

- Hello, this is William Clark of the Chicago Tribune. Welcoming you again, on behalf of Instructional Dynamics, to a visit with the distinguished economist, Professor Milton Friedman. We're recording this interview on Wednesday morning, February 20th, 1974. And Milton, the newspapers have been interesting the last couple of days. In yesterday morning's paper, there was a story about an astronomical rise in wholesale prices. In January, a 37.2% increase, increase at an annual rate of 37.2%. And this morning, we have word that personal income was off in January, for the first time in 19 months. Now, how can you fit those two reports together?

- Those two reports, fit together by virtue of two phenomenon. One, which is present all the time, and of which this is no exception, is the lag in changes in prices behind changes in income. We have observed it over and over again. That when the economy changes direction, the change is first reflected in real output, and real employment. The effect on prices tends to be delayed. Thus, when the economy starts up, at first you have an expansion in economic activity. And only after about another year, or 18 months, does inflation start to follow suit, so that there's about a one and a half year lag of prices behind output. In part that's what this is reflecting. Real output, the rate of growth of real output, peaked in the United States in early 1973, first quarter or second quarter of 1973. But prices, or still the rate of inflation, is still reflected. The earlier very expensive character of the American boom, the worldwide boom, for that matter. So one aspect of this phenomenon, is the typical, standard lag. And there's little reason to expect, from this point of view alone, that prices would really start, that rate of inflation would really start to react to the current, slower economy, until sometime late 1974. The second feature, is of course, the special effect of the energy crisis. A large part of that extraordinary rise in wholesale prices was a reflection of a very rapid rise in the price of oil products, and petroleum products of all kinds. It is something of a paradox, that we are having in this country, is supposedly an enormous federal energy office, which is allocating oil, right, left, and is interfering with everybody. Starting long lines. And at the same time, we've had an extraordinarily rapid rate rise in the price of gasoline, of oil and so on, which is reflected in that tremendous wholesale price rise. Indeed, my own opinion is, that these are not a paradox, as one might seem, but to think with cause and effect. And in practice, the rise in energy prices in the United States, and gasoline and oil prices, has been higher than it would've been if we hadn't directed that absurd federal energy office to go around and keep us standing a long time in line. This is entirely aside from the cost to people of standing in line. I'm talking about the direct price of oil, but going back to your basic question, that's the second factor. Which explains the jump in wholesale price. Now so far, as that factor's concerned, it's likely to be a relatively temporary factor. The world price of oil is, think we discussed this in our last tape, has gone to a level at which it cannot be maintained. And this second factor will be reversed. Therefore, on that grounds, I think we will, in the next four, or five, or six months, even before the first factor makes itself felt, see a substantial easing off in the rate of growth of wholesale prices. This is one of the reasons why I would not be surprised if the rate of inflation, in the latter, in the rest of 1974, was decidedly lower. Certainly on the wholesale price level, but perhaps also on the cost of living level, than it has been in the last six or nine months. Now so far as the

personal income decline is concerned, the other part of your question, that is simply an exaggerated reflection of the slow down in the economy. I say exaggerated because ordinarily what you would expect is, not that personal income would decline absolutely, that's a very unusual phenomenon. After all, when prices are rising at the rate of eight to 10%, a decline in personal income, in dollar terms, means a very substantial decline in real terms. But again, the particular abnormally sharp decline, is undoubtedly associated with a special impact which the oil and gasoline situation has hit on Detroit. It's largely the automobile case. And again, I think we will see in coming months, that personal income will be less exuberant than it was in the last part of 1973. And certainly than it was in the early part of 73. But it will not show continued decline, it will show rising, but at a slower rate than we had earlier.

