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DEVELOPMENT OF THE JAPANESE ECONOMY SINCE VJ-DAY

12 March 1947

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CAPTAIN WORTHINGTON:

We are fortunate this morning in getting one of our last year's graduates, back in this country on a short visit, to give us some up-to-date information about the Japanese economy.

Commander Ormond Freile, U.S.N.R., is an industrial engineer of long experience, both here and abroad. He was called to active duty in the Navy in 1939. During the war he served as Deputy to the Chief of Priorities for the Navy, Army and Navy Munitions Board, and later as Coordinator of Landing-Craft Production. He was naval advisor to the War Production Board on priority matters.

Since he left the Industrial College last June, he has served as Chief of the Industrial Planning Board on General MacArthur's staff in Tokyo; and as Chairman of the Far Eastern Command Requirements Committee, charged with the allocation of critical materials for the Far Eastern Command and the determination of requirements for the occupational forces and the Japanese economy.

His subject is "Development of the Japanese Economy Since V-J Day". I take great pleasure in welcoming Commander Freile bact to the College.

(Applause)

COMMANDER FREILE:

It is quite an experience for me this morning to come back and find that the Industrial College has graduated from the cast-iron seats and a place which we used to call the salt-mines. That is considerable progress since I left here.

Before I get into the subject, I would like to say a few words about the inherent characteristics of the Japanese which have a bearing on the over-all picture.

First of all, the Japanese people as a whole, I am convinced, welcome the occupation. There are, of course, some die-hards of financial standing and political standing who are exerting some, we like to call, passive resistance. But, in general, I think the

Japanese people recognize the fact that their life has been much better since V-J Day.

The other thing I want to point out is that they are highly intelligent. Anybody in this country who is fool enough to discount the inherent intelligence of the Japanese is off on the wrong beam. Their engineers are exceptionally good engineers; their doctors exceptionally good doctors. From an intellectual standpoint, they have progressed very far indeed.

They have over-developed in the past years in the art of doing business, in trading, and in banking; but all through their industrial establishment there is evidence of lack of development in modern production procedures.

This discussion deals with an island country, somewhat smaller than the State of California, having a homogeneous population of about 77 million concentrated in a relatively few small lowlands. A land favored by a relatively healthful climate, abundance of fish and forest resources but drastically limited by poor mineral and agricultural resources.

The extent to which the almost ten years of war deteriorated the economy of Japan, added to the destruction by bombing is realized by but few people in the United States. As the picture has gradually revealed itself over the past eight months, it is indeed a sorry one. Practically everything was to a major extent consumed in supplying the sinews of war. Throughout the entire empire almost nothing has been repaired or replaced during that period and accelerated forced production in coal mines, steel plants etc, has added to the almost unbelievable dilapidated condition of public utilities--railroad trackage and rolling stock and the industrial plant of the nation. The condition of streets, road and domestic dwellings by comparison to our accepted necessities is appalling.

With this treatment as a background Japan is on the road back, but back to what? A definite answer eludes us; yet Japan must develop some economic course along which to travel in the years immediately ahead if she is to rise from her present plight and eventually be self-sufficient and no longer a burden on the United States Treasury.

It is difficult to ascertain what the economy of Japan will be in the predictable future. In attempting to determine what and how much of a certain commodity is essential to Japan to sustain her economy, one is forced to take into account factors that do not lend themselves to ready prognostication.

Some of which are:

1. Redistribution of population as the result of the War plus heavy concentration of allied personnel in Tokyo-Yokohama areas.

2. Difference between war and peacetime requirements.

3. The degree to which Japan may be re-industrialized.

4. The economic effects of the geographic dismemberment of Japan (loss of Korea, Formosa, Sakhalin, and Manchuria).

5. The violent fluctuations of an adjusting economy to postwar levels and conditions (this condition being especially current in the case of a thoroughly defeated nation.) However these are not insurmountable difficulties. There is a guide post clearly written in the Potsdam Declaration (July 2, 1945) which I quote, "Japan shall be permitted to maintain such industries as will sustain her economy and allow the just reparations in kind but not those which would enable her to rearm for war. To this end, access to, as distinguished from control of, raw materials shall be permitted. The eventual Japanese participation in world trade relations should be permitted."

The declaration clearly points out the fact that despite the limitations put on Japan's economy it will be permitted to expand from its present low level. To do otherwise would be to condemn millions of Japanese to a below subsistence level and possibly out and out starvation. When Japan's economy was purely agricultural it supported a fairly stable population of about thirty million; the addition of forty or more millions in less than a centrury had been possible only through industry and foreign trade.

