INTERNATIONAL ECONOMIC ASSOCIATION

CLASSICS IN THE THEORY OF PUBLIC FINANCE

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PREFACE

For some forty years, beginning about 1880, a lively debate on one of the central problems in welfare economics took place between Continental writers on public finance. This problem was concerned with the optimum distribution of resources between the government and the private sector, and with the ideal means of taxing individuals so that resources could be put at the disposal of the state. The debate absorbed the energies of Austrian, French, German, and Swedish writers, and made the reputation on the continent of the Italian writers on public finance. It would be interesting to speculate on the reasons for the neglect of these writers in the English-speaking world, were it not that so many other writers in the field of economic theory encountered similar treatment. We may be sure, however, that this neglect has meant that Anglo-Saxon economics has suffered in consequence. Moreover, this seems an appropriate moment to introduce some of this largely forgotten work, because controversy on welfare economics in English-language journals has recently turned to the problem of the pricing of public goods, albeit rather belatedly.

In the present volume, we cannot do more than provide a sample of the voluminous literature on the subject. However, it can be claimed that the writings of no important school of thought have been omitted. We have tried to assist the reader in the understanding of the evolution of the debate by means of an Introduction.

The arrangement of material which seems best suited to clarify the pattern of the debate is a chronological one. It is true that this arrangement results in the placing of the work of Sax almost to the end of the period of debate instead of establishing his right to be one of the pioneers of the application of utility analysis to public expenditure. However, we have preferred to print Sax's final thoughts on the subject and to discuss his earlier work in our Introduction.

We feel also that our approach demands the inclusion of the famous discussion of justice and taxation by Edgeworth, although this is already available in English.

The editors are indebted to many people who have helped in selecting and translating the essays here presented, and in permitting their reproduction. In particular, thanks are due to Professor James Buchanan of the University of Virginia, for his assistance in the Italian selections. Our only regret is that so much good material had to be omitted, reflecting no doubt the pains of social choice which are the basic subject of this volume.

THE EDITORS

PREFACE TO THE FOURTH IMPRESSION

The first (1958) edition of this work was prepared mainly for specialists on the assumption that it would provide the background to an important neglected field of discussion in public finance. Since that date, the theory of public goods and its implications for public policy has become incorporated in the main body of the economic analysis of public finance in the Anglo-Saxon literature. A glance at the footnotes of some of the standard textbooks on public finance indicates that this assembly of articles has not been in vain. Indeed, the first edition has already been reprinted twice, and now seems the appropriate time to make the work available as a paperback also.

Probably the most influential part of this collection has been the theory of public expenditure, which contains two closely related elements. The first is as a part of welfare economics: under what conditions, if any, can Pareto optimality be achieved in an economic system in which some goods supplied are indivisible? This question has been considered very thoroughly in recent years with due attention paid to the earlier work of Wicksell and Lindahl in particular. The other strand of thought is concerned with the positive theory of the public sector: how can we use economic analysis in order to explain how the size and composition of the budget is actually determined? This is a much more difficult question to answer because it entails the development of a theory of collective action. While there is less evidence of fundamental thinking on this question in this work, it is perhaps of interest to note that, since it first appeared, Erik Lindahl in one of his last appearances in print, has offered some interesting observations on this second element exactly forty years after the appearance of *Die Gerechtigkeit der Besteuerung* (1). The essence of his contribution is an attempt to employ utility theory, as developed in his earlier work, to explain the size composition of the Swedish budget during the twentieth century.

Lindahl also showed in this contribution that he was fully familiar with recent work outside Sweden which stemmed from his own earlier contributions. There is a lesson to be learnt from this when one considers how long it has taken for him and his contemporaries to receive the attention which was denied them in the past.

THE EDITORS

(1) "Om skatteprinciper och skattepolitik", *Ekonomi Politik Samhälle*, Festkrift till Bertil Ohlins 60-årsdag, Stockholm, 1959, pp. 151-171. This paper is available in an English translation by T. L. Johnston in *International Economic Papers*, No. 10, pp. 7-23.

INTRODUCTION

By R. A. MUSGRAVE and A. T. PEACOCK

Since the Great Depression the theory of Public Finance has been dominated by the study of the effects of fiscal policy upon the levels of income, employment and prices. Indeed, the theory of compensatory finance became the very core around which the new tools of macro-theory were developed. In more recent years, there has been renewed interest in the classical question of when and where resources should be put to public rather than private use, and who should bear the cost. The student of public finance must obviously consider both problems, and it is a moot question as to which is of greater practical importance, but at the same time, the classical problem of public resource use remains the central issue in the theory of Public Finance.

Beginning with the famous maxims of Adam Smith, writers on public finance have attempted to establish criteria by which the revenue and expenditure policies of the government *should* be evaluated; and some have attempted to explain the principles by which revenue and expenditure policies *are* in fact determined. Adam Smith considers the type of services which should be provided for through the public budget, prior to examining taxation. His approach to the expenditure problem, though less restrictive than usually assumed, is primarily an historical and institutional one. Some attempts are made to determine why certain activities lend themselves to private and others to public finance, but they remain inconclusive. On the revenue side, a two-pronged approach is taken. Public services which cannot be financed by fees or direct charges should be paid for by taxes, allocated in such a way that the citizens contribute "in proportion to their respective abilities; that is in proportion to the revenue which they respectively enjoy under the protection of the state. The expense of government is like the expense of management to the joint tenants of a great estate who are all obliged to contribute in proportion to their respective interests in the estate" (*Wealth of Nations*, Book V. Chapter II.). Thus Smith ingeniously cuts across the ability-to-pay and the benefit theories of taxation. In fact, the two are made to coincide, as income measures the one no less than the other. Thereafter, a distinct cleavage between the two approaches emerges.

Disregard of Public Expenditures: The Ability-to-Pay Approach

Through most of the nineteenth century, writers in the English tradition mainly concentrated on the problem of defining "ability to pay" more exactly. Viewing the problem of taxation as more or less independent of that of determining public expenditures, their concern was with translating the principle of ability to pay into an actual pattern of tax distribution.

As income came to be accepted widely as the index by which to measure ability to pay, the question became one of deciding whether taxation in accordance with ability to pay should require regressive, proportional, or

progressive taxation in relation to income. Reformulated by J. S. Mill, the principle of "taxation according to ability to pay" became that of "taxation so as to inflict equal sacrifice". Moving ahead of his time, Mill suggested that taxation which inflicts equal sacrifice will also lead to that distribution of the tax burden which minimizes total sacrifice. Though technically incorrect (as Mill, we may assume, thought in terms of total rather than marginal sacrifice), this foreshadowed the later change in emphasis from an *equitable* distribution by equal sacrifice to an *efficient* distribution by least total sacrifice.

The development of marginal utility analysis in the last quarter of the 19th century brought a considerable refinement of the equal sacrifice doctrine. The equal absolute, equal proportional and equal marginal sacrifice concepts were distinguished; and the latter, looked upon as a means of least total sacrifice, was chosen by Edgeworth (see p. 121) as the best solution. Proceeding on the assumption of declining marginal income utility, and of an identical utility schedule for all, this called for maximum progression. The principle of equal absolute sacrifice in turn would call for a progressive or regressive rate schedule, depending on whether the elasticity of the marginal income utility schedule fell short of or exceeded unity. It would be proportional for a schedule of unit elasticity as assumed by Bernoulli. Moreover, it was demonstrated by Cohen-Stuart that progression cannot be considered a necessary consequence of the principle of equal proportionate sacrifice, even though a declining marginal income utility schedule is assumed to apply (see p. 48).

Given the principle that the cost of public services should be allocated so as to cause least total sacrifice, it was but a brief step to the dictum that the distribution of income available for private use should be arranged so as to secure maximum total satisfaction. Provided that the expenditure side of the budget is determined independently of the tax side, there is little logic in limiting the sacrifice doctrine to the fraction of income required to sustain total services. Thus Edgeworth visualized the levelling of incomes as the ultimate consequence of the doctrine of equal marginal sacrifice, but he hastened to qualify this conclusion by adding that detrimental effects on output must be considered as well.

A related though different transition from ability to pay to distributional adjustment was made by Adolph Wagner. He proposed to divide the functions of taxation into the purely fiscal and the social welfare function (see pp. 8/9). The former is to supply the means needed to pay for public services, and the required distribution of the tax bill is more or less proportional to income. The latter is to correct deficiencies in the prevailing state of distribution, and calls for a progressive system. This separation of issues, which appeared also in De Viti De Marco's distinction between the economic and political principles of taxation, will be re-encountered presently in the quite different setting of the Wicksellian system.

A final flowering of the least sacrifice doctrine, as it appeared in Pigou's work of the twenties, added further refinement by including the burden of announcement effects, later referred to as excess burden, into the measure of sacrifice which is to be minimized. Nevertheless, the essential basis of the sacrifice doctrine remained unchanged: this is the assumption of a declining marginal income utility schedule, applicable to all taxpayers alike. Once the assumption of a uniform schedule is dropped, the possibility of drawing general conclusions regarding the proper degree of progression or regression is destroyed. And the subjective foundation of the approach is shattered, if it is argued with the "new" welfare economics that interpersonal utility comparisons cannot be performed in a meaningful fashion. The "scientific" foundation of the ability to pay being entirely removed, the institution of progressive taxation must seek its support from philosophical judgements about "ideal" taxation.

However this may be, the ability-to-pay approach fell short of providing a full answer to the determination of budget policy, as it dealt with the tax side of the picture only. The determination of public expenditures, in the writings of the typical ability-to-pay theorist, was considered a "political" matter, not to be included in economic analysis. Wagner explicitly shifted the determination of public expenditures from Public Finance to politics and general economics (see p. 5), and the continental texts in public finance tended to become treatises in taxation only. Indeed, it would be difficult to explain the support for the ability-to-pay principle (rather than the benefit approach with its emphasis on individual choice) offered by the Manchester economists, were it not that they assumed that the ideal level of government expenditure was the minimum necessary for the maintenance of law and order. Thus they join forces with the social reformers in support of the ability-to-pay doctrine, but to promote a very different cause.

Nevertheless, a transition to the expenditure side of the budget was provided by rewriting least total sacrifice in terms of maximum total welfare. The principle of distributing the tax bill so as to equate marginal sacrifices was supplemented by that of allocating expenditures so as to equate marginal benefits; and the formula was completed by determining the total tax-expenditure level so as to equate the marginal sacrifice of taxes with the marginal benefit of public expenditures. This formulation, to be found in the later works on public finance of Pigou and Dalton, was foreshadowed earlier, if in less refined form, in Schäffle's law of "proportionate" satisfaction of public and private wants.

No one can quarrel with the requirement that the budget plan should be designed to maximize welfare, but much needs to be added to give content to this formula. The fundamental question which remains unanswered is just how the benefits from public services are to be valued, and how this valuation depends upon the way in which the tax bill is distributed. Pending an answer to this question, the extension of the sacrifice doctrine to the expenditure

side of the budget is a formality; and the ability-to-pay approach remains an at best incomplete (and, if interpersonal utility comparisons are rejected: subjectively meaningless) answer to the problem.

Subjective Interpretation of Social Wants: The Benefit Approach

The benefit strand of Smith's maxim found a more favourable climate among continental writers, notably the French reformers. Several variations of the benefit theory were propounded, and some of the main ones, including the use of the insurance analogy to explain the position of the state in the economy, were discussed in detail by Leroy-Beaulieu (see pp. 152—56). While the link between the determination of expenditure and taxes remained, these writers almost all took it for granted that the sole purpose of government was to provide for defence and law and order, and no real attempt was made to derive the demand for public goods from the tastes and preferences of the beneficiaries.

Such at least was the case up to the closing decade of the past century. At that time, the theory of value was rephrased in terms of subjective utility, and much attention was paid to the nature of wants. Little wonder then that this new trend of thought should be extended to examine the wants satisfied by government. If expenditures in the market economy were designed to meet subjective wants of individual consumers, could not the same principle be applied to the wants satisfied by government, thus explaining the determination of tax and expenditure policies by the same laws of value which determine market price? Or if the same principle could not be applied, what alternative explanations could be offered, and how far would these imply modifying the laws of value?

These and similar questions were dealt with at length in the literature of the 80's and 90's, and Austrian, Italian, Scandinavian and German writers joined in the debate. One of the first attempts at dealing with the determination of the tax-expenditure plan as a problem of economic value appears in Pantaleoni's essay of 1883, followed by numerous other contributions, several of which are here included. In 1896 there appeared the important critique by Wicksell, which in a sense terminated this early part of the debate. However, interest in the problem continued, as evidenced in the subsequent contributions by Barone and Wieser. In 1919 there appeared the remarkable doctoral dissertation of Lindahl, written, like Wicksell's work, in German. In it the whole problem was once again reviewed and the voluntary exchange approach to public economy was restated in more rigorous form. There followed a restatement by Sax of his position and Lindahl's rejoinder to various criticisms of his earlier work.

No attempt will be made to discuss in detail each contribution here included, and even less to examine all those other writings which had to be omitted from this collection. However, some of the major issues and positions may be noted. Most important is the initial recognition that the revenue and

expenditure sides of the budget are synchronous, and that the determination of both is part and parcel of the same problem. Such must be the case since, in the assumed setting of full employment, the public use of resources involves their diversion from private use. The public budget, so holds Pantaleoni, must be made part of the Walrasian system (see pp. 16/7). This interdependence between the revenue and expenditure problem is the crux of the matter and explains the inherent superiority of the benefit over the ability-to-pay approach.

Beyond this, the central problem in the debate is the nature of the wants provided for through the budget — referred to variously as social, public, or collective wants — and how they may be determined. The peculiar characteristic of these wants, so noted Mazzola at the outset, is their indivisibility (see p. 42). The same amount must be consumed by all. If a single price were set for public services, some consumers would find that this price exceeds the utility which they would derive from the service. Yet, such consumers could not be excluded from the benefit of public services. To avoid this dilemma, each consumer is called upon to pay a price corresponding to the marginal utility which he derives from the service. Thereby, consumer surplus is said to be eliminated in the pricing of public goods, and this is said to constitute the basic difference between public and private pricing. Assuming the satisfaction derived from the public services to be complementary to that derived from the satisfaction of individual wants, Mazzola concluded that total satisfaction is maximized if the consumer equates the marginal utility derived from his outlays, public and private (see p. 43).

While his was a highly subjective approach, Mazzola did not conclude that the prices of public services are in fact set through a market process. Following the earlier work of Pantaleoni (see pp. 17—18), he held that the valuation of social wants is performed by the agencies of government, rather than by all individual members of the group. However, the agency must choose so as to suit their wishes. Equilibrium is disturbed if the budget plan reflects the views of particular interest groups, in which case adjustment is called for (see p. 44). Thus, we meet the idea that a political equilibrium prevails if an economic equilibrium of maximum satisfaction is established. This same thought—an extension, as it were, of the invisible hand into the political sphere—reappears in many subsequent writings, including Edgeworth's doctrine of equality in distribution as agreed upon by reasonable men (see p. 120) and Wicksell's principle of approximate unanimity in the determination of the budget plan (see p. 87 *et seq.*).

Writing at about the same time as Mazzola, Sax distinguished between collective needs of a sort which permit the determination of specific benefit shares, and others which are purely collective. It is the latter or collective needs proper which constitute the core of the problem. By understanding the community's need for such services, collective needs are identified with the needs of the individual. The level of taxation which the individual is

willing to accept must be such as to exclude only private needs which are less important to him than the collective wants which remain unsatisfied. Thus equilibrium is again established in the budget of the individual taxpayer.

Beyond this, Sax held that the total tax bill must be distributed among various taxpayers so that the individual cost shares are subjectively equivalent; that is, each individual must pay what the services are worth to him. If this equivalence is assured, the individual taxpayer is willing to contribute his share of the cost of public services. By the very nature of the system, the level of budget expenditures must be determined together with the distribution of individual taxes.

Shorn of certain complications and confusing distinctions, the systems of Mazzola and Sax already contained the essentials of the later doctrine. Most important, there is the proposition that social wants are to be traced to the preferences of individuals. The distinction between social and private wants arises not so much because they are "felt" differently, but because public services must be consumed in equal amounts by all, thus precluding single pricing. Since social wants are experienced by the individual, maximization of satisfaction requires that a balance be established between the marginal gain which individuals derive from these two sets of wants. At the same time, it does not follow that the necessary scheme of multiple pricing can be established through the market. From the outset, we find some awareness that a political process is needed to attain this balance. This recognition is present in the work of Mazzola, and is given much emphasis by such writers as Pantaleoni, Montemartini, Wieser and Barone.

A development of this theme was at the core of Wicksell's contribution made in response to the works by Mazzola and Sax. Contrasting the principles of taxation according to interest and taxation according to ability to pay, he chooses the former as the proper approach. Not only does the benefit principle permit an integration of fiscal with general value theory, but it fits naturally into the modern concept of democratic and parliamentary society. Freedom of the individual is the essential characteristic of this society. Hence it would be unjust if anyone were forced to contribute to the cost of public activities which he does not consider in his interest (see p. 89).

This requirement is met in principle by the systems of Mazzola and Sax, according to which the fiscal equilibrium demands that each individual secure a proportionate satisfaction of his social and private wants. At the same time, Wicksell rejects this equlibrium rule as senseless (see p. 81). Each individual, if left to his own bidding, would choose to contribute nothing to the supply of public goods, simply because the total supply thereof would remain unaffected. The utility which the individual derives from public services does not depend on his own contribution but on that of others. The task of maximizing satisfaction, accordingly, cannot be accomplished by the individual taxpayer, but must be solved in modern democratic society by consultation

between voters. The crux of the problem then is how this consultation may be arranged so as to obtain maximum utility.

While there are issues on which public policy must be determined by simple majority, Wicksell argues that most matters of budget policy are not of this type. Specific public services should be voted upon in conjunction with specific cost distributions; and their adoption should be subject to the principle of voluntary consent and unanimity. Awed by the consequence of so stern a principle, Wicksell lowers his demand to one of "approximate unanimity," and proceeds to consider what degrees of majority should be applied to various types of fiscal decisions. Throughout, his concern is to protect the voter who may be unwilling to surrender funds for public purposes.

The principle of approximate unanimity is found to be subject to certain exceptions. One of these relates to the problem of income distribution. Wicksell notes that justice in taxation presupposes justice in the distribution of income (see p. 108). The principle of the veto right of the minority rests on the same premise. At the same time, if the prevailing state of distribution is not just, a correction would hardly be possible if it were to depend on the consent of those who would be hurt thereby. However, Wicksell warns that the greatest care is required in this matter (see p. 109) While he characterizes his period as one in which political power is still excessively concentrated in the upper income groups, he foresees the day when a shift in this power may lead to an excessive and harmful degree of redistribution. Thus Wagner's "social welfare principle" of taxation is recognized as a matter of principle, but Wicksell would be more conservative in its use and is more fearful that it may be abused.

Whatever the desirable degree of redistribution, Wicksell took the important methodological step of separating the problem of just taxation into two parts. On the one side, there is the use of the tax instrument to establish a just state of distribution; on the other, there is the task of distributing the cost of public services in a way which is just in view of this corrected state of distribution.

The concluding and most complete formulation of the doctrine is to be found in the work of Erik Lindahl. Proceeding again from the assumption that a just state of distribution has been established, Lindahl determines the price of public services similar to price determination in the market. Drawing an analogy to the Marshallian case of joint products, the supply schedule of public services for any one taxpayer is a function of the cost of such services and the share of the cost which others are willing to assume for various total supplies. The equilibrium supply of public services and the allocation of its cost are determined by the intersection of such supply and demand schedules (see p. 170, figure 1). The solution is said to meet the requirements of both the ability-to-pay and the benefit doctrines. The requirement of ability to pay is complied with because different taxpayers contribute different amounts,

depending on their incomes; and that of taxation according to benefit received is met because each contributes an amount based on his personal evaluation of public services.

This is the ultimate answer to be derived from the groundwork laid by the systems of such earlier writers as Mazzola and Sax. It is the ultimate consequence of the benefit principle, or of any system which determines the satisfaction of public wants on the basis of individual preferences. Similarly, the solution is in line with Wicksell's principle of budget determination by unanimous decision. At the same time, the Lindahl solution has lost some of the realism of the earlier views and in particular Wicksell's. Though aware of the fact that the competitive mechanism of price determination may be disturbed by many factors of social and political reality, Lindahl nevertheless holds to what is essentially a voluntary exchange model. Thereby, sight is lost of—or better: emphasis is withdrawn from—the Wicksellian point that the individual, if left to his own devices, will contribute nothing to public services and that therefore the problem is essentially one of compulsion and political process.

It is this fact which in the more recent discussion has led to a distinction between two consequences, which result from the condition of equal consumption of public services.* First, and assuming preference patterns to be known, the satisfaction of such wants is not subject to a unique optimal solution (a Pareto optimum) such as applies typically to the satisfaction of private wants. Therefore, the problem becomes basically one of social choice. This difficulty is not evident in Lindahl's system because the satisfaction of public wants is dealt with in a partial equilibrium setting. The second consequence of the condition of equal consumption is that the market as an auction mechanism fails to induce consumers to reveal their preferences with regard to social wants, because all will benefit, whether they pay or not. Hence there arises the need for a political mechanism, to force or induce consumers into revealing their preferences. Both problems must be solved in the political process of decision-making, and it is here that the newer welfare economics enters the picture.

Social Motivation vs. Self-Interest

The trend of thought dealt with in the preceding section firmly rests on the proposition that the valuation of both social and private wants originates with the individual members of the community, all of whom enter into the determination of the budget plan. In both cases we deal with wants subjectively experienced by individuals. Now it is generally held that individual choice in the satisfaction of private wants is based on self-interest rather than

* See Paul A. Samuelson, "The Pure Theory of Public Expenditures", *Review of Economics and Statistics*, Vol. XXXII, No. 4, 1955, where primary concern is with the first difficulty, and R. A. Musgrave, *The Theory of Public Finance*, McGraw Hill, New York, 1958, Chs. 4 and 6, where primary concern is with the second problem.

altruism; and the tenor of the preceding discussion suggests that much the same applies in the choice of social wants.

Some writers have held that this is incorrect, since the individual's action in matters of public policy is said to be guided by social motivation rather than by self-interest. Formally, this social motivation may be accounted for in deriving individual preference schedules for social wants, but such is considered a somewhat artificial and none-too-helpful construction. For these reasons, the preceding approach is rejected as too hedonistic.

Be this as it may, we are still left with the need of deriving the budget plan from individual preferences, however determined. Hence, these considerations may be considered a qualification of the preceding approach, rather than a basically different construction.

Collective Wants and Group Needs

A much sharper distinction arises with writers who hold that the public economy must be explained by a quite different set of principles than private economy. Social wants are not merely a set of individual wants, characterized by certain technical features of indivisibility, or minor differences in motivation. They do not originate in the *homo oeconomicus*, but derive from the needs of the group as such. This Hegelian view is evident in much of the German literature (see p. 29), and finds forceful expression in the later work of Ritschl.

Ritschl holds that the basic principle of market economy is that of exchange and self-interest in the satisfaction of private wants; it is to be distinguished from the basic principle of public economy, which is one of social cohesion and the sense of belonging to and serving a community (see pp. 233/4). To be sure, the public economy must economize in the sense of using its resources most efficiently, but beyond this it differs. The rule of *quid pro quo*, which is the crux of the benefit principle, cannot be applied. Nor can the solution given by ability to pay, which is concerned with justice between individuals. The basic principle is that of collective needs. These needs are felt subjectively by the competent public authorities, and by individuals in so far as they think as members of the community. The public economy thus rests on the sacrifice of its members. The individual feels as a member of the community; and where this is not the case, coercion forces him to act as if he felt in this fashion.

There is a clear difference between this approach and the doctrine of the preceding section, according to which the problem is basically one of satisfying individual wants. This difference exists whether it is held that collective wants are experienced by the group as a whole, and revealed in the action of the leader, or whether it is held that some élite (however determined) knows better what is good for the group than do the majority of voters. While the latter interpretation is more palatable to current thought, the

essential difference between this and the preceding doctrine of democratic choice remains.

This difference is not one of logic, but of value judgement and social philosophy. Comparison between the various approaches thus emphasizes the important fact that the theory of public economy or, for that matter, of any kind of welfare economics must be based on an initial set of value judgements; and that the role of technical considerations—such as that of equal consumption in the satisfaction of public wants—differs, depending on the underlying set of values and institutions to which the theory is to be adapted.

Historical Views

It remains to note a further approach to the nature of the public economy, an approach which does not proceed in normative but in historical and sociological terms.

This view is found in Wagner's approach to public expenditures, where prevailing public expenditures are taken to reflect the requirements of a given historical situation, and where changes therein are taken to reflect underlying changes in economic structure and development. Thus, he viewed the justification of public expenditures in terms of objective criteria, such as population growth or transportation needs, rather than in terms of a theory of value. His law of expanding state activity is derived in the same manner (see p. 8).

Stein similarly viewed the development of the fiscal structure in an historical context. As in the later analysis by Schumpeter, the development of taxation as the major source of revenue is related to the rise of the idea that the state should be looked upon as a free association of individuals (see p. 30). Thus the flowering of taxation in the 19th century is explained as a by-product of the development of constitutional society. At the same time, stress is laid on the difference in the time perspective applicable to the action of the state and of the individual. Since the life of the state is continuous, its primary concern must be with capital formation and with growth. Taxes, to be efficient, must not impair capital, and budget policy must aim at reproducing the wealth which it consumes (see p. 34).

A quite different framework of historical analysis may be found in Goldscheid. Writing at the close of the first World War, he seeks to explain the development of fiscal institutions in terms of the forces of class struggle. The feudal state, so he argues, was a wealthy state, because it was controlled by the ruling classes. As feudalism broke down and the people gained control over the state, it came to be in the interest of the propertied classes to render the state impotent. As a result, the state became impoverished. If the state is to be rendered a useful instrument in the hands of the people, the lost wealth must be restituted to the state, so that it can meet its welfare functions (see pp. 204, 212).

Whatever the validity of Goldscheid's analysis as a theory of fiscal history, his framework of fiscal sociology offers a new and challenging approach to fiscal theory. As distinct from the normative approach of the Mazzola-Lindahl, or even Wicksell variety, his problem is not to determine what would be efficient fiscal action. Rather, it is to develop a framework for explaining why certain fiscal action has occurred. Once developed, such a framework may serve for predicting what action will result under various conditions. Thus a beginning is made towards an econometrics of fiscal politics.

* * *

The preceding pages have not been designed to summarize the wealth of ideas found in the following essays, nor has the discussion been limited strictly to the authors here included. Even less has it been our intention to supply a history of thought on fiscal theory.* Our intention has been rather to provide a better understanding of the many dimensions inherent in the theory of the public economy by tracing the relationship between the various contributions and between these contributions and the development of economic thought. Having now provided this historical and analytical background, we leave the authors to introduce themselves.

* Extensive discussions of the literature may be found in the works of Wicksell and Lindahl which are here included. Moreover, see E. R. A. Seligman, *Progressive Taxation in Theory and Practice*, 2nd ed., New York, 1908; F. K. Mann, *Steuerpolitische Ideale, Vergleichende Studie zur Geschichte der Ökonomischen und Politischen Ideen und ihres Wirkens in der Öffentlichen Meinung 1600—1935*, Fischer, Jena, 1937; and Gunnar Myrdal, *The Political Element in the Development of Economic Doctrine*, Harvard University, 1954, Ch. 7.

THREE EXTRACTS ON PUBLIC FINANCE

By ADOLPH WAGNER

Translated from German by Nancy Cooke

I. The Nature of the Fiscal Economy*

This is not the place to discuss** whether, when and how far the compulsory acquisition of goods by the State may be justified. It suffices here to state that it stems from the very nature of the State as a compulsory association, in the same way as do its demands for compulsory personal services. This justifies the State's compulsory acquisition of goods, and it occurs throughout history. Its principal forms are taxation and expropriation. The compulsory acquisition of goods by the State may be termed "public"; by contrast, we speak of the State's "commercial" activities when it acquires revenue by its own production or by contractual services against specific returns. Public loans also belong to the latter category.

Commercial state revenues are historically older and originally predominated; but historical development has caused them, and more particularly the State's own production revenues, to become much less important in all modern European countries than compulsory acquisition. Accidents of history, and particularly the fact that state domains have often been lost or diminished, are a partial explanation. But the chief reason is a necessary consequence of two major developments in economic history. One of these was the emergence of the legal concept of private ownership in the means of production, especially land, and the actual transfer of most land and real capital into private hands. The second development is the reversal of that historical process: nowadays more and more ground is being gained by another great principle, which might be described as the transition from a form of economic organization mainly along private lines to one of a more collective, and more particularly compulsorily collective, character, as evidenced by the increasing expansion of public and especially state activities.

Whether the goods are acquired by coercion or by "commercial" activities, the State must conduct its own (income) economy if it is to have the means with which to pay labour or acquire goods to be used directly in the performance of public services. This holds generally for central and lower-level government alike.

The fiscal economy or public budget comprises those economic activities which the State must carry out to obtain and use the resources or funds which it needs to supply its services. If the State itself is considered as an economic unit, the fiscal economy may be considered a department thereof.

* Extracts from *Finanzwissenschaft*, Part I, Third edition, Leipzig 1883, pp. 4—16, 69—76.

While the material is presented continuously, all footnotes, all passages appearing in small print, and related other passages have been omitted.

** The discussion in Wagner's *Grundlegung*, Vol. I., § 10, 11, pp. 156—59, is in historical terms and consists of an elaboration of the "law of the increasing expansion of public activities", mentioned here at the end of section I. Ed.

To discharge its tasks as an organization for production, the State needs a certain amount of "economic goods" (personal services, labour and goods, and in a money economy, money). These represent the requirements of the State. If we conceive of the fiscal economy as a consumption or expenditure economy distinct from the State, it has to provide for that part of state requirements which consists of goods or money destined to be paid out in wages or salaries, or to be used directly in public services, or to acquire other goods. This part of the total state requirements may specifically be called fiscal requirements. In a money economy they consist mostly of monetary requirements and appear on the books as state expenditure. To meet the fiscal needs, or to cover state expenditure, the fiscal economy has to function as an income or revenue economy. Its income appears as state revenue. This double function of consumption and income economy is the substance of the fiscal economy.

The special nature of the fiscal economy is determined by its function, which is to provide the State, as the highest form of compulsory collective economy, with the requisite income (goods or money) and to implement its use. The specific character of both the consumption and the income sides of the fiscal economy arises necessarily from this fact. This is of primary importance for a grasp of the science of public finance.

The special character of the fiscal economy, as we have said, derives from its function of serving public bodies, especially the State. The nature and peculiarities of the fiscal economy, its resemblance to and difference from other kinds of economic organization, may here be considered in the following points.

I. The fiscal economy is an economic unit. Its subject is the government which acts for the State.

As an economic unit, it resembles other economic units in many particulars, especially wherever it operates entirely or mainly according to the principles of private enterprise and produces goods and services, but more particularly goods, for unrestricted sale on the market—*e.g.* in farming, forestry or mining. To this extent the theory of public finance is contained in the theory of individual or private enterprise. Strictly speaking, the fiscal economy poses a problem for the science of public finance only where differences in the economic process result, be it in the general operation of the public economy or in that of specific parts, such as state agriculture, forests or mines. However, this is mostly the case and indeed the differences are often considerable. If the State assumes new or retains old "commercial" activities and the property pertaining thereto, it hardly ever does so for purely financial reasons. Considerations of a general economic kind, or social or political reasons are usually and sometimes decisively involved. Hence administration and management, too, are influenced by these same considerations.

Any government as the executive and administrative organ of the fiscal economy—and particularly when subject to parliamentary financial control in a constitutional State—is inherently a complex unit. The government itself has to be artificially formed as a unit, and hence also its policies. In turn, these latter can only be translated into action through a whole apparatus of authorities and individuals. The fiscal economy therefore resembles all those economic units whose management and administrative subject, in the legal and economic sense, is a juridical person—*i.e.* other public economic units and such private units as associations and companies, especially joint stock companies.

II. As in other state activities, the personnel of the fiscal economy consists of officials. The numerous "workers" forming part of this complicated bureaucracy have generally no personal interest in the outcome, or the quantity and quality of the product. In this respect too, there are differences and similarities between the fiscal economy and various kinds of private business. These are important for the theory and practice of public finance.

Compared with an owner-manager running his own business, the fiscal economy of the State inevitably suffers from the disadvantages of all economic units which must work with such a bureaucracy. In this, the fiscal economy is more or less in the same position as other collective economic units and, in business, particularly joint stock companies. "The fiscal service has to be divided into several branches, and direction at the top becomes very difficult. The person ultimately responsible for the whole of the fiscal economy can get decisions implemented only through a chain of intermediaries; he cannot personally supervise the lower officials and has to rely on the written word to know what they are doing and to give them instructions. The resulting cumbersomeness and clumsiness of the public economy have the inevitable consequence that a great many things have to be done otherwise than in private enterprise."[1] The almost inevitable result is a lower working efficiency. At the present time the simple private firm has a natural economic and technical superiority in the ordinary business of farming, manufacture and commerce, compared with undertakings run by the State or local authorities, etc., whose officials have no personal stake in the business and who are moreover hampered by unavoidable controls. This is all the more so where, for reasons to be discussed below, it is in the nature of things impossible to give the official any share in the outcome, or where the dignity of his office makes it undesirable to do so; that is, in fact, in the majority of state activities proper.

On the other hand, the State has two advantages over those other economic units, particularly those private businesses, which must also be run by a bureaucracy. One advantage is economically and more especially financially important: the State has other means than money to reward its servants, namely honours such as rank, titles, decorations, etc. The second advantage

[1] H. Rau, *Finanzwissenschaft*, Vol. I, § 8.

is that the civil service can be given a better standing than any other body of employees, let alone private ones: greater security of office and better prospects of promotion of the ablest men to gradually better pay and higher and more important positions. As an employer, the State is so far almost alone in doing this, and only the large self-governing bodies can compare with it, and then not to the same extent. Thanks to this system, the State often has at its disposal a quite exceptionally competent body of employees and, at equal salaries, a more efficient one than can be found anywhere else.

III. The fiscal economy furnishes a fund of goods (money) with which the State, in its role as a compulsory collective economy, fulfils the tasks entrusted to it, principally the provision of non-material goods such as "public institutions" and services. If the State and the fiscal economy are conceived as one economic whole, we can speak of the transformation of material into non-material goods.

Non-material goods are indispensable to the whole economic life of the community and to all private economic enterprise; hence the services of the State, the State itself, and the fiscal economy (the latter more particularly in its consumption economy) must be regarded as eminently productive in the economic sense. But it is very difficult to attribute an exact value to the technical productivity of individual state activities, to say nothing of their economic productivity. For in the great majority of cases, by the very nature of the State as a collective economy, its products and services cannot be individually sold, for instance in the principal realm of state functions, the maintenance of law and order (the armed forces). In the State even more than in other compulsory associations (including municipalities) there rules the principle of general compensation only. The cost of collective production is not covered, as in the private economy, according to the principle of specific service and return, but is covered in a manner unilaterally determined by the State, without separately accounting to the individual for his benefits from public services. Even in the few cases where the State (and similarly other compulsory economic units, especially municipalities) requires payment (fees) from the individual recipient of a public service, the charge is not determined, as are other prices, by competition; it is fixed by the State and is normally not based only on cost considerations as would be the case in the market.

In business, the sale of output renews the capital advanced for production and thus provides the means for continued production; the State has to raise the required means in another manner, namely by taxation. It follows that the fiscal economy lacks the—admittedly sometimes deceptive—yardstick of continuing profitability by which the private economy commonly measures its technical, business and even economic productivity. But with this yardstick, the fiscal economy also loses an effective check on production and on the implementation of the economic principle.

IV. The life of the State is presumed to have unlimited duration. If, in the course of history, one State vanishes, its successor takes its place. Therefore the State can embark on transactions from which individual business is precluded by the very limitations on its life. One point is important for public debt policy: strictly speaking, only the State can and may contract perpetual debts.

V. The final and most essential difference between private and public economy lies in the significance of the State in the life of the nation and in the State's sovereign position in and above the economic life of the people.

The nature and extent of state activities must be directed towards the fulfilment of objectives which are recognized as proper and determined in accordance with the interests of the people. In this respect the State and hence also its fiscal economy are outside the competitive market. Thanks to its sovereignty, the State is free to define its own tasks, the manner of their discharge and thus the amount and kind of services to be provided for the people, without reference to their demand for these services. The State can carry out these tasks thanks to its fiscal supremacy or power, *i.e.* its sovereignty in the specific field of raising income. The State can acquire the necessary income by compulsory means, without having to produce any specific benefit in return. This compulsory acquisition, particularly by means of general taxation, is the characteristic method by which the State, as the highest form of compulsory collective economy, acquires command over resources, in our economy of private enterprise in which the whole national income and wealth are split into individual incomes and properties.

It is not the business of the theory of public finance to define the principles and criteria by which to determine the field of state action in general and of the separate activities by which the purposes of the State are implemented. These principles belong rather to political theory and public administration, and in so far as the State functions as a compulsory collective economy, to general economic theory.

Because of the inevitable connection between fiscal requirements and state activity, the science of public finance must stipulate three conditions for the determination of both: 1) the organization of effective and independent fiscal control; 2) the observance of the principle of economy; and 3) a proper balance between fiscal needs and national income.

1) Effective fiscal control by Parliament is required so that the extent and content of the State's activities and thereby its fiscal requirements be correctly and economically determined. To this end the determination of the budget by constitutional processes offers the—at least relatively—best guarantee.

In some respects, the government and Parliament represent the two sides of a business transaction, the government assuming the role of supplier and Parliament that of demander for state services. The judgement of each as

regards the value and cost of state services may easily be different; the government may overestimate the value, *i.e.* the advantages accruing to the people and community from public services, and underestimate the cost, *i.e.* the sacrifices entailed by taxation (and its attendant nuisance). And similarly the other way round.

Admittedly Parliament, under the influence of short-sighted public opinion, is likely to make mistakes in the opposite direction from those of the government. To curry public favour, Parliament may demand reductions and petty economies, for example in the armed forces. Nevertheless there is a strong probability that some compromise will be reached by bargaining between the government and Parliament. Such compromise would seem to be the best known way of safeguarding the interests of both the State and the people relative to the determination of the State's activity and the expenses thereby required, and the best way to get the principles of economy duly respected. The guiding principle in examining each case must be: every state activity or form of state activity, and thus every expenditure, is to be rejected which imposes on the community a sacrifice exceeding the usefulness or value to the community of the corresponding state service (absolute criterion for rejection); or, if the same service can be performed equally well but at less cost by private persons, associations or other public organs like municipalities (relative criterion for rejection).[2] In the absolute State there is a greater danger of an incorrect delimitation of state activities and of extravagance; however, even here some kind of checks and controls can be created, for example through a State Council or through the proper relationship between the Ministry of Finance and other ministries. The Prussian financial administration was economical and highly efficient even during the time of absolute monarchy.

The value and cost of state services in general and in particular are admittedly difficult to determine. In view of the non-material nature of most public services and the impossibility of supplying them by sale, it is not feasible to estimate their exchange value at all; and even their use value can only be very roughly calculated. Even the costs are very difficult to establish precisely, because the numerous joint expenditure items (such as the cost of general administration, interest on the national debt, the costs of tax collection) can never be allocated correctly to the separate services. However, in practice this task is made easier by the fact that the bulk of traditional services is never seriously questioned; value and cost have to be considered only when some existing state activity is to be discontinued or some new one undertaken.

2) The principle of economy used to be considered as the main rule in the fiscal, as in every other economy. But this well-intentioned concept, which Rau, too, shared, is not tenable in such absolute form, given the dependence of the nation's whole economic life on the State. This principle can never have absolute, but only relative validity; it may never imply the

[2] *Cf.* Schäffle, *Gesamtes System der menschlichen Wirtschaft*, second edition, § 215, 216.

absolute rejection of any expenditure. This depends upon the purpose for which it is incurred and hence on the public service to be financed by such expenditure. Thrift can never be the guiding principle of state affairs, but is only a rule of prudence—admittedly often neglected in practice—which should be taken for granted in the implementation of the economic principle in the state household, as in every other business.

3) It is always a highly important postulate of correct budget policy, and one which the science of public finance must emphasize, to consider the proper relationship between the fiscal requirements of the State, or other public bodies, and the national income. But it must be recognized at the outset that the level of total state expenditure cannot be determined *in abstracto:* this is true of state expenditures in general, or for a given State at a given time; of the absolute amount of expenditure in terms of money or goods, and of its proportion to national income. All earlier attempts to lay down absolute figures of expenditure or to define an upper limit of its proportion to national income, have always miscarried. These attempts are based on a false, superficial and mechanical conception of the relationship of the State to the national economy, instead of on a proper organic view.

It must be emphasized that in considering the absolute and relative level of expenditure for any public service, neither its cost nor its value alone must be taken into account, but both together. Neither purely political considerations deriving from the nature of the State, nor purely and exclusively private economic considerations must be allowed decisive weight. The following may be taken as a rule: State expenditure may be higher, in absolute terms and as a percentage of national income, in proportion as the immediate economic value (taken in the widest sense) of a public service is greater, its contribution to general productivity greater as well as the "free" national income (*i.e.* in Roscher's sense that part of national income which is left after the satisfaction of the people's essential material needs), and finally, in proportion as the part of state revenue derived from sources other than taxation, *i.e.* from the State's private business activities, is larger.

The question of the relation of public expenditure to national income may also be formulated as follows: should public expenditure be allowed to become so high that the requisite taxation becomes an oppressive burden on the people? This means that normal consumption must diminish, and even more so normal saving must fall or even cease.

The question is to be answered in the affirmative in the case of a temporary national emergency, if the high expenditure holds out the prospect of success and if a given concrete State deserves to be preserved. The question is to be answered in the negative, at any rate theoretically—however hard this may be for the interested parties, especially the politicians concerned—when these conditions are not fulfilled and the situation of oppressive taxation is likely to become permanent. This is often the case in States which are on the decline.

There is thus a proportion between public expenditure and national income which may not be permanently overstepped. This only confirms the rule that there must be some sort of balance in the individual's outlays for the satisfaction of his various needs. For in the last resort, the State's fiscal requirements covered by taxation figure as expenditure in the household budget of the private citizen.

The "law of increasing expansion of public, and particularly state, activities" becomes for the fiscal economy the law of the increasing expansion of fiscal requirements. Both the State's requirements grow and, often even more so, those of local authorities, when administration is decentralized and local government well organized. Recently there has been a marked increase in Germany in the fiscal requirements of municipalities, especially urban ones. That law is the result of empirical observation in progressive countries, at least in our Western European civilization; its explanation, justification and cause is the pressure for social progress and the resulting changes in the relative spheres of private and public economy, especially compulsory public economy. Financial stringency may hamper the expansion of state activities, causing their extent to be conditioned by revenue rather than the other way round, as is more usual. But in the long run the desire for development of a progressive people will always overcome these financial difficulties.

II. The Basic Principles of Taxation*

1) *The Purpose of Taxation*

Thus far we have dealt with the historical development of taxation. We have considered it as a technical means of covering the financial requirements of public bodies, or of helping to cover them together with other sources of revenue. Now the question arises whether this "purely financial" purpose is the sole purpose of taxation and whether taxation is to be so defined. In other words, is taxation to be conceptually limited to this purpose, and is there indeed a purely financial concept of taxation? With very few exceptions, this has been the general view in the literature, theory and practice of the subject. In this work I have propounded a different conception (see particularly the third edition of volume 1, § 27, 209 and the first edition of volume 2, § 329).

Besides the "purely financial", immediate purpose of taxation, it is possible to distinguish a second purpose, which belongs to the realm of social policy. Taxation can become a regulating factor in the distribution of national income and wealth, generally by modifying the distribution brought about by free competition. I stand firmly by this conception, against all polemics. I should even go further now and say that this second, regulatory purpose can be extended to interference with the uses of individual incomes and wealth. The statement of this second purpose leads to an extended, or if preferred,

* Extracts from *Finanzwissenschaft*, Part II, second, revised, edition, Leipzig 1890, pp. 207—208, 299—305.

a second concept of taxation. This is a "social welfare"* concept besides the "purely financial" one.

In my view, the possibility of such a social welfare purpose and concept cannot be disputed, nor can its actual past and present existence, even though it be disapproved. The only controversial issue can be whether, how, to what extent and in what conditions such a purpose can be justified or indeed demanded; similarly, not whether it can exist, but whether it may, should and must. These are no longer questions of theoretical definition and analysis; they belong to the realm of fiscal and tax policy, and of economic and social policy.

Those who persist in limiting taxation and its concept to the purpose of covering public expenditure, come up against yet other occurrences in the history of taxation. Certain imposts, such as protective tariffs, were not established for financial reasons and they could, strictly speaking, then not be recognized as taxation, at any rate in those cases (as for instance now in the United States) where the yield of such imposts is neither needed nor, in part, used to cover budgetary requirements. Protective duties theoretically do not, or only incidentally, serve to cover fiscal requirements, and in practice it is the same. But they are taxes nevertheless, in the wider meaning (levy or impost, both pertinent words) as well as in the narrower sense.

Moreover, it is obvious that taxation does in fact frequently exercise a "social welfare" influence on the distribution of national income and wealth. In altering this distribution, taxation sometimes favours the upper classes (in all cases where these classes enjoy tax privileges or where taxation is actually "inversely progressive", like many consumption and transfer taxes and certain direct taxes, such as licences of various sorts), and sometimes it favours the lower classes (tax privileges such as exemption or reduction through progressive or even degressive rates of income tax, property tax and death duties—most frequently in the latter two cases). This effect of taxation is sometimes unintentional but tolerated, sometimes intentional and deliberate. In the latter case it is the practical result of a "social welfare purpose" in taxation. The redistribution of national income in favour of the lower classes is a conscious aim of modern social policy; the earlier practice of taxation in favour of the upper classes worked in the opposite direction but still represented regulatory interference with the distribution of national income, even though this was not always recognized. Whoever denies this redistributive purpose of taxation as a purpose distinct from the financial one, must logically refuse to admit as taxes all those which in fact do have such a regulatory effect—or, to be more accurate, that part or element in such taxes of which this is true—at least where the redistributive function is known or indeed intended.

* Wagner's contemporaries, such as Bastable and Seligman, used the more literal translation of "socio-political" for *sozialpolitisch*. To present readers, the term "social welfare" will be more indicative of what Wagner had in mind. Ed.

Similarly, taxes deliberately designed to modify the spending of individual incomes do not or do not only serve to raise revenue, and their financial purpose is therefore insufficient for their definition. A second purpose must be presumed. Examples are consumption taxes so high that an article becomes expensive enough to reduce its consumption (*e.g.* brandy), or taxes designed to provide special services for the taxpayer, *e.g.* workers' insurance.

2) *The Significance of the Basic Principles of Taxation*

It is the task of the science of public finance to formulate certain basic principles as a standard for the tax system. These principles are then translated into practical postulates in tax policy and technique. Two considerations must be borne in mind: first and foremost, the fiscal requirements of the State as well as of other public bodies (municipalities), and secondly the interests of the taxpayers. It follows that the scientific deduction of these principles must primarily proceed from the nature of the fiscal economy and secondly from the effect of taxation on the people.

But such principles cannot always be regarded as absolute even in theory. Many of them are relative in time and place; they depend upon cultural, economic and technical conditions, upon current public opinion, ideals of justice and constitutional law. If these change, the principles of taxation change too; they are in part not purely logical categories, but historical ones. Science has not always been sufficiently aware of this.

Moreover, no single principle of taxation can ever be decisive in itself. The various principles are all relevant to any one problem of taxation. It follows that generally a principle needs to be modified when it is applied. Theory should be mindful of this and should admit *a priori* that such modification is legitimate and indeed inevitable, though it remains to be proved so in the concrete case. It follows further that the basic principles of taxation generally possess only relative validity. The science of public finance has not always refrained from being too absolute in its postulates, it has become doctrinaire and has thereby forfeited the practical influence which it should and could have exercised.

Certain principles are so patently inherent in the very nature of taxation and so obvious in its known effects, that they have never been totally disregarded in practice, even before they had been deduced as an explicit standard with which tax practice attempted to comply more rigorously. As the science of public finance developed, these principles have been more precisely formulated and more sharply defined, their causation better explained and their contents better understood. It is the task of theory to make further progress on this road. Thereby, these principles have become and are becoming still more useful as practical guidance. They are the standard by which to assess existing practices, *i.e.* actual tax legislation and its effect on the population.

The principles themselves must, however, constantly be re-examined in the light of practice, to see whether they prove true and feasible. Only thus can

there be a profitable interchange between theory and practice, and only thus can the science of public finance best achieve its second purpose of serving practice by formulating the basic principles of taxation. But again science must be modest in its claim for seeing its postulates translated into reality. In practice, the various principles often require contradictory measures and the obstacles are great. So the principles which the science of public finance establishes can be no more than an ideal, to be approached in practice as far as possible. Just how far this will prove feasible often does not depend on fiscal factors proper, such as the tax system itself, the kind of taxes, the methods of levying them, etc., but upon given technical, cultural and juridical conditions.

These qualifications do not invalidate the basic principles of taxation, nor is it permissible to deduce that divergence from them is harmless, because often unavoidable. All that these qualifications do is to take cognizance of the fact that given conditions are always a contributory, and sometimes a decisive, factor. The theory of public finance and more especially tax theory has not always done so sufficiently.

3) *An Outline of the Basic Principles of Taxation*

The basic principles of taxation and the practical postulates of tax policy are set out below. They are nine in number and fall naturally into four groups.

I. Financial Principles:
   1. Adequacy of yield.
   2. Flexibility of taxation.

II. Economic principles:
   3. Choice of correct sources of taxation, *i.e.* especially examination of the question whether taxes should be levied on individual and national income only or also on individual and national wealth (capital), and whether and how far a distinction must be made between the interests of the individual and the national economy.
   4. Choice of the kind of tax, in the light of the effect of taxation and of different kinds of taxes on the taxpayers, and general examination of the problem of tax shifting.

III. Principles of justice, or of the equitable distribution of taxation:
   5. Universality, and
   6. Equality of taxation.

IV. Principles of tax administration (or principles of the administrative efficiency of the tax system):
   7. Determinacy of taxation.
   8. Convenience.
   9. Effort to ensure the lowest possible collection costs.

The financial principles derive from the requirements of the fiscal economy. It is not usual to put them among the basic principles of taxation, but it is

both proper and essential so to do; indeed they should come at the very top and especially above the principles of justice. Generally, the science of public finance has only been concerned with these latter principles and with those of tax administration. These correspond in essence with the rules laid down by Adam Smith. The principles of justice deal with the equitable distribution of the tax burden among the people. So do the economic principles, but they also deal with the effects of taxation on the national economy, and that is even more important, because it concerns the interests of the community as well as of the individual. The principles of tax administration are founded on the concept and purpose of taxation and contribute to the definition of standards for the tax system and its implementation.

The principles which are here set out are to some extent axiomatic. This is particularly true of the three principles of determinacy, convenience, and economy in the cost of tax collection. They derive directly from the concept and nature of taxation, they are self-evident without requiring further proof. This is not necessarily so of the principles of universality and equality, because opinions on what is "just" are not absolute and general, but temporary and local, changing with the cultural and legal pattern of society. In the modern world with its national sense of personal liberty and civic (political) equality, however, these two principles, too, take on the nature of axioms, following automatically from the concept of personal and political liberty and equality. It is natural that these principles should have accompanied the birth of the liberal political era. Their emergence in theory was immediate (Adam Smith) and in practice too they gradually gained ground and incisiveness.

To present and formulate these axiomatic principles and postulates is easy. But it is not enough, particularly if theory is to be a guide for practice. The difficulty only begins in earnest when it comes to giving these theoretically so simple principles and postulates a precise content, to defining them and if necessary explaining them, when they are to be realized in practice.

III. Justice in Tax Distribution*

Opinion as to what constitutes "just" taxation, and what this involves in practice, depends entirely on how the existing distribution of income and wealth is viewed. This distribution in turn is the outcome of the prevailing law of free competition in the system of private enterprise, that is, personal liberty, predominant though not exclusive private ownership of the means of production, land and capital, and freedom of contract.

A. Whoever accepts this system as unconditionally right and as the only just one, like the liberal economists of the school of the physiocrats and of Adam Smith, must logically regard the existing distribution of income and wealth, which is the result of this system, as the only right and just distribution.

* Extracts from *Finanzwissenschaft*, Part II, second revised edition, Leipzig 1890, pp. 381—87.

The more astute thinkers of this school have indeed drawn this conclusion and have formulated it precisely.

For those who are of this opinion the existing distribution of income and wealth is a matter open to no further discussion, but one to be accepted with all its economic and social consequences. One of these consequences is that one and the same expenditure imposes a different burden or sacrifice on persons of different incomes or sources of income, and generally in different economic circumstances; and inversely, that the different persons' ability to pay one and the same expenditure varies according to their economic circumstances.

For taxation, the consequence is that little or no alteration should be made in this right and just distribution of income and wealth; that is to say, since naturally something will be taken from everyone by taxation, no shift should occur in the relative position of individual incomes and wealth. Taxation will therefore be strictly limited to covering the financial requirements of the budget, and the afore-mentioned "social welfare" purpose, which has been justified in this work, will be rejected.

The consequences of this point of view for the conception of "justice" in taxation, and for the postulates of universality and equality, are essentially and briefly the following.

1) Universality is taken literally. In particular, every citizen of the country is taxable, in principle, whether his income be large or small, labour or rent income. There is no exemption of minimum subsistence incomes.

2) Equality is conceived as "equal proportion of taxation to income", *i.e.* in principle everyone should pay the same proportion of his income in taxation. This means "proportional taxation", or the same percentage on all incomes, and therefore rejection of "progressive taxation" (higher tax rates on higher incomes). It also means equal taxation of earned and investment incomes; existing private wealth and capital are spared, taxation being limited to income alone.

These indications may suffice in the present context to characterize a view of taxation which, by contrast to the one described next, may be called the purely financial or fiscal, or perhaps individualistic view. The justice of the conclusions as to the universality and equality of taxation is unassailable, if the premises be granted: namely that the distribution of income and wealth in the system of private enterprise and free competition is right and just. The conclusions stand and fall with these premises.

B. However, these premises cannot be accepted as correct, at any rate not in the generalized form in which they are presented by liberal economics.

Hence it is also wrong to conclude, as a general principle, that the distribution of income and property and the relative order of private income and property are sacrosanct and that taxation must not interfere with them. It is legitimate, nay essential, to establish a second criterion of taxation beside the purely

financial one: a criterion of social welfare, by virtue of which taxation is not merely a means of raising revenue, but at the same time intervenes to improve the distribution of income and wealth resulting from free competition.

The consequences of this point of view for the postulates of universality and equality of taxation are, in essence, the following.

1) Universality is not taken literally, not even for the actual citizens of the country. Persons with very low incomes, particularly earned incomes, can be exempted from taxation altogether, or from specific taxes, such as direct income tax. (The social requirement of a tax-free subsistence minimum.) In contrast to the purely financial point of view, tax exemption is here not merely an obvious way of compensating for other, higher taxes; it is justified in itself as a means of lightening the economic burden of the poor and taxing them relatively less than the wealthier groups.

2) Equality is taken as meaning "taxation as far as possible according to economic capacity". Since the latter rises more steeply than income and wealth in absolute terms, there should be progressive taxation of higher incomes (*i.e.* taxes rising more steeply than income), and purely proportional taxation is rejected. Equality in this sense means that income from land and investment, or briefly property income, is to be more highly taxed than earned income. This may again require progressive taxation, differentiated by source of income; or taxes supplementary to ordinary taxation, particularly to ordinary income tax—such as luxury taxes or general property or capital taxes, the latter in the first place in the form of sur-tax on income. Further, this point of view implies special taxes, or a general tax system, placing an extra levy on chance gains, windfall profits, etc., which do not represent personal economic earnings (certain taxes on property transfers, stock exchange transactions, etc.).

Finally, serious consideration may be given to property and capital levies, which do not fall only upon income. Inheritance tax is such a levy.

The science of public finance is not the place to develop the principles justifying such a social welfare purpose of taxation, or the practical consequences for a tax system which is "just" from this point of view. Such justification belongs to the fundamental part of political or social economy.

For the present discussion of "justice" in taxation or, more accurately, in the distribution of taxes, one special point needs to be retained. There exists a "just" taxation both from the purely financial and from the social welfare point of view—only it means something very different in the two cases. A great many important controversial issues would have become much simpler if this had been recognized. The two points of view imply two different tax systems, but each of them is internally consistent, logically rigorous and rational, and corresponds to the respective concept of justice.

Our period being one which emphasizes the political rights of the citizen, the purely financial point of view predominates in the tax systems and theories

of the more advanced countries. But it is beginning to lose its exclusive hold. Some features of modern tax systems are clearly contradictory to it. With these beginnings, the answer to what constitutes "justice" in taxation comes to differ from that which was valid in the period of individualistic political rights, just as that period's answer differed from that of the earlier days of the guild system. The whole concept of justice changes and is thereby once more revealed as an historical concept. The greater these changes are, and the more consciously and clearly they are accepted by the people, the greater will be the changes in taxation and its distribution, by which to implement the postulates of universality and equality in the new manner.

CONTRIBUTION TO THE THEORY OF THE DISTRIBUTION OF PUBLIC EXPENDITURE

By MAFFEO PANTALEONI

Translated from Italian* by D. Bevan

I

In the last analysis it is Parliament which decides the distribution of public expenditure in our country. Hence the study of the allocation of the budgetary funds available—as well as of their amount within certain limits—indicates the opinion held by the average intelligence comprised in Parliament on the scale of marginal utilities of the various expenditures.

This statement may appear somewhat enigmatical to any reader not familiar with the economic theory of degree of utility, developed by the late Jevons and by Léon Walras.

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II

It seems obvious that the comparative degree of the marginal utilities of the various items of public expenditure forms the criterion for its distribution. In fact, when Parliament approves any one expenditure, it cannot fail to consider that, so long as the total amount of available funds remains unchanged, many other expenditures which were equally possible before the approval of the particular expenditure in question, become impossible thereafter. Before approval is given, it is therefore necessary to exercise a two-fold judgement: first on the intrinsic utility of the expenditure, whereby the latter is included amongst the *possible* expenditures; and secondly, on its utility compared with the utility of other equally possible expenditures, whereby the expenditure in question is given *preference*.

If the existing tax systems were such that every specific item of expenditure, that is every public service, was covered by a revenue deriving from a specific tax and allocated exclusively to that expenditure, the approval or rejection of each item of expenditure would be complicated by two further considerations, which are to some extent parallel to the preceding ones. The first of these is whether the utility deriving from the expenditure is worth the sacrifice which the tax causes the taxpayer—of whom Parliament is the legal representative: this consideration determines the inclusion or non-inclusion of the tax amongst the *possible* taxes. The second consideration is whether the sacrifice caused by a specific tax, corresponding to a specific expenditure, creates more or less utility than the sacrifice due to other taxes corresponding to other expenditures; on the basis of this second criterion, the specific expenditure in question will be numbered among the *preferable* ones, or excluded therefrom.[1]

In practice, however, the distribution of expenditure is not complicated in this way by the question of revenue, because our fiscal system relies mainly on general taxes rather than on fees. Leaving aside expenditure covered by such specific revenue, the expenditure side of the budget, which represents a certain total sum of satisfactions, or fulfilment of needs, is set against the total sacrifice entailed by the tax bill. Total satisfaction must be worth at least total sacrifice to the mind of the legislator, or, in other words, in the opinion of the average intelligence of Parliament. This opinion may naturally be more or less judicious as a result of the interplay of numerous factors, not the least important of which is undoubtedly the composition of Parliament, since wise judgement is much less probable if the average intelligence is low than if it is high.

III

Before going any further, I should like to make some observations on the possibility of assessing the merits of the decisions made by the average intelligence comprised in Parliament on the utility or otherwise of the distribution of public expenditure and its total amount. At first sight it might be argued that anyone who so set himself up as a judge and wished to establish standards for the distribution of expenditure or amounts of revenue different from those approved by Parliament, must belong to one of three categories: either he must be mentally the equal of that average intelligence, in which case he could not arrive at a different judgement; or he must be inferior to it, in which case his opinion would be less reliable; or he must be superior to it, which could not be proved. But on second thoughts we realize that, besides the average intelligence represented by the votes of one particular Parliament, there are other average intelligences which find expression in other Parliaments. Provided therefore that account is taken of the varied conditions in which Parliaments operate and that a judgement is formed only on equal circumstances, the work of one Parliament can be assessed by comparison with the work of others; or the national expenditure of one country may be expressed as a percentage of that of another, due account being taken of the respective national strengths. Moreover, parliamentary decisions both on the total amount of taxation and on the distribution of expenditure, materialize as facts which bring in their train a long sequence of other facts. Most of these facts are economic; some are of other social kinds. On the strength of these facts, even the mind of a person of lesser intelligence than the average in Parliament, can form a judgement on the greater or lesser merits of parliamentary decisions, provided he remain

* "Contributo alla teoria del riparto delle spese pubbliche", *Rassegna Italiana*, October 15, 1883; reprinted in: Maffeo Pantaleoni, *Scritti varii di Economia*, Vol. 1, Rome 1904, pp. 49—110.

The historical exposition of the theories of Jevons and Walras, and of the theorems of Bernoulli and Laplace, pp. 50—63, has been omitted. Some footnotes have been omitted or abbreviated, and an example taken from the Italian State Railways has been cut out.

[1] This is the same as Walras' *problem of maximum want satisfaction* where, in conditions of equilibrium, the marginal utilities of all expenditure items must have the same ratio to the unit prices of the various means of satisfaction (Léon Walras, *Etudes de l'Economie sociale*, 1896, Leçon 23, § 239, p. 73). I did not quote Walras in 1883, because I had not understood the scope of his doctrine (1902).

within the sphere of legitimate induction and deduction from these facts or results of Parliament's work. Furthermore, it is no less clear that the logical coherence of the said Parliament's decisions can be tested by careful comparison of one with the other. Finally, this same Parliament's opinions on the greater or lesser expediency and usefulness of any particular expenditure are founded—or, by hypothesis, should be founded—on legitimate deductions from economic and political facts; these deductions can be corrected just as an arithmetical calculation, except for the different degrees of difficulty in the two operations. Without continuing these observations, which we shall later have occasion to amplify somewhat, it seems to us that there can be no further doubt about the legitimacy of an investigation into the criteria which prevail in the distribution of public expenditure.

IV

Let us now discuss the considerations influencing the total amount of revenue. There is a relationship of reciprocal influence between total revenue and total expenditure, neither being a fixed quantity independent of the other. If the expenditure could be decided without regard to the size of the revenue, and if it were certain that the latter would always suffice to meet the former, there would be no conflict between the different marginal utilities of the different expenditures, nor would their comparative utility lead to their qualitative and quantitative classification, *i.e.* itemization and determination of the separate amounts to be spent on each item. It follows that, the greater the strain on the budget, the more necessary it is to give careful consideration to the efficiency of each expenditure. Now in this respect only three distinct budgetary positions are possible:

1) Revenue exceeds expenditure. In this case Parliament must decide which is greater: the sacrifice which the exaction of the surplus imposes on the tax-payers or the utility, *i.e.* the satisfactions, which would result from the allocation of the surplus to further expenditures which appear preferable in comparison with yet other less necessary ones. It goes without saying that it is not enough to compare only the immediate sacrifice, and the later ones which may causally derive from it, with the immediate satisfactions, and the later ones which may causally derive therefrom; it is also necessary to take into account those satisfactions and sacrifices which may be foreseen as possible results of not imposing a tax in good time, thereby incurring greater difficulties later, or by the untimely imposition of a tax, leading to similar results. This should be understood as applying throughout.

2) Revenue equals expenditure. Then the only consideration is that which corresponds to the hypothesis already made at the beginning of this discussion.

3) Revenue is not enough to meet expenditure. This situation reflects the fact that, to the legislator's mind, the marginal utility of the objects of expenditure so far exceeds the marginal sacrifice due to the exaction of present revenue, that there is a case for engaging also future revenue[2]—in other words, this marginal utility is also worth the marginal sacrifice due to future taxes destined for the payment of the principal and interest of the debt by means of which the budget is temporarily balanced.[3] In such a case, an even stricter choice between the various possible forms of expenditure is indicated.

Although, theoretically, one can imagine a case in which the total amount of expenditure can be fixed independently of any consideration of the conditions of revenue[4], a hypothesis of this kind has little practical value. Even on the first assumption of revenue exceeding expenditure, when the strain on the budget is relatively small, the point is soon reached where the sacrifice of raising the excess revenue is greater than the satisfaction of its expenditure. This first assumption can come true in two ways: either because of the smallness of the expenditure or because of the largeness of the revenue. In the first case, the very fact that expenditure is so small is an indication that the sacrifice of tax payment is considered greater than the utility resulting from the employment of the funds collected, and in the second case, the satisfaction of further needs would be undertaken. Whatever the final distribution of the expenditure, it must, in the mind of the legislator, always be such that the marginal utility of each separate item of expenditure, given equal amounts, is equal to every other; if this were not so, the distribution would have been different from what it actually is.

V

Having recognized the necessary interaction between revenue and expenditure on the basis of these principles, which seem to me to be in full accord with those taught by Jevons, we can also see whether the relationship is one of antecedence or synchronism. We may take it that Parliament sets out to obtain the largest total sum of utility by weighing the country's wishes against its capabilities—by whatever standards both may be measured; clearly the approval or rejection of any expenditure must be based on a judgement which is the resultant of a complex of different elements or propositions. These are obtained by arranging in decreasing order the marginal utilities deriving from the various possible expenditures and then weighing the marginal utilities inherent in every combination of possible expenditures against the marginal sacrifice caused by the total taxation which each of these combinations would entail. The need for this latter comparison is due to the fact that our budget, as we have noted above, relies mainly on general

[2] It should not be thought that a debt burdens only the future of a country's economy. If the debt is contracted internally, the country's economy immediately suffers from a large withdrawal of capital from the funds destined for present production or consumption.

[3] Unless, of course, the debts are contracted with the firm intention of not servicing and repaying them. In such cases, the economic calculation is simply this: the marginal utility of the funds obtained by means of a loan is greater than the sacrifices resulting from the prospect of insolvency with the dishonourable consequences deriving therefrom.

[4] This case may occur when the taxes are for the sole profit of a victorious nation which imposes them on a defeated nation in pursuance of a policy of economic exploitation.

taxes rather than fees, or in other words, that the sums collected have a general and not a specific destination; they must therefore be justified in terms of the aggregate utility of the entire system of expenditure. All this is tantamount to saying that the revenue and the expenditure side of the budget are perfectly synchronous. It is not permissible to consider that in the State budget the size of revenue is *a posteriori* adjusted so as to meet the expenditure, which is determined first. Nor may the State budget on these grounds be contrasted with private budgets where, as some have alleged, expenditure is adapted to income. Thus, for example, P. Leroy-Beaulieu was wrong in saying: "It follows from this difference that a private person arranges his expenditure to match his income, while most governments arrange their revenue to match their expenditure, increasing or reducing taxation according as they think fit to spend more or less on certain services." (*Traité de la science des finances*, 2nd edition, vol. II, chap. 1, p. 3.) E. Pfeiffer is much more prudent. After enunciating the same distinction, he adds: "This distinction generally corresponds to reality, but it should not be exaggerated, lest it prove untrue on both sides . . . At the present time it certainly is the case that public budgets are established by first determining the necessary or useful expenditure and then thinking how to raise the necessary means in one way or another. But even governments do not have unlimited funds and if they are to conduct their business rationally, they would have to confront sacrifice and satisfaction just as any individual does in his household, and they would always have to consider whether the same means could not be spent to better purpose, whether the advantage due to each expenditure corresponds to the sacrifice involved". (*Die Staatseinnahmen*, Stuttgart and Leipzig, 1866, vol. I, pp.10—13.) Any comparison between private and public budgets seems to us so deficient that it is worth while insisting on the point somewhat more. When it approves the preliminary or the final budget estimate, Parliament, abstraction made of its other functions, is an assembly of delegates, constituted in conformity with a system of laws. As such it enacts a series of acquisitions and transfers, grants credits and contracts debts on a vast scale.

The State budget, such as it is voted by Parliament, does not differ only by the size of its items from any business man's or firm's budget; it is of a different economic nature. There is another public budget which might perhaps be compared superficially with that presented by the directors of joint stock companies to the general meetings of shareholders: that is the budget of the Court of Accounts. The general meetings of shareholders ascertain whether the directors have used the company funds in conformity with the Articles of Association and in the best interests of the shareholders; the Court of Accounts does not investigate the advisability of the expenditure, but simply verifies that every order for payment is legitimate. Both these budgets relate to *past activity*. Parliamentary budgets have nothing in common with these but the name, since they constitute an authorization granted to certain public administrators to spend and transfer public funds, and to form these public funds by means of taxation, borrowing and the investment and transformation of capital. The difference between Parliamentary budgets and private budgets is thus seen to be so great that it seems to us to be impossible, when dealing with the former, to make any useful deduction at all from the rules governing the latter. The finance bill, when it has passed through all the stages required by the constitution, lays down the choice of one single combination of expenditure items and one single combination of revenue items, both combinations having been selected from an immense number of different ones. A comparison of this kind between the State budget and that of private persons errs in the description of the formation of both; but for our present purpose, it is sufficient to discuss the former, however the latter be formed.

A further consequence of the argument we have set out is the rejection of those criticisms of a budget which are aimed exclusively at the suitability of one particular item of expenditure, without taking into account all the other expenditures with which it is bound into a single system. Such reasoning is always faulty, both because it disregards the order of priority accorded to the marginal utility of the item of expenditure considered in itself, and because the quota of sacrifice which is its purchase price is inseparable from the total sacrifice entailed by the exaction of the total funds necessary for the entire system of expenditure adopted.[5]

VI

Having dealt with the question of antecedence or synchronism between the revenue and the expenditure side of the budget, we need patiently to go back somewhat and return to another question which was left in abeyance. We have shown that it is impossible for Parliament to decide whether a particular expenditure is admissible or not admissible otherwise than on the basis of an opinion which is the resultant of a complex of different elements: the arrangement, in decreasing order, of the marginal utilities deriving from the various expenditures and the comparison between the marginal utilities inherent in every combination of possible expenditures with the degree of sacrifice entailed by the total taxation which each of these combinations would entail. Let us now look more closely into the nature of the logical process to be followed in these operations. We shall see, amongst other things, that if practice had not devised numerous and drastic short cuts, the distribution of the revenue amongst even quite a small number of expenditures would be an absolutely insoluble problem for any Parliament. We shall gain a better appreciation of the operations to which a budget is subjected before it can become final.

[5] It is, for example, not legitimate in our opinion to attack military expenditure without reference to the entire plan governing the distribution of expenditure. It would seem as if it were indeed precisely the frequent neglect of the above precept, which is the cause of the inconclusive character of most of the arguments which are put forward for or against military expenditure.

