

CHAPTER XII.

OF MARGINAL AND DIFFERENTIAL VALUES.

The imperfection of equality of competition may be met and overcome by securing equality of opportunity for individuals.

John A. Hobson.

We have seen that the market price and, consequently, the value of labor-forms is fixed by the competition of the marginal pair. Men do not sell cheap because they have acquired their wares at relatively small disutility, nor pay high prices because they are abundantly able to do so. The seller, however fortunate in the acquisition of his trade-form, gets all he can, but is bound by the price fixed by that seller who, having a supply sufficient to affect the entire market, is most anxious to sell. While the buyer, however well to do, buys as cheap as he can, and pays only the price bid by that buyer who, being necessary to exhaust the market supply, is most indifferent. We shall now examine those conditions which determine the identity of the marginal seller and the marginal buyer, respectively, and tend to produce anxiety in the one and indifference in the other; it being understood that the marginal pair are representatives of marginal groups of sellers and buyers, respectively.

With reference to the seller we may state that in normal conditions and in the long run a man will not sell labor-forms at less than their industrial disutility. The great desideratum to the seller is net value, and in all economic

exchanges more or less net value is acquired. Unless the point of exchange is above the point of industrial disutility, production in any given case must soon cease and the exchanges made are abnormal.

All production results from the application of labor-power (directly, or indirectly by the use of capital-forms) to land-forms. This is readily seen, if we consider carefully the fact implied in the definitions already given that the external world at any given time consists entirely of land-forms and labor-forms. All labor-forms used in further production either as aid-forms or as partly finished material are capital-forms; while land-forms, by definition, include not only what we usually call land, but all the opportunities, forces and resources of nature connected therewith or available thereon. Therefore by eliminating capital (labor-forms) from the productive process we have left only labor-power upon the one side and land-forms upon the other. By introducing capital into the process we merely assist labor-power or mitigate the disutility of time.

We may state, further, that the disutilities of production are greater on some land-forms than on others; that a definite number of land-forms are necessarily used to supply the demand of a given market, and that some seller must produce upon the poorest land-form necessarily used to supply the demand of such market. His disutility is greatest of all, and the gross value of a given product being the same for all in the common market, he necessarily receives the least net value of all the sellers of such product in that market. The land-form upon which he produces is the marginal land-form, and he is the marginal producer.

Usually several land-forms are so situated or conditioned with reference to the market that their net values from a given expenditure of labor-power, assisted by given capital-forms, are substantially equal. These land-forms constitute the economic margin. All producers who occupy the economic margin constitute the marginal group in production.

The **Marginal Land-Form** with respect to a given market is a land-form upon which given labor-power, assisted by given capital-forms, will produce the least net value of any land-form necessarily used to supply such market.

The **Economic Margin** of a given market is the aggregate of all marginal land-forms which are tributary to such market.

It must be understood that the economic margin is distinctively an economic, and not a territorial boundary. A land-form may be very near a great market, territorially, and yet be upon its margin economically, while other land-forms, territorially very distant may be far above the economic margin. Liverpool is the world's market for wheat; yet some of the best wheat lands are on the other side of the globe, and some of the poorest near at hand. A land-form in England and one in Dakota yielding the marginal return in the production of wheat for the Liverpool market are both upon its economic margin. All land-forms, wheresoever situated, which yield the marginal return for land-forms tributary to any given market, constitute its economic margin; while any land-form, wheresoever situated, which yields more than the marginal return for land-forms tributary to such market, is a superior land-form.

The **Marginal Return** is the value which may be acquired with a given disutility upon the economic margin.

A **Superior Land-Form** is any land-form which, with the same disutility, yields more than the marginal return.

A **Marginal Producer** is one who produces upon a marginal land-form.

The **Marginal Group** of producers embraces all who produce upon the economic margin.

