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<td>Author(s)</td>
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<tr>
<td>Citation</td>
<td>The Annals of the Hitotsubashi Academy, 3(2): 145-163</td>
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<tr>
<td>Issue Date</td>
<td>1953-04</td>
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<tr>
<td>Type</td>
<td>Departmental Bulletin Paper</td>
</tr>
<tr>
<td>Text Version</td>
<td>publisher</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://doi.org/10.15057/10979">http://doi.org/10.15057/10979</a></td>
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ACCUMULATION OF CAPITAL
IN THE JAPANESE ECONOMY

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I. Need of Capital Accumulation

As independence is close at hand, the problem of capital accumulation has again come up as the major issue of the Japanese economy. As reasons, first, there is the need of rationalization of enterprises. The Japanese industries are badly needing overall rationalization in their postwar programs of rehabilitation after a literally big blank period that was war. Equipment must be replaced. Installations must be modernized. Techniques must undergo thorough renovation. All that is needed to realize these musts is, in a word, capital. This had been advanced as a legitimate course long before independence became an issue of the time. Now on the eve of independence, the issue is being taken up again in its bearing to competitive power on the foreign markets. Aside from the plain fact that competitive power on foreign markets, or reserve capacity to export, is generally governed by comparative costs of production, improvements in production technique are found to have a predominant importance when the composition of export commodities and its future trend are studied. Let us take textiles. They continued to represent 50 per cent of the total value of exports in the statistics of 1950. But, when broken down by description, the statistics showed a greater increase for more highly processed goods, on an average as much as 83 per cent for cloth against 17
per cent for yarn. Again in cloth, while raw cloth saw scarcely any change since the year before, finished cloth priced higher doubled in value in one year. So much for textiles. In the case of metals and machinery, which have recently grown in importance abreast with textiles, the raising of quality of products by refurnishing equipment is a pressing necessity. So far as we must cultivate greater capacity to export in order to be able to achieve an independent economy, rationalization of industries through the reenforcement and renovation of equipment is the paramount need of the time. It is quite in order that the need for capital accumulation was taken up in this connection on the eve of Japan regaining independence.

The second reason is the prevention of inflation. This, too, is a proposition not at all new. Already as early as 1947 and 1948 under intensifying inflation, savings were strongly advocated as means for stopping it. Indeed, savings at that time largely meant restraints on consumptive spendings from money incomes, and as such were in some respects different from the substantial formation of capital. It was certainly problematical at that time if savings could directly result in capital accumulation and if objective conditions in favor of it existed. Going one step further, it could be argued that even inflation might contribute to the accumulation of capital through curtailed consumption compelled by high prices. However, the inflation that visited the Japanese economy at that time did not answer either question in the affirmative. Suppose the inflation had actually prompted capital accumulation, it would directly have caused social unrest, by aggravating inequality in real incomes, of which one is reminded by the behavior of labor in those days. Apart from that point, the material basis of production which might influence such forced savings to gravitate into formation of real capital was totally non-existent. This is the reason savings were chosen as a means of checking inflation. This argument for a time receded from the forefront as the Dodge Plan attained success. But, as repeatedly pointed out even today in order to secure conditions for independence, the Japanese economy has not entirely grown safe from the danger of inflation. Naturally enough the "special procurement" boom created by U. S. orders for one year after the outbreak of the Korean Incident brought the same problem to the surface for current discussion. Despite the possible impression as being untimely in these days of a business setback, it remains an issue deserving attention, if independence is to be a serious business.

This is how capital accumulation has come into discussion today. Together with the introduction of foreign capital, it would seem to exhaust the whole list of major issues of present-day concern. In fact, the argument that capital accumulation is an important matter for the Japanese economy is not new. For, Japan, handicapped on the one hand by the "backward-
ness" of her economy and urged on, on the other hand, by the prime necessity to maintain a given standard of living under the pressure of increasing population, capital accumulation has always posed a problem of supreme importance. It did not come before the footlights necessarily under the cloak of capital. Sometimes it made appearance as a tax problem. The role the land tax played since the 1890's when the modernization of the country took place, the purposes, to which government funds made up largely of farm taxes were put, and the extensive systems of subsidies and grants-in-aid,—these and other financial dispositions were never handled without regard directly or indirectly to accumulation of capital. Only when the limit to taxation on capital came into question, this relationship made itself visible, though then one was seeing only the head of an iceberg. Wages, when looked at from the other side, are another of such cases. The relative ratio of income by labor in national income statistics indicates indirectly the ratio of capital accumulation. The ratio of labor income in Japan, when labor is taken in a narrow sense, is lower than in Europe and America. This phenomenon is commonly known as cheap labor, but may be taken as demonstrating the immense need for capital accumulation. This relationship was clearly seen in the recent wage demands, especially in labor's demands of profit-sharing types, and their effects on reserve power to save were fully studied, so that expatiation on this point would be superfluous. A further instance is foreign trade. Foreign trade, too, itself a cornerstone on which the Japanese economy can only subsist, stands in very close relationship to accumulation of capital. The change of industrial structure effected by foreign trade can be reduced to the problem of capital, viewed from domestic conditions responding to the change. Needless to say, the accumulation of capital given emphatic importance in its relation to independence is substantially under its influence. Moreover, in view of the increment it earns for national income, every item of foreign trade, from net balance rates to terms of trade, affecting as it does domestic production and consumption structure, represents a certain phase of capital formation. The problem of capital is present everywhere and always in the Japanese economy and specific problems cropping up from time to time are nothing but the same thing under different cloaks that the needs of the time place on it. Though taking differing forms, the problem remains one and the same in essence. The simple reason why accumulation of capital is being much talked about as conditions for independence are considered, is just that economic independence being such a fundamental problem, this omnipresent one, no less fundamental, is standing out in relief.

