

## CAPITAL GOODS AND THE RESTORATION OF PURCHASING POWER

ALVIN H. HANSEN

Professor of Economics, University of Minnesota

**I**T is by now, I think, generally agreed that the business cycle is characterized mainly by fluctuations in the output of capital goods. The increase of purchasing power, incident to the revival of business, normally comes about through a flow of funds into the capital goods industries and through the reëmployment of workers attached to these fields. The contraction of purchasing power incident to a depression arises chiefly from the failure of funds, available for investment, to find an outlet in the production of capital goods.

A boom consists essentially in an excessive activity in the capital-producing industries, usually artificially stimulated by an overdose of easy credit. And the boom, as Juglar pointed out long years ago, is the basic cause of the depression.

Sound and healthy revival therefore awaits a sufficient amount of depreciation and obsolescence of capital goods to restore rentability in the capital market. The unhealthy conditions created by a boom can be cured only by a lapse of time—time sufficient to restore through the process of depreciation and obsolescence the normal replacement of fixed capital. History and theory both support the thesis that there is a necessary relationship between the intensity of the boom and the time required to clear the ground for a new industrial advance. The time element may be prolonged if the conditions obtaining in the money and capital markets are unfavorable due to a lack of confidence in the banking structure. The lapse of time required may also be prolonged by the slowing down in the rate of technological developments, by the failure of new products to emerge on the horizon, by the lack of new inventions and new industries to open up fresh fields for profitable investment.

Much is to be said for the view that the sanest and most sensible way of meeting a depression is to wait for the normal processes of revival. This in effect means to wait until depreciation and obsolescence have cleared away the excess supply of capital goods and have opened up again the way for renewed activities in the capital-producing industries; to wait until new products, the discovery of new resources and the development of new techniques have made possible the rise of new industries and the expansion of established ones so that a new outlet can be found for profitable capital investment.

In large measure, this is the policy that has been pursued in Great Britain during the current depression. It is of course all a matter of degree, but as compared with our own attitude, Britain has awaited with astonishing political patience and social tranquillity the working out of the normal processes of revival. In contrast, we in the United States have exhibited a degree of public nervousness and impatience which has necessitated wholesale experiments with forced methods of recovery. This contrast is in part to be explained by a difference in the temperament of the two peoples—the excitability of the American in contrast to the steadiness of the English. It is to be explained in large part, however, by the presence in Great Britain of two fundamental institutions which form important bulwarks against extreme deflation of purchasing power. I refer to the British system of banking and to the system of unemployment insurance. The former has given a security to the financial structure which prevented widespread hoarding of funds and placed therefore a measure of restraint upon the withholding of idle resources from the investment market. The second enabled the mass of the people to endure the depression without a too serious encroachment upon an established standard of living. This twofold security, of the financial structure and of the standard of living, enabled the government to proceed cautiously with recovery programs and prevented it from being drawn into this or that experiment under the pressure of unbearable economic conditions.

Much may be said for the thesis that, in the present state of knowledge of business cycle therapeutics, it is safer to prepare calmly and deliberately for the recurrence of business depression—doing meanwhile what we can to check the ex-

cesses of the boom; and when the expected business stagnation sets in, to wait until, through the lapse of time, new outlets are developed for the capital goods industries, easing meanwhile the strain of the depression by means of the two basic guarantees of security and stability to which I have referred.

Britain's system of unemployment insurance has not only alleviated distress; it has also provided a resisting wall to hold back, in a measure, the receding tide of deflation. If employed wage earners are assured some reasonable minimum of subsistence, even in a period of unemployment, they will be less inclined to hoard current incomes from fear of future dismissal. There results a more active functioning, a freer flow into the commodity markets of the available purchasing power. Moreover, if a minimum of subsistence is maintained for the wage-earning class, there will not result the crowding together, the congested housing, forced by desperate circumstances, which intensifies to an artificial degree the excess of facilities created by the preceding constructional boom. If the total national income falls to very low levels, a degree of overcapacity develops in the whole fixed capital field, that is essentially spurious since it grows with the vicious spiral of deflation.

The development of a sound banking structure and an efficient system of unemployment insurance would be long forward steps for this country. This is the minimum program for grappling with the problems of business depression. So far, present knowledge can, I think, safely guide us. It may be possible to go farther, as I shall indicate, but the difficulties increase.

There is not much that we can do to hasten the recovery of the instrumental trades or to restore private investment in fixed capital once the depression is upon us. Time alone can supply the fundamental cure for the overdevelopment of fixed capital. Yet, under certain conditions, it may be possible to check the severity of the decline and maintain a moderate level of purchasing power, not only by the measures just indicated, but also by a program of governmental capital expenditures.

