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TAXATION AND WELFARE



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TAXATION AND WELFARE

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TO THE MEMORY OF MY SISTER,
EMELYN FOSTER PECK

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TAXATION AND WELFARE

PART I

THE SCOPE OF PUBLIC EXPENDITURES

TAXATION AND WELFARE

CHAPTER I

INTRODUCTION

FOR the first time in our political history taxation bids fair to be the outstanding political issue of a presidential campaign. This is due, doubtless, to the increase in tax burden and the corresponding increase in scope of the functions of government. Ten years ago the expenditures for government, federal, state, and local, were probably under six *per cent.* of the national income. Today they are approximately twice that amount. Federal taxes are steadily declining, but this decrease is being offset by rapid rise in the expenditures of states and municipalities.

Moreover, the issue over surtaxes has brought into relief the problem of distribution in the form of the conflict of interest between a few wealthy men and the rest of the community. Unfortunately the issue tends to be fought out rather by the weapons of political propaganda than by impartial scientific analysis. All sorts of bewildering assertions

and counter assertions are being made. The appeal for tax reduction finds much support in our traditional American individualism. It is advocated, also, on its alleged economic benefits to the mass of the people. President Coolidge is quoted as advocating tax reduction "as the means of enlarging the reward of every one who toils." He also tells federal executives in session "that there is scarcely an economic ill that is not traceable to taxes." Secretary Mellon asserts that high surtaxes are paid by the man of moderate means in high rents and the general price level. On the other hand, Brigadier General John Hartman Morgan writing in the *New York Times* of January thirteenth avers that Germany's present financial condition is due primarily to her neglect to tax war profits.

Most current discussions of taxation in the United States seem to the writer futile or misleading for two main reasons: Taxation is considered as a problem apart from the correlative public expenditures; and there is practically no reference to the writings or opinions of scientific authorities on public finance. In view of this current confusion an attempt at an impartial and scientific survey of the problem of taxation in its financial and social relations may not be inappropriate.

The study falls into two parts, the first dealing with the problem of the desirable amount of taxa-

tion, or the scope of public expenditure, the second dealing with the distribution of the tax burden. The method is mainly theoretical, although there is considerable indebtedness to historical and statistical material. The writer believes that the principles advanced or suggested are in line with those now held by a great majority of scientific students of public finance. The last chapter alone is an attempt at a constructive theory; but that, it will be seen, is in harmony with the trend of thought in the rest of the work.

CHAPTER II

THE STATE AND INDIVIDUAL LIBERTY

THE state is now generally considered as an organization that has grown up experimentally to satisfy human needs. As thus viewed, it is not a sacred or perfected institution handed down from our fathers, but a collective experiment that is still going on. The perfect state, the ideal toward which the actual states may be approaching, is "mankind viewed as an organized unit." The developing or imperfect state is "a particular portion of mankind viewed as an organized unit."¹ Hobhouse distinguishes three stages in the development of the state according as it is based on kinship, on authority, or on citizenship.² The first has to do with the conjectural early patriarchal organization of society. The other two are of contemporary or recent significance. The era of authority in the state corresponds to the era of monarchical or autocratic government, which received its most extreme theoretic justification in the doctrine of the divine right of kings and in the German organic theory of the state, the idea that the state constituted a super-

¹ Willoughby, W. W. *The Nature of the State*, 1907, p. 16.

² Hobhouse, L. F. *Social Evolution and Political Theory*, 1911, Chapter VI.

human organism, an end to which the individual citizens were the means. The collapse of German imperialism has left the more individualistic theory in possession of the field. The state is an organization of individuals who have learned how to co-operate to satisfy wants that could only be satisfied or could best be satisfied by group action. Individuals, then, have certain wants. Some of them can be most conveniently satisfied by individual effort and initiative, some by means of voluntary coöperative associations, and some through the agency of that most comprehensive form of social coöperation that we call the state. The wants of the first two classes may be called private wants, the wants of the third, public wants. Flora classifies the wants of men into three groups,³ individual, collective, and public. The principle of classification is that of least means or minimum cost. Certain wants, or most wants under certain conditions of political, social, and industrial evolution can be satisfied with less effort by the industry and initiative of the individual man,—such as is illustrated in J. Russell Smith's account of the life of the early New England farmer,⁴—or by the business enterprise that takes the form of the individual proprietorship. Other wants, or the same wants under different conditions, may be more economically satisfied by means of voluntary associations, profit-

³ Flora. *Manuale della Scienza delle Finanze*, 1921, pp. 1-3.

⁴ *Commerce and Industry*, pp. 17-21.

taking or non-profit-taking, such as a modern business corporation, a religious organization, or a privately endowed university. Other wants may be most economically satisfied by public or state co-operation. To classify specific wants under these three heads, or to indicate how certain wants would be classified according to different political, social, and economic conditions is the problem of the first part of this essay.

First as to political conditions. If the head of the state is an hereditary monarch, irresponsible, extravagant, and inefficient, like the Stuarts in England, we would expect the more intelligent and public spirited citizens to disapprove of the extension of public activities. Under such conditions, an extension of collective action would be regarded as inimical to personal liberty. And it would involve an increase of economic waste. Hence, we find that the older school of English liberals was for restricting the sphere of the state.

In the case of an efficient monarchy, like that in Germany, where the general welfare was promoted through an efficient governmental organization of highly trained administrators and experts, and where science and education were under governmental control, the development was in an opposite direction. State activity was held to be beneficial and productive. And political science went to the extreme of the theory of the super-state. If any one thinks that abstract theory has

little practical bearing, he may well reflect on this situation; for the German theory that everything the state did was productive, and that the state as a superorganism had an end beyond that of the welfare of the citizens, was probably one of the potent causes of the world war.⁵

With the decay of the principle of authority as the basis of political organization, and the rise of the principle of citizenship, in other words, with the rise of democracy, the attitude of men toward the extension of public activities tends to undergo a change. As an inherited institution into which the individual is born, the state still has the power of compulsion; but with the growth of democracy there comes the power of modifying the nature and scope of state activity through re-interpretation of constitutional provisions, amendment of the constitution by popular vote, or through the extension of government bureaus and public commissions as experience seems to warrant. As men realize their citizenship and their responsibilities, and the advantages they derive from state activity, the compulsory phase of public duties, such as the payment of taxes, tends to recede, and there arises the notion of voluntary or self-taxation on the part of the citizens. The functions of the state become increasingly an expression of voluntary political activity; the state becomes a popular instrument for promoting the general economic and social wel-

⁵ Cf. Hobhouse, L. T. *The Metaphysical Theory of the State*.

fare. Hence, the growth of democracy has caused an expansion of state activity. "It is the democratic element in politics that urges the development of state activity. If we hear protests on behalf of the liberty of the individual, it is generally from the lips of some one who is resisting change."⁶

The forces that tend to resist an extension of the scope of the state are the ideal of individual liberty, or the desire to limit the external restraints exercised by the government, the conservative disposition due to mental inertia or the disposition to accept traditional ideas, and individual self-interest, which operates in the case of a few who possess privileges or vested interests in the older order.

The most desirable ratio of public activity to private activity cannot, of course, be formulated mathematically. The state is an experiment that is still going on. The conditions that should govern the ratio of public to private activity are political, social, and economic. The economist is likely to think that in the long run the forces of political and social life are the product of economic conditions. In other words, semi-unconsciously or sub-consciously the force of economic conditions, the product of the physical environment and the state of technological culture, alters social and po-

⁶ Hobhouse, L. T. *Social Evolution and Political Theory*, 1911, p. 167.

litical ideals, and moulds them into harmony with the trend of economic change. In that case, political, social, and economic principles might ultimately be harmonized under the concept of the general welfare. But for the time being, under the force of habit and tradition and mental inertia, the "lag" between environmental and social change, we may isolate political, social, and economic forces.

From the political point of view the principle that has been dominant in determining the relation of the state to the individual has, among English-speaking peoples, been the principle of liberty. This it will be our purpose to define. Political freedom is to be distinguished from individual freedom. "The former refers to the extent to which the people participate generally in the management of the State, or at least dictate the manner in which its powers shall be exercised. The latter has to do with the extent to which private rights of life, liberty, and property are secure." ⁷ Willoughby goes on to show how the advance of civilization has been accompanied by the evolution of individual rights, so that there has arisen "a struggle between authority and liberty—a struggle that has continued and will probably continue throughout all history." ⁸ The opposition of the individual to the state, as here assumed, would seem to be rather due

⁷ Willoughby, W. W. *The Nature of the State*, 1896, pp. 312-13.

⁸ *Ibid.*, p. 312.

to the limitation of political liberty than to any innate antipathy of the individual to the state. The opposition is between liberty and authority, not between liberty and citizenship. As long as the individual must submit to an hereditary or external government, there exists the basis for an opposition between the individual and the state. But grant complete political liberty or universal adult suffrage and government based on public opinion, and much of this opposition will cease.

Granting, then, complete political freedom, to what extent is individual liberty compatible with an extension of public activity? This problem requires a definition of the concept of individual liberty. Baldwin in the *Dictionary of Philosophy and Psychology* defines "freedom" as follows: "In political and ethico-political reasoning, different meanings of freedom may be distinguished: (a) a nation is said to be free when not under the rule of another nation, or when not subject to a tyrant who is above law; (b) as referring to the relations of citizens or people to the state. Freedom (a) sometimes implies full political rights: a man is free who has the 'franchise'; this signification is called political freedom. This is commonly interpreted as implying the absence (so far as possible or expedient) of interference with the individual by the Government. And this meaning is connected with the political ideal of individualism: that the liberty of any in-

dividual should be restrained by the government only in so far as necessary to prevent his interference with the like liberty of others. (Reid; Spencer.) According to another view, which also takes freedom as its ideal, this freedom must be not merely negative (freedom from interference), but positive, and therefore implying a social order which provides, for the individuals, opportunities for cultivating and exercising their capacities." Individual liberty, then, implies negatively, freedom from external restraint, and positively, opportunity for self-expression or self-realization.

To what extent is there real conflict between liberty and restraint? "This antithesis between the rights of the individual and the welfare of the state, between liberty as such and restraint as such, appears to be a false antithesis. To begin with, if liberty is a social conception, there can be no liberty without social restraint. For any one person, indeed, there might be a maximum of liberty if all social restraints were removed. Where physical strength alone prevails the strongest man has unlimited liberty to do what he likes with the weaker; but clearly, the greater the freedom of the strong man the less the freedom of the weaker. What we mean by liberty as a social conception is a right to be shared by all members of society, and very little consideration suffices to show that, in the absence of restraints enforced on and accepted by all mem-

bers of a society, the liberty of some must involve the oppression of others. Just as the liberty of the strong man to assail the weak destroys the liberty of the weak man to call his body his own, so—to take an instance from our contemporary experience—the liberty of the motor-car to use the roads may, and often does, go so far as to impair the liberty of any other class of vehicle or the liberty of pedestrians to use the same road for their purposes. Excess of liberty contradicts itself. In short, there is no such thing; there is only liberty for one and restraint for another. If liberty then be regarded as a social ideal, the problem of establishing liberty must be a problem of organizing restraints; and thus the conception of a liberty which is to set an entire people free from its government appears to be a self-contradictory ideal.”⁹

Liberty, then, involves restraint. On what grounds is this restraint to be justified? On the grounds of individual rights. And individual rights are the correlatives of duties. Rights and duties together make up the moral order of society. Each duty is that which is expected of the individual. Each right is that which the individual expects of others or of society at large. A right is an expectation which would meet the approval of some impartial third person.¹⁰ To extend indi-

⁹ Hobhouse, L. T. *Social Evolution and Political Theory*, 1911, pp. 189-90.

¹⁰ *Ibid.*, pp. 196-7.

vidual rights and to define them clearly is the function of the state. And the success with which it performs this function will depend upon the completeness and efficiency of social coöperation. This implies the organization of public services by the State, the creation of the conditions of individual development and welfare.

According to Professor Nitti¹¹ the state is not an antithesis to the individuals: it is a synthesis of them. It does not diminish individual liberties, because there are certain liberties that become possible only under the conditions of social coöperation. It increases liberty because it creates the conditions under which liberty can find expression. If, then, the old opposition between liberty and authority has lost under the growth of democratic government its former validity; if liberty on the positive side expands with the development of individual rights, and the state as an institution makes for the expansion of these rights, there may be no opposition, but rather a harmony between individual liberty and the intelligent extension of public activities. And, in this line of reasoning, the classification of the problem would seem to belong to economics; for individual rights are essentially demands for the satisfaction of individual wants.

Opposed to this social point of view is the opin-

¹¹ Nitti, F. S. *Principi di Scienza delle Finanze*, 1907, p. 24. Cf. also the article "Mr. Hoover's Individualism," *The New Republic*, Feb. 21, 1923.

ion of the individualists, such as Herbert Spencer and his followers. They hold that government in its restraint of the disposition of the strong to prevail over the weak is obviating the beneficent law of natural selection, which can operate only under the conditions of free competition. In fact one French economist went so far as to assert that the three forces that have been most productive of human progress have been cannibalism, war, and competition; and that the forces most obstructive to progress are coöperation, protective tariffs, and the development of governmental control.

This conflict of ideas takes one into the field of sociology. Professor Lester F. Ward¹² has shown that natural selection is prodigal and wasteful. The bulk of things subjected to this process are not selected and perish. This is the animal economy that works by the law of competition. Human intelligence is teleological and economic. By means of artifice and invention it short-circuits the slow, blind physical forces of competition. In the human economy the principle of progress is intelligent coöperation.¹³

The sentiment of individualism which is still strong among staid American agricultural and village communities, and among many prominent

¹² *The Psychic Factors in Civilization.*

¹³ "The Psychologic Basis of Social Economics," *Annals Am. Acad. Pol. Sci.*, Vol. 3, 1892-93. Cf. also Willoughby, W. W. *The Nature of the State*, 1896, pp. 320-337.

industrial leaders and politicians has many social and political connections with the past. The following is a summary of Dean Pound's explanation of our traditional American individualism. "Seven factors of the first importance appear to have contributed to shape our American common law. These are: (1) An original substratum of Germanic legal institutions and jural ideas; (2) the *feudal* law; (3) Puritanism; (4) the contests between the courts and the crown in the seventeenth century; (5) eighteenth-century political ideas; (6) the conditions of pioneer or agricultural communities in America in the first half of the nineteenth century, and (7) the philosophical ideas with respect to justice, law, and the state that prevailed in the formative period in which the English common law was made over for us by American courts. All but one of these made strongly for individualism."¹⁴ The high-water mark of individualism in American law was reached in the last quarter of the nineteenth century. Before that signs of a reaction began to appear. The basis of our American law is twofold. On the one hand the substratum is Germanic, which is the basis of what is called the strict law. On the other hand, it is Roman, the basis of equity or natural law. Individualism is characteristic of the strict law. It holds that men of mature age must take care of themselves, and be re-

¹⁴ Pound, Roscoe. *The Spirit of the Common Law*, 1921, pp. 14-15.

sponsible for any contract into which they may enter.¹⁵

The one factor of American common law that did not make for individualism was the feudal law. Here the idea was relationship rather than contract. A man's rights were determined by what he was. The relationship of lord and tenant determined certain definite rights and obligations. The analogy of this feudal relation, suggesting the conception of rights, duties, and obligations arising, not from express undertaking, the terms of any transaction, but as the incidents of a relationship, was the first solvent of individualism in our law. Roman law, on the other hand, aims to effectuate the will of the actor.¹⁶ It emphasizes contract as the expression of the individual will. In the nineteenth century the Germanic, feudal, English contribution to the common law was in disfavor. Attempts were made to Romanize the law. The Romanist idea of contract became the popular puristic idea. This was furthered by the political interpretation of jurisprudence and of legal history, which found the key to social and legal progress in an unfolding of the idea of individual liberty in the progress of political institutions.¹⁷ It was furthered also by the generalization of Sir Henry Maine that the evolution of law is a progress from *status* to contract.

¹⁵ *The Spirit of the Common Law*, 1921, p. 19.

¹⁶ *Ibid.*, p. 21.

¹⁷ *Ibid.*, p. 28.

"But in truth the dogma of Sir Henry Maine is a generalization from Roman legal history only. It shows the course of evolution of Roman law. On the other hand it has no basis in Anglo-American legal history, and the whole course of English and American law today is belying it, unless indeed, we are progressing backward. Taking no account of legislative limitations upon freedom of contract, in the purely judicial development of our law we have taken the law of insurance practically out of the category of contract, and we have established that the duties of public service companies are not contracted, as the nineteenth century sought to make them, but are instead relational; they do not flow from agreements which the public servant may make as he chooses, they flow from the calling in which he has engaged and his consequent relation to the public. What is this in each case but the common-law idea of relation, a relation of insurer and insured and of public utility and patron, and of rights, duties and liabilities involved therein?"¹⁸

"Even more significant is the legislative development whereby duties and liabilities are imposed on the employer in the relation of employer and employee, not because he has so willed, not because he is at fault, but because the nature of the relation is deemed to call for it."¹⁹

After explaining in detail the various theories

¹⁸ *The Spirit of the Common Law*, pp. 28-29.

¹⁹ *Ibid.*, p. 29.

and forces that contributed to the individualistic bias of juristic practice, Dean Pound goes on to show how under the force of judicial empiricism the theory of law-making has come to be conceived as a social function. In acquiring new premises the courts have tended to reëmphasize a traditional factor in Anglo-American law that had come to be neglected, and so shifted the emphasis from the individualist justice of the nineteenth century to the social justice of today.²⁰ Dean Pound enumerates "eight noteworthy changes in the law in the present generation, which are in the spirit of recent ethics, recent philosophy, and recent political thought: (1) limitations on the use of property, attempts to prevent anti-social exercise of the incidents of ownership; (2) limitations upon freedom of contract; (3) limitations on the power of disposing of property; (4) limitations upon the power of the creditor or injured party to secure satisfaction; (5) a tendency to revive the idea of liability without fault not only in the form of wide responsibility for agencies employed, but in placing upon an enterprise the burden of repairing injuries, without fault of him who conducts it, which are incident to the undertaking; (6) a very marked tendency in judicial decision to regard the social interest in the use and conservation of natural resources; (7) an increasing tendency to hold that public funds should respond for injuries to indi-

²⁰ *The Spirit of the Common Law*, p. 185.

viduals by public agencies; and (8) a change from the old attitude of the law with respect to dependent members of the household—that is, an emphasis on the rights of the child and the interests of society in place of the natural rights of the parents.”

From this brief incursion into the domain of political science and jurisprudence it appears that if economic theory points to the desirability of an extension of public activities, it will not be out of harmony with the current trend in these other social sciences. The common point of view is the aspect of general welfare, the welfare of society in the sense of the welfare of the individuals who compose it. If, under certain conditions, the maximum welfare may be more nearly approached by emphasis on public and collectivistic rather than on individual activities, the theory of the social sciences will tend to favor such activities.

The statement that the tendency of social development is no longer from status to contract but from contract to status may indeed have a disconcerting effect, for the term “status” has sinister connotation. It suggests subjection and serfdom. But like the term “liberty,” it may take on a different denotation under different conditions. In the era of authority the meaning of “liberty” was negative: it denoted the limitation of the forces of the ruler. In the era of citizenship (the ideal era of citizenship) it becomes positive: it is not

inconsistent with the enlargement of the state as an instrument for the satisfaction of individual wants and the creation of individual rights. So "status" in the era of authority was an inadequate and unscientific principle of social control. It was based upon the fortunes or accidents of birth; and so it doubtless involved a great waste of human capacity and aptitude. Social progress required that the principle of status as then conceived give way before the principle of contract. Under the era, or putative era of citizenship, status may be presumed to have a different basis. Under the condition of equality of opportunity, or approximation to it afforded by an adequate system of free public education, young people may find their way into positions for which they are best fitted by natural aptitude. Under this condition of individual opportunity and social control, men would receive economic rewards in proportion to their social serviceability. There would be a widened sphere of individual initiative directed to social ends. To use terms of more pleasing connotation, we might say that under the conditions of the coming socialized individualism, men would find opportunity for self-expression only in those relations to their fellows that would increase the welfare of all, the inevitable inequalities being due to natural or biological differences.

From these preliminary studies and speculations it appears that the principles of liberty and democ-

racy, according to their recent interpretations, are not hostile, under certain conditions, to an extension of state activities. We shall next proceed to a consideration of the facts of the growth of public activities by summarizing statistics of the expenditures of the federal government. Then we shall consider the conditions under which specific activities expand, the standards for measuring their expansion, and the principles or rules that may be of assistance in determining how far this expansion should proceed, according to the standard of the maximum social advantage.

CHAPTER III

THE TREND OF RECENT EXPENDITURES IN THE UNITED STATES

BEFORE we attempt to summarize the facts as to the expansion of public activity we may consider the standards for measuring them. Statistics of government expenditures at different times are scarcely comparable because of changes in population, the price level, and the national income. The following standard may be employed: (1) the expenditures in terms of money; (2) per capita expenditures in terms of money; (3) per capita expenditures in terms of money reduced to the same basis of purchasing power, and (4) the percentage of the national income. The first standard is inaccurate because, as Professor Nitti has pointed out,¹ it does not take into consideration the extension of a country's territory or the growth of population. The per capita list makes allowance for differences in these two factors, but it does not take into consideration fluctuations in the value of money. The third standard obviates the disturbing factor in fluctuations of the price level but

¹ Bullock, C. J. *Selected Reading in Public Finance*, 1920, p. 40.

it leaves out of consideration changes in the volume of the national wealth and income. The two preferable standards for measuring public expenditure are evidently the third or the fourth, the modified per capita standard or the percentage of the national income.

Individualists who oppose the extension of public activity might prefer the first of these standards, but we shall try to prove in the course of our further discussion that the second of these two standards is the more normal. In the private economy it is a well-known principle that standards of living tend to keep pace with income, and the same is true of the public economy. The ordinary receipts of the federal government have grown from something over ten million dollars in 1800 to nearly seven billion dollars in 1920. The population in the meantime has grown from over five million to over one hundred and five million. The tax burden of the federal government, that is, the ratio of the total receipts of the federal government to the national income in terms of percentages was as follows: ²

1850		1.97
1860		1.53
1870		5.9
1880		4.52
1890		3.33
1900		3.15
1910		2.16

²Based on King, W. I. *Wealth and Income of the People of the United States*, 1919, p. 129, and National Bureau of Economic Research, *Income in the United States*, 1921, p. 145.

The tax burden of federal expenditures, that is the percentage of the national income which is required to support the activities of the federal government, has tended to decline during periods of peace but rises sharply after each war. The tax burden of the federal government alone was 5.9 *per cent* of the national income in 1870. In 1916-17, just before the increase of expenditures occasioned by the world war, the ratio of taxation by all three jurisdictions—federal, state, and local—totaled 5.97 *per cent*.³ Since then the total tax burden has risen to 14.32 *per cent* in 1920 and 1921.⁴ The following pages comprise a summary of tables drawn up in the research report of the National Industrial Conference Board which have a bearing on the contemporary problem of tax burden.

TOTAL GOVERNMENTAL EXPENDITURES IN THE UNITED STATES *

	Per Capita (dollars)	On Pre-war Purchasing Power Basis
1903	\$ 22.34	\$22.34
1913	33.19	33.19
1914	34.78	34.78
1915	35.80	36.35
1916	35.20	31.71
1917	48.55	33.03
1918	115.30	61.99
1919	178.74	87.62
1920	93.85	38.62
1921	87.40	44.82

* *Taxation and National Income*. Research Report No. 55, National Industrial Conference Board, p. 38.

³ *Ibid.*, p. 38.

⁴ *Ibid.*, pp. 14, 20.

PER CAPITA TOTAL TAXATION ON THE PRE-WAR PURCHASING
POWER BASIS AS PERCENTAGE OF PRE-WAR NATIONAL
INCOME⁶

1902-1903	5.2%
1912-1913	6.9%
1913-1914	6.8%
1914-1915	6.7%
1915-1916	6.2%
1917-1918	5.5%
1918-1919	8.7%
1919-1920	8.9%
1920-1921	11.4%

RATIO OF TOTAL TAXATION TO NATIONAL INCOME⁷

	National Income per Capita	Total Taxation per Capita	Ratio of Taxation to National Income
1912-1913...	\$360.80	\$22.95	6.36%
1913-1914...	357.52	22.93	6.41%
1914-1915...	351.66	23.28	6.62%
1915-1916...	402.77	24.54	6.09%
1916-1917...	482.75	28.81	5.97%
1917-1918...	546.83	57.59	10.53%
1918-1919...	612.83	64.66	10.55%
1919-1920...	648.84	84.37	13.00%
1920-1921...	552.91	79.15	14.32%

During the war, while federal expenditures were increasing at an unprecedented rate, expenditures for states and localities were being restricted. The following table indicates the trend, and illustrates the distinction between the per capita test and the test of tax burden.

⁶ *Taxation and National Income*. Research Report No. 55, National Industrial Conference Board, p. 36.

⁷ *Ibid.*, p. 38.

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STATE EXPENDITURES

	Per Capita	Income per Capita	Individual Burden— Percentage of Income
1915.....	\$4.99	\$360	1.4%
1916.....	5.05	446	1.1%
1917.....	5.04	523	.96%
1918.....	5.42	585	.93%

EXPENDITURES FOR CITIES OVER 30,000 POPULATION

	Per Capita	Income per Capita	Individual Burden
1915.....	\$33.92	\$360	9.4%
1916.....	32.34	446	7.2%
1917.....	32.53	523	6.2%
1918.....	33.35	585	5.7%

The rise in the ratio of total taxation to national income from 5.97 *per cent* in 1916-17 to 14.32 *per cent* in 1920-21 indicates a great expansion of federal expenditures. This of course was the unavoidable result of the war. During peace times our federal expenditures, as judged by the standards of tax burden, have tended to decline. "In the United States, expenditures of the national government showed a sixteenfold rise in the period between 1850 and 1912, but national wealth grew to twenty-seven times its earlier proportions during the same interval. The same phenomenon is observed in other countries of the world, although not to the same degree." ⁸ On the other hand, the

⁸ *Taxation and National Income*. Research Report No. 55, National Industrial Conference Board, p. 11.

tendency of the expenditure of state and local governments is to increase, and that at a faster rate than national wealth. This tendency has not become marked till of recent years. In fact, from 1902 to 1917 the per capita total taxation on the pre-war purchasing power basis as a percentage of pre-war national income fluctuated from 5.2 *per cent* in 1902-03 to 5.5 *per cent* in 1917-18.⁹ The ratio of total taxation to the national income declined from 6.36 *per cent* in 1912-13 to 5.97 *per cent* in 1916-17. But since the war, local and state expenditures, for which statistics will be available in the forthcoming publication of the census bureau, have been making up for lost time. Public improvements, which were postponed during the war, have now been undertaken, and the lower rate of interest has offered an incentive for communities to undertake building and public improvements.

As the strain of federal taxes has lightened, these pent-up demands of states and municipalities have been let loose. To what extent this tendency is justifiable and what should be its rational limits are the topics of the first part of this essay.

⁹ Cf., p. 21.

CHAPTER IV

THE GENERAL THEORY OF PUBLIC EXPENDITURES

THE problem of the most desirable ratio of public to private goods may be clarified by reference to economic theory. It is not worth our while to go into the controversy between the exponents of the consumption theory maintained by Adam Smith and his followers and the productivity theory maintained by their opponents, the German theorists. The common sense view today is that of relative productivity. If the service can be performed more economically through public coöperation than through individual initiative or voluntary private coöperation, the state agency is said to be relatively productive. Otherwise, it is relatively unproductive. The public goods furnished by the state may be material commodities, personal services, or the immaterial conditions of welfare. The state should furnish those services which it can furnish more efficiently or economically. In the words of Woodrow Wilson, "The sphere of the State is limited only by its own wisdom." The most useful *a priori* contributions to this problem have been furnished by economists

who have applied to it economic theories of value. Saxe, Wicksell, and Lindahl have applied to public finance the theories of marginal utility. The most recent work, and one that sums up the trend of this school is *Die Gerechtigkeit der Besteuerung* by Erik Lindahl. Lindahl's important contribution to the tax problem is somewhat weakened by being identified with an attempt to revive the generally discarded theory of individual benefit. The faults of this exposition we shall attempt to deal with in a later chapter. At present we are concerned with the positive contribution of the work. According to Lindahl, the function of the state is to satisfy public wants, which are a part of the complexus of private wants. Since the public life is thus involved with the private life, public economy activity follows the same laws that govern the private economy. The laws of the private economy which are applicable to the problem of taxation are the law of diminishing utility, the law of diminishing productivity, and the law of decreasing intensity of wants in the process of their satisfaction.

The problem of the scope of taxation Lindahl attempts to solve according to the principles of marginal utility, marginal productivity, and supply and demand. The production of public goods should be carried on to the point where utility is just offset by costs, as is the tendency in the private economy, or where the marginal satisfaction

is the same from both public and private goods. Public goods, like private goods, may be divided into producers' goods and consumers' goods. The productive, or reproductive, forces of the state, such as agricultural experiment, and the statistical investigations of industry and commerce, confer benefits that are measurable in terms of money, of market price, and these activities should be governed by the principle of marginal productivity; that is, they should be carried to the point where money expended for state regulation of private activity ceases to be more productive than if spent directly in private activity. Public consumers' goods, such as public art, public cultural education, and public parks, should be governed by the principle analogous to the marginal utility of the private economy. They should approximate the point where benefits are offset by burdens, or where money spent for public consumers' goods ceases to bring in greater satisfaction than money spent for private consumers' goods. The amount of money that will be spent for these public goods will be determined by the individual's estimate of the satisfaction that he will derive from them. Only the connection between cost and utility is more remote and difficult to ascertain than in the case of private economic life. The wants of great masses of individuals are expressed only through representative government; and if representation is imperfect and political or party forces are brought to

bear, the power of economic forces in the determination of taxation is proportionately modified. The problem of the amount of taxation can be determined according to purely economic principles provided that individuals estimate intelligently the benefits that they will derive from state activity, and express their conception of self-interest through the agency of a democratic, representative government.

Lindahl's conclusions are stated in the form of individual benefit, but as we shall attempt to explain later, his arguments are valid only to the end of group benefit. If public operation of an enterprise will produce a greater net social utility, the services rendered by this enterprise should belong in the category of public goods. Only the application of the principle of marginal utility to remote or widely extended operations is difficult. It involves certain problems of the relation of the individual to the state that we shall consider in the chapter on the Application of Fiscal Principles.

On the side of production, then, the scope of the state should be limited by what the Germans call its reproductivity. To state this doctrine in less technical terms, beyond the necessary expenditures of the state, the expenditures for defense and for protection of person and property, public activity should be extended only in so far as this activity will increase the national income more

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than it increases taxes, or will add a greater direct psychic utility than could be secured by an equal expenditure for goods privately produced.

To illustrate this ideal reproductivity of taxes, let us consider seven different hypothetical cases of the effects of taxation on consumption, savings, and income.

	Income	Tax	Consumption	Savings
(1).....	\$2500	\$100	\$1900	\$500
(2).....	2500	200	1900	400
(3).....	2500	200	1800	500
(4).....	2700	200	2000	500
(5).....	2700	200	1900	600
(6).....	2900	200	2100	600
(7).....	2900	200	2100	600

Under the first hypothetical case taxes of \$100 support the necessary activities of the state, leaving \$2,400 which can be divided between consumption and savings. On the second hypothesis taxes have been doubled, but the tax revenue has been wastefully spent, as on wars, or the luxurious expenditure of a monarch. The net result, in this case, is a reduction of savings by the amount of the additional tax. Under the third hypothesis the expenditures are equally unproductive and the net result is a diminution of consumption by the amount of the original tax. On the fourth hypothesis the additional state revenue is productively spent, so that the private income taxed increases by twice the amount of the additional tax. The net social profit of \$100 in this case goes to

increase of consumption. In the fifth hypothesis the conditions are the same except that the surplus productivity of the tax goes to increase of savings and thus expands the fund from which the taxes of the future are to be drawn. On the sixth hypothesis the surplus government revenue is most efficiently employed in such outlay, for example, as scientific research or agricultural experiment so that the individual income increases much in excess of the tax. This surplus economic energy made possible by efficient public coöperation would result both in a higher standard of living and an increase in the total capital goods. The seventh hypothesis is identical with the sixth except in the assumption that the second one hundred dollars of revenue in the sixth were derived from a general property or income tax, and the equivalent revenue of the seventh was derived from an excise tax on specific articles of consumption which injure the health, strength, or happiness of the consumer. Such a sumptuary tax would not alter the welfare that is susceptible to pecuniary valuation. The public revenue, the capital accumulation, and the individual consumption in terms of money would be the same. But the restriction of unwise consumption would leave a larger fund for the purchase of beneficial goods and services. There would be an increased consumption of wealth and a decreased consumption of "illth" to the end of an enhance-

ment of the general well-being. The assumption in all of these hypothetical cases is that the effort required in earning the income is the same.

To approach the theoretical problem more nearly, let us distinguish between the public and the private economy. Fiscal theorists make two main distinctions. First the time range of the public and the private economy is different. The individual plans for one or for two lives. The state exists indefinitely. The motives of the public and the private economy are different. The private producer aims at profits, the amassing of wealth; the end of the public economy is the maximum social utility. On the basis of these two distinctions we can go some way in the practical application of the doctrine of marginal productivity. The state should do those things which are socially desirable but which do not bring profit to individuals, or those things in which there is an incompatibility between private profit and social weal. Secondly, the state should do those things which may bring an economic return but at such a remote future date that the profit motive will not be sufficient incentive to economic activity.

