ECONOMICS

AN ACCOUNT OF THE RELATIONS BETWEEN PRIVATE PROPERTY AND PUBLIC WELFARE

BY

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G. P. PUTNAM'S SONS

NEW YORK
27 WEST TWENTY-THIRD STREET

LONDON
24 BEDFORD STREET, STRAND

The Knickerbocker Press

1906

PREFACE.

THIS book is an attempt to apply the methods of modern science to the problems of modern business.

Within the last thirty years there have been important changes in economic theory. One school of investigators has employed the principle of natural selection to explain the development and present shape of industrial ideas and institutions. Another school has used some of the results of recent psychological study to account for the actions of individual men in pursuing their own interests under the ideas and institutions thus developed. Both these things have combined to make the economic science of the present day very different, in its methods of analysis and powers of explanation, from that which formed the basis of John Stuart Mill's *Principles of Political Economy*.

Meantime new problems have been developing in modern business life; most conspicuously, perhaps, in connection with large investments of capital in factories and railroads. The time which elapses between the rendering of labor and the utilization of the products of labor is now so long that the work of the speculator has far greater importance than it did a generation ago. The size of the units of capital is so large that free competition often becomes an impossibility, and theories of economics which are based upon the existence of such competition prove blind guides in dealing with modern price movements. We have to study, far more closely than we once did, the effect of combinations upon the interests of the consumers on the one hand and the laborers on the other; to examine the results of meeting organizations of capital with organizations of labor, and of controlling them by special legislation or by direct government ownership. We have to deal with socialism, not as the theory of a few visionaries who try to destroy property rights, but as a series of practical measures urged by a large and influential body of men who are engaged in extending the functions of government.

There is no general work in the English language which deals at all comprehensively with these problems of modern economics. As long as Marshall's book remains incomplete there is nothing which attempts to do for the readers of to-day that which Mill did with such signal success for those of half a century ago. The field thus left open I have tried to cover to the best of my ability in the book now offered to the public. It is written for students—that is, for those readers who are willing to give the time and trouble necessary for understanding subjects which are at once important and perplexing. In a professional experience which has been about equally divided between the editorial room and the lecture room, I have generally found that, barring certain necessary differences in form of presentation, what is good teaching in one place is good in another. I have attempted to make the book available for students in the broad sense of the term as well as in the narrow sense; for those who are engaged in doing the world's work as well as for those who are preparing themselves to do it.

I have put things as plainly as I could; but there are some parts of economics where no amount of effort by an author will relieve the reader of the necessity of doing independent thinking on his own account. There are many problems of business life which are so complicated in reality that it is unwise to treat them as if they were simple. There is no foundation for the popular belief that questions of money, of the tariff, or of the relations between labor and capital, are easy to understand if properly presented. The simplicity obtained by looking at them from one side only is apt to be secured at the expense of thoroughness and too often of candor.

Dealing as the book does with matters of active controversy, sometimes clouded by party loyalty or by personal interests, I am far from expecting everyone to agree with its conclusions. But I trust that everyone will recognize my intent to state both sides of disputed questions as clearly as possible, and to treat the controversies as an arbiter rather than as an advocate, even in those cases where the arguments on one side have seemed decidedly stronger than those on the other.

Where these controversies involve important differences of legislative or commercial policy, the arguments have been presented in the text of the book; where they involve differences of explanation or theory rather than of practice, they have been outlined in the foot-notes. These notes are not to be regarded as exhaustive discussions of economic theory, but as summaries of opinion on controverted points, which may serve to pave the way for detailed study on the part of those who are interested to pursue the subject farther than the limits of the present book will allow.

Without going into the more complicated details of modern mathematical economics, I have occasionally employed diagrams in cases where they seemed necessary for a thorough explanation of the subject. For most people who are likely to use this book I am confident that time spent in studying the diagrams will be more than repaid. I have used one of Cournot's methods of presentation, not because it is any better than those employed by his successors, but because it is simpler.

The separation which is made in so many modern books between economic theory and economic practice seems to me a mistake. I have tried to keep theory and application together; and, just as far as possible, to make the study of practical problems a means of developing and explaining scientific theories. Where this method can be employed it gives increased interest to the study of economics; and, what is still more important, it guards us in some measure against the danger of disproportionate and one-sided deductions from certain parts of economic science, to which the student is always liable if he develops his theory first and makes its practical applications afterward. No writer on economics has had as wide an influence as Adam Smith; and while Smith's power was in large measure due to those personal qualities in which he stands pre-eminent, it was in perhaps equal measure due to his habit of keeping theory and practice closely combined. People studied his reasoning carefully because it was applied to things which they really wanted to understand, and was constantly supported by an appeal to the observed facts of business life.

