The Burden of War and Future Generations
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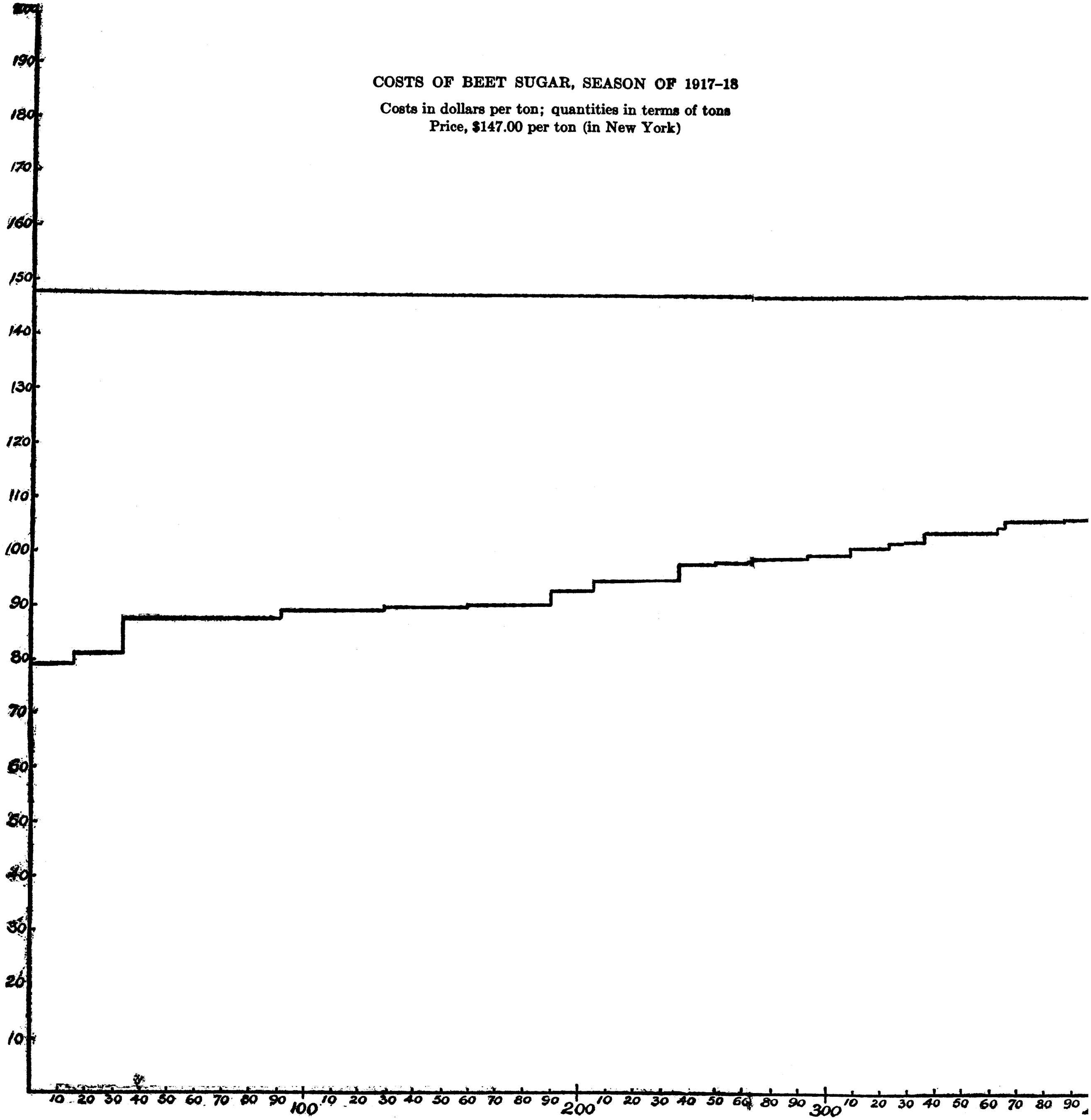
THE BURDEN OF WAR AND FUTURE GENERATIONS

