

## PROCEEDINGS

NOVEMBER 21, 1919.

THE EFFECT OF INFLATION ON THE BUSINESS OF  
INSURANCE.

ADDRESS OF THE PRESIDENT, JOSEPH H. WOODWARD.

It is related of Dr. Johnson that, visiting one of the islands of the Hebrides and being told that twenty eggs might be had there for a penny, he observed: "Sir, I do not gather from this that eggs are plenty in your miserable island, but that pence are few." It is a matter of interesting conjecture whether, if Dr. Johnson should visit the United States today and find eggs retailing in some instances for as much as a dollar a dozen, he would attribute that phenomenon to the abundance of dollars or to the obstinacy of the American hen. However, it seems probable that the shrewd old philosopher would still be an adherent of the quantity theory of money.

A general statement of this theory in its modern form is that the total volume of money or credit in a country multiplied by its velocity of circulation is equivalent to the total volume of goods to be exchanged multiplied by the prices of those goods. Any increase, therefore, in the amount of the circulating media or in their velocity of circulation—the physical volume of the goods to be exchanged remaining constant—must result in an increase in price level.

In a paper on "Inflation" in the *American Economic Review* for June, 1918, Professor E. W. Kemmerer tells us that "inflation occurs when, *at a given price level*, a country's circulating media—cash and deposit currency—*increase relatively to trade needs.*" More generally, inflation implies a redundancy in the circulating media—a supply of money or credit in excess of the requirements of business or commerce. It does not necessarily imply that the

currency of a country is not on a gold basis, although, if such be the case, inflation is, *a fortiori*, likely to exist.

A condition of inflation, if it exists, must have important consequences for the business of insurance. It will be worth while, therefore, to review very briefly the general evidences of inflation at the present time and to consider some of the resulting effects which intimately concern us.

The index numbers of wholesale prices published by the Federal Bureau of Labor Statistics shows that such prices have, on the average, increased from 100 in 1913 to 219 in July, 1919, an increase of 119 per cent. The smallest increase is in metals and metal products, 58 per cent.—the largest in farm products, 146 per cent. The "cost of living" has lagged behind wholesale prices; the increase for the United States between July, 1914, and June, 1919, as reported by the Bureau, is from 100 to 175, or 75 per cent.

The records of the New York State Industrial Commission show that the average wage rate in manufacturing establishments in New York State has increased 88 per cent. between 1914 and August, 1919. Increases of wages among different groups of workers, however, have been very uneven and it is probable that for the country as a whole wages, including the wages of farm labor, have increased considerably less than 88 per cent. The wage rate among the industrial population appears to have kept pace fairly well with the rise in the cost of living—which latter quantity, because of the rapidly rising trend in wholesale prices, bids fair to go materially higher before a turning point is reached.

The next question is whether the present high prices are mainly due to an actual scarcity of commodities or whether the dominant factor is the depreciation of the purchasing power of money. Statistical information of two kinds is necessary in order to determine this. First we must have index numbers which measure the growth of trade needs. Such numbers must be based on physical quantities not involving monetary units—for example, the number of tons of pig iron, coal, copper, etc., produced, the number of bushels in the wheat and corn crops, the number of building permits issued, of tons of freight transported, and the like. Second, we need index numbers to determine the growth in the amount of money or credit currency available for the carrying on of business.

Professor Kemmerer has compiled index numbers showing that between 1913 and 1917 there was a growth in the physical volume

of trade amounting to 21 per cent. He also presents index numbers showing that during the same period there was an increase in monetary circulation of 45 per cent., in the circulation of gold and gold certificates of 76 per cent., in cash reserves of 51 per cent., and in bank deposits of 68 per cent. Comparing these numbers with that of 21 per cent. for the growth in trade, the evidence for the existence of inflation may be taken to be sufficiently convincing.