The chief difficulty with a public works program is the limitation imposed upon this device by the international gold standard. Unless all countries, operating on a fixed exchange basis, simultaneously engage in capital expenditures, the pro-

gram has severe limitations. If one country alone engages in gigantic capital expenditures and succeeds thereby in raising purchasing power, incomes, and the internal price level a disequilibrium is created in the international price structure. No country can raise its price level above the world price level (except within very severe limits) so long as it remains on a fixed exchange basis in relation to the outside world. Public works can therefore never succeed in checking a depression unless the program is undertaken on an international scale, at least by the major countries operating on an international monetary system. Countries, to be sure, with national currencies, with flexible exchange rates, may indeed freely utilize this device. But a flexible exchange system creates other difficulties which we cannot here consider.

There are those who argue that in the present crisis there is no likelihood of any large expansion of the capital goods industries and therefore there are no good prospects of an adequate restoration of purchasing power. It is argued that there still exists a vast amount of excess capacity, and that therefore the prospects for profitable investment of new capital are not yet in sight. This position, I think, is quite untenable. There can be no question that the four years of the depression have made large inroads on the existing capital equipment, and that a large field for replacement through depreciation and obsolescence is in prospect. Moreover, at the bottom of any depression there is always, as indicated above, a spurious element in the visible overcapacity. Once replacement of excess capital sets in, once some measure of new investment is started, once the volume of purchasing power begins to rise, a need for new capital not formerly visible develops. With a moderate rise in the index of business activity it is likely that new capital expenditures must be made by the transportation system, by the iron and steel industry, and by the industries supplying basic instruments of production. Moreover, a general recovery of income will diminish the overcrowding and congestion in housing facilities and will open up new possibilities in this field. In addition new products and new industries are in prospect. Heating and air-conditioning equipment, modernization of residences, modernization of the railroad passenger service, the development of power plants and the like, indicate certain

directions in which the new capital investment is likely to move. Most important, however, is the undoubted fact that in every period of revival the directions which new investment will take are never clearly visible at the moment. The possibilities for expansion are hidden in the dynamics of the situation and emerge only as the revival itself develops and cumulates.

A large field, moreover, for capital expenditures can be found in agriculture. Farmers have for some years allowed their equipment to deteriorate. Farm buildings are out of repair and farm houses are for the most part hopelessly obsolete. An enlarged purchasing power on the part of agriculture offers a considerable outlet for funds into fixed capital.

The development of capital expenditures of this character following from the A. A. A. is one of its important repercussions which must not be overlooked. I do not mean, however, to imply that the A. A. A. is in any sense a sound permanent solution of the agricultural problem. In the very nature of the case it cannot be a permanent solution. It offers at best only a breathing spell made politically necessary by the desperate agricultural situation. No country can permanently indemnify a major industry against technological and structural changes. It can, to be sure, do so for a time, but the accumulation of such burdens in a highly dynamic world, with changes in techniques and demand that make fundamental structural adjustments unavoidable, would in a relatively few years reach such gigantic proportions as to become quite intolerable. But the necessary adjustments can be tempered by measures that do not involve extreme regimentation.

The restoration of the capital goods industries would bring substantial relief for agriculture. The vast unemployment occasioned mainly by the collapse of these industries, furnishes a leading explanation of the serious decline in the market for agricultural products. Agricultural prices rise and fall with industrial employment and urban incomes. Few economic relationships are better attested by recent history, especially that of the last fifteen years. Normal activity in the capital producing industries may be expected to restore in large measure agricultural purchasing power. And increased agricultural purchasing power, in turn, will tend to reinforce and sustain the capital goods industries.

I have indicated that there are various fields which offer prospects for the expansion of capital investment. But there are serious obstacles to be overcome, notably in the N. R. A., which I regard as essentially deflationary in tendency, and in the Security Act with its rigorous restraints upon responsible issues. It is by no means certain that the incipient capital expansion can break through these difficulties even though the technological conditions are ripe.

On the other hand, once the expansion is well under way, it should be allowed to develop without the support of artificial stimuli which must sooner or later be withdrawn. Undue expansion, bolstered up by credit policies that cannot endure, is the curse of every boom.

Moreover, we must consider the reasonable limits of activity in the capital goods industries. We must give serious thought to the problem as to whether or not in view of long-run requirements, these industries are not overexpanded in the United States.

It appears that here also, as in agriculture and in coal mining, a structural adjustment is necessary. In the first place, the capital goods industries have been built up to the peak of boom periods. Unless we are willing again deliberately to foster a new collapse, through an artificial constructional boom, we cannot tolerate a re-expansion of the capital goods industries to the inflated boom level. If we are to moderate the extreme fluctuations of business, it may become necessary to prevent the re-employment of all the workers attached to these industries in 1928 and 1929. Greater stability implies, unless new adjustments are made, curtailment of the capital goods industries. Indeed, such curtailment is in a sense merely the counterpart of deferring public works to depression periods. In the recent boom, public works constituted about one-third of our constructional activities. If public works are to be used as a leveling device, a lower level of employment in the capital goods industries than has previously been reached in boom periods, is implied.