I am very far from trying to substitute economic history for economic theory. In a book like this, the explanations are the important thing; the presentation of facts is not an end in itself, but a means of making the explanation clear and comprehensive. The reader will be disappointed if he expects to find a complete and well-ordered history of the financial and industrial policy of various nations. For such a history, he should look to the various works that deal with the special departments of finance, commerce, or industry. A work like this is designed to enable him to make use of such books, not to dispense with them.

In thus connecting theory and practice and giving due prominence to the work of the speculator in modern industry, I have found myself obliged to abandon the time-honored division of the science into the departments of production, distribution, exchange, and consumption. The subjects which are commonly treated under the head of production are chiefly found in chapters ii, v, and vi; those which are commonly treated under the head of exchange will be found in chapters iii, iv, vii, and viii; while the last six chapters deal principally with questions of distribution, and incidentally with those of consumption.

My obligations to previous writers, in general and in detail, are something which I cannot possibly express in full. When a scientific principle is specially identified with the name of some particular author, I have taken pains to credit it to its proper source—especially in the case of work which, from its newness or for any other reason, has not become part of the general stock of economic discussion. In other cases, I have limited my citations to those books which are likely to prove most accessible and useful to the reader who desires to pursue special subjects farther than can be done within the limits of a general text-book. The titles of such books have been for the most part placed at the head of the chapters bearing on the specific subjects with which they deal; thus forming a bibliography which, while very incomplete, may yet prove serviceable to some readers. Other things being equal, I have included works which are written in English, rather than in foreign languages, and have cited English translations rather than originals.

I am indebted for material aid to my colleagues Messrs. Irving Fisher and J. C. Schwab; and still more to my wife, on whom I have depended both for criticism and for assistance at every stage of the work.

YALE UNIVERSITY, NEW HAVEN,
March, 1896.

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AN ACCOUNT OF THE RELATIONS BETWEEN PRIVATE PROPERTY AND PUBLIC WELFARE.

CHAPTER I.

PUBLIC AND PRIVATE WEALTH.

Preliminary Definitions—History of Economic Science—Individualism and Socialism—Standards of Public Good.

Luigi Cossa: "An Introduction to the Study of Political Economy"; translated by L. Dyer. London, 1893. An admirable history and bibliography. Its title is a little misleading, as the book is of more use to advanced students than to beginners.

J. N. Keynes: "The Scope and Method of Political Economy." London, 1891.

Among the many critical histories of socialism the most useful is perhaps that of John Rae: 2d ed., London and New York, 1891. A good presentation of the ideas and aims of moderate socialists is given in "Fabian Essays in Socialism"; edited by G. B. Shaw. London, 1890. New York. 1891. For a brief statement of extreme individualistic views see W. G. Sumner: "What Social Classes Owe to Each Other" New York, 1883: for a fuller development, W. Donisthorpe: "Individualism" London. 1889.

§ 1. IN the Middle Ages questions of industrial policy were treated by most writers as incidental details in a system of theology or of law. But in the sixteenth and seventeenth centuries people began to separate the study of matters affecting a nation's commerce and finance from the more general consideration of its politics or its morals, and to develop an art of *political economy* which should guide the statesman in his efforts to promote public wealth, as the arts of personal and industrial economy guide the individual in his pursuit of private wealth. In their attempts to formulate the rules of this art, writers of the eighteenth century discovered certain laws which are the basis of the modern science of *economics*.

§ 2. But what is public wealth?

In the first place it is *not* the same thing as government property. It is something far wider. The individual citizens are a part of the nation just as much as the government is; their property, no less than that of the government, must be included in any rational attempt to estimate the industrial resources of the community. Waterworks and railroads owned by private companies are just as much part of the public wealth as are municipal waterworks or national railroads. Whether the public wealth is likely to be increased in any particular case as an indirect result of making more of it public property, can only be decided by examining the circumstances of that case. It will depend upon how well such property is managed. If the agents of the government are disinterested and wise enough, the public property will probably be made to render more service than private property; if they are not disinterested and wise, it will probably be made to render less service. In the latter case, the "nationalization" of a piece of property will tend to diminish the public wealth instead of increasing it.