A useful classification of public services is that of J. S. Mill who distinguishes between the necessary and the optional functions of the state. Woodrow Wilson carries out the same distinction under the terms constituent functions and ministrant functions. These he enumerates as follows:

I. *The Constituent Functions.*

(1) The keeping of order and providing for the protection of persons and property from violence and robbery.

(2) The fixing of the legal relations between man and wife and between parents and children.

(3) The regulation of the holding, transmission, and interchange of property, and the determination of its liabilities for debt or for crime.

(4) The determination of contract rights between individuals.

(5) The definition and punishment of crime.

(6) The administration of justice in civil causes.

(7) The determination of the political duties, privileges, and relations of citizens.

(8) Dealings of the state with foreign powers; the preservation of the state from external danger or encroachment and the advancement of its international interests.

II. *The Ministrant Functions.*

(1) The regulation of trade and industry. Under this head I would include the coinage of money and the establishment of the standard weights and measures, laws against forestalling, engrossing, the licensing of trades, etc., as well as the great matters of tariffs, navigation laws, and the like.

(2) The regulation of labor.

(3) The maintenance of thoroughfares,—including state management of railways and that group of undertakings which we embrace within the comprehensive terms “Internal Improvements” or “The Development of the Country.”

(4) The maintenance of postal and telegraph systems, which is very similar in principle to (3).

(5) The manufacture and distribution of gas, the maintenance of water-works, etc.

(6) Sanitation, including the regulation of trades for sanitary purposes.

(7) Education.

(8) Care of the poor and incapable.

(9) Care and cultivation of forests and like matters, such as the stocking of rivers with fish.

(10) Sumptuary laws, such as “prohibition” laws, for example.

The theory of the relative productivity of the public and private economy suggests a competition between these two agencies in public service. But the distinction between necessary and optional goods indicates that there is a realm within which these two agencies are non-competing. The necessary public goods will be provided by the state efficiently or inefficiently with but little effect from private competition. Protection of persons and property is primarily a function of the state, although even here the distinction between public and private goods is not absolute. Private individuals employ detectives and watchmen. But in

general what Wilson enumerates as the constituent functions are carried out exclusively by the government and are not subject to private competition. The ministrant functions, on the other hand, deal with those things which the government might leave undone or which might be performed by either public or private agencies. Trade and industry might be automatically regulated by free competition. The regulation of labor might be a matter of free contract between employer and employee. Public service corporations can be operated by private individuals, private corporations, or the public. Sanitary regulations can be carried on by the state, if it seems desirable, or people may be left to their own devices. Education can be carried on either by private or public agencies. The poor and incapable may be provided for through public institutions or left to private charity. Forests may be under government management or left to private exploitation. And as to sumptuary laws many people still believe that they constitute an invasion of the individual's private rights. The conditions under which it pays for the government to undertake these optional or ministrant functions we shall consider presently. The general rule is that the government should provide those services that do not appeal to private enterprises and those that it can perform more efficiently than the private producers.

But there are certain functions here classified as

optional that seem to belong more naturally to the public economy. Among these are sanitation, the maintenance of waterways, forests and fisheries, and probably education. Sanitation would seem to be a public function. The combating of contagious diseases and the enforcement of hygienic regulations are collective duties. Curative medicine as distinct from preventive measures belongs to the private sphere. For individuals when they are sick are willing to pay for the services of trained physicians. But as to preventive and hygienic measures which are a matter of invisible germs and the future community health, these may be beyond the understanding or the personal interest of the individual man. The welfare of all, however, is involved; the well-being of the intelligent and the well-to-do is dependent in large degree on the maintenance of health conditions among the ignorant and the poor. Waterways also belong obviously to the public economy. Unlike railroads they are not natural monopolies, and their development offers no inducement to the motive of private profit. The scientific use of forests, especially involving re-forestation, is also a public function, for it takes so long to grow a new tree—fifty to one hundred years—that the motive of self-interest will not induce many to replant. Hence, the serious depletion of forest resources in the United States. The improvement of fishing, especially fish hatcheries, is also a public function, for the fishing grounds, like

waterways, are not natural monopolies, and the hatching of fish leads to general rather than to specific benefit. Education, also although less confidently, may be classified as a function of the state. If we look at it from the individual point of view, as in the statistics of the increased earnings of college graduates, it seems to be a matter of special and measurable benefit. As such, it might equitably be supported by individual fees. But when we consider that our whole complex material culture is dependent upon scientific and technological training, the general benefits of education seem to be paramount. The individual benefit view of education is represented by the private school, and the University which is supported by tuition fees and by gifts from its graduates. The growth of the general benefit view of education is illustrated in the development of our free public schools and our state universities. The difference between cultural and practical education corresponds in some measure to this distinction between the public and the private benefit view. Cultural education, which gives a man manners and polish, appreciation of Dante, Shakespeare, or Wordsworth, enriches the private life of the individual man, but does not contribute directly to the maintenance of that material culture upon which the general welfare is directly dependent. This perhaps explains the tendency of our universities which are maintained by tuition and gifts to emphasize the classical and

humanistic side of education, and also the practical bent of our state universities and colleges. Cultural education, however, perhaps through its tendency toward diffusion, is coming to be considered more and more a general benefit. Professor Einaudi suggests that the diffusion of culture is a public function because the ignorant man has no conception of its necessity any more than he does the necessity of hygiene.¹ The other ministrant functions of the state may be carried on by the state or left as optional to individual enterprise according to economic and social conditions. An analysis of these conditions and their effect upon the desirability of public activities will be the problem in the next two chapters.

¹ Einaudi, L. *Scienza delle Finanze*, p. 144.

CHAPTER V

PUBLIC EXPENDITURES IN THE AGRICULTURAL STATE

IN the last chapter we reached the conclusion that many of the optional functions of the state should be performed under certain conditions and not under others. Among these conditions one of the most important is the ratio of population to land. Historically the course of development is from sparse population and free or cheap land to dense population and high-priced land. With the growth of population society and industry go through a series of readjustments. The first stage is that of hunting, trapping, and fishing—the stage of sparse population. Then as population grows and men have domesticated animals they take up grazing. A higher ratio of population leads to extensive agriculture such as the raising of grain. Subsequent stages are more intensive agriculture, such as dairying and gardening. Among the modern western nations manufacture rises coincidentally with the development of intensive agriculture. Then, when this has assumed a large reach and commands a wide market, trade and transporta-

tion assume increasing importance, science and the learned professions develop more rapidly, personal services of all kinds become a means to livelihood, luxury trades flourish, and advertising and salesmanship become a wide-spread occupation. An industrial evolution is the outcome of man's effort to adjust himself to a changing environment. By a changing environment is meant a declining supply of land or crude natural resources per man. Industrial evolution, then, means a progressive efficiency in the exploitation of a given amount of land. If man does not evolve industrially, but tries to support an increasing population by the old method on the same land, he will encounter the economic law of diminishing return. This will result in emigration or war. If relief is sought through emigration, the same economic evolution follows as the new lands are settled. If war ensues, surplus population is killed off, until the time when intelligence intervenes to lead the way to the next industrial stage.

There is, also, we may infer, a tendency for government and political ideals to become adjusted to conditions determined by the ratio of population to land. The frontiersman tends to be an individualist because under frontier conditions, or conditions of sparse population, the peculiar individual qualities, energy, courage, initiative, and self-reliance, are sufficient for practical success in life. On the frontier natural resources abound, small-

scale methods require the use of but little capital, and the scarce or limiting factor is labor applied to land; so that the uneducated but strong and industrious man can satisfy his wants by the labor of his own hands.

Turner has explained how these frontier conditions developed the peculiar characteristics of the American intellect: "That coarseness and strength combined with acuteness and inquisitiveness; that practical, inventive turn of mind, quick to find expedients; that masterful grasp of material things, lacking in the artistic but powerful to effect great ends; that restless nervous energy; that dominant individualism, working for good and for evil, and withal that buoyancy and exuberance which comes with freedom—these are the traits of the frontier, or traits called out elsewhere because of the existence of the frontier."¹

Under these conditions of free land and sparse population many of the ministrant services of the state cannot or need not be rendered. Sanitation is not a pressing problem. Public education is hardly feasible. Even the necessary service of protection to person and property has to be left partly to the resource of the individual man or the temporarily organized group. The frontiersman adheres to his individualism, his confidence in his own unaided strength and wisdom, as long as he attains a fair measure of success in his problem of satisfy-

¹Turner, F. J. *The Frontier in American History*, p. 37.

ing his wants. But with the increase in population there come into existence various forces that compel the frontiersman to modify his ideal of individualism. Even from the first, as Roosevelt has pointed out, men felt the need of coöperation in defense—in log rollings and in house raisings.² And as population becomes more dense and towns and cities arise, the individual becomes confronted with serious problems which he is unable to solve. Among these are the declining fertility of the soil, the dependence upon transportation, the rise of industrial monopoly, and the prevalence of contagious disease.

The problem of the declining fertility of the soil can be solved temporarily by migrating to new lands farther west. But this solution ends when the wave of pioneers has reached the Pacific. Then there is necessary a change in the methods of farming, and there results a demand for scientists and agricultural experts. With the increased dependence on transportation and the rise of large-scale manufacture, the exploitation of vast resources on a large scale, capital becomes a factor of increasing importance in industry, and management assumes a more and more dominant rôle. The new captain of industry applies the old individualistic ideals to the evolution of American industrial society. The development of corporate combinations into pools, trusts, and agreements proceeds apace until in the

² Roosevelt, Theodore. *The Winning of the West*.

early years of the twentieth century it seemed probable that the outcome of free competition under individualism would be monopoly of the most important natural resources by a small group of wealthy men. Under these conditions individualism declines. The government comes to look less like a necessary evil and more like an institution to perpetuate democratic ideals.

"In brief, the defenses of the pioneer democrat began to shift from free land to legislation, from the ideal of individualism to the ideal of social control through regulation by law."³ "The western radical became convinced that he must sacrifice his ideal of individualism and free competition in order to maintain his ideal of democracy."⁴

With this admission of the need of government regulation comes a growing sense of the importance of education. Advanced scientific attainment is indispensable; and men are sifted out because of intellectual ability and given the training that will fit them to be leaders and experts. Meanwhile man has adjusted himself to a declining per capita supply of crude natural resources by means of mechanical inventions. Manufacture, or the creation of value by fabricating materials to a high degree gains relatively on agriculture. This makes possible a further increase in population and calls for a more detailed differentiation among the people

³ Turner, p. 277.

⁴ *Ibid.*, p. 305.

through the need of scientific, technical, and mechanical skill. Trade, transportation, and personal and professional services increase. Society becomes characterized by specialization and interdependence in place of the simplicity, uniformity, homogeneity, and independence of the frontier family or the isolated village community. As a result, there is need for an increase in the regulative services of the government. Also manufacture, unlike agriculture, operates under the law of increasing returns; the growing nation soon finds that it can create a surplus of manufactured goods. At this point the nation ceases to be primarily agricultural, and becomes also an industrial state.

If there is such a law as the law of the normal expansion of public activities, *pari passu*, with the increase of the ratio of population to land, this may have a pertinent bearing on political philosophy. The individualist is a conservative; he represents the mental attitude engendered by conditions that no longer obtain. The socialist is a radical; he assumes an attitude appropriate only to the dense population, closely integrated and highly evolved civilization of the future. The liberal favors a gradual change or readjustment as experience proves feasible. The liberal seems to be right, because the ratio of population to land changes gradually.

Yet if there is a law of the gradual widening of

state activities, it does not follow that all nations will conform to it inevitably and automatically. This conformity is conditioned upon national foresight and intelligence, upon what Lippmann calls a policy of mastery rather than a policy of drift. Russia at present is an example of a nation that has overreached the evolutionary process. The leaders have tried to set up an order suitable perhaps for a densely populated, highly integrated industrial state, only to find that it is not suited to a society still in the the earlier stages of agricultural development. China might be taken as an example of the opposite kind, of a vestigial or belated individualism. Lacking in coöperative enterprises that might mobilize capital, and failing to establish a strong central government, the Chinese have not evolved beyond a highly efficient but excessively individualized type of agrarian economy.

Before we leave this chapter, the development of government activity in the agricultural state may be more clearly determined by tracing its activities through the different stages of agriculture, from the pastoral stage through the various stages of extensive to intensive agriculture. In the nomadic stage of pastoral life the work of government is very simple. This is the patriarchal stage of government—the era of dominant individualism. With a higher civilization there develops ranching. This implies great improvements in the pumping of water, the storage of fodder, and the means of

transportation. Life, however, is still simple and primitive. There is little use of machinery, little manufacture, and no great need for transportation facilities, since cattle may often be driven to market. Owing to the large size of the ranches and the distance between families, there is small opportunity for the development for the ministrant functions of the state. This in the United States is the typical phase of the frontier economy. With the growth of population, the rise in the value of land, the approach of markets, and the improvement of transportation, there arises the extensive, one-crop system of agriculture. This occasions some increase in business. There is more use of machinery, such as gang-plows, reapers, binders, and threshers. Railroad transportation becomes more important, especially in the crop-moving season, and this causes the need of government regulation. This stage of economic society is subject to peculiar dangers which call for state or social intervention. The one-crop system gradually destroys the fertility of the soil. A crop failure may be disastrous and thus cause a demand for state aid. Pests, such as the boll weevil in the cotton states, engage the attention of government experts. The problem of the tenant farmer, especially in the South, becomes serious, and requires public investigation. But as soon as conditions justify, the intelligent and resourceful American farmers enter a more advanced and complex stage of agriculture,

and take up dairying, horticulture, or diversified farming. This means that they have passed out of the era of frontier agriculture into the new dispensation. Dairying requires individual energy, ability, and thrift, and the disposition to coöperate in the marketing of the product. Transportation is of increasing importance as milk is shipped every day of the year, in contrast to the seasonal moving of grain. The people of the most successful dairying communities are relatively intelligent and progressive, as illustrated in the case of Denmark and Wisconsin. Also much of the success of horticulture depends upon efficiency of coöperation in marketing and the establishment of well-organized public markets. Diversified farming is the most complex and difficult of all forms. It requires good transportation, energy and mental activity, knowledge of crops, soils, and animals. There is need here for individual initiative, a disposition toward voluntary social coöperation, and of government intervention. Yet in the United States, in spite of evolutions in the forms of agriculture, this industry has not kept pace with the development of industries that flourish in towns and cities. We are faced with the social problem of the decadence of rural life; and thoughtful men have considered the part that government should play in the rehabilitation of country life. Professor L. B. Bailey compared the two forces necessary to achieve this end—self-help and governmental in-

terference.⁵ In the case of the farming community the first is of paramount importance. The initiative due to personal leadership in the way of community efforts, and coöperative marketing organizations is the first requisite. But the government also has important functions to perform. It needs to furnish protection whereby the disabilities that are not a part of his business may be removed for the farmer, although, as Professor Bailey goes on to say, governmental protection and control are least applicable and least effective in the farming country. Besides protection, the government should provide education and the conditions that will stimulate the rise of rural leadership. The state should undertake the discovery of local fact by working through an agricultural college. It should carry on agricultural surveys, establish model farms, and train experts for community work. Through federal and state departments of agriculture, farmers' institutes and agricultural extension work should be carried on, and agricultural experiment stations maintained.⁶

The following is a summary of the views of experts as to the place of government in agricultural coöperation and rural organization:

"1. The Government may *investigate* facts and principles underlying the development of agriculture and country life.

⁵ Bailey, L. H. *The State and the Farmer*, 1913, p. 3.

⁶ *Ibid.*, p. 81.

2. The Government may interpret those principles in the light of the needs of the people.

3. The Government may *inform* the people of the results of its investigations and interpretations.

4. The Government may *advise* individuals and groups how to take the best advantage of these facts and principles; that is, how to apply them to farm improvement, marketing and exchange, and community life.

5. The Government may *demonstrate* the best methods of accomplishing this application of facts and principles to actual needs and conditions.

The Government may not participate in the farmers' business nor direct their community life. Only as legislation may be necessary to restrain, should Government interfere with the initiative and development of the individual. It should not try to run a man's farm for him, nor to manage the farmer's business transactions."⁷

Professor Bailey in an address before the American Association for Agricultural Legislation enumerates ten groups of subjects on which the government might legislate. These are: "food production and prices; land settlement; education, and the improvement of country life; marketing; taxation as it relates to agriculture; rural credits; eco-

⁷ "The Place of Government in Agricultural Coöperation and Rural Organization." Adapted from Report of the American Commission, Senate Document No. 261, Part I, pp. 26-27. In Phelan, J. *Readings in Rural Sociology*, 1920, p. 517.

conomic studies in highway development; public grazing lands in the West; collective bargaining in agriculture; farm labor problems in the United States.”⁸

Another factor bearing upon the proper scope of public activity in an agricultural state is the quantity and regularity of the rainfall. The statement that individualism was a product in part of frontier conditions is true until the frontier reaches the arid and semi-arid land of the West. Here conditions change. In the East frontier conditions implied sparse population, free land, good soil, and abundant rainfall. These are the conditions for successful farming for the uneducated but energetic individual man. Under conditions that require a combination of factors in a certain proportion, it is a well-known principle of economics that there will be special inducement offered to the factor of greatest relative scarcity. Thus when land is abundant and cheap, wages are high. During the frontier days in a region like that east of the Mississippi, with good soil, favorable climate, and abundant rainfall, the deficient factor was human labor. Hence, economic success hinged upon that. Economic success varied directly with the efficiency of the individual man, so that individualism was a prevalent philosophy from the frontier days till well into the era of the captains of

⁸ Presidential address before the A. A. A. L. at Chicago, Dec. 29, 1919. University of Wisconsin Bulletin No. 5, Jan., 1920. See also "State Aid to Agriculture," Transactions of the Commonwealth Club of California, Vol. 6, pp. 407, 507.

industry. But when the settlers reached the arid lands, conditions changed. The industrious farmer may plough and sow; but if the rain will not come, his labors are all in vain. The backward factor ceases to be labor and becomes the water supply. Thus J. H. Turner characterizes the changed conditions: "When the arid lands and the mineral resources of the Far West were reached, no conquest was possible by the old individual pioneer methods. Here expensive irrigation works must be constructed, coöperative activity was demanded in utilization of the water supply, capital beyond the reach of the small farmer was required. In a word, the physiographic province itself decried that the destiny of this new frontier should be social rather than individual."⁹ An illustration of this need of public coöperation in arid or semi-arid countries is seen in the success of the Mormons in Utah. In the words of a contemporary writer, "By means of concerted efforts in irrigation they subjugated a desert waste and made it a highly productive principality."¹⁰ In another article Gardner points out that the physiographic conditions which brought about economic coöperation proved an inadequate basis for communism.¹¹

A more recent example of the need of public aid

⁹ *The Frontier in American History*, 1921, p. 58.

¹⁰ Gardner, H. "Communism Among the Mormons," *Quart. Jr. Econ.*, Vol. 31, 1916-17.

¹¹ *Ibid.*, Nov., 1922. See also "The Beginnings of Irrigation in the United States." Hess, R. H. *Jr. Poly. Econ.*, Vol. 20, p. 807.

for agriculture in the arid lands is the well-known government project to develop the water power resources of the Colorado River. This tendency of a dry climate to change one's attitude toward the state is also seen in the attitude of the nineteenth century Englishman, who was a thorough individualist in England, a land of abundant rainfall, but who promptly became a collectivist when he migrated to Australia, a country in which the limiting economic factor is the water supply. It is this need for vast coöperative enterprises that has caused Australia and many of our frontier states to go heavily in debt. Turner has even suggested that need for internal improvements led to the decay of state rights and the rise of nationalism and the power of the federal government.¹²

¹² Turner, F. J. *The Frontier in American History*, p. 29.

CHAPTER VI

PUBLIC EXPENDITURES IN THE INDUSTRIAL STATE

IN the previous chapter we have indicated how the increase in the ratio of population to land causes a gradual readjustment of industry so as to use most economically the factors that exist in changing proportions. As the proportion of labor and capital increases in relation to land, there is a gradual transition from the pastoral stage to extensive agriculture, then to more and more intensive agriculture. The development of intensive agriculture is paralleled by the growth of manufacture. When this comes to predominate over agriculture, that is, when the country comes to export more manufactured than agricultural products, we have reached the status of an industrial state. In the United States our industry is fairly well balanced, with a gradual incline toward the side of manufacturing. The following statistics will indicate the present relative distribution of national industry for the country as a whole.

The characteristics of the industrial as distinct from the agricultural state are a higher degree of specialization and an increase in large-scale pro-

	Net Value Product of Agriculture ¹	Net Value Product of Factory Production ²	Net Value Product of Transportation ³	Net Value Product of Government ⁴
1909.....	\$ 4,686,000,000	\$ 6,107,000,000	\$2,765,000,000	\$1,440,000,000
1910.....	5,728,000,000	6,756,000,000	3,029,000,000	1,542,000,000
1911.....	5,368,000,000	6,350,000,000	3,069,000,000	1,622,000,000
1912.....	5,286,000,000	7,195,000,000	3,249,000,000	1,716,000,000
1913.....	5,887,000,000	7,976,000,000	3,336,000,000	1,829,000,000
1914.....	6,040,000,000	6,964,000,000	3,170,000,000	1,941,000,000
1915.....	6,376,000,000	7,881,000,000	3,428,000,000	2,066,000,000
1916.....	7,249,000,000	12,403,000,000	4,028,000,000	2,207,000,000
1917.....	9,720,000,000	14,957,000,000	4,539,000,000	3,023,000,000
1918.....	12,682,000,000			
1919.....	14,835,000,000			
1920.....	9,853,000,000		5,232,000,000	5,352,000,000

¹ *Income in the United States.* National Bureau of Economic Research, 1922, II, p. 55.² *Ibid.*, p. 98.³ *Ibid.*, p. 117.⁴ *Ibid.*, p. 219.

duction. These cause a greater dependence on transportation and mining, and require the attainment of a high grade of industrial intelligence. This condition may result in a greater need for the governmental services of protection to person and property, and it more certainly requires an increased outlay for public regulation, sanitation, charity, education, and recreation. Economic and social conditions, however, are not the only factors that should govern the expansion of government activities. Political conditions, especially the relative efficiency of the government, are also important. If the ruling body is corrupt, inefficient, or extravagant, the services of the government, however much economic or social need there may be for them, may cost more than they are worth. If much of the public revenue above that required for the necessary public expenditures, were spent by the monarch on his minions and his dames and his games, the political philosophers would be justified in asserting that the best government was the least government. In the light of the history of the Stuarts in England no wonder Adam Smith was a proponent of *laissez faire*.

So far our method has been primarily deductive; in order to correlate these principles with facts, let us refer to some statistics of expenditures of the federal government and of the governments of certain representative states. The comparison of the financial statistics of states is of great significance for

our purpose; for, as Professor Turner has pointed out—following the suggestion of Professor Loria—by traveling from the West to the East in the United States one can recapitulate the course of economic evolution. By inspecting the statistics of states from West to East we follow the movement from sparse to dense population, from the agricultural to the industrial states. The same generalization would apply in a transition from the South to the North. By combining statistics in a transition from West and South to East one might also recapitulate in some degree the evolution of civilization.

To proceed with an analysis of these statistics. On page 61 there is a list of stages arranged in the order in which the percentage of the population is engaged in agriculture and forestry, including the first eight states in order; then three representative states, Wisconsin, Washington, and California, which maintain more of a balance between agriculture and manufacture; and finally three states, Pennsylvania, New York, and Massachusetts in which manufacture and commerce predominate. This shows the correlation between agriculture and scarcity of population, and complex industry and density of population.

On page 62 there is an analysis of income by geographical divisions copied from the publications of the National Bureau of Economic Research. This indicates that the transition from scarcity to

PERCENTAGE OF PERSONS ENGAGED IN AGRICULTURE AND FORESTRY

	Population per Square Mile ¹	Per cent. Agriculture ²	Per cent. Manufacture and Mechanical ³
Mississippi	39	70	10
Arkansas	33	65	12
South Carolina	55	62	16
North Dakota	9	58	9
Alabama	46	55	17
South Dakota	8	54	12
North Carolina	53	53	23
Georgia	49	51	16
Nebraska	17	41	18
Iowa	43	38	20
Wisconsin	48	31	34
Washington	20	23	31
California	22	18	28
Pennsylvania	195	8	42
New York	217	7	39
Massachusetts	479	3	51

density of population, from the agricultural to the industrial state—at least under the conditions with which these statistics deal—is paralleled by an increase in the per capita money income. It is to be noted that these statistics are for the year 1919, when farm income reached a high peak, a peak from which it has decidedly dropped in later years. In 1919 the per capita income of the farm population in the whole country was estimated at \$417; and the per capita income for the rest of the population at \$716. An analysis of the causes of the

¹ Huntington and Williams. *Business Geography*, 1922, p. 425.

² *Ibid.*, p. 430.

³ Knauth, O. W. *Distribution of Income by States in 1919*. National Bureau of Economic Research, 1922, pp. 25-26.

difference between farm and city incomes is not within the provinces of this essay. The city incomes as a rule are earned under conditions of greater specialization, of greater coöperation and interdependence; and in many cases from industries that operate according to the principles of constant or increasing returns, or from professions that require long study or high intellectual capacity.

ANALYSIS OF INCOME BY GEOGRAPHICAL DIVISIONS:

	Per Capita ¹ Income	Percentage of Total ² Division Income Going to Farmers
New England	\$724	\$ 3.39
Middle Atlantic	783	3.81
East North Central	684	14.49
West North Central	610	32.95
South Atlantic	463	24.02
East South Central	364	31.56
West South Central	491	34.35
Mountain	588	19.61
Pacific	796	15.03

On page 64 is a table of taxes related to income by representative states in 1919. A number of interesting deductions may be drawn from these facts. One is that the manufacturing states pay a higher per capita contribution to the support of the national government. New York contributed \$107.95, Massachusetts \$83.42, Pennsylvania \$53.31. In the case of the first eight states arranged according to percentage of the population engaged

¹ *Distribution of Income by States in 1919*. National Bureau of Economic Research, 1922, p. 29.

² *Ibid.*, p. 30.

in agriculture and forestry the federal taxes per capita vary from \$16.54 in North Dakota to \$29.10 in North Carolina. Wisconsin, Washington, and California occupy an intermediate position, paying a per capita tax respectively of \$34.71, \$41.34, and \$55.31. As to state taxes the same generalization holds. Pennsylvania, New York, and Massachusetts contribute respectively \$5.28, \$7.33, and \$8.80. The per capita state taxes contributed by the eight most characteristic agricultural states vary from \$2.80 in North Carolina to \$4.87 in South Dakota. Wisconsin, Washington, and California contribute respectively a per capita state tax of \$6.05, \$8.69, and \$7.11.

The per capita state and local taxes, however, are higher in some of the northern agricultural states. In the case of the eight characteristic agricultural states the local taxes varied from \$7.32 in Georgia to \$38.41 in North Dakota. Pennsylvania, New York, and Massachusetts contributed respectively \$15.23, \$33.08, and \$33.13. There is evident a great contrast here between the northern agricultural states and the southern agricultural states. The southern agricultural states vary from \$7.32 in Georgia to \$12.51 in Mississippi. North and South Dakota contribute \$38.41 and \$38.39 respectively. Wisconsin contributes \$33.87, Washington \$36.83, and California \$32.50. Considering the difference in the average income, it is evident that the manufacturing states, according to our

64 TAXATION AND WELFARE

TAXES RELATED TO INCOME BY REPRESENTATIVE STATES, 1919,¹
PER CAPITA

	Total Income of States	Federal Taxes	State Taxes	Local Taxes	Total Taxes
Mississippi	\$352	\$ 18.01	\$2.66	\$12.51	\$ 33.18
Arkansas	380	18.84	3.17	8.81	30.82
South Carolina ..	438	26.72	2.59	8.10	37.41
North Dakota ...	519	16.54	3.85	38.41	58.80
Alabama	346	18.08	2.65	5.74	26.47
South Dakota	692	21.53	4.87	38.39	64.79
North Carolina ...	383	29.10	2.80	9.71	41.61
Georgia	395	23.71	2.81	7.32	33.84
Nebraska	707	27.65	5.80	33.05	66.50
Iowa	712	26.97	4.96	31.12	63.05
Wisconsin	560	34.71	6.05	33.87	74.63
Washington	791	41.34	8.69	36.93	86.96
California	822	55.31	7.11	32.50	94.92
Pennsylvania	682	53.31	5.28	15.23	73.82
New York	863	107.95	7.33	33.08	148.36
Massachusetts	783	83.42	8.80	33.13	125.35

present tax system, contribute a larger per capita payment to the support of the federal government and that the agricultural states of the North and West contribute more freely to the support of the state and local governments. On the following page is a table giving the per capita costs by principal divisions of the departmental services of the selected states.

Below are the more significant tables of taxes related to income by representative states, based on the principle of tax burden, or percentage of income taken by the tax.

¹Compiled from National Industrial Conference Board, *Taxation and National Income*, 1922, p. 51.

PER CAPITA COSTS BY PRINCIPAL DIVISIONS OF THE DEPARTMENTAL SERVICES OF SELECTED STATES,¹ 1918

	General Government	Protection to Person and Property	Health and Sanitation	Highways	Charities	Education	Recreation
Mississippi	0.28	0.04	0.02	0.005 —	0.44	1.34	0.06
Arkansas	0.19	0.09	0.03	0.08	0.38	1.04	0.005 —
South Carolina	0.26	0.13	0.04	0.01	0.39	0.65	0.005 —
North Dakota	0.38	0.26	0.08	0.01	1.51	2.88	0.005 —
Alabama	0.27	0.13	0.01	0.04	0.76	1.32	—
South Dakota	0.38	0.33	0.06	0.01	1.71	2.73	0.005 —
North Carolina	0.20	0.11	0.04	0.02	0.48	0.68	0.005 —
Georgia	0.14	0.09	0.02	0.04	0.36	1.28	0.005 —
Nebraska	0.43	0.19	0.03	0.01	0.97	1.73	—
Iowa	0.27	0.35	0.05	0.61	1.35	1.26	0.01
Wisconsin	0.39	0.39	0.12	0.36	1.19	2.73	0.005 —
Washington	0.35	0.37	0.03	0.51	0.75	2.81	0.01
California	0.61	0.42	0.04	0.27	1.59	3.41	—
Pennsylvania	0.40	0.36	0.17	0.41	1.06	0.53	0.01
New York	0.73	0.62	0.08	0.80	1.61	1.02	0.03
Massachusetts	0.83	0.49	0.26	0.66	2.57	0.63	0.05

¹ Financial Statistics of States.

**TAXES RELATED TO INCOME BY REPRESENTATIVE STATES TAX
BURDEN OR PERCENTAGE OF INCOME**

	Total Income of States	Federal Taxes	State Taxes	Local Taxes	Total Taxes
Mississippi	\$352	5.11	.75	3.56	9.42
Arkansas	380	4.96	.83	2.32	8.11
South Carolina ...	438	6.10	.59	1.84	8.53
North Dakota ...	519	3.19	.74	7.39	11.33
Alabama	346	5.22	.77	1.66	7.65
South Dakota	692	3.11	.70	5.55	9.36
North Carolina ...	383	7.59	.73	2.50	10.82
Georgia	395	6.00	.71	1.86	8.57
Nebraska	707	3.91	.82	4.67	9.40
Iowa	712	3.79	.69	4.37	8.85
Wisconsin	560	6.20	1.08	6.04	13.32
Washington	791	5.22	1.10	4.67	10.99
California	822	6.73	0.86	3.95	11.54
Pennsylvania	682	7.82	0.77	2.23	10.82
New York	863	12.50	0.85	3.83	17.18
Massachusetts ...	783	10.65	1.12	4.23	16.00

STATES ARRANGED ACCORDING TO AVERAGE PER CAPITA INCOME

New York	\$863
California	822
Washington	791
Massachusetts	783
Iowa	712
Nebraska	707
South Dakota	692
Pennsylvania	682
Wisconsin	560
North Dakota	519
South Carolina	438
Georgia	395
North Carolina	383
Arkansas	380
Mississippi	352
Alabama	346

STATES ARRANGED ACCORDING TO TAX BURDEN OF FEDERAL TAXES

	Per cent.
New York	12.50
Massachusetts	10.65
Pennsylvania	7.82
North Carolina	7.59
California	6.73
Wisconsin	6.20
South Carolina	6.10
Georgia	6.00
Washington	5.22
Alabama	5.22
Mississippi	5.11
Arkansas	4.96
Nebraska	3.91
Iowa	3.79
North Dakota	3.19
South Dakota	3.11

STATES ARRANGED ACCORDING TO TAX BURDEN OF STATE TAXES

	Per cent.
Massachusetts	1.12
Washington	1.10
Wisconsin	1.08
California	0.86
New York	0.85
Arkansas	0.83
Nebraska	0.82
Alabama	0.77
Pennsylvania	0.77
Mississippi	0.75
North Dakota	0.74
North Carolina	0.73
Georgia	0.71
South Dakota	0.70
Iowa	0.69
South Carolina	0.59

68 TAXATION AND WELFARE

STATES ARRANGED ACCORDING TO TAX BURDEN OF LOCAL TAXES

	Per cent.
North Dakota	7.39
Wisconsin	6.04
South Dakota	5.55
Nebraska	4.67
Washington	4.67
Iowa	4.37
Massachusetts	4.23
California	3.95
New York	3.83
Mississippi	3.56
North Carolina	2.50
Arkansas	2.39
Pennsylvania	2.23
Georgia	1.86
South Carolina	1.84
Alabama	1.66

STATES ARRANGED ACCORDING TO TOTAL TAX BURDEN

	Per cent.
New York	17.18
Massachusetts	16.00
Wisconsin	13.32
California	11.54
North Dakota	11.33
Washington	10.99
Pennsylvania	10.82
North Carolina	10.82
Mississippi	9.42
Nebraska	9.40
South Dakota	9.36
Iowa	8.85
Georgia	8.57
South Carolina	8.53
Arkansas	8.11
Alabama	7.65

STATES ARRANGED ACCORDING TO CIVILIZATION¹

	Per cent.
Massachusetts	6.0
New York	5.8
Pennsylvania	5.6
Wisconsin	5.6
California	5.1
Washington	5.0
Iowa	5.0
Nebraska	4.7
North Dakota	3.8
South Dakota	3.8
Arkansas	3.0
North Carolina	2.9
Mississippi	2.5
South Carolina	2.2
Georgia	2.0
Alabama	1.7

From the table on page 70 it appears that there is a fairly close correlation between the rank in civilization of the states according to the opinion of twenty-three leading geographers, ethnologists and others, and the financial statistics of states. Of the first six states according to the map of civilization five are among the first six in total tax burden. Pennsylvania which is estimated as third in civilization ranks seventh in total tax burden. New York, Massachusetts, Wisconsin, and California are among the first five in both columns. Among the sixteen states the following states have iden-

¹Huntington and Williams. *Business Geography*, 1922, p. 74. Huntington, E. *Civilization and Climate*, 1915, p. 185. The numbers indicate the relative rank in the scale of 6.0 according to 23 contributors. The highest possible rank is 6.0 and the lowest given in Huntington is 1.0.