This is a matter of common sense. Not only with the Japanese economy but universally, it is perfectly admitted that economic phenomena
in modern times cannot be rightly grasped without consideration of capital. No wonder this commonplace matter should come into attention in times of emergency. An economic emergency, such as inflation, crisis, collapse or reconstruction, puts one's mind to inquiring seriously what is economy after all, and, in reference to the present subject, to reverting to the old question of capital. This is commonplace enough. But when we view it as a problem of the Japanese economy, we find in this commonplace reconsideration some questions peculiarly Japanese. Why was it that accumulation of capital should be given such stress particularly in regard to the Japanese economy? In what manner is it related to the discrepancy between the standard of production and the standard of living? Accumulation of capital, it is clear enough, is a prerequisite of the first order for elevating the standard of production. But it is asked in what manner it stands in relation to the standard of living. As widely known, one of the fundamental peculiarities of the Japanese economy is a glaring gap between productive power and the standard of living. In what relation does capital stand to the gap? If granted that capital is the core and kernel of the modern economy, movements of capital must be able to give clue toward explaining the contradiction. Or, this explanation from the angle of capital may prove a most satisfactory explanation. Reversely, the full meaning of the present-day need of capital accumulation can only be grasped when we see it in the light of the fundamental feature of the Japanese economy.

II. Dual Aspect of Accumulation

An important fact that needs mentioning in the first place, is that the rate of capital accumulation in Japan is pretty high. In speaking of the rate of accumulation here, we must distinguish between savings considered in terms of money and accumulation envisaged as actual entity, and a perusal of statistics with this distinction in mind gives us figures not agreeing to each other. However, this remarkably high rate of accumulation in either case compared to other countries first draws our attention when we are thinking about capital. For, it is where the high rate of accumulation, and therefore the sharply rising rate of production closely related to it, stand in contrast to the still low standard of living, that the peculiar character of the Japanese economy is found. We shall analyze it with constant reference to capital.

The goal of the savings campaign for 1951 was set by the Savings Promotion Department of Bank of Japan at 530-billion yen, representing about 12 per cent of the estimated 1951 national income of ¥4,656-billion. This is the aggregate of savings estimatedly to be drawn in chiefly through
savings institutions and does not completely cover the total savings in terms of money. A more inclusive calculation put actual savings during the prewar period between 1913 through 1939 at around 15 per cent each year. This comes close to the actual amount of non-governmental savings in the postwar days calculated from national income statistics. According to estimate made by Prof. Yuzo Yamada (in Keizai Hyoron, February 1952), the rates of accumulation of non-governmental capital each year from 1946 to 1950 inclusive are respectively 15.5%, 11.7%, 13.6%, 13.1% and 14.6%, indicating that the prewar rates were well maintained in spite of the economic turmoils following the War. Though this result was not attained by voluntary savings alone, to think of services offered by the Reconstruction Bank, these persistent high rates were spectacular, nonetheless. This was further endorsed when the Annual Economic Report (White Book) of the Economic Stabilization Board issued July 1951, stated, "Installation investment in privae industries for the 1950 fiscal year amounted to ¥165-billion. This meant an increase of 30 per cent, or 18 per cent if the rise of prices is considered, compared to the preceding year and, in terms of commodity, the average level for the prewar period of 1934 through 1936 was attained almost by 80 per cent."

