- Welcome once again as MIT Professor Paul Samuelson discusses the current economic scene. This series is produced by Instructional Dynamics Incorporated. This program was recorded January 7th.

- We begin a new year, 1974. The new year is traditionally a time for stock taking and so I'd like today to try to look at what lessons it is that we have been learning or that are there to be learned from recent economic experience. My thoughts are on this subject because between Christmas Day and New Year's, the American Economic Association has its annual meetings. This year those meetings were in New York City at the Hilton Hotel. As usual, a tremendous number of social scientists, statisticians and economists come together, more than 10,000 I believe this year. And they give papers to each other, the audiences are large and I had to appear on a panel with some very distinguished fellow economists to glean the lessons from the current economic expansion. Well, let me take the fist ten minutes to discuss ten lessons that I think there are to be learned from recent experience, that's a rate of about one lesson a minute. Well lesson number one. Economists cannot forecast the future with precision. Lesson number two. Neither can anyone else. And the forecast made by economists, are systematically better than any made by astrologers, cranks, brokers, bankers, businessmen, revolutionists, and apologists, engineers and computers. This I believe to be a finding of experience. I don't know whether or not priori grounds this would be very likely, but when one actually keeps the almanac and puts into the record the errors of forecasting made by different groups, we have a way over a long period of time of comparing the relative batting averages of different groups. So together these first two lessons, might constitute the random dart theory of getting a forecast. Throw a coin at any one of the couple of dozen leading practitioners of the forecasting art Wharton School, University of Michigan, Chase Econometrics, DRI, Townsend Greenspan, so forth, and you'll do about as well, as if you tried to pick out the very best one. In fact it won't matter much where your coin lands you'll get almost the same forecast anyway, which leads to the next lesson. Lesson number three. Economists can succeed in forecasting like each other. Professor Roy Blough of the Columbia Graduate School of Business, stated this when he was at the Treasury in the form of a dogma, and Blough's dogma still holds. Economists are like eight Eskimos in one bed. The only thing you can be sure about, is that they're all going to turn over together. I may add as a corollary to Blough's law, most economists are going to be all correct together or all wrong together. The dispersion between forecasts by a score of university, bank, governments, and corporation analysts, is much less than the dispersion of their best guesses around where the future reality will in fact lie. This is no more surprising than that the space between a man's ears has no relation to his standard error of inference. Lesson number four. Some economists manage to forecast worse than others, but a Darwinian process of selection often self selection, when one deals with rational men, with alternative uses for their leisure time, does serve to eliminate those whose comparative advantage lies in cosmology or in futurism. If you can't forecast a business situation, become a futurist. After man has said a dozen times, if this next forecast doesn't turn out to be correct, I'll hang up my gloves, he finally does. Or he may learn that the finance company wants to repossess them. However there are exceptions to this rule. Some masochists do make a nice living out of being wrong in an interesting way. They'll predict in every other year that the Dow Jones Averages will go down to 200, where they'll meet the Dollar price of gold. Businessmen who like to have their adrenaline run listening to a ghost story, will often pay just as much to listen to these ever losers as to informed analysts. But my Darwinian proposition becomes irrefutable when I base it on the tautology that the born losers who stay in the forecasting game soon cease to be regarded as economists by members of our guild. Lesson five. An automatic computer can forecast better than an official government agency. I'll add particularly, if the people in that government agency really aren't trying to give their best scientific forecast, but are being guided, as sometimes happens in any administration, by political motives. But an analyst with judgment can still do better than an automatic computer. This is born out, not only by the rather sad performance in recent years of the reduced form Monitorist Model of the Federal Reserve Bank of St. Louis, which I gather from recent publication, does seem about to hang up its gloves as far as published regular forecasts are concerned. But it is also born out by Ray Fair, Professor Fair's audit of his own Princeton model, which tries to do without any inputs of judgment. And which thereby runs up, it turns out from experience, a larger means squared error than the leading judgmental computer models of the Wharton, Michigan, VRI, Chase or other type. Lesson six. Judgmental analysts cannot do without the computer. So much of the information that comes to any man of judgment these days, has been massaged by a computer, handled through it, produced by it, you might even say fabricated by it, that the era has passed when one could have a fair contest between a non analytical observer such as Sumner Slichter and a giant post-Kantian macro computer model. Were Slichter alive today, he would be riding on the escalator of the computer, at the same time that he would be making his own forward and upward strides out of his own native shrewdness. I picked Sumner Slichter because for many years he was an excellent forecaster. You may ask how do I know that Sumner Slichter was an excellent forecaster. I know it the way I know most things. I had a graduate student who wrote a thesis on the craft and art and science of forecasting. This is Professor Robert Adams, now of the Michigan Graduate Business School, but then Head of the Economics Department at Exxon, or as it was called then, Standard Oil of New Jersey. And he made a study of all different forecasting methods, and one of his chapters was devoted to being Sumner Slichter. And what he did was to read everything he could get his