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Interview of Milton Friedman

Conducted by Robert L. Hetzel

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Milton Friedman: Bothered me very much. And then you're assuming what the economists are talking about was trying to understand what's going on, and not trying to promote a particular cause. The problem I always had was between the positive and an [unintelligible 00:00:18]. I used to argue at one point very strongly that the differences of opinion among economists reflected primarily differences of opinion about what the consequences of a policy would be, and not differences in their basic objectives, and not sort of political bias.

Well, I could treat them as objective, more or less objective, pretty objective scholars, but Roosa persuaded me that's absolutely false, and then over time, I'm increasingly impressed with his, that is if you want to know what an individual economist's position will be on various kinds of policies, you will learn more by knowing what his political predilections are than any other way. Now here, let's take a very recent example. I recently saw a Jim Tobin cited in favor of a minimum wage. For years, Jim was always pointing out the bad effects of minimum wage. What changes his economic analysis now? Now he says, "Oh, it won't make much difference." Has he truly done a quantitative analysis that suggests that the quantitative impact would be trivial? Anyway, you see the kind of thing I mean.

Robert L. Hetzel: Yes. I think—

Milton Friedman: And that doesn't really fit into your pattern [unintelligible 00:01:48]. You did say there was a two-way relationship between the policy and the macroeconomic views.

Robert L. Hetzel: Right, but I said there are these three elements in trying to understand how policy gets made, and I think they're all important. But most generally when I think about individual maximizing behavior and I think about political activity, I think of people maximizing their stature, their position in the hierarchal society, and there are two arguments in the function: one is control over resources, and one is control over political power.

Now the trade off, the budget line that individuals face when they choose a position of how to achieve this stature to the extent of which to compete for political controls as opposed to control the resources depends upon how society structures itself in terms of allocating decision-making for the political system or through free markets, and societies choose very different sorts of budget constraints. And one of the fascinating, if discouraging things, about the Federal Reserve System is that it's one of the areas in the United States where we've not been able to develop due process restrictions for there's an extraordinary amount of discretion. But...

Milton Friedman: Maybe that's true.

Robert L. Hetzel: It's a pathological case, but that makes it...

Milton Friedman: Sure. Interesting.

Robert L. Hetzel: Interesting. Anyway. And I'm sure as you've said, the Federal Reserve System, in its own terms, has been extraordinarily successful.

Milton Friedman: That's right.

Robert L. Hetzel: Like the shark in the ocean...

Milton Friedman: Absolutely.

Robert L. Hetzel: That's lived for a million years, and so we need to understand.

Milton Friedman: As I've always said, and as if you've heard and read of me in my writings and my statements, there's no institution in the United States that has a so high a standing in public regard, and so low a rate of success in actual performance. I can't think of the name of any other institutions that has such a wide gap. But now, let's go to yours.

Robert L. Hetzel: But I do feel—we can talk about that part of Burns later, about the particular environment that he lived in, but let's start with Mitchell, and perhaps I can learn something about the University of Chicago in the process. Mitchell was a student at [unintelligible 00:04:34].

Milton Friedman: Mission.

Robert L. Hetzel: Along with Walter Stewart, who later was on the Council of Economic Advisors. And...

Milton Friedman: Now Walter was a student of advanced study. He was in the business world before that. And he has a nephew or a grand-nephew by exactly the same—Walter W. Stewart. He won't do you any good. [00:05:01]

Robert L. Hetzel: Oh, okay.

Milton Friedman: I just wanted who has written extensively on the subject of broader science. He's not an economist.

Robert L. Hetzel: He doesn't believe in the real bills doctrine.

Milton Friedman: He's not an economist.

Robert L. Hetzel: He doesn't know what it is. Oh, okay. Now...

Milton Friedman: I just happened to accidentally to come across that once, and I wrote to him and asked him if he was indeed related to Walter Stewart, and he wrote back and said he was a nephew, grand-nephew or something.

Robert L. Hetzel: Reading Veblen, it seems like Mitchell got two ideas from Veblen. We talk about institutionalists, but the better word seems to be sociologist, whether you think of human activity as being built up from the self-interested maximizing behavior of individuals, or whether you're seeing it coming from the top down, given the way the evolution of institution shaped the way individuals think. And Veblen was a sociologist in that sense, but it seems that Mitchell got his idea of a cultural evolution of institutions from Veblen, and for him, that's what made his economics so dynamic.

Milton Friedman: Well, I don't know what to say. What you say has a great element of truth in it, and he certainly was an institutionalist in that sense, there's no question. But he also thought of dynamism in terms of his business cycle analysis. You know, if you think of his book on business cycles...

Robert L. Hetzel: [unintelligible 00:06:56], yeah. Right, right.

Milton Friedman: In 1913, that really was not a static analysis by any matter of means. He thought he was talking about a very dynamic process, and there's very little in that book, I think as I recall. It's many years, but I think there's very little in that book that deals with this development of social—that you could call sociology.

Robert L. Hetzel: Right, right. And the second—well, we'll come back to that.

Milton Friedman: But they'll...

Robert L. Hetzel: Go back to that a lot. Yeah.

Robert L. Hetzel: Okay.

Milton Friedman: Go ahead.

Robert L. Hetzel: Okay. I'm just...

Milton Friedman: But there's no doubt about what you're saying. Let me go ahead. I first ran into Mitchell the year I spent at Columbia as a student, and I took Mitchell's course

in—I think it was called something like History of Economic Theory, or Economic Theory, or whatever it was, it was a famous course. And from my point of view, it was a terrible course. He spoke beautifully. You know, Mitchell had an incredible capacity to speak extemporaneously in a fashion for perfectly rounded sentences, one after another.

Robert L. Hetzel: Right, the same way, and so...

Milton Friedman: I got him to [unintelligible 00:08:10].

Robert L. Hetzel: And so did Arthur Burns.

Milton Friedman: Right. Well, Mitchell was better verbally in that sense, in our circle.

Robert L. Hetzel: You needed a pipe to...

Milton Friedman: And anyway, let me go back. But I wanted to raise the fact I had just come from Chicago, and to me, economic theory was economic analysis, and engineer analysis. That wasn't what I got out of Mitchell's course. What I got out of Mitchell's course, and this fits into what you're saying, was how the circumstances of time affected what the economists thought about it, and how they proceeded, so it was straight sociology along your line.

On the other hand, I took a second course with Mitchell on business cycles, and that was a totally different—I thought the first course was useless, but the second course on business cycles was very good because Mitchell really knew what he was talking about. He was heavily, deeply involved in that, and it's full of statistics, and data, and ideas in previous theories, and that includes very little sociology.

Robert L. Hetzel: The other thing, it seems to me, that perhaps Mitchell got from Veblen was the way of dichotomizing the economy into an industrial economy which concerned the production of real resources, how inputs are combined, and then superimposed over this a super structure of business economy that dealt with the calculation of prices in nominal terms and the calculation of rates and return in nominal terms. And the problem with the economy—and this is not a real business cycle view—was that as you just mentioned, it was in the faulty calculation of nominal values, and their translation into real values, and that seems to have come from Veblen. [00:10:04]

Milton Friedman: Well, I mean, the difference between business and industry certainly came from Veblen, there's no question. But I'm not sure, I don't know whether Mitchell would've agreed with your description of his notion. And the reason I say that is because in his business cycle model, industry played a significant role in terms of what happened to investing into a particular inventories, for example. Now you can't really—inventories are part of the real industrial world. They're also part of financial superstructure. But anyway, I don't know Mitchell in that sense well enough to say.

Robert L. Hetzel: Hm-hmm [affirmative]. Okay. We'll come back to all these things in more detail. Mitchell also studied with John Dewey.

Milton Friedman: Yes, hm-hmm [affirmative].

Robert L. Hetzel: The empiricist, and when Burns writes about Mitchell, Burns says that Mitchell said that you couldn't deduce individual behavior from first principles, you had to look at what they actually did. And that seems very reminiscent of the importance that they attached to actually going out and talking to businessmen, and getting into the mind of the businessmen, and what is the psychology of the businessmen, actually see what they did. I'm assuming that some of that of Dewey's...

Milton Friedman: It's hard to see any of that in the 1913 block. It's almost entirely statistical, or take the greenback's lawyer, which on a theoretical level is not very good. Well, Simon Newcomb's book on financing the Civil War is much better on a theoretical level in this book. And Mitchell's is much more on a factual and statistical level. And I don't see it would now, he greatly emphasized on the greenbacks. He influenced the news about war events on the price of gold.

Robert L. Hetzel: There were two things in the history of greenbacks. One was what seemed to be anti-quantity theory views, that is he looked at the premium on gold and related that to the fortunes of the northern armies, and it didn't look like it was related to the quantity...

Milton Friedman: Quantity, yeah.

Robert L. Hetzel: Although, people certainly could've formed expectations of. And the second thing, it seems to me there where he began to develop his ideas of the way profits changed over the cycle, that he looked at the way that the boom transferred income to the businessmen, increased their profits across that, so that seems to be where he began to work out his dynamic theory.

Milton Friedman: That part of it, I don't remember.