As said before, savings in terms of money do not by themselves represent accumulation of real capital. To judge the real productive power of a national economy, one must look at savings reversely from the side of investment, which in this case includes investment by governmental and public bodies as well as by private business. Concretely, it means to enumerate a whole list of items of investment, for housing, industrial equipment, stock on hand, etc., a task by far more baffling to statisticians than the case of savings. If national income statistics which are rapidly improving should come nearer to perfection, the estimate from the money side will be found roughly to agree with that from the commodity side, and then a more accurate figuring of the rate of accumulation will be made possible. Until then we have to work with partially surmised estimates with a full knowledge of defects. But the proportion of surmise in this case is deplorably great. For instance, Colin Clark says in his "The Conditions of Economic Progress": "It is admittedly the case that the proportion of the Japanese national income saved is exceptionally high, exceeding 25 per cent even in peace-time. We can only reconcile this with the high proportion of products going to labor if we allow that the Japanese capitalists spend very little on personal consumption, that the rural population and urban working proprietors are exceptionally thrifty, and, indeed, that wage-earners themselves save a substantial proportion of their incomes." (2nd ed., 1951, p. 526.) He calculated rates of accumulation, first by finding annual increases of capital through the successive comparison of the amount
of capital for each year obtained from national wealth statistics, and then by comparing these increases with national incomes for the respective years. This is evidently the commodity method. The observation may not be accurate, as the method itself is not above question, and particularly the figures he used as sources may have contained some errors. But it is shown that the rates are prominently high in comparison with those of other countries obtained by the similar method. In 1950, according to the table he gives in another passage, other countries, with 20 per cent at the highest, even America not coming up to that much, mostly stayed below that percentage. To be more specific, even in one and the same country, Japan, different ages gave different rates of savings, as 42.1 per cent on an average in the 1919-1924 period, 26.6 per cent in 1935 and 28.5 per cent in 1939. It may be added that the trend of these rates going down with the progress of years is significant as an index accounting for the growth of capitalism. Anyway, these figures are good enough for pointing out that the Japanese economy has marked a very high level in the rate of accumulation of real capital, which will serve as a starting premise.

What has caused this singular fact will soon be the major issue in our further analysis. Various causes may be mentioned, such as the hard-working trait and habit of the people or preparedness for natural calamities, which Colin Clark points out partly; but satisfactory explanation will not be obtained without regard to another important factor further resulting from such causes. That is the discrepancy between the standard of production and the standard of living. We shall not reiterate this basic contradiction peculiar to the Japanese economy, as we have had occasions to discuss it. (Cf. The writer's article, "Some Characteristics of the Japanese Economy" in "Economia Internazionale," vol. V, No. 1, Feb. 1952.) Let us state them briefly with reference to capital accumulation. First, the high rate of accumulation indicates high productive power. A most recent analysis of national income has set forth this in a more tangible shape, which was long referred to as the sideline of the rapid growth of the Japanese economy. Again quoting Colin Clark, the annual rates of growth since 1903 were singularly high, 5.4 per cent at the minimum and 7.7 per cent at the maximum. The authenticity of the sources utilized for these figures is not complete, as in the above-cited case of savings, and research work to correct them is being conducted by some younger Japanese experts on national income. But, if, for instance, 3.7 per cent, a figure obtained by Prof. Kazushi Okawa, is taken, the situation will not change radically, for Japan is by far exceeding the 2.5 per cent of the United States, only Portugal and the Soviet Union running up closely in recent years. In view of the normal relationship of productive power and capital, this consequence is rather natural. The same can also be demonstrated from the fact that
the rate of savings is the product of economic growth by capital coefficient. In this way, the high rate of savings is directly linked to the high rate of growth. Secondly, this high rate of savings is linked to the low standard of living. In most cases today, Japan's low standard of living is talked about in comparison with prewar data. According to the White Book of the Economic Stabilization Board, the nation's standard of living for 1950 was 82 per cent of the prewar standard on an average in cities and farming districts. But apart from this short-range view, a thorough reflection on facts of the Japanese economy for the past 80 years discloses that the national standard of living was low in a world-wide comparison and, despite the rapid rate of growth, has never adequately advanced. The high rate of population increase may partly be responsible. The fact that about half of the nation are farmers, each cultivating land smaller than 2 acres may be another reason. The general backwardness of the Japanese economy, too, is an important factor, to be discussed later. But we shall not at present inquire into each of these causes. The question which cannot be passed by in the present discussion is the way how the low standard of living has effected the high rates of savings and of accumulation.

