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BUSINESS FORECASTING

by

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The lot of a business forecaster is at best thankless. And that is more true today, let me assure you, than in any of my years, approximating some twenty, of experience at this business.

To men who are studying business conditions, it is not necessary to point out that we have had a pretty consistent, though irregular, recovery since 1932. I do not care what measure of business one may use, whether it be carloadings or bank debits, steel production or copper consumption, production of boots and shoes or consumption of cotton or wool, production of automobiles, retail trade, or any other measures for which statistics are available on the business scene, we have had a notable recovery. That is so much water under the bridge, and it is not necessary to dwell too much upon past history because that is not where the forecaster fits in. It is his task to look into the future, something of the lot of the crystal gazer if you like, and to tell you, and others who are interested in the progress of business henceforth, where business may be one month, two months, six months, and perhaps a year or longer ahead. That is why I revert again to my first thought, namely, that the lot of a business forecaster is at best a thankless one. If later events justify or prove his forecasts to have been accurate, well, that was expected of him. He has devoted time and energy and presumably has had a broad experience in that field. It was expected of him to be right. But if later events prove him to have been wrong in his forecasts, his reputation has begun to take the skids. This does not alarm me because I know, as every other forecaster of business knows, that we are all entitled to a mistake. But I want to leave this thought - that the current picture of business is so clouded, is so full of new factors, that even the forecaster has difficulty (I know I have) in forecasting for as long as three months where hitherto the business forecaster did not hesitate to forecast for a year or longer.

At the 1936 year-end there were many forecasts, as there always are particularly at a year-end. Not that the split second which marks the shift from one year to the next really means anything, business does not change that rapidly, but it has become fashionable to issue forecasts at the end of the year. So many forecasts on 1937 went so dead wrong, as all of you men know.

The one big measure that seems to evidence the jitters that has gripped business is the stock market, which twice thus far this year has indicated that something may be

wrong, not necessarily that something is wrong in the business picture even though it be a fact that many men still look to stock market activity as a measure of coming business events.

In the enumeration of the measures that I spoke of a few minutes back I had nothing to say about the construction industry, the industry which I study most and perhaps know most about. The construction industry is the one industry that, although it has improved measurably, has given the forecasters the greatest disappointment. And if it is possible to set down one real basic reason why business has failed to live up to the most optimistic forecasts of a few months back the blame can be laid at the doors of the construction industry.

We have, therefore, roughly two broad branches of industry that motivate the economy. We have the consumers goods industries, those which are represented by the boot and shoe business, by cotton and other textile lines, retail trade if you like, and all other items in which the consumer is directly interested; and on the other hand we have the capital goods or durable goods industries, of which the construction business is the keystone. For many years I have held to the opinion that business depressions and periods of business prosperity result from either adjustment or maladjustment between these two broad basic classifications of American business and industry. When we have a close adjustment between durable goods products and consumers' goods products where the items of one can exchange in the market places for the items produced by the other, we have good times, call it prosperity if you will. When the reverse is true, when one broad sector of industry is moving up or down more rapidly than another broad sector of industry we have maladjustment. And that maladjustment is something which I have for years attempted to evaluate, because I have felt that such an evaluation might afford a clue to business prospects months in advance of their occurrence. So I would like now to direct your attention to this chart on the wall.

I have purposely refrained from labeling these two curves. This dashed curve is the Federal Reserve Board index of industrial production, the years 1923 to '25 taken as one hundred. You will note that it begins in 1926 although there is considerably more history to the curve than that. You will find that from 1926 there was an irregular movement upward until the middle of 1929. What has happened since then all of you know without reference to the chart. The lower curve, the curve in dark outline, is merely a contraption. It is what I call my maladjustment curve. This curve represents a

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computation of sundry factors which measure the adjustment or maladjustment between the capital goods and consumers goods industries. I have found over a period of years that this maladjustment curve has forecasted major directional trends in industrial production by from eleven to thirteen months in advance of their occurrence. And I might add that I do not wish it understood that this curve, or any curve, should be used by the forecaster in a manner to enslave him, because even the most useful tool needs to be watched on this count.