In any market it is inevitable that, as a rule, the marginal producer of a given labor-form is also its marginal seller. He is the seller least able and least likely to stand out against the competition of the market. This being true, it follows that the marginal land-form furnishes the conditions which determine the identity of the marginal seller and fixes market values in so far as they are affected upon the seller's side of the market. It should be remembered that the disutility of the marginal land-form determines, primarily and directly, not the selling price of a given labor-form, but the question of whether or not such labor-form shall be produced for sale. It is only secondarily and indirectly that such disutility affects price by gauging the supply. After the labor-form has entered the market, the question of the disutility of its production is of minor importance. The "labor-cost" theory of value as currently stated in this regard is a superficial statement of a half truth. It is true only upon one side—and that the least effective side—of the market. After a labor-form has been produced and is upon the market, the marginal buyer is the primary factor in fixing the price.

With reference to the marginal buyer it may be said

that his indifference does not arise from the fact that he has but little actual desire for the labor-form in question, but from the fact that, compared with all of the things desired by him which he is able to buy, his desire for this particular labor-form is relatively small. If his ability to purchase were doubled, he might quickly purchase it, and his marginal labor-form would be worth approximately one-half as much. Men at the margin do not buy to the limit of their desires, but to the limit of their pocket books. This latter limit is determined by the buyers' success in the acquisition of property or money through industry for use in exchange. This leads us again to consider the fact that all production results from the application of labor-power, directly or indirectly, to land-forms; and that the disutilities of production are greater on some land-forms than on others.

Some buyer, therefore, must acquire his ability to purchase by the use of the poorest land-form necessarily used in his community. Since his disutility is greatest of all, and since the market price of labor-forms such as he produces is the same for all, he necessarily receives the least net value for his exertion, and must be indifferent, so far as effective demand is concerned, to more things in the market than any one else in that market. He must confine his purchases to things which are within the value of what he has to sell. His sales and his purchases as a whole are necessarily economic equivalents. The marginal buyer in normal conditions must be as well circumstanced as the marginal seller, and the probabilities are that he will be no better circumstanced. Both will produce their respec-

tive labor-forms upon the same economic margin, and their products will be economic equivalents.

After a given labor-form has been put upon the market its value is determined by the ability to purchase of a person who has produced another labor-form upon the same economic margin. The indifference of the marginal buyer determines market price, but this indifference is itself determined by the net value which may be acquired upon the economic margin. It is, therefore, to the interest of every producer that the marginal producers of all other labor-forms should occupy the best possible marginal land-forms. For the men at the margin will then produce with the smallest possible disutility and can sell their products at comparatively low prices and still acquire substantial net value. With this net value they will reënter the market as buyers and evince an effective demand for the labor-forms produced by others. And since the marginal producers become the marginal sellers and buyers, respectively, and so fix market prices for all, it follows that every man in normal conditions is directly interested in the welfare of those who produce at the margin.

As has been said, the problem of the producer is the acquisition of net value. Net value lies between two movable points, the point of positive utility and the point of exchange. If net value is to be increased, it must be by the lowering of the former, or by the raising of the latter point. We shall first consider the means by which the point of positive utility may be lowered in production. The disutilities to be reduced are those of matter, time, and space. The utilities by which the reduction may be

accomplished are those of labor-power, capital-forms, and land-forms.

The use of more effective labor-power in the form of skill or ability, or both, lowers the point of positive utility to the user. In competition with others in the open market he has by this means an advantage. This advantage he can enjoy so long as his skill or ability continues to be exceptional. But since all men naturally seek to satisfy their desires with the least exertion, the exercise of exceptional skill or ability upon the part of one man tends to incite all others to the acquirement of like advantages. And those who can not acquire skill or ability of the same kind and degree are moved to seek improvement along some other line. In this way a system of specialized industry develops, each man tending to do that which he can perform with the least disutility or the most effectiveness, knowing that by the exchange of labor-forms, in normal conditions, he can secure in satisfirms suited to his needs the full economic equivalent of his product.

The natural outgrowth of specialization in industry in which, at first, each man makes an entire labor-form of a particular kind, as a coat or an ax, is a system of division of labor in which each man makes but a part, and often but a very small part, of the completed labor-form. Thus in divers ways, the special skill of the individual is neutralized and the point of positive utility lowered by his competitors. And inasmuch as the lessening of the disutility of production tends to increase the amount of the product thrown upon the market, the anxiety of the marginal seller is increased and the point of exchange is there-

by lowered. In a free and open market the resulting net value to the individual producer tends to diminish, although the advantages of special skill are always great enough to encourage further individual development. Purchasers are always benefited by increased production brought about by superior skill, and the individual skill of the producer increases his net values without adding to the cost or other disutility of any other person.