§ 3. Nor can we estimate the public wealth of a nation by taking the sum of the property of its individual members. Many things like pure air and abundant water supply, which form most valuable elements of public wealth, are hardly counted as private property at all. A property-right is a title to part of the public wealth; but the amount of these titles outstanding forms no indication of the amount of enjoyment which the public can command. The exchange value of a property-right is connected with its exclusiveness. It depends not so much upon the enjoyment which the property can be made to afford as upon the completeness with which its owner can monopolize that enjoyment for himself or his friends to the exclusion of the general public.

The total value of these rights of exclusion does not necessarily correspond in any way with the resources available for the public. It is quite misleading to measure a nation's wealth by a census of the property of its members. Property-rights may be created without increasing public wealth or destroyed without diminishing it.[1] Under the English system of enclosures, land which had formerly been free to all the public was made the subject of private ownership. By this practice there was a creation of property-rights without production of wealth. The landlords now had something valuable which could be bought or sold and which did not exist before; but the wealth of the community was in no wise increased. There were no more means of enjoyment in existence than there had been previously. On the other hand, the abolition of slavery involves a diminution of private property without a corresponding loss of public wealth. It sweeps away an enormous mass of exchangeable wealth of individuals. Systems of compensation to the owners of such wealth, though they may shift the burden, cannot annul the loss. Yet such a loss is simply a destruction of titles and transferable rights. It does not destroy means of happiness. The wealth of the community, judged by public standards, is as great after abolition as it was before.

A curious instance where loss of private wealth went hand in hand with gain in public wealth is furnished by the history of the waterworks in the city of Venice. For-

[1] But see § 12.

merly water was so scarce that it commanded a price, and a good well was a source of considerable private wealth to its possessors. But when an abundant supply of water was furnished at slight cost, the commercial character of the water changed, and it could under all ordinary circumstances be had for nothing. But the very abundance of water, which makes it commercially worth nothing, is an element of public wealth; and the scarcity which makes it a valuable article of property is a symptom of public poverty.

The high price of real estate in New York City, which forms an enormous item of private wealth, is partly connected with causes that promote the public wealth and partly with those that antagonize it. So far as it is due to the excellence of the harbor and other things which make New York an admirable trade centre, it connotes a public good. So far as it is connected with the narrowness of Manhattan Island and other things which limit the number of people who can most conveniently avail themselves of these privileges, it connotes a public evil.

§ 4. Improvements in the arts have had a beneficial effect on the public wealth of nations wholly out of proportion to any gains which they have enabled individuals to appropriate for their own exclusive advantage. This benefit cannot be measured in money. If an improvement enables the same number of laborers to produce twice the amount of useful products, it may happen that the price of each product will fall one half. In this case there is no apparent gain in private wealth; but if the article is a really useful one, there is a great gain in public wealth and social well-being through its increased abundance.

The true basis for an estimate of a nation's wealth is to be found in the enjoyments of its members. The wealth of a community does not depend on the money value of its means for such enjoyment, nor even on their physical amount, but on their utilization. Public wealth is "a flow and not a fund"; it is to be measured as *income* and not as *capital*.

§ 5. The distinction between capital and income as *modes of measuring*[1] resources is almost as important as the distinction between public and private wealth, and is quite as much neglected in current economic discussion.

If a man for a series of years earns $10,000 a year and spends it all, he is always rich in one sense, and never in another. He has much income and no capital—unless we stretch the idea of capital wide enough to include the skill which enables him to earn the large income. In like manner a nation whose members habitually produce much and consume much, will have large enjoyments and small accumulations. Measured as income its public wealth will be large; measured as capital it will be small.

The distinction between capital and income is not due to a difference in the things themselves, but to a difference in methods of measurement. The capital of an individual or a community is an amount of wealth in existence *at* a particular moment. The income of an individual or a community is an amount of wealth obtained *during* a specified period. Capital is being constantly converted into income and income into capital. But capital, under all times and conditions, is measured as a quantity, while income is more properly measured as a rate. Capital is a static conception, independent of time; income a dynamic conception involving the time element.

We see this distinction illustrated in the balance sheets of any large industrial enterprise. The capital account of a railroad company gives the property which it owns at a particular moment—road, equipment, land,

[1] For the development of this distinction, which involves a combination of the ideas of Knies and Newcomb, I am much indebted to my colleague Dr. Irving Fisher.

buildings, stocks of other corporations, accounts payable, materials and cash on hand. The income account gives its earnings during the year preceding—from passengers, freight, mail, express, and other sources. The two accounts deal with the same road, but with a totally different set of items; and while the amount of the one has a great influence on the other, there is no direct connection between the two.

