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THE BANKRUPTCY OF WAGE THEORIES: PROLEGOMENA TO A POWER THEORY OF ECONOMY

It needs no special demonstration that pure economics is an economic theory which excludes the influences of social power from the sphere of its construction. It is based on the hypothesis that each subject of social economy functions as an individual computing machine of utility giving no consideration to any relations of power.

I have elsewhere demonstrated that the centre of economic theories lies in the explanation of prices and that the problem of wages occupies the basic position in such theories. Now, how far, we may ask, have economic theories, especially those of pure economics, succeeded in clarifying this problem? In other words, have wage theories, based on the hypothesis of utility economy (in the sense of an economy in which social powers have no influence in the determination of prices), succeeded in explaining the variation of wages? I shall give an answer to this query at the outset: wage theories have been absolutely incapable of explaining wages as a reality. The present-day wage theories, and incidentally economic theories, require revision from this view-point. The essence of the needed revision consists in replacing utility economy by power economy (an economy in which social power operates in determining prices) as hypothesis.

I am convinced the facts have thrown discredit upon the existing wage theories. I shall explain why I dare to make this contention. First, I shall take up the conclusions drawn from the existing economic theories regarding the movement and height of wages in the recent times of economic depression, and then compare these conclusions with economic realities. I wish to know if there is complete

agreement between them. Again, supposing there are some discrepancies between them, I wish to know if they can be explained from the existing economic theories themselves by introducing some new factor.

II.

The prevailing form of economic theory is, at present, the theory of marginal productivity, the content of which may be summarised as follows. To use the common expression, wages are determined by the marginal productivity of labour. To speak strictly, in taking into consideration the relations of general equilibrium, wages settle at the productivity of the final unit of labour. Regarding this there are two points I wish to elucidate here.

(1) It should be noted that the marginal productivity of labour, which is equal with wage-rate in static state, is not the total value of products which depend on the labour unit. For, making an addition to the last unit of labour, there is a corresponding portion to be added for the use of capital, that is, the last increment of capital to buy the marginal labour. Thus, it is necessary that interest on that portion of capital, as well as wages, must be paid out of the value of products depending on the marginal unit of labour. Wage rate must thus be equal with discounted marginal productivity, which is nothing else than the essence of Taussig's theory of wages. According to my own view, this is only a special case of the general principle that the price of a factor of production is equal with the residual marginal productivity, or, to use the Marshallian expression, with the net productivity, which means the value of product of the last increment of that factor minus the price of the corresponding portion of other co-operating factors which must be combined with it in production.

(2) This final unit should be taken as the final unit of labour in so far as it is supplied in society. A more detailed explanation of this statement will perhaps clarify the doubt-

ful points involved. The number of labourers existing at a given time must be taken as the amount of labour supply at that moment, so long as typical labourers cannot live without selling their labour to get their daily necessities (when we can abstract the labour hours per day in considering the quantity of labour), so that labourers cannot have the liberty to sell or not sell their labour.

It is the premise of the theory of marginal productivity that the demand of industrialists for labour is determined by the productivity of labour. So long as workers are placed in circumstances in which they must sell their labour for the means of living, they occupy a position in which they must supply labour at whatever price may be offered and have no liberty of deciding to sell or not to sell their labour. Industrialists offer them wages corresponding to marginal productivity. In other words, industrialists demand their labour at that demand price.

And this demand price must determine the height of wages in so far as every unit must be sold at the demand price for marginal unit. The marginal unit, the productivity of which is equal to wages, must be the marginal unit of labour at a given time. When this point is considered, Paul H. Douglas's explanation given to the nature of the theory of marginal productivity must be full of significance. According to his views, the theory of marginal productivity is based on the premise that all labour has been used up, and that no part of it remains unemployed. The theory fits only in such a state of equilibrium. I wish to make the following addition to the explanation of this theory. If industry is demanding labour at the demand price determined by the marginal productivity of labour in so far as actually employed at a given time, then the wages concerned cannot be stable. Such wages will be reduced sooner or later through the competition of labourers outside the margin, or unemployed workers. This competition will cease only after all workers have secured work.