A nation of scanty resources, dependent upon imports for nearly all her raw materials and most fuels (except ordinary, in fact, low grade coal) Japan has been able over the past ninety years to create a balanced industrial plant capable of producing all of the weapons and materials of modern war (except the atomic bomb). She has also by virtue of a feudal society been able to direct a greater portion of her economic strength to the preparation for and waging of war than probably any other nation in the world. Therefore, economic disarmament, destruction of feudalism and redistribution of capital and financial power are mandatory to control of war potential and thus must be considered in proper relationship to the after war economy.

With this objective, the Joint Chiefs of Staff and the Far Eastern Commission have set a minimum economy level for Japan. This level has taken into account Japan's non-self-sufficiency, organizing ability, creative genius, skill and proclivities of the race, together with cheap water transportation. All must be

considered in their correct significance with relation to domestic supplies of minerals and fibres.

Japan, for the most part, has always been dependent on importation of iron, petroleum, cotton, wool, lead, tin, zinc, mercury, nickel, bauxite, fertilizer, chemicals, rubber, and many other items. Nevertheless, in the decade directly preceding 1937 and in spite of trade restrictions abroad, she improved her economic position, obtaining adequate supplies of these raw materials in exchange for her exports in the course of international trade. Between 1926 and 1936 an increase of approximately 100 percent in industrial output and self-sufficiency in foodstuffs within the empire was accomplished. This expansion was accomplished without foreign borrowing.

In 1935 and 1936 Japan was an exporter of steel although still importing certain steel products and special steel. Exports of machinery and tools, climbed to a figure greater in value than of imports. These consisted largely of the more delicate and complicated types of machinery, machine tools, and instruments. It is no longer safe to state, as one well-informed writer did in 1930, that "Japan can never become a manufacturing nation of major importance because of the lack of fuel, iron, and other basic materials."

For a long stretch of years the textile, food preparation, pottery, and paper manufacturing industries dominated the industrial structure of Japan. By 1938 the position had changed to a point where 61 percent of the industrial production of Japan was in metal, chemical, machinery, and engineering products, which can only be interpreted as meaning that Japan no longer was dependent on the outside world for a large part of her steel, fertilizer, and machinery production, although she still had to import raw materials. Japan has been and will continue to be dependent on external sources for its supplies of oil. On purely economic grounds this is not a deterrent to economic activity; but from a military potential standpoint, it is a matter of utmost importance.

The Japanese strategic policy has been to avoid importation of finished petroleum products as much as possible and to import crude petroleum--fostering the growth of the Japanese petroleum industry by refining in Japan. Thus, the refining industry expanded rapidly in Japan. The total supply of crude and heavy oil almost doubled between 1932 and 1936. The United States supplied almost 75 percent of the 1935-1936 total, the Netherlands Indies and British Borneo making up the remainder. Spurred on by war demands, Japan today has a sizeable modern refining establishment.

The amount of iron ore mined in Japan is relatively very small, not exceeding one million metric tons yearly up to 1940. This, plus importations from Korea, then constituted about one-fifth (1/5) of total demand. However, through government subsidy of marginal mines, output of domestic ore reached a peak of three and six-tenths (3,6) million metric tons in 1944. It is natural then that the growth of the production of pig iron brought about great increases in imports of iron ore, primarily from China and the Strait Settlements. Japanese capital developed mines in Johore Province, Malaya. These supplies could be imported over fairly long distances since water transportation costs were very low. Therefore, the belief that a region cannot develop heavy industries unless it possesses large deposits of iron ore, seems to have been unsound.

By 1936 domestic production of pig iron was nearly double the 1930 output. However, notwithstanding the increase of domestic production, importation of pig iron more than doubled during the same period. In 1929 and 1930 domestic supplies of iron and steel scrap were about three-fifths (3/5) of total consumption, but between 1930 and 1936 imports of scrap iron and steel increased over 200 percent. Itis interesting to point out that in 1936 thin plates, thick plates, and tin plates were exported to foreign countries and colonies to a total that exceeded imports. Production of pipe and tube also exceeded imports in 1931. Wire and rods, after 1928, reached a level fifteen times as high as that of any earlier year. Production of other steel products consisting of forgings, steel casting, and a miscellaneous assortment of other products rose steadily up to 1931, and imports fell off.

The foregoing paragraphs have outlined the basic important position in the Japanese economy of:

1. Import, export, and shipping.
2. Iron, steel, and petroleum production.
3. The combined ingenuity and talents of the Japanese to succeed in their industries and in armament industries in spite of insufficiency of raw materials.