STATISTICS OF TAXATION AS RELATED TO CIVILIZATION

Order according to Civilization	Average per Capita	Burden Federal Tax	Burden State Tax	Burden Local Tax	Burden Total Tax
1. Massachusetts	1. N. Y.	1. N. Y.	1. Mass.	1. N. D.	1. N. Y.
2. New York	2. Cal.	2. Mass.	2. Wash.	2. Wis.	2. Mass.
3. Pennsylvania	3. Wash.	3. Penn.	3. Wis.	3. S. D.	3. Wis.
4. Wisconsin	4. Mass.	4. N. C.	4. Cal.	4. Nebr.	4. Cal.
5. California	5. Iowa	5. Cal.	5. N. Y.	5. Wash.	5. N. D.
6. Washington	6. Nebr.	6. Wis.	6. Ark.	6. Iowa	6. Wash.
7. Iowa	7. S. D.	7. S. C.	7. Nebr.	7. Mass.	7. Penn.
8. Nebraska	8. Penn.	8. Ga.	8. Ala.	8. Cal.	8. N. C.
9. North Dakota	9. Wis.	9. Wash.	9. Penn.	9. N. Y.	9. Miss.
10. South Dakota	10. N. D.	10. Ala.	10. Miss.	10. Miss.	10. Nebr.
11. Arkansas	11. S. C.	11. Miss.	11. N. D.	11. N. C.	11. S. D.
12. North Carolina	12. Ga.	12. Ark.	12. N. C.	12. Ark.	12. Iowa
13. Mississippi	13. N. C.	13. Nebr.	13. Ga.	13. Penn.	13. Ga.
14. South Carolina	14. Ark.	14. Iowa	14. S. D.	14. Ga.	14. S. C.
15. Georgia	15. Miss.	15. N. D.	15. Iowa	15. S. C.	15. Ark.
16. Alabama	16. Ala.	16. S. D.	16. S. C.	16. Ala.	16. Ala.

tical ranks in both columns: Washington, South Carolina, and Alabama. Massachusetts ranks first in one column and second in another. New York ranks second in one column and first in another; Wisconsin fourth in one and third in another; California fifth in one and fourth in another; South Dakota eleventh in one column and tenth in another; Georgia fifteenth in one and thirteenth in another. The widest deviations are Iowa, seventh in one column and twelfth in another, and Arkansas, eleventh in one and fifteenth in another. To some people such comparisons may be odious, but the correlation between the estimate of civilization and the tax burden seems to be surprisingly close. By civilization is meant "those characteristics which are generally recognized of highest value." ¹

The question which of the classes of taxes, federal, state, or local, is most closely correlated to civilization, and which, therefore, we would normally expect to increase more rapidly concomitantly with social progress, is a question which would require considerable investigation. Perhaps the best illustration of the principle that taxes increase with the density of population and the development of the industrial state is seen in the financial statistics of cities, for the growth of large cities is one of the results of the development of complex manufacture. The census classifies cities

¹ Cf. the definition in Huntington and Williams, pp. 73-74.

above thirty thousand population into five classes; and the statistics in the following table indicate that per capita expenditures for the different public services tend almost uniformly to increase with the size of the city.

The question whether all taxes, federal, state, and local, may be expected to increase with the progress of civilization requires a classification. Professor Adams classifies the functions of government as protection, commercial, and developmental. And he formulates the general law of public expenditure for progressive peoples as follows: "Public expenditures tend constantly to increase, but this tendency does not apply in like manner to all governmental functions. Expenditures for protection exhibit a tendency to decrease in proportion as the protective service of the State succeeds; expenditures for developmental functions tend constantly to increase. This being the case, the test of successful fiscal administration, so far as expenditures are concerned, is not in the aggregate amount placed at the disposal of the government but in the relative amounts which from time to time are assigned to the several chapters of the budget."²

A large percentage of federal expenditures is for the army and navy, for protective purposes. States and municipalities may engage freely in the commercial functions, but public utilities, according to our American policy, are operated according to the

² Adams, H. C. *The Science of Finance*, 1912, p. 82.

PER CAPITA EXPENDITURES FOR CITIES, 1917¹

Total	\$19.07	\$2.18	\$2.08	\$1.65	\$0.36	\$0.48	\$1.46	\$2.01	\$1.36	\$5.91	\$0.25	\$0.67	\$0.12
Over 500,000 population ..	22.83	3.16	2.71	1.56	0.55	0.59	1.76	2.12	1.98	6.37	0.28	0.82	0.14
300,000 to 500,000 ..	21.93	2.70	2.23	2.11	0.41	0.62	1.50	2.47	1.95	6.25	0.28	0.77	0.14
100,000 to 300,000 ..	15.48	1.18	1.56	1.70	0.20	0.37	1.22	1.88	0.70	5.45	0.21	0.58	0.10
50,000 to 100,000 ..	13.68	1.15	1.35	1.53	0.16	0.29	1.15	1.58	0.49	5.15	0.17	0.41	0.06
30,000 to 50,000 ..	13.96	1.19	1.20	1.49	0.14	0.31	1.00	1.75	0.51	5.43	0.21	0.43	0.11

¹ Financial Statistics of Cities.

principle of cost; so that they may have no effect on taxation. Expenditures for the states and municipalities tend to be largely for economically productive or developmental purposes. The contrast, then, between expenditures of the federal government and of the state and local government come to be to a considerable extent a distinction between expenses for protection and expenses for development. Fiscal progress, as Professor Adams held, implies a decrease in expenditures for protective and an increase of expenditures for developmental purposes. The distinction between protective and developmental expenditures in the public economy corresponds, in some measure, to the distinction between necessities and luxuries in the private economy, or to the distinction between expenses for necessities and expenses for cultural purposes. The test of efficiency in private expenditures, as Professor Fairchild has pointed out, is the ratio devoted to outlay for cultural purposes, so the ratio for efficiency in governmental expenditures is the ratio devoted to productive and developmental purposes.

Public expenditures for protection are for necessary public goods. As such they follow the analogy of necessary private goods—the demand for them is inelastic. An adequate army, navy, and police force we must have regardless of cost. An excess over what is adequate would be represented by a steeply declining curve of social utility. But as J. A. Hobson has pointed out, there is a distinction

between organic necessities and social necessities. Food, clothing, and shelter are organic necessities; fashionable dress is a social necessity. If fashions change and become more simple and sensible, what were once socially necessary expenditures may cease to exist. By a process of analogy, the international relations of the state may be compared to social relations. More sensible and less extravagant international fashions would mean the substitution of arbitration and international law for war; so that as regards this particular form of state expenditure the advance of civilization should be concomitant with a steady decline.

Many economic writers speak of expenditures for war as unproductive expenditures. From the economic point of view this is obviously true. Taxes spent for war do not increase the taxpayer's ability to pay. But these public expenditures, which are economically unproductive, may be socially and morally productive. They may make the world unsafe for Germanic militarism, and so defend the world economic order of the future. With the reduction of these socially necessary public expenditures, there would be liberated a flow of economic energy which could be directed into the channels of increased private expenditures, increased private savings, or increased public expenditures for productive or developmental purposes. State expenditures tend to be largely productive—for highways, agricultural experiment stations, agricul-

tural extension, and for state universities. Municipal expenditures are for productive improvements such as highways and public buildings, and for the immaterial conditions of welfare such as education, sanitation, and facilities for recreation. The principles which should govern the extension of these activities are principles of marginal productivity and marginal utility. The limit of the amount that may be available for these expenditures is the surplus above that required for the necessary private and public goods. State and municipal expenditures, therefore, can be classified roughly as public luxuries or cultural goods. As such they conform to the law of the private economy; the demand for them is "elastic." Since they belong to the class of luxury or cultural goods, the social fund available for them grows more rapidly than the increase in the per capita income. To illustrate, let us assume a state not economically prosperous, in which the necessary family expenditures were \$1,400 and the average family income \$1,600. Thus 87.5 *per cent* of the family income would go for necessities, leaving 12.5 *per cent* for private luxuries or cultural goods and government expenditures. Assume another more prosperous country in which the average family income is \$2,400, \$1,400 or 58 *per cent* of the family income would go for necessities, leaving 42 *per cent* for private luxuries or cultural goods and government expenditures. In the first case if 6.5 *per cent* were

spent for private luxuries, there would be available 6 *per cent* which we assume would just cover the cost of the necessary public goods. Under the conditions in the more prosperous country let us assume that 20 *per cent* of the average income is spent for private luxuries, leaving 22 *per cent* available for public expenditures. Leaving 6 *per cent* as before for the support of public necessities, there is a surplus of 16 *per cent* of the national income available for public developmental expenditures. What proportion of this would be divided between optional private expenditures and optional public expenditures it is left for the citizens to decide through the action of their political representatives. Their decision will be made more consciously and probably more efficaciously in proportion to their grasp of the principles of social science involved—the principles of marginal productivity and marginal utility. Only the connection between utility and cost in public expenditures is more remote than in private expenditures. In the first place, it is expenditure for group benefit rather than for individual benefit. It is expenditure for utilities that will accrue in a more remote future. It is expenditure in many cases for the more immaterial goods—for goods of such nature that they can with difficulty be valued in terms of money. Certainly the problem of applying the economic principle of the equal final utility of all consumable goods becomes increasingly difficult with the expansion of govern-

mental activity and the increase of public consumption.

The vital principle that emerges from this analysis is that per capita taxes in the tax system as a whole may be expected to increase. And this increase in taxation would theoretically proceed at a faster rate than the increase in average wealth and income; since, if public goods become increasingly developmental or cultural, the expenditures for them would increase faster than total expenditures. This is by analogy with the facts of private expenditure that with the increase of income a smaller percentage is spent on necessities and a larger percentage is available for luxuries or cultural goods.³

The above statistical and other data, if combined with general but less accurate information, would point to the following conclusions. Taxation and public expenditures tend to increase with the growth of population, wealth, and civilization. They bear a direct relation to prosperity, to the growth of specialization and interdependence, to the development of coöperation. They bear an inverse relation to independence in the sense of the ability of families and isolated groups to maintain themselves without frequent contact with others. The ideal of individualism—of atomic individualism, thus appears to be in conflict with other modern ideals. It seems to be vestigial. The true

³ Cf. tables on pp. 59-64.

individualism, that which is consistent with industrial evolution and modern ideals, is at one with socialism. Human life attains unity in the personality, which has both individual and social aspects. The progress toward true freedom has not been away from the state, but toward the true form of the state. With the growth of democracy and representative government, taxation becomes voluntary, and public expenditure represents a rough social estimate of the proper distribution of expenditures between public and private goods. The state is increasingly regarded as a necessary instrument for attaining the maximum yield from our national resources.

One word more as to the nature of independence. The independence of the nomad and the frontiersman means freedom from restraint by man but virtual subjection to the natural environment. This dependence of man on nature means frugal living, hard work, and tragic subjection to the fortunes of flood or drought. With the development of coöperation man gradually frees himself from the immediate dominance of the natural environment. Without public regulation, however, coöperation on a large scale would be impossible. In this sense, taxes may be viewed as the price of effective coöperation, and hence, of social progress.

CHAPTER VII

THE STATE AND PRODUCTION

A. THE EFFECT OF TAXES AND PUBLIC EXPENDITURES ON PRODUCTION.

In this chapter we shall consider two related aspects of state activity, the influence of taxation and public expenditure on production, and the question of the public management of industries.

First, let us consider the effects of taxation on production. Under certain conditions taxation may reduce the tax payer's productivity. A person's ability to work will be reduced by taxation which reduces his efficiency. Hence, taxes of which the incidence is upon the poorer members of the community are liable to reduce their efficiency by reducing their income below the minimum required for efficiency and health. Most regressive taxes, such as the poll tax, tariffs, excises, and the general property tax in its latest development, are likely to be of this nature. This is true especially if the article taxed is a necessity of life. In this case, the increase in price caused by the tax may diminish necessary consumption.

The same may be true if the commodities taxed

are considered by the poorer people as "conventional necessities," where, that is to say, the demand for them is comparatively inelastic so that an increase in price owing to taxation will cause not a reduction in their consumption, but an increase in the expenditure upon them. In this case the working people will have less to spend upon "organic" necessities, and hence the same evil effects upon efficiency may be produced as if real necessities had been taxed. In the case of higher wages, those which contain an element of "surplus," these indirect taxes may not reduce productive efficiency. They may merely check unproductive consumption. Their net effect, then, may be to reduce the workers' standard of living but not his economic productivity.

The distinction between taxes that check production and those that do not may be summed up under the distinction that economists make between costs and surplus. Costs include standard wages, or such wages as are necessary to maintain the working people according to their accepted standard of living. It also includes such salaries, fees, and profits as are necessary to secure the required quantity and the highest quality of professional and business ability, and the minimum interest required to evoke the savings necessary for maintaining and enlarging our productive processes. If taxation is laid directly upon surplus, it will probably cause a small reduction of productive efficiency. If it is

levied upon cost, it will involve waste and damage to production through reducing the worker's efficiency and through the waste and damage involved in shifting the tax upon surplus.

These possible evil effects of taxation upon production may be largely obviated by a properly devised tax system. By making income and inheritance taxes the chief bases of taxation, by exempting the minimum necessary for health and reasonable comfort, and by levying taxes not on necessities but on luxuries, semi-luxuries, and injurious articles of consumption, the possibility of taxation reducing the productivity of the poorer people may be obviated.

On the other hand, if public revenue is derived mainly from excess profits and high incomes, there is said to be the possibility that taxes will reduce savings and thus check the accumulation of capital. In that case, they might tend to diminish the productive power of society in the future. This, it is claimed, will be so especially in the case of highly progressive income and inheritance taxes. The writer believes that the effect of surtaxes in curbing capital accumulation has been over-estimated. Since this is one of the strongest arguments against progressive taxation, it will be considered in detail in a later chapter of this study. For the present we will conclude that taxes when considered alone and apart from the public expenditure which they occasion probably exert some restriction on pro-

duction either through a reduction of the efficiency of labor or a slowing up of the rate of capital accumulation.

To consider the total effects of taxation, however, we must take into consideration the effects of public expenditure which it makes possible. Taxation when taken alone probably exerts some check on production; public expenditure, when taken alone, may greatly increase it. Just as taxation will reduce a man's ability to work if it diminishes his efficiency; so public expenditure will increase his ability to work if it increases his efficiency. This comparison involves the relative efficiency of public and private expenditure, which will be taken up in more detail in the chapter on The State and Consumption. Again, just as taxation may reduce the tax payer's ability to save, if it reduces his surplus out of which saving might be made; so wise public expenditures will increase his ability to save by augmenting his real income and thus enlarging the surplus out of which savings may be drawn.

Again, a wise system of taxation may increase productive efficiency by raising the price and reducing the consumption of injurious commodities. These sumptuary taxes may increase the fund available for productive or socially desirable public expenditures and thus exert a beneficial effect in both directions.

Also, public expenditures may increase social productivity and improve the economic provision for

the future by providing a better balance between material and personal capital. Under the private economy too large a proportion of investment takes the form of material capital and too small a proportion takes the form of human capital and knowledge. The investment that an employer makes in machinery may bring him a permanent return; but the investment he makes in the education of his employees may be lost to him if they leave his employ. Hence, as a rule, the rate of interest obtainable by an individual from an investment in human capital or knowledge is smaller than that obtainable from an equally wise investment in material capital. So the expenditures of the state in supplying free public and technical education tends to restore the balance between material and personal capital, and thus increases the productive power of society as a whole.

As a general rule, taxation tends to increase social productivity if the resulting forms of public expenditure increase productive power more than it would be increased if the funds secured through taxes had been left in private hands. More light will be thrown on this problem by the discussion in the latter part of this chapter and in the chapter on The State and Consumption. Under this relatively productive category of public expenditures would be such objects as (1) railway development in new countries, irrigation, and afforestation; (2) the encouragement of research and invention;

(3) education and training; (4) public health; (5) expenditure in aid of insurance against unemployment, and (6) insurance against industrial risks.

To sum up the main conclusions of the first part of this chapter, although regressive taxes may somewhat reduce the efficiency of labor, and highly progressive taxes may reduce savings, both of these checks to production may be largely obviated by a well-considered tax system. Striking a balance between the two sides of the account, it would seem that the stimulus to production afforded by a wise system of public expenditure may far out-weigh the check resulting from taxation and other devices required to finance it. To what extent progressive taxation actually checks savings, and hence what should be the proper rate of taxation in the system as a whole, will be the topic of a later chapter.

B. THE STATE AND PUBLIC UTILITIES.

The assumption of industrial functions by the state may have only an indirect bearing upon the subject of taxation; for if the income accruing is sufficient to offset the increased aggregate public expenditures, the result will be of no fiscal significance. Whether or not public management of industry would have a fiscal import would depend upon the purpose of the management and its efficiency. If the purpose were fiscal, the industries might be operated as state monopolies, conducted

along purely business lines, and yielding surpluses which might reduce the national tax bill. On the other hand, if the purpose were primarily social, the industry would be operated at cost, on a deficit, or the services might be gratuitous. In either of the latter two cases the cost would have to be made good through general taxation of non-public industries.

As regards the attitude toward the public management of industry people may be grouped into three classes. By some the assumption of industrial functions on the part of the state is considered a tendency toward socialism, and socialism is regarded as the ultimate outcome of democracy. Others oppose this movement, as they consider that economic progress will best be subserved by the extension of private enterprise under voluntary association. Others believe that there is a considerable area of industry in which it is debatable as to whether public or private management will be more efficient, the balance being determined by various factors and conditions. The following study represents an analysis of the subject from the point of view of the third group.

Approaching the subject deductively, it would seem that some industries are more especially suited for public management, those that are of fundamental social importance, that are at the basis of economic life, that provide the general conditions of earning a living—what have been called “the

power houses of our economic system." These could be divided into six classes:

(1) Transfer of values, such as coinage and currency.

(2) Transmission of intelligences, such as the post office, the telegraph, and the telephone.

(3) Transportation of persons and freight by roads, canals, ferries, bridges, railroads, etc.

(4) Transfer of products by means of markets, docks, wharves, exchanges, and elevators.

(5) Transmission of power and utilities, such as water works, electric power, steam heat, water, and irrigation.

(6) In the sixth class might be included all articles necessary for life which are monopolized under privately managed industry.

Following is an enumeration of what have been considered the earmarks of industries that might be placed under public management.¹

"(1) Those that result in the waste of material resources if left to individual exploitation, such as forests.

(2) Those that return only general rewards for industry, such as fisheries (with the exception of oyster beds), lighthouses, harbors, dredging of rivers, building of canals and waterways, etc.

(3) Those that bring an economic return only after a very long time so that there is not sufficient individual incentive, such as reforestation.

¹ Bullock, C. J. *Readings in Public Finance*, p. 147.

(4) Those in which the public is universally interested so that it will keep watch upon public officials and hold them up to a high grade of efficiency, such as the post office, telephone, and telegraph.

(5) Those which have reached a final state of development, so that their operation has become standardized, such as the street electric railway, lighting and power plants, etc.

(6) Those which are simple or routine in their operation.

(7) Those that are natural monopolies."

A serious and impartial study of the relative merits of municipal and private operation of public utilities was undertaken nearly twenty years ago by the National Civic Federation of the United States.² Reference is here made to an article in the *Quarterly Journal of Economics*, "The Civic Federation Report on Public Ownership."³

The following is the conclusion of the committee as to the expediency of either public or private ownership.

"The Committee takes no position on the question of the expediency of either public or private ownership. The question must be solved by each municipality in the light of local conditions. . . .

² *Municipal and Private Operation of Public Utilities*. Report to the National Civic Federation, Commission of Public Ownership and Operation (3 vol., New York, 1907).

³ *Quart. Jr. Econ.*, Vol. 23, 1908-09, p. 161.

In some cities the companies may so serve the public as to create no dissatisfaction and nothing may be gained by experimenting with municipal ownership. Again, the government of one city may be good and capable of taking care of these public utilities, while in another it may be the reverse. In either case the people must remember that it requires a large class of able men as city officials to look after these matters. They must also remember that municipal ownership will create a large class of employees who may have more or less political influence.”⁴

A less impartial attitude toward the subject is taken by Emil Davies.⁵ Davies enumerates five principal factors making for the collective operation of further services:

“1. The necessity for further revenue on the part of the State or city.

2. The protection of the people from excessive charges on the part of a monopoly in private hands or combinations among private traders or concerns.

3. The natural extension of existing State or municipally owned undertakings, by the addition of fresh branches of production or services.

4. The growing discontent of the workers in industries so vital to the health of the community that the State has to interfere, *e.g.*, coal miners, railway workers.

⁴ *Quart. Jr. Econ.*, Vol. 23, 1908-09, p. 164.

⁵ *The Collectivist State in the Making*, p. 203.

5. The growth of socialist ideas."

The following passage may be taken as a summary of the book: "I trust the numerous examples given in this book will have shown that the whole trend of things is toward a further extension of State and municipal trading, and that although many circumstances and influences may *impede* its onward march, nothing is likely to *prevent* it. Indeed the only remedy visible for many of the evils from which modern society suffers, the only possible solution of the ever more threatening labour difficulty, the only method of enabling the great mass of consumers to meet the ever increasing cost of living is that of nationalizing or municipalizing various services and trades, and thus reducing the tribute paid by the masses to the monopolist, the speculator, the middle-man, or the non-producer." ⁶

Since the problem is to be solved by municipal experience rather than *a priori* principles, an extended treatment of this subject would necessitate assembling statistics on the recent growth of public ownership. The following quotation giving a vivid and humorous suggestion of the growth of municipal industries will take up all the limited space that can be devoted to the topic in this study.

"I have touched upon merely some of the instances of state and municipal undertakings known

⁶ *The Collectivist State in the Making*, p. 207.

to me, and there must be thousands of others of which I am unaware.

"Eliminating the element of time in getting from place to place, it is already possible for a man in any civilized country to be brought into the world by a State doctor or mid-wife, reared in a State nursery, educated, clothed, and doctored at a State school, fed at the cost of the community during his school days (except, in London, on holidays and days of public rejoicing). He can earn his living in government work in any country. In most big towns he can live in a municipally owned house. In New Zealand the government will lend him money with which to buy a house, and it will also lend him, free of charge, the plans on which to construct it. If sick, he may be treated by a State doctor or in a State hospital. He may read at a State or municipal library until he goes blind, when the State will take him into a State blind asylum, or until he goes off his head, when he will be cared for in a State lunatic asylum. If unemployed the State endeavors to find him work. In most towns in Italy or in Buda-Pesth, he can buy his bread from a municipal bakery, and in other countries he can get municipally killed meat from a municipal butchery, and flavor it with government salt, after having cooked it over a fire made with State-mined coal. Or he can partake of this meal in a municipal restaurant, drinking municipally brewed beer, wine from the State vineyards, or State

spirits. He then lights his State-made cigar with State-made matches, and can read a municipally produced daily newspaper. By this time, feeling more cheerful, he can draw some more money from his account at the State or municipal savings bank, and can visit the municipally owned race course, where he gambles with the State or city, and can end up the evening at a State or municipally owned theatre. If he likes he can even take a municipal ballet girl out to supper, after which he may, if he feel so inclined, confess to a State-supported priest. Then, if he can afford it, he may go to recuperate at a State or municipal water spa or bath in France, Germany, or New Zealand, after having insured his life with a State insurance office and his house and furniture with the State fire insurance department.

"By this time, if a strong individualist, in despair at the encroaches of the State and municipality in every domain of life's activity, he can buy State gun-powder at a State shop and blow his brains out; or if he likes to blow out some one else's, the State, having brought him into the world and made him what he is, will finish the job and kill him, this being a monopoly jealously guarded by the State except in war time. In Switzerland, Paris, or many another city, the municipality will bury him. There is no time on this occasion to follow him beyond this stage, except to mention that the Public Trustee in most countries will

probably look after the deceased's affairs much better than he himself did during his lifetime." ⁷

It would be possible to assemble an immense amount of opinion or evidence as to the routine unprogressiveness, favoritism, and general inefficiency of governments and on the other hand of the waste and anti-social practices of private industry. But this subject of government management has only an indirect bearing on the problem of taxation.

Below is a summary of arguments for and against public management. The following is a summary by J. A. Hobson of the broad objections commonly adduced as fatal to the socialization of industry: ⁸

"1. The want of any safe and adequate provision for financing the socialized industries.

2. The failure of any industrial government or management in which labor is predominant or strong, or into which State interference enters, to apply adequate incentives to secure the best services of inventors, scientific experts, technical, administrative, commercial, and financial ability.

3. Defective discipline in mine, factory, field, or workshop, and a related slackness and inefficiency of labor.

4. Bureaucratic incompetence, formalism, and corruption in any public ownership and control of

⁷ Davies, Emil. *The Collectivist State in the Making*, p. 127.

⁸ Hobson, J. A. *Incentives in the New Industrial Order*, 1922, p. 39.

industry, whether operated by central officials or by trade parliaments.

5. Inadequate protection of the Consumer against the domination of Producers.”

Below is a summary of Hobson's answers to these objections:⁹

Argument 1 is based on the view of many economists that the unequal distribution of the national income favors savings; that economic progress is conditional on inequality. In answer to this it is asserted that large income or income in excess of what is necessary as an incentive to economic activity tends to reduce productivity. First, by enabling and inducing its recipients to live in idleness, or in useless or wasteful activities, it withdraws from production the personal labor represented by this leisure class. Secondly, this surplus income, diverted into higher wages might raise the physical standard of efficiency of the working class. Thus, it might be converted from waste into productivity.

Against the statement that a tendency toward equalizing incomes will reduce the investment fund is the assertion that a wasteful distribution of income involves a wasteful utilization of capital. The easy accumulation of the rich leads to overinvestment—to saving and applying to capital a larger proportion of the general income than is

⁹ Hobson, J. A. *Incentives in the New Industrial Order*, 1922, p. 49.

needed as capital to produce the consumers' goods for which under these conditions there is an effective demand. The result is recurring periods of business depression. In other words, the great inequalities in income cause a maladjustment between saving and spending.

The rate of interest and falling prices tend to correct the tendency to over-saving and production in excess of effective demand; but this method of adjustment involves much waste; it is slow, imperfect, and inadequate.

Under the condition of a more equitable distribution of income, the proportion of saving to spending would not be so high. But this does not imply an inadequate supply of new capital; for no reduction in the absolute quantity of savings would take place. Under the condition of fuller employment of the factors of production, and so of increased social income, a smaller proportion of saving might yield as large or a larger amount of new capital.

Under the conditions of a more equitable distribution of income, it will be less difficult and costly to get the necessary new capital, the rate of interest will be less. Under pre-war conditions much saving was of the intra-marginal kind, but about one third had to be extracted at some real sacrifice on the part of the suppliers; and the easy saving was remunerated at a price determined by the difficult saving. Under more equalized conditions of income, though the average sacrifice involved in sav-

ing a given proportion of the total income would be higher than under the old system, the sacrifice in doing the most difficult saving might be less. And since a smaller proportion of the larger total income would need to be saved, the price for saving, *i.e.*, the rate of interest might be lower than before.

Again, the remuneration for savings that go to public industries will be paid in the form of interest on bonds rather than in dividends on shares of stock. This will remove a portion of the field of industry from the operations of the risk-taking, speculative spirit; it will provide an ampler field for conservative investment of savings; and so will tend to rationalize and moralize the industrial system. And this increase in safe investment will stimulate thrift. Hobson makes the further distinction between savings for the sake of expanding material capital and savings for the increase of personal capital. This form of saving, investment in education and training, he contends has been underestimated in Great Britain. There is greater need for trained ability in science, finance, and business administration than for material capital.

Another objection to the extension of socialized industry is that under public or bureaucratic management the social savings will not be most economically applied. Hobson answers that only the old, established, standardized industries are to be brought under public management; and that industries in the experimental and developmental

stage will remain outside the area of public control. He believes that under state control industry and commerce will be less risky, there will be less secrecy about business firms, less ignorance about stocks and prices in the world market, and less violent and unpredictable changes in the monetary situation.

Hobson's answer to the second objection may be summarized in his own words:

"The charge against the new Industrial Order that it will be lacking in initiative and enterprise is, therefore, met by the following considerations.

1. The industries proposed for nationalisation, being relatively stable and routine in character, have less use for these qualities than those industries which remain within the sphere of private competitive enterprise.

2. A great deal of this initiative and enterprise has no rightful place in socialised industry, being directed either to the achievement of profitable victories over trade competitors, or to the establishment of a monopolistic power to tax consumers, or to the performance of successful coups in the financial sphere.

3. Nationalised industries should, however, be able to attract as much of these creative and progressive qualities as they require from men who combine them with a keen public spirit and a high regard for such distinction as the public services can be made to afford." ¹⁰

¹⁰ Hobson, J. A. *Incentives in the New Industrial Order*, p. 99.

The charge that public ownership precludes any form of effective management of industry, and therefore tends to reduce the efficiency of labor, is without warrant. It would be possible for the state, after acquiring ownership over the mines and railways, to lease them out to private companies upon terms that would leave unimpaired the previous incentives to efficiency among the employees; but that is not the problem that confronts us. Within the sphere of public industry must be found or devised motives adequate to evoke from the will of the workers productive energy equal to that hitherto evoked by the economic pressure brought to bear in private employment.

What would be the effect of nationalization on the attitude of labor that the British call *ca' canny*? If it is a consciously anti-capitalist policy, nationalization might call it off. In so far as the desire to spread employment by working slowly is a factor in *ca' canny*, the greater scarcity of employment under a public service would sap this motive to inefficiency. On the other hand, this advantage might be offset by the removal of the fear of being "fired" for inefficiency.

Another economic claim for public service is the argument that public industry, by removing the profit motive, the insecurity of wages and employment, and the speeding up, and bad workmanship, will give freer scope for the instincts of workmanship. Hobson, however, does not ascribe much

weight to this argument; for routine, standardization, and large-scale production will continue to be characteristic of the public services; and industrial efficiency requires that minute specialization and sub-division of labor which do not permit the liberty of personal expression which is the essence of true craftsmanship. The elimination of profiteering will hardly make the work more interesting. The compensations are to be found outside the routine services in the enlargement of leisure and other opportunities that are afforded by the new order.

The most potent incentives for the maintenance of industrial efficiency and progress are derived from representative government. Autocracy is failing in industry as it has failed in politics. The democratic institutions that have displaced political autocracy have plenty of faults; but few deem it practicable to return to the autocratic state. So in industry: as a free citizen who has a stake in the government stands to gain by helping to make it good, so the worker who has some control over the industry in which he works, stands to gain by making it efficient. The details of the participation of labor in industry—whether through social ownership, guild ownership and management in certain trades, capitalism combined with profit-sharing and co-partnership, or capitalism limited by wage-boards or other arrangements—are outside the scope of this study. Some of the probable advantages of the introduction of representative democ-

racy into industry are as follows. There may be some gain from a new social atmosphere, the sense of dignity and responsibility of men who are conscious of working for themselves, their comrades, and the public in an industry which in some sense belongs to them and in a government in which they have a voice.

But the great immediate gains to productivity will come from the development of group self-discipline within the workshop or other industrial unit. The possible limits of the efficiency of industry under the conditions of willing coöperation are seen in the extraordinary productivity during the war, when patriotic and other special stimuli took up all the pre-war slack. This problem of efficient self-government in industry is the central problem of public management. Of course, workshop self-government will not yield perfect discipline, but it will yield better discipline than is probable under private management, in view of the progressive revolt of the working class against autocracy in industry. If industrial democracy does not attain this measure of relative success, state industry will be relatively inefficient, and the project for an extension of public management will have to be abandoned as unfeasible.

