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BUSINESS FORECASTING
by
Mr. L. Seth Schnitman, Chief Statistician
F. W. Dodge Corporation, New York City

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BUSINESS FORECASTING

Thank you very much, Colonel. This idea of coming before a group of men on a subject so treacherous as business forecasting calls for a way out for the speaker. So, at the very outset, I am pretty much compelled to say that I am no seventh son of a seventh son. I do not possess any crystal-gazing powers, I do not profess to be a Gypsy or have anything in the way of an adaptation for palm reading or card reading or the reading of tea leaves. Rather I do mean to convey the thought that by a careful and conscientious and methodic survey of existing facts it is possible to make a fair and proper appraisal, not only of where business may stand at any given moment but where business may be some six months to a year hence. From that point of view I will try to tackle today's problem.

To men who are studying business, such as you gentlemen are, it is no news that business has made a very striking - a quite remarkable recovery. If we divide the business picture, or the industrial picture, into its component parts -- if we take business and industry, any measure of business and industry - practically without exception we will find that the facts are simple, namely that all business has shown a very perceptible recovery. Let us take a few of these indicators which statisticians and business men and students of business problems usually look to as measures of business improvement, or, for that matter, business decline, and what do we find? We find among the consumer goods lines, an industry such as silk which though it has not emerged from the depression nearly to the extent of any other of our important goods industries-- has shown a very creditable improvement. This is the worst index, perhaps, that one could take of the present status of business, and yet it has shown a very perceptible improvement over the conditions of the last two or three years. We may take a better index of consumer goods, such as shoes, and here we find, that we are now producing more shoes than ever before in the history of this country. If we take another example, such as rubber, we find that we are consuming rubber today at a higher level than has been the case at any other similar period in our history. Cotton -- cotton consumption today is running at approximately predepression levels, rayon is making new highs -- another consumption goods industry. And so on and on throughout practically all consumer goods lines, regardless of the measure that one may use, he will find that we have made a very appreciable recovery from what was once looked upon as the "great depression."

But without recovery in another phase of our economic life the improvement which we have thus far seen in the consumer goods lines would only have been transitory from the standpoint of our national balance sheet of economic life, I refer, of course, to the improvement in that great class of industry which is known to economists and statisticians as the capital goods, or durable goods lines. In these lines, too, we have seen a very creditable advance, not quite the advance that had been heralded forth, no, but none the less a creditable advance, and an advance that seems to argue well for the nearby, and perhaps even more remote, future. Steel plants are now operating on a plane somewhat reminiscent of predepression days. Automobile plants were never so active as they have been this year, excepting only 1928 and 1929 construction still lags but is rapidly gaining stride. Machine tools have gained the 1929 stride.

Now those lines of industry that represent consumer purchases direct, such as department stores and mail order houses, and the index that is usually looked upon as measuring all kinds of commercial activity, namely, bank debits -- all those measures, too, give mute evidence, if any more evidence be needed, of the remarkable, more or less spectacular revival that has occurred in the business picture.

With this, I direct your attention now, if I may, to this wall chart (Exhibit 1). The broken line represents the Federal Reserve Board index of industrial production, the index with which most of you men are doubtless familiar; an index which covers most of the principal industrial lines, both manufacturing and mining. The index is seasonally adjusted so that the movements on the curve more or less depict the long-term cyclical developments without regard to the season of the year. It is weighted on the basis, as you may know, of the importance of the respective industries and the yearly average for the years 1923 to 1925 has been taken to represent 100.

As you look here (indicating) you see how the curve fluctuated from 1926, well above the 100 line for a period of two years, 1926-1927, how it then suddenly shot up at a rather abrupt pace in 1928 and the early part of 1929, how it declined after that, how we are now at a recovery point that brings the industrial production index to a level higher than at any time since the autumn, in fact since the summer, of 1929. I have taken the liberty to estimate the figures for

August and September 1936. The last actual figure as compiled by the Federal Reserve Board is the figure here (indicating) for July, which stands at 108% of the 1923 to 1925 average, or 8% better than the average for those three years.