Apart from the increase in the volume of circulating media other influences tending to inflation have been at work. During the period studied by Professor Kemmerer the federal reserve banking system was placed in operation. The most important single feature of this improvement in our national banking arrangements, from the standpoint of its effect on inflation, is that the proportion of the assets of banks required to be held as a cash reserve to meet demand liabilities is greatly diminished. A given amount of cash may thus support a greatly increased amount of credit. By this means the efficiency of the dollar is increased, which has an effect equivalent to increasing the number of dollars. Any improvement in banking practice which thus tends to make the dollar more efficient or more nimble tends to produce inflation.

The bearing of the national war-borrowing policy upon this question has received considerable attention. President Wilson, in his message to the special session of Congress in April, 1917, said:

"It is our duty, I most respectfully urge, to protect our people in so far as we may against the very serious hardships and evils which would be likely to arise out of the inflation which would be produced by vast loans."

Echoes have doubtless come to the ears of all of us of the economic controversy which has raged on the subject of the relative merits of taxation and borrowing as a means for filling the war chest. The present consensus of economic opinion as to the relationship between war loans and inflation is summarized by Professor J. H. Hollander in his recent book on *War Borrowing* in the following cautious words:

"To the extent that loans are made ultimately from uninvested capital, from current income, from liquidated investments, or from current or future savings there need be no inflation. To the extent that loans are made by banks for their own account by credit creation, or by individuals through bank loans in the nature of long time engagements rather than of installment purchases,—inflation may result."

Again, there are a number of very difficult economic questions as to the influence of government price-fixing upon inflation. Obviously, price-fixed commodities tend to complicate the real meaning of index numbers. Until our knowledge in this field is more complete, however, little can be said beyond drawing attention to this aspect of the problem.

A general picture of a period of inflation shows: (1) an increase in wholesale prices; (2) an increase in retail prices lagging behind the increase in wholesale price; (3) an increase in wages lagging behind the increase in retail prices. Labor troubles are numerous, commercial failures relatively few, industrial and commercial profits high. In the investment markets bond prices tend to sag because the purchasing power of the money to be repaid by the borrower is decreasing. Indeed, during a period of rapidly rising prices investments with fixed maturities may in effect yield a negative rate of interest. In such a period, stocks and real estate drift toward higher levels because of the increasing value in dollars of the physical property. Being durable income bearers, however, the return from which is spread generally over long periods of time, they are subject to considerations which prevent a very rapid response to underlying economic conditions. Finally, these tendencies are obscured by speculative activities and by the condition of the money market so that the general situation is likely to be confusing.

Inflation has its value in time of war since it stimulates production and tends to check consumption, but these advantages are gained at the cost of grave injustice to certain economic groups and other social effects of an unhealthy nature.

When the tide turns and the forces of deflation commence to make themselves felt the cycle is reversed. We then look for falling commodity prices and wages; a rapid rise in commercial failures, an increase in unemployment, fewer labor troubles, and a decline in the prices of stocks and real estate as related to the prices of bonds and fixed term securities.

It is significant that the Federal Reserve Bank of New York has very recently established a higher rate of discount rates. The *Federal Reserve Bulletin* for November, 1919, says:

“The disappearance of the Treasury from the long term loan market and the rapid reduction in its requirements for short term accommodations foreshadows the approach of the time when the

financial operations of the government will cease to be the important factor in shaping reserve bank policies and rates. A review of all the conditions in the banking situation has confirmed the board in the view that in the application of its discount policy an advance of rates should no longer be deferred."

That we shall ever again see commodity prices what they were in 1913, however, seems highly improbable. There are influences at work tending toward what might be termed a permanently inflated condition—if such a contradiction of terms is permissible. At any rate, a banking and fiscal policy sufficiently drastic to restore anything approaching previous conditions seems unthinkable.

It has been frequently pointed out that the business of insurance is not, strictly speaking, a productive enterprise, in that it does not add to the sum total of existing wealth. Fundamentally it is a contrivance for distributing wealth in such a way as to add to its total utility without increasing its aggregate amount. An insurance company does not sell goods; it sells a promise to pay money at a certain time and under certain conditions. It does not guarantee the purchasing power of that money at the time it is to be paid.