hands on by Sumner Slichter which had a bearing on the future developments of business. And he tried to decide whether Sumner Slichter was saying something about the future. Very often, Slichter was not, often he was saying it was going to rain tomorrow unless the sun is shining. But sometimes, it was clear that Sumner Slichter was saying something definite about the future. Sometimes it appeared that he might be saying something about the future, but it wasn't definitely clear, and in that case, Doctor Adams had a panel of two or three fellow graduate students read the passage in question and if they agreed on what it was that was being said then he entered it in the record. And then, having derived what Sumner Slichter said about the future, Adams went back to see what actually happened in the future, and his findings were quite favorable towards Sumner Slichter, in the prime of his life, as a forecaster. But as the point was made here in lesson six, you can no longer have a Sumner Slichter whose judgment was uncontaminated by the output of the prolific computer. Any consumer of business information is already infected by data that comes from the computer, so it can't be the computer versus man, it has to be man with the computer doing one thing, or doing another. Lesson number seven. Economists can forecast everything. Well, almost forecast everything, but prices. In this sense, we are the reverse of Oscar Wilde's cynics, who knew the price of everything and the value of nothing. When it comes to next March's price of wheat, when you come to think about it though, why should any PhD, be able to forecast that better than people who know a great deal about the crops and milling industry and who have a lot of money riding on the outcome of their best guesses. All the things that are easy to forecast, that is, easy enough for a mere Professor to foresee, those things can be expected to have already been taken account of by the speculative market. Indeed, if there were in Las Vegas, or in New York, a continuous casino, on the money GMP of let's say 1974's fourth quarter, it would be absurd to think that the best economic forecasters could improve, or improve much, upon the guess posted there. Just imagine that every day, all day long, there is a quoted number for what the GNP will be, and you have as many people who'd like to be on one side as on the other side, the bulls and the bears. It's adjusted as they get new information. Whatever knowledge and analytical skill the best money GNP forecasters posses, would already presumably have been fed into the bidding, and of course, it's a manifest contradiction to think that most economists can be expected to do better than their own best performance. But I'm saying something more devastating, than that economist can't forecast particular prices, or forecast better than themselves. What I'm saying is, that the best forecasters have been rather poor in predicting the general price level's movements and level, even a year ahead. Let's go back to the year 1973. By Valentine's Day, 1973, the best forecasters, those with the best batting average, were beginning to call for the growth recession that we now know did set it at the end of the first quarter. So, if we correct their end of 1972, overly optimistic forecasts, which they changed within a month or two, the fashionable crowd has little to blame itself for when it comes to their 1973 real GNP projections. The emphasis there is on the word real. But of course the upwards surge of food and decontroled industrial prices, was not foreseen in advance. It wasn't foreseen in advance by the people in Washington, who made the January 11 1973 decision to decontrol and end phase two, and it wasn't foreseen in advance by Wharton, DRI, Chase, et cetera. And this has been a recurring pattern. Surprise. During and after the event, at the virulence of the inflation, wisdom after the event, in that demonstrating that it did after all fit in with past patterns of experience. And I actually don't know of any exception to this generalization. And monetarists have generally been no better in this regard, according to my records, although some have thought that there is somehow a closer link between M & P than between M and money GNP equals price times quantity. Now, off course over a very long period of time, if you are able from trend considerations of productive potential and average degree to which we realize our productive potential if, for those reasons we were able to predict Q, then you can from the quantity equation of exchange be pretty sure of saying something sensible about the long run relationship between the stock of M and the price level. Even then off course there are some trends in the velocity of money which have to be made. But we're not talking about short run and intermediate run forecasting, and the logic of monetarism itself is that it's the product of price times quantity, which aught to be related to the past rates of change of various definitions of the money supply, with fairly long and variable lags. To be sure, when it comes to predicting the future of price level, some economist have been less unlucky in their guesses than others. But we all know what the corollary of that proposition is. What seems to have thrown the economist fraternity off is the fact that the Phillip's curve seems to have worsened, both in the eyes of those who belief in the Phillips Curve and the eyes of those who don't. And who use a different language to describe the same disappointing effect upon wages and costs generally of each degree of stagnation. Improvement in the rate of inflation, 18 months ahead, is a mirage that economists keep seeing before their eyes, but just as the rail road tracks never seem to meet as they appeared to do ten miles back, so that return to normalcy in the rate of inflation, never seems to occur. Not even after we have euphemistically redefined normalcy to permit of not stable prices not reasonably stable prices 1% per year, but even when we talk about 2,5% annual rates of inflation or more. I remind that it is only a week back that the official government forecast for the end of 1973 was for the rate of increase of prices of 2.5 to 3%, that is something like a third of the rate of increase that we actually were enjoying. Paradoxically as soon as the analysts stopped underestimating wage increases, they began to underestimate general pride increases. One suspects that