That, gentlemen, represents the industrial production index, it represents the volume of goods that has been manufactured in relationship to the earlier base period.

In looking at this curve, it is very simple now to discern a rather rythmical, though very erratic, rise that has occurred since the depths of 1932. Here we had virtually four years of decline from the middle of 1929 to the middle of 1932 we have now had the spectacle of approximately four years of rise, intermittently interrupted -- a rather rythmic picture, with all of the defects, with all of the interruptions. So much for that curve which is well known to those who see Federal Reserve Board bulletins and other statistical bulletins periodically.

The lower curve is a contraption, and that is all I can call it. It is one of those things that oft times makes slaves of men. I hope it may never make a slave of me. It is a mathematical concept. It is a concept which I have arrived at after long study. In a word, it represents, or attempts to represent, maladjustment, and that is all I hold for it -- a maladjustment between the two broad branches of industry to which I alluded at the outset of my talk, a maladjustment between the consumer goods industries and the capital goods, or durable goods, industries. Its movements are important only as to directions and not as to magnitudes. I cannot stress this point too strongly. And for what purpose this curve?

I am quite convinced that the periodic cycle of booms and depressions, of famines and feasts -- those periodic movements, rythmic movements -- are induced by a maladjustment between the consumer goods and the capital goods industries. I come to that conclusion simply because I am convinced that the products of one broad branch of industry must exchange in the open market places for the products of the other broad branches of industry. If the products of consumer goods industries cannot exchange in the open market for the products of the capital goods industries -- for houses, for machinery, for ships, for any other type of capital goods, or durable goods -- we have a backing up of inventories, which ultimately brings on a collapse. That is all, gentlemen, that this curve, which

I call my maladjustment curve, this curve in sharp black outline, attempts to measure. It attempts to indicate the maladjustment between these two broad general classifications of industry, the consumer goods and the capital goods fields.

Now what do we see from this maladjustment curve? (indicating) We find here, (indicating) the earliest point plotted (1926), that there was a virtual adjustment. During 1925 and for the entire period of 1924 and 1925, though not charted here, this curve fluctuated around 100, which means nothing more nor less than that the two broad industrial groups were in practical adjustment. This maladjustment curve is not relative to any year -- 1923, 1924, or 1925, or any other base year -- rather it has the faculty of being self-adjusting. It represents a relative position between two industrial groups at any given momemt. When this curve stands at approximately 100 it means that those two groups of industries, at that particular moment, are in approximate adjustment.

Now what happened? We find that through 1926 there was a downward sag in the maladjustment curve that continued until the early fall of that year. I direct your attention now to the upper curve (The Industrial Production Index). If you will look here, (indicating) you will find the year 1927 and that there was a downward movement then in the industrial production index not materially unlike in directional trend from that of this curve (indicating the Maladjustment Curve) a year earlier Approximately one year had elapsed between the declining phases of the two curves.

Look over here to 1928 through to the fore part of 1929 (pointing to Industrial Production Index) and you see a direct counterpart in this curve (indicating the Maladjustment Curve), almost to the exact duration, starting here in late 1926 and continuing through to the second quarter of 1928

Gentlemen, in May and June of 1928, I dared, against all odds, to put my neck out and make the statement that before another full year would have advanced we would be in the early phases of a major business depression. I dared to do that because the facts seemed to warrant it. I had taken the two broad industrial groups -- consumer goods and capital goods -- and reduced them to a formula. The results of this formula you see pictured on the wall I came to the conclusion that the products of one group were not going to exchange for the products of another, and because they could not exchange one for another we would soon have an industrial depression. It was not until this line, in its declining phase, (indicating Maladjustment Curve) crossed the 100 line, and that, gentlemen, was months in advance of the time of the stock market collapse, now at its seventh anniversary — that I was convinced beyond the shadow of a doubt that my earlier point of view was correct. I had hoped, still against hope, that some one would be willing to believe it. And what happened? What happened is still too fresh in the minds of most men. Here (indicating the Maladjustment Curve in middle of 1928) we had the signal, and the industrial production index in June of 1929, practically a year later, started to drop and dropped precipitately. The President called a National Recovery Conference in November 1929, shortly after the stock market collapse and some six months after the industrial production index had already dropped more than twenty index points. It was my privilege to be on one of the committees that was asked to prepare a report on the long-term effects of the depression in the stock market, and the probable duration thereof, and I said at that moment "Gentlemen, we are in a major business depression, we might just as well face the music."