To be sure, the transfer of a considerable volume of public works from good times to bad would not, in a perfectly mobile and flexible economic structure, necessitate a decline of the capital goods industries. If we could assume an automatic

adjustment of the interest rate, a new equilibrium could be reached between saving and investment. The pressure of funds released by the transfer of public works would then find an outlet in new private investment made possible by the lower interest rate. But the interest rate is often sticky, and investment in consequence is sluggish. Such periods as that of 1873-1896 indicate that as the interest rate falls under the pressure of surplus funds, the outlet of such funds into real investment is slowed down, creating relative business stagnation. Funds find any easy outlet into investment when the prospective rate of profit, and therefore the interest rate, is high. When the rate is pushed down toward that minimum envisaged by the classical economists, the outflow into investment in capital goods becomes sluggish and difficult. When the volume of savings outruns technological developments the prospective rate of profit is low, and investment in new capital falls below the required level.

Experience thus warns that it is not possible to make the easy assumption that the investment opportunities, withdrawn by the transfer of public works from prosperity to depression, will find ready substitutes in private capital outlets.

Moreover, we must note the fact that the capital goods industries have been predicated in the past upon a continuous growth of population. We are now in a transition stage. We are reaching a period of population stabilization. The whole new outfit of capital formerly needed by the added population—houses, factories and equipment for the new workers—is now no longer needed. A stable population needs only to replace its existing capital and to make such additions as technique requires.

In brief, if we aim to achieve more stable business conditions and if we are approaching population stabilization, it is evident that our capital goods industries may have to suffer a decline from the previous high levels attained in boom periods. If this analysis is correct a diversion of workers from these fields into other lines is indicated. It is probable, however, that this diversion may be minimized in considerable measure by an absolute expansion of private expenditures on durable consumer's goods.

Where can the employees of capital goods industries go?

If we look at the trend of occupational statistics, we shall discover that the movement is in the direction of the service fields. Employment in the production of material goods is, relatively, on the decline.<sup>1</sup> Moreover, there is a tendency in the direction of a larger proportion of community and governmental services.

It is clear that the problem is not nearly so simple as is suggested by the superficial dichotomy of commodities into producers' goods and consumers' goods. A decline of the former in relation to the latter does not of necessity imply a relative decline of the capital goods industries. For durable consumers' goods, both public and private, constitute a growing part of capital goods. The boom does not come to a close because of a lack of "spending", meaning thereby expenditures on consumers' goods; for one of the leading characteristics of all recent booms has been an excess of "spending", both public and private, on durable consumers' goods. Such excess of "spending" has indeed encroached on the volume of funds available for investment to such a degree that the rate of interest in the capital market has been pushed to levels which precluded profitable investment in producers' goods. At this point the output of producers' goods must, of necessity, decline. Thus, the depression may be precipitated, not by a failure of consumption, but by an excess of "spending" on durable consumption goods.

The problem does not run in such overly simplified terms as production and consumption, saving and spending. Rather it runs in terms of the adjustment of the production of all capital goods, both producers' goods and durable consumers' goods, whether public or private, to the funds seeking investment. A disequilibrium in these terms implies business instability.

To maintain some measure of equilibrium in these two terms may involve, in the future, control of both. The volume of funds seeking investment may be regulated to some extent by three methods: banking policy, taxation and wage policy. And the output of capital goods may be regulated in part by the expansion or contraction of public works.

Banking policy and public works are the traditional weapons

<sup>1</sup> It is possible, however, that of total consumers' goods, durable consumption goods (a part of the larger category of capital goods) are growing relatively to "liquid" consumption goods.



for the control of cyclical fluctuations, the former being more useful to check the boom and the latter to check depression. Public finance and wage policies, properly managed, might under certain conditions prove more efficacious. Like public works, finance policy is better adapted to check the depression. But even more than public works, its use is rigorously limited under the traditional gold standard; for under this system a country which permits an unbalanced budget is quickly brought to terms through the flight of capital and gold withdrawals. Wage policy was indeed the chief means of adjustment under the more automatic and flexible cost-price structure that prevailed in the nineteenth century. But under modern institutional arrangements it acts perversely, rising too slowly in boom times and falling little, if at all, in periods of depression.

For the secular stagnation of business, incident to the accumulation of surplus funds unable to find an adequate outlet in profitable investment, the traditional remedies are: (a) huge governmental capital expenditures designed to absorb the surplus funds (*vide* Keynes) and (b) taxation of surplus incomes or increase in wage rates (*vide* Hobson).

The wage program offers obstacles not always realized. In a period of secular business stagnation the profit margin is already too narrow; hence the sluggish rate of investment in new capital. An increase in wage rates would narrow this margin still more, thus destroying still more the prospect of profitable investment. But while a redistribution of income through wage increases if carried beyond the equilibrium point closes investment outlets, a redistribution of incomes through taxation is, in strict theory, a feasible method of securing equilibrium between saving and investment. There are, however, severe practical limits also to this method, since in an international economy, unduly high taxation is likely to cause a flight of capital and a deflation of purchasing power and prices.