Not only does the competition among men engendered by differences of skill and ability incite them to a further development of labor-power, but it leads them to supplement their labor-power by the use of auxiliary capital-forms. All that has been said with respect to the use of exceptional labor-power applies equally well to the use of capital-forms. This is naturally true, inasmuch as capital-forms represent the stored up utility of labor-power. The purpose of acquisition of capital-forms is the same as that of the acquisition of superior personal skill and ability; the results of the use of one and the exertion of the other are the same upon all the parties concerned.

The use of capital-forms in production tends to stimulate invention along all lines; it tends to specialize industry along the line of particular inventions; it tends greatly to the encouragement and development of division of labor; it tends to lower the point of exchange of the labor-forms produced, and tends to diffuse among purchasers or consumers many of the advantages of the use of auxiliary capital-forms in production through the socialization of utility.

If an individual producer makes use of pure capital-

forms to enable him to reduce the disutility of time, the special advantage gained by him is but temporary. In normal conditions all may use capital-forms according to their abilities, and the result is that the price of pure capital as expressed in current interest rates is fixed by the marginal user of pure capital who, for the same reason that he is the marginal buyer of labor-forms, is the man who produces at the margin. In normal conditions, the advantages of the use of capital-forms and of more effective labor-power are diffused by advancement in the industrial arts and by the lowering of prices and rates of interest, so that even the marginal producers share therein. The market prices of labor-forms and of interest rates, in such conditions, tend to a general level which reflects the economic welfare of the marginal pair. The disutilities of all men are reduced to the lowest limit and all utilities tend toward spontaneity.

There can be no production of labor-forms without the use of land-forms. A labor-form is in reality a land-form which has been so changed in form or position, or both, by the expenditure upon it of labor-power that its present distinctive utility is the result of the labor-power thus expended.

The utilities of land-forms for the production of labor-forms differ greatly. In some cases the difference is partly one of fertility, but in all cases there is a difference of site or locality with reference to market which manifests itself in value. The man who, in producing labor-forms, occupies a land-form which, with like fertility, is superior to that occupied by others in location, is enabled to place

his trade-forms upon the market with less disutility than his competitors. The same is true if his land-form, with like location, is superior to that of others in fertility. By selling at the market price, which is the same for all, he possesses an increment of net value which the others do not. The point of disutility is lowered as to him by virtue of the superior utility of his land-form.

In considering the cases of the use of exceptional labor-power and of capital-forms we found that the tendency is to induce all to increase their skill and ability, and to lead to the general acquisition and use of capital-forms. A man simply by acquiring superior skill can not long retain an advantage over his fellows. Others will soon reach his attainments, and if he still further increases his skill, the increased attainments of others will closely follow. All can not be equally skillful or powerful, nor can all acquire and use capital-forms to the same extent or with equal advantage. But a given expenditure of labor-power and a given use of capital-forms will bring the same reward if applied upon land-forms of equal utility.

The law of the market by which all obtain labor-forms at prices fixed by the marginal pair causes the benefits of extra production to be diffused in lower prices among all the buyers of the community. But if given labor-power and capital-forms are applied upon land-forms of unequal utilities, the resulting net values are unequal. And while the advantage of the use of superior land-forms tends to incite a desire in all other persons to acquire and occupy similar land-forms, there faces them the fact of nature that the number of such land-forms is limited, and it is

not within the range of human effort to increase them. Personal skill and ability may be increased until the results are marvelous; capital-forms may be multiplied until both in number and variety they are well nigh countless; but irrespective of improvements—and improvements are *not* land-forms—land-forms can not be created. They are the gift of nature, and any changes or improvements made upon them or out of them by labor-power are labor-forms. This distinction must be clearly seen and constantly kept in mind in all economic discussion.

With increase of population the competition for land-forms, instead of increasing their number, forces into use those of inferior utility, and this increases the value of superior land-forms. As the pressure of population increases the buyer of land-forms becomes, not indifferent, but anxious; while the seller's anxiety changes to indifference. The same cause—increase of population—which in the case of labor-forms tends to produce a general market with equality of net values, tends in the case of land-forms to a one-sided market, with inequality of net values.