In 1926 we had a declining tendency in the maladjustment curve. When this curve started to go down in 1926 I ventured the prediction that somewhere between eleven and thirteen months hence the industrial production index of the Federal Reserve Board, adjusted for seasonal conditions, would likewise go down. This curve of maladjustment has no value or meaning to me other than as an index or directional change, and I can not stress that too strongly. It does not attempt to measure magnitudes of change. Thus, the slightest bend in the curve, or change in direction, signifies, if it works at all as a forecaster, that months hence a similar directional change may be expected in the industrial production curve.

What did happen? Well, you see the industrial production index went down from the fall of 1926 to the autumn of 1927, and yet by that time the maladjustment curve had already started up. When this change had occurred in the direction of the maladjustment curve late in 1926, after I had already set down my opinion that we would soon see a decline in the industrial production index, I changed my prediction for the more remote future. I said that we would soon find, toward the end of 1927, a reversal in the course of the industrial production index that would bring us greater recovery. So long as the maladjustment curve continued in the same general direction upwards and onwards, in the light of the conditions then known, I was perfectly willing to remain with my neck out by stating that business as measured by the industrial production index of the Federal Reserve Board would continue on and upward for at least a year hence. But what happened? About the middle of 1928 I had some very real, definite evidence of maladjustment between the two broad, basic classes of industry, between consumers' goods and capital goods. Here was a definite turn in the curve (indicating) - it started to turn and then kept on going down. I watched that closely. I was satisfied that here was something that needed watching because of the implications for production and the entire industrial structure. When we had gotten down to this point (indicating position of maladjustment curve on chart), which was months in advance of the actual occurrence of the business decline,

I ventured the opinion that before the end of 1929 we would be definitely in the throes of a business recession and there (indicating the FRB production curve) is what happened. I want to direct your attention to this little change in the industrial production index in 1929. There was really nothing in the maladjustment curve a year earlier that foreshadowed anything like that, so I had nothing to say about that at the time by way of forecast because I was satisfied the major trend was down. This recovery (indicating rise in FRB curve in early 1930) happened almost entirely because men's minds at the end of 1929 were so ordered as to believe that we were in fact in the era that all of us heard about, and also because Government, in its attempt to stay the tides of business recession, had been temporarily successful in getting men - manufacturers, business men, railroads and public utilities and others - to combine their efforts in an endeavor to turn the tides of the cycle, a fruitless task because of the implication of the maladjustment curve beginning with 1930.

As this maladjustment curve continued on down and down I continued to believe that we were definitely in a major business decline. However, at the end of 1929 and early 1930 we had a definite change in direction (favorable) in the maladjustment curve. But by that time men were beginning to get jittery, the Government was getting jittery, and we started to cast about for new instruments that might be employed to reverse a trend which seemed unending. And yet in the face of the jitters the maladjustment curve did forecast the slight rise which occurred in the spring of 1931. Again I call your attention to the fact that this curve has value, if it has any at all, only in forecasting directional change. In the late summer of 1930 the maladjustment curve gave evidences of a change in direction, and it continued on down through 1932. At the beginning of 1932 we had a directional change upward in the maladjustment curve, which indicated that we might again be nearing a major change in the direction of industrial production. Now make no mistake, this did not forecast the magnitude of improvement because the chart does not forecast magnitudes. As we know now, as a matter of hind-sight, the industrial production index curve promptly dropped, (summer of 1933). The reasons for this abortive, that is all it was, recovery, are doubtless well known to all of you. It was due to the Governmental efforts growing out of the NRA, the attempt of manufacturers to beat the NRA, the general feeling on the part of American business men, and those abroad as well, that we were headed to an ungodly amount of inflation.