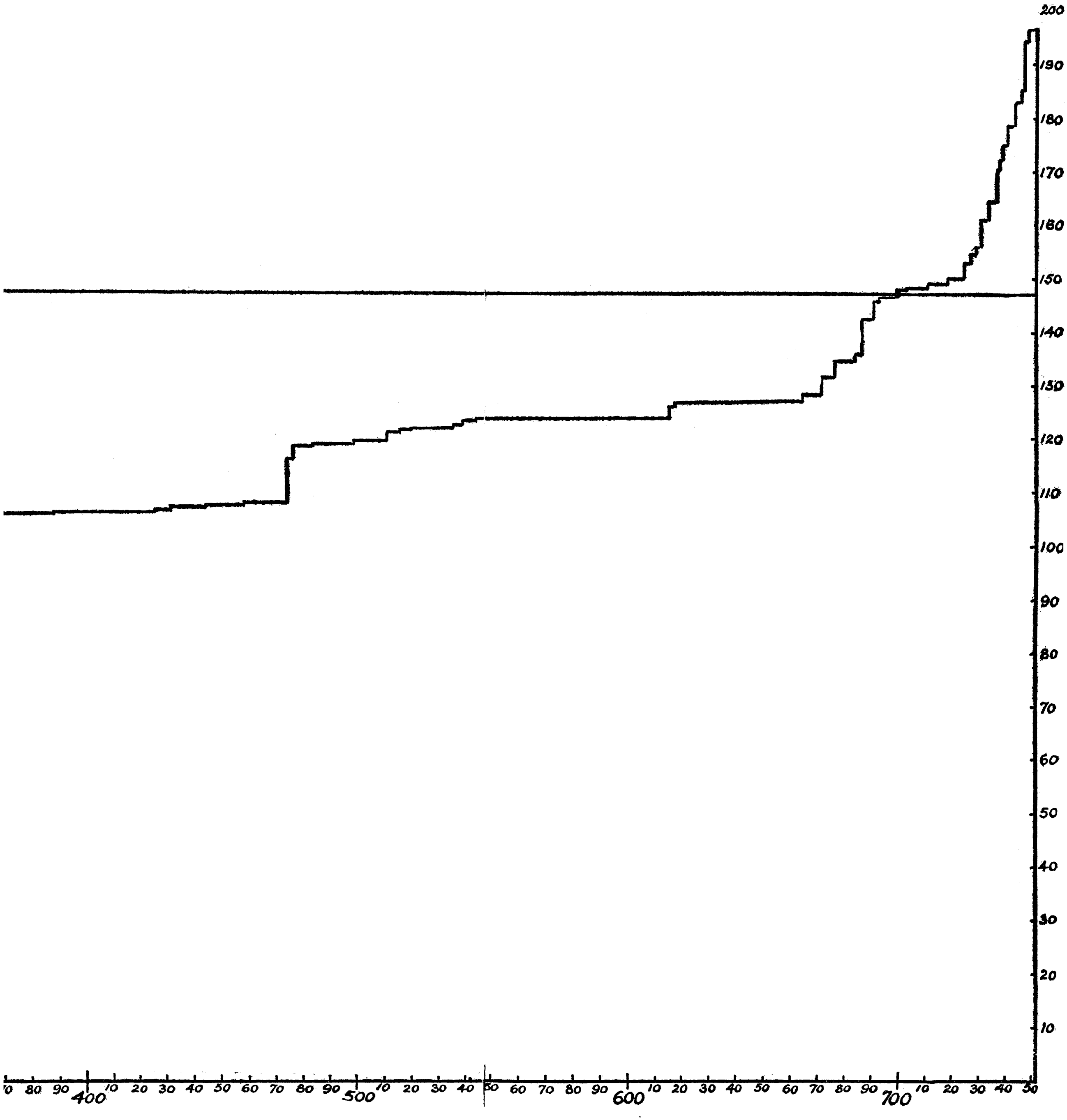
SUMMARY

Burdens of war are objective and subjective, 242. — Costs resulting from destruction, and cost of maintaining the fighting forces, 243. — Choice between rival ways of financing a war, 245. — Different effects of the levy plan and the loan plan, 247. — The assumed burden of a loan to the lender, 249. — Subjective burdens of levy and loan methods, 252. — Conclusion, 254.

I HAVE been invited to contribute to the *Quarterly Journal of Economics* an article on how far and in what sense the burden of the war can be shifted on to future generations. This question is one of practical as well as theoretical importance and I welcome the opportunity of examining it. Some of the issues involved are, indeed, obvious, but others have been the subject of controversy. A part of the difficulty has arisen out of an ambiguity in the meaning of the term "burden": for that term may be interpreted either *objectively* as a cost in things and services, or *subjectively* as a cost in satisfactions. In the following pages I shall endeavor, keeping this distinction in mind, to set out the whole problem in a logical order.