Let us first suppose, in order to facilitate the study of our problem, that all expenditures which are declared desirable, are desirable in exactly equal measure, that is to say, they are to satisfy equally intensive needs and occasion equal expense. On these assumptions, the determination of the point of equilibrium between the satisfactions procured by the expenditure and the sacrifice caused by the exaction of the necessary funds, requires nothing but a prudent weighing of needs against funds. This operation concerns solely the number of items of expenditure to be included amongst those to which preference is given. Once this number has been established, three consequences follow: 1) Combinations with a greater number of items are excluded, because the satisfactions they procure do not compensate for the sacrifices involved; 2) combinations with a smaller number of items are included, because they have a margin for the satisfaction of further needs; 3) the choice amongst the various possible combinations of the established number of items of expenditure, must be based on criteria which do not follow from our assumptions.

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Let us change the conditions of our problem by making more realistic assumptions. The various items of expenditure correspond to needs of varying intensity; to satisfy them requires various quantities of differing cost. The elements which have to be combined are therefore no longer items of expenditure pure and simple, but the same items separately weighted by three coefficients: the first of these indicates relative desirability, the second the quantity necessary to equate the marginal utilities, and the third the relative intensity of the sacrifice caused by the corresponding taxation. But these are calculations which require far more time than is available to any Parliament, and which far exceed the intellectual capacities of the great majority of mankind.

Nevertheless, year by year budgets are compiled, and in the countries of Europe and America certainly with a fairly considerable degree of perfection. But the methods have become ingenious through centuries of experience. It remains for us to examine these methods and to show how they shorten and simplify the operations which we have considered, and how they put them within the reach of the average intelligence comprised in Parliaments.

VII

Of the numerous operations through which a budget must pass before it becomes final, much the most important, from a purely economic point of view, are those which are grouped under the heading of the *preparation* of the budget.

It is first of all worth pointing out that it is the task of the civil service, which plays the main part in the preparation of the budget, to smooth out an enormous number of difficulties which would otherwise arise, and which do arise in the doctrines of those writers who stray too far from the reality of matters. In truth, if we were to reason as they do, we should have to say that in a State all those functions which pertain to government represent items of expenditure: if we then ask ourselves what these functions are, we come up against a problem which has not yet been theoretically solved and with regard to which we could not go beyond the sphere of a few general principles, such, for instance, as that the maximum result is to be obtained with the minimum means, and that it is necessary to leave to the State those functions for which individual powers are insufficient. Administratively, however, the problem is solved as follows: the finance minister examines the statements of estimated expenditure presented by all the ministries, including his own, in the light of his own estimate of the revenue and the extreme limit to which he can go in an attempt to meet the demands of the various ministries, bearing in mind the necessity of obtaining at least a formal balance; but the formal balance, from its very nature of being a balance obtained by means of incurring debts, can only be transitory. It follows that although temporarily the functions of the State can be those allowed by the formal balance, they are normally limited by the necessity of obtaining a real balance. There enters into the administrative process the above-mentioned theoretical requirement of balancing the marginal sacrifice engendered by the exaction of total revenue against the marginal utilities of the various items of expenditure, or, as Sidgwick puts it: "We must regard both expenditure and supply as having at least a margin within which the restriction or enlargement of either must partly depend on the effects of the corresponding restriction or enlargement of the other; within which, therefore, the gain secured to the public by an additional increment of expenditure has to be weighed carefully against the sacrifices inevitably entailed by the exaction of an additional increment of supply."

When, therefore, the question of the distribution of expenditure, of its total amount and of the composition of the revenue is brought before Parliament, the question has to all intents and purposes already been solved, except for details; and the prior work of the administration has already brought every question to the level of the parliamentary average intelligence. In our view, the greatest intellectual effort falls on the finance minister, since the revenue envisaged in the first budget estimate rests predominantly upon a calculation of probability, on the basis of which he must judge whether there is equilibrium or not, and must formulate a financial policy. Nor would he perhaps be able to accomplish this work, however much, by reason of special study and long experience, his competence exceeds that of the members of Parliament, if, before reaching his hands, the various parts of the budget had not already undergone as much elaboration as that by which he in turn prepares it for assimilation by Parliament. We have already seen that statements of expenditure are prepared by every individual ministry. Now these ministries are the bodies most competent to estimate the requirements

of the country in all the categories of services within their competence. It follows that it pertains to them to establish the marginal utility of each separate item of expenditure in their own budget, which they do by setting up an order of priority and estimating the amount of expenditure necessary. The finance minister cannot overrule this assessment, which he accepts as a factual datum, but Parliament can do so. Now each individual ministry proceeds to form its own budget based on a series of principles which are so many means of eliminating less useful combinations. Firstly, it is evident that expenditure which might be made for services not falling within the special province of a specific administrative department, will be excluded from its consideration; and it will be realized how much this means, if a moment's thought is given to the monstruous jumble of proposals which Parliament would have to examine if it had to start from scratch in the compilation of a budget. Secondly, each individual statement is drawn up on the basis of those of previous years. These past statements represent so many experiments made, and ministers do not deviate from them without special reason. Thus the order of the marginal utilities of the various forms of expenditure is not established anew each year, but is gradually revised by the modification of small details and slowly transformed in the light of new requirements which arise in the course of time and to which the available funds must be adapted. There is a constant tendency for the individual ministries, as well as the administrative offices under them, to be engrossed solely in their own importance to the national well-being, and consequently to present ever-increasing demands on the national budget. But, against this, it is the task of the finance minister—as we have already said—to take account of the country's economic forces and to maintain financial stability. If the ministries are used to meeting energetic opposition, whether from the finance minister or from Parliament, they are more inclined to keep within the limits set by previous statements, and they exercise a more rigorous selection amongst the various services that are to be satisfied.

Thirdly, it is of fundamental importance for a speedy and correct solution of the theoretically very complex problem of the distribution of expenditure, to make a sharp distinction between irrevocable and administrative expenditure (corresponding to the consolidated fund services and the supply services in Great Britain—Ed.), and between ordinary and extraordinary expenditure. When an expenditure is declared irrevocable by Parliament, or is constitutionally so (arts. 19 and 31 of the Italian Constitution), it is thereby automatically removed from the sphere of what is debatable, unless the government is to be brought down. If government bonds are issued for the purpose of enabling a ministry to perform some service over a number of years, the possibility of debating its suitability and utility in the future is forgone until such time as the debt created therefor has been redeemed. The number of competing combinations is thereby yet further restricted, and the only flexible expenditure remains that for civil and military administration. The entries of irrevocable expenditure may be more or less numerous. According to Baron Louis, only the interest and the amortization on the national debt ought to be included; William Pitt's consolidated fund comprised the National Debt, the Pensions List, the Civil List, pensions and allowances of the royal family, the emoluments of the Speaker, the Lord-Lieutenant for Ireland, and the Comptroller-General, the expenses of the diplomatic service and of the higher courts of justice as well as some other items of lesser importance. But whatever concept prevails with regard to the items to be included in this category, its function in the formation of the overall budget is always the same. It is not the business of each separate ministry to make this distinction between irrevocable and administrative expenditure, because there is only one combined entry for irrevocable expenditure regardless of its origin, mostly in the treasury accounts. Hence the revenue on which the individual ministries rely on the basis of previous financial years, is available almost exclusively for administrative expenditure. It is more important for them to make a sharp distinction between ordinary and extraordinary expenditure and to sub-divide into actual expenditure and items carried forward. Further classifications derive from the nature of each ministry's functions.

We shall not go into further detail on this point. It all goes to confirm the same fact, that administrative principles and division of labour render a problem soluble which theoretically presents the greatest difficulties. Let us now see how an estimate of the size of total revenue is reached and on what principles this is balanced against expenditure. If we begin with the last problem, we soon reach a formal solution. It is a rule consecrated by very long experience that in the compilation of the budget ordinary and extraordinary expenditure together must never exceed ordinary revenue alone. If it were thought possible to allow ordinary expenditure up to the amount of ordinary revenue and to rely on extraordinary revenue for extraordinary expenditure, financial history would in all probability be like that of France, which has had 46 budgets in deficit and 31 with a surplus between 1801 to 1880. The reason is that "the budgets of 1846, 1875, 1876 and 1877 were the only ones where ordinary revenue was enough to cover all expenditure"; and that "tax assessment has always been held to have to provide revenue only just in excess of total ordinary expenditure." But this principle of financial accountancy, according to which one should not count on extraordinary revenue to cover extraordinary expenditure, signifies, in the last analysis, that experience has proved the rule that the marginal utility of the entire ordinary and extraordinary expenditure is equivalent to the sacrifice caused by the exaction of the ordinary revenue alone; and that, in conformity with this rule, a margin must be left for unforeseen events or as a remedy for unavoidable errors in the first choice of combinations of expenditure. In the absence of provision of this sort, unexpected expenditure has to be met by incurring debts, thus ranking it for the future among the irrevocable expenditure to the detriment of expenditure that might in other circumstances be judged more

necessary. The result is a loss of freedom of choice. However, this is only the formal aspect of the problem. The question remains to discover on what principles to assess whether ordinary revenue should be increased and in general how high it should be.

To estimate the size of revenue is an extraordinarily difficult task, which falls to the finance minister, almost without any assistance at all. There is no rigorously scientific and therefore approximately exact method. It is a question of estimating the economic strength of the country by the more or less successful application of one's own knowledge of economics, and of utilizing what is known about the functions of the separate taxes. Even so, a table of estimated revenue compared with a table of actual revenues over a long series of years would show the most remarkable divergences. The method generally adopted and also thoughtlessly advocated, is as follows: The average revenue from each tax during previous years is calculated, and it is assumed that estimates of its future yield should not be higher or lower without special reason. If, in previous years, the yield of the taxes under consideration formed an increasing or decreasing series, it is thought advisable to envisage a further increase or a further decrease of revenue, and the average obtained is modified accordingly in one direction or the other. In general estimates are on the conservative side rather than in excess of the true figure. This method is quite unsuitable. By treating the revenues as a statistical series, one obtains an unwanted element of forecasting, namely a *long-term* element of forecasting future revenue; of revenue, that is to say, in which constant and uniform causes prevail over accidental and variable ones. But in estimating the revenue of the next financial year, one needs an element of forecasting which is relatively much more influenced by special, accidental and variable causes than by general, uniform and constant ones. It also remains to be seen whether the series of tax yields is one of those which, by their nature, admit of statistical treatment, and with what reserves and precautions.

The assessment of the probable size of revenue is so difficult a task because the sources of public income are extremely varied. Grouping them under general headings, we can say that there are four kinds of income: income from taxation, subdivided into income from general taxes and income from fees; income from the administration of state property; income from the profitable transformation of one type of state property into another type bearing a higher yield; finally, income from loans. The assessment of probable income from general taxes is difficult enough, and this is much harder still when it comes to fees and state property. From this point of view it is fortunate when the budget is supplied only to a small extent from these sources. In most modern states, income deriving from state property, counted as effective revenue and not as the simple movement of capital, has become quite insignificant in comparison with income from taxation, whether general or specific.

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Before leaving this question, we must note that it is difficult to say whether an over-estimate or an under-estimate of revenue is more disastrous, and that the tendency to remain somewhat below the true figure, rather than to exceed it, is anything but prudent. One of the effects of the budget estimates is that the finance minister's forecast becomes common knowledge through discussion in the Chambers and through the publication of a preliminary budget, which is seized upon by the press of all civilized countries; it thus becomes an important factor having a bearing on public credit and especially on the quotation of the consolidated Public Debt. But in its turn, public credit is a determining cause for the elasticity of some of the most important taxes. As a result, the presumed elasticity of taxes to a certain extent affects their real elasticity. It may therefore be said of the proponents of this method: οὕτως ἀπαλαίπωρος τοῖς πολλοῖς ἡ ζήτησις τῆς ἀληθείας καὶ ἐπὶ τὰ μᾶλλον τρέπονται.*

As regards the assessment of the burden of taxation on the capacity of the taxpayers, there is an even greater lack of any methodical and scientific guide, and the finance minister must judge from the most varied indications what degree of disturbance will be caused to the national production. The purely economic question is linked with a psychological and political one, that of the tolerance of the population in face of the burden. It must therefore be recognized that when the budget is presented to Parliament, in order that its form may be finally decided, an immense work of preparation has already been carried out, which Parliament has only to modify in details, as it may think fit. But this work is much more advanced with regard to expenditure than to the total amount of revenue: this is the more so because the attitude of Parliament is one of the principal factors of which the finance minister takes account when estimating the tolerance of the country with regard to taxation. In any case, a problem which theoretically would be of the utmost difficulty, namely a value judgement by Parliament on the marginal utility of a limitless number of combinations of expenditure compared with the sacrifice entailed by various amounts of revenue, is quite well solved by means of a series of administrative devices based on experience.

* "So little pains do most people take in the investigation of truth, accepting readily the first story that comes to hand." Thucydides, lib. I, c. 20.

ON TAXATION

By LORENZ VON STEIN
Translated from German* by Jacques Kahane

I. The Concept and the Nature of Taxes

Taxes are conceptually entirely different from all other public revenue. Ever since taxation started, taxes have so outclassed all other sources of public revenue as to make them seem almost insignificant. Taxes can be said to represent the nation's entire civic sense on the economic plane. We must conclude that they are not only formally, but fundamentally, different from other sources of revenue. This is indeed so.

In administering public property, the State is an independent economic agent with its own capital; fees and regalia represent a payment to the State in return for services rendered to individuals for the satisfaction of their individual needs. Taxation, by contrast, represents a field in national economic life where, by virtue of the State's constitution and administration, part of the individuals' economic income is withdrawn from them and becomes the community's economic income. Stated in the most general terms, this means that taxation is the economic expression of the individual's cohesion with the nation, that vital force forever shown in a thousand ways of thought and deed; the whole course of the individual's economic life is subordinated to the State's, without the latter providing any specific counterpart for each specific tax payment. Therein lies the paramount significance and force of taxation. The individual's attitude to the community is translated into an obligation which ceases to be determined by him and the justification of which from the point of view of the community is not questioned. What is more, this obligation arises in a field in which the individual is ostensibly at his most independent, namely his economic life and property, of which the State, without work, appropriates in taxes as much as it needs. All I own and earn, is subordinated to the tax; the duty to look after myself comes second to the duty to pay to an extraneous power; my right to keep my own is subject to the right of the State to take from me what it needs. And this power is not thrust upon me from outside, by brute force; however distasteful I may feel it is to have to give up what is mine, I know within myself that the State has a right to it. In the case of state-owned property and fees the personified State and the individuals act side by side; in taxation, they directly confront each other with their seemingly totally different vital principles. Hence the process differs fundamentally from anything else to be found in the world of goods and commerce. It is only natural that the free human being should try to understand this process so as to create ultimate harmony out of the conflict between the notions of taxation and personal freedom.

* *Lehrbuch der Finanzwissenschaft*, Fifth, revised edition, Leipzig 1885, Part II, pp. 346—61. One short passage of subsidiary argument has been omitted.

Neither the philosophy of law nor pure political theory resolve this economic contradiction; it has been left for the science of public finance to try and do so. For subject peoples it may be good enough, as Franklin said, simply to accept taxation as an inescapable fact, or else to dismiss it with some trivial utilitarianism, like Montesquieu. But those who would be in the vanguard of civilization must go to the bottom of the matter, and in so doing they will gain theoretical and practical knowledge from their understanding of the fundamental idea. We shall briefly try to present the elements necessary thereto.

There is no doubt that the community of people with its interaction between all is one of the two major conditions of all progress, the other being the unfolding of the individual's possibilities. What I am, what I have and what I do belongs in some part to what I have received through the community. The strength of community resides in what each individual surrenders to it from his personal life—material, spiritual and social matters. It is thus—even mathematically—impossible that the community should offer the individuals the conditions of economic accomplishment, unless the individuals return to it part of their earnings made possible by the very existence of the community. As long as human beings and nations exist, this reciprocal process will continue, even though the individual may neither want it nor even be aware of it. This is the economic principle of human society.

Political theory shows us that the State personifies this society and endows it with the power of volition and action. Everything that constitutes the essence of community is comprised by the State, by its will and deed, its constitution and its administration. The State confers measure and order on all things, including the economic interaction of individuals and community, which is inherent in the very nature of community. The relevant intentions of the State are expressed in legislation and enforced upon the individual by public administration. This is the genesis of taxation.

The general necessity of individual contributions to the community rests not on arbitrary individual decision, but on the essentially dual nature of human personality, with its communal and individual aspects. The concept of taxation, on the other hand, depends upon the emergence of the idea of the State. The first process occurs without anyone being conscious of it, the second is not conceivable until man achieves consciousness of the nature, functions and powers of the State. So long as a community follows only its own natural laws and thereby evolves from abstract community into concrete society, the differences in the amount and distribution of individual contributions are due to the nature of the social order. The laws of social life do indeed impose some kind of order on these contributions, but it is an order determined and enforced by the ruling class in its own interest, rather than one deriving from a consistent body of law and independent administration, as implied by the idea of the State. Such contributions never constitute taxation, but an exaction, the form of which may vary greatly

according to the social order. All this changes with the ascendancy of the idea of the State as a free association of equal citizens. Once individuals cease to be subordinate to the domination of the social order, their contributions to the community are conditioned by the factors upon which rests the life of the State as such, namely personal freedom and equality before the law. Differences in individual contributions then no longer depend upon social classes and privilege, nor on the interests and power of the ruling group. The new criterion is the degree and form of the individual development of each free personality within the State. To this end, all individual contributions are reduced to the only common denominator of any economic development, namely money. Taxation is therefore a concomitant of the evolution of the independent State towards its independence, and indeed there can be no taxation before this concept of the State is consciously accepted. Taxation also removes all the dues and exactions of an economic nature which are based merely on social differences and necessarily replaces them by monetary payments. Taxation and all its provisions, finally, no longer rest on social differences and their sway, but on the law of the constitutional State based on free citizenship. It is the State which now lays down the amount and distribution of taxation through its tax laws and tax administration, according to the economic individuality of the citizens. We thus see that while contributions of the individual to the community are inherent in the nature of the community as a human society, taxation only arises with the full evolution of the concept of the State as having independent existence and activity. It is not the concept of community, but only the concept of the independent State which should be recognized as the basis for the historical and organizational evolution of taxes into constitutional tax systems—so much so, that in fact the labour of millenia was needed before taxation could begin, in the 19th century, to reach its full development.

It will now be understood what we mean by saying that while exactions of all kinds are as old as human history, taxation is one of the newest concepts and institutions known to history. To avoid ambiguity by the confusion of very different matters, one should say that taxation in its real sense is barely two hundred years old. Taxation did not originate in the compulsory levy, by the State, of some form of contribution from the individual trying to earn his living; taxation appeared when the State, by its legislation and administration, attempted to assess these contributions constitutionally on the basis of the individual economic capacity of each person. The rudiments of taxation are indeed to be found wherever a State justifies its right to levy contributions by reference to its own will and needs. The full flowering of taxation, however, occurs only when the will of a people, acting through legislation, confers upon the State the right to intervene in the economy. Taxation is not yet present when the exaction of contributions is based merely on the needs of an autocratic State; we can speak of taxation only when these levies come to be based on the needs of the life of the community.

It follows that conceptually taxation means more than simply the development of the formal concepts of the amount and distribution of individual money contributions; the higher justification of taxation lies in the utilization of these contributions for the ends in the name of which they are levied, namely the fulfilment of the individual through the whole and through the conscious activity of the whole, *i.e.* the administration of the State. To comprehend the true nature of taxation one must therefore go far beyond tax problems narrowly defined. Taxation is the point where the science of public finance joins hands with the science of public administration. Each science is conditioned by the other and both are parts of one and the same higher science dealing with one organic aspect of life: the theory of the State, and State activity on the ethical plane, in terms of the moral order of society.

Most so-called definitions of taxation to my mind do no more than differentiate between taxation and other state revenue and public loans. The value of such definitions essentially lies in the clearest possible formulation of this difference. By contrast, what I would call the idea of taxation develops the concept and nature of taxation from the essence of personality and State. Any philosophical foundation aside, the value and justification of this idea of taxation reside in its furnishing the science of public finance with the elements of a tax theory no longer as a mere mechanical arrangement of material, but as an ultimately quite natural organic system. This is admittedly the basis for the following discussion.

In our view, the various fields of tax theory cannot be properly studied without first setting up two categories, which we shall call the principles and the history of taxation. These will be found to be relevant to every part of the theory. We proceed from the idea of taxation, as defined above, because only it yields us these two necessary categories. We shall describe both and develop the system of taxation from them.

II. The Principles of Taxation

The Economic Principle, the Financial Principle and the Principle of Public Economy

Taxation, then, is the order of individual contributions established by the State through law and administration, and as such, taxation is the prime condition of modern communities. It follows from the higher concept of legislation, that in this field, too, the State, in its willing and doing, cannot merely express its own subjective views—as was the case in the days of purely monarchic financial systems—but must gradually give expression to the essence of taxation in this sense. In principle, it is immaterial how many centuries are needed to bring this about, but the passage of time does complicate the nature of taxation as the relationship of the individual to the whole. It comprises a number of diverse, well-defined elements, which the State merges into unity in taxation. These independent elements and their appreciation by the State underlie the principles of taxation or, as we may say, the implementation of the idea of taxation by State action.

These principles may most conveniently be termed the economic principle, the financial principle and the principle of public economy.

The *economic principle* of taxation rests on the idea that the community and its personification, the State, are absolute data not limited by any measurable duration. Hence their needs, too, are without material limits, either in time or magnitude. When providing for the satisfaction of these needs by means of taxation, the State claims as much as it requires from the economic life of each individual. What the State takes for this purpose must clearly be of the same nature as the purpose. Private economy, however, contains two elements which differ markedly in regard to taxation and which must therefore be considered by the science of public finance, even if only from the point of view of taxation. One of these elements is of a limited nature, both as a concept and in real life. We sum it up in the term "capital". We need not here discuss the distinctions between different forms of capital,* but we must remember that from the point of view of each individual his capital is finite. The second element is the "earnings" which are derived, in one way or another, from this capital. Again disregarding the distinctions between different forms of earnings, we may express them in one figure by reducing the global earnings of each economic unit to the common measure of money. Expressed in monetary terms, earnings are income. Income is a potentially unlimited attribute of each economic unit, and hence not objectively restricted in either duration or magnitude. But income is conditioned by capital and therefore—we may omit the details—always strives to reproduce its own prerequisite, namely this very capital. The process by which this is achieved we call capital formation. Capital, income and capital formation are thus organic fundamentals of the economy, *i.e.* when one of them ceases, then the whole economy perishes.

From this organic view of the private economy there follow the three propositions of the economic principle of taxation.

Being destined to meet the immeasurable and forever changing needs of the State, taxation must never hit the objectively limited element in private economic units. If taxation were to absorb part of that element, it would not only immediately consume the amount in question, but would also slowly destroy the process of its reproduction through income and capital formation. In destroying private economy, taxation would destroy its own source and thereby also the State and the community. In consequence, the first proposition of the economic principle of taxation must be never to impair capital.

Income affords a contrast to capital in this respect. However much one may dissect income, as Hermann does, it always corresponds in the last resort to the creative productive forces of man, which as such are both unbounded and ever-changing. The income of the economic unit is conditioned, further-

* Ownership of capital, as here defined, includes disposal over all factors of production, including labour. Ed.

more, by a second factor besides its own capital, namely interaction with the community. It is this interaction which is the lasting element in the economy, since it creates itself and must exist even in the absence of capital. Taxation can, by its own nature, address itself only to income and reclaim from it part of that which its interaction with the community enables it constantly to create afresh. The second main proposition of the economic principle of taxation is therefore the following: irrespective of its name and form, every tax can only be a tax on income. All tax is income tax. It is true that a payment not levied on income is nevertheless a contribution to the State, but it is no longer a tax and it would be most confusing to call it so.

The third proposition of the economic principle rests on the consideration that income is the source of capital formation and that capital in its turn creates and augments income and thereby the source of taxation. Taxation should therefore never be so great as to consume income to the point where income loses its ability to create capital. These are the three basic propositions of the economic principle of taxation.

It remains to examine how these economic principles fit in with the paramount principles of universality and equality of taxation in the face of the varying capacity and income of economic units. This question will be discussed in the general section on the principles of taxation.

The *financial principle* of taxation becomes relevant when the total amount of taxation collected according to the economic principle is confronted, as the total revenue of the State, with its total needs, *i.e.* when trying to balance revenue and needs. This is no more than the application to taxation of the basic principles of public finance, expressed in monetary terms. The financial principle of taxation comprises three propositions: 1) the State must never demand from the capital-forming economic units more taxes than are needed to meet total state requirements; 2) the process by which the individual surrenders to the State part of his income, shall be so arranged as to consume the economically feasible minimum of time and labour; 3) the State shall, so far as possible, try to find employment for the monetary capital raised by taxation between the moment of collection and the moment of actual expenditure. These three propositions constitute the whole financial principle of taxation.

The first and third of these propositions are valid not only for tax revenue but for all state revenue. According to our earlier discussion of the latter, these two propositions find expression in the budget and in the Treasury's financial management respectively. The second of the above propositions, on the other hand, supplies the universal principle for the collection of all taxes, whatever the diverse forms of collection appropriate to each separate tax according to fiscal theory.

The *principle of public economy*, as applied to taxation, leads us far beyond the tax itself to the dynamic link between the individual tax payment and

taxation as a living institution. We shall call this principle briefly the principle of the reproductivity of taxation. It is well worth while stressing the importance of this principle in contrast to the usual theoretical treatment, which considers the subject of taxation exhausted with the discussion of the tax itself.

We may presume here that the reader is familiar with the differences in the nature and concept of public economy and of public finance in the narrower sense. The only additional aspect to be discussed here is the special relevance to taxation of the principle which states that the degree of economic strength and progress of the individual is at the same time also the degree of economic strength and progress of the State.

This is the point which reveals the true relationship between public economy and what we have called the administration of the State.

The taxes levied from private economic units both provide the conditions of the State's economic existence and make them limitless. But if the receipt of taxes were the be-all and end-all of the State's circular flow of goods, the State would again depend on the individual—though perhaps not on his arbitrary decision or power, for the State is ultimately omnipotent and can take whatever it finds. But the State can find something to take only if private economic units have something to give. In turn, economic units can only possess and earn something under certain indispensable conditions. If, therefore, the State is to find in actual taxation not merely conceptual but real economic strength and freedom, the possession and exercise of supreme power are not enough. The State must use its power to create the conditions which are the absolute prerequisite of the economic capacity which is the source of taxation. Economic theory has formulated the laws and manifestations of the economic capacity of the individual, which we call "tax potential" inasmuch as it is the source of taxation and hence also of the economic strength of the State. Tax potential is the resultant of all the economic conditions of personal development and manifests itself as capital formation by individuals. Among these conditions, public services are the most essential prerequisite for individual progress. The totality of these state services, their concepts, rules and regulations, we shall subsume in the concept of administration. It is administration in this sense—the manifestation of the highest function of the idea of the State—which makes the economic requirements of the State infinite. The prerequisite for the satisfaction of these requirements is the tax potential of the nation and its process of capital formation. If the State is to obtain by taxation the economic means for its administration, then the State must know how to create, through its administration, the prerequisite for the nation's tax potential, which is the source of taxation. This is the origin of the organic circuit in the innermost life of the State, which has always been obscurely felt by all peoples but which science has only now learned to formulate: tax potential creates the tax, the tax creates administration and administration in its turn creates tax potential.* We say

* The term "administration" as here used includes all functions of government. It should be noted

that this circuit is organic because each of its elements conditions the others, so that if one of them is lacking, the others also disappear. It is this organic nature of the dynamism in this field of state revenue which alone enables us to transform formalistic tax theory into a science of taxation. By basing itself on the nature and life of the State, this science attains to the status of an integral part of political theory.

In the wider perspective of political theory, the value of a system of taxation therefore does not reside in the amount and level of the taxes, but in the system's ability to form capital when the State spends its tax revenue to the benefit of the citizens' tax potential and thereby to the benefit of the economic strength of the State itself.

It follows that as a principle of public economy taxation must ultimately be so designed that public administration causes each tax payment to revert to the taxpayer by enhancing his ability to form capital. A tax is right and justified in so far as it is able to achieve this better and faster; a tax becomes wrong the moment is loses this ability through defects in the administration. It may be said that the financial value of a system of taxation can be measured by the amount of goods equivalent to its monetary yield; but we must add that the real value of taxation lies in the economic value of the administration which depends on the tax for its sustenance. The value of taxation on the national plane can therefore never be judged in terms of a merely financial system or merely economic performance; its real value always lies in the value of the State's administration for the benefit of the community. It is only by reference to the administration that political theory can arrive at a just comprehension of taxation. In terms of the rigorous concepts of economics, we can say that the true purpose of every tax is to be reproductive and to create at least as much as its own magnitude. This reproductive power of the tax is and remains the absolute condition for the life of the State. The State achieves this for its members and for itself through the administration's reproductive use of the tax proceeds, *i.e.* by the activation of its noblest forces the State must recreate for itself the material conditions of its own supreme development.

Herein lies an element which transcends not only the concept of taxation as such, but also the level of taxation prevailing at any given moment. The needs of the administration are, in themselves, boundless and they make themselves irresistibly felt, in innumerable forms, in the everyday life of the State. Their innermost justification makes them indifferent to the economic principle of taxation which we have expounded above and drives them constantly to exceed the limits which the latter must inexorably draw. This is the field in which the administration comes into conflict with the financial system, as we have indicated earlier in general terms. It is natural that this conflict should arise above all in the field of taxation. Every year, the battle

that in the German debate on the proper scope of Public Finance, Stein, along with Wagner, was the outstanding proponent of the view that public expenditures as well as taxes should be included. Ed.

has to be fought between state income and individual income. On a higher plane, we can speak of a conflict between the development of the community and of the independent individual, the former requiring ever-increasing taxation in opposition to the individual's urge and striving for capital formation. This deep-seated, never quiescent, conflict finds its verbal expression in tax theory as the "level of taxation". The movements of this level are governed by the following law: the closer to perfection is the fulfilment of the idea of the State, the more must the individual contribute in taxes. This law might be termed that of the constant increase of individual tax contributions to the community. We have already dwelt on this law in our first volume, particularly in relation to the problem of social policy. We shall not repeat this discussion here. We must repeat, however, that this constant rise in taxation —the economic manifestation of the vital law of development of society—is counterbalanced and limited in the tax system by the economic principle, even though the legislative power of the State is, in itself, sovereign. The practical and scientific formulation of this conflict gives rise to the two extensive fields of operation of the public economy principle of taxation: tax reform and tax policy. Tax reform concerns the arrangement of particular taxes within the tax system, while the task of tax policy is to imbue tax legislation with an appropriate sense of the overall relationship between taxation and national economy.

These, then, are the three great principles inherent in the nature of taxation, which the fiscal legislation of the State must put into practice. Here too, the State, though sovereign, is confronted by basic principles which it cannot alter. The needs of the State, on the one hand, and the concept of its omnipotence on the other, have, however, brought it about that the limitations which these principles impose on the taxing power of the State have been recognized by it very slowly, so that we have in fact only now achieved a true system of taxation. The history of taxation forms an essential part of the history of the conflict between the idea of the State and social rights and interests. In its turn, each form of tax has its own, highly instructive history. The system of taxation which we now possess can therefore perhaps best be explained in terms of the main outlines of its own history.

THE FORMATION OF THE PRICES OF PUBLIC GOODS

By UGO MAZZOLA

Translated from Italian* by Elizabeth Henderson

(1) The laws of price formation on the market are well known: it depends upon the varying quantities of goods and the degree of their final utility for buyers and sellers, the conditions of monopoly and competition, etc.[1] Once established, a market price has this peculiarity that it corresponds not to all the various degrees of final utility which one and the same good may have for the various persons wishing to acquire it, but only to one of these degrees of utility. Let us suppose, for example, that there are seven persons for whom a good has different degrees of final utility: *A*, *B*, *C*, *D*, *E*, *F* and *G* are willing to pay for a unit of this good 100, 90, 80, 70, 60, 50 and 40 lire respectively. If a price of 70 lire has been established on the market, only *A*, *B*, *C* and *D* will purchase the good, because its degree of final utility for them equals or exceeds 70; *E*, *F* and *G*, for whom the desired good has a final utility of less than 70, will be debarred from its purchase. But among the persons *A*, *B*, *C* and *D* who are able to buy, only *D* pays a price corresponding to the degree of final utility the good has for the buyer, namely 70; *A*, *B* and *C*, for whom the good has a final utility of 100, 90 and 80 respectively, pay less for the good than its value to them according to the intensity of their need.

This difference between the degree of final utility which a good has for some buyers and the lower price which may be established on the market is called "differential utility" or, in Marshall's apt words, "consumers' rent".[2]

(2) In our earlier discussion of the degree of final utility of public goods, we have seen that the burden of raising the required means is so distributed that after the distribution all the separate shares of resources collected have the same degree of final utility, so that each member of the community pays for the consumption of public goods a price which corresponds exactly to the degree of final utility which these goods have for him. Hence no member of the community experiences the above-mentioned phenomenon of market price formation, no-one is debarred from acquiring the desired good, no-one reaps a differential utility by paying a price lower than the good's final utility to him or lower than its value to him.

In this fact resides a characteristic difference between price formation on the ordinary market and price formation with respect to public goods, and

* *I dati scientifici della finanza pubblica*, Rome 1890, Chapter IX, pp. 159—83.

[1] For the laws of price formation, see Stanley Jevons, *The Theory of Political Economy*, 2nd edition, London 1879; Léon Walras, *Eléments d'économie politique pure*, Lausanne 1889; and Carl Menger, *Untersuchungen über die Methode der Socialwissenschaften*, Leipzig 1883. On monopoly prices, see Cournot's elegant exposition in *Recherches sur les principes mathématiques de la théorie des richesses*, Paris, 1838.

[2] Alfred Marshall, *The Pure Theory of Domestic Values*, quoted by Maffeo Pantaleoni, *Principii di economia pura*, Florence 1889, pp. 35, 94, 165, 187.

hence between the private and the public economy. This matter deserves the most careful attention and still lacks an explanation.

The explanation does not seem to be an easy one. Most recently, Sax and Wieser discussed its importance, but Sax's explanation is not satisfactory, and Wieser stopped short of the real difficulty by making certain general assumptions and concluding that further study lay outside the limits of the theory of value and impeached upon the spheres of jurisprudence and economic philosophy.

(3) Sax's explanation is as follows.

The fact that the price of public services equals their subjective value to the users, is not peculiar to the public economy but rests on the distinction between material goods and services. Only the former have exchange value, the latter have only subjective value differing according to the intensity of the need. Hence only individual valuation counts in the case of services; they have no value of their own, unlike the material goods with which services are paid for.[3]

Ricca-Salerno, in summarizing and explaining Sax's concept with his usual accuracy and clarity, affirms that "services could not exist and could not be exchanged, if there were not at the same time material goods which constitute the economic basis of these services."[4] "Hence we cannot really speak of a uniform and intrinsic value of services, but only of the utility to be obtained by applying resources to this end. . . . All goods which are useful or in limited supply possess an inherent objective or exchange value, which is the same for all, rich or poor; this is the average resultant of all individual valuations and as such assumes a uniform character which covers and conceals the diverse origins and elements. By contrast, the subjective value of the same goods in relation to a variety of uses, to various forms of consumption and to private and public services, always differs for each different individual, according to the state of the private economy."[5]

This explanation reflects the error of Sax's whole system, which is based on a denial that services have the character of goods and on the principle that the fiscal economy is only a consumption economy. We shall discuss the economic character of services in the appendix to this work and do not wish to repeat the argument here. Services are goods like all other goods and like all others have their own objective exchange value. Nor is it correct to say that services could not exist and could not be exchanged in the absence of material goods, because experience shows that any number of economic relations rest on an exchange of services which comes about without the intermediary of what Sax and Ricca-Salerno call material goods.

[3] Emil Sax, *Grundlegung der theoretischen Staatswirthschaft*, Vienna 1887, pp. 191—96.

[4] Ricca-Salerno, *Scienza delle finanze*, Florence 1888, p. 23.

[5] *Ibid.* p. 45.

(4) Wieser[6], with his profound insight into economic relationships, was careful to avoid the trap into which Sax has fallen. Recalling Sax's description of the phenomenon, Wieser set this observed principle up as a special law of value for the public economy. According to him the theory of taxation is actually part of the theory of value rather than being economically founded on an application thereof. In stressing the favourable effects of this difference, Wieser observed that if the same law were valid for the private economy, that is if everyone paid for the satisfaction of his needs the precise equivalent of the degree of final utility which the goods he wants have for him, then there would be a general levelling out of needs and wealth would cease to offer any advantages, just as poverty would cease to impose any restrictions.[7]

Wieser remains astonished at the spectacle of a society allowing of the coexistence of two such diverse forms of economic organization: one (private) in which satisfactions are so unequally distributed, and the other (public) where perfect equality reigns. Looking for the reasons of this divergence, Wieser asked himself whether the private property order, while giving rise to such serious inequality in the satisfaction of needs, did not at the same time, through favouring the accumulation of wealth, give so much impulse to the satisfaction of needs generally that even those benefit who have the smallest part in private consumption.

According to Wieser this profound difference can be explained only by considering that the two forms of economic organization have different aims (but he does not say what these are) and that the extent of personal liberty is different in the two cases. Here Wieser's analysis stops and his book comes to an end; the rest, he says, belongs to the sphere of jurisprudence and economic philosophy, and the reader is left knowing as little as before.

Wieser offers an exposition rather than an explanation of the phenomenon; he says that the public economy has different aims but fails to say what they are or why they determine such a difference in prices.

It is no explanation to say that the increase in wealth due to private property gives rise to a different remuneration of public services, because first of all the causal connection is not proved and also because the phenomenon can be observed even at the very beginnings of the system of private property.

Nor is it correct to say that the analysis of this matter lies outside the limits of the theory of value. We do not need historical or philosophical study, we simply need to know why the prices of certain goods are formed in one way and the prices of certain other goods in another way.

This is a question of economics pure and simple, and not of philosophy or jurisprudence.

The problem thus remains unexplained. Having stated this, let us now examine it.

[6] Friedrich von Wieser, *Der natürliche Werth*, Vienna 1889, pp. 232—36.

[7] So much so that poverty would no longer be poverty, nor wealth wealth!

(5) Our earlier analysis has shown every individual need to contain some proportion of need for complementary public goods, upon which individual satisfaction is conditional. We have also seen that the valuation of the "co-efficient of production" or of the degree of final utility of the public goods in the combination is only a reflection of the intensity of the autonomous need from which the need for public goods derives.

Let us now assume that price formation on the market is such that the price of each good corresponds to the degree of final utility which the good has for the person wishing to acquire it, so that the buyer pays neither more nor less for the good than its value to him. As has been said, there would then be a general levelling out of needs and their general satisfaction in accordance with the intensity of all needs. But since the nature of the goods would not change, their consumption would, even in that case, still be conditional upon some complementary consumption of public goods, the prices of which would be formed in an analogous manner. Each individual need would continue to contain a reflected need for public goods and the ratio of the latters' prices, and hence degree of final utility, to the total price would be proportional to the extent to which separate individual satisfactions are conditional upon public goods.

(6) However, as we have seen, market prices in the private economy come about in quite a different manner and they determine considerable inequality of satisfactions. The objective or exchange value of goods or services is equal for all, rich or poor, and there are enormous differences in the degree of final utility which the goods may have for each person having a need for them. Once the price is established on the market, only some buyers incur, by their purchase of the desired good, an expense equal to that good's final utility to them; many others, for whom the price exceeds final utility, must renounce the satisfaction of many needs and resign themselves to allocating their resources of direct or indirect goods (labour and other exchange or consumption goods) to the satisfaction of the most urgent needs. Yet others, who buy the same goods but for whom these have a degree of final utility exceeding the price, reap a differential utility and can therefore satisfy less urgent needs.

Moreover, such divergences can occur even in the case of one and the same person. Somebody may for instance value the goods *A*, *B*, *C* and *D* at 10, 8, 6 and 4 respectively. Hence the degrees of final utility would yield *A*10, *B*8, *C*6 and *D*4. If now the market price is *A*9 and *C*5, that person reaps a differential utility of 2; but if there are also market prices of *B*9 and *D*5, he can redistribute his resources in accordance with the changed circumstances and obtain the same satisfaction as before. If on the other hand the market price of *B* and *D* is equal to the degree of final utility or below it, the person in question can use the differential utility afforded him by the prices of *A* and *C* to satisfy less urgent needs, say *E*, *F*, *G*, *H*, etc.

(7) We can therefore make two principal assumptions:

a) the price exceeds the degree of final utility;

b) the price is lower than the degree of final utility and allows differential utility to be used for the satisfaction of less urgent needs or for helping to pay prices exceeding the degree of final utility, or both.

When the price exceeds final utility, the need remains unsatisfied.

But if the autonomous individual need remains unsatisfied, so does the public need contained therein. Public goods in themselves afford no satisfaction, and we cannot speak of any satisfaction of public needs.

If the need is only partially satisfied, then the degree of final utility of the public goods in the combination, or the valuation of their complementary efficiency, varies in proportion not with the total intensity of the need, but with the satisfaction obtained.

Let us say that a need has an intensity of 20 and that in its full satisfaction the public goods in the combination account for 10; then these latter will have a degree of final utility of 10. Now assume that at a given marker price only 10 degrees of intensity of the need are met, while 10 remain unsatisfied. Clearly the internal ratio of efficiency will be altered and the contribution of public goods to the 10 degrees of satisfaction will no longer be ten, but less. In this case the degree of final utility of public goods no longer has the same relation to the price as had the intensity of the total autonomous need. With 10 degrees of the autonomous need remaining unsatisfied, the proportion of public need included therein falls and the degree of final utility of the public goods is assessed not by their intended efficiency in the case of full satisfaction, but only by their efficiency in the actual satisfaction which has proved possible; and in such a case the degree of final utility of the public goods equals the price.

Prices may leave room for differential utility. This will in the first place be used to make good the excess of other prices over final utility; next, if there is no such excess or if something remains after compensating it, the differential utility will be used for meeting less urgent needs and hence satisfaction will expand. But all the needs met by means of the differential utility are also needs the satisfaction of which is conditional upon the consumption of complementary public goods, since we know that all needs are subject to this condition. Only the extent to which private satisfactions depend upon public goods may vary, but they always do in some measure.

Hence the satisfaction of new needs also entails consumption of public goods and their degree of final utility is not given but is determined by that of the autonomous need. In whatever manner, therefore, resources are distributed at varying prices and in whatever manner satisfaction comes about, there is always a relationship of dependence, and whatever need or needs can be satisfied at any particular set of prices, satisfaction always involves consumption of public goods.

(8) Irrespective of the state of needs and of each individual's resources for the satisfaction of needs, and irrespective of differences in market prices and of their relation to the degree of final utility of the desired goods, the degree of final utility of public goods is always equal to their price. The reason is that either some need is not satisfied at all and then, with the principal need unsatisfied, there is no collective need; or, if there is some satisfaction, then this implies the consumption of a given dose of public goods and hence their degree of final utility equals their price.

This statement is not invalidated by the fact that whenever a price yields differential utility this applies also to the public goods. As we have seen, such differential utility is used for the satisfaction of other needs; but the satisfaction of these also depends upon the use of complementary public goods and it is hence necessary to apply resources to the acquisition of other public goods instead of the former.

(9) Nor is this all. The price and final utility of public goods are equal not only by virtue of the latters' complementary character. This supreme law of the fiscal economy is confirmed by the objective circumstances of the use and consumption of public goods.

Two features are characteristic of the consumption of public goods: indivisibility of their use and the consolidation of needs.

We have earlier had occasion to point out that most of the goods are supplied in an uninterrupted and indivisible manner. The services of law and order, public health etc., are contributory causes to private satisfactions, but although these services are consumed in connection with every satisfaction, the individual quantities of consumption cannot be divided up and measured and their exact share in separate satisfactions is not known. This indivisibility of consumption constitutes a technical reason preventing the establishment of a single market price. In the case of a market price for any good, anyone who cannot pay the price must abstain from consumption. But if public goods had a price exceeding their final utility for some classes of consumers, these latters' inability to pay the price would not debar them from using the goods: to debar them, it would be necessary to withdraw the goods altogether even from the use of those who can pay the price, otherwise those who do not pay would still enjoy the public goods. Hence the price is fixed for each consumer in accordance with the maximum he can pay as determined by the degree of final utility the goods have for him. The indivisibility of public services also explains why, whenever the consumption of some public good can be ascertained from case to case and whenever such consumption has certain determinate and identifiable individual characteristics, the public economy resorts to a device very similar to prices in the private economy, namely fees.

(10) The consolidation of public needs is only a special case of the tendency of all needs to consolidate, as discussed earlier (Chapter II, § 7). We need only add that owing to the special circumstance that public purposes are a condition of the achievement of all other purposes and owing to the resulting specific nature of the process of satisfying public purposes (Chapter III, § 6), collective needs consolidate in a very rapid and intense manner. We have also seen that this leads to consolidation of cost. Convincing proof can be found by looking at a series of annual budgets of any nation: revenue and expenditure will be seen to recur regularly throughout all financial years. The consolidation of cost also explains a fact which to many seems difficult to grasp, namely coercion in collecting private contributions. This is only the external aspect or the legal expression of the consolidation of the cost of production of public goods.

(11) The above formulation of the law of public price formation may, however, give rise to some misunderstanding, which needs to be dispelled. To interpret equality between the degree of final utility and the price of public goods in this manner, may seem to imply that any price arbitrarily fixed for them (and hence any arbitrary tax distribution) would always end up by corresponding to the degree of final utility of public goods. This would be to return to an old and false principle of tax policy which, relying on a natural but unknown force redressing human arbitrariness and errors, assumed that any inequitable and unjust tax would by itself eventually become equitable and just.

But this is just a misunderstanding and a superficial one at that, which disappears at once under closer scrutiny.

The principle we have expounded rests on the assumption that another principle is operative, namely that of maximization of utility which we have discussed in the previous chapter*; the validity of the law depends on the ability of each economic unit to distribute its resources of goods to the effect of maximum utility, in such a manner that after the distribution all the quantities of goods used have the same degree of final utility. It is therefore assumed that arbitrariness and error do not disturb this tendency.

Whatever the price formation of goods on the market, two conditions obtain: 1) At any given set of prices, every economic unit can distribute its resources in such a manner as to obtain, within the limits of the existing prices, the maximum of satisfaction in relation to the scale of intensity of the various needs; 2) Every satisfaction which it is possible to obtain is conditional upon the simultaneous and complementary consumption of public goods.

In the early stages of political development, when every member of the community is a consumption economy, satisfactions come about by each member's diverting to the satisfaction of public needs that part of his resources which corresponds to a distribution according to the tendency towards

* "All the degrees of final utility of the various quantities of goods (to which resources are allocated) must be equal. Only thus can the maximum possible satisfaction be obtained from a given quantity of disposable goods." Chapter VIII, § 4. -Ed.

maximum utility. The question of price and of price divergences with respect to the final utility of public goods arises only with the advent of the exchange economy and when political organization becomes a special case of the division of labour. The acquisition of public services then also becomes an act of exchange, but this does not alter the fact of their being complementary to private satisfactions. In the consumption economy as in the exchange economy the overall allocation of resources is always governed by the tendency towards maximizing utility, and it is the valuation of the complementary utility of public goods which determines the share of private resources which economic units devote to the acquisition of public goods.

It will readily be appreciated that differential utility can arise only from faulty valuation—and in that case total satisfaction of needs will be less than optimal because the result is not the intended one—or when the equilibrium of the scale of utilities is disturbed.

Such disturbance occurs when the agencies to which valuation is entrusted represent the predominating interests of one class or one people. Then some members of the community are obliged to devote to public goods a greater part of their resources than corresponds to the complementary utility which these goods have for them, and hence obtain less satisfaction of needs; others can retain a larger quantity of private goods, when the complementary utility necessary for private satisfactions is obtained at the expense of other economic units.

(12) These, then, are the subjective and objective reasons for the strange fact that within any society there is a public economy where prices are established on different principles from those of the private economy, and why the price of public goods corresponds to the degree of final utility which they have for the consumers, so that each pays for these goods according to his own valuation.

An explanation of this phenomenon has been attempted in the past by reviving an unwarranted economic distinction between goods and services and by assuming a non-existent difference in price formation in the two cases. It has also been said that the phenomenon constituted a special virtue of the system of private property, as a slight compensation for the great inequalities of satisfactions which this system entails. Ultimately any attempt at a solution has been abandoned and the explanation of a patently economic fact was relegated to jurisprudence and philosophy. Now we have an explanation, and the merit belongs to the theory of the complementarity of goods. Without it, the most characteristic feature of the fiscal economy would have remained unexplained or wrongly explained.

(13) One more point needs to be clarified, in order to refute a possible objection against the theory of the price of public goods, as here expounded. As we have shown earlier, attempts have been made to make distinctions

between the relative intensity of individual and collective needs on the basis of an initial subsistence minimum which the individual can achieve by private goods alone and which leaves no room for the allocation of any goods to the satisfaction of collective needs. We have already exposed the error of such a conception; now there remains to see what relation the exemption of a subsistence minimum bears to our theory of public prices.

It might seem that in the case of the subsistence minimum, when there is no room for the allocation of goods to the satisfaction of reflected collective needs, the theory is not applicable.

But we have shown that the subsistence minimum, like every other standard of living, is also conditional upon the consumption of public goods. If now a tax falls on resources indispensable to somebody's life, two cases are possible. Either that person must perish for lack of what he needs in order to live, or, if his economic unit is an exchange economy, he will try to shift the burden of the tax onto others.[8] In the first case there will be no satisfaction either of private or collective needs; in the second case, one part of the indivisible consumption of private and public goods is paid for not by the beneficiary, but by other economic units. In both cases the subsistence minimum is automatically exempted. Legislation to exempt minimum incomes is designed to avoid the painful process of repercussions and hardship by placing some of the burden on the wealthier members of the community.

It will be seen that this is not a law governing the economic process and establishing a relation of sequence between individual and collective needs, but a single case justified by the stated reasons. And indeed, immediately beyond the limit of the absolute minimum indispensable for human life for physiological reasons, we find that resources are again simultaneously employed for both private and public needs, and the law of the formation of prices for public goods, as we have stated it, comes into its own again.

(14) We must, however, note two deviations from this law.

1) Fees, or fixed charges, as we have had occasion to observe, represent a price phenomenon in the public economy resembling private prices. For example, the delivery of mail may have a widely varying final utility for the users, but the price is uniform.

The reasons underlying fees are well known. The fee is a price, and most often a monopoly price, fixed according to the government's purposes in performing the service.

These purposes may vary. A service may benefit only a particular class of users and it may therefore be thought inopportune to perform it free of charge and so to make it correspond to the degree of utility for all members of the community, while only some use it (*e.g.* civil jurisdiction). In other cases the public service may simply be a better way of carrying on certain

[8] If hardship caused any considerable number of people to die or many to emigrate, the remaining members of the community could obtain higher wages and thereby obtain the necessary minimum.

activities and making them more widely accessible, and then public utility resides not in the service itself but in its improved performance. When fees are charged for services deemed to be of general utility to the public, these are so organized that they are not beyond the reach even of the poorest, in spite of a uniform price (deferred payment of legal costs, exemption from school fees, etc.)

2) It may happen that a public good is enjoyed by some economic units whose need for it was not intense enough for them to demand its satisfaction, simply because the good was made available for collective consumption at the instance of other economic units for whom the good had so high a degree of final utility that they demanded and obtained satisfaction of the need. "For instance, urban street lighting is a need of the wealthier classes; they demand it, and for them demand and consumption coincide. The poorer citizens do, it is true, also benefit from street lighting, but they would most probably not have asked for it themselves, since they lack any means in excess of those required for more urgent wants."[9]

But this is not a case of differential utility deriving from a difference between the final utility of a good and its price; it is a case of free utility deriving from the indivisibility of consumption.

(15) Apart from these deviations, the law is valid for the whole of the fiscal economy. The principle of public price formation may be formulated as follows.

In any economy, the tendency towards maximizing utility causes available resources to be so distributed among various uses that the degrees of final utility of all the goods allocated are, after the distribution, equal.

The formation of the prices of public goods comes about in such wise that in any economic unit the degrees of final utility of public goods are, after the distribution of public burdens, equal. This price formation is different from that of the market and it rests on the complementary nature of the utility of public goods and on the objective conditions of their consumption.

(16) The analysis so far was based on the simple assumptions which underlie all pure economic research: the tendency of human behaviour towards maximizing want satisfaction at least cost, and the free and conscious evaluation of this standard of well-being. We assert that the results of our analysis are valid within this set of assumptions and that things do in fact happen in this manner when, in the absence of disturbances, the assumed underlying causes are fully operative. The reasons why the analysis is placed in this context can be appreciated in the light of the few concepts initially expounded and any further explanation is redundant for anyone who has even an elementary notion of what scientific research means.

[9] De Viti De Marco, *Carattere teorico dell'economia finanziaria*, Rome 1888, Chapter III.

But the task of science is not thereby exhausted. It is not enough to deduce from a few premises the general laws which govern a set of processes; we must also enquire whether and how the law derived by abstract methods does in fact operate.[10]

Thus theoretical research consists of two main parts. First, abstraction is made from time and space and the analysis so attempts to discover the constant properties of phenomena, such as can be deduced from the simplest basic assumptions of pure economics. Later all the objective conditions in which the phenomena come to pass have to be studied, and we have to examine how the laws we have discovered operate within the multiple relationships of real life and what causes may modify the effects of the laws. If, then, we consider the fiscal economy throughout all its stages, and note the special aspects of each successive phase in the historical process of consolidation of political co-operation and try to determine them with precision, then we can discover more specific causal relations and can augment our scientific knowledge by new facts of great value both for theory and for the practice of public finance.

This latter part of research exceeds the necessarily restricted limits of this work, but this does not mean that we do not recognize its importance or that we wish to belittle the valuable services which historical investigation can render to any social science and to the science of public finance in particular.

Only co-ordinated research of both kinds can offer a full explanation not only of the general principles of public finance but also of its actual manifestations within the various forms of political organization.

But pure theoretical research must retain its primacy. Apart from the value of the scientifically accurate results so obtained, a theory founded upon the enduring and constant features of human nature also has the inestimable advantage of constituting a safeguard against any all too arbitrary or fanciful interpretation of historical events.

[10] For historical investigations see the recent works by Loria, *La teoria economica della costituzione politica*, Turin 1886, and by Vocke, *Die Abgaben, Auflagen und die Steuer vom Standpunkte der Geschichte und der Sittlichkeit*, Stuttgart 1887.

ON PROGRESSIVE TAXATION

By ARNOLD JACOB COHEN STUART
Translated from Dutch* by Johan C. Te Velde

I. Critique of the Principles upon which Progression is Usually Defended

I have not been able to discover who was the first to proclaim the thesis that because the degree of utility of income decreases when income increases, it follows that equality of sacrifice entails progressive taxation. This can be found now and then mentioned casually, and as if it were tacitly assumed.

It is not always easy to determine what is meant. In Wagner I find the following statement: "The sacrifice theory must acknowledge, as indeed Rau himself does a few lines earlier without being aware of the contradiction, that 'approximately, the larger the share of a person's total wealth a certain sum of money represents, the more value it has for its owner and therefore corresponds to a greater share of the total satisfaction at his disposal.' In other words, an equal amount of taxes and an equal tax rate entail a heavier sacrifice when levied on a smaller income and *vice versa*."[1] In my view Wagner was misled by the word "value" in Rau's statement. Rau does not say that an equal sum of money gives less enjoyment when the income is greater. He does say that if that sum represents a smaller portion of total income it corresponds to a smaller portion of total enjoyment, and hence has less significance for the owner. The words quoted from Rau can be used to disprove the contention that sacrificing equal sums would result in an equal burden of taxation upon everyone. But the right answer to this refutation would be to say: "I admit that a sum of money has greater value for someone when it represents a larger share of his total supply. Well, I shall arrange things so that the sum levied constitutes an equal portion of the total supply of each, that is, I will levy an equal percentage upon each." It cannot be deduced from Rau's words that such an equal share would not correspond to an equal portion of the total enjoyment of goods. Wagner thinks that the above quotation contradicts Rau's immediately subsequent statement that "all persons will be able to give up with equal ease or equal difficulty the same proportion of their total stock of goods." But there is no contradiction. From the words Wagner cited it appears that he regards the thesis according to which the sacrifice of the same percentage would be greater when the income is smaller to be an obvious result of the proposition which says that the degree of utility decreases with income. The former statement, as it were, merely expresses the latter in other words.

* *Bijdrage tot de theorie der progressieve inkomstenbelasting*, The Hague, 1889. The first of the two sections translated here is Part II, pp. 91—115, the second Part IV, pp. 124—133.
The translation is published by courtesy of the University of Chicago.

[1] Adolph Wagner, *Finanzwissenschaft*, Leipzig, 1880, Part II, p. 355.

In Wagner this argument is more or less supplementary. When he treats of the application of the sacrifice theory in more detail, he gives another argument for progression. Lately, the former argument has been placed in the foreground primarily by Dutch authors. In an essay by Professor N. G. Pierson in the *Gids* of October, 1881, one still finds the direct assertion that "to part with a certain portion, say five or ten per cent, of one's income" entails less sacrifice when the income is greater. This is true at least up to a certain point, because "to part with 30 out of an income of 300 is a heavier sacrifice than to part with 3,000 out of an income of 30,000. But anyone who has 50,000 income, can as easily dispense with 5,000 as one whose income is 60,000 can dispense with 6,000." In the second edition of his *Grondbeginselen der Staathuishoudkunde*, which appeared in 1886, we find that Pierson, accepting Jevons' and Menger's view that with growing income each money unit provides less enjoyment, concludes that progression should be continuous, though decreasing.

Treub, whose work dates from 1885, also derives tax progression entirely from the decrease of the degree of utility. He is in no doubt about this: having shown the necessity of this decrease, he simply concludes: "Within the range of numbers 1 and 2" (1 refers to the income entirely necessary for the satisfaction of primary subsistence needs, and 2 refers to the point beyond which, according to him, the degree of utility does not decrease any further) "the degree of utility decreases with a rise of income; as income rises, the decrease of utility becomes gradually less until it ceases altogether at number 2. That is, as income increases, ability to pay increases not only absolutely but relatively; . . ."[2] Like Wagner, Treub thinks that this follows automatically. The premise is regarded as merely being expressed in other words.

Professor Cort van der Linden begins with the statement that it is an "indisputable fact" that "the sacrifice of the same percentage becomes smaller in the degree that income itself becomes larger."[3] It appears from the subsequent passage that he regards this fact as sufficiently explained by the phenomenon that to provide the same quantity of enjoyment each addition to income must be larger. Further on we find the same idea again expressly stated in the words which I have italicized: "Up to the highest incomes it remains true that to double the enjoyment much more is necessary than doubling the income. This alone is what matters, because, *if true, proportional taxation will affect larger incomes less than smaller ones*."[4]

Since then Pierson has begun to doubt the strength of this argument. In introducing the work of Cort van der Linden, he states the argument once more. For the benefit of the reader I quote:

[2] M. W. F. Treub, *Ontwikkeling en verband van de Rijks-, Provinciale- en Gemeente-belastingen in Nederland*, Leiden, 1885, pp. 517/18. Although Treub speaks only of ability to pay and nowhere expressly mentions the principle of equality of sacrifice, he regards the two as identical.

[3] P. W. A. Cort van der Linden, *De theorie der belastingen*, The Hague, 1887, p. 89.

[4] *Ibid.*, p. 100.

"The reason why progression is thought necessary to obtain equality of burden is well known. It is not because an income ten times as large would give more than ten times as much enjoyment. Precisely the contrary is true. The value which we attach to additional income decreases in the degree that the sum to which it is added increases. The general law which governs the value of things applies to income as well. Someone who already has an income of 10,000 does not obtain as much pleasure from an additional 100 as someone who has an income of 500. Since everything can be obtained for money, one never becomes completely satiated with money as one does with other things. But usually one attaches less value to the portion of income which is saved than to the portion which is consumed. And within the latter, less value is placed upon that which is expended for luxuries than upon that which provides the urgent necessities. Since I have previously attempted to elucidate this conception,[5] I hope that here a mere statement of it will be sufficient. I assume I make myself plain when I say that different portions of income can be expressed in terms of percentages according to the enjoyment they provide. Supposing someone has an income of 1,000 per year, which provides him with an enjoyment of 100 per cent. Perhaps he will value an additional income of 1,000 at 95 per cent, a second increment at 90 per cent, and a third at 85 per cent.

This is the basis of progressive taxation. But as I said before, it is not sufficient. An observation must be made which is often mistakenly left out of consideration. Taxes are always paid out of those portions of income to which the owner attaches least subjective value. I admit that this is obvious. But since everything depends on it, it cannot be left unmentioned, even though it is obvious. Going back to our example, the person with an income of 4,000, who is taxed 3 per cent, does not take one fourth of the tax of 120 from the indispensable portion of his income and one fourth each out of the three succeeding portions. He takes the whole 120 from the last 1,000, which he values at 85 per cent. Close attention should be paid to this. If things were different, for instance with another subjective valuation of the various portions of income, or if the source of the tax were another portion, progressive taxation would, in my view, be impossible."[6]

So much for Pierson's demonstration. But he warns us beforehand that the argument does not convince him any more. Earlier in the same article he states:

"It is impossible to obtain equality of sacrifice in any case, even when the tax is not shifted onto anyone else. It certainly cannot be obtained by the levy of an equal percentage. The progressive levy is a means

[5] N. G. Pierson, *Grondbeginselen der Staathuishoudkunde*, 2nd edition, Haarlem, 1886, p. 312.
[6] Pierson, *Gids*, February 1888, pp. 308, 309.

whereby equality of sacrifice may be approached closely. At least, thus far I have been convinced of this. But I must confess that weighty considerations run contrary to this conviction and I venture to present it merely as a tentative result. A complicated mathematical problem is involved in this question. I certainly hope that one of our mathematicians will take it in hand; his conclusions may have great influence upon our views."[7]

The doubt expressed above, though not further elucidated, has received little response. Dr. Bok, a few months after the appearance of this article, accepted Pierson's above-quoted argument because it appeared "decisive" to him. Nor does Cort van der Linden's article in the *Tijdspiegel* of August, 1888, suggest that his confidence in the strength of the afore-mentioned theory is shaken. Hence Pierson regarded it necessary further to elucidate his meaning in the *Economist* of November, 1888 (p. 745 *et seq.*).

Obviously we are dealing here entirely with a mathematical aspect of the problem and mathematics will have to furnish the answer.

I argued earlier that economics must supply the data; it must tell us how enjoyment varies with income. From these data mathematics will have to deduce the relation between the percentage of enjoyment and the percentage of money.

Let us see how to do this.

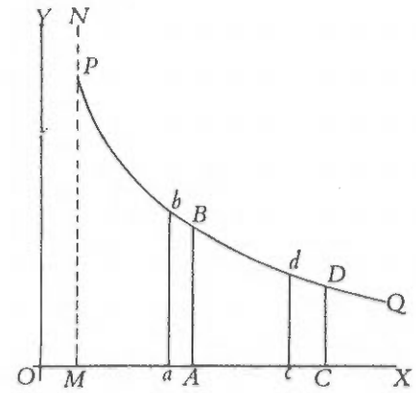


Fig. 1

Let the line *PQ* in figure 1 represent the utility curve as determined by the data furnished by economics. The total sum of enjoyment provided by that part of income *OA* of which we take account, must then be represented by the area *MABP*. The corresponding enjoyment provided by income *OC* is represented by *MCDP*.

Now suppose that a certain amount must be set aside for taxes. As a result the income available for the provision of satisfaction will decrease from

[7] *Ibid.*, pp. 304, 305.

OA to *Oa* and from *OC* to *Oc*, if *aA* and *cC* represent the respective amounts of taxes.[8] The enjoyment sacrificed by the owners of the incomes *OA* and *OC* is equal to the areas *ABba* and *CDdc* respectively.

If the sacrifice of enjoyment for each is to represent an identical proportion of his actual enjoyment, the relation of *aABb* to *MABP* must be the same as that of *cCDd* to *MCDP*.

The question may be asked: if *aA* amounts to 5 per cent of *OA*, what percentage of *OC* must *cC* be for these proportions to be equal? It is evident that the solution may be left entirely to mathematics. Once economics has indicated the slope of the curve *PQ*, no economic reasoning will be able to change the result which can be deduced mathematically. If that result seems strange to economics, the most the latter can do is to revise the data.

Though it is impossible for economics to determine the slope of the utility curve perfectly, the result is just as true if economics merely gives certain indications concerning the slope. Economics may declare, for example, that "the value which we attach to additional income is less in the degree that the sum to which the increment is added is larger." This merely states that the utility curve has a descending slope.

Even without mathematics we can observe the result this feature of the curve will have on the relation between the percentages which must be levied upon various incomes in order to attain equality of sacrifice. However, only mathematics can give us the preciseness characteristic of an exact science.

By employing the mathematical method it will become evident that the apparently so obvious and generally accepted conclusion was incorrect.

It is easy to understand how this conclusion was reached. It seems to me to be based upon the following reasoning. If the degree of utility did not decrease when income rises (if the utility curve were horizontal), the same amount of taxes would mean an equal sacrifice of enjoyment for everyone, and at the same time levying the same percentage on income would amount to a proportional sacrifice of enjoyment for each. However, the value of the same amount of money decreases as income increases. Hence, an equal levy demands a smaller quantity of enjoyment as income increases. The same

[8] Mr Pierson in the above-quoted argument declares that taxes are always paid out of those parts of income which have the least subjective value to the owner. If someone has an income of 4,000 and must pay a tax of 120, he will pay it out of the last 1,000.

This is perfectly true if the utility curve decreases continuously. However, as I have attempted to show earlier, the utility curve can make jumps. It is possible that someone attaches more value to the fourth thousand than to the third. The question may be asked, if this happened to be the case, whether the owner of the income of 4,000 would pay the tax out of the third thousand which he values least? In order to find the enjoyment sacrificed, would one have to place the tax to the left of *C* even though the income is larger than *OC*? The answer is no. Even then the tax must be placed to the left of the last point of income. The utility curve would not be what it is if this were not true. The enjoyment which a person has to forgo when his income shrinks from 4,000 to 3,880 because of the tax, is the same as the enjoyment which he could have provided for himself if his income had increased from 3,880 to 4,000.

Instead of speaking of portions of income out of which taxes are paid, I think it better to say that one will always attempt to arrange things in such a way that the payment of taxes entails the least possible sacrifice of enjoyment in any given circumstances. And this is always represented in the figure by placing the tax to the left of the end of the income curve on the axis *OX*. This is also true when the income is larger than *OC*, as will be realized upon further thought.

percentage entails not proportional, but less than proportional sacrifice of enjoyment when income increases.

The underlying reasoning may be expressed in even simpler terms: the person who has an income of 10,000 has not only ten times as much money as the person with an income of 1,000, but in addition the money out of which taxes are paid has less value for the former than for the latter. It is not sufficient that the former simply pay ten times as much money.

This conclusion would undoubtedly be correct if an income ten times larger than another yielded *total* enjoyment ten times greater, while an equal percentage of both incomes entailed a sacrifice of less than ten times the enjoyment for the recipient of the larger income. To express it more precisely: the conclusion would be correct if the subjective value of the last income increment necessarily decreased faster than the *average* subjective value of the entire income.

Supposing the tax rate is 5 per cent. Upon an income of 1,000 an amount of 50 is levied, and 500 upon an income of 10,000. Supposing the subjective value of the money to be paid in taxes amounts to half as much for the recipient of the largest income as for the recipient of the smallest. The former sacrifices ten times as much money, but merely half of ten, that is five times as much enjoyment. But his total enjoyment cannot be ten times as great as the total enjoyment of the person with an income of 1,000; it must be less than ten times as great. Were it exactly five times as great, the desired proportionality would be obtained by the same percentage, which would cause him to sacrifice exactly five times as much enjoyment as does the recipient of the smaller income. If the total enjoyment deriving from the ten times larger income were more than five times as great, progression would be necessary in order to obtain equality of sacrifice. Were it less than five times as great, degression would be required.

I hope I have made it clear that the conclusion is not as self-evident as is usually thought. However, whether it is self-evident or not, the question is whether it is correct. To return to our graphical representation: is it a necessary consequence of the descending slope of the line *PQ* that, if *Cc* represents the *same* proportion of *OC* as *Aa* of *OA*, the area *cCDd* comprises a *smaller* proportion of *MCDP* than *aABb* does of *MABP*? Hence, must a larger share be taken of *OC* in order to obtain an equal proportion?

I have answered this question by means of an analytical exposition. However, I suspect that for most of my readers this argument will not be convincing.

I shall attempt to give that exposition again in a form which, I hope, will not demand too much exertion from them. I refer to Appendix I* for certain parts of the proof and certain calculations.

* Not included here — Editors.

The question is: Is progression an inevitable consequence of the descending slope of the utility curve? In other words, is it possible that a descending curve might also yield proportionality or degression?

It must be pointed out that those who deduce progression from the descending slope, ascribe additional characteristics to the utility curve. In order to satisfy these authors we must take account of this in our answer. Different writers appear to have different opinions regarding these other characteristics. They all agree that the degree of utility can never become negative, nor equal to zero. However, according to Treub the utility curve must run horizontally beyond a certain point; according to Cort van der Linden it must continue to descend. Some writers, for example Treub and, as it seems, also Pierson, are of the opinion that the enjoyment provided by the first portions of income is infinitely great, and that at the subsistence minimum the utility curve as it were runs into the infinite; others, like Cort van der Linden, do not express this view. In my own view the enjoyment provided by the first portions of income is not infinitely great, but should not and cannot be included at all.

It may be expected that all this is not without bearing upon the solutiou of our problem.

It seems desirable to me to deal with the question in the most general terms.

First of all we ask: must progression result from descending curves in all circumstances, or may some descending curves yield proportionality or degression? After we have answered this question, we can determine what influence the other characteristics ascribed to the utility curve have on our answer.

Let us begin with the problem of how to find all the possible utility curves which require proportional taxation in order to arrive at equality of sacrifice.

In solving this problem we must look for the simplest possible criterion by which to test whether a curve has the characteristic of indicating proportionality.

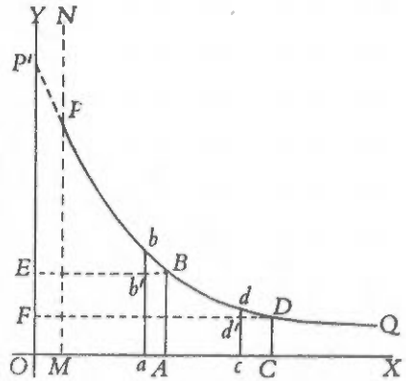


Fig. 2

Let PQ in figure 2 be the utility curve and aA the amount to be levied upon the income OA. Let aA be 5 per cent of OA. The enjoyment sacrificed, the area $aABb$, will amount to approximately 5 per cent of the area of the rectangle $OABE$. This is an approximation because in fact the small rectangle $aABb'$ comprises exactly 5 per cent of $OABE$. However, we shall disregard the difference. Since the total enjoyment $OABP'$ is greater than the rectangle $OABE$, the enjoyment sacrificed will not be 5 per cent of total enjoyment. Supposing the total enjoyment $OABP'$ is $2^1/_2$ times $OABE$, the forgone enjoyment $aABb$ would be 2 per cent of the total. Let Cc amount to 5 per cent of OC and the levied sacrifice $cCDd$ again approximately 5 per cent of the rectangle $OCDF$. If the enjoyment forgone is again to be 2 per cent of rotal enjoyment $OCDP'$, then total enjoyment must again be $2^1/_2$ times the rectangle $OCDF$.

