

JUST TAXATION—A POSITIVE SOLUTION

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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 latter's 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.

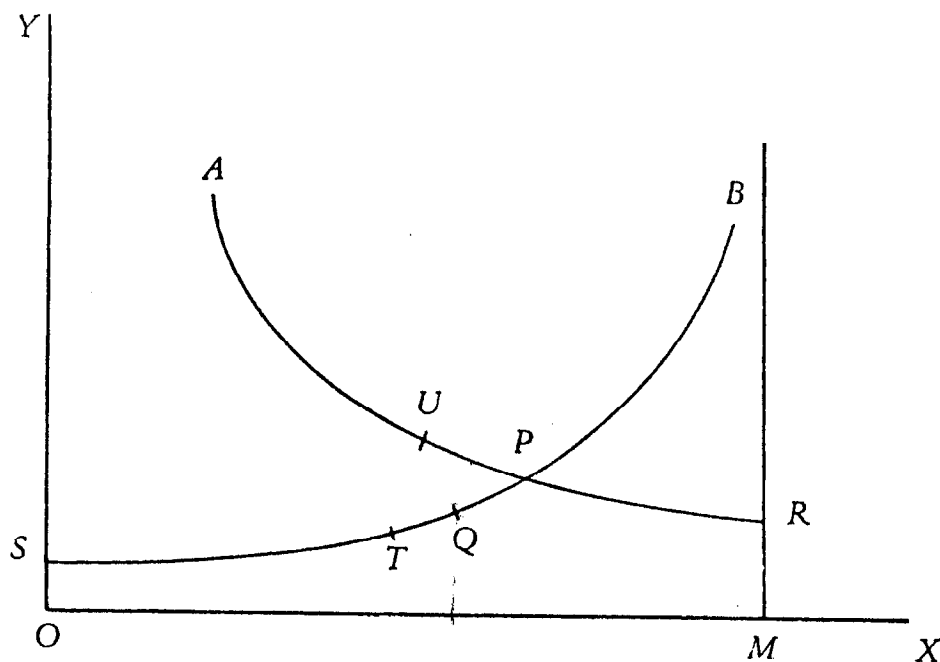


Fig. 1

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 equi-

librium 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 the 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:

$$f'(y) = \varphi'(y) = \alpha - \beta y,$$

the two curves would be straight lines with the equations

$$x = \alpha - \beta y$$

and

$$1 - x = \alpha - \beta y$$

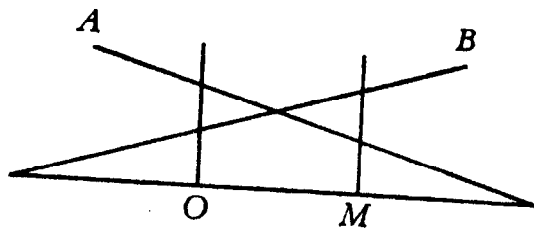


Fig. 2

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 respect⁴ 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 calculation⁶—*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 than they want to pay of their own free will. We have indicated elsewhere⁸ 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.