Down in here (indicating 1932-1933 on chart), when men's minds were in a fog my maladjustment curve was likewise

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in a blind spot, and yet with all of that I consistently held my ground and ventured the opinion that so long as that curve was moving downward any recovery in the business structure was an unnatural one. Well, manufacturers do not care whether it is natural or unnatural if they are making profits, to be sure. But this recovery in here (indicating 1933 FRB index) due, if not more so, to artificial influences than to any other cause, although the seeds for genuine economic recovery had actually been sown, in my opinion, way back here (indicating 1930-1931 maladjustment curve) by way of forecast. Then I had another change in direction. At the tail end of 1933 the maladjustment curve rose and it gave me this indication: that toward the close of 1934 we could again expect a change of direction in the industrial production curve. I want now to direct your attention to the fact that at no time in the earlier history of this industrial production curve of the Federal Reserve Board, which is seasonally adjusted, was there anything like these fits and starts of the later period. This gives further evidences to me that the lot of the forecaster, even using a device such as I have developed, is at best a thankless one.

The curve of maladjustment continued downward, had a slight upward turn at the 1934 year-end; followed by a similar movement in the industrial production curve about a year later. But it was not until 1935, until late spring and early summer, when the maladjustment curve had started upward and stayed upward for several months, that I was satisfied in my own mind that we could expect a more regular industrial recovery a few months hence, something that would last a little longer without the fits and starts which had occurred with the advent of the 1933 recovery period. A glance at this chart will show you there was somewhat of a greater regularity in that movement.

A year ago I stood on this platform and there (indicating position on chart) was the position of the curve on maladjustment and there (indicating) was approximately the industrial production curve position. I ventured then the opinion that so long as the maladjustment curve had continued upward for months through the middle of 1936 we could be fairly certain that the industrial production index of the Federal Reserve Board, from this period on, would continue upward in a general sense. There was not anything in the maladjustment curve that forecasted this sharp decline that occurred between December and January (1936-1937) in the industrial production index. But perhaps more than any other single reason accounting for the sharp decline is the fact that labor strife became so important that it temporarily, at least, retarded the march of production, though in the main the production index was upward.

I direct your attention now to this little decline in the maladjustment curve in the middle of 1936. From this platform I suggested a year ago that though conditions looked favorable for at least the first half of 1937 the final half of the year might begin to give evidence of declining production. Well, we have a little of that right now. The last position charted there is the month of August (1937). And now I will show you the position of the maladjustment curve today. (Removing cover from maladjustment curve August 1936-August 1937). That decline in 1936 in the maladjustment curve was, as you see, very short lived, and so I concluded that the decline in here (indicating) in the production curve of the Federal Reserve Board would likewise be short lived. But we had another decline in the maladjustment curve at the end of 1936, which, if this chart has any forecasting value at all, means that at the end of 1937, right in here (indicating) (and conditions now look temporarily upset) we may have another decline in the index of production. That appears as a short lived decline from the maladjustment curve. Here we have an upward movement in the maladjustment curve (spring of 1937) that carries through for several months, which means that in 1938 after the short and possibly sharp recession, all other things being right, we might expect a continuation in the main of a general upward trend in the production index. But again I direct your attention to another change in direction in the maladjustment curve that occurs about the middle of 1937, which means that some time in the middle of 1938 we may again be visited with a reversal, this time downward, in the production index. The end result of all these upward and downward indicated movements of three or four months apart will produce a very, if they happen at all, irregular picture again of industrial production from this point on through there (indicating 1937-1938 period).

Well, I repeat, the lot of the business forecaster is a thankless one, and why is it so thankless? We have many new situations now. We have a situation today for example that far too few people who are studying business conditions are aware of; even if they are aware of it they have not properly evaluated its import in any of their analyses. I refer now to the fact that the nation is no longer growing at anything like the rate of only ten years ago. I submit that it takes people to make markets and if manufacturers, whether they be of automobiles or shoes, or producers of buildings, are not aware of the fact that the nation is no longer growing at anything like the old rate it makes more difficult their job of evaluating the prospects, not the immediate prospects to be sure but the prospects for one or two or five years hence. But that is not so important, although it has a large place and is of growing significance.

