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*Functional Finance and the Federal Debt**

By *ABBA P. LERNER*†

Apart from the necessity of winning the war, there is no task facing society today so important as the elimination of economic insecurity. If we fail in this after the war the present threat to democratic civilization will arise again. It is therefore essential that we grapple with this problem even if it involves a little careful thinking and even if the thought proves somewhat contrary to our preconceptions.

In recent years the principles by which appropriate government action can maintain prosperity have been adequately developed, but the proponents of the new principles have either not seen their full logical implications or shown an over-solicitousness which caused them to try to save the public from the necessary mental exercise. This has worked like a boomerang. Many of our publicly minded men who have come to see that deficit spending actually works still oppose the permanent maintenance of prosperity because in their failure to see *how* it all works they are easily frightened by fairy tales of terrible consequences.

I

As formulated by Alvin Hansen and others who have developed and popularized it, the new fiscal theory (which was first put forward in substantially complete form by J. M. Keynes in England) sounds a little less novel and absurd to our preconditioned ears than it does when presented in its simplest and most logical form, with all the unorthodox implications expressly formulated. In some cases the less shocking formulation may be intentional, as a tactical device to gain serious attention. In other cases it is due not to a desire to sugar the pill but to the fact that the writers themselves have not seen all the unorthodox implications—perhaps subconsciously compromising with their own orthodox education. But now it is these compromises that are under fire. Now more than ever it is necessary to pose the theorems in the purest form. Only thus will it be possible to clear the air of objections which really are concerned with awkwardnesses that appear only when the new theory is forced into the old theoretical framework.

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Fundamentally the new theory, like almost every important discovery, is extremely simple. Indeed it is this simplicity which makes the public suspect it as too slick. Even learned professors who find it hard to abandon ingrained habits of thought have complained that it is "merely logical" when they could find no flaw in it. What progress the theory has made so far has been achieved not by simplifying it but by dressing it up to make it more complicated and accompanying the presentation with impressive but irrelevant statistics.

The central idea is that government fiscal policy, its spending and taxing, its borrowing and repayment of loans, its issue of new money and its withdrawal of money, shall all be undertaken with an eye only to the *results* of these actions on the economy and not to any established traditional doctrine about what is sound or unsound. This principle of judging only by *effects* has been applied in many other fields of human activity, where it is known as the method of science as opposed to scholasticism. The principle of judging fiscal measures by the way they work or function in the economy we may call *Functional Finance.*

The first financial responsibility of the government (since nobody else can undertake that responsibility) is to keep the total rate of spending in the country on goods and services neither greater nor less than that rate which at the current prices would buy all the goods that it is possible to produce. If total spending is allowed to go above this there will be inflation, and if it is allowed to go below this there will be unemployment. The government can increase total spending by spending more itself or by reducing taxes so that the taxpayers have more money left to spend. It can reduce total spending by spending less itself or by raising taxes so that taxpayers have less money left to spend. By these means total spending can be kept at the required level, where it will be enough to buy the goods that can be produced by all who want to work, and yet not enough to bring inflation by demanding (at current prices) *more* than can be produced.

In applying this first law of Functional Finance, the government may find itself collecting more in taxes than it is spending, or spending more than it collects in taxes. In the former case it can keep the difference in its coffers or use it to repay some of the national debt, and in the latter case it would have to provide the difference by borrowing or printing money. In neither case should the government feel that there is anything especially good or bad about this result; it should merely concentrate on keeping the total rate of spending neither too small nor too great, in this way preventing both unemployment and inflation.

An interesting, and to many a shocking, corollary is that taxing is *never* to be undertaken merely because the government needs to make money payments. According to the principles of Functional Finance, taxation must be judged only by its effects. Its main effects are two: the taxpayer has less money left to spend and the government has more money. The second effect can be brought about so much more easily by printing the money that only the first effect is significant. Taxation should therefore be imposed only when it is desirable that the taxpayers shall have less money to spend, for example, when they would otherwise spend enough to bring about inflation.