Gustav Cassel, in his equation of general equilibrium,

regards the total supply of productive goods as equivalent to its existing amount. With regard to labour, which we are here considering, he is not without a reason in view of the circumstances we have noted above. Of course, there are some who insist that the supply function of labour must be taken into consideration and who recognize that the amount of labour supply varies according to supply prices. But even from this standpoint, there will be no need of revising the statement I have made above. Now, what is it that determines supply prices in the supply function of labour? It must be the loss of utility consequent on the supply of labour, so long as utility economy is accepted as one of the premises. But for the labourers of the prevailing type who earn a living by the supply of their labour, this loss of utility in general is necessarily insignificant compared with the utility of wages they are capable of securing (however small the wages may be) in consideration of the operation of the so-called "instinct of workmanship". For this reason, even supposing that the amount of labour supply is the function of prices, that amount in equilibrium will be practically the same as the total amount of existing labour, and the marginal unit of labour supply may be regarded as the marginal unit of the total amount of existing labour.

I shall go on with my discussion on the assumption that the content of the theory of the marginal productivity of labour is as I have above explained.

What is the nature of the condition of wages during the post-bellum depressions, especially the heaviest depression which began in 1929? The rate of unemployment was unprecedentedly high. Let us see what were the relations between wages and the marginal productivity of labour during this period. (1) Many industrial enterprises continued their operation despite their losses. Viewed from this fact, wages were much larger than the marginal productivity of employed labour (or the productivity of labourers excluding the unemployed). (2) We have already seen that the marginal productivity at which wages are to settle must be the produc-

tivity of the marginal unit which will be determined when the available volume of labour is wholly employed, that is, without any remaining part. But we now know that the marginal productivity in this original meaning, or the supposed marginal productivity of all labour including the unemployed, is much smaller than the marginal productivity of the former (i.e., the labourers excluding the unemployed).

What are the conclusions we can draw from the facts under examination? We have learned that wages do not settle at the marginal productivity of the existing labour, and, further, that they do not settle even at the marginal productivity of employed labour, so that they were higher than either of these during the period of this depression. True, depression does not mean a static state, and one may indeed say that it is only too natural that wages do not correspond to the marginal productivity of labour during a period of depression. But this static economic law is based on the premise that industrialists demand labour at the marginal productivity point, so that wages tend to approach it. But no such tendency was shown in the wages paid during the years of depression. Wages were always above the marginal productivity of employed labour (this means that marginal enterprises continue their business at a loss) and failed to correspond to it. In consequence, wages are always far above the marginal productivity of the existing labour. Nor is this all, Real wages rose somewhat in actuality, although the theory under examination contends that when unemployment increases and consequently marginal productivity decreases, unemployed workers will necessarily engage in a keen competition by reducing wages. All of these facts are in direct opposition to the stand taken by the theory of marginal productivity. Wages were much higher than marginal productivity during the recent period of depression, while they failed to show a tendency to approach in their movement the underlying level of marginal productivity, rather tending to rise despite the increase of unemployment. All these are inconsistent with the contention of the theory of marginal productivity. Nor

is it possible to find anything within the theory explaining all this.

III.

I shall now make some observations regarding facts in connection with what I have so far stated. During the post-bellum depressions, wages were always above the marginal productivity of employed labour. This is clear from the fact that many inferior enterprises went bankrupt and had to suspend their production. By the productivity of labour here is meant residual productivity or net productivity, that is, nothing else than the value of products minus costs in other co-operating productive goods. It needs no demonstration that this cost includes interest at comparatively high rates, due to long term contracts, as well as the wear and tear expenses of equipment installed when prices were high. In fact, the wages which an enterprise can rationally pay cannot be beyond the marginal productivity in this sense, which is necessarily cut down by the costs in the other items.

Not only were wages higher than marginal productivity to such an extent that they forced some industrial enterprises either to go bankrupt or to curtail their production, but also, the difference between wages and marginal productivity did not show the tendency to be eliminated. Of course, wages were reduced nominally, and in many cases substantially too, to some extent, but notwithstanding the rate of unemployment increased year after year, and the curtailment of production also steadily increased. These facts indicate that the difference between wages and marginal productivity was not eliminated in spite of wage reduction. This is also indicated by the fact that in considering means for eliminating unemployment, the contention is vigorously made that high wages are largely responsible for unemployment and that, if they are reduced, one of the principal causes of unemployment will be eliminated.