In taking another step into the inquiry, we shall be more specific in our analysis. The first thing to be noted is that there is a difference in the rate of growth by industries. The high rate of growth of the Japanese economy was due to the rate for the manufacturing industry and not for agriculture. The degree of contribution by agriculture to the national income has been gradually on the decline during Meiji Era (1868-1912) until in 1950 it was barely 20 per cent. The remarkable growth was thus the advance in productive power of the manufacturing industry. Seen from the angle of capital accumulation, this means that almost the whole saving capacity of the Japanese economy has been concentrated in industry, especially large-scale modern industry. Such being the case, agriculture was destined to become a losing rival and, pressing heavily upon the standard of life in general as it occupies half the population, has been working adversely against the elevation of the living standard in Japan. Secondly, the relationship between the rate of income and the rate of investment must be discussed. The rate of income, needless to say, is affected by the size of population. With a rapidly increasing population, the volume of investment, or the rate of savings, that will bring about increases in the per-capita income, will grow far larger than seen at the first glance. It can be said that a less advanced nation, where industrialization and population increase are basic requirements, will find her efforts to raise the standard of living set within a formidable frame, despite the enormous rate of economic growth achieved. Third to consider are the terms of foreign trade. In a long-term observation, production goes up when the terms of trade deterio-
rate on a world-wide scale and vice versa. If this experience-tested generalization intact applies to Japan, it may be said that the advance of Japan's trade was achieved because of the worsening of the terms of trade. As a matter of course, the center of trade is the manufacturing industry. That being granted, it is questionable if the high rate of accumulation, which has made possible industrial development, did not directly work as a cause holding down the living standard. Suppose the terms of trade themselves have no direct relationship to the living standard, there still remain a large number of questions, requiring further examination, that lie between the general changes of trade and the foundation of the Japanese economy. Examination of these questions, in each case, requires thorough-going evaluation of facts, as stated before, and will be above mere hasty guesswork. Indeed, the facts given here are presented because they conclusively suggest the method to solve economic problems under the conditions peculiar to Japan. Our problem of capital accumulation must be approached with this particular method in mind.

III. Development of the Theory of Capital

It is widely understood and needs no expatiation in this place why accumulation of capital is the fundamental requirement for economic development. Its theoretical basis is the advantage of roundabout production. Accumulation of capital makes possible the roundabout employment of factors of production, especially labor. Fruits expected of the direct application of labor, despite possible help from technical advancement, at its best, do not promise anything more than a hand-to-month subsistence. The roundabout use of labor, or, in other words, the raising of productivity of labor by the help of capital, is alone the means in modern form of increasing profits. Even technical advancement needs accumulation of capital as a prerequisite. This was clearly established by the theory of capital of Böhm-Bawerk in the 1870's and leaves little to be added. This theory established by the Austrian school is more than an academic theory but rather an everyday affair we are personally familiar with.

Let us take the Asian economy as a whole and compare it with that of Western Europe. The most outstanding fact that leaps into our eyes is that the vast expanse of Asia, while holding half of the total population of the world, is only earning one fifth in terms of income. This plight is commonly described, in a terse phrase, as the backwardness of Asia. But whence came the backwardness? It is not that the peoples of Asia are not industrious. They are never less, but sometimes rather more, hardworking and willing to work than the peoples of Western Europe. The lower the
living standard, the harder people have to work in order to keep the pot boiling from day to day. Working hard, why do they have to see the standard of living rising niggardly? The only explanation is, economically viewed, the shortage of capital. Referring to Colin Clark's estimate for a third time, in the use of capital per employed person, Japan stands on the one-third level and the whole of Asia on the one-fifth to one-tenth level of Britain and the United States. It needs no repetition that the smaller the accumulation is, the lower the productivity will be, and these two again imply a lower standard of living. This is demonstrated by the facts that the rehabilitation programs of Asia are in reality always mapped out on the basis of capital required for development and that U. S. aid to Asia virtually takes the form of aid in capital.

This is a basic fact. It was rightly given renewed attention when we were faced with reconstruction after the War. Nor has it been affected in the least by the antagonism between socialism and capitalism. But we are aware that the way capital benefits an economy is different according to the stage of economic development. Though the fact of the beneficial effects on production remains unchanged, the manner of the contribution greatly varies according to the ages and the degrees of economic maturity of a country. The same function of capital in a system of full employment cannot be witnessed in under-employment. Differences in production structure are a powerful factor of changing the effects. Similar differences are observed between the working of new investment where accumulation has been accomplished to a certain extent and the working of such investment in a less mature economy. In short, there exist remarkable differences according to the stage of economic development. Our interest will be focused on this point in the following discussion.

The foregoing observation that capital functions differently with actual economic conditions can best be explained by reviewing what basis the theories of capital in different ages in the history of economic theories adopted in setting up their systems. Though, as stated above, the primary proposition on which theories of capital were based was the advantage of round-about production, they did not originate in such a pure form. The reasoning took a contrary order and started from the close observation of the workings of capital at different ages. The working of capital peculiar to the economic development of different ages were analysed and taken to represent the intrinsic nature of capital historically viewed, and then this and other relevant notions were worked out into an elaborate and general system. To cite an example, in the early period of the classical school, capital was treated in combination with savings. A latest example is that capital is being contemplated inseparably with capitalism at its deadlock. The more general "roundabout" theory was constructed to support and cover inclu-
sively all these specific particular capital theories. This is why the modern theory of capital of the Austrian school became a system chronologically far later than those of the classical and socialist schools. Though no one today thinks about capital but by this fundamental theory, no one can disregard the working of capital peculiarized for each different stage of historical development. More particularly, in discussing capital accumulation in Japan, it is imperative to take into full account the half modern and half non-modern character inherent in the Japanese economy. Because of its complex character, in which problems encountered over different periods by the countries of Western Europe present themselves all at once, the preliminary task is to find without error what we should rightly pay attention to.