The objective burden which future generations bear as the result of a war is measured by the difference between their actual economic situation and the situation which they would have enjoyed if all other things had been equal and no war had occurred. This difference in economic situation, interpreted in the broadest sense, will, for any country, take account of the indirect effect of war casualties upon the quantity and quality of the population of which future generations are composed.


COSTS OF BEET SUGAR, SEASON OF 1917-18
Costs in dollars per ton; quantities in terms of tons
Price, $147.00 per ton (in New York)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For the present purpose, however, a somewhat narrower interpretation is more convenient, and I propose, leaving the difference made in the people themselves out of account, to consider only the difference made to their economic environment.

The real costs of war to a country include two parts, the destruction wrought in it or in its possessions by the enemy and the resources devoted by the country itself to the conduct of the war. The former of these groups includes in an invaded country all the wreckage done to houses and furniture and roads and land; in an uninvaded country the results of bombardment from sea and air and the destruction and damage done to shipping. The latter group includes the whole body of effort wrought by men laboring in conjunction with equipment to supply the sinews of war, together with the existing capital stock actually used up in the war, e.g., trees cut down, railway lines torn up, rolling stock sent to the front and destroyed there and so forth. In a country which is in contact and communication with the rest of the world yet other elements will be involved. For the government of that nation may, for the purposes of the war, borrow either from the governments of other nations or from individual foreigners, and, even when the government does not so borrow, private persons in the warring countries, in order to provide their contributions, whether of loans or taxes, to the government may do this; or, if they do not actually borrow from foreigners, they may do what is substantially the same thing by selling foreign securities or other marketable possessions formerly held by them to foreigners and using the proceeds for the war. Finally, the government or private persons may ship abroad gold for the purchase of war material thus depleting the gold reserves of the country.

These various costs are in part, but only in part, represented in a deterioration below the standard which it would otherwise have attained in the economic environment of the future: because, to meet them resources are obtained, not only by drawing upon that environment, but also in other ways. When so many factories and houses have been destroyed by enemy action, so much of a country's forests cut down, so much labor and capital diverted from making and maintaining industrial equipment, so much foreign borrowing undertaken, this inventory of cost is not equivalent to an inventory of objective burden thrown upon the future. Broadly speaking we may say that, in so far as the costs of war are met in ways other than the provision of extra work by the war-waging generation and the undertaking by them of unusual economies in personal consumption, these costs are thrown upon the future — it being understood that, against these costs the future is likely to have left to it certain durable forms of industrial equipment which were made for war purposes but remain and are useful also in peace. We cannot, however, make the converse statement that, in so far as war costs are met by extra work or unusual personal economies they are not thrown upon the future, because this extra work and reduced consumption is likely, by wearing out the efficiency of the present generation to reduce the contribution which it is able to make to production, and therefore, *inter alia*, to the capital equipment available for future generations. How far this sort of reaction will go must vary, of course, with different classes of people: — extra work for those who normally work hard and diminished consumption for those who already live sparingly will have a much larger effect than extra work for normal idlers and reduced consumption for gourmands and pleasure-seekers. The general conclusion must be that costs met in these ways (and of course this holds good whether they are so met during the actual course of the war or during the period of reconstruction immediately following it) are partly thrown by an indirect process on the future. On the whole, however, they are likely to be so thrown in a much less degree than costs which are met in the other ways described in preceding paragraphs. Hence the greater the extent to which war costs are met by extra work and personal economies the smaller the extent to which future generations are likely to be burdened by them.

The choice between rival ways of meeting war costs, and therefore the extent of the objective burden on future generations, is influenced by a number of important factors wholly independent of the financial policy pursued by the government. Among these are the strategic position of the country and, therefore, the physical power of its citizens to borrow from abroad, the extent to which its citizens hold securities saleable in a foreign market, the extent to which there is labor power in the country which normally is leisured or not fully occupied, and the willingness of the people to stint their personal comfort and enjoyment for a public end. These factors call for no special comment. Let us suppose that in respect of all of them the conditions are given. On that assumption a very important question has to be faced, namely, what difference will be made to the sources from which war costs are met, and therefore to the objective burden thrown on future generations by the policy which the government chooses to pursue. The foreign borrowing undertaken by it we may suppose to be determined by military considerations — foreign loans constituting a kind of extra over and above what it can get out of its own people — which lie outside our purview; and attention may, therefore, be confined to the choice between various sorts of domestic taxes and domestic loans.