two things are involved; wishful thinking and perhaps a change in the structural difficulty of the economy in experiencing steady or slowly growing price levels. What usually happens when people's predictions go wrong, is that they find alibis in contra factual predictions incapable of being falsified or corroborated. Thus some say an alibi: it is price controls that have caused the error in my forecasts in either direction, but off course we shall never know what the world would have been like without those price controls. Or they say, if the FED would do something, this or that, which actually there is no betting odds that the FED would do, then the really would agree with my forecast. Much of the disagreement from policy, but not all, comes from differences between advisors, on how much sacrifice a short term welfare their willing invest now and in the near future for some hypothetical better behavior of the economy in the more distant future. Those with a low rate of time discount who will cheerfully recommend the flyer in seito masochistic losterity, are likely by the Darwinian process of politics to find themselves not in power for the period of time they say their therapy requires. You know there are all sorts of people who say if the Government only do what I tell them to do, namely be tough, hang in there tough, cause a recession, temporary recession, then we'll get back on the beam including the beam of my own regression equations. That's a very safe gambit to pursue because there is very little likelihood in our populous democracy, that if you advice that to the prince or the president that you'll stay in a power, in a position of power and advice. Lesson number eight. We have discovered that in recent years, the US economy has been remarkably unprone to swings of inventory accumulation such as characterized our past history. Those who were predicting a 1974 genuine recession prior to the post mid-east war energy crises, they were counting on just such an inventory slingshot effect to give them their downturn. But they have had to look elsewhere for their recession. Namely, as we've been discussing in these tapes, to the energy situation. A lesson like lesson eight can be a very dangerous lesson to learn, if we learn that the US economy is unprone to swings of inventory accumulation just as that ceases to be the case and I note that some recent new forecast that I've been getting by some analysts do look for considerable inventory accumulation in 1974. I think we should suspend judgment and wait for some signs of that before we belief in it precisely because we've been burned so often in so many quarters in making such forecasts in the last eight, ten, twelve quarters. This stability of inventory behavior of the American Economy, it seems to me is particularly paradoxical because in an age of inflation it would be less than excusable for a good business manager to try to accumulate inventory and successfully to accumulate inventory just when it will help you to have a an active inventory policy it would appear that American industry seems to be in fact following a very stable conservative, you might even say sluggish inventory policy. Lesson number nine. We have learned that a micro event, such as an Arab Oil boycott, can loom large as a macro economic depressant. And actually as we've been seeing, if the boycott is more than a charade, more than a passing thing, most experts now do agree, that real output will decline in this first half of 1974. But we realize alas that our King's Fischer Macro Economic Tools, do not tell us how to handle such a micro economic restriction on supply and productivity. I mean how to handle it for the purpose of making better forecasts. It is not even clear that we should call such an energy induced downturn a recession since it may not involve much wastage between our actual GNP and our producible GNP. However to the extend that gasoline scares hurt the auto business and hurt the suburban building market, some of the same secondary effects of conventional recession will become operative calling for some of the same conventional lean-against-the-wind policy measures. Lesson number 10. The conventional wisdom about improvement of the balance of payments, from depreciating of a currency seems in 1973 at long last, to receive some support from the factual evidence. There has certainly been a lot of more important things to worry about in recent years than the way the dollar will move, has moved, up or down, in the somewhat flexible foreign exchange rate markets of the world. And the depreciated Dollar has finally resulted in our developing a balance of trade surplus, much needed, we still don't have enough of that, and also developing an upward trend in our balance on current account. The conventional wisdom does seem to have been working. On the other side we see in Japan at least that the appreciated Yen, has resulted, I must say in combination with a determined effort by the Japanese Government to play ball, to get rid of their surplus, well has resulted in their getting rid of their current surplus and they're actually have been losing reserves, moreover the clean floating or somewhat clean floating Yen Dollar exchange rate has resulted in a upward movement at long last of the Dollar relative to the Yen. My recollection is that in March, when I was in Japan, at par to the worst of the situation, the Dollar had sunk so low that at times I would get only 255 Yen to the Dollar. If it stabilizes, I remember a day facto in end of March at 265. Well it's now, the dollar has appreciated, and you now get 280 Yen to the Dollar, but more than that I noticed on six months contracts ahead the quoted rate was 321 Yen to the Dollar. Well, ten lessons, ten minutes, it's taken more than ten minutes, and I've used up almost all of my time, and I still haven't in fact drawn all the lessons that are taught by our recent times. I ought not to finish without giving one extra lesson, one to grow wise on, so to speak. Let's call it lesson 11. Lesson 11. Events of the last half dozen years, have shown us how much economics remains an art rather than a science. Economics is exciting, because what we study is hard, not easy. Once again I think experience has taught us the hard way that eclecticism in economics is to para phrase Justice Oliver Wendall Holmes, not so much a desirability as a necessity.

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