THE DIFFERENTIAL EMPLOYMENT STRUCTURE OF JAPAN

By KAZUSHI OHKAWA

Professor, The Institute of Economic Research

I. Introduction

When economists discuss the characteristics or features of the Japanese economy, it is usual to speak of the rapid growth rate, the high rate of saving, labor's low relative share and the like. Here, however, I would like to deal with the structural aspects. It is often said that the Japanese economy is a combination of both Western-type industry and Asian-type agriculture. In reality, in less than a century since the Meiji Restoration in 1868, industrialization has developed very rapidly along the line of building up a Western-type factory system; and nowadays, large-scale factories are producing many modern commodities to compete with advanced countries. But, at the same time, there still remain many small-scale firms employing large numbers of workers, and also a large number of very small-scale farms throughout the country. Thus the Japanese economy is unique in its industrial structure, which is quite different both from advanced economies of the Western type and from backward economies of the Asian type.

As is shown in Table 1, in Japan the number of workers employed by small-scale firms of less than 50 employes comprises a little more than half of the total number of workers in manufacturing; while in the more advanced countries it is only 15-16 per cent. It is noted that the percentage of workers employed by the largest-scale firms in Japan is not very low as compared with that of medium-scale firms.

Data of a similar kind are not available for other industries, but it is clear that there is also a large number of very small

Table 1 Distribution of Wage-earning Workers according to Size of Establishment in Manufacture

<table>
<thead>
<tr>
<th>Countries</th>
<th>Year</th>
<th>Japan</th>
<th>U.S.A.</th>
<th>U.K.</th>
<th>West Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of workers</td>
<td>1954</td>
<td>1954</td>
<td>1949</td>
<td>1955</td>
<td></td>
</tr>
<tr>
<td>1—9</td>
<td>23.1</td>
<td>3.8</td>
<td>4.81</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>10—49</td>
<td>29.2</td>
<td>12.5</td>
<td>11.32</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>50—99</td>
<td>9.0</td>
<td>9.4</td>
<td>10.1</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>100—499</td>
<td>17.1</td>
<td>29.1</td>
<td>22.6</td>
<td>30.8</td>
<td></td>
</tr>
<tr>
<td>500—999</td>
<td>6.5</td>
<td>12.5</td>
<td>13.1</td>
<td>13.1</td>
<td></td>
</tr>
<tr>
<td>1000 and over</td>
<td>15.1</td>
<td>32.6</td>
<td>28.1</td>
<td>32.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Remarks:
1. Japan,......, Survey of Establishments
2. U.S.A.,......, Census of Manufacture
3. U.K.,......, Production Census
4. West Germany,......, Statistical Yearbook

Notes: 1. 1-10, 2. 11-49.

1 Hearty acknowledgement is due Dr. Alan Gleason for editing my English and giving helpful comments, and Messrs. T. Noda and T. Sasaki and Miss Y. Ando for helping me in editing and arranging tables and charts.
Table 2. Composition of Labor Force according to Employment Status

<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th>U.S.A.</th>
<th>U.K.</th>
<th>France</th>
<th>West Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>1950</td>
<td>1951</td>
<td>1954</td>
<td>1950</td>
<td></td>
</tr>
<tr>
<td>Self-employed</td>
<td>33.3</td>
<td>19.8</td>
<td>8.4</td>
<td>25.9</td>
<td>18.8</td>
</tr>
<tr>
<td>Wage-worker</td>
<td>49.6</td>
<td>78.7</td>
<td>91.5</td>
<td>67.7</td>
<td>76.7</td>
</tr>
<tr>
<td>Family-worker</td>
<td>17.1</td>
<td>1.5</td>
<td>0.1</td>
<td>6.4</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

(Male)

<table>
<thead>
<tr>
<th></th>
<th>(Female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-employed</td>
<td>14.8</td>
</tr>
<tr>
<td>Wage-worker</td>
<td>29.6</td>
</tr>
<tr>
<td>Family-worker</td>
<td>55.6</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

(Total)


Establishments in other sectors, especially in service industries, in which family enterprises prevail widely as in the case of agriculture. The composition of labor force according to employment status given in Table 2 will be a great help in illustrating Japan's characteristics in this respect.