There was not the slightest indication in this curve (pointing to Maladjustment Curve for 1929) that any change in direction in the industrial production index would occur within a year. Yet one did occur, as you will note (in the winter of 1929-1930), and when that occurred I said, again reasoning from the facts at my disposal — and the facts at any one else's disposal — that that the rise in the Industrial Production Index would be a temporary reversal in trend only and would not last.

Recovery could not set in from a level of that sort, I argued, because this (indicating the Maladjustment Curve) was still measuring a continuing decline in the adjustment between the two branches of industrial life. All of the efforts of business men who came to the Washington Conference in 1929 from all parts of the country railroad presidents, industrial leaders, and public utility men, pledged to undertake huge expenditures to break the back of the depression went more or less for naught. We had this little hump in business (indicating the rise late in 1929 and early 1930 in the Industrial Production Index) and down the index went again and continued down in more or less direct parallel with this movement here. (indicating the Maladjustment Curve a year earlier)

What happened then? At the end of 1929, and I have already indicated, I believe, that this Maladjustment Curve has a forecast value of approximately a year -- the chart points it -- we had hit a level which looked like we might be turning around -- which looked as though by the end of 1930 or early 1931 we might have arrived at a turning point in our economy.

But we had already become panic stricken, we had put the pressure on at the wrong places, which is always the case, I believe, in depressions. Temporarily it had its stimulating effect, and this (indicating the Industrial Production Index in early 1931) started to turn upward. I must at this point again emphasize, that I do not believe the Maladjustment Curve has any value as an index except as an index of changes in direction and not changes in magnitude. I will enlarge upon that a little later.

At this point, I repeat, this change of direction (pointing again to the Maladjustment Curve at the beginning of 1930) made it possible for me to say, and I was more than happy to be able to say, that we were probably nearing a change in direction so far as industrial production was concerned. That happened (again pointing to curve of Industrial Production for early 1931).

We had for a period of almost two solid years an adjustment (pointing to Maladjustment Curve for 1930 and 1931) -- considerably below a normal adjustment of 100-but none the less a general plateau, which gave heart, which made it appear that we were somewhere near a depression bottom. That condition makes it appear that perhaps much of the so-called tinkering that was talked of and actually entered in upon should never have been even talked of. But here is what happened The directional change of the Maladjustment Curve late in 1930 forecast a similar change in production for late in 1931 only to sink lower because of tinkering. We were panic stricken again, and so when this (indicating the Maladjustment Curve) started down again I was convinced that the industrial production index would soon follow, and it did. It went down here, (indicating the production index in 1932) That marked the low of the depression in industrial production, and, for that matter in most other standard measures of business. And, that was when we were all panic stricken and everybody was looking for some Messiah, everybody was convinced that he and his brother were economists, he and his brother were lawyers, and knew what was best for the country, and when we all dumped our securities at a time when people who were wise and smart were buying them.

All of this effort, -- private effort just as bad as governmental effort, - all of the frenzy of the period upset the apple cart and my curve of maladjustment precipitatedly fell to a new low level.