We do not mean to elaborate here on doctrinal history. Let us only give some features having reference to our problem. First comes the classical school, which found the most essential character of capital in the thrift of man. According to Adam Smith's Wealth of Nations, the essential requirements to promote national wealth were division of labor and capital. The former was the means most effective of increasing the efficiency of labor; the latter the primary factor making division of labor possible. This idea is, if put in present-day terms, equivalent to regard capital as a condition for economic development. Smith, however, did not think that accumulation of capital was accomplished simply by the augmentation of production profits or the increase of national income, but "parsimony" did it. "Parsimony, and not industry," he wrote, "is the immediate cause of the increase of capital. Industry, indeed, provides the subject which parsimony accumulates. But whatever industry might acquire, if parsimony did not save and store up, the capital would never be the greater." (Wealth of Nations, ed. Edwin Cannan, p. 321.) Capital comes out of the fruits of production. But what Smith meant was to show the true meaning of the accumulation of capital by putting a factor, thrift, in between the mere increase of the fruits of production and the formation of capital. This was clearly an important discovery of the truth about the nature of capital. Though it historically grew out of the need of capital at a time when capitalism was a rising tide, his idea must be credited theoretically too as a contribution of immense value in clearly showing a line pattern connecting thrift, accumulation and production increase. This idea of capital by Smith remained dominant long in the thought of the classical economists. Both Senior's explanation of interest by abstinence and Marshall's theory of waiting belong to this category of thinking. One of the merits this theory carries is, as will be explained, the directness of appeal to individuals in their personal experiences of economic life.

It was not long, however, before this idea of the classical economists
was subjected to attacks. They came from the socialist-school economists whose way of thinking was so widely diversified in essentials and details that, apart from the common background against classicism, unity among them in the treatment of problems was hardly observable. Moreover, we must point out striking differences by period in the way they, with Marx as a leading figure, adopted in treating of capital. In treating of the nature of capital which is our present problem, they, it can generally be said, put primary importance on what accumulation actually does. With the classical economists, the more capital accumulated, the better economic interests were served, and therefore the personal motive of thrift was given a foremost place unreservedly. For Marx, on the other hand, the focal point of interest was in what relation accumulation stood to economic self-reproduction. Concerns over the possibility of expanded reproduction and discussions on relevant issues like imperialism and colonialism all clearly showed where their chief interest was. Through such discussions and analyses, Marxists sought to visualize the downfall of capitalism. They think that the whole set of problems of capital, from its definition down to primitive accumulation and crisis, must be grasped in connection with the theory of collapse, though the validity of such interpretation leaves much to be examined. For instance, Schumpeter remarked that these notions had all long been dead and even gone below ground. Without going so far, it is well known that, to take further examples, their theory of crisis incorporating the problem of credit and their theory of development and adaptation remain only poorly developed. This, however, is not to discount the importance of the problems Marx sought to take up. Though the Marxian solution kept to only one phase of the matter and needed to undergo further development in many respects, we are prepared to recognize their contribution in demonstrating that the very process of accumulation poses a problem gravely affecting the conditions of equilibral development. To say that to Marx accumulation was the essence of capital, may be going too far. But he brought to light a new phase of the working of capital not noted by the classical economists, in discovering that at a certain stage of development of the capitalist economy it was the dynamic action of accumulation that was the problem of capital.