Robert L. Hetzel: Just to finish up this earlier part, then the final set of teachers were the sound money men. Laughlin, who was an advisor to McKinley, and took the opposite side from Brian and Irving Fisher.

Milton Friedman: No doubt, no doubt. Well, Laughlin was very much anti-quantity theory. In the American Economics Review, there's a great debate between Laughlin and Fisher sometime around 1903, or '05, or '06, somewhere in there. There's Fisher on the pro-quantity theory, and Laughlin on the anti-quantity theory.

Robert L. Hetzel: And Adolph Miller was also one of his teachers at Chicago, and of course, Miller...

Milton Friedman: No, I wouldn't think he was a teacher at Chicago, because they don't—no, or maybe he was. I thought...

Robert L. Hetzel: Yeah.

Milton Friedman: He was in California?

Robert L. Hetzel: No.

Milton Friedman: At Berkeley.

Robert L. Hetzel: Well, yes, he was at Chicago, and then Miller was responsible for bringing Mitchell to California.

Milton Friedman: Well, then where was Miller?

Robert L. Hetzel: He was originally in Chicago.

Milton Friedman: I see, and then he went to California?

Robert L. Hetzel: That's right, and brought Mitchell with him.

Milton Friedman: I see.

Robert L. Hetzel: Then, of course, Miller went to the board in the '20s and '30s, and Walter Stewart was there in the '20s, and they were primarily responsible for the real deals annual report in 1924. Mitchell was not impressed by the work of the neoclassical economists, the marginal economists. When he looks at the behavior of price determination, he says he's trying to steer a crooked course between thinking about supply and demand, and actually trying to put himself into the mind of the businessmen and think about his psychology, so... [00:15:28]

Milton Friedman: What, in my opinion, that comes down to is what I concluded after I took his course at Columbia is he just wasn't much of a theorist. And, well, in his mind, his mindset wasn't that of a theorist, and that, you see, he was altogether different, the margin. His mindset was really that of a theorist.

Robert L. Hetzel: Okay. Well, just to jump ahead without getting into it, you can see where ultimately where I want to go is 1970, and the breakdown of the Phillips curve. Prices don't fall during recession, and the question is whether Burns had enough of a theoretical model in his head that he could take the implications of that model to the data and reject the model as opposed to tinkering with it and adapting with it. And it seems to me that Mitchell didn't—the question is going to be whether Burns...

Milton Friedman: I don't believe Burns ever believed in the Phillips curve in the sense in which you're talking about it now, as a trade-off.

Robert L. Hetzel: Right. He didn't—well, again, this jumps ahead. He thought, at least he testified in Congress, that he could envisage macroeconomic interventions in the economy, a jobs bank, various sorts of programs that would eliminate the standard Phillips curve trade-off.

Milton Friedman: Well, he could, like you and I, he obviously was very much aware that monetary changes could have short-term effects on a number of variables. But he was a quantity theorist in his analytical analysis. However he wasn't as policy behavior.

Robert L. Hetzel: Well, okay. We'll talk more about that.

Milton Friedman: Well, let's go back.

Robert L. Hetzel: I've tried to read as much as I can of everything Burns wrote, and I've read everything he said in FOMC meetings. The only time he ever expressed a strong quantity theory view was when he was under attack for raising interest rates, and he wanted a defense. He would say, "Sustained rates of change in the money supply will cause inflation," but he didn't operate in that long run. He operated period by period, and he didn't apply, so...

Milton Friedman: Well, he said, as I remember in one of these hearings you're talking about, he said if money supplies should exceed 6 percent, I think, per year, for any length of the time, you would have sustain in pricing. And the next year under his control, it did exceed 6 percent, and the year after that. So what I'm saying is that there was no connect between his theoretical analysis and his correct analysis on the one hand, and his incorrect behavior, which is a mystery.

Robert L. Hetzel: But it's less of a mystery if really when he came to macroeconomics, he used an analytical apparatus...

Milton Friedman: I don't believe that was at the source of it at all. I believe what was at the source of the disconnect was his greater confidence in himself as a politician than as an economist.

Robert L. Hetzel: Okay, let's come back...

Milton Friedman: Well, we'll come back to that.

Robert L. Hetzel: To that.

Milton Friedman: But you want to go back to Mitchell.

Robert L. Hetzel: Well, not...

Milton Friedman: Mitchell was a very interesting character, I might say. He was extremely able, and had a tremendous ability to write and talk, and he had a great tolerance—he was able to recognize ability in other people, and to—I've always said the greatest vice of

people who are in charge of either action agencies, or research agencies, or anything like that, or universities or departments, is that a great many of them are unable to appoint people to have as colleagues or as inferiors, people who are able to be themselves. [00:20:06]

That was a great virtue of Ted Schultz as a chairman of the economics department, because he recognized the bounty, and he was willing to bet on it even though he himself was not as able as that fellow. It was true of his emphasis on George Stigler, for example, and on myself.

Robert L. Hetzel: Well, it was a problem—this jumps ahead, but it was a problem that Burns got into. If you look at the people he appointed...

Milton Friedman: Burns never could do it.

Robert L. Hetzel: Brewer [phonetic]...

Milton Friedman: He had one of those...

Robert L. Hetzel: Lilly, Partee, they were nobodies.

Milton Friedman: But I'll give you a better analyst. But he was chairman of the Council of Economic Advisors. He never tried to get me to be a council member. When he was leaving, he then tried to get me to be a council member.

Robert L. Hetzel: Burns wanted to use his leverage over monetary policy to exert the maximum influence within government...

Milton Friedman: I think he was...

Robert L. Hetzel: So it was very important to him not to have any individual who was contradicting him for creating—they said it was important to him, just the Federal Reserve System. That gave him the maximum leverage to get the kinds of policies—I mean, basically his problem was—this jumps ahead—he wanted to use a variety of macroeconomic interventions to manage the economy, which meant that he wanted to not only be fifth chairman, he wanted the Secretary to Treasury, he wanted to be head of the Council of Economic Advisors, head of OMB. He had to sit at the table, and if you want to sit at the table, if you want to be a player, you got to bring something to the table, and he brought monetary policy to the table.

Milton Friedman: That's an interesting interpretation. I would never have put it that way, but I think you're right.

Robert L. Hetzel: On this other point, though I think it's particularly important in this period, I was lucky enough to talk to Ezra Solomon yesterday, and I asked him about Nixon because Nixon was clearly a very capable guy, very able.

Milton Friedman: Oh, no, yeah.

Robert L. Hetzel: And Solomon gave a number of anecdotes.

Milton Friedman: What was Solomon? Was he in the council when Nixon was?

Robert L. Hetzel: Yes. Yeah, in '71, '72.

Milton Friedman: I see.

Robert L. Hetzel: Yeah. He gave a number of examples where he would talk to Nixon about agricultural acreage set-asides, and Nixon, it would be going through his mind. He said, "You can see the cross-benefit analysis and the trade-offs," so then how did Nixon—how could a guy who was so able let the situation get so out of control. And his answer was that in Burma, the king, when he went to the temple, like everyone else, he had to take his shoes off, but the king had a slipper carrier. He was so important, he would take his slippers off, and then have somebody just to carry his slippers. And he said Nixon's great problem was that he surrounded himself by slipper carriers. No one was willing to confront him and tell him, and tell him how serious the problem was, and no one—the people who got there were the people who told Nixon what he wanted to hear, and it's a problem of exercising our power.

Milton Friedman: Well, I wonder if that's a—see, the explanation I've always given for it is a sense of overconfidence in his own abilities, that he was sure he was going to be handling it or able to handle it. I'm thinking of the crucial...

Robert L. Hetzel: You mean Burns?

Milton Friedman: Unwillingness—no, for Nixon.

Robert L. Hetzel: Nixon. And it could be both.

Milton Friedman: Crucial unwillingness of Nixon to burn the tapes. If he had burned the tapes, he never would've been impeached to resign. And he could've burned it in good conscious. He could've said, "I met with all these people in my office and gave them my word that this was confidential. I'm not going to let my word be spoiled by these tapes. I'm going to burn them." Do it publicly in the public eye. Why didn't he do it? He wanted to preserve them for history, and he was sure he could handle it without having to do that.

Robert L. Hetzel: I mean, can't you say the same thing of Arthur Burns and other Fed chairmen also. That is that Burns developed the leading—he was the first business economist, the person to use leading indicators to make short-term forecasts of the economy to see where it was going over the next few months, and that ability to make short-term forecasts and change interest rates accordingly when things are going well gives you a false sense of power. What you're really doing is tracking the economy's interest rate.

Milton Friedman: Maybe, well, but...

Robert L. Hetzel: You're mimicking the prices, but it gives you a sense that you're controlling. And then when you think that—when you're under pressure, you think that, well, I can delay. I know I should be raising interest rates, but I've got these other political problems. I can keep things under control. I can make these trade-offs. You think you can, and you delude yourself. [00:25:29]

Milton Friedman: Well, that may be. Anyway, let's get back to your...

Robert L. Hetzel: Sure.

Milton Friedman: Agenda.

