

Alfred & Mary Paley Marshall
The Economics of Industry
(1879)

Chapter XI.
Wages

§ I. WE have seen how the produce of land, capital and industry, exclusive of rent and taxes, is divided into Interest and Earnings ; into the share which remunerates abstinence, and the share which remunerates work whether bodily or mental. Let us now look at the way in which this latter part is Normally subdivided among unskilled labour and the different kinds of skilled labour and of business power.

We are not now concerned with the advantages which custom or social opportunities or trade organizations give to the various ranks of industry in bargaining, for their several shares of the Earnings-and-interest Fund; but when we come to discuss the theory of Market wages in the next Book, we shall see how such advantages may cause the wages of a trade to diverge for a considerable time from their Normal level.

Let us first inquire what constitutes the Normal demand for the work of each trade. This demand depends partly upon the desire of consumers to obtain the things which that trade produces or helps to produce, and partly upon the extent to which its aid is wanted by other industrial classes and the owners of capital who take part in making these things. Thus the demand for the work of a trade may be said to depend on the *competition for its aid* in production. The meaning of this term may be made more clear by an illustration.

The recent advance in England's wealth has caused a great demand for building; and those who produce other things have had to give more of them than before for the purchase or hire of a house. There has been an increased competition for the aid of the building trades, which has raised their wages and enabled them to obtain a larger share of the wealth of the country than before. Now suppose that during such a rise in the price of houses, there is a sudden check to the supply of (say) house carpenters. The rest of the building trades will then find it difficult to obtain the aid of carpenters to supply roofs, floors, etc. And since the work of masons, plasterers, and master builders will be of little use without such aid from the carpenters, the competition of the other building trades for the aid of carpenters will force up the wages of carpenters, and enable each of them to obtain an exceptionally large share of the Earnings-and-interest Fund.

This competition will not act directly; the masons will not ask the carpenters to assist them in their work I twill act indirectly through the master builders; for, as we shall see presently more fully, in all conflicts between the different industrial classes the employers of labour act as buffers, which absorb part of the force of a blow, but pass on most of it to others. The scarcity of carpenters will compel employers to offer them higher and higher wages; the consequent rise in the price of houses will check the demand for them; the employers will have an over-abundant supply of masons and other labourers, and will lower their wages. Meanwhile the check to the building trade will increase the competition among master builders, and so diminish their own Earnings of Management. Thus the increased competition for the aid of carpenters will raise their wages, and this rise will be obtained partly at the cost of those who require houses, partly at the cost of

Space for Notes



the rest of the building trades including the master builders.

§ 2. The demand for unskilled labour depends on the competition there is for its aid, whether in producing things or in ministering directly to people's wants. It is increased firstly by every increase in the amount of capital that is ready to support and assist industry, and secondly by every increase 'in the amount of business power and of skilled labour of various kinds, that are competing for the aid of unskilled labour in the work of production.

When the wages of unskilled labourers exceed that amount which enables them to maintain the Standard of Comfort to which they are accustomed, population increases fast; but when they are less, the growth of population is checked. For instance, the daily wages of unskilled labourers in England have seldom been less than what would purchase half a peck of wheat; and they have seldom risen above what would purchase two pecks; they have oscillated up and down between these two limits. If it were a fact that whenever the day wages of unskilled labour were less than a peck of wheat, population diminished, and that whenever they were greater than a peck of wheat, population increased rapidly; then a peck of wheat would be the Normal day wages of unskilled labour. For when a high rate of wages caused a rapid growth of unskilled labour, it would increase the competition of unskilled labour for the aid of capital and of other classes of industry; and this would lead to a fall of wages: conversely when a low rate of wages checked the supply of unskilled labour, it would lead to an increase in the competition on the part of capital and other classes of industry for the aid of unskilled labour; and this would lead to a rise of its wages. Thus a peck of wheat would be the centre or Normal value towards which the remuneration of unskilled labour constantly gravitated, and any deviation from which would be a temporary irregularity, which, the moment it exists, sets forces in action tending to correct it.