Rates of Unemployment in Various Countries

Year	United States	Germany	Great Britain	Japan
1929	8.3	—	*8.2	
1930	15.1	—	11.8	5.2
1931	19.3	23.7	16.9	5.9
1932	24.1	30.1	17.6	6.9
1933	24.0	25.8	16.4	5.7
1934	(a) *22.6 (Jan.)	15.3 (Jan.)	*13.9	*5.0
1935	(b) *21.0 (Jan.)	—	*14.9	*5.0 (Jan.)

Wages in Various Countries (1929 as Basic Year)

Note: A for nominal wage, B for real wage,
C for skilled labour and D for unskilled labour.

Year	United States				Germany		Great Britain		France		Japan
	A	B	C	D	A	B	A	B	A (Mines)	B	B
1927	97	95	97	96	87	91	102	100	91	—	105
1928	98	97	98	98	95	96	100	99	90	—	104
1929	100	100	100	100	100	100	100	100	100	—	99
1930	91	94	89	90	102	106	100	104	108	100	91
1931	79	92	77	79	97	109	98	109	104	99	88
1932	60	77	60	60	82	104	96	110	96	98	89
1933	62	83	62	61	79	104	95	112	95	101	—
1934	72	92	70	69	79	102	96	111	—	—	—
	(Mar.)	(...)	(...)	(...)							

(a) Statistical Year-Book of the League of Nations, 1933/34.

(b) Figures marked * are taken from International Labour Review, Vol. XXXII, No. 3.

The fact that an enterprise reduces its production and discharges some of its workers reveals that the marginal productivity of the labour employed is less than wages. Viewed from the stand-point of the theory of marginal productivity, under such a circumstance there will be competition from unemployed workers leading to a reduction of the supply prices of labour, and this is bound to result in a reduction of actual wages. But let us see what are the actual facts in connection with this matter. Let us take the facts during 1931. In the United States, the unemployment rate

was twice that of 1929 but the reduction in real wages was only eight per cent. In Germany the unemployment rate was twenty-four per cent., and wages increased by nine per cent. during this period. In England, the unemployment rate doubled as compared with that in 1929, but real wages increased also by nine per cent. Thus, many facts point to a tendency exactly opposite to what the theory of marginal productivity teaches.

The foregoing facts indicate that wages were higher than the marginal productivity of employed labour. And this is not all; the marginal productivity of existing labour, including unemployed, to which wages are expected to approach and to be bound to settle there, according to the theory of marginal productivity, must have been still lower. There is no certain way of ascertaining this marginal productivity in the latter case (or the productivity of the last labourers when all labourers would have secured work, including the unemployed). But there are some references that we may use as materials in supposing it.

According to the conclusions reached by Paul H. Douglas from economic facts in the United States, labour (L) and productive capital (C) are in the relations shown in equation A as regards their respective productivity (P). Since the index of L in that equation is about 0.75, so far as it is treated within the given sphere of materials, the formula A will take the form like B¹⁾

$$P=L^{\kappa} C^{1-\kappa} \dots \dots \dots (A); P=L^{.75} C^{.25} \dots \dots \dots (B).$$

The above formula shows the following. If capital is regarded as a constant amount, 1 per cent. increase of labour supply effects 0.75 per cent. increase in the total amount of physical products, and, at the same time, 0.25 per cent. decrease of the marginal productivity of labour. From this may be derived the conclusion that the elasticity of labour demand is -4. Collateral evidence of this conclusion may be

1) Paul H. Douglas, The Theory of Wages, 1934.

found in Pigou's contention that the elasticity of labour demand is -3 and also in the fact the total amount of the wages paid to the industrial workers in the United States in 1909 or 1918 is 75 per cent. of the total value of products (However, the percentage after the world depression is said to swing around 65 per cent.). Now, let us adopt this formula as our main premise and make several suppositions. In the first place, let us suppose that when the relation between the variations of productive factors and the corresponding change in productivity when the former is only one per cent. is equally existent in the case when the increase or decrease of labour is between 10 and 20 per cent., and also that the existence of idle equipment which will be brought into action with the increase of labour in employment can be abstracted. Under such supposed conditions, the decrease in the marginal productivity of labour, owing to the taking into employment of all unemployed, will be about 6 per cent. Thus, it may be said without any doubt that wages are much higher than the marginal productivity of the labour employed, and still higher than the marginal productivity of the existing labour force, which is six per cent. lower than the former.