Robert L. Hetzel: I mean for Mitchell—and here I know we're going to differ, but I want to bring it up because I've read so many examples of the way Burns thought about intervention markets. But for Mitchell, I mean, what drove market behavior was not the way prices allocate resources by communicating information about scarcity, it was rather the psychology of the economic actors. And in the absence of value theory, what he was interested in was the institutional factors that caused lag price adjustments.

Milton Friedman: No, I think that's it. You're not going to differ with me on that.

Robert L. Hetzel: But when you look at Burns, there's a lot of that, too. For example, Burns' attitude toward intervention in the foreign exchange markets. He didn't think of the exchange rate as a price that was deliberating trade flows, and then had a nominal—had a real component. He always thought of the short-term effects of the government interventions would have on the psychology of the markets.

Milton Friedman: I have great difficulty with that one because I spent a lot of hours and hours on some with trying to persuade Arthur on the floating exchange rates. And during the period before Nixon came into office in 1968, when, as you know, Arthur was one of his many advisors, and Arthur organizes a group in which I was member to an advisor. And as you know, I wrote a memo on why we should have separate exchange rates, which I gave to Nixon in the fall at the end of '68, which Nixon made the great mistake of not following.

Oh, well, the reason he didn't was because Arthur wasn't in favor of it, and if I had had Arthur on my side, I believe it would've been done, and it would've made a big change. And that summer before that happened, I spent hours trying to persuade Arthur to be in favor of floating exchange rates, and I did not succeed. And then the problem is at this stage, which is what '58, almost 30 years later, I can't reproduce the—it's Arthur [unintelligible 00:28:19] on the other side. I had the similar—but I'm not sure your interpretation is right, and let me tell you why.

I had a similar long argument with Lionel Robbins, and this time on paper by letters, and those are available. And you and Lionel—or I do know what Lionel's argument was

because I brought this up again a few years ago when I gave a talk down at Claremont. It was Robbins and Mory [phonetic] election, and Robbins' argument was not in terms of the short-run effect of manipulation of exchange rates. He was all against manipulations and exchange rates. He was all against government intervention in the market. His argument, and I think this was Arthur's as well, we have to nail our flag to the mast as a way...

Robert L. Hetzel: Yes, I remember.

Milton Friedman: Lionel would say it, because if we let go of that fixed exchange rate, then our policy is going to be the will of the wisp. It's going to be a metastable equilibrium. Wherever we push it, it will go. There's no anchor.

Robert L. Hetzel: No nominal monetary...

Milton Friedman: No nominal anchor, and we've got to have this as a nominal anchor. And I believe that was Arthur's view, too. Well, no, I can't guarantee it. [00:29:37]

Robert L. Hetzel: I actually don't think so, and I don't know as much about this yet as I should, but there are a number of letters from Arthur Burns to Nixon in the spring of '71 on this issue. And at the Camp David meeting on August 15, Burns gave a very long, dramatic appeal not to post to Dave –

Milton Friedman: I know, I know.

Robert L. Hetzel: Goldman.

Milton Friedman: And Nixon says in his memoirs it's one of the few occasions in which that he did not—and he's always trusted Arthur—and this was one of the few occasions in which he rejected his advice, and went against his advice.

Robert L. Hetzel: As nearly as I can tell, I mean, in many ways, Burns had the attitudes of the conventional businessmen. He looked back to the experience of the 1930s and the prevailing wisdom at the time, he associated devaluation with the monetary manipulations of the Roosevelt administration, and he believed that if the Nixon administration were to devalue, it would raise that old bugaboo, and again, most of Burns' analysis then comes down to how is it going to affect the psychology of the investor. How is it going to affect the confidence of the businessmen? And he thought that would shatter the confidence of the businessmen, and just the conventional kind of argument against this exchange...

Milton Friedman: Do you have a record of what he said on that occasion, August 15 [unintelligible 00:31:29].

Robert L. Hetzel: I've only talked very briefly with Alan Tracken...

Milton Friedman: Discussed at some length. Have you read the...

Robert L. Hetzel: *The Sapphire Book* is the name.

Milton Friedman: Now, *The Sapphire Book* is one. But I think Nixon and his memoirs. Have you looked at the Nixon memoirs?

Robert L. Hetzel: No. No, no.

Milton Friedman: I think we've got them here, and if you remind me, I'll get them out for you because I believe he also discussed this there. I also have read *The Sapphire Book*.

Robert L. Hetzel: Well, Herb Stein was there, too, and I've not...

Milton Friedman: Oh, yeah, Herb was there.

Robert L. Hetzel: Talked to him yet, so he will know.

Milton Friedman: Herb is a funny conservative. He's one who never saw a tax he didn't like.

Robert L. Hetzel: Yes. Well, I'm looking forward to...

Milton Friedman: He's a nice fellow. I like Herb.

Robert L. Hetzel: Talking to him, but he reminds me of Josephus, who wrote the *Jewish Antiquities* and *History of the Roman War*. Josephus was a Jewish general who defected and joined the Romans, and then Josephus wrote a history of the wars.

Milton Friedman: I see your...

Robert L. Hetzel: And the history is self-serving. And anyways, there are a lot of memos and a lot of between Stein and Nixon. And Stein was a young guy, a Young Turk, and he comes across as the guy who's really the one who's pushing Nixon to get to be—Nixon wants 4 percent unemployment by 1972. Stein is the one who's really saying, "If you're going to get that, this is the GNP you're going to have under Thorkin's [phonetic] law. You're going to have to have this level of GNP, and to get that, you're going to have to have that money growth. And if you're going to get that money growth, you've got to take Arthur Burns on. You've got to confront him, and you got to sit down with Arthur Burns and you've got to say, "Arthur, are you on board with this or not? Do you have these same objectives or don't you? And are you going to give us that money growth, or are you not?"

Milton Friedman: I guess Herb never argued against the money growth.

Robert L. Hetzel: By the summer of 1970, the council in general—and I think George Shultz, too, had agreed that 6 percent M1 growth was a reasonable standard. And Stein is the one that was always pushing for higher money growth. He was the one that said, "You need me."

Milton Friedman: That's a major...

Robert L. Hetzel: At least...

Milton Friedman: But he's changed his position just precisely...

Robert L. Hetzel: There are lots of memos...

Milton Friedman: I think '83.

Robert L. Hetzel: On [inaudible 00:34:12].

Milton Friedman: Well, I once met with Nixon in the Oval Office during that period. I don't know whether it was in '70 or '71. Well, his purpose was to try to persuade me—must've been in '70 or early '70s—tried to persuade me to try to pressure Arthur to increase money growth. And I told Nixon, "Well, if you increase money growth that way, you're going to get inflation." And he said to me, "Well, we've got to win this election," or something like that. And I said to him, "Well, you know, unless you're in the virtue of winning our election, if after the election certain taxes are exempt, that the country's having a big inflation." And he said to me, "Well, let's wait and see about that after the election."

Robert L. Hetzel: There's a good...

Milton Friedman: And no doubt in my mind that he was willing to do anything to get him elected.

Robert L. Hetzel: Well, he was very...

Milton Friedman: Almost...

Robert L. Hetzel: He very explicit saying that no election has ever turned on the rate of inflation. It's always turned on unemployment.

Milton Friedman: That's right. And it Arthur who taught him that. In the—when was it, 1960? Let's say Nixon versus Kennedy. Arthur persuaded Nixon, and then went on and defeated him, it was the recession they were having at the time. [00:35:44]

Robert L. Hetzel: Yeah, that comes out. All your letters are preserved, by the way, and I have a lot of them that I'm sure I'll get.

Milton Friedman: My letters?

Robert L. Hetzel: You sent some letters to Nixon, some letters to Stein, some letters to George Shultz. Most of them are still available.

Milton Friedman: Maybe, but this one...

Robert L. Hetzel: This was the...

Milton Friedman: I don't...

Robert L. Hetzel: You sent a couple letters that could've been the one you're talking about. One in early '71...

Milton Friedman: This wasn't a letter.

Robert L. Hetzel: And in early '72.

Milton Friedman: This wasn't a letter.

Robert L. Hetzel: Right, but I'm saying you sent letters saying that inflation...

Milton Friedman: That might be.

Robert L. Hetzel: Was going to—there would be a resurgence of inflation.

Milton Friedman: But that's not the incidence that I'm talking about.

Robert L. Hetzel: Right, right.

Milton Friedman: It was a face-to-face meeting. It wasn't letters. I didn't realize I had sent them letters to them, to tell you the truth. But Nixon said...

Robert L. Hetzel: Well, there are some letters on...

Milton Friedman: In terms of IQ, the only major political figure I've ever met that I would put on the same level of Nixon was Bob Taft, Sr. Nixon was absolutely a first-rate intellectual. Somebody else you ought to talk to if you want to get on these lines is Allan Wallace.

Robert L. Hetzel: You know, I knew he was involved in the early...

Milton Friedman: That's right. Well, Nixon was...

Robert L. Hetzel: But I didn't whether he...

Milton Friedman: Vice president.