- I see. We have a number of letters here, Dr. Friedman, that we might try to get to this morning. The first letter is from Donnelly P. McDonald Jr., President of People's Trust Bank, of Fort Wayne, Indiana. It says, dear Dr. Friedman. This morning's mail brought a transcript of the February 1974 economic discussion conducted by New York's First National City Bank officials. I have enclosed a Xerox of parts of it, describing a new to me concept of the relationship between changes in the money supply, and the economy. City Bank described the Fed's monetary policy in 1973 as one of moderate restraint, because the rate of money expansion was less than the rate of inflation. They almost imply that Fed's goal should always be to increase money by some increment greater than the existing level of inflation, if recessions are to be avoided. I find this extraordinary, and would appreciate your comments. I'll read just one paragraph from the transcript that he sent. A year ago at this time, we detected that the Federal Reserve had shifted towards a less expansive monetary policy and we began to track that policy, and to express some concern that the policy of moderate restraint would be overdone. As it turned out, while money grew during the year, by between 5% and 6%, real money, after subtracting the effects of price inflation, actually declined throughout the year. And this will effect importantly, the performance of the economy, in real terms, here in the first half of 1974. And Mr. McDonald would appreciate your comments on this.

- Well, that's a very, very interesting and thoughtful question. And it is something that is very well worth commenting on. The fact is, that what the First National City Bank people are saying, is not really different. What's different are the words in which they are expressing the relationships between money and the economy. What does it mean to say that the real money balances declined last year? If we, to put it in a slightly different way, what that means, is that income grew more rapidly than the quantity of money. Now, listeners to the tape will recall that during the course of this past year I have said that, time and again, the present rate of economic growth and nominal national income, and dollar national income, cannot be maintained. Because it is running decidedly ahead of that rate, which would be justified by rising quantity of money. Quantity of money, M_2 , the concept which in the past 10 years, for the past 10 years or so, has kept almost exact pace with GNP. So that the velocity of M_2 has been constant. That is on the average, over the past 10 years, a 1% increase in GNP, has been associated with the 1% increase in M_2 , or vice versa. And especially if you allow for the lags involved. The 1% increase in M_2 now, has been associated with about a 1% increase in GNP, nine months later. Now, over the past year, I have in front of me a chart showing this relationship. That which I have been using as a basis of the comments. The chart I have relates, not GNP but personal income, to the course of the monetary growth nine months earlier. And for almost the whole of 1973, the rate of growth of personal income, has been distinctly higher than the rate of growth of M_2 .

two. M two has been growing at a rate of nine, nine and a half, 10%. Which would've justified about a nine, nine and a half, 10% rate of growth of GNP. But instead, GNP has been growing up in the rate of somewhere about 11 to 13%. Well now, that's essentially the essence of what First National City Bank are saying, when they said that real quantity of money has declined. They mean that the income has grown more rapidly than the quantity of money. Such an excess growth of income, cannot be long maintained. And we are experiencing the consequences of that in the present slow down. And in this sense, you can say, that the slow down is a result of a decline in the real quantity of money. So far, it's all simply a different form of language, a different way of describing. Now, let me go on to another aspect of that different way of describing, which is language. Another feature, which I just mentioned a few minutes ago, in discussing the current situation, is a tendency for prices to react later than output. So that prices have an inertia of its own. Alright, now let's suppose for a moment that the Federal Reserve, after having followed an expansive policy, after allowing the money supply to grow very rapidly, keeps down the rate of the growth of the money supply to a lower level. For a time being, prices will continue to rise as rapidly as what's justified by the earlier rate of monetary growth. After six to nine months output will slow down, but prices will continue to rise. Consider that intervening period, when prices are rising under the impotence of the earlier monetary expansion. During that period, the real quantity of money will be declining. That will simply be a delayed reaction to the earlier expansion. In that sense, that's another way of describing the difference in the timed pattern of response of prices on the one hand, and output on the other. Another verbal way to describe it would be in terms of the behavior of the real quantity of money. And from this point of view, it is true that one can interpret a decline in the real quantity of money is evidence that there is downward pressure on the economy. Because, what it means, is that dollar income is rising more rapidly than the quantity of money, and these, sooner or later, will have to come back together. All of that is fine. The place where what the First National City Bank says is highly misleading, and which Mr. McDonald does well to pin point, is when you go beyond this descriptive use of this, of these terms, and imply a prescriptive use. A use for policy formation. And there I do think that the First National City Bank is highly misleading. Let us suppose you follow that, the implicit prescription. Let's suppose you said the Federal Reserve is always going to keep real money balances rising. The effect of that would be infinite inflation. Because, while it's true that for a time, the price movement has its own impotence and inertia, it is reflecting in a delayed fashion, what was happening to the quantity of money earlier. And therefore, if you were to try to keep real money balances rising, whenever inflation was starting to taper off, this would lead you to put in more steam to keep it going at a still higher rate. And there would be no stopping point, whatsoever. The crucial theoretical point here, is that if you leave aside, the short term leads and lags, the question of six months, nine months, 18 months, and look at the fundamental relationships. The fundamental thing, that underlines the analysis, and that's absolutely at the core of it, is that the monetary authorities can determine the nominal quantity of money, the amount of money in dollars, but the people who hold the money, decide what its real value shall be. That's the crucial distinction that underlines the monetary theory. Let me elaborate on that a little. Today, and think of the real quantity of money people want to hold, not in terms of divided by a price index, because it's easier to think of in other terms. Think of it in terms of the number of weeks of income that people want to hold in the form of money. If we take our present quantity of money, if we take, it amounts to roughly, roughly, something like a half year's income, say 25 or 26 weeks of income. Now let's suppose that the Fed starts to increase that. So that, if the consumer, the public at large, did nothing that would amount not to 26 weeks income, but it would amount to say 50 weeks income, they try to double it. What

