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Effective Demand in the Short and in the Long Run

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1.

When effective demand is created by one means or another, the beneficial effects on employment in general will show themselves fairly soon (although it may take some time until the demand seeps through the anterior stages of production and further through income and consumption). After a time, however, there appear effects which go in the opposite direction.

1.1.

When the demand is created by investment in productive equipment and plant, then new capacity will begin to become operative (unless the equipment merely replaces another one of equally large capacity which is at the same time withdrawn). By that time, or soon after, the stimulating effects of the outlay on the equipment will have been largely exhausted. The new capacity will absorb effective demand, which it will withdraw from other equipment. While the overall level of effective demand will be the same as it was before the investment took place, it will be spread over a larger total capacity (and presumably the profits will also be so spread) thus the rate of utilisation will be lower and further investment will be accordingly discouraged.

This outcome will depend crucially on the relative amounts of the spending on the investment and the capacity created, in other words on the capital-capacity ratio. For most industrial investment this ratio is

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probably lower than unity. Moreover, the equipment will usually last for a number of years so that a net depressing effect is bound to appear sooner or later.

1.2.

The backlash against an additional effective demand will materialise also if this is generated not by investment but by deficit spending of the government, although the mechanism will be different here. To make it evident we shall assume permanent deficit spending as it would be appropriate in an economy with a continuing tendency to underemployment. Such permanent deficit spending has been envisaged by Kalecki in the last war as a possible or perhaps probable necessity for maintaining full employment in the post-war economy, and he proposed to finance the interest payments on the debt by a capital tax or by an income tax so designed that it would not discourage investment. Thinking on very similar lines Domar produced a model with exponentially rising national income and deficit spending in constant proportion to it, which showed that the public debt as a ratio of national income converged to a constant value in the course of time. On Kalecki's assumption the taxpayers could be supposed to have the same propensity to save as the 'rentiers' who received the interest on the public debt so that no effect on demand would result from the transfer of income from taxpayer to rentier. Domar seems to have made the same assumption implicitly in his model. While Kalecki's assumption was a policy recommendation we are faced today with actual deficit spending over long periods in some countries where his recommendation with regard to taxation seems hardly to be followed. We have therefore to ask ourselves how Domar's model would have to be modified if we assume that the receivers of the interest have a high propensity to save while the tax payers on the contrary save only little. In this case it will be necessary, if adverse effects on demand and employment are to be avoided to have additional deficit spending so as to offset the excess saving of the rentiers.

I follow Domar in assuming that the yearly deficit spending is a constant proportion β of the national income Y. It may be imagined that

this is the spending necessary to ensure that the employment and capacity use remain constant and the national income increases at a constant rate g. The propensity to save of the rentiers is larger than that of the taxpayers by α percentage points. It is assumed that the price level is stable. We have then the following difference equation for the public debt F:[1]

$Y_t = Y_0(1+g)^t$: National income excl. of interest on publ. debt

F: public debt
β: Savings gap which has to be compensated by deficit spending, as per cent of national income
i : interest
α: differential saving propensity of rentiers as compared with taxpayers

Price level is assumed to be stable.

$$\Delta F_t = F_{t+1} - F_t = \beta Y_t + \alpha i F_t$$

Solution to the homogenous equation:[2] $F_t = F_0 \quad \varepsilon^t$.

$$\varepsilon^{t+1} - \varepsilon^t = \alpha i \varepsilon^t$$

$$\varepsilon = 1 + \alpha i$$

$$F_{t+1} - (1+\alpha i)F_t = Y_0 \beta (1+g)^t.$$

Using shift operator E we obtain a particular solution:[3]

$$F_t = \frac{1}{E-(1+\alpha i)} Y_0 \beta (1+g)^t.$$

$$F_t = \left\{ \frac{1}{[1+g-(1+i\alpha)]} \right\} \cdot Y_0 \beta (1+g)^t$$

$$F_t = \frac{\beta}{(g - i\alpha) \cdot (1+g)^t Y_0}$$

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[1] Editor's note: in the original typescript, only on this occurrence, public debt was denoted by D. It has been changed into F to grant consistency with the rest of the paper.
[2] Editor's note: in the original manuscript in German: Lösung der homogenen Gleichung.
[3] Editor's note: the original manuscript incorrectly reported in the following equation "E" instead of 1. We thank Sergueri Kaniovsky and Michael Wüger for pointing out Steindl's original error.