The number of hired wage-workers in Japan comprises only 40 percent (50 percent in the case of males and 30 percent in the case of females), while the numbers of the other two categories, self-employed and family-workers, total almost 60 percent, a very high figure as compared with that of more advanced countries. Thus, the predominance of small-scale firms is closely related to the widespread existence of family firms, where unpaid family workers play a great role in carrying out production of goods and services.

Such an employment structure is a historical product of the capitalistic development of the Japanese economy up to the present, in the sense that this structure has established its root in an economy where the traditional pattern of production still remains nationwide. A structure such as this has often been characterized as a "dual economy" which means that both the modern capitalistic element and the old traditional element co-exist side by side. I am not opposed to this characterization. However, as far as employment is concerned, I think it is more appropriate to describe such a situation as a differential employment structure for reasons which will be explained later. It is primarily this structural problem that I would like to discuss in this paper. It is my view that in the case of Japan's type of structure, the theories or concepts of employment or unemployment which have so far been developed will not necessarily be valid in their applications.

II. Empirical Observations

First, let us begin by illustrating the real employment and wage situation in Japan through an analysis of a curious statistical result. In the area of international comparisons of labor's relative share, a very simple measure, namely, the ratio of income per wage worker to the national income per capita of
all people gainfully occupied is often used. The numerical values of this ratio are 120 per cent for Japan (in 1953), 60 per cent for U.K. (in 1950), 80 per cent for U.S.A. (in 1951) and 90 per cent for West Germany (in 1950). The highest value for Japan seems strange at first glance, but actually it merely reflects the very low level of income of the non-wage working classes, in particular that of unpaid family workers. This is because of a hidden bias in the method of computing the ratio, a bias resulting from the implicit assumption that all non-wage workers will get the same average wage as earned by wage-workers. Because of the high degree of unreality of this assumption in Japan, the ratio gives a result according to which the total income earned by labor exceeds the total national income! This can be demonstrated by the following simple equation where the notation is as follows:

\[ R = \frac{W}{Y} \text{ where } R = \frac{W}{P} 
\]

\[ Y = \frac{W}{(1 + \frac{P}{P_e})} = \frac{W}{P_{w + w}} \]

Since, \( E = \frac{W}{P_{w + w}} \), hence, \( E + W > Y \) in the case of Japan where \( R > 1 \).

Where there is little difference in the average incomes of wage-workers and non-wage workers, the formula gives useful results. But, in cases such as Japan, where unusually wide differentials exist, the formula gives a quite unreasonable result.

Secondly, it is noticeable that within the wage-workers' group, wage differentials show a large dispersion because of the large proportion of low-wage workers as compared to the more or less normal patterns of the advanced countries.

For example, the frequency distribution of wage rates in Japan is quite different from that of the U.S.A., as may be clearly observed in Chart 1. In Japan's case there is a strong bias toward the low level group, while the U.S.A.'s distribution is rather smooth. Incidentally, the coefficient of dispersion is very high, being 102 in Japan's case as against 43 in the case of the U.S.A. These statistics show respectively the existence of a large number of low-wage workers and of sizable wage differentials.

Now, we would like to take up
comprehensive data relevant for our purpose, namely, recent results of Industrial Statistics, compiled by the Ministry of International Trade and Industry, which are summarized in Table 3 and illustrated by Chart 2.

These data show that both productivity and wage differentials form almost straight lines sloping downwards from bigger enterprises to smaller ones and that the slope of the productivity line is steeper than that of the wage line. The latter fact is natural even in the case where the relative share of labor is the same for each scale of establishment, but here it is observable that the difference of slope is larger than in such a case.

The productivity level of the workers in the smallest firms (4 to 9 workers) is less than 30 per cent of the level of the largest firms (more than a thousand workers) while the wage level of the smallest firms' workers is little more than 30 per cent of the largest firms' level. This is really a remarkable differential and it prevails throughout manufacturing industry.

Next, by using the Farm Economy Survey compiled by the Ministry of Agriculture and Forestry, we calculated corresponding data for agriculture...
Here also we find a wide range of income and productivity differentials for various farm household income groups. The lowest group produces an income only 17 per cent of that of the highest group, a difference which is even larger than that of manufacturing industry. In Japanese farming, incomes earned by jobs off the farm constitute a considerable part of total farm income. The figures in the last column which include these incomes, however, do not change the wide differential tendency as shown by the percentage figures in the table.