There is no doubt that the function of trade unions is partly responsible for the fact that wages have always been higher than the marginal productivity of labour. It is clear that this has been especially and remarkably so in the case of England. But the following condition must be taken into consideration in a theoretical discussion of this effect of labour unions on wages. Though a large number of workers are organized into trade unions for the purpose of securing a monopolistic position in the labour market, they always face (1) some non-organised workers and (2) the attempt made by the unemployed workers to sell their labour at a price which is much lower than the prevailing rate, that is, the present wage, when there is a high rate of unemployment. This conclusion is inevitable so long as one takes utility economy as the major premise and stands on the ground of the theory of marginal utility. Industrial enter-

prisers will also attempt to reduce their losses by employing workers out of work at cheaper wages. Thus, there will be unemployment within the members of a labour union. Of course, labour unions may adopt the policy of preventing unemployment for their members through organized resistance, but so far they have not succeeded in such a policy in any country. When some members of a labour union have joined the camp of the unemployed, they will be forced to enter into competition leading to wage reduction. So long as there exist the two factors of non-union workers and unemployment, the function of a monopolistic power to place wages above productivity will not be theoretically effective. Viewed from the premise of utility economy, there should be a downward movement of wages towards marginal productivity.

This can be said even as regards England, where the trade union movement is highly developed. But let us take our own case in Japan. The labour union movement here is still in its infancy, and one cannot even dream of a monopoly of labour supply by unions. The fact remains, however, that wages during a period of depression were above the marginal productivity of labour. Let us now study facts in the United States. The population returns of that country for the year 1930, classified according to vocations, show that the number of male workers above ten years of age employed in industries and mines was roughly 13,177,000. From this number are deducted those between the ages of 10-19 according to the ratio of age composition of the general population, and this leaves a figure of 8,828,000.²⁾ There may be some above the age of 20 who should also be excluded, but since there are women workers who should be included, we may take 8,800,000 as approximately correct. Let us compare this number with the number of union workers. In 1927, there were 4,241,542 union workers belonging to various organizations. In 1930, those belonging to the American Federation of Labour alone numbered 2,961,096.

2) Statistical Year-Book of the League of Nations, 1933/34, p. 26, 39.

The total number of industrial workers in 1929 was 8,785,600, while in 1934 it was 6,600,100. The total number of industrial workers in England in 1929 was 10,223,000³⁾ while in 1934 it was 10,139,000. In 1928, there were 4,673,114⁴⁾ labour union workers in that country. The foregoing figures indicate that even in England, the number of unorganized workers cannot be ignored.

Under the circumstances described above, so long as utility economy is accepted as true, wages should drop rapidly to the marginal productivity of at least employed workers and thereby suspend the curtailment or bankruptcy of industrial enterprises and the increase of unemployment. As a matter of fact, however, all such unfortunate economic phenomena continued their trend. This reveals the impotency of the marginal productivity theory in explaining the variation of wages, although the monopoly of labour through the medium of trade unionism in England and other countries must be taken in to consideration. Nor is this all. Despite the increases of unemployment, real wages have often increased. This cannot be explained by the theory of marginal productivity nor, for that matter, by the theory of supply and demand on which the former is founded.

IV.

The supporters of the theory of marginal productivity attempt to explain the foregoing facts by introducing other circumstances. But they can never succeed in their attempt so long as they take into consideration circumstances other than social power—in other words, unless they adopt the new premise of power economy.

Let us examine this matter in reference to the argument of J. R. Hicks. By introducing some new factors, he tries to explain that during the period of world depression, wages in England rose despite the increase of unemployment. His

3) *International Labour Review*, September 1935, p. 409.