The most interesting fact with regard to the present situation in all branches of insurance is the recent rapid growth in premium income, a growth greatly in excess of the corresponding increase in our population and material resources. In life, fire, workmen's compensation, surety, and casualty lines generally, the situation is the same. The volume of business is greater than ever before. Life insurance companies are doing double the new business that they were a short time ago.

There is no evidence, however, that any larger percentage of the nation's savings is being diverted into insurance channels. The same percentage of incomes as was devoted to life insurance in 1913 when applied to the increased incomes of 1919 will account for nearly all of the increase in business. We are dealing, therefore, with a consequence of a high degree of inflation. If the present high commodity prices were due mainly to an actual scarcity of goods, wages and profits would not show the same tendency to increase step by step with prices and the percentage of the family income available for life insurance would be so diminished that less insurance rather than more would be written. Money devoted to the payment of a life insurance premium registers a preference

for future goods over present goods, and in a time of great actual scarcity this preference would be reversed and the future sacrificed for the present.

Considering the reasons for the rapid increase in the volume of fire insurance it seems fairly clear that this cannot be attributed to a proportional increase in the actual physical amount of property requiring protection. It represents chiefly the increase in values brought about by inflation. During a period of rising prices the amounts of insurance carried tend to lag behind the value of the property requiring protection. Property owners, especially if their policies contain a coinsurance clause, must keep wide awake lest they be caught in a condition of under-insurance. In such a period, therefore, the moral hazard should, generally speaking, be good and the incendiary fire loss relatively low. When the tide turns and values fall in proportion to existing lines of insurance the moral hazard increases and the necessity for greater underwriting caution arises.

In workmen's compensation insurance, the continued activity in general lines of industry, the substantial increase in the wage rate and the relatively small amount of unemployment have contributed to produce a volume of business far surpassing all previous records. In automobile and miscellaneous lines of insurance there has been a tremendous growth, and it is safe to say that practically no branch of insurance has failed to respond to the economic conditions.

The situation in plate glass insurance is of special interest. A plate glass policy provides—*not* that a specified sum shall be paid for the breakage of the insured plate—but that the company must replace the broken plate with a plate of similar quality and value or pay the actual cash value *at the time of breakage*. Such a policy, therefore, in effect does guarantee the purchasing power of money. What has been the result? Mr. Fred S. Garrison says:

“Owing to the conditions brought about by the war the price of glass increased so rapidly that it was practically impossible to keep the rates abreast of current prices. . . . The price of glass during the last three years increased 200 per cent. in some cities and the increase in the premium rates was intended to at least partially meet this increased cost.”

We have seen that, on the whole, the effect of inflation upon the premium accounts of the companies is of an apparently cheerful nature. Let us now turn to the other side of the account and con-

sider its effect upon the beneficiaries of the policy contracts. Where, as in fire insurance or accident insurance, the premium payments and the corresponding loss payments both take place within a relatively short period of time there is no great disparity between the true value of the consideration and the true value of the benefit. But where, as in life insurance, the premium payments may extend over many years, the fluctuating purchasing power of money is obviously an important consideration.

Many beneficiaries are today receiving insurance money which has lost over forty per cent. of its purchasing power as compared to the money received by the company as premiums. There can be no better example of the evil social effects of inflation than this. In effect, over forty per cent. of the vast accumulations of the life insurance companies of this country—the property of the policyholders held for the protection of families left helpless through the death of the bread winner—has, if present conditions prove permanent, been confiscated and devoted to paying the cost of the war. No scheme of deliberate taxation could conceivably be as drastic as this. The injustice of it all is none the less cruel for being unintentional and the fault of no one in particular. Again, consider the situation of annuitants and of the beneficiaries under long term awards under workmen's compensation acts. An income probably all too meager for its purpose at the time it was entered upon has now become woefully inadequate. These are facts which should not be overlooked.

