

savings and investment in this way: When the rate of savings exceeds the rate of investment, business declines; when the rate of investment exceeds the rate of savings, business improves. In other words, if those savings are invested, they go back into purchasing power, and the industrial community retains its ability to purchase the goods made. If they go back into investment faster than the savings accumulate, so that the whole body of savings is being reduced, then there is a greater demand for goods than the rate at which goods are being produced, and business improves. The converse is true: that when the rate of savings exceeds the rate of investment, business declines.

In spite of the formidable character of that two-volume book on money, these ideas are comparatively simple. He puts the same thing in a slightly more complicated form when he brings in the rise and fall in prices. He says that when the rate of investment exceeds the rate of savings, business improves and the price level rises. When the rate of savings exceeds the rate of investment, business drops off, and the price level drops. Yet there is one thing that Keynes completely leaves out. He does not indicate that there could, under any conditions, be a series of circumstances in which it is not possible to invest as fast as you save; but in that he seems to dodge the real heart of the question.

Now there is another Englishman, J. L. Hobson, who wrote a little book entitled, "Rationalization and Unemployment." Mr. Hobson brings out this point: that conditions may arise, and in fact are constantly arising, in which it is not possible to find sufficient profitable investment to take care of savings. We are getting down now to the position Mr. Drury has been taking. As Mr. Hobson suggests, that may occur when the money received by industry for the production and distribution of goods goes too much into the hands of those who invest and too little into the hands of those who purchase. If too much has gone into the hands of those who invest, and too little into the hands of those who purchase, so much purchasing power has been eliminated that the correspondingly increased volume of money looking for investment cannot find profitable use.

It seems to me that Hobson really completes the theory that starts with the classical theory of economic balance, goes through the Foster and Catchings' paradox, to Keynes' statement of the facts of the phenomena of the business cycle, to his own statement of the causes which lie behind those facts.

Until I, at least, find some more complete statement I am going to build my own economic thinking along the line of that original economic theory plus the additions of these three sets of authors.

I stated that the seriousness of this present situation was due to a confluence of three things, of which the typical business cycle, which I have just described, was one and a typical post-war deflation a second.

What is a typical post-war deflation? Since the beginning of the industrial age we have had three long-time price declines following periods of warfare. The first was the period following the Napoleonic Wars and beginning about 1818. At the end of the inflation which financed those Napoleonic Wars, a sharp drop commenced which, with many ups and downs, continued until about 1850. That was a long period of a great financial distress and failures in this country. I have seen the statement made that all but one life insurance company in the United States either failed or went through reorganization during that long-time price decline. It was a period also of political struggle, as these economically distressful periods always are. It ended about 1850 with the discovery of gold in California. This brought on a gold inflation, which raised the price level and started prosperity again. Things were not continuously hard during that period. There were ups and downs, and sometimes people felt better about it, and sometimes worse.

Next came the Civil War in this country, and the series of mid-century wars in Europe, which culminated in the Franco-Prussian War in the early seventies. There again followed a period of decline from the paper inflation by which war is financed. This decline, with its various ups and downs, continued until about 1895. Again, we had labor troubles, strikes, agrarian unrest, greenbackism, Populism and all sorts of difficult times. Still it was masked in this country to a considerable extent by the opening up of new resources in virgin territory, with the best chance for the investment of new money that was to be found anywhere in the world. Millions of European money, in fact, came here for that purpose.

Along about 1895 the price level started up again, due to the discovery of gold in South Africa and Alaska and the invention of the cyanide process for abstracting gold, which made its recovery from low-grade ore very much cheaper.

About the time of the World War we again had the typical paper inflation by which every great period of war is financed, followed in 1920 by the typical de-

flation which has followed every war. This inflation and deflation are serious things. If we are reckoning up the causes of misery and distress which come from warfare we must put inflation and the subsequent deflation which accompanies it as among the most serious. It is long drawn out, and the cause of intense misery to many thousands of people. There is that second cause for the seriousness of the particular cycle in which we find ourselves. I will call your attention to a good characterization by Colonel Ayers, of the Cleveland Trust Company, when he announced a few months ago his conclusion that we were enduring, not an ordinary business cycle, but a "major, secondary post-war deflation." That gives it a good name and, I presume, is comforting to that extent.

The third element that magnifies our troubles is the unique agricultural crisis. There has been, I think, no time in the world's recent economic history, at least not since the beginning of the industrial age, when such a series of important developments, in agriculture have culminated at once. That relates particularly to the staples.

With wheat there has been the rapid development of the tractor and the combine. There has been the rapid development since the war of the necessary tools and methods for growing wheat safely on more arid areas than had previously been the case. There has been the development of new varieties of wheat, which grow successfully on more arid areas. There has been the development of techniques of management, particularly by Professor Wilson of the Montana Agricultural College, whereby a farmer and a hired man can cultivate successfully 1500 or 2500 acres. There has been the export of all of these methods, processes and machinery to less advanced countries with low labor costs, of which the most interesting is Russia. There has been no great effect on the market at the present moment from this production of wheat by Russia, but that country certainly presents a threat of future competition. There is the further fact that wheat is one of those inelastic commodities whose consumption does not greatly increase with a drop in price.

All of these things, quite independently of the other factors mentioned, have seriously affected the prosperity of a very large number of people at the present moment.

Cotton is in a similarly unsatisfactory condition, due to other causes. The west of Texas has opened up a great new cotton-growing area, which can produce 75 per cent more than the old South. Their picking season

is not rainy, which means that the bolls may be left on the cotton stalks for months at a time and picked by the farmer and his wife and children after school, rather than by a big gang of darkies as is necessary in the old South. The boll-weevil also is not as serious a pest in northwestern Texas as it is in the old South. Meanwhile cotton growing in Egypt is developing. The Sudan is being opened up. Russia is opening up the Turkestan area. Then again the rayon process has been developed and has crowded out much of the cotton that had previously been used. All these things together have combined to put the industry in a serious condition.

We have this combination of a typical business cycle, a typical major secondary post-war deflation, and a unique agricultural distress. All of these things, combined with the psychological effects of a continuously lowering price level, have developed into a pathological state which has intensified the whole thing.

The continuously lowering price level produces the element of fear. First, there appears the element of caution. As the price level continuously descends, the investor says, "Things are going to come down; I will wait a month before I buy." The next month he sees that things have come down, and that he was wise in waiting; he waits another month, and another month—and so on. In the meantime continuous decline in commodity prices affects the price of farm lands, then of city real estate, later of stocks and bonds, and begins to take the value out of every bit of collateral that our banks hold. Not merely the farmer, and next, the ordinary investor, but the banker himself begins to fear. As the price level continues to drop that fear becomes at times a perfectly justifiable panic. The necessity under these conditions for keeping money liquid, which again stops investment, which again furthers the fall in prices, in an ever-continuous and never-ending circle, brings us into a rather logical state of pathological fear.

We are getting toward the end of the evening, and probably I should begin to talk about remedies, although I have been putting that off as long as possible.

It would not be wise for two men, who tend to agree with each other and are therefore amateur economists, to propose remedies that are too fundamental or too complicated, that go too deeply into questions of finance, gold supply and all the rest of it. Some of these things, therefore, I wish to lay as a burden on the shoulders of those who are wiser than I am, and perhaps wiser than Mr. Drury and myself put together.