

They overlap; none of them is quite completed and the last has only begun. The first, the production phase, was marked by expansion of manufacturing capacity, intensive development of industrial efficiency and cost reduction, culminating in mass production of standardized goods and services for national and world markets. The second, the distribution phase, was concerned with more efficient methods of marketing and merchandising, at first by extensive development of devices for mass distribution, and more recently by intensive appeal to varied and changing individual consumer tastes. Finally we have come to what may be called the absorption stage, in which the essential and still unsolved problem that confronts future business progress is to expand the absorptive capacity of the consumer market, not merely by lowering prices through cuts in production and distribution costs, or by reaching more consumers through extensive or intensive sales efforts, but by discovering means to increase the total spending power and spending disposition of the mass of consumers who must be counted on to absorb the bulk of the goods and services produced and offered for sale by modern business. Within a century the emphasis has thus shifted from the problem of manufacturing goods to that of manufacturing customers, and this problem will become of increasing moment as the rate of growth of our population continues to decline and as our technological advance continues.

This is mainly a mechanical problem, involving control of the uses of purchasing power as between consumption and investment. It has its important psychological and ethical aspects, in some of which I am greatly interested, but I am not concerned with them here. In fact, the tendency to treat the problem as a question of social justice or of equity in the distribution of wealth has done more to confuse the issue and retard progress toward its solution than almost anything else. It does not matter who has the money or how much, but what he does with it; the uses of money have become impressed with a public interest. We are likely to make more headway if we forget the grievances of the man in the street, concentrate attention on those of employer and business man, and try to make him understand that the essential issue in the question of continuous consumption is one of insuring the stability and profitableness of business, of making the industrial mechanism work smoothly and successfully. The only alternative is to scrap the whole capitalistic contraption and construct

something new along lines of state socialism, centralized national planning and control of production and investment, which I do not think is necessary or desirable.

I do not intend here to criticize the planning concept, but I think it can be shown that deep beneath the surface of it, in almost perfect disguise, you will find the scarcity concept of value. Fundamentally it is designed to restore and stabilize a deficit economy, by curtailment of production and systematic sabotage of productive power. It has developed in and apparently fits perfectly a situation in which capital facilities are inadequate and consumption needs to be curtailed for the sake of capital accumulation, as in Russia. There can be no reason for applying it to a surplus economy other than the purpose of maintaining the value of existing savings and capital investment, prudent or not.

This is the nigger in the woodpile of every proposal for national planning which implies production control by governmental supervision, or by revision of anti-trust laws to permit price fixing. Even where the intentions of its advocates are ingenious—and in some cases they are—I am sure that the purpose is impossible. In every advanced industrial community, in which there have been accumulated capital facilities of production sufficient to provide a higher standard of living than the population actually enjoys or a scale of consumption larger than it absorbs, almost all additional savings and surplus profits and part of the excessive past savings are perforce confiscated or dissipated in consumption by the automatic processes of price competition and periodic boom and depression. There is a law of degradation of capital in economics comparable to Carnot's second law of thermodynamics in physics, and it lies behind the modern business cycle as much as it does behind all periodic physical phenomena. It all comes down to the fact that when an economic organization has passed out of the scarcity stage and into the surplus stage, consumption is compulsory and inescapable.

In a paper at the last annual meeting of the American Society of Mechanical Engineers I tried to explain, somewhat superficially, certain aspects of the process which are sufficiently obvious, such as the periodic expansion of consumer purchasing power by investment of savings, surplus profits and pyramided bank credit in the construction of private capital facilities or in production for export, and the writing off of such investment or the recording of its dis-

sipation in subsequent depression when no further increase of consumer purchasing power is forthcoming to support the new productive capacity which it created.

Since then, further statistical studies by the Federal Reserve Bank of New York in connection with corporation profits, and some studies of consumption upon which I have been engaged, throw further light on the process. As a result of them I think it can be shown that at no time since 1919 has there been any such thing as overproduction or underconsumption of manufactured goods as a whole, in the strictly statistical sense of a volume of surplus not currently absorbed at some price. Nearly all manufactured goods, and of course all services, have been currently consumed, whether or not the costs have been fully paid by consumers. The year-to-year changes in inventories of consumers' goods could not amount to more than 2 per cent of the total in any year, and the over- or underproduction of finished manufactures in relation to the current rate of consumption at no time exceeded 5 per cent in volume.

The fluctuations and cyclical movements of both industrial production and consumption during this period have been directly connected with changes in purchasing power in the consumer market; that is, with wage, salary and farm income, and in fact can be definitely forecast by the cumulative changes in such income over a twelve-month period. The purchasing power fluctuations themselves appear to arise from financial factors external to the productive operations of the consumer goods industries themselves, principally the accumulation and use of corporation surpluses and the changes in the volume of bank credit invested in production of capital facilities. Yet in spite of the fluctuations in volume of production and consumption during this period, which show that in fact total production has always been balanced with consumption, it is evident that there has been a continuous dissipation of capital because the value of the goods and services consumed—measured at prices which reflect a nominal profit—together with savings made and taxes paid by individuals, has consistently exceeded, by an average of about 18 per cent, all reliable estimates of the national income year in and year out.

In other words, all the goods and services produced have been consumed, but part of them have been given away, and their cost has come out of business surpluses and bank credit, and indirectly out of dissipation of savings of individual consumers themselves through

bank failures. The profits of those business concerns that have made any during this period have been derived from the losses of the rest (and of bank depositors and investors). On balance not only have the services of capital been given to the community gratis, but part of the capital itself has been dissipated in consumption.

Apart from the dissipation of savings and bank credit in production of capital facilities, a most important feature of the post-war period was the enormous dissipation of capital in the production of goods for export. Some of this was capital goods, some consumer goods; but it all came to the same thing. It relieved the domestic market both of some unnecessary productive facilities and some consumers' goods, not offset by corresponding imports, put a lot of money in the pockets of American consumers and gave foreigners a lot of things for nothing. So long as the investment was unproductive and was never to be repaid, it was the most effective possible means of promoting domestic consumption while it lasted. It was just as though it had been put into public works at home. In fact it can be said as a safe generalization that most export trade, and certainly all favorable balance trade, is done at a loss to domestic investors and at a gain to both foreign and domestic workers, for export products are pretty generally dumped in order to maintain an excessive productive capacity at home.

I appreciate that it is impossible to make this whole picture clear in any short statement, but the essential conclusion which I ask you to accept on faith is that, by virtue of this process, modern capitalism in its advanced stage has become, under compulsion of automatic economic forces, the most comprehensive and colossal system of unorganized and unwilling charity the world has ever seen, simply because it cannot accumulate the surpluses which its productive capacity provides or use them in any other way than to consume them. If that part of the community which accumulates them does not consume them—and it cannot because it is small in numbers—the rest must and will and does. Balancing production with consumption is therefore a meaningless phrase. It not only *does* exist already, for industry as a whole, but it in no way necessarily implies stability of employment or anything else. The instability of production, consumption and employment which is the curse of the system arises from external factors which affect the flow of purchasing power in consumer channels; and