In answer to the fifth objection to government management that it will afford inadequate protection to the consumer against the combinations of producers, Hobson avers that this danger may be

obviated by giving consumers some representation in the government of the trades which exist to supply their wants, and by linking up more closely the trade unions with the coöperative movement.¹¹

But leaving the subject of public management, there is no question that the expansion of large-scale industry requires a certain corresponding expansion of government activity. In the case of public service utilities the government has the choice between regulation and management. This is true of industries that operate according to what economists call the law of decreasing costs or increasing returns. The larger the industrial plant the lower the per unit cost of product. The result of this is struggle for enlargement of an industrial plant, cut-throat competition, and finally combination or integration in some form, and monopoly limited only by potential competition or the danger of public interference. Hence, from the social point of view government management or regulation is a prerequisite of industrial democracy and hence, in the long run, to the existence of industry. Regulation is a necessary and hence a productive factor in industry. When the public saves in reduction of strikes and lock-outs, in modifying the industrial cycle, and in prevention of profiteering in prices and wages, more than it costs them in ad-

¹¹ For a less sanguine analysis of the scope, limitations, and difficulties of collectivism, see Robertson, D. H. *The Control of Industry*, 1923, Chapters VIII and IX.

ditional taxes, it is conforming to the economic principle of marginal productivity.

This may be justification for the greater taxes which the federal government exacts from manufacture than from agriculture. In 1918 manufacturing corporations paid the federal government \$2,112,044,810 as income, profits, and excess profits taxes while the entire agricultural industry probably did not pay the United States government over \$100,000,000 in these classes of taxes.¹² The writer goes on to comment that "it seems highly improbable that in 1918 the Federal Government rendered to the manufacturing industry service valued at more than twenty times that furnished to agriculture." From the social point of view this apparent injustice in the distribution of tax burdens tends to disappear. The growth of expenditures is a concomitant of the development of the industrial state. And the great increase in wealth that results furnishes the source of support for those regulative and developmental activities of the state without which the existence or the prosperity of the new order could not endure. Besides, the acceptable principle of taxation today is not benefit but taxable faculty.

On the subject of the public management of industries we may formulate our conclusions as follows:

¹² *Income in the United States*. National Bureau of Economic Research, Vol. 2, pp. 5-6.

A. CONDITIONS FAVORABLE TO PUBLIC MANAGEMENT.

1. The need of supplying an essential service in a field unattractive to private capital.

2. The need of conserving certain natural resources which would be wasted under private management.

3. The need of safeguarding the quality of certain commodities, like milk and water, in which minimum standards of quality can be determined scientifically.

4. When the competition of a public industry is necessary to restrain a private monopoly.

5. When considerations of social advantage require that the use of the services should be discouraged, and public opinion will not favor complete prohibition. The policy here to be followed is that of a government monopoly, and a price much in excess of cost.

6. When social considerations require that the service should be rendered at less than cost, *e.g.*, water.

7. When considerations of social advantage require that essential services be provided free of charge to those who otherwise would go without them on account of poverty, *e.g.*, hospital service, education, etc.

8. When labor is hostile to private management and in favor of nationalized industry.

9. When public employment is held in high esteem, so that honor and security of tenure rather than high salaries will attract the highest grade of scientific ability.

B. CONDITIONS FAVORABLE FOR PRIVATE MANAGEMENT.

1. Where dynamic industrial conditions prevail, and private profit is needed to evoke initiative and enterprise.

2. Where the maintenance of soil fertility is a vital factor, as in the case of agricultural land.

3. Where the mass of people are so limited in intelligence and social vision that they can respond adequately to no motive but the direct appeal to personal gain: where social coöperation can only be unconscious and indirect.

4. Where government is inefficient or corrupt, and public opinion divided or indifferent.

CHAPTER VIII

THE STATE AND DISTRIBUTION

WE might take as a general thesis of this book the rule that the activity of the state or the communities is desirable if it tends to increase the volume of the national dividend, to equalize the distribution of the national dividend, to diminish the variability of the national dividend, or to increase the human satisfaction derived from the consumption of the national dividend. The subject of this chapter is the relation of public activity to the distribution of the national dividend.

Under the conditions of the unrestricted working out of all the factors of the industrial situation there is great economic inequality. According to the conclusions of the National Bureau of Economic Research,¹ "in 1918 the most prosperous one *per cent* of the income receivers had nearly 14 *per cent* of the total income, the most prosperous 5 *per cent* of the income receivers had nearly 26 *per cent* of the total, the most prosperous 10 *per cent* of the income receivers had nearly 35 *per cent* of the total, and the most prosperous 20 *per cent* of the income

¹ *Income in the United States*, Vol. I, p. 147.

receivers had about 47 *per cent* of the total income." This economic inequality means an uneconomic utilization of our national resources. The price-controlled economy responds to offers of purchasing power, not necessarily to intensity of human needs. The price that an individual may offer for a commodity is a better index of his purchasing power than of the intensity of his desire for that commodity. If all incomes were equal, the amount of money offered for a commodity or service would be an index of the intensity of the want that it satisfied. Under such conditions the most urgent wants would be satisfied first, then the less urgent wants, and so on to the limit of effective demand. Hence, economic resource would be utilized to the maximum in the satisfaction of wants. But under conditions of economic inequality, effective demand is rather an index of wealth or income than of intensity of desire. Inequality, then, tends to invalidate market price as an index of social requirements. The wants of the rich are weighted as against the wants of the mass of poor or moderately well-to-do people. Our economic energy is diverted to the production of luxuries before all of the essential wants of society have been met. Thus the private economy, controlled by the principles of market price, and not modified or redirected by the power of the state, does not derive the maximum welfare from our economic resources.

Economic inequality is probably the primary

cause of class distinctions, of social stratification. Hence it conditions much wasteful expenditure in the way of pecuniary emulation. Veblen has made us familiar with the invidious distinctions which are based upon differences in wealth and income, and which lead to expenditures for the maintenance and exhibition of social status, expenditures that have no real human or organic utility. Economic goods and services become valuable merely as symbols of success and distinction in the great game of social competition.² Thus economic inequality and the pecuniary standard lead to non-social and irrational choices in consumption, which tend further to invalidate market price as an index of social requirements. Costliness becomes of more significance than utility. With the demarkation of social classes, symbols of prestige and status become social necessities, like certain articles of injurious consumptions among the poorer classes of laborers. If the income of a member of the upper class declines, he will cling to these symbols of prestige and status at the expense of the necessities for health and efficiency.

Inequality and social stratification are also held to be the causes of the phenomenon of fashion, which reduces the lifetime of articles subject to its sway, and thus has the practical effect of a waste of resources or a reduction in the quantity of goods

² Cf. Kyrk, Hazel. *A Theory of Consumption*. Hart, Schaffner, and Marx, prize essay in economics, 1923, Chapters III and IX.

available for satisfying wants. It also causes waste in production in increasing the risk incurred by buyers and sellers of fashionable goods. If, then, economic inequality operates to reduce the total welfare that can be derived from our economic resources, the activity of the state and the communities, if it tends to offset this inequality, may be highly desirable from the point of view of the general good.

The state may effect the distribution of wealth through the operation of three factors: taxation; the public ownership, operation, or regulation of industries; and public expenditures. We shall consider these in order.

First let us consider the influence of taxation on economic inequality. A regressive tax tends to increase the inequality of incomes. On the other hand, a progressive tax, especially a steeply progressive tax, tends to diminish the inequality of incomes; and the more steeply progressive the stronger this tendency. In the case of the regressive tax, with the increase of income, taxation takes a decreasing percentage of that income. In the case of a progressive tax, with the increase of income, taxation takes an increasing percentage of that income. A regressive tax system tends to increase inequality; a progressive tax system, especially a system that entails a sharply progressive rate, tends to decrease inequality.

The poll tax is regressive; for while each citizen

pays the same amount, with the increase of income the tax represents a decreasing percentage of that income. Tariffs and excise taxes on articles of wide consumption are also generally regressive; for, although the tax rate is proportional to the amount consumed, the amount which the poor man spends on these commodities is a higher percentage of his total income than that in the case of the rich. On the other hand, indirect taxes on articles of luxurious consumption that are used only by the rich, such as champagne and Rolls-Royce cars, may lead to a progressive rate; since the poor man, who does not consume these articles, is thereby exempted from taxation on them. This form of taxation, however, is not very successful as a source of revenue, since the rise of price occasioned by the tax would cause a rapid diminution in the demand for the articles in question. An indirect tax to be successful from the fiscal point of view must be on articles of wide consumption for which the demand is relatively inelastic. Semi-luxuries are the class of commodities most suitable for a compromise between productivity and equality. But taxes on these tend to be regressive; for, although the rich spend more for them than the poor, with the increase in income the expenditures for them tend to be a diminishing percentage of that income. Also the general property tax, in its practical application, tends to be regressive; for a large proportion of the property of the poor or moderately well-to-do con-

sists in real estate and tangible personal property, while an increasing proportion of the property of the rich consists of intangibles, such as stocks and bonds. The rich can evade the general property tax and the poorer classes cannot; hence, the general property tax becomes increasingly regressive with the increasing percentage of intangible property that characterizes the development of the industrial state. A sales tax or a number of taxes on particular commodities has the same regressive tendency as tariffs and excise taxes.

On the other hand, income taxes, inheritance taxes, and profit taxes may be made steeply progressive. This may be done by exemptions of small incomes, inheritances, and "normal" profits, and by graduating the rates with the increase of receipts from these sources. The income tax may be made still further progressive by a differentiation of the rate between earned and unearned income. Earned income, or income from personal exertions, may be taxed at a lower rate than income from investments. This may be justified on the grounds that the unearned income yields a greater net return than the earned income, since from the economic welfare derived from the latter must be deducted the disutility of earning the income. Also in the case of the earned income, the worker is compelled to live near his place of employment, where the cost of living is generally high; whereas the man whose income is entirely from investments can live

in the country or in Europe where the cost of living may be much lower. Also, the recipient of earned income, since his income is terminable and precarious, must make a larger provision in the form of savings against periods of unemployment and old age; and hence, has a smaller income available for present consumption. For this reason his taxable faculty is less than that of the recipient of funded or perpetual income.

In the light of these distinctions it is obvious that the state may increase or decrease economic inequality according to the form of the tax system adopted. A tax system in which the bulk of state and local revenues were derived from poll taxes and general property taxes, and in which the bulk of federal revenues were derived from import duties and excises, would be a regressive tax system, and would aggravate economic inequality. On the other hand, a tax system in which the local revenues were derived mainly from property taxes; the state revenues from corporation, inheritance, and income taxes; and the federal revenues primarily from excess profits taxes and progressive income and inheritance taxes, and only secondarily from import duties and excises, might be a progressive tax from the point of view of the tax system as a whole, provided there were liberal exemptions and highly graduated rates in the case of the income and inheritance taxes. Under such a condition the state might contribute greatly to the general welfare by

mitigating the evils of inequality that we have discussed above.

A survey of the present tendencies and the present political issue of taxation may be pertinent in the light of the above distinctions. During the war when the excess profits tax was bringing in two billion dollars revenue a year and the income tax reached a maximum of 73 *per cent* of the higher increments of income, the tax system as a whole was doubtless progressive. Since then the tendency has been in the opposite direction. The excess profits tax was repealed in 1922, and the maximum income tax reduced from 73 to 58 *per cent*. At present the Mellon proposal advocates a further reduction of the income tax to a maximum rate of 31 *per cent*. The chief source of state and local revenue is still the property tax. Hence if federal taxes are reduced and state and local taxes correspondingly increase, as is the present tendency, unless the federal tax program of the progressives is adopted or the system of Secretary Mellon is offset by the institution of progressive income and inheritance taxes by the states, the services of the state in mitigating the evils of economic inequality will be seriously weakened.

The second method by which the state can mitigate the evils of inequality is through ownership, management, or regulation of public utilities. This is true because the motive of public management is different from that of private management. The

private economy aims at profits, the amassing of wealth; the public economy desires the maximum social utility. By thus substituting the social motive for the acquisitive motive, the evils of the pecuniary system tend to be obviated. The public economy aims at a distribution according to need or according to merit rather than according to purchasing power. The methods by which the state affects this redistribution were explained in the latter part of the preceding chapter. By supplying an essential service in a field unattractive to private capital, by conserving natural resources which would be wasted under private exploitation, by safeguarding the quality of certain essential commodities, by preventing private monopolies, by raising the price through public monopolies of articles of undesirable consumption, by supplying essential services gratuitously or at less than cost, by diminishing strikes and lock-outs through settlement of industrial disputes, and by securing the highest grade of experts without the need of paying exorbitant salaries, the state may act in such a way as to offset in very large measure the excessive or undesirable inequality that is inherent in free competition and the pecuniary organization.

The third method by which the state may influence economic inequality is by public expenditure. Inequality of incomes may be increased by public expenditure that is regressive, that is, expenditure of such a sort that the smaller the in-

come the less the benefit derived from the public expenditure. Inequality may be diminished if public expenditure is progressive, that is, if the expenditure is such that the smaller the income the greater the benefit occasioned by the public expenditure. In line with this reasoning a regressive system of public expenditure would aggravate inequality; a progressive system of expenditure would mitigate inequality. For example, if public expenditures were, to a considerable degree, for the maintenance of high protective tariffs in the interests of a few rich manufacturers, for the support of officials who administered heavy import duties on articles of wide consumption, for the maintenance of luxurious regal courts or style of living among administrative officials, or for the maintenance of automobile roads through exclusive summer resort regions, to this extent public expenditure would be regressive and would aggravate inequality. On the other hand, if public expenditures were for the purpose of maintaining officials who levied income, inheritance, and profits taxes, also import duties and excises on luxuries and semi-luxuries and not on necessary and desirable commodities, for the support of officials who lived in democratic simplicity, and for the maintenance of systems of transportation utilized by the great mass of the people, expenditures might be correspondingly progressive in character and tend to decrease the inequality of wealth.

According to Dalton³ the maximum reduction in inequality or the maximum progression is attained when taxes are levied according to the principle of minimum sacrifice and public expenditures are made according to the principle of maximum benefit; that is, revenue is secured by taxing the super-rich and is spent largely for the benefit of the sub-poor. The principle of maximum benefit operates in so far as public expenditures contribute a large element of one's real income. Of such a nature are expenses for charities, hospitals, old-age pensions, sick benefit, unemployment benefit, maternity benefit, widows' pensions, etc. Such expenditures would proceed on the principle that the private economy with its pecuniary organization tends to aggravate economic inequality and therefore that the function of the state is to counteract this inequality for the general good. The motive of the state would be the pecuniary motive reversed; in other words it would aim to reestablish equality as measured by the pecuniary standard.

So far we have analyzed public expenditure in relation to private pecuniary income. Regressive public expenditures are in direct proportion to private pecuniary income; progressive public expenditures are in inverse proportion to private pecuniary income; adherence is still to the pecuniary standard. The assumption that would validate this

³ Dalton, H. *Principles of Public Finance*, Part III, Chapter XIX.

socio-political principle is that the capacity for consumption is equal among all people. Only on this assumption could equality of income make for the maximum social welfare. But this assumption is obviously untrue. People differ in their capacity for service, and for enjoyment and appreciation; and, obviously, in order to obtain the maximum welfare from a given amount of economic resources, economic power or the command over goods and services should be in proportion to one's capacity for utilizing these goods or services. If free competition were the form of organization most effective for deriving welfare from a given amount of economic resources, the individual's capacity for utilization or enjoyment would under this system be in proportion to his purchasing power. This we know is not invariably true, for wealth may be derived from luck, from windfalls, or from the accidents of inheritance. Wealth is not necessarily an index of productivity. The theory of the classical economists is that in the long run individual wealth tends to be a rough index of individual productivity. But under modern dynamic conditions the variations between wealth and social serviceability appear often to be very wide. This subject will be treated in greater detail in a later chapter of the book.

But if wealth is no valid index of productivity, neither is economic productivity a valid index of capacity for consumption, of power of enjoyment

and appreciation. The business manager, the entrepreneurial genius may be indifferent to art and literature, to the beauty of nature, and to the finer amenities of social life. But if wealth is no index of consumptive capacity, the same is true also of poverty. Hence the ability to receive, the counterpart, in the case of the poor, to the ability to pay taxes on the part of the rich, is confined only to the consumption of necessities.

Yet public expenditures in a rich country like the United States have to do with the conferring of direct psychic utility in lines which correspond to the expenditures for comforts and luxuries in the sphere of the private economy. Beautiful public buildings, museums of art, advanced cultural education, municipal music and drama,—these are increasingly supplied by the public economy under conditions of increasing national wealth. And they are supplied under conditions of the most efficient expenditures, that in which the grant or service responds not to purchasing power alone, not to poverty alone, but to individual capacity for utilization or enjoyment. Under these circumstances the pecuniary standard is disregarded, and a more scientific method of economic consumption is adopted in its place. Each member of society is given a right to specific goods and services according to his capacity for utilizing them regardless of the size of his income. An excellent illustration of this is our system of free University education.

But the same principle evidently applies to our public school system, to public libraries and art museums, and to beautiful public buildings. In the case of public concerts, playgrounds, parks, and swimming pools this principle is modified by the principle of supplying necessary services to those who otherwise could not enjoy them because of poverty.

To sum up the main conclusions of this chapter, the state may mitigate inequalities by a progressive system of taxation, securing the revenue mainly from taxes levied on the rich, and by a system of progressive public expenditures spending this revenue in making up the deficiency of necessities on the part of the poor. Further, if the national income warrants, public expenditures may be made for services analogous to the comforts and luxuries of the private economy, and distributed in proportion to the individual's capacity for consumption. If we strike a balance between the two sides of the account, the loss due to the restriction of luxurious consumption on the part of the rich due to the redistribution of wealth is probably more than offset by the increased utility on the part of the poor, and a great social profit will probably remain owing to public expenditure which ignores the pecuniary standard and is determined by the individual capacity for consumption. More light will be thrown on this problem by the discussion in the chapter following. How far the state through taxation and

public expenditures or public industry may effect a redistribution of wealth without reducing business enterprise and the desirable accumulation of capital will be the subjects of later chapters in this study.

CHAPTER IX

THE STATE AND CONSUMPTION

WHEN we turn to the subject of consumption we enter a field which has been less thoroughly explored by political economists. We are, however, coming to perceive the great importance of this phase of the subject. A large body of economists now hold that consumption is the motive force of economic processes. Professor Giddings identified the consumption economy with culture. "It is through the diversification of consumption that man passes over into a productive economy, and it is in the standard of living, created and measured by the diversification of culture that we have the efficient cause of the modern production of wealth. In other words the standard of living is the cause, not the effect of production."¹ From the point of view of utility of consumption another authority avers that wealth may be better spent in wise consumption than in indiscriminate investment. And W. C. Mitchell holds that the vast majority of people would gain as much from wiser spending as from increased earnings.

¹ Giddings, F. H. *Polit. Sc. Quart.*, Vol. 18, 1903, pp. 459-460.

The area of distinction is much wider in the case of public and private consumption than in public and private production. In the latter case we find a large field of industry in which choice is extremely difficult. Both socialized and private industries are operated by the same general type of human beings; by men who have been trained in the same educational systems. Both tend to operate on a large scale, both employ the methods of specialization, and both profit by the same advance in technological culture. The distinction between the profit and the non-profit motive tends to disappear. Management becomes differentiated from capital, becomes the factor of dominant importance, and comes to be remunerated on a salary basis. Thus the organization of the public utility and the private corporation in many respects tends to be identical, and in others their differences tend to diminish. Public and private productivity over a large area of the industrial field would seem to be not far from equal; so that the choice between these forms of production is not perhaps a vitally urgent problem.

But when we come to compare public and private consumption, we find a marked difference. Also, there is a decided contrast between productive efficiency, both public and private, and the advance of the arts of consumption. A lucid exposition of the backwardness of consumption is found in an article by Professor W. C.

Mitchell.² He finds four causes for this condition. First, the fact that the family is still in the main a unit for consuming goods makes impossible in the field of consumption that specialization which is one of the causes of efficiency in production. Secondly, the arts of consumption are under technical disadvantages. Rapid progress in the arts of production has been due to progress in physics and chemistry, sciences which deal with the subject-matter which is simplest, most uniform, and most amenable to experimental control: these are the sciences of which our knowledge is most full, precise, and reliable. Progress in the arts of consumption rests on an increased understanding of physiology and functional psychology, subject-matters which are less simple, uniform, and amenable to experimental control than are physics or chemistry. Hence, from the point of view of technical aid from the scientists, the housewife is at a disadvantage in comparison with the manufacturer. Thirdly, the art of making money has advantages over the art of spending it on the side of business method. In the case of the business enterprise all things are referred to a single pecuniary standard. The housewife's gains are not thus reducible to dollars, but consist in the bodily and mental well-being of her family. Since she lacks a common denominator, her subjective valuations are often fluctuating and

² "The Backward Art of Spending Money." *Am. Econ. Rev.*, Vol. II, pp. 269-281.

inconsistent. Fourthly, women, who are the chief agents in consumption, are inclined toward that form of ostentatious expenditure which is described by Veblen in his *Theory of the Leisure Class*.

According to Professor Mitchell, the prospect for improvement in consumption lies in two directions, the extension of business enterprise in the field of consumption, and the development of municipal housekeeping. In the field of private business enterprise we have the apartment building, the family hotel, and the coöperative kitchen. In the field of municipal housekeeping we have pure food laws, municipal certification of milk, increased expenditures for playgrounds, parks, library stations, and day nurseries. These two movements bring about an increase in socialized spending of money with a neighborhood instead of the family as the unit. Such experiments give men a larger share in organizing expenditures; and men bring to the task a trained capacity for coöperation and the development of system—qualities to which the greater size of the unit allows free scope.

A more technical exposition of the advantages of organized and socialized consumption is found in an article by Professor S. J. Chapman.³ The principle of increasing return in production operates because of increased efficiency due to specialization. The same principle may be made operative in con-

³ "Laws of Increasing and Decreasing Returns." *Econ. Jr.*, Vol. 18, 1908, pp. 52-59.

sumption, and for the same reason. As the law of decreasing return comes into operation at some stage in the expansion of individual businesses, so the same law comes into operation in the systems of private consumption. This is the law of diminishing utility. When industries are systematically related to one another for the production of goods, there exists the conditions of specialization, of increased efficiency, which gives the law of increasing return. This law also operates in the field of consumption, when on account of integration or organic connection between the different parts of the system of consumption there arises the possibility of increased specialization in consumption. The author makes special reference to the operation of this principle in the case of such public goods as parks, libraries, theaters, street lighting, good and pleasant roads, conveniences in the supply of water, and illumination provided for houses, which can be provided only when the community on a particular spot has reached a relative magnitude. As integrated industry becomes more productive in part because of increased possibility of adapting tasks to individual skill or ability in production, so organized consumption may bring increasing returns in utility because of the increased possibility of adapting consumption to the varying wants and capacities for consumption of the individual. The conditions of this increasing return are a larger volume of commodities, and in consequence the

larger sphere of individual choice, so that each person may get more exactly what he or she wants.

A valuable analysis of the subject of consumption is found in an article by William Smart.⁴ He classifies articles of consumption under the six following categories:

"1. Food and drink. 2. Dress, including ornament. 3. Shelter, including furnishings and equipment of the house. 4. Transport, including travel and communication generally. 5. Education, including literature and art. 6. Recreation." From his survey of these categories of consumption he reached the following principles:

"(1) That similar amounts of capital and labor may be embodied in forms that admit only of rapid consumption, or in forms whose consumption extends over months and years.

(2) That, whether embodied in perishable or in permanent forms, the consumption of these goods may be selfish, or may spread its advantages over groups of consumers.

(3) That, in some forms of consumption, man must be alone—his consumption excluding that of others—while in other forms he consumes best by calling in others to enjoy with him.

(4) That, alike in unselfish and in selfish consumption, the individual may take out of existence

⁴"The Effects of Consumption on Distribution." *Annals Am. Acad. Polit. and Soc. Sc.*, Vol. III, 1892-93.

more wealth than yields any adequate return to society in life, happiness, or labor."

The general conclusion of this article, which is similar to that of the two preceding, is that progress in consumption requires a more scientific knowledge of the subject and an increased socialization of consumption.

With this material as a background we shall proceed to analyze the problem of public and private consumption under the following heads: (1) Kind of goods. (2) Adjustment to capacity of consumers. (3) Possibility of using expert advice. (4) Waste.

From the point of view of kinds of goods expenditures may be subdivided into the two main divisions, necessities, and luxuries or cultural goods. The goods that satisfy these cultural wants are the material conditions that make life worth living. According to Fairchild, the proportion of the total income which is available for the satisfaction of cultural wants after the necessities have been supplied is the best possible index of the worth of the standard of living.⁵ A similar statement is made by J. A. Hobson.⁶ "Progress in civilization may be measured by and largely consists in the broad diffusion of the standard of life containing larger elements of consumption which express the individual needs, tastes, and interests of consumers." Since

⁵ Cf. Fairchild, H. P. "The Standard of Living—Up or Down." *Am. Econ. Rev.*, Vol. 6, 1916.

⁶ *Incentives in the New Industrial Order*, p. 139.

this surplus fund in excess of necessities is thus of vital significance for welfare, its distribution as between public and private goods is an important phase of our problem. Many economists also make a useful further classification besides that of necessities and luxuries. Not all luxuries are to be classed as wealth in the etymological sense of the word; some, to adopt Ruskin's term, are more properly characterized as "illth." These goods and services may be positively injurious to the individuals who consume them, or though they may produce some utility, it may be inadequate to compensate for the labor or other cost required in producing them. As to just what goods, specifically, may be classified as "illth," the economist is not competent to say. Authoritative judgments on this question await that further development of physiology and functional psychology that is essential for progress in the arts of consumption. Tentatively one might accept Hobson's enumeration of stimulants and drugs, bad literature, art, and recreations, the services of prostitutes and flunkies. According to Hobson: "Not merely does no human utility correspond to the economic utility ascribed to such goods, but there is a large positive disutility."

This distinction of expenditures above necessities as desirable or undesirable may be further clarified by reference to an article by A. F. McGoun.⁷ De-

⁷ "Higher and Lower Desires," *Quart. Jr. Econ.*, Feb., 1923, pp. 291-301.

desirable expenditures are those which do not lead to deterioration of character. Since this is too vague a term, the economist gives it a positive meaning by defining character as personal efficiency or capacity for labor. On this method of classification, desirable expenditures are included in the group of necessities, and luxuries are identified with undesirable expenditures. The first test, then, of desirable expenditure is that it increases the capacity for labor. Among these desirable expenditures a hierarchy might be established on the principle of the time limit. The more remote the time intervening between the consumption of any necessity and the time at which it issues in increased capacity and satisfaction, the more important is the good. A third criterion of the rank of a desire is its possibilities of social gratification, those desires being preferable which can be satisfied by common as opposed to exclusively individual consumption. Since the great deterrent to individual economic effort is the law of diminishing utility in individual consumption, the most socially desirable goods will be those which satisfy and develop foresight and altruism. By means of these, one's incentives to economic activity will be maintained, if he works for his own future welfare, or for the satisfaction of others. The desire for education, literature, art, and religion are, according to this criterion, the highest desires of all.

While this definition of desirable expenditure as

that which does not lead to the deterioration of character seems to us entirely sound, McGoun's identification of character with productive efficiency seems a rather narrow conception. If character were measured by capacity for enjoyment or appreciation as well as by capacity for labor, this limitation of conception would be obviated. Our practical conclusion, however, would be the same. Desirable expenditures would be those that increase one's capacity for labor or his capacity for enjoyment.

While these distinctions do not, of course, furnish the scientific basis for a justification for increased public expenditures they would seem to throw the burden of proof on the contention of the individualist; for a large proportion of the goods which may be provisionally classified as "illth" belong to the system of private expenditure. Our classification, in general, is as follows:

Economic Goods	{ Necessities	
	{ Luxuries	
	{	Goods that ought to be desired, or wealth.
		Goods that ought not to be desired, or illth.

Included under necessities are both public and private goods. Private goods include adequate food, clothing, and shelter. The public goods include protection, adequate regulation of industry and a certain amount (varying according to conditions) of education, sanitation, and recreation.

Included under luxuries are both public and private goods. The private luxuries include art and literature—both good and bad—travel, sports, automobiling, moving pictures, candy and soft drinks, cigars and cigarettes, card playing, etc.—beyond what is necessary for recreation. The public luxuries include the laying out and adornment of parks, the erection of beautiful public buildings, such as libraries and museums of art, the building of good and pleasant roads, the establishment of municipal bathing facilities, municipal music and drama, and in general, education, sanitation, and recreation in excess of what would be deemed necessary from the point of view of the productive efficiency of the people. Leaving out the advantages of social consumption, which have been said to operate according to the law of increasing return, it seems probable that a reduction of private consumption and an increase in public consumption are economically justifiable on the principle of the equal final utility of all consumable goods. For money spent for parks and playgrounds, for libraries and public schools and colleges, for scientific research and agricultural experiment will probably bring in a greater social return than money spent for additional industrial plants that cannot be operated at full capacity, or for factories that produce candy, tobacco, chewing gum, and cosmetics.

The distinction between public and private consumption may be considered from the point of view

of the more complete adjustment of consumption to the capacity of the individual consumer. Some persons have greater natural or acquired capacity for enjoyment of certain kind of goods than others, and as one ascends from the necessary wants to the cultural wants these divergences and variations in capacity of utilization will grow.⁸ Such differences are accentuated by education. What we call cultural education is largely the acquisition of skill and refinement in the arts of consumption. Practical or technical education has for an end the greater efficiency in production. These facts together with the growing complexity of modern life and the differentiation among individuals makes necessary the widest possible diversification in the field of consumption if individual capacities for utilization of wealth are to be most efficiently employed. The conditions that make possible the satisfaction of individual needs are a large economic surplus above necessities and a large sphere of individual choice. The expansion of private wealth fulfills the first of these conditions and the socialization of consumption, as was explained in the summary of the article by Professor Chapman, comprises the second. This is the condition of the operation of the law of increasing return in consumption.

⁸ Cf. The mathematical demonstration of this principle. Wright, P. G. "Total Utility and Consumers' Surplus." *Quart. Jr. Econ.*, Vol. 31, 1916-17, pp. 307-318.

By socializing consumption a given amount of wealth may be much more efficiently utilized. By way of illustration, suppose that a community had \$100,000 to invest in library facilities. Would this bring a greater net social return if invested in one public library or if \$1,000 were invested in each of 100 private libraries? The answer seems obvious. In the case of the private libraries the four hundred or five hundred books would be read probably not more than once. Except for professional value as reference books the investment in them would thereafter mainly represent sunk costs. In the case of the public library the books would be used again and again. There would be an interaction between public demand for the books and public supply by the expert librarian. The efficiency of public schools and universities over private tutors and private schools is another illustration. Just as in the case of a public library the services of the teacher and professor are more efficiently utilized. Through a larger audience and a wider appeal a given amount of educational effort brings an increasing return as the service becomes public and socialized. Another illustration is the utilization of land for recreational purposes. When population is relatively sparse and land accordingly cheap, land may be cultivated extensively for artistic and recreational purposes in the form of large private lawns and back yards; but when density of population causes high valuation of land, the social utilization

of land in the form of parks becomes desirable. Land thus socialized for recreational purposes obviously brings a larger return per acre than is possible under frontier or village conditions. Here again desirable public expenditures develop apace with the increasing density of population.

Public and private consumption may be contemplated from the point of view of the possibility of getting disinterested and expert advice on matters of consumption. Under primitive conditions, when most economic goods belonged in the category of organic necessities, the individual's conscious wants were a fairly good test of the desirability of consumption goods. Consumption had a direct biological utility. Under such conditions a man is likely to have a definite notion of what he wants. But as growing wealth increases his command over luxuries or culture goods, he becomes bewildered by the great variety of choice. The overburdened housewife, according to Mitchell's enumeration, must buy milk and shoes, furniture and meat, hats and underwear, bedding and disinfectants, medical services and toys, rugs and candy. She can hardly be expected to possess expert knowledge of the qualities and prices of such varied ware. Under these conditions the consumer is largely at sea without compass or rudder. For guidance and advice, he may turn to the private or the public economy. Assuming that he is sufficiently suggestible or conventional, he will turn for

guidance to certain classes who possess social prestige or professional influence. So in the free, prodigal sphere of the private economy the leader of fashion and the advertising man set the pace that the average citizen follows with the sequacity of a sheep. The guidance of the social leader is not expert. The guidance of the advertising man is not disinterested. Of course advertising may develop much variety and taste in consumption, but the motive back of it is private profit which may or may not be identical with public utility. According to Hobson, "The monetary profit of producers is the principal determinant of most changes in the nature of consumables, and the standard of consumption is one of the most serious sources of danger in the evolution of a healthy social economy."⁹ Again, "The prevalence of many of the most costly social evils of our time, war, drink, gambling, prostitution, overcrowding, is largely attributable to the fact that their material or trade appliances are sources of great private profit."¹⁰ Walter Lippmann gives a vivid account of the bewilderment of the modern consumer.¹¹ "Advertising, in fact, is the effort of business men to take charge of consumption as well as production. They are not content to supply a demand, as the textbooks say; they educate the demand as well. In

⁹ *Work and Wealth*, p. 112.