These two sets of data are difficult to compare because of such factors as the fact that, in one case, scale is measured in terms of income and, in the other case, in terms of number of hired workers, but it seems useful to show them together rather than separately in order to illustrate the employment structure of the whole economy. It is assumed that the tertiary sector follows the same pattern. In this way the following points may be noted:

(1) The net value productivity of the lowest income class in manufacture is very close to that of the highest income class in agriculture. In reality there are many manufacturing firms the scale of which is even smaller than the class just mentioned, namely the class of less than three workers about which we have no adequate data available as to value productivity. In view of this situation, it will be assumed that the productivity curve as illustrated in Chart 2 is more or less a continuation of the productivity curve which could be inferred from the figures in Table 4. However, the distribution of the income from the product at this border line class differs greatly between manufacture and agriculture. In manufacture, wage earnings per year are 87 thousand yen and labor’s relative share is around 44 per cent; while in agriculture, average product per worker, which is almost the same as wage earnings in manufacture,
is a mixed income of the farm household consisting of rent, profit, and interest as well as wages, if we neglect the very small amount of wage payment for hired workers. On the side of small-scale manufacture, there are also a considerable number of self-employed and family workers, but in this case the proportion of hired labor is much larger. Where the total family income in manufacture is estimated to be around 700 thousand yen, which is very close to the family income of the top classes in agriculture, there may be a kind of border line between capitalistic enterprise (we mean, in this case, an enterprise in which most of the workers are hired) and family enterprise in which almost all the workers are self-employed.

(2) The average wage earnings in manufacturing firms falling in the two smallest-size groups are around 90–100 thousand yen, which is almost equal to the level of farm income for the average-size enterprise in agriculture.

(3) Turning to the highest class in manufacture, the wage earnings per worker are 220–270 thousand yen, which exceeds slightly the total income per worker for the highest class in agriculture. If we consider the qualitative difference between workers in manufacture and agriculture, these two figures are not significantly different. On the other hand, the income of a proprietor who belongs to the lowest class (say hiring less than 3 workers) might be assumed to be near the level of wage earnings of the highest class workers, though adequate data are not available as yet.

These observations may be enough to suggest that small proprietors' income, mixed income of the upper level family farms, and wage earnings of upper class workers, are not determined independently but are closely related to each other in the general framework of the demand for and supply of employment.²

III. Some Theoretical Observations

Chart 3 is used to illustrate continuous wage and productivity differentials as observed in the previous section in order to provide a basis for a theoretical model. Both wage and productivity figures are shown on the vertical axis and the scale of enterprise in terms of capital stock per worker.

² Of course, a mechanical comparison of urban workers and farmers in terms of money income alone is lacking in accuracy. The so-called "psychic income" gained by farmers, as well as the consumers' price difference between urban and rural districts and so forth, should be taken into account in a comparison of real income. Consideration of these factors would reduce the differentials but probably not sufficiently to weaken seriously the broad conclusions drawn from the data presented.
(capital intensity) is shown on the horizontal axis.

We have no good data available as to the capital intensity classification. However, I think a capital intensity scale is theoretically better than the number of workers classification already adopted in the previous table.

Taking into consideration some data on the capital intensity classification of incorporated companies, we assume here that the above-mentioned differentials will also be valid for a capital intensity classification and that there is a close correlation between capital intensity rank and number of workers rank. In other words, the smaller the enterprise in terms of the number of workers the lower the capital intensity will be.

Line A denotes continuous differentials of average net value productivity and line W continuous wage rate differentials. On the horizontal axis, attention is drawn to two points; first, M1 representing the border line between capitalistic enterprise and family enterprise, and second, M2, denoting the marginal point of family enterprise, in the sense that the net productivity is just sufficient to cover wages. The two points A1 and A2 on line A show the average net value productivity at M1 and M2 respectively. The most important features of this chart are: first, the degree of wage differentials is much smaller than that of productivity differentials, secondly, capitalistic enterprise and self-employment enterprise do not constitute two independent sectors but comprise a continuous, interrelated economic structure.