There is a distinction of some importance between the *nominal subject* and the *real subject* of a levy, whether the levy be by way of taxation or of loan. The nominal subject is, of course, the man from whom the money is actually taken over by the state. In so far as this man cuts down charities or presents or wages (while retaining the same staff) to provide this money, he is not, however, the real subject. For he simply transfers the obligation of meeting the call involved in the levy on to somebody else. This somebody else is the real subject of the levy: the nominal subject is the real subject only when he furnishes the funds required otherwise than by transferring the obligation away from himself. It is thus plain that it is the conduct of the real and not of the nominal subject that is of interest from the present point of view. Every one knows that the levy of £100 will have different direct effects when it is made from different real subjects. Taken from one, it will cause him to work harder; from another it will check personal consumption; from another it will check investment; from another it will cause him to let his plant run down a little; and so on. Now different methods of war finance involve different distributions of war charges, and it would, therefore, seem that we should be able, by analyzing their distributions, to trace out their respective consequences upon the position of future generations. The beginning of this investigation looks prosperous enough. Thus we know that the poor can at the best of times save very little; and they have no plant to keep up. Consequently war levies exacted from them practically must be provided out of extra work and extra personal economies. Unfortunately, however, it is just among the poor that resort to these methods is specially likely to react on efficiency and so injure productive power. This reaction *may* in the end hit future generations, by indirectly lowering productive equipment, as much as an equivalent levy on better-off persons, part of whose contributions would come out of funds destined to be turned into material capital, would do. There is no getting over this difficulty. In consequence of it, we cannot, I think, lay down any broad distinction between different methods of war finance which will enable us to say that one method is likely, on account of its distributional reactions to involve more or less objective burden to future generations than another method.

We must not, however, stop at this negative conclusion. Various methods of war finance do not differ solely on the side of distribution. We have still to contrast the consequences of taking £1,000 from a man by way of loan and taking exactly the same sum from the same man in the form of a tax levy. If this man were a representative man and there was no such thing as economic friction, the choice between the two plans would be indifferent to him. If the money is taken in a levy the man loses it outright; if it is taken as a loan he is promised £50 a year on it, but knows that he will have to provide the £50 himself in extra future taxes. True, it may be said, if he is confronted by an emergency, and has a £1,000 war bond, he will be able to sell it and turn it into ready money at the cost of being £50 a year poorer afterwards. But, in the absence of economic friction, he would, in a like emergency, if he did not possess the war bond, be able to borrow £1,000, also at the cost of being £50 a year poorer afterwards. This argument is valid in the abstract. But, of course, in actual life economic friction is a real thing and a man cannot borrow £1,000, unless he happens to have good collateral, with anything like the ease that he can sell a £1,000 war bond. Therefore, as a matter of fact, if there is a chance of emergency, it is a real advantage to have a £1,000 war bond even tho the whole of the interest one gets on it is paid by oneself. Moreover, besides this real advantage of loans over taxes to the persons who furnish the money there is also an imaginary advantage: for it will not generally occur to those persons, even tho it were exactly and demonstrably true, that they will themselves have to pay individually the interest they individually receive. Consequently, they will certainly *feel* better off under the loan plan than under the tax plan, and are, therefore, likely to provide what they do provide more largely by cutting down investment and less largely by extra work and economies in personal consumption than they would have done under that plan. To this extent, therefore, the loan plan, in so far as the money is raised from the better-to-do classes, will react on the sources from which war costs come in a way that involves a larger objective burden on future generations than would be imposed upon them under the tax plan.

And there is yet a further point. The argument of the preceding paragraph proceeded on the assumption that the people who provide money under war loans are so situated that, after the war their taxes (so far as required to finance war debt) and their loan interest are expected to be equal. As a matter of fact, however, experience has never yet revealed a tax system anything like as strongly graduated for increasing incomes as loan subscriptions are normally found to be, at all events when the loan required is large. Hence, the richer classes, from whom, when a large amount of money is wanted, contributions under any plan *must* chiefly come, will think, and rightly think, that a loan hits them much less severely than an equivalent levy would do. Hence the inducement to work harder and to effect personal economies in consumption will be correspondingly less, and they will be more inclined to rely in one way or another upon draughts on real capital. It is true that the poorer classes, with the prospect of heavy taxation before them will, if they understand the situation, realize that under the loan plan they will be hit more severely than under the levy plan; and that, therefore, they should tend to work harder and economize more. It is plain, however, that in practice this tendency will work very much less strongly than the converse tendency among the rich, while, even in so far as it does work, its consequences are ambiguous because of the damage likely to be done to the productive efficiency of those affected. On the whole there can be no doubt that under the loan plan capital resources will be more seriously depleted, and future generations, therefore, more seriously burdened than under the levy plan.