Robert L. Hetzel: After the transition and the initial policy of, you know, the gradualism policy, I didn't know that he was involved after that, so I haven't...

Milton Friedman: No, I'm talking about an earlier involvement. This was in the 1950s, in the Eisenhower administration. Nixon had a committee on growth or something, and Allan Wallace then was the executive director of that, and he worked very closely with

Nixon. That's how I first met Nixon. Allan had me meet Nixon in Washington when Nixon was vice president. That's why I thought Allan Wallace would be interesting on...

Robert L. Hetzel: Thank you. That would be good. Burns said this of Nixon, so maybe he was serious. I didn't know how to take this, but he said, "What I"—and speaking to Nixon, "What I encountered, to my surprise, was a fellow intellectual. Dick Nixon leads a solitary life of the mind. It's extraordinary that he's been so unpopular over the years with intellectuals. He's really one of us."

Milton Friedman: He's right. Absolutely.

Robert L. Hetzel: So he's serious? Okay.

Milton Friedman: Oh, absolutely. Who? Arthur?

Robert L. Hetzel: Yeah, Arthur Burns.

Milton Friedman: Oh, well, certainly. I would agree to every word of that. I've always said Nixon was really an intellectual. He liked abstract ideas. That's the impression I got of him the first time I met. He was perfectly willing to talk in general terms about abstract problems.

Robert L. Hetzel: That certainly wasn't like President Johnson, for example, or...

Milton Friedman: Oh, no, it wasn't the same. Oh, no. As I say...

Robert L. Hetzel: And you know, they want...

Milton Friedman: The only other political figure I've met whom I would put in the same class is Bob Taft.

Robert L. Hetzel: Part of Nixon's problem also seems to have been a personal insecurity.

Milton Friedman: That is true.

Robert L. Hetzel: When Connally joined the administration as Secretary of the Treasury, Nixon looked at Connally, and Connally had everything that Nixon didn't have. He had charisma, and when Connally told him how to take advantage of the—I don't think you can understand this period, Nixon or Burns, without understanding what a difficult period it was for the United States. It was, in a way, like the Depression or the 1890s. People felt threatened by forces that seemed beyond their control, and one of them was very much homemade, and that was inflation.

And the businessmen felt that they wanted government to help them deal with the militancy of labor, and they were willing to put up with government regulation, and true-see government bureaucrats to deal with that. And the consumer wanted protection from greedy

corporations. Detroit wanted protection from the Japanese that were sending in automobiles. The middle class wanted protection from the hippies who were threatening their values and their civil rights, and Connally was the one who could tell Nixon that you can put together a political platform or coalition that builds on those grievances, that creates scapegoats, and... [00:40:27]

Milton Friedman: I don't accept your interpretation.

Robert L. Hetzel: Okay, that's good because I want to talk because I think this is important in terms of understanding Burns, too, so we'll come back to this.

Milton Friedman: I don't think, I don't agree with that interpretation. I do partly, but I believe that you've got things upside down. The price control was put in in order to enable them to close the gold window, not the other way around. Let me exercise this hypothetical thing. Suppose Nixon had followed my advice and closed the gold window in early 1969. I urged him as the first act as his administration...

Robert L. Hetzel: Yeah, he could've done it then.

Milton Friedman: It should be the close of gold. And announce publicly if you hadn't realized how bad the situation was until you came into office, you could blame the democrats on it. See, when I came in to office, I found that our foreign financial affairs were a mess. The democrats had followed a policy which had led to a big balance of payments deficit, and a demand on our gold, and the only thing we can do is to close the gold window. Blame it on the—you never would've had price control.

Robert L. Hetzel: Well, I think that...

Milton Friedman: And the reason you wouldn't have had price control is because you never would've been face-to-face with an absolute deadline in necessity. The real crisis of August 1971 was the demand for gold.

Robert L. Hetzel: Well, okay, let me pursue that. It's clear that that's what precipitated the controls, and it's also clear that Connally thought that the way to package devaluation, closing the gold window, was with control, so it took an offensive...

Milton Friedman: Actually...

Robert L. Hetzel: It was packaged as the United States standing up to unfair foreign competition.

Milton Friedman: If he had just closed the gold window and nothing else, every headline would've been that negative Nixon, he's taking us off the gold [unintelligible 00:42:29]. As it was, this is part of a big package. It's a great influence on...

Robert L. Hetzel: The import surcharge.

Milton Friedman: Absolutely.

Robert L. Hetzel: This is our club, and to finally get a fair sharing of the defense burden...

Milton Friedman: It was a Buchanan.

Robert L. Hetzel: Give fair trading...

Milton Friedman: A Buchanan approach.

Robert L. Hetzel: Sure. But I think that that was primarily...

Milton Friedman: Look, inflation was already coming down. It was less than 4 percent by the time you did that. In August 15, it was about 3.5 percent.

Robert L. Hetzel: Right, but what Burns and the Nixon council were looking at was wage inflation. They thought that's what was driving inflation.

Milton Friedman: Yeah, that's true.

Robert L. Hetzel: And wage inflation was still at 7 percent. It had yet to come down.

Milton Friedman: And you're right about the businessmen who thought that was a way to hit the union, but they would not have been invited, though, if it hadn't been for, one, that something else had to be done about the ideation. And, two, that Burns had warmed them up.

Robert L. Hetzel: We can come back to that, but I think there were three more fundamental reasons for the controls, and that the problem with the—yeah, I'll quit whenever you want me, too.

Milton Friedman: No, that's all right.

Robert L. Hetzel: The problem with the gold window, or with the gold losses was precipitating. In the FOMC minutes, there's a discussion at the first FOMC meeting after Camp David, and Burns is giving a brief review of the rationale for the controls. And what he says is that in the spring of 1971—this is not exactly his words but basically this is what he says—the administration got the monetary policy it wanted. They got very high rates expansion of M1, and what happened was that the unemployment rate was still very slow to change. The financial market were becoming very nervous. Bond rates were going up. And Burns said that he argued, convincingly, that if I simply give you the expansionary monetary policy you want, it won't work because of inflationary expectations. You've got to combine it with controls, so that was one thing.

The other thing was that they only had a year to go, and the unemployment rate was still 6 percent. They wanted a dramatic decline in the unemployment rate, much greater than anything they'd ever seen taught within a year. And they felt like to get the kind of expansionary monetary policy they wanted—to get 5.5 percent, 5 percent unemployment, 4.5 percent—they needed the controls. And the last thing is that Nixon was a master politician. He waited until there was just this deafening chorus of do something. [00:45:29]

We have this problem. You're doing. You're just sitting there. You've got no strategy, you've got no plan, so when he put the controls in, this wasn't an obvious program to re-elect Richard Nixon, it was a response to this overwhelming clamor to do something, so politically, it was really...

Milton Friedman: Oh, there's no doubt. Politically, it was very [unintelligible 00:45:54].

Robert L. Hetzel: Although it was brilliant in the same sense as the dictator who stands in his balcony with the crowds cheering him is exactly the same sort of—the strong [inaudible 00:46:06].

Milton Friedman: Excuse me. I've just got to go for a moment to—I've got to go to the bathroom.

Robert L. Hetzel: Oh, okay.

Milton Friedman: Would you like to use the bathroom, too, because there's one down here, too.

Robert L. Hetzel: Sure.

Milton Friedman: There's one at the end of the hall and turn to the left.

Robert L. Hetzel: Okay.

[00:46:17]

[RECORDING STOPS]

[RECORDING RESUMES]

[00:46:18]

Milton Friedman: Is that if you kept the average unemployment rate from 1900 to 1930, it's lower than in the 30 years after the passage of the Full Employment Act. So you achieve prestige by persuading the public that you're going to reduce unemployment, and by following policies which lead to higher unemployment. At least if you just look at these facts.

Robert L. Hetzel: On this other issue, though, of leadership, there are a lot of letters from Burns to Nixon. Burns exhorting Nixon to show leadership. Burns is saying, "The country is in a crisis. People need leadership. They're confused," and you get the feeling that Burns thought that Nixon really needed him. He needed him as a counselor.

Milton Friedman: Oh, there's no doubt about that.

Robert L. Hetzel: He, Nixon, of course with good reason, didn't trust Connally. He didn't trust Haldeman and Ehrlichman. He thought Burns needed him as a counselor, and he thought the country needed leadership.

[00:47:31]

[END TAPE 48, SIDE A]

[START TAPE 48, SIDE B]

[00:47:35]

Robert L. Hetzel: I think that's one reason why Burns didn't likely...

Milton Friedman: I don't think I remember the Connally references.

Robert L. Hetzel: He needed to be close to the administration. Although, Burns was very aggressive in trying to influence policy. When he felt like he was not being listened to, he had no confliction about going before congressional committees, talking to the newspapers, saying things that were very embarrassing politically.

Milton Friedman: Well, it's very interesting from that point of view because when he was chairman of the Council of Economic Advisors and the council was in a very, very low state in public opinion, one of the measures Arthur took to raise the prestige of the council was to refuse to participate in radio talk shows, or to make any public statements at all, or to testify before Congress. Just the opposite of the behavior later on.

