

Interviewer: Welcome once again as MIT Professor Paul Samuelson discusses the current economic scene. This series is produced by Instructional Dynamics Incorporated. Well Professor Samuelson, is it true that the recession is finally over?

Samuelson: Yes, I always warn lecture audiences that just because you hear a thing said in Washington doesn't mean it's automatically untrue, and I believe that history will record that the truth of the 1973, 1975 business cycle is behind us. Let me, as an exercise, review with you some material that I had to prepare on short notice in connection with a Washington meeting. The person who usually gives a matter of fact roundup of the current cyclical position was unable to attend this meeting, and since I was to be in attendance I was asked whether I would pinch it on short notice. I realized that this was not my specialty, but I was agreeable, it was a challenge, it was interesting to mobilize the data. So let me, first, avoid, everything but implicit theorizing, and let's just take a factual look at the data that are available. First, the consensus forecasters data resources, incorporated DRI of auto extine, doctor Micheal, Evans, the Wharton school model, towns in Greensbane, you know, the group to I might refer, they've been expecting the truth to come as I have been putting up for some time somewhere between April Fools day and my own May 15th birthday. And I've been counseling, at even money, go with the experts. Well, it now appears that that was good advice, and even money you win you bet, it rather now appears that a year or two from now, when doctor Jeffrey Moore of the National Bureau of Economics Research goes into executive session with himself and his colleagues, that he will record that the recession did hit bottom, as I put it somewhat precisely on April 19th at 11:01 A.M.. Moreover, the leading indicators, and we've now got a new series of them, purified of inflation and revised and amplified, so that we now have 12 pretty good early bird leaders, they gave their usual one month lead or two months lead at the low returning point. In this case it's near two, one month lead, they went up in April slightly, after persistently going down for a long long time, and they went up, I'm tired, they went up in March slightly, and they went up in April quite significantly. I believe it was a four and a half percent jump in the leading indicators which this series has been trade back to 1948 in parallel with the old series, which is one of the biggest jumps. When I talk to a banker, four nights ago, and asked whether we weren't very near the turn he said no because the leading indicators don't yet indicate that, well he's now had the news that they do indicate that. It is sad that the leading indicators are just good on a no go, go basis. They aren't quantitative they're qualitative, and what they tell you is that the recovery is up. Moreover, if that is the case, if we have just passed the truth, then we are at what is typically the easiest time of the business cycle to be correct in making qualitative forecasts. You're safest at this juncture, just after the truth is behind you and projecting a general rise in real GNP and in, in the income, real income, and employment, for the first year following the turn. This qualitative precision is however deceptive. As I wish to explain. It's deceptive because the quantitative parallel prediction is by no means so easy and safe to make and furthermore, we'll see in a moment, that even in its own terms it's a tautology which could be misleading. The pace of the recovery during the first year of the recovery is alas quite variable. There is quite a standard deviation of the past experience in the first four quarters after the bottom was reached. The big question of course, that everybody is asking is whether this is a V bottom. Sticking just to the historical facts and patterns and assuming as much theorizing as we can, the only crude empirical rule which I recall, read

something like the following if the preceding downturn was sharp and short, and particularly if it involved a good deal of discernible inventory accumulation and excess, then the odds are most favorable for a sharp, and perhaps short, recovery. You might formulate, so to speak, a revised second law of Isaac Newton, only what came down hard can be expected to rebound hard. So superficially, this might suggest that the mid 1975 to mid 1976 could be a period of vigorous growth, for the reason that we know now, that the economy collapsed rather badly from the Fall of 1974, from August and September, time of the Summer meetings, to the Spring of 1975. And we also know that there was considerable inventory movement involved in this period of time. So, that way of looking at the problem does favor the probability of a V rather than a U or a L shape bottom. However, there's another way of looking at the late, unlimited recession. If you date its beginning from November 1973, and that's perhaps what the National Bureau is going to do when it finally speaks out on this problem, or for that matter, you could date the beginning of the growth trend recession, from Easter of 1973. If you do that, this recession was a long drawn out affair. It's been called a maxi recession. The worst recession since the 1930's is in the age of Keynes. It's been called a replay of the old world wide recession. Well, from that view point, a Newton's law, no longer leads to the confident bet that the recovery will be extreme and bouncy in its intensity. I think that crude empirical law ought to be modified because I believe that the longer and more drawn out the previous recession has been, so that you are very far from your potential, it seems to be that that lays the basis for a rather sustained recovery, and for all I know a rather rapid recovery in its initial stages. I remind you, that the Newton's law that I just stated would not have been seen to have been applicable to the 1933 trough. After all it was a very long and drawn out affair from 1929 to 1933, but in point of fact, the real economy grew from 1933 to 1937 when there, recession of 1937-38 finally got under way, at a pace that was so rapid that most of us had forgotten about that period. And my recollection is that the rate of growth of the money even in that period was way way above four percent, five percent, sort of long run numbers that one has had to think about. And the rate of increase in real output for a very considerable and long period was very considerable but, of course, it was from such a low base, that it was possible for that to be the case. There's another factor though that makes us hesitant in applying any simple Newton law, there's always the possibility that we are in fact in a W bottom. There've been W bottoms in history. The most famous perhaps was the 1932 bottom, followed by a recovery, punctuated many think by the apprehension and concern over the election of that man Roosevelt, in the Autumn of 1932, so that you'd again went into collapse and most endless record the lowest V of the W, as having fallen in 1933 not in 1932. So, if we're in a W bottom, then it's an illusion, this pole reversed day trough, and so you don't even have the tautology of sure things growth in the first year after a recovery. Well I'm inclined not to bet with that, but it's always a possibility. If you wanna be fallacious and use the language of Chardist, there's even the possibility of an inverted head and shoulders formation. The first trough came in the Spring of 1974 after the opaque boy cut was over. The second perhaps came this Spring, it's the, not the left hand shoulder but the, the head, it's the lowest trough, the inverted formation, and the other shoulder will come sometime this Autumn for you to name if you believe in that kind of absurd technical analysis. Well it is absurd but what is not absurd is an argument which you can get to understand that the commissioner of labor statistics, Jewish Chichkin, may defer from some of his colleagues in the National Bureau of Academic Research, in that he may not be willing to concede that November 1973 is the proper date for the onset of this recession, because he could treat that as an exogenous oil boy cut phenomenon, and that the proper dating of the recession does not begin until August or September of 1974. Well, sticking to the taxonomy of the historical record. Here are the facts on the growth of real GNP, in the first year of