The Standard of Comfort is not in fact rigidly fixed. But yet it is, at any place and time, so nearly fixed, and does exercise so great an influence on the growth of population, that the wages which afford the means of maintaining this Standard may fairly be called the Normal wages of unskilled labour there and then. When wages are at this level they are in equilibrium, unless there happens to be at the time a great change in the field of employment for labour. This is the Normal or Centre value about which fluctuations of Supply and fluctuations of Demand cause the wages of unskilled labour to oscillate. But the Normal value itself varies from place to place and from time to time with changes in the Standard of Comfort of the people. A rise of wages caused by an increased demand for labour will be temporary, unless it lead to a rise in the Standard of Comfort; in which case it will be permanent, and Normal wages will be raised.

§ 3. Next with regard to various kinds of skilled labour. The demand for each class of skilled labour depends on the competition there is for its aid. It is increased firstly by every increase in the capital that is ready to support and assist industry, and secondly by every increase in the unskilled labour, in the skilled labour of other classes, and in the business power that are competing for the aid of labour of this class.

The causes which determine the supply of skill of any kind in one generation are, as we have seen, chiefly to be sought in the opportunities and the habits of the previous generations. The trouble and expense which parents will undergo in preparing their son for his work depend on their means, their habits of forethought and self-denial, and their knowledge of and access to various trades. The poorer and the more ignorant parents are, the higher is the rate at which they are likely to discount the wages which their son will receive at a future time. The lower parents

are in the social scale, the greater must be the advantages which they can procure for their son by a given outlay on his education in order that they may be induced to make it.

Parents generally bring up their sons in the same industrial grade as their own; there is so much freedom of intercourse between different trades of the same grade in the same place that their wages (or more strictly their Net Advantages) seldom differ much for any long period together. Any increase in the inducements to parents to bring up their children to a trade, or to adults to enter it, increases the supply of labour in it; the chief part of this supply being drawn from trades in the same grade with it.

Thus we are brought to the **Law of Normal Wages**, which is:—

The amount of the Earnings-and-interest Fund, and the way in which it is divided into the shares of interest and earnings being already known, the wages of each trade depend on the way in which this latter share is sub-divided. The Normal wages of a trade are therefore determined by the relation in which its wages (or more strictly, its Net Advantages), must stand to those of other trades in order that the supply of labour in it may be kept up, and this depends on the difficulty of the work to be done in it, on the expensiveness of the general and special education, and on the natural qualities, physical, mental and moral, required in it.

Trades in the same industrial grade generally require an equally difficult and expensive education, and have equal wages. The lower the grade of a skilled occupation, the higher is the ratio which its wages bear to the expenses of preparing for it.

When a rise in the wages of a trade above the Normal value causes a rapid increase of the numbers in it, its members find a diminished competition on the part of others for their aid; they are at a disadvantage in bargaining for their share of the produce of land, capital and industry, and their wages fall. Conversely when a fall in the wages of this grade below the Normal value checks the increase of the numbers in it, the competition on the part of capital and the other classes of industry for the aid of this trade is increased, and its wages rise. But when the wages are at the Normal value they are in *equilibrium*; the growth of numbers is neither so fast as to lower them, nor so slow as to raise them. Toward this value the wages of the trade continually gravitate, and any deviation from this rate is a temporary irregularity, which, the moment it exists, sets in motion forces tending to correct it.

But these forces often act very slowly because of the friction of various social and economic obstacles that hinder men's passing from one trade to another, especially if they are in different grades; and the "temporary irregularities" may extend over very long periods of time. Fluctuations of supply and demand cause the wages of each trade to oscillate above and below their Normal value; just as a floating cork oscillates with each passing wave, above and below the surface of the sea. The Normal wages of skill of various grades rise or fall slowly, as the tides rise or fall. They change with those slow changes in the social condition of various ranks of the people which work themselves out in the course of many generations.

The effect of progress is as a rule to increase the supply of intelligence and ability, so that if the difficulty of the work to be done did not increase, the wages of skilled labour would be likely to fall. And in fact the Task-wages, that is the wages that are paid for skilled labour of a given efficiency, are falling in many branches of manufacture; though they are on the whole rising in some trades which are under

specially favourable circumstances, as for instance the building trades. But the difficulty of the work to be done, and the intelligence required for doing it are increasing, and the average earnings of the workers -their Time-wages-are generally rising, even where their Task-wages are falling.