The second law of Functional Finance is that the government should borrow money only if it is desirable that the public should have less money and more government bonds, for these are the *effects* of government borrowing. This might be desirable if otherwise the rate of interest would be reduced too low (by attempts on the part of the holders of the cash to lend it out) and induce too much investment, thus bringing about inflation. Conversely, the government should lend money (or repay some of its debt) only if it is desirable to increase the money or to reduce the quantity of government bonds in the hands of the public. When taxing, spending, borrowing and lending (or repaying loans) are governed by the principles of Functional Finance, any excess of money outlays over money revenues, if it cannot be met out of money hoards, must be met by printing new money, and any excess of revenues over outlays can be destroyed or used to replenish hoards.

The almost instinctive revulsion that we have to the idea of printing money, and the tendency to identify it with inflation, can be overcome if we calm ourselves and take note that this printing does not affect the amount of money *spent.* That is regulated by the first law of Functional Finance, which refers especially to inflation and unemployment. The printing of money takes place only when it is needed to implement Functional Finance in spending or lending (or repayment of government debt).[1]

[1] Borrowing money from the banks, on conditions which permit the banks to issue new credit money based on their additional holdings of government securities, must be considered for our purpose as printing money. In effect the banks are acting as agents for the government in issuing credit or bank money.

In brief, Functional Finance rejects completely the traditional doctrines of "sound finance" and the principle of trying to balance the budget over a solar year or any other arbitrary period. In their place it prescribes: first, the adjustment of total spending (by everybody in the economy, including the government) in order to eliminate both unemployment and inflation, using government spending when total spending is too low and taxation when total spending is too high; second, the adjustment of public holdings of money and of government bonds, by government borrowing or debt repayment, in order to achieve the rate of interest which results in the most desirable level of investment; and, third, the printing, hoarding or destruction of money as needed for carrying out the first two parts of the program.

II

In judging the formulations of economists on this subject it is difficult to distinguish between tact in smoothing over the more staggering statements of Functional Finance and insufficient clarity on the part of those who do not fully realize the extremes that are implied in their relatively orthodox formulations. First there were the pump-primers, whose argument was that the government merely had to get things going and then the economy could go on by itself. There are very few pump-primers left now. A formula similar in some ways to pump-priming was developed by Scandinavian economists in terms of a series of cyclical, capital and other special budgets which had to be balanced not annually but over longer periods. Like the pump-priming formula it fails because there is no reason for supposing that the spending and taxation policy which maintains full employment and prevents inflation must necessarily balance the budget over a decade any more than during a year or at the end of each fortnight.

As soon as this was seen—the lack of any guarantee that the maintenance of prosperity would permit the budget to be balanced even over longer periods—it had to be recognized that the result might be a continually increasing national debt (if the additional spending were provided by the government's borrowing of the money and not by printing the excess of its spending over its tax revenues). At this point two things should have been made clear: first, that this possibility presented no danger to society, no matter what unimagined heights the national debt might reach, so long as Functional Finance maintained the proper level of total demand for current output; and second (though this is much less important), that there is an automatic tendency for the budget to be balanced in the long run as a *result* of the application of Functional Finance, even if there is no place for the *principle* of balancing the budget. No matter how much interest has to be paid on the debt, taxation must not be applied unless it is necessary to keep spending down to prevent inflation. The interest can be paid by borrowing still more.

As long as the public is willing to keep on lending to the government there is no difficulty, no matter how many zeros are added to the national debt. If the public becomes reluctant to keep on lending, it must either hoard the money or spend it. If the public hoards, the government can print the money to meet its interest and other obligations, and the only effect is that the public holds government currency instead of government bonds and the government is saved the trouble of making interest payments. If the public spends, this will increase the rate of total spending so that it will not be necessary for the government to borrow for this purpose; and if the rate of spending becomes too great, *then* is the time to tax to prevent inflation. The proceeds can then be used to pay interest and repay government debt. In every case Functional Finance provides a simple, quasi-automatic response.

But either this was not seen clearly or it was considered too shocking or too logical to be told to the public. Instead it was argued, for example by Alvin Hansen, that as long as there is a reasonable ratio between national income and debt, the interest payment on the national debt can easily come from taxes paid out of the increased national income created by the deficit financing.