But, I want to (pointing to Maladjustment Curve) direct your attention to one basic fact, and that is that in the summer of 1931 -- and here again please remember that this curve forecasts directional changes and not magnitude, the slightest directional change is important as an indicator, it may be only short-lived but it is important -- here we had a very small change in direction(still pointing to Maladjustment Curve in summer of 1931). I set myself to the task then of watching its effect a year hence, and what did we find? Here is what we found A rise in the industrial production curve, but since the Maladjustment Curve had already started down, I was convinced that the improvement in production, too, would be short lived, that it was not the real thing. None the less it was part of a broad, general upward swing that has not yet attained, apparently, its maximum development. Then here (indicating the Maladjustment Curve in 1932 and 1933) was a period of a blind spot. We had no directional change in the Maladjustment Curve. The period of 1932 and a major portion of 1933 was a blind spot because it was controlled very largely by forces outside of the normal business picture. Those were largely the forces of government. Government was convinced that something had to be done. It tried this and it tried that, and in so doing gave a continued further maladjustment, because the bulk of the emphasis was on what line of industry? It was on the consumer goods industries. The NRA, the Triple A, all of those impediments were largely on the consumer goods lines. True, effort was directed on the capital goods lines through the PWA and later through FHA, but those were too slow to get into operation, and so I got this blind spot in my computation.

This (indicating on the chart the spring and summer of 1933) was the NRA period. The fear that prices were going to advance inordinately, brought in orders of all types and descriptions far in advance of actual needs, so we had this (indicating mid summer and autumn of 1933) inordinate drop. With the continuation of this downward curve a year earlier (the Maladjustment Curve) this rise in the production index was an abnormal rise and could not last, and it did not, yet it, too, was part of a broad phase upwards -- even though it was interrupted.

Then we came down here (indicating the Maladjustment Curve) late in 1933, and we had this directional change, short though it was. I was then quite convinced that in here (still indicating) was a broader significance than any before — that this was part of an ascending cycle Yet, with all of that, when it (the Maladjustment Curve) turned down again in the early part of 1934 and continued that way until the middle of 1934 I continued to say that all that movement in the production index which was indicated for 1934, though upward, would be an abortive movement.

At no time in this earlier history (pointing to years 1926-1930) did you see such an irregular movement of the industrial production curve. This curve has had eliminated from it all seasonal influences as far as that is humanly possible. You find nothing of the abortive, interrupted rise in trend that you see in here, (indicating the years since 1930) When we got down here in 1934, right in there, (indicating the Maladjustment Curve in July, 1934) I had the first evidence of what looked like a genuine, broad turning point akin to this general broad turning point (pointing to Maladjustment Curve at end of 1929). This was a regular movement, it was not very abrupt, so I watched it very carefully. I was convinced that we would see a similar turn, not necessarily of the same magnitude, but of direction, in the fall of 1935 in the production index. It happened. But I made the remark, as some of you men may recall who were here, that if the Maladjustment Curve were to turn downward and did not continue upward for the remainder of the year 1934 and into 1935 that that would point to a short-lived recovery in production, and that is what actually happened (indicating decline in production in early 1935). It went up here, (indicating the Production Index for late 1934) akin to this directional movement (in the Maladjustment Curve a year earlier), and then it shot back down

A year ago this (indicating the Maladjustment Curve on a rising plane in late 1935) was the position of the curve, and at that time I suggested, reading from its implications, that business would continue, and that the industrial production index would continue upward through 1936 from the second quarter forward, and that we would probably have a short, sharp recession. I further stated that if let alone from outside influences we would be well on the way toward a good, old-fashioned business recovery. We did not have that part of the curve (indicating the production curve) — as a matter of fact, the curve about a year ago was down in there, this part has all been added by the lapse of time.

Now where do we stand today? What are the implications? What is the business future? Well, I will let you all in on this little secret. (Removed paper covering from the Maladjustment Curve for 1936). That curve, as you will notice, that maladjustment curve, the black curve that is still very far removed from an adjustment, has been continuing upwards and consistently so since the Spring of 1935. It is the only directional change that has occurred in that curve in more than a year. That (indicating) marks the August, 1936 position of the Maladjustment Curve. The implication, gentlemen is this That industrial production, and most other standard measures of business, can be counted upon to continue forward through at least July of next year, bearing in mind that this chart, this curve, has a forecast value, if it has anything at all, of between eleven to thirteen months. This small downward directional charge (in the Maladjustment Curve for August 1936) may turn out to be unimportant in actual relationship to industrial production, it may mean a very important directional move. On very imperfect and preliminary figures that I now have covering September the Maladjustment Curve reverses its downward trend of August but this may turn out to be only a false directional trend upwards.