It is obvious that war industries are dependent upon iron and steel manufacturing, petroleum, and shipping to which must be added aluminum insofar as the airplane industry is conerned. The supply of machine tools, bearings, instruments, etc., cannot increase beyond the available supply of materials; and even though materials were diverted to that type of manufacture, finished tools would be useless without materials to process into end products.

Though dependent as outlined above upon important raw materials and petroleum, Japan developed in the course of the 1930s an industry

capable of supplying all her needs from precision engineering to the largest and most complex heavy industrial equipment in the Orient. In steel, the backbone of war industry, she attained a yearly capacity in the home islands of better than 8 million tons of ingot. She turned out more than 50,000 machine tools a year. Her chemical capacity included more than 5 million tons of sulphuric acid and nearly two hundred thousand tons of nitric acid a year. Her nitrogen fixation capacity was second only to the United States and Germany.

Although the industrial capacities noted above are small compared to those of the United States, Japan managed to siphon all or nearly all of the products of industry into the maintenance of her military establishment. In no industrial nation of the world did the civilian requirements absorb so small a share of industrial production, and probably in no nation in the world has an industrial establishment the size of Japan's been acquired with so small a total national wealth.

The basic reason for Japan's ability to concentrate her national wealth in creation of industry may be summarized as follows:

1. Concentration of both industrial management and the ownership of capital in the same few hands with the consequent plowing back of capital into industrial plant.

2. Direction of industry by an all powerful central government which treated industry as an instrument of national policy and guided it accordingly through.

a. A close alliance with the industrial powers of the country.

b. The use of control associations as a device to restrict individual enterprise and competition

c. Liberal use of subsidies for directing industry along political lines.

The present proceedings for the dissolution of the Zaibatsu, elimination of the control associations, restricting of subsidies, and segregation of banking and industry are recognition of these factors.

Reparations will at the time of removal recognize the Potsdam Declaration in the matter of a minimum economy for Japanese peace-time needs.

Under present economic conditions in Japan, all industrial production continues to be most inadequate. While index figures

show on paper a slightly increased production from month to month, such indices are not considered to present an accurate view of the industrial picture. From an over-all point of view, and including the raw materials as well as finished product situation, productive industrial activity is on the whole slowing down and will continue that way for sometime in the future. Electric power is available to industry only two days out, of seven and gas and electricity for domestic consumption are limited to a few hours a day.

Generally, the inadequate industrial situatuion is due to the following circustances:

1. Shortage of raw materials and the discouraging outlook for such imports under government-to-government trading.

2. Disorganization attendant upon the unsettled reparations and financial picture.

3. Reforms instituted by the Allies, and the controls over business inevitable in a military occupation.

4. Labor restlessness due to misconception of "Free labor" ideology.

5. Frustration, amounting to apathy and lack of enterprise, on the part of management in trying to produce anything at a profit under existing circumstances.

The above circumstances responsible for the present low industrial production are not capable of easy or early solution. The situation is, therefore, extremely grave, with the possibility of complete economic breakdown a reality.

In conjunction with studies made by the War and State Departments in Washington, SCAP has determined the following production levels to be the irreducible minimum needed by Japan during the immediate future. They are shown compared to present actual rates of production. The inadequacies of present production are apparent.

Category	Minimum Level	Present Rate of Production
Pig Iron	500,000 M. Tons/yr.	58,000 M. Tons/yr.
Steel Ingot	2,000,000 " "	469,000 " "
Machine Tools	10,000 Units/yr.	3,600 Units/yr.
Sulphuric Acid	3,400,000 M. Tons/yr.	1,000,000 M.Tons/yr.
Soda Ash	260,000 " "	22,000 " "

Category	Minimum Level	Present Rate of Production
Caustic Soda	100,000 M. Tons/yr.	38,000 M. Tons/yr.
Chlorine	35,000 " "	13,000 " "
Nitric Acid	30,000 " "	8,000 " "

The 1946 import program in idnsutrial raw materials as submitted by SCAP is partially listed below and compared to actual imports to date. The inadequacies are equally apparent.