4) *Handbook of Labour Statistics*, 1931, p. 397.

contention in the main may be summarized as follows.

While an enterprise uses circulating capital, during such a period of depression it suffers a loss. But when the capital is deposited with a bank, some gain is derived from the interest thereon. For this reason, if wages do not drop, it is more profitable for an industry to curtail its production and discharge part of its working force. However, there is a difficulty in re-employing the discharged workers when they are wanted on some future occasion. Because of this difficulty, an industrial enterpriser retains, even at a loss, some of the more useful workers for future use. Moreover, those who are in supplementary relations with them will be also retained, and thus an attempt is made to keep the loss at a minimum. An industrial enterpriser refrains from reducing the wages of his workers to the extent that he wants to retain them.

Let us examine whether Hicks's contention holds water. He contends that an enterprise refrains from reducing the wages of its workers because it wants to retain the useful workers for future service. But if this be true, there would be no obstacles in the way of the reduction of the wages of unskilled workers, who may be hired at any time because of the abundance of their supply. But the statistics we have reviewed show that in the United States, during the period of depression between 1929 and 1932, the wages of unskilled workers were relatively higher than those of skilled workers. If employers were unable to reduce wages because of their wish to retain the skilled workers for the following revival period, as contended by Hicks, only their wages would be maintained at a comparatively high level, and those of unskilled workers, whom it is not necessary for entrepreneurs to retain, and whom they may employ whenever they want, would be greatly lowered. Hicks's theory is only a paper theory, so to speak, since it is contradicted by actual facts. His argument that it is difficult for an employer to re-hire skilled workers discharged during a period of business depression is groundless. Those workers who are discharged in a time

of depression will have no other way than to await opportunities for employment as unemployed workers. Their labour is always for sale. They will supply it any time upon the recovery of business if they are paid suitable wages.⁵⁾ Hicks further says that even when depression is intensified, thus necessitating wage reduction, employers will not reduce wages down to the subsistence level, because if they do, they will not be able to secure the needed labour supply even when they offer good wages during a period of prosperity. Why? Because the employers would have disrepute on account of their drastic reduction of wages. It is argued that such employers would not be able to secure a labour supply even if they were to pay good wages because they would not offer security of employment to workers.⁶⁾ However, it should be noted that even during a period of business prosperity, there is not any great scarcity of labour. There is some degree of unemployment, or the so-called normal unemployment at any time. It will be far from the consideration of employers to provide for the distant future, especially when they are placed at the parting of the ways between life and death at the depths of a world depression. Hicks's explanation only shows the difficulty of explaining the actual variation of wages from the theory of marginal productivity. His theory, in short, is no explanation of the given problem, being at most an admission of the impossibility of the required explanation.

Compared with the theory of providing for prosperous future times, the explanation by means of the principle of inertia is far more rational. It is explained that once wages are fixed at certain rates, they do not become reduced because of their inertia, even during a period of depression. Schumpeter points out how frequently this explanation has been employed by writers on wages.⁷⁾ It may be stated that

5) J. R. Hicks, *The Theory of Wages*, 1932, p. 51 et seq.

6) *op. cit.*, p. 53.

7) Joseph Schumpeter, *Verteilungslehre u. s. w. Archiv f. Sozialwissenschaft u. Sozialpolitik*, Bd. 42.

his criticism of the theory of inertia is not appropriate. Nor does the theory of inertia itself touch the core of the wage problem. He criticizes the theory of inertia something as follows.

The assertion that present wages are determined by inertia amounts to the statement that present wages are chiefly affected by past wages ; but the past wages themselves were in turn determined by the productivity of labour in the past. Therefore, to explain wages by means of inertia is the same as to explain them by means of the operation of the productivity of labour. Now I wish to examine this criticism. To assert that past wages were determined by past productivity is only to clarify at what height inertia operates to stabilise wages, but such an assertion does not indicate the essence of inertia itself. Moreover, once the existence of inertia is admitted, one cannot reasonably say that past wages were determined by the productivity of the past, and at the same time one will have to admit that past wages were, in their turn, determined by the inertia that has come down from the distant past. To resolve the determination of wages by inertia into the action of productivity is essentially an unreasonable process. Furthermore the action of the inertia of prices in the case of all kinds of finished products and produced productive goods also must be taken into account. The inertia of price in the case of these latter is very insignificant and operates only for a short period of time so that it is soon overcome by the general tendency of supply and demand. Owing to such circumstances, the prices of other commodities than labour can drastically change in various ways, while real wages remain somewhat stable generally. This phenomenon, however, cannot be explained by means of productivity of labour.