The point is, then, that some time after mid-year next year we should be on the lookout so far as industrial production is concerned. I hope to know a month or two hence whether this directional change in the maladjustment curve for August really means anything more than a slight, unimportant downward turn in this upper curve (the industrial production curve) for next year. So much for that.

Business can look forward today confidently and with much satisfaction for 1937. Some storms will gather, I believe, after mid-year, but these, I think, will be blown out to sea by the favorable winds that will arise in the capital goods industries, notably in the field of private construction. Make no mistake, gentlemen, I do not mean to convey the thought that we are in the beginning phases or bordering on a broad building boom of the type that characterized the 1920's. That just is not in the wood, but none the less I am convinced that the total volume of construction for the year 1937 will exceed that for any other year since 1930, and that will be an accomplishment. The mean result of that accomplishment is this we will only be back approximately at the half way mark on recovery hill, so far as the construction industry is concerned, so steep, so disastrous, so precipitate has been the decline in this, the most basic, perhaps, of all of our industries, the construction field.

Now, much optimism has been spread abroad by observers who have the same facts at their disposal as I have, optimism for a great big, old-fashioned, never to be forgotten boom in the residential field. Gentlemen, I cannot share that view. I wish I could, for the very bread and butter of our organization is intimately tied to residential building and its fortunes. It is not that I do not expect the continuation of further important gains in the residential field, no, that is not the reason at all that I cannot share that point of view, but I am just facing the facts and I think we might just as well face the facts. With the picture of industrial production such as we see here today, (indicating) where the index is now 108% of the level of 1923 to '25 and likely to go higher, above all else now is the time to keep one's feet on the ground. Now is the time to remember that forces making for the next depression are now sapping the lifeblood of an economy that recurrently is plagued with outgrowths of parasitical nature of all kinds which eat upon easy credit and a speculative mania.

The crisis of 1837 taught the lesson, or should have taught, and the folly, if you will, of credit over-extension. The panic of 1857, with its long train of banking failures and ruined businesses and industries, taught the contemporaries of that day, or should have, the lessons of speculative banking. The depression of 1873, and that comes as close to being a parallel to the current depression from which we have just emerged as any of them, taught its lessons, too, and those were the very costly lessons of land speculation and stock gambling. And the later depressions — that of 1884 and of 1893 and of 1903 and of 1907 and of 1921 and the last one, that of 1929 — all taught their lessons, all left their imprint upon our mentalities and upon our institutions, but perhaps not indelibly enough.

Now the swing from a state of pseudo prosperity, or actual prosperity through to depression, always brings on serious evils of all types, against which, it is my firm conviction, legislation is of little or no avail. Once let the idea spread abroad that by legislation it is the duty of government to take care of every one and presently you will find that every one will cease taking care of himself. Once let the notion go abroad that by extending to the consumer easy credits and long terms of three or four or five or ten or twenty years for consumable goods of all types and then, gentlemen, I am convinced will have been sown the seeds for the next, perhaps the greatest depression of all our time, and then will I be sure the lessons of the last century of depressions have been fully wasted and thrown to the four winds. Once let the idea get across that government should continue, without hindrance, expenditures of all types and descriptions, and then will the pressure for even further and larger expenditures become overwhelming and completely overpowering.

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 consequent 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? 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.

What is the lesson? The lesson is clear, as I see it. Now above all other things, is the time when we should have our eye cast upon the future, upon the period that may be removed by some three or four or maybe five years, when this debt building process will again have attained to the level that I just referred to as being unmanageable.

It isn't that the next depression, when it comes, may be a result of overspeculation that worries me, it isn't that it may be a result of the folly of easy credit, per se, it isn't that it may be the result of speculative banking, as was the case in earlier times. It is rather because I feel it proper to suggest that the next depression may be very analogous to the depression of 1884 which, gentlemen, was a depression with a slowly sinking and weakening structure on all sides. It is one thing to prepare one's self for a sudden shock, such as the collapse of a bank, it is still another thing, gentlemen, to set your ship in a sea of constantly mounting forces — such as those of 1884 — that can do ought else but drive you on a reef.