effect would that have? That would mean that everybody in the community would have less cash balance, more cash balances than you desire, you would try to get rid of it. It's a game of musical chairs, you can't get rid of it, you can only transfer it. But in the process of transferring it, you would bid up prices. And prices and income would rise to the point, where once again, balances for 26 weeks income, and then the only way in which the Fed could try keeping it up to 50 weeks, would be by pumping in still more money, and that would be a recipe, as I say, for infinite inflation. There is a Texas banker by the name of Spears, who has been writing me and berating me for my misguided understanding of monetary policy, because he says, obviously the sensible policies in effect, is to keep the quantity of money equal to 50% of the GNP. That's his point of view. But you can see that, that is a formula which is impossible for the Fed to achieve. They might be able to achieve it temporarily. Why could they achieve it temporarily and now we bring back the two together, the two strands that I've talked, because of the lags in reaction. If people reacted instantaneously, they couldn't achieve it at any time. Then at every moment of time, real cash balances would be whatever people wanna hold. But the lag in the reaction, would enable them to achieve it for a time. So that right now, if the Fed starts pumping money in very more rapidly, it will take time before people adjust their spending and income. And during that interim, real cash balances would rise. This is really the basic problem of monetary politics. That what the Fed can do in the short run, it cannot do in the long run. And therefore if it follows short term goals, as it has so often, it tends to get out of whack in the long run. The attempt in the short run, for example, to keep down interest rate, in the long run rises it. The attempt in the short run to offset a recession, well in the long run produce a more rapid inflation and subsequently a deeper recession. That's why it is so important, from my point of view, that the Fed should take a longer term goal, and not try to meet the day by day situation that emerges.

- It's an interesting comment. Now let's take another letter. This one from Ernest W. Luther, senior economist for Investors Diversified Services in Minneapolis, writing to Dr. Friedman. It was with great interest that I listen to your Instructional Dynamics tape, describing your visit to Brazil, and the monetary correction factor applied in that country to adjust for the rate of inflation. This fascinating device deserves, I think, a more detailed theoretical analysis than you gave it in your initial comment, and I hope you will do so in your next tape. Just what are its advantages and disadvantages, if any. Does its use diminish incentives to employ more conventional monetary policy, in order to rid an economy of inflation? Who were the brilliant economic advisors who suggested these techniques to the Brazilian government? What are the odds of our imitating these methods in the United States?

- Well, I agree with Ernest Luther on the importance of discussing this issue. Indeed I think, it is perhaps the single most important policy issue that needs to be aired in the United States, at the time. Let me stress, start out with its disadvantages. Its disadvantages, well perhaps I oughta repeat over again what it is I'm talking about.

- Yes. That would be good.