This unnecessary "appeasement" opened the way to an extremely effective opposition to Functional Finance. Even men who have a clear understanding of the mechanism whereby government spending in times of depression can increase the national income by several times the amount laid out by the government, and who understand perfectly well that the national debt, when it is not owed to other nations, is not a burden on the nation in the same way as an individual's debt to other individuals is a burden on the individual, have come out strongly against "deficit spending."[2] It has been argued that "it would be impossible to devise a program better adapted to the systematic undermining of the private-enterprise system and the hastening of the final catastrophe than 'deficit spending.' "[3]

[2] An excellent example of this is the persuasive article by John T. Flynn in *Harper's Magazine* for July 1942.

[3] Flynn, *ibid.*

These objections are based on the recognition that although every dollar spent by the government may create several dollars of income in the course of the next year or two, the effects then disappear. From this it follows that if the national income is to be maintained at a high level the government has to keep up its contribution to spending for as long as private spending is insufficient by itself to provide full employment. This might mean an indefinite continuation of government support to spending (though not necessarily at an increasing rate); and if, as the "appeasement" formulation suggests, all this spending comes out of borrowing, the debt will keep on growing until it is no longer in a "reasonable" ratio to income.

This leads to the crux of the argument. If the interest on the debt must be raised out of taxes (again an assumption that is unchallenged by the "appeasement" formulation) it will in time constitute an important fraction of the national income. The very high income tax necessary to collect this amount of money and pay it to the holders of government bonds will discourage risky private investment, by so reducing the net return on it that the investor is not compensated for the risk of losing his capital. This will make it necessary for the government to undertake still more deficit financing to keep up the level of income and employment. Still heavier taxation will then be necessary to pay the interest on the growing debt—until the burden of taxation is so crushing that private investment becomes unprofitable, and the private enterprise economy collapses. Private firms and corporations will all be bankrupted by the taxes, and the government will have to take over all industry.

This argument is not new. The identical calamities, although they are now receiving much more attention than usual, were promised when the first income tax law of one penny in the pound was proposed. All this only makes it more important to evaluate the significance of the argument.

III

There are four major errors in the argument against deficit spending, four reasons why its apparent conclusiveness is only illusory.

In the first place, the same high income tax that reduces the return on the investment is deductible for the loss that is incurred if the investment turns out a failure. As a result of this the *net* return on the risk of loss is unaffected by the income tax rate, no matter how high that may be. Consider an investor in the $50,000-a-year income class who has accumulated $10,000 to invest. At 6 per cent this would yield

$600, but after paying income tax on this addition to his income at 60 cents in the dollar he would have only $240 left. It is argued, therefore, that he would not invest because this is insufficient compensation for the risk of losing $10,000. This argument forgets that if the $10,000 is all lost, the net loss to the investor, after he has deducted his income tax allowance, will be only $4,000, and the rate of return on the amount he actually risks is still exactly 6 per cent; $240 is 6 per cent of $4,000. The effect of the income tax is to make the rich man act as a kind of agent working for society on commission. He receives only a part of the return on the investment, but he loses only a part of the money that is invested. Any investment that was worth undertaking in the absence of the income tax is still worth undertaking.

Of course, this correction of the argument is strictly true only where 100 per cent of the loss is deductible from taxable income, where relief from taxation occurs at the same rate as the tax on returns. There is a good case against certain limitations on permissible deduction from the income tax base for losses incurred, but that is another story. Something of the argument remains, too, if the loss would put the taxpayer into a lower income tax bracket, where the rebate (and the tax) is at a lower rate. There would then be some reduction in the net return as compared with the potential net loss. But this would apply only to such investments as are large enough to threaten to impoverish the investor if they fail. It was for the express purpose of dealing with this problem that the corporation was devised, making it possible for many individuals to combine and undertake risky enterprises without any one person having to risk all his fortune on one venture. But quite apart from corporate investment, this problem would be met almost entirely if the maximum rate of income tax were reached at a relatively low level, say at $25,000 a year (low, that is, from the point of view of the rich men who are the supposed source of risk capital). Even if all income in excess of $25,000 were taxed at 90 per cent there would be no discouragement in the investment of any part of income over this level. True, the net return, after payment of tax, would be only one-tenth of the nominal interest payments, but the amount risked by the investors would also be only ten per cent of the actual capital invested, and therefore the net return on the capital actually risked by the investor would be unaffected.