I now pass to a further problem. Let us suppose that full account has been taken of the difference between the effects of the levy plan and the loan plan upon the conduct of the persons affected during the war, and of the way in which this difference is reflected in the direct objective burden borne by future generations. Does the choice between the two plans involve any further difference over and above this in the amount of that direct objective burden? In answering this question it is well to distinguish between the payment of interest on the war debt and the repayment of principal through a sinking fund. So far as interest is concerned, it is obvious that what is taken from the income of tax-payers in taxes goes into the income of holders of war loan, and that, therefore, all that happens is a transfer of income from one section of the community to another section, and, in so far as tax-payers and war loan holders are identical, from one pocket to another pocket in the same coat. Plainly in a transfer of this kind it is impossible that any *direct objective burden* — I am not at present concerned with other sorts of burden — can be involved. There remains the money raised for repayment of principal through a sinking fund. As regards this it has been claimed by certain writers that the preceding argument is inapplicable. They reason that, when a holder of war loan has the principal of his loan paid off by the government, he receives no benefit, but is simply left in his old position — possibly a slightly worse position, because he will have the trouble of finding a new investment — and that, therefore, there is nothing to set against the objective burden thrown on the tax-payer in the form of taxation to provide the money to pay him. Professor Seligman writes: "The fallacy involved in the contention that the sacrifice imposed upon the future tax-payer is counter-balanced by the benefit accruing to the bondholder consists in the failure to realize that there are no benefits thus accruing to the bondholder." [1] Professor Scott arrives by similar reasoning at the same conclusion: "Speaking quite generally, the effect of a loan (he is discussing an internal loan) is that posterity is rendered liable to do the amount of work which is necessary to pay it off." [2] The substance of this argument is that, since, in the main, repayments of principal made to holders of war loan are certain to be reinvested, posterity as a whole will be forced by the process of debt repayment to create new capital, and so to refrain from consumption, to approximately the extent of the debt repayments. Let us provisionally accept this presentation of the facts. Even so to suggest, as the language

[1] Annals of the American Academy, January, 1918, p. 64.
[2] Economic Journal, September, 1918, p. 258.

used by Professors Seligman and Scott seems to do, that they imply a *direct objective burden* on posterity equal to the amount of the debt repayment is paradoxical in the extreme. Posterity will possess the new capital which it has been induced by the fiscal expedients of the state to create. What right have we to ignore this possession? To do so is as tho one should say that a man who has been induced by circumstances to put £100,000 into a factory instead of into a yacht or a bean feast was thereby made poorer to the extent of £100,000 than he would otherwise have been. If there were reason to suppose that the world would end immediately after the investment had been made, there would indeed be something to be said for this view. But at present no cosmical catastrophe is in sight and posterity may be expected to reap the fruit of its investments in the same way as its ancestors. Thus, tho it is true, as Professor Seligman asserts, that the bondholder gets no benefit from debt repayment, it is also true that the tax-payer suffers no loss. What he in effect does is to make an investment of certain funds, the proceeds of which will serve in future years to keep the bondholders' position intact without any further call upon the tax-payer himself being required. On posterity as a whole no *direct objective burden* is imposed by debt repayment of an internal loan, any more than by payment of interest upon it.