I would like to discuss first the capitalistic enterprise sector, where large scale enterprises and medium-and-small-scale enterprises co-exist. According to the statistical data available, the following relationships are decidedly clear. Using the notation \( \alpha \) and \( \beta \), representing large-scale enterprise and small-scale enterprise respectively, (1) the average net value productivity of \( \alpha \) is greater than that of \( \beta \), (2) the wage rate of \( \alpha \) is higher than that of \( \beta \), (3) the capital intensity of \( \alpha \) is larger than that of \( \beta \). (These relationships have already been mentioned above)

By denoting capital stock as \( K \), number of labor force employed as \( N \), output as \( Y \) and wage rate as \( \omega \), the above relationships can be arranged as follows:

1) \( \frac{Y_\alpha}{N_\alpha} > \frac{Y_\beta}{N_\beta} \),
2) \( \omega_\alpha > \omega_\beta \),
3) \( \frac{K_\alpha}{N_\alpha} > \frac{K_\beta}{N_\beta} \).

Now the average profit rate of enterprise can be expressed by the terms mentioned above as follows: \( \frac{Y-N\omega}{K} \), which can easily be changed to the expression \( \frac{(1-N\omega)}{K} \) \( \frac{Y}{Y} \), where \( N\omega \) is labor's relative share and \( \frac{K}{Y} \) is the capital coefficient. If we represent these latter two terms by \( R \) and \( C \), an equal rate of average profit for enterprises \( \alpha \) and \( \beta \) can be expressed as follows;

\[ \frac{1-R_\alpha}{C_\alpha} = \frac{1-R_\beta}{C_\beta} \text{ or } \frac{1-R_\beta}{C_\beta} = \frac{1-R_\alpha}{C_\alpha} \]

This equation simply enables us to show the relationship between both types of
enterprises in terms of the capital coefficient and labor's relative share. If the equality is to be maintained, it is clear that if \( C_\alpha \leq C_\beta \), then \( R_\alpha \geq R_\beta \).

Next, let us assume that both \( \alpha \) and \( \beta \) enterprises as going concerns adopt certain techniques which determine a certain production function \( Y = (K, N) \) at a given wage level and capital price. This means, in other words, that the average productivity of labor \( \frac{Y}{N} \), capital intensity \( \frac{K}{N} \), and capital coefficient \( \frac{K}{Y} \) or \( C \) are all determined by production functions. From actual observation of the statistical data available we can introduce the following quantitative relationship between enterprises \( \alpha \) and \( \beta \) with respect to the capital coefficient, namely, \( C_\alpha > C_\beta \). As for relative share, \( R_\alpha < R_\beta \) is observable from actual data. Hence, in theory, it is possible to assume some equilibrium state between \( \alpha \) and \( \beta \) based on the conditions \( C_\alpha > C_\beta \) and \( R_\alpha < R_\beta \). This means that in the case of \( \alpha \), the disadvantage of having a greater capital coefficient due to technological requirements is apt to be compensated for by the advantage of the smallness of labor's relative share, which shows that in larger-scale enterprises, the ratio of the wage rate to productivity is smaller than in the case of smaller-scale enterprises. In actuality, the profit rate of \( \alpha \) may be greater than that of \( \beta \) in the long run when the degree of \( R_\alpha < R_\beta \) is apt to be greater than that of \( C_\alpha > C_\beta \) and this depends mostly on the wage differentials in relation to the productivity differentials.

Although this is a very rough sketch of the economic structure in which we are interested, employment under conditions of wage differentials should, I believe, be analyzed in terms of the framework of such a structure. Since it is reasonable to suppose that the marginal productivity of labor of \( \alpha \) enterprise is higher than that of \( \beta \), it is quite obvious that the demand price of labor should show a differential, but in reality the larger-scale enterprises can hire labor at a level lower than the demand price because the supply price of labor is apt to be