The lines OX and OY are the coordinates or axes. The vertical lines BA or DC, originating from any point on the curve PQ upon the axis OX, are the ordinates of that point. The portions OA or OC thereby cut off from the horizontal line are the abscissae of that point.

It appears that a proportional levy results in proportional sacrifice of enjoyment when for each point of the utility curve the product of abscissa and ordinate comprises the same portion of the total area between the ordinate, the axes, and the curve to the left of the ordinate of the point.

The problem of finding all possible curves which, thought of as utility curves, would indicate proportionality, becomes the following: find all curves which have the characteristic that for each point the product of abscissa and ordinate comprises a proportional share of the area contained between the axes, the ordinate of that point, and the portion of the curve to the left of it.[9]

It appears that there are certain curves of this type.

As everyone can see, the horizontal line IK (figure 3) parallel to the axis OX belongs to this kind. The product of abscissa and ordinate is here equal to the total area mentioned. It can also be seen without the help of higher mathematics that every straight line OL drawn from origin also belongs to this type of curves. Here the product of abscissa and ordinate is double that of the total area. Every parabola OU and OV whose vertex is at O and whose axis is OX or OY, also possesses the characteristic we are looking for. The product of abscissa and ordinate, depending upon whether OX or OY is the axis, amounts to 3/2 or 3 times the total area.

But, and this is of importance to us, there are also descending lines which possess the afore-mentioned characteristic. Let us examine these descending lines more closely to see how they can help us in answering the question of the necessity of progression. They all have the peculiarity that they run

[9] We came to this conclusion by substituting the rectangles $aABb'$ and $cCDd'$ for the areas $aABb$ and $cCDd$, and by neglecting the difference ($b'Bb$ and $d'Dd$). It is shown in Appendix I that the conclusion is nevertheless mathematically correct.

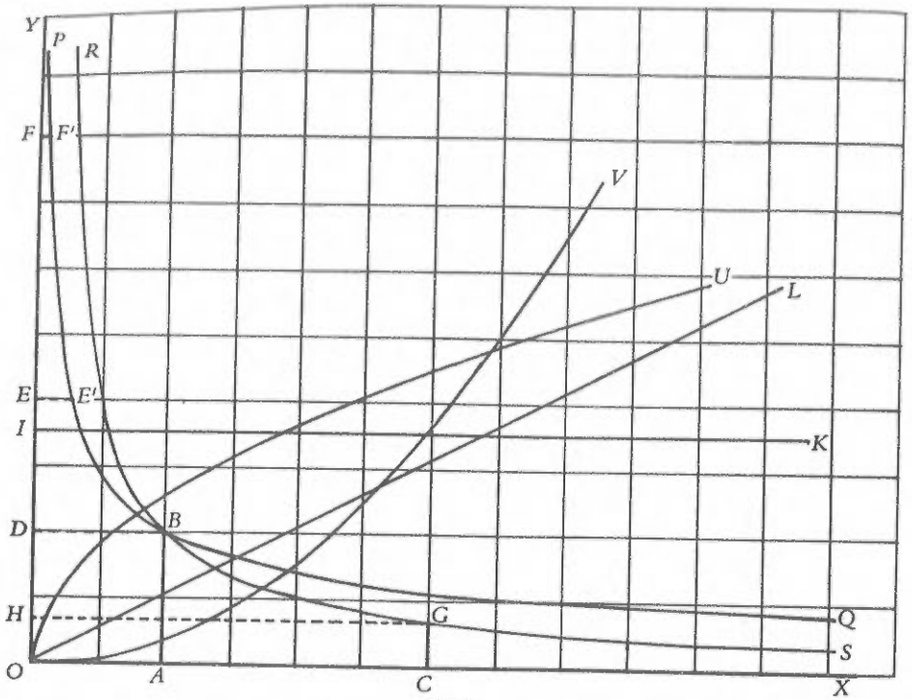


Fig. 3

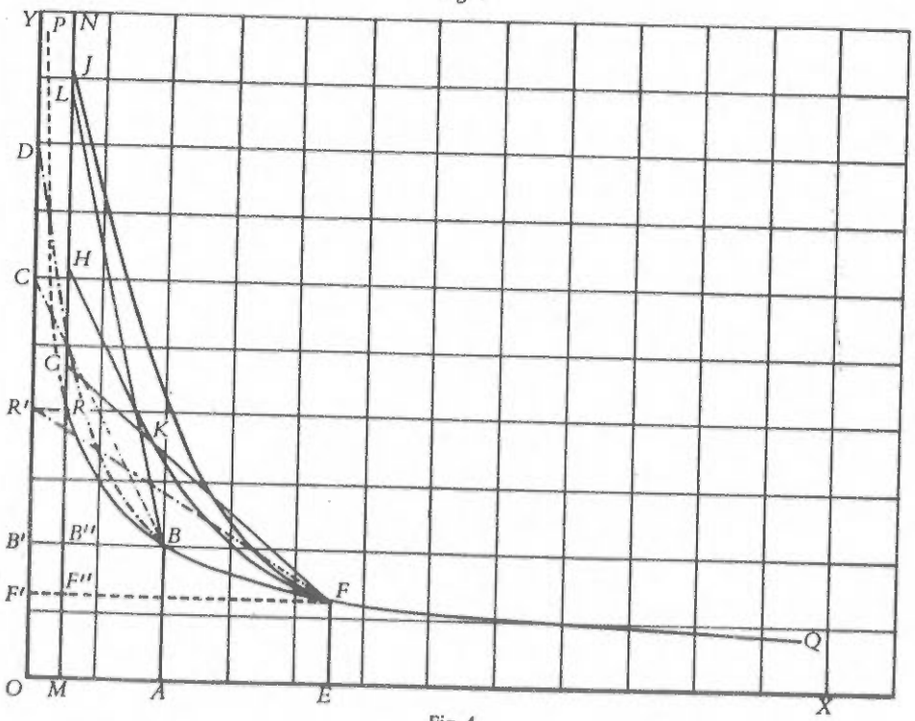


Fig. 4

asymptotically to both axes, that is, they run into infinity on both sides, continually approaching the axes.

It does not follow that the area enclosed by the axis OY, the abscissa and ordinate of a point and the infinite portion of the curve to the left of that ordinate must be infinitely large.[10] For example, for the line PQ in figure 3 the area $OABPY$ is always double the area $OABD$, which is the product of abscissa and ordinate.[11, 12]

It is thus established that there are descending curves which result in proportionality. It seems reasonable to suppose that there are also descending curves resulting in degression, and others in progression.

Indeed, if we draw a proportionality curve which falls more steeply at the beginning, or what is the same, rises more sharply to the left of a certain point, we get beyond this point not proportionality but degression. This may be demonstrated as follows.

Let the line PQ in figure 2 represent a curve yielding proportionality. Now let the curve rise more sharply to the left of point b. The total enjoy-

[10] In analytical geometry a line is determined by its formula, that is, the relation between ordinate and abscissa for all points on the line. In the descending lines mentioned here the ordinate is always inversely proportional to a power of the abscissa, which power is smaller or equal to unity.

On the line PQ in figures 3 and 4 the ordinate is inversely proportional to the square root (power $^1/_2$) of the abscissa. If the abscissa OA is four times as large as OM (figure 4), the ordinate AB must be $1/\sqrt{4}$, that is $^1/_2$ the ordinate RM.

[11] How the area between OY and PQ which continues into infinity still has a finite value can be explained as follows. If we mark off on the axis OY (figure 3) a portion $DE = OD$, then the area $DBE'E$ equals half the area $OABD$. Further, if we mark off a portion $EF = OE$, which is equal to twice OD, then the area $EE'F'F$ again equals half the area $DBE'E$, and thus equals one quarter of $OABD$. Each time we mark off sections on OY, each of which equals the entire section marked off before, we obtain areas equal to half the previous area. And the entire area between the infinite branches of OY and BP, to the left of AB, equals the area $OABD$, multiplied by the sum of the infinite series: $1 + {}^1/_2 + {}^1/_4 + {}^1/_8 + \ldots$. The sum of this series is 2. The sum of the first three members is $1^3/_4$. If we add the fourth member it becomes $1^7/_8$, with the fifth member $1^{15}/_{16}$. Each increment is equal to $^1/_2$ the previous increment. The difference becomes smaller and smaller and the sum approaches closer and closer to 2. But regardless of how far we continue the series it can never exceed 2.

[12] Among all the descending lines yielding proportionality, there is one for which the area becomes infinite. I have indicated such a line, RS, in figure 3.

When this is the case, that is, when the enjoyment provided by the first portions of income is regarded as infinite, the distinction between equal and proportional sacrifice of enjoyment disappears. This is true of every utility curve drawn according to this assumption, if it wants to take that infinite enjoyment into account—as Treub, who draws this kind of curve, apparently does not want to do. With an income OC total enjoyment is equal to that of income OA plus the area $ACGB$. Since the total enjoyment of OA is infinite and that of the increment is finite, the relation of the total enjoyment of OA to that of OC equals unity. Regardless of how large we make OC, the enjoyment provided by it can never become one millionth part greater than the total enjoyment provided by OA, because the millionth part of infinity is also infinite, and regardless of how far we separate C from A the area $ACGB$ always remains a finite quantity. Between total quantities of enjoyment provided by incomes of different size there may be an arithmetical difference; geometrically they are all alike. If we want proportional sacrifice of enjoyment, and the relation between the quantities of enjoyment which two persons sacrifice must be the same as the relation between their total quantities of enjoyment, then this relation must be unity also. In other words, each must forgo an equal quantity of enjoyment.

The course of the line RS is entirely consistent with the result obtained. We can define this curve (a rectangular hyperbola) as one for which the product of abscissa and ordinate always has the same value. The area $OCGH$ is exactly equal to the area $OABD$. By levying an equal percentage upon everyone, we would, if RS were the utility curve, at the same time demand an equal and proportional sacrifice of enjoyment. This result of our exposition is one more proof of the incorrectness of the assumption that the degree of utility of the first portions of income is infinite.

ment for all incomes becomes greater and for all incomes larger than Oa the increase equals the space between the branch $P'b$ and the new branch now more sharply ascending to the left. Let this area be R.

The ratio between the total enjoyment of OC and that of OA has now become smaller. It would have remained the same if relatively more had been added to the greater total enjoyment $OCDP'$ than to the smaller total enjoyment $OABP'$. But the same increase R has been added to both. For example, if $OCDP'$ were $1^1/_2$ times as large as $OABP'$ and the area R equal to $^1/_3$ of the latter, then the relation of the total quantities of enjoyment of OC and OA, when the utility curve rises more sharply to the left, is no longer $1^1/_2 : 1$, but $(1^1/_2 + {}^1/_3) : (1 + {}^1/_3)$, that is, $1^3/_8 : 1$. This must also become the relation between the forgone quantities of enjoyment. When levying an equal percentage cC and aA, respectively, the relation was $1^1/_2 : 1$. Now it must become $1^3/_8 : 1$. If I continue to levy aA upon OA, I must levy *less* than cC upon OC, that is a smaller percentage. This is true of all incomes larger than OA. We must, at least beyond b, levy a continually smaller percentage as the income increases. In other words, there should be continuous degression.

Conversely, we obtain progression if the utility curve descends less sharply at the beginning, or in the further part descends more sharply than one of the proportionality curves.

If the problem is stated in general terms as above, and we ask whether in all circumstances descending curves result in progression, the answer is quite obviously no. There are descending curves which result in proportionality and even in degression.

But the curves found do not possess certain characteristics which some writers ascribe to the utility curve, and for them our answer is not yet complete. First of all, it is not sufficient for those who agree with me that the utility curve for the first portions of income cannot be drawn. Nor is the answer sufficient for those who differ from me in this respect.

The lines found all run, as I said, asymptotically to the axis OY. That is, according to those curves the degree of utility of an income equal to zero would be infinite, even though it would not follow (see above) that the total enjoyment of each income must be infinitely great.

Regardless of how one may look upon the degree of utility of income below the subsistence minimum, yet agrees with the author that an infinitely great degree of utility is in any case unthinkable, that is, *if this curve has a beginning somewhere on the axis OY*, then there must be some progression at the beginning. However, this progression can again be changed into proportionality or degression as soon as it is desired, say at an income of one guilder. In figure 4, let PQ again be the same curve as in figure 3. The total area $OABPY$ is thus equal to twice the rectangle $OABB'$. We now

place upon the axis OY the interval $B'C = 2OB'$ and draw the line BC. Then the area $OABC$ equals twice $OABB'$ and thus also equals $OABPY$. Whether the utility curve is PQ or CBQ is immaterial for all incomes greater than OA. The total enjoyment remains the same and hence also the relation between the total enjoyment derived from different incomes. For all incomes exceeding OA by enough that the tax payment does not reduce the remaining income to less than OA, proportionality is again achieved.

It is evident that for all incomes larger than a certain income OA, at a given course of the utility curve to the right of AB, what matters is not the shape of the curve to the left of B, but the size of the area to the left of the ordinate AB. Every curved line, for example BD, if drawn in such a manner that the area $OABD$ equals $OABPY$, results in proportionality beyond A. If we draw the lines BC or BD in such a way that the area $OABC$ or $OABD$ is larger than $OABPY$ (that is larger than twice $OABB'$), then there is no longer proportionality to the right of A but steady degression.

It is thus possible by beginning with one of the proportionality curves to find lines which, beginning on the axis OY, result in proportionality or degression beyond a certain point. Conversely, it is possible to draw any line from any point on the axis OY and determine at each point on this line how far to the right it would have to run in order to result in proportionality or degression. If the curve is descending, it must always continue to fall more or less sharply to yield proportionality; if at any point a descending curve were to continue horizontally, we would get not proportionality but degression.

Now if we do not take account of the enjoyment provided by the first portions of income, if we deduct a subsistence minimum from each income—how can we proportionately decrease the enjoyment of the remaining income? With regard to the entire income, there must always be some progression, at least at the beginning. The money percentage levied on all incomes below the subsistence minimum is zero and for all incomes exceeding this minimum it is positive; so it must have risen in the meantime.

But it is easy to see that proportionality or degression may again be obtained some way beyond the subsistence minimum.

Let the subsistence minimum be OM in figure 4. If at M we erect the vertical line MN, we need not be concerned with the area between OY and MN. It is immaterial what course the utility curve takes; we do not take account of the enjoyment represented by the area to the left of MN. Let the portion RQ of PQ to the right of MN be the utility curve. $OMRPY$ is the area corresponding to the line whose course we are not taking into account; it equals twice the area $OMRR'$, and the total enjoyment of the income OE is no longer twice $OEFF'$ but twice $OEFF'$ minus twice $OMRR'$. If we draw the line FG in such a manner that the area $MEFG$ equals twice the size of $OEFF'$, then again for all incomes larger than OE the total enjoyment is the same as if PQ were the utility curve and as if no subsistence minimum

had been deducted. Hence, whether the utility curve is *GFQ* or the entire curved line *HFQ* (drawn so that $HFF'' = GFF''$), there is again proportionality beyond point *E*. As said before, the only thing that matters so far as the curve to the left of *E* is concerned, is the size of the area and not the shape of the curve.

If the utility curve rises more sharply to the left of *F*, for example if *JFQ* is the utility curve, so that the area to the left of *EF* is still larger, there is degression to the right of *E*. Were the area *MEFJ* equal to twice the size of *MEFG*, thus four times *OEFF'*, and we wanted to levy 1 per cent of everyone's enjoyment, the money percentage levied upon incomes below *OM* would naturally be zero; for incomes larger than *OM* the tax would gradually climb from 0 to nearly 4 per cent at *OE*, and thereafter it would slowly decrease as far as about 2 per cent on very large incomes.

In this case too it is evident that progression does not necessarily result from the descending slope of the utility curve. It may be argued that some progression appears to be necessary at the beginning. To this the following answer may be given. First, provided the curve falls sharply enough at the beginning, progression may be replaced by proportionality or degression very soon, say at 2 or $1^1/_2$ or $1^1/_4$ times the subsistence minimum, even though the curve continues to descend. Second, progression at the beginning is not the result of the descending slope of the utility curve, since, if we deduct the subsistence minimum, we would get continuous though rather weak progression even if the utility curve were horizontal.

So much for the mathematical demonstration.

I am not saying that the curves which I have taken as examples approach the correct utility curve. It is not my purpose to defend degression or even proportionality. I wanted to point out that these curves satisfy the condition that the enjoyment provided by any sum of money decreases as the income to which it is added increases. Regardless of whether we assume the enjoyment provided by the first portions of income to be infinite or not, of whether or not a subsistence minimum is subtracted, whether the curve is permitted to continue its descent or is changed into a horizontal line, one can always find curves which satisfy the proposed conditions and which still result in proportionality or degression either over their entire length or beyond some arbitrarily selected point. *This is true so long as no conditions are made as to the degree of the descent of the utility curve.*

The law which is invoked to justify progression, the general law of decreasing value of the last increment, tells us nothing concerning the degree of this descent. Progression does not follow from the general law of decreasing utility.

Herewith I could close this part of the discussion. Before leaving this disputed subject I hope I may be allowed to follow in the footsteps of my predecessors and discuss the problem in numerical terms.

In the previously mentioned article in the *Gids* Pierson used some tables to illustrate his theory. He used them not so much to show the necessity of progression, as to illustrate that progression must be decreasing. Even for that purpose the tables were not suitable. But Pierson pointed out that this was due to the incorrect underlying assumption that the values of each additional 1,000 guilders decrease in an arithmetical series. Pierson's argument was further illustrated in a table prepared by Bok, which also showed decreasing progression. That table was based upon the idea that "the different portions of income can be expressed in terms of percentages according to the enjoyment they provide." Bok's table is reproduced below.

A has an income of 1000 which he values at fully 100%											1000
B has 1000 more than A. He values this at 95.0%. Total subjective value											1950
C	„	1000	„	„	B.	„	„	„	„ 91.0%.	„	„ 2860
D	„	1000	„	„	C.	„	„	„	„ 87.5%.	„	„ 3735
E	„	1000	„	„	D.	„	„	„	„ 84.3%.	„	„ 4578
F	„	1000	„	„	E.	„	„	„	„ 81.3%.	„	„ 5391
G	„	1000	„	„	F.	„	„	„	„ 78.4%.	„	„ 6175

Let the tax be 3 per cent of income. Each then pays:

A:	30,	which	he	values	at	100.0%,	that	is	30.00,	or	3.000%	of 1000
B:	60,	„	„	„	„	95.0%,	„	„	57.00,	„	2.923%	„ 1950
C:	90,	„	„	„	„	91.0%,	„	„	81.90,	„	2.863%	„ 2860
D:	120,	„	„	„	„	87.5%,	„	„	105.00,	„	2.811%	„ 3735
E:	150,	„	„	„	„	84.3%,	„	„	126.45,	„	2.762%	„ 4578
F:	180,	„	„	„	„	81.3%,	„	„	146.34,	„	2.714%	„ 5391
G:	210,	„	„	„	„	78.4%,	„	„	164.64,	„	2.666%	„ 6175

The relation of sacrifice of enjoyment to actual enjoyment is 3 per cent for A, 2.92 for B, 2.67 for G. This inequality can be eliminated only by subjecting B and all the following to a progressive tax, which will bring the relation between sacrifice and enjoyment up to 3 per cent for all.

A	will	have	to	pay	3.0000%	on	1000
B	„	„	„	„	3.0798%	„	2000
C	„	„	„	„	3.1468%	„	3000
D	„	„	„	„	3.2128%	„	4000
E	„	„	„	„	3.2765%	„	5000
F	„	„	„	„	3.3389%	„	6000
G	„	„	„	„	3.4008%	„	7000[13]

[13] W. P. J. Bok, *De belastingen in het Nederlandsche Parlement van 1848—1888*, Haarlem, 1888, pp. 177, 178. It seems to me that in the calculation of these figures a mistake has crept in. I do not mention it because it might detract anything from the result, but merely because someone may want to check the figures and may get the impression that he followed the wrong method because he obtained different results. The column of percentages should correctly read as follows:

3.0000%	3.1428%	3.2584%	3.3755%
3.0790%	3.2014%	3.3155%	

So much for Bok's tables. They show progression, and the progression is decreasing. The difference between successive percentages becomes smaller and smaller. As a counter-illustration the table below shows proportionality except between the first and second 1,000.

A has an income of 1000, which he values at 100%											1000
B has 1000 more than A. He values this at 95.00%. Total subjective value											1950
C	,,	1000	,,	,,	B.	,,	,,	,,	,, 93.80%.	,,	,,	,, 2888
D	,,	1000	,,	,,	C.	,,	,,	,,	,, 93.00%.	,,	,,	,, 3818
E	,,	1000	,,	,,	D.	,,	,,	,,	,, 92.41%.	,,	,,	,, 4742

Let the tax be 3 per cent of income. Each then pays:

A:	30,	which	he	values	at	100.00%,	that is	30.00,	or	3.000%	of	1000
B:	60,	,,	,,	,,	,,	95.00%,	,,	,, 57.00,	,,	2.923%	,,	1950
C:	90,	,,	,,	,,	,,	93.80%,	,,	,, 84.42,	,,	2.923%	,,	2888
D:	120,	,,	,,	,,	,,	93.00%,	,,	,, 111.60,	,,	2.923%	,,	3818
E:	150,	,,	,,	,,	,,	92.41%,	,,	,, 138.61[5],	,,	2.923%	,,	4742

If the relation between sacrifice and enjoyment is to be 3 per cent for all, A must pay 3 per cent of his income and all the others 3.079 per cent.

The following table shows degression except between the first and second thousand.

A has an income of 1000, which he values at 100%											1000
B has 1000 more than A. He values this at 80.0%. Total subjective value											1800
C	,,	1000	,,	,,	B.	,,	,,	,,	,, 77.0%.	,,	,,	,, 2570
D	,,	1000	,,	,,	C.	,,	,,	,,	,, 76.4%.	,,	,,	,, 3334
E	,,	1000	,,	,,	D.	,,	,,	,,	,, 75.6%.	,,	,,	,, 4090
F	,,	1000	,,	,,	E.	,,	,,	,,	,, 75.0%.	,,	,,	,, 4840

Let the tax again be 3 per cent. Each then pays:

A:	30,	which	he	values	at	100.0%,	that is	30.00,	or	3.000%	of	1000
B:	60,	,,	,,	,,	,,	80.0%,	,,	,, 48.00,	,,	2.667%	,,	1800
C:	90,	,,	,,	,,	,,	77.0%,	,,	,, 69.30,	,,	2.696%	,,	2570
D:	120,	,,	,,	,,	,,	76.4%,	,,	,, 91.68,	,,	2.750%	,,	3334
E:	150,	,,	,,	,,	,,	75.6%,	,,	,, 113.40,	,,	2.772%	,,	4090
F:	180,	,,	,,	,,	,,	75.0%,	,,	,, 135.00,	,,	2.790%	,,	4840

In order to get a uniform relation of 3 per cent between sacrifice and enjoyment for all, the tax rates would have to be as follows:

A	would	have	to	pay	3.000%
B	,,	,,	,,	,,	3.375%
C	,,	,,	,,	,,	3.338%
D	,,	,,	,,	,,	3.273%
E	,,	,,	,,	,,	3.247%
F	,,	,,	,,	,,	3.226%

If we leave out A, equal sacrifice is obtained by levying a smaller percentage as incomes become larger.

The objection may be made that according to these tables progression will always be necessary between the first and the second 1,000. This, however, is easy to explain by an obvious inaccuracy in the assumption upon which all these tables are built. If the entire income of 1,000 is valued on the average at 100 per cent, then, according to the law which is illustrated by these tables, the first guilders of this thousand must necessarily be valued at more, the last at less than 100 per cent. It cannot be assumed that the subjective value of the last increment between zero and 1,000, and between 1,000 and 2,000, etc., would remain constant.

Were we to take account of this, it would not be difficult to design tables showing continuous progression or degression. I shall limit myself to an example of the latter. Apart from assuming an average subjective value for each 1,000 of income, I also assume an average subjective value for the money paid out in taxes. The figures are so chosen that the average degree of utility of each 1,000 must lie between the degree of utility of the last units of the previous income and that of the last of the 1,000 under consideration. For example, the last of the first thousand are valued at 50 per cent, the average degree of utility of the second thousand is 45 per cent, the last units of the second thousand are valued at 40 per cent, etc. The standard is 100 per cent, which is assumed to be the average degree of utility of the first thousand (which means that the first units of this thousand must be valued at more than 100 per cent).

The table is as follows:

A has an income of 1000, which on the average he values at 100%											1000
B has 1000 more than A, valued on average at 45%. Total subjective value											1450
C	,,	1000	,,	,,	B,	,,	,,	,,	,, 37%.	,,	,,	,, 1820
D	,,	1000	,,	,,	C,	,,	,,	,,	,, 33%.	,,	,,	,, 2150
E	,,	1000	,,	,,	D,	,,	,,	,,	,, 31%.	,,	,,	,, 2460
F	,,	1000	,,	,,	E,	,,	,,	,,	,, 29%.	,,	,,	,, 2750

Let the tax again be 3 per cent on income. Each then pays:

A:	30,	which	he	values	at	50.0%,	that is	15.00,	or	1.500%	of	1000
B:	60,	,,	,,	,,	,,	40.0%,	,,	,, 24.00,	,,	1.655%	,,	1450
C:	90,	,,	,,	,,	,,	35.0%,	,,	,, 31.50,	,,	1.733%	,,	1820
D:	120,	,,	,,	,,	,,	32.0%,	,,	,, 38.40,	,,	1.786%	,,	2150
E:	150,	,,	,,	,,	,,	30.0%,	,,	,, 45.00,	,,	1.829%	,,	2460
F:	180,	,,	,,	,,	,,	28.5%,	,,	,, 51.30,	,,	1.865%	,,	2750

In order to make the relation between sacrifice and enjoyment of all equal to that applying to A, that is to 1.5 per cent, the percentages must be as follows:

A	must	pay	3.000%	of	1000
B	,,	,,	2.719%	,,	2000
C	,,	,,	2.600%	,,	3000
D	,,	,,	2.520%	,,	4000
E	,,	,,	2.460%	,,	5000
F	,,	,,	2.412%	,,	6000[14]

Now this is substantial and continuous degression. I want to ask whether the assumptions concerning the decreasing degree of utility in my tables are more improbable than those, for example, of Mr. Bok? Is there something *contra rationem* in these tables, at least *prima facie*, other than perhaps the result itself? I said on the face of it, because if the results (proportionality and degression) are wrong, there must also be a mistake in the assumptions upon which these tables are based.

I make no more claims for my tables than I made for my curves; I am not saying that they correctly represent the decrease of the degree of utility. Nor did Pierson and Bok make such a claim for their tables, which serve more to illustrate than to prove their point. But their tables do convey the impression of proving the necessity of progression, even though they do not aim at giving its exact scale. Therefore I have attempted to construct other tables, in order to show quite plainly and tangibly that progression is not a necessary consequence of the decrease of the degree of utility with rising income.[15]

[14] In the calculation of these figures it is assumed for the sake of simplicity that the degree of utility of the last 60, 90 and 120 units, etc., remains constant. For example, if F pays 2.412 per cent instead of 3 per cent, that is 144.72 guilders instead of 180, the value of the money taken from him will not be 28.5 per cent any more, but somewhat less. In order to equalize the sacrifice he would have to pay somewhat more than 144.72 guilders or 2.412 per cent of his income. But the difference is very small and does not change the result, which is degression.

[15] Mr. Minderhoud of Sneek has an article entitled "Bijdrage tot de kennis der inkomstenbelasting" in a recent number of *Vragen van den Dag* (Vol. 4, No. 5). In this article progression is not only calculated on the basis of a supposition, but at the same time, the author thinks he has given proof of the necessity of progression.

His assumption concerning the course of the utility curve comes down to the following. If one visualizes income as divided into equal portions or units, there is a constant relation between the values of any two successive portions. This means that income increases arithmetically and the degree of utility decreases geometrically. The formula of his utility curve has the form $y = r^x$, where r is a constant smaller than unity.

It appears highly improbable to me that the degree of utility descends in this fashion. Supposing the last unit of 3,000 has half the subjective value of the last unit of 1,000. This certainly will not be regarded as an exaggerated representation of the decrease of utility. According to the representation of Mr. Minderhoud the last unit of 5,000 has half the value of the last of 3,000, and the last of 7,000 half the value of the last of 5,000, which amounts to $^1/_4$ of the value of the last unit of 3,000 and $^1/_8$ the value of that of 1,000. Now it is most unlikely that the degree of utility of an income of 21,000 only amounts to $^1/_{1024}$ of that of an income of 1,000. But the full unreasonableness of this supposition becomes evident when one realizes that according to this idea the same decrease takes place with every 20,000. The degree of utility of an income of 40,000 is not more than $^1/_{1024}$ of that of 20,000, and likewise the degree of utility of an income of 220,000 is merely $^1/_{1024}$ of that of an income of 200,000, and not even one millionth part of that of 180,000!

If Mr. Minderhoud reads my Appendix I, he will readily realize that with regard to his proof for the necessity of progression, the mistake in his reasoning lies in the apparently so correct conclusion he draws on p. 327. Whether there is progression between two values of x does not depend so much upon the magnitude of the decrease of the degree of utility y, as upon the *law* according to which the decrease takes place.

I shall now give an explanation of figures 3 and 4 for the benefit of the reader.

Figure 3 indicates certain mathematical lines which, when thought of as utility curves, yield proportionality.

Figure 4 shows their application to the different conditions which the utility curve is expected to satisfy. All authors agree that it must descend. This is the chief condition. Hence, figure 4 includes only descending curves.

PQ is a descending curve which yields proportionality for all incomes. It runs asymptotically to both axes.

CBQ, *DBQ*, *R'FQ* are lines which originate in the axis *OY*. For small incomes they yield progression, but for incomes exceeding *OA* proportionality.

LBQ, *GFQ*, *HFQ* are lines which, after deduction of a subsistence minimum *OM* (when a horizontal utility curve would yield continuous progression), yield progression for small incomes and proportionality for incomes exceeding *OA* (or *OE*).

JFQ is a line which, also after subtracting the subsistence minimum *OM*, indicates progression for small incomes and degression for incomes larger than *OE*.

II. The Calculation of a Scale of Progression*

In the previous chapter it has been called to the attention of the reader that if the utility curve were known, it would be simply a mathematical problem to determine the scale of progression. It could be solved with certainty.

I wrote that unfortunately economics is not in any better position to furnish us with the correct slope of the utility curve than to give us the correct percentage scale necessary in order to obtain equality of sacrifice. But while economics can teach us nothing regarding the scale of percentages, with regard to the utility curve it can tell us at least that this curve must slope downwards.

We have seen, however, that this characteristic of the utility curve, about which there is general agreement, is of little help.

We have seen that it does not follow from the decrease of the degree of utility that progression is necessary to obtain equality of sacrifice. There are descending curves which result in proportionality, even at the lowest incomes, while other curves yield degression and yet others progression.

Hence, no judgement concerning the necessity of progression can be formed on the basis of the data furnished by economics. With these data mathematics can provide only a negative solution; nothing can be deduced regarding the question of progression or non-progression. Knowing these data, we know no more than before. In so far as progression appeared necessary, at least in the beginning, it was the result of other requirements,

* Cohen Stuart, *loc. cit.*, pp. 124—133.

namely, that in my view a subsistence minimum ought to be deducted from each income.

To make the application of mathematical methods fruitful, we would have to provide different data. We would have to know *how* the degree of utility decreases when income increases. But, I repeat, it is not possible to make anything more than guesses about that.

It can be demonstrated that since the needs of man, including those which can be satisfied by money, are unlimited, the *final utility* of income, unlike that of other goods, can never become zero, however large income might be. But just as with other goods, no law has been found for money to indicate how the degree of utility of the last increment decreases. One or two horses may have great subjective value for someone, a third less, and a fourth still less, etc. This decrease may be extremely irregular. It is possible that someone values the first two horses at 100 per cent, the third horse at 99, the fourth at 98, the fifth perhaps at 30, four additional ones at between 5 and 0, while a tenth horse would have no utility for him at all. It may be maintained that the latter could never be true of money. But just as economics cannot determine the relationship of percentages which indicate the subjective value of the first horse and the third, so no law has been found which tells us at what percentage we value the last guilder of 2,000 if we value the last guilder of 1,000 at 100 per cent. You may make a guess at it and answer 90 or 20 or 50 per cent. One may agree with you or not, but one cannot prove you either right or wrong.

The question may now be asked: since what we know about the utility curve is of no help to us, is its consideration of any assistance at all in the question of progression?

I believe it would be wrong to answer this question in the negative without probing it more thoroughly.

It is true that no more can be said for certain about the extent of the decrease of the degree of utility than about the scale of progression. Indeed it may even seem superficially that more can be said about the latter than about the former.

We find that there is a fairly widespread and strong feeling that proportional taxation results in unequal sacrifice. This feeling is sometimes translated into advocacy of sharply progressive rates. While conscious of their inability to determine progression in general, people do justify theoretically their particular scales of progression and feel that their scales approach the truth. They would declare that while they know nothing about the extent of the decrease of the degree of utility, such knowledge is not necessary. They think it is obvious to everyone that progression is necessary in order to obtain equality of sacrifice.

If this conviction were general and, above all, if there were some measure of agreement not only concerning the necessity of some progression but also concerning its limits and scales, we should have a situation which Stuart

Mill calls "the degree of certainty, on which a legislator ought to act." We could then set aside the consideration of the utility curve, about the exact shape of which there certainly is no general agreement.

But we are too far removed from this condition. The proposed scales of progression are for most persons, including the proponents of progression, nothing but expressions of complete arbitrariness.

Even though it may be said that progression is necessary, as has often been done upon incorrect grounds, and even though one may convince the hearer and reader, little is gained thereby in practice so long as the proposed scale of progression cannot be made convincing.

As soon as we leave the well-trodden path of taxation proportional to income, we find ourselves in a wide open space[16] where we can follow any number of paths, ranging from those which deviate very little from the road of proportionality to those which lead to confiscation of all higher portions of income and to equalization of all incomes. The proponents of progression are aware that there is great resistance against any deviation from the solid road of proportional taxation. This is certainly due to the fact that they generally try harder and with more success to lure people away from that road than to give guidance for the choice of another.

In these circumstances it cannot be ruled out *a priori* that some degree of unanimity on the extent of the decrease of the degree of utility can be reached as a first stage, to be followed by greater agreement on the more complicated notion of the tax rates equalizing sacrifice and the scales of progression.

I shall make an attempt to treat the question in this manner. The method which I shall adopt is as follows. I shall begin by making a certain assumption concerning the shape of the utility curve and shall calculate the scale of percentages from this supposed line. Then I shall subject this curve to a critical review and attempt to justify my assumption as best I may. In conclusion I shall discuss what influence a possible mistake in the assumption would have upon the percentage scale, in other words how the percentage scale itself may be wrong.

The assumption on which I propose to develop my sample calculation of progression, rests on the distinction between equal and proportional enjoyment.

Let us assume that the value attached to a certain amount of money, say one guilder, is inversely proportional to the amount to which it is added. Thus the degree of utility, the *final utility* of income, is inversely proportional to the size of income. We assume that the value of one additional guilder is ten times as high for a person who has an income of 1,000 as for one with 10,000, and fifty times as high as for one with 50,000. Or, what comes to the same thing, we assume that for a person who has an income of 1,000, one guilder has as much value as 10 for a person with 10,000 income, and

[16] Mr. Culloch [J. R. McCulloch — Ed.] declares: "You are at sea without rudder or compass."

50 for a person who has an income of 50,000. Our assumption then is *that the same percentage of income provides equal enjoyment for all.*

Of course, I do not for a moment suggest that the utility curve corresponds exactly to this assumption. As indicated above, I shall discuss later whether the curve is likely to deviate much from the assumption and what influence such deviation might have.

According to our assumption, the same percentage provides equal enjoyment. But we want to get at proportional enjoyment, that is more enjoyment as the total income is greater. Hence, we must take away more enjoyment as the income is greater, and thus levy a larger percentage. It is obvious that progression follows from our assumption.

The assumption completely determines the shape of the utility curve beyond the subsistence minimum.

This utility curve is, as it were, the simplest mathematical expression of the decrease of utility accompanying the increase of income.[17] It is one which we have met before as a proportionality curve, a rectangular hyperbola, the line *RS* in figure 3. The reason why the curve now results in progression is that we do not think of the curve as drawn through (to the left), but subtract a subsistence minimum. If drawn through to the left, this curve, like a horizontal one, would result in proportionality; but the elimination of the first section on the left, the subtraction of the enjoyment provided by the first portions of income, has completely different effects in the two cases. With a horizontal line, subtraction of a subsistence minimum would lead to the Benthamite progression. The progression indicated by our hyperbola is nothing like it.

What I have said above should not be interpreted as meaning that according to my assumption the utility curve of all incomes, including those below the subsistence minimum, is a hyperbola of which we simply leave the first section out of account. The intention is to assume that as soon as income exceeds the subsistence minimum, the degree of utility, which then assumes determined values, decreases with an increase of income according to the afore-mentioned law. This decrease may be graphically illustrated by means of a portion of a rectangular hyperbola. But this certainly does not imply that for incomes below the subsistence minimum the utility curve could be represented by the portion of the hyperbola which we do not take into account. On the contrary, the reason why a subsistence minimum is subtracted is precisely that nothing can be said about this first part of the utility curve.

[17] Professor van Pesch tells me that my assumption is the same as that employed by Daniel Bernoulli. The principle which Bernoulli uses as a basis for his consideration of "moral" or "relative value" is that "the relative value of an infinitely small change in someone's income is proportional to the quotient of the absolute amount of this change and his total wealth."

This would be the same as to say that the degree of utility of wealth is inversely proportional to the amount of wealth. Or, degree of utility is nothing else than the quotient of the subjective value of an infinitely small change (of wealth or income) and the absolute amount of this change.

I have not been able to determine whether Bernoulli with his "relative value" refers to the quantity of enjoyment which I called "subjective value" or that which earlier I called "significance". Compare this with the observation made on page 48 on Wagner's reproach to Rau.

The kind of progression resulting from our assumption is a problem which must be solved by mathematics. The utility curve corresponding to our assumption is completely determined; it is a mathematical problem to express the relation between enjoyment percentage, money percentage and income.

I refer to Appendix II for the solution.* Its result is as follows.

Let the money percentage be p, the enjoyment percentage α, the subsistence minimum M, and the income X. Then:

$$p = 100\left[1 - \left(\frac{M}{X}\right)^{\frac{\alpha}{100}}\right]$$

Before we go on to investigate how far our assumption is plausible, let us look a little more closely at the progression we have found.

It is easy to see that the formula discovered results in progression. The larger is the income X, the smaller becomes the fraction $\frac{M}{X}$ and the larger the difference $1 - \left(\frac{M}{X}\right)^{\frac{\alpha}{100}}$; p also becomes larger.

Equally, it is immediately evident from the formula that p can never be 100. Regardless of how large X becomes, the expression $\left(\frac{M}{X}\right)^{\frac{\alpha}{100}}$ retains a positive value, and thus p always equals 100 times a magnitude smaller than unity.

Furthermore, the formula is seen to be quite simple and not difficult to apply. Once we know the subsistence minimum M and have chosen the enjoyment percentage α to be levied equally upon all, then for each value of X the corresponding value of p can be found.[18]

* Not included here. — Ed.

[18] Let the subsistence minimum equal 500. If 2 per cent of the enjoyment is to be taken away, what percentage must be levied upon an income of 3,000? We get the following equation:

$$p = 100\left[1 - \left(\frac{500}{3000}\right)^{\frac{2}{100}}\right]$$

The value of $\left(\frac{500}{3000}\right)^{\frac{2}{100}}$ can be found by means of logarithms.

$$\log.\left(\frac{500}{3000}\right)^{\frac{2}{100}} = \frac{2}{100}\log.\frac{500}{3000} = \frac{2}{100}\log.500 - \frac{2}{100}\log.3000.$$

One then finds: $\frac{2}{100}\log.\ 500 = 0.05398$

less $\frac{2}{100}\log.3000 = 0.06954$

$9.98444 - 10$

thus $\left(\frac{500}{3000}\right)^{\frac{2}{100}} = 0.9652$

Subtracted from 1.0000

Remainder 0.0348

$\times 100$

$p = 3.48$

Hence, upon an income of 3,000 we must levy 3.48 per cent in order to take away 2 per cent of the enjoyment.

Income (Money units)	Exempted Minimum (M) = 250				Exempted Minimum (M) = 500			
	Enjoyment Percentage (α) = 1		Enjoyment Percentage (α) = 2		Enjoyment Percentage (α) = 1		Enjoyment Percentage (α) = 2	
	Tax		Tax		Tax		Tax	
	%	Amount (units)	%	Amount (units)	%	Amount (units)	%	Amount (units)
250	0.00	0.00	0.00	0.00	....	.....	.....	.....
300	0.18	0.54	0.36	1.08	....	.....	.....	.....
400	0.47	1.88	0.94	3.76	....	.....	.....	.....
500	0.69	3.45	1.38	6.90	0.00	0.00	0.00	0.00
600	0.87	5.22	1.74	10.44	0.18	1.08	0.36	2.16
700	1.02	7.14	2.04	14.28	0.34	2.38	0.67	4.69
800	1.16	9.28	2.30	18.40	0.47	3.76	0.94	7.52
1,000	1.38	13.80	2.73	27.30	0.69	6.90	1.38	13.80
1,500	1.78	26.70	3.52	52.80	1.09	16.35	2.17	32.55
2,000	2.06	41.20	4.07	81.40	1.38	27.60	2.73	54.60
2,500	2.28	57.00	4.50	112.50	1.60	40.00	3.17	79.25
3,000	2.45	73.50	4.85	145.50	1.78	53.40	3.52	105.60
4,000	2.74	109.60	5.39	215.60	2.06	82.40	4.07	162.80
5,000	2.95	147.50	5.82	291.00	2.28	114.00	4.50	225.00
7,500	3.34	250.50	6.58	493.50	2.67	200.25	5.27	395.25
10,000	3.62	362.00	7.11	711.00	2.95	295.00	5.82	582.00
12,500	3.84	480.00	7.53	941.25	3.17	396.25	6.24	780.00
15,000	4.01	601.50	7.88	1,179.00	3.34	501.00	6.58	987.00
20,000	4.29	858.00	8.39	1,678.00	3.62	724.00	7.11	1,422.00
30,000	4.68	1,304.00	9.13	2,739.00	4.01	1,203.00	7.86	2,358.00
40,000	4.95	1,980.00	9.65	3,860.00	4.29	1,716.00	8.39	3,356.00
50,000	5.16	2,580.00	10.05	5,025.00	4.50	2,250.00	8.80	4,400.00
100,000	5.82	5,820.00	11.30	11,300.00	5.16	5,160.00	10.05	10,050.00
200,000	6.47	12,940.00	12.51	25,200.00	5.82	11,640.00	11.30	22,600.00
300,000	6.85	20,550.00	13.22	39,660.00	6.20	18,600.00	12.01	36,030.00
500,000	7.32	36,600.00	14.10	70,500.00	6.67	33,350.00	12.90	64,500.00
1,000,000	7.96	79,600.00	15.28	152,800.00	7.32	73,200.00	14.10	141,000.00

As a rule one will not be concerned much about the percentage of enjoyment. The question is rather put in these terms: if I levy a certain percentage upon an income of so many guilders, how much must I levy upon other incomes? This question can be solved if we assign values to X and p in the above equation; we can find the value of α, and by inserting it, find the value of p for each value of X.[19]

[19] Supposing the existence minimum is 250, and that one wants to levy approximately 2 per cent upon an income of 2,200. We obtain the following formula:

$$2 = 100\left[1 - \left(\frac{250}{2200}\right)^{\frac{\alpha}{100}}\right]$$

$$\text{whence } \left(\frac{250}{2200}\right)^{\frac{\alpha}{100}} = 1 - \frac{2}{100} = 0.98$$

$$\text{thus } \frac{\alpha}{100}\log.\frac{250}{2200} = \log.\ 0.98$$

$$\text{or } \alpha = 100\,\frac{\log.\ 0.98}{\log.\ 250 - \log.\ 2200} = 100\,\frac{-\log.\ 0.98}{\log.\ 2200 - \log.\ 250}$$

In order to obtain some idea of the progression obtained by applying our formula, the table may be of service. The subsistence minima are 250 and 500 and the enjoyment percentages are 1 and 2. The percentage to be levied upon the various amounts of income is indicated.

The progression derived from our assumption is what we call *degressive*. It is known what this means. So long as there is progression, the percentages taken from successive incomes differing from each other by equal amounts always rise. If the difference between succeeding percentages is equal, the progression is called *uniform*; it is called *progressive* if this difference becomes larger at higher incomes, and *degressive* if it becomes smaller. If we take from our table incomes each of which is 500 more than the preceding one, we find the following:

Income	500:	Percentage	to	be	levied:	0.69.	Difference
,,	1000:	,,	,,	,,	,,	1.38.	0.69
,,	1500:	,,	,,	,,	,,	1.78.	0.40
,,	2000:	,,	,,	,,	,,	2.06.	0.28
,,	2500:	,,	,,	,,	,,	2.28.	0.22
,,	3000:	,,	,,	,,	,,	2.45.	0.17

It can be seen that the difference becomes smaller each time.

We then find:

$$\log.\ 2200 = 3.34343 \qquad \log.\ 0.98 = 9.99123 - 10$$
$$\log.\ 250 = 2.39794 \qquad -\log.\ 0.98 = 0.00877$$
$$\log.\ 2200 - \log.\ 250 = 0.94449$$

$$\text{Thus } \alpha = 100\,\frac{0.00877}{0.94449}$$

We can again divide by means of logarithms, and find that $\alpha = 0.9285$.

For the sake of simplicity, let $\alpha = 1$ per cent. Then the percentage p to be levied on an income of 2,200 becomes 2.15. For all other incomes the formula will again be

$$p = 100\left[1 - \left(\frac{250}{X}\right)^{\frac{1}{100}}\right]$$

A NEW PRINCIPLE OF JUST TAXATION

By KNUT WICKSELL

Translated from German* by J. M. Buchanan

FOREWORD

I have intentionally given this essay a somewhat challenging title and, from the outset, I have taken up a rather heterodox position in opposition to the traditional doctrines. However, the essay contains not so much a new principle of just taxation, than a method to ensure that such measure of justice as can be attained is in fact achieved in practice.

The principle as such is, in reality, nothing more than the benefit principle, the well-known principle of equality between Value and Countervalue. I attempt, however, to extend the range and applicability of this principle on both sides. On the one hand, following the lead of Sax and his successors, I apply the modern concept of marginal utility and subjective value to public services and to the individuals' contributions for these services. In my opinion, though not according to Sax, the most important objections to the principle of Value and Countervalue are thereby at once removed. On the other hand, and to my knowledge no-one has done this before, I relate the tax principle itself to the form of modern tax administration, specifically the parliamentary approval of taxes. I attempt to describe the conditions in which the Value and Countervalue principle could be used more or less automatically by parliamentary tax bodies in all those situations where the principle is generally applicable.

* "Ein neues Prinzip der gerechten Besteuerung", *Finanztheoretische Untersuchungen*, Jena 1896, pp. iv—vi, 76—87, 101—159.

This translation includes the bulk of the second essay in the volume, together with the relevant portion of the Foreword. Part of Section II of the essay and the Appendix have been omitted. The former consists of a critical review of the works of Sax and Mazzola. The Appendix contains a demonstration that a specific sort of utility function, in addition to certain other assumptions, is required to justify progressive taxation on the basis of ability-to-pay.

The essay is not closely related to the remaining two essays in Wicksell's book. The first of these deals with theoretical problems of tax incidence; the last essay is a critical analysis of the Swedish fiscal system. Certain footnote references to these two essays have been omitted.

The major difficulty of translation was to find a suitable English equivalent for *Leistung und Gegenleistung*. The term "benefit principle" is not sufficiently specific. Words like "service" and "contribution" and their opposites have been deliberately rejected: as the German *Leistung*, they have the double meaning of the doing and the thing done, but they are essentially one-way processes. The state renders a service or makes a return for the taxpayer's contribution, the taxpayer enjoys a state service and makes a requital for it. *Leistung und Gegenleistung* is a reciprocal exchange relationship, a *quid pro quo* (Mill), but the originators of the *quid* and the *quo* are interchangeable. In the context, the notion of strict reciprocity seemed the more important to retain, and with some misgivings Value and Countervalue have therefore been chosen—and always furnished with a capital initial to warn the reader of their special use here.

Another translation point worth noting is the use of executive and legislative branch (or legislature) of government, for what, in English usage as opposed to American, would simply be Government and Parliament. This was done nor only for the sake of American readers, but also because for Wicksell the "executive" is often a constitutional monarch.

Finally, a point of form. Following German practice at the time, Wicksell placed his subsidiary arguments in the body of his text, using small print. Footnotes were used primarily for references to other works. To bring the presentation of this translation more into keeping with English tradition, the small-print subsidiary arguments have here (with one or two exceptions) been placed into footnotes, distinguished by letters from the original, numbered, footnotes.

If this principle were to be accepted, one could in my opinion transform into public activities proper many activities which today are left to private initiative or to public enterprise operating on the fee or pricing principle. This transformation could be effected without opposition and the results would be advantageous to everyone.

At the same time, I do not overlook that there is an area of public activity where the benefit principle is not applicable, and for which the organic conception of the State is more appropriate. In this area there is justification only for a tax distribution based on the *a priori* principle of ability-to-pay and proportionate sacrifice. However, I limit this area of public activity somewhat more than is usually done, since I include only those situations where the community, and thus its members, are obligated to third parties (for example, creditors of the State) and where the amount of expenditure has been predetermined. When such obligations are initially created, however, the right of voluntary consent to taxation should be upheld even more energetically because the State, by its very nature, cannot withdraw from its pledges once they are made.

Finally, I turn briefly to the difficult question of how far the taxing authority should go in meeting the demands not only of political but of social justice. This is the question of the extent to which one should follow the explicit purpose of modifying the existing income distribution, which is taken as given in the context of political justice.

I am ready to admit that some will be inclined to classify much of my discussion as armchair speculation. I accept the charge happily, since it was my purpose above all to construct a complete, comprehensive and internally consistent system. For this reason, I never worried about pursuing my theory to its final conclusion. How much of this—or whether any at all—may be of practical use in the near future, men of affairs may decide. I shall gratefully accept their criticism just as any other objective criticism.

I. THE MAIN PRINCIPLES OF TAXATION IN TRADITIONAL DOCTRINE

When we consider the question of tax justice, we meet with difficulties completely different from those which confront us when we study tax incidence. In the latter, there is little doubt concerning the principles to be applied since they coincide with the basic laws of economic theory. Only the deficiencies of economic theory itself made a practicable and realistic solution of incidence questions difficult or almost impossible. In the case of tax justice, on the other hand, the sole, but all the more formidable, difficulty lies in the discovery of the basic principles. Once these are correctly determined, that is, once the distribution and the amount of taxes are determined, the application depends entirely on the free choice of the government or the representative body—provided, of course, that there exists some fairly reliable knowledge as regards the final incidence of the taxes involved.

The difficulty rests, first, on the ambiguity, the relativity and the changeability of the concept of justice itself. Each attempted solution of our problem will necessarily be coloured more or less by the general social and political philosophy of the writer, by his station in life and by his personal sympathies and antipathies. As has been correctly observed, there can be justice only among equals. Justice from above to below always smacks of condescension or contempt. Justice from below to above has only too often been synonymous with revenge.

Even apart from all this, and even if one is or believes oneself to be completely clear concerning the goals to be attained, it is no simple matter to encompass the infinitely varied and here relevant mutual relations and interrelations between individuals, classes and the State in one single formula which is comprehensive, rigorous and susceptible of application in practice. In these circumstances it is astonishing that the various views on tax justice are not further apart than they actually are.

As is well known, there are essentially two opposing basic principles, of which all others are but personal versions. They are the principle of equality or proportionality between "Value and Countervalue" and the principle of equality or proportionality of sacrifice; in other words, "taxation according to benefit" and "taxation according to ability-to-pay" or to the capacity of each. Of these two principles, the second now prevails, although the most distinguished modern economists have never accepted it as the only justifiable one. Perhaps its ascendancy has been due less to the inherent virtues of the principle itself than to the fact that the explanation of tax law and of the amount of taxation based on the Value and Countervalue principle simply seemed inapplicable to a whole group of important tax problems[a], once one tried to get beyond generalities.

In other spheres, indeed, the sacrifice or ability theory is equally hard to reconcile with established facts. But this did not much worry its defenders. They simply excluded those spheres from tax theory proper, as allegedly appertaining rather to the "private economy" operations of the State. At the same time, they declared the remaining area to be the more important and more in correspondence with the proper functions of the State, and proclaimed that the sacrifice theory itself had its roots in a "higher" conception of the State than does the opposing theory.

None the less, even theorists who favour the sacrifice theory, for example Adolph Wagner, uphold the principle of taxation according to benefit in

[a] There can be no question of genuine equality between Value and Countervalue unless it is possible to determine the costs to the State of an individual's enjoyment of a public service. This is only exceptionally possible. If, however, the subjective value of the public service to the individual is to be the standard for the calculation of his tax, the difficulty arises that normally this value cannot be measured. In many situations it must be considered high beyond measurement, and this evidently precludes both equality and proportionality with the tax.

Moreover, certain public expenditures, such as interest on the national debt, involve no "service" to the taxpayer at all, but are simply the result of previous obligations undertaken by the State; while others, such as expenditures for the care of the poor, are evidently of direct benefit only to certain classes of the people while the costs may have to be shared by the other classes, etc.

practically all cases in which this principle can be applied without difficulty. Thus they include not only those public services which may be financed by levying a charge or a fee, but all other specific public services for which a particular interest on the part of certain individuals or classes is demonstrable. The exclusive domination of the ability-to-pay principle was thus really confined to that sphere in which the requirement of equality or proportionality between Value and Countervalue seemed altogether out of place. This procedure in itself surely appears somewhat peculiar if ability-to-pay is to be regarded as the really dominant fundamental principle for the whole tax system.

In practice, taxes—or at any rate whole tax systems—have so far been based on the most diverse principles, as I shall attempt to show.

Can the preference of modern fiscal theorists for the principle of equality (or proportionality) of sacrifice unreservedly be considered a step in the direction of scientific progress? At least in one, and certainly a very important, respect I venture to assert that the answer is No. With all its clumsiness the theory of Value and Countervalue had at least the virtue of maintaining some sort of contact with the other, the expenditure, side of the public economy. That theory provided something like an upper limit to the concrete amount of taxes by rejecting any public expenditure, along with its companion tax levy, which failed to render each taxpayer a service corresponding to this payment. Justice would thereby have been done at least to the extent that each man received his money's worth.

In this respect the sacrifice theory appears far weaker. It determines, and indeed can determine only the distribution of taxes but has nothing whatever to say on the absolute amount of the total tax bill (and hence of the individual's tax bill). Either this last question must be entirely left out of account, which would certainly be very convenient but in my opinion hardly scientific, or the benefit principle must needs be reintroduced, as best it may, in any attempt at a theoretical determination of the actual amount of the taxes to be raised, or at least of total taxation.

Some writers have recognized this difficulty, but it appears to me that they take it much too lightly. In his review (*Conrad's Jahrbücher*, July 1890) of Mazzola's book *I dati scientifici della finanza pubblica*, J. Kaizl asserts that "the (sole) task of public finance" is "to produce the economic means which are required for the satisfaction of those demands—be they collective or individual—which are to be met out of public means by virtue of the State's *fiat*." The latter itself, or in other words the decisions about the actual magnitude of the tax bill, would thus be completely outside the sphere of public finance.

Robert Meyer speaks in a similar vein. Neither in "practical decisions on tax questions" nor in "the theory of finance" is it possible to discuss "the total amount of the State's needs which depends essentially upon the discharge of the State's administrative functions."[1] Wagner and Schäffle place a some-

[1] *Die Prinzipien der gerechten Besteuerung*, p. 172.

what broader interpretation upon the scope of the theory of public finance, but by and large they too support the above position. For Schäffle, "the paramount principle of the theory of public finance" is "the proportionate satisfaction, over the whole economy, of state needs in comparison with the equally proportionate satisfaction of private needs[2]." I cannot see, however, that he makes any real use of this principle which, although perhaps somewhat unclearly stated, appears to me to be very important. Nor does he indicate any criterion by which the satisfaction or the failure to satisfy this principle may be identified. Wagner quite plainly states that the "guiding principle" for the representative body's scrutiny of the budget is that "every state activity and thus every expenditure is to be rejected which imposes upon the community a sacrifice exceeding the usefulness or value to the community of the corresponding state service".[3]

Now if Wagner's principle is to be accepted as the only grounds upon which a proposed state activity may be rejected, then it seems that logically the positive counterpart of this principle cannot be evaded. This is that the representative body must approve every state service and every public expenditure which imposes upon the community a sacrifice which is smaller than the expected usefulness and hence the value of the service to the community. In other words, the comparison between the economic sacrifice to the community and the estimated utility of the proposed public activity would have to be applied both ways, and would define both positive and negative criteria for the allocation of privately-owned goods to public and private purposes.

Such a principle would almost necessarily lead to communism in the worst sense of the word if the sacrifice theorists' severance of all connections between the distribution of the tax sum and the individual evaluation of the separate state services were to be accepted. Any public expenditure which, under any guise whatever, aimed simply at taking money away from the rich in order to increase the incomes of the poorer classes would, from the point of view of the whole community, yield an excess of utility over sacrifice and would thus qualify for approval. If *A* has an income of 10,000 *mark* and *B* an income of only 1,000, then any "state activity" which, for example, takes 100 *mark* from *A* and only 10 from *B*, and subsequently divides the sum of 110 *mark*, say, equally between *A* and *B*, would cause an excess of sacrifice for *A* and an excess of benefit for *B*. In absolute terms both are 45 *mark*. But the sum of 45 *mark* probably has smaller subjective value for *A* than for *B*, both before and after the transfer. Therefore, the excess sacrifice is bound to be smaller than the excess benefit or utility and consequently the total sacrifice smaller than the total utility—*q.e.d.*

[2] *Die Grundsätze der Steuerpolitik*, p. 17.

[3] *Finanzwissenschaft*, Third edition, Part I, § 34, p. 70. [See p. 6 in this Volume—Ed.] For the sake of simplicity we shall neglect here and in the following discussion Wagner's "relative" criterion for rejection (when it costs more for the state to carry out the activity than for private persons or associations to do so).

However obvious and trivial this objection may appear, I cannot see how it could be refuted.[4] To be sure, this danger does not arise in the actual tax systems of most countries at the present time. On the contrary, exactly the opposite danger is present, which does not make it any better. The politically influential classes, which are almost everywhere the richer classes, will, from psychological necessity, evaluate the utility of public expenditures largely or wholly from their own point of view. However equally the tax burden is subsequently distributed, as long as the distribution is based exclusively on the principle of equal sacrifice, there remains a strong probability that the state expenditure which the upper classes have decided upon will fail to compensate the lower classes adequately for the sacrifice imposed upon them.

Of course, if we accept Wagner's view that the sacrifice theory in its pure form is valid only for those situations where "an interest, an enjoyment, or an advantage to the individual is absent or cannot be measured"[5], then this objection loses most of its force. But how, in such situations, can the total utility of state services be compared at all with the corresponding total sacrifice? If utility is zero for each individual member of the community, the total utility for the community cannot be other than zero. If the utility to the individual cannot be measured, it would seem to be at least as difficult to measure the total utility for the community even approximately, for purposes of comparison with the total sacrifice which, in its turn, is always a definite sum for each given or projected distribution of taxes (even though this sum in turn may not always be easy to ascertain). Such comparisons are nevertheless made, for otherwise the deliberations of the tax-approving assemblies, that "bargaining between the Government and Parliament" (Wagner), about whether or not this or that public expenditure is to be accepted or rejected, would be completely without purpose. This is obviously a theoretical difficulty which must be resolved if there is to be any science of public finance in the true sense of this term. According to Wagner the development of society is pushing the principle of Value and Countervalue more and more into the background while the principle of ability-to-pay has become more generally accepted. Actually, however, taxation in the modern State has come more and more to depend upon the legislative assembly, which is nothing if it be not the representative of the interests of the taxpayers. It would be strange indeed if taxation by interested parties should not result in taxation according to interest.

John Stuart Mill was one of the firm opponents of the principle of equality between Value and Countervalue or, as he himself expressed it, the *quid*

[4] It is perhaps superfluous to note that the text here does not yet touch upon the question of the merits or demerits of the existing distribution of wealth and income, nor upon the implications of this question for the problem of tax justice. And especially I should mention that this is not the place in which to discuss Wagner's well-known idea that taxation should be employed to equalize the income distribution. All these problems cannot be discussed until later, see Section VII.

[5] *Finanzwissenschaft*, Vol. II, second edition, § 179.

pro quo principle. In a somewhat more sarcastic manner than is otherwise his custom, he speaks of "persons, . . . , who are not content with the general principles of justice as a basis to ground a rule of finance upon, but must have something, as they think, more specifically appropriate to the subject"[6]—though it must be said that Mill here assumes the "principles of justice" to be identical with the theory of "equal sacrifice". Mill's strongest argument against taxation according to benefit is the following: "Government must be regarded as so pre-eminently a concern of all, that to determine who are most interested in it is of no real importance."

This can perhaps be accepted for the most elementary activities of the State. It may even be true, as Mill asserts elsewhere, that if the protective services of the State were abolished, the physically and mentally weaker members of the community would suffer most and might even be reduced to slavery by the others. But in practical questions of taxation one never has to decide whether the State as an entity shall cease to function altogether. The discussion is almost always concerned with this or that change in the scope of the State's operations, this or that extension or (much more rarely) contraction of the separate branches of public activity.

It is quite possible that, although the general or some particular activity of the State taken as a whole may create utility far exceeding the corresponding sacrifice, the last unit of this activity creates utility of a magnitude quite comparable to that of the corresponding sacrifice. Indeed this must always be so, for otherwise there would be no real limit to the expansion of the State's activities and the relevant deliberations of the representative assembly would be redundant. But as soon as the utility of the public service considered can even be compared with the amount of the sacrifice, it is no longer permissible to say that it is of "no real importance" whether this utility accrues to different persons in different measure. On the contrary, the question assumes decisive importance for the very initiation of that public service. Suppose, for example, that some new state activity is not of damage to any social class nor even a matter of indifference, yet is overwhelmingly beneficial to one particular group, or at least is more highly valued by that group than by others. With a given pre-determined distribution of taxes this new extension of public service might well fail to receive a majority of votes in the legislative body representing the taxpayers, although with some different distribution of the necessary tax burden even unanimous agreement might have been possible.

It is difficult to acknowledge the universal validity of a tax principle which, when applied to a typical tax-approval situation, might cause a public activity of general usefulness to be rejected with the resultant loss in welfare for the community.

As opposed to Mill's one-sidedness, Adolph Wagner deserves great credit for accepting the principle of taxation according to benefit wherever there

[6] J. S. Mill, *Principles*, Book V, Chapter II, § 2.

is a measurable special interest to individuals or classes of the community. But he limits the field of application too narrowly by including only certain cultural and welfare activities. In my view the benefit principle can and must be applied to all those activities of the State which involve the problem of a rational delimitation of separate state expenditures. By contrast the benefit principle can definitely not be applied to expenditures which are based on something other than the interests of present citizens, for example expenditures which result from obligations undertaken by the State at some earlier date.

It may be true that it is often very difficult for the individual to judge to what extent a proposed expansion of a certain state operation—such as an increase in the numbers or the salaries of some category of public officials—would provide him or those whose interests concern him most closely, with benefits corresponding to the sacrifice of having to pay a given amount of new taxes. But business life is full of equally difficult problems and these must be, and are, resolved in some fashion. This much is certain: If the individual is unable to form an even approximately definite judgement on this point, it is *a fortiori* impossible for anyone, even if he be a statesman of genius, to weigh the whole community's utility and sacrifice against each other. The superior insight of the statesman or the public official relates, after all, only to the technical aspects of the question. He knows what he can accomplish with this or that sum of money which may be placed at his disposal from tax revenues. So far as the economic side of the question is concerned, that is whether the benefits of the proposed activity to the individual citizens would be greater than its cost to them, no-one can judge this better than the individuals themselves or those who represent their interests in the legislature.

The principle of taxation according to benefit, and even equality of Value and Countervalue, is completely appropriate to the marginal case, which at the same time is the most important in practice. At this point the distribution of taxes cannot and need not be influenced by any other notions of justice. No-one can complain if he secures a benefit which he himself considers to be (greater or at least) as great as the price he has to pay. But when individuals or groups find or believe they find that for them the marginal utility of a given public service does not equal the marginal utility of the private goods they have to contribute, then these individuals or groups will, without fail, feel overburdened. It will be no consolation to them to be assured that the utility of public services as a whole far exceeds the total value of the individul sacrifices.

It will readily be seen that the considerations introduced here are closely akin to the modern interpretation of value and marginal utility. It might indeed have been presumed that this interpretation must be of significance for the theory of public finance no less than for economics in the more narrow sense.

Robert Meyer's excellent book *Die Prinzipien der gerechten Besteuerung* (1884) is a case in point. Menger's concepts, even though Meyer introduced them in the first instance only with reference to the private economy, have clearly made an outstanding contribution in helping the author towards a deeper understanding of the problem of tax distribution. Some of the Dutch economists have similarly been influenced by Jevons.

Emil Sax and those—mainly Italian—writers who have followed in his path, more ambitiously applied the idea of marginal utility and value not only to the distribution of taxes but also to their absolute amount. Thereby they transformed, as it were, or meant to transform, the whole problem of tax justice from an ethical problem into a purely economic one.

In his above-mentioned review of Mazzola's book, Kaizl suggests that the Sax approach offers nothing fundamentally new, and he recalls Schäffle's tax norm concerning the "proportionate satisfaction" of state and private needs. However, as we have had occasion to note, Schäffle's formulation has so far remained too vague to be fruitful for science. In my opinion, it will be one of the most important tasks of the theory of public finance to replace that all-too-vague formulation by one that is more precise and meaningful. This task requires searching enquiry into the conceptual content of the norm and into the concrete conditions of its satisfaction. Modern value theory may well prove as helpful in this field as it has already been in the study of the private economy. There, too, Schäffle's correct but vague interpretation of exchange value as "a balance between the cost of production and the amount of subjective use value" was replaced, in the light of modern value theory, by a much more precise formulation of theoretical and practical usefulness.

Kaizl complains that when the theory of public finance proceeds in this direction it becomes too involved in metaphysical (ideological) speculation and neglects concrete reality, the decisive significance of the power of the State and the political structure of society in general. Considering the works mentioned, this objection can perhaps not be refuted out of hand. However, I shall try to show later that this defect is not necessarily inherent in the method of approach suggested.

II. The Economic Theory of Public Economy*

When Mazzola discusses the formation of the price of public goods, it appears that he is none too clear on what he wishes to prove. Kaizl, in his previously noted review, comments appropriately that we are not told whether the central thesis of equality between "the marginal utility of public goods and their price" is to be interpreted as a law of the fiscal economy or as a prescription for fiscal action.

* Editors' note: Of this section, only that part of the critique of Mazzola's work has been retained which is essential to an understanding of Wicksell's doctrine. *Cf.* footnote on p. 72. The passages quoted from Mazzola are on pp. 42, 43 of this volume.

Mazzola, after lengthy discussion, comes to this conclusion: "Irrespective of the state of needs and of each individual's resources for the satisfaction of needs, and irrespective of differences in market prices and of their relation to the degree of final utility of the desired goods, the degree of final utility of public goods is always equal to their price. The reason is that either some" (individual) "need is not satisfied at all and then, with the principal need unsatisfied, there is no collective" (in Mazzola's reasoning, complementary) "need; or, if there is some satisfaction, then this implies the consumption of a given dose of public goods and hence their degree of final utility equals their price."

This is clear enough, but the theory, this alleged "supreme law of the fiscal economy", hardly agrees with experience in all those cases where fee finance is impossible. It is all well and good to say that public goods are not consumed when the individual's resources do not enable him to satisfy some private need, but these goods have to be paid for in some way. The tax collector will hardly be inclined to discuss whether this or that consumption of public goods has actually occurred or not.

Only a few pages later, Mazzola himself wonders whether he has not stated his thesis in too general terms. He warns us that his statement should not be misinterpreted as implying an acceptance of the "old and false principle" which, "relying on a natural but unknown force . . . assumed that any inequitable and unjust tax would by itself eventually become equitable and just." This implication is wrong, Mazzola says, because his thesis assumes the simultaneous application of the further principle of "maximization of utility; the validity of the law depends on the ability of each economic unit to distribute its resources of goods to the effect of maximum utility, in such a manner that after the distribution all the quantities of goods used" (each for its own purpose) "have the same degree of final utility."

"It is therefore assumed," so he continues, "that arbitrariness and error do not disturb this tendency."

Thus, the "law" of the fiscal economy is after all translated into the following postulate of fiscal policy: The imposition of taxes is just and applies without arbitrariness and error when each taxpayer succeeds in distributing his resources in such a manner that his utility is maximized.

However, neither Mazzola himself, nor his critic Kaizl, appear to have noticed that this requirement of tax policy is really meaningless.

If the individual is to spend his money for private and public uses so that his satisfaction is maximized, he will obviously pay nothing whatsoever for public purposes (at least if we disregard fees and similar charges). Whether he pays much or little will affect the scope of public services so slightly, that for all practical purposes he himself will not notice it at all. Of course, if everyone were to do the same, the State would soon cease to function. The utility and the marginal utility of public services (Mazzola's public goods)

for the individual thus depend in the highest degree on how much the others contribute, but hardly at all on how much he himself contributes.

This objection might seem trivial, but I do not see how it can be met if Mazzola's argument is accepted. Whenever this or that type of public service is expanded, the individual will reap a certain utility, be it of a selfish or altruistic kind; and this utility may appropriately be described as the marginal utility of the public service for our individual. Now it is correct that efficiency requires approximate equality between this marginal utility and the price (or tax) paid therefore. Otherwise the individual would desire a restriction or further expansion of the public service and the related expenditure. However, the actual scope of the public service is not determined by the evaluation of the single individual, but by that of *all* (or at least of all voting) members of the group. Equality between the marginal utility of public goods and their price cannot, therefore, be established by the single individual, but must be secured by consultation between him and all other individuals or their delegates. How is such consultation to be arranged so that the goal may be realized? On this point Mazzola does not say a word, but, as I see it, this is precisely the question which ought to be decided. The final result of his investigation, therefore, leaves much to be desired.

Nevertheless, I am convinced that the theoretical construction, of which Mazzola and probably Sax as well were but vaguely aware, contains a kernel of truth, which may be developed so as to become fruitful for both fiscal theory and practice. In order to show this, I must first restate the problem in a form which is less abstract and more in line with current reality.