We may conclude therefore that, apart from the consequences produced through reaction on the conduct of the persons affected at the time, the choice between the levy and the loan method makes no difference to the direct objective burden thrown on future generations. The payment of interest and the repayment of principal alike are transfers, not costs, and to whatever there is somewhere lost there corresponds elsewhere an exactly equivalent objective gain. It does not, however, follow from this that no difference is made by the choice between the two methods in the *subjective burden* borne by future generations. There is reason to believe that it is of this rather than of the *objective burden* that both Professor Seligman and Professor Scott are really thinking — tho to interpret them so involves a rather generous straining of their language — when they claim that the need to repay internal war debt throws a real burden upon posterity. Let us, therefore, consider the effects upon subjective burden. To simplify the discussion I shall begin by studying a representative man so situated that what he pays in taxes to finance the debt exactly corresponds to what he receives in interest and in repayment of the principal of his war loan holdings. In these circumstances it is obvious that the interest money merely comes out of one pocket and goes into another, and that a subjective burden is excluded as completely as an objective one. But with the part of the tax used to repay principal the position is a little different. In effect £100 has been taken from our representative man in taxes and then paid back to him as a price for cancelling his £100 war bond. If this procedure had not been gone through, this £100 would have remained in his disposable income and would, we may suppose, have been spent. As the procedure has been gone through, he realizes that, should he spend it, his " capital " will be £100 less than before and his future income therefore £5 less. He will, therefore, it would seem, need to save the greater part of that £100 and invest it so as to keep up his capital and conserve his future income; and this new need will obviously involve a real subjective burden. Such reasoning, however, ignores the fact that, tho if he does not save that £100, his future income will be £5 less, his future taxes, out of which his war loan interest is paid, will also be £5 less, since the £100 of war loan to provide interest on which the taxation is required has *ex hypothesi* been cancelled. When account is taken of this fact, it becomes apparent that the representative man's *net* income, after taxation has been deducted, will be exactly the same in the future as it has been in the past. His position as a whole, therefore, is not damaged in any way, and there is no reason why, to safeguard himself, he should save that £100 which he would normally have spent. It may perhaps be replied that the prospective escape from taxation will not balance the prospective loss of interest because he may reckon that, as general wealth increases, the amount of taxation which he personally will have to contribute will fall. But this reply is illicit, because he must be taken as a representative man whose wealth and (in his family) numbers expand in the same ratio as that of the whole community. A second possible reply — that the tax will fall through loan conversion — is obviously irrelevant since conversion would reduce loan interest equally with the taxation made to provide that interest. We may conclude, therefore, that, if he realizes the whole situation, the representative man will suffer no subjective burden in consequence of debt repayment. No doubt it is probable that in practice he will not realize the whole situation and will not perceive that his loss of capital is balanced by his saving of prospective taxation. So far as he fails to perceive this, he *will* be pushed into saving part of the £100 which he would normally have spent, and so *will* suffer a subjective burden. This appears to be the leaven of truth in Professor Seligman and Professor Scott's reasoning.

Naturally this is not a complete account of the position. For, in actual life, as I have urged strongly elsewhere,[1] when money is raised for a war, such a vast

[1] The Economy and Finance of the War, pp. 66 et seq.

amount is required that a very much larger proportion has to be taken from the rich — who have a wider margin — as compared with the poor that it is usual to take from them under normal taxes. When loans are employed, therefore, it is almost certain to happen in practice that the money raised afterwards to pay interest and repay principal upon them will be taken from the poor in much larger quantities than it is received by them. The annual transfer of resources to serve the war debt is thus in considerable measure a transfer from poorer persons to richer persons. Obviously that fact involves a large subjective burden to posterity as a whole; for the simple reason that a poor man is injured much more when a shilling is taken from him than a rich man is benefited when a shilling is given to him. This is, perhaps the chief practical objection to financing wars by internal loans to any greater extent than is absolutely necessary. But this element of subjective burden on future generations, tho it is almost certain to be associated in fact with the loan method, arises out of the way in which, as a matter of fact, governments choose to distribute normal taxes, and is not inherent in the method itself. In a purely abstract comparison between that method and the levy method, it should, therefore, be left out of account.

So far I have considered only the direct objective burden, and the subjective burden arising out of this, which is borne by future generations. It has to be added in conclusion that the loan method also strikes at the future in an indirect way. It does this because it involves in the future large and continuous taxation to provide funds for the service of the debt. The fact that taxes raised for this purpose represent merely a transfer and not a using-up of resources, does not warrant the inference that they are innocuous to production. On the contrary, it is impossible to raise large sums of money by taxes which have to be continued year after year, and the impact of which, therefore, everybody anticipates and prepares for, without in one way or another hampering production, discouraging industry and driving capital and ability to seek investment elsewhere. The extent to which these things happen depends, of course, partly on the scale of taxation that is necessary, partly on the kind of taxes which the government chooses to impose, and partly on the comparative position of the particular country under review and other countries in the matter of tax rates. But to some extent they are practically certain to happen. In this way future generations will be hit by the aftermath of a policy of finance by loans. Nor can it be justly replied that a policy of finance by levies will hit them to an equal extent because it will discourage industry and drive capital away during the war itself, thus injuring the equipment which is left to the country after it. For, during a war, not only are special motives of patriotism at work to maintain industry and government restrictions to prevent the export of capital and brains; but also, wars being short, taxes levied in war time are not expected to continue as ordinary taxes are and are not capable, therefore, of reacting so strongly upon production. In any complete comparison of the effect upon future generations of financing war by levies or by loans a very important place must be assigned to this last element in the account.

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