Robert L. Hetzel: But that's because he thought that he was being listened to.

Milton Friedman: Here. Now this is about the strongest opposition. That's the freeze, not the price controls, came from Arthur Burns. He wanted us to wait. Even if all the arguments are right, he said he still felt there was no rush, and so on. And always gave great weight to Burns' opinion because of high respect for his superior intellect, and because he always followed the practice. He once described to me of telling the President what he needs to hear, not just what he wants to hear. This...

Robert L. Hetzel: Well, maybe he was the only one who did that.

Milton Friedman: This was to be one of the few cases...

Robert L. Hetzel: It's possible. Yeah.

Milton Friedman: In which I did not follow his recommendations. I decided to close the gold window and let the dollar float. As events unfolded, this decision turned out to be the best thing that came out of the whole economic program when I announced on August 15, 1971. Isn't that wonderful? Whereas he says about price and wage control somewhere, that's the worst thing he ever did.

Robert L. Hetzel: Oh, really?

Milton Friedman: Yeah. He's very self-critical about them, if I remember in his memoirs. Okay, now he's over...

Robert L. Hetzel: Yeah, that's one area where I don't have enough memos yet. I was hoping George Shultz would open his memos to the public, but he's not willing to do that yet.

Milton Friedman: He's not, yeah.

Robert L. Hetzel: Because I don't—it's clear that Nixon didn't like the idea of controls because he associated it with government interference.

Milton Friedman: Because he had been—well, the reason was because he had worked for...

Robert L. Hetzel: He had worked for the office...

Milton Friedman: The LPA.

Robert L. Hetzel: Yeah, so he must've worked for Godwin, I guess.

Milton Friedman: That's right.

Robert L. Hetzel: On the other hand, the discussions I have seen of Quadriad means, they don't emphasize that. What they emphasize is that the political problems it would cost them with the labor unions. And so I don't know whether what was going on in Nixon's mind was more of this political calculation or whether it was more of his own feelings, personal feelings. I just don't have enough information on that. But it's clear that when at those times when the administration wants a more expansionary monetary policy from the Federal Reserve System, when Burns feels that he has more leverage, those are the times he goes public with his exhortations, not for controls but for incomes policy. He feels like...

Milton Friedman: Well, the first time he did that was in the spring of 1971.

Robert L. Hetzel: 1970.

Milton Friedman: I think '71.

Robert L. Hetzel: No.

Milton Friedman: Maybe you're right, but I thought it was '71.

Robert L. Hetzel: No, in May of—I know this and I'll tell you why in a minute—in May of 1970, there was a banker's convention at Hot springs, Arkansas, and Burns used that occasion to argue for an incomes policy, and that's the event that triggered your letters, and those are in the Burns files at Ann Arbor.

Milton Friedman: I didn't realize my letters are in there.

Robert L. Hetzel: They are, and I have them. You wrote one from Dorchester, and then you wrote one from Vermont. And one's dated, I don't know, maybe...

Milton Friedman: No, no. I wrote one from—oh, Dorchester Avenue, right.

Robert L. Hetzel: Right, yeah.

Milton Friedman: From Chicago. That was a hand...

Robert L. Hetzel: Right, that was the first one.

Milton Friedman: That was a handwritten...

Robert L. Hetzel: They were both handwritten.

Milton Friedman: They're both handwritten, yeah. [00:52:17]

Robert L. Hetzel: Yeah. So that date's the first one, and that's when the Nixon administration wanted to push the Fed strongly off its concentration on bringing inflation down. And then the second case is in late 1970 when the administration decides it has to have a 1065 GNP to get the unemployment rate down. And then Burns give a speech at Pepperdine College, and basically challenges the Nixon administration, and there's this exchange where Stein says, "Well, philosophically, I'm against controls, but if that's what it takes to get an expansionary monetary policy, I think we ought to talk to them to see if we can do business with Arthur."

Milton Friedman: It's incredible to me that Herb Stein could've taken that position. He did.

Robert L. Hetzel: He did. He was the Young Turk, and he was the guy who was rising up. I mean, you can see what's going on here because he's the one with the competence. He's the guy with the answers, and for a young kid, I mean he has, all of a sudden, just an enormous amount of stature in this administration. And there's a wonderful letter that you wrote, and I wish I could remember the exact words, but this was after the 1972 economic report of the president came out. And you start off by saying, "Dear Herb, you have given the best and most convincing explanation that could possibly be given for a policy

that has no shred whatsoever of any possibility of ever being supported by rational economic analysis.” So you could see your mind starting out with, well, I should say something positive, but then you can see the way the sentence evolved by the time you got to the end of it. That’s a great letter.

Let me ask you about the book that Burns wrote in ‘57, *Prosperity in Depression*—I’ll get the name here in a minute. It starts out with Prosperity, he lists you and George Stigler in the introduction. You read this book, and you get the sense that Burns thought he had solved the problem of the down part of the business cycle. That he had come on in 1953 as Eisenhower’s advisor, and he’s very proud of that. He never misses a chance to tell his anecdote about how Eisenhower tells Arthur, “You would’ve made a great chief of staff.” So you read that, you very much get the feeling that Burns thinks that if government intervenes aggressively when the signs of recession appear, that you can deal with recessions. You can solve this bane of humanity.

Then the remaining problem then is how to reconcile prosperity and inflation. That if the government maintains prosperity, what do you do about inflation. And you get the feeling that this is like—and Burns would’ve just hated this analogy—and Heller thought that he had solved the problem of recession with tax cuts, and Ackley wanted to make the program complete by showing how you could deal with inflation by tax increases so that between the two of them, Heller and Ackley, their legacy was going to be an activist fiscal policy and tax decreases, and then tax increases that would stabilize the economy. And that’s why they put the Fed under so much pressure in the ‘60s because they knew Johnson hated high interest rates, and they wanted to use that as a club. They said that if you don’t go along with tax increases, then Martin’s going to have to raise interest rates, and unfortunately, Martin could not do a thing, and agreed that, yeah, they would go for that strategy.

Of course, as you know, it failed for two reasons. One is they didn’t get the tax increase, and the second, even if they had gotten it, they still had to control money. But you get the feeling that Burns has that same sense of history being on his side, that his task is incomplete, that ultimately when history is written, his accomplishments that we recognized in 1953, but what he wants to go on and do next is to show how you’re able to return the economy to full employment without inflation. But to do that, he needs this whole variety of government programs and interventions. And that, plus his feeling the country and Nixon needs leadership, and that they need him, let himself be seduced. [00:57:46]

As I said, then the old council thought that monetary policy was the most important instrument, and Burns thought that various sorts of fiscal interventions were at least as important as monetary policies, so the two circled around and eventually they traded, and they each got what they wanted.

Milton Friedman: Well, you know monetary authorities, whoever it is, always argued that wrong things come from fiscal policy. And treasury authorities, whoever they are, always argued that these come from monetary policies, so I think that Burns is not at all exceptional in this respect.

Robert L. Hetzel: Yes, but it's more than that. I mean the Fed chairman, he says that if you attack me, I'm going to draw attention to the deficit, and I'm going to cause you lots of problems, so you better leave me alone because I can really...

Milton Friedman: But in fact, when it's head of the Fed, whether it's Martin or Burns, testified and tried to justify the Fed's policy, and they always say that the bad things that happened were due to fiscal policies, so they don't really leave them alone.

Robert L. Hetzel: Of course in 1971, Burns was arguing for tax cuts when the Nixon administration was trying to—and reading *Prosperity*, I'm curious if you remember that because Burns very clearly has a real view of inflation. He says, “Sure, inflation has lots of causes. One of the causes is the expansion of credit,” but when he talks about the expansion of credit, he talks about the proliferation of different kinds of financial irregularities. It's very much a Gurley Shaw Radcliff sort of...

Milton Friedman: I don't remember that.

Robert L. Hetzel: And the other thing which he emphasizes is wage-price spiral. Businessmen and consumers after the wage...

Milton Friedman: Yeah, that he would've done because he put a great deal and emphasis on confidence in his whole business cycle analysis.

Robert L. Hetzel: But that...

Milton Friedman: Confidence in businessmen played a big part.

Robert L. Hetzel: That must've had some influence, though. I mean, he really did believe—well, two things on the controls. One is that in 1970, he thought he had to get—he wanted to get the country moving again in a non-inflationary way, and he wanted to get businessmen invested, but the problem was the confidence of the businessmen was eroded because the businessmen didn't know what profits they could keep because of the militant demands of labor for wage increases. And with that uncertainty about inflation and inflationary wage increases, businessmen lacked the confidence, and at that time he was arguing for an incomes policy, which he viewed as an aggressive job line. Although there's a fascinating...

Milton Friedman: You know, he does. He always tried to pretend that he didn't have an income policy without official action. This is also the attitude of the Kennedy and Johnson CEA.

Robert L. Hetzel: There's a fascinating...

Milton Friedman: Tobin, Heller, and so on, they also thought that you could jump on it.

Robert L. Hetzel: There's a fascinating...

Milton Friedman: And Burns attacked them.

Robert L. Hetzel: In '66, yes.