¹⁰ *Ibid.*, p. 112

¹¹ *Drift and Mastery*, 1914, pp. 67-68.

the end, advertising rests upon the fact that consumers are a fickle and superstitious mob, incapable of any real judgment as to what it wants or how it is to get what it thinks it would like. A bewildered child in a toy shop is nothing to the ultimate consumer in the world market of today. To say, then, that advertising is merely a way of calling attention to useful goods is a gorgeous piece of idealization. Advertising is in fact the weed that has grown up because the art of consumption is uncultivated. By advertising I don't mean descriptive catalogs which enable the buyer to select. I mean the deceptive clamor that disfigures the scenery, covers fences, plasters the city, and blinks and winks at you through the night. When you contemplate the eastern sky ablaze with chewing gum, the northern with tooth-brushes and underwear, the western with whisky, and the southern with petticoats, the whole heavens brilliant with monstrously flirtatious women, when you glance at magazines in which a rivulet of text trickles through the meadows of automobiles, baking powders, corsets, and kodaks, you begin to accumulate a sense of the disastrous incompetence of the ultimate consumer."

But the most valid objection to the control of consumption by the advertising man is not that he is interested but that he is not really expert. For his individual purpose, of course, he is extraordinarily efficient; he puts over his proposition and

pockets his reward; but what of the wider social effect? Mitchell has pointed out that the art of spending money involves the ultimate problem of what is worth striving for. In this aspect the art of spending money is allied to philosophy and ethics. From this point of view the deficiency of the advertising man as a social mentor in consumption is obvious. His influence is directly opposed to the philosophic reference to future time and immaterial values. He aims at a present return, and his suggestions are in the direction of a material conception of welfare, the notion that well-being is due solely to the consumption of material goods.

A more judicial analysis of the relative influence of the producer and the consumer on the production of goods¹² leads to doubts as to whether the producer can dominate consumption, and direct it into the channels of pecuniary profit to himself. It is a question whether the problem of "demand creation" is to create or to discover wants. According to one authority, it is to discover "unconscious wants" and make them conscious. Just what the distinction may be between creating wants and discovering unconscious wants and coaxing them above the threshold of consciousness may not be immediately obvious. But there seems to be some division between the producer and consumer of

¹² Cf. Kyrk, Hazel. *A Theory of Consumption*, Chapters IV and X.

control over the productive processes. The producer will probably dominate consumption if the consumer has an accession of purchasing power, but is ignorant of the values of goods, and personally suggestible. On the other hand, the consumer will dominate if he knows what he wants and will accept no substitute, if he is intelligent and firm. It is a matter of intelligence and character. Consequently, the development of scientific education, the diffusion of experience, the progress of chemistry and household economics, and public interference with consumption in the form of prohibition, pure food laws, the public supply of water, and the public certification of milk, all tend to strengthen the influence of the consumer on production. All this tends to a more economical and scientific ordering of consumption. The government operating through the scientific expert tends to strengthen the power of the consumer by disseminating information as to the purity and quality of commodities. This interference of the state in the field of consumption, however, is limited owing to the paucity of scientifically applicable standards. With the development of exact science, however, we may look for an expansion of government services in this field—which is another reason why, in the interest of society, we may probably anticipate an increase of tax burden.

The combination of the expert and the advertiser may be one solution of the problem of the consump-

tion of private goods. Thus the work of Dr. Wiley as advisor to a woman's magazine, and the expert readers of the various publishing houses may be examples. On the other hand, with the development of socialization in consumption we may expect the society leaders and the advertising man to lose some of their influence as arbiters of fashion in spending, and their place to an increasing extent be taken by public officials, such as the librarian, the welfare worker, the university professor, the scientists of the government bureaus. These are the men to whom we may look for the most authoritative judgments in their special fields in our quest of a rational technique of consumption.

Finally, public and private consumption may be compared with regard to waste or excess. We shall approach this topic by considering the subject of waste under the six categories of consumption enumerated by William Smart in his article, "The Effects of Consumption on Distribution."

The *first want*, the most fundamental form of consumption, that for food and drink, offers a vast field of possible waste. Under the head of waste would be included consumption beyond what is needed to sustain a full, healthy, and pleasurable life. This would involve a complete waste of wealth. In the words of Smart, "There is scarcely any form of consumption where excess is so plainly a robbery of a poor society as that of food and drink." Statistics of expenditures for luxuries by

the American people are available in the Internal Revenue Publications. From this source Ralph E. Heilman, head of the Northwestern University School of Commerce, has estimated as follows certain expenditures for the year 1920:

1. Ice-cream and soft drinks	\$600,000,000
2. Cigarettes	\$800,000,000
3. Tobacco and snuff	\$800,000,000
4. Cigars	\$510,000,000

The second category of the consumption of wealth is that of dress including ornament. Here, according to Smart, selfish consumption is not as likely as in the case of food. For clothes worn by the wealthy are worn at second hand by the poor, and finally live a second or third life in the form of shoddy. Unlike goods of the fire-works order, their consumption takes place over months or years, and involves a more complete utilization as wealth. Truly fashionable dress, however, especially that designed to be fragile, so that it cannot be re-worn, is an exception to the rule. Here capital and labor are sunk in the making of goods that have a life relatively short. Statistics of this sort of waste are, of course, unobtainable. But Dean Heilman's estimates based on data furnished by the government are suggestive.

Jewelry	\$500,000,000
Furs	\$300,000,000

In the case of the third great category of consumption goods, shelter, consumption is least indi-

vidual and transitory, least devoted to purely selfish ends; for according to Smart, houses are built for the abode of successive generations so that the utility is spread over a considerable period of time and accrues to a circle small or wide. But even here there is a possibility of abuse and waste. If the house is badly built, or poorly located, or if it becomes the refuge of a recluse, wealth is worn out in ministering to a few where it might have ministered with better effect to larger numbers.

The fourth category offers considerable scope for waste in maintaining private and exclusive instruments for transport. W. R. Ingalls¹⁸ has estimated that automobiling as a luxury was costing the American people at the rate of upward of three billion dollars per annum in 1919. He also cites F. R. Pleasonton who estimates that the total national expense for automobiling, *i.e.*, for both pleasure and business purposes, is over eight billion dollars. Another form of nascent luxury in the United States is unnecessary and indiscriminate railway travel. Ingalls cites the figures for passenger miles for 1916 and 1920:

1916	34,585,952,026
1920	46,724,880,000

The fifth category, that of education, including literature and art, is probably less susceptible to waste. Doubtless there is much waste involved in cheap magazines, flashy literature, and bad art.

¹⁸ *Wealth and Income of the American People*, 1922.

Hobson in his discussion of Sport, Culture, and Charity,¹⁴ makes a severe arraignment of much modern education as a mere revival of barbarian standards of culture. The writer, however, is convinced of the relative efficiency of our modern educational systems. But at the worst statistics of education in the United States preclude the possibility of any great relative waste in this field; for the total expense for formal education in the United States, approximately one billion dollars, is scarcely more than one third of the national bill for tobacco. In fact, according to the estimates of Dean Heilman, the national bill for cosmetics, perfumes, and face-powders in 1920 was approximately three fourths as much as that for education; and fifty *per cent* more than the total endowment of all the private colleges and universities in the country. According to these estimates, the national bill for cosmetics, ice-cream and soft drinks, tobacco and snuff, jewelry and furs, was more than four times the total amount spent on education. According to W. R. Ingalls the total expenses for pleasure motor cars were over three times as much as our estimate of the total expenditures for education.

The last category of consumption, that for recreation, opens a vast field for socially unremunerative consumption. Hobson's chapter on Sport, Culture and Charity, referred to above, is a telling ex-

¹⁴ *Work and Wealth*, Chapter XI.

position of the scope of waste in this field. Not only does this involve a great expenditure of economic goods, as is evidenced in the cost of football stadiums in the United States, but it creates an atmosphere hostile to the real interests of intellectual and artistic life. Sociologists have pointed out that much of the pleasure of athletic sports is an exploitation of instincts which formerly had individual and biological utility, but which are atavistic from the point of view of modern social and economic life. Hobson asserts that the over-emphasis on sport "diverts into lower forms of activity the zests and interests intended to promote a life of work and art." Besides our commercialized or organized sport "spoils the spontaneity and liberty of play, which is a necessity of every healthy life." There are no statistics at hand of the economic costs of sport; but considering the receipts of the athletic activities of our universities, the salaries of the athletic coach—several times that of the most prominent professors, the salaries of professional baseball players, the large stakes offered to prize fighters, and the great profits made by the promoters of these contests, it would appear that in this one category of recreation there is involved a great economic and social deficit that might have been obviated by a wisely organized and directed system of social consumption.

From the evidence adduced in the last few pages we are now in a position to form an opinion as

to the relative amount of waste in the spheres of public and private expenditures. The greatest waste will probably be found in the categories of food and drink, recreation, transport, and dress, and the least in shelter and education. Food and drink, and dress belong wholly within the field of private consumption. The extravagances of transportation also belong mostly to the private sphere, although we need not overlook the activities of the United States Shipping Board. The desire for recreation is satisfied by both public and private agencies; but here also the extravagance must mostly be laid at the door of the private economy, for no one complains of excess appropriation for parks, playgrounds, or other facilities furnished by the states or municipalities. The national government and the municipalities are committed to the policy of architecturally rich and beautiful public buildings, but few protests are audible on this head. Such public improvements are a source of pride and inspiration to the citizens. According to Smart, this category offers little scope to possible waste, and then only if the buildings are badly built, poorly located, or become the refuge of recluses. Whatever amount of waste may be involved in private shelter, it is evident that there is a relatively negligible amount in public building. As to education, the category that belongs most completely in the public sphere, we have already given statistics which imply a slight relative waste; for the total expenditures,

as noted above, represent only one third of the sum devoted to one form of luxurious conveyance.

If we should add up the items of so-called luxurious expenditure enumerated above, a conservative estimate might bring us not far from the following figures:

Food and drink	4 billion
Dress	1 "
Transport	4 "
Recreation (outside of automobiling)	3 "

This would give us a figure nearly double that of the total expenditures of the government—federal, state, and local. And, if we deduct one billion dollars from the national revenue, on the ground that as interest it merely is taken from some people and paid to others, the discrepancy between expenditures for private luxuries and for public services becomes still more disproportioned. Of course, not all money expended for private luxuries belongs under the category of "illth." Athletic sports, automobiling, expensive dress, costly entertainment are justified to a certain extent as recreation. It is only the excess over what has real recreational value that could be classified as "illth." What proportion this would be of the total expenditures in this category the writer is not disposed to guess. Statistics available, however, will indicate certain definite trends. The internal revenue reports show that the total federal receipts from taxes on luxuries and semi-luxuries for 1920-21 and '22 sharply declined.

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Some reduction is evidently due in part to the lightening of federal taxes. The only item which has not consistently declined is tobacco for which the figures are as follows:

1920	\$295,000,000
1921	255,000,000
1922	270,000,000

This decline in the tax receipts from luxurious consumption was concomitant with an expansion of public expenditures by states and municipalities. The problem of securing a source of revenue to meet the growing state and municipal expenditures at once arises. At present this is done in part by the device of public debt. A new source for further expansion in public expenditures may appear in the near future. With the reduction of the federal expenditures due to cutting down the national debt and reducing the appropriation for the army and navy, there will be released a considerable fund of economic energy which may be devoted to expanding developmental expenditures. From the point of view of our analysis, then, the current trend toward larger state and local taxes, and toward reduction of federal expenses and restriction of private luxurious consumption is in the direction of economy and good sense. While our conclusion is that further expansion of public activities is normal and desirable, this expansion should take place in the field of outlay and expenditure rather than in the field of productive industry. A large proportion

of the field of industry may more profitably remain under the sphere of private management, at least for the present. But conditions are such as will already justify a considerable enlargement of the field of socially organized consumption. And this social consumption must be provided through funds secured by general taxation.

There will be no attempt in this study to take up the problem of the most efficient tax system, but the distinction between wealth and "illth" has a direct bearing upon the form of taxation. Private expenditures on "illth" bring a net social loss, first from the cost of production, and second from the disutility in consumption. A heavy indirect tax on such economic goods might both check undesirable consumption and increase the means for the most productive form of social expenditure. This might result in a large increase of net social utility.

The conclusions based on the foregoing summaries and analyses are strengthened by a recent analysis of the subject of consumption by G. P. Watkins.¹⁵ He distinguishes the different types of utility, as particular utility, complementary utility, imputed or transputed utility, adventitious utility, and multiple utility. By a different standard of classification he divides utility into processive utility and existential utility. Particular utility be-

¹⁵ *Welfare as an Economic Quantity*. Hart, Schaffner, and Marx prize essay. Houghton Mifflin, 1915.

longs to a good apart from its consumption groupings. Complementary utility is added utility due to harmonious combination or grouping of goods. Transputed utility is utility attributed or imputed to some necessary member of a complementary group because of greater relative scarcity. Adventitious utility is not utility due to the intrinsic qualities of the object, but conventional utility due to the suitability of the good for purposes of insidious social comparison. Multiple utility is the utility due to the fact that the good or service can be enjoyed simultaneously by two or more consumers. On the second principal classification, processive utility is the utility of goods that are destroyed in the process of consumption. Existential utility is the utility of durable goods, or of goods whose deterioration or obsolescence has no relation to the rate of enjoyment or use. For our purpose we may deduce two principles from the foregoing distinctions and definitions; first, that the direction of the curve of utility may be determined to some extent by the relative proportions of the different kinds of utility involved; and, second, that the curve of social or aggregate utility may deviate to a great extent from a summation of all the curves of individual utility.

The primary principle involved is the principle of diminishing utility, but this may be modified or offset by various conditions or forces that are inherent in economic progress or amenable to the so-

cial will. One of these conditions is the increasing scope and variety of expenditures made possible by increasing wealth. The number of wants increase as their intensity diminishes. The urgent wants are pressing, but limited in number; the less urgent wants continually increase in number and variety with the growth of wealth and civilization. This evolution of wants is concomitant with the increase of efficiency in production. If a good is scarce or costly, it is applied first to the satisfaction of the strongest desires. As it becomes more easily obtainable, it becomes available for an increasing diversity of uses. This increasing number of the less urgent wants acts as one check on the descent of the curve of utility. Hence, the primary principle may be restated as the principle of diminishing utility at a decreasing rate of diminution.

A further check on the decline of utility may be due to the advent of complementary utility. The variety that is made possible by increasing wealth may be enhanced by a harmonious combination. Diminishing utility is a law of the variation of particular utility; according to it, 2 and 2 may equal 3. Complementary utility is governed by different principles;¹⁶ according to it 2 and 2 may equal 4 or even 5. To illustrate, the utility of two chairs might be less than twice the utility of one, but the utility of meat and salt in proper combination is greater than the combined utility of these goods

¹⁶ Cf. *Wealth as an Economic Quantity*, Chapter VII.

consumed separately. The utility procured by a given expenditure for furniture and wall paper might be greater or less than the utility of the separate items according to whether or not the color scheme is harmonious.

Another check or offset to the decline of utility in general is multiple utility. This implies a temporal plurality of use. A landscape, a statue, a public lecture, a theatrical performance, a public pageant, are examples. Multiple utility is especially the characteristic of public wealth.

Another method of checking the rate of decline of utility with the increase of wealth and income is the substitution of goods giving existential utility for those giving processive utility. With the expansion of free income, expenditure for beautiful and comfortable dwelling houses and furniture and for museums and works of art will bring a greater net utility than expenditure for luxurious articles of food and drink; for, because of the durability, these goods represent an investment; they possess the power to produce satisfaction for years after their cost has been met. The only item of recurring cost is interest and upkeep. Whereas, in the case of processive goods there is involved the entire range of economic costs involved in replacing the consumed commodity. Thus expenditure for goods that possess existential utility is a form of investment. The net utility derived from such goods would seem to operate rather according to the prin-

ciple of increasing return than decreasing return.

The remaining type of utility, adventitious utility, has a different effect on the direction of the total curve of utility; or rather, it tends to differentiate the curve of social or aggregate utility from a curve which is a summation of all the curves of individual utility. The reason for this is that this kind of utility can exist for some people merely because it causes a corresponding disutility in others. The pleasure to be got from the wearing of diamonds is due to the envy of others who cannot afford them. Hence there is, as Watkins has pointed out, a close connection between cruelty and ostentation. The same is true of wealth that is amassed to the end of power over one's fellows. The gain in the rich man's power or influence over the poor man is offset by the poor man's loss of control over his own affairs. The gain of one is the loss of others; and if the number of those who wear diamonds or live a life of idleness and ostentation is less than the number of those who envy them, the net amount of adventitious utility from the point of view of the sum of the individuals who compose society may be less than zero.

This analysis by Watkins supplements admirably the studies in consumption by Smart, Mitchell, and Chapman, and the statistics which we have found available in our comparison of public and private expenditures. An economic consumption would

imply such an order of expenditures that utilities of different kinds could be exploited in a certain sequence. The smaller number of necessary goods would be chosen with special reference to their particular utility. From the second point of view the utility of these goods would be processive rather than existential. As the income increases, and free income gives scope for the enjoyment of comforts and luxuries, goods should be purchased increasingly with reference to utilization of the principles of complementary, multiple, and existential utility. On the other hand, waste in consumption might be viewed as a failure to substitute the different species of utility with the growth of income, and a preference for adventitious over multiple utility. Thus Smart's analysis as corroborated by recent statistics led toward the conclusion that waste is greatest in food and drink, recreation, and dress; and least in shelter and education. In more abstract terms this might be stated as excess expenditure on particular and processive utilities (rich food and drink and tobacco) and adventitious utilities (expensive motor cars, diamonds, furs, "sport, culture, and charity"); and relatively parsimonious expenditure for complementary and multiple utilities.

The economic expenditure of free income implies an organization of consumption. This organization may be effected through the family and the community. The family is the suitable instrument

for the organization of expenditures for the comforts or "decencies" of life. Household conveniences and durable consumption goods such as household furnishings, pianos, and victrolas would belong here, such goods as provide a permanent psychic income or admit of increase of utility through harmonious arrangement. Following out the same line of reasoning, the sphere of luxurious expenditure should belong to the state or the community. The means to meet this expenditure should come from general taxation, and the source of the taxes should be the free social income. This conclusion is defensible on the ground that only by socializing luxurious expenditures can the evil element of adventitious utility be eliminated; and on the ground that since most luxurious public goods belong to the class that produce existential and multiple utilities, it is possible to realize much utility at a relatively small cost. This conclusion is another way of stating the thesis of Chapman that public expenditures conform to the principle of increasing returns because of greater efficiency, due to large-scale or organized consumption.

To illustrate this idea of the high serviceability of public goods, a library or university or other public building as a work of architecture possesses both existential and multiple utility. The books in the library possess existential but not multiple utility. The lecture by the professor in the classroom possesses multiple utility. It might also be

said to possess existential utility; for in imparting information or ideas the lecturer does not lose but rather increases his knowledge of his own subject. The public park or recreation ground has both existential and multiple utility.

In conclusion, our summary of the field of consumption from the point of view of Watkin's analysis may be expressed in tabular form.

Necessities—individual consumption—particular utilities	} {	processive utility
Comforts—family consumption—complementary utilities		} { existential utility
Luxuries—community or public consumption—multiple utilities		

This analysis leads one to a still more liberal conclusion with regard to the problem of the scope of public expenditures. For such expenditures would, on this evidence, be expected to increase with the general increase of free income, and with the growing intelligence or good sense of the people. As free income increases faster than total income, and *a fortiori*, the income available for luxurious expenditure much faster than total income, it would appear that state expenditure should increase at a faster rate than the national income; or, in other words, social welfare would seem to require a gradual increase in the tax burden. With growing intelligence or good sense on the part of the people this increasing tax burden would be met voluntarily by income formerly wasted on goods that possess adventitious utility.

CHAPTER X

THE APPLICATION OF FISCAL PRINCIPLES

IN the preceding chapters we have considered evidence which leads to the opinion that with increasing density of population and with the growth of civilization an increasing public expenditure is desirable. This increase should involve a gradually heavier per capita contribution to the support of the public activities and also, in all probability, a gradually increasing percentage of the national income. We have also pointed out that there are certain economic standards for determining and regulating the rate of growth. This general tendency is both economically desirable, and in line with the trend of public purpose and opinion. But what of the nature and efficiency of the agencies by which this public opinion is to be carried out? If they are relatively wasteful or inefficient, that would modify our opinion as to the desirability of increased public expenditures which is based on economic considerations alone. In other words, the desirable rate of expansion of public activities depends, to a considerable extent, upon the efficiency of government. In our first chapter we implied that

the idea of the disharmony between the individual and the state, the conflict between liberty and authority, was mainly the survival of a political philosophy that had held over from the era of political authority, but which had been rendered obsolete by the advent of the era of citizenship. Since, under the democratic dispensation, the acts of the government are an expression of the will of the voters, the idea of compulsion has less and less pertinence, and the idea of voluntary taxation, at least from the viewpoint of the group, takes its place. An examination of contemporary political life, however, precludes an unqualified acceptance of such a hopeful view. We are to examine, then, in the following chapter the political agencies or conditions under which an economically desirable extension of public services may be carried out.

Lindahl's economic determination of the scope of taxation, which is very profound in the treatment of the economic aspects of the question, is altogether unrealistic in those parts which deal with political science. His theory might be stated in popular form somewhat as follows. If you can get more for your money by increased public services than you could if you kept the money and spent it yourself, exert political pressure toward an enlargement of the public service. If your money, otherwise taken in taxes, would bring you a greater utility if spent for private goods, sup-

port the statesmen who stands for economy in public expenditures. This individual benefit theory, however, is not tenable. The standardized definition of a tax as "a compulsory contribution from the person to the government to defray expenses incurred in the common interest of all, without reference to special benefits conferred" implies that the scientific principle of taxation is group benefit, which is in harmony with the principle of individual faculty. A more accurate statement of the social economic principle would be as follows: If your money spent for public services will bring in a larger net social utility than if you spend it on yourself, express your approval of the current tendency toward an enlargement of the public service. If your money otherwise taken in taxes would increase the general benefit by satisfying certain urgent private wants, take a stand for greater economy in public expenditures. The economic principles involved are the principle of marginal productivity as applied to public producer's goods and the principle of marginal utility as applied to public consumer's goods. We are concerned in this chapter with the application of these principles through the agency of representative government.

Democracy, under modern conditions, is no easily workable form of government. It has certain limitations which make difficult the application of scientific principles to the problem of taxation. These limitations are the limitations of represen-

tative government. One of these is the difficulty in the size of the electoral and governmental areas. Owing to this size there is lacking the direct connection between cost and utility which operates in the private economy. Economic determination of the cost and utility of public services, especially the kind supported by taxation becomes a highly complicated problem.

Another limitation in the application of scientific principles to taxation is the vagueness in the ends of political action. The services of the state, such as protection, education, sanitation, are largely immaterial. They are the conditions or means under which men may amass material goods. Also the state in its emphasis on consumption, on spending money rather than on making it, is under much the same disadvantage as the housewife in comparison with the business man. For the latter can conveniently reduce all things to the single pecuniary standard; while the standard of welfare—bodily, intellectual, artistic, spiritual; the present welfare as against the future; the welfare of the group and of all the individual members, is such a complex problem that it takes one into the region of ultimates in philosophy and ethics. This lack of a definitely applicable standard of valuation, of a common denominator, is even more pronounced in the case of the statesman who spends public revenue than in the case of the housewife who spends her husband's income. The housewife, as Mitchell has

pointed out, can hardly make an objectively valid comparison between the various gratifications which she may secure for ten dollars—attention to a child's teeth, a birthday present for her husband, or two days at a sanatorium for herself. Her problem, however, might well be more susceptible of an approximately scientific solution than that of a statesman who compares the marginal productivity, the social return of a public investment, in a new battleship for the navy, a new agricultural experiment station, an irrigation or drainage enterprise, or an enlargement of the work of the Geological Survey. The public officials who preside over the operations of our educational systems might well be at a loss in estimating the relative social productivity of a professor of classical archeology or a professor of anthropology. And turning to the side of the state's direct contribution to psychic income, it would be difficult to estimate the relative utility of a new park on the East Side and a new automobile road in the Adirondacks. In the case of such choices among public expenditures the same economic principles of valuation apply as in the private economy; only their solution requires a broader outlook, more complete information, the working by freer approximations, and to some extent, at least, the method of trial and error. The problems of public expenditure involve choices over a wide area, choices among immaterial goods, choices as between present and distant future re-

turns, and choices between individual and group benefits. Most men's minds do not travel far; their determinations are not swayed by reference to a remote future time—hence the difficulty in popular democratic government of approximating a scientific solution of the problem of public expenditure.

Another difficulty in democratic government is the necessity of expressing public opinion through the agency of political parties. This, however, is unavoidable in large democracies, the more so the larger the size of the electorate. Political parties have distinct limitations owing to the fact that the normal function of the parties is to present for popular choice alternative candidates and policies.¹ Government by party is thus, as President Lowell explains, a defective instrument. It would be so if the leaders were all men of the highest integrity and intelligence, because in presenting alternatives for popular choice they inevitably limit the scope and distort the expression of public opinion. In the light of these facts it is evident how inadequate is Lindahl's practical application of the theoretical solution of the tax problem. For, the increase or reduction of public expenditures is hardly ever the pair of alternative principles upon which the outcome of an election hinges. Both parties are likely to be in favor of "economy" in public expenditures, although just what this means has to be interpreted

¹ Lowell, A. L. *Public Opinion in War and Peace*, p. 219.

in the light of subsequent practice. Economy, in the sense of getting the greatest possible return for every dollar of public money spent, may very well be identical with an extension of public activities. Besides, where there are several opposing planks in the platforms of the opposite parties, it is often a difficult task to interpret the election as an expression of popular choice. In discussing this question President Lowell observed, "It is often impossible to ascertain on which of the issues involved the people have rendered a verdict. Since, therefore, in large democracies public opinion is expressed directly through political parties, which offer choices between important alternatives, and since the problem of public expenditures is generally a subsidiary one from the political point of view and one on which the two parties are generally in verbal agreement, the tax problem would seem in most cases to be outside of the area of solution by public opinion as expressed in representative government.

Also in modern large democracies there are obstacles to the formation as well as to the expression of public opinion. If the machinery of political parties confuses the expression of public opinion on such problems as the scope of public expenditures, the conditions of modern social and industrial life render the formation of intelligent opinions on such questions increasingly difficult. This is the result of complexity and specialization. The citizen of

the early New England town was competent to decide such public questions as were likely to arise. Should the schoolhouse receive another coat of paint? Was the teacher competent to teach arithmetic? Was the road in need of repairs? But in large modern municipalities there are few men, even those who have had the best advantages of education, who would feel competent to express an opinion on more than a few of the questions that have to be decided by the people or their representatives. According to President Lowell, "The amount of information needed to form an intelligent opinion on public affairs has been constantly increasing."² Various agencies, such as the schools, the libraries, and the press, the governmental and scientific bureaus and foundations are working to enlarge and popularize the information that is requisite to an intelligent grasp of public problems; but probably specialization and complexity are running away from pursuing science. In the words of President Lowell, "It is not improbable that the amount of knowledge needed for the administration of public affairs is increasing more rapidly than the diffusion of such knowledge, and that this is lessening the capacity of the ordinary citizen to form an opinion of his own on the various matters that arise in conducting the government."³ "The progress of specialization means that an intelligent man is less

² Lowell, A. L. *Public Opinion and Popular Government*, p. 47.

³ *Ibid.*, p. 49.

competent than formerly to decide questions that arise outside of his own vocation." ⁴

The conclusion of the matter seems to be that an increased reliance upon the services of experts is indispensable to efficient government. The complexity of civilization, the progress of invention, and the consequent need of accurate technical knowledge requires the services of an increasing number of specially trained men. This is a possible explanation of the political indifference of many voters. Being called upon to render a verdict upon questions with which they are not competent to deal, they refrain quite sensibly from any expression of opinion. The transition from the democratic town meeting to the complex industrial world state involves grappling with questions beyond the reach of popular intelligence. The practical politician represents a temporary adjustment to the more complex social order. He is the specialist only without training, who takes over the work for which the citizen has no time or special aptitude. The specially trained experts whose work has revolutionized industry will doubtless be introduced more and more into the field of public administrations. Western democracy, however, has preserved a deep-seated distrust of the expert. Experts imply bureaucracy; and bureaucracies have been unpopular for two reasons: first, because they are considered inefficient; and second, because they are

⁴ Lowell, A. L. *Public Opinion and Popular Government*, p. 49.

considered incompatible with democratic government. The first objection, according to President Lowell, is not historically justifiable. Historically, monarchy has been more efficient than democracy, because it depended more upon trained expert officials. In the words of President Lowell, "There have been admirable bureaucracies, and there have been execrable ones, but even the worst of them have shown a certain durability derived from the expert character of their members. In spite of the gravest vices, they have given to the governments they have served a permanence beside which the democracies that existed on a large scale until a hundred years ago have seemed ephemeral."⁵ President Lowell goes on to say that the introduction of trained expert officials under the Roman government accounted for the long life of the Empire after the state had broken down under the republican form of government with its rapid rotation in office and unskilled administrators.

The second objection to bureaucracies—that they are incompatible with democratic government, is more to the point. Men may secure official positions through appointment, in which case there may be favoritism and injustice; or on the principle of the merit system in politics, they may secure appointments and promotions on the basis of competitive examinations. In either case they may be out of touch with popular thought and not amen-

⁵ Lowell, A. L. *Public Opinion and Popular Government*, p. 270.

able or responsible to public opinion. The greater efficiency on the part of the government may be a poor compensation for the loss of political self-determination on the part of the great mass of the citizens.

This dilemma between efficiency and democracy is deserving of thoughtful analysis. Is there a fundamental conflict between an enlargement of the body of expert officials and representative democracy? Let us consider the meaning of the term "representation." This may mean one of two things. First, that the people select men for political offices who will deliberate together and exercise their own untrammelled judgment, so that the policy to be pursued is determined by the collective opinion formed by the representative body after it meets. Secondly, the policy to be pursued may be determined by the people, and the representatives may be merely chosen to carry it into effect. As we have seen, the second policy is coming to be less and less characteristic of modern democracies; because the citizens are less and less able to agree on a definite political program, and the machinery of political parties is capable of putting into effect only the salient decisions of the popular will. The result is that in all modern governments the actual decisions are made by a few. According to James Bryce all varieties of governments can be reduced to one form—the government of the many by the few. President Lowell ex-

presses the same thought. "All political organizations, however democratic in form, are practically oligarchies erected by a few leading spirits." ⁶ If this is the case, political self-determination is limited practically to a choice among the agencies by which the leading spirits shall be chosen. Shall we choose the oligarchy of the practical politician or of the expert official? On the side of efficiency the latter seems immeasurably preferable. But the nominee of the political party can at least be recalled if he is notoriously inefficient or corrupt; or if he is utterly indifferent to popular opinion, he can be removed at the next election.

The solution of the problem of representative democracy seems to be a differentiation as to the function of experts and administrators. The administrator ought to be a representative official in touch with the public, a leader of thought, and yet amenable and responsible to public opinion. He should be a generalist, like the business administrator, as distinct from a specialist. His duty is not to administer directly but to lay down the general policy to be pursued and to coördinate and stimulate the special administrators. He thus represents the public, and supplies the needed coöperation and compromise between public opinion and expert knowledge. By concentrating responsibility and being removable from office if unsuccessful, he makes possible the general element of popular con-

* Lowell, A. L. *Public Opinion and Popular Government*, p. 55.

trol which is regarded as indispensable to democratic government. Representative democracy, then, seems to require three things. First, that the government be efficient. If the majority of the citizens desire a good government, experts chosen by appointment on the basis of competitive examination may in this sense, be more truly representative than politicians chosen by the people out of a limited group that were nominated by the political machine. How people are willing to dispense with immediate political self-determination in order to secure efficiency in government in cases where good government is of vital need is seen in the recent rise of dictators in Europe. The adoption of the city manager plan by cities in the United States is a move in the same direction.

The second trait of representative democracy, the choice of public officials, must not be made arbitrarily, not on grounds of favoritism or privilege. From this point of view appointment on the basis of competitive examination may be considered democratic. In the words of President Lowell, "In its political aspect democracy means popular government, the exercise of power by the mass of the people. In its social aspect it means equality of opportunity."⁷ Which aspect of democracy will be emphasized depends on conditions at any given time. Society wants political self-determination. It wants efficient government. People desire liberty

⁷ Lowell, A. L. *Public Opinion and Popular Government*, p. 57.

and they desire equality. Their most urgent desire is generally that one which under the given conditions is least satisfied or most thwarted. They want that thing the lack of which they feel most painfully. A century and a half ago in the era of political authority they passionately sought self-determination. At the present time the desire for social equality seems to be more urgent than the desire to take a hand in the administration of public affairs. The increased reliance upon technical and professional experts in public administration is in harmony with the current movement for social equality. The opening of educational facilities to all who can profit by them means equality of opportunity as regards entrance to the public service.

Walter Lippmann has interestingly expressed this part of the present democratic preference for social and economic welfare over the desire to express one's will in various forms of political action. "The democratic theory . . . is involved in perpetual conflict between theory and practice. According to the theory, the full dignity of man requires that his will should be, as Mr. Cole says, expressed 'in any and every form of social action.' It is supposed that the expression of this will is the consuming passion of men. . . . But as a matter of plain experience, self-determination is only one of the many interests of a human personality. The desire to be the master of one's own destiny is a strong desire, but it has to adjust itself to other

equally strong desires, such as the desire for a good life, for peace, for relief from burdens. . . . The democratic theorist was absorbed by one interest: self-government. Mankind was interested in all kinds of other things, in order, in its rights, in prosperity, in sights and sounds and in not being bored. . . . Because the art of successful self-government is not instinctive, men do not long desire self-government for its own sake. They desire it for the sake of the results. That is why the impulse to self-government is always strongest as a protest against bad conditions." ⁸

An approach to the scientific application of fiscal principles may be made along four general lines: first, a determination of the proper sphere of general public opinion; second, the development of the merit system and a determination of how far it should be applied; third, the evolution of political morality as regards the choice of honest and capable administrators; and, fourth, the development of the agencies for informing the public mind, for organizing the machinery of knowledge, to borrow the phrase of Walter Lippmann.