American business is now more than ever face to face with a new hazard - the hazard of politics, of the business of Government, of Governmental policies, call it what you will. It is a hazard, the processes of which have been materially accelerated by world events in recent years no less than by our own domestic shifting scenes. Time was when it was difficult enough for the business man to fathom the vagaries of the business cycle and to prepare judiciously for the expansive and contractive phases thereof. But now he is called upon more than ever to evaluate the economic effects of undeclared wars, such as the Ethiopian or Spanish, or more lately the Sino-Japanese affair. He must consider the economic impacts of production controls of all manner and description and of all kinds, both domestic and foreign. He must weigh seriously the economic repercussions of far-reaching and deep-seated economic and social reforms at home and abroad. And, more than that, he is called upon to plumb the economic effects of budgetary imbalances, of mounting public debts, of rising taxes, and of unexampled monetary controls. That these hazards, and I know no better name for them, will broaden before they lessen is a virtual certainty. The pendulum is in that direction and that is why business men today, after some five years of irregular business recovery, are beginning to wonder whether the game is really worth the candle.

It is being borne in on us that no industrial recovery can be complete so long as millions of people are still unemployed and millions more live by Governmental largesse; so long, too, as the seeds of labor strife are sown so deeply, no less by labor than by Government and no less by employer than by employee; so long also as the Government elects to punish business by inflexible rule rather than by workable, necessary discipline; and so long, too, as business looks with suspicion on everything that Government does, whether constructive in purpose or not; and, finally, so long as governments at home and abroad continue to live beyond their means whatever the reasons. That too is why the lot of the business forecaster today is more treacherous, more difficult, and certainly more thankless than ever before, and that is why I, with my little contraption, am really beginning to wonder whether the contraption itself is not soon to fail me.

Now the future is not without hope. Adjustments to all of these new conditions and new hazards, as I call them, will be made, but in the meantime it is my conviction that you may expect irregular, striking jittery movements in business

for many months to come. Disappointment, I believe, awaits those who believe that out of these new controls and policies of Government can come an assurance against the once recurring periods of business prosperity and consequent depressions. Disappointment, I say, awaits them, though the test still lies ahead. The Government has spent billions of dollars for public works of all descriptions and in this expenditure it has helped to restimulate business, but whether or not the game has been worth the candle still lies in the future. Should business begin to falter more than it is faltering now I believe we may again expect the Government to step into the breach with some other program, whether it be public works this time or a rearmament program of a scope and magnitude of the sort that Great Britain has recently embarked upon -- it makes little difference. The controls which the Government has set up will demand of Government new controls to make the original controls work. That too is why the lot of the business forecaster is a treacherous one -- it is increasingly more difficult to forecast Governmental policies.

There is no design on the part of Government to upset business but if a control, whether it be a monetary control or a production control, whether it be qualitative or quantitative, does not work by itself the controller is on the spot. Now that the stake of Government in continued business recovery is as great as it is, greater than ever before, the Government just can not let go of the controlling. What will happen? I believe that the current unsettlement which occurred in the commodity markets early this year, followed by similar disturbances in the stock market, followed by unsettlement in men's minds at the heads of businesses, will continue to blow business hot and cold. But underneath it all I can not, in the face of nearby implications of this maladjustment device, (and that is all it is -- a device) get bearish, to use a word of Wall Street, at this juncture of our economic recovery. Business profits, however, which in the final analysis are the thing that should underly, if they do not, the rise and fall in security prices, may and doubtless will suffer. The stake, as I said earlier, of the Government is tremendous, and at this juncture of the cycle we can expect that the Government recognizes the importance of its own stake.

One thing more before I close. I want to revert now to the situation in the building and construction field. The great big disappointment to business men has been this construction business. What are the prospects for further construction recovery? I discount considerably the general feeling, which has gained many adherents, that high construction costs are alone responsible for the slovenly recovery in private building. I do