Milton Friedman: In '66, yeah.

Robert L. Hetzel: Yeah. There's a fascinating summary of a discussion in spring of '71 about how to respond to Arthur Burns, and Nixon says, "They won't teach you this in Sunday school, but jawboning incomes policy, it's not going to do any good. Businessmen are going to follow their own self-interest, and if any businessman tells me that he's pursuing the public interest, boy, I'll sell the stock in that company in a hurry." So Nixon realizes that these aren't going to happen. And the fact is...

Milton Friedman: Well, you can see that.

Robert L. Hetzel: You're going to do it.

Milton Friedman: That's a good example of Nixon's intellectual capacities.

Robert L. Hetzel: Yeah, he was absolutely right. For him, it was clear. You either had a controls program or you didn't. The in-between was a waste of time. And by then...

Milton Friedman: Well, it's hard to understand why Arthur would've taken the position he did.

Robert L. Hetzel: Except of all the importance he attached to government leadership, and having a person who was strong and would give people confidence, the feeling that this person would lead the amount of this troubled time.

Milton Friedman: Yeah, I never had any...

Robert L. Hetzel: Well, and then he extrapolated from his own self-confidence. I mean, surely when Arthur Burns walked into a room, Arthur Burns was the center, and he may have...

Milton Friedman: Yeah, that was...

Robert L. Hetzel: Felt that that personal support...

Milton Friedman: John Davenport once wrote an article for *Fortune* in which he said about the Federal Reserve, and he said people ask where is the head of the table, and he says, "Where Arthur sits is the head of the table."

Robert L. Hetzel: Were you the one who originally said that, or...

Milton Friedman: No.

Robert L. Hetzel: Okay.

Milton Friedman: John Davenport in *Fortune* magazine sometime. And I thought it was a wonderful way of describing Arthur's—the emphasis he had, the confidence he generated in his own abilities. [01:03:13]

Robert L. Hetzel: Well, I'm afraid I'm going to overstay my welcome. Let me ask you one more quick set of questions. Oh, by the way, Mitchell had a home in Vermont?

Milton Friedman: Oh, yeah.

Robert L. Hetzel: And he was also a cabinet maker?

Milton Friedman: Greensboro, Vermont.

Robert L. Hetzel: You were into woodworking, too, right? Weren't you? I guess as a hobby.

Milton Friedman: Oh, I always have been, yeah.

Robert L. Hetzel: And had a home—so there must've been a relation between...

Milton Friedman: Mitchell was a very complicated character. Oh, no. No, what happened was Mitchell was up in Vermont before most of the rest, and it was his being in Vermont that I think brought most of the National Bureau people up to Vermont. See, Arthur had a home in Vermont. And Geoff Moore had a home in Vermont, summer. Most of the National Bureau people had a summer place in Vermont, and we went to Vermont thanks to Arthur, initially.

[comment redacted at interviewee's request]

Robert L. Hetzel: As a political matter, Rosen said...

Milton Friedman: You know he was the one who was responsible for getting Arthur involved in the leading indicators, of course. He was asked by—was it Morgenthau—somebody at the Treasury—Mitchell was asked.

Robert L. Hetzel: Hm.

Milton Friedman: As a leading business cycle, clearest in the country, he was asked if he could provide some of the indicators for the government by which—some indicators of the government, which there is no predict the future behavior of the economy. And he, if I remember the story, and I don't know that I have this totally right, but my impression is that he had Arthur go down to Washington, and Arthur and Geoff Moore, I think who Arthur brought down, were responsible for the original leading indicators.

Robert L. Hetzel: And that gave a whole generation of business finance this feeling that they had a nudge in the economy that...

Milton Friedman: Sure, they had a tool that they could use.

Robert L. Hetzel: They could play on...

Milton Friedman: Well, you were asking one question.

Robert L. Hetzel: Yeah, I wanted to finish this up. I was just saying before I get kicked. I want to leave gracefully.

Milton Friedman: You'll leave gracefully, don't worry.

Robert L. Hetzel: When you read Mitchell and Burns, and you read their description of the business cycle, it's a dynamic theory of money illusion, but it's so complicated you can't sort it out. You don't know what shocks are. You don't know what the propagation mechanism is. You don't know what role the price system is. You get the feeling that it doesn't serve them well as an analytical apparatus in the sense that when they take their theory to the data, when they use it to predict, if it doesn't predict, then their apparatus is so complicated that they're never going to reject their own framework. They're just going to tinker with it because it's so complicated that along some dimensions, it will always fit. And so the thing to do is just to play with it so that it continues to fit over time. So it's not useful as a theory in that it can't be rejected.

Milton Friedman: Well, I'm not sure that's entirely right. In the first place, they weren't taking the theory to the data, they were taking the data to the theory, and they were forming their theory out of the data.

Robert L. Hetzel: They were looking for...

Milton Friedman: They were looking for regularity.

Robert L. Hetzel: Empirical regularities.

Milton Friedman: Empirical regularities, and Mitchell started that in his 1913 writing. He continued it to a minor extent in his '25 or '26, whatever that year that was [unintelligible 01:06:54]. Now in the Burns and Mitchell writing, all of that has taken a big step forward with this much more sophisticated statistical mechanism of reference cycles and specific cycles of stages and all that. But in that apparatus, they asserted certain propositions that I think it was possible to contradict with data about the length of the cycle, about the regularity of the cycle and conformity. And some of those, unless I'm mistaken, it would've been possible to contradict. No, I agree with you that like that in most such theories, in such apparatuses, there's a lot of fitting in going on. There's none of the, no business cycle theories to my knowledge that has yet contradicted the simple Slutsky theory.

Robert L. Hetzel: Which is the—this is you...

Milton Friedman: The cycle is simply an accumulation of random—you pick from a random number generally, a series of random numbers. Now cumulate them.

Robert L. Hetzel: Well, that's the real business cycle theory, that these productivity shocks are just this...

Milton Friedman: I know, that's just theory at random.

Robert L. Hetzel: And what you feed in is what you get out.

Milton Friedman: It's just a bunch of nonsense. No, no. But you see, if they give it a name, they call it productivity shocks.

Robert L. Hetzel: But they don't restrict it with any kind of theory, these shocks.

Milton Friedman: None whatsoever, no.

Robert L. Hetzel: So they...

Milton Friedman: Well, they calculate the shocks as deviations from a production company fundamentally.

Robert L. Hetzel: But those models are...

Milton Friedman: They mimic the cycle, but they're paralleled.

Robert L. Hetzel: Well, you said the difference between can and do...

Milton Friedman: That's right.

Robert L. Hetzel: But those models are like—I think this is one problem with economics today, with all its sophistication, the absolute requirement that theories have to be general equilibrium means that the models are so complicated that they will always fit along some dimensions and not along others. So you don't reject them because you just take the dimensions along, which they do not fit, and you tinker with the model.

Milton Friedman: Yeah, well, I agree with you on that. I'm just questioning whether the Burns-Mitchel apparatus wasn't a good deal more specific. See, the Burns-Mitchell people were not trying to mimic the cycle. They were really trying to describe it by an eliminative number of dimensions. At any rate, but I don't really feel very strongly about that one way or the other.

Robert L. Hetzel: Except that for Burns, more knowledge about the business cycle always, in effect, was more detailed knowledge about particular series, and how they...

Milton Friedman: I suppose.

Robert L. Hetzel: And that's a different way of proceeding than by drawing the line and saying, I have this simple framework which yields implications in the—and so what I want to ask you is that since your approach was so—and correct me if I'm wrong, but when I read your—was it 1952—article about measurement and your assertions about a good theory, one of the ideas is to make the theory simple enough that it can be rejected by the data. And that's so very different than the NBER...

Milton Friedman: That's very different.

Robert L. Hetzel: Approach. Where did that come from? It didn't come from necessarily your views. It didn't necessarily come from people like Frank Matt because they weren't empiricists.

Milton Friedman: No, it didn't come Frank Matt at all.

Robert L. Hetzel: And people like Catelli [phonetic] were statisticians, so where did this Chicago school come from?

Milton Friedman: Well, I don't really know because of the fact that Dodson, the metropolological view and what was important was to ditch the possibility of rejection, turned out to be identical with a Popperian view. Fundamentally it's a Popperian view of methodology. And one of his famous books on articles he's labeled, "Contradiction and Reputation" or "Reputation and Contradiction," something like that. It doesn't matter. But at the time I wrote my first drafts of what later was a methodology essay—I had not met, or read, or heard of Popper. So I know that wasn't the source of influence. So where it came from, I don't know. I really can't answer that question.

Robert L. Hetzel: Would you be willing to...

Milton Friedman: Some people later thought maybe it came from Dewey, but I never read Dewey.

Robert L. Hetzel: John Dewey?

Milton Friedman: Yeah. John Dewey—he was a mentalist.

Robert L. Hetzel: Mitchell was—yeah. I mean Mitchell was Dewey's student.

Milton Friedman: Yeah, Mitchell.

Robert L. Hetzel: And Mitchell didn't have this view.

Milton Friedman: No. No, he didn't.