The complete solution is thus:

$$F_t = F_0 \cdot (1 + i\alpha)^t + \left[\frac{\beta}{(g - i\alpha)}\right] \cdot (1 + g)^t Y_0$$

and the debt in relation to the national income is:ù

$$\frac{F_t}{Y_t} = \frac{F_0}{Y_0} \cdot \left[\frac{(1 + i\alpha)}{(1 + g)}\right]^t + \frac{\beta}{(g - i\alpha)}$$

It appears that under the new assumptions there may, but there need not be, a convergence of the debt/income ratio. It depends on whether $g > i\alpha$ or $g < i\alpha$. Thus if the interest and differential saving propensity are high enough in relation to the growth rate of the national income (which depends on growth of productivity) then the debt will steadily rise in proportion to income (it should be mentioned that even in the opposite case the convergence will probably be very slow so that the stable solution is probably of little practical relevance). This implies that the 'rentiers' income will rise in relation to the other (the 'productive') incomes and their consumption will rise in relation to the total consumption.

It will be noted that I have treated the public debt problem as a question of maintaining and stabilising effective demand rather than as a question of taxation and of balancing the budget. This is the proper approach from a Keynesian point of view: taxes serve to limit effective demand to the required level and not necessarily to balance the budget. As is well known, a balanced budget may be restrictive or expansive in terms of effective demand as the case may be – it depends entirely on the savings propensities of the tax payers on the one hand and the receivers of the public spending on the other.

In the preceding model the interest on the public debt was paid out of taxes introduced expressly for that purpose. It would not require much change if it were instead assumed that the interest is paid out of a reduction in spending, say for example on social services. We have, however, also to consider the case where interest is paid out of new borrowing. This, in fact, is possible only if there are still unused resources unless there is to be a demand inflation (rising prices and profit margins) because the rentiers will spend a part of their income, which

will absorb resources. That implies that this type of finance will sooner or later lead to full employment, at which point we come back to the original model as room has to be made in the national budget reckoning for the consumption of the new rentiers and that will happen by appropriate taxes or a reduction of spending. In the intermediate period there will also be an increase in rentiers' share of income and consumption, although less drastic than in the above tax model because the interest will be an additional income and not, as before, a replacement of other incomes.

1.3.

Another source of effective demand is foreign investment (an export surplus), which is a very good way of creating demand especially in manufacturing. But the foreign assets acquired in consequence ordinarily yield a return of interest, dividends or profits, a rentiers' income again. The case offers thus to some extent a parallel to the deficit spending. Here also we can see that in the course of time a whole class of rentiers tends to arise (think of late Victorian or Edwardian England) accounting for a growing portion of the national income and depressing the propensity to consume of the nation as a whole. To prevent the unlimited accumulation of interest income the country would have to operate an import surplus, which would again imply a negative effect on demand.

Of course, from the ordinary businessman's point of view there is a world of difference between the two cases: here, there are no taxes and budgetary problems involved, there is an investment which pays for itself, and the country as a whole is getting accountably richer. It is a case of sound business principles, but the ultimate logic of a country with an inveterate structural surplus is to buy up the whole rest of the world and earn the greater part of her income from it. On the way to this ultimate aim the country will probably run into depressions.

Naturally an import surplus will represent just the opposite of the above case. It will provide contraction in the short run which, if it is to be stopped, will have to be countered by an export surplus which will increase effective demand.

1.4.

Another parallel case is consumer credit and mortgages. In the aftermath of its expansion of consumption there remains the burden of service of the debt, which reduces disposable income.

1.5.

Another case concerns a rise in asset prices, for example land, which is created by additional spending of the developing agents and speculators. The speculative gains may be, even if only in part, spent on consumption, but later on the homeowners will have to pay increased rents which diminishes their spending power.

While all the above methods of increasing effective demand lead to a backlash, this is not true for the method of changing the propensity to consume by changing the distribution of income in favour of low savers. If this is at the expense of profits the strategy may not be successful in so far as it could affect investment. But there are other groups of high savers which might be targeted, such as managers and professional people, and above all, the rentiers. A cheap money policy is primarily indicated if one wants to exert a lasting influence on effective demand.

The negative aftereffects implied by budget deficits, export surplus or consumer credit will take quite a time until they work up to the point at which they call urgently for counteraction. It is therefore not implied here that such ways of creating effective demand can or should not be used. After a time, however, their usefulness will be exhausted and the situation will have to be reconsidered.

2.

In the course of the post-war decades in all industrial countries the financial sector has gained in importance in relation to the industrial

sector.[45] The dynamics, the accumulation of wealth, power and prestige of finance has far outstripped the general pace of advance. Industry in the sense of material production could not keep pace with finance, because its share in the national product declined, but more importantly perhaps, because the industrial firms have more and more turned to financial activities, they have invested more and more of their gains in financial assets or real estate rather than in equipment and factories. This shrinking of the main traditional market of the banks made it necessary for them to find new fields for their activity and new customers for their credits.