recoveries. For all the post war cycles, post World War II cycles. I happened to pick this up from the Argus weekly staff report of June 2nd 1975 but it's easy for you, for many monetarists, to confirm these numbers. The 1949 recession ended I think around the Autumn of 1949, and the first four quarters of that recovery, 1950, there was an eight point one percent rate of year growth. 1954 1955 eight point three percent real growth. 1958 59, that's one that people often call a V bottom, was a seven point one percent, a recovery. From February 1961, the beginning of the Kennedy administration when the economy hit its troth next four quarters, 1961 62 recovery, a healthy growth of seven point seven percent. If you just looked at those numbers, and you were sitting in the last part of 1970, you would say gee, we're going to grow an average of seven point seven, seven point one, eight point three, eight point one percent, at least a seven and a half percent rate of real growth is going to come in the recovery 1970, 1971. And some of the mechanical thinking simply doing what I'm doing for you, I heard that academic consultants meetings in Washington and then contributed, it had only a small amount of the share of the guilt in the famous or infamous, one O six five billion estimate for 1971, by the Nixon administration, you recall Paul McCracken and Herbet Stein and George Shultz, argue that against the consensus forecasters. Well, in point of fact, the recovery was only two point two percent. Let's not do any exclusion from the data, take all the data, average the two point two percent in there, and according to my risk and take that gives us an average for all the post war recoveries, six point seven percent. And if you don't wanna do anything more extreme than arithmetic averaging, than using this method you are to bet that in the four quarters from the middle of 1975 to the middle of 1976, the economy will grow in the bulk part of six point seven percent. I would warn against any such simple forecasting, if you can't do any better than forecast a miles weather by crude searching out of average past climate conditions, you may have to resort to that method. But it's a method which can very soon reach diminishing returns. You ought really to go beyond the mere taxonomy of the problem, and beyond the old farmer almanac of all recoveries in the annals of the National Bureau. It's relevant for example that the eight point one percent in the 1949 50 recovery, that amount of real growth, was certainly affected by the outbreak of the Korean war in June, about halfway in that first year of the recovery. It's a fact that the 1955 model year, beginning in the late Autumn of 1954, was just a terrific model year, there was something about the car designs that just resonate response from the American public. You could sense it in the showrooms of the automobile agencies, at the very beginning. I remember that Arthur Burns was much more optimistic about 1955 than the staff, and I asked one of the staff members why is Arthur Burns so optimistic and he says Burns has reasons, the reasons we'll never know. Well, perhaps it was good luck that his astronaut was built out by the terrific year recovery. I would myself take that rebound of auto sales as an exogynist event and I would flunk any student who, in a turned paper to me, explain it by other than a demi variable or something to do with a style changes, I would apply the same analysis that I would apply to the length of women skirts rather than any refined indifference curve analysis. It's relevant surely that the 1958 troth turned out to be something of a square root bottom, and the number's as vigorous as it is because there was a very serious steel strike in the last part of 1959 which was foreseen in advance. So, I think you have to supplement the mere taxonomic data on historic cycles. By an analysis of the existing factual evidence that has a bearing on the probability of strengths and weakness on the various sectors of economy. Well, let me give an example. Let's take the consensus forecasters. They averaged out in their estimate of real GNP growth in the 12th month from the end of the second quarter of 1975 to the end of the second quarter 1976, not far below that crude six point seven percent average. Now, typically as I look at their forecasts, particularly the ones that they like best, their controlled forecasts, they based their guesses on the