Robert L. Hetzel: Would you be willing to talk a little bit about your relationship with the Cowles commission?

Milton Friedman: Oh, sure. There's notes on about that.

Robert L. Hetzel: Because your debate with him must've helped you to change your own ideas.

Milton Friedman: Oh, I'm sure it has right now.

Robert L. Hetzel: You had some things in common with him about how to think in general about identification, but your strategy for actually coming up with the models...

Milton Friedman: Oh, no, no, no.

Robert L. Hetzel: Was very—okay.

Milton Friedman: Oh, yeah. I don't think we were—we weren't in agreement on the subject of identification. We were in agreement—I think what was common between us was at first, the use of mathematics. Second, the use of statistics. See, that was in the early period after the war, and in 1945 when the war ended, I was at the highest point I ever reached in terms of my control in my ability in statistics because I had just spent two years primarily in statistics, and it went downhill from there. But I was still, by the '50s, very much involved in early statistical kind of thing, and they were, too, in statistical methodology. And we were both interested in the use of mathematics. We were both interested in essentially the same problem, but now you interpret the economy as a whole in the business cycle. And we both liked Arthur. And those seminars were very good.

The seminars, they had very able people there. Yeah, after all, the whole collection of people were very good. But I differed from him, I think on the subject of identification because I thought that nothing could ever be completely identified. It was impossible, and that's where somehow—I know I had the idea that prediction at that time because there's where I introduced the notion of a naïve tense.

Robert L. Hetzel: But their...

Milton Friedman: Of asking whether their structural model could produce better results than simply extrapolating the past.

Robert L. Hetzel: Okay, let me put it this way. Their view toward identification was more mathematical. That is, you start with a mathematical model of the economy instead of statistic difference equation. You imposed formal identifying restrictions from the theory, and then you take that to the data. And in fact, if you had the theory, you could do that, but the problem is you don't have the theory.

Milton Friedman: Don't have the theory, and...

Robert L. Hetzel: And at that point, you had worked on, for example, on the Civil War and inflation, and then comparing the amount of inflation in the Civil War with other episodes. So it seems like your work led you along a different line. Your approach was to realize that the data were given by very poorest experimental design to look across historical episodes and to think, what comes closest to the controlled experiment that we need as scientists...

Milton Friedman: And it's a good one to take.

Robert L. Hetzel: To determine pros and...

Milton Friedman: I think that's fine. I used to say there's no such thing as a completely controlled experiment, and there's no such thing as an entirely uncontrolled historical episode. And many historical episodes will be a better controlled experiment. You couldn't ask for a better controlled experiment than this century gave us on collective and then versus free market.

Robert L. Hetzel: And this is one of the discouraging things about macroeconomics, now people, when they go to study economics, they take a time series, and they run it over however long they have the series. But the way to think about it is to look at the 1970s and say you will never get as clear an experiment of policymakers trying to use nominal variables to control real variables, and look at what happened. And then they do a time series of VAR, which combines the 50, 60, 70.

Milton Friedman: Which is absolutely insane.

Robert L. Hetzel: It makes no sense.

Milton Friedman: Absolutely. I agree with you. Absolutely no—I've never seen any sense in these VARs. And I think this real business cycle, this stuff is for the birds. It doesn't prove a thing. In fact, I was contemplating writing a little note to the Journal of Economic Perspectives, which had a long article in it. The latest issue of the JEL had a series of articles on the real business cycle there, and some pro, some con. And I was thinking of writing a little note just saying that according to—what are these two authors? [01:17:39]

Robert L. Hetzel: Prescott and...

Milton Friedman: Prescott and somebody. Somebody else, whoever it is. They say that they can implicate...

Robert L. Hetzel: Lilly and Prescott.

Milton Friedman: No. Bishop wasn't there. It was Prescott and somebody else. Anyway. They say that the amplitude of the real business cycles is approximately 65 percent and the amplitude on the historical business cycle and interpret this in this instance this is 65, and this is 50, and this is 75. Various real business cycle models, and they imply that that's

some evidence in favor of those models, but the Slutsky equation can be constructed. What do they call it, the figure of theirs? It doesn't matter. I'll take the word that's in the article. But anyway, you can take a Slutsky model and get it to have an amplitude to pick the right period of accumulation, and the right amplitude of the random forces you put in, and get it to be 65. But which one shall I believe?

Robert L. Hetzel: They can get theirs to be 110 percent [unintelligible 01:18:47].

Milton Friedman: Oh, see, it's pretty easy to make it 100.

Robert L. Hetzel: I mean, everybody recognizes now that the characteristics of the series that you use as input determine the characteristic of the series you get as output, and yet they impose no discipline from theory on the series they use as the input.

Milton Friedman: That's right.

Robert L. Hetzel: It's not a model.

Milton Friedman: It's just a purely—it just had nothing to do with anything. Just an exercise in mathematical ingenuity.

Robert L. Hetzel: I think if you could identify the shock, it would probably be useful in about—

Milton Friedman: Well, but how would you identify it? How do I identify it by seeing whether...

Robert L. Hetzel: Well, they don't talk about that. You know, they don't have...

Milton Friedman: No, no.

Robert L. Hetzel: They don't have government. They don't have money. Okay.

Milton Friedman: But your question is a very good one because I'm sure that must've had some source. I didn't think it out of the blue sky.

Robert L. Hetzel: Well, let me read you...

Milton Friedman: But I don't know where.

Robert L. Hetzel: Let me read you the things that were in Koopmans' article, "Measurement Without Theory." Because, well, he says, "My first argument then is that even for the purpose of systematic and large-scale observation of such a many-sided phenomenon, theoretical preconceptions about its nature cannot be dispensed with, and the author's do so only to the detriment of their analysis." "There is no sign in the book of an awareness of the problems of determining the identifiability of, and measuring, structural equations as a prerequisite to the practically important types of prediction. Without resort to theory,

conclusion relevant to the guidance of economic policies cannot be drawn. The mere observation of regularities in the interrelations of variables then does not permit us to recognize or to identify behavior equations among such regularities.”

[Interview paused]

[01:20:29]

Milton Friedman: Now, the problem with that quotation is that they were using a theory, but it wasn't his theory. He's right that you can't do anything with data without theoretical preconceptions, but how did they pick the particular series they studied and the interrelations between those theories. It was from theoretical preconceptions that underlined what they did, but it was a different theory than his theory. It wasn't a general equilibrium theory.

Robert L. Hetzel: Well, it's not clear what it was.

Milton Friedman: Not clear what it was. It was not an explicit theory.

Robert L. Hetzel: I get the feeling that over time imbalances develop because of lag, price adjustment on the sides of the capitalist doc is out of line, but it's not a...

Milton Friedman: But the kind of theory it was—no, no, go back to your original thing. Yeah. The kind of theory that was imbedded was the difference between nominal variables and real variables.

Robert L. Hetzel: Right. It's dynamic money illusion was the...

Milton Friedman: That was the kind of theory that was imbedded.

Robert L. Hetzel: The Gibson effect sort of thing is what they were identifying, but that's useful as a propagation mechanism, but you can't do anything with it without some clear precision of what the shocks are.

Milton Friedman: But they thought that the—I know, but they thought...

Robert L. Hetzel: They wanted to turn this into a theory of a self-perpetuating movement from one stage to the next, and...

Milton Friedman: Right, right. They thought that by identifying empirical regularities, they could specify the theory more [unintelligible 01:21:29].

Robert L. Hetzel: There was a self-equilibrat...

Milton Friedman: Would you like something to drink or anything? I feel I'm not being a very good host to you.

Robert L. Hetzel: I think we can probably move in...

Milton Friedman: I am going to kick you out pretty soon, but I'll be glad to give you some Coke or something in between.

Robert L. Hetzel: Just a second. But the self-equilibrating mechanism in this, it wasn't the price system.

Milton Friedman: No, it wasn't because they were concerned with the global aggregates and not with what they thought of—well, no, that's not right. I don't know how to answer your question on that because they were very conscious of the effects of the price system there. Certainly both Arthur and Mitchell were conscious of the effect of the price system.

Robert L. Hetzel: But the heart of the marginal analysis is the way that prices are determined by small changes so that prices convey information about scarcity, and that's not in their work. The price system is a way of communicating information about scarcity and clearing markets. It's the psychology of the businessmen that drives [unintelligible 01:23:19].

Milton Friedman: Gee, I don't know what to say about that. Arthur, for example, was a very devote Marshallian. He knew Marshall in and out, and was a very great, a very strong follower of Marshall's analytical apparatus, which surely includes what you're now talking about.

Robert L. Hetzel: But think of the other economists at the time, like Abba Lerner, like Modigliani. Their macroeconomics was a relationship between—as you explained in talking about Leyan Hufud [phonetic], macroeconomics was separate from microeconomics, and the price system didn't work well enough so that when you got a shock, you had quantity adjustments. And so these economists, as good as they were, weren't able to integrate their neoclassical framework with their macroeconomics. So is it a surprise Burns didn't do it?