Can we then accept the explanation of wages by inertia as the theory is advanced by its exponents? I am inclined to believe that inertia, as the term is used in this explanation, is only an analogy which must be translated into a term having a social meaning. Inertia is nothing but resistance

against price variation, against its depreciation in the present case. Now, what is the nature of this resistance or obstacle? It simply means that wages are determined by the relations of power. The prevailing wages correspond generally to relations of power or position. It may be said, therefore, that the requirement for a given wage is based on social position. In other words, the requirement regarding social position can be satisfied only by receiving a definite level of wages, so that it is difficult for the supply price of labour to drop below that niveau. Such is the very nature of inertia which is said to determine wages.

V.

Wage theories based upon the theory of marginal productivity, or when viewed from the broader standpoint of the premise of utility economy, are incapable of explaining not only the movement of the post-bellum wages but also wages at their heights. We shall analyse this point by taking up Schumpeter's theory.

His wage theory only indicates from beginning to end how theories of general equilibrium are incapable of explaining the realities of wages. It is in fact a theory which attempts to prove the impotency of wage theories. To begin with, theories of general equilibrium, and consequently wage theories (which are part of the theories of the prices of productive goods) contained therein, are based upon the supposition that both demand and supply are penetrated thoroughly by the principle of value. Let us first consider supply. The children of government officials do not become wage-earners, while those of the working class remain in their own class. The sphere in which they may shift from one vocation to another is extremely limited. Industrial enterprisers, government officials, artists and workers all become so by the force of circumstances and not by their voluntary choice. This means that labour supply is not ruled by the principle of value. In other words, those factors which determine the

distribution of labour among various occupations and professions are outside economic circumstance.⁸⁾ The same truth may be found as regards labour demand. As to the demand for consumption goods and machinery, the best, or those having the highest capacity, are most urgently demanded, consequently at the highest demand prices. But this is not so as regards industrial enterprisers. Those who are the best fitted for industrial enterprises do not necessarily engage in such enterprises. On the contrary, only those having the capital necessary for industrial enterprise, as well as the social position and other qualifications, are able to become industrialists. The same thing may be said of government officials and professional men. Those who offer the most valuable service (who are engaged in work for which the highest reward is given — this is the writer's interpretation) are not necessarily endowed with the best abilities. Such persons are selected from among those having the required qualifications. Even the service of the highest class of government officials can be performed by the average ability of average men.⁹⁾ In other words, the demand for labour is also not determined by the principal of value. In order that the calculation of value be inclusive and satisfactory, it is necessary that labour power be distributed from the viewpoint of the value of service and that demand for service correspond to the function of value. Only in such a case will the value of each service be normal. But the foregoing requirements are not satisfied in actuality.

The various groups of labourers stand out separately like so many islands, among which there is scarcely any means of communication. On each of the islands only the principle of value dominates. In other words, various labourers exist there in definite numbers and there is no shifting between the different groups.¹⁰⁾ The wage theory when revised as above fits the existing facts. The truth is that the principle

8) Schumpeter, *Wesen u. Hauptinhalt*, p. 349.

9) *op. cit.* p. 351.

10) *op. cit.* p. 353.

of value does not actually dominate when we take into consideration the whole sphere of labour.¹¹⁾

To put the statement in a nutshell, this wage theory may be interpreted something as follows. The distribution of labour does not follow the principle of value, so that each worker performs his definite work or service after his definite social qualification or according to his definite social position. He is given wages corresponding to his service. I wish to offer a criticism of this view as follows.