In the second place, this argument against deficit spending in time of depression would be indefensible even if the harm done by debt were as great as has been suggested. It must be remembered that spending by the government increases the *real* national income of goods and

services by several times the amount spent by the government, and that the burden is measured not by the amount of the interest payments but only by the inconveniences involved in the process of transferring the money from the taxpayers to the bondholders. Therefore objecting to deficit spending is like arguing that if you are offered a job when out of work on the condition that you promise to pay your wife interest on a part of the money earned (or that your wife pay it to you) it would be wiser to continue to be unemployed, because in time you will be owing your wife a great deal of money (or she will be owing it to you), and this might cause matrimonial difficulties in the future. Even if the interest payments were really lost to society, instead of being merely transferred within the society, they would come to much less than the loss through permitting unemployment to continue. That loss would be several times as great as the *capital* on which these interest payments have to be made.

In the third place, there is no good reason for supposing that the government would have to raise all the interest on the national debt by current taxes. We have seen that Functional Finance permits taxation only when the *direct* effect of the tax is in the social interest, as when it prevents excessive spending or excessive investment which would bring about inflation. If taxes imposed to prevent inflation do not result in sufficient proceeds, the interest on the debt can be met by borrowing or printing the money. There is no risk of inflation from this, because if there were such a risk a greater amount would have to be collected in taxes.

This means that the absolute size of the national debt does not matter at all, and that however large the interest payments that have to be made, these do not constitute any burden upon society as a whole. A completely fantastic exaggeration may illustrate the point. Suppose the national debt reaches the stupendous total of ten thousand billion dollars (that is, ten trillion, $10,000,000,000,000), so that the interest on it is 300 billion a year. Suppose the real national income of goods and services which can be produced by the economy when fully employed is 150 billion. The interest alone, therefore, comes to twice the real national income. There is no doubt that a debt of this size would be called "unreasonable." But even in this fantastic case the payment of the interest constitutes no burden on society. Although the real income is only 150 billion dollars the money income is 450 billion—150 billion in income from the production of goods and services and 300 billion in income from ownership of the government bonds which constitute the national debt. Of this money income of 450 billion, 300 billion has to be collected in taxes by the government for interest payments (if 10 trillion is the legal debt limit), but after payment of these taxes there remains 150 billion dollars in the hands of the taxpayers, and this is enough to pay for all the goods and services that the economy can produce. Indeed it would do the public no good to have any more money left after tax payments, because if it spent more than 150 billion dollars it would merely be raising the prices of the goods bought. It would not be able to obtain more goods to consume than the country is able to produce.

Of course this illustration must not be taken to imply that a debt of this size is at all likely to come about as a result of the application of Functional Finance. As will be shown below, there is a natural tendency for the national debt to stop growing long before it comes anywhere near the astronomical figures that we have been playing with.

The unfounded assumption that current interest on the debt must be collected in taxes springs from the idea that the debt must be kept in a "reasonable" or "manageable" ratio to income (whatever that may be). If this restriction is accepted, *borrowing* to pay the interest is eliminated as soon as the limit of "reasonableness" is reached, and if we further rule out, as an indecent thought, the possibility of *printing* the money, there remains only the possibility of raising the interest payments by taxes. Fortunately there is no need to assume these limitations so long as Functional Finance is on guard against inflation, for it is the fear of inflation which is the only rational basis for suspicion of the printing of money.

Finally, there is no reason for assuming that, as a result of the continued application of Functional Finance to maintain full employment, the government must always be borrowing more money and increasing the national debt. There are a number of reasons for this.

First, full employment *can* be maintained by printing the money needed for it, and this does not increase the debt at all. It is probably advisable, however, to allow debt and money to increase together in a certain balance, as long as one or the other has to increase.