Item	1946 Program (M.T.)	Actual Imports Thru 30 Sept. 46 (M.T.)
Salt	458,000	150,000
Coking Coal	400,000	----
Pig Iron	155,000	2,000
Graphite	25,000	---
Rubber	10,000	1,000
Magnesia Clinker	18,500	---

The fuel situation in Japan has become more and more serious. Stockplies of coal have been reduced to less than 500,000 tons. Production hampered by threat of strikes and lack of materials continues at about two million tons per month, inadequate by at least 50 percent, both in tonnage and in B.T.U. content, for a minimum economy. Japanese indigenous petroleum production can supply less than 20 percent of the needs of the economy. The importance of coal alone can be judged from the fact that a one percent increase in the coal allotment to the metallurgical industry could mena a nine percent increase in pig iron and steel ingot production.

The data provided above indicate a gravely deficient industrial situation, one which in all probability will grow more precarious rather than less, and will provide a continued drain upon War Department appropriations unless determined steps are taken to stimulate production. Under present circumstances, at least a year's time is believed necessary before the diverse effects of the new tax laws, the dissolution of the Zaibatsu and general reform legislation can be fully absorbed by a reorganized industry and before imported raw materials arrive in Japan in any appreciable volume. Until that time little can be expected of Japanese industry to stimulate production on its own initiative.

Rehabilitation of Japanese industry is slow and discouraging as is indicated by the present production in key industries as related to the proposed minimum economy. Some of this inertia is

the result of a weak government, failure to institute an adequate control of critical materials in order to channel them into essential industrial production, and a premature acceleration of the "Free Labor" ideology resulting in deterioration of the will to work among Japanese labor.

Fundamentally it is lack of foreign exchange and resultant lack of materials and commodities which can be produced only through importation.

Insufficient Clothing
Insufficient Medical Care
Insufficient Housing for Families

result in low productivity, for instance:

The average production hours per day in coal mines are 2 to 3 hours. The production is about 6.7 tons per month per miner underground. The average work month is about 11 to 14 days. WHY? The necessities of hunting food or clothes, malnutrition preventing other than short periods of labor and sickness all add up to an almost unbelievable total of non-productive hours.

The vicious circle of an economy, so far depleted that there is not enough of anything to meet the barest requirements, will curtail development for a long time. Repair of coal mines is not to be accomplished quickly because of lack of steel and other commodities and increased steel output is doubtful unless coking coal is available, and Japan's chances of adequate coking coal are dim indeed as long as the China situation continues. Beside the internal condition of a worn out and depleted economy there are more fundamental reasons for a discouraging outlook on Japan's economy. The one which is to have probably the most profound effect over future years on the Japanese people is "Loss of Empire."

It is not necessary to consider the lost empire conquered by Japan in 1942, since it resulted in a purely wartime adventure and in spite of needed oil and materials obtained in the south, was a continual military drain on Japan. Likewise Manchuria need not be included as a part of the "Lost Empire." Although it was held by Japan for 10 years previous to Pearl Harbor, during which considerable development was achieved, the war and its wastage prevented fulfillment and integration in the Japanese Empire, as did the attitude of the Kwantung Army in keeping Manchuria apart from the Empire as a military preserve.

The real "Lost" Japanese Empire was contained in the fifty-year-old colonies of Korea, the Kurile islands, and the Bonin and Marcus Islands and finally in the Mandated Islands, in effect, given to Japan in the treaty of Versailles. It was not a rich

empire as empires go but it was developed years before Hitler into a profitable example of colonial intergration, into a comprehensive national plan. As far as natural resources go it was not impressive. Korea had some minerals-copper, iron ore, alumina, shale, and graphite; however, most of them were of lean quality and expensive to exploit. Formosa had some coal-petroleum and most of the world's supply of camphor trees. Karafuto contributed fish products, about two million tons annually of coal and about a million barrels of petroleum. Okinawa and other island of the Old Empire had little resources. The Kuriles had no signifigance except for fish production. Of the mandates Anguar in the Carolines furnished Japan with 70 thousand tons of phosphate rock annually for fertilizer. Korea, as proverty stricken as any area and more so than most, was made to supply Japan with about 40 million bushels of rice, annually making up two-thirds of the home islands deficit. This was accomplished largely by forcing Koreans to consume cheaper millet from North China and exporting Korean grown rice to Japan. Formosa contributed the balance of Japan's rich deficit to the extent of better than 20 million bushels of rice.

