States tax. A variety of raw materials is available, bamboo, straw, abaca and buntal fiber. The 40 to 60 thousand weavers are employed for the most part in homes, but there are also 16 plants which finish the rough product for export. The total capital represented is about $2,000,000.

Mining is of course an industry of increasing importance, and one which is expected to have a stabilizing effect on Philippine economy. Although gold shipments (all to the United States) are not classed as exports, we shall consider them here along with the other mineral products which are so classified. The total investment in all mines in the Commonwealth amounts to about $55,000,000. Of 375 gold companies incorporated up to the end of 1937, 25 are producing, 11 others are nearing that stage. Over 20,000 laborers and miners are employed in that industry alone. Output is increasing yearly, amounting to over $25,000,000 in 1937. A substantial amount of capital in recent years has been diverted from sugar to gold mining—a significant indication of the position it is expected to assume. In the last few years, exports of other ores have begun to figure in trade returns—iron, chromium, copper, manganese, and lead in the order of their importance—making up nearly 2% of total exports in 1937.

The enterprises in this second group, which are already going concerns and for which the prospects are reasonably good, have already forged ahead in importance in the total picture of the Commonwealth’s trade. In 1934, they accounted for 24% of the Islands’ exports; in 1937, for 40%, the largest comparative increases being recorded in abaca, copra, desiccated coconut, mineral products, and hats. Therefore, in the first group of industries which are dropping off, and in the one just considered, we have accounted for 98% of the Commonwealth’s total exports in 1937.

In recent years, there has been a revival of interest in producing goods for home consumption, but on a
somewhat larger scale than in the old cottage crafts. Textile weaving is one industry which is commanding a large share of attention, because of Dependence on Foreign Cotton. This stalled cotton printing is necessary every time cotton is ported for furnishing the loom for weaving, and in piece goods. It can be and is grown in the Islands to some extent, and may occupy part of the area which is eventually to be recovered from sugar and coconuts. But it will be a long time before local production can furnish domestic needs for the raw product. Moreover, some skepticism is being expressed about the country's entering a field which is already threatened with overproduction in almost every corner of the world. There is now one mill in Manila turning out coarse cotton goods, equipped with 323 looms and 8,000 spindles. The Japanese have installed factories for underwear and hosiery, and according to an announcement a few months ago, they are importing 400 looms from Japan for cotton cloth weaving.

Only modest schemes are under consideration for cotton manufacture, compared with the extent of the industry in other great textile centers. The National Development Company recently signed a contract for textile machinery to be delivered by the end of 1939. This calls for spinning and weaving mills with the necessary equipment for cotton bleaching, dyeing, printing and finishing. The deal involves over $850,000 and has been referred to as one of the largest business deals of the year. As against this, one estimate has put at $72,000,000 the cost of installing the necessary buildings and machinery and furnishing the power to produce cotton goods at the rate they are now imported.

The strength of the Philippine textile industry of the future is seen in the home industries, weaving distinctive Philippine goods largely from domestic raw materials; sinamay, from abaca; piña cloth from piña alone or mixed with abaca, cotton or silk; justi made from silk yarns imported from China and Japan. The home weaving industries need some such kind of organization as has characterized the Philippine embroidery business, for furnishing the workers with equipment and material, for standardizing the products and marketing them. An improvement has recently been made in the native loom which should make for greater efficiency and larger output, but capital and perhaps government aid will be necessary to make the improved loom widely available.

Sack-making is one branch of the textile industry which has received little attention, in spite of the wide use of bags for sugar and rice. Annual imports are valued at about $2,000,000. Plans are being considered for forming a corporation capitalized at $1,000,000, to manufacture burlap bags for local use, from abaca and maguey. The cost of establishing a factory is estimated at about $450,000. Since the market is more or less assured and steady, the enterprise is considered a sound one.

Shoe manufacturing looks like one of the most promising among those industries which have taken on a new lease of life in the last five years. About $4,000,000 is invested in the business today, giving employment to 15,000 people. There are five shops manufacturing rubber shoes, four making leather footwear, and some 350 smaller shops in some of which shoes are turned out much as they were 100 years ago by the first Chinese shoe-makers in the Philippines. One interesting branch of the rubber-shoe business is that which makes use of old auto tires, which can be purchased for less than $1.00 each. From one tire, the workers can get 60 pairs of slippers which sell for 8 to 15 cents a pair. The work is done entirely by hand, as is much of the work in the other smaller shops. The annual output of shoes is now close to two million pairs. The import of shoes in 1937 was valued at $235,000, marking an increase over 1934; but the increase was in leather shoes, and is part of the measure of the increasing use of footwear throughout the Islands.