It is necessary for us henceforth to distinguish between common and superior labor-power. The former is labor-power exerted with only ordinary skill, energy or ability, and without the use of auxiliary capital-forms. The latter is labor-power exerted with more than ordinary skill, energy or ability, or with the use of auxiliary capital-forms, or, commonly, with both.

We have already seen that auxiliary capital-forms are simply products of labor-power and represent its stored up utility. From another point of view the relation between

labor-power and capital-forms is equally plain. Labor-power includes not only the physical but the mental powers of man when irksomely exerted for the satisfaction of desire. Superiority in the exertion of labor-power is a matter of mind rather than muscle, and this is especially true when the object sought is the satisfaction of desire through the use of capital-forms. It is by the exercise of superior labor-power that capital-forms are thought out and produced in the first instance; by superior labor-power they are saved, collected and made ready for future use, and by superior labor-power they are finally put to use. The production, conservation and use of capital-forms always involve an exercise of personal skill, energy and ability. In so far, therefore, as the use of capital-forms is merely auxiliary to labor-power and does not involve a reduction of the disutilities of time it is merely an exercise of superior labor-power.

Common Labor-Power is labor-power exerted with only ordinary skill, energy or ability, and unattended by the use of capital-forms.

Superior Labor-Power is labor-power exerted with more than ordinary skill, energy or ability, or attended by the use of auxiliary capital-forms, or both.

In ordinary circumstances the producer upon the economic margin exerts common labor-power. Upon the margin, also, is found a dearth, if not an utter absence of capital-forms.

Let us assume that on the marginal land-form of a given community a day's common labor-power will produce a labor-form of the value of one dollar and fifty cents,

and that the disutility of such labor-power is represented by fifty cents. Then the net value of such day's labor-power is one dollar. Upon another and superior land-form in that community labor-power of like disutility will produce two labor-forms of like kind as the first, and hence, of the value in that market of three dollars. Here the net value is two dollars and fifty cents. When the two occupants dispose of their products each pockets his net value, and one acquires two and a half times as much as the other with the same disutility. The principle underlying this illustration is universal in its operation. The market price of any product is fixed by the marginal pair and, in normal conditions, is the same for all sellers in a given market. The producer upon a marginal land-form is the marginal seller, and a producer of some other labor-form upon another marginal land-form is the marginal buyer. In the interchange of the market the net values of all marginal producers are substantially equal; while above the margin the net values of different producers, in normal conditions, vary according to the efficiency of their labor-power, their use of pure capital-forms, and the utilities of their respective land-forms. Through all net values, wheresoever produced, there may be drawn a line, horizontally as it were, which will separate those values which are only equivalent to the marginal return to common labor-power from those which exceed it. The former are marginal and the latter differential net values.

Marginal Net Values are net values which are only equal to the net marginal return to common labor-power.

Differential Net Values are net values which exceed the net marginal return to common labor-power.

Marginal net values are economic equivalents and, so far as they are received, all men fare alike. Beyond these lie differential values of various kinds. The present day struggle in the industrial and commercial worlds is for the attainment of differential net values. Although these values assume many different forms their sources are but five; the use of superior labor-power, the use of capital-forms, the use of superior land-forms, the possession of franchises, and the possession of monopolies. These five sources result respectively in differential net values of five classes: differential labor values, capital values, land values, franchise values, and monopoly values. This classification is of great importance, as upon it is based the conclusions of Economics upon the ultimate question of that science—the question of the distribution of values.

Differential Labor Values are differential net values which distinctively result from the use of superior labor-power.

It must be remembered that, by definition, superior labor-power includes all labor-power when assisted by the use of auxiliary capital-forms. It will be seen, moreover, that all capital values are differential, they being in excess of the marginal return to common labor-power.

For convenience we shall sometimes omit the words "net value" in connection with the term "differential," as the meaning will always readily be understood. Thus the term "labor differential" will be understood to mean differential net value resulting from the use of superior labor-

power; "land differential," differential net value resulting from the use of a superior land-form, etc., thus bringing into use without further explanation the terms "capital differential," "franchise differential" and "monopoly differential," all of these terms referring to differential net values and indicating their sources.