First, we must find out the limits of what a generally intelligent citizen can do. This is the sphere within which public opinion can make decisions and determine policies: matters familiar and near at hand, those which are matters of ordinary experience and common sense—like most village and rural

⁸ *Public Opinion*, 1922, pp. 311-312.

problems. The judgment of the people is also likely to be sound on general moral questions. However backward our representative democracy may be from the point of view of efficiency, the growth of democracy has proved to be compatible with the growth of political morality.⁹

The following is the gist of the conclusions of Professor Shotwell. If one looks over the political history of modern Europe and America three main facts stand out. The extension of the suffrage, the extension of the scope of government, and a steady growth in public honesty. The opening of the electorate for the masses, which has placed power in the hands of the least intelligent, and the increasing scope and impersonality of government have increased the possibilities of corruption; yet the history of public morals seems to indicate the very reverse of this. Distrust in democracy is twofold: distrust in its moral integrity and distrust in its capacity for affairs. History would seem to remove the former, for the facts support the hypothesis that, instead of increasing with the growth of democracy, the practice of corruption in politics tends to decrease. As regards the basis of representative government, the election, no civilized country would submit to the practices that were common a century ago. In the United States things done openly even a generation ago would set their

⁹ Shotwell, J. T. "Democracy and Political Morality," *Pol. Sc. Quart.*, Vol. 36, 1921, pp. 1 to 8.

perpetrators now behind the bars of federal or state prisons.

The same tendency is found in administration and civil service. Hardly more than a generation ago power was regarded as an avenue to wealth. At the beginning of political institutions such a practice was taken as a matter of course. In contrast democracies have evolved such an austere theory of public morals that the public servant is expected to secure less for his services than he could procure for the same ability directed toward private ends. What is scandalous today in the administration of the modern state was a common practice in the days preceding representative government. Yet owing to the pervasive influence of legislation and the opportunities for the intrusion of the personal factor there is still some corruption of the subtle and elusive kind. The further elimination of corruption in politics depends upon enlightenment, upon education and experience in political life, which means an ever widening measure of democratic control.

A discussion of the appropriate field of expert officials is, of course, outside the scope of this study. But since the expert is the product of social complexity and the organization of industry he will doubtless be a factor of increasing importance in administration. As Walter Lippmann has pointed out, we are moving away from the traditional American doctrine of democracy with its idea of the

normal citizen—public spirited, intelligent, and omniscient. The increasing number of issues on which the citizen has no definite opinion is evidenced by the large percentage of voters who fail to exercise the privilege of suffrage. But as President Lowell has pointed out, people who have no opinion on a subject may have definite opinions as to the method by which it ought to be decided. They may be ignorant of law, and yet have a definite opinion that a man accused of crime should be tried by a court of law. They may be ignorant of germs, yet have a definite opinion that an epidemic should be combated by skilled physicians. And the time may soon come when people who realize that they have no intelligent opinion on such questions as the tariff and taxation may yet have definite opinions that these problems should be solved by fiscal and economic experts. In this sense it may be possible to work out an ultimate harmony between representative democracy and specialization in administration.

Any agency that increases information may also contribute toward the scientific application of the principles of taxation in allied fields. Walter Lippmann in his work on *Public Opinion* points out that the public press is not suitable to carry on this work of democratic enlightenment,¹⁰ but that various independent scientific agencies must be organized so

¹⁰ Cf. also Bliven, Bruce. "Our Changing Journalism," *Atlantic Monthly*, Dec., 1923.

as to furnish the public with the information necessary for intelligent political action. This enlargement of the popular political intelligence is an alternative to the bureaucratic centralization and administration by experts. The working out of these problems, of course, belongs to the special sphere of political science.

In concluding this first part of our study in taxation we might summarize as follows the conditions under which increased public expenditure is justifiable.

(1) Economic conditions: the transition from the pastoral stage through the various stages of extensive to intensive agriculture and finally to manufacture and the complex industrial state, the transition from poverty to wealth.

(2) Social conditions: the transition from scarcity to density of population; from rural to urban life; the development of social integration, from independence and homogeneity to interdependence and heterogeneity.

(3) Political conditions: the transition from governmental inefficiency to efficiency; the transition from the principle of authority to the principle of citizenship; the transition from the conception of individual justice to the conception of social justice; the transition from direct democratic administration through the administration by the politician to administration by representatives assisted by specialists and experts.

(4) Physiographic conditions: the change from conditions of abundant to deficient rainfall.

(5) Cultural conditions: the transition from personal opinion to scientific knowledge; the evolution of exact science.

These conditions are all existing in the United States today. Although there is no change in the climate of the country, the fact that the great West, a large percentage of which is arid or semi-arid, is the most sparsely populated—and therefore the area within which there will be in all probability a greater expansion of population in the future, enforces our thesis from the physiographic point of view.

PART II

**THE DISTRIBUTION OF THE TAX
BURDEN**

CHAPTER XI

THE MEANING OF JUSTICE

IN the first part of this study we have considered the problem of the justification of taxation in the necessary and desirable services of the state. Political institutions are not ends in themselves. They are organs of social life and are justified in so far as they promote the general social utility. Taxation is a means to the existence of the state; and the justification of taxation is to be found in the end of the state. This end may be phrased as the general welfare or the maximum social utility. There has been some dispute among fiscal writers as to whether the function of taxation were primarily fiscal or social, that is, whether it was primarily to raise the necessary revenue or to change the distribution of wealth, redress inequalities in fortune, regulate industry and control consumption. A writer in the *Finanz Archiv* has shown that there is really no conflict between these functions of taxation.¹ A tax has three ends, financial, economic, and social. All three are coördinate ends. The financial end of the tax is to maintain the state.

¹ Leon, J. N. "Der Begriff der Steuer," *Finanz Archiv*, Vol. 31, 1914, pp. 6-8.

The end of state activity is social welfare. The social end of the tax is to promote social welfare. The difference between the fiscal and the social view of taxation is based on the distinction between the immediate end and the ultimate end.

One important function of the state is to mitigate inequalities of wealth. Sociologists have pointed out that inequality seems to be a concomitant of civilization. Inequalities tend to increase with the enlargement of opportunity. Hobhouse has pointed out how slavery is a late development in social history.² Both military and economic success make for inequality. Economic advance offers opportunity to men of ability, and inheritance perpetuates the resulting inequalities with cumulative effect. Hence, in modern times, in spite of civic and political equality, we have contrasts of wealth and poverty which must be recognized as a social menace. Hobhouse points out how the Gracchan legislation was an attempt to save the economic independence of the mass of citizens of Rome, and how its ill success wrote the doom of the Republic. To a certain extent this growing inequality of modern times ought to be checked. It is a result, not a cause, of economic progress. The cause of progress is a greater efficiency of coöperative efforts, of that organized production which makes possible specialization and invention—the law of increasing returns. Some inequality is doubtless justifiable, as some

² Hobhouse, L. T. *The Elements of Social Justice*, Chapter 5.

men are more efficient than others; but the division of wealth is not between individuals as such but between one individual plus society and another individual plus society. In the words of Hobhouse, "What can justly be said is not that A of his own efforts creates so much wealth, and B so much, but that operating on and with the existing social system the increment of wealth due to A is greater or less by so much than that due to B. Now, if the account were between A and B alone, that might conceivably determine the basis of remuneration; but in the account between A or B and Society it fails because the coöperating society is a major factor in both cases."

To what extent society is the major factor is evident in the case of the manager of large enterprises, the most prominent of the individual forces in the industry. "The organizer of industry who thinks that he has 'made' himself and his business has found a whole social system ready to his hand in skilled workers, machinery, a market, peace and order—a vast apparatus and a pervasive atmosphere, the joint creation of millions of men and scores of generations. Take away the whole social factor and we have not Robinson Crusoe, with his salvage from the wreck and his acquired knowledge, but the naked savage living on roots, berries, and vermin." ³

These facts furnish a justification for state inter-

* Hobhouse, L. T. *The Elements of Social Justice*, pp. 162-163.

ference in order to modify the distribution of wealth and redress inequalities of fortune. Since inequalities in wealth are due, to a considerable extent, to increased economic opportunities made possible by an evolving material culture, by increased social productivity, the modification of these inequalities that is necessary for social harmony should be brought about by the same force that has conditioned them, *i.e.*, the collectivity. As we have pointed out in the first part of this study, this end may be realized, to a large extent, through the medium of increased public expenditures. It may also be brought about, in part, through the machinery of taxation.

This use of taxation to mitigate social inequalities does not necessarily involve the acceptance of extreme theories, such as the compensatory theory or the socialistic theory. It merely justifies public action in modifying the distribution of wealth to the extent that this is required by the principle of the general welfare. The state in redistributing wealth to the end of social harmony applies the principle of distributive justice. The purpose of the state in fixing upon a rate of taxation, either proportional or progressive, is to attain justice. An approximate determination of the proper distribution of the tax burden is, therefore, dependent upon a definition of justice.

Justice, according to Aristotle, is a kind of equality. In order to understand justice we must know

what equality means. Equality may be absolute or relative. It may be conceived in several different senses. One is equality of endowment or ability; another, equality of wants; another, equality of rights. Equality in the sense that all men are endowed by nature with equal gifts can be at once dismissed from discussion. On the other hand, the statement that men are equal in the sense that they have equal rights is an allegation that deserves examination. A right is the correlative of a duty. It is a claim on others or on society of such a sort that it would meet the approval of some impartial third person. It is a personal claim which society allows. Is equality of rights absolute or relative? Is equality an equality of absolute magnitude or of proportion? Hobhouse avers that in virtue of certain traits or qualities peculiar to human beings all men have certain equal fundamental rights, such as equality before the law, the right to protection of person and property. Also in the case of special relations to particular people equality means equal reciprocal obligations and equal opportunity to exercise choice in entering into such relations.

If we look away from certain fundamentals common to all human beings, we find that men differ. Equality then becomes a matter of proportion. Individual rights here are relative to merit or desert. Desert may be measured by effort or attainments; or, to use economic terms, by the principle of cost

or the principle of utility. If we consider the whole system of rights and obligations, equality seems to be a relative term, but the proportion is less differential than it would be if it were based solely on some standard of individual merit.

The principle of equality, "to each one according to his needs," is also a proportionate rather than a strictly absolute principle. A hard worker would require more food than a light worker. A man of intellectual endowment would need an expensive education. An artist would require beautiful and possibly not inexpensive surroundings. However, there would be less differentiation between the wealth of individuals if equality were based on needs rather than on merit; for to a considerable extent, the needs of human beings are the same—the conditions of physical health and efficiency, and the opportunity for mental and spiritual development to the limits of their capacity. The principle of needs implies a provision for adequate maintenance of useful functions.

As a practical principle of equality Hobhouse suggests that we accept a compromise between need and desert, and in estimating desert consider both effort and attainment. In allotting rewards for services consideration should be taken (1) of the effort made, (2) of the value of the work done, and (3) of the needs of the performers. The relative emphasis on these different aspects of equality is to be determined by reference to the common good.

As to the remuneration of those of special merit or ability, Hobhouse approves of payment in excess of functional costs, in order to evoke the maximum productivity, but he holds that "the movements of remuneration should be diminishing increments tending to stability at some maximum point which can only be determined by experience of the limit of wealth commonly desirable in the interests of the possessor and the community."⁴ This limitation of individual earnings is justified by considerations of the greater productivity of the social factor.

In brief, justice, according to one of the most learned and sane of modern scholars, is the impartial application of a rule founded on the common good. It defines individual rights from the point of view of the common good partly on the basis of needs and partly on the basis of merit or ability. Equality requires that the fundamental needs of all citizens should have the first lien on the national income. "When necessities are short, superfluities must vanish." The general economy should strive to meet the needs of all members of the community in proportion to the urgency, but under such conditions as to maintain the necessary economic functions. There should be no method of acquiring wealth except by social service. The lowest remuneration for work done is that which will maintain the least capable worker

⁴ Hobhouse, L. T. *The Elements of Social Justice*, p. 169.

required by the industrial system in a condition of full civic efficiency. And the highest reward given for the services of the most able producer should be remuneration above vital or functional cost; a small margin in an efficient and highly organized state, a larger margin in a stupidly and wastefully administered state. In the sense that it is here used, justice or proportional equality is the principle of social harmony, purely dependent on, or derivative from the common good. The sense in which equality is absolute is that all people are entitled to a standing in the social order that is based on rules or standards universally and impartially applied. That is, equality of consideration must be assumed in determining relative, proportional equality.

CHAPTER XII

SURTAXES AND THE ENTREPRENEUR

THE problem of this part of our study is the application of the above theory of justice to the problem of the rate of taxation. To begin, should the rate of taxation be proportional or progressive? Modern theory and recent practice have both inclined toward progression. Professor Seligman's study *Progressive Taxation in Theory and Practice* has probably had great influence in crystallizing theory which received an extreme application in the war finance of the belligerent countries. The three main arguments for progression are based on the need for exempting the minimum of subsistence, the law of diminishing utility of income, and the law of the diminishing cost of income. In more detail these arguments are as follows. A proportional rate imposes an inordinate sacrifice of consumption on the poor man, for it does not allow exemption of the minimum of subsistence. Above the minimum of subsistence additional increments of income are spent on the gratification of less and less urgent wants. Also a consideration of the costs of production points toward a progressive rate, for

the more money you make, the easier it is to make more. In other words, taxable faculty increases faster than fortune or income.

At this point we must take into consideration two practical objections to progressive taxation; first, that it checks business enterprise and initiative, and second, that it retards the accumulation of capital. The second of these objections will be considered in the following chapter. The contention that high surtaxes check business enterprise and initiative will be considered in the present chapter.

The opponents of high surtaxes argue that large private profits are a necessary incentive to the highest form of business ability, that these profits are really the wages of efficient management, and that to confiscate them by high surtaxes means, in effect, taking away from the enterpriser the products of his own industry and skill. Surtaxes, in effect, take away from the enterpriser part of the wealth he has created by his managerial ability. They penalize initiative and enterprise, and drive into the ranks of capitalists or mere money-lenders men who could be more serviceable socially as organizers or operators of great productive enterprises. High profits or the high salaries that are paid to officials in the enterprises that earn high profits are thus justified according to the productivity theory.

There are doubtless some grounds for this view. One of them is the increasing importance of the fac-

tor, management, in modern industry. As productive processes become more specialized and complex, the problem of assembling, organizing, and correlating the numerous productive factors into the most efficient combinations becomes correspondingly difficult; and the intelligence which can work out the most efficient form of organization is necessarily of a superior type. In other words, management is the central or pivotal factor in modern industry. Managerial ability of the highest order is the factor in greatest demand, of the greatest relative scarcity, and therefore receives a correspondingly high remuneration.

On the other hand, as is well known, knowledge of the best ways of doing business has become wide spread, and is becoming standardized in books dealing with business administration. Trade secrets can hardly be said to exist. There is no longer a quasi-private monopoly of method due to individual experience or ability, as in the day of the captain of industry. Scientific business management is increasingly a matter of the collective wisdom and experience. It is becoming a part of our social inheritance. The question of the contribution of the entrepreneur, of his personal earnings, according to the productivity theory depends on the relative contribution of the entrepreneur and society.

It is a generally accepted theory among economists that under static social conditions profits

would disappear. In other words, profit-taking is possible only in a dynamic society. The causes of the possibility of profit-taking, then, reside in the forces that make society dynamic. These forces, according to Professor Seager,¹ may be summarized as follows: "(1) price fluctuations, which may be confined to particular commodities or general; (2) the introduction of novelties; (3) improvements in methods of production; (4) variations in climatic or other natural conditions; (5) the exploitation of new lands and natural resources, and (6) modifications in the current rates of remuneration of other factors in production." Some of these forces are merely the contribution of the physical environment. Others are the product of social change. Others may be, in part, due to the activity of the entrepreneur. Variations in climatic and other natural conditions and opportunities afforded by new lands and natural resources are conditions furnished by the physical environment. Price fluctuations may be due largely to increased population or a rising standard of living in relation to natural resources or climatic changes. In other words, the market is due largely to changes in the social factor. Changing rents and wages are due mainly to variations in the ratio of population to land. The introduction of novelties and improvements of methods in production may be due to the genius of the entrepreneur, but more commonly,

¹Seager, H. R. *Principles of Economics*, p. 199.

they are due to the work of the inventor, the research man, and the experimenter in scientific management. The enterpriser is the man who adopts the improvements and inventions, reorganizes industry on the basis of a new method or a new invention, and utilizes it to the end of cost reduction. He is thus the pioneer in the application of more efficient methods made possible by the natural environment or an evolving material culture. Owing to dynamic conditions due to the greater speed of invention and technological change, fresh opportunities for readjustment are continually arising; and these give scope to the intelligence, originality and daring of the enterpriser. These dynamic conditions are largely social in origin, the work of the inventor and the experimenter, or the quasi-automatic evolution of an expanding material culture.²

Priority in adopting these inventions and improvements and utilizing them in the contest for cost reduction may give the differential efficiency in management that nets a temporary advantage in the form of profits. Profits, then, from the productivity point of view, may be viewed as the reward for initiative in readjusting our productive processes so as to satisfy increasing or changing social wants. It would appear, then, that entrepreneurial ability of a high grade deserves a liberal pecuniary

² Cf. Ogburn and Thomas. "Are Inventions Inevitable?" *Pol. Sc. Quart.*, March, 1922.

reward. Since, however, the great bulk of the forces that make conditions dynamic—immigration, growth of population, inventions, improvements, changes in social wants, are largely social phenomena, or are the contributions of the technological and other specialists rather than of the business manager or the financier, it would seem that the causes of profit-taking are mainly social. In other words, the conditions of the market, a supply of natural resources, and the state of technological culture seem socially of far more significance than the recognition and application of these changes that are made by the business manager. The entrepreneur adopts methods developed by a long line of experimenters in management. He employs a labor force that represents modern social conditions. He uses capital equipment that is a product of the coöperation of workers, savers, educators, and inventors for hundreds of years. The contribution of any one individual, at the best, would seem to be relatively small in comparison to that of society and the natural environment.

In the face of these facts, how is it that the enterpriser acquires his relatively large income? The answer to this would be that his peculiar function puts him in a position of exceptional pecuniary advantage. He is at the center of the financial system; he is on the inside of things while others are apparently on the outside. He distributes the income earned by the enterprise among the different

productive factors, and is the residual claimant for any surplus that may remain. This in many cases, after he has already paid himself a salary commensurate with his personal estimate of the importance of his own services. Theoretically competition would tend to wipe out this excessive remuneration, and business losses would tend to offset business gains. But dynamic processes accelerated by the evolution of science and invention continually increase the rate of social change, and thus perpetuate and aggravate the conditions of profit-taking.

While social forces accentuate the conditions under which profits may be made, they tend to reduce the risks that attend business ventures. The enterpriser may eliminate his risks by insurance or by huge corporate surpluses accumulated during years of unusual business activity. Bureaus of experts enable him to anticipate business cycles. Socialized and centralized banking are mitigating the depressions due to the business cycle, so that the losses of the risk-takers and profit-takers are being reduced to a minimum.

While the liability to losses is being reduced, the possibility of profits is being increased owing to the acceleration of social change and technological improvement. The evolution of pure and applied science thus brings about a gradual increase in the national dividend; and the entrepreneur, because of his position at the financial center of things, is

able to appropriate much of the increasing social productivity. Wages, salaries, and agricultural income tend to reach a conventional level, to remain fixed until the social dividend increases perceptibly. Meanwhile, the profit-taker or the residual claimant has appropriated this wealth in the form of corporate surplus and extra dividends that are often concealed from the public. In this way the profit-takers are enabled to secure a lead over the lagging wage earner, smaller salary earner, and recipient of agricultural income, and to appropriate wealth which is socially earned and which is not a necessary incentive to his own economic productivity.

While the work of the enterpriser, although often highly productive, may thus be remunerated far in excess of its social contribution, there are, as is well known, various forms of wealth that are legally acquired under present conditions without the performance of any useful social function whatever. Increments in land values and all other forms of unearned increment account for an immense amount of individual wealth. This is due to immigration, natural increase in population, and changes in social standards, all of which are mainly social in origin. A great deal of private wealth is due purely to luck.

Such "windfalls" as war profits belong to this class. Wealth that appreciates without any deservedness on the part of the owner, but on ac-

count of the abnormal demand due to war conditions, may be sold at inflated prices, the proceeds invested in tax-exempt securities; so that the unearned wealth is funded and holds a perpetual right to the products of the labor of the community. Also wealth acquired by the exploitation of new lands has often little or no relation to economic desert. In the words of Professor Seager: "The large element of chance that figures in a determination of profits from the development of new regions, makes economic desert of less moment here than in connection of other species of profit. This is particularly true in connection with the mining industry, which presents numerous examples of able men toiling through their whole lives for a scanty and precarious subsistence, while others, having neither ability or training, acquire great wealth." ³ Monopoly profits also belong to the class of gains for which there is no corresponding social service. The interests on investments, according to the theory of Professor Wolfe, which will be developed in the following chapter, may also contain large elements of saver's surplus or unearned income.

Turning from the consideration of unearned wealth to that of wealth acquired by entrepreneurial activity, a large part of this wealth may be due to peculiarities or limitations in the character of the entrepreneur himself. We can hardly be said to have a scientific knowledge of the char-

³ Seager, H. R. *Principles of Economics*, p. 209.

acter of the typical industrial manager. In Professor Taussig's *Inventors and Money-Makers* he holds that the typical industrial leaders are actuated by one or more of a number of definite motives, such as the instincts of contrivance, of acquisition, of domination or emulation and of altruism or devotion. The first one of these motives the enterpriser shares with the inventor. The last one, with the philanthropist. Professor Taussig's enumeration of traits seems sufficiently inclusive. For the traits of the money-maker reduced to a bare type we have to resort to biography and fiction.⁴ In the brilliant social satire by Mr. Woodward he depicts "the type of intellect that leads unerringly to great business success—a mind moving in one dimension, without depth or breadth, but incredibly flexible and adaptable to the needs of the hour." The financier's "reputation for profundity arose from his unexpected resourcefulness; and this, in turn, was a product of a makeshift intellect. He had no definite plan, and no far reaching vision, but he knew how to surmount obstacles as they arose. In his essential relations to life he was like a peddler on a country road, meeting people who came by, and getting the better of them."⁵

Again, his "career illustrates clearly the fixity of purpose which is the first law of great financial

⁴ Cf. Dreiser, Theodore. *The Financier*. Woodward, W. E. Bunk. Wells, H. G. *Men Like Gods*.

⁵ Bunk, p. 122.

success. It is a career for the single track mind, blind to wide horizons, and bent solely on material acquisition." . . . "They have ideals, . . . but their ideals are usually naïve, incredibly childish, and guided with a meretricious gaudiness. Through the control of power they are able to impose these mediocre ideals upon civilization, and thus set a standard of achievement which is unworthy of the human spirit." . . . "The dominating motives (of big business) are self-interest and self-assertion. It confuses ability with trickiness, and is unsympathetic to the type of mind which does not know how to 'sell itself.' . . . These traits are allied to the stern intentness of purpose which gives this mind its chief distinction. Color and charm are born of the clash of contending inner impulses. Richness of character, sympathy and understanding of life are developed by natures trying to set themselves in balance. This inner strife is lacking in the great mind of business or finance. It is driven by a single fixed purpose. Consequently, it has only a limited understanding, and acquires information without knowledge.

"But—still worse—it lacks foresight. This failing appears to be congenital and ineradicable, for even in its own field of industrial enterprise it cannot see into the future, and merely stumbles through life, seizing and holding rapaciously anything it comes across which seems to have material value.

"It runs headlong into a world war like a blind

man walking into a ditch and carries with it a flock of deluded nations. It is surprised at everything and irritated at everything. Being devoid of constructive social genius, it is unable to devise any workable plan for the betterment of the world, so it contents itself with a complacent, piddling philanthropy. Like a surly dog with a bone it snarls at those who approach it with suggestions for creating a world of beauty and kindliness.

"Such a mind can be moved only by catastrophes. These it understands and respects. This is a pity, since it necessarily follows that it must be spoken to, if at all, in terms of disaster. The world is now delivering an address in this language, and the oratory promises to become much more eloquent within the next few years." ⁶

Just how far the satirist's type of the acquisitive and narrow-minded financier is typical of modern money-makers we shall not attempt to say. Possibly it is mainly the abstraction of a literary type. Professor Taussig's characterization may be nearer to the truth. Many of our money-makers are endowed with other and more generous traits. They combine the qualities of the inventor, the organizer, and the philanthropist with that of the financier. But Mr. Woodward's satire indicates the type of character that may amass a fortune if given free play under modern dynamic conditions. The

⁶ *Bunk*, pp. 328-330.

money-maker who also is endowed with public spirit will return his surplus to society in the form of capital accumulation or gifts. He voluntarily imposes a high surtax upon himself to endow public institutions. But this condition of voluntary gifts is less efficient than compulsory public taxation for two reasons. First, the donor is less likely to make his grants according to social needs than is the public finance committee; and second, the selfish and acquisitive character, like that depicted in Mr. Woodward's satire, is entirely exempted from public contribution. In other words, to exempt a large part of the surplus from taxation and leave it under private control is to tax altruism and social vision and to exempt acquisitiveness and predacity.

The reason why some men do not make money is not that they lack ability but that their interests are too broad to be limited by material acquisition. A man like Steinmetz, who was so actuated by enthusiasm for scientific progress and public welfare that he received only his necessary expenses from the General Electric, is a case in point. So also are the discoverers of Insulin. They took out a patent on their discovery not to commercialize it and make money, but to prevent enterprisers from monopolizing it, charging all the traffic would bear, and thus extorting huge profits from the public. The pecuniary reward for the activities of these discoverers is in inverse proportion to their social serv-

iceability. Thus moral worth and pecuniary reward under conditions of free competition are often in inverse ratio. The best men morally, those actuated by a sense of social duty, will make their contribution to group welfare without high remuneration. In the words of Hobhouse, "All they ask is the provision of the needs of their toil, the instruments, the opportunities, the necessary powers, and they give their work as a labor of love. Of the majority, who are not altogether of this type, it is not possible to speak in universal terms. The value of reward, and particularly of profit as a motive, has been immensely exaggerated. Those with whom it is the sole motive are, perhaps, as rare as those with whom it is no motive at all. But it takes all sorts to make a world. Indirect results of high remuneration, dignity, or the leisure and freedom to be won, are powerful inducements to some. To others recognition means a great deal, and when it is withheld they suffer a dull resentment. Then again there is the adventurous type, attracted by high prizes, and unwilling to respond with its greatest effort unless to such a stimulus, and at the other end of the character scale the plodder and saver, who will undertake the long preparatory period of the professions, looking forward to a constant accession of ease and comfort. Upon the whole, there is little doubt that if we take human nature as it is—and it is really useless to take it

as it is not—some measure of remuneration by achievement as distinct from effort does directly or indirectly promote achievement.”⁷

Theoretically, in accordance with our definition of justice, remuneration should be sufficient to cover functional costs plus a reasonable surplus as a pecuniary recognition of unusual social service. But other types of character are just as serviceable as the entrepreneur. The artist, the scientist, the social philosopher, the scholar, the inventor, the statesman, these are surely on a par with the financier and the enterpriser when measured by the value of their contribution to the public good. Only, as we have pointed out before, the business man's central position gives him an undue pecuniary advantage. From this point of view, high surtaxes may be viewed as the means of mitigating an extreme pecuniary inequality as between different classes of efficient producers.

By way of résumé, of the large individual incomes, some are wholly unearned, others in all probability, only partly earned. It is not administratively feasible to distinguish the earned from the unearned income, that due to entrepreneurial ability from that derived from windfalls. Hence if society acquiesces in large payments to one class, it must confer vast gratuities on the other. Again, granting that large incomes are normal, in the sense

⁷ Hobhouse, L. T. *The Elements of Social Justice*, pp. 163-164.

that the factors inherent in the economic situation will bring such a reward to a few men if there is no social interference or control, to pay enterprisers a greater surplus above functional costs than is paid to artists, scientists, and scholars, amounts practically to the payment of large bonuses to the possessors of certain unamiable and non-socially desirable traits of character, such as acquisitiveness, narrowness of intellectual and social outlook, and dominant self-assertion.

In this chapter we have analyzed the rewards paid to entrepreneurs from the point of view of the productivity theory, since this is a common ground on which one can debate with the defenders of conservative practice. But the productivity theory as applied to wages, salaries, and rent as well as profits, is tending to obsolescence. Although the productivity principle is theoretically justifiable, it is impossible to apply it under modern conditions. Under complex conditions, conditions of coöperation and interdependence, it is as impossible to isolate the contribution of any individual factor as it is to estimate the part of a lone soldier in winning a great modern battle. Under these circumstances, the social utility theory or theory of maximum social advantage tends to displace the theory of individual productivity. The extent to which this would lead to higher surtaxes, the reduction of pecuniary inequality, and the increase in public expenditure has already been indicated in the

earlier chapters. To what extent private income should be reduced by surtaxes or what should be the limit of untaxed private wealth will be the problem of the final chapter, which develops a theory of taxable faculty.

CHAPTER XIII

SURTAXES AND THE ACCUMULATION OF CAPITAL

THE conclusion of our preceding chapter is that highly progressive taxation will probably not reduce the enterprise and initiative of our ablest business men provided the individual still retains after paying his tax a substantial surplus above functional costs. This is in harmony with Hobhouse's definition of justice; and is, we believe, the generally accepted opinion of orthodox economists. A more serious criticism of the argument for progressive taxation has to do with the accumulation of capital. According to this argument a policy, such as highly progressive taxation, that operates toward an equalization of incomes by preventing or cutting down the large incomes, reduces the proportion of the general income that is saved. In brief, equalize incomes and tax surpluses, and you reduce the investment fund. This emphasis upon the function of the accumulation of capital is the one argument on which the defenders of the good old system of natural liberty now principally rely. Only out of large surplus incomes can large-scale improvements be made or vast new enterprises be undertaken.

Progressive taxation, by tending to reduce the inequality between individual incomes tends to reduce the supply of savings. The practical limit of progressive taxation, then, is the point at which the tax begins to check the accumulation of capital, and this, it is assumed, begins to operate fairly early within the scale of progressive rates. If the tax rate continues above this point, it becomes a collective evil, for economic and social progress is dependent upon the accumulation of capital. A highly progressive tax thus kills the goose that lays the golden egg. This argument for large surplus incomes is a justification for social inequality. Many of these large incomes are unearned. They are of the nature of inheritances, windfalls, or other adventitious gains. Yet they are justifiable as the stimuli to the accumulation of capital upon which economic progress depends. Progress thus appears to be based upon economic inequalities and injustice.

Many of our most eminent economists accept this view. Even David Friday, who disposes of the argument that progressive taxes on income and profits check business enterprise, has not undertaken a refutation of this criticism. His own words are as follows: ¹ "In view of what we have said concerning the uses to which profits are put, it is pretty clear that high taxes on large incomes and large profits decrease the volume of capital available for

¹ *Profits, Wages, and Prices*, 1920, pp. 183-4.

investment and interfere to some extent with the growth of the national wealth. While it is true that the ability of the recipient of small incomes to save increases as those incomes are freed from the burden of taxation, it is also true that he actually does save a smaller proportion than would the recipients of large incomes or the corporation enjoying large profits. And the increased savings which this class does make do not come so largely to the general investment market but are mainly absorbed by an increased demand on the part of the savers themselves for durable goods like houses, furniture, and automobiles. These new taxes, without much doubt, retard the growth of national wealth and most certainly lessen the flow of funds upon the investment market and the expansion of the national 'plant.' The increase of capital has been one of our chief concerns for a century past, and to the extent that these taxes interfere with it, they must be subjected to most critical scrutiny."

Another liberal economist, A. B. Wolfe, although advocating heavy tax rates on large incomes, admits the force of this argument. "Heavy tax rates on large incomes reduce, perhaps by nearly as much as the amount of the tax collected therefrom, the amount of savings turned back, without sacrifice, into the investment flow."² Professor Wolfe goes

² Wolfe, A. B. "Savers' Surplus and the Interest Rate." *Quart. Jr. Econ.*, Vol. 35, 1920-21, p. 32.

on to say, "Whether such heavy taxation is advisable or not depends, among other things, upon (1) the ability of the government to make more socially productive use of the tax proceeds than private enterprise would make of them as savings and reinvestment funds, and (2) the effect of such taxation on the interest rate." The problem of making socially productive use of the tax proceeds has been the subject of the first part of this essay. The need for funds by private enterprise and the effects of high tax rates on the rate of interest will be discussed in subsequent pages.

In order to illustrate the common view of the effect of highly progressive taxes upon the accumulation of capital, let us consider two typical cases, that of the financially average man and that of a multi-millionaire with an income of \$1,000,000 with reference to the conditions of federal finance in the year of 1922. Assume that the federal income tax had a purely proportional rate with no exemptions, and that it was the sole source of federal internal revenue. Then dividing the federal revenue required for 1922, approximately \$3,200,000,000, by the number of American families and there would result an income tax of about \$145 per family that received the mean income of \$2,200. Under these conditions it would appear that the chances for the accumulation of capital and through it for economic progress would be very small, the family income being in most cases exhausted by the necessary ex-

penses of living and the payment of the tax. In the case of the rich man it would be different. Ten thousand dollars might be used for family expenses. A tax at the proportional rate of 6.6 *per cent* on \$1,000,000 would be \$67,000, leaving a surplus of over \$900,000 that might be saved. If there were social need for additional capital, it would be reflected in a rising rate of interest; and this surplus would be an elastic source of supply that would respond to a rise of interest to the marginal rate requisite for saving.