Milton Friedman: But that statement that you made was just theory of the relation between the financial and the real [unintelligible 01:24:27]. That's exactly what that is, it's a money illusion. Money illusion in the sense that the real economy doesn't adjust fast enough. And you're right, there was no price theory in theirs, and there's a sense—see the difference between them and this is that Burns and Mitchell were working on what you might almost call micro units.

They were working on a much more detailed basis than Abba Lerner or Leyan Hufud. They were working on such aggregates as investment consumption, interest rates, et cetera, whereas Burns and Mitchell were working on iron and steel, aluminum, on copper. They were working on what were really micromagnitudes in one sense. They were macro in the sense that they were working on industry-wide aggregates, not on individual firms. But surely they were aware that the price, let's say of copper, was going to depend on supply and demand. And you're asking does that in any way affect their—well, they thought of business cycles as just presenting raw data.

Robert L. Hetzel: But what they were concerned with was this dynamic evolution through time of the behavior of prices, and to that, they did not have an optimizing framework that made the static analysis of dynamic.

Milton Friedman: No, I...

Robert L. Hetzel: They took it down a dead-end.

Milton Friedman: Well, I'm afraid you're right on that. If you look at Mills' behavior of prices, it doesn't have any theory in it at all. It's more extreme than Mitchell and Burns, and he was in National Bureau, too. He was a Mitchell protégé. I don't know how to answer that question.

Robert L. Hetzel: Why don't you get me something to drink, and I'll ask you one more.

Milton Friedman: Okay.

Robert L. Hetzel: Okay?

Milton Friedman: What would you like to drink?

[01:26:34]

[Interview pauses]

Robert L. Hetzel: You begin both *Monetary History* and *Monetary Trends* with epigrams about the importance of organizing facts around the theory. What did you mean by the quote, "What are large collections of facts for? To make theories from, says Macon. To try ready-made theories by, says the history of discovery. It's all the same, says the idolater. Nonsense, says we." What did you mean by that? [01:27:03]

Milton Friedman: Just what it says. That you cannot make theories without some factual evidence, but you cannot use facts alone to get your theories. That neither the naïve empiricists in thinking that if you just look at enough facts, they'll explain themselves. That's what—it's the same proposition. See, the other epigram, that epigram is from De Morgan, I think, isn't it?

Robert L. Hetzel: It says Augustus De Morgan, *A Budget of Paradoxes*.

Milton Friedman: De Morgan, that's right. *A Budget of Paradoxes*. A wonderful book, if you want to look at it. But the other book is from Marshall, and it says, "Facts by themselves are sad. The most misleading statement, is he who says that facts speak for themselves." That's it, isn't it? The most misleading of all statements is facts speak for themselves without reference to how they're organized, or who does the organizing and so on. Well, that epigram from Macon, from De Morgan, and capitalize at all, pure empirical

induction will get you nowhere. But on the other hand, you can't construct, or test, or develop a theory without looking at empirical, without building in some empirical evidence into it. It's a two-way street. And I think that's a very good quotation.

Robert L. Hetzel: Yeah, it really makes you think about, well...

Milton Friedman: You know the other thing I remember so well from De Morgan because that's where this little poem of his about infinity, about what has it? Dogs have fleas on their backs to bite them, and big fleas have littler fleas to incite, and so on, *ad infinitum* from Idaho.

Robert L. Hetzel: Yeah.

Milton Friedman: That's it. Because a dog...

Robert L. Hetzel: I mean, this has got to be the essence of the Chicago school, isn't it? They have theories simple enough that you can go back and forth from the theory to the data, and work and enter between the two.

Milton Friedman: And you've got one of these of the old Chicago—I'm not sure it's any longer it because that's not Bob Lucas.

Robert L. Hetzel: No, it's not Bob Lucas, although Bob Lucas was so brilliant that in the '70s, he could do both. He could take the breakdown of the Phillips curve and take your expectations augmented Phillips curve, and provide a rational expectations underpinning that was used for explaining why monetary policy cannot systematically control real variables, so that was his best work where he combined...

Milton Friedman: I think it was.

Robert L. Hetzel: The two.

Milton Friedman: But I think the later business in which he's entirely trying to get to the general equilibrium analysis is much less satisfactory. But I'm not running Bob down because I think he did a tremendous service in promoting the ideas, but I agree with you. It's this notion of—see, and in a way—well, I don't know. What I was going to say, I guess, is not right. But you raised a question I wish I had an answer to, but I don't.

Robert L. Hetzel: The question of where your own...

Milton Friedman: Methodology came from. And I'm trying to think about whether any of that could've come out of the work I was doing at the statistical research group. It seems completely uninvited in a way.

Robert L. Hetzel: But by the early '50s when you had developed these views, and you first began to use the quantity theory, you had been away from Chicago for a long time. Then you came—you had been away from Blinder and that...

Milton Friedman: Oh, sure. There, I was left there in '35. I really wasn't back, I didn't get back until '46. [01:31:35]

Robert L. Hetzel: These ideas must've been percolating for a long time, and in the Depression, the problem was how to solve the unemployment gap, and in the '40s, it was how to solve the inflation gap, and you needed a symmetric explanation, and...

Milton Friedman: Well, but so far as inflation was concerned, and reading some of the memos I wrote at the Treasury in the early '40s, they were strictly Keynesian. So I don't know what...

Robert L. Hetzel: Those memos don't reflect a sense of the —and I think this is one place that's caused some confusion about your work in money, and the work that, say, that was done elsewhere on the East Coast. You applied price theory in a consistent way that others weren't doing that. As others were working on money demand, and they were bringing marginal analysis to bear the public's demand for money, but you were doing that, plus talking about the price level within the neoclassical framework for supply and demand, where you both brought money supply and real money demand to bear, so there's a loyalty.

I know what you said about economists and disciplines out there, and everybody learns it—but there was a loyalty to the price system that was an adherence to the price system that you can only find in a few economists like Blinder at the time, when he works out the price-specie flow mecca that just isn't there elsewhere. And when you took it to monetary manners, you worked it out fully in terms of the marginal analysis for the real demand for money, and the interaction on money demand and supply. And so it's like you and Stigler were one of the few people left in the world that really thought the price system could coordinate economic activity, and you brought that to bear on the macroeconomic level, and Stigler brought it to bear on the microeconomic level, so that must've come from ultimately from Chicago, that...

Milton Friedman: Yes, but it came—I think the...

[01:34:00]

[END TAPE 48, SIDE B]

[START TAPE 49, SIDE A]

Milton Friedman: But I think you mustn't underemphasize the influence of Simons and of Aaron Director. I think they both were very, very influential. Simons, of course, died in '46. Aaron is still around, but of course not very active. And certainly in connection with industrial organization, George's [unintelligible 01:34:12] Aaron was a very important

stimulus. But equally in connection with the new monetary [unintelligible 01:34:12]. And remember, he worked with Paul Douglas on the question of unemployment. Douglas and Director, and they were both for unemployment, and really proposed a stable monetary growth policy. And Aaron was always very much aware to the price theory, price analysis, very much in Blinder's tradition. Knight was, too.

Robert L. Hetzel: Yeah, but Knight...

Milton Friedman: But Knight wasn't interested in it.

Robert L. Hetzel: Right, but Simon's thought was hard to control liquidity.

Milton Friedman: You're now talking about the monetary side. But on the price side, certainly the notion of being faithful to the price analysis of supply and demand permeated Simons just as much on the macro side as it did on the micro side, but he thought that the matrimony would be highly unstable.

Robert L. Hetzel: When I read Blinder and his book on international trade, it's like a great cathedral, just the overarching view of how the price system works to equilibrate the balance of trade, and establish the absolute and relevant price difference between countries. It's really not only aesthetically beautiful, but it has real explanatory power. Did he talk about that price specie flow mechanism in the class that you had at Chicago?

Milton Friedman: Not, well...

Robert L. Hetzel: Or was it his straight price theory class?

Milton Friedman: Not in 301. Not in the price theory. He headed back...

Robert L. Hetzel: So you weren't as close to that at that time?

Milton Friedman: Oh, yes.

Robert L. Hetzel: You were?

Milton Friedman: Oh, because he also gave a course on international trade.

Robert L. Hetzel: And he taught his book in that trade, or did...

Milton Friedman: No, he didn't really teach his book. He was really working at that time on what came out later as the—I really can't tell you in detail. I no longer remember in detail, but I don't think he taught the book. I'm sure the book had it in, and I'm sure we all read the book, but that wasn't what he taught. He taught a much broader course than that.

Robert L. Hetzel: When was the first time you read *The Wealth of Nations*?

Milton Friedman: Oh, almost surely after I was at Chicago, and I can't tell you exactly when. Probably it was one of the books I was led to read by Blinder's course. Yeah, I don't really know. I could see one if I had a date as to when I acquired my first *Wealth of Nations* book.

Robert L. Hetzel: Do you remember first reading the *General Theory*, when the first time...

Milton Friedman: Yes. I'm not sure, but I think I read it shortly after it came out. In fact, I do have my copy of *The General Theory*, and I think I have in it the date on which I bought it.

Robert L. Hetzel: On a different subject, do you have...

[END OF RECORDING]