In the third place there is the Keynesian standpoint. Keynes' theory of capital has in common with Marx's that they both are anti-classical. This heresy in regard to the classical school characterizes his General Theory. But what Keynes expounded in this work was that investment which fills the gap between income and consumption in a short-run observation is not always sure to do so in a country where capital accumulation is pretty large, and just that. To extend the reasoning to apply to a long term and develop it into the theory of secular stagnation was left to be accomplished by
later Keynesian economists from Hansen to Domar. Their doctrines seeking to explain the causes of long-term stagnation of capitalism at its maturity, are rightly more concerned with the analysis of such subsidiary factors as population, technique and frontiers. Though the focal point in this analysis, for our present problem, is the size of investment opportunities, full credit must go to the Keynesians for bringing capital to the foreground in a new shape as a problem covering the entire economy. The new shape here means, first, that the premise of under-employment as opposing full employment is deliberately introduced in the theory. This is greatly related to the ethics and logic of savings, as pointed out by Keynes. The classical economists, working always on the premise of full employment, thought that savings were instantaneously diverted to effective investment. So far as investment was intended for the diversion to a more profitable use of the factor of production, there was no contradiction between the logic and the ethics of savings. For savings then were a force promoting economic interest of the society as well as a personal virtue. But once that premise was given up and the state of under-employment due to involuntary unemployment was taken into consideration, the matter did not always go so simple. Under these conditions, savings did not necessarily result in effective investment, hence the consequence, that savings, though a personal virtue, were not always a social good. We already pointed out that the personal element has an important bearing in the theory of capital. In that sense, the mere shifting of the premise from full employment to under-employment meant a difference greater than seen at first sight. The second meaning of the new shape is the importance placed on consumption. With the classical school, production occupied a dominant position, as seen in its production-thrift-savings formula. Malthus, giving more weight to consumption at the heyday of the classical school, was a minority voice. It was Keynes who, coming back to Marx, gave more importance to the role of consumption. This is most clearly shown in the theory of effective demand, so well known that we see no need of dwelling upon it here, but to note that, in view of the foregoing two points, the gist of the Keynesian theory of long-term stagnation is that effective demand which is the economic motive force does not necessarily ensure the equilibrium of full employment. This theory has been the target of many oppositions. Some of these are made from the standpoint of the classical school, others from the Marxian position. Some critics reject it from a difference in evaluation of the incidental factors which form the premise to the theory, while still others, going into its logical structure, declare it untenable altogether. Simplifying the matter by taking a present-time view, it may be fair and helpful to draw a clear line to demarcate economies with conditions amenable to the Keynesian view from other kind of eco-
nomies. With all criticisms and limitations, however, no one can deny that this school established a new way of looking at the working of capital, thereby serving as a stimulus for coordinating varied notions on capital. Its theory clarified in a most convincing manner that capital acts differently according to the stage of maturity of capitalism. Besides being convincing, it was practical. One of the reasons Keynes' theory could grow to academic prominence so as to claim the name of a school was its practicality. This characteristic is perhaps due, firstly, to the fact that the concepts utilized by him were of general kind and amenable to statistical treatment; and, secondly, that, starting from a precise and penetrating evaluation of the facts of Britain's economy, he always was aware he was working for the specific political program of coping with chronic depressions. The practical character is one of the features of the Keynesian way of thinking, which makes the ready application of the theory possible to the present discussion of capital accumulation. The Keynesian policy of public investment is an outcome of such application. In case income is not entirely applied to consumption, as seen from the empirical fact that the value of propensity to consume is less than the unit, deficient consumption must be filled up with fresh investment. Now, investment, in an economy with capital accumulation already large enough, is always demanding to grow at an ever expanding rate and is rarely finding itself sufficient left free. If chronic depression is due, as his adherents say, to the failure to firmly secure fresh investment large enough to maintain full employment, some artificial policies must be devised as a means to correct this situation. Keynes mentioned with special weight the lowering of interest rates as one of such remedies. But there is a certain limit to interest policies under the capitalistic financial system. To meet the demand beyond the limit, public investment must appear upon the scene, to replace private investment. That America's economic policies since the New Deal have chiefly been framed with major emphasis on public investments, though through up-and-down vicissitudes, is widely known and today is becoming a pattern for other countries. There are many questions yet untouched regarding the effects of, and especially the limits to, public investment. Nevertheless, no one can be indifferent to the theoretical and practical import of the conclusion that public investment is a cardinal form of capital accumulation side by side with private investment.

IV. Position of the Japanese Economy

As stated above, capital accumulation in the Japanese economy must be looked at from the angle of its characteristic feature which consists in
the discrepancy between the standard of production and the standard of living. We have studied some ground principles underlying this situation. Some of such principles refer to economic relationships of general and fundamental significance, as, for instance, between population increase and foreign trade, while some others refer to decidedly political relationships tinged with, say, militaristic color. With these in mind, one may look retrospectively and say that this contradiction was imposed, without choice on the part of this country. Japan had to strive for productive power higher than its ability allowed, in order to secure a rising standard of living despite the ever increasing population. Though with occasional ups and downs, it has been the course that fate set on her since she opened her doors to the outside world at the middle of the nineteenth century. The level of capital accumulation, pretty high in world comparison, is an inevitable consequence of this fated course. The expression of "fated," we admit, is inaccurate and inadequate to depict the whole matter. We do not mean it in a predestinarian sense. We mean the road a modern industrial nation facing the two conflicting factors of population pressure and poor natural resources had to follow by sheer necessity. Though the similar course which England followed early in the nineteen century may serve to demonstrate the validity of the description, the comparison must be broadly qualified. For there are differences, to name, in the ways agriculture was disposed of as the primary industry and conditions of oversea markets, and there is the time distance for a top-runner nation and a late starting one. The differences grow even wider when one closely looks into how domestic political forces and industrial and financial capitalists inseparably connected thereto of this country strived to take their chances in the nation's career. Despite all these circumstances, one is compelled to admit, capital accumulation in Japan was carried out not voluntarily nor out of the time-honored virtue of industry and thrift but rather as something inevitable in following the pre-arranged course or something imperatively forced from outside. Its rapid progress and the characteristic contradiction between the standard of production and the standard of living are not two, but one and the same thing. And here lies the problem, specifically Japanese, of capital accumulation.