<table>
<thead>
<tr>
<th>Scale</th>
<th>Average</th>
<th>1,000 and over</th>
<th>500</th>
<th>100</th>
<th>500</th>
<th>100</th>
<th>500</th>
<th>100</th>
<th>500</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>under 18</td>
<td>13,659</td>
<td>17,435</td>
<td>14,816</td>
<td>12,478</td>
<td>10,807</td>
<td>9,379</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18—20</td>
<td>5,175</td>
<td>5,993</td>
<td>5,450</td>
<td>4,960</td>
<td>4,799</td>
<td>3,726</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20—25</td>
<td>7,072</td>
<td>8,027</td>
<td>7,229</td>
<td>6,784</td>
<td>6,579</td>
<td>6,084</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25—30</td>
<td>9,728</td>
<td>11,119</td>
<td>10,334</td>
<td>9,322</td>
<td>8,622</td>
<td>7,799</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30—35</td>
<td>14,276</td>
<td>16,784</td>
<td>15,462</td>
<td>13,616</td>
<td>11,825</td>
<td>10,294</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35—40</td>
<td>17,478</td>
<td>21,337</td>
<td>19,640</td>
<td>16,270</td>
<td>14,046</td>
<td>11,662</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40—50</td>
<td>19,727</td>
<td>24,715</td>
<td>22,208</td>
<td>17,811</td>
<td>14,727</td>
<td>12,942</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50—60</td>
<td>20,884</td>
<td>27,363</td>
<td>23,992</td>
<td>19,017</td>
<td>15,045</td>
<td>12,135</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 and over</td>
<td>19,140</td>
<td>28,032</td>
<td>22,933</td>
<td>18,712</td>
<td>14,683</td>
<td>12,077</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

suppressed to a lower level by the existing competition among the workers who accept work at lower rates in this situation.

In theory, it is not easy to give a full explanation of the competitive relationship between workers of larger-scale enterprises and smaller-scale ones. However, as is illustrated by Table 5 and Chart 4, the wage differentials between larger-scale and smaller-scale establishments according to the age difference of workers is well worth noting. For low-age workers the differential is very slight, while for middle-age workers, the differential is very wide, and this is mainly
responsible for the average differential between larger-scale and smaller-scale establishments.

In connection with this fact, I am inclined to point out that there is a sort of imperfect competition as far as the movement of labor between α and β is concerned, and that this becomes greater as the workers get older. However, as a whole, the very existence of low wages in smaller firms can act so as to make lower the wage level of larger firms.

Thus, within the capitalistic enterprise sector as a whole, we have three kinds of differentials—productivity, wage rate and profit rate. Referring again to Chart 4 above, let us turn our attention to the point M₁ on the horizontal axis. At this border point, the profit per worker (which is denoted by $A₁W₁$ in the chart) is just enough to maintain the concern, as the amount of profit will be almost equal to the ordinary level of wage earnings of workers. In other words, this marginal enterprising is in a competitive situation with workers in the sense that if the wage level rises relative to his profit, he will be ready to become a hired worker himself and such a marginal enterprise will disappear.

As mentioned above, in the Japanese economy the number of workers hired by the capitalistic enterprise sector is only about 40 per cent of the total labor force, so that the importance of the sector of family enterprise is very great.

Now, we move to the consideration of this sector, which is mainly composed of agricultural and, to some extent, service industries. In this sector, each independent small proprietor is working as a manager as well as a worker and depends on his own family labor force. Generally speaking, the marginal productivity of labor in this sector must be lower than that of the capitalistic sector because if it were not lower such persons would not remain in a state of self-employment. However, they will get all the net product other than rent and interest paid to outsiders, so that if we assume for the sake of simplicity that they own all capital as well as land required to carry on their enterprise, it turns out that average productivity of labor instead of marginal productivity is the income indicator.

Though we have little data on the tertiary sector, much empirical study has been done on the agricultural sector with regard to the matters relevant to this problem. A wide range of differentials for average productivity is observable in agriculture in terms of cultivated area of land, almost corresponding to the differentials already discussed in terms of the income classification in Table 4. Again for the sake of simplicity, if we neglect the small amount of capital, which also differs according to the land scale, it may be assumed that the labor productivity differential is mainly determined by land scale in the case of cultivated land of homogeneous quality. In reality, this means that the inability to enlarge the land is primarily responsible for this productivity differential.

Next we should examine the border point $M₂$ on the scale line in Chart 3, assuming that this scale line is also applicable to the land-scale differentials. If we assume the so-called marginal labor productivity concept to be considered
in terms of a man-year unit, at the border point, M₂, we would presumably find a worker with almost no capital, and with average productivity theoretically equal to marginal productivity at a level which is a minimum in a sense that if, at this point, another laborer engages in production, his product will be lower than the income required to keep the level determined by the continuous differential line of wage or minimum income.

The definition of so-called under-employment or disguised unemployment in agriculture is a controversial issue. Some insist that in such a case the marginal productivity of labor must be zero, while others assert that it should be positive. However, the problem of a zero or positive marginal productivity is not the crux of the issue. It may be admitted that in a very theoretical setting it might be possible to define the conditions under which marginal productivity of labor is zero. This might be done if we assume a certain institutional framework of self-employed farmers who are maximizing their total net product under certain assumed conditions.

