

to measuring the extent of unemployment. As a matter of fact, however, it is impossible to measure unemployment unless one is to class as unemployed all persons who are not at work. The common desire is to measure only *voluntary* unemployment, but it is entirely impossible to say how much employment is *voluntary* and how much *involuntary*. An example or two will suffice to verify this statement.

A woman has been working in a mill. She stops work because she needs a rest. She is not sure whether she will return to work later or not. Shall she be classed as unemployed?

A man falls ill. Is he to be called unemployed? Suppose that for five years he continues sick. Is he still one of the unemployed? Suppose that his chief trouble is old age. Do you still class him in the same manner? If not, what age limit will you fix? Will it be the same for the rugged veteran and the feeble weakling? Suppose that a man is able bodied and will work for his usual wage of ten dollars a day but not for eight, is his unemployment voluntary or involuntary?

A study of these difficulties seems to prove that the only solution is to cut the Gordian knot, and measure *changes* in employment. This task in itself is difficult enough. The inquiry which we conducted was designed to answer a number of specific queries about the employment situation.

First, we wanted to know whether or not there really had been much falling off in employment. The fact was pointed out to us that bread lines were not in evidence and that there was little to show much suffering on the part of the working class. Was it not possible, then, that the supposition that there were five million idle men, arose merely from the fact that there had been a great shifting in workers from manufacturing, mining, and transportation into other industries for which no records were available—for example, into agriculture and trade? Another way of putting the problem is this: Were the figures at hand showing a decline of employment in the manufacturing industry typical of what was happening in all industries, and did they mark a huge volume of idleness, or were they simply records of a shift of workers from one industrial field to another?

Another question which we sought to answer was whether the decline in the number of employees measured with a fair degree of accuracy the total shrinkage in employment, or whether there was a large additional amount of idleness which arose from placing great

numbers of employees upon a part-time basis during the period of dull business.

To secure answers to these queries was by no means an easy task. Numerous lines of attack were tested, some of them with discouraging results, but eventually it was found that by appealing directly to the employers of the country, a sufficient body of information could be obtained to give satisfactory answers to practically every question upon which information was sought. Records were received from employers in all important industries, the reports covering in the aggregate nearly 10 per cent of the employees of the United States. When the results thus obtained were tabulated, the following facts were revealed.

First, the depression of 1921 did bring about a tremendous decline in employment, for, as a matter of fact, relatively few workers shifted from one industry to another. Falling off in employment was, however, confined mainly to the construction, manufacturing, mining, and transportation industries. In other fields, the depression apparently caused but little change in the total number at work.

About one-seventh of all the workers of the country were idle during the duldest part of 1921. Most of those at work put in full-time, but there were a sufficient number of part-time workers to reduce the total number of employee-hours worked by about one-sixth. When you think of what it means to have one-sixth of the time of all employees in the country lost, you can readily see that the problem dealt with was one of the first magnitude.

The tabulation of the figures led to one discovery which was wholly unexpected—namely, that the tendency to lay off employees was much stronger in large enterprises than in small ones. At the lowest period of the cycle, concerns employing fewer than twenty-one employees had reduced their total labor force by only 3 per cent, while firms hiring from twenty-one to one hundred employees had lessened the number of hours worked by nearly 14 per cent, and enterprises hiring over one hundred employees had cut down their volume of employment by more than 28 per cent. It thus appears that, in the depression of 1921, the man who worked for a large concern was nine times as likely to lose his job as was the man working for a very small enterprise.

This finding is quite the opposite of what many writers have reasoned ought to be the case; in fact it has been freely asserted that with the better organization resulting from the advent of large-scale industry,

the stabilization of employment would automatically come about. After seeing these figures, however, we wonder whether the reverse is not true. Since unemployment is the outstanding and all-embracing feature of the business cycle, what characterizes it apparently must characterize the cycle in general. What is the reason that we do not read of frequently recurring depressions, crises, and panics in the history of centuries past? Is it because big business was in those days wholly non-existent? It is possible, of course, that the 1921 depression was abnormal, and that in the depressions of the years to come, it will be the large firms and not the small ones that will give steady work to their helpers. If the 1921 depression followed the normal course, and if the largest enterprises do give the least regular employment, the economic basis underlying this state of affairs is certainly one deserving most careful attention. We must find the answer to this question: Why is the enterprise having fewer than twenty-one employees able to keep them practically all at work when its larger rival is laying off its workers?

Unfortunately, it is impossible as yet to give a categorical reply to this query. Perhaps the small concern has the advantage because it is in the most intimate contact with the ultimate consumers of its goods. If my hypothesis considering the causes underlying the business cycle is correct, this relationship is presumably one of the greatest moment.

Our Bureau has never formed any theory of the business cycle, hence if I state my analysis of the causes of this phenomenon, you must remember that I am speaking for myself alone, and that my views may be very different from those of the Directors of our Bureau, or the other members of the Research Staff. I shall, nevertheless, enumerate at this point the sequence of events which it seems probable to me characterizes the business cycle.

Just at present, we are near the crest of a typical boom in business. Retailers have found sales good during the past few months. Their profits have been materially enhanced by the fact that the price level has been rising, and hence their wares have tended to grow in value while on the shelves. The increasing cost of goods has so forced itself upon the attention of the retailer that he now feels the necessity of stocking up before prices go higher. As a result, he is buying vigorously and increasing his stocks on hand. The more rapidly he buys the harder it becomes for him to get his orders filled promptly. As deliveries become bad, his natural tendency is to place orders for more goods than

he expects to actually get.

This, of course, makes it harder than ever for the manufacturer to keep up with his orders. The manufacturer feels, however, that business is extremely good, and that he can go ahead without fear of difficulty because he has orders on hand. Under these circumstances, he of course puts on as much pressure as possible in an effort to turn out products with maximum speed. This process leads to a snowballing effect. Prices rise more and more rapidly, and it becomes increasingly difficult to get goods. Some day, however, the consumers will conclude that prices are too high, and we shall have buyer's strikes of various kinds similar to the one witnessed recently in the sugar industry. As these buyer's strikes spread, whether silently or with much noise, the retailer will discover that his goods are not moving from his shelves at the rate which he had counted upon. Then he will become panicky, and his natural tendency will be to cancel the orders which he has already placed. As he cancels orders, the wholesaler and the jobber will necessarily try to follow suit, and the manufacturer will be the one who suffers from the process. Factory prices will collapse, and the manufacturer will find that he is able to sell his finished products for only a fraction of the price that he expected to get for them. Many of the goods which he was manufacturing to fill orders received will remain on his hands. He will be overstocked with raw materials that he bought at high prices. He will have large loans falling due which would have been easy enough to pay off had prices held up, but which it will be next to impossible to meet under the new price conditions.

Strangely enough, during all this time, retail prices will still be holding up to relatively high levels, for the retailer's custom is to sell his goods at a certain percentage over cost price with little regard to current price at wholesale. This tendency for retail prices to remain high after factory prices have fallen sharply has long deceived economists, and has led them to believe that the force causing the decline in prices must originate in the factory. As a matter of fact, the truth seems to be that *the initial impetus comes from the consumer* when he fails to buy the expected quantity of goods from the retailer.

Once factory prices have reached bottom, there ensues a considerable period of liquidation characterized by many failures and large amounts of "frozen credit" at the banks. During this period, retail prices steadily fall, retail purchases are extremely low, but the physical volume of sales by retailers remains at a relatively