So far as there are no significant changes in basic factors, such as population, natural resources and technique, the destined course based on these factors will remain the same. The contradiction between the standard of production and the standard of living will not be dissolved, in the last resort, but by raising the standard of production. This does not at all mean that the present low living standard may remain as it is nor may the final bulwark for more brisk export continue to be the notorious cheap labor. The living standard, first of all, must set as an immediate
target the return to the prewar level with due consideration for sounder class gradation and increased stamina under business fluctuations. Indeed, no policy is worth considering which does not aim at the stabilization of living as its final objective. This is more specifically true of cheap labor for increasing export. Granting for a moment that a low living standard, being reflected in the costs of exports, affects favorably the international difference of export costs, sole dependance on this means, imposing the whole burden on labor, will no longer meet acceptance in view of the present condition of the world market. We bore all this in mind when we said above that the final force to determine the living standard is the power to produce. This is endorsed by the phenomenon that the international difference of wages is but a reflection of the difference of power of labor to produce in respective countries. In discussing the Japanese economy, burdened as it is with the population increase, one is incessantly reminded of this argument.

From the foregoing observation our first conclusion is that capital accumulation in the Japanese economy even today remains on imperative need. The situation that high-speed accumulation of capital is imperative in view of impending independence and future development remains unchanged. The view of capital advanced by the classical economists still literally applies to facts in Japan. The tenet that thrift is the prime factor of capital formation can rightly be upheld along with the ethics of thrift and holds good logically aside from the ethical consideration. In fact, partly accountable for the high rate of savings was the fact that in this country savings were assured of returns securely supported by as rapid growth of the economy. The people realized that savings were profitable by themselves. The prime motive that caused many a self-made capitain of industry to go through hardships with the clenched teeth was certainly found here. In this respect, it is doubtful if present-day savings promise as brilliant prospects. There are some misgivings that the Japanese economy may not keep on developing as rapidly as it has done in the past. For, according to the international comparison by Colin Clark, in every capitalistic country the rate of capital accumulation declines as its economic structure grows mature. In Japan with a high accumulation record, the rate steadily declined from the singular figure of 50 per cent around 1880-1910 to the moderate 25 per cent in the 1930's, in step with the general trend. If the slackening is taken to signify the gradual slowing down of economic development, prospects may no longer be assured at a rate as large as in the past. We said above that the high rate of savings was forced from outside. But, in fact, the handsome returns accruing from savings worked to dim that feeling. Compulsion as an objective term was psychologically replaced by the active pursuit for profits subjectively felt.
If, however the conditions have undergone change, the future accumulation of capital may not be expected as on the old basis. The change has not yet gone so far as to make it necessary to preach the virtue of consumption rather than the virtue of thrift as Keynes did. Even at present, the persistent forces, which, objectively viewed, have urged the Japanese economy toward accumulation at a high rate, are not a bit abated, and may have rather been accentuated by the recent population onrush.

An important phase of the theory of capital by the classical school still holds good to the present reality of the Japanese economy. But as a matter of course, the present-day economy, in general terms, differs from that which concerned the classical economists, and, for this very reason, the applicability has certain limitations. One of the limitations refers to the slackening of economic development, above mentioned. If the normal stimulus to personal savings threatens to weaken down due to these circumstancial changes, public savings should come into play to reinforce private savings. Another limitation concerns what Keynes rightly pointed out, that the balance for investment and savings does not always insure full employment. It may strike one as strange at first sight that the Japanese economy, to which the abstinence theory of capital by the classical economist literally applies on one side, should on the other be amenable to the Keynesian view which is established on facts totally different from those of the classical school. But the Japanese economy is one of the modern economies and, as such, has problems similar to those now confronting economic systems in other senior countries. One of the troubles which afflict a later developed country in contrast to a senior country is that it has to face problems that belong to different stages of maturity before reaching them. For Japan, this trouble is magnified by her heavy dependence on foreign trade. The direct motive that made Keynes work out his theory of under-employment was, as well known, the chronic existence of unemployed masses. So far as the unemployment problem is concerned, Japan has to share the difficulties of European countries. These two limitations to "voluntary savings" call into action public savings either to supplement or to replace them. This is what is termed public investment. Public savings, commonly called state capital, can be traced back to taxes and public bonds. Then, what shall be the right proportion of state capital to capital from private savings, in what relationships they shall stand to each other, and what shall be the most desirable form of investment for this kind of capital,—these are questions worth discussing at full length. A glance at how much of the savings and investment in this category is needed at present will show its importance in regard to capital accumulation. For instance, a February, 1951, report of the Industrial Rationalization Deliberative Council estimated the capital needed for equipment during the fiscal year 1951 at about
¥180-billion, of which about ¥40-billion should be supplied by the state. This was for purely private business, apart from ordinary state funds appropriated for public works, government railways and other governmental enterprises. The situation which required the state to participate by more than 20 per cent, though this included the U. S. aid counterpart fund, etc., for the rationalization program of purely private industries, reveals that a change has actually set in with capital accumulation in Japan. Public investment in the case of Keynes was chiefly considered as a policy for combating depressions. But today it has a far greater application, and the Japanese economy is no exception in this respect.