- They, so called monetary correction, and I may say one of my Brazilian students has been chiding me for using the term monetary correction. He says I oughta use the term, inflationary correction. Because it's a correction for the rate of inflation. What it is, is essentially universalized escalator clauses. Where often then

you would escalate a clauses in wage contracts, where by let's say a three year contract is made between an employer and a trade union. And that contracts calls for some increases in wages, and in addition, it calls for an adjustment of the wage, to whatever happens to the cost of living. So that if the cost of living index rises by 1%, not one percentage point, but 1%, the wage pay will go up by 1%. If the cost of living rises by an annual rate of 10% per year, the annual wage rate will go up by 10%, and so on. We're often living with that. Now, the idea is to expand that to a great variety of other instruments. For example, if you have a mortgage, and you take out a mortgage on your house, currently you are locked into a particular interest rate. Maybe you would get a mortgage of 10% per year. Why are you willing to pay 10%? Because you expect inflation over the coming years at a rate of maybe 6%. So you think you are really getting a 4% mortgage in real terms, but a 6% in addition you are paying to allow for inflation. Now that's fine if inflation is exactly 6% year after year, but suppose inflation next year is 10%, well then you're getting away with murder. Suppose inflation is 2%, then you're stuck in a very difficult position. Similarly with bond interest rates of the same kind. And throughout our system, we have a situation in which except for those wages which are in escalator clauses, and except for a few other contracts like, such for example, as the standard reel arrangement for commercial retail stores and shopping centers in the like. Everybody is locked in for periods in the future, to contracts entered into with a certain expectation of inflation. I mentioned retail stores because that's an interesting example. There's no explicit escalator clause, but usually those rents are on the basis of a certain percentage of gross receipts. As a result, there's an automatic escalator clause built in, since gross receipts will tend to vary with inflation. Well now, under the present situation, if inflation is very different from what you expected, let's suppose, next year Fed did manage to hold down the money supply, very sharply inflation is only 2% per year. You can imagine the cry that would go up from the people who were locked in to 10% mortgages. The people who had, were locked into wage increases, that did not have an escalator clause, but which has been made on the basis of the expectation of rapid inflation. It is precisely this problem which is raised, by an unanticipated change in the rate of inflation. That makes it so difficult to slow down an inflation. Because, when you slow down an inflation, everybody is locked into it, and you have this kind of a problem. Now I stress it in those terms, because there's a crucial and important thing to emphasize about universal escalator clauses. Is that an escalator can go down as well as up. The great objection that people make to it, and this gets to the question of what are its disadvantages. Great objection people make to is, as a disadvantage, is not in my opinion a real disadvantage. That objection which people get to, is they say, won't this mean, that you will accelerate inflation? Because, they say, with universal escalator clauses everywhere, any increase in price, anywhere, will call this, cause all prices everywhere to go up. Now there's an element of validity to it. What it means is, that if inflation proceeds, it will proceed in different areas of the economy at a more even pace. There will be less distortion between places. Right now, if you have a increase in the rate of inflation, it tends to effect certain areas before it effects others. It tends to effect sensitive prices before it effects wages. It tends to effect sensitive wages, wages covered by cost of living, escalator clauses before it effects relatively fixed wages. It tends to effect equity payments and the likes before it effects bond interest on past debt. It tends to effect new loans before it effects outstanding loans. And consequently, it certainly is true, that if you had universal escalator clauses there would be in the first instance, a more rapid spread of inflation throughout the economy. But the ultimate rate of inflation would be no higher. What you would be doing in the process would be eliminating the distortions, the differences between elements. Now we turn around the other way. Let's suppose you take measures to slow down inflation. This is why I say the escalator clause goes down as well as up. Then it would also mean, that