This is one of the enterprises, however, for which most of the material must be imported. Leather comes from the United States, Japan and British East Indies (valued at $1,275,000 in 1937). There are 60 tanneries in the Commonwealth, but their leather is not yet considered satisfactory for all purposes, although it is said to make excellent soles. The rubber import, largely from Japan and Java, was valued at $830,000 in 1937.

Domestic production of rubber is increasing steadily, reaching nearly 900 tons in 1937. Almost half of this goes into the local rubber-shoe industry and a few minor rubber products, the rest into export. Over 1,500,000 acres in the Islands are considered ideal for the growth of rubber trees. One American firm has already been successful in its experimental plantation in Basilan, the National Development Co. plans to undertake rubber growing, and a local shoe factory also has ambitions to plant rubber trees.

Industries connected with food production are receiving considerable attention. The milling of rice and cassava flour from local products has been considered, for wheat flour costing some $4,000,000 is the largest single item of food imported. Wheat
is grown in a few localities, but it is not likely to
supplant to any great extent the older crops of rice
and cassava which are more easily grown and more
readily adapted to food uses. Cassava may be ex-
panded, for use along with wheat flour, thus cutting
down to some extent the import of wheat, and for use
in starch-making which has already been begun in one
factory with a large measure of success.

The dairy industry must start almost from scratch.
Manila, Iloilo and Cebu have dairy farms furnishing
fresh milk to the cities, but they are all small, too
small to permit of butter making or milk canning.
Dairy products valued at $3,700,000 were imported in
1937, a large part from the United States. Meats may
in time be supplied locally; a few small plants are
producing ham, bacon and sausages. The lack of
refrigeration for developing the meat and dairy indus-
tries constitutes an enormous obstacle, for there are
less than 200 ice plants in the Islands, and electric re-
frigeration is still beyond the reach of small industries.

Fish is so common an item of food that it is diffi-
cult to estimate even roughly the annual catch. An-
nual consumption has been estimated at $50,000,000
—and there was an import of $1,780,000 in 1937. The
Japanese of course figure in this industry, both in the
local catch and in supplying canned imports. The
government is taking steps to protect and encourage
the fish industry, to stop illegal practices. The
National Development Co. is establishing a fish-can-
nning factory in Pampanga, and has signed contracts
for the construction of a can-manufacturing plant, to
cost $115,000, the tin to be imported from the United
States or Germany. There are now 3 fish canneries,
with an investment of $40,000, employing 800 persons
in the largest plant.

This list by no means exhausts the possibilities of
the country. Other miscellaneous industries for which
some data are available are: a fac-
tory manufacturing cutch extract for
tanning, with a $250,000 investment,
employing 150 people; a match fac-
tory; 4 shellcraft factories; 4 paint
and varnish factories, representing an investment of
$50,000. Attention has been drawn to the valuable
source of varnish oil in the lumang bato tree, which
is now grown on nearly 800 acres, the annual value of
the oil output being about $150,000. There is one
modern plant in Manila extracting this oil, which
Filipinos claim is in a class with Chinese tung oil, and
for which they see an assured market in the United
States. One brewery has recently installed a bottle
factory which will furnish, from local raw materials,
half the annual needs of the company. A modern fac-
tory to manufacture high-grade glassware and tiles is
nearing completion. There is also a new plant about
to begin the manufacture of nails, bolts, screws and
similar articles.

There are a number of almost untouched fields which
offer great promise. A special committee studying the
industrial possibilities of the country has recom-
mended the following projects, among others: manu-
facture of glass and clay products, the one from rice
husks, the other from the clay of the rice fields;
totaquina, from cinchona bark; chemicals, cosmetics,
fertilizers; paper, from sugar bagasse, abaca, rice
straw and wood. A number of these undertakings
would call for only modest investments; and the raw
materials and markets for the products lie at their
doors.

Incomplete as this picture is, it outlines the prin-
cipal smokestacks along the skyline of Manila and
the other industrialized towns. Whether they will
increase to any measurable extent depends on a great
many more factors than can be considered here, or
answered anywhere: world conditions; competitive
aspects of a number of the industries upon which the
country may embark; the future of the Philippine
tariff; the ability of Commonwealth officials so to
guide their country's development that it will attract
foreign capital; the release of capital in other parts of
the world which has enjoyed for a longer period the
blessings of modern industrialization!