The new fields were first of all abroad. Banking was internationalised to a hitherto unknown extent. Taking the industrial world as a whole, 'abroad' meant of course the third world. The fortuitous event of the oil crisis made it easy to expand in this field. With the Mexican crisis of 1982 this era found an end. It was followed by the high time of the merger movement, leveraged buyouts and the stock exchange boom. The buyouts meant that credits and bonds replaced a tremendous amount of share capital. The paradoxical situation was that an industry that did not know what to do with its money, which to quite a large extent ceased to be a customer for the banks because it had a surfeit of funds for real investment, now got very highly indebted exclusively in connection with its financial transactions. A related field was the finance of real estate. Land prices rose tremendously in the course of the 70s and 80s – this movement has come to an end just recently; witness the near bankruptcy of Mr. Trump. The increase in the price of land had to be financed and this offered another field for the banks. Overlapping with the developments mentioned occurred a large increase in borrowing by consumers, both for mortgages and for durable consumer goods. This proved to be the mainstay of the large and extended boom after 1982.

It may be surmised that the appearance of these new opportunities was not merely a fortunate coincidence but that the banks themselves had

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[4] BHADURI A. and STEINDL J. (1985), "The Rise of Monetarism as a Social Doctrine", in Arestis P. and Skouras T. (eds.), *Post-Keynesian Economic Theory: a Challenge to Neoclassical Economics*, Armonk, New York: M. E. Sharpe.

[5] Editor's note: the original typescript reports here the citation "(Bhaduri-Steindl 1986)", which has been corrected as shown in the previous footnote.

a hand in it, whether by their influence on economic policy or by their manipulation of the modern propaganda machine, the media which contributes not a little to the growth of fashions, movements and trends in our society and economy. Deregulation, tax provisions for consumer credit, tax treatment of capital gains played their role, moreover, the banks themselves created specialised institutions (investment banks), which were a decisive factor in facilitating the scope, speed and growth of the leveraged buyout movement.

Capitalism today is not exactly what it used to be. The classics used to see it as a production machine, which produced a surplus from which the owners paid the interest to the banks that financed it. Today the greater part of the interest does not come from that source but from governments, developing countries, and from consumers and homeowners directly. If the shrinking of the surplus producing machine in relation to the financial apparatus is going to continue we may expect a continuation of the trend to more direct extraction of interest. Does it make a difference? Can it be a permanent feature of the system or are there going to be difficulties arising from it?

There is evidently a striking analogy between this problem and the problems of a permanent budget deficit considered further above. In both cases there is a continuing accumulation of debt that is not 'covered' by assets in the productive sector. And in both cases there is an extraction of interest payments which are not paid out of the surplus and which tend automatically to lead to further accumulation of debt. In fact, the budget problem is only one part or one aspect or example of the more general problem, which is presumably deeper in so far as it refers to an institutional development in our society.

Could we then imagine that the earlier model of the public debt might be reinterpreted so as to represent the generalisation just indicated? I shall try just to sketch such a reinterpretation. We have to imagine that the economy is divided in two parts, the surplus producing sector, briefly productive sector, and a financial sector. The total saving of the economy (which is gross of consumer credit and gross of realised capital gains) is only partly used in the productive sector; the excess over that amount is employed by the financial system (banks, capital markets etc.) in the

various outlets mentioned before. The lending of this excess saving, expressed as a proportion of the national income of the productive sector Y^+ corresponds to the β of the former model. An amount βY^+ has to be spent 'extra,' i.e. outside the surplus producing system. This implies a corresponding accumulation of debt on which interest has to be paid. This interest comes from various sources – from government, from abroad, from concerns who have bought out others, from consumers. There arises again the question of a different propensity to save of interest payers and receivers. That means that there will be either a depressing influence on effective demand or else the necessity of further spending and borrowing 'extra.'

Thus the problem of budgetary deficit spending turns out to be only one case of several ways of compensating for the lack of investment opportunities in the productive sector. In all cases there will be an increase in the share of the interest receivers' income and consumption in the total. Since interest is regarded as a parasitic income this may create social tensions (it may be said that interest nowadays to a large extent accrues to old age pensioners. This is due to institutions which are not a logical necessity and which served very well to enlarge the base of support for the monetaristic policy of high interest rates). Resentment against paying interest may develop in much the same way as the resentment against paying taxes which heralded the neoclassical revolution and which was nourished by the experience of a long-term trend of increasing burden of taxation. Of even greater importance is the instability of this credit system: part of the debt is based on the expectation of a rise in asset prices or of incomes which, as we have seen recently in the US in case of land values, may easily rebound. In fact the increase in asset prices will be called in question or actually stop and reverse when the real growth of the economy subsides. In consequence the financial system becomes more vulnerable as the relative volume of debt increases.