any slowing down of inflation, in the form of a slower rate of monetary growth, would also effect all prices more rapidly, so that you would get the slowing down of inflation more rapidly, and more important more evenly spread without the distortions that are involved today when you slow down inflation. Thus, the, what are alleged to be its disadvantages, is not a disadvantage, it's an advantage. It's the advantage that the, you have fewer distortions introduced, either by increasing in price, or decreasing in price. The real, and fundamental disadvantage, is the nuisance involved in all of this arithmetic calculation. The problem in re-contracting all over the place. The problem in having every single contract that anybody writes, having to have a provision, for adjusting for the price. Now it's certainly far more convenient to deal just in dollars. And from this point of view, I have no doubt, that universal escalator clauses have a great disadvantage. That I would not urge them. I would not think they were desirable. If we were in a situation of, where the alternative was an absence of inflation. But unfortunately, that is not our situation at the moment. We have gotten to the point, where we have an inflation raging somewhere like eight, or nine, or 10% a year, in the form of cost of living. And the question is, are we going to be able to slow that down, and how? And this brings me to the second of the questions, basic questions that Ernest Luther raised. Does the use of escalator clauses diminish the incentive to employ more conventional monetary policy, in order to rid the economy of inflation? Now I would say just the opposite. That in the absence of escalator clauses, there are tremendous obstacles to using conventional monetary policies to rid an economy of inflation. Because, when you start to use conventional monetary policies, you get into the problem I've stressed. The problem that of slowing down inflation effects different contracts differentially, leaves those 10% mortgage holders to raise a hell. Produces tremendous political pressure to slow down, to reverse things, and to get the inflation moving again. That's exactly what happened in Brazil. When conventional monetary policy was used in 1964, to slow down the inflation from 100% at that time, to 30% in 1967. It produced a severe depression and they couldn't stand the political pressure to do something about it. And thus, it seems to me, the situation is rather than universal escalator clauses are a precondition for establishing a political climate in which it will be possible to employ more conventional monetary policy in order to rid the economy of inflation. Now one has to, a full analysis has to include, some qualifications here. One qualification to it, is that, under the present circumstances, inflation increases the real tax yield of the government. Because, to put the other way, increases a real tax burden on you and me. Because given that our personal income tax has graduated tax rates, given that the exemption is stated in dollars, the tax brackets are stated in dollars. If prices rise at 10%, people are pushed into higher rate brackets. And the income tax they pay rises by more than 10%. Similarly, inflation today reduces the burden of the government debt on the government, which means it cheats the people who have bought the government. And that's the other side of it. And thus, the effect of introducing universal escalator clauses, cause they would have to be introduced on taxes as well as another thing, is to reduced the profit which government gets from inflation, but also to reduce the real tax yield of the government. And from this point of view, to impose still greater pressure on it, to engage in inflation as a way of raising taxes. So the effects on government are much more complicated than these effects on the economy as a whole. And there I do not think one can give a simple answer to that. One can only say, that if the government were dedicated to trying a slow down inflation, it seems to me it would be easier for it to do it with universal escalator clauses from the point of view of the public reaction it would generate. It might not be easier from the point of view of its own internal book keeping arrangements.

- You don't think it's likely that we'll see this in the United States then.

- No, I wouldn't say that. That gets me to the next question that he raised. What are the odds of our imitating these methods? I do not believe that in the United States, we're likely to see the government take the lead in introducing it. That's a different question. Let me note, incidentally, that in the area of taxes, the Canadian government has just introduced this kind of an escalator clause arrangement, for personal income tax, just to suggest the pressures that there are there. There are bills in the, proposed for the United States, which would do the same thing. However, I think we will imitate these methods in the United States in a different way, through private arrangements. I think outfits like Industrial Investors Diversified Services, will be doing it. Because, I think there is a strong private incentive to do it. There's a great demand on the part of public, for assets of this kind. Let me go back. In the labor field, we certainly have been doing it. Escalator clauses have been spreading like wildfire in labor contracts. In the area of lending and borrowing, the equivalent of escalator clauses have been spreading, namely variable interest rate contracts. Contracts in which the long term loans, in which the interest rate that is paid, is linked to the prime rate. Or, a halfway step toward an escalator clause, because in general the prime rate for short term interest rates does reflect the rate of inflation. The reason the prime rate is now varying at a rate of nine to 10%, instead of in the range of, let's say four to 5%, which maybe it was 10 years ago, is because the rate of inflation has speeded up so much. So, but I think we will have the market imitating these methods.

- Thank you very much. We've been visiting with Professor Milton Friedman of the University of Chicago. If you would like to suggest subjects for Dr. Friedman to discuss on future tapes, or ask questions, please write to Instructional Dynamics Incorporated. 166 East Superior Street, Chicago, 60611. We'll be talking with Dr. Friedman again in a couple of weeks.