III. The Inadequacies of the Traditional Methods of the Science of Public Finance under Modern Political Conditions

Let us return to the traditional theory of public finance for a moment. If I may make bold to risk a general observation against men who in so many other respects are above even my praise, I would venture to suggest that, with some very few exceptions, the whole theory still rests on the now outdated political philosophy of absolutism. The theory seems to have retained the assumptions of its infancy, in the seventeenth and eighteenth centuries, when absolute power ruled almost all Europe. It is true that the pure concept of absolute state power was diluted, somewhat timidly and ineffectually, with elements of the constitutional monarchy, dating from 1815 or 1830. But hardly anyone has gone further, not even in countries where monarchy no longer exists, either by virtue of the constitution or *de facto*.

Even the most recent manuals on the science of public finance frequently leave the impression, at least upon me, of some sort of philosophy of enlightened and benevolent despotism, and they seem to represent a running commentary on the famous rule "Everything for the people, nothing by the people"—or, at most, with the faint-hearted addition "perhaps a little by the people."[7]

Imagine how an enlightened and benevolent absolute ruler—one imbued, say, with the sense of equity of our modern educated classes—would organize the expenditures and taxes of his country. He would find himself in possession of certain traditional revenues from demesnes, monopolies, imposts and taxes. He would spend this income on the satisfaction of public wants ranked in the order of their importance so that the people would be assured of receiving the highest attainable total utility. In so doing he could, of course, hardly avoid giving preference to those activities which are of particular importance to him as the head of the State or, even more so, as its representative in the outside world. As regards the distribution of the public burden, he would make every effort—especially when new direct taxes become necessary—to adjust the burden in accordance with the citizens' varying ability to pay and he would try thereby to diminish rather than increase the existing inequalities of wealth.[8] On the other hand, our ruler would probably not worry overmuch about the thorny question whether the activities of the State adequately compensate his subjects for their sacrifice. Still less would he worry whether each separate state service so compensates each class of citizens. These problems might be forced on his attention only in extreme cases of violent dissatisfaction among all or parts of his people. In general the benevolent despot would rest content when he had collected the public income from the separate classes of property owners and bad allocated it to the various public expenditures to the best of his conscience. But since taxes so levied from above are almost bound to seem burdensome to the taxpayer, our ruler would try to avoid the appearance of burdensomeness as best he may. For example, he would give preference to indirect taxation, such as regalia, duties, "state enterprises", etc., over direct taxation; he would use fees and dues rather than tax revenues to cover the costs of those state services which are directly demanded by individuals. If the ruler thereby succeeded in increasing public revenue and expenditure "on the quiet", that is if the imposts, dues and fees were not considered as taxes by the people, he would probably congratulate himself on having combined such prosperous finances with so slight a (visible) tax pressure.

It will perhaps be granted me that contemporary theory still tends to regard such a financial system as the acme of wisdom. In particular, the method

[7] The best proof is that most works on public finance, and especially German ones, give hardly any space to the practically so important question of tax approval. Or let us recall Roscher's diatribes as late as 1886, when he felt moved to "hold up the warning mirror of the outrages of the century of Louis XIV" to those "who, misled by the dust and rust which in time cover all human institutions, attach but scant value to parliamentary approval of taxes." As if the parliamentary systems of most European countries were old enough to be covered in dust and rust! Roscher would have done better to speak of the teething troubles which tend to afflict "all human institutions" at their beginnings, for it is truly the modern law of tax approval, together with the older rights of the estates, which mark the beginning of effective parliamentary government in many countries.

[8] It will be shown later that this argument is not intended as a criticism of Wagner's "social welfare principle" with which, on the contrary, I am in full agreement. (*Cf.* p. 8 *et seq.* in this volume—Ed.)

of dues and fees for direct services to individuals is unreservedly recommended for almost all areas where it can be applied at all, although it can be shown[9] that beyond a certain limit this manner of covering the costs of a public service is economically nearly always relatively disadvantageous. Much the same can be said of the position taken by a number of writers, particularly Germans, on the so-called private business operations of the state (income from land, forests, railways, etc.). Adolph Wagner went so far as to assert that the existence of this sort of state revenue correspondingly reduced the real as well as the apparent tax pressure and that therefore state expenditures may without damage expand somewhat further.[10] This view can at best be true only in very special circumstances.

Concerning the state expenditures which must be financed by (direct or indirect) taxes, the modern science of public finance, as was noted, places almost exclusive weight on the problem of the just distribution of the tax total.

For the most part, however, only direct taxes are discussed. People argue whether the principle of justice requires this or that degree of progression, this or that tax reduction or exemption; they fail to grasp that the whole question simply cannot be answered at all and that any reply must be illusory in the absence of knowledge about the distribution of the remaining indirect taxes among the various social classes.[b] It should be recalled that indirect taxes are often the chief source of revenue; in Sweden they contribute four-fifths or more of the total.

In particular, as Held correctly pointed out[11], the much-discussed question of the merits of a tax-free minimum income is essentially irrelevant, except of course from the half fiscal, half humanitarian point of view of avoiding tax arrears and distraint. With our existing fiscal systems, it is quite impossible to discover any manner of ensuring such a tax-free minimum income, let alone name a country where this is in effect done.

By contrast, the question of determining the absolute magnitude of taxes, that is the appropriate extent of public expenditures in relation to the resources of the private economy, has been largely ignored. Indeed, as we have seen, some writers expressly exclude that question as allegedly not pertaining to the theory of public finance proper.

Even Adolph Wagner, who shuns such extreme views and who does not normally allow any sphere of public activity to escape his scientific scrutiny and appraisal, refers to this subject in a manner which appears more apt

[9] See Section V below.

[10] *Finanzwissenschaft*, Third edition, Part I, § 35, p. 73. (*Cf.* p. 7 in this Volume—Ed.)

[b] In most countries the important investigations of the relative pressure of the tax system on the separate social classes are lamentably deficient. It is true that any precise answer to these questions must remain among the insoluble problems. But we could make instructive, even if approximate, comparisons if only we had statistics on the consumption of taxed goods by the various population groups. In some countries, for example here in Sweden, it would seem that investigations of this sort have been purposely discouraged.

[11] *Einkommensteuer*, p. 104.

to show up the present deficiencies of the relevant public institutions than to point the way towards their desirable development.

In the first part of his *Finanzwissenschaft*, Wagner demands "effective fiscal control", for which, according to him, "the determination of the budget by constitutional processes offers the—at least relatively" (relative to what?)—"best guarantee." "In some respects, the government and Parliament represent the two sides of a business transaction, the government assuming the role of supplier, Parliament that of demander for state services. The judgement of each as regards the value and cost of state services may easily be different." But there exists "a strong probability that some compromise will be reached by bargaining between the government and Parliament. Such compromise would seem to be the best known way of safeguarding the interests of both the state and the people relative to the determination of the state's activity and the expenses thereby required."*

I can see no aptness at all in this comparison with ordinary "business transactions" if it is meant to refer in any way to the ideal operation of a public economy and to be more than just facetious criticism of actual abuses. In an ordinary business transaction both the price and the quantity of the goods to be exchanged are under discussion. Price and quantity are closely interrelated and both determined by bargaining between the contracting parties, who generally represent opposing interests.

In our case the "price" of the goods is pre-determined by the prior assumption that any sums appropriated will be spent in the most efficient and economical way. There remains only the problem of determining the quantity of the goods to be exchanged, that is, the extent of the state services and the amount the taxpayers have to pay therefor. On this the executive and the legislature may well disagree, but the interests of both sides should be the same. There is certainly plenty of occasion for consultation, mutual explanation and persuasion between the executive and the legislature, but it would hardly be appropriate to speak of "bargaining and compromise."

I believe that Wagner has here unwittingly introduced an element which, while doubtless fully corresponding to reality, is not consistent either with his postulate of "effective fiscal control" or with the desired result of his discussion, the proper relationship between government expenditure and government revenue.

In my view Wagner's conception of the relation between the executive and the legislative branch in fiscal matters can be valid only on one of the two following assumptions.

Either (1) the executive and the legislature both consider themselves as organs of the collectivity, but the boundaries of their respective spheres of authority are not yet sharply drawn and especially the right of the legislature to approve or to reject tax proposals is not yet fully established. This is normally the situation in the infancy of constitutional government, as is

* *Cf.* pp. 5-6 in this Volume—Ed.

shown by countless examples from the recent history of Europe. In such circumstances, however, one cannot very well speak of effective fiscal control.[c]

Or (2) the Wagner-type relationship may arise as a result of a much more ordinary cause. Even when the boundaries between the legislature and the executive are clearly defined and there is no thought of over-stepping them, the approval of taxes is in actual fact reached largely through bargaining and compromise. I agree with Wagner on this point. But why is this so? Because neither the executive nor the legislative body, and even less the deciding majority in the latter, are in reality—or from psychological necessity can be—what the ruling theory tells us they should be. They are not pure organs of the community with no thought other than to promote the common weal.

The executive more or less selfishly pursues its own dynastic ends and seeks its own private economic advantage. It tends to be interested mainly or even exclusively in certain state activities such as military affairs, not only because it is inclined to overestimate their importance for the people's welfare, but because its own existence, its proper *raison d'être*, is intimately tied up with this aspect of the State. These two considerations tend to be psychologically closely related.

This danger is perhaps even greater in constitutional than in absolutist states, as Nasse, among others, has observed.[12] If the entire moral responsibility for the prospering of the whole body politic rests on the executive branch of government, there is at least a likelihood that a benevolent monarch, surrounded by competent advisers, will make the welfare of the whole

c Lorenz v. Stein, ever intent on seeking out the higher reason behind existing institutions, has tried to exalt the "conflict between legislative and executive power" even in the sphere of public finance into a necessary element of modern political life. This surely goes too far. Stein holds that the "executive power" cannot possibly merely "implement" legislation but must "give effect" to it, for the obvious reason that "wanting a revenue is not the same as having it and an expenditure is not reduced by refusal to incur it." The first part of this proposition is as incontrovertible as the second is ambiguous and questionable. The ultimate consequence of Stein's principle would be merely that the legislative body has the right to respond to the requests of the governmental authority with Yes but not with No. The "parliamentary practice" which he recommends appears primarily to be that of resignation. Subsequently, Stein proffers the strange information that this position of the "executive power" which he has just declared to be necessary, actually is a feature peculiar to "pure Germanic life" (as distinct from the Roman, including the English). Stein suggests that this may be related to the further peculiarity that in Germany there has so far been (in Stein's own words) "excellent work on the principles and practice of financial administration, but very little understanding of its constitutional aspects." Indeed, for a long time, "nobody has taken the trouble to study either his own constitution or those of other countries." (L. v. Stein, *Finanzwissenschaft*, Fifth edition, Vol. I, pp. 288—357 *passim*).

The facts are simply that the budgetary laws in England and France were largely complete before any major German state had any constitution at all, let alone constitutional laws relating to public finance. It seems to be a general characteristic of all constitutions, especially of those forced upon the powers that be, that there is an initial lack of clarity on precisely the most important points. This is due to the fact that both contracting parties, while anxious at the time not to revive old disputes by undue obstinacy, hope in the future to be able to interpret the ambiguous wording to their own advantage. Besides, it must not be forgotten that even the most limpid constitutional provisions cannot guarantee the exercise of actual power by an executive or legislative body which is not adequately backed by public opinion or which for some reason dare not appeal to public opinion. This was in fact the situation with the Prussian *Landtag* of 1863 and therein no doubt lay the fundamental reason for the much-discussed conflict and its results.

12 See his evidence before the Cobden Club as cited by Leroy-Beaulieu, *Science des Finances*, Fifth edition, Vol. II, p. 182.

community the lodestar of his policy. But when, instead, the executive can shift almost all responsibility onto the legislative branch, there is no such likelihood. The main task of the government will then be to win and hold a parliamentary majority for the executive's own interests. The way to this end indeed leads through bargaining and compromise. But this kind of compromise in no way safeguards "the best interests of the State and of the people"; on the contrary it will almost certainly be at the expense of some third party.

In their turn, the members of the representative body are, in the overwhelming majority of cases, precisely as interested in the general welfare as are their constituents, neither more nor less. Otherwise they simply would never have been elected or would not be elected again. At best and in the most fortunate cases they are representative of a majority within the population and decisions are made by a majority within the legislature itself. It can very easily happen (as John Stuart Mill, among others, has noted) that, even with universal suffrage, legislative decisions do not express the will of the majority of the people. And this certainly happens where the whole legislative and tax approval machinery still lies exclusively in the hands of the propertied classes (as it does in Sweden).

In any event decisions are regularly made against the will of some larger or smaller group of the population. So far as I can see, this almost necessarily means over-burdening these groups with taxes.

If political parties alternate in gaining a majority, there is of course a chance that the losses and gains may cancel each other. This requires, among other things, that the government change with the majority or that it remain completely non-partisan and seek its role purely in the exercise of administrative power. Unless this is so, it is easy for capable but unprincipled politicians to exploit the party constellations of the day for the purpose of swelling public expenditure far beyond the amount corresponding to the collective interest of the people. Then the parties win in turn but in the end they all lose; it is like a game of roulette where the players win and lose in turn but the money finally ends up with the bank.

The science of public finance should always keep these political conditions clearly in mind. Instead of expecting guidance from a doctrine of taxation that is based on the political philosophy of by-gone ages, it should instead endeavour to unlock the mysteries of the spirit of progress and development. The movement that is afoot cannot be stopped, but it might be guided in a direction such that the desired goal is fully attained to the satisfaction of all.

IV. The Principle of (Approximate) Unanimity and Voluntary Consent in Taxation

The movement which has nearly everywhere shaped the political history of this century has been steady progress toward parliamentary and democratic forms of public life. One of the prime movers is modern general education

in the widest sense of the term, since this enables even the lowest classes of the people to participate more and more in political life; another is the tremendous development of the press, whereby everyone has gained unprecedented access to knowledge of public affairs. In addition, there is the spectacular growth of industrial, commercial and scientific relations both within every country and among all countries of the world. These relations are as apt to promote lasting world peace as peace itself is a condition of their very existence. The old hierarchical structure of society, the origin and purpose of which were war and conquest, is becoming more and more obsolete and unnecessary.

The ultimate goal of this progressive movement is equality before the law, greatest possible liberty, and the economic well-being and peaceful co-operation of all people. It is not the purpose of the movement and indeed it would be contradictory to its guiding spirit, to have wholly or partly shaken off the yoke of reactionary and obscurantist oligarchies only to replace it by the scarcely less oppressive tyranny of accidental parliamentary majorities.

It is true that modern parliaments can hardly be reproached with any such tyrannical leanings. The petty regulations, the irksome interference in every aspect of private life have largely disappeared, or else they just linger on as the moribund residues of earlier epochs. Freedom of movement, of occupation, religion, research and of the press will, it may be hoped, remain permanent features of the civilized world.

Ordinary legislation is full of cases with only two mutually exclusive alternatives, no third alternative being practicable or even possible. If it is in the nature of things that a certain social action must either be permitted or forbidden and opinions differ as to which it shall be, then there are clearly only two alternatives: either the minority must yield to the majority or the reverse. The former may normally be regarded as the lesser evil, especially since it is very often only a matter of difference of opinion rather than of a genuine conflict of interests. It is highly probable, therefore, that a new idea, once it has passed the preliminary stage of being recognized by only a few far-sighted men and has become accepted by the majority of the current generation, will eventually permeate the entire population. Indeed this has happened in countless situations. Decision by means of a simple majority must, it seems, be the rule in this area. We do find that even in the most progressive countries decisions on particularly important questions are sometimes subject to special rules such as the requirement of a qualified majority, the veto power of the two chambers of the legislature, the veto of the executive authority etc.; however, these are clearly not designed to safeguard the interests of the minority (which in itself would be absurd in this case) but to meet the general desire for stability in political life.

In the area of tax legislation and tax approval, however, the above-mentioned dilemma hardly ever presents itself. It is singular, although well in accord with the present state of theory, that, to my knowledge, no scholar either in constitutional law or in the theory of public finance has devoted as much as one word to this important distinction.

If any public expenditure is to be approved, whether it be a newly proposed or an already existing one, it must generally be assumed that this expenditure as such, neglecting for the moment the means of covering the costs, is intended for an activity useful to the whole of society and so recognized by all classes without exception. If this were not so, if a greater or lesser part of the community were indifferent or even opposed to the proposed public activity, then I, for one, fail to see how the latter can be considered as satisfying a collective need in the proper sense of the word. If such an activity is to be undertaken at all, it should for the time being be left to private initiative. It would seem to be a blatant injustice if someone should be forced to contribute toward the costs of some activity which does not further his interests or may even be diametrically opposed to them.

In my view, there can only be formal, not substantive exceptions to this rule. I shall discuss these exceptions in Section VII below.

We must assume, then, that the planned state activity as such must be recognized as being of general usefulness. The next step is to weigh the expected utility against the necessary sacrifice. This is a matter on which the views of the different classes of citizens will be conditioned by their varying wealth and income and the consequent varying urgency of their private needs, as well as by their varying subjective evaluation of the particular collective need. For both reasons the proposed distribution of costs is obviously decisive for the citizens' judgement on the relative value of the utility and the cost of the public activity.

Now if a given pre-determined tax distribution is considered as having sole and universal validity and is therefore to be retained in this as in all cases, it may well happen that the proposal fails to secure even the simple majority of votes which under existing rules is normally required for decisions, whereas a majority might easily have been found with some different tax distribution. And it is virtually certain that such decisions will prejudice or neglect the interests of certain groups.

This leads us to a vital point which, to my knowledge, has never received the attention it deserves from tax theorists. It is not necessary either from the theoretical or from the practical point of view that tax distribution should be so rigid and pre-determined, nor indeed that it should be independent of the approval of the expenditure itself. There are hundreds of ways of distributing the costs of a proposed state expenditure among the separate classes of the people. There is the whole range from the simple head tax or the (at least) comparable levies on flour, salt, spirits etc., to the progressive income, property or inheritance tax and the indirect tax on luxury goods. Provided the expenditure in question holds out any prospect at all of creating utility exceeding costs, it will always be theoretically possible, and approximately so in practice, to find a distribution of costs such that all parties regard

the expenditure as beneficial and may therefore approve it unanimously. Should this prove altogether impossible, I would consider such failure as an *a posteriori*, and the sole possible, proof that the state activity under consideration would not provide the community with utility corresponding to the necessary sacrifice and should hence be rejected on rational grounds.

Whether justice demands any more than this may be left in abeyance for the time being. When it comes to benefits which are so hard to express numerically, each person can ultimately speak only for himself. It is a matter of comparatively little importance if perchance some individual secures a somewhat greater gain than another so long as everyone gains and no-one can feel exploited from this very elementary point of view. But if justice requires no more, it certainly requires no less. In the final analysis, unanimity and fully voluntary consent in the making of decisions provide the only certain and palpable guarantee against injustice in tax distribution. The whole discussion on tax justice remains suspended in mid-air so long as these conditions are not satisfied at least approximately.

There can be no doubt that, from the point of view of general solidarity or charity, parties and social classes should on occasion share an expense from which they except no great or direct benefit, or should contribute beyond the measure of their own advantage. Give and take is a firm foundation of lasting friendship and even if one cannot count on the taking, there are few men who are completely indifferent to the welfare of their fellows.

It is quite a different matter, however, to be forced so to contribute. Coercion is always an evil in itself and its exercise, in my opinion, can be justified only in cases of clear necessity. It can hardly be said to be clear necessity if someone who has already made an advantageous exchange would of course prefer an even better bargain; and interests which can secure no hearing at all are nearly always free to turn to private initiative and voluntary association.

Indeed, this latter course has been adopted on a large scale even in spheres which are normally regarded as properly belonging to the competence of the State. Side by side with the national army, many countries have voluntary rifle clubs and similar institutions which sometimes constitute no mean military force; or quite considerable means of warfare are sometimes raised privately and placed at the disposal of the State. Alongside the state organization for churches and schools, we find religious groups which, from their own means, support their clergy and churches and we find private schools and institutions of higher learning. Even the judicial activities of the State are accompanied by private boards of syndics, arbitration tribunals, investigating commissions and such like.

In short, as soon as a general problem enjoys a sufficiently wide interest, the means and the methods of its solution will not be lacking—least of all in our time.

If the distribution of taxes always rested on the principle of voluntary consent, it seems to me highly probable that many such activities which today can be undertaken only by private groups, would come to be incorporated into the operation of the State. The bitter opposition which now confronts the introduction of many very useful state institutions would largely disappear as soon as each individual could be certain that he would never be burdened with a larger share of their cost than he personally or his interest group had accepted through their representative in the legislature.[13]

The practical realization of the principle of voluntary consent and unanimity, as I should like to call it, requires first of all that no public expenditures ever be voted upon without simultaneous determination of the means of covering their cost. It is irrelevant whether the means are to come from the proceeds of new taxes or from anticipated increases in the revenue from existing taxes. This procedure used to be the rule in constitutional states, but in modern budgetary systems it has fallen more and more into disuse. This is primarily due to the fact that increasing population and income levels have caused the yields of indirect taxes, such as customs and excises, to increase so rapidly that the necessary means were normally already available when a new expenditure came to be approved. At any rate this was often the case in Sweden. The decision concerning the acceptance or rejection of an expenditure was regularly tied to the decision concerning the raising of funds only for expenditures which were in the first instance to be financed from loans rather than from taxes. This sort of joint decision is of little value, however, unless the manner of servicing the debt is voted upon at the same time.

In many cases parliaments have perforce accepted the logical connection between the approval of expenditures on the one side and the way in which the costs are to be financed on the other. When important financial innovations are proposed, it has become customary to draw up a general plan of financing for the immediate future (a plan for the successive introduction of new taxes). Or else expenditures of doubtful popularity are made more palatable by more or less solemn promises on the part of both the government and the legislature that the costs are to be met by taxes falling more particularly on the shoulders of certain tax groups, for example the well-to-do classes, etc.

Unfortunately such plans and promises are not constitutionally binding. The plan of financing need not necessarily be carried out later and the promises may be respected only until public opinion has shifted to other subjects, whereupon the old methods may be reintroduced without being noticed.[14]

[13] It is implicitly assumed here that the legislative assembly is truly representative of all interest groups within the people. We shall presently discuss the conditions for this goal to be fully attained. Existing legislative bodies are mostly far removed from this ideal. But this does not invalidate our conclusions. On the contrary, the veto right of the minority clearly is the more necessary the less the so-called representative body reflects the true interest groupings of the population.

[14] The reader can perhaps find examples of this practice in any country with which he is familiar; in Sweden there is no lack of them.

Things would be entirely different if the decision concerning the allocation of the costs in question were to be made a necessary condition for the approval of any public expenditure. It could hardly be maintained that insurmountable practical difficulties stand in the way of implementing such a rule or another clearly embodying the relevant principle.

Suppose now that this principle were combined with the requirement of approximate unanimity of decisions—absolute unanimity may have to be ruled out for practical reasons. When the government or a faction of the legislature proposes a new public activity or the extension of an existing one, the motion would constitutionally have to be accompanied by one or several alternative proposals for the distribution of the costs. The other factions of the legislature might then propose amendments concerning both the magnitude of the expenditure itself and the manner in which the costs are to be covered.

Some of the proposals may be capable of being combined, others remain mutually exclusive. All of them are put to the vote on something like the following pattern:

	Tax Plan	
Main bill A	a	Vote
	b	Vote
	$c + d$[15]	Vote
	e	Vote
	f	Vote
Amendment A'	a	Vote
	e	Vote
	g	Vote
Amendment A''	b	Vote
	h	Vote
	$i + k$[15]	Vote
.....		

If any of the alternatives presented for balloting secures the required qualified majority, say three-fourths, five-sixths or even nine-tenths of the votes cast, then this combination becomes law (for example, the main bill A with tax plan e, or amendment A'' with taxes i and k). If several alternatives secure the required qualified majority, some way must be found to choose amongst them (the simplest being to go by the relative number of votes). If none of the alternatives secures the required majority the whole proposal would be considered defeated for the time being.[d]

[15] Obviously several tax proposals can be presented together, for example an increase in the tax on spirits and in that on beer and wine, or an increase in income tax along with an increase in inheritance tax.

[d] The technical procedure could probably be modified in many ways. In any case a much more flexible manner of voting would be required than is in general use today. A "division" in the British house is said to need no less than three-quarters of an hour for counting the Ayes and Noes of no more than six hundred members. With the aid of modern electrical devices which, if I am not mistaken, the practical Americans have already put into use, perhaps two or three seconds would be enough for this procedure.

As we have noted on more than one occasion, the above reasoning rests on the assumption that the legislature is completely free to accept or reject the public expenditure item under consideration. When the expenditure is a necessary result of a previously existing obligation and cannot, therefore, be refused, an entirely different procedure is in order. One cannot speak of taxation according to benefit when the expenditure is not made for the sake of the utility it is expected to yield to the country but rather to meet a recognized obligation. The expenditure must always be approved and if this has to be done by vote at all a simple majority is the obvious procedure. While it is highly desirable that the majority be inspired by motives of justice and equity in the distribution of this particular burden, it is difficult to make any generally valid observations of detail on this distribution.

It is hard to say out of hand what public expenditures belong to this category. In the first place interest and amortization payments on the public debt come to mind. In so far as the state considers it as its main task to uphold contractual agreements and to protect legal rights, the property of the holders of government bonds and treasury bills must be as sacred as any other lawful claim. The question whether or not and to what extent the state or other self-governing bodies should meet their obligations can seriously arise only in situations when direct interference with existing property rights seems indispensable.[e]

There is usually an element of legal or moral obligation in most other state (or other public) expenditures as well. This sort of obligation appears to me, however, to be generally much less imperative and much more transitory than is often claimed. If, for example, an existing state activity becomes obsolete and had best be suspended, the redundant officials may undoubtedly claim appropriate compensation, but nothing more. The idealistic "obligations" of a state to its "mission", to the future, etc., can be left out of account. If such tasks fail to rally the whole nation, their chances of fulfilment are always poor. And those classes of the people who have such state activities most at heart, should back their faith with deeds in the field of taxation as well, lest doubts be cast on the disinterestedness of their aspirations.

I think, therefore, that except for a small number of public expenditures (which should be precisely listed in the constitution) the principle of approximate unanimity of tax approval can be applied generally—and must be so

[e] Interest and principal of the debt are to be considered as items on the liability side of the state's balance sheet and it seems that the most appropriate way of providing for them would be to earmark the interests the state may receive from its assets. If this were insufficient, there would be a clear case for taxation based on ability-to-pay or on equality or proportionality of sacrifice. The benefit principle might be applied only in so far as the state activity for which the debt was originally contracted may have been of demonstrable special benefit to certain classes, districts, etc.

All the more unequivocally should the benefit principle be upheld in decisions concerning the alternatives of financing a planned state expenditure by loans or immediate taxes. A loan has to be serviced in the future and special safeguards for the protection of the non-propertied classes are all the more necessary as the propertied classes almost invariably derive economic gains from any debts the State incurs. This point will be discussed later.

applied if tax justice is to be found anywhere else than on paper, in the books on finance theory.

The problem is comparatively simple when new expenditures are to be approved and to be financed by new taxes.

The mechanics become more difficult when a reduction of expenditures and revenues is involved, because in modern budgets the individual expenditure and revenue items do not correspond to each other. Hence it is not pre-established what revenue (tax) shall be abrogated with the cessation of a certain expenditure, and *vice versa*. The following appears to me as the simplest solution. The first step would be a provisional classification of budgetary revenue and expenditure, each single expenditure or category of expenditures being assigned to a definite revenue category. The relevant decisions would obviously have to be by simple majority. Once this is done, a specified fraction of the legislature (say one-tenth, one-sixth or one-fourth of the total members) may be entitled henceforth to demand removal or reduction of any tax group (including taxes proper, surcharges or personal services rendered to the State) and thereby also the abolition or reduction of the state activity to which the tax revenues had been assigned. Due notice would obviously have to be given and the required period of notice laid down in the constitution. It would then be up to the other members of the legislature to choose whether they wish to satisfy the recalcitrant party by some different distribution of the tax in question or whether they prefer to agree to the proposed abolition or reduction of the state activity.

What has been said above applies also to simple tax reform, that is, to the substitution of one kind of tax for another. If such a reform is backed by a majority of the size indicated above, then the proposal will naturally be adopted without further ado. But tax reform should not be allowed to be carried by simple majority, because the interests of the minority might be severely prejudiced. If there is a group, whether it be a minority or the majority itself, which feels especially burdened by any tax, this group may try to achieve a better tax distribution by giving notice of refusal with respect to this tax and the corresponding pre-classified state service (not just any state service in the group's arbitrary choice—this would clearly be absurd). In so doing, the group of course risks the danger that the service will really be abolished and the satisfaction of the collective need has to be transferred to private initiative.

Special provisions would have to be made for taxes which are bracketed with expenditures of unchangeable amount, for example interest on the public debt. Since the expenditure cannot be stricken, a minority's refusal to pay the tax is *a fortiori* unthinkable. Nor should the initially specified or subsequently agreed manner of covering such interest payments be altered against the will of the minority. Any tax changes proposed in this connection would have to be subject to a qualified majority decision.

However strange the arrangements here proposed may appear, I do not hesitate to assert that they constitute the only way in which the two-fold problem of justice in tax distribution and the correct magnitude of the amount of taxes can be solved in a definitive manner. The suggested arrangements provide no ideal solution for the problem of tax distribution—but neither do they stand in the way of such a solution. Within the limits of the minority's tax refusal right there would, in general, be ample room for variants of tax distribution and any one of these could be chosen for reasons of equity, simplicity etc., provided it secured approximately unanimous approval by the taxpayers or their representatives. In the last resort, such approval—and it alone—constitutes a palpable and plain but reliable guarantee that the desired goal will really be achieved. As much cannot be said of all the various tax doctrines.

In terms of practical political considerations it may be pointed out that the arrangements here proposed are equally suitable for protecting the interests of the politically defenceless classes at the upper and the lower end of the scale. As things are at the moment, there is hardly a country in the world where, notwithstanding universal and equal suffrage, the lower ranks of the population can secure parliamentary representation in proportion to their numbers—not to speak of countries like Sweden, where the working classes occasionally find an eloquent champion in Parliament but do not, and under the constitution cannot, have any direct representatives of their interests. In these circumstances, the arrangements which we have suggested would mostly serve to protect the mass of the poorer classes against excessive tax burdens and therefore in fact to defend the majority against the minority.

But the tables can be turned. If once the lower classes are definitely in possession of the power to legislate and tax, there will certainly be a danger that they may behave no more unselfishly than those classes which have so far been in power. In other words, there will be a danger that the poorer classes in power may impose the bulk of all taxes upon the rich and may at the same time be so reckless and extravagant in approving public expenditures to which they themselves contribute but little that the nation's mobile capital may soon be squandered fruitlessly. This may well break the lever of progress. This danger should not be dismissed lightly nor belittled, especially not by those who feel, as I do, that the advance of democracy is so rightful an end and so much a part of progress itself that they do their best to further this advance in spite of all misgivings. There can be no doubt that the best and indeed the only certain guarantee against such abuses of power lies in the principle of unanimity and voluntary consent in the approval of taxes.

This is precisely the reason why those who yield but with bad grace and evil forebodings to the ever more insistent claims for democracy, should make every effort now to establish this principle in existing tax legislation. It is scarcely to be expected that the new ruling classes will freely impose

such self-restraint upon themselves if they do not already find it embodied in the constitution. Nor should it be taken for granted that there will be much time for reflection. The day is close when the balance of political power will be overturned. Let the eye rove East or West, North or South, everywhere the centre of gravity of political power is inexorably moving downwards. It is a matter of not being overtaken by events which can neither be prevented nor long delayed.

If the ideas presented here should come to be accepted, they would give a strong impulse to a reform which outstanding thinkers have advocated for half a century, but which so far has hardly progressed beyond the discussion stage. I have in mind the so-called system of proportional representation. Those who are familiar with John Stuart Mill's writings and especially with *Representative Government*, need not be reminded how much importance this sagacious mind attached to an apparently so insignificant change in election procedures and how healthy he thought it would be for various spheres of public life. However, so long as all matters in the competence of Parliament are decided by simple parliamentary majority, a few members more or less are a matter of scant importance for any party which is too small and powerless to hope that it will ever be in a position to command majority decisions. Mill's chief object was to ensure a parliamentary hearing for every opinion which could rally some thousands of adherents in the population. The point is well taken. But today political discussion is so largely conducted outside the halls of Parliament, that the advantage would be a somewhat relative one.

Things would be entirely different if, in tax legislation, the minorities possessed the right to veto any public expenditure the utility of which they did not expect to correspond to the outlay required of them. This is the only way of giving full effect to the rightful claim that everyone should be represented in Parliament only by persons for whom he has voted because he shares their views, and not by persons whose opinion on important questions may be diametrically opposed to his own and against whom he has cast his vote on election day.[f]

There can be no legitimate doubt any more that this last question can be solved in a satisfactory manner. Suffice it to point out that the system

[f] As is well known, Mill (*On Representative Government*, Chapter VII) endorsed the plan of an Englishman, Thomas Hare, which in theory appears both simple and ingenious. Since then quite a body of literature on proportional representation has appeared in many languages. I am not familiar with much of it, nor am I an expert on parliamentary procedure, and so I feel it is beyond my powers to decide which of the many proposed solutions of the problem deserves most support. To my knowledge, the method most widely favoured so far is that proposed by Professor Dr. jur. V. D'Hondt, a Belgian. Recently a Swedish mathematician, Dr. Phragmén, Professor at the Stockholm *Hochschule*, has worked out a new and apparently very ingenious proposal which attempts to eliminate a few remaining weak points of the D'Hondt solution. The proposal has been published in *Schriften der schwedischen Akademie der Wissenschaften* and, in popular form (and in Swedish), as a pamphlet.

which is today so widely advocated is quite in accord with the principle of approximate unanimity in tax approval. Both approaches are rooted in the common ground of respect of personal liberty and its greatest possible ascendancy.

V. Some Consequences of the Principle: Fees Versus Taxes as Financing Devices

The first and most important consequence of the adoption of the system here proposed would be that taxes would cease to seem a burden. Instead they would come to be regarded as what they really should be, namely as means to procure to the community as a whole and to each of its classes particular benefits which could not be obtained in other ways. Each member of society would be happy in the knowledge that the goods which taxation withdraws from his private use are destined solely for purposes which he recognizes to be useful and in which he cas a genuine interest, be it for purely selfish or for altruistic motives. Surely this would do more than anything else to awaken and maintain the spirit of good citizenship.

There would no longer be occasion for the many devious devices by which the true magnitude and significance of the tax load have in the past been concealed from the people. The fiscal principle would have to yield to the economic principle; the direct method of raising state revenues should become the rule and the indirect method the exception. This is not to suggest that there should no longer be any indirect taxes at all. Seeing that the poorer classes' sources of income are highly precarious and apt to dry up, we cannot but agree with Robert Meyer's convincing argument[16] that it is in the clear interest of these classes to have the tax levy vary with their wage income and thus with their consumption. This can best be done by a tax on comparatively non-essential personal consumption goods, such as spirits or tobacco. Taxes of this kind have the great advantage over most other indirect taxes that their amount does not increase with the number of children in the family. Rather the reverse: in Sweden, for example, the important spirits tax (levied on manufacture and retail sale) without doubt primarily hits the unmarried worker for whom there should be less hardship in having to give up an additional share of his income. I venture also to state with confidence that a tax of this nature would not be contrary to the wishes of the workers. It must be understood, of course, that even a tax on non-essentials always remains a tax and that it may not be imposed twice over, on top of people's full share of taxes, under the excuse, say, of promoting temperance. By contrast to such a tax on non-essentials, the workers will always be likely to oppose taxation of basic foods, and in my view with good reason.

Special consideration should be given to those public expenditures which today are still normally financed on the basis of the so-called fee principle.

[16] *Die Prinzipien der gerechten Besteuerung*, § 34.

When fees are used the principle of taxation according to benefit, of equality between Value and Countervalue, comes into full play since no-one, at least in so far as he is free to use or not to use the public service under consideration, is obliged to pay more for the services performed by the State than he feels they are worth to him. This is not true of the tax proper according to the usual theory and practice. Thus fees and direct charges have increasingly come to be considered justified means of covering the costs of all those state activities which procure to the individual a separately identifiable utility as distinct from that enjoyed by the other citizens. As was previously pointed out, this idea implicitly involves the acknowledgement that the principle of Value and Countervalue is justified in all cases in which it can be applied.

If this principle were re-instated (save for certain strictly defined exceptions) in the manner I have proposed, then there would no longer be such a dividing line between the alleged business method and the fiscal method of financing state expenditure, between the fee and the tax principle. Contrary to what may be thought at first sight, the fee principle will then be seen to deserve not more, but less application than is now customary.

Up till now the question of limiting the applicability of the fee principle has been discussed almost entirely from the point of view that a general, national or social utility often accompanies the divisible private utility provided by the public service. Adolph Wagner is very definite on this point. He says: "For determining the height of the fee . . . the main consideration must be that the State always undertakes the activity more or less also in the general public interest. Therefore the individual who derives utility from such an activity need not be charged its full cost; others (the whole society) also have an interest in these individual utilities and share them indirectly, as it were, in terms of 'social cohesion'. The more this happens, the lower the fee may be set, and *vice versa*."[17]

This argument of Wagner's is, of course, fully acceptable, but it is concerned with only one of the two grounds on which a restriction of the fee principle may be defended. If the community or at any rate a sizeable part of it has an interest in a particular utility accruing to an individual, then it would clearly be unreasonable to allow the creation of that more general utility to depend solely upon that individual: he might not value the state activity highly enough to make the sacrifice of paying the required fee or charge, or else ignorance may cause him or poverty force him to do without the service. Herein lies the chief justification of the modern demands for free or very cheap process of law, elementary education, medical care, certain public health measures etc.

But even apart from considerations of this kind, there is another very cogent reason why it is often better to cover the costs of public activities

[17] *Finanzwissenschaft*, Third edition, Vol. I, § 208, p. 498. The passage refers to fees in the proper sense, but in line with Wagner's general views, it would equally well fit the tariffs, say, of transport services etc.

in some way other than by levying fees or direct charges. This reason is of a purely economic sort and is closely connected with my discussion elsewhere of monopoly prices[18]. It is a distinguishing feature of most public enterprises that the so-called general costs of operation, meaning thereby not only the fixed costs which are paid once and for all, but also those of an annually recurring nature, usually require enormous sums. By contrast, what we may call the current operating costs in the narrow sense of the word or "unit costs"*, that is the additional costs for each unit of service, are normally insignificant or hardly distinguishable. The maintenance costs of a road, a port or a canal are largely due to weather damage and have relatively little to do with the amount of traffic. The cost of the original investment, although it is usually based on a forecast of the degree of utilization, obviously remains unchanged whether this degree of utilization is widely exceeded or never reached.

Similarly, in railway, postal and telegraph administration etc., an annual increase or decrease of some millions of passengers, ton-miles of freight, letters, telegrams etc. has relatively little effect on annual costs and of course still less on the amount of fixed and working capital and on the interest payable thereon. If such enterprises were to be run on the fee principle and total production costs, or at least current general operating costs, have to be spread over a relatively small number of service units, the unit price would normally have to be much higher than the marginal cost (that is, the additional cost occasioned by an additional unit of service). Such a pricing policy would allow the public service to satisfy the demands of only those persons who rate its subjective value higher or at least as high as the fee which is charged. The entire range of demand which is less intensive than this objective level must remain unsatisfied.

This drawback could of course easily be remedied if a reduction in the price (fee) could be counted upon to cause the members of the community to make proportionately or more than proportionately greater use of the state activity. This will rarely be the case, however, for it means in effect that the previous prices had either been wrong from the outset or had not been adjusted to changing conditions.

There is yet another method of trying to achieve a fuller private and social utilization of the public activity. This method is often employed in practice, not only by state enterprises but also by enterprises run by private associations or by individual capitalists.

Assume that the total costs of the enterprise are covered at a certain price. If now that price is maintained for the customers already using the service, and at the same time the introduction of a special price reduction for certain new groups of users may lead to an increase in utilization, such a step would

[18] See "Zur Lehre von der Steuerincidenz", *Finanztheoretische Untersuchungen*, p. 19.

* Translator's Note: Throughout the following, *Einheitskosten* will not be literally translated as unit costs, but as marginal costs, which expression fully renders Wicksell's meaning.

obviously be to the advantage of the public. It would also be to the advantage of the management so long as the lower price always exceeds marginal cost and thus the increase in total cost occasioned by the extension of service.

As Sax and others have emphasized,[19] this is the true purpose of differential tariff schedules (in so far as they are not due to cost differences) in public transport undertakings as well as in many other state or private enterprises.[g]

There are a number of obvious reasons why differential pricing has only limited applicability. However, a similar purpose may be achieved by yet another method, which appears far superior in theory and also warrants more attention in practice than it has so far received. It will obviously be completely immaterial to the consumers (at least in a rational economy) whether they pay piece-meal for the service in question through a price on its use or whether they pay for it wholly or partly over longer periods through monthly, quarterly or yearly contributions. Under the second scheme, the price could at once be reduced to the level of marginal costs, or when these are zero or lower than the costs of collection, the service could be provided free of charge. This procedure would nearly always lead to a considerable, and often enormous, increase in use and hence in the total utility of the public service, to the advantage not only of the national economy as a whole but also of the economic condition of each individual.

This method is, however, normally precluded for a private enterprise unless the consumers of its services are also its entrepreneurs, as in a consumers' co-operative. The State and other collective enterprises are already constituted as associations or unions and taxation enables them to collect such contributions. This, incidentally, provides an important and hitherto unduly neglected argument for the assumption by the State of the great transport undertakings or other similar enterprises.

Let us try to illustrate the matter by a numerical example. Assume that an enterprise, for example a new public square, street, highway, bridge or other similar project, initially occasions only general costs such as interest on the debt incurred for the purchase of the land, interest on fixed capital, outlays for lighting, cleaning and repair (the latter being considered as independent of the frequency of use). These general costs amount to an annual total of 100,000 *mark*. Assume further that experience has shown annual utilization to rise as follows at various possible charges:

[19] *Grundlegung der theoretischen Staatswissenschaft*, p. 461. See also his essay on the organization of transport and communication in *Schönberg's Handbuch*, Third edition, I, p. 571.

[g] A simple but instructive example is the pricing of theatre seats. Marginal costs hardly count at all and total receipts need cover only general costs. Seats will therefore be priced according to their desirability which, however, cannot be measured by any objective standard. Evaluations from the point of view of only the rich or only the poor theatre patrons would diverge widely. A mean must be found somewhere in between and this is what in fact happens. As the tickets are finally priced, the poor consider the better seats too costly and the rich the cheaper seats not good enough. Precisely for this reason all the seats are occupied—provided of course that the (subjective) value of the performance exceeds their actual price.

At a price of 10 *pfennig*	1,000,000 units
At a price of 8 *pfennig*	1,200,000 units
At a price of 6 *pfennig*	1,500,000 units
At a price of 4 *pfennig*	2,100,000 units
At a price of 2 *pfennig*	4,000,000 units
And finally, if the service is provided free of charge...	10,000,000 units

Total costs could be recovered only with a price of 10 *pfennig* per unit and each successive price reduction would occasion a growing deficit which would have to be financed out of general revenues (taxes). And yet it is clear that in spite of necessitating a certain tax increase, each price reduction would mean an economic gain for the community as well as for each single individual. The approximate magnitude of this gain can easily be expressed in terms of money. When the service is provided free (which would, in this example, be the most beneficial arrangement), the ten million units annually consumed would include

1,000,000	units which would have been taken up at a price of 10 *pfennig:* consequently their subjective value amounts to (probably significantly more but at least)	100,000 *mark*
200,000	units which would have been added at a price of 8 *pf.*, the subjective unit value amounts to (probably more but at least) 8 *pf.*, therefore all together	16,000 *mark*
300,000	units of a unit value of (at least) 6 *pf.* or a total of	18,000 *mark*
600,000	units of a unit value of (at least) 4 *pf.* or a total of	24,000 *mark*
1,900,000	units of a unit value of (at least) 2 *pf.* or a total of	38,000 *mark*
	and finally	
6,000,000	units for which the average subjective value may perhaps be ½ *pf.* or a total of	30,000 *mark*
	The sum total is	226,000 *mark*

With the possible exception of the last entry the separate components of this total are obviously smaller than their real values and (apart from the possibility that the last entry may be too high) the sum too is likely to be smaller than it is in reality. This total of 226,000 *mark* is still confronted by the original expenditure of 100,000 *mark* which cannot now be financed through prices but must be financed through taxation. There remains, however, a surplus utility of at least 126,000 *mark* which could not have been secured under the previous arrangements.

It is of course extremely difficult, indeed impossible, to adjust the tax payments in such a manner that they will be precisely proportionate to each individual's use of the public service, let alone to the subjective utility which thereby accrues or would accrue to him. But the additional utility is so large that even with considerable inequity in the distribution of the tax each individual can still reap a greater or smaller surplus. If, for example, a given individual's consumption of the service increased with every successive price reduction in the same proportion as was assumed above for the whole population, even a tax levy twice as high as his former payments and as the amount corresponding to strict proportionality would still leave him with a sizeable surplus as compared with the system of fees. Of course the gains to the individual would be still greater if he happened to be liable for a tax smaller than required by strict proportionality, part of his share of the tax being paid, as it were, by other individuals such as those mentioned first. This is no reason why these individuals should forgo such advantage as they too can secure.

Now let us look at a situation in which marginal cost is not completely negligible—as is usually the case with railways, postal and telegraph services etc. Obviously, charges cannot here economically be reduced to the point of providing the services free.[h]

On the contrary, utility is here maximized when the price exactly equals marginal cost. Or, to put it more generally, since these costs are not always easy to ascertain nor always constant, tending to decrease with increased utilization: *The price should be reduced to the point at which the additional use at the new price generates additional income which exactly matches the additional costs occasioned by that additional use—neither more nor less.*

This rule can easily be expressed mathematically. If the marginal cost is constant and amounts to k, the appropriate charge p is simply

$$p = k$$

If the marginal cost is not constant the total annual cost of the enterprise (general and variable costs together) must be expressed as a function of annual utilization x. The function $f(x)$ would be regarded as given by experience. A small increment in utilization, dx, will cause a corresponding increment in total cost, $df(x) = f'(x)dx$ and this increment in costs must be exactly covered by additional revenue. Therefore $f'(x)dx = pdx$, or

$$f'(x) = p$$

On the other hand, *ceteris paribus* the rate of utilization is a function of the price in some way which must also be assumed to be known from experience (or remains to be ascertained experimentally). If $\varphi(p)$ represents the form of this function, we have

$$x = \varphi(p)$$

Now x may be eliminated from these equations and the value of p is determined by the solution.

Geometrically, the value of p is determined by the intersection of the two curves which represent the two above equations.

The size of the resulting deficit is immaterial in this connection, that is to say, it is irrelevant for the economic justification of the price reduction. It would of course be gratifying if the price reduction diminished the deficit or even led to an increase in revenue, since this would indicate a significant increase in use, which remains the thing of primary importance. At the same time this circumstance should give occasion for still further price reductions because, rationally, the deficit must always include the entire amount of the general costs and until this is so the enterprise has not reached its theoretical optimum utilization. Any surplus of revenue over cost would be even less acceptable. The existence of such a surplus as, for example, the spectacular profits of the Prussian State Railways, may be a shining testimony to the efficiency of the administration and to the prosperity of the industrial and commercial life of the country; but at the same time the surplus also indicates that the enterprise is far from its optimum degree of utilization both in national and in individual terms. The passenger and freight traffic of the Prussian State Railways would probably increase very considerably with an appropriate reduction in rates. Everyone would gain thereby and no-one need lose, provided only that the ensuing deficit be financed by taxes in a suitable manner.[i]

h Suppose that in our numerical example marginal costs are 2 *pfennig*. Obviously individuals would enjoy greater utility if the service were free than if its price were 2 *pfennig*, the difference being about 6,000,000 × ½ *pf.* = 30,000 *mark*. But against this there would be additional costs of 120,000 *mark* and since these must be shared in the form of taxes, there would on balance be a net loss of 90,000 *mark*.

i It need hardly be pointed out that even though the economically most efficient method of operating a public enterprise must result in a deficit in the ordinary meaning of the word, it does not follow that every public enterprise which runs a deficit is good. Such an enterprise may not be capable at all of providing any utility corresponding to the cost and had therefore best not be undertaken. On the other hand, it will always be a reliable criterion of the economic soundness of an enterprise if full costs may be covered or a surplus achieved by a possible price increase. Rationally, however, one should never avail oneself of this possibility, nor need it exist. To use our numerical example once more: it could be that even at a price of 10 *pfennig* (or for that matter a higher one) costs cannot be fully recovered because the frequency of utilization would always remain too low. If this is the case, one cannot even be certain whether the enterprise is really economic at this (or a higher) price. It is possible that the total utility does not amount to the 100,000 *mark* of costs. On the other hand, assuming that the remaining figures in our example are correct, the activity is evidently economic when the price is sufficiently reduced or the service provided free. It is immediately apparent that the total utility created must then exceed the total costs to a greater or lesser extent, even though these costs could not actually be covered by revenues derived from any uniform price.

As a general rule: If a public enterprise is already in existence and thus a potential loss of the original investment costs must be faced in any case, then the (theoretically) most economic method of covering costs will always be Price = Marginal Cost, that is the additional costs occasioned by the last unit of service, leaving the general costs to be financed by taxes. If this cannot economically be done, that is if no conceivable way of distributing the required tax total can command approximate unanimity, then the whole enterprise will have to be considered as uneconomic and had best be discontinued. Any loss of money or interest payments thereon might then be shared according to the principle of equal (or proportionate) sacrifice.

There are, of course, a number of difficulties in working out such a scheme in practice[20]; but in principle the results here developed seem to me to have such patent merits, that I find it astonishing that the point has been noted so little or not at all in the literature.[21]

The reason for this omission is no doubt the fact that so far it has always been taken for granted that any tax for this particular purpose would have to be raised like all others according to a pre-determined principle of taxation. Wagner states quite plainly: "Administration according to the principle of pure public expenditure (or, as Sax put it, "collective goods of general use") would represent an unjustified concession to the users of the particular facility as opposed to the whole community, which would then have to pay the full costs out of general taxation."[22]

Sax wants to apply this principle in only one case, but then unconditionally: "When some public service is so used by the general public that individual utilization is proportionate to the economic condition (the 'capacity') of the individual as appropriately exemplified by the existing distribution of taxes."[23][j]

It does not seem to have occurred to either of these two writers that the tax involved could be distributed in any other way than by "general taxation", *i.e.* according to the "economic condition" of each individual. This is not in the least necessary. What is there to prevent in each case special taxes so designed as to accord with the observed or (after the price reduction) anticipated utilization of the service by the separate social and occupational groups? What is there to prevent the inhabitants of a village who benefit more than proportionately from a public service from paying a greater share of the tax than the remaining citizens? There is nothing to prevent it[24]—provided the minorities have a veto right and thus sufficient safeguards against exploitation of certain classes or the neglect of certain legitimate interests.

In the absence of such safeguards—as in ordinary budgetary law—the parties' mutual distrust often stands in the way of measures which, on closer inspection, would prove to be in the considered interest of all. Instead, the

[20] For example, a state enterprise, say a railway, may be used a great deal by foreigners who cannot be taxed for the purpose of financing the general costs. Special tariffs or international compensation agreements might be a way out.

[21] The only exception of which I know is to be found in A. Marshall, *Principles of Economics*, Book V, Chapter VIII, § 8.

[22] *Finanzwissenschaft*, Third edition, Vol. I, § 268, p. 656.

[23] *Schönberg's Handbuch*, Second edition, p. 533. However, the passage is omitted in the third edition.

[j] This is going too far since, as we have shown above, the fee or price should not be lower than the marginal or additional cost. Wagner notes this correctly, although somewhat unclearly, when he says (*op. cit.* p. 657): "A fee, even if moderate, limits use to the true demand and is altogether economically sounder." But Wagner too completely fails to recognize that the prevention of uneconomic use is the only necessary purpose of the fee.

[24] The very question seems redundant, for it is often done. For example, the maintenance costs of roads in Sweden (and similarly in most countries) are first allocated among the local inhabitants according to their property or income in such a manner that (with otherwise equal property) the owners of agricultural land and other land, and finally the non-landed property owners contribute on three separate scales. In addition, the State makes certain contributions.

fee principle is being retained as a makeshift to an extent quite out of keeping with the economic welfare of the population.

I have discussed this point at such length because it seems to me to be of the greatest economic interest. To secure wider participation, especially of the working classes, in the various welfare activities of the state and specifically a greater utilization of the means of transport—this would, in my opinion, represent a cultural mission of the first order. It may be pointed out once again—and it is new proof of the importance of the modern conception of the variability of use value and subjective value—that the poorer classes' apparently lower valuation of these public goods and services is no indication of their lower—let alone absent—objective utility for these classes. It simply means that perforce they value money more highly. With the proposed measures, objective utility for the whole national economy would therefore without doubt be far greater than would appear from our earlier attempt at expressing this utility in money terms.

The extent to which such national benefits should possibly be realized at the expense of some classes is a different question and notoriously an extremely difficult one. But where such benefits can be attained without any sacrifice to anyone, no means to achieve them should remain untried. Each letter, each telegram, each piece of railway freight which is not sent, each journey which is not made because more is charged for it than it would cost the community, constitutes an unsolved economic problem which can and must be solved in a rational manner. Unless I am much mistaken, the principle of unanimity and voluntary consent in taxation provides a means of bringing this problem, too, a good deal closer to its solution.

VI. Further Consequences: Taxes Versus Loans

Interest payments on the public debt do not belong to that category of public expenditures for which the minority may be allowed the right of refusal or rejection, since they are necessary results of previous obligations undertaken by the State (or other self-governing bodies).

For that reason, it seems to me all the more essential to uphold the principle of the minority right of veto on the occasion of the creation of such debt obligations, which by their nature the community cannot evade in the future. I have in mind the decision as to whether a proposed expenditure is to be financed by loan or by taxes.

If the loan is secured from outside the economy, that is if the State borrows abroad, then clearly the man in the street is right when he thinks that future generations are thereby saddled with a burden which the current generation could shoulder just as well or better and hence should carry. If the money is borrowed domestically, this objection would for obvious reasons not be valid (as is often noted). But then there is all the more danger that the loan may in the future lead to a national income distribution which is unfavourable to the non-propertied classes.

In either event the interests in question are not represented at all or are represented inadequately in the tax-approving assembly. There seems to be a clear case for the requirement of full unanimity of all parties as the only possible guarantee against prejudicing these interests. Even those who view the novel device of minority veto rights with suspicion may perhaps favour them in this case.

Adolph Wagner has discussed the economic effects of public loans (especially internal ones) in such a clear and convincing manner, both in his older works and in the third edition of his *Finanzwissenschaft*[25], that there is little to be added. In so far as his argument is supported by somewhat obsolete economic concepts, some revision may be needed, but it will buttress rather than invalidate his conclusions.

The core of Wagner's argument can be summarized as follows. Unless it can draw on existing surplus capital, an internal loan is bound to absorb some portion of the industrial "circulating" capital of the country. As a result the country will be poorer in capital in the immediate future. This effect will be the more pronounced because the capitalists, whose capital sums so absorbed will continue to yield them not only normal interest but in general rather more, will now have no "special motive to limit their own consumption and to increase their savings for the purpose of building up new capital, as they would if all the money, or part of it, had been taken from them by taxation."[26] The diminution of the country's capital will necessarily result in a reduction in wages, at least apart from the period while the loan is being taken up. Other things being equal, the whole process must undoubtedly worsen the condition of the working classes, especially if the proceeds of the loan are not applied to productive purposes proper.

It is apparent that this argument rests on views which are at least akin to the old wages-fund theory. When Brentano brought the customary objections to that theory to bear against Wagner, the latter replied that in his view "the problem of the causes of shifts in wages can be explained neither by the wages-fund theory alone nor alone by Hermann's so-called German theory of the dependence of wages upon demand, that is the expenditure of consumers; but only by both these theories together, their integration being not only possible but" (in Wagner's view) "necessary."[27]

It is not clear to me how such an integration could be achieved. In my opinion the second of the theories mentioned can be explained only as resting on a conceptual confusion. "The demand, or expenditure by consumers" can give rise to wage increases only if it is transformed into demand and expenditure for labour, that is to say, if the money spent by consumers is

[25] Vol. I, pp. 144—67.

[26] *Op. cit.* pp. 163—64. I have taken the liberty of combining Wagner's two alternative arguments into a single one.

[27] *Finanzwissenschaft*, Third edition, Vol. I, p. 164.

transformed into capital, thus involving postponement of consumption for a short or longer period.

I have discussed elsewhere[28] how the wages-fund theory could be improved and completed so as to meet all theoretical requirements. On the basis of the wage theory derived from Böhm-Bawerk and developed by me in that essay, Wagner's statement remains valid in all essentials. A diminution of industrial capital, other conditions remaining unchanged, will undoubtedly lead to a reduction in average wages, even if not proportionately.

There is yet another aspect, however, which can hardly be emphasized too strongly. A diminution of the supply of capital will cause not only a reduction in wage income, but also an increase in the rate of interest and hence in capital yields. In the extreme case of abundant capital supply this increase in the interest rate could fully compensate the capitalists for the capital loss experienced, even if the latter should have come about by means of a tax levy and therefore without any repayment obligation on the part of the State. If, however, the money is merely lent to the State, then the capitalists—or better, the owners of mobile capital—gain twice over, since they will now receive a higher return on both the "sacrificed" capital and the remaining capital. It is true that the capitalists, as taxpayers, must share in the future payments of interest on the debt, but this need not necessarily outweigh the gains. A net gain may remain, even if the proceeds of the loan are employed for purposes which are completely unproductive in the ordinary sense, for example for the conduct of a war. The burden on the non-propertied classes is then bound to be all the heavier.

The fact that a public calamity can thus create material gains for certain social classes at the expense of the others clearly constitutes a grave anomaly in our legal order and, at the same time, a danger of immense implications—perhaps the only "war danger" which is inherent in our modern economic systems.[k]

On the other hand, extraordinary expenditures, even when financed through taxation, can often not be met without absorbing some part of the circulating capital. It would then be too much to expect the propertied classes to agree readily to such a financing method, which would in most cases place the bulk of the burden on them.[l]

Justice must be done to all. I can see no better and indeed no other way of accomplishing this than to insist upon approximate parliamentary unanimity

[28] "Zur Lehre von der Steuerincidenz", *Finanztheoretische Untersuchungen*, p. 25 *et seq.*

[k] Wagner deserves the greatest credit for having resolutely uncovered this sore point of our contemporary public economy and for having pointed the way towards its cure, by stressing the need of financing such expenditures at least partly by taxation and of making advance arrangements for the required taxes (flexible income taxes, special war taxes, etc.). As is well known, Great Britain has recently moved more and more in the suggested direction and this may have contributed more than a little to the peace-loving attitude of the island kingdom's propertied classes.

[l] In addition, there are many situations in which financing by loans remains the economically soundest method, because (to use Laffitte's words as cited by Wagner) it "takes the capital where it is, while taxes take capital where it is not". The use of loans also greatly facilitates the utilization of foreign capital.

of decisions both on the financing method, *i.e.* by taxation or loan, and on the sharing of the taxes either for the expenditure itself or for the future amortization of the debt. If the legislature fails to reach such unanimity, the proposed expenditure should be abandoned.

Should rejection not be possible because the expenditure is considered as "inevitable", as "a necessary condition for the life of the society", etc., then the expenditure does not properly belong to the category discussed here. It is then one of those expenditures for the financing of which, as we have noted earlier, the constitution itself should make specific provision. (Compare Wagner's above-mentioned proposal concerning arrangements for special war taxes.) But we should be wary of lightly identifying some active interest of a majority of the group in power with political or social necessity. The others are human beings too and members of the society, and their interest constitutes at any rate part of the public interest. No single social class is entitled to claim a monopoly of patriotism, and least of all those who are not entirely above the suspicion that they occasionally use the misfortunes of their country for profitable investment.

VII. The So-Called Social Welfare Approach* to Taxation

It has been pointed out several times that the principle of approximate unanimity in tax approval cannot be applied in all circumstances. Specifically, it was seen to be inapplicable when the amount of a public expenditure is predetermined by existing obligations towards third parties and where the financial deliberations must therefore lead to a positive result.

We shall now consider an equally necessary, although ultimately only an apparent, exception to the principle of unanimity and voluntary consent as the basis for just taxation. In so doing, we shall have to touch upon one of the most important, but unfortunately also one of the most sensitive and difficult points of modern fiscal theory and practice.

It is clear that justice in taxation tacitly presupposes justice in the existing distribution of property and income. This holds of any approach to the question. It would otherwise be impossible to speak either of equality between Value and Countervalue or of equality of sacrifice. It cannot be recognized as any true surrender of Value to the State nor as a sacrifice if someone is forced to return that which he possesses wrongfully, or if he is prevented from securing possession of that to which he has no acknowledged right.

The principle of the veto right of the minority, which has been defended in this essay, equally rests on the premise that the property status of each individual is fully acknowledged by the State and must in justice be so acknowledged. If this is really so, then it seems strange that the State should take the liberty of interfering with the rights it has itself sanctioned by imposing taxation at will—that is to say, without being impelled by such necessity as transcends all law.

* Editors' note: see footnote on p. 9 in this volume.

If, however, this presupposition does not correspond to the facts, if there are within the existing property and income structure certain titles and privileges of doubtful legality or in open contradiction with modern concepts of law and equity, then society has both the right and the duty to revise the existing property structure. It would obviously be asking too much to expect such revision ever to be carried out if it were to be made dependent upon the agreement of the persons primarily involved.[m]

It is nevertheless clear that one can scarcely proceed cautiously enough in such matters; sooner or later there comes the reckoning for every hasty step. No measure should be carried out unless it have the prior unanimous or at any rate overwhelming support of the whole people. The vagaries of accidental parliamentary majority are not enough. It would be quite in order to make decisions of this kind subject to a more or less qualified majority, but such a rule would be a matter of preserving a certain desirable stability in social relationships (if it be not sufficiently assured by other means) rather than of an obvious right of those primarily involved.

There is another fundamental difference between the question considered here and that discussed earlier. A revision of property rights (and here we must agree, *e.g.*, with Helferich[29] rather than with Wagner) would, by its nature, be independent of any consideration of financing state needs. It does, incidentally, not necessarily follow that the abrogation of certain business privileges must lead to an increase in state revenues.[n]

The whole question is obviously very closely connected with the so-called social welfare approach to taxation which Adolph Wagner has indroduced. I am the first to acknowledge the immense merit Wagner deserves for his courageous stand in stressing a task of the State which had received all too little attention and recognition in the theory of public finance, and also for having thus opened up further tax—or rather revenue—sources for the

[m] I am well aware of the apparent contradiction between what I am saying here and the principle I proposed earlier. If the majority is entitled to make decisions concerning the justice of the existing property structure, why then, one might at first glance be inclined to ask, should the majority not just as well decide how much taxes each individual has to pay? If not, would it not be a case of taking away with one hand what had been given with the other?

More careful consideration, which we shall undertake presently, will show that there are in fact highly important differences of form and substance. The difference of form is that it is one thing to abrogate once-and-for-all certain property titles and privileges, and quite another to interfere with them arbitrarily from time to time and piece-meal. The difference of substance is that—as is obvious and will be discussed below—the once-and-for-all method will nearly always be concerned with the desirable future economic order and will respect currently acknowledged property rights, while with the second procedure these rights would not protect anyone from the whims of the "tax authority".

In any case, decisions on far-reaching questions of property rights need not, and in my view should not, ever be taken by a narrow majority. This too is a clear case for a qualified majority rule, although on somewhat different grounds than before.

[29] "Allgemeine Steuerlehre", *Schönberg's Handbuch*, Third edition, Vol. III, p. 131.

[n] If this should happen, as it usually does, the State might for the time being have to do without some part of its current revenue and this is clearly a matter for simple majority decision. The simplest thing to do would be to use the new revenue, just as all other revenue from state property, to finance expenditures of pre-established amount, such as interest and amortization payments on the public debt.

community. However, I cannot agree with all the details of Wagner's relevant discussion.[o]

In particular, the role of inheritance taxes in social policy seems to me somewhat doubtful, in spite of its apparent obviousness.

In agreement with several of the most distinguished political scientists (Bentham, J. St. Mill, F. A. Lange and others) Wagner conceives of the inheritance tax not as a true tax, but as a means by which the State actually shares in the inheritance. His reasoning on this point does not convince me.[30]

It is true that the old family inheritance law was based on a social order which has now largely disappeared. In general, family ties, at least in a legal sense, have been considerably weakened or restricted, especially with Germanic peoples. In most cases there are no family relations any more between more distant kinsfolk. But it appears doubtful whether these family ties have been fully replaced by relations between the individual and the State, although this may be so to a certain extent. Other relations of modern life come more readily to mind, such as those of friendship, co-operatives, business, profession or political party. In other words, there is a good case for limiting the existing law of (intestate) family succession, but on a much larger scale than would seem to make state (or parish) coinheritance rights an adequate complement to family succession. The right complement is, in my view, an extension of testamentary rights, or better of the right to dispose of property by will. I cannot see any moral or economic foundation for a provision such as that in current Swedish law, by which a testator whose heirs-at-law are his children, has the right of testamentary disposal over only one-half his estate, however enormous it may be. Why should the children of millionaires necessarily be condemned to idleness? Has not experience shown a thousand times that the most outstanding economic, scientific and social successes have almost always been achieved by those whose natural abilities were neither hamstrung by dire poverty nor completely escaped the wholesome struggle with difficulties and obstacles, while mediocrity has almost invariably been the rule in both opposite cases?

The point of view held by some, mostly socialist, writers to the effect that the evils of the existing distribution of property could be radically

[o] As a general note which is not decisive for the practical results of his theory, I might point out that Wagner places entirely too much weight on the alleged deficiencies of the existing competitive economic system. Wagner explains elsewhere that this system is disastrous for the working classes more particularly because it is still fashioned by property structures handed down by historical tradition. This is so true that I should be inclined to invert Wagner's postulate, as it were, and to say that in principle the task of the State in this sphere is to strengthen rather than to hamper the competitive system.

In my opinion the workers as a class should have nothing to fear from free competition. What is wrong with the system is that competition has never yet been really free, property and superior education having given the upper classes an economic headway which the lower classes cannot make good however hard they try. Herein lies the principal cause of the workers' subordinate and unsatisfactory position, at least in so far as the latter is open to improvement by social rather than population policy.

If one examines Wagner's proposals in detail, as we shall do below, it will be found that they have very little to do with the effects of free competition, but are almost exclusively concerned with a (partial) limitation of traditional property or income rights and privileges.

[30] Wagner has promised a further development of his views in a future work (*cf. Finanzwissenschaft*, Vol. II, Second edition, § 241, p. 588).

eliminated by confiscatory inheritance taxes must be regarded as illusory, at least so long as the rest of our economic order remains. Large and even enormous fortunes have often been amassed in one or two generations. But even where this is not the case—would it be at all consistent fully to recognize the owner's right of possession during his lifetime but to deny him any right to dispose of his property at death? Could this be done without great economic damage?

These objections have no direct bearing on Wagner's argument, but only because he failed to draw the logical conclusions from his premises. He claimed only a moderate share of inheritance for the community, primarily as a substitute for those private economic obligations (financial support of poor relatives etc.) which used to be incumbent upon the current owner of the family estate and which have now partly devolved upon the State and local authorities. This is no doubt a very right and sensible proposal, but Wagner himself would hardly consider that it does full justice to the "social point of view". From that point of view the main thing to do would be to take energetic measures to prevent the unearned accumulation of riches (and with it mostly also their uneconomic use) which is now encouraged by law and custom.

The only practical way to reach this goal appears to me to lie in the recognition that any right of inheritance, bequest or gift necessarily involves two parts. There is the right to give and the right to receive. These must be strictly distinguished and each treated on its own merits. To restrict the right to give more than is absolutely necessary even now oftens runs counter to our ideas of justice and equity and also may be seriously questioned on economic grounds.[p]

The right of inheritance taken in the second, and more proper, sense of the word as the unlimited right to receive must, if at all, be justified in quite different terms. Unless I am much mistaken, it rests on a now obsolete conception of social and family relationships. The right of inheritance in this sense does not seem to be required either by moral or by economic considerations; on the contrary, its continued maintenance gives rise to growing misgivings on both grounds. There used to be some apprehension lest the abolition of inheritance rights might make if difficult for great business enterprises to be carried on after the death of their proprietor. This argument caused the followers of Saint-Simon to propose that the right of inheritance by blood relations should not simply be abrogated but should be transformed into a so-called right of inheritance "by merit". But this fear must be considered groundless now in view of the tremendous development of the corporate form of business organization.[q]

[p] We may agree with Wagner that there are no grounds for the fear that an inheritance tax would diminish the incentive to economize and save so long as the amount of the tax is slight; but then it cannot have any equalizing effect worth mentioning on the property distribution.

[q] To mention only a few well-known examples: One of the largest of the Paris giant stores, the fashion goods establishment "Au Bon Marché" on the left bank of the Seine, was bequeathed a few years ago by its

It cannot be claimed that the right of the testator, if recognized as such, necessarily includes an (unlimited) right of the recipient. Even the former is of course no absolute right but is everywhere subject to certain social restrictions. No court of law would prove a will containing provisions for purposes which were adjudged immoral or harmful. If, therefore, the right to inherit or to receive gifts were limited, say, in accordance with J. S. Mill's famous proposal to a certain maximum amount—which in principle need only be large enough to allow the heir or legatee to choose and embark upon a career or, if he be unable to work, enough for a decent living—then this could hardly be considered an undue limitation on the testator's right to dispose of his property. The testator would still be free to dispose of his own as he pleases, except for foreseeably noxious purposes. Indeed it is quite likely that thoughtful parents, especially if they had acquired their wealth by their own work, would prefer to spare their children the doubtful present of a life more or less of idleness, if the customs of the country, aided and abetted by the law, did not brand such behaviour as "unnatural".

To go further into this subject would take us beyond the frame of reference of this essay. What I have said may suffice to show why I look, not to the inheritance tax, but to a thoroughgoing reform of the whole inheritance law, for an adequate means of meeting the social demands of the modern age in the area of property rights.

The inheritance tax appears to me, in the main and in principle, only as a—quite appropriate—complement to the ordinary income and property taxes. It provides a means of making these taxes progressive, when the nature of the expenditure makes progression just and suitable. I should say, therefore, that inheritance taxes too should be subject to the principle of unanimity and voluntary consent. I say deliberately "in the main and in principle": the possible exclusion of certain distant kinsmen from intestate succession scarcely touches the problem under discussion, and the inheritance tax may after all be accepted as a temporary substitute, pending more rational and radical changes in the existing inheritance law itself.