And so if there is one thing that I can leave with you as a parting thought, it would be in my paraphrase of the old truism about war In times of prosperity let us prepare for the depression. In this way, gentlemen, and in this way alone can I see the only way in which we can mitigate — not eliminate, because I do not think we can ever eliminate — the ravaging processes of that cyclical movement which we call an economic boom and depression.

Before I close, I would certainly commend to each of you the reading, if you have not already done so, of an article that appeared in the magazine section of the Sunday "New York Times" by James Truslow Adams, which he calls "Parties and Panics — What link?" What link? He makes the case that there is virtually no link between parties and panics. These inexorable processes of depression that ultimately are followed by processes of boom he assigns to a psychology, to men's mentalities, to the speculative, to the forces which I humbly tried to enumerate for you, and I think it is well worth your time if you will just spend a few minutes with that article.

There must be some questions that have occurred to you men as I have propounded here, and if there are I will be more than happy to attempt to answer them.

Enclosure Exhibit 1

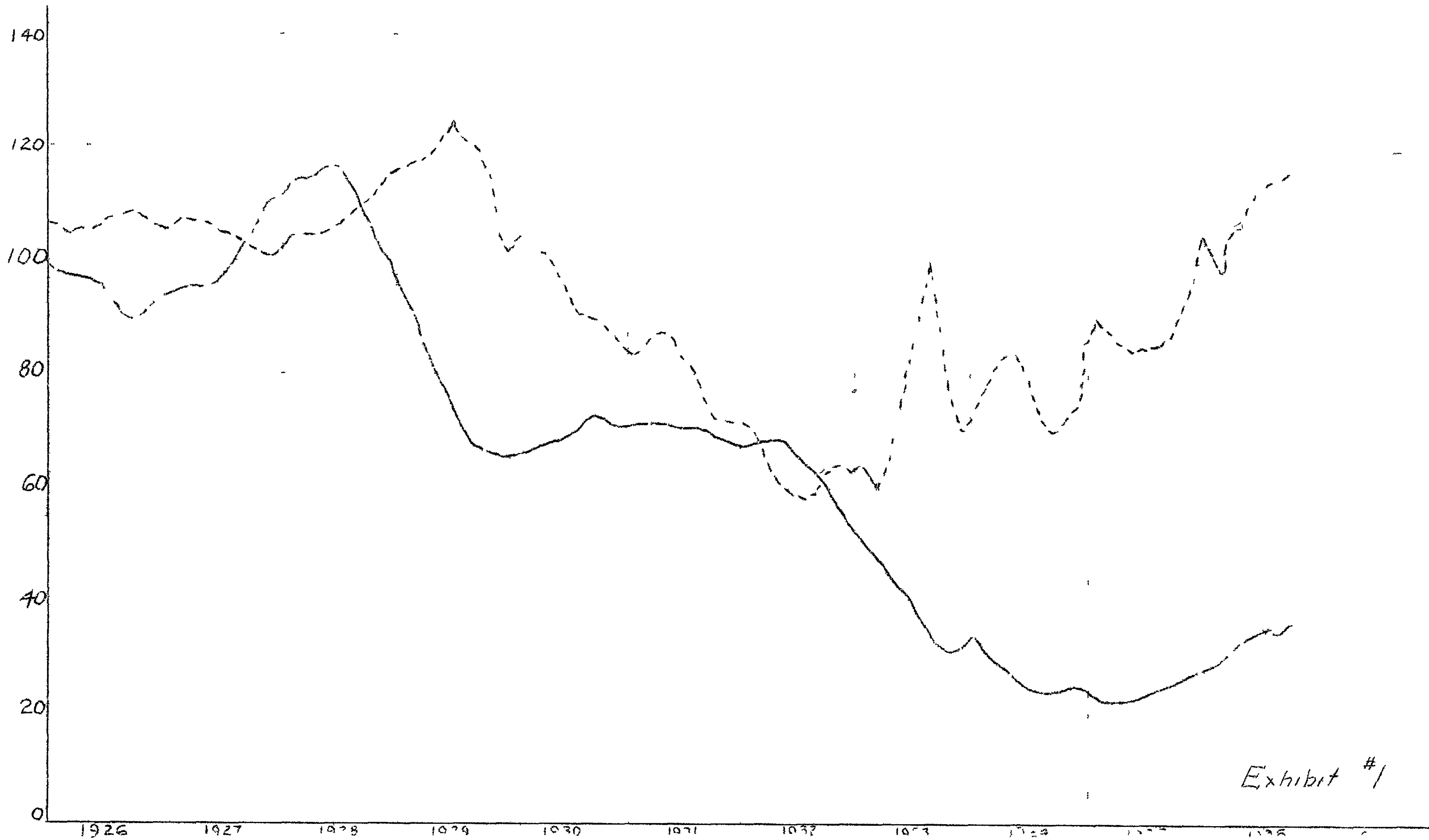
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Exhibit #1