However, if we take, for example, a man-year unit instead of a man-hour or man-day unit, the whole picture changes, because the marginal worker must produce at least enough to maintain his minimum standard of living. Hence his productivity over a year period, must be positive.

The most common way of defining so-called disguised unemployment is employment characterized by an unusually low level of marginal productivity and this definition has generally been applied to the conditions of the farming population in most Asian countries. This is a mistake. The main reason why it is a mistake is that it stems from too much generalization from Western experience to Asian situations. In a country like Japan, where capitalistic enterprises have emerged and developed from traditional ways of production and living, it is a basic rule that there always exists a gap between the marginal productivity of labor in modern industry and that of the traditional pattern of self-employment enterprises.

Again let us observe Chart 3. The zone between M₁ and M₂ represents the sector of self-employment enterprises, so that the point M₁ is also the border line between the sectors of capitalistic and self-employment enterprise.

The controversial issue concerning the conditions determining labor mobility between these sectors will not be discussed here in detail. It will suffice to say simply that, in a static situation, the wage differentials in the capitalistic sector will correspond to the differentials of family mixed income in the self-employment sector as a whole, to the extent that the new labor force coming from the lower income families (the source of the smaller enterpriser's labor supply) has a lower labor supply price.
IV. Conclusion

In brief, such a situation as a whole may be called a differential employment structure. The main causes for this particular structure are two: 1) the inequality of capital distribution among individual enterprises, and 2) the peculiar pattern of supply curves of labor, which are not uniform among various groups of workers. I quite agree with the assertion that the level of the wage rate in relation to productivity will be determined by the relationship between the rate of capital accumulation and the rate of increase of labor supply. It is to be noted, however, that in an economy where the supply of labor as a whole is apt to exceed the demand which comes from the development of the capitalistic sector and where the man-land ratio is unfavorable to man as is the case in Japan the differential employment structure will be an inevitable result because of the two reasons mentioned above.

Much has been said on the problems of structural unemployment as against Keynesian unemployment due to a shortage of effective demand, disguised unemployment, under-employment in agriculture and the like. Recently, in relation to the development of theoretical and empirical approaches to the economic conditions in underdeveloped countries, studies on these problems have developed rapidly. However, once we recognize that the differential employment structure, as distinguished from the fairly homogeneous structure of employment in Western economies, is the most basic feature of the Japanese economy, almost all discussions on the problems mentioned above become meaningless.

By this, I mean that the productivity of labor engaged in various industries (even within the same industry) including family enterprises shows a wide range of continuous differentials, and that the wage rates or incomes of working people accordingly also have wide continuous differentials. As seen from the experience of the Japanese economy, these differentials may be said to be a structural characteristic rather than a temporary condition, since the situation has not changed over a long period. Hence, it is difficult to analyse such phenomena in terms of orthodox equilibrium theory, because the general pattern of labor supply permits employment at remarkably different wage levels, and thus makes the proportion of unemployed much less than in advanced economies.

Actually, in Japan, according to the official statistics of the labor force, the percentage of unemployment is only around 1.5 per cent even in recession periods, and I think this is mostly unemployment of a frictional nature. But most scholars consider that this is due to the existence of considerable disguised unemployment. In fact, according to several surveys, the number of the so-called disguised unemployed was estimated to be 2 to 8 million, depending upon different criteria of measurement. It is not necessary to enter into the technical problem of measurement here. The only point to which I would like to call attention is
the inevitable arbitrariness or multiplicity of the measurements of disguised unemployment due to the very nature of the economy. For example, if we take up a representative definition of disguised unemployment according to which the marginal productivity of labor is lower than that of normal employment, we are quite puzzled to find that there is no normal level of labor productivity with which the so-called lower productivity of labor can be compared. In other words, in an economy like Japan's, the existence of differentials of productivity and wages is not a peculiar phenomenon due to particular conditions of employment or unemployment, but it is a universal phenomenon which has always existed throughout the whole economy and various kinds of occupations.

Therefore, from the policy point of view, the problem should be discussed not from the standpoint of decreasing disguised unemployment, but from the standpoint of improving the differential employment structure by narrowing down the range of differentials of productivity and income.