§ 6. As a matter of pure mathematics, a quantity of capital and a rate of income should be as incommensurable as a line and an angle. In practice, however, we are constantly comparing the two. The rate of interest furnishes a basis on which we compare and exchange capital and income with one another. If we say that the rate of interest is five per cent. we mean that we regard an income of five dollars a year as equivalent to a capital of a hundred dollars. The causes which determine this basis of comparison are extremely complicated; they are treated at length in chapter ix.

§ 7. Of the two methods of measuring wealth, the income standard is of more primary importance; that of capital is secondary. Accumulations of capital have their chief usefulness as means of producing income. For this reason the term capital is confined in ordinary usage to things which are valued in connection with productive industry. As thus limited, the word capital, in its public sense, means wealth used for producing more wealth. A nation's capital consists mainly of food, necessary clothing and shelter, materials, machinery, means of transportation, and instruments of exchange. It is impossible to say just which objects are capital and which are not. It is very far from being possible to form an accurate money valuation of the amount of such capital. On the other hand, private capital is property used for acquiring more property. We can tell with substantial accuracy what property each individual is using as capital, and can estimate its money value very closely. Just as the acquisition of property is usually attended with production of wealth, so the investment of property as private capital is usually attended with accumulation of public capital. But there are cases where one takes place without the other. The burglar's outfit or the roulette table of the gamester is private capital—property used for acquiring more property; but it certainly is not wealth used for producing more wealth. On the other hand, the pioneer in science often adds greatly to the wealth of the country by the use which he makes of existing wealth; but the cases are very rare where he increases his property in so doing, or where the attempt to acquire property is a dominant motive in directing his action. Public capital is not the sum of the private capital of individuals, any more than public wealth is the sum of individual property rights. Public capital consists of useful things; capital *goods*, as Clark calls them. Private capital consists of titles and rights to a part of those things.[1] The increase or diminution of such titles is not synonymous with an increase or diminution of the things themselves.

§ 8. The relations between the different forms of wealth may be summed up as follows:

[1] Some economists, who see that there is a distinction of this kind, fail to recognize its true nature. Both Marx and Clark, for example, speak of capital as a permanent thing, independent of the transmuted and changing goods of which it is at each moment composed. But Clark regards this thing as permanently productive and its increase as normal and natural; while Marx regards it as an unproductive dead-weight, whose increase is a spoliation of the laborer. But what is this thing which is permanent while the goods change? It is nothing else than the titles to property in process of industrial transmutation; titles which carry with them the control and direction of the process. Whether the existence of these titles increases the production of the community depends on the wisdom with which the control is exercised. They are not necessarily productive as assumed by Clark; still less are they necessarily unproductive as held by Marx. They are more likely to be productive than not, because our industrial arrangements are such that, if men fail to use their capital for things the community needs, they lose money and are eliminated from control of the next period of production.

Wealth in the public sense consists of all means of enjoyment, whether they have a commercial value or not. The use obtained from these things in a given period is the public income for that period. The amount in existence at any given moment is the public capital at that moment in the broadest sense of the word. But it is customary to confine the term capital to wealth which is actually used for producing more wealth.

Wealth in its private sense, better designated as property, consists of rights to part of the public wealth. The amount of such rights which accrues to any person in a given period is his income for that period. The aggregate amount which he has at any moment is his capital in the broadest sense of the word. But here again it is customary not to apply the term capital to a man's whole property, but to confine it to that part which he uses as a means of acquiring more property.

§ 9. These distinctions are something which the student of economics must master at the very outset. This is not so easy as it appears. The political economists of the sixteenth, seventeenth, and early part of the eighteenth centuries habitually confused public and private wealth. The theories of that time constitute what is known as the *mercantile system* of political economy, because they involve the idea that a nation should strive to make money in the same manner as an individual merchant. Just as a prudent business man so manages his affairs as to produce more than he consumes and make money by the excess of his sales over his purchases, it was thought that a prudent statesman should so manage the affairs of the nation as to make it produce more than it consumes and export more than it imports. It was considered by many that this excess of exports over imports constituted an index of national prosperity and the true measure of the increase of national wealth. Just as the money which an individual has made represents his power of industrial