I agree all the more whole-heartedly with the second main feature of Wagner's social welfare system of taxation. I have in mind the special taxation, or better confiscation (although very partial under Wagner's proposal) of unearned increments of wealth, the so-called windfall profits.[31]

I shall limit my discussion to the case which is both the most important in practice and can most easily be proved. I have in mind the increase in land values due to changing economic conditions, particularly to the growth of cities.

founders, M. and Mme Boucicaut, to the whole of the then staff (some 1300 persons). So far as I know, the business is still in this collective ownership and no-one has suggested that the arrangement has weakened the firm's competitive position. A similar situation obtains in the cotton mills of Oldham and Rochdale in England, where most of the stock is held in very small blocks by the workers. One of the largest and certainly one of the most prosperous businesses in England, the Co-operative Wholesale Society, which supplies groceries to all British and Irish consumer co-operatives, is another good example of the same kind.

[31] This idea too was defended by both Mills, father and son, and in a much more incisive way.

It is possible to raise objections against such taxation on the grounds that speculation is a lawful economic process. Indeed, such objections have been raised, among others by G. Cohn, and they cannot be dismissed out of hand. In so far as the increase in land values is in fact due to the owner's speculative activity, this circumstance should be fully taken into account. For this reason I do not completely agree with Wagner's proposal (with which Cohn agrees on this point) that suburban plots of land which are used only for agricultural purposes or which lie idle in order to "absorb value" should be entered in the real estate tax register at their current putative sales value and taxed on that basis.

If land which is otherwise suitable for urban construction is in some way "withheld from the market" by the owner, he must be doing so for one of the two following reasons. Either he does not possess enough capital to build himself but does not want to sell the land now at a low price when he expects to be able to get a much higher price in a few years' time. Or else, if construction were to be undertaken now, only rather plain and simple buildings would be economic, while in a few years' time the land may lie on one of the main thoroughfares of the rapidly growing city and, if still undeveloped, could then be used much more profitably. If now, a high tax of the kind proposed forced the owner to sell his land too soon, the major part of the potential profit would accrue to someone else, *i.e.* to the buyer who probably has more capital. This is patently unjust. On the other hand, if the owner were forced by the tax to build too soon on his land, this would represent, in a purely economic sense, a relatively inefficient utilization of the available building space. This is no less undesirable.

But all of this concerns only the form of taxation to be selected. On the whole it must be granted that in such cases, and even more so when land has already been developed, an increase in its value has precious little to do with any speculative activity of the owner, but is due to causes connected with the general economic development of the community.[r]

One concession may be made, so as not to tax this type of property more heavily than others: it should be recognized that the current value of land depends not only upon its current yield but also, though mostly not much, on the expected future increase in yield. In other words, allowance should be made for the fact that capital so invested tends to yield somewhat less than the current rate of return.

With this reservation, I would say that social justice requires much more drastic measures for the limitation of such windfall profits than Wagner

[r] It is of course theoretically untenable to claim, as is often done, that the increase in land values is a direct creation of the business activity of the surrounding economy (*cf.* my *Über Wert, Kapital und Rente*, p. 15 [translated as *Value, Capital and Rent*, London 1954]). On the contrary, the greater concentration of the population and the availability of urban land required therefor are necessary conditions for that very business activity. But with negligible exceptions, the increase in land values has just as little or less to do with anything the owner or his ancestors may have done.

Incidentally, once the right of expropriation of private land for public purposes is recognized, the proposed participation of the community in future increases in land values can hardly be opposed.

himself suggested. Apart from the above-mentioned extra tax on idle building sites Wagner proposes that the value increments should become taxable on the whole only when the land changes possession (including transfer at death). This restriction seems to have little justification; moreover, the proposed measure seems just as questionable, from the point of view of the unhindered flow of commerce, as do all other transfer taxes (naturally excepting the inheritance tax).

Instead, I would propose that it should be laid down by law that any increment of real estate returns—whether the land be built-up or not—after a certain date shall be subjected to a special tax. The only increments excepted should be those which the owner can show to have been due to his own action (land improvement, new construction or alteration of buildings, etc.) and to correspond merely to the interest on his additional capital outlay. The tax should be increased in successive steps to the point where the unearned windfall profits are in principle absorbed, but allowing for too wide rather than too narrow a margin, so that some reward be left to the owner for any indirect investment he may have made, for his work and speculation, and for any losses he may suffer if the price should fall.[s]

The difficulties involved in any practical solution to the social problem considered here will doubtless be formidable. But the important thing is first to acknowledge the principle and it must regretfully be stated that there is as good as no trace of it in existing tax systems.[t]

A few figures may serve to indicate that the values involved may often be quite considerable. The reader will no doubt be able to add equally striking examples from his own experience.

In 1875 the assessed value of real estate situated within the city of Stockholm and liable to taxation was 177 million *kronen*. The succeeding period of fifteen years was marked by strong population increase and very lively building activity; by 1890 the assessed value had risen to 469 million.

On the conservative assumption that the value of the land alone accounts on the average for one-fourth of the assessed value, land values would have increased by 73 million over the fifteen years. With an interest rate of 4 per cent, this sum would produce an annual income of nearly 3 million *kronen*, or about three-fourths of the Stockholm municipal (direct) tax at that time.

It is a moot question just how much of this total might be considered as an adequate reward for a type of private speculation which in any case has very little significance for the economy as a whole. To me it is beyond doubt that the bulk of this total amount could have been collected for the community by the State or the city without injury to any legitimate interest, without economic damage, and especially without creating less favourable conditions for the building industry and without raising house rents by one penny.

This is not to say that the same measure, if introduced today, could be expected to be similarly successful, seeing that more stationary conditions are likely in the near future. But this is no reason for delaying the introduction of such a policy. Rather the opposite, because there would then be time to become accustomed to the legislative innovation without private interests having occasion to feel injured. When a boom is under way, future yields tend to be largely anticipated by speculation, and their partial confiscation could perhaps not take place without very palpable injury to private economic interests.

Apart from urban and suburban land, my proposal would also have to apply to the increase in the value of land adjacent to newly opened transportation routes, except when the property owners have been specifically assessed for a part of the cost or have voluntarily contributed to it.

In Sweden a case in point is the landed property connected with our largest export business, namely the great Northern forests.

The defenders of our current, admittedly highly protectionist, commercial policy are wont to predict that the chief beneficiaries of a transition to free trade would be the big business enterprises which own our sawmills and forests, labour becoming cheaper and the prices of the products rising. The objection is highly exaggerated, but not without foundation. But the evil could easily be redressed, or even turned into a general good, if the State and the municipalities were to claim their full share of such unearned gains at the time of the transition. Taken all in all, unless I am much mistaken, the proposed measure is one of those which, once taken, make everybody wonder why they had not been introduced much earlier.

In one of the Australian colonies, I believe Victoria, at the time of the gold rush rich ore was found on land tracts which individual citizens of the colony legally owned but of which they had not actually taken possession. The owners quite naturally now came running to take possession. But the legislative assembly of the colony thwarted them by autonomously annulling the title deeds and placing the land once more into the ownership of the colony itself. This action seems to me to have been fully justified, for even without express stipulation there must have been the implicit presumption that the original purchase contracts concerned fields and pastures and not

[s] It is an open question whether the same procedure should be applied to capital gains on ordinary goods, for instance to speculation in futures. For one thing, gains and losses tend to even out much more. Moreover, stock exchange speculation proper has an important economic function to which the above-mentioned real estate speculation can hardly lay claim. Each stock exchange transaction, however much it be branded as "gambling", necessarily has the tendency to direct goods, labour and liquid capital from places where there is little demand for them and where they are relatively cheap to places where they are in greater demand and are dear. If a stock exchange transaction fails to do that the speculator will have to pay for his own mistake. On the average any profits the speculator may make constitute only a portion of the greater gains which the community derives from his activity.

This is not to say that in this sphere there are not also profits which are sometimes completely unwarranted (and not seldom morally reprehensible) and to which special tax measures could justly be applied. But there is no demonstrable general tendency in this direction, as there is in the case of the increasing value of land as a result of increasing population density and urban concentration.

[t] I know of only one instance of an approximate practical realization of the principle propounded above: this is the new land and income tax of New Zealand. According to Seligman's description (*Progressive Taxation*), p. 58), land is taxed on the basis of its imputed value at—not very steeply—progressive rates. Capital invested in land improvement is deductible and itself taxed at the lowest rate.

gold. Unfortunately it seems unlikely that gold will be discovered in our country or in most other countries of the old world. All the less is it justifiable or reasonable to leave to chance all those future values which are not as yet incorporated into existing private property and not the subjects of any valid private legal title. The only result would be that the regrettable present inequality in the distribution of wealth would be unnecessarily aggravated.

VIII. Conclusion

Although the discussion in the preceding section is certainly of the greatest importance for finance, it constitutes a digression into the area of law rather than of taxation, of general legislation rather than of tax legislation. Let us now return once again to the principle of unanimity and voluntary consent in the approval of public expenditures and taxes and say a few words concerning the practical implementation of this principle.

It is a necessary condition that expenditures and the means of financing them be voted upon simultaneously. It is clear that such arrangements could be made independently and certainly without any change in the constitution. The various parties need only make use of the right, which they possess under most constitutions, to make the approval of each budgetary demand, or at least of each new one, contingent upon a specific, initially defined manner of financing the expenditure.[u]

If this procedure should become general practice, a very important practical step would have been taken in the direction of the system proposed in this essay. The requirement of the veto right of the minorities would follow sooner or later as a logical and necessary consequence. When, as today, the expenditures and the revenues are approved separately, it may in fact appear as if in both cases, but especially in the latter, decisions can only be reached by simple majority. But it would be different if expenditures and revenues were always confronted with each other, because there would then normally be a choice between many alternative possibilities. It stands to reason that a combination which satisfies everyone—and such a combination has been shown to be theoretically possible whenever a public service possesses general usefulness—must be imbued with more justice than any other which might appeal more to an accidentally greater half of those interested, but which would be at the expense of the others. Once this is conceded, the right of minority veto is already recognized in principle.

[u] It is self-evident that this is not to suggest the introduction of special kinds of taxes for each single expenditure, let alone separate financial administration for each budgetary item. The assignment of specific revenues to specific expenditure categories could remain an accounting device; nor need it be done with more meticulous precision than is customary in the itemization of the budget generally.

It would have been superfluous to mention this if Leroy-Beaulieu, in his *Traité de la Science des Finances* (fifth edition, Vol. I, p. 130 and elsewhere), had not exaggerated the alleged practical difficulties of a "système de la specialité des taxes", the theoretical virtues of which he recognizes at least in the field of local finances. When he notes that such a system "evidently" could never be applied to the expenditures of the State, he appears to have forgotten that this was in fact done on a large scale in some of the older constitutional states.

Objections can, of course, be raised against the formal inclusion of a right of this nature in the constitution. One could speak of possible abuses, obstructionism etc., by which a disloyal minority might try to press its own particular purposes. I am not denying the possibility of such results. All power can be abused. But the danger would seem the less the more the various parties were free to take care directly of their legitimate interests. Obstructionism is a weapon of despair, the petty and mostly sterile vengeance of minorities whose rights are trampled underfoot. The abuse of power on the part of a minority, unless it be all-powerful, is in any case exposed to the threat of reprisals in one form or another, while the power of the majority is quite uncontrolled and the minority has no legal possibility of throwing off the yoke.

The constitutions of many European countries almost seem designed to offer every possible encouragement to the approval and every possible hindrance to the rejection of tax proposals.[32] However far the system here proposed may be from such constitutional provisions, I venture to suggest that it is nothing more than a logical development of the specialization of the expenditure budget. Although such specialization was introduced in many countries only after violent constitutional struggles, its usefulness would not now be queried by any serious politician. It serves as a control by the legislature over the executive. In precisely the same way the bracketing of specific revenues and expenditures, combined with the legally acknowledged right of veto, would serve as a control by each single group of the legislature over all other groups.

I am profoundly convinced that, at least in the country with which I am most familiar, such control is urgently needed, primarily to protect the interests of the lower classes. However, my proposals have not been advanced from this point of view alone. Their purpose is—and I may perhaps take credit for it—to do justice to both sides: to the side to which I belong by birth and upbringing and to the side of those with whom, in my mature years, I have come to feel more and more in sympathy.

The propertied classes undeniably include a significant share of a nation's intelligence and economic initiative, and in many a case their preferred position is due at least in part to their own efforts. These classes should not be forced by the ill-considered claims of a precipitant democracy to assume the whole burden of the community's tax load. But neither should the members of the poorer classes, who after all do also possess some judgement and who are not beasts of burden but human beings, be called upon to pay for expendi-

[32] Under the Swedish constitution the lower house does not even have the right to refuse to approve a new tax. If the two chambers vote with different results, the votes of both chambers (230 in the lower, 150 in the upper) are pooled and simple majority decides. Experience has shown the upper chamber to be much more open-handed and to be apt to vote as one man in such matters, so that the lower house (which incidentally is not elected by universal suffrage but one subject to very high property qualifications) actually needs a large majority—in the extreme case 5 to 1—merely to reject a new budgetary proposal!

A striking contrast is offered in the legislation of the state of New York. The governor has a provisional veto against every item of the budget. A two-thirds majority of each house is necessary to override this veto and to uphold the proposed expenditure. (See Leroy-Beaulieu, *loc. cit.* Vol. II, p. 179.)

tures of whose utility and necessity they cannot be convinced, perhaps for very valid reasons.

It will assuredly be one of the most important tasks of the future to attenuate and eventually to eliminate the conflict between the social classes. So long as it exists, however—and it will unfortunately continue to exist for a long, a very long time—there is nothing to be gained from discussing social problems as if there were no such conflict. One must take the material as it is and see what can be made of it.

It is not the business of the science of public finance and of tax legislation to do away with the egotism of the social classes, but to assign it its proper place as a safeguard of legitimate particular interests. This force, to which so much ill will has been imputed, may then yet produce some good.

THE PURE THEORY OF TAXATION*

By FRANCIS YSIDRO EDGEWORTH

The character of pure theory, deduction from received first principles, attaches not only to the incidence of taxes, which has been considered in the preceding paragraphs, but also—in a minor degree, doubtless—to the distribution of the fiscal burden among the taxpayers, which is to be considered in what follows. There is at least one aspect of this subject which may present sufficient length of reasoning and strength of premises to deserve the title "pure". The view thus distinguished is that according to which the sacrifice felt by the taxpayer is a dominant factor in the apportionment of the fiscal burden, the hedonistic, or in a special sense utilitarian, principle of taxation, as it may be called. Some other principle may be held—for instance, that of "ability", or "faculty", in a more objective sense, but can hardly be held to belong to the domain of pure theory.

The purest, as being the most deductive form of utilitarianism is that from which Bentham reasoned down to equality.[1] There are those who regard this form as also purest, in that its first principle is the most apt to be universally accepted. That principle proposes as the end of action, or criterion of conduct, the greatest sum-total of happiness; the intensification of pleasure, its prolongation and distribution among increased numbers being approved only when they conduce to that end. The conception has been formulated mathematically by the present writer.[2] In extending the summation of pleasure, according to the formula, over all time and all sentience, it is to be considered that, just as egoism is never so perfect but that distance in time renders pleasure less attractive, so utilitarianism is never so perfect but that persons whose interests are widely separate will not each "count for one" to the other.[3]

This remark may seem particularly appropriate to the adoption of utilitarianism as the rule of political action. The average citizen cannot be expected to care much for the interests of the foreigner, perhaps not very much for the interests of fellow-citizens outside his own class, nor at all for a remote posterity.

The proof of utilitarianism as the principle of political action has been variously conceived. The same speculative height is reached by different paths. There is an approach on the economic side which it may be allowable

* *Economic Journal*, Vol. VII, 1897, reprinted in F. Y. Edgeworth, *Papers Relating to Political Economy*, Royal Economic Society, London 1925, Vol. II, pp. 100—122. The first part of the article on tax incidence has been omitted, and so have some footnotes.

1 "Propositions of Pathology upon which the Advantage of Equality is Founded," *Principles of the Civil Code*, Part I. ch. vi. (*Works*, Vol. I. p. 304); *Constitutional Code*, Book I. ch. iii. sec. v. (*Works*, Vol. IX, pp. 14—18) *et passim*. J. S. Mill's doctrine of equality is not so clear (*Utilitarianism*, p. 93). Fitzjames Stephen complains of its obscurity with some reason (*Liberty, Equality, and Fraternity*, ch. v.).

2 *Mathematical Psychics*, p. 57 *et seq*. On the pleonastic words "of the greatest number" commonly suffixed to "greatest-happiness," see *ibid*. p. 117, and *cp*. some good remarks by Professor Montague at p. 34, of his preface to Bentham's *Fragment of Government*.

3 *Ibid*., Appendix IV., "On Imperfect Egoism."

to point out here. Let it be granted that there is a certain analogy between political and industrial co-operation or concerted action—an analogy admitted by many high authorities with respect to the fiscal action of the State.[4] We must not regard as an essential feature of the analogy the circumstance that in economic bargains there generally prevails a rate of exchange corresponding to final utility. That circumstance is brought about by competition, which does not exist in the case of the political contract. It is therefore improper, with Lord Auckland, to call income-tax "a fair price for protection",[5] to ask with Thiers, "What is society if not a stock company in which every one has more or fewer shares?"[6] This is the fundamental fallacy of the "*quid pro quo* principle" or "benefit theory", which is justly rejected by J. S. Mill,[7] Professor Seligman, and other high authorities. The "economic" theory of taxation propounded by Professor Sax, his "conception of tax as a value-phenomenon",[8] appears open to a similar objection. The truer analogy is with those economic bargains which are not governed by competition; for instance, an agreement between an employer or an association of employers and a trade union, or, as in the case of a "boundary" dispute, two trade unions. Is there any general principle governing such agreements?

The present writer has suggested, as the principle apt to be adopted by two [or, *mutatis mutandis*, a few] self-interested parties contracting in the absence of competition, the greatest-happiness principle, slightly modified: that arrangement to be made which conduces to the greatest sum-total welfare of both parties, subject to the condition that neither should lose by the contract. Of course each party would rather have his own way completely. But the action of self-interest being suspended by mutual opposition, the more delicate force of amity which even in economic men is not entirely wanting,[9] may become felt. Moreover, each party may reflect that, in the long run of various cases, the maximum sum-total utility corresponds to the maximum individual utility. He cannot expect in the long run to obtain the larger share of the total welfare. But of all principles of distribution which would afford him now a greater, now a smaller proportion of the sum-total utility obtainable on each occasion, the principle that the collective utility should be on each occasion a maximum is most likely to afford the greatest utility in the long run to him individually.[10] Thus the recommenda-

[4] *E. g.* the well-conceived analogy between the State in its fiscal capacity and a co-operative institution in Professor De Viti's *Carattere Teoricetico dell' Economia Finanzieria*, p. 103, *et seq.* *Cp.* Professor Graziani, *Istituzioni di scienza delle finanze*, 1897, lib. 3, cap. 4, and authorities there cited.

[5] Quoted by Professor Seligman, *Progressive Taxation*, p. 96, in which context many similar references will be found.

[6] *Ibid.*

[7] *Political Economy*, Book V, ch. ii. § 2, par. 2.

[8] "Die Progressivsteuer," p. 87 *et seq.*, in the Austrian *Zeitschrift für Volkswirtschaft*, Vol. I, Part I. Cp. *Grundlegung der theoretischen Staatswirthschaft*, Vienna 1887, *passim*.

[9] Much evidence was given before the Labour Commission as to the beneficial effects of "closer acquaintanceship between the parties." (Group A, Q. 607. *Cp.* Q. 2,019, 15,072—3, etc.).

[10] Thus it would appear reasonable that a foreman who is insolent to the workpeople, and not particularly serviceable to the employer, should be dismissed, if thereby the employer's profits are not sensibly

tion of utilitarianism to self-interested parties would not be—as Bentham's teaching has been said to be—like making ropes out of sand. *A fortiori*, the higher the degree of public spirit which is ascribed to the parties.

On these or other grounds assuming the greatest-happiness principle to be the test of governmental action, at least with respect to taxation, let us proceed to apply the principle. The primary problem is to determine the distribution of those taxes which are applied to common purposes, the benefits whereof cannot be allocated to particular classes of citizens. The condition that the total net utility procured by taxation should be a maximum then reduces to the condition that the total disutility should be a minimum.[11] From the condition that the total disutility should be a minimum, it follows in general that the marginal disutility incurred by each taxpayer should be the same. But if the inequality of fortunes is considerable with respect to the specified amount of taxation, there may not be taxation enough to go round, so to speak. The solution of the problem is that the higher incomes should be cut down to a certain level. At the same time the fact that the general marginal condition is not perfectly satisfied, suggests the solution of a wider, a *secondary* problem, namely, to determine the distribution of taxation, not being limited to that amount of which the benefit is indiscriminate. The solution of this problem in the abstract is that the richer should be taxed for the benefit of the poorer up to the point at which complete equality of fortunes is attained. The *acme* of socialism is thus for a moment sighted; but it is immediately clouded over by doubts and reservations.

In this misty and precipitous region let us take Professor Sidgwick as our chief guide. He best has contemplated the crowning height of the utilitarian first principle, from which the steps of a sublime deduction lead to the high tableland of equality;[12] but he also discerns the enormous interposing chasms which deter practical wisdom from moving directly towards that ideal.

"In the first place it is conceivable that a greater equality in the distribution of produce would lead ultimately to a reduction in the total amount to be distributed in consequence of a general preference of leisure to the results of labour on the part of the classes whose shares of produce had increased."[13]

There is also the danger—

diminished, while the workpeople gain considerably in freedom from annoyance; or, again, that workmen should consent, on terms not extravagant, to do a little extra work on an emergency, if thereby the employer is saved from considerable loss. But to illustrate fully the applicability of the principle would be out of place in this article.

[11] The authority of Bentham may be cited in favour of this theory of taxation:—

"It is therefore necessary that those who create wealth by their labour should give up a portion of it to supply the wants of the guardians of the State. . . .

"All government is only a tissue of sacrifices. The best government is that in which the value of those sacrifices is reduced to the smallest amount (*Principles of the Civil Code*, Part I, ch. xiii., *Works*, Vol. I. p. 13, ed. 1859).

"To take care that this pain of constraint and privation be reduced to the lowest term" (*View of a Complete Code of Laws*, ch. xxix., *Works*, Vol. III, p. 204).

[12] *Principles of Political Economy*, Book III, ch. vii., § 1.

[13] *Loc. cit.* § 2.

"That the increase through equalisation of the incomes of the poorer classes will cause the population to increase at a more rapid rate than at present; so that ultimately the increment of an average worker's share will be partly spent in supporting a larger number of children, and partly reduced through the decrease in the efficiency of the more crowded labour."[14]

It is remarkable that Mill should have apprehended the dangers of deficient production and excessive population less than the danger to liberty. The weighty sentence into which he condenses the substance of his teaching on liberty deserves to be repeated.

"It is yet to be ascertained whether the Communistic scheme would be consistent with that multiform development of human nature, those manifold unlikenesses, that diversity of tastes and talents, and variety of intellectual points of view which not only form a great part of the interest of human life, but in bringing intellects into stimulating collision and by presenting to each innumerable notions that he would not have conceived of himself, are the mainspring of mental and moral progression."[15]

Liberty is not the only one of the higher goods which is threatened by a dull equality: there is also the "function of maintaining and developing knowledge and culture", the performance of which function, as pointed out by Professor Sidgwick, has hitherto been largely due to "rich and leisured persons".[16]

The transition is easy to another reservation, which is in some sense more intrinsic than the preceding. The Benthamic argument that equality of means tends to maximum of happiness, presupposes a certain equality of natures: but if the capacity for happiness[17] of different classes is different, the argument leads not to equal, but to unequal, distribution. The testimony of Professor Sidgwick that Bentham would probably have recognised this reservation[18] carries a double weight of authority. The possibility corroborated by so high evidence is calculated to temper the more drastic applications of utilitarianism.

The preceding reservations relate to the pursuit of socialistic equality by any methods; the following relate more particularly to the pursuit of that end by means of taxation. A progressive tax rising to such a rate that it would not be the interest of the taxpayer to increase his fortune by saving or enterprise above a certain amount,[19] while improving the distribution, would check the augmentation of the community's wealth. There is, however, to be set off the probable increase of saving among the poorer classes. Especially the investment of capital in persons by way of education might be increased.[20] There would be an increase of production also so far as the proceeds of socialistic taxation are applied to render the poorer classes more efficient.[21] But against this increase in the efficiency of the poor might have to be set some decrease in the efficiency of the not very rich.[22]

Again, there is the general presumption against governmental action, the special danger that taxation extended beyond its proper objects will be abused. The warning comes with less weight from those who are ready to employ taxation for a collateral purpose of which they themselves approve—the correction of intemperance.

In fine, the increase of taxation is limited by evasion.

These extensive, though briefly indicated, reservations reduce the *prima facie* revolutionary dictates of pure utilitarianism to the limits of common sense. The position thus defined is much the same as Mill's.[23] "That the State should use the instrument of taxation as a means of mitigating the inequality of wealth" is not to be demanded when a "tax on industry and economy", a check to the growth of wealth, is thereby imposed.[24] But the utilitarian will be as "desirous as any one that means should be taken to diminish those inequalities": such means as the limitation of inheritances and the taxation of unearned increments, so far as these means are free from the dangers above enumerated. A similar reconcilement between equality and security[25] is taught in an article replete with utilitarian wisdom on *The Ethical Basis of Distribution*, by Professor T. N. Carver.

"The minimum amount of repression [or check to the growth of wealth] is secured by imposing an equal sacrifice on all members of the community, but the minimum amount of sacrifice is secured by collecting the whole tax from those few incomes which have the lowest final utility. No rational writer advocates the latter plan exclusively, but many rational writers do

[14] *Ibid.*

[15] *Political Economy*, Book II, § 3.

[16] *Ibid.*

[17] This terminology has been employed by the present writer (*op. cit.*, p. 57; *cp.* pp. 64, 125) to designate differences both in the amount of means which different individuals may require in order to attain the threshold or zero-point of happiness, and in the amounts of utility which they may derive from the same additions of means above that point. Compare Professor Carver's weighty observations (*American Acad. of Polit. Sci.* 1895, p. 82) upon difference in *wants*—a term which may also refer to differences in the amount of means needed for efficiency.

[18] Professor Sidgwick says: "I do not however think that Bentham intended to deny (1) that one person may be more capable of happiness than another, or (2) that, if so, the former's happiness is more important than the latter's, as an element of general happiness." (*Elements of Politics*, p. 583, note 2. *Cp.* note 3 for a fuller statement of Professor Sidgwick's own view.)

[19] The condition which a progressive tax must fulfil in order not to have this effect, is clearly expressed by Professor Ulisse Gobbi in a recent tract to which the chaste use of mathematics lends a peculiar charm. (*Sul carattere razionale dell'imposta progressiva*, § 3.)

[20] *Cp.* Marshall, *Principles of Economics*, *sub voce*, Discount of future pleasure; also Sidgwick's *Principles of Political Economy*, Book III, ch. ii.

[21] The exemption of a minimum is to be defended not only after Bentham (*Constitutional Code*, ch. xv., *Works*, Vol. I, p. 319) on the ground of least sacrifice, but also on the ground of greatest efficiency.

[22] For an instance see below, p. 134.

[23] For some differences from Mill see below, p. 130.

[24] Mill, *Political Economy*, Book V, ch. ii, § 3.

[25] The reconcilement is taught by Bentham with respect to legislation in general. See the forcible chapter on 'Security and equality—their opposition," with the context (*Principles of Civil Code*, Part. I, ch. xi, *et passim*); *e.g.* "It is not equality itself but only a tendency towards equality, after all the others [security, subsistence, and abundance] are provided for, that is the proper object of endeavour" (*Works*, Book III, p. 294).

advocate the former plan. Yet it is not beyond dispute that the former plan ought to be followed exclusively."[26]

This passage, read with the context, almost exactly expresses the thesis here maintained; except that the last sentence is asserted rather too diffidently, and the first clause much too confidently. *Minimum sacrifice*, the direct emanation of pure utilitarianism, is the sovereign principle of taxation; it requires no doubt to be limited in practice; but query whether the requisite limitation is to be obtained from *equal sacrifice*, or any of the cognate subsidiary forms of the hedonic principle which are presently to be considered?

Before leaving the principle of minimum sacrifice, let it be observed that, under the limitations which have been described, this principle may also be applied to justify differential taxation on the ground of differences in other respects besides size of income: for instance, difference in the permanence of the income, differences in civil state, number of children, age, and other attributes.[27]

Besides the principle of minimum sacrifice, which has been considered, there are other species of the hedonic theory of taxation. The most familiar are the principles of equal and of proportional sacrifice: that each taxpayer should sacrifice an equal amount of utility, or an equal proportion of the total utility which he derives from material resources. The former species is the commonest in England; the latter flourishes in Holland. The two species might be included in a genus termed "like sacrifice."

It will be convenient to consider first the practical consequences, next the theoretical proof of these two principles.

In order to deduce conclusions from either premiss, there is required another premiss relating to the law of diminishing utility. There are some reasons for assuming—it is at least the simplest hypothesis—that utility diminishes in inverse ratio to means, after the law of Bernoulli. Upon this assumption the principle of equal sacrifice gives proportional taxation; the principle of proportional sacrifice gives progressive taxation.

But there seem to be better reasons for assuming that the utility diminishes with the increase of income at a faster rate. There is the testimony of high authorities, Montesquieu, Paley, J. B. Say and many others cited in the learned pages of Professor Seligman. True, Mill regards the doctrine as "too disputable altogether" with regard to the higher incomes. But neither Mill nor any other considerable authority has held that the diminution is *less* than in the inverse ratio of the income. Mill's estimate being the lowest, we may take as the most probable estimate one intermediate between his and others, and assume that the utility diminishes at a rate exceeding the increase of income, if not for the highest incomes, at any rate for incomes considerably above the usually exempted minimum.

[26] *Annals of the American Academy*, 1895, p. 97.

[27] Dr. Robert Meyer has given a list of attributes (*Principien der gerechten Besteuerung*, p. 53).

This presumption is confirmed by the observation that the property in question, the diminution of utility out of proportion to the inverse income, almost certainly holds for large differences as distinguished from differential variations; as Dr. Robert Meyer has well argued.[28] But, if such is the character of the utility-curve as to finite differences, it is probably also its character as to differential variations. The observed circumstances would not be consistent with the prevalence of Bernoulli's law throughout. It must be assumed that for a considerable tract of the curve—supposed not violently discontinuous—the property in question prevails.

Some doubt may remain as to the extremity of the curve which corresponds to very high incomes. It has been supposed by several high and independent authorities, that ultimately the law of Bernoulli holds good. Some of the reasons assigned are to be found in the passages cited below from eminent authors.[29] It is here submitted that the character ascribed to the extremity of the utility-curve is not sufficiently evidenced. First, as to capitalisation, regarding it as an application of income to future gratifications (whether personal or vicarious), one does not see why it should not approach satiety with a rapidity greater than that which is assigned by the Bernoullian law. It may be suspected, too, that an improper inference is drawn from the circumstance that as the income is increased by equal increments the differences between the successive increments of utility become less. But it is not with these differences that we are concerned, but with the *ratio* between successive increments of utility. And there is nothing to show that this ratio does not increase more rapidly than according to the Bernoullian law. The pleasure derived from a certain income may well increase with the income somewhat as, according to the theory of errors of observation, the probability that an error will occur within a certain distance increases with the distance.[30]

[28] *Die Principien der gerechten Besteuerung*, p. 333. Professor Sax's criticisms of this passage seem unnecessarily severe (*Progressivsteuer*, pp. 52—3). Professor Sax's own reflections (*ibid.*) confirm the assumption here made as to the character of the utility-curve, up to a certain point at least of the curve.

[29] Professor Sax, *Die Progressivsteuer*, *loc. cit.*, p. 101: "By this inclusion of future needs the concept of needs is extended very far and comes to cover also needs of very low intensity. Since the degree of intensity of needs cannot fall to zero, it follows that from a certain point onward the differences in the average intensity of needs must decrease rapidly and thus become inversely proportional to incomes. These two circumstances together eventually annul the progression of valuations and logically arrest the progression of taxation."

Professor F. J. Neumann, *Progressive Einkommensteuer*, p. 146: "Since the last portions of *very high* incomes . . . normally serve the satisfaction of more or less equally unimportant needs or else are capitalized."

Professor Treub, in a passage quoted at length by Mr. Cohen Stuart (*Bijdrage tot de Theorie der Progressieve Inkomstensbelasting*, The Hague, 1889, p. 148) speaks of "the point where the marginal utility of income becomes constant."

Professor Graziani, *Giornale degli Economisti*, 1891, p. 164: "The concept of a continuously rising rate (of tax) is excluded, because it has been shown that it is impossible for the difference in the valuations of successive portions of wealth to grow continuously."

[30] The marginal utility of money—the measure of the increment of welfare which corresponds to an increment of income—might quite well have some such form as the probability-curve, viz.

$$y\left(=\frac{du}{dx}\right)=Ae^{-(x-a)^2}$$

where x, the independent variable, is the amount of income, y, the dependent variable, is the marginal utility of income (the differential of u, the total utility of income); a is the minimum of existence, and A

Ultimately the additions become imperceptible, but not the less do they obey the law that a disproportionately large increment of the independent variable is required to produce the same increment of the dependent one. In fine the view here combated has no doubt derived some adventitious aid from the supposed practical necessity of adopting a proportional income-tax for very high incomes; which could only be justified by the principle of equal sacrifice upon the assumption of the Bernoullian law.

It is to be admitted, however, that the property in question has been accepted by Mr. Cohen-Stuart, who cannot be suspected of mathematical confusion, and who has expressly distinguished the theoretical and practical points of view.[31]

Here are his reasons:—

"For the millionaire—or rather . . . the *milliardaire*—the possession of his income signifies no more than a cipher, the increase of which has no longer any influence on his consumption. To see the cipher increased by 4 per cent. for instance, if it is a pleasure to a man with 10 millions [francs per annum] or one with 100 or 500 millions, would be, I should say, about the same pleasure to each. . . . As soon as all personal wants are pretty well satisfied, and, *a fortiori*, after the income has passed this limit, its increase proportionately, that is by an equal percentage, must, as it seems to me, tend to afford an equal pleasure. That the addition of the same *amount* should be as strongly desired, should produce equal pleasure, however great the income, seems to me absurd; that the same *proportion* of the income should have this effect strikes me as rational."[32]

The mathematical reader who is not convinced by Mr. Cohen-Stuart on this point will hardly defer to others.

Upon the assumption that the diminution of marginal utility with income is (throughout) in excess of Bernoulli's law, the principle of equal sacrifice and that of proportional sacrifice both give progressive taxation, the latter in a higher degree than the former.[33] Either principle, but more probably the latter, may (upon the assumption above made) lead to a subtraction of income so great as to leave the possessor little interest in increasing his income beyond a certain limit. The two varieties of like sacrifice may in this respect resemble the principle of minimum sacrifice in requiring to be limited by a regard for other disutilities beside the constraint and privation occasioned to the taxpayer.

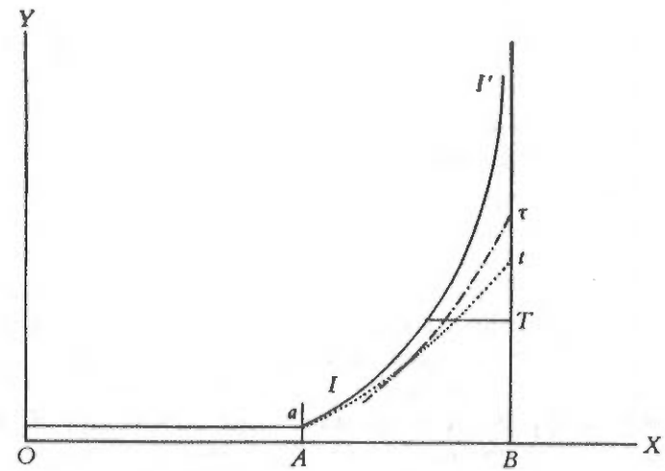
another constant. In order that the sacrifices (first supposed small) made by two individuals having incomes x_1 and x_2 should be equal, the respective contributions should be, not as $x_1 : x_2$, but as $e^{+(x_1-a)^2} : e^{+(x_2-a)^2}$. And this disproportion of contribution to income would not only be maintained, but increased, as the income is indefinitely increased. *A fortiori*, if proportional, not equal, sacrifice is aimed at. *A fortiori*, too, if the sacrifices are not small.

31 *Op. cit.* p. 134.

32 *Op. cit.* p. 155.

33 *I.e.* higher for any assigned form of the utility-curve, and amount of taxation.

The relation between the different modes of the sacrifice theory might thus be exhibited diagrammatically. Let Y measured along the axis OY represent size of income; and construct the curve II' such that the co-ordinate to any assigned Y represents the number of incomes smaller than Y. Thus the strip of area $Y\Delta X$ represents the portion of the national income which consists of incomes of the size Y. The curve II' is probably shaped as in the



figure; in conformity to Professor Pareto's beautiful theory of income-curves ("Cours d'Économie politique pure: Courbe des revenus." *Cp. Economic Journal*, Vol. VI, p. 666) II' may be regarded as asymptotic to—or at least terminating on—a perpendicular through B, where OB is the total number of incomes; Aa may be taken as a minimum exempted from taxation.

Then to apply the principle of minimum sacrifice, find a point, T, on the ordinate through B, such that the area intercepted by that ordinate, the horizontal through T and the curve II' should represent a portion of the national income equal to the required amount of taxation. To apply the principle of proportional taxation, find t on the same ordinate such that the required amount of taxation may be equal to the amount represented by the area intercepted between that ordinate, the curve II', and a curve at which the ordinate η at every point fulfils the condition

$$(y - \eta) \times \frac{du}{dy} \div u = \text{constant};$$

where u is the total amount of utility derived (on an average) from the income y. This curve is represented by the continuously dotted curve line in the figure (upon a certain supposition as to the minimum of exemption, *cp.* Cohen-Stuart, *op. cit.*, on the "subsistence minimum"). To apply the principle of equal sacrifice, find τ, on the same ordinate, such that the required

amount of taxation may be represented by the area contained between the ordinate, the curve II', and the curve of which the ordinate η fulfils the condition

$$(y - \eta) \times \frac{du}{dy} = \text{const.}$$

A part of this curve is represented by the discontinuously dot ed (broken) line in the figure. If completed this curve may be expected to meet II' asymptotically below A. But, doubtless, regard to efficiency and other practical considerations may lead to the deformation of the curve, so as to join on at an earlier point to II'.

It will be apparent from this illustration that equal sacrifice is less socialistic than proportional sacrifice, and proportional sacrifice less so than minimum. But in what degree either mode of like sacrifice is less socialistic than minimum sacrifice, we have no data, it is submitted, for determining. It is quite possible that the curve through τ, and, *a fortiori*, the curve through t, should prescribe a taxation of the higher incomes, which in the interests of production it would be fatal to carry out. Like sacrifice can no more, or not much more, than minimum sacrifice be trusted to act without checks. What, then, is the ground for preferring like sacrifice?

The method of applying the limitation might well be, for all the forms of the sacrifice theory, the use of such a scale of progression as would be given by the principle of proportional taxation *upon the supposition* that the extreme tract of the utility-curve was such as it has been conceived by Mr. Cohen-Stuart and others. Practical reasons, not deductions from any form of the first principle, would thus lead to a "degressive progression" culminating in a simply proportionate tax of the higher incomes, such as in fact seems to be coming into vogue. Then those who hold the principle of proportional sacrifice might avail themselves of the curious theorem given by Mr. Cohen-Stuart, that an approximately proportional tax being imposed on the higher incomes, the law of progression for the tax on the lower incomes, as deduced from the principle of proportional sacrifice, would be much the same, however the law of utility might vary, between wide limits.[34]

The distinction between like sacrifice and minimum sacrifice is not more serious when the principles are applied to differences in other respects besides amount of income. For example, whether is it easier to say that incomes

[34] Professor Sax's criticism of this arrangement as illogical is not justified by the logic of mathematical science. "From unproved premisses can never follow a conclusion that is to be regarded as proved; from mere assumptions, never a real fact." And much to the same effect in the context (*Progressivsteuer, loc. cit.* p. 82). Now the character of certainty in the conclusion with uncertainty in the premisses is one which frequently is presented in that branch of mathematical science which, as being applied to human affairs, is nearest akin to pure economics, namely, the calculus of probabilities. In ascertaining the probability that a given effect has resulted from a certain cause, it is generally necessary to deal with certain quantities termed *a priori* or antecedent probabilities, about which nothing is known, except that they are not very small [or very great, or very unequal] Thus Mill, of such an argument: "it would be impossible to estimate that probability with anything like mathematical precision," yet "a practical decision can generally be come to without much hesitation." *A priori* probabilities of this character are involved in the received treatment of physical observations.

which are not equally permanent should not be taxed equally, because the sacrifices would not be equal to each other, as Mill has it,[35] or because their total would not be a minimum, as here proposed? So the doctrine of minimum sacrifice, as well as that of proportional sacrifice, may use the proposition affirmed by Mr. Cohen-Stuart, that for the purposes of taxation the married differ from the unmarried chiefly in having a higher minimum of exemption.[36]

To have deduced the precepts will aid us in estimating the authority of *like sacrifice*. This may best be effected, from the utilitarian point of view adopted in this article, by determining the relation of the principle under consideration to the supreme principle. That relation is one of complete autonomy, if like sacrifice is prescribed by intuitive justice. But the utilitarian will not accept this *imperium in imperio*. He will object to like *sacrifice* thus supported, what several acute dialecticians[37] have objected to proportional sacrifice, that its propriety is not self-evident.

A position more neutral with regard to utilitarianism is taken by Mr. Cohen-Stuart when he maintains that proportional sacrifice, leaving the relation between all the parties in respect of welfare unchanged, is *the* principle for the Manchester man.[38] Somewhat similar appears to be the position of Professor Sidgwick, except that he has explicitly recognised the supremacy of the greatest-happiness principle, and admits the possibility of its being employed to promote equality by taxation. But he regards this direct interposition of the supreme principle as liable to a dangerous excess. The principle of equal sacrifice is therefore deputed to act, a deputy not liable, like the principal, to be betrayed into imprudent concessions. This paraphrase is based on the following passages and their context:—

"The obviously equitable principle—assuming that the existing distribution of wealth is accepted as just, or not unjust—is that equal sacrifices should be imposed on all; and this [is] also obviously the most economic[39] adjustment of the burden except so far as it is thought desirable to make taxation a means of redressing the inequalities of income that would exist apart from governmental interference."

"The introduction, however, of this latter principle to any marked extent involves the danger" [described in the preceding chapter]. "And the danger is much greater here . . . because if the principle is applied at all, any limit to its application seems quite arbitrary."

The position of Mr. Cohen-Stuart with respect to proportional sacrifice and that of Professor Sidgwick with respect to equal sacrifice are tenable,

[35] *Political Economy*, Book V, ch. ii, § 4, note.

[36] *Bijdrage*, pp. 140—145.

[37] *E. g.* Graziani, *Istituzioni*, p. 301; Sax, *Progressivsteuer*, p. 62.

[38] *Bijdrage*, ch. v.

[39] "Economic" is, of course, used here in the same sense as in the preceding chapter; that is, nearly equivalent to utilitarian in our first sense. (See Henry Sidgwick, *The Principles of Political Economy*, London 1883, Book III, Chapter vii, § 1, par. 1).

so long as we hold with Mr. Cohen-Stuart that the utility-curve is ultimately of the Bernoullian form. But if, as above contended, this premiss is not tenable, then a rapidly progressive taxation following from the principle of proportional sacrifice, the Manchester man could hardly be expected to acquiesce in that principle. Nor could the principle of equal sacrifice be safely deputed to act on behalf of the supreme principle. Of the deputy as well as of the sovereign, we might then say: "if the principle is applied at all, any limit to its application seems quite arbitrary." At any rate, the only certain limit to the application of equal sacrifice—viz. that more than the necessary minimum of taxation should not be raised and more should not be required from the higher incomes than would bring down all above a certain level to that level[40]—is greatly in excess of practical limitations. Is it not simpler to dismiss the deputed principle of equal sacrifice, and to adopt as the true norm of taxation minimum sacrifice tempered by a regard for the growth of wealth and other advantages above enumerated?

The capacity of like sacrifice to act independently is even less upon another view of its authority. What if, as compared with the utilitarian code, it is not a sort of by-law, as just now in effect supposed, but simply a clause, a badly-transcribed clause, of the code itself? What if *equal sacrifice* is but a corrupt reading for *equi-marginal sacrifice*, the condition of minimum dis-utility?[41] Thus Mill, in that classical passage which has influenced the most influential of his successors,[42] in the same breath proclaims the principles of equal and of least sacrifice:—

"Whatever sacrifices it [a government] requires from them [persons or classes] should be made to bear as nearly as possible with the same pressure upon all, which, it must be observed, is the mode by which least sacrifice is occasioned on the whole."[43]

It is remarkable that in support of one of the principal reforms with respect to taxation which he advocated, Mill should have employed the genuine utilitarian reasoning in favour of equality rather than the questionable principle of equal sacrifice.[44] Thus when he first introduces the proposal to limit inheritances:—

"It must be apparent to every one that the difference to the happiness of the possessor between a moderate independence and five times as much is insignificant when weighed against the enjoyment that might be given, and the

[40] As appears from the position of the curve through t in the diagram.

[41] Above, p. 121.

[42] Both Mr. N. G. Pierson (*Staatshuishoudkunde*, 1886, p. 310) and Sir Robert Giffen (Evidence before the Financial Relations Commission Q. 7777) profess to follow Mill.

[43] Mill, Book V, ch. ii, § 2, par. 1. The divergence between the principle of equal sacrifice presented by Mill and that of minimum sacrifice is indicated by the present writer (*op. cit.* p. 118). Professor Carver calls attention to the fact that Mill affirmed the two divergent principles in the same passage (*Amer. Acad. for Pol. Sci.*, 1895, p. 95).

[44] Bentham is always clearer than Mill in the deduction of equality from greatest-happiness, because he virtually employs the differential calculus: adding and subtracting "particles of wealth," as in *Pannomial Fragments* (*Works*, Vol. III, p. 231).

permanent benefit diffused by some other disposal of the four-fifths" (*Political Economy*, Book II, ch. ii, § 4).

And in a later chapter on inheritance, he refers to "the deeper consideration that the diffusion of wealth, not its concentration, is desirable" (Book V, ch. ix. § 2).

So McCulloch can see no halting-place, such as the principle of equal sacrifice is supposed to supply, between a proportional income-tax and that levelling of the higher incomes which, as above shown, is the inference from the principle of minimum sacrifice.[45]

So Dr. Robert Meyer describes as "the commonest argument" in favour of progressive taxation one which rests upon an interpretation of equal sacrifice which makes it virtually identical with equi-marginal sacrifice.[46]

So some of the high authorities who have advocated progressive taxation on the ground of equal sacrifice may be credited with an "unconsciously implicit"[47] utilitarianism of the pure type. Mr. Cohen-Stuart indeed has argued that several of these high authorities hold the principle of proportional sacrifice. For whereas they have deduced progressive taxation from the principle of equal sacrifice, *simpliciter* and without any *datum* as to the law according to which utility diminishes, this fallacious reasoning is explicable, he thinks, on the former supposition, but on the latter inexplicable. But what if there was in the confused minds of these distinguished publicists not *equal* sacrifice nor yet *proportional* sacrifice, but *equi-marginal* sacrifice (leading to *minimum* sacrifice)? It is true that this premiss is less consonant to their statements than the other. But then their conclusion really does follow from this premiss. Obliged as we are to make a compromise between obscure premisses and fallacious reasoning, may not the line of least confusion, so to speak, be—not the assumption that the premiss was somewhat obscure and the reasoning somewhat erroneous, but—that the premiss was quite confused and the reasoning quite exact?

Altogether, whatever view we take of the relation of the principle of like sacrifice to pure utilitarianism, the sphere of its action independently of that supreme principle appears to be insignificant.

The proposal here made to substitute *minimum* for *equal* in the "sacrifice" theory of taxation will not modify considerably the practical directions afforded by that theory. Rather the obligation to follow those directions is made clearer. As of old, before the invention of the compass, the star-steered sailor would not sensibly have altered his course if he could have discovered, by the use of a telescope, that what he had regarded as a luminous point was really a double star, composed of bodies separated from each other many million miles; so in the present state of financial science, affairs

[45] *Edinburgh Review*, Vol. LVII, p. 164 (1833).

[46] *Op. cit.* p. 331.

[47] The happy term applied by Professor Sidgwick to the utilitarianism which is latent in current ethical opinion.

being at such an enormous distance from principles, the discovery that the sacrifice theory comprises several distinct ends is not calculated to result in a serious alteration of the line of conduct indicated. Rather the use of our speculative instruments in separating the species of this theory of taxation conduces to keeping in view the generic principle, in spite of distance and obscurity. The use of *minimum*, instead of *equal*,[48] sacrifice enables us to pierce the sort of metaphysical mist which has been raised by the question: *Why* should the principle be adopted?[49] The question is not embarrassing to those who regard minimum sacrifice as a deduction from the greatest-happiness principle—"the only possible, the only conceivable principle which can guide legislation on a great scale."[50] Again, there is a want of clearness in the reasoning from the principle of equal sacrifice, because in order to obtain any conclusion some assumption must be made as to the rate at which the increase of utility tends to diminish with the increase of means;[51] while "to ascertain the exact relations between something psychical and something material is impossible."[52] But the reasoning from the principle of minimum sacrifice assumes no exact relation between utility and means; it assumes only what is universally admitted, that utility does not increase proportionately to means, the Jevonian "law of diminishing utility". Again, some confusion is caused by the conflict between the two forms of equal sacrifice; equal in a proper sense and proportional. But the pure utilitarian has no difficulty in accepting both principles as equally inexact but equally useful approximations to the true principle; or rather that of proportional sacrifice as more exact, being more in accordance with minimum sacrifice, equal sacrifice as more useful, in this country at least, as being more familiar.

To take as a concrete example the problem presented by the financial relations between England and Ireland, the general result of the preceding considerations would be to strengthen that argument in favour of the Irish claim which is grounded by some high authorities on the principle of equal sacrifice, and to weaken those objections to the argument which are grounded by other high authorities on the indefiniteness of the principle. This correction would be the less important in so far as the consideration of sacrifice has to be combined with other considerations not admitting of precision.

There are several considerations special to the concrete problem which can only be adverted to here—put in the form of questions to which the answers are not given. (1) What disbursements from the Exchequer are applied to common purposes, the benefits of which cannot be allocated to particular regions, any more than to particular individuals? Does "the expenditure . . . .

[48] In the following paragraphs dealing with practice it has seemed best as most agreeable to usage, to occasionally employ the term "equal" generally, covering *proportional* as well as *equal* in the proper sense (see above, p. 124).

[49] Asked, *e. g.*, by Professor Graziani with reference to the Dutch form of the doctrine, *Istituzioni*, p. 301.

[50] Sir Henry Maine, *Political Institutions*, last page.

[51] Above, p. 124.

[52] Seligman, *Progressive Taxation*, p. 136.

for the general objects for which a government is carried on, namely, for the administration of justice, the maintenance of order, the maintenance of the poor"[53] and so forth, belong to this class? (2) Whether, if much of the taxation complained of is raised by duties on stimulants, the privation thereby occasioned to the consumers should be left entirely out of account, and no part of it should be reckoned in that total of sacrifice which it is sought to minimise, because some part of the taxed commodities is consumed intemperately? (3) Whether it is any mitigation of such sacrifice that the consumer of the taxed articles was free to abstain therefrom; or whether it is not only demonstrated by the classical political economy[54] that taxes on commodities are not less burdensome, but also demonstrable by the modern mathematical method[55] that they are more burdensome, than direct taxation? (4) Whether, if a special rate of taxation is claimed by the inhabitants of a peculiarly circumstanced part of a united kingdom, such as Ireland, on the ground of a special predilection for certain now heavily taxed commodities, or on any other *prima facie* reasonable ground, such a claim is not to be entertained, because it would not be practicable to allow a special rate to the inhabitants of some other part of the United Kingdom, such as Wiltshire; or whether, as Mill says, with reference to his proposal to allow a specially low rate of taxation for a class whose sacrifice is specially great, "the difficulty of doing perfect justice is no reason against doing as much as we can?"[56] (5) Whether, if Ireland is overtaxed only because she is poor, it may not be a problem of practical interest to determine by how much her taxation is in excess of what it would be if a just distribution of taxation as between rich and poor prevailed throughout the United Kingdom? (6) Whether and how much the Irish claim is strengthened by the treaty of the union providing for "particular exemptions or abatements"? or (7) on account of the alleged "economic drain from Ireland"? or (8) on old scores, in particular the generally admitted overtaxation in the middle part of the century, and the much-disputed transactions in the first part of the century?

To attempt to evaluate these items in the account between the two countries would be out of place in a discussion of pure theory. It will merely be assumed here, for the purpose of illustration, that the items referred to are not so

[53] Sir Robert Giffen, in evidence before the Royal Commission on the Financial Relations between England and Ireland (Q. 11,024).

[54] See Mill, Book V, ch. vi, § 1. Cp. Bastable, *Economic Journal*, Vol. VI; note to p. 202.

[55] If a given amount—which may at first be supposed finite and small—is raised by taxing a few commodities (not specially selected in the interest of the consumer as suggested by Professor Marshall, *Principles*, Book V, ch. xii, § 7), there will in general occur under the head of those commodities a loss of "consumers' rent" which does not occur when the amount is directly subtracted from income, the consumer being free to reduce his expenditure on all commodities without disturbance of prices. The proposition may easily be extended to larger amounts of taxation.

Abstraction is here made of certain secondary advantages attending indirect taxation: that it is apt to escape attention, and that it is taken at a time and in a manner very convenient. The former advantage, as Mill observes (*loc. cit.*), is dwindling; the latter may find a set-off in the practice of stopping income-tax at the source.

[56] *Political Economy*, Book V, ch. ii, § 4.

preponderant as to make the consideration of "sacrifice" of no account. Upon this assumption the first approximation to the solution of the problem is obtained by minimising the total sacrifice, subject to the condition that production is not much diminished. The condition, as above explained,[57] operates at two points. There is danger of diminishing by differential taxation the accumulations of the very rich, the efficiency of the not very rich.

The latter consideration has been urged with great force by Professor Sidgwick and Professor Bastable in the Memoranda submitted by them to the Financial Relations Commission.[58] It must be remembered, however, that the consideration figures on both sides of the account. If the efficiency of the richer country may be somewhat diminished by increase of taxation, the efficiency of the poorer country may be considerably increased by relief from taxation. The gain on balance is especially evident in the case where the aggravation of taxes is experienced by those whose income exceeds the necessaries for efficiency, and the relief from taxation is experienced by those whose income falls short of the necessaries for efficiency; necessaries being here defined, as proposed by Professor Marshall, in such wise that the income of any class is said to be below the necessary level when an increase in their income conduces to an increase by a greater amount in their efficiency.[59]

It is not quite clear how far this consideration of efficiency forms part of the ground on which the exemption of a minimum income from taxation is ordinarily claimed. It is, at any rate, a consideration only subordinate to a consideration for the "sufferings of privation" which, as Bentham says, are caused by taxes levied upon persons who may not have wherewith to pay.

The balance of minimum sacrifice against maximum production being necessarily rough, it is no great objection to any part of the calculation that it is devoid of numerical precision. Yet that is the sort of objection which has been brought against Sir Robert Giffen's estimate of the "taxable surplus" for Ireland and Great Britain respectively. On this subject Professor Bastable writes:—

"The fairest rough test—and no test can be looked on as more than an approximation—of taxable capacity is to be found in a comparison of total income rather than in any refined and doubtful calculation as to what is left after necessary expenses have been defrayed."[60]

"The difficulties inherent in any attempt to refine on or manipulate the total income in order to get a measure of ability, seems to indicate the convenience of keeping to the plain rule of taxation according to income."[61]

[57] Above, pp. 122-3.

[58] Vol. II, 182 col. *b.*, and 184 col. *b.*

[59] *Principles of Economics*, Book II, ch. iii, § 3. The level of *necessaries* in the technical sense, is in general different from the "necessaries of life," "the requisites of life and health" (Mill) usually referred to in this connection.

[60] Appendix to *Evidence of Financial Relations Commission*, Vol. II, p. 185.

[61] *Economic Journal*, Vol. VI, p. 200.

"The decisive objection to such theories is the difficulty of their practical application. To estimate income is a task, perhaps, too difficult for the statistician; but to discover the amount of 'free' income is quite hopeless, and the employment of conjectural amounts as guides in so definite a matter as taxation is a dangerous course which might lead to the most paradoxical results. A slight alteration of figures would supply the premisses for an altogether different conclusion."[62]

"In 1886 Sir R. Giffen estimated the taxable surpluses of Great Britain and Ireland respectively at 800 millions and 15 millions; in 1895 he estimated them at 900 millions and 22 millions. From which it at once follows that Ireland's taxable capacity had risen from being less than 1:53 to more than 1:41. . . . Mr. Lough gets 1,092 millions to 15 millions or $72\frac{4}{5}$:1 as the ratio."[63]

This argument seems to exaggerate the determinateness of the problem. Taxation is "not so definite a matter". The claim to a special rate of taxation, as Mill says of the claim on behalf of temporary incomes, "does not rest on grounds of arithmetic, but of human wants and feelings". As involving an estimate of immaterial quantities the distribution of burdens in the way of taxation might be compared to the distribution of prizes by way of examination. It is not so definite a matter measuring intellectual ability by numerical marks. "The difficulties inherent in any refined attempt to get a measure of ability" might seem to indicate the convenience of keeping to some "plain rule" of examination, *e.g.* that the marks of a candidate should be proportioned to the *length* of his answers. But this plain rule being plainly unfair is not preferable to more refined estimates which though affected with "personal equations", and all kinds of fortuitous aberrations, still aim at least at ideal fairness. It is quite possible that marks so different as 53 and 41 assigned to the same candidate by different assistant examiners might assist the head examiner in placing the candidate. So the very divergent estimates of damages made by separate jurymen are compounded into a result by which substantial justice is secured. The estimates of taxable surplus must be similarly treated as liable to a considerable "error" or uncertainty. It is in this spirit that the distinguished propounder of the estimates in question has understood his figures.

"When we come to deal with the matter equitably, that is a thing which ought to be allowed for."[64]

"But then of course these are very rough computations indeed, and are only meant to be illustrative of what the effect of applying this principle would be."[65]

"Some rough mode of calculation of that kind is all you can do."[66]

[62] *Economic Journal*, pp. 199, 200.

[63] *Ibid.* p. 200, notes.

[64] Evidence of Sir Robert Giffen before the Commission on Financial Relations between England and Ireland (Q. 7777).

[65] Evidence of Sir Robert Giffen before the Commission on Financial Relations between England and Ireland (Q. 7778).

[66] *Ibid.* Q. 7780.

"I do not suggest and never suggested such a rule [that the taxable incomes of Ireland and Great Britain are in the proportion 22:900] could be applied in a strict arithmetical way."[67]

In short, the general principle for adjusting taxation between two regions—or any classes, whether defined geographically or not—between which it is thought fit to establish distinctions of taxation, is not a simple rule of three applied to incomes, but rather a method such as that which was adopted in Switzerland in 1851, for regulating the contributions of the cantons to the "Federal Expenditure."

"To make oneself familiar with all the different circumstances which have to be taken into consideration in order to form a judgement on the economic situation of a canton; then, using a free judgment, and without taking too rigorous a basis, to tax each canton according to a certain tact."[68]

The alternative plan of "proportioning the normal contributions of different income classes to the *total* incomes of the respective classes, while carrying out Mill's principle of not trenching on the subsistence minimum, by excluding taxes on the necessaries of life as well as direct taxes of the poor",[69] derives, it is here submitted, an undue support from Mill's use of *equal*, instead of *minimum*, sacrifice. Even on the principle of equal sacrifice proportional taxation of income (above the exempted minimum) is an extreme measure.[70] The golden mean is not to be attained by creeping cautiously close to the limiting extreme—*nimium premendo litus iniquum*. The guiding star of Utilitarianism shines in a direction away from that hard coastline, and gilds the bolder course with the light of pure theory.

[67] *Ibid.* Q. 7787.

[68] Quoted by the Royal Commission on the Financial Relations between England and Ireland, Vol. II, Appendix XVI.

[69] Professor Sidgwick in Appendix I. to Vol. II. of Evidence before the Commission on Financial Relations (C. 7720), p. 183. Compare the very similar language of Professor Bastable on p. 185.

[70] As argued above, p. 130.

THE FUNDAMENTAL PRINCIPLES OF A PURE THEORY OF PUBLIC FINANCE

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Translated from Italian* by D. Bevan

1

The pure science of public finance needs more than a theory of production and a theory of public wants.[1] It needs also a theory of public enterprise, this latter theory being simply a particular aspect of the general theory of marginal productivity. In this way due account can be taken not only of the demand for public goods and services, but also of their supply, and an attempt can be made to find the conditions of equilibrium between demand and supply.

The enterprise constitutes the new element to be studied in the field of production. The enterprise is simply a way of organizing the various factors of production entering into a process of production. Given a specified quantity of factors of production in a specified place and time, there are various ways of combining and organizing these factors for different purposes or even for one single purpose. There is also always one such way of organization to achieve the purpose most economically: this constitutes the most perfect enterprise at that moment. The best way will be ascertained by means of trial and experiment. And since the quantities of factors of production vary continually, because they also depend upon the results of the combinations, there will be an infinite number of attempts at organization, especially in a dynamic society. Any organization which is more economical than the previous ones represents an advantage and an element of production. Precisely for this reason pure economics considers enterprise as one of the factors of production. All the conditions and causes of the greater or lesser productivity of an act of production must be regarded as so many forces co-operating in the process of production. If, given equal labour and capital, the productivity of two productive combinations can vary because of a difference in organization, we must conclude that industrial organization or enterprise is a factor of production. This conclusion is important because of its application to the sphere of public finance.

The principal forms of industrial organization concern the persons constituting the enterprise, that is to say, the active agents in the co-ordination of the various factors of production. From this point of view, enterprises can be divided into individual enterprises and collective enterprises. A distinction can also be made between private and public enterprises. The public enterprise can be an individual enterprise, but in the majority of cases

* "Le basi fondamentali di una scienza finanziaria pura", *Giornale degli Economisti*, 1900, II.

[1] Concerning these two theories, see my article "Tentativi per la costituzione di una scienza finanziaria pura", *Rivista popolare di politica, lettere e scienze sociali*, Oct. 1900.

it is a collective enterprise. Public enterprises are political organizations. Any political organization also constitutes an industrial enterprise. The reverse does not hold. The industrial enterprise is the genus, the political enterprise the species.

2

The fundamental starting principle is, then, the following: every political organization is an industrial enterprise.

The important question is to determine the nature of this special organization which is called a political enterprise.

Let us start from the premise that entrepreneurs, or those persons whose task is the co-ordination of the various factors of production, always obey the law of the least cost. Given the choice of different forms of co-ordination, they prefer the most economical organization. If they choose the political organization, it means that this enables them to achieve their purpose in the most economical way.

The processes by which different economic units can achieve a particular purpose may be indicated schematically in the following way.

Three entrepreneurs *A*, *B* and *C* wish to satisfy the same needs and to achieve the same purpose. They can do this in three ways:

a) By working in isolation, without being concerned about one another, each of them combining the various factors of production in whatever way he considers most advisable. This is the case of the *individual enterprise*.

b) By acting in association with one another. This will happen whenever a joint effort is apt to raise the productivity of industry. It is the case of the *collective enterprise*.

c) By causing the cost of the enterprise to be shared also by other economic units *D*, *E*, *F*, *G* etc. which do not form part of the enterprise, that is to say, by distributing the cost of the enterprise over a community. Recourse will be had to this process when it represents the most economical way in which to achieve a particular purpose. In this case we shall have a *public enterprise* or a *political enterprise*.

The characteristics of the public enterprise are thus derived from the method best apt to achieve maximum utility by the production process. This method is hardly ever the best for individuals, but nearly always so for groups of individuals acting jointly. This economic method sometimes merges with the very purposes of the political organization. The public enterprise may be defined as "a productive organization designed to obtain the participation of an entire community in the purchase of given goods or services". In general it is the least costly form of enterprise for the entrepreneurs, because it causes economic units not forming part of the enterprise to contribute to the cost of production of the goods.

3

The entire theory of public enterprise consists in an appropriate formulation of the fundamental theorem by which pure economics explains the activity of the private entrepreneur.

Theorem: "The (individual or collective) public or political enterprise supplies services or goods up to the point at which its supply equals the demand for the said goods; it is supplied with factors of production up to the point at which its demand for them is met".

We can look upon the entrepreneur, in accordance with Walras's very apt conception, as an intermediary between a market of commodities and a market of productive services or of factors of production. Let us examine what is meant by demand and supply in the commodity market and the market of factors of production. This examination will clarify the concepts of agent, object and cost of the public enterprise, and will explain the nature of the hedonistic calculation which pertains thereto.

The agent of the political enterprise, or the political entrepreneur, is that economic unit, or that group, or that economic class which, at its own risk and peril, co-ordinates factors of production in a manner such as to compel an entire community to participate in the production of particular goods or in the performance of particular services. The object of the activity of the political entrepreneur is not the satisfaction of one rather than of another need, but rather the creation of a coercive force for the distribution of the cost of certain production processes over a community. Hence the entrepreneur's supply on the commodity market consists in that special service that we may call "coercive distribution of certain costs over a community". The demand for this special service comes from those who stand to gain by making other economic units contribute to the cost incurred in certain production processes, due allowance being made for the cost of coercion. Those who exercise this demand are nearly always the political entrepreneurs themselves, or, in other words, the demanders themselves create a political enterprise or try to take possession of a public enterprise which already exists. Sometimes, on the other hand, the services of the enterprise are bought by a group of economic units which do not participate in the enterprise. In the first case the entrepreneur's profit consists in the difference between the reduction in the cost of obtaining certain goods and services, and the cost incurred in running the enterprise, that is to say, the cost of coercion. In the second case the profit is the difference between the cost of coercion and the price which others will pay for the services of the political enterprise.

On the market of productive services the political entrepreneur competes with private entrepreneurs. The prices of the factors of production are determined by the ratio between their marginal productivity and their cost in the enterprises. If the state has a large demand for certain factors, this may cause an increase in their price and then, if it is possible to increase the amount of the factors, their supply will be augmented. The political entrepreneur

can thus cause a different distribution of income for the suppliers of certain productive factors, and an increase in certain types of production. It may be that the particular producers so privileged will support the political enterprise, not because they are its entrepreneurs, but because they obtain indirect advantages from it.

4

Political enterprises require very large fixed and working capital and special personal aptitudes. For this reason it is difficult for competition to arise or to be maintained between political entrepreneurs, since a second enterprise must necessarily perish in the face of a single purpose to be achieved in the same environment. The high cost of this form of enterprise also explains why not everyone undertakes it, although it would obviously be advantageous for any economic unit to spread the costs of production destined entirely to its own private profit over an indefinite number of other units.

5

The concept of cost in the theory of public finance is one which has given rise to great confusion, because the object and the subject of the financial enterprise have not been kept distinct from each other. The costs to the enterprise, the costs to the community and the costs to the consumers have always been confused. The theory of public finance has suffered from the same defect which long bedevilled economics as such: the theory of distribution has not been kept distinct from the theory of welfare (Hadley). The theory of distribution shows how the public wealth is divided amongst the various members of the community; the theory of welfare is concerned with wealth in relation to the community as a whole and treats not of individual, but of overall results. In the theory of public finance the State, or the agent of the financial action, has nearly always been regarded as the representative of the community, both necessarily having common costs and rewards. Our analysis shows that we need to distinguish between the political entrepreneur, the consumers of political services and the community. According to the scope of the enterprise, there will be a greater or a smaller number of consumers and of members of the community considered in relation to the political entrepreneur. We shall therefore distinguish:

1) The *cost to the enterprise*. These costs, according to the case considered, may comprise: a) the cost and the disutility of the work of management; b) the expenses incurred in obliging the community to assume certain specific costs, that is to say, in obliging the community to assist in procuring specific goods or services, or the cost of coercion; c) the quota of production cost to be met by the political enterprise itself, so as to obtain, together with the community, certain specific commodities or services.

2) The *cost to the consumers* (of the service of coercion) of the products of the political enterprise. If the consumers are themselves producers, or, in other words, political entrepreneurs, the costs are those mentioned in case 1). If the consumers are economic units which do not form part of the political enterprise, their costs are objectively expressed by the expenses which are necessary in order to obtain from the political entrepreneur the coercive distribution of certain specific costs over the community.

3) The *cost to the community* consists of all the community's sacrifices, the amount of work it has to do and the goods it has to give up. These costs do not, however, all constitute a total loss, since there may be compensations and rewards. We can, in fact, make two alternative assumptions: a) either the community as a whole comes within the category of consumers of public services—in which case it constitutes part of the demand on the commodity market; b) or the community as a whole constitutes the political enterprise, and has organized itself in order to impose coercion on all the members with a view to obtaining the participation of all in the costs incurred in certain types of production.

6

The latter hypothesis is that which is most prevalent in public finance theories. The hedonistic calculation which the agent of public finance activities ought to make nearly always concerns the ratio between the costs which the community has to bear and the satisfactions which it derives from its contributions. But, in reality, the community can never be completely identified with the political enterprise. We cannot assume even theoretically that the political organization represents a great co-operative of producers and consumers, as some people like to imagine. The political organization has, in fact, the purpose of compelling all the people to bear the costs of specific types of production. Now, there are two immediate conflicts amongst the members of the community: one concerning the types of production to be financed in common, the other concerning the distribution of costs. The stronger party would win the day both in choosing the types of production and in allocating the costs; it follows that only the stronger party would benefit from producing the force of coercion and, hence, from political organization. Even if we suppose a society with very broad conceptions of liberty, and one in which theoretically all the members can participate in public enterprise, the costs of coercion to be incurred by the political entrepreneur will not disappear, since in every society there will always be different tastes and different needs and there will always be majorities and minorities, and hence the desire and the necessity for coercion. If the costs under 1) b), were to disappear, this would mean that the political enterprise had ceased to exist and had been transformed into another enterprise. This could happen only if the anarchists' dream of the suppression of all political enterprise came true. If this were possible, it would imply a reduction of costs for the community, because the political enterprise is always a costly form of enterprise, and also because it does not allow free play to private

initiative. But, on the most favourable assumptions, no elimination but only a diminution of the costs under 1) b) can be expected. The chances of such diminution are the greater, the larger is the part of the community which participates in the political enterprise and the more separate economic units and separate groups are free to constitute themselves into enterprises or to withdraw from previous political enterprises (Molinari).

7

An analysis of the hedonistic calculation to be made by the political entrepreneur leads us to formulate certain theoretical cases relating to the constitution of the enterprise.