Second, since one of the greatest deterrents to private investment is the fear that the depression will come before the investment has paid for itself, the guarantee of permanent full employment will make private investment much more attractive, once investors have got over their suspicions of the new procedure. The greater private investment will diminish the need for deficit spending.

Third, as the national debt increases, and with it the sum of private wealth, there will be an increasing yield from taxes on higher incomes and inheritances, even if the tax rates are unchanged. These higher tax payments do not represent reductions of spending by the taxpayers. Therefore the government does not have to use these proceeds to maintain the requisite rate of spending, and it can devote them to paying the interest on the national debt.

Fourth, as the national debt increases it acts as a self-equilibrating force, gradually diminishing the further need for its growth and finally reaching an equilibrium level where its tendency to grow comes completely to an end. The greater the national debt the greater is the quantity of private wealth. The reason for this is simply that for every dollar of debt owed by the government there is a private creditor who owns the government obligations (possibly through a corporation in which he has shares), and who regards these obligations as part of his private fortune. The greater the private fortunes the less is the incentive to add to them by saving out of current income. As current saving is thus discouraged by the great accumulation of past savings, spending out of current income increases (since spending is the only alternative to saving income). This increase in private spending makes it less necessary for the government to undertake deficit financing to keep total spending at the level which provides full employment. When the government debt has become so great that private spending is enough to provide the total spending needed for full employment, there is no need for any deficit financing by the government, the budget is balanced and the national debt automatically stops growing. The size of this equilibrium level of debt depends on many things. It can only be guessed at, and in the very roughest manner. My guess is that it is between 100 and 300 billion dollars. Since the level is a result and not a principle of Functional Finance the latitude of such a guess does not matter; it is not needed for the application of the laws of Functional Finance.

Fifth, if for any reason the government does not wish to see private property grow too much (whether in the form of government bonds or otherwise) it can check this by taxing the rich instead of borrowing from them, in its program of financing government spending to maintain full employment. The rich will not reduce their spending significantly, and thus the effects on the economy, apart from the smaller debt, will be the same as if the money had been borrowed from them. By this means the debt can be reduced to any desired level and kept there.

The answers to the argument against deficit spending may thus be summarized as follows:

The national debt does not have to keep on increasing;

Even if the national debt does grow, the interest on it does not have to be raised out of current taxes;

Even if the interest on the debt is raised out of current taxes, these taxes constitute only the interest on only a fraction of the benefit enjoyed from the government spending, and are not lost to the nation but are merely transferred from taxpayers to bondholders;

High income taxes need not discourage investment, because appropriate deductions for losses can diminish the capital actually risked by the investor in the same proportion as his net income from the investment is reduced.

IV

If the propositions of Functional Finance were put forward without fear of appearing too logical, criticisms like those discussed above would not be as popular as they now are, and it would not be necessary to defend Functional Finance from its friends. An especially embarrassing task arises from the claim that Functional Finance (or deficit financing, as it is frequently but unsatisfactorily called) is primarily a defense of private enterprise. In the attempt to gain popularity for Functional Finance, it has been given other names and declared to be essentially directed toward saving private enterprise. I myself have sinned similarly in previous writings in identifying it with democracy,[4] thus joining the army of salesmen who wrap up their wares in the flag and tie anything they have to sell to victory or morale.

Functional Finance is not especially related to democracy or to private enterprise. It is applicable to a communist society just as well as to a fascist society or a democratic society. It is applicable to any society in which money is used as an important element in the economic mechanism. It consists of the simple principle of giving up our preconceptions of what is proper or sound or traditional, of what "is done," and instead considering the *functions* performed in the economy by government taxing and spending and borrowing and lending. It means using these instruments simply as instruments, and not as magic charms that will cause mysterious hurt if they are manipulated by the wrong people or without due reverence for tradition. Like any other mechanism, Functional Finance will work no matter who pulls the levers. Its relationship to democracy and free enterprise consists simply in the fact that if the people who believe in these things will not use Functional Finance, they will stand no chance in the long run against others who will.

[4] In "Total Democracy and Full Employment," *Social Change* (May 1941).