not think that is entirely tenable. I believe there are other forces at work of equal importance that have retarded recovery in the construction industry. I believe also that from the very nature of the construction industry we may reliably count upon, regardless of these new hazards, further extension in recovery in construction. But here, too, those who expect a boom over the nearby future in the construction industry are, I believe, to get a rude awakening. Why? Much of the debris of the last building boom has yet to be cleared. Thousands upon thousands of foreclosed properties from the last debris have yet to be disposed of by the lending institutions, and the lending institutions are very cautious in loaning new money on real estate in the light of these new hazards. Also, it is still, in many places in America, more profitable to rent than to build and own. We have today the case of the H.O.L.C., which refinanced some million homes in America, to say nothing of the additional million financed by the Farm Credit Administration; the spectacle of homes being offered for rent, having been foreclosed by the H.O.L.C., on rates that do not show more than three or four per cent on their capitalization. So long as these conditions prevail, where stimulus can not be obtained from a broad, basic sector of the economy, such as the building industry, just so sure can you be that without Governmental stimuli of one character or another we can not be far removed from a recession in business. The Government knows that very well. But I can not get bearish over the near future because new controls, if needed, will be forthcoming.

In closing, I want to say just one thing finally on the question of debts, and I know no better way of saying it than to read from my closing remarks of last year:

"The depression with which we most are familiar, namely the depression of 1929, was brought on by a number of causes; a thousand or more causes have been advanced, no one of which was alone. It is my conviction that perhaps the deepest rooted and the most important single cause, if there can be any such, was the collapse of credit consequently upon this speculative frenzy to which I alluded a few minutes ago. At the very time that the Federal Government had been successful in reducing our national debt by some ten billions of dollars, what was happening on the other side of the ledger?" (This, you will remember, was in the 1920's) "Private debt was permitted to go to unheard of dizzy heights, to such heights that it later and ultimately just had to come to grief. And then, when through the processes, the inexorable processes,

if you will, of depression, private debt was scaled down through foreclosures or defaults or repayments, or what have you, the government stepped into the picture and took hold where private debt had left off — the government became our most important debt-building agency. The net result is merely this: that we are rapidly again approaching the point where debt, both public and private, will again reach an unmanageable, an uncontrollable level; where debt can be leveled only again through the costly death-dealing processes of a depression."

I thank you.

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Q. For the last three months machine tool orders have been on a steady decrease. The same thing occurred before 1929 — what inference do you draw from that?

A. The machine tool industry, although not a large industry, is a key industry. Its principal custom is drawn from the automotive field. I for one am satisfied in my own mind that fewer automobiles will be built in 1938 than will be built in 1937, and therefore the implications I would draw are these: that somewhere a stimulus must be found that will offset, if we are to get an offset, the decline that is likely to occur in the automobile field. I do not believe that that impetus can come out of the building industry. That is one of the reasons that I feel as I do about the prospects for 1938 — certainly after the middle of 1938.

Q. Is this maladjustment curve of yours published in the Dodge publication?

A. I knew that question was bound to come; I would be very much disappointed if it had not. This index is not published anywhere. It is a personal contraption, it is something that I have played along with for a good many years. Some two or three years back, I more or less got myself on record before The Army Industrial College as saying that perhaps next year I might disclose just what it is, and then when I began to see some of the jittery movements I concluded maybe I had better leave it in my own fool's paradise for another year or so. And I still prefer to do that. One of these days I am going to dedicate this to the public — probably when it goes wrong.

Colonel Jordan: We hoped you were going to dedicate it to The Army Industrial College. (laughter)

Q. I would like to ask a very elementary question. What has been the general effect on business concerns that have used forecasts? I do not know a great deal about it, but I understand they are something of rather recent origin.

A. Well, that depends entirely upon whose forecasts they use. It so happens that in the building business, about which there is still lots that I might learn, one might take a barrel of statistics and divide them into ten equal parts, or a hundred equal parts if you like, and put them in the hands of men of equal training, equal mentality, equal judgments, and yet get ten or a hundred different conclusions from the analysis. That is another condition that makes the lot of the forecaster a pretty difficult one. So long as everything moves along smoothly and his forecasts are right he is on top, he is the topnotcher, but the moment something goes wrong and he is called on the carpet to explain why it went wrong he begins to take the ice. It so happens, in direct answer to your question, that many, far too many, manufacturers took too seriously the very favorable forecasts made by their own staffs and by consultants at the end of last year. Far too many of them, for their own comfort, expected boom conditions, rising ratios of profit margins, and all that sort of thing, which are not now coming to pass. As a result of this, many manufacturers enlarged their plants, increased personnel, enlarged advertising expenditures, and a myriad of other things, in their budgetary setups, and for that they may be sorry.