Situated as it is in a quarter of the world character-
ized by a comparatively low standard of living, the
Commonwealth has enjoyed a higher standard largely because of its relation-
ship to the United States. But it re-
quires only a brief inquiry to disclose
that many of the advantages of higher
standards have not permeated to the tenants, the field
laborers, the unskilled workers in the factories, in fact
to the great mass of the population. Consider their
minimum daily wages: 15 to 25 cents, with board and
lodging, on sugar plantations; 70 cents to $1.00 for
miners; a 40-cent minimum in cordage mills; 30 cents
in tobacco factories; 25 cents in the lumber industry,
even less in the smaller household industries.

Production of goods for home consumption will re-
quire a higher standard, increased purchasing power
for the forgotten Filipino. And where is it to come
from? The reduced government income, which seems
inevitable over a considerable period, will narrow the
scope of governmental aid or subsidy. If plans for
industrialization now being considered—and many of them are still in the gray-matter rather than the blue-print stage—throw the Filipino into direct competition with neighboring Far Eastern countries, the day of the sweatshop will be prolonged. The social justice program of President Quezon, efforts to enforce a minimum daily wage of 50 and 75 cents, are being followed by widespread labor agitation which may result in chaotic industrial conditions, or which may eventually see industry established on a sounder base of a decent wage and better working and living conditions. Much depends upon both labor and the government.

It will be interesting to watch the development of the Commonwealth today and the new nation tomorrow, under changing conditions. If the country is able to profit by mistakes in its own past development, as it now seems to be doing, and by lessons which are to be learned in other countries which have adopted a greater degree of industrialization, it may be able to carry out a significant experiment. The "distributive state" is the term which President Quezon has chosen to describe his objective. The natural resources of the Philippines are such that a decent livelihood would seem to be within the reach of every Filipino, even though for some time he may have to be content with a simple economy and one still based largely on the products of the soil and of his own handiwork.

**Principal Sources:**

U.S. Tariff Commission, United States-Philippine Trade, 1937; Philippine Statistical Review, Manila; American and Philippine Chamber of Commerce Journal, Manila; Philippine Herald, Manila; The Philippine Yearbook, 1936-7, Manila; Sugar News, Manila; Reports of Department of Finance, Bureau of Customs, Manila; Census of the Philippine Islands (1918), Manila, 1921.

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**Far Eastern Exchange Rates Dropping**

*Kurt Bloch*

The last few weeks have seen a steady downward movement of the Shanghai rate of exchange in all the important markets of the world. News emanating from Shanghai indicates that this downward movement of Chinese currency has also affected the Japanese yen. In Shanghai, Japanese yen and Chinese national currency are exchanged at par despite the nominal difference between the pegged rate of the yen, as quoted internationally, and the low quotation of the Shanghai dollar.

The drop in the Chinese dollar is not very surprising. Psychologically, the loss of Suchow towards the latter half of May and the rapid retreat of the Chinese armies along the Lung-hai railway could not fail to have their effects on the largely speculative exchange fluctuations. (See "Chinese War Finance," Far Eastern Survey, May 18, 1938; May 4, 1938, pp. 108-9.) Moreover, the new exchange regulations of March 14 have not achieved what was intended. The idea of the Hankow authorities seems to have been that exchange requirements could be limited by rationing to the "legitimate" demand. The result has naturally been quite different. Demand has rapidly increased and outgrown the official allotments. In addition, the drop in the exchange rate has caused nervousness among the owners of deposit accounts with Chinese banks, such accounts having been blocked since August 1937.

This nervousness was best evidenced by the discount of so-called wei-wah money, that is, blocked bank accounts. In the beginning of the hostilities such wei-wah money was traded in at a discount up to 60 per mille; but the rate soon recovered, and the discount rarely exceeded 10 per mille until the beginning of March. Then, well-informed Chinese at Hankow began to offer wei-wah in larger amounts, and the discount rose to 20 per mille before the publication of the exchange regulations. Ever since, wei-wah money has shown a tendency to depreciate; in the beginning of April the discount rose to 45 per mille, and in the first week of May it moved between 30 and 35 per mille.

Presumably the sellers of wei-wah are rapidly converting cash gained at sacrifice prices into foreign exchange, and the steady fall of the exchange rate to little more than one half its former value cannot fail to hasten the conversion process. It would also appear that the Hankow authorities have steadily decreased their weekly exchange allotments to Shanghai, which in the first week totalled around £450,000 sterling and are now probably less than £300,000. Furthermore, it is not only the nervous Chinese who are trying to convert their Chinese currency holdings into foreign exchange. Under the pressure of Japanese military control, an exodus of foreigners in Shanghai has begun and the latter are also converting their currency holdings into foreign exchange.

With Chinese anxious to flee from their risky dollar holdings, a new interest in purchasing valuables has been awakened; the flight into material values from