Formosa also supplied 90 percent of Japan's sugar; tea and fruits from Formosa also contributed to the Japanese economy, both as imports for Japanese consumption and exports needed for foreign exchange to world markets. The camphor monopoly, canned crab, and other specialty fish products added materially in this way also. Fish products from the Kuriles added an additional amount. All of this amounted to much of a clear gain to the Japanese from their empire. While Korea probably fared about as well economically under Japanese rule as it will on its own and while Formosa was probably better off as a part of the Japanese Empire than is conceivable as a part of China it is noteworthy that in neither case did Japan spend vast sums on betterment in these colonies. They took areas populated by people of a lower standard of living than their own, introduced modern management, and operated the colonies as planned adjuncts to the economy of Japan. All direct returns went to the Japanese and only the benefit of orderly administration of these countries accrued to the Koreans and Formosans to which may be added some benefits of the introduction of industry and industrial products.

The loss of empire then, means a direct loss of investment in Korea, Formosa, Okinawa, Karafuto, Bonin and Marcus Islands, and the Mandated Islands, together with an average Japanese profit on that investment of between 15 and 25 percent. To this must be added loss of employment of about one-half million Japanese.

More important than this even would be the general economic value of empire which has been much confused in modern times, sometimes unintentionally by theoretical economists who, accustomed to operating in an "Intellectual Cloister," have never seen an empire in economic pains and sometimes by politicians who, although they

are fully aware of empire operations, would like the world not to know. The simple fact is that if a nation having empire wishes to make it pay, it will pay--witness the acknowledgment some years ago by Winston Churchill that one out of every six Englishmen made a living out of India. Further, empire results in available foreign exchange--a most valuable commodity in buying and selling in an international market where dependence is not on price but on exchange. This was the accrued value of empire to Japan. Simple exploitation of empire, similar to the Belgian Congo and the Peruvian Indian Empire, was practiced by Japan in the camphor monopoly. More drastic forms of exploitation were the forced sugar planting in Formosa, the forced export of rice from Korea, and the forced labor of Koreans in the Hokkaido coal mines. Other imperialist measures were the salt, opium and saké monopolies. Foreign capital was excluded from Japanese industry.

Unless the Japanese are to live like New Guinea bushmen, they must import large portions of most commodities and all of many necessary to modern living. These she must pay for mostly in dollars. In no case can she pay for them in Japanese yen. Therefore she must earn dollars or other foreign exchange by exporting goods to countries having free exchange or a trading system whereby exchange can be cleared. In Japan this condition is particularly pressing. Obliged to import 70 to 90 percent of her industrial raw materials and more than 20 percent of her food, with no gold and no foreign investments, she must pay for everything with exports in a world resistant and unsympathetic to Japanese exports.

The loss of empire is estimated to result in over a quarter of a billion dollars at 1936 prices net yearly and an increase in her foreign exchange demands of about 36 percent. It is inconceivable that prewar trade between Japan and her ex-empire can be recaptured in anything like the same prewar pattern. Disruption of Japanese shipping, banking, etc., together with a distorted economy over all East Asia, affected primarily by political conditions preclude much encouragement here. For instance, since Formosa is a part of China with all that that implies, trading operations have been absorbed by the China Central Trust, a Chinese trade and international payment monopoly; sugar is quoted at 31 cents per pound, or more than four times world price.

Misguided expressions fostering reduction of the standard of living in Japan to the level of the rest of the Orient have tended to further handicap natural trade and industry recovery.

In summation, the loss of empire means a loss of yen economy to Japan of about 1/3 of her prewar requirements of raw materials and food--resulting in a material increase in foreign exchange demand,

which can be accomplished only through manufacture and export of commodities salable in countries having free exchange, or a trading system whereby exchange can be cleared. To accomplish this, Japanese industry must repair itself and produce enough for a living economy for its people plus the needed exports.

The outlook is grave and the time necessary to accomplish this is incalculable.

What are likely to be the responses of her economy to these foreign trade prospects? Japan will doubtless attempt to reduce her food imports to the minimum by devoting more of her manpower to agriculture and fishing than she did before the war. In reality, however, the return from the application of additional labor in these fields would be small. It seems probable then that the only solution left to her will be that of retracing part of the course she has followed in the two decades before the war, of concentrating her resources to an increasing extent on the consumption-goods industries and of attempting to build up an export trade in those goods sufficient to enable her to buy raw materials and food she needs. But to succeed in that attempt Japan would have to create an export of these commodities far greater than she had before the war, for her population has grown and other sources of income (from colonial and foreign investments and merchant marine) will no longer be available to her.

Japan will be faced with most serious obstacles in her efforts to revert to her former industrial structure, partly because raw silk has lost its former preeminent position in international trade, and partly because of the fear of Japanese competition on the part of Western industries. The most that can be expected is a "modest" participation in international trade, and, by the same token, a small degree of industrial rehabilitation.

(25 March--350)E