Q. I think it was in May 1935 that the Supreme Court threw out the NRA and that happens to be about the bottom of your curve —

A. It is a happenstance. There are a lot of things that happen that way. Right about in here (indicating 1931), just after England had left gold, (as a matter of fact it was six years ago tomorrow, September 21, 1931) my maladjustment curve started to move down, it went on down, and at the tail end of the year I did not know what was going to happen to it. Then in 1932 I ventured the prediction that within between twelve and fifteen months we would probably be forced to leave gold too. Well, I had a lot of other things to go by - it was probably just a happenstance but it happened to be right. When the Supreme Court handed down its decision on NRA and my curve moved upward for three or four months hence, this situation in 1935 gave me heart. I was fairly certain then, with that sort of control cleared away, that we could look forward with some

degree of certainty that business recovery would be fairly healthy and of fairly long duration, certainly over a period of many months. So that happens as a happenstance.

Q. I would like to ask a question about the increases in rents and the increases in building costs. Are rents rising rapidly enough?

A. During the first few months of this year there was a very rapid rise in construction costs, the net result of which was that we now stand with a construction cost index, and there are no perfect indexes of that; that would probably run somewhere between twelve and perhaps eighteen per cent above what it was a year ago. Since about the middle of this year there have been no appreciable rises in construction costs, but in the interim rents have been rising consistently though much more slowly and gradually. That maladjustment between rents and construction costs is beginning to iron out. I hold no alarm at all about this factor of construction costs because as soon as rents rise to a level where it becomes again profitable to build there will be building.

Q. I should like to ask about the statistical value of this unemployment census which is about to take place in the United States.

A. Well, that is a big order. I guess the census takers themselves would be as frightened with that question as I am. I personally do not attach very much economic significance to the census of unemployment about to be taken. It is interesting: it will prove of value perhaps, but the values which are ascribed to it probably are largely of academic rather than practical interest. Now that may sound like it is something of a defeatist's point of view. I think we need to know how many people are unemployed but I do not think this unemployment census is going to tell us. That is about the way it sizes up to me. We still will have the American Federation of Labor that will feed the country with its estimates, and we still will have the United States Chamber of Commerce that will feed the nation with its estimates, and we will have private statistical agencies that, for purposes best known to themselves, will arrive at estimates, all at variance with the official estimate gathered from the census of unemployment. Whether it will clear the air or befog the mind I can not say, but personally I do not think there will be very much of practical use flow out of it.

Q. In speaking of profits, what in your opinion will be the effect of this undistributed profits tax on the short

term and the long term stockholder in business?

A. If you could answer for me whether the Government is going to maintain its policy as to undistributed profits tax or whether it is presently to abandon it, my task in answering your question would probably be a whole lot easier. However, on the assumption that the undistributed profits tax is to stay with us, I would conclude that the equity holder is in a position of jeopardy because of the necessary dilutions which will come in his stock when manufacturers and other units require capital for expansion. They will not have it, they will have to go out and borrow it. Probably they will not borrow but will do as most of them have done in recent months - issue new stocks to dilute equities, and in so doing the common stockholder is placed somewhat in a position of jeopardy. Specifically, let us take a company like Macy's, a company that was earning, and still is earning, very well. This company recently issued rights to its stockholders permitting them to subscribe to new stock on the ratio of one share for ten held. Now with the recent decline in the market those rights, had they not been exercised within a few days before they matured, would have been worthless. The stock which was selling at about \$48 or \$49 when the rights were issued promptly dropped during the recent decline to \$37, which was the issuing price on the new stock. Earnings have to come along in such a way as to make possible the payment of dividends on that additional ten per cent increase in capital. That has been forced upon Macy's, and it has been forced upon a good many manufacturers, by virtue of the undistributed profits tax. That is not entirely it but it is largely it.

Q. I had another question in view. I remember reading about Phoenix Petroleum - they gave away their surplus and dividends and now they have to borrow from their stockholders to get capital for expansion.