Let us first define the technical terms to be used. The *marginal productivity* of a productive element is the increase in product obtainable by the application of the last available unit of that element to a productive combination. *Homo oeconomicus* will continue to employ each factor of production up to the point at which the last increment of the factor yields an increment of product just sufficient to pay for itself; we shall call this point the *saturation point*. But the productivity of factors cannot be considered in a purely physical sense, but must also be treated from an economic point of view, which means taking into account the costs incurred in the employment of any factor of production. The economic saturation point is thus reached before the physical saturation point, and the marginal productivity of a factor is given by the point of intersection of the price and cost curves, calculated objectively and subjectively. By virtue of the law of substitution every factor of production in the same enterprise must have the same marginal productivity. All the enterprises in the same market at the same time have the same economic marginal productivities. The profits of the entrepreneurs are differential gains arising from the productivity of supra-marginal applications. It may happen that there are marginal profits, when absence of perfect freedom of competition amongst the various factors of production or amongst the various entrepreneurs enables the enterprise to stop producing before it reaches the intersection point of the cost and price curves. In these cases the marginal productivity of the enterprise constitutes a *surplus* profit for the entrepreneur, since marginal cost does not coincide with the marginal increments of receipts, but is exceeded by them.

8

We can imagine four theoretical cases of the form of the political enterprise: (a) the political entrepreneur may be a single person; (b) an economic group or class may produce political services for itself; (c) an economic group or class may produce political services for outside consumers; (d) a political enterprise may be representative of an entire community, in which case it produces political services on behalf of the entire community.

In none of these cases is it admissible to consider the political enterprise as something abstract, as though it were itself a person. This is the error of those public finance theories which looked upon the body politic as an entity different from the individuals composing it. The reaction against this way of conceiving the political enterprise, or the State, finds its culmination in Sax, who contends that the tasks of the state, the needs of the state and the functions of the state are nothing other than the tasks and needs of the true economies which at any given moment compose the state, and that the hedonistic calculations which are made are calculations of real persons and not of abstract or imaginary persons.

9

Let us start with case (a). It is the case of the absolute chief of a tribe, of the medieval prince, of the autocrat of the great Renaissance states. An individual has such intellectual power, such moral standing and such material force that he can be a political entrepreneur. This means that, amongst the possible uses of his productive activity, amongst the possible forms of enterprise open to him, he will prefer the political enterprise because this will procure him the largest income. He will use his power in order to compel the whole community to bear the costs incurred in obtaining his income. In the first place, however, the entrepreneur has to face the cost of the work of management and of the employment of capital in the enterprise. He must maintain armed forces, prepare the means of coercion and provide himself with a complex administrative apparatus. These uses of capital are indispensable for the entrepreneur.

A confusion of the means and the end led some writers to the belief that these necessary uses of capital constituted true functions of political organization. The state's so-called functions of defence and offence are not needs to be satisfied but rather means for achieving the aim of obtaining an income from the community. Factors of production will continue to be employed in this special form of enterprise until the marginal productivity of the productive process equals its marginal cost. The entrepreneur's profit is the difference between cost and product. This profit, the income of the enterprise, will be employed to satisfy the particular needs of the entrepreneur. Here too, there has been some confusion between the satisfaction obtained from the consumption of an income and the true functions of the entrepreneur. It is not the increasing functions of the state, nor yet the growing needs of the political entrepreneur which are the ultimate cause of the entire process—it is the greater satisfaction which derives from an increase in income. For this reason, if the needs of the entrepreneur are to be taken into account, they should be considered as one of the causes which can influence the quantity of goods and hence their value. We can look upon the requirements of the entrepreneur as influencing the demand for the services which the political

organization can provide. This demand does not by itself explain or mark the limits of the enterprise; these limits must also be determined in relation to the productivity of the enterprise in question. The entrepreneur's requirements are never autonomous data; just as they can continually vary with variations in the environment, so can they be modified by a modification in the productivity of the enterprise. We can therefore say that if the entrepreneur's requirements are small, the incentive to greater production will also be small; this incentive can increase not only with an increase in his requirements, but also with an increase in the productivity of the enterprise.

In conclusion, we can say that the entrepreneur's hedonistic calculation does not relate to the question whether it is more economical for him to satisfy certain needs by public or by private production. So far as the isolated entrepreneur is concerned, any need will be most economically satisfied by the political enterprise, since it distributes the costs of production over economic units which receive no part in the distribution of the product. The single political entrepreneur's hedonistic calculation on the contrary concerns the comparison of the cost of the enterprise and its product, abstraction being made of the needs which are satisfied with the income obtained. Right from the beginning of these hedonistic calculations we must seek to avoid confusion between goods and needs. Subjectively, utilities are compared; objectively, quantities of goods (Graziani).

10

Let us pass on to case (b): it is the most frequent case, that of a group or an economic class which carries on the enterprise in order to compel the community to provide the class with an income.

Here we have the first form of co-operative association in the political enterprise; we shall see other forms. Meanwhile let us note that it is wrong to believe that the political enterprise is always a collective enterprise—we have already seen that it can even be an individual enterprise. Nor is the political enterprise a co-operative enterprise designed to satisfy certain needs in the most economical way. Here too, the point is that a larger income can be derived from the political than from any other form of enterprise. Every associate will calculate whether it is of more advantage to him to participate in the political enterprise rather than take part in private, individual or collective production.

When a co-operative political enterprise is formed, the expenses of coercion are of two kinds: one kind of coercion is needed to keep the association together, another—the usual kind—is concerned with distributing the costs over the community. The profits of the enterprise are distributed according to the marginal productivity of the associates and to the marginal productivity of their capital contributions. Here too, the enterprise has a marginal

productivity. In the hedonistic calculation the community is neglected; the real subjects are only the associates.

Historically, the first form of the costs of the sole function of the political enterprise, namely coercion, was expenditure on war. War is seen as a way of obtaining an income, and as the most economical way of doing so. This constitutes the phase of *war competition*, as Molinari calls it. The strongest obtain their profit by killing off the weakest, rather than by dividing a stock of means of subsistence amongst all of them; the sum total of work and disutility borne in the cause of destruction is held to be less than the privations which would have to be accepted if the means of subsistence became scarce. In the case of anthropophagy there would be a double profit, since the means of subsistence would increase in two ways.

In a second historical phase greater profit is derived from making slaves of the weakest instead of massacring them. We then have what Molinari calls *political competition*. War has two main objectives: the defence and the enlargement of states which have already been formed. The most intelligent tribes which live by means of raids, set out to perpetuate this form of income which threatens to become transitory and to decline, they subjugate populations and have an interest in protecting them, since they thereby protect their own dominion. The political enterprise becomes an organization for the exploitation of conquered territories and enslaved populations. This is decisive progress in comparison with war competition, since in political competition we find that the community is not only protected against foreign invasions, but by means of institutions which safeguard its internal and external security, the community is sometimes also encouraged to increase its gross product.

Here too, the means of attaining an increased income or profit have been confused with the particular aims and purposes of the enterprise. The effect has been taken to be the cause. A little reflection will immediately show the mistake. The income of the enterprise can be divided into two parts: a) one part is destined for the continuation, improvement and extension of the enterprise, and will be used, for example, for fortresses, harbours, arms, means of defence and attack, roads, bridges etc. These achievements may prove advantageous to the community, or, in other words, they may satisfy the needs common to the association or political enterprise and to the community. But this coincidence of needs is purely fortuitous and has no bearing on the hedonistic calculation of the entrepreneur; on the other hand, the cost of these satisfactions also invariably falls, for the most part, on the community; b) the second part of the income is destined for the satisfaction of the needs of the associates. Nor may these expenditures be confused with the needs of the political organization; the satisfaction of the needs of the single associates may not be regarded as functions or attributions of the state. It is not a question of the spending of an income. It is not a question of special needs of a collective nature. The point is that the size

of the income engenders particular requirements and that the satisfaction of these requirements constitutes a particular standard of living which, as an element of demand, may influence the intensity of exploitation on the part of the political enterprise.

11

Within the political co-operative, there is, however, room for a further stage of economic action. The following problem might arise: is the income obtained to be spent collectively or individually? The question can clearly arise only with regard to some particular need and not to the income in general. If it arises with regard to the need x, the following assumptions can be made: a) that the need x is a need felt by all the members of the political association and that they are all equally in agreement with collective satisfaction; b) that the need is felt by only a part of the political associates; c) that it is a need common to all, but that not all are agreed on the desirability of making collective provision for it. Case a) is purely hypothetical. In cases b) and c) the opinion of the majority prevails; it is the fact that the stronger part finds collective action desirable which leads to collective action. Coercion is necessary in order to achieve this purpose, in the same way as coercion is used in relation to those members of the community who are not associates of the political enterprise. The profit of the majority still lies in being able to distribute the costs of production over economic units which derive no immediate benefits from the productive process. Here too, it is not the satisfaction of the collective need which constitutes the function of the political enterprise—the sole political function is, as always, coercion.

However, the collective expenditure now imposed by the coercive force of the political entrepreneur is made by the entrepreneur himself, and it serves the satisfaction of certain needs of the associates. This means that the entrepreneur has expenditures and therefore functions other than those of coercion. What hedonistic calculation determines these expenditures? Ten associated economic units have a given income of 100. Of these economies, eight believe that 56 income units should be spent, for example, on water supplies, while the other two want to be free to spend their share of the income in their own way, or believe that they can get water very cheaply for themselves, at a cost lower than the collective cost. What is the calculation of the first eight economies? It is generally believed that the calculation concerns the relative cost of providing water by individual or by collective action. In fact however, it is clear that the comparison really lies between the possible diminution of cost on the one hand, and on the other the sum necessary for creating the coercive force which will enforce the distribution of the total cost and lead to a diminution of costs for the majority. The majority acts in relation to the minority just as the entire association acted in relation to the community, namely as a political enterprise. The parties which contend for the conquest of the management of the enterprise can be

considered as so many political enterprises, armed organizations for the conquest of power, acting for the sake of the material and moral benefits which the management of the enterprise procures. In our example the hedonistic calculation of the eight economies which want collective water supply, is roughly as follows. The total amount necessary to obtain the water may be 56, if each acts in isolation: this means that each of the eight economies must bear a cost of 7. For collective action to be advocated, is it necessary that it should entail a total cost of less than 56? This condition is not necessary, nor may it be sufficient. It is not *necessary* because, even if we suppose the cost of collective action to be the same, that is 56, collective action will have the advantage of distributing the total cost over ten economic units instead of eight. Collective satisfaction of the need for water supply would reduce the costs of the individual economic units to 5.6, on the assumption that the costs are distributed equally. This gain of 1.4 for each of the eight economies must be compared with the cost incurred in obtaining collectivization, that is to say, with the expenses of coercion. The condition is not *sufficient* because collectivization entails expenditure which must be taken into account in determining the desirability of the action. Let us suppose that collective action reduces the total cost of water supply from 56 to 50; it is clear that collectivization can be effected so long as the expenses of coercion are less than 6; if they exceed 6, there will be no economic advantage.

12

We have so far examined two kinds of expenses incurred by the political association, those of external coercion and those of internal coercion. There is, between them, at least a quantitative, if not a qualitative, difference. When a political group seeks to impose its costs of production on a part of the community which does not participate in the enterprise, the cost so imposed in general increases until the last increment in the expenses of coercion equals the product. This is the process and the financial phenomenon which is called taxation. On the other hand, the purpose of coercion inside the group is that of sharing the cost rather than of transferring it completely to another class. The associates, that is to say, do not wish to evade all the costs of the enterprise, but wish that the entire community should participate in them; they do not decline making a contribution in order to achieve their purpose, they wish only to diminish it. We shall call *contribution quota* that expenditure which is borne by the associates and which, when calculating total cost, should be added to the expenses of coercion. The difference between tax and contribution quota is, however, a quantitative and not a qualitative one, since both derive from the single function of the political enterprise and simply indicate degrees or the greater or lesser scope of the enterprise. In one case we shall have complete exploitation, in the other lesser exploitation (Molinari).

13

Let us now analyse case (c), namely that of a political enterprise in the hands of a group or a class which, as well as being a direct consumer of the services of the enterprise, also sells the services of coercion to consumers not belonging to the group. This is the most developed form of public enterprise, in which the entrepreneurs can clearly be distinguished from the consumers. Let us briefly quote concrete examples of this form of enterprise. The State grants certain privileges to an economic unit or to a group of such units, against appropriate compensation. We are here excluding those cases in which the privileged economies have conquered power in order to impose the privilege by coercion. But it may happen that the State sells to an inventor the coercive force which will ensure him the exclusive use of his invention; grants a bank the monopoly of note issue, reserving the right to participate in the profits; grants a right of protection to a manufacturer or to an industry which has been able to buy the protection. It is common knowledge that manufacturers who have an interest in obtaining certain measures or laws, often attempt to bribe governments, representatives of the people and legislators. We may recall the immoral policies of which the directors and representatives of trusts are accused, or the complaints against dishonest procedures of governments and contractors in the commissioning of public works, or yet the shady practices and compromises involved in obtaining works of local and regional benefit or of exclusive benefit to special classes. In all these cases the special service of coercion, which could not otherwise be obtained, is bought from the political entrepreneur. Sometimes the coercion concerns external State action, that is to say, action by one political entrepreneur against other political entrepreneurs. Thus many wars have been paid and fought on behalf of other countries, or of particular economic classes. In the Middle Ages these special economic contracts were frequent. The interventions of the Emperor or the Pope in the struggles between cities were essentially economic operations; the political entrepreneurs, namely the Emperor and the Pope, sold services of coercion to the consumers, who were the cities. Even today examples can be quoted in which warring parties invoke the intervention of a State and pay for it by the cession of some territory or by the recognition of rights of suzerainty and the duties involved therein.[2]

In this case the hedonistic calculation of the entrepreneur requires no explanation. The entrepreneur obtains a profit from his operations, which he is induced to continue until he has reached a saturation point, the point of equilibrium. The functions of the State are determined by the consumers' interest which creates the State interest. Here too, the community does not enter into the hedonistic calculation; nor do we find any pressure of general needs which can be collectively provided for at reduced costs.

[2] Even in the case of free agreements between two economic units, the fulfilment of contracts can be ensured by recourse to the State, and by buying the force of coercion. Laws, statutes, regulations etc. may be considered from this point of view.

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There remains case (d), in which an entire community constitutes the political enterprise and participates in it. Is the entrepreneur the community, and must the hedonistic calculation derive from the community itself? The entrepreneur produces coercive force. This force of coercion is applied to the maintenance of the community in certain specific forms, to the achievement of certain aims and ideals, to the collective satisfaction of certain needs. The form, the aims and the needs of the community are not under discussion. It is certain, however, that if they were identical for all the associates, the action of the political entrepreneur would be redundant; coercion would cease and all political organization would disappear. The continued existence of the State means that coercion is necessary in order to make the needs of a majority prevail. The hedonistic calculation appertains only to part of the community, namely the majority. However, given the hypothesis of general participation of all the members of the community in the political enterprise, coercion assumes a milder form; it takes the form of contribution quotas and not of tax. A further struggle develops with regard to the determination and distribution of the contribution. The individual's readiness to vote for the expenses of coercion will vary according to the size of the contribution. The expenses of coercion canse collective action always to be more costly than individual or independent associated action. It may nevertheless happen that, despite these expenses, the maximum size of corporation, which comprises the entire community, proves more economical. But we already know that the greatest total productivity of collective production is neither necessary nor sufficient to determine collective action; the expenses of coercion must also be taken into account. The whole question lies then in the proportions in which a particular need is felt by the members of the community, and in the possibility of distributing the contributions in unequal fashion.

Coercion consists in obliging all the associates in the enterprise to contribute towards a particular purpose, for example, water supply. Let us make the broadest hypothesis and postulate that it is a question of achieving a purpose, or of satisfying a need, that is of a general nature. The enterprise levies a contribution from all the members of the community. Let us further suppose that the contribution quota is equal for all members. The objective economic expression of the advantages of collectivizing the production of a good, will be the price at which the consumer can buy a given product. This price, whether it is paid before the service is performed or at the moment of consumption, must be lower than the price previously ruling on the market. For example, water previously cost twenty pence per cubic metre and now, with collective production, it costs ten pence per cubic metre. All the associates should agree on this collective production, which proves less costly *for all*. But this is not a sufficient reason to induce all of them to collectivize production, and indeed we see bitter discussion and opposition against

assuming certain types of collective production which are manifestly of a general character and more economical. What are the reasons for this?

In the case of equal contribution by all members, as in the case of prices paid at the moment of consumption, the reasons must be sought in the fact that, at the moment of deciding what needs are to be satisfied collectively, not all the associates can agree on the preference to be accorded to one rather than to another need. The process is as follows. All individuals have before them a more economical way of satisfying their own needs, this being the coercion which will distribute the costs over the whole community. According to the urgency of his own needs and the greater or lesser ease with which he can satisfy them in isolation, everyone will try to make that need prevail, the collective satisfaction of which will afford him the greatest advantage. Any collective production which fulfils the condition of the greatest economy and which yields products of general consumption, could with advantage be accepted by all the associates. But they think in terms not of the isolated differential utility of a single productive act, but of the relative utility of all the possible types of production that could be collectivized. For conflicts to be avoided, the political entrepreneur's power of coercion would have to be infinite and limitless; but it is certain that this power too is, at every moment, finite in extent and efficacy.

There are other cases when collective production yields the most economical product, the contributions on the part of the individual associates being unequal. Then the political struggle against the sanctioning of collectivization becomes unavoidable and obvious. It may, for example, be said: water is a good of general consumption which can be obtained collectively at a lower cost, but in order to obtain it let us raise existing tax rates proportionally. If the existing system is already unequal, this means that the inequality will be accentuated and that the economic calculation will differ for the various economic units according to whether they are favoured by the tax system or not.

Hence here, too, the calculation of advantages entails not merely a comparison of different total costs or prices, but a more complex comparison of the various associates' relative utilities.

In conclusion: even when the political entrepreneur represents the entire community, the very fact that the entrepreneur functions means that the community needs a service of coercion in order to distribute the costs. This means that the calculations of economic advantage differ from one associate to another when it comes to determining the needs to be satisfied collectively. The collectivization of the satisfaction of some needs always aims at a participation in the costs by economic units which would not voluntarily have so participated.

15

A public finance theory which conceives of the financial phenomenon as the activity of an industrial enterprise whose purpose it is to distribute

the costs of specific types of production over the entire community, adds a correction to those public finance theories which take as their basis and starting point the concept of collective needs. These theories relate only to the conditions of demand for public services and not to the conditions of supply. We, however, demonstrate that there are no public, or collective, needs in the strict sense of the word, as opposed to private needs. It is always real individuals who calculate the advantages of imposing on the community the production of certain specific goods. The needs satisfied by the owners of the public enterprise, and which are called collective needs, are either expenses necessary to the functioning of the enterprise, or they are satisfactions that can be obtained by the consumption of the income or the profit of the said enterprise. The nature of the need does not explain the special activity of the political organism; it is the public enterprise which determines and originates the satisfactions of the entrepreneurs. That is to say that the most economical form of enterprise is adopted for the procurement of goods; if this is the political enterprise, the needs satisfied with the income thus obtained cannot be assumed to be the causes of the enterprise: at most, certain satisfactions will be means for the creation and maintenance of the enterprise. We see that historically the so-called public or collective needs vary: no collective need can be said to be of a universal character in space and time. Thus the test of history also confirms us in the opinion that it is fallacious to consider that satisfactions obtained collectively necessarily derive from the special nature of needs which are termed collective.

ON TAXATION IN GENERAL

By PAUL LEROY-BEAULIEU
Translated from French* by Elizabeth Henderson

The public domain may well in the future furnish the public treasury with more abundant receipts than it does now, but taxes will long, if not forever, remain the principal source of public revenue. Hence the study of tax questions is perhaps the most important part of the science of public finance. What is the best tax system, not only for the exchequer but for society itself? What are the consequences of various taxes for the fortunes of the taxpayers and for the relative position of the various classes of the people? What is the effect of taxation, not only on the citizens' material output, but on their very freedom and way of life? All these are so many questions which must be probed and to which it is desirable that we should find an answer.

We must first define our terms and this should not prove too hard in our case. The public knows well enough what taxes are. Every time the public authorities levy, directly or indirectly, any money from the public for which it does not immediately receive any visible counterpart, the public says that it is paying a tax. None the less, economists and financial writers have not so far agreed on the definition of taxes. Much hair-splitting has gone on on this subject. Instead of observing a simple and universal fact, the definition of taxation has been made the foundation stone of various economic and financial systems. Every writer has put his own personal fancies in the place of observed facts. A tax is purely and simply a contribution, whether direct or masked, which the public authorities impose upon the inhabitants[1] or goods for the purpose of defraying government expenditure. Whether that expenditure is good or bad, judicious or not, in the interests of all or some—these are distinctions which can have economic and social repercussions, but which do not change the concrete nature of the tax. In Turkey, for example, practically the entire tax revenue goes to pay foreign creditors and to maintain the luxury of the court; are we to say that the subjects of the Ottoman Empire pay no taxes, because they do not, as it were, benefit from the money the government exacts from them? It would run counter to all common sense, or be an outrage to the language, not to call by the name of tax any contribution regularly imposed on people or goods by the country's public authorities for the purpose of defraying government expenditure. We have no right to change the traditional and universally accepted meaning of words and to substitute our philosophical conceptions, just for the sake of constructing a system.

* *Traité de la science des finances*, Vol. I, Book II, Chapter 1, pp. 146—162; seventh edition, Paris, 1906.

[1] In earlier editions I used the term citizen, but this is too narrow—see below. (Footnote to the fifth edition.)

However, we need not stop at the simple observation of the practical and present nature of taxation. We may ask what taxation should be in a society governed according to all the rules of justice and prudence: and here the definitions could be many. Even in this field of ideals we meet with precepts of patent inaccuracy, however much some specious aspect may have gained them popular favour.

The greatest economists, Smith, Say, Ricardo, have limited themselves to saying that a tax is the quota each citizen has to pay towards the cost of public services. More recently, Courcelle-Seneuil, Proud'hon, Clamageran and Joseph Garnier have also accepted this definition, although they have elsewhere in their writings added corrections and interpretations which modify it. For our part, we find it difficult to change anything at all in this formula; the moment one departs from it in the slightest particular, one falls into errors which we shall point out below. All that we may add is that government expenditure should to the extent possible be just and useful to society. This is the sentiment which inspired the Constituent Assembly in its Address to the French People on patriotic taxation, written by Mirabeau in 1789: "Taxation is a common debt of the citizens, a kind of compensation and the price of the advantages which society confers upon them. . . . Taxes will in future be ouly an advance payment to obtain the protection of the social order, a contribution imposed upon each by all." This definition is perhaps a little vague; but it is not wrong. Its only defect is that it limits taxes to citizens, whereas many taxes fall upon all the inhabitants, even those deprived of civil rights and foreigners owning property in the country or even only passing through it.

We shall classify all the definitions of taxation which in our view are wrong or incomplete under three headings, according as they rest on one of the following three main ideas: taxation is an exchange of services; taxation is an insurance premium paid for the guarantee of safety; taxation represents the use of national capital and the general costs of its exploitation. These definitions are ingenious, but each of them is incomplete and so are all three together. All the same, except for the third which is of recent invention, they have prospered, owing to an appearance of scientific rigour and philanthropic sentiment.

To say that taxes are the price of services rendered by the State is not always right. At least the statement needs to be developed further, as Madame Clémence Royer does: "Taxes are the quota of productive power, in the form of personal services or contributions of all kinds, which each citizen owes to the community in exchange for the services he has received, receives or will receive from it by virtue of his being a member of society, and by way of repayment of the advances made by past generations to the benefit of future generations." There is some little affectation in Madame Royer's words; yet her definition is one of the least objectionable among all the incomplete definitions of taxation. Indeed, she takes account of an element

which the authors of most other formulae neglect, namely the public debt and the share of tax revenue absorbed by interest and amortization thereon. Any member of any contemporary civilized nation pays, by his tax, not only the price of services he currently receives from the government, nor indeed does he merely repay the productive advances made by prior generations: he also contributes his part to the burden which the folly and the mistakes of his contemporaries and his ancestors have placed upon the nation. Governments do not only render services, they also make mistakes: they commit the whole nation forever, so that in nearly all countries a large part of the taxes goes to pay interest on debts contracted for futile or even harmful expenses. The State is a juridical person acting on behalf of all citizens and all citizens are responsible for its actions. The principle of solidarity of all the members of one nation, and of all successive generations of each nation, sanctions the establishment of taxes which are not the price for a corresponding public service, but the redemption or expiation of earlier collective mistakes. To conceive of taxes as the simple price for equivalent public services could in theory lead to repudiation of the public debt. We shall see elsewhere in this book that some countries have been led to refuse payment of their debts, precisely on the basis of an argument which has much in common with the above definition of taxes. On the morrow of the peace treaty which marked the end of the Civil War, a section of public opinion in the United States opposed recognition of the federal debt contracted during the hostilities, on the grounds that, war being an act patently harmful to society, it was neither legitimate nor expedient to exact from the citizens any tax to pay interest on money spent in so disastrous a fashion. We do not admit that the principles of good faith and national solidarity can be compatible with such reasoning and such practices: this is why we reject as incomplete the definition of taxes as the simple price of public services.

It might be argued that this definition is correct if it be understood in a general rather than a specific sense: that is, if each citizen is to consider the whole of the tax he pays as the price for all the direct and indirect benefits of a material, intellectual or moral kind, which he derives from the society to which he belongs—it also being understood that this sum of taxes contains a sizeable part which the government uses not to cover the cost of current or even past services, but to pay interest on debts which have often been contracted lightly and without real benefit to the nation. So interpreted in a very broad sense and particularly from an ethical point of view, the definition might be accepted. Indeed, however badly a society may be administered, it does generally procure to its members a body of satisfactions not only of a material, but also of a personal order, which more than compensate the people for the financial sacrifice imposed upon them. This is why so few people ever bring themselves to change their nationality, even though the country which is theirs by accident of birth may be subject to the greatest fiscal oppression. But it must be admitted that in justifying the above definition

from this point of view, we are going somewhat beyond the area of economics and finance: and in that area the definition is patently wrong. Taxes cannot always be regarded as an exchange of services in the strict sense.

The second formula to which we take exception is that of taxes being regarded as an insurance premium. This definition is even more incomplete than the preceding one. Nothing could be further from the truth than to imagine that the sole function of the State is to be a simple policeman. Its attributes are far wider than such a conception would imply. A mere glance at the budget of any European country will show that its expenditure for security is only a small fraction of the whole. The gendarmerie, the prisons, urban and rural police and the ministry of justice together do not account for more than the twentieth part of the present budget of France; add the expenses of the ministries of war and of the navy, which are not concerned only with security in the narrow sense of the word, but with the country's standing and influence abroad and the fulfilment of its traditional role in the world—even then the expenses come to only one third of the budget. To say that taxes are an insurance premium is a singularly narrow, though specious, definition. If it were true, the State would have to abstain from any expenditure with a view to the material or intellectual betterment of the nation: the State would be debarred from concerning itself with roads, from taking part in the great undertaking of general education, relief of the poor, etc. and no subsidies would be forthcoming therefor.

Another proof that the insurance premium theory of taxation is wrong, is that insurance companies behave quite differently from the State in case of total or partial loss of the insured person's property. The insurance company restitutes the full value of the burnt-down house, the sunken ship, the crop spoilt by hail or the cattle killed by epidemics. But whatever act of God may cause some individual's property to vanish: whether the sea engulf it or fire devour it, whether floods crumble it or war ruin it—the State does nothing to indemnify the unfortunate owner; or if it does, it is in rare cases, for small sums and on an *ex gratia* basis. All that the State guarantees is that your rights shall not be persistently infringed by others; it does not make good the damage caused by act of God or by the hand of man. Let a thief take advantage of a deficient police system to rob you of your fortune: the State will try to catch the thief, but if he has already used up what he has stolen from you, the State will not pay you back.

It is quite clear that the State does not fulfil any insurance function and that taxes have nothing in common with insurance premiums. Even if we reduce the proposition to the statement that taxes are the price of the service called security, the definition remains incomplete; for we have seen that the State renders many services other than security, and we have also seen that taxes are not only the price of real services, past or present, rendered by the State, but that they also represent the part which each citizen, by virtue of the principle of national solidarity, must bear of all the liabilities of the State.

Let us turn to the third definition, the most recent one, which says that taxes represent the use of national capital and the general costs of its exploitation. This definition is ingenious. It comes from an author who aims at nothing less than a radical change in the fiscal systems of modern nations: his name is Menier, the apostle of the single tax on capital.[2] This formula is much less incomplete than the two preceding ones, but it could not be accepted as correct unless each of its component terms—"use", "general costs" and "national capital"—were interpreted in a singularly wide sense. The definition has the defect of not explaining those public expenditures which are not for a material service or yet a non-material present one. Such expenditures do exist and it is to be assumed that they will always exist. It is just as illusory to believe that governments will in the future always be circumspect and wise, as it would be to hope that all men will some day be virtuous and clever. And if governments are led by their folly and rashness, or even by the folly, rashness or aggression of their neighbours, to spend money for purposes other than the exploitation of the national capital, must the citizens not contribute by their taxes to the payment of these expenses? This definition therefore does not escape the blame of being too narrow and of failing to take account of a matter which is widespread enough, namely the existence of public debts and international wars.

Summing up, we can say that all the philosophical definitions of taxation which have so far been put forward, are wrong or incomplete. Taxes are not only an exchange of services. Only by a perversion of the meaning of words can they be called an insurance premium; that definition lacks all precision. To say that taxes are the price of the service of security, is to consider only a very limited part of the attributions of the State and the duties of the citizens. To say that taxes represent the use of national capital and the general costs of its exploitation, is still to hold too narrow a view and to neglect a whole series of political and social facts. How, then, shall we define taxes? We have said it: if we want a simple formula, we cannot go beyond saying that "taxes are the contribution exacted from each citizen for his part in the expenses of the government." If this seems too modest and too empirical, we could say: "Taxes are the price of services rendered now or in the past by the State; they also represent the part which each citizen, by virtue of the principle of national solidarity, must bear of all the liabilities of the State."

We now have to examine another question: is taxation a good or an evil? At first sight, this would seem to be an academic question which can be solved only by making a distinction. A tax can be bad in that it diminishes

[2] E. J. Ménier, *Théorie et application de l'impôt sur le capital*, Paris, 1874. The late Duc Victor de Broglie, in *Le libre échange et l'impôt* (published posthumously by his son in 1879) has forcefully sustained this theory of taxes representing general production costs: "The State is the entrepreneur of the general costs of social production; the State is, as it were, the trustee of all producers." The late Duke adds that "state expenditures are in point of fact the general costs of national production." The author concludes, wrongly, that taxes should be levied on the nation's capital, by way of indirect taxation. (Footnote to the third edition.)

the citizens' income and hence their ability to acquire satisfactions or even to create means of production; on the other hand, a tax can be good in that it serves to create new values, means of production of collective or free use, such as roads, ports, etc. Theoretically, no absolute answer to the question seems possible. It is all a matter of practical application: only the case study of the use to which the yield of each tax is put will show whether society has been impoverished by the tax or enriched by it. We can say that taxes are good when their yield is devoted to productive expenditure, such as work which the State is better able to perform than are individuals or associations; we can add that, on the contrary, taxes are bad when their yield is put to unproductive or futile uses. Even in the first case there always remains the question of degree, for experience shows that governments may be guilty of abuse even in the case of useful public works, by undertaking them too recklessly.

But this reply is not good enough. There are people who maintain in a general way and on abstract grounds that taxation is always good, or at any rate that it is hardly ever an evil. Two arguments are adduced in support of this somewhat sweeping statement. One is that "taxes return to the taxpayers and fall upon them as a fruitful rain"; the other, that taxes force or induce people to make an extra effort of economy and work. On the basis of this latter principle, some writers have gone so far as to assert that if England had not waged war against America and France at the turn of the 18th century, she would not have been richer around 1820 than she actually was at that period.

Let us examine these two arguments. They are of unequal validity: the first is more specious, but much the worse; the second contains a particle of truth, but is abused by exaggeration.

To say that the taxes paid by the taxpayers return to their hands, or at least to those of other citizens, is an allusion to the fact that all government expenditure ultimately goes into wages or public works. All the money paid by the taxpayers serves either to remunerate government employees or to pay workers, either directly through government employment or indirectly through government orders to industry or purchases from traders. The money may also be used for interest payments to the holders of government bonds. Thus, the argument runs, it may be that taxation takes away from some, but it gives to others an equivalent amount. What the taxpayers lose, government employees receive, or else workers on public contracts, manufacturers who receive public orders, or yet *rentiers*.

Supposing this statement were true—and we do not admit that it is—it would still not prove that taxation is never an evil. The taxpayer would, in fact, be made to suffer for the benefit of government employees and workers, manufacturers and traders receiving government orders, and *rentiers*. The taxpayer would have a right to complain if the tax bill exceeded the amount necessary for public services and legitimate debt charges. It might

be argued that in practice the taxpayers are the same persons as the government's workers, its suppliers and the *rentiers*. A writer whose name we shall often have occasion to mention, Hamilton, has ingeniously refuted this objection. He says that to pretend that the money raised by taxation is spent among those who have paid it, is just as absurd as to acquit a thief convicted of stealing money from a shop, but who says in his defence that he later restituted the money to the tradesman by buying his goods.

The only compensation which the taxpayer gets for his taxes are the services rendered by the government employees or by the public works constructed with the tax monies. But if taxation is increased beyond the necessary or useful level simply to engage new government employees or to raise their salaries and for sumptuous building, the taxpayer clearly gets no adequate compensation for the sum he has paid: more is taken from him than he gets back and he has a right to complain. As MacCulloch says so rightly, a diminution of public expenditure and hence of taxation procures to the taxpayers an advantage of the same kind as that which accrues to the public whenever there is a fall in the price of some essential or generally useful commodity. We may add, however, that this advantage is limited to cases where the reduction in expenditure does not lead to disruption of the services or to interruption of work of general utility.

Any taxes serving only to increase the number of government employees or their salaries, unless this were absolutely necessary; or to employ more workers on public works and give bigger orders to government suppliers, unless these public works or orders were of unimpeachable utility—any such taxes would be harmful to the growth of public wealth and public welfare. It is indeed clear that if the money thus uselessly withdrawn by taxation had remained in the taxpayers' hands, it would have been used either for purchases from manufacturers, traders and farmers, and hence to remunerate workers and entrepreneurs, or to create new industries and to improve agricultural land. In whatever way the taxpayer had employed the excess part of taxation exacted from him by the government, be it that he had used the money to increase his consumption or to accumulate reproductive capital, it is certain that national production would have been at least as much as in the case of excessive government spending. Moreover, this national production would have yielded far more individual satisfactions and probably also more benefit and durable accomplishments for society as a whole, if the State had limited its tax levies to the strictly necessary. Once all the public services are adequately provided for, there is a presumption that money left in the taxpayers' hands will be spent by them to better purpose for the general welfare and the growth of national wealth, than money levied by the fisc through additional taxes to defray the costs of public works of no obvious and immediate utility. Any overblown tax system involves an increase in government employees, which is in itself an evil; for all of them are withdrawn from farming, industry or commerce, they live only on a levy on the

product of these occupations and increase the general costs of the use of the national capital—unless, of course, their functions are of incontrovertible utility to society.

We believe to have refuted the sophism by which taxes as such are said not to be harmful, because the sums levied are spent and distributed among the citizens by the government, in the form of wages, the price of supplies and public works, or yet of interest on government bonds.

With reference to the heavy taxation necessitated by England's wars since the 1688 revolution, Adam Smith wrote that if these wars had not deflected a large part of the nation's capital in a particular direction, that is, if armaments had not absorbed enormous sums which in other circumstances would have remained in the hands of the citizens, much of this capital would probably have served useful purposes: the annual product of agriculture and industry would have grown each year and each such increase would have facilitated yet further increases. More houses would have been built, more land improved, and land already improved would have been better cultivated. More factories would have been started up and existing ones enlarged. It is hard to imagine, concludes Adam Smith, to what levels the wealth and income of England might have attained in such favourable circumstances.* This is what the author of *The Wealth of Nations* thinks of the use the taxpayers would have made of the sums they had to pay in supplementary taxation for the wars England waged during the 18th century. This eminent economist's words apply equally to all taxes which are not raised for expenditure of obvious utility.

It has been said that Adam Smith exaggerated. We would not deny that he did so to some extent. The sums levied by taxation during these wars and which would have remained with the taxpayer in their absence, would perhaps not have been wholly, or even mostly, devoted to savings going to swell the nation's capital. So far, so good. But it has also been said that it is by no means proven that the taxpayers would have saved any more at all if taxation had not increased. This highly debatable thesis has found in MacCulloch its most plausible and sharp-witted champion.

We here come to the borderline of the theory which maintains that taxation forces, or at least induces, the taxpayer to save. We have not concealed that in our view this proposition contains a grain of truth. Only, if taxes are to have this result, they must be moderate and must be imposed gradually.

Let us see what MacCulloch says; it is the counterpart to Adam Smith's views which we have recorded above: . . . "but for the contests in which we have been engaged since the Revolution, the greater portion of the wealth expended on carrying them would never have existed. Smith forgot that an increase in taxation has the same powerful influence over a nation that an increase of his family or of his necessary expenses has over a private individual.

* This passage paraphrases a section of Book II, Chapter IV, of the *Wealth of Nations*. See Adam Smith, *Wealth of Nations* (Cannan Edition), 1925, p. 327. (Editor's Note).

The constantly increasing pressure of taxation during the war begun in 1793 was felt by all classes, and gave a spur to industry, enterprise, and invention, and generated a spirit of economy that we should have in vain attempted to excite by any less powerful means. Had taxation been very oppressive, it would not have had this effect; but it was not so high as to p oduce either dejection or despair, though it was at the same time sufficier ly heavy to render a very considerable increase of industry and parsimony necessary to prevent it from encroaching on the fortunes of individuals, or, at all events, from diminishing the rate at which they had previously been increasing. Man is not influenced solely by hope, he is also powerfully operated on by fear. Taxation brings the latter principle into the field. To the desire of rising in the world, implanted in the breast of every individual, an increase in taxation superadds the fear of being cast down to a lower station, of being deprived of conveniences and gratifications which habit has rendered all but indispensable; and the combined influence of the two principles produces results that could not be produced by the unassisted agency of either. Without the American war and the late French war there would have been less industry and less frugality, because there would have been less occasion for them. And we incline to think that those who inquire dispassionately into the matter will most probably see reason to conclude that the increase of industry and frugality occasioned by these contests more than sufficed to defray the enormous expense, and that the capital of the country is probably about as great at the moment as it would have been had they not occurred."[3]

Thus MacCulloch; it is an optimistic doctrine, an application of Virgil's maxim

> . . . Labor omnia vincit
> Improbus et duris urgens in rebus egestas.

The end of the second verse, which is always omitted, is the principal part of the formula. Necessity sharpens the wit of the mind and the strength of the body. Taxation is a form of necessity.

This theory is not unacceptable as such, though MacCulloch's conclusions push it to its extremes. Supposing that the wars of the 18th century had not broken out: we do not believe with Adam Smith that almost the whole of the sums levied by taxation to defray these wars would have been devoted to saving and an increase in the national capital, but we are even further from MacCulloch, who holds that without these wars the capital of Britain would not have been any greater than it actually was in 1815. It is a singular exaggeration of the stimulating power of the obstacle to believe that wars and the taxation in their train in no way hamper the formation of capital. MacCulloch's conclusion seems the more exaggerated as a great number of the indirect taxes introduced during the late 18th and early 19th centuries were very contrary to the development of industry and trade. It may perhaps

[3] J. R. McCulloch, *Taxation and the Funding System*, 1844, pp. 10—11.

have helped to deceive MacCulloch that there was such a spectacular development in mechanical processes, particularly in textile spinning, during the wars against France. But it is likely that in the absence of these wars Europe would have attained thirty years earlier to the level of material prosperity it enjoyed around 1870.

Incidentally, MacCulloch qualifies in another passage (*op. cit.* p. 11—Ed.) the exaggerations contained in the one quoted above: "But we must be on our guard against the abuse of this doctrine, and must not suppose that, because it holds in certain cases and under certain conditions, it will, therefore, hold in all cases and under all conditions. To render an increase in taxation productive of greater exertion, economy, and invention, it should be slow and gradual; and it should never be carried to such a height as to incapacitate individuals from meeting the sacrifices it imposes by such additional exertions and economy as it may be in their power to make without requiring any very sudden or violent change in their habits. The increase of taxation should never be so great as to make it impracticable to overcome its influence, or to induce the belief that it is impracticable. Difficulties that are seen to be surmountable sharpen the inventive powers, and are readily and vigorously grappled with; but an apparently insurmountable difficulty, or such an increase of taxation as it was deemed impossible to defray, would not stimulate, but destroy exertion. Whenever taxation becomes so heavy that the wealth it takes from individuals can no longer be replaced by fresh efforts, these efforts uniformly cease to be made; industry is paralysed, and the country declines. Oppression, it has been said, either raises men into heroes or sinks them into slaves; and taxation, according to its magnitude and the mode in which it is imposed, either makes men industrious, enterprising, and wealthy, or indolent, dispirited, and impoverished."

We have quoted at such length from MacCulloch, because he has displayed more ingenuity than any other writer in defending a theory which is interesting and in which a grain of truth is surrounded by gross exaggeration. Even granted that fairly heavy taxation, provided it be still moderate and well assessed, has the power to stimulate man's physical and mental effort, it does not follow that such taxes are harmless when they are not fully justified by clear social advantage. The additional effort and work they require from people are in themselves not a good but an evil. The ideal of life is not enforced and ceaseless toil, nor constant mental strain and alertness: the ideal is more leisure, to be devoted to tranquil occupations of the mind and to the pleasures of the spirit. Anything which demands from man an additional physical or mental effort which would not otherwise be necessary, is an evil. Even supposing that the British did, by their industry, regain part of the wealth which they lost through increased taxation in the train of the wars England waged against Europe, this does not seem to us an altogether satisfactory result; for to arrive at that point, they had to forgo part of the leisure which they could have devoted to disinterested pursuits.

It is, moreover, beyond doubt that very high taxes have considerable drawbacks. They are very difficult to assess equitably and to collect economically. They nearly always encourage fraud and concealment, that is to say immoral behaviour. They place the country where they are in force at a disadvantage with respect to the other industrious countries of the world. They tend to cause capital and even people to emigrate. High taxation has been blamed for the economic decline of the Netherlands since the end of the 17th century and for the Dutch capitalists' habit of investing their savings abroad, the domestic profit rate having been much reduced by all sorts of taxes. After the Civil War in the United States, the evil effects of a system of excessive taxation were much in evidence. In France, since 1871, it cannot be gainsaid that certain industries have been incommoded to the point that some firms have transferred their business abroad.

There is thus no theoretical or practical reason in favour of high taxation. However, we do not fully share the view of those many economists for whom the best tax is always the smallest. There are circumstances and countries where—to express our view by an oft-abused expression—taxes are literally the best investment. Taxation can be an excellent form of collective saving, though it is forced saving and yields no direct or immediate benefit to the person from whom it is exacted. Imagine a country where taxes are moderate and well assessed, do not artificially distort the pattern of industry, cause no grave inconvenience to the taxpayer and are not distributed in a grossly unfair manner. We say that there might be cases where there is no particular urgency for the government to reduce taxes still further, even when this could well be done without disrupting existing services. It might be right for the government to keep to the existing level of taxation and to use the money for public works or general education. Let no-one say that the citizens would take care of these matters if the government, instead of imposing excess taxation upon them, left them the money of which this excess taxation deprives them. There is many a case where private initiative cannot take the place of the government's. Experience shows, for example, that many works such as railways, canals, river regulation and port improvement, yield more to society as a whole than the interest on the cost of construction, even though they frequently ruin the shareholders of the original venture. The reason is that these works produce a utility which is not always direct and immediate, and is therefore not wholly attributable to charges for the sole profit of the private entrepreneur. A new branch railway exerts a beneficial influence over a very wide sphere: it increases the receipts of neighbouring lines which it feeds, and augments the income not only of those who use the new line for the transport of their products, but also of those who do not send their products any distance away but simply bring it to the nearest market which is now less glutted. Thus the effect of the branch line is widespread, diverse and manifold; but the entrepreneurs cannot make all the beneficiaries contribute to the cost, since many of them derive no direct

benefit from the new line nor even manifestly use it at all, simply stepping into the place of those who do use it. This is why many public works cannot be carried out for private account; they would ruin private entrepreneurs, while being highly remunerative for society as a whole. Works like canals, ports, roads and sometimes even railways essentially enter into the attributions of a State which is rich and which can easily raise substantial revenue.[4]

There is an old axiom which has prospered, although economists as a whole have opposed it: it is that taxes are the best investment. This phrase has been much abused. It can be said that so far and in most European countries, taxes have not normally been a particularly productive investment. Indeed, the major part of the sums raised by taxation has been put to uses which are commendable neither from the economic nor the social point of view. But if past uses of tax monies do not justify the unqualified validity of the phrase we have quoted, it does not follow that in a well-administered country this could not be literally true. Often taxation can and should be a collective form of national saving. Apart from what individuals and families save for their own welfare and enrichment, it is quite legitimate that the government effect, in the name of the nation, a sort of collective saving to augment the public wealth of the citizens and to improve the nation's capital equipment. In so doing, the government serves the general purposes of civilization, which must ceaselessly multiply the man-made resources of universal and free usage, such as roads, canals, ports and schools. If we ask ourselves what distinguishes a civilized country from a primitive one, it is precisely the size of its national equipment, which could not have been created otherwise than with the help of the nation's collective savings, gathered in the form of taxes.

We do not, then, consider taxation as an evil. We do not conceal that in our view taxation may be a good. The thesis that the best tax is always the smallest one seems to us an exaggeration; it is an undue reaction against past and present waste. All the same, taxation should not absorb more than a small fraction of the citizens' income, lest it introduce some sort of communism into society, discourage individual effort and cause capital and people to emigrate.

Can the right measure of taxation be determined *a priori?* Is there a formula which could serve as a rule for the establishment of the proportion of people's income which can be exacted without damage to society? None of the attempts to set up such a rule have been successful. Some authors have spoken of a lower and an upper limit of taxation, the lower limit being the amount necessary to provide for the indispensable public services, and the upper limit being given by all the useful services which the State is more competent or better able to perform than individuals or associations.[5]

[4] It does not follow that one should indulge in a real debauchery of ill-considered public works, such as those which have become known in France as the Freycinet Plan. Moderation, reflection and time are always called for. (Footnote to the third edition.)

[5] *Cf.* Vignes, *Traité des impôts en France*, Vol. II, p. 8.

This is an ingenious theory, but unfortunately it lacks precision in practice. What, exactly, are the indispensable public services? It is hard to tell. They are not the same for different peoples, under different climes, and at different levels of civilization—not the same in Hungary, say, as in Russia, in Russia as in Austria or Italy, in Italy or Austria as in France or Germany. Not even the service of security and physical protection of person and property is completely inelastic: it is not understood in the same way in the East and the West, in the South and the North. If, on the other hand, we seek to discover just what are the services which the State is more competent to perform than individuals, we have the same trouble. It is a matter which is very hard to determine in practice. For all its being ingenious, the theory under discussion here gives us no very definite or clear guidance in practice.

Is it possible to lay down a ratio between the standard amount of taxation and the national income, that is the sum of private incomes? There is always something arbitrary in such proportions. For example, a good many economists and bankers have established a ratio between note issue and metallic cover, but this has been found completely futile in practice. Some banks have remained solvent with bank note circulation four or five times as high as metallic cover, others have foundered when more then half their circulation was covered.

But although such *a priori* proportions can have no absolute value, they are not completely useless. They can serve as a rule of thumb. It is certain that a bank whose note circulation is covered to less than one third, is in a precarious position; at the same time, another which has half its circulation covered, may not be in a very secure position either.

To return to our subject, we believe that it is possible to fix an empirical lower and upper limit to taxation. The limits are not inflexible, they are only approximate. We consider that taxation is very moderate when the sum of national, provincial and municipal taxes does not exceed five or six per cent of private incomes. Such a proportion should be the normal rule in countries where the public debt is small and whose politics are not dominated by the spirit of conquest. Taxation is still bearable, though heavy, up to ten or twelve per cent of the citizens' income. Beyond twelve or thirteen per cent the rate of taxation is exorbitant. The country may be able to bear such a rate, but it is beyond doubt that it slows down the growth of public wealth, threatens the liberty of industry and even of the citizens, and hems them in by the vexation and inquisition necessarily entailed by the complexity and height of the taxes.

ON PUBLIC NEEDS

By ENRICO BARONE

Translated from Italian* by J. Eros

It is not easy to define the term public needs in an unequivocal manner. Nor can we get over the difficulty by making a distinction, as some do, between a general need (for example for bread) and a collective need (for example for internal security). Even if general needs and collective needs can be unequivocally defined, this does not solve the question of defining public needs because, in actual fact, it is not true that the economic activity of the State is designed to satisfy all collective needs and only collective needs.

We shall call public needs those for which the State provides in any given country and at any given time. Economic reasons of utility and cost enter into the definition, but they are not the only reasons.

Public needs so defined can be divided into two great categories: those which are, and those which are not susceptible of individual and specific demand and divisible supply. Railways and postal services fall into the first category, foreign defence and security into the second.

The first category of public needs could also be satisfied by private enterprise, at prices which we shall call economic prices, irrespective of whether they are due to competition, or are monopoly prices or agreed prices.

For the second category of public needs, the State coercively distributes total cost among the various individuals. The distribution rests on income, and according to his income each individual then pays a political rather than an economic price. The political price is the rule for all those public needs which are not susceptible of specific individual demand and divisible supply.

In between there are intermediate categories of public needs, the prices of which we shall call quasi-political. They are needs with individual and specific demand and divisible supply, but with a price which, without being political, is nevertheless not that economic price which a private entrepreneur would charge. In the case of quasi-political prices the State usually distributes among the consumers either the entire cost, but in a way which differs from the private entrepreneur's and is held to serve collective interests better; or else less than the entire cost is distributed among the consumers, because the State considers that by providing for this particular need in specific demand, it provides also for other needs which do not possess this characteristic. Quasi-political prices are, then, normally either cost or below-cost prices. We can speak of political prices (or taxes) for public needs which are not susceptible of specific individual demand and divisible supply; and of quasi-political prices for public needs for which there is specific individual demand. Quasi-

* Preface to "Studi di economia finanziaria", *Giornale degli Economisti*, April/May 1912.

political cost prices are mostly charged by public enterprises, or, as they are sometimes called, collective monopolies—since public enterprises often replace a private monopoly by a public one; below-cost quasi-political prices are exemplified by fees.

This classification is not perfect, as no classification can be perfect; not all the facts and not all the institutions of public finance fit into it. For example there is a tendency, especially in democratic countries, to establish political prices even for needs with specific individual demand and divisible supply, the object being to charge one section of the consumers with a higher price so as to relieve other consumers. Other examples of the imperfection of the above classification are that not all public enterprises or collective monopolies distribute the whole cost or only the cost among the consumers; that fees are not always below-cost quasi-political prices. Finally, under certain financial systems a whole series of special services with specific individual demand and divisible supply are furnished by the State at prices higher than cost. This is a special kind of taxation—the most illogical one—which represents a perversion of fees into taxes. Many of the taxes on the transfer of capital belong into this category.

Nevertheless this classification is useful as a first approximation. Its division of the various ordinary revenues of the State is near enough to reality, and it also permits an effective analysis of the cases which do not fit into the classification here outlined.

The most important of the public needs falling within the purview of the theory of public finance are those for which there is no specific individual demand and divisible supply (*e.g.* internal security). These needs are provided for by means of taxes, that is political prices.

In the case of public needs with specific individual demand, the latter automatically determines the measure in which the need is to be satisfied or, in other words, the quantity of the service to be produced. In the absence of such specific individual demand, on the other hand, the problem of the extent of the public need becomes much more complicated.

It is true that there is a school which believed it could give a simple solution of the problem; but it did not succeed, except through purely verbal generalizations. I have in mind the Austrian School, which thought it could apply to public needs as well the individual calculus of marginal utilities according to which the individual is supposed to allocate his income to various items of private consumption.

This is one of the major misuses of the theory of marginal utility.

These writers say, in effect, that their assumptions hold for the limiting case and would be the more likely to come true the closer reality approached the limiting case. Let us discuss this point.

Let us suppose that all members of society are called upon to decide; that they are all so well informed of the utility of public services that they are able to decide in full knowledge of the facts; and that they are all such perfect hedonists that they are willing not to withhold their contribution. On all these assumptions each member of society, according to his own appraisal of the utility of a public service, would be prepared to devote to it some part of his income to be withdrawn from his private consumption.

This would seem to amount to a determination, if not of the measure in which each single public need should be satisfied, at least of the overall extent of public needs. The distribution of public revenue between various public needs would then constitute a second stage.

However, it is quite illusory to think of any such determination of public needs. No public finance system can rest on subjectively determined individual contributions. There must be some principle of distribution of public expenditure according to incomes; the principle can be discussed and established by common agreement between the members of society, but once it is established it must be respected. Is it to be expected that this principle of distribution will be fulfilled by single contributions determined by individual evaluation, that is, by income portions allocated to public needs according to the criterion of maximum individual utility? That would be pure coincidence. The problem therefore seems to be overdetermined. Maximum individual utility in the allocation of income between public and private needs is incompatible with any pre-established principle for the distribution of the burden of taxation.

If this be granted—and it must be granted—then the whole theoretical construction of the Austrian School falls to the ground. It does so even in the limiting case, which we have outlined above with all the hypotheses favourable to the theory which we have refuted; it falls, *a fortiori*, if we leave this limiting case behind and come closer to reality.

Is the problem of the quantity of public services then in fact undetermined? Not so. The problem can be stated in the following terms. Private persons do not demand public goods. The size of the supply of public goods is determined by a majority (*de facto* or legal fiction) which makes decisions by direct vote or through delegation. This leads to the establishment of the burden of taxation, which will be distributed according to certain established principles and will fall more or less heavily upon the individuals as public services go on increasing. Every single individual must undergo such a burden. If the majority (expressed by direct vote or through delegation of powers) imposes too much on the single individual, there will be reactions designed once more to reduce the burden of taxation to tolerable limits. Such reactions may take the form of fiscal fraud in the declaration of incomes; or of emigration of capital to countries where the burden of taxation is lighter—this is easier the greater the proportion of mobile capital is to the total; or of direct emigration of persons; or finally, they may take the extreme form of revolt or revolution, when a great number of people find the burden of taxation intolerable.

JUST TAXATION—A POSITIVE SOLUTION

By ERIK LINDAHL

Translated from German* by Elizabeth Henderson

We may begin by assuming that there are only two categories of taxpayers: one, *A*, relatively well-to-do, and the other, *B*, relatively poor. Within each category all individuals must pay the same price for their participation in public consumption. The problem is the relative amount of the two prices, *i.e.* the distribution of the total cost of the collective goods between the two groups.

If we further assume that the question is to be solved by free agreement between the two groups, the process may be considered as a kind of economic exchange. We must note, though, that the concepts of supply and demand as well as the object of exchange are of a special nature. One party's demand for certain collective goods at a certain price appears from the other party's point of view as a supply of these goods at a price corresponding to the remaining part of total cost: for collective activity can only be undertaken if the sum of the prices paid is just sufficient to cover the cost. In fact, however, the demand and supply do not concern the collective goods themselves, but only shares therein.

Apart from these special features, the price problem under discussion can be likened to that of isolated exchange. In both cases supply and demand are monopolistic, and equilibrium is reached by agreement between the two protagonists rather than by free competition. Theoretical economics generally regards price formation in the case of isolated exchange as an indeterminate problem. The same seems, at first sight, to hold of the distribution of public expenditure among the beneficiaries. It is, after all, obvious that the sum of the contributions which the various parties may be prepared to make towards the realization of the more important collective goods far exceeds the latters' total cost. Must we conclude that the problem is not susceptible of a purely economic solution?

The indeterminacy of the price problem in the case of isolated exchange is to some extent due to the assumption that the exchange does not take place once and for all, but happens gradually, different prices being charged for the units successively exchanged. But in considering the taxpayers' approval of public expenditure, it is more natural to make the opposite assumption. It must as a rule be expedient to vote simultaneously on all the expenditures within any one branch of public activity, since they usually belong together in the sense of being parts of one consistent whole. In other words, the manner of covering the cost of the more important public services is not determined separately, but together with less important services and according to the same principles for both. In some circumstances it is technically quite possible

* *Die Gerechtigkeit der Besteuerung*, Lund 1919, Part I, Chapter 4, pp. 85—98: "Positive Lösung". [With the author's approval, some footnotes have been omitted or abbreviated—Ed.]

to separate approval of the more and the less important public expenditures, and indeed this frequently happens. None the less we shall extend our assumption to such cases as well, for we are at the moment simplifying the problem by postulating an even distribution of political power and this makes it inevitable that all economically related public services should be approved simultaneously and their cost distributed in the same way. If one party succeeded in getting the cost of the more important public services distributed in a more favourable way than the cost of the marginal ones, this would indicate that that party has defended its own interests better than the other parties and hence that political power is not distributed evenly. It must surely seem unjustified from the point of view of the existing property order that one party secures precisely those expenditures which it values most at a lower price than the less important ones. If the economic rights to which the individuals are entitled under a given property order are to be safeguarded in equal measure, everyone should pay the same price for the same units of cost both in the area of the private economy and of public finance.[1] On these assumptions the question of distribution really means how big a share of certain total costs each party has to bear. Since the extent of collective activity is not given *a priori*, but is one of the variables of the problem, the absolute amount of taxation has to be determined at the same time as its distribution. The economic aspect of the problem thereby becomes a good deal more determinate, even though not fully so: the extent of collective activity desired by the taxpayers becomes largely decisive for their cost share.

The more detailed analysis of the manner in which equilibrium is established on the given assumptions may best be illustrated by a diagram. Our figure shows on the abscissa the relative share of one party (*A*) in total cost at various distribution ratios. At point *O* party *A* pays nothing at all towards total cost, leaving the entire burden to the other party, *B*. The further we move away from *O*, the greater becomes *A*'s share and the smaller *B*'s. At point *M* the situation is completely reversed; *A* carries the whole burden and *B* none. On the ordinate we indicate the amount of public expenditure which each party is prepared to sanction at the various distribution ratios. As in the private economy, so here too demand rises up to the point where marginal utility equals price. On the basis of the curves of individual marginal utility we have drawn two curves representing the monetary expression

[1] In real life exceptions to this rule may appear expedient from a practical point of view, but they still rest on an uneven distribution of political power. Exceptions mostly occur when it comes to adding new public institutions to existing ones. Generally, the traditional manner of covering the cost of the old ones is retained, and only the new expenditure is put to the vote, which may often lead to a different distribution of costs. But this is not to safeguard all the parties' interests in equal measure. If some categories of taxpayers have agreed to pay a greater share of the cost involved in the new proposal, this proves that they should bear a greater part also of the cost of the existing services. Even if the old distribution was right at the time, this does not mean that it should be retained forever. If the taxpayers now approve a new expenditure, their evaluation of the old, related expenditure must have changed. It would be better, therefore, never to approve new expenditure without a concurrent, new vote on the total cost of the whole branch of public activity in question.

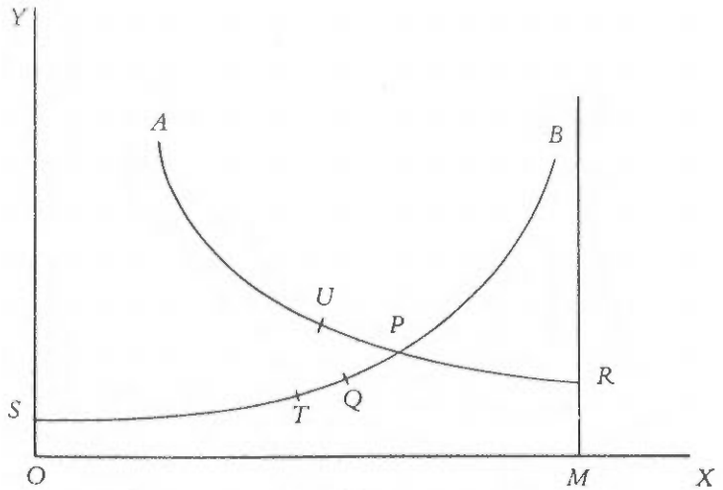

Fig. 1

of the marginal utility of total public activity for the two parties. The two curves show immediately how demand for public goods varies according as the parties have to shoulder a greater or a smaller part of public expenditure. At the distribution ratio most favourable to itself, party *A* is obviously prepared to approve a maximum of public goods and *B* a minimum, and *vice versa* when the distribution is most favourable to *B*. The intersection point of the two curves indicates the only distribution of costs at which both parties agree on the extent of public activity.

At the different positions of distribution the two parties will approve public expenditure only to the extent that one party's demand is matched by the other's "supply". The possible equilibrium positions must therefore lie on the curve *SPR*, but we may be able to define them more closely. Let us suppose, for example, that the two parties initially agree to split the cost in equal parts. A provisional equilibrium will be established at point *T*. But only half of *A*'s demand is satisfied and this party will insist on an expansion of public activity. Party *B* can agree to this only if it can secure a more favourable distribution of costs, and *A* will have to face the fact that it must take on a greater share of the cost burden. The equilibrium position is thereby shifted closer to the intersection point of the two curves. It is obvious that any sizeable divergence between one party's demand and the other's "supply" at any given distribution of costs will thus always tend to modify the distribution norm. But the shift of the equilibrium position towards *P* continues smoothly only so long as *A*'s growing sacrifice—and it grows in a double sense, by virtue both of the increase in public expenditure and of the increase of *A*'s share in the cost—is more than compensated by the greater utility due to the expansion of collective activity. Once these two factors become equal, as for instance at point Q, *A* has reached the equilibrium position most favourable to itself. At an unchanged distribution of cost it would still be more advantageous for *A* if public activity increased yet further, but *B* will not agree to this. An increase—even though a somewhat smaller one—in public expenditure would still be desirable for party *A* if It had to shoulder a greater share only of the *additional* expenditure. However, we are here excluding be assumption that *B* might accept such a compromise. It is true that such a distribution would be somewhat more favourable to *B* than the old one, but we assume that party *B* is intent on altering the entire cost distribution to its advantage. *B*'s agreement to an expansion of public activity is thus contingent upon *A* shouldering a greater share of total cost; but such a shift of the equilibrium position towards *P* means that the difference between utility and sacrifice diminishes for party *A*, which will therefore try to remain at the distribution we have indicated.[2] So far as party *B* is concerned, it would probably be the best thing for it to get rid altogether of its duty to contribute to the cost of collective activity, since this would cause the latter to contract relatively little. The equilibrium positions most favourable to either of the two parties thus generally lie far apart. Since the most favourable position for one party is for the other the least favourable of all the *possible* equilibrium positions, each party naturally tries to shift the equilibrium, within that interval, to its own advantage. Which of the possible positions—which lie on the curve *QPR*—will eventually lead to equilibrium, is mostly a matter of the extent to which each party is able to defend its own interests.

The above discussion may be illustrated algebraically in the following terms, for which I am indebted to Professor Knut Wicksell.

Party *A* contributes fraction x to the total public expenditure and party *B* hence $1-x$; y is the amount of public expenditure expressed in money; $f(y)$ and $\varphi(y)$ are the monetary expressions of the total utility of this expenditure for *A* and *B* respectively. Curve *A* then has the equation

$$f'(y) = x$$

where $f'(y)$ is the utility increment accruing to *A* from the last unit of money spent and x is the proportion in which *A* has contributed to this money unit.

Similarly, the equation of curve *B* is

$$\varphi'(y) = 1 - x$$

At a certain value of x (to the left of the intersection point of the curves) party *B* offers an appropriate supply of y. Its total utility for party *A* is $f(y)$, the tax costs xy. If we let x and y increase along curve *B*, the utility increment for party *A* is $f'(y)\Delta y$, whereas the cost increment is $y\Delta x + x\Delta y$ or (since we are moving along curve *B*) $(-y\varphi''(y) + x)\Delta y$. (Note that f' and φ'

[2] The distance between the equilibrium position "most favourable" for each party and the intersection point of the two curves is conditioned by the relatively higher or lower position of the curves: if, as in the present case, *A* is richer than *B* and the A-curve therefore lies above the *B*-curve, the distance is relatively small for *A* and relatively large for *B*.

are decreasing functions, and f'' and φ'' hence negative.) Maximum utility for party A is reached when

$$f'(y)\,\Delta y = (-y\varphi''(y) + x)\,\Delta y$$

or

$$x = f'(y) + y\varphi''(y)$$

If we suppose the functions f' and φ' to be identical and, for simplicity's sake, linear:

$$f'(y) = \varphi'(y) = \alpha - \beta y,$$

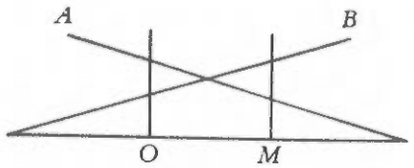

Fig. 2

the two curves would be straight lines with the equations

$$x = \alpha - \beta y$$

and

$$1 - x = \alpha - \beta y$$

and party A would reach maximum utility when

$$x = \alpha - 2\beta y$$

This, together with the equation for curve B and elimination of y, gives

$$x = \frac{2 - \alpha}{3}$$

which is independent of β. α obviously is the distance from the zero point where curve A meets the abscissa. If, as in the little diagram ($OM = 1$), this distance is greater than 2, x becomes negative. It would then be most advantageous for party A if it could make its agreement to the public expenditures in question contingent upon B making a certain contribution to them in proportion to the amount of the expenditures.

It is not difficult to see what equilibrium position corresponds to a situation in which both parties have equally safeguarded the economic rights to which they are entitled under the existing property order. This position can be called the standard position, in that it would be reached if power were distributed evenly in relation to the existing property order. Equilibrium will be established at the intersection point of the two curves, where both parties can exchange up to saturation, and where therefore the money value of the net gain which both parties together derive from public activity is maximized.[3] Even at this point one party could still improve distribution from its point of view by restricting demand; but the resulting diminution

[3] In the case of market exchange, where free competition leads to a price at which all market parties can exchange up to saturation, we can also state as a general rule that the overall satisfaction of wants of all individuals, as valued by them in money terms, is maximized. If, on the other hand, satisfaction is measured by some psychological units of value, this rule remains valid only on the assumption that the existing property order may be regarded as the most adequate from a utilitarian point of view. *Cf.* Knut Wicksell, *Vorlesungen über Nationalökonomie*, Theoretischer Teil, Vol. 1, p. 125 *et seq.*

of public activity necessarily causes this advantage—always expressed in terms of money—to be less than the loss suffered by the other party. Now any given property order means in the first place that each individual can satisfy his wants in the measure of their money value for him. It follows that in the field of taxation both parties will have equally safeguarded their interests in this respect[4] only at the standard equilibrium position which we have defined above.

We can draw the conclusion that the price of collective goods, too, by and large tends to correspond to marginal utility for each interested party.[5]

Our argument also holds when there are more than two parties or when each party includes individuals with different interests and different wealth. In this case we must, according to the same principles, look for the different equilibrium positions between two of the smallest groups at different levels of these groups' combined share in total cost. We thus get a common price curve for these two groups, and if we relate it in the same manner to the price curve of a third group, we get a common curve for all three groups. We continue until we are left with only two curves, with the help of which we can determine the definitive equilibrium position. In this case, too, it is correct to say that the price of collective goods is chiefly determined by their marginal utility for the different interested parties.

Our above discussion of the price formation of collective goods may shed many a new light on the content of the fiscal laws. We have shown that, provided the taxpayers are all in an equal position to defend their economic interests when tax laws are passed, the financial process would result in each individual having to pay a tax amount corresponding to his valuation of public services. This proves that the actually existing graduation of taxation is in a sense the result of the same economic principles which cause the same goods to have the same prices on the free market.

We have so far neglected certain economic and political factors which in real life somewhat complicate the problem. We shall now briefly turn our attention to these.

We have so far assumed that everyone agrees on the nature of the public services to be produced, leaving only the question of their extent and of the distribution of the cost. In reality there is no such agreement.

First of all we have to note that collective wants do not have the same order of priority for all. With reference to any given public activity, the different classes will probably not regard the same collective goods as marginal. The wants least important to one class may rank rather high with the other, and *vice versa*. If Parliament were presented only with the totals of the tax

[4] We stress again that in this context we are concerned only with determining the financial consequences of a *given* property order. We are here neglecting the question of the moral justification of that property order and of the related financial equilibrium position.

[5] Marshall rightly pointed out that such an equilibrium position must be regarded as the ideal one also in the case of isolated exchange. See *Principles of Economics*, Seventh edition, p. 791.

bill and of public services, each party would feel that it had failed to receive adequate return for the last unit of tax paid. Each party would insist on a reduction of the tax load and this would result in a diminution of expenditure; but opinions would differ as to what public services are to be forgone. There is only one way to avoid a contraction of public services harmful to all: each party must undertake to pay a greater share than the other towards the cost of those services which each finds most useful. The conflict of interests then leads to specification of the various revenue and expenditure items and an economic solution becomes possible.

Often a choice must be made between several mutually exclusive alternatives, about the advantages of which opinions may differ. Let us suppose that two rivers are to be linked by a canal, which one party wishes to take through farmland and the other through an industrial area. Can such a conflict be resolved by purely economic methods? First we must note that the parties must consider not only the positive advantages of the alternatives, but also the sacrifices involved; the parties will choose that alternative which offers them the greatest net gain. In our example one party may well get the other's agreement by offering to pay a major part of the cost of that alternative which is specially useful to the first party. But if there is a sharp clash of interests, it may not be possible to reach agreement by such means. The decision then lies with the balance of political power.

The matter becomes even more complicated if we take account of the fact that in any given financial period society has revenues other than taxes, and must provide for expenditures other than those directly connected with public consumption during the same period. We do not mean matching revenues and expenditures, but the true net amounts to be included in the final financial calculation[6]—*e.g.* the income from public domains remaining after interest and amortization on the national debt. The resulting increase or decrease in government revenue would seem to have the effect, so far as the taxpayers are concerned, of cheapening public services during the period or making them more costly. In fact, however, the various classes have widely divergent interests in the various branches of public activity, and for this reason the conflict can be resolved only by specialization of the budget. Each party would then try to cause any surplus to be used for those branches of public activity in which it has a relatively greater interest than the other parties. And if there is a deficit to be covered, for instance service of the national debt, each party would insist that from its own point of view distribution be the most favourable. Conflicts will arise, which can be resolved to the equal satisfaction of all only if political power is evenly distributed.

Finally, there is the most important circumstance that in reality the two parties do not have equal political power. The budget reflects the ability

[6] Since the ultimate purpose of the financial process is the satisfaction of certain public needs, only those sums are to be considered as true net revenue which are available for such satisfaction, and only those expenditures as true net expenditure which are directly due to such satisfaction or must for other reasons be covered by taxation.

of certain parties to defend their interests better than the other parties. The resulting shift of the standard equilibrium position of the public finances is in direct proportion to the extent of the preponderance of power.

With due qualification, the actual equilibrium position can still be determined according to the same principles we have used above. If we are dealing with only one given category of public goods and have to determine the amount and distribution of the tax burden, the coercive element due to the preponderance of power obviously has the same effect as if the weaker parties now attached greater values to the public goods. In our diagram the new equilibrium position is best found by moving the old one along A's price curve, say to point U; B's net gain decreases in proportion with the magnitude of the coercive element. In the face of several alternatives, the dominant party will be able to make that prevail which offers it greater positive advantages than does the "standard" case. If a budget surplus is available or a deficit to be covered, the distribution of benefits and sacrifices will be more favourable to the dominant party than to the others. All these are highly intricate questions and their further discussion is of no great interest. So many factors are in play, particularly as regards tax distribution, and they are so hard to determine, that any result would approach reality only proximately.