Perhaps this is the conclusion that the economic realist will have to accept, so that there will be a decisive check upon progressive taxation, and public expenditures in order that there may be no retardation in the growth of the national dividend, the source of taxation of the future. In that case we shall have to acquiesce in a large measure of economic inequality. Yet if lower tax rates are deemed necessary to secure the required savings we shall have to compromise with our professed social and political ideals. We shall infringe the principles of ability to pay or equality of sacrifice that are the accepted tenets of democratic theory. Before we submit to this theoretical dilemma it will be necessary to submit the conventional argument to a searching analysis.

Some of our most constructive economists have replied to this conventional argument. It is pointed out that accumulation under conditions of

great inequality involves great social waste. This waste occurs in the fields of both consumption and production. A large part of our industrial output takes the form of luxury goods, much of which, to use the term of Ruskin, should be classified as "illth" rather than wealth. In this connection Hobhouse observes: "If it is a question of sound economy, there could hardly be a more wasteful method of securing accumulation than the present, particularly as interpreted in the argument in question. For this argument assumes incomes so large that saving becomes a matter of little or no sacrifice—an item of uncertain magnitude salved from a waste of luxury expenditure." ³

Capital accumulation under the condition of great inequalities in income also involves waste in the field of production. Hobson expresses the opinion of social economists ⁴ that the existence of large surplus incomes diminishes in two ways the productivity of the nation. First, by enabling and inducing its recipients to live in idleness, or in useless or wasteful activities, it withdraws from production the personal labor represented by this leisure class. Second, this surplus income diverted into other channels, such as higher wages, increased money payments or enlarged public expenditures, might raise the standard of efficiency or evoke a

³ *Principles of Social Justice*, pp. 192-3.

⁴ *Incentives in the New Industrial Order*, 1923, p. 48.

larger output of voluntary effort in the case of a great majority of the producers.

This lack of voluntary effort on the part of the working classes—this lack of whole-hearted social coöperation, which culminates in strikes and sabotage, is one phase of waste in production that is probably due in no small measure to inequalities of income. Sociologists have pointed out that many of our wants, in general the cultural wants, are largely conventional or social. Conspicuous waste and conspicuous leisure as emphasized by Veblen make for class conflicts and disturb production. Under conditions of social equality men will more cheerfully endure a life of hardship and toil. This was recognized long ago by the English poet Goldsmith.

Though poor the peasant's hut, his feasts though small,
He sees his little lot the lot of all;
Sees no contiguous palace rear its head
To shame the meanness of his humble shed;
No costly lord the sumptuous banquet deal
To make him loathe his vegetable meal.

Under modern conditions of great natural resources, specialization, and dynamic changes in industry, great fortunes have been quickly and easily amassed; but society is becoming increasingly animated by a passion for social equality; so that a continuance of the old *laissez faire* and wasteful conditions of capital accumulation may lead to a

revolution or at least a refusal to coöperate or a half-hearted coöperation on the part of a large group, a necessary factor in the productive process.

Another criticism of the argument that great inequality of incomes is necessary for the accumulation of capital takes the form of the assertion that under this condition there is actual overaccumulation of capital. Being visionless as to the limit of the social needs for additional capital, the automatic savers of income will accumulate until they have disturbed the desirable balance between saving and consumption. In other words, this form of capital accumulation leads to overinvestment and the business cycle. As illustrated by our industrial achievements during the war it is pointed out that in times of peace our present industrial plant is not operated to full capacity. George Soule estimates that we could regularly turn out forty *per cent* more than we do.⁵ To the argument that if you equalize incomes and tax surpluses you reduce the investment fund Hobson replies ⁶ that a wasteful distribution of incomes involves a wasteful utilization of capital. The easy accumulation of the rich makes possible an overinvestment in material capital. A trade depression causes this excessive capital to stand idle, and reduces employment and production on the part of all the other factors of

⁵ "Can a Living Wage be Paid?" *New Republic*, May 3, 1922.

⁶ *Incentives in the New Industrial Order*, p. 50.

production. A maladjustment of income disturbs the economic balance between saving and spending, and by enlarging the former while contracting the latter, produces the means of turning out consumable goods at a faster pace than they get consumed. These stoppages in industry are due to the fact that production has outstripped consumption. Two checks upon overinvestment, the fall in the rate of interest and falling prices, do operate, but they are slow, imperfect, and inadequate. Falling interest rates do not proportionately reduce saving, for much of the saving is done by costless or intra-marginal savers.⁷

The fall of prices is also inadequate to preserve the desired balance between production and consumption because, when, on account of overinvestment, the prices of commodities begin to fall, consumers do not at once proportionately increase their purchases. The standard of consumption of most classes is not elastically responsive to price changes. With the fall of retail prices consumers save a little more though the economic situation demands that they should save a little less. Not until the fall of prices has gone far enough to cause widespread unemployment, *i.e.*, to reduce the general pace of current production, does the painful adjustment between production and consumption operate, not by stimulating consumption but by

⁷ Cf. Wolfe, A. B. "Savers' Surplus and the Interest Rate." *Quart. Jr. Econ.*, Vol. 35, 1920-21, pp. 1-35.

depressing production for a time even below the rate of reduced consumption.⁸

A similar view has been presented by Harold G. Moulton.⁹ Professor Moulton argues that there is a possibility of excessive thrift, and that the rate of capital accumulation is dependent upon expanding consumption. The process of capital formation has varied under different conditions. He discusses capital formation under primitive conditions, under the conditions of pioneer life in America, and under conditions of modern specialized society.¹⁰ Under primitive conditions where exchange does not exist, if an individual is to increase his productive power by the use of capital, he must devote a portion of his time to the creation of capital goods—he cannot devote it exclusively to the creation of consumption goods. Under the conditions of pioneer life in America men created capital goods during portions of the year which could not be devoted to the production of consumers' goods, that is, when the farmer could not plant, cultivate, or harvest his crops he devoted his time to digging ditches, clearing and improving land, constructing farm buildings, and making public roads. The capital formation under these conditions was not a result of abstinence, time preference, or impatience. It was

⁸ Hobson. *Incentives in the New Industrial Order*, p. 52.

⁹ "Commercial Banking and Capital Formation." *Jr. Poly. Econ.*, Vol. 26, 1918, pp. 484-508; 638-663; 705-730; 849-881.

¹⁰ *Ibid.*, p. 857.

accompanied by little or no diminution in immediate consumption. The alternative to capital formation was not consumption but idleness. Under these two sets of conditions there was little danger of overproduction of capital equipment; for the capital goods were largely owned and used directly by those who created them.

Under the conditions of modern specialized society capital formation is a much more complicated process. It may easily result in excessive thrift. The change in the nature of the process Moulton illustrates as follows: "Mr. Jones produces goods for Mr. Smith's consumption. Smith in turn produces goods for Jones's consumption. Now if Jones curtails his consumption in obedience to a thrifty impulse or a desire to secure a competency for old age, he curtails the demand for Smith's goods and thus reduces Smith's production. And if Smith has a similar urge to save, he in turn reduces the production required of Jones. It is obvious that under such circumstances saving would not lead to the creation of additional productive equipment; on the contrary it would result in only part-time use of existing capital equipment and lead to many hours of leisure on the part of Jones and Smith as producers."¹¹ Moulton's conclusion is that there is an interdependence between large consumption and new capital formation. Some individuals can save advantageously providing others are spending

¹¹ "Commercial Banking and Capital Formation," p. 853.

as usual; but if everybody saves, there is no market for the products of capital goods. Under modern conditions consumption appears to be the controlling factor.

Moulton gives two supposititious cases illustrating the possibility of a more rapid increase of capital when consumption is high than when it is low.¹² "First, suppose that as a result of large consumption seventy-five *per cent* of our energy were devoted each year to the production of consumers' goods, fifteen *per cent* to the replacement of existing capital goods, and ten *per cent* to the creation of new capital goods. Now suppose that because consumption is kept low only sixty *per cent* of our productive energy is devoted to the creation of consumers' goods, fifteen *per cent* to the replacement of existing capital goods, and five *per cent* to the production of new capital goods. Under these circumstances it would take twice as long to double the existing supply of capital goods as in the former case."

Moulton points to a considerable array of evidence in support of the view that the increase of capital equipment is most rapid when there is a large consumptive demand, and hence that consumption is in truth a directly controlling factor.¹³ The decade from 1897 to 1907, one of great extravagance, was a period during which capital was

¹² "Commercial Banking and Capital Formation," p. 854.

¹³ *Ibid.*, p. 859.

created more rapidly than ever before in our history. The period from 1874 to 1879 was one of low consumption and of a very slow rate of capital formation. Thrifty nations like France and Holland have had a less rapid rate of capital formation than more extravagant nations like the United States and Germany. The strongest evidence is derived from our experiences of the war. The European demand for American goods increased the production in existing industrial establishments, and also led to the rapid creation of new capital. In 1916 the savings from all sources were nearly three times those of a normal year. And savings were larger in 1917 and 1918 than in 1916. In Great Britain the demand for war supplies gave employment to women and children. The increased purchasing power of the masses resulted during the first year of the war in an increase of the output of goods for private consumption, in addition to the enormous increase in the production of war supplies.¹⁴ "In 1916 the Garton Foundation estimated that although 1,500,000 workers had shifted from peace industry to munitions-making and other special war work in England, and several additional millions had been taken for the armies, England succeeded in feeding and clothing its people not appreciably worse than in times of peace, while manufacturing a sufficient surplus of goods

¹⁴"Commercial Banking and Capital Formation," p. 860.

to maintain a very considerable part of the export trade."

Moulton also points out that there is "abundant evidence of the relation of consumptive demand to capital formation in connection with the economic cycle. In periods of depression there is an enormous amount of unemployment and part time work. In addition there is a general disposition to be economical. And it is not until there occurs an increase in consumptive demand that a revival from a serious business depression occurs." Here the argument is identical with that of Hobson.

Moulton also adduces evidence that a curtailment of consumption causes a slackening in the rate of capital formation.¹⁵ He cites Villers to the effect that "in England during the 'hungry forties' whenever the price of food stuffs rose in consequence of bad harvests, virtually all of the income of the English laboring classes went for food, with the result that manufacturing industry everywhere languished and unemployment became widespread. With the falling of food prices a demand again arose for manufactured goods, and employment became once more relatively plentiful." Another illustration of the effect of lessening consumption on production and capital formation is found in the periods of business depression that follow a panic. Still another illustration is found in our

¹⁵ "Commercial Banking and Capital Formation," pp. 862-4.

recent war experience. "Immediately after the outbreak of war the President and others urged the most rigid economizing on the part of the American people, and the result was a sharp retrenchment in consumption. Within a few weeks the result of this was manifest in declining sales and lessened production, together with a slackening of ordinary new capital construction. There was then inaugurated the movement for business as usual as a means of preventing unemployment and of insuring large profits. A retrenchment of consumption thus quickly made itself felt throughout the entire business world." ¹⁶

In addition to the fact that universal or excessive thrift may retard rather than promote the rate of capital formation Moulton points out that the expansion of bank currency that attended the evolution of our commercial banking machinery represented a method of capital formation that did not involve a curtailment of the present consumption demand necessary as a motive and stimulus to business activity. The outstanding feature of commercial banking is its ability to take a given amount of cash resources and to make loans to many times the amount. By 1916 the percentage of cash to loans and investments in our banking system was estimated at six. Thus on the basis of a slender cash reserve the commercial banking system created credit instruments approximately sixteen times the

¹⁶ "Commercial Banking and Capital Formation," p. 863.

amount of that reserve; and so far as these credit instruments were concerned, *i.e.*, their availability for the purchase of capital instruments, they were the equivalent of cash. By means of this expansion of cash reserves, about nine and one half billion dollars of bank credit loan funds were secured on the basis of a cash reserve of six hundred million dollars. This capital formation did not involve cost, *i.e.*, a curtailment of consumption, except in the provision of the six hundred million dollars cash. Moulton estimates that in the neighborhood of two thirds of all the credit extended by commercial banks goes for fixed rather than for working capital.¹⁷

The conclusion of this matter seems to be that under modern as under primitive conditions capital goods are formed through the application to this purpose of the productive energy of society. Under a pecuniary order the recipients of income must spend less than that income in order to provide funds with which business men may mobilize the human energy to create capital goods. Under conditions of expanding bank currency, however, it has been possible for enterprisers to secure these funds with very slight antecedent saving on the part of consumers. Moulton reaches several other conclusions which bear indirectly upon our problem. Under the conditions of great inequality of income the rate of capital formation is a retarded and also

¹⁷ "Commercial Banking and Capital Formation," p. 729.

an uncertain one.¹⁸ It leaves unsolved the problem of making individual provision for old age.¹⁹

It leads to unbalanced social development. "The organization of business enterprise on a profit-making basis does not promote an efficient proportioning of productive energy of society between long run and short run social requirements. It is essentially visionless so far as the larger national welfare is concerned."²⁰

Moulton's conclusions have a special bearing on the topic of this chapter. The virtue of thrift has been greatly overestimated; and from the point of view of social welfare it may readily be extreme. Yet under conditions of modern specialized society some thrift is requisite; consumption must be curtailed in order to release funds required by entrepreneurs in the creation of new capital. But this curtailment of consumption should be carried only to the point of proper balance between the creation of producers' and consumers' goods so as not to retard the rate at which such capital may be created. Professor Seligman has admirably summarized this thought.²¹ "A wealthy country is one where the consumption of the people is great and variegated and where the current production is so large that there will still be a substantial surplus

¹⁸ "Commercial Banking and Capital Formation," p. 879.

¹⁹ *Ibid.*, p. 880.

²⁰ *Ibid.*, p. 821.

²¹ Seligman, E. R. A. *Essays in Taxation*, 1921, p. 717.

susceptible of being converted into capital for future production and into an environment which will spell increasing welfare and civilization."

The chief factor in the accumulation of capital appears to be not abstinence or time preference or the curtailment of consumption but that regularity and expansion of demand that allows for a smooth and regular flow of goods from the investment field through the creation of raw materials to the finished product in the hands of the ultimate consumer. How little this smooth flow of goods has been dependent during the last fifty years upon the failure to satisfy desires, the non-satisfaction of which would involve felt sacrifice, is demonstrated in the article by Professor Wolfe, "Savers' Surplus and the Interest Rate." The following table will make this clear:

	Automatic saving of wealthy and ultra wealthy. ²²
	Corporate surpluses (in the main). ²³
Costless	Bank credit loan funds (minus the cost of saving the
Savings	required cash reserves). ²⁴
	Savings of middle class to the extent that they are
	intra-marginal. ²⁵

Wolfe estimates that approximately nine tenths of saving involves savers' surplus—a surplus as un-

²² Wolfe, A. B. "Savers' Surplus and the Interest Rate," pp. 21-23.

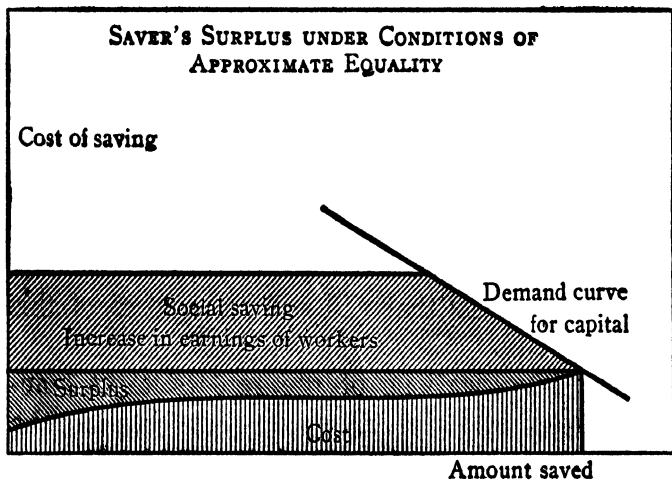
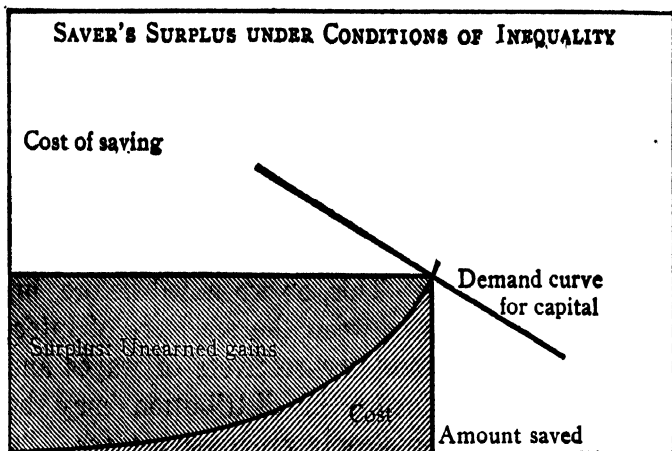
²³ *Ibid.*, pp. 27-29.

²⁴ *Ibid.*, pp. 29-31. Also Moulton, "Commercial Banking and Capital Formation," p. 873.

²⁵ Wolfe, pp. 10-21.

earned as the socially produced increment in land rent.

The existence of this unearned surplus is due to an unnecessarily high rate of interest which becomes a charge upon productive industry. The result is inequality between the receivers of investment income and the great mass of the people whose incomes are derived from wages and salaries. There are two main theories of this rate of interest, the marginist theory and the behavioristic theory. The marginist theory in explaining the above facts would admit that although the great bulk of the savings are automatic or intra-marginal, a small percentage of the necessary savings involves high abstinence or sacrifice of present satisfaction on the part of those who supply them. And since there can be only one market price for the whole supply, the easy saving has to be remunerated at a price determined by the difficult saving. The advocates of the behavioristic theory do not admit that the marginal saver occupies this strategic position in the matter of the rate of interest. Interest is largely due to forces that are traditional or conventional. Professor Wolfe, who represents this school, believes that the social appropriation of much of this surplus can be achieved by a higher standard of living among the workers, cessation of redundant immigration, a lower labor class birth rate, better organization leading to more effective bargaining power, more steeply graduated income



and profits taxes, and more scientific application of public revenues to social purposes.²⁶

Under the situation as viewed from the point of view of the marginist theory a large proportion of the necessary savings are costless or nearly costless on the part of the savers but the savers are remunerated at the same rate as the smaller group of high cost savers. This, as we noted before, involves an injustice between the receivers of interest and dividends and the receivers of wages and salaries. This injustice in distribution may be remedied in part by steeply progressive taxes. By means of these taxes a considerable percentage of the unearned or unnecessary surplus will be appropriated by society and will be devoted to the increase in real wages and salaries through scientific public expenditure. But the practical question we are facing is whether the income surplus is so great that after supplying funds for heavy public expenditures through surtax rates that run up to 50, 60, or 65 *per cent* there would still be sufficient margin above functional costs to furnish the bulk of loanable funds that will still be required of this income group.

Some investigations of the rate of capital accumulation within recent years may reassure the doubters of democracy. Professor Friday²⁷ esti-

²⁶ "Savers' Surplus and the Interest Rate," p. 35.

²⁷ "The Accumulation of Capital." *New Republic*, Dec. 14, 1921.

mated that the total savings for 1921 approximated \$8,800,000,000 and that approximately \$6,800,000,000 had been saved by the rich in that year of high taxes. He concludes that the effect of taxes in curbing capital accumulation has been overestimated.

If the surplus monetary incomes of the rich should prove inadequate for both taxes and savings, it would be necessary to draw increasingly upon the savings of a great mass of people with lower pecuniary incomes. The social surplus would still exist as a source of the capital fund; and that surplus might be appreciably augmented through a reduction of the leisure class and greater efficiency and a readier disposition to coöperate on the part of the workers. In answer to the charge that if surplus incomes were reduced accumulation would cease, Hobhouse replies:²⁸ "That is to assume that the community lacks either the means or the sense to save." Considerable light is thrown on the problem as to whether the middle and lower classes lack either the means or the sense to save by the investigations of Professor Friday.²⁹ He classifies savers into two groups; first, people of large means who own corporate and government securities, and officers of corporations who receive large salaries; and second, the great mass of people who receive wages and salaries. Owing to the decline of profits caused by the fall of prices and the relatively high

²⁸ Hobhouse, L. T. *The Elements of Social Justice*, p. 192.

²⁹ "The Accumulation of Capital." *New Republic*, Feb. 7, 1923.

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wages and salaries which decline on the average more slowly than prices, there was much less inequality between these two groups in 1922 than in 1921. This difference was reflected in savings.

Total	By the rich	\$6,800,000,000
Savings	By agriculture and business not corpo-	
1921	rate, and building operations other than	
	public and corporate	\$2,000,000,000
Total		\$8,800,000,000

The total savings for 1922 Friday estimates at approximately \$10,000,000,000. The income of the mass of the people derived from wages and salaries and exclusive from that received from agriculture and government service was \$33,000,000,000. The savings of this class he estimates at approximately \$4,000,000,000 or 12 *per cent* of the total income. Friday comes to the following interesting conclusions. The major portion of our \$10,000,000,000 of capital was accumulated by the rich. The interest and dividend payments to people of large incomes were sufficient to enable them to pay their income taxes and still have left as much as they had in the year of maximum business profits. The notion that a large distribution of the national income among the laboring classes militates against abundant capital accumulation finds little support in the events of the past year. The large payments in wages and salaries revived trade.⁸⁰

⁸⁰ Cf. Moulton. Above.

In this connection Hobson has an interesting argument for a less unequal distribution of income.³¹ Under conditions of higher wages there would be a lower rate of interest and less savers' surplus. "Though the average sacrifice involved in saving a given proportion of the total income would be higher, the sacrifice in doing the most difficult saving might be less, and when we consider that a smaller proportion of this larger total income need be saved (the larger income resulting from a reduction of the idle class and increase in the efficiency or voluntary effort of the workers), we see that the price for saving, *i.e.*, the rate of interest might be considerably lower than before."

Under conditions of great inequality of income it is possible, as we have seen, that a large percentage of the necessary savings may be costless, *i.e.*, costless to savers. The utilization of these savings, on the other hand, involves a heavy cost through the rate of interest. The costless savings to the rich are not costless to society. Would it be possible to secure costless or nearly costless savings with little or no savers' surplus? In other words, would socially costless saving be within the realm of possibility? Moulton's contention that consumption, or the market, is a dominant factor in the situation leads to the conception of the social rather than the individual aspects of saving. The paying of taxes is essentially an individual phenomenon; the

³¹ *Incentives in the New Industrial Order*, p. 58.

accumulation of savings may become a predominately social one. Then social organization may increase the efficiency of human effort in the field of the accumulation of capital as it has in the field of production and consumption of goods. It may operate according to a principle of increasing returns. Thus the corporate surplus combines the principle of increasing return in production and the costless accumulation of capital. The commercial banking system according to Moulton increases the efficiency of individual savings sixteen-fold. The commercial banking system furnishes elastic funds for commercial purposes, that is, sufficient funds to effect the transfer of goods already produced to the consumer without disturbance of the price level. The commercial banking system, according to Moulton, is equally capable of furnishing funds for investment purposes and actually does so. From the point of view of a well-organized banking system there is no fundamental distinction between commercial and investment banking. Commercial loans should be normally self-liquidating over a short term; investment loans should be self-liquidating over a long term. The only difference is in the matter of risk which is of necessity greater in long-time operations. The success of these coöperative institutions in multiplying the efficiency of savings points to the suggestion of further socializing the saving process through the Federal Reserve System. By a rational use of

this system we might realize a practically costless saving and at the same time obviate the unearned gains that inhere in consumers' surplus. Professor Phillips³² has demonstrated that the centralization of reserves under the Federal Reserve system, and the custom of counting credit on the books of the Reserve bank as reserve of the member bank has greatly expanded the available capital for industrial purposes. One hundred dollars in gold in the vaults of the Federal Reserve bank may represent a loanable capacity of \$2,700 on the part of the member bank. This power inherent in the Federal Reserve bank of expanding currency may supply society with an elastic currency for both commercial and investment operations. That is, by means of commercial bank analysis of the applicant for credit, personal honesty, managerial efficiency, and good market prospects may secure to the entrepreneur the means to purchase or create the capital instruments required by society.

Thus there might be automatic social saving or the creation of capital goods without sacrifice of individual consumption and without expense to society except the functional costs of banking, in other words, without savers' surplus. The Federal Reserve board through its statistical department by keeping record of the production, exchange, and distribution of goods could regulate the distribution of credit among investment and commercial

³² Phillips, C. A. *Bank Credit*, p. 110.

borrowers so as to maintain the proper balance between producers' and consumers' goods. If there should be a scarcity of producers' goods relative to consumers' goods, this relative scarcity would cause a rise in the price of this type of producers' goods. The rise in price would cause an expansion of business profits for dealers in this line. And (assuming character and ability on the part of the entrepreneur) on the basis of the improved market prospects the means for financing and building the additional plant needed could be secured simply by mortgaging the product beforehand through the instrumentality of the loan funds created by the banking system on the basis of a slender cash reserve in the central bank. Under the circumstances a low rate of interest would be feasible; for if the Federal Reserve system can expand cash savings twenty-seven fold, it is evident that a low rate of interest on the expanded currency would cover all functional costs involved in saving the cash reserve and in the operation of banking. The limiting factor in the rate of the accumulation of capital under these conditions would not be the aggregate volume of individual thrift but the expansion and variation in social wants as reflected in market prices.

So much for the accumulation of capital under a just and democratic system of distribution, in particular under conditions of steeply graduated taxation. As we have explained above, such a sys-

tem of taxation is advocated as a policy for the long run. Its realization implies social reforms in various directions, for one, as we have just suggested, the complete socialization of banking. Social reform inevitably must be gradual and all along the line, not by isolated groups who are left in untenable salients, exposed to the cross fire of Conservatism, Prejudice, and Privilege.

Before leaving the subject of social savings we may consider some aspects suggested by our study of consumption. As Watkins has pointed out, the term saving is a more comprehensive one than is commonly supposed.³³ It is not to be viewed as synonymous with commercial investment. There are opportunities for saving and accumulation within the field of direct utility and consumption. Thus savings may take the form of durable consumers' goods which yield a psychic income of existential utility. The theory underlying this form of saving is that it increases the stock of consumers' goods in which there is a slow rate of the diminution of utility. Savings of this kind are conditioned upon free income; and hence are promoted by any social arrangement that reduces social inequality.

In line with this reasoning there is also a great social advantage in the accumulation of public durable consumers' goods. Under conditions of a considerable social surplus, society might devote part of its energy to the creation of new capital with a

³³ Watkins, G. P. *Welfare as an Economic Quantity*, p. 64.

view to the ultimate increase of consumption. Such a policy is practicable only within the area of the public economy; for, where the productive energy of society is apportioned by individual entrepreneurs, the motive force to capital formation is private gain. And this gain has to be realized within a relatively short time. As we have noted before, low taxes and high individual consumption on the part of the wealthy imply a large output of articles of private luxury. High taxes and reduced private consumption of luxuries may mean increased luxurious consumption by the public. Under the individualistic régime the output of articles of private luxury employs a considerable portion of the productive capacity. But the capacity of the industrial equipment that is engaged in the making of these goods is in excess of the needs of the relatively small class of consumers. Hence, overproduction relative to demand causes a fall of prices, and inability to realize profits, and hence a period of industrial depression until demand has again caught up to supply sufficiently to assure profits from the production of luxury goods. The burden of this period of depression falls largely on the working class that is employed in the luxury producing industries. The returns on capital, meanwhile, are largely insured by means of surplus and reserves set aside during periods of productive activity.

The bearing of this situation on our problem is

that high taxes and increasing public expenditure would largely reduce the operation of the profit motive in the production of luxuries. Luxuries of the desirable kind, or goods that possess multiple utility, are to be consumed by the entire public, or by the individuals who compose the public in proportion to their individual capacity for consumption or enjoyment. The demand for necessities and for the decencies and comforts of life will remain fairly constant. And the output of public luxuries will lack the causes of fluctuation that inhere in the profit economy. Since the government aims not at profit but at the maximum social utility, the output of public cultural or luxury goods may be based on the growth of the national surplus, and may easily be regulated as to output. Hence, the increase in public luxurious consumption and the decrease of private luxurious consumption might yield not only the added utility of organized expenditure but go a long way toward obviating the ills of the industrial cycle.

Another way of expressing this thought; industry can produce more than society can buy at prices that will yield a profit under conditions of great inequality of incomes—not more than society can consume, for certain types of luxury goods—goods for which the demand is elastic, will bring in a considerable utility if the supply is great, even if the marginal utility (utility in terms of money) is small. Especially is this true of durable consump-

tion goods, which continue to yield utility long after the major economic costs have been met.

Durable consumption goods that are the objects of public savings are goods of large variety or magnitude. Museums and architecturally imposing buildings are examples of this form of public accumulation. As we have noted before, goods of this sort generally combine existential with multiple utility. Being the best examples of durable goods, they bring the largest return in utility for a given outlay; and being public and accessible to all, they are available for enjoyment by those who have the greatest capacity for utilization or consumption. Their gradual destruction or obsolescence is due to the working of forces that have no relation to the rate of enjoyment or use. And their collective ownership tends to breed a unific communal sentiment based on the common pride of ownership, the obverse of that divisive feeling engendered in the consumption or use of articles of adventitious utility. The limit to the utility of public consumers' goods is the citizen's capacity for enjoyment. The fact that this is determined to an appreciable extent by education is one reason for an increased demand for this form of social service.

The investment in education is treated by some economists as a separate form of saving. As Hobson remarks,³⁴ intelligent parents recognize that they may be doing better for their children by

³⁴ *Incentives in the New Industrial Order*, p. 63.

spending any surplus income they possess in giving them a good education than in putting that surplus in the bank. Thus we need not only a balance between producers' goods and consumers' goods, but in the field of investment a proper balance between the formation of material capital and the formation of personal capital. In fact the social aspects of education and training are receiving an increasing emphasis over the individual aspects. This is unquestionably the most productive form of public expenditure, for it is the only means by which we can preserve that technological culture which is the chief factor in production and that intellectual and artistic culture which is the prerequisite to efficient consumption.

CHAPTER XIV

A THEORY OF TAXABLE FACULTY

HAVING considered in the two preceding chapters the two foremost objections to progressive taxation, we shall now attempt to determine more accurately the rate of taxation according to our accepted concept of justice. There are three alternative principles for the equitable distribution of tax burden: first, the cost to the public of the services rendered to the individual tax payers; second, the benefit of such services to the individual tax payers; and third, the individual tax payer's ability to pay.

The cost of service principle can be applied to the class of services conferred by public utilities; but it cannot be applied to services rendered out of the proceeds of taxes, as distinguished from prices. For a tax is a payment in return for which no direct and specific equivalent has to be rendered to the tax payer.

The benefit of service principle, which has been employed extensively to justify taxation, has been largely abandoned by fiscal authorities. It is impossible to estimate accurately the benefits which individuals receive from public service. Moreover,

many forms of public service, such as public charities, are conferred upon people who obviously have no ability to pay. The benefit theory has some applicability to local taxation; but even here its validity is due to the fact that the benefit conferred by public services increases the taxable faculty of the citizen or organization that receives the benefit. In other words, benefit is a principle of taxation in so far as it creates a taxable faculty or ability to pay taxes.

The third principle, that taxation should be distributed between individuals in proportion to their ability to pay, has now been accepted by the great majority of fiscal experts. But how is ability to pay to be measured? Most recent writers on fiscal subjects, in discussing this phase of the question, estimate the sacrifice of the tax payer in paying his taxes, and then attempt to deduce some scheme of the distribution of the tax burden from a principle concerning sacrifice. The three most common of these principles are "minimum sacrifice," "equal sacrifice," and "proportional sacrifice." All of these principles lead to progressive taxation. The principle of equal sacrifice leads to a moderate rate of progression; the principle of proportional sacrifice leads to a steeper rate of progression; and the principle of minimum sacrifice, involving a high level of exemption and confiscation of the higher increments of the largest incomes, leads to very steeply progressive taxation.

Turning to the comparison of the three principles of sacrifice we shall attempt to reach approximately a desirable rate of taxation by a process of elimination applied to these three principles.

First, as regards the rate of progression that leads to confiscation of the later increments of the largest incomes. The socialistic theory as well as the minimum sacrifice theory has been employed to justify this form of progression; but according to Hobhouse's definition of justice, which we are employing as a standard, the socialistic doctrine is untenable. It accepts equality in the absolute sense. It emphasizes need alone, and makes no allowance for proportion according to merit or desert. The theoretical objections to socialistic absolute equality have been concisely formulated by Professor Seligman.¹

A theory more subtle than the socialistic, but one that points in the same direction of confiscation of the upper increments of income, is the minimum sacrifice theory of Professors Edgeworth² and Carver.³ Starting from the utilitarianism of Bentham Professor Edgeworth contends that the greatest happiness principle implies that the total

¹ Seligman, E. R. A. "Progressive Taxation." *Am. Econ. Assoc. Pub.*, Vol. 22, 1908, pp. 129-32.

² Edgeworth, F. Y. "The Pure Theory of Taxation." *Econ. Jr.*, Vol. VII, 1897.