A. So long as the business is improving it is possible to spread out the earnings over a larger number of shares; the moment business stands on a plateau or goes down you can readily see what happens.

Q. I would like to ask what the opinion is now, after we have had about a week's reflection, on the effect of the Government's desterilization of three hundred million dollars of gold?

A. I do not think there is any secret about the Government's own disappointment as to its effect. I think it was largely a gesture, sort of a trial balloon (it is only governments such as our own that can play with toy balloons of that character) and it did

not have the effect that the Government had anticipated it would have. The reason, in my opinion, is this: that there is a growing doubt, and it is only temporary yet, that the Government can not balance its budget this fiscal year and that the possibility for balancing its budget even next year, should be going into a declining phase of business, is not as simple a matter as it appeared to the Government a few months back. Because of that the Government may have to use much more heroic measures, the sort of thing that I indicated a few minutes ago - it might embark, and it certainly has license enough to embark, because of conditions abroad in the Far East and elsewhere, upon a large, unheard of, unparalleled peace-time armament program. I do not say that it will but it is perfectly possible that it may. It will take that sort of thing, it will take a heroic effort on the part of Government, and perhaps outside of the field of monetary control such as this particular instrument has been, to turn the tide of the cycle once it starts downward.

Colonel Jordan: I want one gentleman in this audience to ask a question. We are all interested in what he is doing; he has stocks and bonds which we are all interested in. He is the man in charge of the Army Mutual Aid.

Q. I have read Dr. Schnitman's book on insurance and have passed it out pretty generally in the Army. We are all interested to know when he is going to write the sequel to it, which he mentioned a year or two ago?

A. That sequel is in manuscript form now. In fact, I was under commitment with the publisher more than fifteen months ago to have it published but I am not yet satisfied with the treatment which I have afforded to the chapters relating to the railroad business, particularly the investments in railroad bonds. I will not be satisfied with it until I can be reasonably sure in my own mind that the conclusion which I now hold is the conclusion that I want to hold because of fact, and that is the conclusion that in the next recovery, when, as, and if, holders of railroad bonds had better get out and stay out. We have had a period of five years of irregular business recovery; no major railroad which has been unfortunate enough to get into receivership, and more than thirty per cent of the trackage is in that category (or under 77B), has been able to get out of receivership. We can not be far distant, we may be a year or two or three years off, even with Government controls of new varieties, from a turning point of a major adverse character. So I am

frankly very much concerned about the investments of insurance companies in the railroad field, and particularly am I concerned when I scan the investments of insurance companies and find, as any of you can find upon examining the bond list of your own insurance company, cases where bonds of railroads are held with maturities well beyond the year 2000. Did I say the lot of the forecaster was a hazardous one? Well, let me tell you we have railroad bonds, not many fortunately, that carry maturities, now mind you this fact well, of the year 2361 and those are found fortunately not in many portfolios. Those bonds that mature in the year 2361 are the West Shore railroad bonds, a division of the New York Central Railroad.

Q. I hesitated to ask a question here because I did not want to turn this talk on general economics into an insurance talk, but I am very much interested in Dr. Schnitman's idea and I would like to ask him a question which I think will interest nearly all here. In the close of his book on insurance he suggested the possibility of the Government doing the insurance business in the United States. Nearly all of us in the Army and Navy carry Government life insurance and I think most of us believe it is a very fine insurance (at least for the policyholder, it may not be for the taxpayer). I would like to know whether Dr. Schnitman has looked into that matter at all recently and how he would consider the management of Government insurance?

A. I guess about the best way to answer that is to say that I, too, am a holder of Government insurance. That does not necessarily prove that I believe that the Government insurance per se is any better managed than private insurance. I do think that we may yet come, it may not happen until the next depression, to the time when Government will be compelled to step into the breach much more so than it did in the formative days of the R.F.C. and that we may yet find growing out of the Social Security legislation a program of government insurance for all such as we now have in the Veterans Administration. We may yet have the Government in the insurance business on a large scale, where all who want to buy that kind of protection can get it.