There are two ways in which a dominant party can achieve a shift of the financial equilibrium position to its own advantage.

First, the dominant party can abuse the others' ignorance and mislead them into believing that the budget is more favourable to them than it really is. Some forms of taxation have less obvious effects and their incidence is hard to trace; the taxpayers then do not clearly realize how big the tax burden really is and the ruling party can extract more taxes from them. Nor can the other parties easily verify the actual use to which government revenue is put and the ruling party may succeed in securing certain benefits of which the others never gain any certain knowledge. The more informed is public opinion and the tighter the control over public authorities, the less room is there for such "financial illusions". None the less we should not underestimate their extent even in relatively democratic countries. Indirect taxes, which are very hard to trace, still play a great part in most modern fiscal systems and the politically dominant classes therefore probably have ample possibilities of making the tax burden which falls on the other parties look smaller than it really is.[7]

If the ruling party cannot achieve favourable finance arrangements by covert means, it uses its predominance to impose openly upon the others higher taxes then they want to pay of their own free will. We have indicated elsewhere[8] how the concept of "political cost" has been introduced in an

[7] A. Puviani, *Teoria della illusione finanziaria*, 1903, has treated this question in an interesting and original way. See also R. Murray, *Principi fondamentali di scienza pura delle finanze*, Florence 1914, p. 83 *et seq.*

[8] *Gerechtigkeit der Besteuerung*, p. 47.

attempt at quantitative measurement of the importance which the other parties' resistance has for the ruling party. But we must bear in mind that the decisive factor need not always be the fear of revolution; in the course of time the powerless classes will come to influence the ruling classes' sense of equity. As the weaker classes succeed in giving currency to their own sense of justice, so their concrete political power grows and so, also, diminishes the ruling classes' preponderance of power and their ability to secure by force special benefits at the expense of others. In the last resort the views about what is just in taxation determine its actual shaping.

THE VALUATION THEORY OF TAXATION

By EMIL SAX

Translated from German* by Elizabeth Henderson

Summary of the Initial Two Sections

In the first two sections of the paper, Sax discusses certain premises which underlie his theory of the economy of the State. He first deals with the sociological and methodological premises of his theory. The essence of the new approach, according to Sax, is that the economic activity of the State is not to be based on the exercise of political power but on the will of the community as a sum of individuals. Not every individual will be engaged actively in all decisions of the State, but may participate only in a more or less passive role through his membership in the group. The motivation of individual action in economic affairs is the same with regard to private and public economy, including in both cases egoism, mutuality and altruism.

The economic activity of the State, so Sax's argument continues, operates within an organization for joint action of individuals to achieve a common purpose. The structure of this organization involves authority and compliance, and an element of compulsion to ensure that the common purpose is accomplished. The power of compulsion, however, does not suspend the principle of economic efficiency. Out of the interaction of individual intentions and interests, there results a precarious balance between the governing and the governed groups. This balance then finds expression in a specific line of governmental action.

This approach, so argues Sax, differs from that of the theorists of the "political school", who base the underlying process of decision-making not upon all citizens, but only on the members of the governing group. These in turn act upon the basis of self-interest. If this were the correct view, then the determination of public finances would not be a matter of economic principle, but merely of expressing political force. But such is not the case. If the ruling group deviates too far from the correct economic policy—the policy which meets the preferences of the entire group—those who are placed at a disadvantage will protest. In the extreme case, they will overthrow the ruling group.

Sax then turns to certain premises in economic theory. While public and private economy are subject to the same basic principles, they take altogether different institutional forms. The purpose of economic analysis is to reveal this essential similarity and to develop the theoretical framework

* "Die Wertungstheorie der Steuer", *Zeitschrift für Volkswirtschaft und Sozialpolitik*, New Series Vol. IV, 1924. Reprinted in *Zeitschrift für Nationalökonomie*, 1956, No. 3.

The translation covers the central part of the essay, pp. 209-226. The beginning and end are summarized by the Editors. Footnotes are omitted.

This essay was written in response to Lindahl's *Die Gerechtigkeit der Besteuerung*, and is a restatement of the position Sax took, and extensively developed, nearly forty years earlier in *Grundlegung der theoretischen Staatswirtschaft*, Vienna, 1883.

which is required for the purpose. After a lengthy and none too clear consideration of the nature of economic needs, Sax concludes that the satisfaction of collective, as well as of individual, needs is conditioned by the availability of scarce resources, and that the psychological process of want determination is essentially the same in both cases. Through the social process private and collective needs are co-ordinated in an integral system.

This approach, Sax continues, has been criticized as unrealistic. The critics have argued that it implies a solution according to which the individual pays his taxes voluntarily as assessed by himself. Yet, in reality, the individual may be compelled to contribute against his own wishes.

Sax recognizes that there is some validity in this criticism. Yet, he maintains that the satisfaction of collective and individual needs is essentially similar in nature. Moreover, he emphasizes that the further development of his theory does not make use of the extreme hypothesis that there is no difference whatsoever between private and collective needs.

At the same time, Sax finds it necessary to distinguish between two kinds of collective needs. There are those for which a specific benefit share can be imputed to the individual, and here a comparison with individual needs is altogether possible. There are others, referred to as collective needs proper, where such individual shares cannot be determined. As far as these needs are concerned, the individual cannot make a comparison with his private needs. Sax concludes that the determination of want satisfaction, in this case, must proceed on a different and purely collective basis.

Classification of Collective Activities and the Corresponding Financial Measures

In all collective activity, the acting persons are the individuals forming the community, or their representatives in public office. Collective activity is aimed at concrete individuals, singly or as a community, and its purpose is the promotion of their welfare. In this sense individuals are the objects of collective activity—as distinct from the sense in which individuals become objects of collective activity through contact with its technique.

All these activities are of the same economic nature. The realization of the ends requires the withdrawal of goods from individual economic units and the use of these goods, through the institutions of collective activity, either for direct consumption or as remuneration for the services of public authorities or employees. These goods constitute the "cost". Those withdrawn from individual economic units are the cost to each individual; the sum of goods used in collective activity is the cost to the community, *i.e.* the sum of its members as an acting subject. For the process to be economic, the goods in question must be so used that they satisfy a need of higher priority than that from the satisfaction of which they were withdrawn, that is the lowest in the order of private needs to be satisfied. The relevant

decision must be reflected in the value of the goods. If we say that the value of the goods withdrawn from their prior use is their cost value, and the value of the same goods in their intended use their use value, then we can formulate this theorem: use value must exceed cost value and may never be below cost value, and when this is not so the intended economic activity is to be abandoned. This remains true even of those transfers of goods which concern us here, namely those enforced by the State. Any enforced withdrawal of goods in contradiction to their cost value represents an anti-economic act. This is the common feature characterizing these transfers of goods as a process of valuation. The word cost itself includes the notion of reference to some purpose for which the goods in question are to be used; we can therefore briefly speak of cost valuation, provided we always remember that what is really involved is comparison between cost value and use value.

The same economic point of view prevails for the cost incurred by the community. However, any State action involves expenditure for means of production and for the remuneration of those rendering public service, and this expenditure also represents a social relationship between the community as a whole and those individuals who, in any particular case, may be the suppliers of resources or recipients of wages. With respect to this expenditure, the members of the community have a selfish interest *vis-à-vis* these suppliers and wage earners, to the effect that no more should be spent than economic considerations require: the prices and wages should not be higher than those actually ruling in the private economy under equal circumstances.

For example, a law on civil service pay expresses the community's collective decision as conditioned by that motive, although with some qualification regarding the length of service and the standard of living which current public opinion regards as proper for the representatives of public authority. We need only note in passing that here, too, there may occur political "obstructions", if the ruling class, from whose ranks officials are recruited, selfishly exploits its power in favour of its own class members.

The extent to which goods are to be transferred from the private to the state economy, and in particular the amount of goods to be withdrawn from each economic unit for collective purposes, is determined by individual value. The lower the value which anyone attaches to a unit of his property, the more such units (money) he will be prepared to spend for some particular purpose, if necessary. In addition, the amount of goods to be transferred is also conditioned by the social relations between the members of the community, as the subjects of action, and those individuals who benefit by it. These social relations derive from the degree of selfishness or altruism which individuals within the community display towards each other, or from the peculiar mixture of "mutuality". But this kind of quantitative determination of the goods to be transferred must not prejudice their cost valuation.

The social relations themselves are fashioned differently according to the group of persons who become objects of collective activities with varying reasons and purposes, and according to the kind of welfare promoted by these activities. These differences make it possible to classify the actions of the State and hence to distinguish the measures by which the community, or the public authorities, determine the reasons for a transfer of goods, the individual economic units affected thereby, and the amount of goods. These are the financial measures, which in this way we can consider as groups of economic actions.

Let us briefly look at the groups of collective activity.

A first fundamental difference in collective purposes is that some of them involve not only general participation of all members of the community, but also separate specific individuals and their personal way of life, while with other collective activities no such separate participation can be observed. We thus have a first clearly defined group which, for brevity's sake, we shall call personal (*partikulare*) collective activities.

Personal collective activities are characterized by one of two features: either the satisfaction of individual needs through collective supply of goods and services is a means for the achievement of some collective purpose; or, for various technical reasons, the satisfaction of collective needs leads directly or indirectly also to some identifiable personal benefit for certain individuals. The collective self-interest of the members of the community then works towards asking, in each separate case, that the individual economic units contribute the means for the individual benefit in question. At the same time some limited altruism becomes operative, which is due to the community spirit and which varies in degree with the conjoint overall collective purpose.

We thus get two sub-groups of personal collective activities. In the one case normal self-interest prevails in the community as it does in private business, and occasions the same behaviour as of a private entrepreneur in relation to the buyer of his products. Community altruism enters into it only in so far as the community, as a monopolist, may for diverse reasons modify the price in favour of certain individual economic units, which a private entrepreneur would not do. However, this has generally but little influence on the total sum of goods transferred. For the rest, the community as a whole remains indifferent to the extent to which each consumer makes use of the goods and services according to his individual valuation of them. Collective activities of this kind might well be labelled "public enterprise". The prices at which goods and services are supplied to individual economic units are called tax prices.

A higher degree of altruism is displayed whenever the community sees fit to promote individual interests in some measure. When the satisfaction of some individual need is contingent upon the individual's ability to acquire the goods and services at their value to himself, the purpose is fulfilled if the community fixes the price so that its cost value to any of the economic units in question does not exceed its use value for them, whatever the cost to the community. This can clearly be done in practice only on rather wide averages applicable to people in various property groups. Public services which certain individuals are compelled to use on specified occasions (such as official proceedings) are priced, irrespective of their cost, so that the amount of goods which each has to pay corresponds to their average value for various groups of economic units or even, according to the purpose, to the value for the poorest, *i.e.* the average value for the great mass of the population. Hence the amount of goods to be transferred is so determined that the transfer, if it were voluntary, would be economic, but would not take place if more goods were involved. For altruistic reasons, persons at subsistence level are not asked to contribute anything at all. Institutions of this kind are called "public services" and the payments in question are called fees. The deficit is borne by the community as the cost of the respective overall collective purpose.

The second group of collective activities comprises those the purposes and effects of which are immediately directed to the members of the community as a whole. Here again, we have to distinguish two sub-groups, according as the individual does, or does not, receive an identifiable benefit. In these collective purposes all the members of the community are at once acting agents and beneficiaries; in the one capacity they decide, in the other they jointly bear the cost. The relations of individuals to one another are fashioned by mutuality: a kind of altruism created by the need for joint action towards a common end, and designed for mutual assistance to the exclusion of self-interest, if necessary. Each participant is moved to action, even though it benefits others and irrespective of the relative extent of the others' benefit and his own, so long as he achieves his own purpose. This common feeling is a bond of formal equality uniting the community. With respect to the cost there remains a divergence between the members' self-interest to the effect that no-one is to receive an advantage at the expense of anyone else: the total cost having to be met by payment of separate amounts, any deficiency in the contributions of one side would entail an increase in the amounts to be paid by the other side. This is excluded if everyone contributes for his share of benefit the full measure of goods he would use in his own economic unit in equal circumstances, that is, what he would be prepared to spend according to his individual valuation. This is indeed what happens in free "mutualistic" associations. Thus the members' relative interests find expression in the fact that each contributes to the cost according to his individual valuation. Joint action on the basis of this principle also ensures that the purpose is achieved in the most economical manner, which is everybody's intention. Collective action amounts to the consumption of goods, either for the immediate satisfaction of the members' needs or as capital investment ultimately leading to such satisfaction.

As regards the translation of these dispositions into concrete economic action, the varying degree to which individual benefits are identifiable becomes important. Individual shares in the total result can be identified only in some sort of semi-collective formation in which the activities of the "public services" are extended to all members of the community, or else when the public activity enters into the economic process as such and the material benefits in which each partakes according to his wealth can still be evaluated by the community in terms of current market value. Hence purposes of this kind will be found within the limits of narrower local communities.

The economic way of proceeding is given by the above premises. In cases of the first kind the recipients are periodically required to contribute certain amounts of goods, which are to be considered as a lump sum in lieu of current fees: they are determined like fees for all participants alike according to their wealth, which is measured by some observable indicator such as rent.

But for our comparison cases of the second kind are more important. The first step is collective cost valuation in the narrower sense, *i.e.* the determination of total cost according to the economic principle which we have explained earlier. Thereupon the cost shares have to be determined in accordance with the participants' wealth. This can be done only by distributing total cost according to the wealth with which each individual can be observed to take part in the common purpose. Distribution according to this yardstick gives each individual a share of benefit the use value of which is in excess of his cost value—such excess having been postulated as a condition of the economic action taking place at all. We have again a general process of valuation.

If, as we are assuming, the individual benefits are measurable and each person's property has a definite ratio to his benefit, then the distribution of total cost according to property must result in the same ratio of cost share to benefit share for all participants. The calculation is based on figures which are available or can at any rate be ascertained approximately, and the economic activity in question can therefore easily be carried out successfully from the point of view of all participants. In my *Grundlegung der theoretischen Staatswirtschaft* (1887) I have proposed to call the cost shares so determined by distribution "assessments" (*Umlagen*).

When individual benefits are not identifiable, the question is how to achieve the same desired economic result notwithstanding the non-measurability of individual benefits. This brings us to the principal subject of our discussion.

Collective Needs Proper and their Satisfaction

Purposes of the above-mentioned kind extend throughout vast fields of state activity commonly characterized as pertaining to sovereign power and law, on the one hand, and to culture and welfare on the other. We all know the fully developed State and can therefore take these purposes for granted

without further explanation. The separate concrete collective needs arise from the technical means required in each case, and the utilization of which represents the purpose as opposed to the cost. Examples of general collective needs are the organizational structure necessary to the very existence of collective activity, and the means of transport, in so far as transport is the territorial basis of the life of society. Other cases are the deficits of "public enterprises and services". It should just be mentioned that we must include also the State's subordinate local authorities and personal associations which, as collective organisms, are in no essential way different from the State strictly speaking.

Collective activities of this kind intend and create conditions of welfare which extend to all members of the community and benefit each alike as if they existed for each alone. We can think of any example we choose, such as the control of epidemics: everybody is saved from infection, nobody more or less than anybody else. It is right therefore to speak of these benefits as indivisible. The fact that individual shares are neither identifiable nor measurable is translated into material equality of all in relation to the purposes in question. The State supplies these activities for all, and by virtue of its coercive power they become an essential need for each person, that is, a need which is given the same subjective rank by all.

This situation has certain consequences for the economic intentions of the members of the community and for their resulting economic actions. All are agreed that the common purpose, which is the same for all, should be achieved in the greatest measure at the least cost to each; since it is a need which is the same for all, there is also agreement that the individuals' cost shares should be equivalent—*i.e.* subjectively equivalent—according to the mutualistic relationship. The first agreement relates to the amount of each individual's tax as such, *i.e.* the absolute amount of tax; the second to the relation of each individual's tax to that of all others, *i.e.* the relative amount of tax. Both points of view combine in economic action and we therefore have first to analyse the processes by which the absolute amount of tax is determined, and then to examine how the latter is affected by the principle of equivalence. It needs to be stressed that by amount of tax we always mean the total withdrawal of goods resulting from the combination of various taxes in an economic unit.

The economically correct amount of tax for each individual is the quantity of goods which he would be prepared to withdraw from the satisfaction of his lowest-ranking needs and to use instead for higher-ranking needs (starting from the top of the scale). The "higher-ranking" needs are the collective needs under discussion. The absolute amount of tax is therefore determined by the relations of interdependence between the two planes of life. They are in a functional relation of reciprocal limitation, because the goods available for the satisfaction of needs are distributed over both. The use of more goods for the one means less for the other. The more goods

are needed for collective purposes, the more tax falls on each and the more numerous and more important are the individual needs which cannot be satisfied. This obvious situation has binding consequences for the correct amount of tax. For any collective need the quantity of goods to be expended must only be such that the individuals' taxes, the sum of which provides that quantity of goods, exclude the satisfaction only of individual needs of less importance than the collective need which is being satisfied.

How is it possible to ascertain whether this actually happens in a given case, and how can it be made to happen?

An individual may be able to measure the loss of certain welfare elements in his personal life, but he cannot measure the corresponding gain in community welfare, which extends to all members without distinction. But he undergoes the influence of the spiritual bond of community and this enables him to judge: it has the effect that individuals become part of the common feeling and volition with respect to the common welfare. By virtue of this motive, individuals as members of the community understand the relative importance of concrete purposes for the community; they are clearly conscious or obscurely feel that they all share equally in these purposes and bow to the necessity of withdrawing the required goods from individual purposes to the extent that the collective purposes have greater importance for all together and hence for each separate person.

General agreement in this sense finds expression in community decisions. The actual institutions through which collective decisions are taken are irrelevant in theory, but highly important in practice. Decisions may lie with community organisms whose personnel is drawn from leading government circles and disposes of the required knowledge of the economic and social conditions in the State. The citizens' declarations, complaints and grievances, their very attemps to escape an unjustifiably high tax etc., briefly all the means at their disposal to safeguard their interests, furnish these decision-makers with the information they need in order to determine the limitations which can be imposed on individuals in favour of state purposes. Under parliamentary rule and more particularly in democratic countries, decisions are taken publicly by the population itself in the representative bodies, through conflicting opinions and balance of political power. Majority votes express the determinant factual reasons (or indeed the abuse of power for those well-known "obstructions"). The "parties" uphold not only their members' special interests, but also certain conceptions with regard to the functions of the State. The outstanding personalities whom the various groups of the people choose as their party leaders, are capable of taking an overall view of group and general interests. This is how party conflict leads to decisions reflecting current public opinion on the relative importance of promoting welfare in the two areas.

Any such collective decision implies a value judgement: that it is justified to use the goods which the individual has to give up as his tax, to pay the cost of the collective purposes which assume the nature of an essential need for each individual. This is collective cost valuation from the point of view of the individual. For each one of them, use value exceeds cost value—apart from cases in which some essential individual need would have to remain unsatisfied. But such self-sacrifice is never required.

From the point of view of the community itself, the relationship of interdependence between the personal and the social plane of life has another aspect.

The economic principle demands that collective needs be satisfied in the order of their importance, so that the limited resources may yield a maximum of welfare. The individual, for his share in benefits, neglects this order of collective purposes, but the community must pay attention to it, for the reasons stated. To this end, the public authorities draw up an order of needs and satisfy them, in that order, up to the point where the means assumed as available are exhausted. Cost valuation in the narrower sense takes place, with the intention and effect of minimizing the cost in each case and thereby lengthening the line of needs to be satisfied with the given quantity of goods. But the available means are not given *a priori*; by virtue of the interdependence relation their quantity depends upon certain individual needs remaining unsatisfied. Another cost valuation has to ensure that the collective needs be satisfied from the top of the scale down to that which is still just more important than the individual needs which can no longer be satisfied owing to the withdrawal of the required goods from individual economic units. This is cost valuation from the point of view of the community.

In content, both cost valuations coincide. They are one and the same, only seen from a different point of view. We can speak of overall valuation. The result is that in the collective judgement of the members of the community no purpose realized in one plane of life ever excludes the realization of higher-ranking purposes in the other. In this sense we can speak of a position of equilibrium or of equalization of levels between the two planes.

The achievement of this position fulfils the task of collective volition with respect to needs of both categories.

If in any concrete case equilibrium is not established, two courses are possible: either the tax must be reduced so that higher-ranking individual needs can be satisfied, whereby the decrease in the total sum of taxes excludes the satisfaction of the lowest-ranking collective needs; or *vice versa*, more goods have to be spent to extend collective activity to further collective needs, and these goods have to be levied through increased taxes, whereby corresponding limitations are placed on personal needs (the beneficial effects of state activity possibly counter-balancing these limitations). Thus the taxes must be so determined as to influence the purposes of both areas in the direction of equilibrium. In fact, it is well known that modern civilization has brought public functions so much to the fore that with few exceptions it became necessary to settle the question in favour of collective purposes. This is the

substance of parliamentary discussion on the requirements of vigorous state activity as befits our times and on the measure of the permissible tax burden on the citizens: the budget and financial debates. Occasionally equilibrium lasts for some time. This may happen if, at a given level of taxation, an expansion of collective activity is made contingent upon the increase in revenue to be expected from the growth of population or national wealth (development of the national economy); or else if any diminution of wealth owing to economic events leads to a decision to contract state activities by abandoning the least important ones. The financial device of public loans belongs to the same category: when the means for "necessary expenditure" cannot be raised through taxation without upsetting equilibrium, their levy is handed on to the future. On the other hand, the maintenance of equilibrium is always threatened by the ceaseless movement of life. Technical progress continuously creates new individual and collective needs and people feel driven to satisfy both in the utmost measure. Public authorities, as representatives of the community, are intent on expanding collective activity, individuals try to raise their standard of living or above all to maintain it. As a result it becomes necessary to establish ever anew what balance expresses the collective judgement on the comparative importance of betterment in the two areas.

When it comes to setting the individual tax burden, decisive importance attaches to the principle of equivalence, which expresses the connection between the relative and the absolute amount of tax. This is where the second of the above-mentioned agreed points of view becomes operative, namely that according to which individual cost shares must be subjectively equivalent. The taxes determined by overall valuation must meet the requirement of equivalence. The relative amount of taxes becomes a counter-check and regulator of the correct assessment of the individual tax burden. If the total sum of taxes is as high as collective judgement requires and if the individuals' taxes fulfil the principle of equivalence, then each person's tax is in the right absolute amount. If a tax system fails to make individual tax burdens equivalent and equivalence is subsequently established, the absolute amount of these taxes changes. Two cases are then possible: either the total sum of taxes remains at its right amount, or it changes in its turn. In the first case the correction of the separate tax amounts takes place within the continuing equilibrium position. People are then apt to say that taxes are on the whole not too high, but unevenly distributed, and there is tax reform in the sense of even distribution. But if the total sum of taxes changes, the increase or decrease modifies the equilibrium position. The resulting change in individual tax burdens shows the influence of the relative amount of taxes on their absolute amount, since the new amount of taxes will be that which corresponds to the new equilibrium.

Taxation is thus seen as an economic process with two aspects which condition each other. Individuals are prepared to pay the cost of state activity

on condition that their cost shares be equivalent and overall cost valuation determines the sums to be used for collective activity on the assumption that they be raised by taxes corresponding to that principle. No overall valuation would be possible without determining the amount of the individuals' taxes on the principle of equivalence, because the effects of taxation on the satisfaction of individual needs cannot otherwise be ascertained. We can summarize the result of our investigation as follows: Taxation for the purpose of satisfying collective needs is a collective cost valuation on the basis of equivalence of individual cost shares, as conditioned by the relationship of mutuality.

This economic action is a concrete expression of the economic principle. It is obvious that taxes assessed by the processes of valuation which we have described, yield the greatest total which is possible in any given set of economic conditions. At the same time, the tax each individual has to pay is the smallest possible in proportion to his economic situation, and is also of the correct economic amount and as such should not be exceeded. The first of these statements means the maximum satisfaction of collective needs which is possible in given circumstances; the second, that the goods which the individual retains yield him the maximum satisfaction of personal needs which is possible in the same circumstances. The equilibrium position represents maximum collective utility, both as the sum of individual satisfactions and as the welfare of the community as such.

Our theory is based on normal taxation. Quite a different matter are confiscatory taxes aiming at a modification of the income and wealth of certain population groups. The reasons for such interference with the existing property distribution are exogenous to the theory. Nor has the question of absolute and relative amount of such taxes any relevance, since it is subject to *a priori* decisions in the light of political purposes and political power. Taxes of this kind are no concern of ours. They are weapons in the struggle for possession—that social relation which plays so nefarious a part in human life. Taxation as we are discussing it here belongs to stable situations; it is an economic action happening within the framework of the actually existing current property order.

Taxation may also be made to serve considerations of economic policy (including social policy). It is self-evident that such taxes are not financial measures strictly speaking and therefore also remain outside the range of our theory.

In conclusion, we must deal with an objection which may be raised against our tax theory. This objection would invalidate the theory on the grounds that the principle of equivalence cannot be established in practice, divergences in the mental and physical capacities of mankind making it impossible to evaluate the satisfaction of needs, and no one person being able to appreciate another's valuation. But this is not what my theory says. The members of the community do not have to understand each others' inner valuation

processes; what I am saying is that individual values can be deduced from externally observable facts by which they are determined. The objective facts which condition value in each economic unit are wealth and needs. Wealth can be measured in terms of money units representing units of goods. Needs have an order of decreasing intensity. The more units of goods a man possesses, the less intensive is the last need that he can satisfy; given equal needs, the value of the unit of goods is lower. (For the time being we assume that the intensity of needs decreases in the same proportion as wealth increases.) Thus value in the separate economic units is inversely proportional to their total wealth, and equivalence of tax means quantities of goods directly proportional to wealth. The influence of the scale of needs on value works in such wise that, the more numerous and the higher-ranking the needs are, the higher is the marginal value of the last need satisfied, given equal wealth. In comparing the needs of various individuals, we also find certain observable differences: the number of persons whose needs have to be satisfied by one economic unit, the presence or absence of special circumstances creating certain categories of needs—such as illness or health, old age or youth, heavy or light work etc. For the rest the deduction draws on an average of needs more or less given by natural circumstances and the equalizing factors of social life which fashion the physical and mental characteristics of the people. Thus the value conditioned by wealth is modified by differences in needs; the resulting new value can be ascertained by observable facts and enables the principle of equivalence to be fulfilled. It is true that equivalence is not quite precise, owing to the use of average needs in the calculation. But this does not prejudice the economic action, since the part of altruism contained in the relation of mutuality tempers the demand for strict equivalence in the direction of mere approximation thereto. Indeed, if a community possesses any significant degree of practical altruism, its influence may be even further-reaching. There are cases where certain groups of the population are, by virtue of the others' altruism, partly or wholly relieved of the tax burden which would be theirs on the principle of equivalence.

The particular objection which we have mentioned therefore does not stand up. The fact remains, however, that taxation as an economic action can never fully attain its objective. The individuals involved are too numerous and the process itself too complicated, not to speak of the political disturbances to which it is exposed. One of the major contributing reasons is the practical difficulty of measuring in each single case the wealth and needs which determine individual values. The relevant techniques of investigation need to be developed in the light of the growing differentiation of modern civilization. Furthermore, the effect of taxation on individual economic units may have harmful consequences for the national economy as a whole or may counteract equivalence; it then becomes necessary to take measures to prevent such consequences, if at all possible. A steady improvement of all these practical

measures is manifest in the development of tax systems everywhere. Finally, we cannot overlook anti-collectivistic individual egoism, which leads to the attempt, by stealth and falsehood, to evade due taxation, even when it is of the right amount. This is a violation of the canons of mutuality within the community. No amount of moral condemnation entirely prevents bad tax ethics; if it ever becomes a significant factor in any given situation, it must, by collective decision, be controlled by appropriate measures, which may be more or less successful. By gradually overcoming all these difficulties, perfection is approached. Success means that what is economically right, eventually prevails. With the understanding of such growing pains, the theory fully encompasses reality.

Summary of Concluding Part

In the remaining part of the essay, Sax comments on other approaches and defends his own formulation.

He points out that the marginal utility approach of the Wicksell-Lindahl type is based on the assumption that each individual can evaluate his subjective share in public services. Accordingly, taxes are treated as a price. There is no need to evaluate the total utility of public services, and the relative tax shares are determined automatically.

The major objection which Sax raises against this approach is directed against the premise of subjective evaluation. The analysis of collective needs proper, according to Sax, requires a collectivistic approach. Only where the Wicksell-Lindahl approach is applied to groups and classes, can it be made consistent with the collectivistic approach.

Sax criticizes the individualistic school for not considering the utility of public services to the group as a whole, and for concerning itself with utility shares only. He holds that the marginal approach, while applicable to the share problem, cannot be applied in dealing with the utility of public services for the group as a whole. As the editors understand it, this involves a confusion of identifying "group" with "total" on the one side and "share" with "marginal" on the other.

Sax distinguishes his approach from that of the political school and the sacrifice school. The former is rejected as not solving the problem on economic grounds; the latter is rejected as dealing with relative shares only. His own theory, Sax believes, solves the problem of both the overall level of taxation and of tax shares, and does so in accordance with economic principles.

THE THEORY OF THE PUBLIC ECONOMY

By FRIEDRICH VON WIESER
Translated from German* by R. Bruce

I. The Nature of the Public Economy

It is common usage to speak of the public economy as the national household, or, as the case may be, the county household, city household, or generally the public household. The whole of public economy is thereby given a name taken from one single section of private economy. Similarly, whenever in the past economists tried to explain public economy, they nearly always used an approach based on the familiar concepts of private economy. Classical theory took the view that the economic relation between State and citizens is one of exchange, the citizens paying tax in exchange for public services. Nowadays it is fashionable to regard public activity as a special form of production: non-material production, supported by non-material capital, and designed to create the non-material goods of peace and rule of law. Such concepts do nothing but obscure the true nature of public economy. To be sure, public and private economy cannot be conceptually separated, both having common roots and common aims. Both have the purpose of maximizing the utility of scarce resources. But the means of power peculiar to the public economy present it with its own peculiar tasks, to be solved in its own peculiar ways. The forms of state revenue with which the theory of public finance is concerned are alien to private economy and have nothing to do either with exchange or production. The conception of tax as a price for non-material products is of no use as a basis for tax theory, because the principles involved in tax assessment have nothing in common with the law of price.

The economic process of the State is different from that of municipalities and other self-governing bodies. The economy of self-governing bodies resembles private economy more closely, but it is too dependent upon the special form which local government assumes in particular countries to be adequately described in a general theoretical exposition. On the other hand, we must not evade the task of describing the typical state economy. The theory of social economy would be incomplete and unable to serve as a foundation for the theory of public finance and economic policy, if it failed to describe the typical pattern of the economy of the State.

The best insight into the economic structure of the State is gained by starting with public expenditure. Every state activity, whatever its kind, is accompanied by expenditure, and the whole body of state activity finds its economic expression in state expenditure. When applied to state expenditure, economic theory—as is its function—follows a classification along economic rather than administrative lines. We shall set up two main categories. We

* *Grundriß der Sozialökonomik*, Book I, Part II, Chapter III: *Theorie der Staatswirtschaft;* second edition, Tübingen 1924, pp. 292—302.

gather together in the first category those expenditures which are comparable to the private economy. They are expenditures for services which the State performs separately for separate individuals, as happens in private exchange, or nearly so; for such services, the State may require payment from the person concerned, or at any rate some appropriate return. We shall call such expenditure personally identifiable, or in short personal expenditure, and distinguish it from the second category, that of non-identifiable collective expenditure.

The State incurs personal expenditure in its purely business undertakings, and likewise in the postal services, railways and all other public undertakings conducted for administrative considerations. Here, there is an exchange between the State and the recipients of the services, the State charging prices out of which it covers its expenses just like a private entrepreneur. The fact that the State sometimes deviates more or less from the price which it might obtain for the use of public services if it were seeking its own advantage just like a private entrepreneur, does not affect our argument. Even when this happens, the process is not basically different from that of private business and there is no need for us to discuss this any further.

The State also makes personal expenditure in numerous administrative procedures, including jurisdiction, if it incurs costs for services rendered at the instance of some particular party and in its special interest, or in consequence of some person's infringement of the law. For such personal expenditure the State is well justified in recovering the cost from the interested, or culpable, party by collecting a fee to meet the cost wholly or at least partly. The costs of litigation in civil actions, which have to be borne by the losing side, are the most obvious example. The litigant and the judge are not market parties and do not transact an exchange; the fee is not a price and has only this in common with a price that it is a personal payment required in connection with a personal expenditure. Fees deserve the closest attention in the theory of public finance, but within the framework of the analysis here proposed they have no significance and we shall not discuss them further. We shall count as collective expenditure all those administrative expenses which are occasioned by single parties but not covered by fees.

In what follows, we shall concern ourselves exclusively with collective expenditures, because only they are characteristic of the special economic processes of the State which we intend to discuss. Collective expenditure can be sub-divided into three groups according to the degree in which it approaches private economic expenditure. The first group comprises expenditure for the administration of the national economy, for the purpose of protecting and assisting the private economy and especially business; in the broadest sense, expenditure on colonial wars and other wars fought for the sake of the national economy would have to be included here. Governmental economic expenditure shares its aim with the private economy, the intended effect in both cases being to ensure and increase private income. But the process of expenditure is different. The State does not itself create income

but merely helps to create it. Public administration provides the foundation for earning incomes; for the rest, the private economic units are left free to use or not to use the institutions and opportunities so created. State economic expenditure especially benefits the propertied class, which has the highest incomes. The second group consists of other government expenditure for internal administration, again including jurisdiction. To this group belong not only poor relief and assistance generally, but also money spent on social reform, where the primary purpose is not to raise national income but to improve the lot of the masses. The third group, finally, comprises expenditure on state needs in the narrower sense: expenditure for the maintenance of the State, its internal and external power and prestige, for the Head of the State and the armed forces. All this is often called "state necessities" and contrasted with the interests of the people, the power and glory of the State being conceived as an end in itself. In truth, of course, it is justified only by being essential to the welfare of the people and serving it.

Collective expenditure is collective in the sense that common means are employed by one joint authority to produce services of indiscriminate benefit to all. To a much lesser degree is it collective in the sense of satisfying collective needs proper. The public economy mainly serves universal or widespread individual needs, and indeed the same individual needs which private economy also serves: from food and other subsistence needs to the loftiest cultural needs. Private economic units serve these needs either by keeping an economic check on their immediate satisfaction, or by producing or earning the economic means necessary for satisfaction. The public economy serves them by keeping an economic check on state activity which protects civil life and economy and promotes them by actions exceeding the power of individuals. Against minor dangers, people can protect themselves on their own or by association with others, either directly or indirectly through insurance against harmful effects. To insure a house serves no special "need for insurance", but the same need for shelter for which the house is intended; in like manner, the state security services do not serve some special collective need for protection, but rather the same needs of life for which the economic goods in individual possession are intended. Even expenditure for state needs in the narrower sense does not serve some special public need, but also the personal needs of the citizens. In speaking of the essential or vital needs of the State, the term is understood in the more general sense as against the narrower economic concept of needs. Unlike individual needs of life, public ones are not concerned with acquiring means of satisfaction nor with satisfaction itself, and they are not subject to Gossen's law; they are needs in the sense of the need for power and the need for freedom. Their aim is the independence of citizens in their activities directed to the satisfaction of their physical and cultural needs.

It follows that the process of the public economy is not identical with either the private household or private business. It differs from the private household in that it serves principally not the immediate satisfaction of needs,

but its protection and promotion. It differs from private business and especially from production in that the public economy does not itself create productive income. It is true that the State, by its administration, does create certain material values, such as roads. These are comparable with the products of private production, in respect of the technical character of their construction and use. But even here there is the difference that these material values, being available for general use, are not intended to provide the State with immediate revenue, but rather to promote opportunities for earning private incomes. When private economic units so assisted create products, these are not, strictly speaking, products of the administration as well. State economic administration is separated from production by a significant hiatus, the effect of which is visible in the difference between their respective evaluations. The rest of state activity, which creates or protects moral values, is separated from private production by an even wider gulf. Only figuratively can such state activity be described as non-material production, only figuratively can peace, security and other precious conditions of the people's existence, which the State helps to develop and protect, be described as non-material products. These terms are no more admissible than it would be proper to describe a statesman or a general as a producer. The means available to the statesman or general, the civil service and the army, are not disposable goods like the things a producer uses; nor can their productive value and their intrinsic value be distinguished as they can in the case of productive labour in the technical sense. To wage war, to dispense justice and to administrate are just as much advance provisions for the future life of the State as they are in themselves the life of the State.

The closest analogy to the public economic process which we find in the forms of private economy is a club or association, which provides common facilities in the interests of its members and incurs common expenditure therefor. Like an association, the state economy is essentially one of common expenditure; as such, it does at any rate have some resemblance with the private household and to this extent the current term of public household is not inappropriate. Just like the expenditure of an association, the State's spending is not covered by any income of its own. Like an association, the State has to collect membership contributions, which the members must defray out of their private incomes. The revenue side of the state economy is not independent; state revenue, which consists of the citizens' contributions, is a special form of derivative income. By virtue of its sovereign power, the State is in a position to make the contributions which it requires compulsory, but it may not assess them arbitrarily any more than other sovereign rights may be used arbitrarily. The ideal State, which we must theoretically postulate, will distribute the compulsory contributions with economic justice among the citizens.

The distribution of the compulsory contributions is an important part of the public economic process. We shall have more to say on how it must be carried out in order to fulfil the economic principle.

II. Value in the Public Economy

In its business undertakings the State, like any other entrepreneur, calculates in terms of exchange value. It would be a mistake to deviate from the rational principles of the private entrepreneur. If labour conditions are bad, then, certainly, the State should be the first to furnish an example of reform in its own undertakings, just as in the era of enlightened absolutism state domains set the example for the improvement of peasant conditions. The ideal State which we postulate will, as a private entrepreneur, remain conscious of its duties as a State, and will avoid increasing its revenue by means which, as a State, it would have to condemn and oppose. Even in the sphere where the State is concerned with market value, therefore, a ray of purer social valuation begins to intrude.

Public undertakings like the Post Office and the railways are business undertakings which the State conducts for administrative considerations. Hence they might best be termed administrative undertakings. They have become administrative institutions without losing their character as enterprise. They too have to be conducted in terms of exchange value, but administrative interests enter more strongly into the calculation. As a general rule, the immediate purpose of public control is that the State wants to subtract these undertakings from private monopoly. In the absence of other motives, the administrative undertaking has no grounds for departing from market values as such, and will regulate services and prices as would have happened in conditions of orderly competition. Often, however, the administrative undertaking has wider aims: the Post Office makes no charge at all for official mail; sometimes the public is charged prices which do not yield the customary net profit and even cause losses, the intention being to promote production and traffic by reduced tariffs; such tariff levels are sometimes in operation even if the desired increase in national income cannot be expected until years hence; or indeed, such tariffs are maintained for certain groups of people or certain local sectors of the total network even though it is known that no compensating increase in traffic can ever be expected of these groups or sectors. Of the measures listed here, the first has no theoretical significance for us; the second and third will be discussed later; for the moment we shall concentrate on the last point only. If a municipal tram line grants early morning workers reduced fares from which it earns nothing, or if the Post Office arranges a service for remote and isolated districts at the ordinary mail rates and thereby makes a loss, then the market valuation has been influenced by a social valuation alien to the market. The market price is, as we know, the composite result of need and effective demand. The private entrepreneur supplying the market caters not to the need as such but to effective demand only. Not so the administrative undertaking in the cases mentioned. It serves a need unsupported by sufficient ability to pay, and it does so because it deems the need it serves to be important enough to warrant satisfaction in any case. Here the administrative undertaking charges not

according to exchange value but according to use value, as the latter would be determined by a centrally conducted society according to the laws of the simple economy.

In contrast to the administrative undertaking, the economic administration of the State no longer calculates according to exchange value and is altogether disconnected from the notion of profit; if we neglect fees and direct charges, its services are offered free. A road which produces no profit has no exchange value as income-producing capital, nor, since it is not intended for sale, has it any other exchange value. To be sure, this public use value is based on the private economic value of the road for the persons using it. If roads and equally all other institutions of the economic administration were not suitable for use by anyone and had no personal value for anyone, they would have no public value either. In the main, economic administration must be directed towards enabling private economic units to secure the highest possible net profit in terms of money. A State which, in principle, acknowledges the justification of the system of private enterprise would find itself in insoluble contradiction with this view if it were to reject, on principle, the valuations which citizens reach in accordance with market prices.

Only in exceptional cases, when the State interferes in the general interest to supplement or rectify the course of private enterprise, will the State base its decisions on valuations which supplement or rectify private exchange value. More especially the economic administration, as indeed the administrative undertaking does to some extent, will make provision for certain legitimate needs even when they are unsupported by adequate purchasing power. If, after a crop failure, grain export is prohibited, the State does not calculate in terms of exchange value but of public use value on the analogy of use value in the simple economy. The need is evaluated without reference to ability to pay. The poorer classes not being able to compete successfully with foreign purchasing power, the State gives their needs priority over the market profits of producers and exporters and transport concerns.

Public use value, as we meet it in the economic administration of the State, shares with market value the basic condition of all economic action in the simple economy, *i.e.* divisibility of labour and of stocks of goods. Public use value is a partial value determined by the partial utility of the last available unit. However, this partial value is not sufficient for the State in numerous fields outside its economic administration, where the process of the public economy is such that the assumption of divisibility cannot be made. This is the case wherever common effort must be employed as a whole and total effects estimated; these effects can no longer be reckoned as a sum of partial values, like profits in the world of goods. Examples are not lacking even in the economic administration, although on the whole it is concerned with partial values only. Thus the question whether the country is to be mainly industrial or mainly agrarian will not be decided merely by weighing the sum total of yields to be expected from the increased activity of industry

or farming; other considerations enter, such as the overall effect of the one or other system upon population structure, the health of the nation, its military strength, and other major national interests. Marginal laws no longer count; partial values imputed on the basis of marginal utility are altogether too narrow for the valuations in question. They rest on the primary interests of society. What is at stake is the total value of the benefits to be achieved by common effort.

This does not imply abandonment of calculation in terms of partial values for individual goods and labour expended for public services. Armaments and all other items of military equipment, strategic stocks of food, buildings and ships are paid for individually according to their marginal value; similarly, the emoluments of officers and civil servants in the main follow the marginal laws of the market. Given the very large amounts of expense involved, the military administration cannot afford to be anything but strictly economical and cannot depart in any single case from the law of marginal value. But over and above this, military interests have to be evaluated as a whole on the national level in terms of the effect of the use of military power on national independence. The monetary sacrifices imposed on the citizens for the purpose of national defence are measured in terms of this total value and on it rests compulsory military service as well as all the other oppressive burdens which the people have to shoulder in time of war. If misused for dynastic wars, general military service would be an intolerable exploitation of the people, far worse than the worst entrepreneurial exploitation; when limited to national defence, military service rests on a collective valuation—military service for the sake of the State is rated so highly that the State resolves to demand it of the citizens, even if they are thereby withdrawn from the peaceful occupations which the market assesses most highly in terms of exchange value.

Collective valuation by the State diverges from private exchange value most widely in the case of the evaluation of human labour. For the entrepreneur wage labour is simply a means to earn profits; economically, the worker is nothing more to the entrepreneur than a person offering labour for wages and is paid no more than the marginal utility of labour. The State, on the other hand, cannot acquiesce in a valuation which in the last resort amounts to regarding the worker, as a human being, as a mere means of revenue. The State cannot condone a system by which anyone contributing to the process of social production is treated unfairly when the product comes to be shared. The State must respect the dignity which is the worker's birthright as a human being with human needs, and as a member of society. The State does not normally go so far as to overthrow the private legal order and to interfere with the distribution of the national income according to market valuations; but the State does recognize its obligation to protect the threatened vital interests of the workers to the best of its ability and if necessary with the help of public funds. This has the further consequence

of enabling the workers to bring such forces to bear as will give them a chance to earn adequate wages.

The theory of value in the public economy has not been much investigated. Friedrich List made the most significant attempt with his "Theory of Productive Forces" which he opposed[1] to the "Theory of Values" represented by the English school. List's immediate intention was only to construct the theoretical foundations of his "infant industry" tariff policy, but he stated his theory in general terms and used it to develop the general concept of public value for his particular purpose. According to List, the State should not calculate in terms of private exchange value as an entrepreneur does, but should be concerned only with the promotion of the nation's productive capacity; the immediate sacrifices in exchange value will be amply repaid later. The State should act like a father who secures the good of his sons more surely by incurring costs for their best possible education than by sending them out to earn their living as soon as possible and sell their labour on the market. But List's own example shows that the contrast between exchange value and productive forces is not such as he sees it. The father who gives his sons the best possible education so as to enable them to earn as much as possible later, counts on an exchange value derived from the expected productive powers. So does any entrepreneur who is prepared to work at a loss for some time. In this respect there is no essential contrast between the entrepreneur's calculation and the State's; the only difference is that the State can hold out longer than even the richest entrepreneur. List's terminology is justifiable only in so far as the periods of time in the perspective of the entrepreneur are short enough to enable him to calculate in advance with fair accuracy how much in exchange value he can expect. By contrast, the State has to plan its protective customs policy for such long periods, and the expected expansion of productive capacity in this period is so far-reaching, that the figures of future values are beyond present assessment. All that the State can do in the meantime is to evaluate the productive powers as such. What List describes is a form of public use value: the use value of slowly maturing productive forces which for the time being lack the complementary additions necessary for their fruitful development. List failed to touch upon those points which could really reveal the contrast between exchange value and public use value.

III. The Economic Principle in the Public Economy

It is clear that whenever the State goes by exchange value in its business activities and administrative undertakings, it keeps strictly to the economic principle, like all entrepreneurs; it aims at the highest net profit as calculated by comparison between costs and receipts. It is furthermore clear that the economic principle is not violated if the State occasionally, in these undertakings, considers simple social utility instead of exchange value. It still chooses that gain which it deems the highest it can reach in the circumstances.

[1] *Das nationale System der Politischen Ökonomie*, Chapter 12.

If this thought be pursued further, it will be seen that the State also follows the economic principle in its economic administration, where public use value counts rather than immediate exchange value. Here too the State always follows the line of maximum utility. However, the indirect productivity of administrative institutions cannot be calculated as accurately as the direct productivity of a private enterprise once it is in regular operation. Regular output is the result of the fully rational use of means of production and it is possible to calculate exactly what yield is to be expected from the outlay of certain costs. The indirect effect to be expected from administrative institutions can never be estimated as certainly in advance, because the free private initiative of the entrepreneur is interposed. Considerable effects may follow if large-scale use is made of the opportunities provided by the administration, but it may also happen that even the best efforts of the administration yield but scant effects because private enterprise fails to use the opportunities so provided.

The same idea may be taken a step further, beyond the economic administration of the State to the vast spheres of other public administration ruled by the State's evaluation of the general interests of society. It will be seen that here too the economic principle as such prevails, though it can no longer be expressed in accounting terms. The State can give numerical expression only to the partial value at which, in accordance with market prices, expenditures for goods and services appear, item by item, in the budget estimates and the final accounts. No numerical expression can be given to the total value attaching to public administration by virtue of its overall effect, which total value is the mainspring of State activity and the ultimate criterion of the level of expenditure. Who would presume to express in figures the "utility" of a victorious war and to balance it against the costs and other sacrifices? And yet national sentiment will unanimously demand to go to war if the State's vital interests are threatened. Evaluation is concerned only with the intensity of the people's wish to safeguard certain interests; if public opinion is united in its emotional judgement, quite definite decisions are taken without its being either possible or indeed deemed necessary to state the degree of intensity in figures. Admittedly, in other instances disputes over political issues are founded to a large part on lack of certainty about the effects for the very reason that these latter cannot be numerically expressed.

The economic principle requires that the State's economic plan provide, within the means available, for the most important public interests at the expense of the less important ones. The greater the available funds, the more public services can be undertaken and the more benefits included. The richer State can afford its citizens more effective military protection, the poorer State has to be modest in its military expenditure. Even where the State's economic plan is determined by total value, it is thus directed to the same end as an economy concerned with partial values, namely to extend the limits of utility as far as possible.

The protective functions of the State are of particular importance for its budgeting. To this extent state expenditure must always be conditioned by the danger against which the State offers protection: stronger safeguards are necessary against a raging torrent than against still waters. At a time when the great powers are engaged in an armaments race, no country can afford to fall too far behind in military expenditure. The poorer State cannot measure the extent of its military preparations merely by its own economic capacity, but must also take account of the general armaments position; even a State whose economic means are on the decline may have to expand military expenditure at such a time. These circumstances are at the root of the oft-quoted maxim that, unlike the private economy where expenditure is to be determined by available receipts, the State has to determine its revenue in the light of necessary expenditure. But this is much too general a formulation. State spending too must be conditioned by the revenue which due observance of the limits of individual economic capacity permits the State to levy from the citizens' income. We shall presently have more to say on this. The one thing that is true is that, more frequently than private persons, the State is obliged to step up its essential expenditure suddenly and extensively. The reason lies in the special nature of the State's economic functions. Private economy has to see to the economic satisfaction of needs and to earn the means necessary thereto; it is concerned with partial satisfactions and partial effort and hence can flexibly keep to the line prescribed by marginal utility on the basis of Gossen's law. But the public economy, to the extent of its protective functions, has to determine the level of its expenditure largely on the basis of facts over which it has no control. Imminent danger of war may suddenly jeopardise vital national interests, the safeguarding of which called for no special provision in more peaceful times.

The State always has to observe certain limits given by the economic capacity of the individuals from whom compulsory contributions are levied. If all citizens were equally endowed with wealth, theory could get by with the simple rule that there should be one uniform limit of utility for State and citizens; the State should not appropriate means which could be used privately to create greater utility, nor, conversely, should means be withheld from the State which it could put to better use. Given the prevailing inequalities, however, this rule is inadequate to define an economic standard for the distribution of the tax burden among individual taxpayers. To be sure, it is not our task to solve this major problem of tax theory within the framework of general economic theory. Nevertheless, we could not say that economic theory had fully discharged its task if it failed to provide at least the general theoretical foundations which tax theory requires to solve the problem.

The two guiding principles of just taxation, universality and equality, are a direct consequence of the nature of the State as an organization of society. The social character of the state association would be annulled in the absence

of the principle that all members are obliged to make contributions towards their common aims; it would equally be annulled if the obligation applied in unequal measure. It is the task of tax theory to show how to implement the principle of equality in detail. Opinion on this has changed in the course of time. The classical theory demanded that contributions should be graded according to income, and should, as Adam Smith said,[2] be proportional to the income which citizens enjoyed under state protection. This assumes that public services are invariably reflected in an increase in personal income—an assumption valid perhaps for the economic administration, but certainly not for the rest of state activity. Modern theories are different. They demand tax distribution according to personal economic capacity measured by the ability to pay taxes or by the size of the sacrifice imposed upon the individual by his tax payments. Advanced modern views support certain definite claims: taxation of subsistence incomes is considered intolerable and their exemption claimed; tax distribution without reference to the number of children and other similar need circumstances is deemed unjust; unearned incomes are to be more heavily taxed than earned ones and there should be progressive taxation of higher incomes. Perhaps these demands go too far, perhaps at least the cost of economic administration should, as older theory thought, be covered by levies in exact proportion to income. It is not part of our task to deal with such questions of detail, but we must raise another objection from the point of view of general economic theory. In the motives which modern teaching invokes, we miss a solid theoretical foundation. Neither economic capacity, nor ability to pay tax nor tax sacrifice are established concepts of economic theory, and so long as tax theory bases its demands on these motives only, it remains without connection with general economic theory.

The concept of subjective value, or personal value as we have called it, gives us the connection we seek. All the separate elements of capacity, ability-to-pay and sacrifice, which are invoked, are really elements of personal valuation. The number of children and similar circumstances are clearly elements of the need situation; size and source of income—whether earned or not—are elements of the income and wealth situation and hence of the supply situation in monetary terms. When we speak of minimum subsistence income, we measure income level by the standard of subsistence needs; the claim for progressive taxation means comparing growing income with decreasing intensity of needs according to Gossen's law and the marginal law. The basis of all progressive tax rates is the general scale of needs, according to which the personal value of a unit of money is much higher for the first thousand units of income than for the second, let alone for the 99th and 100th thousand, and the difference between the first and the second thousand much greater than that between the 99th and 100th thousand. Thus all the tendencies of modern tax policy are theoretically firmly founded on the

[2] *The Wealth of Nations*, Book 5, Chapter 2, Part 2, 1.

concepts and laws of economic value. Neither by its general administration nor by its tax system ought the State to interfere with the private economic order but should respect it as an historically proven institution of society. The State should not use its sovereign powers of taxation to level out the existing inequality of income and wealth; what it should do when assessing the contributions levied from the citizens, is to take account of the scale of personal values which expresses the inequality of income and wealth. The State would violate the economic principle if it treated all private economic units from which it levies contributions as having equal valuations.

The prototype of the consideration of personal value in taxation, and of progressive taxation especially, is a phenomenon of exchange which we discussed in connection with the theory of joint costs in a supply monopoly. We have seen that in certain circumstances the monopolistic classification of demand, usually regarded as exploitation, is the only practicable means of raising the revenue of an undertaking serving social needs to a level at which the undertaking becomes viable. We have referred especially to the relevant experiences with railways and canals. Without the rule "charge as much as the traffic will bear" many big installations would have gone by default. Progressive taxation is an application of this notion to the whole of public administration. Railway tariff rates classify travellers and freight so as to achieve the big receipts needed to cover railway finance; in the same way, progressive tax rates classify citizens so as to deal with each according to his ability to pay, because it is recognized that all must contribute within the limit of their means so as keep the national economic process going. Progressive rates and consideration of personal value levels in taxation are consequently logical applications to the public economy of experiences proved valid in the private economy. The heavy pressure which the rising demands of the modern public economy make upon the weaker economic units can be alleviated only by a comprehensive assessment of the citizens' compulsory contributions so co-ordinated that the stronger are taxed relatively more than the weaker. This sort of tax distribution allows the public economy to extend its frontiers as widely as possible without impinging at any point upon the limits of the private economy. Up to a point, the modern State thereby approaches the socially levelling use value calculation of the simple economy. It does so without prejudice to the spirit of the system of private enterprise, since private property as such and its historically given inequality are left intact. Modern fiscal policy does not set out to correct the existing property order; it limits itself to making that order the basis of tax distribution. The utility created by the public economy is maximized by levying higher contributions from those citizens who have a higher margin of utility thanks to their less committed incomes.

A SOCIOLOGICAL APPROACH TO PROBLEMS OF PUBLIC FINANCE

By RUDOLF GOLDSCHEID
Translated from German* by Elizabeth Henderson

The Nature and Significance of Financial Sociology

The origin of the State lies in association for purposes of defence and to meet common fiscal needs. These two factors endow the State with its distinct status as an association in law. Hence it is the most serious deficiency of our whole body of social science that we lack a theory of financial sociology and that the problems of public finance remain without sociological foundation. Only sociology can show how social conditions determine public needs and the manner of their satisfaction by more direct or more indirect means, and how ultimately the pattern and evolution of society determine the shaping of the interrelations between public expenditure and public revenue. A community's expenditure and revenue cannot in the long run be considered separately. They have so close a reciprocal functional relationship that we may say: Tell me how and whence you acquire your revenue, and I shall tell you what your expenditure budget must look like. The same applies in reverse: Tell me what you want to spend your money on, and I shall tell you by what means you will get the required revenue, what classes of society you must draw upon and the size and kind of administrative apparatus you will need therefor. The mechanism of mutual interdependence between expenditure and revenue ought to be the primary problem of the science of public finance; but although frequent tentative beginnings were made in this direction, they were never followed up consistently. Instead of an analysis of the relation between expenditure and revenue, there was only purely superficial comparison; at best the question was raised, in a practical context, whether it was more opportune to reduce expenditure or to raise revenue. In these circumstances the science of public finance had no particular need to uncover the roots of this functional relationship in the structure of society.

The pattern of public finance has at all times had a decisive influence on national and social evolution. Tax struggles were the oldest form of class struggle, and fiscal matters were an important contributory cause even in the mightiest spiritual movements of mankind. It is a fact, for instance, that the great religious revolutions can be proved to have been strongly rooted in intolerable tax pressure. On the other hand, it is interesting to observe that the failure of most revolutions can be traced to the same sociological source, namely to the deficiencies of the victorious classes' fiscal policy.

* Extracts from "Staat, öffentlicher Haushalt und Gesellschaft, Wesen und Aufgaben der Finanzwissenschaften vom Standpunkte der Soziologie", *Handbuch der Finanzwissenschaft*, edited by W. Gerloff and F. Meisel, Vol. 1, Tübingen 1925, pp. 146—185.

A more extensive statement of Goldscheid's *Finanzsoziologie* will be found in his *Staatssozialismus oder Staatskapitalismus*, Vienna, 1917.

The Dispossession of the State

The science of public finance is in the main concerned with the finances of the State; yet it never stops to ask who in fact is the State. How are things in reality? Strict class distinction appears natural at the earliest stages of a society organized as a State. External protection and power, and enrichment of some classes at the expense of others have always been the purpose of contributory systems. It is not so long ago that things became different in public life and even now the change is anything but fundamental. Indeed in some respects the development in the most recent centuries has been such that we have no right to look with contempt upon the fiscal conditions of the past nor to pride ourselves on our achievements. There are two reasons for this. First of all, it is a fact that, contrary to appearances, the public household rested on a much more solid foundation in more primitive stages of civilization than it does in our most advanced modern States. Not always was the State propertyless and indeed deeply in debt as our tax States generally are. Large debts were by no means originally an ineluctable feature of the State. In antiquity and often still in the Middle Ages it was the rule for the State to own large possessions, albeit in the form of the princes' personal property. Sometimes indeed these possessions were so vast that tithes and taxes or customs used to be quite incidental and were levied only to supplement public property—which, it is true, was mostly the property of prince, nobility or Church—or else to cover extraordinary expenditure due to war or the results of war, or to the rulers' mismanagement and waste. Only later and by slow stages the State gradually lost its property by a process which we may best call the gradual "expropriation of the State". This expropriation has gone very far by now and it is one of the factors which cause contemporary public finance systems to compare very unfavourably with those of even the most distant past. In earlier times the public finances were more ingenuous and by that token also much more honest. The fiction of tax justice was not yet current, nor was it necessary to use it on such a scale as since the end of the Middle Ages and particularly during this last century of the ascendancy of democracy.

The earliest form of the science of public finance was chrematistics, which later evolved into cameralistics. Now it was the avowed object of chrematistics to enrich the prince's treasury. If those early financial experts occasionally tried to identify the wealth of the prince with the well-being of the people, they did so in a purely incidental manner. This aspect was stressed mostly in questions of foreign defence, to the extent that State funds served as war funds. For the rest it was taken for granted that the people had to provide the means for the splendour of the rulers' way of life. This attitude is well epitomized in the famous saying by Louis XIV: *L'état c'est moi*. But, however unscrupulous and extravagant a use the princes always made of their extorted riches, this does not alter the fact that for a very long time it was considered natural for the State to be rich. This was so in early antiquity and particularly

also during the initial period of mercantilism; it was advanced capitalism which became the creator of the poor State, or as we might almost say, the State which is poor on principle.

This development was due to the struggle among the princes and between them and the Church, which had acquired a strong capitalistic structure. The main factor was the constant wars arising from this struggle. The feudal State, the guild State as well as absolute monarchy had a natural interest in accumulating as much wealth as possible, in keeping the economy subject and in regulating it in minute detail in order to appropriate unto themselves as much as possible of the newly-emerging private wealth and to rule sovereign over the subjects' possessions. Everywhere tax pressure became the most powerful motive force of social struggle. Fiscal exploitation is the oldest form of exploitation besides outright slavery. Fiscal exploitation was the lot of nations defeated in war and fiscal exploitation is the beginning of the process by which free men are enslaved. Long before the emergence of the capitalist economic system fiscal exploitation is seen to operate and only thereby was the ground gradually prepared for the capitalist economy. We can trace this development in the oldest forms of exploitation which were war and slave economy, as also in the oldest forms of capitalism, the capitalism of the princes, nobility and guilds, as well as of the Church. In all these original forms of exploitation and early forms of capitalism public finances and tax system played a decisive part. Marx recognized this very clearly when he described public debts as the lever of original capital accumulation. Strangely enough, however, he failed to build this profound insight functionally into his whole doctrine.

The degree to which the characteristic features of the State as such depend upon the evolution of public finances is also strikingly demonstrated by the genesis of basic democratic rights. By and large, Parliamentary institutions began when the estates acquired the right to control taxation and franchise was originally closely linked to tax assessment, only the taxpayer having the right to vote. This latter limitation has lasted almost into our own days. Similarly, nearly all the privileged classes' privileges were tax privileges, the classes were largely tax classes. Wars and the financial needs of power politics became the origin of social forms, and this too confirms our thesis that the juridical nature of the State can be properly understood only if its military and above all financial nature has been grasped first.

One of the most interesting chapters in the history of the evolution of the State is the transition phase when the ruling classes' best interests began to be served by a poor rather than a rich State. In the pure feudal State as also in the pure absolute State, when the people had no right whatever of influencing the management of the public finances and the rulers could squander the public wealth at their discretion and replenish it as they wished at the expense of the people, public property was merely a special form of the private property of those in power. From the moment when public

property began to be subject to some sort of public control, however limited, any economic strengthening of the State became an obstacle to the arbitrary power of the new rulers. Thus we realize that two equidirectional tendencies combined to bring about the dispossession of the State: on the one hand the princes' reckless borrowing and heedless disposal of State land and domains, and their incapacity to administer public property or conduct the economy; on the other hand the interest of the new creditors of the State in exploiting the State more and more. Thus exploitation by the State ended up in exploitation of the tax State.

The masses which eventually acquired greater power in the State saw themselves cheated of their prize when they got not the rich State but the poor one. The poor State can calmly be allowed to fall into the hands of the people, which thereby acquires nothing but empty coffers. It is the innermost meaning of the synthesis of the State's sovereign political power and economic impotence—which to preserve even now everything is being done—that when poor men conquer power over the poor State this is but a meeting of the dispossessed. The relation between private property and public property is thus a decisive factor in the whole development of the property order. In the absolute State those who held the greatest power were the State itself, its wealth was their wealth. In the era of constitutional government, State and property became separated. As constitutional government grew, and as large-scale private enterprise gained power in the unfettered economy, so these entrepreneurs jealously tried to prevent the State from competing with them in the economic field. The rising bourgeois classes wanted a poor State, a State depending for its revenue on their good graces, because these classes knew their own power to depend upon what the State did or did not have money for. But the poor State of necessity eventually cramps production, the poverty-stricken State must by the same token be the poverty-creating State.

Social Fictions and Social Reality

One of the most naive of the doctrines which dominate our times is that which lays down that science is to concern itself only with what is and not with what should be. This most conveniently absolves one from looking into the real effects of property order and financial system, or indeed from establishing objectively whether they even aim at furthering the common weal.

It is of course possible to imagine or to construe an economy and a State which aim at the satisfaction of the people's needs. But in reality the essence of economy and State is by no means given by such an aim. The contrary can be observed over and over again: the State often does not set out at all to manage economically, it sets out to waste, to rob Peter in order to pay Paul, to be poor in order not to have to give. Hence, however correct the definitions which professional science gives of economy and State, these

definitions pass off economy and State as they should be for economy and State as they are. These definitions are contrary to fact and therein lies the fundamental illusion of the social sciences.

It remains one of the unwritten laws of our time never to look for the cause. People prefer not to investigate too closely why things are as they are, so as not to have to find out that they might be otherwise. Neither cause nor effect are faced, and for the same reason: one must do violence to the facts in order to do violence to the people.

An honest and dispassionate study of the manner in which social structure and financial circumstances mutually condition each other would have led to far more profound and reliable results than did the traditional methods with their implicit party-political prejudice, which are so uncompromisingly one-sided as to constitute an *a priori* hindrance to the discovery of objective truth. It would of course be a grave mistake to examine state, social and economic institutions solely from the point of view of assessing them as good or bad, just or unjust, by some general standard. But it is an even worse mistake simply to take it for granted, without even attempting to prove it, that they have objectively good, just or humane ends. This is tantamount to replacing diagnosis and therapy by descriptive pathology. The aims of social measures are fully determined by the given social structure; they can be studied objectively only by basing analysis and judgement on the real aims rather than on aims described as such for political reasons.

Thus it is perfectly possible to praise the virtues of the feudal State or absolute monarchy or the capitalist economy; but it is absurd to believe in the possibility of just taxation within these social systems. Equally one may regard it as utopian to want to do away completely with warfare, but then one must not accept the illusion that there is some way of creating a secure financial order in a world torn by wars. It is possible, on some subjective grounds, to approve of the growing indebtedness of the State to private capital, but it is foolish self-deception to believe that the dispossessed and heavily indebted State is capable of fulfilling major social tasks. Nor is it, finally, impossible to view with sovereign neglect the contradiction between social and economic structure and its juridical and financial superstructure; but it would be an altogether unrealistic misrepresentation to regard the defects which necessarily result from this contradiction as accidental disturbances or as ineluctable evils due to human nature or to the nature of society and economy. All this goes to prove that a sociological approach is the fundamental condition of any objective theory of public finance. Or in other words: the history, sociology and statistics of finance are the three pillars which alone can support a theory of public finance which is not totally divorced from reality.

Of these three basic pillars, financial sociology is the most important. It alone can show up the part played by the origin and composition of public revenue in the development of society as a whole and thereby in the destiny

of nations and individuals alike. It depends upon social structure and upon the internal and external political constellations whether taxes in kind or money taxes are preferable, whether and to what extent indirect or direct, personal taxes or taxes on objects, income and profits taxes or land, investment, property and death taxes are to be chosen, whether the tax screw should be tightened or relieved, what groups of the population are to bear the heavier or the lighter burden, whether more reliance is to be placed on customs and excise or on loans, whether internal or external borrowing is preferable, whether expenditure is to be reduced or revenue raised, how taxation is to be combined with economic incentives, and so on.

Fiscal Reform and the Social Question

If the State has no property of its own, the public treasury is bound to be no more than a channel for the passage of tax monies. In the absence of an owner of public property there will always be a tendency for tax revenue, swelled by a sizeable profit, to return to those who, being richest, are allegedly intended to contribute most. This leads to the sorest point in all financial theory and practice, indeed in the entire body of economic theory so far. The latter retains a purely private and individualistic approach also as regards financial problems, which cannot be examined from the point of view of social economy so long as there are no rudiments even of a *theory of public property*. In this respect the socialist theory of society and economy fails no less than the bourgeois theory, because in the last analysis both are equally hostile to the State. Socialist theory knows the State only as the class State and hence has no positive attitude to it, at least in theory. The liberal view of the State suffers from even greater contradictions. Liberalism has forfeited its ability to survive because its financial policy forces it to accept State power. Liberalism is involved in the contradiction of conceding the widest political powers *vis-à-vis* the citizens to a State which it otherwise knows only as an indebted, clumsy, bureaucratic apparatus incapable of economic administration and hence to be debarred as far as possible from interference with the economy.

In these circumstances it is neither surprising nor accidental that in times of difficulty the conservative view of the State always comes to the fore, however exclusive its accent on the power of the State. Even though conservative theory limits the State according to the interests of certain ruling classes, it does at least advocate a State which is to some extent politically *and* economically strong. Thereby this theory appears to incorporate the most consistent and coherent doctrine. In reality even conservative theory has not as positive an attitude to the State as it pretends to have. The State which this theory defends is not the people in the form of society, notwithstanding lip-service to the "creative spirit of the people" in a loud-voiced enthusiasm for the unity of State and people. But this identification remains in the realm of ideals and is never translated into any real care of the State for the people;

on the contrary, the unscalable wall of sacrosanct private enterprise is always interposed between State and people. So if liberals and socialists are hostile to the State, conservatives are hostile to the people. The State as an organization of the people lacks politically powerful groups from which it could draw support. And this grave shortcoming is most strongly reflected in the science of public finance. This is particularly obvious in the fact that the science of public finance is that part of the social sciences which has lagged furthest behind during recent decades and which indeed is less advanced now than it was in the past. Paradoxically, one of the main reasons for this is the advance of socialism. While all other branches of economics have received the most fruitful stimulus by socialism, no such thing can be observed in the science of public finance. This could hardly be otherwise, seeing that the decisive impulse of all economic theory has been the struggle for or against socialism and that socialism is characterized by its negation of the State which it regards as moribund.

It is true that nowadays socialism is no longer inclined to wash its hands entirely of questions of public finance and to leave them to the ruling classes alone. Modern socialists no longer unconditionally reject the budget; they stress very rightly that the important thing is not the kinds and level of taxes but their use; they insist that only the social effect of a tax can show whether it is not in fact indirect although its formal features characterize it as direct; and they demand that the ever-growing consumption and transfer taxes should be abolished and *replaced*, not supplemented, by taxation of income and property (resolution of the Socialist Party Congress, Jena 1909). This is indeed considerable progress, but it does not amount to a consistent and internally logical positive financial programme; nor does the rejection of all public debts and the reiterated demand that besides sharply progressive income taxes property itself should be radically drawn upon by property and death taxes.

What is needed above all is a thorough understanding of the functional part played by public finance in the evolution of State and society and in their mutual interdependence. It does not help to work out the most beautiful programme of duties for the State, if this means asking it to do something which its given structure does not enable it to do. Hence the main question is this: whereby can the structure of the State be expected to be fundamentally altered? Marx pinned his hopes on the day when capital accumulation and concentration would have gone so far that the expropriated would expropriate the expropriators; but he made no allowance for the fact that as soon as capitalism threatens to become its own gravedigger it plunges the State into war. Indeed Marx so completely neglected the State in his conclusions, that he failed to observe how its expropriation helped the private expropriators. Even now, when socialists have long abandoned the belief that the capitalist economy can all at once be transformed into a socialist one, and when they identify themselves with the State to the extent of entering government

coalitions together with bourgeois parties, even now the socialists' positive attitude to the State remains limited to its political aspects and they continue to negate it economically. Mere approval of the budget is not enough for an economically positive attitude to the State; the State must be so shaped that it is able to assume economic functions on the largest scale. In other words, the State cannot attain to economic justice without economic strength and economic efficiency. Since these must be exhibited primarily in the public household, the State cannot cease to be a class State so long as the public finances remain class-bound at every level.

All the most bitter sociological critique which Marx and Engels have levelled at private enterprise could not alter the sovereign position of the capitalist power State so long as, prisoners of the individualistic ideology, they regarded the separation of worker and means of production as the primary evil. The real social evil resides in the separation of State and means of production, in the fact that organized society is debarred from ownership of the nation's material wealth. Nationalization of means of production remains an empty formula without clear understanding of the relations between State and society. The bourgeois classes have conquered the State by stripping it of its wealth, the working classes must try to conquer it by returning its wealth to it. A propertyless State may be politically conquered by the workers for a time, but it cannot be economically held in the long run. The decisive revolutionary battle must be fought in the field of the theory and practice of public finance and in any case the central doctrines of capitalism are rooted in the science of public finance. This is the reason why public finance reform means as much or indeed more to us than constitutional and administrative reform meant to the generation a hundred years ago.