³ Carver, T. N. "The Ethical Basis of Distribution." *Annals of Am. Acad. Pol. and Soc. Sc.*, Vol. VI, 1895. "The Minimum Sacrifice Theory of Taxation." *Pol. Sc. Quart.*, Vol. XIX, 1904.

net utility due to taxation should be a maximum. This implies that the total disutility should be a minimum. It follows from this that the marginal disutility incurred by each tax payer should be the same. The result is equi-marginal sacrifice, or least total sacrifice. In other words the theoretical "solution of the problem is that the higher incomes should be cut down to a certain level," or that "the richer should be taxed for the benefit of the poorer up to the point at which complete equality of fortune is obtained." This conclusion Professor Edgeworth reached by analysis of the principles of taxation in so far as they are subjective and abstracted from the more objective productional conditions. As a practical man, however, he shrank from his own conclusions, as he recognized the necessity of allowing for objective conditions.

Our objection to this theory is its non-conformity to abstract justice, or the definition of justice given by Hobhouse, which we have accepted as a norm. If "the richer should be taxed for the benefit of the poorer up to the point at which complete equality of fortune is obtained," we should have an absolute equality, which would violate our principle of relative proportional equality. In other words, if complete equality of fortune among the citizens were secured by means of taxation, there would be no allowance, no proportion according to merit or desert, which Hobhouse maintains is one of the constituents of a practical principle of justice that

is derivative from the principle of the common good.

It seems to the writer, however, that the principle of minimum sacrifice as thus stated could never actually be applied in such a way as to secure complete equality of fortune among all the citizens. At most it could merely level down the incomes of the richest citizens to the level of others less well-to-do. The incomes of the least well-to-do citizens would always remain untouched by taxation, unless the government should take in taxes a very high percentage of the national income. Hence, the minimum sacrifice theory of taxation would not point to any form of equality, absolute or proportional. To illustrate, suppose that in a certain community there were three wealthy men, A, B, and C, whose incomes were respectively \$1,000,000, \$800,000, and \$600,000. If the desirable expenditures of the community could be met by a revenue of \$200,000, this sum might be procured by an income tax of 20 *per cent* levied on the richest man. If the community required a revenue of \$600,000, it might be secured by a tax confiscating incomes in excess of \$600,000, which would be paid by the two richest men. If the revenue required were \$900,000, it could be secured by confiscating all the incomes in excess of \$500,000. Since this device would exempt from taxation all other citizens, there would be on their part no sacrifice occasioned by the restriction of consumption due to

taxation. There would not be absolute equality of sacrifice through taxation because the great mass of the citizens would pay no taxes at all. For the same reason there would not be proportional sacrifice; but there might well be minimum or least total sacrifice. The objection to this form of taxation would be practical. It would probably impair or destroy the motive to economic activity. This would be so if the economic incentive were solely acquisition. If one hundred *per cent* of all incomes over \$500,000 were taken in taxes, all earned incomes above that limit might cease. The government to secure revenue might then reduce the limit to \$400,000, \$300,000, and so on. Taxation would thus progressively wipe out its own source. In the case of rich men who were not actuated solely by acquisitive motives, this result would less certainly follow. The morally best and most public-spirited men might continue to work as usual, so long as the confiscating tax took merely the economic surplus, and did not cut into functional costs. In the case also of those whose dominant motive was social emulation, as according to the doctrine of Veblen, this declension of productivity might not occur; since one can achieve social prestige, as Carnegie pointed out, by paying taxes as well as by public munificence or vast bequests. But probably the burden on the altruism or joy in creative activity or love of social power of the few richest men would be too heavy, especially if they felt that their con-

tribution was a compulsory one, arbitrary, and not in accordance with any accepted principle of justice.

But returning to the aspect of pure theory, if the minimum sacrifice theory cannot be harmonized with either theory of equality, it is even less applicable than the socialistic theory, for that theory is justifiable if we accept justice as absolute equality. In any case, if our analysis is accurate, the minimum sacrifice principle cannot be accepted in this connection, because our avowed problem is to apply the principle of justice to the problem of the rate of taxation.

In a later article written as a supplement to the observations on the first principles of taxation in the article, "The Pure Theory of Taxation," Professor Edgeworth seems to accept the view that the principle of minimum sacrifice is not related definitely to any principle of equality.⁴ The point at issue in this article is whether absolute equality of sacrifice, proportional sacrifice, or minimum sacrifice is to be accepted as the first principle of taxation. Professor Edgeworth is inclined to accede to Professor Seligman's criticism of his former article and accept proportional rather than absolute equality. He avers that "proof of this, in the ordinary sense of demonstration as deduction from axioms, on such a subject is not to be expected." And he concludes, "I must leave the issue in the

⁴"The Subjective Element in the First Principles of Taxation." *Quart. Jr. Econ.*, Vol. 24, 1909-10, p. 460.

obscurity which envelops the first principles of conduct." He, however, argues for the view that Mill entertained, the idea of absolute rather than of proportional sacrifice.

While we are unable to adopt the minimum sacrifice theory because of its non-conformity to abstract justice, it is fair to accord it the credit due to any profound analysis of a subject from a new point of view. From the point of view of pure theory it is a more applicable form of the subjective canon than equal or proportional sacrifice. It "requires only the law of diminishing utility, not also some more exact datum as to the rate at which utility (*i.e.*, the increase of utility) diminishes with the increase of means." "The principles of equal and of proportional sacrifice deal with data which cannot be exactly determined. Different hypotheses as to the rate at which the increase of utility diminishes will lead one to progressive, proportional, or even regressive taxation. But the principle of least sacrifice points definitely to progression." ⁵

From the practical point of view the principle of minimum sacrifice has a certain applicability. It would justify a reduction of inequalities due to inheritance and unearned increments. While it might well impair the energy that would command the higher increments of earned income, it would have no effect, apparently, on those that are un-

⁵ "The Subjective Element in the First Principles of Taxation." *Quart. Jr. Econ.*, Vol. 24, 1909-10, p. 466.

earned. This would be the proper field for the practical application of the minimum sacrifice principle.

To sum up the points for and against the theory. It does not conform to abstract justice; *i.e.*, it does not admit of equality. It makes no allowance for individual merit or desert, for higher functional costs in certain fields, or for remuneration in excess of costs for the sake of evoking high potential productivity. Hence, its practical application would probably destroy the conditions of the maintenance of certain necessary economic functions. On the other hand, as a justification for the confiscation of unearned incomes it conforms to Hobhouse's dictum that there should be no method of acquiring wealth except by social service.

We are now in a position to conclude this second step in the process of eliminating theories of the tax rate. If the socialistic, confiscatory, and minimum sacrifice theories from the points of view of abstract justice and practical applicability are untenable, the steepest rate of progressive taxation will have to be dropped from consideration. Exception must be made to inheritance and possibly unearned increments, where the tax rate may reach one hundred *per cent.*

Having eliminated the minimum sacrifice theory from consideration, our choice would appear to lie between the equal sacrifice principle, the proportional sacrifice principle, or some other principle of taxable faculty. There are, however, several

grounds for dropping any form of the sacrifice theory as it is generally understood by fiscal writers. First, it is not clear on grounds of equity which of these two theories of sacrifice is to be preferred. Second, there is no agreement among economists as to the rate at which the marginal utility of income diminishes. Thirdly, the sacrifice theory, as developed by economists, with the exception of Professor Seligman, ignores the cost of acquiring the income.

This leads us to abandon the sacrifice theory as a means to the determination of taxable faculty, and to adopt a new theory which we may call the theory of net utility or consumers' surplus. Taxable faculty, on this theory, is a matter of the margin between the utility of income and the cost of income, or rather, it is a matter of the net utility of income. To develop this theory we shall have to undertake two analyses, an analysis of the utility of income and an analysis of the cost of income.

As regards the utility of income this theory is open to the same charge of inconclusiveness as our second objection to the sacrifice theory. There is no agreement among economists as to the rate at which the marginal utility of income diminishes. Practically all economists accept the principle of the diminishing utility of economic goods; but they expound it typically with reference to successive units of the same commodities. As regards the utility curve of income or of purchasing power of

all commodities they are generally non-committal. This is not always the case. According to the suggestion of Bernoulli, the satisfaction that one derives from his income commences when he has enough to support life, and afterwards increases, by equal amounts, with every successive percentage that is added to his income.⁶ By way of illustration, if two hundred dollars were required to supply the bare necessities of the individual, an income of two hundred dollars would represent no net satisfaction. It would represent merely a balance of the utility and the disutility. An income of less than this would represent a balance of disutility. An income of two hundred and fifty dollars would represent the satisfaction to be derived from fifty dollars. An additional ten dollars to an income of two hundred and fifty dollars would mean an addition of 20 *per cent* to one's net satisfaction. An equal amount of satisfaction could be derived from one hundred dollars added to an income of five hundred dollars, from one thousand dollars added to an income of five thousand dollars, from one hundred thousand dollars added to an income of five hundred thousand dollars, and from one million dollars added to an income of five million dollars. In other words, according to this estimate, if we assume that the relation between income and economic welfare is the same for all tax payers, the additional ten dollars will mean as much sat-

* Cf. Marshall, A. *Principles of Economics*, pp. 135 and 842.

isfaction to the poor man as the additional one million dollars to the man who is very rich. This estimate of the utility of income seems very much at random; if it were true, we would be at a loss to account for an economic incentive of the recipients of large incomes. Professor Fisher also seems to accept the view that the curve of the utility of income diminishes rapidly. "From the fact that the richer an individual is, the less the marginal desirability of money to him or her, it further follows that the difference in desirability of two fortunes is much less than their money values would suggest. A man whose income has increased from \$1,000 to \$10,000 a year is better off than when it was \$1,000 a year, but he is not ten times better off. The extra \$9,000 may not be worth as much as the original \$1,000, in which case he is not even twice as well off. It is still truer that a man with a fortune of \$500,000,000 is only slightly better off (if at all) than one with only \$1,000,000. Were these facts better appreciated, 'great riches,' though desirable, would be less dazzling to those who have never possessed them." ⁷

On the other hand, Professor H. C. Adams suggests that the curve of the utility of income might take a different direction.⁸ According to Professor Adams it is an error to assume that men's estimate of money is subject to the same psychological rules

⁷ Fisher, I. *Elementary Principles of Economics*, 1921, p. 299.

⁸ Adams, H. C. *The Science of Finance*, pp. 347-8.

as their estimate of economic goods. After a certain state in the increase of income is reached, the motives to industrial activity change. A man works for social prestige, industrial and political power. In the words of Professor Adams, "The more money a man has the more he wants, and not unfrequently the last dollar gained is the object of keener passionate regard than the first." Professor Adams' theory of the utility of income, if true, would seem to apply to a limited class, particularly to the money-makers and payers of surtaxes.

Most economists are of the opinion that it is impossible to draw the curve of the utility of income with any approach to exactitude. Thus, Professor Seligman: "A tax takes away commodities which are something material, something tangible. To ascertain the exact relations between something psychical and something material is impossible."⁹ Professor Taussig reaches the conclusion that price and pecuniary income are not an exact measure of utility: "We cannot set down the complete price schedule; and even if we could, the differences of income, the illusiveness of prestige, the doubtful satisfaction of a pain economy combine to render a calculation of real enjoyment impracticable. We cannot measure with an approach to accuracy the satisfactions got from wealth."¹⁰

⁹ Seligman, E. R. A. "Progressive Taxation," p. 222.

¹⁰ Taussig, F. *Principles of Economics*, I, p. 132.

At this point in our analysis, we must admit that owing to the indefiniteness of the utility curve of income we cannot hope to reach any mathematical formulation of an equitable tax rate. But recent studies in the theory of consumption may enable us to formulate some approximate rules for determining the general direction of the utility curve. The amount of utility that is to be ascribed to necessities is not a part of our problem, since both modern theory and practice agree on the exemption of necessities from taxation. According to Watkins, the utility of necessities is mainly transputed utility. They are prized because they are the conditions of possible future comforts and luxuries. Net utility begins only with free income or surplus. Additional increments of income above that required for necessities bring about a possibility of leisure. The choice between leisure and economic activity is determined by the urgency or lack of urgency of the still unsatisfied wants. This is largely a matter of the stage of civilization. Civilization is a matter of social progress and of economic progress. Social progress consists in an increase and a refinement in the number of wants, and economic progress consists in the ability to satisfy these increasing wants. In other words, the inelasticity of the demand for income is an index of civilization. As wants increase above bare necessities there is an attempt to attain quality and

variety and interrelation in the commodities consumed. Man attains net satisfaction and consumers' surplus. A further increase of goods, provided there is intelligent choice and selection, will bring additional satisfaction. And this will be especially true if consumption is so organized as to make accessible those additional utilities that Watkins has termed complementary, existential, and multiple utilities. These added utilities are in greater part the products of family, and more especially of community or state organization. Higher increments of income make possible the enjoyment of goods whose utilities are characterized as adventitious. At this point there is a sharp divagation between the curve of social or aggregate utility and the curve that would represent a summation of all the curves of individual utility; for, as we have noted before, adventitious utility that accrues to the consumers of certain forms of luxury is offset or more than offset by the disutility of those who cannot afford these articles.

The problem of taxation is concerned with individual utility. The problem of public expenditures is a problem of social utility. Our present problem, the definition of taxable faculty, has to do with the relation of individual utility and individual cost. Expenditures for luxuries which yield adventitious utility is one of the conditions that tend to check the decline in the curves of individual utility. The desire for goods of this sort

may have great urgency, although small social importance. Professor S. J. Chapman¹¹ has based an argument for progressive taxation on this distinction.

In summary of our views on the utility of income, it would appear that the fundamental law is the law of diminishing utility, but that there are various forces which tend to check the decline of the utility curve. In the case of individual incomes the desire for power and prestige has this effect, also the desire for articles of luxurious consumption that have adventitious utility. Anything that increases the urgency or the multiplicity of wants tends to exert the same effect; and this is true of the congeries of influence that we term civilization. A general demand for income is thus increased by education, by the development of a more and more scientific technique of consumption. It increases with the rise of social coöperation and the growth of public institutions. The social or public demand for income is due not only to rising standards of consumption but to considerations of economic efficiency, for income publicly spent brings greater utility at less cost. From the point of view of individual taxable faculty it would appear that increasing facilities for consumption tend to promote the conditions under which there is a more inelastic demand for income or under which

¹¹ "The Utility of Income and Progressive Taxation." *Econ. Jr.*, Vol. 23, 1913, pp. 25-35.

the diminution in marginal utility tends to be checked.

The theory of taxable faculty to which this investigation has led is that faculty is in proportion to individual net utility or to the margin between the utility of individual income and the cost of individual income. For this contribution to the study of taxable faculty we are indebted to Professor Seligman,¹² although this phase of his work seems to have been quite generally ignored by writers of fiscal theory. "The elements of faculty, then, are twofold—those connected with acquisition or production, and those connected with outlay or consumption. What is the application of the topic in hand?

"If we regard only the first set of elements, it is evident that the possession of large fortunes or of large incomes in itself affords the possessor a decided advantage in augmenting his possessions. The facility of increasing production frequently grows in more than arithmetical proportion. A rich man may be said to be subject in a certain sense to the law of increasing returns. The more he has, the easier it is for him to acquire still more. The initial disadvantages have been overcome. This was emphasized already by Adam Smith, when he said: 'A great stock, though with small profits, generally increases faster than a small stock with

¹²Seligman, E. R. A. "Progressive Taxation in Theory and Practice." *Am. Econ. Assoc. Pub.*, Vol. 22, 1908, pp. 291-2.

great profits. Money, says the proverb, makes money. When you have got a little, it is often easy to get more. The great difficulty is to get that little.' In fact the same idea was originally pointed out by Rousseau two decades earlier as an additional argument for progressive taxation. 'The difficulty of acquisition,' he tells us, 'always grows in proportion to one's needs. Nothing is made with nothing: that is as true in business as in physics. Money is the seed of money, and the first pistole is sometimes more difficult to earn than the second million.' While the native power of production in other words remains as before, this 'acquired power' has greatly augmented. Hence, from the point of view of production, faculty may be said to increase more rapidly than fortune or income. This element of taxable capacity would hence not illogically result in a more than proportionate rate of taxation.

"On the other hand, the elements of faculty which are connected with outlay or consumption bring us right back again to the sacrifice theory. While the idea of faculty includes that of sacrifice, however, the two ideas are not extensive. Faculty is the larger, sacrifice the smaller conception. Faculty includes two sets of considerations, sacrifice only one. While the sacrifice theory in itself, as we have seen, is not sufficiently cogent to lead to the demand for any fixed scale of progression, its influence in the other direction is assuredly not strong enough

to outweigh the productive elements of faculty, which seem to imply progressive taxation."

The utility of income is a rather indefinite factor; but if faculty is determined by the two factors, utility of income and cost of income, it becomes a more definite concept, because the cost of income is more nearly measurable. As Professor Seligman has pointed out, the increase of income conforms in general to what might be called the law of diminishing cost. The costs of economic activity are two-fold: first, the sacrifice or pain of doing something injurious or distasteful, and, second, the sacrifice or pain of refraining from doing something beneficial or pleasurable. In more detail, cost may be due to muscular or nervous strain, fatigue, worry, liability to industrial accidents, reduced power of resistance to occupational and other diseases, the absence of personal spontaneity, the necessity of submitting to the will of another, or an ignorance of the social value of one's industrial effort.

J. A. Hobson has made a careful analysis of the human costs of various groups of workers.¹³ The gist of his analysis is that the per capita human costs in industry tend to decrease and certainly do not increase as men rise in the income scale. Hobhouse is of the same opinion. "It is by no means clear that human costs increase in proportion to the social value of the nature of the work.

¹³ *Work and Wealth*, Chapters IV and V.

Intellectual work and responsible work are certainly taxing, but probably less taxing than coal mining, or even the agricultural work that involves constant exposure to all weathers." ¹⁴ The view that per capita or human costs do not increase with increase in income is also supported by the fact that the upper increments of income are in many cases received for the kind of work which in itself offers positive utility to offset the disutility in production. Creative work in art and science, and the satisfaction of functioning in executive positions in many cases cancel the disutility of labor. Furthermore, the higher increments of income represent an increasing percentage derived from investments.

There are several practical reasons, however, why it is feasible to consider all incomes of equal cost without regard to the size of the income. The working day for all classes of labor tends to be approximately equal. Men in different pursuits may be presumed to put forth much the same personal effort. Yet each man tends to exaggerate the costs of his own occupation, and to think that his neighbor whose vocation is different has an easier time. The practical assumption, which is probably not far from the facts and which might well be taken as a working hypothesis, is that the human costs of all legitimate occupations are the same.

If the cost of personal incomes may thus be as-

¹⁴ Hobhouse, L. T. *The Elements of Social Justice*, p. 161.

sumed to be equal, without regard to the size of the incomes, this equality of cost does not apply to the specific parts of individual incomes, since these incomes vary in amount. If the human costs of A and B are equal, but A earns \$1,000 per year and B earns \$2,000, the costs of B per \$1,000 units are one half that of A. The cost of the second increment of \$1,000 is half that of the first. The cost of the last increment of \$1,000 to C, who earns \$3,000 is one third as much as the cost of A's \$1,000. That is, the marginal cost is in inverse proportion to the size of the income.

A tax takes away the final increment of income. The cost of the tax is the loss of utility of consumption of the final increment of income plus the cost of earning the final increment of income. And the utility to compensate for this cost is that derived from the public services that it procures. On our assumption of equal per capita costs the law of diminishing cost may be formulated with mathematical exactitude. The cost of the last \$1,000 of a \$10,000 income is 10 *per cent* of the cost of a \$1,000 income. The cost of the final \$1,000 of a \$100,000 income is 1 *per cent* of the cost of a \$1,000 income. The final \$1,000 of a \$1,000,000 income is only one tenth of 1 *per cent*. The cost curve approaches zero as a limit. The rate of diminution of the curve of the marginal cost of income is accelerated by the fact that the smaller incomes are typically derived from labor or personal exer-

tions, and that as one proceeds up the income scale a larger percentage of the income is derived from investments.

On the following page is a suggestive graph of the cost curve of income per \$1,000 units, assuming that incomes of all sizes are of equal cost.

On the basis of these data we can state our conclusions with regard to the criticism that a high tax rate checks individual initiative and enterprise. The general motive for economic activity is net satisfaction, a surplus above functional costs or net free individual income. A glance at the graphs on pages 256 and 257 will show that for highly civilized or ambitious men there is obviously a surplus that begins, per hypothesis, somewhere between \$2,000 and \$4,000; and that in proportion to the development of civilization or the urgency of individual wants—all of the forces which tend to check the decline of the utility curve or make it more nearly horizontal, there is an increasing margin between utility and costs or of net free individual income. This surplus represents the limits of taxable faculty. According to the present status of the social ideal, the conception of justice as a working principle, a small proportion of this surplus should be left to the individual as the reward of achievement. But there are several considerations which point to the conclusion that a large percentage of this surplus should be taken in the form of taxes by the state. First, as we have noted be-

CURVES OF THE UTILITY OF INDIVIDUAL INCOME

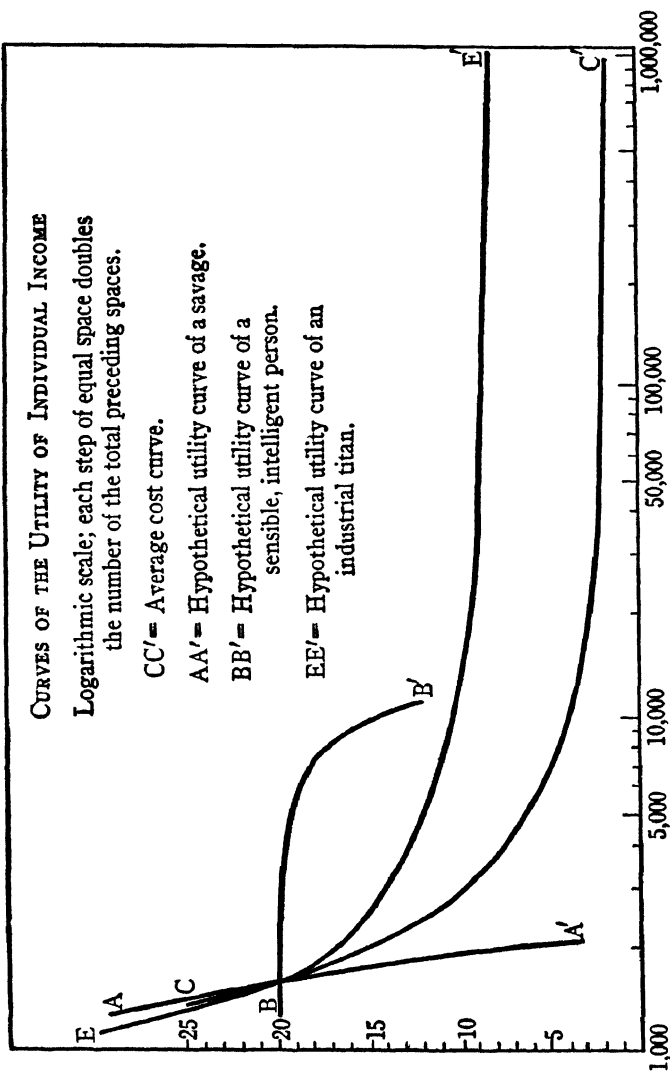
Logarithmic scale; each step of equal space doubles the number of the total preceding spaces.

CC' = Average cost curve.

AA' = Hypothetical utility curve of a savage.

BB' = Hypothetical utility curve of a sensible, intelligent person.

EE' = Hypothetical utility curve of an industrial titan.



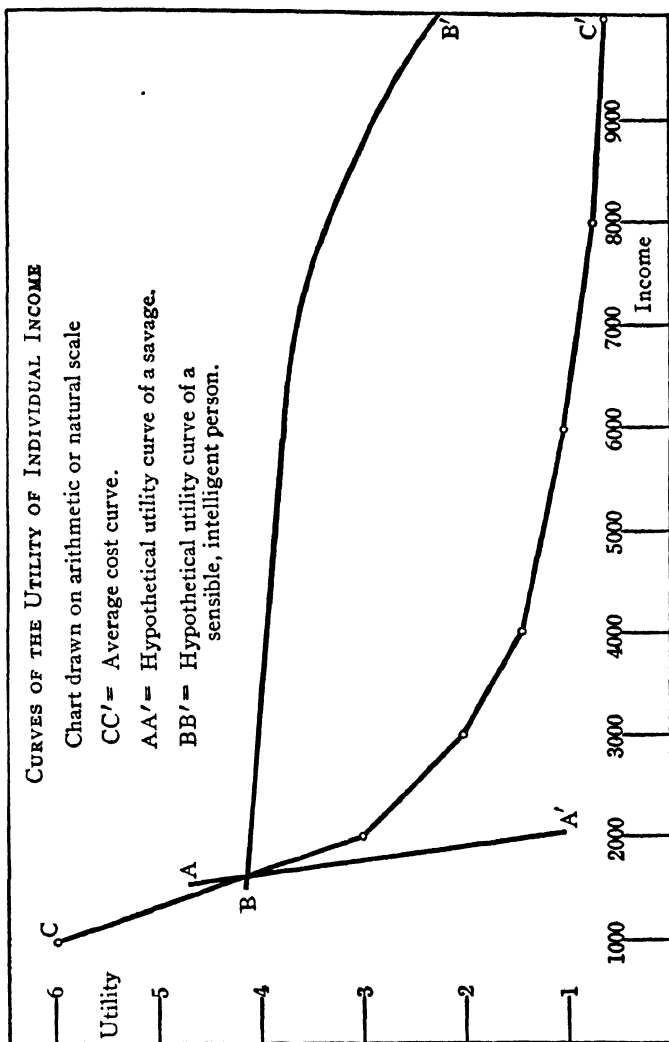
CURVES OF THE UTILITY OF INDIVIDUAL INCOME

Chart drawn on arithmetic or natural scale

CC' = Average cost curve.

AA' = Hypothetical utility curve of a savage.

BB' = Hypothetical utility curve of a
sensible, intelligent person.



fore, under the highly complex conditions of modern life, society or the community is the dominant factor in production. The taxes paid may be viewed as a rough toll for protection, facilities, aid, the market, and in general, the accumulated culture afforded by the social environment. A more urgent reason for high taxes is that, as we have noted before, it would make possible the reorganization of consumption in such a way as to achieve a greater aggregate utility.

Society today is dynamic rather than static, and this dynamic condition has made it possible by luck or shrewdness for men to reap gains far out of proportion to their social serviceability. It is this element of surplus, of "unnecessary" income which can be taken by the state without diminishing individual energy, which if left to the individual will swell the great mass of wasteful consumption, and which if taken by the state—assuming governmental efficiency—may be so spent as to conform to what Professor Chapman calls the principle of increasing return in consumption. In the words of Professor Friday:¹⁵ "It is very difficult to believe that anyone has withdrawn from industry, or even lessened his exertion, because there has been taken from him part of an income which far outran the usual rewards that fall to men in return for their endeavors. The economist who comes to college and applies himself in the hope and expectation

¹⁵ *Profits, Wages, and Prices*, 1920, pp. 188-9.

that he may attain to a salary of \$3,000 or \$4,000 per annum, and presently finds himself the possessor of a consulting practice which yields him \$12,000 or \$15,000 per year, will not exert himself less if the government takes a much higher proportion than at present in income taxes."

The same principles apply to the situation of the business man who ventures his capital in the hope of earning from 10 to 12 *per cent* profit. After he had earned 30 *per cent* upon that capital the government took from him 6.4 *per cent* by the excess profits tax leaving him 23.6 *per cent*. In the words of Professor Friday, "He would rather have 30 *per cent*, but 23.6 *per cent* is better than 10 or 12 *per cent*." And *a fortiori* this applies in the case of still higher profits. In the words of Friday, "Both the income and the excess profits have the rare distinction of operating in such manner that the more the individual or corporation pays the more it has left. Indeed, the mere proposal that he (the business man) will not exert himself borders on the ridiculous."

The figures on page 261 indicate the amount taken by the state, and the individual income that is left after the deduction of the tax in the case of incomes varying from \$10,000 to \$1,000,000. If we accept the dictum of the social economists that society is the major factor in production, the individual man is richly remunerated for his minor contribution; for according to the

regulations of our progressive income tax the share of the state did not equal that of the individual until the individual income was nearly \$300,000. Under the present maximum surtax rate of 50 *per cent* it is only in the case of the very highest incomes that the share of the state equals that of the individual tax payer. From this point of view it would appear that our present practice in taxation makes ample allowance in the way of pecuniary reward for exceptional ability of the money-making variety.

According to our definition of justice, taxable faculty represents a large percentage of net free income or of the margin between the curve of individual utility and the curve of cost. What proportion of this it is practicable under given conditions for the state to take is a matter of the efficiency of government and the limits of private wealth that is desirable in the interests of the possessor and the community. If the common wealth were administered by a stupid and conventional government, and much of it used for unnecessary armaments, it would be a good thing for the community that a large fraction should remain at the disposal of the most capable men, among whom a proportion would find good social use for it. But if the state were efficiently organized by means of the merit system, permanence of tenure, and official dignity, so that public consumption would make possible the added multiple and existential utilities,

INCOME AND TAX PAYABLE IN 1923 BY MARRIED MEN WITHOUT DEPENDENTS

Income	Personal Income Tax	Net Income After Payment of Tax
\$ 10,000	\$ 520	\$ 9,480
20,000	1,720	18,280
30,000	3,520	26,480
50,000	8,640	41,360
75,000	17,830	57,170
100,000	30,140	69,860
200,000	86,640	113,360
300,000	144,640	155,360
500,000	260,640	239,360
1,000,000	550,640	449,360

a large part of this surplus might be appropriated to the state on the grounds of the maximum social advantage. The problem of the actual efficiency of government and the rate of increase of governmental efficiency we shall have to leave to the political scientists. According to our analysis of the curve of utility, the desirable limit of private wealth is that which yields an income but slightly in excess of full family comfort and welfare. Under the present price level this might not fall far from \$10,000; but of course this is a matter for special investigation.

If we attain a relative efficiency in administration, and civic responsibility on the part of the tax payers, the above data indicate that there will be ample sources of revenue for the support of public institutions. A higher surtax rate would be feasible on the increments of income above \$10,000. And in time the maximum surtax of 65 *per cent* or more

might be feasible and the voluntary choice of the tax payers, because of enlightened, collective self-interest. This, of course, is only a solution for the long run.

So much for the problem of taxable faculty or the individual aspects of taxation. The social aspects of taxation involve the subject of public expenditures to which we have devoted the first part of this study. But there are further observations to be made in the light of the graphs on pages 256 and 257. The curve BB' aims to symbolize approximately the sphere of desirable individual expenditure up to the limits of perhaps \$10,000. This curve would be identical with the curve of social utility. The segment of the curve EE' in the increments above the desirable limit of private income symbolizes a divergence between the curve of social utility and the curve that would represent an aggregate of all the separate curves of individual utility. In other words, if all the income beyond this point were spent by individuals, the net social utility might be very small. By means of steeply progressive taxation and organized public expenditure the decline in the curve of social utility may be checked, and it may approach the horizontal after the manner of the few individual incomes of the type EE' . Whether the curve of social utility can be horizontal or the diminution in utility merely retarded is a subject on which we may speculate to no definition conclusion. The phe-

nomenon of diminishing utility may be said to be a corollary of Weber's and Fechner's law of psychophysical relations according to which in order that the psychical intensity of a sensation may increase at a constant arithmetical rate, the physical intensity of the corresponding stimulus must increase at a geometrical rate. Another argument for declining utility is the fact that particular utility underlies all other kinds; and the law of diminishing utility is the universal principle of particular utility. On the other hand, we have the arguments of Chapman and Watkins that organized consumption follows the principle of increasing return, and that the added utilities which Watkins calls complementary, existential, and multiple utilities may offset and possibly more than offset the decline in particular utility. This may be especially true under conditions of economic and cultural progress. Economic progress produces an increasing surplus which may be devoted to exploiting the higher forms of utility. And cultural progress connotes an increasing mastery in the arts of consumption. Under these conditions the curve of social utility, inevitably concave in its earlier increments, becomes more and more horizontal or may even attain an upward bend.

In that case the social demand for income might be as inelastic as the demand of the individuals represented by EE' in the graph. Public expenditure to this end would amply justify steeply progressive

income taxes or steeply progressive taxes from the point of view of the tax system as a whole.

One further point as to this theory of taxable faculty. The fiscal writers who have discussed the rate of taxation from the point of view of the sacrifice theory have assumed that a rapid fall in the utility curve would imply progressive taxation. This is especially true of those who accept Bernoulli's law. Our theory of taxable faculty is just the reverse. The more gradual the diminution in the curve of utility, the greater the net utility, consumers' surplus, or taxable capacity. Moreover, as the utility curve becomes more horizontal with the growth of education, taste, and the development of a scientific technique of consumption, so also increases the ability to pay of the individual tax payer. Civilization which implies increasing public expenditures therefore provides the increasing revenues to meet these expenditures. It is merely a matter of progressive intelligence and social coöperation.

Finally, we may refer to the possible application of this theory to the present political issue of taxation. Secretary Mellon proposes a reduction in the maximum surtax from 50 to 25 *per cent.* This is a movement away from the theory of justice in the distribution of tax burden to which our analysis has led. The argument is advanced that a lower rate will bring increased revenue. This argument places expediency above justice. The

better alternative would seem to be the maintenance of a rate that is more in accordance with justice and the bending of effort toward administrative improvements so that the loopholes to evasion and avoidance might be stopped.

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