expectation of a rebound in domestic auto sales and production. And upon a modest rebound in housing starts. Well, what to think? Even the pessimistic variants of the consensus forecasters seem to me to put too little probability weight on the real possibility that domestic car sales might be very disappointing in the year to come. There's also, in my view, room for downside risk that the rebound in housing could be even less than that of the revised projections of the consensus forecasters. I was reading one of the better ones of them and he said that, our clients in the housing industry look at our housing forecast they laugh. So we're shading our housing forecast a little. Well I don't think he shaded it enough, particularly since there're factors like the following. The real weakness in housing now is not in single dwellings, it's primarily in multiple dwellings and apartment buildings and condominiums and so forth. If those were to come back strong, and some come back in them is probably necessary to realize the rebound in housing that some of the consensus forecasters used, I think we'd have some signs up and I certainly think that experts in the housing industry who are nearer to that industry than I am would have some warning of it ahead. Well, what's the moral? The moral for me is not to replace the consensus growth estimate, which might be six to seven percent, but my own more conservative guess, or pessimistic guess or bearish guess, of four to five percent, I don't even know whether that is my preferred interval. But rather, I would call so very seriously a wider spread, I think that at least that four quarter period should be characterized as involving a four to eight percent range. Moreover, within that range, you're gonna have some quarters which might very well be ten and 12 percent, they're not uncommon in the post war recoveries in the very early periods. So, I think in other words, you are to second guess the alleged degree of precision of even the best forecasters and to induce you to do that all the more, I just invite you to scrutinize the different forecasts that you get. Say for the fourth quarter of 1975 by anyone of the consensus forecasters, at short time intervals of one month, two months and even six months, it's as if they learned an awful lot in 29 days because sometimes you see some tremendous changes in so short a period. Well, there's a moral about the imprecision of this, of our ability to forecast. Some people drive the moral that for a policy purposes, for example, monetary policy recommendations, and policy recommendations for money over a period of as long as a year, I welcome the fact that the congress is getting on the tail of the federal reserve to report sooner what they decided 45 days ago and not 90 days ago at the open market committee. Seems to me that there may be some good reason for very short run secrecy, but 45 days is a pretty long run and I don't think anybody in the bottom market is going to be able to make any money by the revelations that come out of that time. But I welcome more the change of the discussion to ranges of rate of growth in one monetary aggregate or another, over a longer period of time, such as a year. Arthur Burns gave his range, the five percent to seven and a half percent, if I recall correctly for the interval of one year ahead, from the end of the first quarter say March, to the end of the first quarter 1976. And given this imprecision of what, even the most prudent and clever person can say about what's going to happen to real growth in a year ahead, some people, many of them whom call themselves monetarists, draw the conclusion that you should name a single figure and stick to it. I draw the, almost the opposite conclusion. I think that it's a mistake to decide today what ought to be the average rate of growth of  $N_1$  in the first quarter. Because, in my judgment, it might turn out to be prudent for us to want it at that time to be plus ten percent per year. Or, to be plus one percent per year. You say, only one percent at that early stage of the business cycle and I say yes, if there's a velocity effect which is causing the system to run forward at too rapid rate, and if, when the open market committee are meeting, in the fourth quarter of 1975, the best guesses about where the system will be six months from then, and nine months from then, suggest that there will be beginning some congestion which might reactivate a wage spiral,

might reactivate and re accelerate the general price level and the direction of two digits price inflation, then it could very well be that for a period of time, a one percent increase in the rate of growth annualized of  $N$  one, could be optimal. The difference between one percent and ten percent, for the fourth quarter of the year in money supply, to me, matches the difference of four percent to eight percent kind of a confidence interval, of where the system is likely to have grown in the first year of the recovery. Now, mind you, we have been talking about the easiest period of all the business cycle. Not only to make qualitative forecast, and in a sense to guess at the center of the quantitative forecast interval. But It's also a buying large, the easiest period of time for policy recommendations, the easier period of time for policy recommendations as far as I know, is a period like last September or October or November, when the economy is deteriorating very badly, because then it seems to me that anybody except against all inflation, should be in favor of more expansionary policy. Reversible expansionary policy. The big question, I'll be discussing this on future occasions, is whether the recovery is likely to proceed too slowly or too quickly. And, so, I did an interesting thing, I took two of the consensus forecasters, who are not too far apart on their best guesses to what the real output is likely to be in the four quarters, but who are pretty far apart in what they think is gonna happen to prices. The DRI computer is fairly optimistic about being able to hold their own in the improvement in price inflation, the Chase Econometrics computer, I speak figuratively, is more pessimistic about that. But what I did though was to take their optimistic real growth forecasts in each case, and in each case their pessimistic real growth forecasts, and then see what difference it made in their price projections. And here they were very much alike, it turns out that at this stage of the cycle and for some time at least, the behavior of the price level, whether good or bad, is not too sensitively to be affected by whether we grow in fact at four and a half percent or whether we grow in fact at seven percent. Speaking for myself, I think given my value judgements, and my scientific influences, I would prefer in the first year of a recovery, one that has started from so lower level, I would prefer a seven percent rate of year growth rather than a four percent.

Interviewer: If you have any comments or questions for Professor Samuelson, address them to Instructional Dynamics Incorporated, 450 East Ohio Street, Chicago, Illinois, 60611;