The difference in form between voluntary savings through thrift and roundabout savings by public power means little in itself. For, the Japanese economy cannot but supplement the shortage in one form of savings with another, as long as capital accumulation is imperative, while income, the source of savings, is limited. One may introduce ideological questions here, but that would not change the logic of economy as appears at the first glance. Of course, savings are no purpose in themselves. They must bring investment in their wake, and it is for this purpose that savings are encouraged. The reason we have been upholding the logic of capital accumulation is that we recognized the rational interactions between savings and investment, provided the latter are prudently made. If investments are directed by, say, militaristic policies, the natural consequence will be that the living standard deteriorates in relation to the standard of production; if investment should be focussed on the manufacturing industry working for foreign trade, agriculture and petty industries will be sacrificed, making the aforesaid contradiction worse. These problems should receive more careful consideration than the mere distinction of two kinds of savings, in view of their importance in deciding the character of the Japanese economy, though it may be noted that this very classification has substantial significance in the instances last mentioned. The reexamination of subsidies, aids or other types of "investment" by the government in this connection is necessary today when savings and investment in public form are given special regard. Without going into details, it may be said that it is necessary to scrutinize more carefully the effects of investment on the present Japanese economy where savings, though high in ratio, are still regarded as far short of requirements. It is common knowledge that many public works projects in government budgets are unproductive. This discouraging criticism must put us to thinking seriously. That governmental undertakings generally lack efficiency can not but be admitted from frequent examples in this country. Even the way of using government fund is often subject to public censure in spite of the assiduous supervision of the Board of Audit. Not all public works expenditure is unproductive. Disaster re-
habilitation which takes away the larger part will promote the cause of independence and stabilize the Japanese economy if it is really used to help recovery from damages and the prevention of calamities. In 1952, public works were assigned an appropriation of ¥145.6-billion, of which ¥50-billion was for calamity rehabilitation, to meet 30 per cent of state responsibilities for such projects during the past year. When compared to ¥100-billion or the annual average of damages during the 6 years, 1945-1950 inclusive, even this appropriation is not large enough. Only a much bolder financial policy to solidify the groundwork of the independent economy will make state capital work effectively after all. When we speak of using capital effectively the matter we are most concerned about is where investment is to be applied to. In fact, money is not always needed exactly where it is saved. A notable instance is that, in postwar Japan, recovery in the consumption phase has excelled that in basic industries. Why should this be so, when we compare this with the rehabilitation programs in Germany where productive facilities systematically are given first priority at the cost of consumption goods? All these matters too are presently being taken up in reference to the accumulation of capital.

One more characteristic feature of the Japanese economy is that capital is not always invested cumulatively. Take housing construction. It is an important form of capital accumulation. But Japanese houses being mostly wooden-built, fires each year destroy the valuable accumulation in unending succession. Fires number 15,000 to 18,000 annually, almost constantly from about 1925 up to the present. The damages were estimated in 1949 at ¥26,700-million, almost approaching the figure of ¥33,000-million expended for housing projects in the same year, though with the reservation that fires statistics include other items than houses. The instance given here is another case of capital accumulation being used in a very wasteful manner. The same may be said of the rehabilitation programs above mentioned. If riparian works were carried out on a more thoroughgoing scale, as in the Tennessee Valley Administration plans, to root out the causes of recurrent devastations completely, the yearly visitations of typhoons and floods would be doing less harm, except in rare cases beyond human control. This, however, is far from reality, again because adequate capital is not available. How much can be stored away from annual production? Where is the margin of the roundabout course to be found and how can its productivity that determines the margin be measured? These old questions that Böhm-Bawerk presented in expounding his theory of capital must still continue to be asked in the present Japanese economy. More than that, in view of the greater need for capital accumulation, these questions must be taken up more seriously. To solve these questions under the prevailing complicated circumstances is the task of human wisdom.
To attain a well-balanced achievement, plans must be had.

Inasmuch as capital accumulation in Japan is the primary requisite for independence, it must be based and worked out on plans. For the present, however, we are not proposing policies. We are just trying to learn whatever can be learned by analyzing facts. In a practical discussion concerning this country, it is always helpful first to look into a problem as it relates to the characteristic feature of the Japanese economy before proposing policies. In discussing capital accumulation this must be given special emphasis.

—Written in April, 1952—