(1) The operation of extra-economic conditions affecting the distribution of labour is clearly explained by the theory, but I think that these circumstances must be treated as data for the theoretical construction. So long as the social restrictions which determine the distribution of labour among various groups or occupations are presupposed as data, and so long as the quantity of each group of labour is regarded as fixed to some extent, can we then say that the above wage theory is harmonious with existing facts? According to Schumpeter, an affirmative answer must be given to this question. Industrial enterprisers get the highest income because their service is the highest value, that is, of the highest utility, and government officials and professional men receive large incomes because their work is of high utility, apart from any question as to whether men of greater capacity or ability than they exist or not. But here is a matter which has been overlooked by Schumpeter. The kind of distributed work varies according to the class to which one belongs, and those belonging to a high social class gain the highest income, or in other words the price of their labour is high. This fact is recognized by him but the nature of the fact itself constitutes a question. If utility economy is taken as a premise, the wage theory of pure economics must hold. High wages are the result of the high marginal utility of the service concerned. But there should be no parallel relationship as a predetermined harmony between the level of the value

11) *op. cit.* p. 356.

or utility of a service and that of the social position of the persons who perform that service. If such a relationship exists, as Schumpeter's thesis must presuppose, it cannot be explained without introducing a metaphysical factor such as Providence. Moreover, it is impossible to explain from such a standpoint the fact that the price of a certain kind of labour or the wage for some work remains high even when the value of the service has depreciated, that is, the utility of it has decreased. Inasmuch as the value of service is dominated by the principle of marginal utility, the value of the service in high professions must be very low, seeing that there are many persons who are qualified for the definite positions of government officials and company directors. Their salaries do not depreciate to any great extent even when marginal utility or marginal productivity has become very small (especially when a rapid increase in unemployment among intellectuals is witnessed). This cannot be explained by the wage theory as described above. The truth is that the demand for wages, i.e., the supply price of labour, determines the marginal productivity or value of the labour employed. Contrary to Schumpeter's explanation, the productivity of service capable of paying the wage required is made possible and realised by the device or the method of production, which must be selected and adapted according to the supply prices of various kinds of labour. This treatment of the supply price of labour in terms of power economy can explain the parallel relationship between social position and wages, without introducing any metaphysical factor.

(2) Not all of the questions raised by Schumpeter are dealt with by him and the remaining questions, not taken into the sphere of his explanation, show the inadequacy of his treatment. According to his interpretation, a coolie can never perform the functions of government officials or engineers, however excellent his ability may be, so that labour supply does not follow the principle of value in this case. Nor does industry or society demand that government officials

or engineers be recruited from the class of manual labourers, but only from a definite class in society. Thus, the field of each kind of labour is an island by itself, and therein only the principle of value dominates. The wages of high-class labour are high because their value is high or their marginal utility is high. Against this statement, I have raised the question as to why the labour of the high class is high in value. To answer this question by means of predetermined harmony is not only metaphysical in treatment but highly inadequate. To show the latter point, that is, to show its inadequacy, I cite here the following facts. Wages for the same labour are different for men and for women workers. In the United States, wages differ for the same labour for White and for Chinese workers; in Southern France they differ for Frenchmen and for Italians for the same service. While all these are admitted as facts, Schumpeter does not give them any explanation at all. These phenomena can only be explained by the difference of supply prices due to different social positions, and this indicates the deep influence of the supply prices of labour in determining wages. For Schumpeter, the quantity of the various kinds of labour and their value functions are everything; and for this reason, the difference in wages between men and women workers and between Whites and Chinese should not exist so long as the work performed is of the same nature.

The factor causing differentiation of wages between workers of different sex and different nationality for the same service must operate in all cases. This factor is the supply price which is based upon social position. In principle, the respective value of each kind of labour tends to follow its respective supply price so that the methods of production are selected according to the latter and when the methods of production so selected are not successful, a corrective change in supply price must take place to some extent. For this reason, supply prices of labour are not merely a reflection of its value or productivity but indicate the level which the value, which will result from the productive process,

must attain. By such an interpretation alone can the differences of wages, as well as the maintenance of high wages despite unemployment, and, in short, all difficult questions concerning wages be explained. This is why I am convinced that wage theories should shift from the basis of utility economy to that of power economy.

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