BUSINESS FORECASTING

(Discussion following Lecture by Mr. L. Seth Schnitman)

September 21, 1936

Colonel Jordan: Mr. Schnitman, may I say that the Faculty has already been ordered to read that article and the Class will be similarily instructed to read it.

Q. Is it true that the maladjustment between consumers products and capital products is greater today than it was even in 1929?

A. Well, in a quite real sense it is. This is colored largely by external influences: the effect of the governmental construction program and a lot of other influences that may or may not become permanent policies and which may make it necessary to somewhat revise the formula. Taking it in the large, it is true that the maladjustment is about as bad as it is pictured, even though the upward direction is definitely favorable. To be more specific, I can very well conceive, and it probably will happen, that the next depression when, as, and if it comes will occur at a time when this index (pointing to the Maladjustment Curve) will be a long ways removed from what might be a practical adjustment. In other words, because of the external influences, if this were to go up for a period of two years (pointing to Maladjustment Curve projected into 1938) and went up very precipitately, it might signify a later turn in the production index from this level (indicating the Maladjustment Curve at about 80) instead of approximately 100.

Q. The maladjustment curve is very interesting. I wonder if it would be practicable to give us some kind of an idea as to how that curve is derived?

A. Well, it isn't a question that I have been unprepared for. I get that question every year, and I would have felt that my talk did not get over, to use the parlance of the street, if I did not get that question. I had promised myself, and I think at an earlier class I had promised, that at some future time I would dedicate the curve, and more specifically its composition, to the public interest. But I must again beg leave from doing that. Because of the external influences I am not quite completely convinced, though it has worked on every major important occasion in the past, that it can work as effectively in the current cycle with governmental and other external interference. I hope that at some future time, not very far removed, I will be able to disclose the nature of the curve. It is not a thing complicated; it is just as simple as a safety pin; it does not involve any long computation; and once I get the basic figures that enter into the curve the computation can be made approximately in a minute to bring it up to date. I am sorry I cannot answer the question specifically.

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Q. Last year you indicated that there might be, in fact I think you said there probably would be, a down turn in your maladjustment curve in June or July. I notice that it did not come in June or July but apparently did come in August. Perhaps I am asking too much the same question that has just been asked, but at that time you said you did not care to tell us how you arrived at the conclusion that that drop would come; I wonder if now that there was a drop just about a month later than you expected it if you could tell us what caused it?

A. I should be more than happy to tell you. As I have indicated, the curve has the faculty of forecasting for a period of ap roximately eleven to thirteen months in advance, and I cannot be ever sure that it is going to be eleven or twelve or thirteen. My observation a year ago that it might turn down in June of 1956 was largely based upon the belief that one of the component factors, and I will give you this much in direct answer to the first question, that enter into the chart, namely automobile production, would probably account for the turning down of the curve. Now as to the timing of it, I can never be sure, as I say, as to whether it will be exactly twelve months or only eleven months or perhaps thirteen months. Does that answer your question?

A. Yes sir.