State socialism could not achieve any decisive results. Real progress is to be found only in State capitalism, which fundamentally alters the structure of the public household and thereby the whole economic structure of the State. For example, we can observe everywhere that the State is decisively fashioned by heavy industry with its control over iron and coal, by the big landowners and the financial magnates. However much socialism keeps focussing attention on it, this piece of knowledge cannot come to full fruition so long as it is not thought through to its logical conclusion, namely the pattern imposed upon public finance by the influence of these closely allied classes.

It is therefore both absurd and very strange that nearly all the leading socialist theoreticians from Marx to our days, who otherwise so despise bourgeois economic and financial theory, should agree with it completely on the one point that tax reform and public finance reform can by and large alter nothing in the existing social and economic order and that fiscal policy can contribute little or nothing to a solution of the social question. This view is firmly taken by Karl Renner, whose little book *Die Steuern und das arbeitende Volk* (1909) is one of the best socialist contributions to financial

problems and the first to contain significant groundwork for a financial sociology; it is equally apparent in Eduard Bernstein's *Das Steuerprogramm der Sozialdemokratie* (1914), which for the rest is full of valuable detail. To pose the social question in these terms is to make it insoluble *a priori*. So long as the basic structure of the public household remains as it is, no more than the most modest success can be expected for such slogans as *No Public Debts* or *Abolish Indirect Taxation*, which Renner and Bernstein adopt in company with the overwhelming majority of social democrats. A State without property of its own, where the ruling classes wield the tax power, has far too limited a choice of sources of revenue to be able to forgo radical consumption taxes even if it wished to do so. Such a State, by reason of its very construction, is fated to fall more and more into debt however much it tries not to do so. The exact contrary of what Renner and Bernstein say is true: it is a petit bourgeois and in the last analysis individualistic illusion to believe that capitalism and all the evils it entails for State and society alike can be surmounted without a fundamental reform of the public household and without eliminating its fiscal foundations. Only a rich State can be a just State.

The fundamental insight which can be gained from financial sociology is this: that nowhere the entirety of any given order of society and economy is reflected as clearly as in the public household, that the State cannot be very different from its financial system, that every single private household is intimately connected with the State household. If the State household lacks sound foundations, every private household is by the same token not only economically but morally undermined. We can go even further and say that the degree of soundness of the public household determines the level of public morality. What is the point of the eternal complaints about low tax ethics, if the financial practices of the State and other public authorities cannot stand the test even of economic standards, let alone moral ones?

The State Within the State

Nothing much can be altered in the structure and functions of the State so long as exploitation remains the guiding principle. In this context it makes little difference whether the State exploits or is exploited. In either case the mechanism of exploitation leads to something like a State within the State and this becomes the real State in the place of that which is declared as such by the formal legal order and its sham moral trimmings. The science of public finance must realize that what it is doing in the main is to deal with the finances of that State within the State, to describe *its* laws and to look for norms to cover *its* requirements. So long as the science of public finance continues doing this rather than conceiving of the public finances as the finances of the people and consolidating them as such, so long will the science of public finance remain divorced from the vital needs of society and indeed

fall further and further into the error of looking for directives which undermine any healthy development. Whenever in the past the State was mentioned in any proposals or argument, it was overlooked or concealed that what was meant was the caricature of the State, the State within the State; and for that reason, all attempts at setting the public finances right had to fail, or else much ingenuity was wasted on constructing financial systems which represented either naive self-deception or cunning deception of the people. The struggle between the State and the State within the State prevented the State from assuming the functions which it should have assumed in a changing society. The State remained in contradiction with its own social foundations, because its financial system kept it chained to an obsolete past.

All these connections have been far too neglected in the past. This was responsible for failure to understand how strongly tax exploitation and capitalistic exploitation, the turn of the tax screw and the turn of the profit screw, reinforce each other. Once this is recognized the mutual dependence of exploitation at all levels is seen in its full significance. Fiscal exploitation is an indispensable adjunct of exploitation by private enterprise; it constitutes the legal foundation of capitalism and an element of its fulfilment. Even socialist theory has so far almost completely overlooked this. It gave us a detailed and astute description of the struggle of the classes for control of the State, but we lack an equally discerning description of the eventually resulting struggle of all classes against the State. Yet it is precisely this latter phenomenon which became decisive in shaping public finances and thereby the whole development of State and society. Over and over again we can observe that as soon as the capitalist classes' power over the State diminishes, they encourage inflation by all means; and they immediately return to the advocacy of deflationary measures as soon as they sit firmly enough in the saddle to be able to ride as and where they please. Always the capitalists have needed the State to establish profits on a really grand scale, never have they been able to consolidate their economically, socially and politically predominant position without the backing of the public finances. The State became the instrument of the ruling classes by the fiscal organization which they imposed upon it. Capitalists have used the public household on the largest scale to enhance their profits and extend their power since capitalism has emerged triumphant in the form of finance capital.

Private capital and the group of finance magnates who constitute the State within the State know very well where they are most vulnerable. They know that they must retain control over the public household if their power is not to be sapped at its roots. In a democratic community, which is at the same time economically strong, there is no room for a State within the State. Only a State forced to live from hand to mouth and deprived of sufficient funds to meet even the most urgent social needs on its own remains at the mercy of private capital. If the State must constantly fail to satisfy even

the most urgent social needs because it is, so to speak, the foremost pauper in the country, because the nation's wealth is on the whole owned by the nation's private members and because the State has access to all resources only at one remove—how then can the State arouse anything but hostility against itself? Those who hold power are hostile to the State because they naturally want to keep it economically impotent and unable to take too much from them without damage to itself; and the poor are hostile to the State because it is incapable of giving them that for which in their weakness they can look only to the community. The poor can be helped only if there are as many rich as possible—this has so far been the unwritten basic law of economic theory. It was said that to attack private wealth meant creating poverty for society. The wealthy classes always pretended that the poor were parasites and would be destroying their host by destroying private wealth. It is still the ultimate wisdom of those who rule the State that the economy must be protected against the State and the State against the poor.

The Restitution of Wealth to the State

Every social problem and indeed every economic problem is in the last resort a financial problem. Whatever question is under discussion, whether it be intensification of agriculture to exploit the astonishing potentialities opened up by the progress of chemistry, or rationalization of industrial production, or an attempt to avoid the enormous waste of human life and health in cultural progress—always we need capital, to be advanced for equipment which can yield a return only later. In this sense capitalism is an eternal economic category and it is immaterial whether the tasks are those of public economy or private economy. It follows that economic calculation is much the same for public economy and private economy, except for the former's ability to apply more precise methods in technical production and in the economy of human resources. The important divergence between public and private economy sets in with the manner of creating surplus value and using it in the interests of society. The extent to which public enterprises should aim at making a profit is purely a question of expediency, to be decided according to circumstances; it is not a question of principle which requires a general solution. The important thing is to understand that the paramount goal must be public capital accumulation and concentration, and that the community's development potential grows in the measure in which revenue can be converted into durable public investment goods and high-grade organic capital. For these reasons State capitalism and human resources are the two basic pillars of an orderly economy.

It is quite certain that the science of public finance will never deserve to be taken seriously if it fails to concern itself with the immanent contradiction between capitalist economy and socially productive public economy, and if it fails to consider how it may be possible to avoid frustrating the

purpose of public economy by the means it employs. The right way is to transform the public property order. This means that the science of public finance must culminate in a theory of public property. Such a theory will in turn become the basis for a legal order so designed as to protect and increase public property and to raise its productivity. The natural social result of such a development would be a State which gradually needs to take less and less and yet can give more and more. For a well managed public economy necessarily becomes a source of income for all.

SOME CONTROVERSIAL QUESTIONS IN THE THEORY OF TAXATION

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Translated from German* by Elizabeth Henderson

From the economic point of view, the activities of governments and local authorities are a link in the chain of man's endeavour to satisfy his needs. To cover the cost of such activity by taxes means converting private property into public property and so more aptly serving the satisfaction of certain general needs. Like any other economic activity, this collective activity, too, must be guided by economic principles. Modern public finance and fiscal theories attempt to define those principles and to show their relations with the principles governing the private economy.

Thanks above all to the contributions of the Austrian School, the basic outlines of this theory are now fairly well established. But there remains disagreement on the details and finer points of the theory. This is shown by the criticism levelled at an earlier work of mine[1], in which, following Knut Wicksell's tax theory[2], I attempted to apply the theory of marginal utility to the area of public finance. I propose here to discuss some of the questions raised by my critics.[3]

Can the value which public services have for the individual taxpayer be assessed in terms of money?

I had asserted that this was possible and had made this assumption the basis of my analysis of taxation. This assumption has been widely criticized. It has been said that public activity financed by taxes benefits not the separate individuals but the community as a whole, and that even where individual benefits are identifiable, they escape quantitative measurement.

Not much need be said on the first point. If the State is considered as a supra-individual organism whose economic needs are covered by the citizens' tax payments, then it is certainly quite consistent to deny that individuals benefit by the satisfaction of public needs. But this assumption is a metaphysical

* "Einige strittige Fragen der Steuertheorie", *Die Wirtschaftstheorie der Gegenwart*, Ed. Hans Mayer, Vol. IV., pp. 282—304, Vienna, 1928. With the author's approval, some footnotes have been omitted or shortened.

1 *Die Gerechtigkeit der Besteuerung, eine Analyse der Steuerprinzipien auf Grundlage der Grenznutzentheorie*, Lund, 1919. (Part of this, pp. 85—98, is translated in this volume—Ed.)

2 *Cf.* particularly ("A New Principle of Just Taxation" in this volume).

3 The most elaborate critiques in German are those by E. H. Vogel, "Das Gerechtigkeitsproblem in der Besteuerung, eine kritische Untersuchung zur werttheoretischen Richtung innerhalb der Finanztheorie", *Jahrbuch für Nationalökonomie und Statistik*, Vol. 118, p. 97 *et seq.*, 1922, and by H. Ritschl, *Theorie der Staatswirtschaft und der Besteuerung* (Bonner Staatswissenschaftliche Untersuchungen, 11), Bonn and Leipzig, 1925. Both authors are adherents of an organic State theory and hence take a sceptical view of any application of value theory to the theory of public finance. However, even Emil Sax, who is the foremost representative of this latter approach, has not applied the theory of marginal utility to tax questions—see his important paper "Die Wertungstheorie der Steuer" (the central part of which is translated in this volume—Ed.), *Zeitschrift für Volkswirtschaft und Sozialpolitik*, 1924. I do not intend to engage here in a detailed counter-critique, but shall merely reply to the most important objections as I go along.

construction without relevance to reality. If, by contrast, the State is seen as the community of all citizens, public needs must be described as the needs of that community. This is tantamount to admitting that the satisfaction of these public needs ultimately benefits the individuals who together make up the State. This premise is quite sufficient for an individualistic tax theory. Opinions may, of course, differ on the question whether there is any qualitative difference between the needs for which the State provides and the needs of the private economy proper, or whether the difference is merely one of the manner of meeting the needs.[4] Differences of opinion on this problem should not, however, obscure the common view that the satisfaction of public or collective needs is bound to yield some sort of satisfaction to the individual as well. Once the fiction of the State as a supra-individual organism is abandoned, it is no longer permissible to speak of the "general advantages" of public activity as of good fairies hovering aloft, but it must be acknowledged that these advantages consist in some sort of promotion of the interests of the physical persons composing the State.

More weight seems to attach to the second objection, namely that individual benefit from public services is not precisely measurable. Indeed, if any taxpayer were asked for his valuation of the general or specific benefits he derives from public services, he would probably not know the answer. None the less we make bold to assert that such individual valuation is not only possible, but forms the basis of taxation as it forms the basis of all other economic action.

In this as in all other cases, however, it is not total utility but marginal utility which can be precisely measured. If public activity were so indivisible that its cost could neither be diminished nor increased—it would cease if its cost were diminished and would function no better if its cost were increased—then we could speak of the total utility of public services. This total utility is normally so high that the individual is prepared to sacrifice his all for it, even his life. The utility can therefore not be exactly expressed in terms of money. In this case the purely economic analysis of taxation, on the lines applicable to the private economy, would yield highly uncertain results. Hence it is of the greatest importance to fiscal theory that the costs of public services are variable. If in a given case public expenditure were diminished by ten per cent, the government would certainly not have to give up its activities but would merely be constrained to organize them in a less effective manner. And if the budget were increased by ten per cent, the extra money would not be wasted but would be used for all kinds of improvements in public administration. Successive increases in public expenditure result in relatively small utility increments, which represent the marginal utility of public services and which the individual can more or less accurately evaluate in terms of money.[5]

4 *Cf. Die Gerechtigkeit der Besteuerung*, p. 51 *et seq.*

5 *Cf.* E. Sax, "Die Wertungstheorie der Steuer", *loc. cit.*, p. 230.

A concrete example may illustrate how such valuation is possible. Let us talk again to the man who was unable to say how big a value he placed on public services. Let us put before him several alternative proposals for some particular branch of public activity, say the care of the poor. The cheapest of these proposals would cost our man £50 in taxes; the next best one £60; and each further better alternative would cost him an extra £10 in taxes. Let us make the advantages of each proposal quite clear to the man and ask him to think over which he would prefer. He will find the answer difficult, but will finally decide in favour of one particular proposal, which seems to him to hold out the prospect of greatest advantage as compared to the cost. He may for instance choose the proposal under which he would have to pay £70. May we not assume that our man values the difference between the utility deriving from the 70£ and the 60£ proposals at more than £10, and the difference between the 80£ and the 70£ proposals at less than £10? This is not to suggest that our man has a really objective judgement on the value of each proposal. He may be swayed by political prejndice or public opinion. If he were fully familiar with all the facts, his answer would no doubt be different. We are here only talking of the value he attaches to some public service in certain given circumstances.

When the proponents of an individualistic tax theory speak in quantitative terms of the advantages which individual taxpayers derive from public services, they mean those marginal values which can be identified in the evaluation of persons asked to choose between alternative solutions to some fiscal problem, in given circumstances. Most taxpayers never have an opportunity for such a choice and are therefore not aware of the evaluation on which they would base their choice; nevertheless, these values are not altogether unknown quantities. They can be constructed theoretically as the resultants of those factors which would in any given case determine the evaluation.[6] These factors can be ascertained by analysing the process of evaluation.

Most public expenditures are, in the first instance, of some personal benefit to the taxpayer. Law and order protect his life and his property and enable him to earn his living in orderly conditions. Most of the expenses for cultural purposes also offer him direct advantages in many ways: education benefits him and his family, the higher level of general education increases his cultural satisfactions and even helps him in his professional life. In most cases it is possible to observe such a purely personal benefit which accrues to all citizens. But in some cases the personal benefit accrues only to one or the other group of the population. A small but powerful group may, as in former times of

[6] However, the critics of the individualistic tax theory are wrong when they pretend, as some do (*cf.* for instance E. Sax, "Die Wertungstheorie . . .", p. 227), that it rests on the altogether unrealistic assumption that every taxpayer himself is aware of the value which each branch of public activity has for him. I repeat that the basic idea is only that every taxpayer, when brought face to face with several alternative proposals, is capable of arriving at some sort of valuation which will lead him to prefer one of them; and that it is possible, with the help of certain external factors, to estimate this value in given circumstances.

autocratic rule, use public funds to cover its own expenses (a costly court, for instance) and this is certainly not of advantage to the overwhelming majority of the people. Equally, the needs of a poor class of the people may be met at the expense of the community. Expenditure for the care of the poor is of direct personal advantage to its beneficiaries, but does not directly touch the welfare of the rest of the citizens.

But the benefits which an individual derives from public services are not exclusively of such a personal nature. They consist also in the satisfaction of his altruistic desire that other people should enjoy certain material or spiritual advantages. Think again of the care of the poor. These expenses benefit also those members of society who do not receive subsidies, because they meet the richer persons' desire not to let their poorer brethren starve. This kind of more or less pronounced altruistic motive tends to merge with selfish motives into some sort of undifferentiated interest in the "common weal" of the nation or city or parish. The individual's appraisal of public services is then the money value of his interest in the increment of common weal due to them. When the opponents of the individualistic tax theory stress that the advantages of public activity are of a general nature, they no doubt have in mind this circumstance which we have discussed, namely that individual advantages are not only of a personal kind, but of an altruistic and idealistic kind as well. The objection does not stand when the individualistic tax theory is interpreted as I have done above. The theory is individualistic not in the sense that it deals only with tangible personal advantages to be derived from public activity, but in the sense that its analysis of the separate actions composing that activity proceeds from physical persons.[7]

We can now identify the factors which determine individual evaluations of public services. The value of material benefits to the individual, *i.e.* of an increase in his income or property, rests on their marginal productivity as assessed by the individual. Nobody will be willing to give more money for certain material benefits than they are worth. On the other hand an individual may derive subjective benefits from public activity—either direct personal advantages which he may enjoy, say, by visiting churches, art galleries or public gardens, or such idealistic and altruistic advantages as he may derive from the satisfaction of his desire that public services should benefit other individuals or should serve some common higher purpose. To the extent that an individual derives such subjective benefits from public activity, his valuation of it will rest partly on his own interest in the service and partly on his economic capacity, whereby he can convert a certain interest into money. At equal interests, the evaluation is directly proportional to capacity, and at equal capacity the evaluation is directly proportional to interest. Since differences in the interests of individuals are of less significance

[7] Individuals are not considered in isolation, but as members of society, with all the implications about the relevant relationships. The organic state theory is based on the mystical postulate that society is more than the sum of its members in that sense.

than differences in their capacity, the latter must be considered as the most important factor in determining the value of public services; interest is only some sort of modifying factor. It follows that material and subjective advantages are evaluated in terms of money according to quite different standards. Both cases have an additional variable factor in common, which is the individual's greater or lesser ability to recognize the real advantages of any public service. People are usually unable to appreciate the full implications of these very intricate matters and must hence be content to guess the value of the advantages. In so doing, they are highly subject to the influence of public opinion. Individual evaluation is, thus, a complicated process and a function of many factors. But if these factors are known in any given case, the individual values can be calculated. In this sense it is quite correct to speak of the individual advantages due to public activity as definite amounts of value.

These individual values are not fictitious quantities devoid of real significance, but are of decisive importance for the tax system. This is shown by the fact that by and large the pattern of tax distribution does agree with these values and that in the last resort they must underlie any actual decisions on the amount of public expenditure and the total tax bill. These two questions are still controversial and need closer examination. I shall go on to discuss the second question here; I will deal with the first one in the next section.

The amount of public expenditure is not given *a priori*, but in fact constitutes one of the most important problems of public finance. In so far as the followers of the organic state theory consider this problem at all, their solution is as follows. Certain organs of the public administration assess the size of state and private economic needs and satisfy the former up to the point at which the general advantages of the satisfaction of public needs compensate the individuals for the sacrifices entailed by the curtailment of private needs through taxation. This can of course be said, but what is this economic calculation supposed to mean? The common view would no doubt be that in any given case of a planned expansion of some public service the general benefits are put on one side of the scales and the individual sacrifices imposed by taxation on the other. But on second thoughts any such weighing of one against the other must be seen as nonsense, if only because individual subjective tax sacrifices can hardly be summed. These sacrifices are difficult enough to determine individually, and a sum of a great many of them really is not a meaningful concept. Tax pressure must surely in general be assessed from the point of view of the single individual. It follows that the "general advantages" which are supposed to correspond to the tax pressure are also assessed from the point of view of the individual only. The economic calculation in the case under discussion is seen to be of a mainly individual nature: the value of public activity, assessed from the point of view of the single taxpayer, is confronted with the individual tax sacrifice.

This is not to suggest that the men in charge of fiscal decisions—such as the members of the appropriate parliamentary committee—necessarily compare the advantages with their own tax sacrifice. They probably base their calculation on the point of view of some average citizen. Knowing the factors which have a bearing on the individual's evaluation, the decision-makers try to form a judgement on the extent to which the benefits from public services compensate the average citizen for his tax sacrifice. Our discussion has shown that this assessment is not crudely self-centred, but is very largely conditioned by a variety of ideals and generous motives. It does not really matter very much what particular person is taken as representative of an average assessment, since the distribution of the tax burden is likely to follow individual valuation fairly closely, at least so far as certain groups of the population are concerned; in that case the economic calculation relating to the total amount of public expenditure leads to the same result irrespective of the particular individual point of view on which the calculation is based.

If our argument is correct, then the individual values which we have analysed ultimately do determine the actual tax burden, because the men who take decisions base their financial calculations on an estimate of these individual values. The estimates can of course be wrong. People's interest in the expansion of some public service may, for instance, be overestimated. But in this case there will be public protest and somehow or other the real valuations will become apparent. The politicians will have their error brought home to them. In this process public opinion as voiced in the press is of the greatest importance. The last appeal is to the voters themselves. It may well happen that the solution of some budgetary question, *e.g.* defence expenditure, is a vital point in the political parties' platform for parliamentary elections. If any voter registers his vote for one particular solution of the question, he thereby discloses his own evaluation, and since the election result naturally has its bearing on the actual solution of the budgetary question, this solution rests directly on individual values. There are, thus, direct as well as indirect links between the individual evaluation of public services and the actual decision on the amount of taxation.

The above constructions may appear somewhat unrealistic. It may be said that after all no such calculations are normally made when it is decided to expand public activity. It is indeed true that budgetary questions are most often settled on the basis of some general feeling of benefit exceeding sacrifice. But the same is true in the private economy. People do not carefully assess the marginal utility of each outlay, but act on some sort of general feeling of what they can afford to spend. However, this feeling does, by and large, rest on people's experience in making the most of their income, that is, it rests on considerations concerning the amount of benefit in each case. The same is true of public finance: the feeling of how far it is legitimate to go in each case, ultimately rests on individual calculations of utility and sacrifice.

It is a matter of indifference that these calculations are often highly subject to political ideas and prejudices—just as every single person's private spending depends very much on what other people do.

Careful analysis therefore leads back to our previous assertion that individual values are the ultimately determining factors.

How far do general economic principles govern the amount and distribution of taxation?

There are, strictly speaking, four main problems in public finance: what needs are to be covered by public goods; the choice between several alternative ways of using, for the same purpose, a sum allocated to the satisfaction of some need; what is the total cost of each branch of public activity; and how are these costs to be distributed among the taxpayers.

Once the latter two problems are solved, the solution of the former two raises no major difficulties of principle. If any particular public service is capable of being performed in several alternative ways, the choice between them is in essence made as follows. For each solution an equilibrium position of amount and distribution of taxation is constructed, and that alternative chosen which offers all parties the greatest benefit—measured by a standard which corresponds to the prevailing constellation of powers. The question of what needs should be provided for with public funds, can be solved in a similar manner. If the best public method of meeting some particular need offers greater net advantages than could be achieved by private enterprise, then, and only then, the need will be provided for by the State.

We shall therefore not go further into these questions, although they no doubt raise many interesting problems. We shall assume that we are dealing with some given public service and have to ascertain its total cost and distribute it among the taxpayers. The question of distribution is the more controversial. We shall therefore put it first. We shall start with the most obvious feature of tax distribution and ask ourselves why the tax burden is not equal for all citizens, but usually has some definite relation to income.

Several answers are possible. It is usual to point out that the paramount difference between the public and the private economy is that the former has the power of coercion. This enables the contributions to public expenditure to be graduated according to the citizens' ability to pay. This answer cannot be said to be wrong, since the power of coercion no doubt does leave its mark on the actual tax distribution; but it is at best an incomplete answer. The kind of price differentiation exemplified by taxation can equally well be explained in purely economic terms. There is no lack of similar situations in the private economy, in the absence of coercion.

We have in mind the circumstance that most private firms are unable to specify certain costs for the actual product; these are not marginal costs in the usual sense but must be regarded as costs common to the entire output. In some cases these costs are distributed evenly over all the products. But

wherever possible, this principle is abandoned in favour of another, whereby each good or service is made to bear as much of these common costs as it can and hence the consumers' valuation of the products becomes determining for the latters' share in these costs.[8] Strong economic factors work in this direction. Price differentiation enables output to expand and this leads to economies of scale. In some cases of joint production of several goods in technically conditioned fixed proportions, price differentiation becomes a necessary condition for any equilibrium of supply and demand for all the products.

The latter type of case is the most important in this context, and I shall illustrate it by a concrete example.[9] Measured in weight, the production of cotton yields about one third raw cotton and two thirds cotton seed. The total weight of the annual cotton production of the United States is estimated to be about ten million tons, that is $3^1/_3$ million tons of raw cotton and $6^2/_3$ million tons of cotton seed. Total cost is estimated at 960 million dollars. In pricing the products this total cost is not apportioned evenly to each ton—which would mean 96 dollars per ton, irrespective of whether it is raw cotton or cotton seed—but each ton of raw cotton bears about ten times as great a share of the joint costs as does each ton of cotton seed. The price of raw cotton is about 240 dollars per ton, that of cotton seed no more than about 24 dollars; the $3^1/_3$ million tons of raw cotton account for 800 million dollars and the $6^2/_3$ million tons of cotton seed for 160 million dollars. The reason is of course that raw cotton is more valuable to consumers than is cotton seed. If the prices of both products were the same, the demand for raw cotton would exceed its supply, and the supply of cotton seed would outgrow the demand for it, unless the total production of both goods were greatly restricted. Only price differentiation makes it possible to establish equilibrium between the supply of both products and the demand for them.

Taxation is also a case of distributing common costs. The public expenditures which are to be financed by taxes cannot be specified for each individual; they represent services which benefit all citizens or at least a majority of them. Public expenditures are costs common to the satisfaction of certain needs of the members of society. We have seen that the money value of these satisfactions is not equal for all, but is conditioned by factors the most important of which—objective advantage and economic capacity—have a certain positive correlation with income. By and large these values rise with higher income. If, now, taxation is so graduated as to match valuation, the analogy to the above example taken from the private economy becomes patent. In both cases joint costs have to be distributed and in both cases they are distributed according to the consumers' valuation of the goods or services. In these

[8] For a detailed analysis of the relevant problems, see J. M. Clark, *Studies in the Economics of Overhead Costs*, Chicago, 1923.

[9] From H. D. Henderson, *Supply and Demand*, Cambridge Economic Handbooks, I.

circumstances it would hardly seem extravagant to say that taxation proportional to income—provided that the ratio correspond to valuation—is a result of the same laws of price formation which govern the private economy. It is true that in actual fact the tax distribution tends to be somewhat different, because the coercive power of the State is used by one strong party to secure advantages for itself at the expense of other parties. The economic explanation of the price differentiation exemplified by taxation is therefore not a complete explanation and needs to be qualified by reference to the importance of coercion. But it is an explanation not to be overlooked and indeed would seem to be the best starting point for an analysis of the problem.

To the best of my knowledge, Friedrich von Wieser was the first to have pointed to this analogy between the public and the private economy.[10] I have elsewhere (*op. cit.*) tried to discuss this analogy in detail and, in so doing, have taken account also of the differences, which are due to the fact that in public finance we have a case not only of common costs but of common goods produced by the coercively maintained collaboration of all citizens. I should like to add some further comments on this point.

The easiest way of showing the analogy is to think of taxation coming about as follows. All groups of taxpayers (through their parliamentary representatives) negotiate at the same time about the amount and the distribution of taxes, each group equally safeguarding its own interests.

In our example of cotton production the greater demand for raw cotton was the direct cause of its being assigned a much larger share in the joint costs than cotton seed. In the public economy, demand is represented by the various groups' interest in the expansion of public activity. The total amount of public expenditure is not given; there is always a choice between less costly and more costly solutions. We have alluded earlier to this circumstance, which enabled us to calculate the value of public services for the individual; the same circumstance now provides a purely economic answer to the question of tax distribution. Let us suppose that a start had been made with the most obvious solution, which is that all citizens, rich and poor alike, should contribute equal amounts to cover public expenditure. The poorer groups would then naturally insist that public expenditure be limited as much as possible, because their share even in a relatively small total would be a great burden to them. The wealthier classes, who would have no difficulty in sustaining the tax burden, would insist that the State fulfil its obligations in larger measure. The conflict can be resolved by the choice of another distribution key. The influence of "demand" on "price" certainly causes more friction here than it does in the market, but we can nevertheless assume that the wealthier group of taxpayers would voluntarily shoulder a greater share of public expenditure so as to reduce the "price" of public services for the others and thereby to get their agreement to an expansion

10 "Theorie der gesellschaftlichen Wirtschaft", *Grundriss der Sozialökonomik*, I, Tübingen 1914, p. 426. I referred to this in *Gerechtigkeit der Besteuerung*, pp. 83 and 84.

of public activity.[11] As the wealthier groups' share in the cost grows, public services become more and more expensive to them and they will be less anxious to expand them; at the same time the poorer groups will become more willing to contribute to such expansion. There will be one particular distribution key which differentiates the "price" of public services for the various parties in such wise that everybody's wishes regarding the amount of taxation coincide. Taxation can then be arranged according to the different parties' different valuations of public services. Just as in the private economy, marginal utility and price can be made to coincide. On the assumption that the parties are in a position to safeguard their interests in equal measure[12], they will choose that solution.

Let me give a simple example to illustrate my meaning. A town council is planning a public garden for the indiscriminate benefit of all rate payers. It will cost at least 10,000 *mark* a year to maintain the garden. The more is spent on it, the better will the garden prosper and the more readily will the rate payers be prepared, if necessary, to sacrifice more goods for this purpose. Half the rate payers (*A*) are fairly well-to-do, the other half (*B*) are rather poor. The subjective utility of the garden may be taken to be roughly the same for all; but utility in terms of money is much higher for the rich than it is for the poor, for the rich can pay the same sum much more easily than can the poor. Let us assume the following figures:

Total cost of the garden	Maximum tax payment by Group *A*	Maximum tax payment by Group *B*	Maximum possible total sum of tax
10,000	10,000	5,000	15,000
15,000	14,000	7,000	21,000
20,000	17,000	8,500	25,500
25,000	19,000	9,500	28,500
30,000	20,000	10,000	30,000
35,000	20,750	10,250	31,000

The two parties negotiate about the amount and the distribution of the cost to be incurred for the garden. No proposal can be accepted unless

11 Ritschl neglected this relationship—*cf.* for instance his paper "Zum Abschluss der Saxschen Steuerwertlehre", Schmollers Jahrbuch, Vol. 50, p. 117.

12 As I have shown in *Gerechtigkeit der Besteuerung*, p. 86 *et seq.* (see above, p. 168 *et seq.*—Ed.), this case has, strictly speaking, more affinity with isolated barter than with the case of free competition which we have borrowed from the private economy. If we drop the assumption that the parties safeguard their interests in equal measure, the problem would be indeterminate within certain limits. In some cases it may be of advantage to a party to restrain its desire for an expansion of public activity, if the latter involved a shift in distribution. (As a variant of our cotton example, we may assume that the consumers of raw cotton and of cotton seed are two great monopsonies. The same situation would then obtain. The buyers of raw cotton might secure a greater net gain than they could do with free price formation, if they managed to depress the price of raw cotton by artificial contraction of demand.) However, if such manoeuvres succeed—which is by no means certain, since both parties may play that game—the total net gain, expressed in money, of all parties would fall. This can be regarded as a sure sign that one party has furthered its own interests at the expense of others.

both parties have reached agreement on it. If all are to pay the same amount, Group *B* votes only for the cheapest, the 10,000 *mark* garden. But our figures show that Group *A* can increase its net gain by offering to pay a little more than half, 8,000 *mark*, towards a 15,000 *mark* garden. Group *B* accepts this proposal. It would clearly be against all economic reason to make all rate payers contribute the same amount. The ideal solution is differentiation of the payments. Which of the possible solutions will be chosen, depends upon the parties' negotiating skill. Each party tries to get away with paying as little as possible, but each is at the same time anxious that the town should have as large a garden as possible. Some compromise is bound to be reached. If this consists in Group *A* contributing twice as much to the cost of the garden than Group *B*, then both parties have safeguarded their interests in equal measure, because only this distribution key corresponds to full agreement between both parties' wishes regarding the size of the garden.

But the assumption of equal power to safeguard interests does not hold in real life. We have to examine how far the analogy between the public and the private economy is thereby disturbed.

It is an exception for the amount of taxation to be considered in direct connection with the distribution of taxation. Normally the amount of public expenditure is determined first, and then people look for the best method of raising the necessary taxes. But the very fact that the first question can be solved independently of the second, implies that any discussion of the amount of taxation presupposes that the taxes will be distributed in some way which is conditioned by their amount—that is to say, that each will have to bear a tax burden more or less corresponding to his valuation of the public services. We can therefore assume *a priori* that the distribution question can be solved by a unanimous decision about the amount of public expenditure. In our case, the real problem is to know how the particular distribution pattern has come about. It is quite consistent with the usual methods of theoretical analysis to start with an examination of the equilibrium positions of hypothetical cases and to proceed later to identify the forces which would be operative in other cases. This is the sense in which the above discussion of tax distribution being determined by the amount of taxation should be understood.

There remains the highly important circumstance that, owing to the balance of political power in any concrete case, there is a very great difference in the degree to which the various groups of taxpayers can enforce their wishes regarding the administration of taxation. This certainly qualifies the above-mentioned analogy. In some cases political power may formally be vested in one single party, *e.g.* the capitalists, which regards it as unnecessary to enter into negotiations with other parties. I have tried to show elsewhere[13] that even in such cases the above construction remains applicable, though in a modified form: the party in power is always to some extent subject to the influences of other parties. Even with an unequal distribution of power

[13] *Cf. Die Gerechtigkeit der Besteuerung*, pp. 49 and 50.

actual taxation can be explained as a reflection of all the parties' valuation of public services. The only result of an unequal distribution of power is, in essence, that the equilibrium position outlined above is shifted to the advantage of those in power; the extent of the shift can be regarded as directly proportional to the weight of the preponderance of power.

Unless the analogy between the private and the public economy is to be unduly disturbed, taxation must by and large correspond to individual valuations. What are the relevant facts?

The divergences between actual taxation and individual values can be summarized as follows. (1) Irrespective of the balance of political power, purely technical reasons prevent taxation in each case being arranged exactly according to each individual's valuation of public activity. At best the overall pattern of taxation can be roughly so arranged. (2) It is the exception for purely subjective differences of interest and for varying subjective assessments of the value of general benefits to receive separate consideration. As a rule the tax distribution rests not on the real individual values of public services, but on value estimates made, as shall be shown later, according to the views of the group in power. (3) A powerful group may bring about a general and approximately even shift of tax pressure to its own party advantage. As an example we may recall that during the last twenty or thirty years the political ascendancy of the working class has led to the gradual replacement of indirect by direct taxes and at the same time to ever more steeply progressive rates for the higher income brackets. (4) The tax burden may also be shifted in a more irregular fashion in relation to individual values. This is due above all to high special taxes on certain kinds of income and property which prevalent public opinion regards as unjustified. We may mention the example of capital gains taxes. Other shifts are conceivable. Some knowledgeable group which possesses superior insight into the intricacies of tax incidence may turn this knowledge to advantage by imposing on other citizens a tax burden of which they are not readily aware. (5) Finally, the total amount of taxation probably undergoes a shift when the distribution alters. From the theoretical point of view the amount may diminish or increase, but in actual fact an increase is more likely.[14] This tendency towards an expansion of public

[14] When a party possessing a given preponderance of political power is bent on achieving that tax distribution which is most favourable to itself, this party would no doubt prefer to combine even that favourable distribution with a considerable increase in public expenditure and total taxation. But the preponderance of power having been "used up" as it were, this party may have to scale down its claims in this respect and may find it has to meet the wishes of the other tax-paying parties by restricting public expenditure. If, on the other hand, the party in question is content with a smaller distribution shift to its own advantage, then it can bring greater pressure to bear in favour of such expansion of public activity as it desires at the given distribution. In the first case public expenditure will be smaller than it would be in conditions of equal political power, in the second case greater. (An obvious example: If a powerful working class tried to shift tax pressure so far as possible onto the wealthier groups of the population, these groups' strong resistance would force the workers at the same time to reduce the total amount of taxation. But if the shift remained moderate, the working class party can achieve the expansion of public activity which it desires.) If we have said that an increase is more likely, we have done so for two reasons: first, because in this case the net gain of the party in power increases through a favourable shift both in the distribution and the amount of taxation, whereas in the contrary case the diminution of public

activity seems to be a concomitant of an uneven distribution of power, as we have indicated; it obviously deserves the economist's most careful attention.

This catalogue shows that most of the divergences of taxation from individual values do, after all, have some relation to the latter—whether these values at least form some general standard for tax distribution, or whether a general shift of tax pressure from one income group to another takes place. The divergences do not prevent individual values being reflected in taxation, even though in modified form. In most cases such general shifts are much more important than are irregular divergences, most often due to confiscatory special taxes. We may therefore legitimately maintain that the analogy of price formation in the public and the private economy is not unduly qualified by the above-mentioned shift in the equilibrium position as a result of an uneven distribution of power and of other factors.

It should be clear from what I have said that I do not wish to deny that there are tangible and essential differences between the public and the private economy. My intention was merely to insist that certain principles common to both forms of economy should not be forgotten.

Can the benefit principle be established as a tax principle of general validity?

The theoretical analysis designed to identify the motive forces which condition taxation should not be regarded as fruitless speculation. Such an analysis assumes practical importance by throwing some light on the real content of the tax principles which have been established and are actually applied. On the basis of theoretical analysis these principles can be formulated more precisely and thereby contribute to more rational taxation.

It has been shown that by and large taxation rests on individual valuations. Hence there is an *a priori* presumption that most of the historically given tax principles embody the basic idea that taxation should correspond to these individual valuations. Given the intricacies of taxation, however, it is also likely that this basic idea has not always been correctly formulated. Closer analysis of tax principles confirms this suspicion. Economists therefore have the clear duty to replace the old and vague formulations of this idea by a new and fully adequate one resting on more judicious knowledge of the nature of taxation.

Of the traditional tax principles, the benefit or interest principle can most easily be made to correspond with the basic idea outlined above. If individual interests in public activity are to be used as the standard of taxation, they must be expressed in money terms. This monetary expression of interests is clearly identical with the individual valuations of public services which we have discussed.

expenditure reduces the net gain; secondly, because psychologically there is bound to be more resistance against so tangible a fact as a change in the distribution of taxes than against an increase in public expenditure, the justification of which is more difficult to judge. Since the party can overcome only a certain amount of resistance, this latter course will probably enable it to achieve a greater net gain.

Considerations of this kind led Wicksell (*op. cit.*) to claim primacy for the benefit principle. I myself went on from the principle of tax justice to develop this idea further. I argued that justice in taxation is inextricably linked with justice in the distribution of property, since it would obviously be nonsense to speak of "a just portion of an unjust whole". Just taxation then implies that in the presence of a just property structure taxes are distributed in accordance with this structure, and that an unjust property structure needs prior adjustment—if not by other means, then by taxation—so that the (remaining) tax burden can then be distributed in accordance with the improved property structure. But if taxation is to correspond to any particular property structure, it must by and large reflect the individual valuations conditioned by that structure. Quite apart from anybody's views on the justice of the existing property structure, taxation according to benefit, in the above sense, must therefore be an essential element in any rational and just tax system.

The attempt to re-establish the benefit principle as a generally valid tax principle has, however, met with some opposition. "We can see in this theory nothing but a modern variant of the old relative or exchange theory of taxation, a theory which surely must be regarded as definitely disposed of. It cannot be revived even in new garb." This is what Sax wrote[15], giving expression to an opinion which is fairly widespread among other public finance theorists as well.

There is not really much substance to Sax's own disapproval, for so far as I can see our difference of opinion on this point is merely one of terminology. What Sax means by his equilibrium position which corresponds to equal satisfaction of collective and individual wants[16], is by and large the same as I mean by "taxation according to benefit". So far as our views differ in substance, it is mostly a matter of the explanation of this distribution norm.[17]

My other critics' disagreement with the benefit principle is also more apparent than real. The controversy concerns formulation rather than real problems. I shall prove this by giving a brief outline of the two tax programmes which have been advocated in opposition to my benefit theory. One of these has been called "taxation according to ability", the other "economically correct taxation".

[15] *Die Wertungstheorie der Steuer*, p. 231.

[16] *Cf. Op. cit.* p. 217 (p. 184 in this volume—Ed.).

[17] *Cf. Op. cit.* pp. 216 and 217 (p. 183 in this volume—Ed.) for Sax's view. Besides postulating that the common purposes should be achieved in the greatest possible measure, Sax thus sets up the distribution norm—equal subjective value of sacrifice (equivalence of cost shares) with wants equal for all—as an independent second postulate, and derives this norm from the relationship of "mutuality" between the members of society. I think we do not need this dualism, since the distribution norm in question can itself be regarded as a result of the realization of the first postulate. If the common purposes are achieved in the greatest possible measure, that is, if the question of the amount of public expenditure has found an economically correct solution from the point of view of every single citizen, this implies that the appropriate distribution already obtains. This explanation is not in contradiction with Sax's system, as can be seen from his discussion of "mutuality" (see p. 181 in this volume—Ed.), where he expresses similar ideas. Our basic views do not really differ much and my argument may be regarded as complementary to that of Sax.

We have shown that economic capacity is probably one of the most important among the factors which have a bearing on the individual value of public services, *i.e.* individual interest in them expressed in terms of money. The advantages of public services can be taken to be of a predominantly subjective nature and their individual value then derives chiefly from the means which the taxpayer can make available for such purposes. Since, as we have noted, these individual values ultimately underlie the actual pattern of taxation, there seem to be good grounds for holding that taxation according to ability, which may be desired and sometimes actually comes to pass, can be described as an important branch of taxation according to benefit. If this is so, there is obviously no contradiction between the two principles, but rather a relationship of rank: the benefit principle is the general one, the ability principle a practical norm for meeting the cost of subjective advantages. Hence the ability principle can go hand in hand with that other benefit principle, which is the principle of objective advantages. This is the argument by which I attempted in my earlier work to do away with the old conflict between these two principles.

Nevertheless it should be noted that there remain some controversial questions of substance. These can be formulated as a set of alternatives: taxation according to benefit *or* ability? We have to examine whether these real contradictions are at the basis of the conflict between the two principles.

The first question is whether the proponents of the ability principle must be regarded as taking exception to one particular corollary of the benefit principle, which says that to the extent that the advantages are objective, the taxation norm should be based on their value rather than on the taxpayers' ability to pay. This first question has to be answered in the negative: adherents of the ability principle have approved taxation according to benefit in cases where the advantages have proved tangible and easy to estimate—*e.g.* in the case of municipal taxes. Besides, it may be assumed that the more elusive advantages, such as those due to government activity, have some relation to income and wealth. Hence even taxation according to ability somehow takes account of these advantages.[18]

A second question arises from the fact that the present adherents of the ability principle take their strongest argument against taxation according to benefit from the idea that subjective differences of opinion regarding the advantages of public services must not be allowed to absolve anyone from contributing to them. Is, then, the conflict between the two principles expressed in different solutions of the problem of the extent to which subjective

[18] We may also say that at any rate the earlier adherents of the benefit principle, who combined an objective interpretation of interests with a postulate for the application of the benefit principle to the whole of taxation, thereby more or less established the goal of taxation according to ability. "In fact the principle of objective advantages was only a form of taking account of the subjective points of view which must be made to prevail in tax distribution" (E. Lindahl, *Gerechtigkeit der Besteuerung*, p. 24). Hence it may be said that there was no contradiction of substance between the older interpretations of the two principles; the dispute turned around the formulation of the tax programme, where neither side was explicit. (*Cf. op. cit.* p. 16, footnote 2.)

differences of interest may be reflected in taxation? Again the answer is in the negative.[19] It is perfectly possible to interpret the benefit principle as meaning that taxation should be based not on objective advantages, but on subjective advantages as defined by the valuations of the ruling majority. If the majority thinks that the advantages of public services benefit everyone in equal measure, then the result of the benefit principle will be taxation in direct proportion to ability to pay. In some cases such an interpretation of the principle is necessary, in others (*e.g.* expenditure for the Church) opinions may differ as to whether differences in benefits should or should not be reflected in the manner of covering the cost of certain expenditures. "The extent to which individual interests may be sacrificed to the interests of society is a moral question. The answer depends on whether the general attitude is more individualistic or anti-individualistic. Objectively, we can merely note that in branches of public activity more particularly concerned with constitutional matters the wishes of the minority cannot be reflected as effectively as they can in other branches of a more economic nature.[20] Even with a more individualistic interpretation of taxation according to benefit, it can hardly be said to conflict with taxation according to ability. For even then the taxpayer's ability to pay is decisive: the relation between tax distribution and ability to pay is to rest on the relative magnitude of subjective interests. The conflict between individualism and anti-individualism cannot be resolved scientifically and must be taken as a datum; but it should not be sharpened into a conflict between the benefit principle and the ability principle in the field of public finance. This conflict is, rather, expressed in different interpretations of the two principles.

But even granted that the conflict between the benefit principle and the ability principle is formal rather than real, we may ask, with reference to the above attempt to rehabilitate the benefit principle: If taxation according to this principle is in substance identical with taxation according to ability, what is there to be gained by speaking of "taxation according to benefit" rather than accepting the now current term of "taxation according to ability":

The answer is threefold. (1) The ability principle can thereby be more clearly motivated and its basis of interpretation becomes firmer. It has been said that "ability" as such is an empty concept. The point is well taken. But the term ability is endowed with a definite content if it is regarded as

[19] Anyone familiar with the history of tax theory will readily appreciate that the controversy between the older adherents of the two principles did not turn on the solution of this problem. As has been pointed out in the preceding footnote, the practical result of the two principles was by and large the same, *i.e.* taxation in direct proportion to ability to pay. In any case the problem of the practical validity of subjective differences of interest was not really the point for the older champions of the two principles. The point was that these principles were used as weapons in the underprivileged classes' struggle for a more equitable distribution of taxes. Since these classes were burdened beyond their ability to pay, their primary aim was no doubt to achieve equality with the other citizens in the matter of the relation between taxation and ability to pay.

[20] *Die Gerechtigkeit der Besteuerung*, pp. 140 and 141.

a factor influencing the money value of interests. We also get a satisfactory explanation of the fact that the kind of equality to which our sense of equity aspires involves equal pressure on ability rather than, for instance, equal tax amounts or such like. (2) We can thereby avoid the dualism of basing taxation now on advantages—whenever these are tangible and objective—, now on civic duty. Both forms of taxation can be regarded as means towards the realization of one and the same principle, namely the benefit principle in the broader sense. (3) The question of the correct amount of taxation is automatically solved together with the question of distribution, which is not possible if the ability principle is regarded as an independent norm of taxation.

There remains the final question of the implications of taxation according to benefit for correct economic taxation.

The claim for economically correct taxation is often set up in opposition to the claim for just taxation, on the grounds that taxation, being an economic phenomenon, should be organized primarily according to economic principles.[21] But economic and moral principles need by no means disagree. Economic taxation is an empty phrase which becomes meaningful only when taxation is to serve some particular purpose, for instance a greater and more general satisfaction of wants. When such a purpose comes to be more closely defined, principles of justice may certainly assume decisive importance.

The idea of economic taxation can more soundly be derived from the following reasoning. For all its being a very common postulate, just taxation is not, strictly speaking, a logically compelling one. The sense of equity underlying this claim is historically conditioned and is no necessary basis of our concept of taxation. The principles of justice may therefore be put to one side when it comes to determining the aims of taxation and of other branches of economic activity. The aim may very well be maximum satisfaction of wants for the whole community, the wants of any one individual to be measured by the same standard as those of all others. It is irrelevant to ask whether this solution is just or unjust. A system of taxation which primarily corresponds to this aim is "economically correct".

This conception of the tax problem has gained more and more approval among economists[22] in recent decades. No wonder, for it affords a simple manner of tackling the tax problem and one which appeals to the theoretician. By and large the development of the theory of public finance in this direction represents distinct scientific progress in comparison with the earlier arbitrary interpretation of tax principles.

Formally the claim for economically correct taxation is unassailable, since the ultimate postulates set up in this as in other cases are hardly susceptible

[21] *Cf.* for instance H. Ritschl, *Theorie der Staatswirtschaft und Besteuerung.*

[22] Edgeworth and Carver were the first to have thought through the theoretical implications of this tax programme, and in line with their terminology it is sometimes called "the principle of minimum sacrifice". In Germany, the most recent proponent of the economic principle is H. Ritschl, *op cit.*

of scientific proof.[23] But we may ask whether the adherents of the economic taxation principle are justified in taking up such a negative attitude towards the traditional principles of just taxation. Is it not possible to set up the benefit principle as an ultimate objective of economic taxation?

To answer this question we can follow the lines of our earlier argument by which we have established a certain relation between taxation and the given property order. If we assnme a property order which leaves nothing to be desired from the point of view of social purposes, then the economic principle in public finance will obviously really lead to taxation according to benefit—the latter, as we have said, being conducive to maximum satisfaction of wants as expressed in money terms under the prevailing property order. On this point there is full agreement between the claims for just taxation and for economically correct taxation.

It is, however, more likely that the existing property order is not regarded as the best possible one. In that case it is at least theoretically possible to split the tax postulate in two: the property order is to be improved by taxation and the remaining tax burden is to be distributed in proportion with the new distribution of wealth, *i.e.* it is to represent taxation according to benefit in relation to the new property order. The following observations will show that such a division of the postulate also facilitates the practical execution of the tax programme in question.

First of all it would be exceedingly difficult to arrive at the desired improvement in the property order by means of measures by any and all tax authorities. There would be complete chaos if governmental and municipal tax authorities—each after their own fashion—were to take a hand in such improvement. The most natural solution is for the government alone to organize the tax system with a view to influencing the distribution of wealth in the desired direction, while local authorities accept the existing order and hence must arrange taxation according to the benefit principle. Since this principle has full validity at least for local finances, it must for this reason alone constitute an essential part of an economic tax system.

Secondly, the economic principle is not very useful as a practical tax norm even for state taxes, since the multiplicity of special problems makes it wellnigh impossible do decide by direct methods what solution offers the greatest increase in the overall satisfaction of wants. It is not enough to weigh the direct subjective tax sacrifices against the direct advantages from public activity. It is above all imperative to consider all the numerous side effects of taxation on the size of national income. Unless purely arbitrary assumptions are to be admitted, this problem can be solved only on very general lines. The economic principle thus leads to modification of taxation according to benefit in some respects, *e.g.* by heavier tax pressure on certain kinds of

[23] I may in the past have expressed myself too categorically in favour of just taxation; *cf. op. cit.* p. 6. Now I have revised my opinion to the extent of admitting the theoretical validity also of the economic postulate.

income which appear less justified from the economic point of view. It is to be supposed that such extra burdens imposed for social reasons generally account for only a small part of the total tax bill and taxation according to benefit thus forms the real core of any tax system.

Thirdly, the distinction between taxation according to benefit and taxes as instruments of social policy can contribute to the realization of the economic postulate in yet another way. Taxation always has harmful by-products, in that it reduces economic incentives; we must assume that these harmful effects are much greater in the case of social policy tax measures, which always tend to be confiscatory, than they are in the case of true taxation according to benefit. The latter has the sole purpose of covering expenditures for the benefit of the taxpayer himself and is in fact only an expression of his right of disposal over his own property. If social considerations are to be allowed to pervade the entire tax system, there is a danger that dislike of taxation and hence its harmful effects will be much greater than when the bulk of the tax burden can clearly be seen to constitute only taxation according to benefit—for in the latter case the taxpayers must admit that they are ultimately taxed according to their own wishes and that taxation brings them more advantages than sacrifices. In other words, taxation becomes uneconomic when it fails to take some degree of account of the people's sense of justice. Even from the purely economic standpoint one therefore arrives at the traditional claim for just taxation. Hence the principles giving expression to that claim, and chiefly the benefit principle, are indispensable to any realization of the economic principle of taxation.

By and large we can thus say that the difference between the claims for just taxation and economic taxation resides only in a slightly divergent approach to the so-called social aspects of taxation, to the development of which the "economic" approach has certainly contributed new and fruitful ideas. But in both cases the central core of the tax system must be some sort of taxation according to benefit, *i.e.* taxation in accordance with a definite distribution of property. The reason is that some definite property order must be the basis for those individual valuations which in actual fact are operative forces of the tax system.

In this sense the benefit principle appears as a tax principle of universal validity. The possibility of working out a rational tax system on the basis of this principle would seem to be the most important practical result of the application of the theory of value to the study of tax questions.

COMMUNAL ECONOMY AND MARKET ECONOMY

By HANS RITSCHL

Translated from German* by Elizabeth Henderson

The economy of the State is a form of economy with its own peculiar properties. We shall try to identify and analyse these properties by means of a comparison between the basic principles, the form and structure of the state economy and the free, capitalistic market economy. Despite some typification and generalization, we shall discuss the state economy in terms of the actual forms assumed by the economy of the modern State and its subordinate bodies, such as municipalities. Once we have established the features peculiar to these forms of economy and classified them, we may ask whether this type of economy can be described as communal economy. By then we shall have identified so many elements of the communal economy, that we may be able to draw the picture of an economy which is exclusively communal in form, not only by contrast to the free market economy. This will help us to a full understanding of the principle and nature of the communal economy. Finally, we shall examine how, in our present-day dualistic economic systems, such communal economy takes shape in the economy of the State, and what interaction and distinction there is between it and the free capitalistic market economy.

A. The Form of Social Cohesion

Both the state economy and the free market economy presuppose a group of persons whom the economy encompasses and by whom it is carried. But there is a great difference in the form of social cohesion within these supporting groups. The free market economy rests on an exchange society: the relationship of the individual economic units with each other is merely "social" in Tönnies' sense. Pictorially, the connection is mechanical rather than organic. The link is provided by division of labour and trade, separation and complementarity. The exchange society represents and carries an economic compound in which division of labour and the interplay of trade create an autarkic and economically viable whole.

The elements of this exchange society include economic units of the most diverse social structure: family associations and family partnerships such as today still survive amongst the peasantry, but have almost vanished from urban life; co-operatives, foundations and clubs with their economies; and associations formed to secure profits properly speaking. Whatever the principle of cohesion in the internal structure of these units, the social relation among them is only that of the market: they trade with each other and against each other. The economy of the State, too, enters into this exchange society

* *Gemeinwirtschaft und kapitalistische Marktwirtschaft. Zur Erkenntnis der dualistischen Wirtschaftsordnung*, Tübingen, 1931. The translation includes most of Part II, "Die Staatswirtschaft als Gemeinwirtschaft", pp. 32—49.

in many ways. Timber from State forests is sold to the highest bidder, public contracts awarded to the lowest tender. But to conceive of the State as commercial, involves some prior shifting of ground—as indeed is suggested by the use of the expression fisc as applied to the State in this role essentially alien to its character, and by the implied assumption of a change in its juridical status.

The principle of social cohesion in the State is not that of society, but of community.

We are all alike born into the community of the nation and the citizenship of the State. The history and fortunes of State and nation are common to us. The images through which we understand this bond all derive from the closest blood ties. The fatherland and the mother tongue make us all brethren together. Anyone is welcome to the exchange society who obeys its regulations. But to the national community belong only the men and women of the same speech, of the same ilk, the same mind. They have in common love of their homeland, of its mountains, woods and rivers, its villages and cities; they have in common the great figures of its past, the same hatred and suspicion of the "hereditary" enemy; they have in common joy of victory, the sacrifice of their sons, maternal sorrow, the grief of defeat and the bitterness of bondage. "All for each and each for all" is the motto of community. But the exchange society's motto is "*Chacun pour soi, Dieu pour nous tous.*" Through the veins of society streams the one, same money; through those of community the same blood.

Is it necessary to demonstrate once again that any individualistic conception of "the State" is a gross aberration? It is nothing but a blind ideology of shopkeepers and hawkers, a universalization of exchange thinking conceived precisely at the moment when the expanding exchange economy was beginning to grow to the size of the modern State, and when the State economy assumed the forms of a money economy. And those who teach us to see the State as nothing but power and coercion, forget that this power does not primarily show itself in the statutes of an exchange society, but is personified in the army, which is founded upon the individual's greatest and ultimate sacrifice for the community: that of his life.

Thus it is the community of the nation united in the State which, ultimately, carries the State. The State is only the juridical organization of this community; sociologically, the State is the collectivity.

The collectivity and national community are the basis and subject of the economy of the State, just as the exchange society is the subject of the free market economy.

In the principle of cohesion lies the primary fundamental difference between communal economy and market economy. But neither of these systems exists today to the exclusion of the other, and they meet and interweave in a host of ways. It is of the essence that the member of an exchange society is at the same time a member of the community, that the member of a

community is also a member of an exchange society. Indeed, in the old city economy with its autarkic nature, to some extent in the manorial economy and again in the economy of the nation State, the group of persons forming the exchange society coincides with that forming the national community.

Community and society today carry each other. Sociologically, the community is interwoven with the component elements of the exchange society; economically, the community today mostly rests on the exchange society; and juridically, the community in its turn carries and provides the foundation for the exchange society. But let us not forget that more important than the individual's juridical bond with the collectivity, is his spiritual, emotional and cultural bond with the community and its forces. Community can create society, but society can never give birth to community. Nor can community be born of the "collectivization" of the means of production, as a radical means designed to effect a distribution of income according to that conceptually highly individualistic principle of rewarding labour with its allegedly "total" product. Indeed, the claim for such collectivization has so far never been grounded in the spirit of community, but in class solidarity.

Community and society do not, as Tönnies sees it, supersede each other through the course of history as the basic forms of social cohesion; here too, there is today a social dualism, by virtue of which parts of an individual's being and life belong now to community now to society. The principle of society has never ruled alone. In our days, man's nostalgia for true fellowship is again bringing the principle of community to the fore. But it is most unlikely that society can be displaced completely as a form of social cohesion. We are far removed from such a possibility, both historically and as matter of feasible organization.

B. The Nature of the Needs

Having established the political community as the subject of the economy of the State, we have also determined who is the subject of the needs which that economy satisfies. The state economy serves the satisfaction of communal needs. They derive as objective communal needs from the goals of the State to maintain and develop the community. I have shown in my *Theory of the State Economy* how these objective communal needs are subjectively felt by the competent public authorities and by individuals, in so far as they think, feel and act as members of the community. I shall later have more to say on the sustaining power of the community spirit. Just as the community always aims at the welfare of the whole body politic and thereby of its parts, so the community has its share in assuring the satisfaction of socially important individual needs; we can then speak of communal needs "partaking" in individual ones. The satisfaction of such communal needs and the diverse forms of covering their cost today account for a large part of the state economy. If the State satisfies needs which are purely individual, or groups of individual needs which can technically not be met otherwise than jointly, it does so

for the sake of the revenue only. A profit-making economy is thus incorporated into the communal economy of the State. In essence and substance the economy of the State is a matter of satisfying pure or partaking communal needs. These are not in any way to be considered as needs of the individual which for some technical reason must be provided for "collectively". In the satisfaction of communal needs, be they pure or partaking, the communal economy differs teleologically not so much from the market economy as such, but from its elements, the individual economic units or firms. These serve the satisfaction of individual needs, though some of them may be partaking in the satisfaction of some communal need. Indeed, the economic resources of the individual units in the exchange economy are often drawn upon for the satisfaction of a communal need, by virtue of their structure and obligations. Examples are personal services to the State, compulsory military service, billeting, taxation. The market economy as a system of providing goods supplies both spheres, even though it rests only on individual economic units. The goods serving the fulfilment of communal purposes as of individual purposes are largely purchased on the free market and are made available by the market economy. However, the motivation of the suppliers on the market is not the balanced and general provision for individual and communal needs, but rather the profitable sale of goods. This balanced provision is secured by the market economy only in the context of an overall blending of purposes in the broader framework of the economy as a whole.

C. The Nature of Motivation

In the free market economy the economic self-interest of the individual reigns supreme and the almost sole factor governing relations is the profit motive, in which the classical theory of the free market economy was appropriately and securely anchored. This is not changed by the fact that some economic units, such as those of associations, co-operatives or charities, may have inner structures where we find motivations other than self-interest. Internally, love or sacrifice, solidarity or generosity may be determining: but irrespective of their inner structures and the motives embodied therein, the market relations of economic units with each other are always governed by self-interest. Herein lies the validity of the economic principle in its first formulation, *i.e.* that a given end is to be achieved with the least means, to buy cheaply and to sell dear. The classical theory was right in observing on the market none but the *homo oeconomicus*, but this is only a partial view of the economy and the classical theory's association of the concept of the economic process with self-interest has remained disastrous to this day. In its second formulation, to achieve the greatest utility with given means, the economic principle has frequently become quite independent of self-interest operating as between one person and another. The economic principle is a general principle of rational behaviour (Dietzel)—and not only in a

rationalistic sense. The principle applies to all deliberate practical action in the fields of material things, art, politics and intellectual activity just as much as in the narrower field of economics, whence it stems. In this general, yet no less rigorous sense the principle also applies to the state "economy" as the sum of all the community's deeds and actions. This is frequently misunderstood, but it is in this general sense that I have accepted the principle as formative for the state economy and have built my general tax theory upon it. Let us note that the only possible economic principle is one which does not, as such, say anything as yet about the motives of action, and one which can be based on the most diverse motives of action, such as selfishness, communal spirit, love, solidarity, sympathy, ambition, etc.

In the exchange society, then, self-interest alone regulates the relations of the members; by contrast, the state economy is characterized by communal spirit within the community. Egotism is replaced by the spirit of sacrifice, loyalty and communal spirit. In the exchange society, the individual is guided only by his personal advantage; here, he thinks, feels and acts as a member of the community. His own interests take second place. The communal spirit is the principle on which rest community and State. The spiritual metamorphosis which makes an individual a particle of the whole, is not so much a matter of becoming conscious of being part and parcel of this whole, but an immediate nascence of the innermost spiritual forces of the individual, who never ceases to live and to be within the community to which he belongs. This understanding of the fundamental power of the communal spirit leads to a meaningful explanation of coercion in the state economy. Coercion is a means of assuring the full effectiveness of the communal spirit, which is not equally developed in all the members of the community. Coercion forces the individual to act as if he were inspired by communal spirit. Coercion is only the outer clasp and fastening of the community, but if communal spirit be lacking, coercion can replace it only in part.

It is only when the nation is in the most desperate straits that the communal spirit of all merges into one great single will. In everyday political life there are necessarily a good many conceptions of the common weal, and they may combine with group or class interests and become tarnished by them. Yet each party pursues not only its group interest, but the realization of its own conception of the common weal. Nor do the parties alone decide, but the public authorities act out of their own closer integration with the State. The objective collective needs have a tendency to prevail. Even the party stalwart who moves into responsible government office, undergoes factual compulsion and spiritual change which make a statesman out of a party leader. Contemporary history is full of obvious examples. There is not a single German statesman of the last twelve years, may he have come from the left or the right, who escaped compliance with this law.

The adherents of an all-too-clever materialistic sociological theory think they can corrode all spiritual unity and grandeur by casting the aspersion

of ideology upon them; they see nothing but class and group interest at work. And they think that with their short-sighted and narrow-minded realism they can dismiss this theory of communal spirit.[1] Let us leave them with their view.

Communal spirit is seen throughout history as the sustaining force of political community, and this in a double sense: in the active sense of creative communal spirit as evidenced by the politically active citizen who, in the old folk state or the modern constitutional state may play his part, sometimes real sometimes fictitious, in the shaping of the community's volition, or who may, as a member of Parliament, civil servant or above all as a soldier, act on behalf of the community and so prove his communal spirit. In a more passive sense unity is shown by the willing subordination to the will of the community and State. Obedience, submission and subordination are held in honour as manly virtues. Willing subordination remains an indispensable virtue also in the democratic State. The minority complies.

D. The Nature of the Economic Process

1. *The Underlying Principle*

The free market economy is conducted according to the profit motive. The competing economic units rest on the profit motive and are inspired by it. The theory of the capitalistic economic system has exposed the profit motive, the pursuit of profit, the avidity for profit, as the motive power, the spirit and the economic mentality of the capitalistic system. Since the market economy as an economic system rests on free competition, it is the playground and the scene of unlimited pursuit of profit, which is the motive power of the system.

The state economy, by contrast, is not out for profit and is not conducted for the sake of profit; it is neither the intention nor the purpose to earn a surplus over costs. To that end the state economy would have to be predominantly an organization for production, it would have to inject goods and services into the market economy, to offer values in order to realize a plus in value. In my exposition of the history of economic doctrines, I have shown that repeated attempts have been made to conceive and explain the economy of the State as a production and profit system. It is quite clear that these attempts amount to no more than capitalist ideology, and that any explanation of the state economy in terms of capitalistic analogies is bound to misjudge its essence. In my theory of the state economy I have demonstrated in detail that the economy of the State is, in the last analysis of its nature and content, not a production economy but a consumption economy, and this view has since become widely accepted.

[1] *Cf.* H. Sultan, "Die Theorie der Staatswirtschaft" (a critique of my theory), *Archiv für Sozialwissenschaft und Sozialpolitik*, 1928; F. Neumark, review of my *Theory* in *Conrad's Jahrbücher*, 1926; to some extent also Beckerath. On the other hand, we find approval of the theory of communal spirit in S. Helander, "Die Grenzen der Besteuerung", *Finanzarchiv* 1931, vol. 48, No. 1, p. 160; and now also E. R. A. Seligman: "It is this membership (in the groups as such) which transmutes and transfigures the individual."

This consumption aspect is expressed meaningfully in speaking of the public household. The economy of the State is comparable not to the firm but to the household. The purpose is not to reap profits by satisfying the needs of other economic units, but to satisfy pure and partaking communal needs. The political community is the subject of both the economy and of the needs satisfied thereby. This consumption economy may include some production for its own use as well as some profit-making undertakings, for the sake of revenue.[2]

If we look for the economic principle behind this consumption character of the state economy, we find not the profit principle but the production for need principle. The economy of the State is a production for need economy. The most rigorous expression of this principle is embodied in the basic rule of public finance, *i.e.* that revenue and expenditure must balance. Another exemplification and illustration of this principle is the theorem which says that, within the limits of potential revenue, expenditure determines revenue in the state economy. Revenue is raised only to the extent that the needs require—although it is true that in most cases the needs are tailored to the measure of potential revenue and indeed are limited by it. It follows that in principle—and practically at least within each budgetary period—the state economy is a static economy, by contrast to the dynamic capitalistic market economy. Indeed, the words static and state have a common root in the Latin *status*, situation. We shall have to examine later how the public economy, in its static non-cyclical form, tries to dissociate itself from the dynamic market economy and to maintain itself above it.

2. *The Principle of Securing the Means*

In the free market economy no goods can be acquired without a *quid pro quo*. Goods and services are available only in exchange for other goods and services. There is the principle of specific compensation. Each person receives a share in the yield of the economic process corresponding only to his contribution of labour, capital, means of production and land. Given unequal endowment with material goods and intellectual capacity, the market system by itself does not lead to an harmonious and complete satisfaction of all socially important needs and the gap must be filled by the public economy. This has justly been stressed by economists of such widely divergent views as Adolph Wagner, Cassel father and daughter, and G. Colm. Therein lies the reason for the emergence and recognition of communal needs partaking in private needs, and for an expansion of the public economy into these areas—not, however, the meaning and historical basis of public economy

[2] "The household (of a sovereign or landlord) can include enterprise for profit" (Max Weber, "Wirtschaft und Gesellschaft", *Grundriß der Sozialökonomik* III, p. 47). At the same place we find: Household and enterprise for profit are "both possible in rational form", and: "economic organization to satisfy needs is not, in its rational form, more primitive than enterprise for profit, although it comes first historically". Finally, to justify my characterization of the state economy as an economy for consumption: "Consumption economy and enterprise for profit may be so linked in the action of any one individual, that only the final act (sale here, consumption there) tells us what process is on hand."

itself. Like community and communal life, public economy is older than the free market economy, which detached itself later.

As community rests on communal spirit, so the public economy rests on the sacrifices of its members. Between State and citizen, between the community and its members, there is no reckoning of what is given and what received, no specific compensation nor any excogitation of general rewards. For the means needed for common purposes and aims, the public economy appeals to the citizens' spirit of sacrifice and demands their property and life without reward. Given the unequal measure of people's communal spirit and given the need to ensure the success of the willing sacrifice, the voluntary principle is not enough. The contributions and obligations must be legally determined and laid down. In fundamental contrast to the exchange society and market economy, community and public economy rest on compulsory military service and taxation. Through compulsory military service the community makes sure that it can dispose of all fit citizens in time of war. Taxation provides the goods needed for common purposes, to the extent that the public economy does not itself produce these goods or their equivalent. Taxation raises these goods either in a form directly usable for common purposes (building labour for roads, bridges or fortresses, contributions in kind towards the maintenance of officials and the supply of armies), or in the form of means of exchange (farm produce to be sold by the State, and above all money).

3. *The Principle of the Use of Means*

Taxation effects subsequent changes in the free distribution of incomes in favour of more important and as yet unsatisfied communal needs. The theory of public finance as a basis of taxation has to show how the economic principle is to be applied in the process of raising the required means, and hence in the distribution of taxes among competing groups of communal and individual needs as an economic action resting on social valuations.

Equally, the economic principle governs the use of state revenue. The purposes and the needs arising therefrom must be satisfied in the order of their importance. When purchasing goods, the State follows the economic principle in its first formulation. This is particularly obvious when public contracts are awarded on tender.

But even though the economic principle is generally valid in the state economy as it is in the market economy, the public economy yet has special forms of using its means. The supply of labour, for one, rests on the citizens' obligation for general personal services and military service, or on voluntary entry into state service. If this should temporarily or permanently absorb a man's full working energy and leave him no time to earn his living, the community must provide for his upkeep.

In the free capitalistic market economy the hiring of outside labour for services and work is again subject to specific compensation: payment by

performance, the wage principle. For simple work the wage is paid by working time, but wherever possible by performance (piece rates) or graduated according to the quality and importance of the work and the degree of responsibility.

In the state economy, by contrast, we find the principle of maintenance. The soldier is adequately clothed, housed and fed, and his pay is a sort of pocket money. The official receives no wages, but a salary (*Gehalt*), which word (in German) in itself suggests that he is held and maintained in a certain social standing. Salaries are graduated according to the officials' prior training and their position. The maintenance principle is further expressed in wives' and children's allowances and maternity benefits. If there should temporarily be no need for an official, he receives a retainer which enables him to keep up his proper standard of living. For old age, widows and orphans, the State provides by old age pensions, widows' and orphans' pensions according to the maintenance principle and thereby assures a proper standard of living for the official's family too. In the free market economy all these cases of loss of earnings are covered not by the maintenance principle, but by the insurance principle. But since the market economy does not apply the insurance principle generally or in good time, the State provides by social insurance for collective needs partaking in the care of the unemployed, the old and the sick, the disabled, and the widows and orphans. State coercion thus makes the insurance principle universal. In so far as part of the cost and contributions is met by the employers or by State subsidies, there is a dovetailing of the maintenance principle of the public economy and the insurance principle of the market economy. In the care of the poor and in social assistance the maintenance principle is applied to all those members of the community who have become destitute.

Thus the employment relationship of the official is the public economy's form of acquiring the services of labour, the wage relationship that of the capitalistic market economy.

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