What has been the effect of inflation upon the investments of insurance companies? The most important class of investment is bonds. The holder of a bond is a creditor as distinguished from a property owner. If the purchasing power of a dollar declines between the time he lends his money and the time it is repaid to him he has no redress. In extreme cases the loss of purchasing power during the term of an investment may exceed the entire amount of interest received. The only way in which a company might have protected itself against the effects of inflation would have been to invest part of its assets in stocks and in real estate. A good many fire and casualty companies have considerable holdings of stocks but, unfortunately, these are mostly railroad stocks which fail to respond to the increased values of the properties whose ownership they represent for the reason that it is highly unlikely that the government will ever permit the stockholders to profit to any

extent through such increases in the value of their properties. Real estate holdings of insurance companies are inconsiderable and represent chiefly buildings acquired for the company's own occupancy. A dozen years ago, the late Professor Lester W. Zartman, with a fine disregard for prevailing opinion, advocated the purchase of real estate by life insurance companies as an investment, citing the success of the French companies in this field. The legislative policy in this country, however, has been to prohibit life insurance companies from investing in stocks or in real estate beyond the requirements of the company for its own occupancy: a company could not hedge against the effects of an impending inflation even had it been foreseen. One of the incidental benefits of the present situation is that companies now find themselves in a position where they can dispose of properties acquired years ago under foreclosure on most satisfactory terms. Although the fire and casualty companies have been relatively unhampered by legislative restrictions only a very few have so divided their holdings between bonds and stocks as to receive some advantage from the effects of inflation upon investments.

It is a trite saying that America is now the world's great creditor nation. Has this any meaning for insurance companies? During the period of England's economic and financial supremacy British insurance companies were liberal investors in American securities. This was true independent of whether or not the company was admitted to transact business in the United States. The present exceptional state of affairs in the foreign exchange market makes first class investments in the allied nations most attractive. But our statutes prohibit such investments on the part of American companies unless they are admitted to transact business in the countries in question. It must be confessed, however, that it does not seem likely that many of our companies will desire to make investments of this kind, helpful as that action might be to the promotion of trade relations.

Finally, some comment may be made on the situation as regards the expense accounts of the companies. In discussing the rate situation for 1918, the London *Times*, speaking of the British fire companies says:

"The fact that a general advance has hitherto not been considered necessary in the face of higher expenses is probably due to the great increase in the volume of insurance caused by the rise in



## ON THE BUSINESS OF INSURANCE.

prices. . . . It may be assumed that the bulk of this increase was caused by the higher values of the property insured. Office expenses have naturally not been increased to the same extent, and many insurance companies have, therefore, in spite of actually higher working expenses, been able to show a slightly lower ratio."

The agent or broker whose remuneration consists of commissions has seen his income, by reason of the increased volume of business written, keep reasonable pace with the rising cost of living. As an economic class he has not been discriminated against. Not so, however, with the army of clerks and stenographers without whose constant daily toil the vast and intricate machinery of modern insurance would cease to function. Increases and special allowances they have had, to be sure, but not enough to keep step with the soaring cost of the necessities of life.

Several plans for stabilizing the purchasing power of a dollar have been brought forward by economists—notably by Professor Irving Fisher. It is not my purpose to attempt to describe these plans. The main object of these remarks is to urge that, in the absence of any such stabilizing influence, we should train ourselves to think in terms of a fluctuating instead of a constant unit of exchange.

Summing up, the main points which it is hoped have been developed are as follows:

1. There exists at the present time a high degree of currency inflation.
2. This has important consequences for the business of insurance.
3. It explains the growth of premium income.
4. It has had, if it proves permanent, the indirect effect of confiscating over forty per cent. of the assets of the companies to help pay the cost of the war.
5. It has worked serious injustice to many beneficiaries.
6. The problem of inflation must be carefully studied and thoroughly understood if the companies are to play their part intelligently in the era of reconstruction.