§ 4. A rise in the Time-wages of any trade tends to diminish profits. But if the wages that are paid for work vary according to its efficiency-if Task-wages are unaltered--the share of the produce of industry that is left for others will be the same whether Time-wages are high or low. It is only where the rise in Time-wages is not accompanied by a corresponding increase in efficiency, and therefore Task-wages rise, that the change is injurious to capital. In fact when a labourer has to be supplied with costly machinery, a rise in Time-wages is a great benefit to capital, if it lead to such an increase of efficiency as to keep Task-wages unchanged. Of course the machine itself sometimes "sets the pace," and an indifferent worker may be able to do all that is required. But such cases are much more rare than is generally thought. Of two weavers or two turners working side by side at similar looms or similar lathes driven by the same machinery, one will often do twenty per cent more in a day than the other; and it would be to the advantage of the employer to secure the energetic man by paying him more than twenty percent more Time-wages, that is, by paying him Task-wages at a little higher rate than he pays the inefficient man. For in this way he will turn his machinery and the space in his factory to the best account.

Even in the case of unskilled labour it is to the advantage of capital that Time wages should rise, provided Task wages do not rise too. If two labourers at 18s. a week will do as much work as three at 12s., the former are in the long run cheaper. For they are likely to remain longer in full health and strength and to have healthier and stronger children than the others ; and a much heavier burden will be imposed on capital through the poor rates by three low-waged than by two high-waged labourers.

There is however a limit beyond which a rise in the Time-wages of unskilled labourers will not cause a proportionate increase of their efficiency, and when this limit is passed any further rise in Time-wages will raise Task-wages too; but even then the rise of Task-wages will be slower than that of Time-wages. The growth of capital and the progress of the arts of manufacture will, if wars can be kept down, make the world rich enough to afford high wages for that little unskilled labour which cannot be supplanted by machinery. This increase of wealth will not indeed raise the wages of unskilled labourers if their Standard of Comfort remains low and they marry imprudently. But a time may come when the Standard of Comfort of unskilled labourers will be such as to keep them from rapidly increasing their numbers, even though their wages have become as high in old countries as they are now in new countries.

§ 5. The influence which demand exerts on wages is sometimes expressed by saying that under a system of free competition every man's wages tend to be equal to the *discounted value* of the produce of his labour.

Let us for instance imagine a thing to be made by unskilled labour alone without any superintendence, and without the aid of any capital except that which was advanced in the payment of wages. Suppose that this capital has been advanced gradually, some of it a short time, some along time, on the average half-a-year before the thing is ready for sale. Let the rate of interest for six months, allowing for risk, be five per cent. Then if the thing can be sold for £105, the Discounted value of this half-a-year beforehand will be £100. And competition will tend to make the wages of those who made it equal to this Discounted value of £100.

But a case as simple as this never occurs in practice. The earnings of many different kinds of industry, one of which is almost always that of Superintendence or Management, enter into the Expenses of production, and therefore into the price of almost everything that is sold. And in order to deduce from the price the earnings of one of these kinds, we must find out not only the interest on the capital employed but also the earnings of the other kinds of industry, and deduct them all from the value of the produce raised. We cannot then speak of the Discounted value of the work of any one of these classes. But we may still speak of the "Net Return" of that labour. The Net Return of a machine was defined as the value of the work that it does after allowing for Depreciation and the Expenses of working it, including the Earnings of Management. The **Net Return** of a man's labour is the value of the produce which he takes part in producing after deducting all the other Expenses of producing it*

[*A statement of this kind has been mistaken by some writers for a theory of wages. But it is only the Law:--"Value tends to equal Expenses of production" – written in a new form.]

This phrase is very, useful when we are examining the part which Demand takes in determining wages. For instance, if the demand for houses is rising, the Net Return of the labour of some or all of the various building trades must be increasing. There may be signs of a greater scarcity of labour in one of the building trades, as for instance that of the carpenters, than in others; and we believe that the earnings of other branches of the building trades (including the Earnings of Management, (of the master builders) are not likely to rise, we may say that the competition for the aid of carpenters' labour will increase, that the Net Return of their labour will rise in value, that they therefore will get an increased share of the Earnings-and-interest Fund ; and that their wages will rise.

Again the phrase Net Return of labour can be usefully applied in explaining the influence of Demand in equalising Task-wages in the same occupation. This influence may be described by saying that under a system of free competition every man's wages, or more generally every man's earnings, tend to equal the Net Return of his industry.